BLOSSOM RESTAURANT

2082 N. HILLCREST ROAD SARATOGA SPRINGS, UTAH

ARCHITECT	OWNER	GENERAL CONTRACTOR	CIVIL ENGINEER	STRUCTURAL ENGINEER	KITCHEN DESIGN	MECHANICAL/PLUMBING ENGINEER	ELECTRICAL ENGINEER
HARRIS ARCHITECTURE OREM, UTAH	JENNY CHAN SARATOGA SPRINGS, UT	T.B.D.	LEGEND ENGINEERING HEBER CITY, UT	LEI ENGINEERING SPANISH FORK, UT	RESCO SALT LAKE CITY, UT	EPIC ENGINEERING HEBER CITY, UT	EPIC ENGINEERING HEBER CITY, UT

LICENSED ARCHITECT STATE OF UTAH 03/18/20

BUILDING PERMIT SET 03/18/2020

REVISIONS
#	Date	Description

DRAWN BY
MHF

HARRIS ARCHITECTURE
920 E 800 N, OREM UT 84097 | 801-377-6303 | WWW.HARRIS-ARCHITECTURE.COM

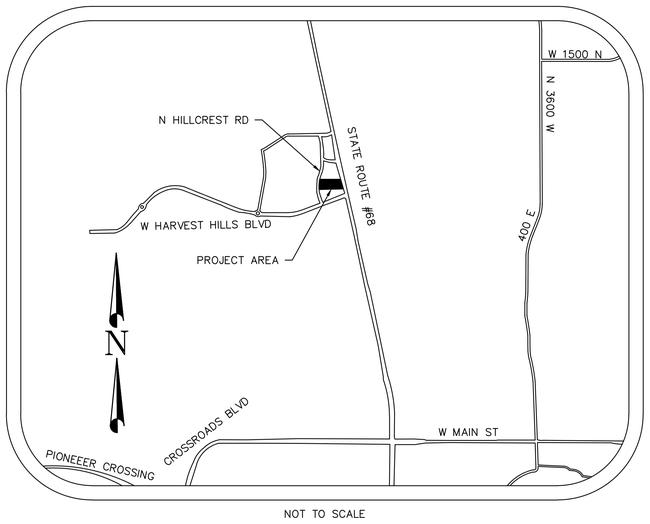
BLOSSOM RESTAURANT
TITLE SHEET

03/18/2020

A0.0

CHAN RESTAURANT
2082 N HILLCREST ROAD
SARATOGA SPRINGS, UT 84045

VICINITY MAP



NOT TO SCALE

INDEX

OWNER
JENNY CHAN
1734 CENTENNIAL BLVD
SARATOGA SPRINGS, UT 84045
(435) 201-0973

CIVIL ENGINEER
LEGEND ENGINEERING
CAL JOHNSON
52 WEST 100 NORTH
HEBER CITY, UTAH 84032
(435) 654-4828

ARCHITECT
HARRIS ARCHITECTURE
BRETT HARRIS
3520 N UNIVERSITY AVE #200
PROVO, UTAH 84604
(801) 377-6303

SURVEYOR
LEGEND ENGINEERING
CORY NEERINGS
52 WEST 100 NORTH
HEBER CITY, UTAH 84032
(435) 654-4828

SITE DATA

LOT AREA:	65,095	SF (1.49 ACRES)
BUILDING AREA:	6,836	SF± 10.5%
PAVEMENT AREA:	36,053	SF± 54.8%
LANDSCAPE AREA:	16,860	SF± 26.5%
FUTURE DEVELOPMENT:	5,346	SF± 8.2%
FUTURE BUILDING:	4,000	SF
FUTURE LANDSCAPE:	1,346	SF±
NUMBER OF LOTS:	1	

LEGEND & ABBREVIATION TABLE

R.O.W./PROPERTY LINE		EXISTING CURB AND GUTTER	
EASEMENT LINE		PROPOSED CURB AND GUTTER	
CENTER LINE		INVERT ELEVATION	IE
PROPOSED TRAIL		TOP BACK CURB	TBC
PROPOSED WATER LINE	W W	TOP ASPHALT	TA
PROPOSED PRESSURIZED IRRIGATION	PI PI	TOP OF GRATE	TOG
PROPOSED SEWER LINE	SS SS	FINISHED GRADE	FG
PROPOSED STORM DRAIN LINE	SD SD	TOP OF CONCRETE	TC
EXISTING SEWER LINE	-SS- -SS-	HIGH WATER ELEVATION	HWE
EXISTING WATER LINE	-W- -W-	CATCH BASIN	
EXISTING STORM DRAIN LINE	-SD- -SD-	PROPOSED STREET LIGHT	
EXISTING CONTOUR	4247	STORM DRAIN MANHOLE	D
FINISHED CONTOUR	47.00	SANITARY SEWER MANHOLE	S
		PROPOSED WATER VALVE	W

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

LEGEND ENGINEERING
52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
www.legendengineering.com

JENNY CHAN RESTAURANT
COVER SHEET
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S JOHNSON
STATE OF UTAH

SHEET: C-0

BUILDING PERMIT 2/7/2020 DATE: 2/7/2020

L:\Legend Projects\Harris Architects - Chan Restaurant\CHAN RESTAURANT 7A.dwg - - Feb 07, 2020-1:35pm

SURVEY CONTROL					
Point #	Northing	Easting	Elevation	Feature	Description
61056	5000.00	5000.00	4749.03	BRASS CAP	SECTION CORNER BENCHMARK
30001	3278.31	6437.61	4665.20	MAG NAIL	NW COR LOT 3
30010	3244.00	6634.16	4654.24	SCRIBED "X"	NE COR LOT 3
30012	2984.36	6374.78	4656.35	SCRIBED "X"	REFERENCE CORNER NW LOT 1

BENCHMARK=4749.03' (NAVD88)
NORTHWEST CORNER
SECTION 11,T5S, R1W, SLB&M

EXISTING SANITARY SEWER MANHOLE
RIM=4658.12'
IE=4648.38'

EXISTING STORM DRAIN MANHOLE
RIM=4658.24'
IE S=4651.50'
BTTM=4651.50'

FOUND SCRIBED "X" POINT 30012

RADIUS=472.00'
LENGTH=17.51'
CHORD BEARING=N17°56'08"E
CHORD LENGTH=17.51'

299.941
N90° 00' 00.00"W

5' P.U.E.

RADIUS=472.00'
LENGTH=154.14'
CHORD BEARING=N09°03'34"E
CHORD LENGTH=153.45'

EXISTING SANITARY SEWER MANHOLE
RIM=4655.19'
IE=4647.34'

EXISTING STORM DRAIN MANHOLE
RIM=4655.45'
IE S=4650.31'
BTTM=4650.31'

HILLCREST ROAD

LOT 1
1.49 AC
65,095 SQ. FT.
2082 NORTH HILLCREST ROAD

EXISTING STORM DRAIN MANHOLE
RIM=4654.54'
IE S=4649.80'
IE W=4654.54'
BTTM=4649.67'

EXISTING STORM DRAIN INLET
TOG=4654.09'
IE E=4650.14'
IE W=4650.17'
BTTM=4649.50'

EXISTING STORM DRAIN INLET
TOG=4654.04'
IE W=4650.20'
BTTM=4649.61'

SEWER STUB (4X4 POST)

EXISTING SANITARY SEWER MANHOLE
RIM=4654.42'
IE=4646.71'

22.900
S00° 17' 44.00"E

N89° 53' 49.00"E
369.950

EXISTING STORM DRAIN MANHOLE
RIM=4654.37'
IE W=4648.69'
IE S=4648.47'
BTTM=4648.27'

EXISTING STORM DRAIN MANHOLE
RIM=4652.61'
IE S=4644.79'
IE W=4644.46'
IE E=4646.81'
BTTM=4644.21'

10' P.U.E.

10' P.U.E.

20' LANDSCAPE TRAIL + PUBLIC ACCESS EASEMENT

EXISTING SIDEWALK

5' STORM DRAIN EASEMENT

N00° 39' 00.10"W
194.710

REDWOOD ROAD (SR-68)

LEGEND

- LOT LINES (PROPERTY)
- EXISTING CURB AND GUTTER
- EXISTING WATER LINE
- EXISTING SANITARY SEWER LINE
- EXISTING STORM DRAIN LINE
- EXISTING GRADE CONTOUR LINES (4960)
- FINISH GRADE SLOPE (1.25%)
- SENSITIVE LANDS

CALL BEFORE YOU DIG! IT'S THE LAW! BLUE STAKES 1 800 662 4111

N

0 20 40 60
1" = 20'
Scale in Feet

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

LEGEND ENGINEERING
52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
www.legendengineering.com

JENNY CHAN RESTAURANT
BOUNDARY AND TOPOGRAPHICAL SURVEY
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S JOHNSON
STATE OF UTAH

SHEET: C-1

SITE PLAN APPLICATION 1/24/2020 DATE: 1/24/2020

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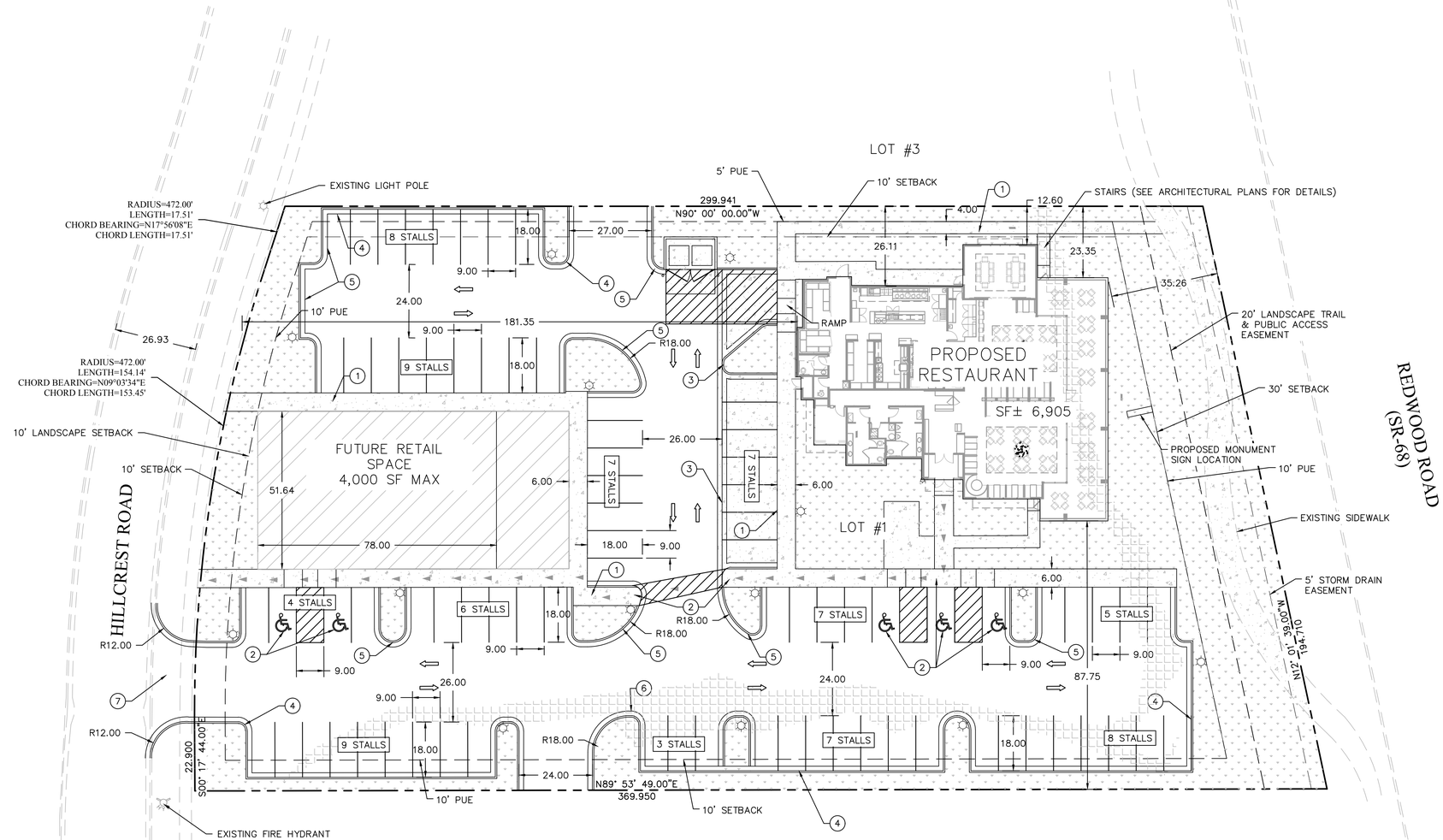

LEGEND

- LOT LINES (PROPERTY)
- EXISTING CURB AND GUTTER
- PROPOSED CURB AND GUTTER
- SETBACK LINE
- EXISTING FENCE
- LANDSCAPE AREA
- CONCRETE AREA
- SENSITIVE LANDS
- PROPOSED LIGHTING LOCATIONS
- EXISTING LIGHTING LOCATIONS

SITE DATA

LOT AREA:	65,095	SF (1.49 ACRES)
BUILDING AREA:	6,836	SF± 10.5%
PAVEMENT AREA:	36,053	SF± 55.4%
LANDSCAPE AREA:	16,860	SF± 25.9%
FUTURE DEVELOPMENT:	5,346	SF± 8.2%
FUTURE BUILDING:	4,000	SF
FUTURE LANDSCAPE:	1,346	SF±

BUILDING DATA

ZONE: RC (REGIONAL COMMERCIAL)

SETBACKS:
- FRONT YARD: 10' SETBACK
- SIDE YARD: 10' SETBACK
- REAR YARD: 30' SETBACK

PARKING TABULATION

REQUIRED: 1 PER 100 SQUARE FEET OF BUILDING AREA (SIT DOWN RESTAURANT USE)
4 PER 1,000 SF OF BUILDING AREA (RETAIL USE)
REQUIRED: 68 STALLS (6,800 SF/100 = 68)
16 STALLS (4,000 SF/1,000 X 4 = 16)
84 TOTAL STALLS (4 ADA STALLS)
PROVIDED: 80 STALLS
5 ADA STALLS
NO TRUCK UNLOADING ZONE REQUIRED.

SENSITIVE LANDS

TYPE: STEEP SLOPES (SLOPES GREATER THAN 30%)
AREA: 3,879 SF± (0.09 ACRES)
6.0% OF TOTAL PROJECT AREA

NOTES:

1. PROPOSED SIDEWALK PER CITY STANDARD ST-1. SEE SHEET C-5.
2. ALL HANDICAP STALLS AND RAMPS TO BE INSTALLED PER ADA STANDARDS. SEE SHEET C-5 FOR DETAIL.
3. 3' ROLL GUTTER PER DETAIL 3. SEE SHEET C-5.
4. PROPOSED CURB & GUTTER PER DETAIL 1. SEE SHEET C-5.
5. PROPOSED REVERSE PAN CURB PER DETAIL 2. SEE SHEET C-5.
6. PROPOSED DUMPSTER LOCATION. SEE ARCHITECTURAL PLANS FOR DETAIL.
7. PROPOSED COMMERCIAL DRIVE APPROACH PER CITY STANDARD ST-4B. SEE SHEET C-5.

LEGAL DESCRIPTION

LOT 1 OF HARVEST POINT COMMERCIAL PLAT "A"

A RIGHT OF WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE CITY OF SARATOGA SPRINGS PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT OF WAY. CONTACT CHRIS KLINGEL AT 801-766-9793, EXT. 118.

GENERAL NOTES:
1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION
2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION
3. ALL PROPOSED WATER LINES TO HAVE A MINIMUM OF 5' OF COVER
4. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL AS PER CITY STANDARDS.
5. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
6. SEE UTILITY PLAN FOR CONSTRUCTION OF SEWER AND WATER LINES.
7. ALL WORK TO BE ACCORDING TO CITY STANDARDS AND SPECIFICATIONS.

CALL BEFORE YOU DIG! IT'S THE LAW! BLUE STAKES 1 800 662 4111

N

0 20 40 60
1" = 20'
Scale in Feet

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

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JENNY CHAN RESTAURANT
SITE PLAN
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S JOHNSON
STATE OF UTAH

SHEET: C-2

BUILDING PERMIT 2/7/2020 DATE: 2/7/2020

SURVEY CONTROL					
Point #	Northing	Easting	Elevation	Feature	Description
61056	5000.00	5000.00	4749.03	BRASS CAP	SECTION CORNER BENCHMARK
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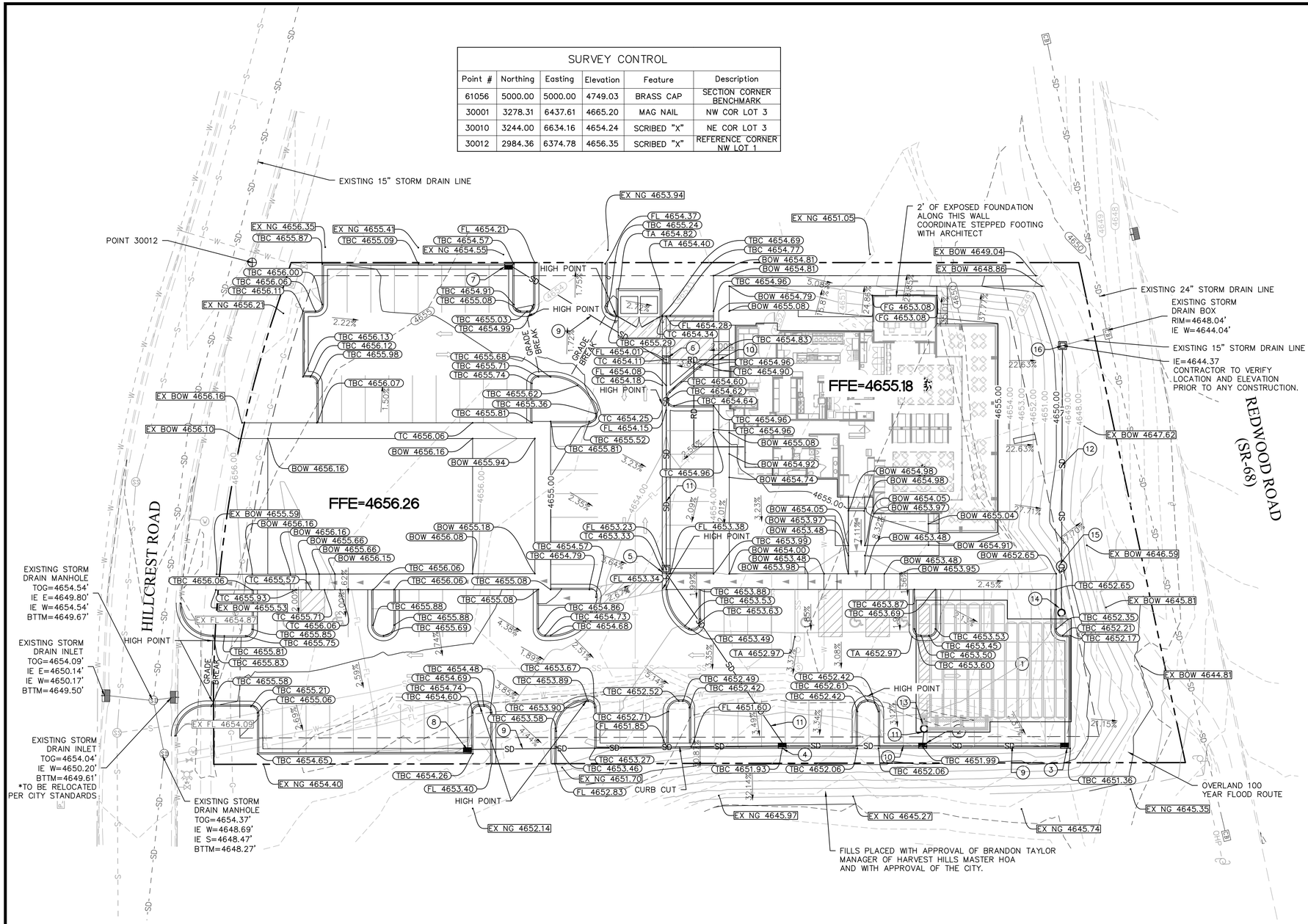
30012	2984.36	6374.78	4656.35	SCRIBED "X"	REFERENCE CORNER NW LOT 1



LEGEND

LOT LINES (PROPERTY)	
EXISTING CURB AND GUTTER	
PROPOSED CURB AND GUTTER	
PROPOSED STORM DRAIN LINE	-SD-
EXISTING STORM DRAIN LINE	-SD-
PROPOSED SEWER LINE	-SS-
EXISTING SEWER LINE	-SS-
PROPOSED WATER LINE	-W-
EXISTING WATER LINE	-W-
EXISTING FENCE	-X-
GRADE BREAK	GRADE BREAK
FINISH GRADE CONTOUR LINES	4960
EXISTING GRADE CONTOUR LINES	(4960)
FINISH GRADE SLOPE	SLOPE
ACCESSIBLE ROUTE	
GRADE BREAK	GB
INVERT ELEVATION	IE
TOP OF GRATE	TOG
TOP OF ASPHALT	TA
TOP BACK OF CURB	TBC
PROPOSED	PROP
EXISTING	EX
FINISHED GRADE	FG
FINISHED FLOOR ELEVATION	FFE
BACK OF SIDEWALK	BOW
BOTTOM OF WALL	BOT
TOP OF WALL	TOP
TOP OF CONCRETE	TC
FLOW LINE	FL
LANDSCAPE AREA	
CONCRETE AREA	
CATCH BASIN	
STORM DRAIN MANHOLE	SD

1. INSTALL ADS STORMTECH UNDERGROUND DETENTION SYSTEM (SC-740 CHAMBERS). SYSTEM TO BE WRAPPED IN THERMOPLASTIC LINER. SEE SHEET C-6 FOR DETAILS. VOLUME=5,655 CF IE IN=4645.15 IE OUT=4644.86 BOTTOM OF CHAMBER=4644.86 BOTTOM OF ROCK=4644.36
2. CURB INLET CATCH BASIN W/ SNOUT PER DETAIL SD-2 & 4. SEE SHEET C-5. RIM=4651.49 IE=4645.23
3. CURB INLET CATCH BASIN PER DETAIL SD-2. SEE SHEET C-5. RIM=4650.86 IE=4647.61
4. CURB INLET CATCH BASIN PER DETAIL SD-2. SEE SHEET C-5. RIM=4651.43 IE=4645.48
5. 3' x 3' CLEANOUT BOX PER DETAIL 5. SEE SHEET C-5. RIM=4653.23 IE=4648.98
6. 3' x 3' CLEANOUT BOX PER DETAIL 5. SEE SHEET C-5. RIM=4654.01 IE=4649.75
7. CURB INLET CATCH BASIN PER DETAIL SD-2. SEE SHEET C-5. RIM=4654.07 IE=4650.82
8. CURB INLET CATCH BASIN PER DETAIL SD-2. SEE SHEET C-5. RIM=4653.76 IE=4650.51
9. 8" CORRUGATED HDPE
10. 6" ROOF DRAIN LINE
11. 12" CORRUGATED HDPE
12. 15" CORRUGATED HDPE
13. NYLOPLAST 30"ø INLET MANHOLE. SEE SHEET C-6 FOR DETAILS. RIM=4651.87 IE=4645.15
14. NYLOPLAST 30"ø OUTLET CONTROL MANHOLE W/ 3"ø ORIFICE INSTALLED ON OUTFLOW PIPE. SEE SHEET C-6 FOR DETAILS. RIM=4652.11 IE=4644.86
15. TREATMENT DEVICE MANHOLE. INSTALL CONTECH CDS 2015-4 STORMWATER TREATMENT SYSTEM. SEE SHEET C-5 FOR DETAILS. CONSTRUCTION DETAILS TO BE PROVIDED BY CONTECH UPON REQUEST BY CONTRACTOR. RIM=4651.53 IE=4644.82
16. 3' x 3' CLEANOUT BOX PER DETAIL 5. SEE SHEET C-5. RIM=4648.59 IE IN=4644.57 EX IE OUT=4644.37

MATERIALS TABLE:

77 LF± 6" CORRUGATED HDPE STORM DRAIN PIPE.

271 LF± 8" CORRUGATED HDPE STORM DRAIN PIPE.

181 LF± 12" CORRUGATED HDPE STORM DRAIN PIPE.

97 LF± 15" CORRUGATED HDPE STORM DRAIN PIPE.

CURB INLET CATCH BASIN (5)

CLEANOUT BOX (3)

SC-740 ADS STORMTECH SYSTEM (1)

CONTECH CDS 2015-4 SYSTEM (1)

GENERAL NOTES:
1. CONTRACTOR TO NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION
2. CONTRACTOR TO VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION
3. ALL PROPOSED WATER LINES TO HAVE A MINIMUM OF 5' OF COVER
4. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL AS PER CITY STANDARDS.
5. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES TO BE REPLACED IN KIND.
6. SEE UTILITY PLAN FOR CONSTRUCTION OF SEWER AND WATER LINES.
7. ALL WORK TO BE ACCORDING TO CITY STANDARDS.

ACCEPTED CONSTRUCTION DRAWINGS AND PRE-CONSTRUCTION MEETING OR A GRADING PERMIT AND PRE-CONSTRUCTION MEETING MUST BE OBTAINED FROM SARATOGA SPRINGS CITY PRIOR TO DISTURBING ANY VEGETATION OR MOVING ANY SOIL. CONTACT THE CITY ENGINEERING DEPT. AT 801-766-9793.

I HEREBY CERTIFY THAT THIS DESIGN FOR THE ONSITE DRAINAGE OF THIS DEVELOPMENT WAS PREPARED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE PROVISIONS OF THE CITY OF SARATOGA SPRINGS' STANDARD SPECIFICATIONS AND DRAWINGS , AND WAS DESIGNED TO COMPLY WITH THE PROVISIONS THEREOF. I UNDERSTAND THAT THE CITY ASSUMES NO RESPONSIBILITY OR LIABILITY WHATSOEVER FOR THIS DESIGN.

CALL BEFORE YOU DIG! IT'S THE LAW BLUE STAKES 1 800 662 4111

N

0 20 40 60

1" = 20'
Scale in Feet

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

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52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
www.legendengineering.com

JENNY CHAN RESTAURANT
GRADING AND DRAINAGE PLAN
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S JOHNSON
STATE OF UTAH

SHEET: C-3

BUILDING PERMIT 2/7/2020

DATE: 2/7/2020

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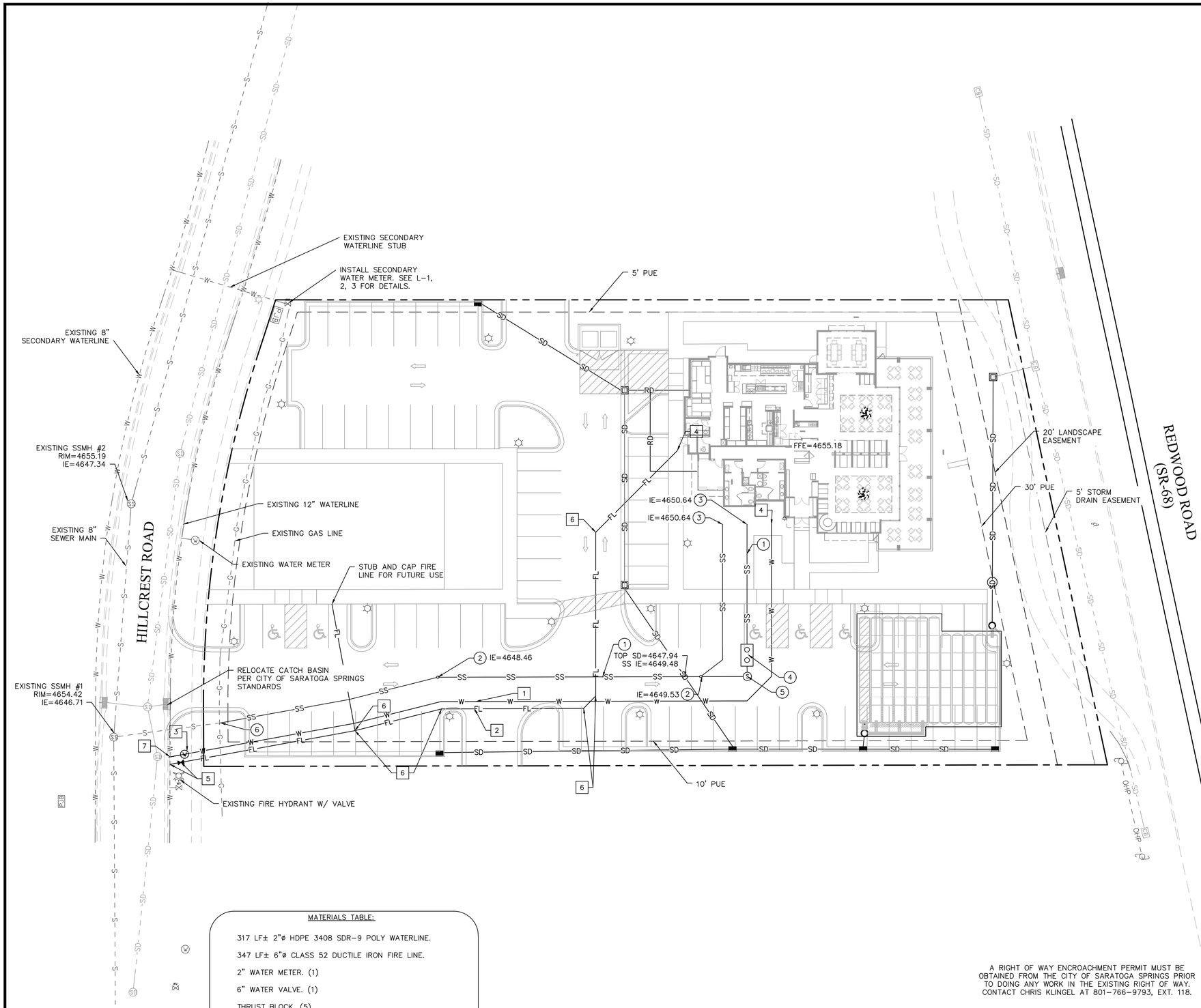

LEGEND

PROPERTY/ROW LINE	
EXISTING CURB AND GUTTER	
PROPOSED CURB AND GUTTER	
PROPOSED STORM DRAIN LINE	-SD-
EXISTING STORM DRAIN LINE	-SD-
PROPOSED SEWER LINE	-SS-
EXISTING SEWER LINE	-SS-
PROPOSED WATER LINE	-W-
EXISTING WATER LINE	-W-
EXISTING GAS LINE	-G-
INVERT ELEVATION	IE
PROPOSED	PROP
FINISHED FLOOR ELEVATION	FFE
EXISTING FIRE HYDRANT	
EXISTING WATER VALVE	WV
EXISTING WATER METER	W
EXISTING SEWER MANHOLE	SS
PROPOSED FIRE HYDRANT	
PROPOSED WATER VALVE	
PROPOSED WATER METER	W
PROPOSED SEWER CLEANOUT	
PROPOSED SEWER MANHOLE	S
PROPOSED LIGHTING LOCATIONS	
EXISTING LIGHTING LOCATIONS	

SEWER DESIGN NOTES:

1. INSTALL 6"ø PVC SDR-35 SEWER PIPE AT 1% MIN. SLOPE.
2. INSTALL 6" CLEANOUT.
3. END ALL UTILITIES 5' FROM BUILDING, SEE PLUMBING PLANS FOR CONTINUATION.
4. INSTALL 1,000 GAL. GREASE TRAP PER TSSD STANDARD D-10. SEE SHEET C-5.
   RIM=4652.97
   IE IN=4650.13
   IE OUT=4649.93
5. INSTALL SAMPLING MANHOLE PER TSSD STANDARD D-6. SEE SHEET C-5.
   RIM=4652.60
   IE IN=4649.90
   IE OUT=4649.70
6. CONNECT TO EXISTING SANITARY SEWER LATERAL PER CITY STANDARDS. SEE SHEET C-5 DETAIL SS-3.
   IE=4647.55
   * CONTRACTOR TO VERIFY LOCATION AND ELEVATION PRIOR TO ANY CONSTRUCTION.

WATER DESIGN NOTES:

1. INSTALL 2"ø HDPE 3408 SDR-9 POLY WATERLINE.
2. INSTALL 6"ø CLASS 52 DUCTILE IRON FIRE LINE.
3. INSTALL 2" WATER METER PER CITY STANDARDS. SEE SHEET C-5 DETAIL DW-6.
4. END ALL UTILITIES 5' FROM BUILDING, SEE PLUMBING PLANS FOR CONTINUATION.
5. CONNECT TO WATER LINE PER CITY STANDARDS W/VALVE AND THRUST BLOCK. SEE SHEET C-5.
6. INSTALL THRUST BLOCKS PER CITY STANDARDS. SEE SHEET C-5 DETAIL DW-2.
7. HOT TAP CONNECTION TO EXISTING 12" WATER LINE PER CITY STANDARDS.
8. INSTALL FIRE HYDRANT PER CITY STANDARDS. SEE SHEET C-5 DETAIL DW-4.

MATERIALS TABLE:

317 LF± 2"ø HDPE 3408 SDR-9 POLY WATERLINE.

347 LF± 6"ø CLASS 52 DUCTILE IRON FIRE LINE.

2" WATER METER. (1)

6" WATER VALVE. (1)

THRUST BLOCK. (5)

336 LF± 6"ø PVC SDR-35 SEWER LINE.

6" SEWER CLEANOUT. (2)

1,000 GALLON GREASE TRAP. (1)

A RIGHT OF WAY ENCROACHMENT PERMIT MUST BE OBTAINED FROM THE CITY OF SARATOGA SPRINGS PRIOR TO DOING ANY WORK IN THE EXISTING RIGHT OF WAY. CONTACT CHRIS KLINGEL AT 801-766-9793, EXT. 118.

GENERAL NOTES:
1. CONTRACTOR SHALL NOTIFY BLUE STAKES PRIOR TO CONSTRUCTION
2. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL EXISTING UTILITY LINES AND STRUCTURES PRIOR TO CONSTRUCTION
3. ALL PROPOSED WATER LINES SHALL HAVE A MINIMUM OF 5' OF COVER
4. ALL SEWER, WATER AND STORM DRAIN PIPES SHALL BE BACKFILLED WITH SELECT GRANULAR FILL AS PER CITY STANDARDS.
5. ANY OFF SITE DAMAGE TO EXISTING ASPHALT, CURB & GUTTER, LANDSCAPING AND ALL UTILITIES SHALL BE REPLACED IN KIND.
6. SEE GRADING PLAN FOR CONSTRUCTION OF STORM DRAIN LINES.
7. ALL WORK SHALL BE ACCORDING TO CITY STANDARDS.

CALL BEFORE YOU DIG! IT'S THE LAW BLUE STAKES 1 800 662 4111

N

0 20 40 60
1" = 20'
Scale in Feet

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

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HEBER CITY, UT 84032
PHONE: 435-654-4828
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JENNY CHAN RESTAURANT
UTILITY PLAN
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S JOHNSON
STATE OF UTAH

SHEET: C-4

BUILDING PERMIT 2/7/2020

DATE: 2/7/2020

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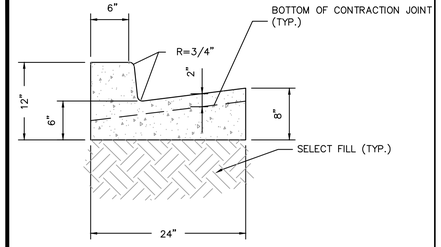
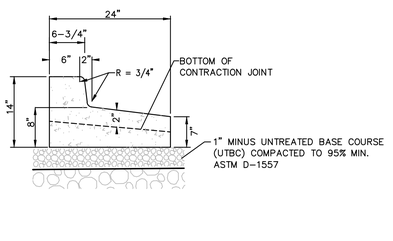
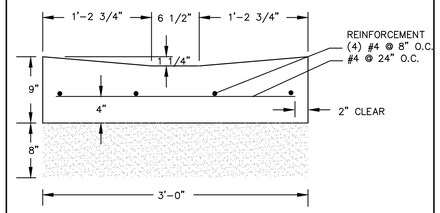


1 | 24" CURB & GUTTER
N.T.S.

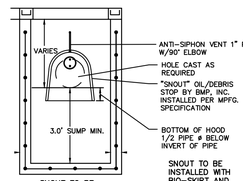


2 | 24" REVERSE PAN CURB & GUTTER
N.T.S.

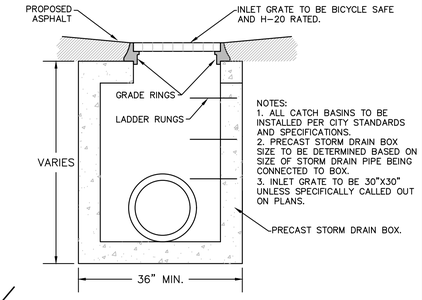


NOTE:
1. INSTALL 3'-0" WATERWAY WITH SAME STANDARDS AS CALLED OUT FOR 4'-0" AND 6'-0" WATERWAYS ON APWA PLAN NO. 211

3 | 3'-0" ROLL GUTTER
N.T.S.



4 | SNOUT OIL & DEBRIS STOP
N.T.S.

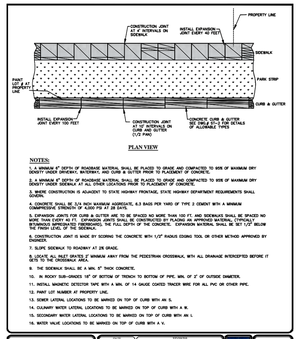


5 | STANDARD STORM DRAIN INLET BOX
N.T.S.

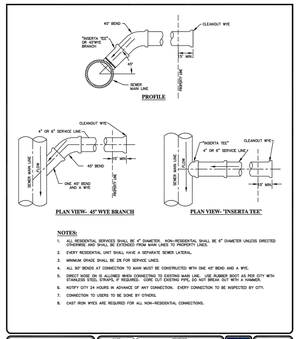
Sidewalk

1. **GENERAL**
   - A. Variance from specified dimensions and slopes must be acceptable to the ENGINEER. System configuration may be changed at ENGINEER's discretion.
   - B. Additional requirements are specified in APWA Section 32 16 13.
2. **PRODUCTS**
   - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   - B. Expansion Joint Filler: 1/2-inch thick type F1 full depth, APWA Section 32 13 73.
   - C. Concrete: Class 4000, APWA Section 03 30 04. If necessary, provide concrete that achieves design strength in less than 7 days. Use caution; however, as concrete crazing (spider cracks) may develop if air temperature exceeds 90 degrees F.
   - D. Concrete Curing Agent: Clear membrane forming compound with fugitive dye (Type ID Class A), APWA Section 03 39 00.
3. **EXECUTION**
   - A. Base Course Placement: APWA Section 32 05 10. Maximum lift thickness before compaction is 8-inches when using riding equipment or 6-inches when using hand held equipment. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   - B. Concrete Placement: APWA Section 03 30 10.
     1) Install expansion joints vertical, full depth, with top of filler set flush with concrete surface.
     2) Install contraction joints vertical, 1/8-inch wide or 1/4 slab thickness if the slab is greater than 8-inches thick. Maximum length to width ratio for non-square panels is 1.5 to 1. Maximum panel length (in feet) is 1.5 times the slab thickness (in inches).
     3) Provide 1/2-inch radius edges. Apply a broom finish. Apply a curing agent.

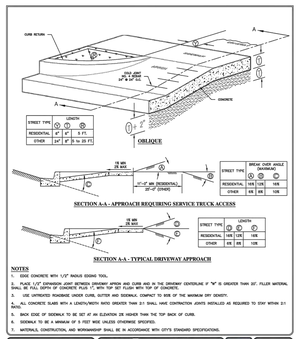
231



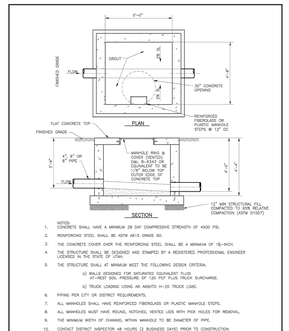
SIDEWALK, CURB & GUTTER STANDARDS | SARATOGA SPRINGS CITY | ST-1



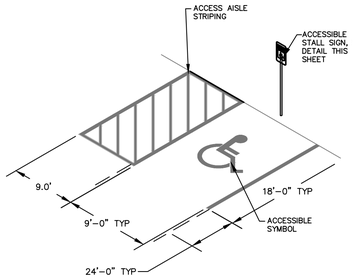
SEWER SERVICE CONNECTION | SARATOGA SPRINGS CITY | SS-3

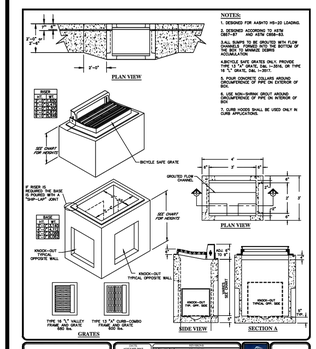


COMMERCIAL DRIVE APPROACH | SARATOGA SPRINGS CITY | ST-4B

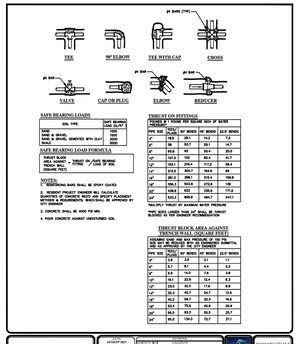


TIMPANOGOS SPECIAL SERVICES DISTRICT | SAMPLING MANHOLE 42"I OR LESS | MAG 421 | D-6

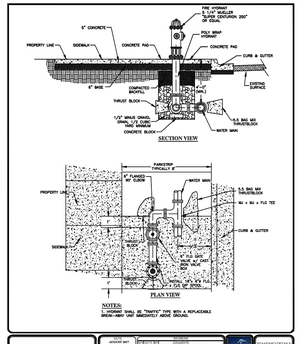




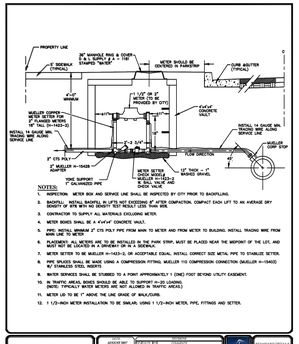
GUTTER INLET BOX | SARATOGA SPRINGS CITY | SD-2



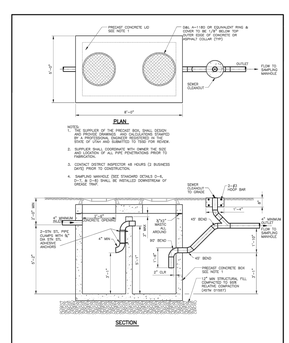
CONCRETE THRUST BLOCKS | SARATOGA SPRINGS CITY | DW-2

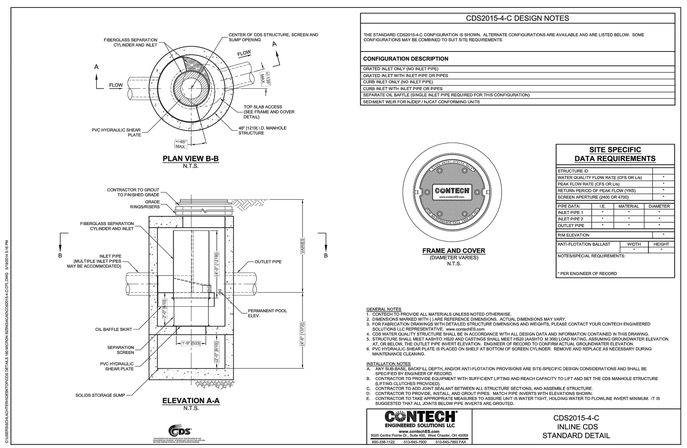


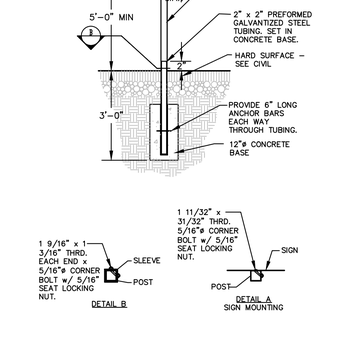
FIRE HYDRANT CONNECTION | SARATOGA SPRINGS CITY | DW-4



NON-RESIDENTIAL METER CONNECTION 2" OR 1 1/2" | SARATOGA SPRINGS CITY | DW-6







ADA ACCESSIBLE RAMP | SARATOGA SPRINGS CITY | ST-5B

LEGEND ENGINEERING
52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
www.legendengineering.com

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

JENNY CHAN RESTAURANT
DETAILS
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S JOHNSON
STATE OF UTAH

SHEET: C-5

BUILDING PERMIT 2/7/2020 DATE: 2/7/2020

PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER	EPM NAME EPM NUMBER EPM EMAIL
ADS SALES REP	SALES NAME SALES NUMBER SALES EMAIL
PROJECT NO.	

ADS
ADVANCED DRAINAGE SYSTEMS, INC.

SiteASSIST by StormTech
FOR STORMTECH INSTRUCTIONS, DOWNLOAD THE INSTALLATION APP

CHAN RESTAURANT
SARATOGA SPRINGS, UT

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (+1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION WITH 2017 AND 2018 INTERIMS.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

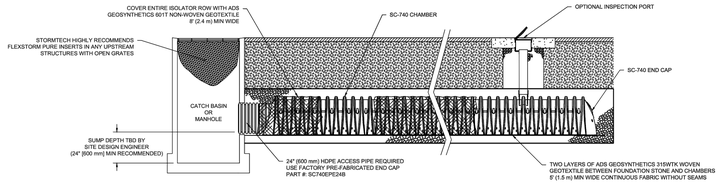
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

PROPOSED LAYOUT		CONCEPTUAL ELEVATIONS	
67	STORMTECH SC-740 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)	11.00
24	STORMTECH SC-740 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)	6.00
6	STONE ABOVE (in)	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)	4.50
6	STONE BELOW (in)	MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT)	4.50
40	% STONE VOID	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	4.50
5588	INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)	TOP OF STONE	3.50
		TOP OF SC-740 CHAMBER	3.00
		12" (300 mm) TOP OF CHAMBER INVERT	2.88
		BASE STONE INCLUDED)	1.66
2874	SYSTEM AREA (SF)	24" ISOLATOR ROW INVERT	0.81
218.66	SYSTEM PERIMETER (ft)	BOTTOM OF SC-740 CHAMBER	0.50
		UNDERDRAIN INVERT	0.00
		BOTTOM OF STONE	0.00

NOTES:
1. CHAMBERS SHALL BE ARRANGED IN ROWS AS DETERMINED BY SITE DESIGN ENGINEER. SEE TECH SHEET #7 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ABBREVIATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND FIELD FABRICATE ENDS OF ROWS, TO ADAPT TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
2. THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
3. THIS CHAMBER SYSTEM WAS DESIGNED WITHOUT SITE-SPECIFIC INFORMATION ON SOIL CONDITIONS OR BEARING CAPACITY. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THE SUITABILITY OF THE SOIL AND PROVIDING THE BEARING CAPACITY OF THE IN-SITU SOILS. THE BASE STONE DEPTH MAY BE INCREASED OR DECREASED ONCE THIS INFORMATION IS PROVIDED.

*INVERT ABOVE BASE OF CHAMBER

PART TYPE	ITEM ON LAYOUT	DESCRIPTION	INVERT*	MAX FLOW
PREFABRICATED END CAP	A	24" BOTTOM PREFABRICATED END CAP(TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATION ROW)	0.10"	
MANIFOLD	B	12" X 12"(TOP, ADS N-12	12.00"	
PVC CONNECTION	C	12" SIDE PVC CONNECTION	1.20"	
INSPECTION PORT (SCHEDULE 40 PVC)	D	24" (600 mm) SCH40 PVC (OR KIN)		0.7 CFS IN
NYLOPLAST (OUTLET)	E	30" DIAMETER (DESIGN BY ENGINEER)		2.0 CFS OUT
UNDERDRAIN	F	6" ADS N-12 DUAL WALL PERFORATED HDPE UNDERDRAIN		



SC-740 ISOLATOR ROW DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

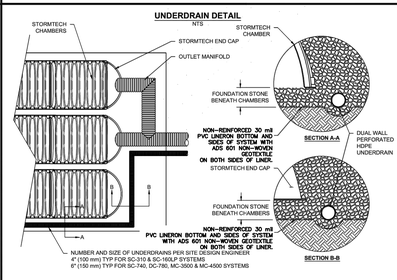
STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

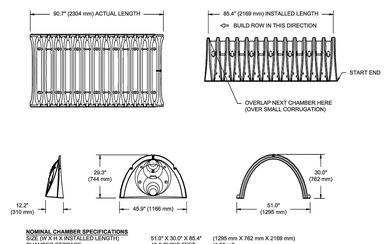
STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



SC-740 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	—
SC740EPE06B / SC740EPE06BPC			—	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	—
SC740EPE08B / SC740EPE08BPC			—	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	—
SC740EPE10B / SC740EPE10BPC			—	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	—
SC740EPE12B / SC740EPE12BPC			—	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	—
SC740EPE15B / SC740EPE15BPC			—	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	—
SC740EPE18B / SC740EPE18BPC			—	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	—	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

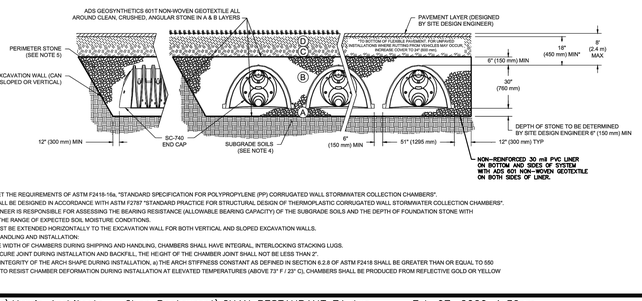
* FOR THE SC740EPE24B THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

NOTE: ALL DIMENSIONS ARE NOMINAL

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% RELATIVE DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3]

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

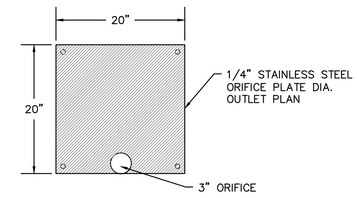
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/IN/IN. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

NYLOPLAST DRAIN BASIN
NTS

NOTES

1. 8-30" (200-750 mm) GRATES/SOLID COVERS SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
2. 12-30" (300-750 mm) FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC
5. FOR COMPLETE DESIGN AND PRODUCT INFORMATION: **WWW.NYLOPLAST-US.COM**
6. TO ORDER CALL: **800-821-6710**

A	PART #	GRATE/SOLID COVER OPTIONS		
8" (200 mm)	2808AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
10" (250 mm)	2810AG	PEDESTRIAN LIGHT DUTY	STANDARD LIGHT DUTY	SOLID LIGHT DUTY
12" (300 mm)	2812AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
15" (375 mm)	2815AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
18" (450 mm)	2818AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
24" (600 mm)	2824AG	PEDESTRIAN AASHTO H-10	STANDARD AASHTO H-20	SOLID AASHTO H-20
30" (750 mm)	2830AG	PEDESTRIAN AASHTO H-20	STANDARD AASHTO H-20	SOLID AASHTO H-20



ORIFICE PLATE

NO.	REVISIONS	BY	DATE

ENGINEER: CJ CHECKED BY: LR

LEGEND ENGINEERING
52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
www.legendengineering.com

LEGEND ENGINEERING

JENNY CHAN RESTAURANT
ADS DETAILS
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT 84045

PROFESSIONAL ENGINEER
No. 11316562-2202
CALVIN S. JOHNSON
STATE OF UTAH

SHEET:
C-6

BUILDING PERMIT 2/7/2020
DATE: 2/7/2020

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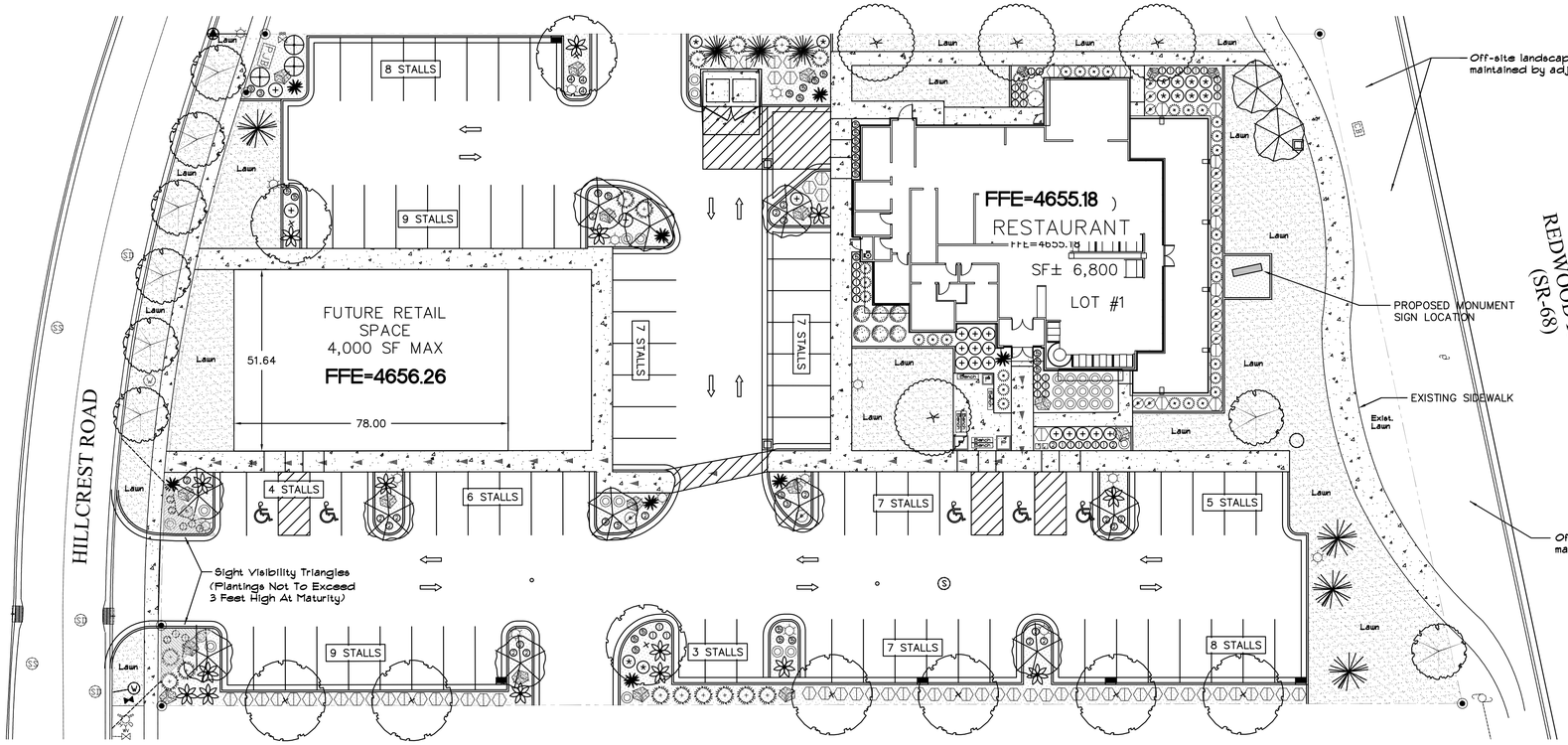


Plant List (TREES)

Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
4		Gleditsia triacanthos 'Imperial'	Imperial Honeylocust	2" Caliper 10' Height	Full Head Crown Straight Trunk
4		Pinus flexilis 'Vanderwolfe'	Vanderwolfe Limber Pine	8'-10' Height B & B	Full Throughout Specimen
3		Pinus nigra 'Arnold Sentinel'	Arnold Sentinel Pine	8'-10' Height B & B	Full Throughout Specimen
8		Prunus virginiana 'Canada Red'	Canadian Red Cherry	2" Caliper 8' Height	Full Head Crown Straight Trunk
13		Pyrus calleryana 'Chanticleer'	Chanticleer Flowering Pear	2" Caliper 8' Height	Full Head Crown Straight Trunk
9		Zelcova serrata 'Green Vase'	Green Vase Zelcova	2" Caliper 10' Height	Full Head Crown Straight Trunk

Plant List (SHRUBS)

Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
16		Berberis thund. 'Crimson Pygmy'	Crimson Pygmy Barberry	5 Gallon	15"-18" Height
2		Cornus alba 'Ivory Halo'	Ivory Halo Dogwood	5 Gallon	18"-24" Height
15		Physocarpus o. 'Summer Wine'	Summer Wine Ninebark	5 Gallon	24"-30" Height
30		Pinus mugho 'Slowmound'	Slowmound Mugo Pine	5 Gallon	18"-24" Spread
15		Rhus aromatica 'Grow-Low'	Grow Low Sumac	2 Gallon	18"-24" Spread
6		Rosa x. 'Rainbow Knockout'	Knock Shrub Rose	5 Gallon	15"-18" Height
12		Caryopteris clandonensis	Blue Mist Spiraea	5 Gallon	18"-24" Height
18		Spiraea b. 'Anthony Waterer'	Anthony Waterer Spiraea	5 Gallon	18"-24" Height
8		Yucca filam. 'Ivory Tower'	Ivory Tower Yucca	5 Gallon	18"-24" Height

Plant List (ORNAMENTAL GRASSES)

Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
70		Calamagrostis 'Karl Foerster'	Karl Foerster Feather Grass	5 Gallon	24"-30" Height
3		Panicum virgatum 'Shenandoah'	Shenandoah Switch Grass	5 Gallon	24"-30" Height
29		Pennisetum o. 'Hameln'	Hameln Dw. Feather Grass	2 Gallon	12"-15" Height

Plant List (PERENNIALS)

Quan.	Symbol	Botanical Name	Common Name	Size	Remarks
43		Hemerocallis Stella d'Oro	Stella d'Oro Day Lily	1 Gallon	12"-15" Height
23		Lavandula 'Munstead'	Munstead Lavender	1 Gallon	12"-15" Height
6		Penstemon e. 'Firecracker'	Firecracker Penstemon	1 Gallon	12"-15" Height
3		Rudbeckia f. 'Goldstrum'	Black-Eyed Susan	1 Gallon	12"-15" Height
26		Salvia 'East Friesland'	East Friesland Salvia	1 Gallon	10"-12" Height

** Plant material quantities are provided for convenience in bidding ONLY!! The contractor shall provide and install all plant materials either shown or noted on the plans, and of the sizes and heights specified.

Planting Notes

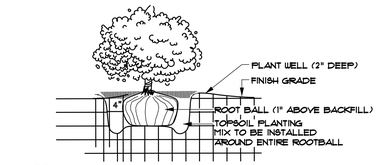
1. All lawn areas shall receive a 4 inch depth of topsoil, shrub planting areas an 8 inch depth of topsoil. If topsoil is not available on-site, t must be imported from an approved local source. All topsoil shall be of a sandy loam consistency. Provide a chemical analysis for all topsoil for approval.
2. Prior to placement of topsoil, all subgrade areas shall be loosened by scarifying the soil to a depth of 6 inches, by the use of mechanical means, in order to create a transition layer between existing and new soils.
3. All plant material holes shall be dug twice the diameter of the rootball and 6 inches deeper. Excavated material shall be removed from the site.
4. Plant backfill mixture shall be composed of 3 parts topsoil to 1 part humus additive (Soil Pep/or equal), and shall be rotary mixed on-site prior to installation.
5. Plant fertilizer shall be 'Agriform' brand 21 gram tablets used as per manufacturers recommendations.
6. Upon completion of planting operations, all shrub pits and tree wells shall receive a 4 inch depth of loose planting mixture as a cover. The overall shrub beds themselves (beyond plant wells) shall receive a 4" depth of decorative stone surfacing over Pro-5 weed barrier fabric. The decorative stone materials to be bid are as shown in the legend. These materials are available through several local suppliers. Provide a "Mock-Up" of the various proposed materials for approval.
7. In decorative stone beds, cut the fabric from around the water well of each plant, then apply fine ground bark inside water well. The remainder of the planter bed shall receive the depth of decorative stone.
8. Landscape maintenance shall be required for a period through the second mowing of the lawn (30 days minimum) and shall include mowing, weeding, pruning and one fertilization.
9. The contractor shall comply with all warranties and guarantees set forth by the Owner, and in no case shall that period be less than one year following the date of completion and final acceptance.

General Notes

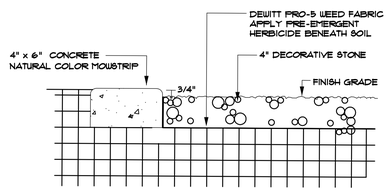
1. All bidding landscape contractors shall have a minimum of 5 years experience in the installation of commercial landscape and irrigation projects, and be able to supply the necessary staff to perform all tasks associated with these drawings, and in a professional and timely manner.
2. The landscape contractor, at all times, shall have personnel on-site experienced in being able to interpret the drawings correctly, and accurately measure the design layout using the specified scale.
3. The contractor shall verify the exact location of all existing and proposed utilities, and all site conditions prior to beginning work. The contractor shall coordinate his work with the project manager and all other contractors working on the site.
4. The finish grade of all planting areas shall be smooth, even and consistent, free of any humps, depressions or other grading irregularities. The finish grade of all landscape areas shall be graded consistently 1/2" below all walks, curbs, etc.
5. The contractor shall provide all materials, labor and equipment required for the proper completion of all landscape work as specified and shown on the drawings.
6. All plant materials shall be approved prior to planting. The Owner/Landscape Architect has the right to reject any and all plant material not conforming to the specifications.
7. The contractor shall plant all plants per the planting details, stake/guy as shown. The top of the rootballs shall be planted flush with the finish grade.

Sub-Grade Requirements

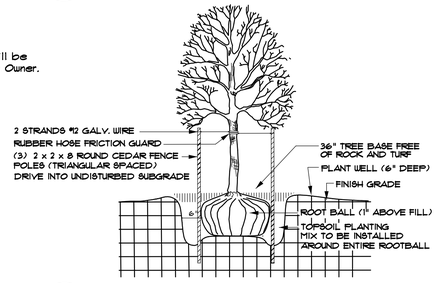
1. LAWN AREAS : Eight (8) inches below finish grade. This will allow for the installation of a four inch depth of topsoil along with the sodding material, leaving it slightly below finish grade and concrete areas. finish grade and concrete areas.
2. SHRUB AREAS : Twelve (12) inches below finish grade. This will allow for the installation of an eight inch depth of topsoil along with a four inch depth of bark mulch or decorative stone, leaving it slightly below finish grade and concrete areas.
3. SUB-GRADE COORDINATION : The Landscape contractor shall meet early on in the construction process with the site grading contractor, in order to ensure that all sub-grades, prior to final topsoil placement, are provided. Any discrepencies or questions shall be discussed and resolved at that time. Landscape operations shall not begin until the specified sub-grade elevations have been provided.



1 / L-1 Shrub Planting
N. T. S.



2 / L-1 Mowstrip / Stone Mulch
N. T. S.



3 / L-1 Tree Planting
N. T. S.

Landscape Calculations

LOT AREA	65,095 S.F.	1.49 Acres
LANDSCAPE AREA	16,860 S.F.	25.9 %
BREAKDOWN :		
LAWN AREA	10,738 S.F.	63 %
PLANTING AREA	6,122 S.F.	37 %

Drought Plant Materials

TREES :	41 TOTAL	100 %
Required	21	50 %
Provided	28	69 %
SHRUBS/OTHERS :	325 TOTAL	100 %
Required	162	50 %
Provided	317	98 %

Legend

Symbol	Description	Remarks
	Landscape Boulder / 4' Min. Dia. Size / Individually Placed	Boulder Type And Color Shall Be From Brown's Canyon Source (Or Equal) Blonde-Tan Colored Quartzite, Block Edges (Not Rounded).
	4" x 6" Extruded Concrete Mowstrip / Natural Color	Install In Straight True Lines And Uniform Curves, & Between All Lawn And Shrub Areas. Compact Sub-grade To 90% Prior To Installation.
Laun	New Lawn - Provide Drought Sodding Mixture	Install In Areas Shown To A Depth Of 4 Inches Over "DeWitt" Brand Weed Barrier Fabric. Submit Beige/Tan Sample Color For Approval.
No Hatch	New Shrub - Stone Area / 1 1/2" Min. Size / Light Brown - Tan	Install In Areas Shown To A Depth Of 4 Inches Over "DeWitt" Brand Weed Barrier Fabric. Rock To Be A "Calico" Product Or Equal.
	New Shrub - Stone Area / 2" Min. Size / Medium Brown	Install In Areas Shown To A Depth Of 4 Inches Over "DeWitt" Brand Weed Barrier Fabric. Rock To Be A "Calico" Product Or Equal.
P	New Landscape Planter / By Owner	Exact Size & Specification Item To Be Determined By Owner. Contractor To Coordinate Installation.
Bench	New Landscape Bench / By Owner	Exact Size & Specification Item To Be Determined By Owner. Contractor To Coordinate Installation.
	New Concrete Stepping Pad / 18"x18" Exposed Aggregate	Install In Locations Shown With 6" Spacing Between Pads And From Adjacent Concrete Surfaces.

Submittal Requirements

1. The contractor shall provide to the Owner/Engineer product samples of all landscape materials such as boulders, decorative stone, bark mulches, weed barrier fabric, soil ammendments & import topsoil in order to obtain approval to be used on the project, and prior to shipment to the site. Failure to provide this in a timely manner will in no way affect or delay the construction schedule and time for project completion.

Landscape Architect

RDL Design Company, Inc.
1020 East Yale Avenue
Salt Lake City, Utah 84105
Phone : 801-647-3114
Email : rdldesign@comcast.net

CALL BEFORE YOU DIG! BLUE STAKES 1-800-662-4111

N

0 20 40 60
Scale : 1" = 20'-0"

NO.	REVISIONS	BY	DATE
	PROJECT ENGINEER: LB	DESIGNER: LB	

LEGEND ENGINEERING, LLC
52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
TOLL FREE FAX: 1-866-310-9972
www.legendengineering.com

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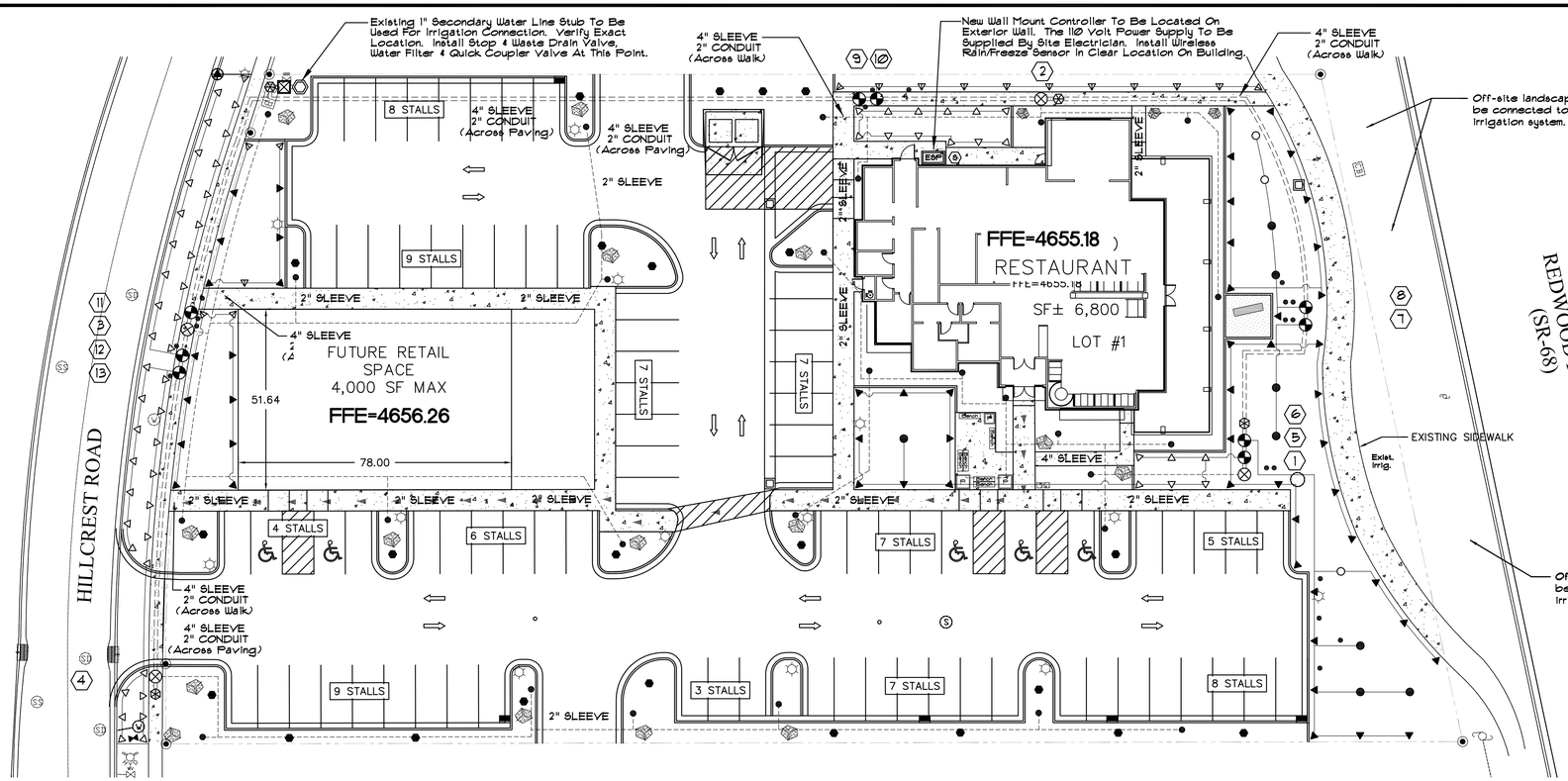
JENNY CHAN RESTAURANT
LANDSCAPE PLAN
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT. 84045

STATE OF UTAH — LICENSED LANDSCAPE ARCHITECT — License No. 10536990 — 01-14-20

SHEET: L-1

FILE NAME: 01/14/20 | SCALE: 1"=16'



Sprinkler List

Symbol	Model-Number	Description	Remarks
●	Rainbird EMT-6	Multi-Outlet Emmision Device	Amount & Type Of Emitters As Req'd
▽	Rainbird RD-04-NP	Pop-Up Sprayhead Sprinkler	#HE-VAN-10 Series Nozzle As Required
▽	Rainbird RD-04-NP	Pop-Up Sprayhead Sprinkler	#HE-VAN-12 Series Nozzle As Required
▼	Rainbird RD-04-NP	Pop-Up Sprayhead Sprinkler	#HE-VAN-15 Series Nozzle As Required
◓	Rainbird 100-PESB-R	Remote Control Valve	1" Size In Valve Box With Gravel Sump
⊗	Rainbird XCZ-100-PRBR	Drip Control Zone Kit	1" Size In Valve Box With Gravel Sump
⊛	Rainbird 33DNP	Quick Coupler Valve	3/4" Size In Valve Box With Gravel Sump
●	Rainbird (Or Equal)	PVC To PE Pipe Connection	Install Throughout Various Planting Beds
ESP	Rainbird ESP-4ME	Exterior Cover Controller	Modular / 110 Volt Power By Others
S	Rainbird WR2	Rain/Freeze Wireless Sensor	Install In Clear Bldg. Exterior Location
⬡	Mueller Oriseal Mark II	Stop & Waste Valve	1" Size / Install Inside Curb Box
⊠	AMIAD 2" T Series	Semi-Automatic Water Filter	Install Below Grade In Jumbo Sized Box
======	Schedule 40 PVC	Main Service Line	1 1/2" Size Throughout
———	Schedule 40 PVC	Lateral Circuit Line	Pipe Size As Required / 1" Min. Size

Sleeving Installation Notes

Contractor shall coordinate the installation of sleeving with the installation of concrete flatwork and paving. All sleeving is by contractor unless otherwise noted. Install sleeving based upon the sizing guide below:

PIPE SIZE / WIRE QUAN.	REQUIRED SLEEVING
3/4" - 1 1/4" Piping	1-2" PVC Sleeve
1 1/2" - 2" Piping	1-4" PVC Sleeve
1-25 Control Wires	1-2" PVC Sleeve

Pipe GPM Design Guide

Pipe Size		Water Flow (GPM)
(Velocities Not To Exceed 5 Feet/Second)		
1"	Size / NA	Ø - 12 GPM
1 1/4"	Size / ●	12 - 22 GPM
1 1/2"	Size / ●●	22 - 30 GPM

NOTE: Contractor shall perform all pipe sizing using the above design guideline. 1" minimum size piping to be used with schedule 40 pvc.

Emitter Installtion Guide

PLANT SIZE	EMITTER DEVICE	QUANTITY
1 Gallon Shrub Plant Material	XB-10PC (1 Gal./Hr.)	Two Each
5 Gallon Shrub Plant Material	XB-20PC (2 Gal./Hr.)	Two Each
7 Gallon Shrub Plant Material	XB-20PC (2 Gal./Hr.)	Three Each

Final selection of emitter types and quantity to be the responsibility of the irrigation contractor, in order to provide the optimum amount of precipitation to each plant, in addition to complying with plant warranties.

Sprinkler Notes

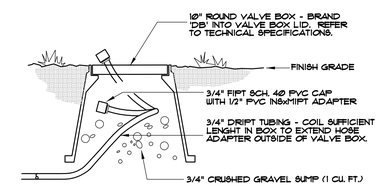
1. All main service lines and pipe sleeving shall be buried minimum 18 inches below finish grade, all lateral circuit lines minimum 12 inches below finish grade. Backfill all lines with sand or lump free soil. All clean material shall be settled and compacted to proper finish grade. All piping shall be capable of winterization by the use of compressed air / "Blown Out".
2. All control valves and quick coupler valves shall be installed in fiberglass control boxes with bolt down lids. Washed gravel shall be installed in the box bottom to a depth of 8 inches.
3. All sprayheads (if used) shall be installed using (2) 1/2" barbed ells, (1) 1/2" marlex ell, and 1/2" swing pipe cut to the appropriate length (12" min.-24" max.). Quick coupler valves shall be installed using the appropriate sized swing joint assembly including 3 marlex ells, and (1) 12 inch schedule 80 pvc riser.
4. The design and layout of all sprayheads shall provide for a minimum 60% DU (distribution uniformity).
5. All sprayheads adjacent to hardscape paving shall be spaced 1 to 3 inches away from paving.
6. Control valve wire shall be #14 single conductor white for the common wire, and #14 single conductor for the hot wire. Use red for the hot wire on all lawn control valve zones, green for "drip" zones and blue (2) as spares along the entire main service line. Spare wires shall be 'home run' to the controller. All wiring shall be UF UL rated. All connections shall be made with water tight connectors, and contained in control valve boxs. Provide 36" extra wire length at each remote control valve in valve box. Install control wiring with service line where possible, taped to the underside of the pipe at regular intervals. Provide slack n control wires at all changes in direction.
7. Contractor shall locate the irrigation controller per the Owner's direction. The 2" conduit from the controller to the nearest landscape area shall be installed by either irrigation or building electrical contractor.
8. Install 3/4" manual drain valves at all low points along the main service line. Use a 2 inch schedule 40 pvc sleeve over the valve with a valve marker cap. Install a two cubic foot gravel sump at the valve bottom.
9. All sprinkler lines passing under paved and other hard surfaces shall be installed in schedule 40 pvc sleevings a minimum of two sizes larger than the pipe size to pass through it. The sleeve depth shall be the same as the deepest pipe to pass through.
10. Upon completion of the installation, provide the Owner with a complete set of "As-Built" drawings showing any and all deviations from the original plans. It shall also show the locations of main service lines, control valves, wire routes, and manual drain valves.
11. It shall be the responsibility of the sprinkler contractor to demonstrate to the Owner the proper winterization and start-up procedures for the entire system prior to final payment.
12. The contractor shall comply with all state and local plumbing codes, and shall honor all warranties and guarantees set forth by the Owner.

General Notes

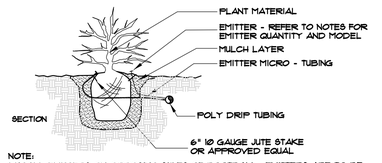
1. The contractor shall verify the exact location of all existing and proposed utilities, and all site conditions prior to beginning construction. The contractor shall coordinate their work with the project manager and all other contractors working on the site.
2. The contractor shall verify the exact location and size of the irrigation waterline stub, and the available water pressure at the point of connection. Any conflicts from what is shown on the plans shall be brought to the attention of the engineer for a resolution.
3. The contractor shall be responsible for the installation of all irrigation sleevings under paving and other hard surface areas, whether shown on the plan, or required otherwise. This shall also include the installation of electical conduit(s) from the controller location to the nearest planting area.
4. The controller shall be hardwired to the available 110 volt power source, with all work being performed per state and local codes. The controller shall be located in a convenient location as determined by the Owner and site/building contractor.
5. The contractor shall provide all materials, labor and equipment required for the proper completion of all irrigation work as specified and shown on the drawings.

Submittal Requirements

1. The contractor shall provide to the Owner/Engineer product data sheets of all irrigation materials such as control valves, control wire, quick coupler valves, control valve boxes, controller(s), pvc piping, drip tube piping, drip emitters & backflow prevention devices in order to obtain approval to be used on the project, and prior to any shipment to the site. Failure to provide this in a timely manner will in no way affect or delay the construction schedule and time for project completion.
2. All irrigation materials shall be located for the project a minimum of 60 days prior to shipment to the site. The contractor shall provide to the Owner/Engineer written confirmation of this a minimum of 30 days prior to beginning work on the project. No substitutions will be considered following this time period.

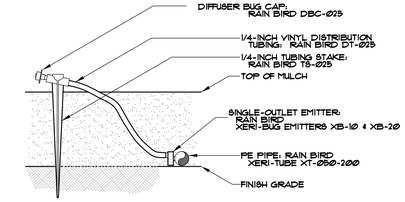


1 / L-2 Compression Flush Cap
N. T. S.



NOTE:
INSTALL EMITTERS ON OPPOSING SIDES OF ROOTBALL. EMITTERS ARE TO BE INSTALLED TO CLEAR SURFACE BY A MINIMUM OF 1" AND A MAXIMUM OF 2". FLUSH ALL LINES THOROUGHLY, INCLUDING EMITTER MICRO-TUBING PRIOR TO EMITTER INSTALLATION. IF PLANTING ON A 4:1 SLOPE OR GREATER, INSTALL BOTH EMITTERS ON UPHILL SIDE OF ROOTBALL.

2 / L-2 Drip Emitter
N. T. S.



NOTE:
1. USE RAIN BIRD BUG GUN MODEL EMA-BG TO INSERT EMITTER DIRECTLY INTO XERI-TUBE OR RAIN TUBE TUBING.

3 / L-2 Emitter Into Xeri-Tube
N. T. S.

Irrigation Controller Valve Schedule

VALVE DATA				HYDRAULIC DATA			
#	Size	Sta. #	Head Type	Landscape Zone	Prec. Rate-inch/hr	GPM	PSI
1	1.0"	1	Drip	Plantings-Sun	NA	5.0	30
2	1.0"	2	Drip	Plantings-Sun	NA	5.0	30
3	1.0"	3	Drip	Plantings-Sun	NA	5.0	30
4	1.0"	4	Drip	Plantings-Sun	NA	5.0	30
5	1.0"	5	Spray	Lawn-Sun	1.58	25.0	30
6	1.0"	6	Spray	Lawn-Sun	1.58	30.0	30
7	1.0"	7	Spray	Lawn-Sun	1.58	30.0	30
8	1.0"	8	Spray	Lawn-Sun	1.58	30.0	30
9	1.0"	9	Spray	Lawn-Sun	1.58	15.0	30
10	1.0"	10	Spray	Lawn-Sun	1.58	15.0	30
11	1.0"	11	Spray	Lawn-Sun	1.58	30.0	30
12	1.0"	12	Spray	Lawn-Sun	1.58	15.0	30
13	1.0"	13	Spray	Lawn-Sun	1.58	15.0	30

Landscape Architect
RDL Design Company, Inc.
1020 East Yale Avenue
Salt Lake City, Utah 84105
Phone : 801-647-3114
Email : rdldesign@comcast.net

CALL BEFORE YOU DIG
BLUE STAKES 1-800-662-4111

N

0 20 40 60
Scale : 1" = 20'-0"

NO.	REVISIONS	BY	DATE

PROJECT ENGINEER: LB DESIGNER: LB

LEGEND ENGINEERING, LLC
52 WEST 100 NORTH
HEBER CITY, UT 84032
PHONE: 435-654-4828
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www.legendengineering.com

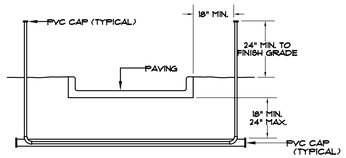
LEGEND ENGINEERING

JENNY CHAN RESTAURANT
IRRIGATION PLAN
2092 N. HILLCREST ROAD, SARATOGA SPRINGS, UT. 84045

STATE OF UTAH — REGISTERED — 165390 — LANDSCAPE ARCHITECT — 01-14-20

SHEET: L-2

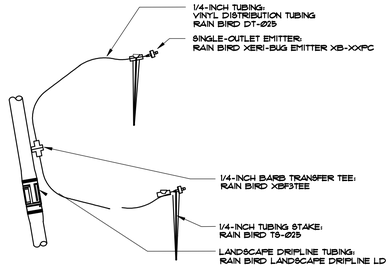
FILE NAME: 01/14/20 SCALE: 1"=16'



NOTES:
1. ALL PVC IRRIGATION SLEEVES TO BE SCHEDULE 40 PVC PIPE.
2. ALL JOINTS TO BE SOLVENT WELDED AND WATERTIGHT.
3. WHERE THERE IS MORE THAN ONE SLEEVE, EXTEND THE SMALLER SLEEVE TO 24-INCHES MINIMUM ABOVE FINISH GRADE.
4. MECHANICALLY TAMP TO 95% PROCTOR.

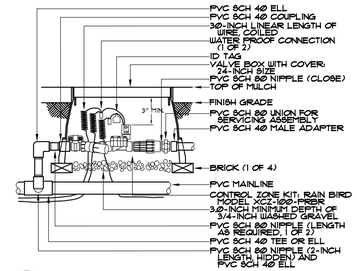
1 / L-3 Sleeving

N. T. S.



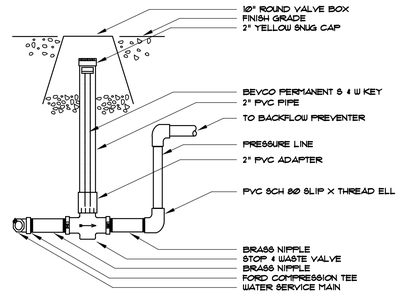
2 / L-3 Dripline - Additional Emitters

N. T. S.



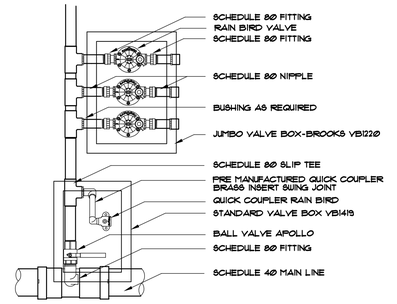
3 / L-3 Xerigation Control Zone Kit

N. T. S.



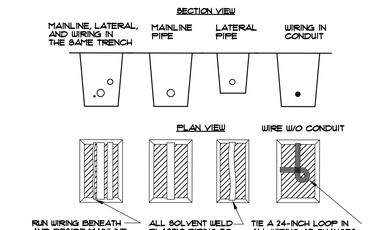
4 / L-3 Stop & Waste Valve

N. T. S.



5 / L-3 Valve Manifold

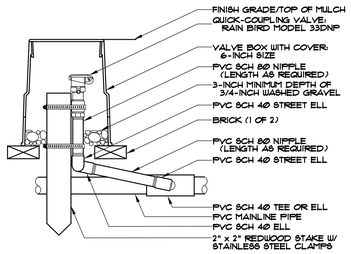
N. T. S.



NOTES:
1. SLEEVE BELOW ALL HARDSCAPE ELEMENTS WITH SCHEDULE 40 PVC PIPE TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE WITHIN.
2. FOR PIPE AND WIRE BURIAL DEPTHS SEE SPECIFICATIONS.

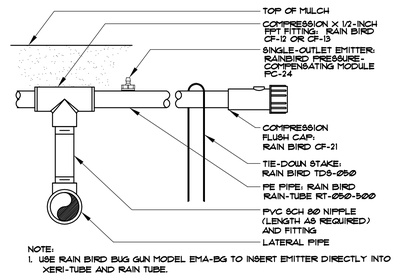
6 / L-3 Pipe & Wire Trenching

N. T. S.



7 / L-3 Quick Coupling Valve

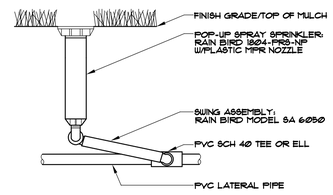
N. T. S.



NOTE:
1. USE RAIN BIRD BUG GUN MODEL EMA-BG TO INSERT EMITTER DIRECTLY INTO XERI-TUBE AND RAIN TUBE.

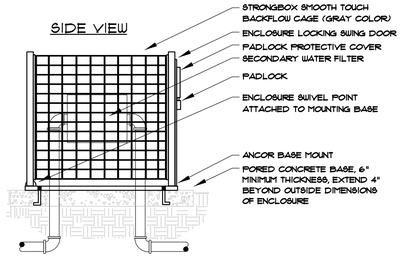
8 / L-3 PVC To PE Pipe Connection

N. T. S.



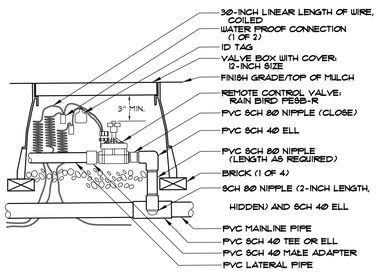
9 / L-3 Pop-Up Spray Sprinkler

N. T. S.



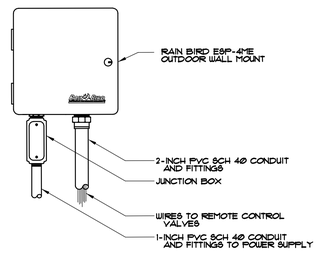
10 / L-3 Connection Enclosure

N. T. S.



11 / L-3 Remote Control Valve

N. T. S.



12 / L-3 Wall Mount Controller

N. T. S.

NO.	REVISIONS	BY	DATE

PROJECT ENGINEER: LB DESIGNER: LB

LEGEND ENGINEERING, LLC
52 WEST 100 NORTH
HEBER CITY, UT 84032
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JENNY CHAN RESTAURANT
IRRIGATION DETAILS
2082 N. HILLCREST ROAD, SARATOGA SPRINGS, UT. 84045

STATE OF UTAH
JOSEPH D. LEGEND
168360
01-14-20
LICENSED LANDSCAPE ARCHITECT

SHEET: L-3

FILE NAME: 01/14/20 SCALE: 1"=16'

GENERAL NOTES:

1. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED BUILDING PERMITS, SCHEDULING INSPECTIONS AND PROVIDING MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH ALL APPLICABLE SECTIONS OF THE INTERNATIONAL BUILDING CODE (IBC) AND APPLICABLE REGULATIONS ENFORCED BY LOCAL AND STATE AGENCIES.
2. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS ON SITE AND REPORT ANY DISCREPANCIES AND/OR UNFORESEEN ADVERSE CONDITIONS REQUIRING DRAWINGS AND/OR CONSTRUCTION MODIFICATION IN WRITING TO THE ARCHITECT'S AND CONSTRUCTION MANAGER'S OFFICE.
3. ALL NEW CONSTRUCTION AND MODIFICATIONS TO ANY EXISTING CONSTRUCTION OF SYSTEMS RELATED TO ANY CONSTRUCTION MUST CONFORM TO THE APPROPRIATE CONSTRUCTION, ENERGY, MECHANICAL, ELECTRICAL, STRUCTURAL, CIVIL OR ANY OTHER BUILDING RELATED STATE OR LOCAL CODES / ORDINANCES THAT ARE ADOPTED AND ENFORCEABLE.
4. REGARDING FINISH AT CONCRETE FOUNDATIONS WALLS, PROVIDE RUBBED FINISH IMMEDIATELY AFTER FORMS AR REMOVED - VERIFY W/ ARCHITECT PRIOR.
5. EXTEND SHAFT WALLS, STAIR WALLS, AND CORRIDOR WALLS TO BOTTOM OF DECK. FIRE TAPE ONLY AT UNEXPOSED AREA OR ABOVE FINISHED AREAS.
6. ALL ITEMS THAT PENETRATE FIRE RATED CEILINGS (LIGHTS & ETC.) SHALL BE TENTED WITH 5/8" TYPE 'X OR TYPE 'C' GYPSUM BOARD.
7. CONTRACTOR TO PROVIDE WOOD BACKING (FRTW WHERE REQUIRED) FOR ALL ITEMS ATTACHED TO WALLS.
8. "PROVIDE" SHALL REPRESENT THE REQUIREMENT TO SUPPLY AND INSTALL THE ITEM INDICATED.
9. ANY AND ALL QUESTIONS REGARDING THESE DRAWINGS SHALL BE DIRECTED TO THE ARCHITECT OR OWNER'S REPRESENTATIVE.
10. THE ARCHITECT & OWNER ASSUME NO RESPONSIBILITY FOR ANY UNFORESEEN EXISTING CONDITIONS, ANY CONTRACTOR' WORK, WORKMEN, SUBCONTRACTORS OR ANY PERSON CONNECTED WITH ANY CONSTRUCTION ON THIS WORK.
11. PROVIDE 10# ABC FIRE EXTINGUISHERS (PER NFPA 10) EVERY 3,0000 SQ. FT. MAX WITH A MAX. TRAVEL DISTANCE OF 75' TO AN EXTINGUISHER - TYPICAL - VERIFY EXACT LOCATIONS WITH THE FIRE MARSHAL.
12. DIMENSIONS ARE TO FACE OF FRAMING TO FACE OF FRAMING / CONCRETE UNLESS OTHERWISE NOTED.
13. PROVIDE FIRE SAFING AND SEALANTS PER MFR'S INSTRUCTIONS AT PENETRATION OF ALL WALLS REQUIRING FIRE RESISTANCE AS INDICATED. FIRE RESISTANCE OF FIRE SAFING AND SEALANTS SHALL MEET THAT OF THE WALL IN WHICH PENETRATION OCCURS.
14. SEE SHEET A3.2 FOR WALL TYPES DETAILS.
15. VERIFY WITH ARCHITECT AND MANUFACTURER EXACT ROUGH OPENING DIMENSIONS FOR ALL BUILT IN ITEMS.
16. COORDINATE DUCT INSTALLATION WITH STRUCTURAL, ELECTRICAL, PLUMBING AND FIRE SPRINKLER INSTALLATION.
17. FIRE RATED THRU-PENETRATIONS MUST BE TREATED ACCORDING TO EACH MANUFACTURER'S SPECIFICATION FOR TYPE AND SIZE OF MATERIAL AND THE ANNULAR SPACE REQUIREMENTS OF EACH PENETRATION.
18. SEE PLUMBING DRAWINGS FOR TYPICAL FLOOR DRAIN DETAIL.
19. ALL GYPSUM BOARD EDGES TO BE SQUARE EDGE UNLESS OTHERWISE NOTED.
20. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES, ETC.
21. MAINTAIN FIRE PROTECTION SYSTEM DURING CONSTRUCTION AND TAKE ALL PRECAUTIONS TO PROTECT WORKMEN AND STRUCTURES.
22. ALL WINDOW COVERINGS, SECURITY SYSTEM / ELECT. KEY CARD ACCESS, TV'S AND FF&E TO BE PROVIDED AND INSTALLED BY OWNER.
23. CONTRACTOR TO PROVIDE REINFORCING AT WALLS BEHIND DOOR STOPS / BUMPERS
24. LANDSCAPE DRAWINGS TO BE PROVIDED BY OWNER. SEE DRAWINGS BY OTHERS - TYPICAL.
25. FIRE SPRINKLER STANDPIPES, VALVE GAUGES, ETC MUST NOT ENCROACH INTO THE REQUIRED STAIRWAY WIDTH RADIUS.

ABBREVIATIONS

AB	ANCHOR BOLT	HT, HGT	HEIGHT
A/C	AIR CONDITIONING	HVAC	HEATING / VENTILATION / A/C
AC	ACOUSTIC(AL)	ID	INTERIOR DESIGNER
ACT	ACOUSTIC CEILING TILE	IN	INCH(ES)
ADD	ADDENDUM	INCL	INCLUDE(D), INCLUDING
ADJ	ADJACENT	INFO	INFORMATION
AFF	ABOVE FINISHED FLOOR	INS	INSULATE, INSULATION
ALUM	ALUMINUM	INT	INTERIOR
ALT	ALTERNATE, ALTERNATIVE	JT	JOINT
APPROVE	APPROVE(D), APPROVAL	LAM	LAMINATE
APPROX	APPROXIMATE(LY)	LAV	LAVATORY
ARCH	ARCHITECT(URAL)	MAX	MAXIMUM
AUTO	AUTOMATIC	MECH	MECHANICAL
BD	BOARD	MFR	MANUFACTURER
BET	BETWEEN	MTL	METAL
BLDG	BUILDING	MIN	MINIMUM
BOT	BOTTOM	MIR	MIRROR(ED)
CAB	CABINET	MISC	MISCELLANEOUS
CB	CERAMIC BASE	NO	NUMBER
CLG	CEILING	OC	ON CENTER
CLR	CLEAR(ANCE)	OPP	OPPOSITE
CTR	CENTER	PL	PLASTIC LAMINATE
CMU	CONCRETE MASONRY UNIT	PT	PAINT(ED)
COL	COLUMN	PSF	POUNDS PER SQ FT
CONC	CONCRETE	PSI	POUNDS PER SQ IN
CONST	CONSTRUCTION	PVC	POLYVINYL CHLORIDE
CONT	CONTINUE, CONTINUOUS	PWD	PLYWOOD
CONTR	CONTRACT(OR)	QTY	QUANTITY
COORD	COORDINATE, COORDINATOR	RA	RETURN AIR
CORR	CORRIDOR	RE	REFERENCE, REFER TO
CT	CERAMIC TILE	REINF	REINFORCE(D), REINFORCEMENT
DBL	DOUBLE	REP	REPRESENTATIVE
DEMO	DEMOLISH, DEMOLITION	REQ	REQUIRE(D), REQUIREMENT
DIA	DIAMETER	RM	ROOM
DIM	DIMENSION	SA	SUPPLY AIR
DN	DOWN	SCH	SCHEDULE
DR	DOOR	SEC	SECTION
DTL	DETAIL	SHT	SHEET
DWG	DRAWING	SIM	SIMILAR
EA	EACH	SPEC	SPECIFICATION(S)
ELEV, EL	ELEVATION	SQ	SQUARE
ELEC	ELECTRICAL	SS	STAINLESS STEEL
EQ	EQUAL	STD	STANDARD
EQUIP	EQUIPMENT	STL	STEEL
EXIST. EX.	EXISTING	STRUC	STRUCTURAL
EXT	EXTERNAL	SYM	SYMMETRIC(AL)
EWC	ELECTRIC WATER COOLER	SV	SHEET VINYL
FA	FRESH AIR	TEN	TENANT
FEC	FIRE EXTINGUISHER CABINET	T&G	TONGUE AND GROOVE
FFEC	FIXTURES / FURNISHINGS / EQUIPMENT CONTRACTOR	TEMP	TEMPERATURE
		THK	THICK(NESS)
FIN	FINISHED	THRU	THROUGH
FLR	FLOOR	TYP	TYPICAL
FOS	FACE OF STUD	UL	UNDERWRITERS LABORATORY
FRP	FIBER REINFORCED PANEL	UNFIN	UNFINISHED
FT	FOOT, FEET	UON	UNLESS OTHERWISE NOTED
GA	GAUGE	VAR	VARIABLE, VARIES
GALV	GALVANIZED	VERT	VERTICAL
GC	GENERAL CONTRACTOR	VIF	VERIFY IN FIELD
GL LAM	GLU LAMINATED BEAM	VIN	VINYL
GYB, GYP BD	GYPSUM WALL BOARD	W/	WITH
GYP	GYPSUM	W/O	WITHOUT
H	HIGH	WC	WATER CLOSET
HDWR	HARDWARE	WD	WOOD
HM	HOLLOW METAL		
HOR	HORIZONTAL		
HR	HOUR		

CODE INFORMATION

A NEW BUILDING FOR
BLOSSOM RESTAURANT
2082 NORTH HILLCREST ROAD
SARATOGA SPRINGS, UTAH

1. APPLICABLE CODES: 2018 IBC, 2018 IMC, 2017 NEC, 2018 IPC, 2018 IFC, 2018 IFGC, 2018 IECC, 2009 ICC/ANSI A117.1
   THE CONTRACTOR IS TO COMPLY WITH ALL APPLICABLE CODES, ORDINANCE RULES, REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF ADMINISTRATIVE AUTHORITIES HAVING JURISDICTION.
2. SEE STRUCTURAL DRAWINGS FOR SEISMIC DESIGN CATEGORY, SOIL PROFILE, WIND LOAD, EXPOSURE, ETC.

3.	OCCUPANCY	GROUP: A-2 RESTAURANT	IBC SECTION 303.3
4.	TYPE OF CONSTRUCTION	TYPE 5B	IBC TABLES 504.3, 504.4, 506.2, & 601
5.	ALLOWABLE AREA	ALLOWED: (A-2 SPRINKLED) 24,000 S.F. PROVIDED: 8,126 S.F.	IBC SECTION 506
6.	NUMBER OF STORIES	ALLOWED: (A-2 SPRINKLED) 2 STORIES PROVIDED: 1 STORY	IBC TABLE 504.4
7.	ALLOWABLE BUILDING HEIGHT	ALLOWED: (A-2 SPRINKLED) 60' MAX HEIGHT PROVIDED: 25'-4"	IBC TABLE 504.3
8.	NUMBER OF OCCUPANTS LEVEL 1 - A-2 RESTAURANT	217 OCCUPANTS (SEE CALC. BELOW AND SHEET A0.3)	IBC TABLE 1004.5
9.	EGRESS CAPACITY		
	GROUP A-2 RESTAURANT	NUMBER OF EXITS REQ'D: 2 PROVIDED: 4	IBC SECTION 1006
		COMMON PATH OF TRAVEL ALLOWED: 75' PROVIDED: LESS THAN 75'	IBC SECTION 1006.2.1
		EXIT ACCESS TRAVEL DISTANCE ALLOWED: 250' PROVIDED: LESS THAN 250'	IBC TABLE 1017.2
		STAIR EGRESS WIDTH REQUIRED: NOT PROVIDED PROVIDED: NOT PROVIDED	IBC SECTION 1005.3.1
		OTHER EGRESS WIDTH REQUIRED: 43.4" PROVIDED: 60" MIN. (BASED ON 217 OCC)	IBC SECTION 1005.3.2
10.	ACCESSIBILITY GROUP A-2 RESTAURANT	PROJECT CONTAINS 3 PUBLIC ENTRANCES. OF THIS 3 ARE REQUIRED TO BE ACCESSIBLE (60% MIN.) - PROJECT PROVIDES 3 THAT ARE ACCESSIBLE.	IBC SECTION 1105
11.	FIRE SPRINKLERS	REQUIRED - YES PROVIDED (NFPA 13)	IBC SECTION 903
12.	OCCUPANCY SEPARATION	BASED ON NON-SEPARATED USES	IBC SECTION 508.3
13.	FIRE RATINGS EXTERIOR WALLS ROOF AND CEILING ROOF MATERIAL STRUCTURAL FRAME BEARING WALLS NON BEARING WALLS EXTERIOR OPENINGS	NOT REQUIRED - NON RATED NOT REQUIRED - NOT RATED CLASS "B" RATED NOT REQUIRED - NOT RATED NOT REQUIRED - NOT RATED NOT REQUIRED - NOT RATED NOT REQUIRED - NOT RATED	IBC TABLE 601 & 602

OCCUPANCY CALCS.

LEVEL 1

(A-2 RESTAURANT) (SEE SHEET A0.3 FOR ADDITIONAL INFORMATION)

ACCESSORY STORAGE =	5 OCCUPANTS
DINING FIXED SEATS =	57 OCCUPANTS
DINING W/O FIXED SEATING (UNCONSENTRATED) =	125 OCCUPANTS
ASSEMBLY W/O FIXED SEATING (STANDING) =	21 OCCUPANTS
BUSINESS AREA =	1 OCCUPANTS
KITCHEN =	6 OCCUPANTS

TOTAL LEVEL 1 215 OCCUPANTS

TOTAL BUILDING 215 OCCUPANTS

MIN. PLUMBING REQTS

ASSEMBLY - RESTAURANTS

WATER CLOSETS			IBC SECTION 2902.1 & IPC SECTION 424.4
MALE - 1 PER 75	REQUIRED: 2	PROVIDED: 1 W.C. 2 URINALS	
FEMALE - 1 PER 75	REQUIRED: 2	PROVIDED: 2 W.C.	
UNISEX -	REQUIRED: 0	PROVIDED: 1 W.C.	
LAVATORIES			IBC SECTION 2902.1 & IPC SECTION 424.4
1 PER 200	REQUIRED: 2		
MALE -		PROVIDED: 2	
FEMALE -		PROVIDED: 2	
UNISEX -		PROVIDED: 1	
DRINKING FOUNTAINS			IBC SECTION 2902.1 & IPC SECTION 410.4
1 PER 500	REQUIRED: NA	PROVIDED: DRINKS PROVIDED AS SERVICE	
SERVICE SINKS			IBC SECTION 2902.1 & IPC SECTION 414.1
	REQUIRED: 1	PROVIDED: 1	

DEFERRED SUBMITTALS

THE CONTRACTOR SHALL SUBMIT THE FOLLOWING DOCUMENTS TO THE ARCHITECT AND ENGINEER OF RECORD FOR REVIEW AND APPROVAL AFTER THEY HAVE BEEN ENGINEERED BY OTHERS. THE DOCUMENTS MAY BE SUBMITTED AFTER THE BUILDING PERMIT IS ISSUED (IF ALLOWED BY THE BUILDING DEPARTMENT), BUT MUST BE SUBMITTED AND RECEIVED BACK AS APPROVED PRIOR TO COMMENCING FABRICATION OR CONSTRUCTION OF THE COMPONENTS.

1. FIRE ALARM PLAN SUBMITTAL
2. ROOF TRUSS SUBMITTAL
3. ROOF COVERING INSTALLATION DETAILS
4. FIRE SPRINKLERS
5. ALL OTHER NON-STRUCTURAL ELEMENTS NOT SPECIFICALLY LISTED BUT DEEMED NECESSARY BY THE BUILDING OFFICIAL.

GENERAL BUILDING NOTES

BUILDING DESCRIPTION

1 LEVEL WOOD FRAME BUILDING - SLAB ON GRADE

SQUARE FOOTAGE

LEVEL 1 BUILDING	=	6,840 SQ. FT.
PATIO DINING	=	1,286 SQ. FT.
TOTAL BUILDING	=	8,126 SQ. FT.

SYMBOLS

CENTER LINE DESIGNATION

BREAK LINE DESIGNATION

GRID LINE (A)

HIDDEN LINE

FOOTING LINE

BUILDING SECTION (1 / A1)
1 = SECTION No.
A1 = SHEET WHERE DRAWN

WALL SECTION (1 / A1)
1 = SECTION No.
A1 = SHEET WHERE DRAWN

DETAIL SECTION (1 / A1)
1 = SECTION No.
A1 = SHEET WHERE DRAWN

DETAIL REFERENCE (1 / A1)
1 = SECTION No.
A1 = SHEET WHERE DRAWN

DOOR DESIGNATION (101)
101 = DOOR No.

CONST / DEMO NOTE DESIGNATION (1.1)

WALL TYPE DESIGNATION (WT1)

ROOM NAME AND NUMBER (OFFICE 101)

INTERIOR ELEVATION KEY (A / D A7.1 B / C)

WOOD
(ROUGH CONTINUOUS MEMBER)

WOOD BLOCKING
(INTERRUPTED MEMBER)

PLYWOOD

GYPSUM BOARD

INSULATION (LOOSE OR BATT)

WALL IN PLAN

CONCRETE

CONCRETE BLOCK

BRICK

RIGID INSULATION

WINDOW

EARTH

GRANULAR FILL

SPECIAL INSPECTIONS REQ.

SEE SHEETS S0.0 & S0.1 FOR TRUSS LOADS @ SPECIAL INSPECTIONS.
SPECIAL INSPECTION IS REQUIRED FOR EIFS (IF APPLICABLE) PER IBC.

SUBMITTAL REVIEW PROCESS

PER IBC SECTION 107.3.4
HARRIS ARCHITECTURE, THE REGISTERED DESIGN PROFESSIONAL IN CHARGE SHALL BE RESPONSIBLE FOR REVIEWING AND COORDINATING SUBMITTAL DOCUMENTS PREPARED BY OTHERS, INCLUDING PHASED AND DEFERRED SUBMITTAL ITEMS, FOR COMPATIBILITY WITH THE DESIGN OF THE BUILDING.

PER IBC SECTION 107.3.4.1
DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING.

LICENSED ARCHITECT
CHRISTIAN HARRIS
#8359003-0301
03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

DRAWN BY
Author

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920 E 800 N, OREM UT 84097 | 801-377-6303 | WWW.HARRIS-ARCHITECTURE.COM

BLOSSOM RESTAURANT
PROJECT INFORMATION

03/18/2020

A0.1

8'-0"

6'-0"

A NEW BUILDING FOR

BLOSSOM RESTAURANT

SARATOGA SPRINGS UTAH

5'-0"

2'-0"

RENDERING - SUPPLIED ON CD BY ARCHITECT

ARCHITECT

HARRIS ARCHITECTURE

WWW.HARRIS-ARCHITECTURE.COM 801-377-6303

OWNER

JENNY CHAN
SARATOGA SPRINGS, UTAH

GENERAL CONTRACTOR

T.B.D.

STRUCTURAL ENGINEER

LEI
SPANISH FORK, UTAH

MECH/LUMB/ELEC ENGINEER

EPIC ENGINEERING
HEBER CITY, UTAH

CIVIL ENGINEER

CIVIL SOLUTIONS
PROVO, UTAH

NOTE: VERIFY ALL INFO WITH OWNER PRIOR TO FABRICATION OF SIGN

NOTE: VERIFY LOCATION AND DESIGN WITH CITY OF OREM SIGN ORDINANCES

LICENSED ARCHITECT CHRISTOPHER M. HARRIS #6359001-0301 03/18/20 STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

DRAWN BY
Author

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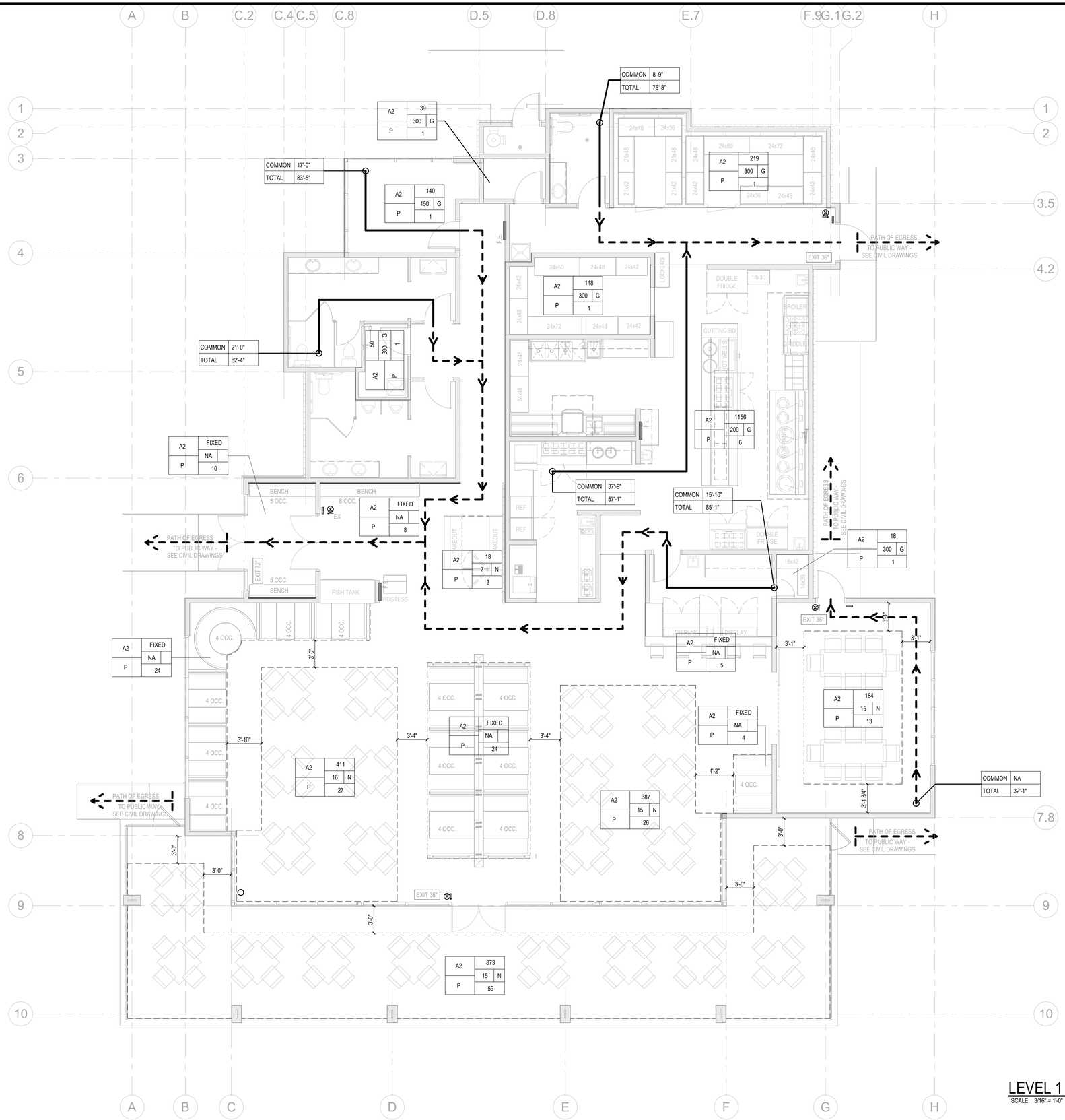
BLOSSOM RESTAURANT
PROJECT IDENTIFICATION SIGN

03/18/2020

A0.2



EGRESS LEGEND	
SYMBOL	DESCRIPTION
	COMMON PATH OF EGRESS TRAVEL DISTANCE
	EXIT ACCESS TRAVEL DISTANCE
EX	EXIT SIGN- CEILING OR WALL MOUNTED
FE	FIRE EXTINGUISHER (VERIFY EXACT LOCATION WITH LOCAL FIRE MARSHAL)
	TACTILE EXIT SIGN AS PER ICC 117.1

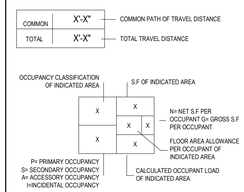
OCCUPANCY CALCS.		
LEVEL 1		
(A-2 RESTAURANT)		
ACCESSORY STORAGE	=	5 OCCUPANTS
DINING FIXED SEATS	=	57 OCCUPANTS
DINING W/O FIXED SEATS (UNCONSENTRATED)	=	125 OCCUPANTS
ASSEMBLY W/O FIXED SEATING (STANDING)	=	21 OCCUPANTS
BUSINESS AREA	=	1 OCCUPANTS
KITCHEN	=	6 OCCUPANTS
TOTAL LEVEL 1		215 OCCUPANTS
TOTAL LEVEL BUILDING		215 OCCUPANTS

SHEET SPECIFIC NOTES

NOTE: PROVIDE 10# ABC FIRE EXTINGUISHERS (PER NFPA 10) EVERY 3,000 SQ. FT. MIN WITH A MAX. TRAVEL DISTANCE OF 75' TO AN EXTINGUISHER - TYPICAL - VERIFY EXACT LOCATIONS WITH THE CITY OF SARATOGA SPRINGS FIRE MARSHAL. (ALL CABINETS WITHIN RATED WALLS TO BE FIRE RATED AS PER THE SPECIFICATIONS).

FIRE EXTINGUISHER CABINETS

NFPA GUIDELINES STATE THAT THE DISTANCE FROM FLOOR TO TOP OF EXTINGUISHER TO BE NO MORE THAN 5 FEET.



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BLOSSOM RESTAURANT

EGRESS / OCCUPANCY PLAN

03/18/2020

A0.3

LEVEL 1 EGRESS / OCCUPANCY PLAN
SCALE: 3/16" = 1'-0"

BUILDING PERMIT SET 03/18/2020

LICENSED ARCHITECT
CHRISTOPHER M. HARRIS
#6359003-0301
03/18/20
STATE OF UTAH

NOTE: CONTRACTOR TO VERIFY LOCATIONS OF SIDEWALKS, DRIVES AND CURBS WITH CIVIL DRAWINGS.

RECESS CONCRETE SLAB IN FIRE RISER ROOM MIN. 1.1/4" (TO ACCOUNT FOR SLOPE TO DRAIN) - VERIFY W/ GC

RECESS CONCRETE SLAB IN TOILET ROOMS MIN. 1.1/4" (TO ACCOUNT FOR SLOPE TO DRAIN) - VERIFY W/ GC

RECESS CONCRETE SLAB IN TOILET ROOMS MIN. 1.1/4" (TO ACCOUNT FOR SLOPE TO DRAIN) - VERIFY W/ GC

LINE OF CONC POUR-BACK AT COLUMN - TYP.

STRUCT COL SEE STRUCTURAL

STRUCTURAL COL SEE STRUCTURAL

4" CONCRETE SLAB ON GRADE RE: STRUCTURAL

6" CONCRETE SLAB ON GRADE RE: STRUCTURAL

2'-0"x2'-0" CONCRETE PIER RE: STRUCTURAL DRAWINGS

FLOOR SLAB / FOUNDATION NOTES:

1. SEE SITE PLAN FOR ALL SLABS OUTSIDE THE BUILDING FOOTPRINT.
2. SEE FIRST LEVEL FLOOR PLAN FOR REMAINING EXTERIOR AND INTERIOR DIMENSIONS OF THE BUILDING.
3. NOTE THAT THE DIMENSIONS SHOWN AT THE WINDOW OPENING CUT-OUTS ARE NOMINAL ONLY DUE TO DIFFERENCES IN ROUGH-OPENING SIZES BETWEEN WINDOW MFGRS. REFER TO SPECIFIC WINDOW MFGR USED ON PROJECT FOR ACTUAL WIDTH OF CUT OUT. TYPICAL.
4. SEE STRUCTURAL DWGS. FOR LOCATIONS OF CONTROL JOINTS AND CONSTRUCTION JOINTS (UNLESS OTHERWISE NOTED OR SHOWN ON THIS SHEET)
5. SEE STRUCTURAL DWGS. FOR CALL-OUTS AND MINIMUM SIZES ON FOUNDATION WALL SIZES WITH STRUCTURAL DRAWINGS.
6. SEE STRUCTURAL DRAWINGS FOR SLAB REQUIREMENTS, FOOTING SIZES, REINFORCING AND FOUNDATION NOTES. (FOOTINGS NOT SHOWN HERE - REFER TO STRUCTURAL FOOTING & FOUNDATION PLAN AND FOOTING SCHEDULE(S).
7. AS SHOWN ON THE STRUCTURAL ENGINEER'S DRAWINGS, WHERE WINDOW SILL IS AT FLOOR LEVEL (ELEV 100'-0"), THE GENERAL CONTRACTOR HAS THE OPTION TO EITHER CUT-OUT (DROP) FOUNDATION WALL AT THESE WINDOW LOCATIONS ONLY OR DROP ENTIRE FOUNDATION WALL SUCH THAT ENTIRE SLAB RUNS OVER TOP (SEE1.0 AND STRUCTURAL DETAIL SHEETS). THIS SLAB PLAN SHOWS THE FOUNDATION WALL CUTOUT / DROPPED ONLY AT THE ELEV 100'-0" WINDOW LOCATIONS.

GRAY HATCH DENOTES SLAB (TYP.)

FLOOR SLAB PLAN

SCALE: 3/16" = 1'-0"

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

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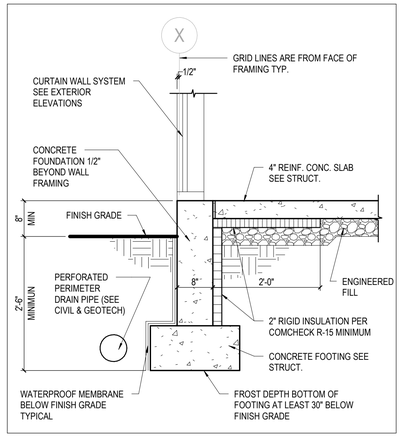
BLOSSOM RESTAURANT

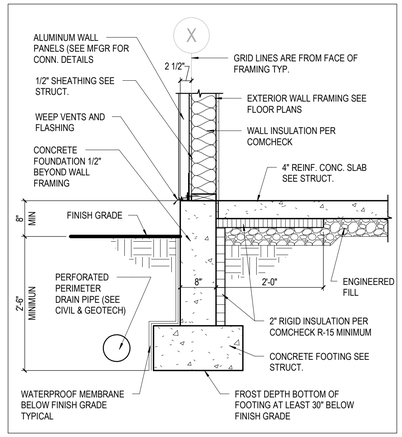
FLOOR SLAB PLAN

03/18/2020

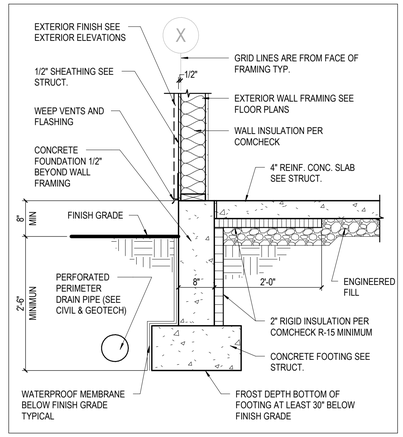
A1.0



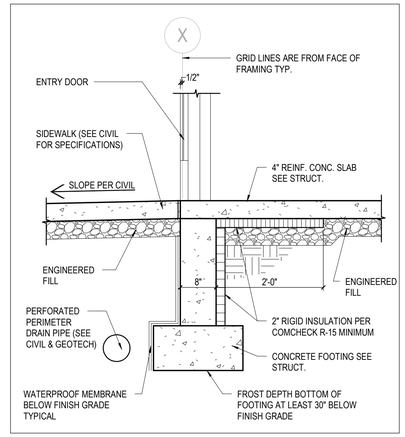
A A1.0A **8" FOUNDATION 'A'**
SCALE: 3/4" = 1'-0"



B A1.0A **8" FOUNDATION 'B'**
SCALE: 3/4" = 1'-0"



C A1.0A **8" FOUNDATION 'C'**
SCALE: 3/4" = 1'-0"



D A1.0A **8" FOUNDATION 'D'**
SCALE: 3/4" = 1'-0"

E A1.0A **8" FOUNDATION 'E'**
SCALE: 3/4" = 1'-0"

F A1.0A **8" FOUNDATION 'F'**
SCALE: 3/4" = 1'-0"

G A1.0A **8" FOUNDATION 'G'**
SCALE: 3/4" = 1'-0"

REVISIONS

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DRAWN BY
Author

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BLOSSOM RESTAURANT
FOUNDATION DETAILS

03/18/2020

A1.0A

LICENSED ARCHITECT
SCOTT D. HARRIS
#6359003-0301
03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

3/18/2020 8:38:00 AM

Q:\ACADFile\Chan Chinese Restaurant\$Working\Chan Chinese Restaurant.rvt

GENERAL NOTES:

1. SEE SHEETS A4.0 & A4.1 FOR DOOR SCHEDULE AND DOOR / WINDOW TYPES.
2. SEE SHEET A3.2 FOR WALL TYPES.
3. SEE SITE PLAN (BY CIVIL ENGINEER) FOR LOCATION / EXTENSION OF WALKS & ACCESSIBLE ROUTE PLAN.
4. CONTRACTOR TO FOLLOW MANUFACTURERS DETAILS FOR FLASHING, CAULKING FOR EXTERIOR WINDOWS AND DOORS.
5. SOILS ENGINEER TO PROVIDE INSPECTION OF THE SITE ONCE EXCAVATION HAS TAKEN PLACE TO DETERMINE IF ANY PERIMETER DRAINAGE SYSTEM AND WATERPROOFING MEMBRANE IS REQUIRED.
6. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS AS NECESSARY TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES, ETC.
7. RETURN THE ENDS OF ALL HANDRAILS TO EITHER THE WALL OR THE FLOOR - TYP.
8. FRAMING CONTRACTOR TO PROVIDE BACKING FOR ALL WALL - MOUNTED ITEMS.
9. DOORS TO BE FRAMED SUCH THAT 18" OF CLEAR SPACE EXISTS ON THE PULL SIDE. ON THE PUSH SIDE 12" OF CLEAR SPACE SHALL BE PROVIDED IF BOTH A CLOSER & LATCH ARE USED.
10. SEE STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS, SHEAR WALL LOCATIONS, HOLDOWN / STRAP LOCATIONS.
11. SEE STRUCTURAL DRAWINGS FOR LOCATIONS OF CONTROL JOINTS.
12. ALL SUB-CONTRACTORS TO VERIFY EXACT FLOOR TO FLOOR HEIGHTS AND FINISH CEILING HEIGHTS WITH OWNER AND GENERAL CONTRACTOR PRIOR TO CONSTRUCTION AND INSTALLATION.

LEVEL 1 FLOOR PLAN
SCALE: 3/16" = 1'-0"

BUILDING PERMIT SET 03/18/2020

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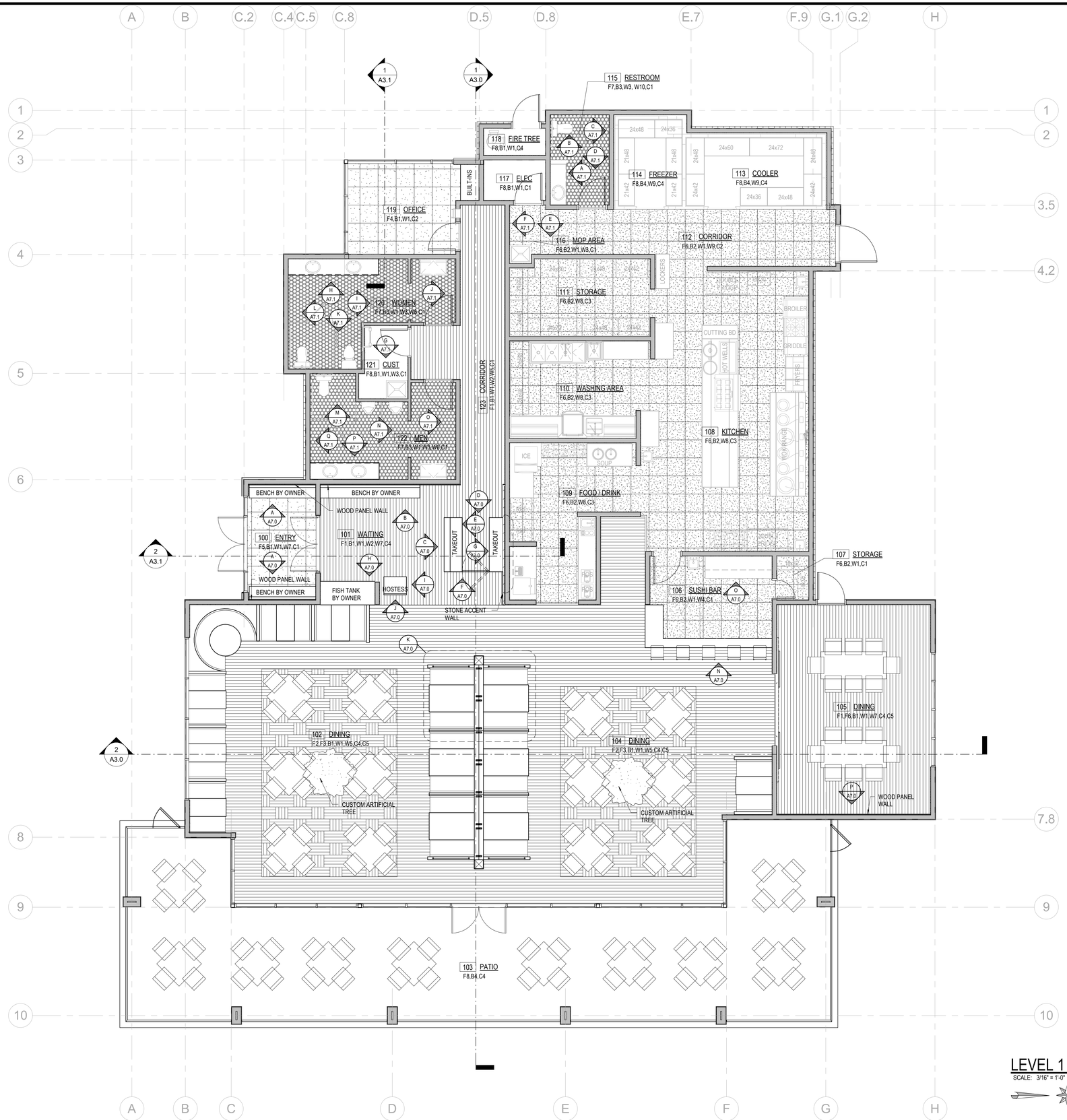
BLOSSOM RESTAURANT
LEVEL 1 DIMENSION FLOOR PLAN

03/18/2020

A1.1



FINISH SCHEDULE

FLOOR

F1	LVP1	RECEPTION / PRIVATE DINING, LIGHT 4063V SILK, 6x48, SOUNDSCAPE, 63121, SHAW, VERTICAL PATTERN
F2	LVP2	MAIN DINING, DARK, 4063V INK, SOUNDSCAPE, 63549, SHAW, HORIZONTAL PATTERN
F3	LVP2	MAIN DINING, DARK, 4063V INK, SOUNDSCAPE, 63549, SHAW, BASKET WEAVE PATTERN
F4	CARPET TILE 1	OFFICE, RAID 01518, COMMUNITY, SHAW
F5	CARPET TILE 2	VESTIBULE, RUFFIAN II, EBONY EARTH 1506, MANNINGTON
F6	QUARRY TILE	KITCHEN AREA, ASHEN GRAY, OTO3 (2), QUARRY TEXTURES 6x8, DAL TILE
F7	FLOOR TILE	RESTROOMS, 1" HEX, BLACK, D311, DAL TILE
F8	SEALED CONCRETE	

BASE

B1	4" BLACK RUBBER
B2	4" TILE
B3	4" PORCELAIN TILE
B4	NONE

WALL

W1	GYPSUM BOARD	(SEE PLANS FOR ANY FIRE RATING), SMOOTH LEVEL 4 FINISH, PAINT
W2	WALL STONE	ALMOND, SPLIT FACE, IMEXWARE, DAL TILE
W3	WALL TILE 1	RESTROOMS & MOP SINK, 6'-0" HEIGHT - 0190 ARTIC WHITE, 4x12, VERTICAL, DAL TILE
W4	WALL TILE 2	SUSHI BAR, DARK GREY, DP03, DIPLOMACY 12x24 VERTICAL, DAL TILE
W5	WALL COVERING 1	DINING & CORRIDOR A-198-141 CASHMERE, BURNISHED SILK, VERSA, TRI-KES
W6	WALL COVERING 2	RESTROOMS, 2TWW-01 LIGHT GREY, WELL WELL WELL WC, TRI-KES
W7	CEDAR WOOD	CLEAR CEDAR, RANDOM LENGTHS
W8	FRP	KITCHEN AREAS, EMBOSSED WHITE FIBERGLASS, REINFORCED PLASTIC (FRP)
W9	BY MANUFACTURER	
W10	EPOXY PAINT	RESTROOM, SW7757 HIGH REFLECTIVE WHITE, SHERWIN WILLIAMS

CEILING

C1	GYPSUM BOARD - (SEE PLANS FOR ANY FIRE RATING), SMOOTH LEVEL 4 FINISH, PAINT
C2	ACOUSTICAL CEILING TILE ON SUSPENDED GRID SYSTEM (NON-RATED) - REVEAL EDGE
C3	WASHABLE ACOUSTICAL CEILING TILE ON SUSPENDED SYSTEM (NON-RATED) - REVEAL EDGE
C4	STRUCTURE EXPOSED - PAINTED
C5	SUSPENDED WOOD CLOUD STRUCTURE - SEE R.C.P. SHEET A6.1

MISC.

COUNTER TOPS	SHARPHAM, 5415, CAMBRIA COLLECTION
STAIRS	N/A
SINKS	SEE KITCHEN EQUIPMENT SHEETS
HARDWARE	BRUSHED STAINLESS STEEL
ENTRY DOORS	STOREFRONT - BLACK
INTERIOR DOORS	PLASTIC LAMINATE
HOLLOW METAL FRAMES	HOLLOW METAL - BLACK
METAL HANDRAILS	N/A
TOILET PARTITIONS	BRUSHED STAINLESS STEEL
LAMINATE	CABINETS, 5488-NT SMOKY BROWN PEAT, FORMICA
BOOTH DIVIDERS	CAPIZ NATURAL 2", CREAM 2", SANDSTONE, 3FORM
BOOTHS	BLACK VINYL SEATS W/ BLACK AND WHITE STRIPE BACKS
PAINT 1	GENERAL, SW 7042 SHOJI WHITE, SHERWIN WILLIAMS
PAINT 2	RESTROOMS, SW7757 HIGH REFLECTIVE WHITE, SHERWIN WILLIAMS
WOOD	RIFT CUT WHITE OAK
TWO TREES	CUSTOM ARTIFICIAL BLOSSOM PINK TREE

FINISH NOTES:

F1: SEE FINISH PLANS / SCHEDULES FOR ALL MATERIALS, COLORS, ACCENT WALLS, PATTERNS, ETC. SUBMIT ALL SELECTIONS TO ARCHITECT FOR APPROVAL.

F2: SEE PLANS FOR ACCENT WALLS - VERIFY COLORS WITH ARCHITECT. (ALL ACCENT WALLS TO RETURN TO AN INSIDE CORNER - TYPICAL).

F3: WALL MATERIAL LOCATED ON FINISH SCHEDULE ABOVE DOES NOT LIST THE ENTIRE WALL SYSTEM - ONLY THE EXTERIOR LAYER (FOR COMPLETE SYSTEM & RATING CONSTRUCTION, SEE WALL TYPES AND SECTIONS).

F4: USE WATER-RESISTANT GYPSUM BOARD AND EPOXY PAINT AT ALL WET-WALL LOCATIONS (I.E., RESTROOM, KITCHEN, BREAK ROOM, DRINKING FOUNTAIN, ETC).

F5: WINDOW COVERINGS, FURNISHINGS AND BUSINESS EQUIPMENT TO BE PROVIDED BY OWNER (COORDINATE W/ ARCHITECT).

F6: PROVIDE SCHLUTER TRANSITION STRIPS AT CARPET TO TILE TRANSITIONS, STAINLESS STEEL.

F7: WINDOW COVERINGS, FURNISHINGS AND EQUIPMENT ARE BY OWNER (TO BE COORDINATED W/ ARCHITECT).

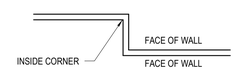
F8: PROVIDE ADA COMPLIANT SIGNAGE. OTHER INTERIOR AND EXTERIOR SIGNAGE AND GRAPHICS BY OWNER.

F9: RESTROOM PARTITIONS AND ACCESSORIES TO BE STAINLESS STEEL, BRUSHED.

F10: EXPOSED STEEL STRUCTURE - DARK NATURAL STEEL FINISH, U.N.O.

F11: FINISHES COLORS TO TERMINATE AT INSIDE CORNERS ONLY. SEE BELOW.

R = RATED GLASS
S = SPANDREL GLASS
* = TEMPERED GLASS



LEVEL 1 FINISH FLOOR PLAN

SCALE: 3/16" = 1'-0"

BUILDING PERMIT SET 03/18/2020

REVISIONS

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Author

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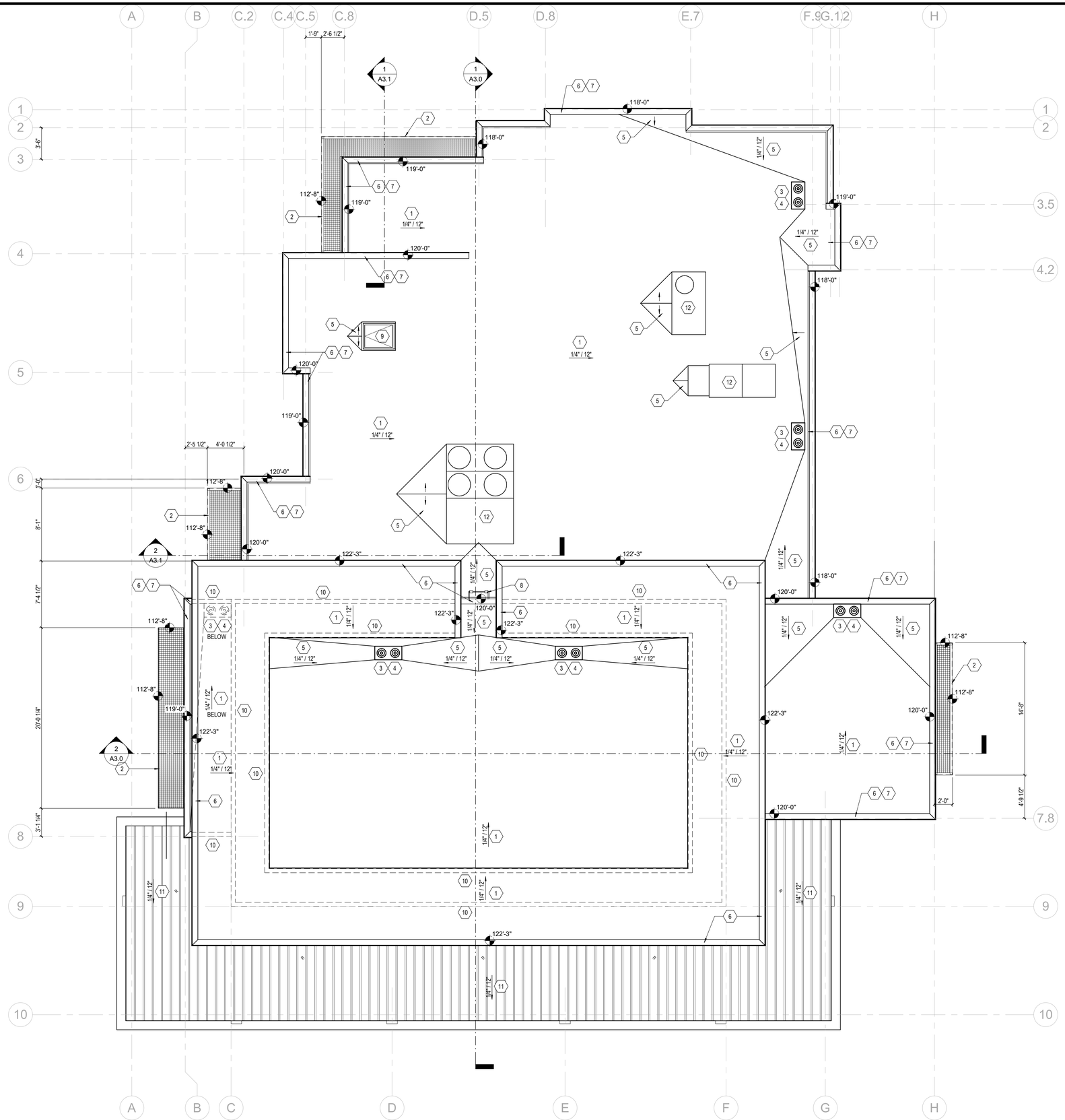
BLOSSOM RESTAURANT

LEVEL 1 FININSH FLOOR PLAN

03/18/2020

A1.2



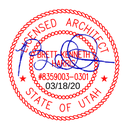
ROOF NOTES:

1. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, HATCHES, ETC.
2. ALL ROOF PENETRATIONS TO BE DETERMINED AND INSTALLED BY ROOFING SUBCONTRACTOR COORDINATE ALL LOCATIONS W/ ALL APPLICABLE TRADES.
3. VERIFY LOCATION OF ROOF PENETRATIONS. SEE ALSO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS.
4. SLOPE TOP OF PARAPETS BACK TO MAIN ROOF AT 1/4" PER FT. MINIMUM SLOPE (TYPICAL)
5. ALL MECHANICAL EQUIP. SHALL BE PLACED BEHIND THE TALLER PARAPETS WHEREVER POSSIBLE. SEE MECH. DWGS.
6. ALL MECHANICAL EQUIPMENT SHALL BE PLACED ON SOUND ISOLATION PLATFORM (PER MFGR'S RECOMMENDATIONS). SEE MECHANICAL DRAWINGS.
7. PROVIDE WALKWAY PADS AROUND ROOF HATCHES AND TO ALL UNITS ON THE ROOF.
8. CONSTRUCT CRICKETS WITH RIGID INSULATION SLOPE 1/4" / FT. MIN. (PROVIDE CRICKETS AT ALL MECHANICAL EQUIP. LOCATIONS).
9. CRICKET AND SLOPE LAYOUT IS SCHEMATIC. SEE SHOP DRAWINGS FROM INSULATION MFGR. AND INSTALLER FOR EXACT LAYOUT. CRICKETS SHOWN ARE REPRESENTATIONAL ONLY.
10. PROVIDE HEAT TAPE AT ALL DRAINS AND AT ALL PIPES IN UN-TEMPERED SPACES.
11. PROVIDE DRAINAGE OPENINGS AND SCUPPERS AT CANOPIES.

ROOF PLAN KEYNOTES

1	PVC ROOF MEMBRANE SLOPE 1/4" PER FOOT (CLASS B RATED) OR EPDM ALTERNATE)
2	PAINTED ALUMINUM OR STEEL (POWDER COATED) CANOPY WITH 2"x2" WIRE MESH (SEE STRUCTURAL)
3	ROOF DRAIN - PROVIDE HEAT TAPE AT ALL DRAINS AND AT ALL PIPES IN UN-TEMPERED SPACES
4	OVERFLOW +2" ABOVE ROOF DRAIN - PROVIDE HEAT TAPE AT ALL DRAINS AND AT ALL PIPES IN UN-TEMPERED SPACES
5	CRICKET - MIN SLOPE 1/4" PER FOOT
6	PREFINISHED METAL PARAPET CAP
7	PARAPET BRACING AS REQUIRED - SEE STRUCTURAL FOR LOCATION AND DETAILS
8	ROOF ACCESS LADDER
9	36"x36" ROOF ACCESS HATCH AND GUARDS. SEE DETAIL 5/A4.3
10	LINE OF WALL BELOW
11	STANDING SEAM METAL ROOF
12	ROOF TOP UNIT - SEE MECHANICAL DRAWINGS

ROOF PLAN
SCALE: 3/16" = 1'-0"



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BLOSSOM RESTAURANT
ROOF PLAN

03/18/2020

A1.3

KEY NOTES

SITE CONSTRUCTION
- 2.1 FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.
- 2.2 ENGINEERED GRAVEL FILL - SEE STRUCT. & GEOTECH.
- 2.3 PERFORATED DRAIN PIPE AT PERIMETER - SEE CIVIL & GEOTECH.

CONCRETE
- 3.1 CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS.
- 3.2 CONCRETE FOOTING - SEE STRUCTURAL DRAWINGS.
- 3.3 4" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.
- 3.8 6" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.

MASONRY
- 4.5 STONE ACCENT WALL - SEE FINISH SCHEDULE

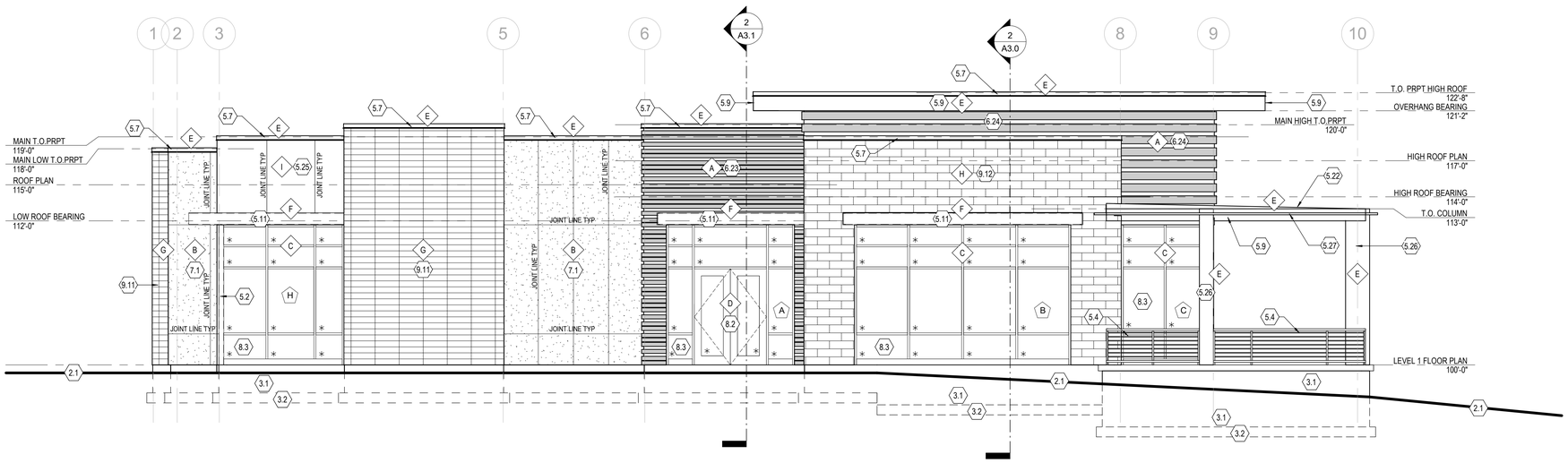
METALS
- 5.2 STEEL TUBE (PAINTED, U.O.N.) - SEE STRUCTURAL DWGS.
- 5.4 STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS - PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR CALL-OUTS AND CONNECTION DETAILS)
- 5.7 PREFINISHED ALUMINUM PARAPET CAP
- 5.8 PREFINISHED METAL FLASHING
- 5.9 PREFINISHED ALUM. FASCIA, SOFFIT (VENTED @ PITCHED ROOFS), GUTTERS, & DOWNSPOUTS (DOWNSPOUTS DRAIN TO MEMBRANE ROOF BELOW) WHERE POSSIBLE
- 5.11 STEEL CANOPY PAINTED - SEE STRUCTURAL DWGS.
- 5.14 STEEL CHANNEL (PAINTED, U.O.N.) - SEE STRUCTURAL DWGS.
- 5.22 PREFINISHED STANDING SEAM METAL ROOF (CLASS A RATED)
- 5.24 ROOF ACCESS LADDER
- 5.25 ACM METAL PANELS SEE DETAILS SHEET A4.5
- 5.26 PREFINISHED WRAPPED METAL COLUMN
- 5.27 METAL FIN (PAINTED) - SEE STRUCTURAL

WOOD AND PLASTICS
- 6.1 2x4 STUDS - SEE STRUCT. FOR SPACING
- 6.2 2x6 STUDS - SEE STRUCT. FOR SPACING
- 6.5 2x TREATED PLATE - SEE STRUCT. FOR BOLT PATTERN AND SPACING
- 6.9 BLOCKING - SEE STRUCT.
- 6.11 DOUBLE - 2x TOP PLATE 48" LAP SPLICE MIN.
- 6.12 WOOD BEAM / HEADER - SEE STRUCT DRAWINGS
- 6.13 PRE MANUFACTURED WOOD TRUSSES - SEE STRUCTURAL FOR SPACING. SEE ALSO TRUSS MFGR.
- 6.17 TRUSS BLOCKING - SEE STRUCT.
- 6.18 WOOD SHEATHING - SEE STRUCT. FOR TYPE AND THICKNESS
- 6.19 WOOD BEAM - SEE STRUCTURAL DRAWINGS
- 6.20 WOOD COLUMN - SEE STRUCT.
- 6.21 2x FASCIA BOARD
- 6.23 1x4 CLEAR CEDAR WOOD SIDING OVER C CHANNELS
- 6.24 1x8 CLEAR CEDAR WOOD SIDING OVER C CHANNELS
- 6.25 PARAPET BRACING AS REQUIRED - SEE STRUCTURAL
- 6.26 2x6 RIFT CUT WHITE OAK EQUALLY SPACED
- 6.27 2x8 RIFT CUT WHITE OAK
- 6.28 2x12 RIFT CUT WHITE OAK
- 6.29 SUSPENDED WOOD CEILING SEE DETAIL N/A4.3

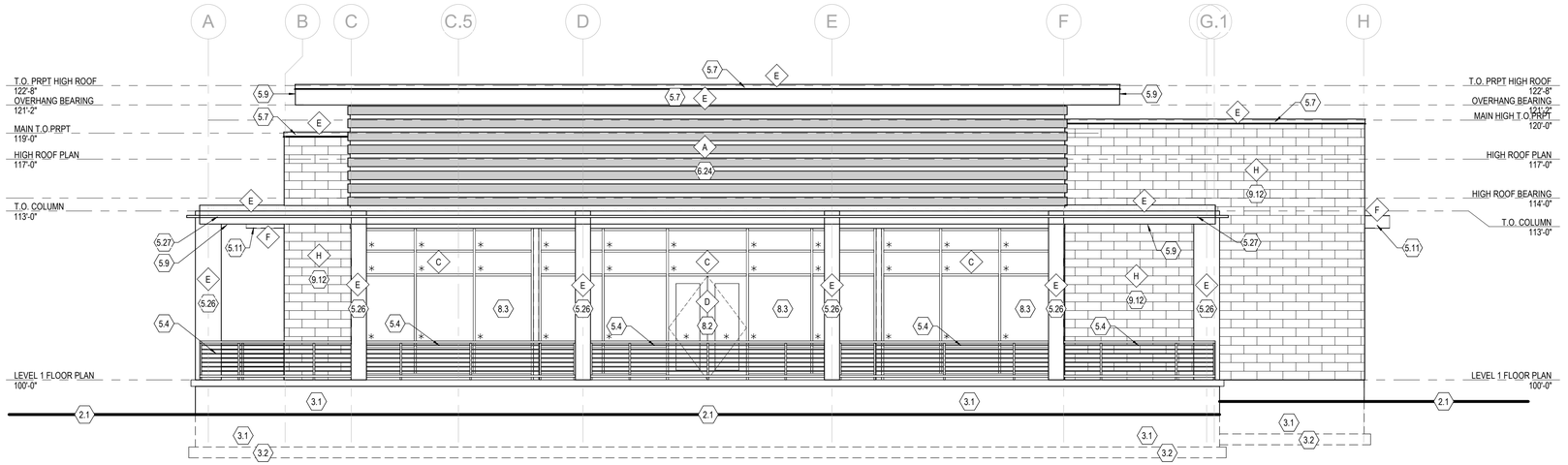
THERMAL & MOISTURE
- 7.1 EXTERIOR INSULATION & FINISH SYSTEM (EIFS) - SEE SHEET A4.6 & A4.6A FOR THICKNESS.
- 7.3 AIR BARRIER - TYVEK COMMERCIAL WRAP "D" OR APPROVED EQUAL. (TAPE AND SEAL SEAMS & PENETRATIONS) TYP. AT EXTERIOR WALLS. (AT GENERAL CONTRACTOR'S OPTION; A FLUID APPLIED AIR BARRIER MAY BE USED IN LIEU)
- 7.6 BATT INSULATION - R19
- 7.9 POLYISO ROOF INSULATION (6" MIN.)
- 7.12 BATT INSULATION - FILL VOID OF JOIST R49 MIN - SEE COMCHECK
- 7.14 PVC ROOF MEMBRANE - (CLASS B RATED) EQUAL TO SIKA SARNAFIL (EPDM ALTERNATE - EQUAL TO CARLISLE SYNTEC SYSTEMS)

DOORS AND WINDOWS
- 8.1 HOLLOW METAL DOOR OR ENTRY SYSTEM
- 8.2 ALUMINUM ENTRY / WINDOW SYSTEM
- 8.3 ALUMINUM CURTAIN WALL WINDOW SYSTEM
- 8.8 DOOR - SEE DOOR SCHEDULE

FINISHES
- 9.1 5/8" TYPE "X" GYP BOARD
- 9.3 5/8" TYPE "X" GYP BOARD CEILING
- 9.5 ACOUSTIC TILE ON SUSPENDED SYSTEM - REVEAL EDGE
- 9.11 6x24 DAL TILE - SEE EXTERIOR FINISH SCHEDULE (SEE MFGR FOR INSTALLATION DETAILS
- 9.12 6x24 DAL TILE BRICK COARSE - SEE EXTERIOR FINISH SCHEDULE (SEE MFGR FOR INSTALLATION DETAILS
- 9.13 3 FORM PANEL TYP - SEE FINISH SCHEDULE
- 9.14 WALL TILE - SEE FINISH SCHEDULE



SOUTH ELEVATION
SCALE: 3/16" = 1'-0"



EAST ELEVATION
SCALE: 3/16" = 1'-0"

GENERAL NOTES:

1. PROVIDE / MAINTAIN 30" MINIMUM FROST DEPTH CLEARANCE FROM TOP OF GRADE TO BOTTOM OF FOOTING - SEE STRUCTURAL FOR EXACT HEIGHTS OF FOUNDATION WALLS.
2. GENERAL CONTRACTOR TO COORDINATE ALL FOOTING HEIGHTS AND FOOTING STEPS WITH CIVIL AND STRUCTURAL AND WITH FINAL GRADES ON SITE.
3. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES, ETC...
4. SOILS ENGINEER TO PROVIDE INSPECTION OF THE SITE ONCE EXCAVATION HAS TAKEN PLACE TO DETERMINE IF ANY PERIMETER DRAINAGE SYSTEM AND WATERPROOFING MEMBRANE IS REQUIRED.
5. ALL SUB-CONTRACTORS TO VERIFY EXACT FLOOR TO FLOOR HEIGHTS AND FINISH CEILING HEIGHTS WITH OWNER PRIOR TO CONSTRUCTION AND INSTALLATION.
6. FOR SOUND INSULATION AT INTERIOR WALLS SEE FLOOR PLANS AND WALL TYPE DETAILS, SHEETS A1.1, A1.2 & A3.2. VERIFY INTENT WITH OWNER.
7. SEE ROOF PLAN FOR ALL DIMENSIONS OF CANOPIES.

S = SPANDREL GLASS (SEE FLOOR PLANS / ELEVATIONS FOR ADDITIONAL LOCATIONS).
* = TEMPERED GLASS (SEE FLOOR PLANS / ELEVATIONS FOR ADDITIONAL LOCATIONS).
SEE SHEETS A4.0 - A4.1 FOR DOOR AND WINDOW TYPES

KEY TO EXTERIOR FINISHES

A	WOOD	CLEAR CEDAR
B	STUCCO	875 GREY CLOUD, FINE FINISH, SENERGY
C	WINDOWS	BLACK
D	STOREFRONT	BLACK
E	METAL 1	BLACK
F	METAL 2	COPPER PENNY 5792K, OCM
G	WALL TILE - 1	BUILT SERIES MATTE, COLOR BAM - 6x24 DALTILE
H	WALL TILE -2	BUILT SERIES MATTE, COLOR BAM - 6x24 DALTILE - BRICK COARSE
I	METAL WALL PANEL	ACM PANEL

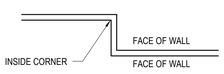
FINISH NOTES:

NOTE: ALL METAL TRIMS / VENTS ON EXTERIOR OF BUILDING TO BE PAINTED TO MATCH THE COLOR OF THE BRICK / STUCCO / METAL PANELS / OR OTHER EXTERIOR FINISHES THAT THEY ARE LOCATED IN. VERIFY PAINT COLOR WITH ARCHITECT AND OWNER.

NOTE: SEE ARCHITECTURAL FINISH SCHEDULES FOR ACTUAL COLORS AND MATERIALS.

NOTE: ALL COLORS / MATERIALS TO BE SUBMITTED TO ARCHITECT AND OWNER FOR APPROVAL.

NOTE: EXTERIOR FINISHES / COLORS TO TERMINATE NO INSIDE CORNERS ONLY. SEE BELOW.



LICENSED ARCHITECT
CHET KNUTSEN
6839013-0301
03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

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BLOSSOM RESTAURANT
EXTERIOR BUILDING ELEVATIONS

03/18/2020

A2.0

KEY NOTES

SITE CONSTRUCTION

- 2.1 FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.
- 2.2 ENGINEERED GRAVEL FILL - SEE STRUCT. & GEOTECH.
- 2.3 PERFORATED DRAIN PIPE AT PERIMETER - SEE CIVIL & GEOTECH.

CONCRETE

- 3.1 CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS.
- 3.2 CONCRETE FOOTING - SEE STRUCTURAL DRAWINGS.
- 3.3 4" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.
- 3.8 6" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.

MASONRY

- 4.5 STONE ACCENT WALL - SEE FINISH SCHEDULE

METALS

- 5.2 STEEL TUBE (PAINTED, U.O.N.) - SEE STRUCTURAL DWGS.
- 5.4 STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS - PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR CALL-OUTS AND CONNECTION DETAILS)
- 5.7 PREFINISHED ALUMINUM PARAPET CAP
- 5.8 PREFINISHED METAL FLASHING
- 5.9 PREFINISHED ALUM. FASCIA, SOFFIT (VENTED @ PITCHED ROOFS), GUTTERS, & DOWNSPOUTS (DOWNSPOUTS DRAIN TO MEMBRANE ROOF BELOW) WHERE POSSIBLE
- 5.11 STEEL CANOPY PAINTED - SEE STRUCTURAL DWGS.
- 5.14 STEEL CHANNEL (PAINTED, U.O.N.) - SEE STRUCTURAL DWGS.
- 5.22 PREFINISHED STANDING SEAM METAL ROOF (CLASS A RATED)
- 5.24 ROOF ACCESS LADDER
- 5.25 ACM METAL PANELS SEE DETAILS SHEET A4.5
- 5.26 PREFINISHED WRAPPED METAL COLUMN
- 5.27 METAL FIN (PAINTED) - SEE STRUCTURAL

WOOD AND PLASTICS

- 6.1 2x4 STUDS - SEE STRUCT. FOR SPACING
- 6.2 2x6 STUDS - SEE STRUCT. FOR SPACING
- 6.5 2x TREATED PLATE - SEE STRUCT. FOR BOLT PATTERN AND SPACING
- 6.9 BLOCKING - SEE STRUCT.
- 6.11 DOUBLE - 2x TOP PLATE 48" LAP SPLICE MIN.
- 6.12 WOOD BEAM / HEADER - SEE STRUCT DRAWINGS
- 6.13 PRE MANUFACTURED WOOD TRUSSES - SEE STRUCTURAL FOR SPACING. SEE ALSO TRUSS MFGR.
- 6.17 TRUSS BLOCKING - SEE STRUCT.
- 6.18 WOOD SHEATHING - SEE STRUCT. FOR TYPE AND THICKNESS
- 6.19 WOOD BEAM - SEE STRUCTURAL DRAWINGS
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- 6.21 2x FASCIA BOARD
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- 6.28 2x12 RIFT CUT WHITE OAK
- 6.29 SUSPENDED WOOD CEILING SEE DETAIL N/A4.3

THERMAL & MOISTURE

- 7.1 EXTERIOR INSULATION & FINISH SYSTEM (EIFS) - SEE SHEET A4.6 & A4.6A FOR THICKNESS.
- 7.3 AIR BARRIER - TYVEK COMMERCIAL WRAP "D" OR APPROVED EQUAL. (TAPE AND SEAL SEAMS & PENETRATIONS) TYP. AT EXTERIOR WALLS. (AT GENERAL CONTRACTOR'S OPTION; A FLUID APPLIED AIR BARRIER MAY BE USED IN LIEU)
- 7.6 BATT INSULATION - R19
- 7.9 POLYISO ROOF INSULATION (6" MIN.)
- 7.12 BATT INSULATION - FILL VOID OF JOIST R49 MIN - SEE COMCHECK
- 7.14 PVC ROOF MEMBRANE - (CLASS B RATED) EQUAL TO SIKA SARNAFIL (EPDM ALTERNATE - EQUAL TO CARLISLE SYNTEC SYSTEMS)

DOORS AND WINDOWS

- 8.1 HOLLOW METAL DOOR OR ENTRY SYSTEM
- 8.2 ALUMINUM ENTRY / WINDOW SYSTEM
- 8.3 ALUMINUM CURTAIN WALL WINDOW SYSTEM
- 8.8 DOOR - SEE DOOR SCHEDULE

FINISHES

- 9.1 5/8" TYPE "X" GYP BOARD
- 9.3 5/8" TYPE "X" GYP BOARD CEILING
- 9.5 ACOUSTIC TILE ON SUSPENDED SYSTEM - REVEAL EDGE
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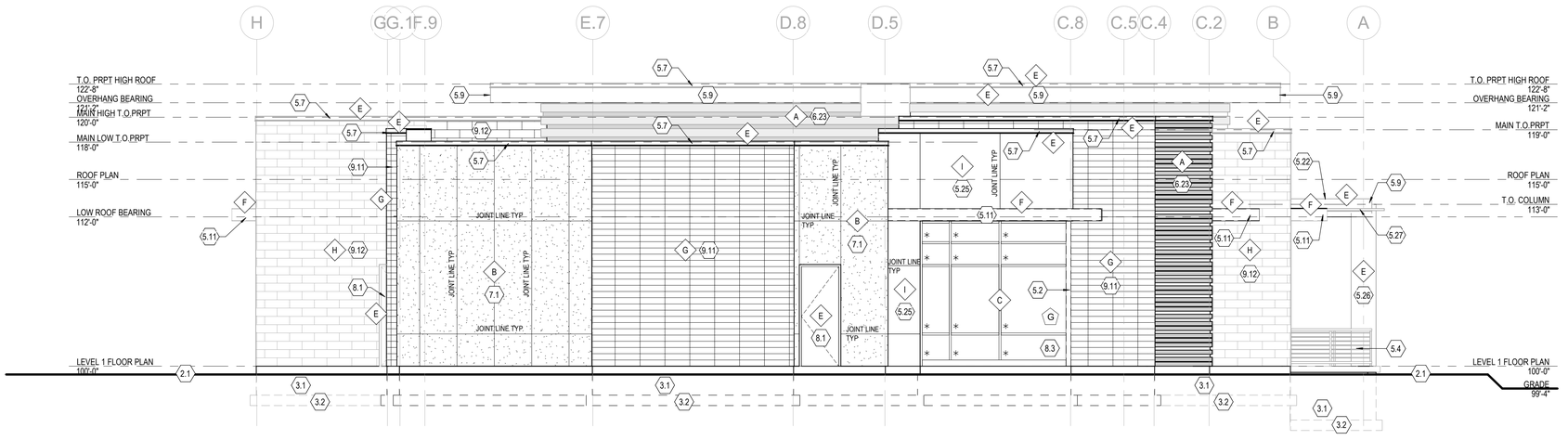
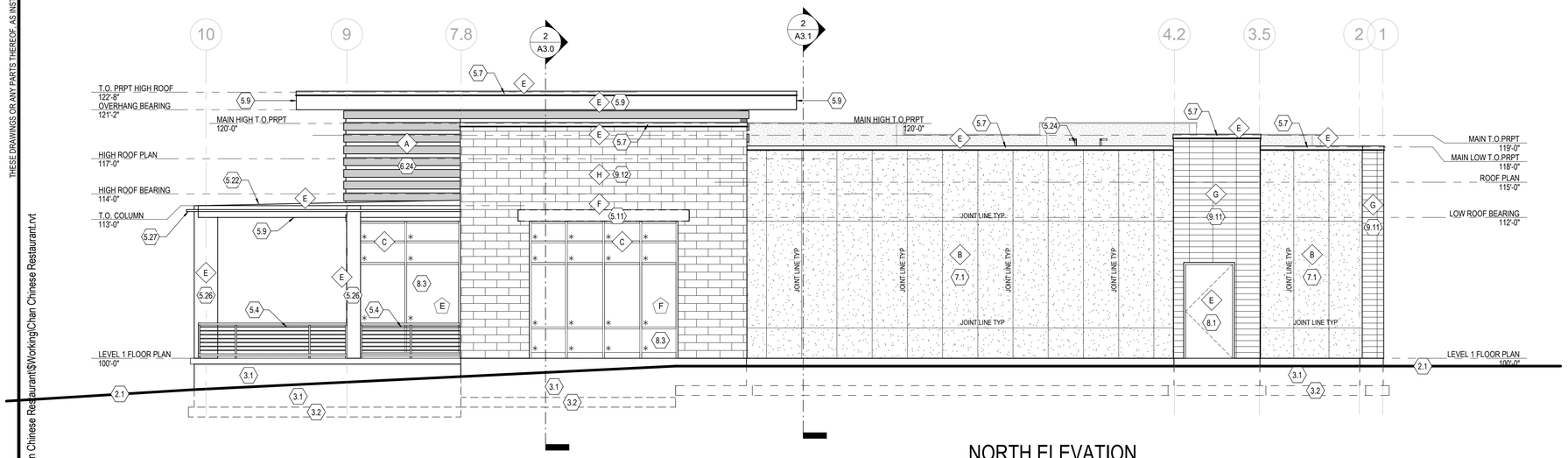
- 9.12 6x24 DAL TILE BRICK COARSE - SEE EXTERIOR FINISH SCHEDULE (SEE MFGR FOR INSTALLATION DETAILS
- 9.13 3 FORM PANEL TYP - SEE FINISH SCHEDULE
- 9.14 WALL TILE - SEE FINISH SCHEDULE



WEST ELEVATION

SCALE: 3/16" = 1'-0"



NORTH ELEVATION

SCALE: 3/16" = 1'-0"

GENERAL NOTES:

1. PROVIDE / MAINTAIN 30" MINIMUM FROST DEPTH CLEARANCE FROM TOP OF GRADE TO BOTTOM OF FOOTING - SEE STRUCTURAL FOR EXACT HEIGHTS OF FOUNDATION WALLS.
2. GENERAL CONTRACTOR TO COORDINATE ALL FOOTING HEIGHTS AND FOOTING STEPS WITH CIVIL AND STRUCTURAL AND WITH FINAL GRADES ON SITE.
3. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF HATCHES, ETC...
4. SOILS ENGINEER TO PROVIDE INSPECTION OF THE SITE ONCE EXCAVATION HAS TAKEN PLACE TO DETERMINE IF ANY PERIMETER DRAINAGE SYSTEM AND WATERPROOFING MEMBRANE IS REQUIRED.
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6. FOR SOUND INSULATION AT INTERIOR WALLS SEE FLOOR PLANS AND WALL TYPE DETAILS, SHEETS A1.1, A1.2 & A3.2. VERIFY INTENT WITH OWNER.
7. SEE ROOF PLAN FOR ALL DIMENSIONS OF CANOPIES.

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SEE SHEETS A4.0 - A4.1 FOR DOOR AND WINDOW TYPES

KEY TO EXTERIOR FINISHES

A	WOOD	CLEAR CEDAR
B	STUCCO	875 GREY CLOUD, FINE FINISH, SENERGY
C	WINDOWS	BLACK
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I	METAL WALL PANEL	ACM PANEL

FINISH NOTES:

NOTE: ALL METAL TRIMS / VENTS ON EXTERIOR OF BUILDING TO BE PAINTED TO MATCH THE COLOR OF THE BRICK / STUCCO / METAL PANELS / OR OTHER EXTERIOR FINISHES THAT THEY ARE LOCATED IN. VERIFY PAINT COLOR WITH ARCHITECT AND OWNER.

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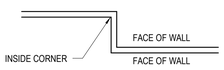

LICENSED ARCHITECT
SCOTT A. HARRIS
6539013-0301
03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

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BLOSSOM RESTAURANT
EXTERIOR BUILDING ELEVATIONS

03/18/2020

A2.1

KEY NOTES

SITE CONSTRUCTION

2.1 FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.
2.2 ENGINEERED GRAVEL FILL - SEE STRUCT. & GEOTECH.
2.3 PERFORATED DRAIN PIPE AT PERIMETER - SEE CIVIL & GEOTECH.

CONCRETE

3.1 CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS.
3.2 CONCRETE FOOTING - SEE STRUCTURAL DRAWINGS.
3.3 4" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.
3.8 6" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.

MASONRY

4.5 STONE ACCENT WALL - SEE FINISH SCHEDULE

METALS

5.2 STEEL TUBE (PAINTED, U.O.N.) - SEE STRUCTURAL DWGS.
5.4 STEEL GUARDRAIL (POWDER COATED AT EXTERIOR LOCATIONS - PAINTED AT INTERIOR LOCATIONS) +42" FROM FLOOR LINE SUCH THAT 4" SPHERE MAY NOT PASS THRU (SEE STRUCT. DWGS. FOR CALL-OUTS AND CONNECTION DETAILS)
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5.24 ROOF ACCESS LADDER
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5.26 PREFINISHED WRAPPED METAL COLUMN
5.27 METAL FIN (PAINTED) - SEE STRUCTURAL

WOOD AND PLASTICS

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6.2 2x6 STUDS - SEE STRUCT. FOR SPACING
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6.29 SUSPENDED WOOD CEILING SEE DETAIL N/A4.3

THERMAL & MOISTURE

7.1 EXTERIOR INSULATION & FINISH SYSTEM (EIFS) - SEE SHEET A4.6 & A4.6A FOR THICKNESS.
7.3 AIR BARRIER - TYVEK COMMERCIAL WRAP "D" OR APPROVED EQUAL. (TAPE AND SEAL SEAMS & PENETRATIONS) TYP. AT EXTERIOR WALLS. (AT GENERAL CONTRACTOR'S OPTION; A FLUID APPLIED AIR BARRIER MAY BE USED IN LIEU)
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DOORS AND WINDOWS

8.1 HOLLOW METAL DOOR OR ENTRY SYSTEM
8.2 ALUMINUM ENTRY / WINDOW SYSTEM
8.3 ALUMINUM CURTAIN WALL WINDOW SYSTEM
8.8 DOOR - SEE DOOR SCHEDULE

FINISHES

9.1 5/8" TYPE "X" GYP BOARD
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9.5 ACOUSTIC TILE ON SUSPENDED SYSTEM - REVEAL EDGE
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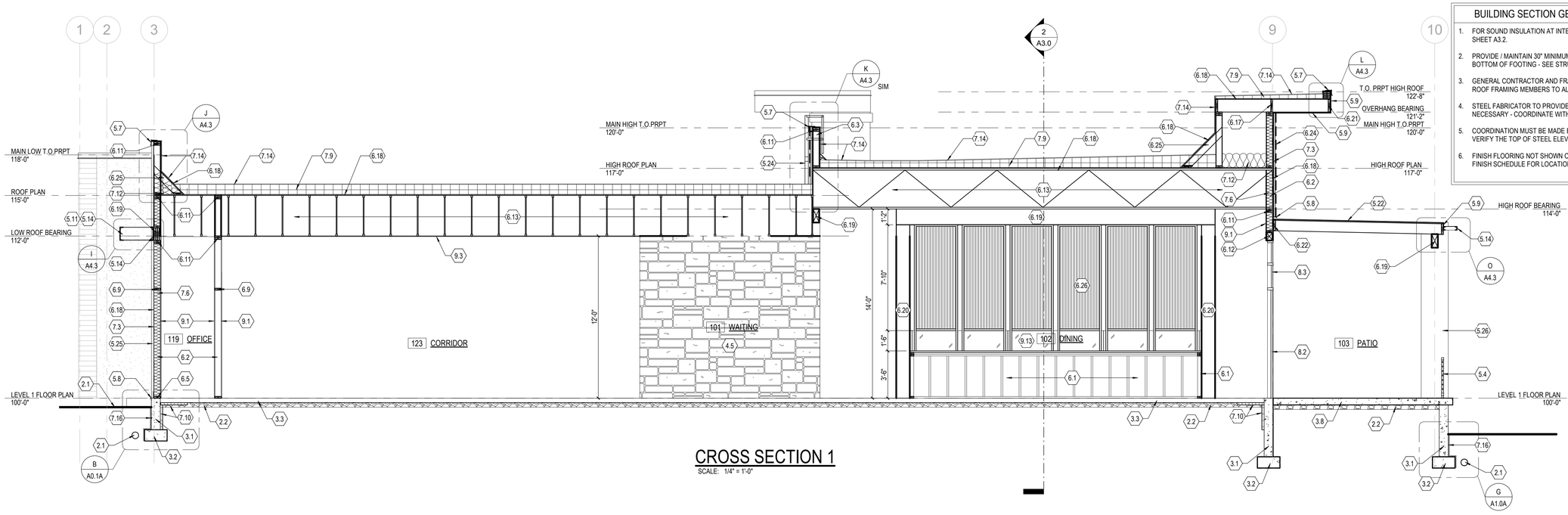
6.12 6x24 DAL TILE BRICK COARSE - SEE EXTERIOR FINISH SCHEDULE (SEE MFGR FOR INSTALLATION DETAILS
6.13 3 FORM PANEL TYP - SEE FINISH SCHEDULE
9.14 WALL TILE - SEE FINISH SCHEDULE

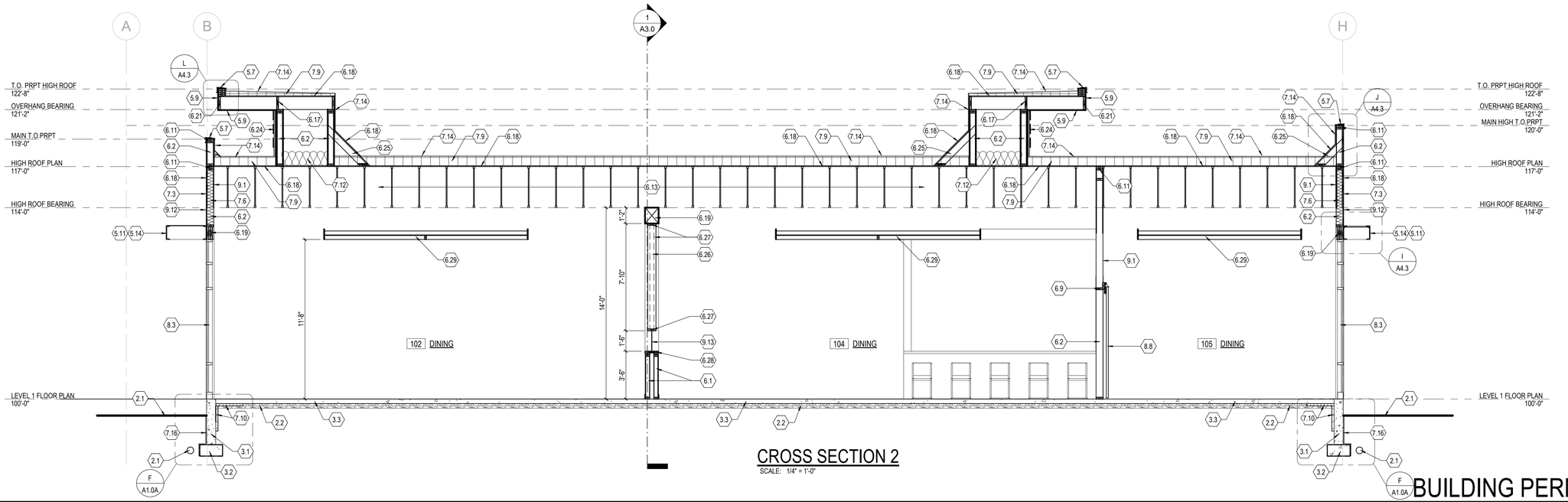
BUILDING SECTION GENERAL NOTES:

1. FOR SOUND INSULATION AT INTERIOR WALLS SEE FLOOR PLANS AND WALL TYPES SHEET A3.2.
2. PROVIDE / MAINTAIN 30" MINIMUM FROST DEPTH CLEARANCE FROM TOP OF GRADE TO BOTTOM OF FOOTING - SEE STRUCTURAL FOR EXACT HEIGHTS OF FOUNDATION WALLS.
3. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR ROOF HATCHES, ETC.
4. STEEL FABRICATOR TO PROVIDE WOOD BLOCKING ATTACHED TO STEEL BEAMS WHERE NECESSARY - COORDINATE WITH FRAMING PLANS AND SECTIONS.
5. COORDINATION MUST BE MADE BETWEEN TRUSS MFGR AND STEEL FABRICATOR TO VERIFY THE TOP OF STEEL ELEVATIONS AS THEY RELATE TO TRUSS BEARING.
6. FINISH FLOORING NOT SHOWN ON CROSS SECTIONS - REFER TO FLOOR PLAN AND FINISH SCHEDULE FOR LOCATIONS.



CROSS SECTION 1

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



CROSS SECTION 2

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

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

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BLOSSOM RESTAURANT

BUILDING CUT SECTIONS

03/18/2020

A3.0

KEY NOTES

SITE CONSTRUCTION

2.1 FINISH GRADE - SLOPE AWAY 1/2 INCH PER FOOT MIN.
2.2 ENGINEERED GRAVEL FILL - SEE STRUCT. & GEOTECH.
2.3 PERFORATED DRAIN PIPE AT PERIMETER - SEE CIVIL & GEOTECH.

CONCRETE

3.1 CONCRETE FOUNDATION WALL - SEE STRUCTURAL DRAWINGS.
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3.3 4" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.
3.8 6" REINFORCED CONCRETE SLAB - SEE STRUCT. DWGS.

MASONRY

4.5 STONE ACCENT WALL - SEE FINISH SCHEDULE

METALS

5.2 STEEL TUBE (PAINTED, U.O.N.) - SEE STRUCTURAL DWGS.
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5.24 ROOF ACCESS LADDER
5.25 ACM METAL PANELS SEE DETAILS SHEET A4.5
5.26 PREFINISHED WRAPPED METAL COLUMN
5.27 METAL FIN (PAINTED) - SEE STRUCTURAL

WOOD AND PLASTICS

6.1 2x4 STUDS - SEE STRUCT. FOR SPACING
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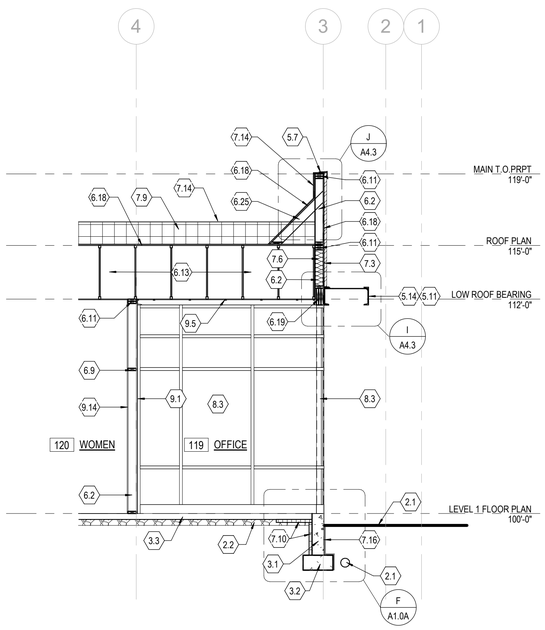
7.1 EXTERIOR INSULATION & FINISH SYSTEM (EIFS) - SEE SHEET A4.6 & A4.6A FOR THICKNESS.
7.3 AIR BARRIER - TYVEK COMMERCIAL WRAP "D" OR APPROVED EQUAL. (TAPE AND SEAL SEAMS & PENETRATIONS) TYP. AT EXTERIOR WALLS. (AT GENERAL CONTRACTOR'S OPTION; A FLUID APPLIED AIR BARRIER MAY BE USED IN LIEU)
7.6 BATT INSULATION - R19
7.9 POLYISO ROOF INSULATION (6" MIN.)
7.12 BATT INSULATION - FILL VOID OF JOIST R49 MIN - SEE COMCHECK
7.14 PVC ROOF MEMBRANE - (CLASS B RATED) EQUAL TO SIKA SARNAFIL (EPDM ALTERNATE - EQUAL TO CARLISLE SYNTEC SYSTEMS)

DOORS AND WINDOWS

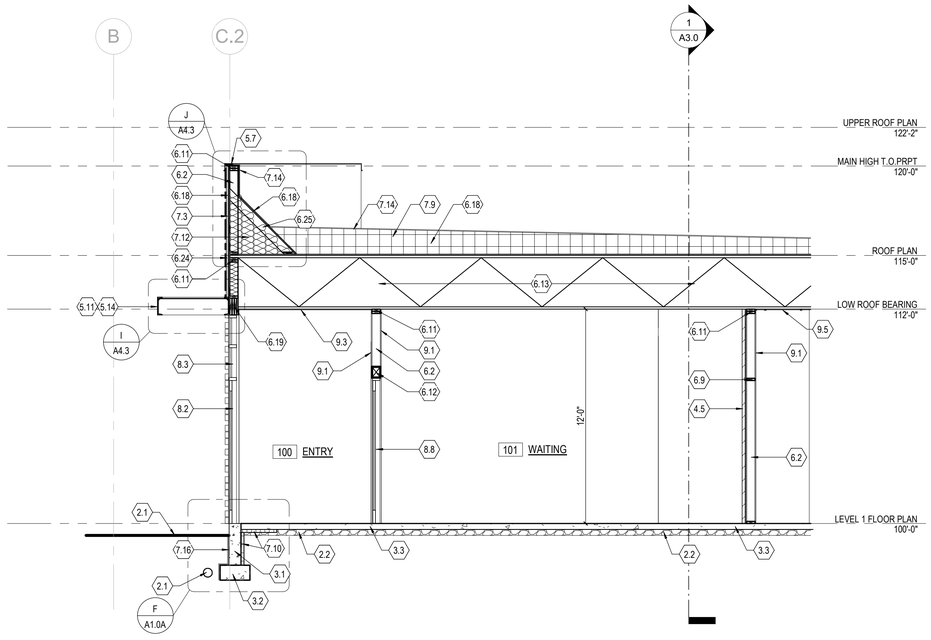
8.1 HOLLOW METAL DOOR OR ENTRY SYSTEM
8.2 ALUMINUM ENTRY / WINDOW SYSTEM
8.3 ALUMINUM CURTAIN WALL WINDOW SYSTEM
8.8 DOOR - SEE DOOR SCHEDULE

FINISHES

9.1 5/8" TYPE "X" GYP BOARD
9.3 5/8" TYPE "X" GYP BOARD CEILING
9.5 ACOUSTIC TILE ON SUSPENDED SYSTEM - REVEAL EDGE
9.11 6x24 DAL TILE - SEE EXTERIOR FINISH SCHEDULE (SEE MFGR FOR INSTALLATION DETAILS
9.12 6x24 DAL TILE BRICK COARSE - SEE EXTERIOR FINISH SCHEDULE (SEE MFGR FOR INSTALLATION DETAILS
9.13 3 FORM PANEL TYP - SEE FINISH SCHEDULE
9.14 WALL TILE - SEE FINISH SCHEDULE



CROSS SECTION 3
SCALE: 1/4" = 1'-0"



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

BUILDING SECTION GENERAL NOTES:

1. FOR SOUND INSULATION AT INTERIOR WALLS SEE FLOOR PLANS AND WALL TYPES SHEET A3.2.
2. PROVIDE / MAINTAIN 30" MINIMUM FROST DEPTH CLEARANCE FROM TOP OF GRADE TO BOTTOM OF FOOTING - SEE STRUCTURAL FOR EXACT HEIGHTS OF FOUNDATION WALLS.
3. GENERAL CONTRACTOR AND FRAMING SUB-CONTRACTOR TO ADJUST FLOOR AND ROOF FRAMING MEMBERS TO ALLOW FOR ROOF HATCHES, ETC.
4. STEEL FABRICATOR TO PROVIDE WOOD BLOCKING ATTACHED TO STEEL BEAMS WHERE NECESSARY - COORDINATE WITH FRAMING PLANS AND SECTIONS.
5. COORDINATION MUST BE MADE BETWEEN TRUSS MFGR AND STEEL FABRICATOR TO VERIFY THE TOP OF STEEL ELEVATIONS AS THEY RELATE TO TRUSS BEARING.
6. FINISH FLOORING NOT SHOWN ON CROSS SECTIONS - REFER TO FLOOR PLAN AND FINISH SCHEDULE FOR LOCATIONS.

LICENSED ARCHITECT
BRETT C. HARRIS
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03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

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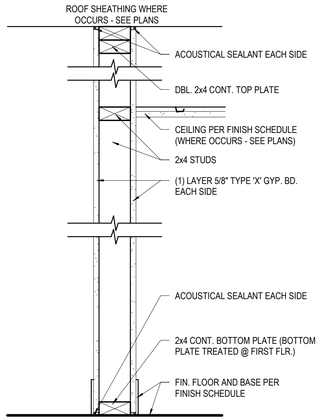
BLOSSOM RESTAURANT
BUILDING CUT SECTIONS

03/18/2020

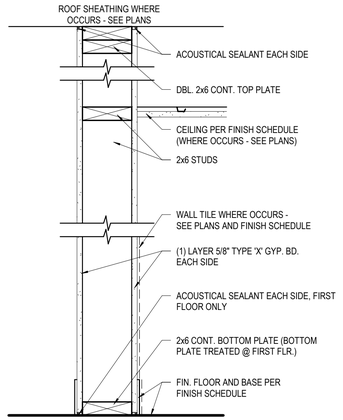
A3.1



PARTITION TYPE:
INTERIOR PARTITION NON-RATED — WT1

SCALE: 1.1/2" = 1'-0"

UL DESIGN NO.:
GA FILE NO.: WP 3510



PARTITION TYPE:
INTERIOR PARTITION NON-RATED — WT2

SCALE: 1.1/2" = 1'-0"

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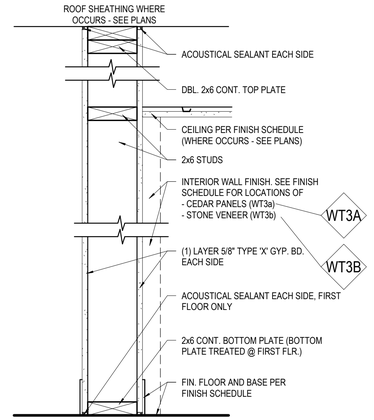

PARTITION TYPE:
INTERIOR PARTITION NON-RATED — WT3 (A, B)

SCALE: 1.1/2" = 1'-0"

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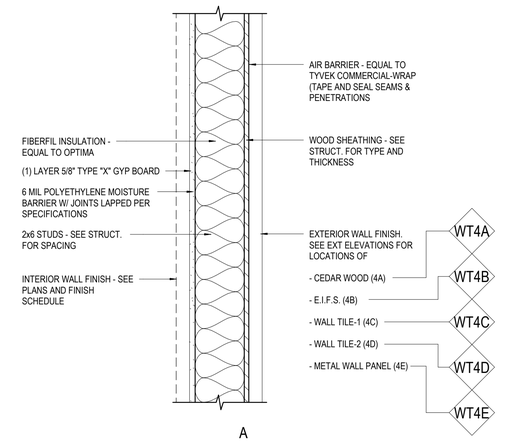

PARTITION TYPE:
EXTERIOR WALL - NON-RATED — WT4 (A, B, C, D, E)

SCALE: 1.1/2" = 1'-0"

UL DESIGN NO.:
GA FILE NO.:

WALL TYPE NOTES:

1. SEE STRUCTURAL DRAWINGS AND CALCULATIONS FOR SPACING, GRADE AND SPECIES OF LUMBER.
2. SEE FINISH PLANS FOR BASE AND OTHER INTERIOR FINISHES.
3. PROVIDE FIREBLOCKING IN CONCEALED ROOF AND WALL AREAS AS PER IBC SECTION 717.
4. PROVIDE WATER RESISTANT GYPSUM BOARD AT ALL BATHROOM WET WALL LOCATIONS.
5. CEILING TYPES, HEIGHTS AND LOCATIONS MAY VARY - VERIFY EXACT CEILING FINISHES W/ REFLECTED CEILING PLANS.

STRUCTURAL SHEATHING NOTES:

S1. WALL DETAILS DO NOT SHOW ANY POTENTIALLY REQUIRED STRUCTURAL SHEATHING - SEE STRUCTURAL DRAWINGS FOR SHEAR WALL LOCATIONS AND INCLUDE ANY REQUIRED SHEATHING.

S2. ANY TILE WAINSCOTING AT WALLS IS NOT SHOWN ON WALL DETAILS - REFER TO FINISH PLANS FOR LOCATIONS.

BUILDING PERMIT SET 03/18/2020

REVISIONS

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BLOSSOM RESTAURANT

WALL TYPES / DETAILS

03/18/2020

A3.2

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DOOR SCHEDULE

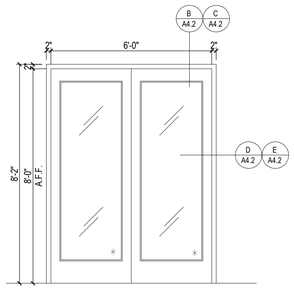
MARK	DETAIL #	DOOR SIZE	DOOR MATERIAL	FRAME TYPE	GLASS TYPE	HARDWARE	FINISH	FIRE RATING PER MIN	REMARKS
100	D1	PR 3'-0"x8'-0"x1 3/4"	ALUMINUM	ALUMINUM	TEMP	A,F,G,H,I,L,O	FACTORY PAINTED		ALUM. STOREFRONT SYSTEM (PREFINISHED)
101	D1	PR 3'-0"x8'-0"x1 3/4"	ALUMINUM	ALUMINUM	TEMP	A,G,I,L	FACTORY PAINTED		DOUBLE DOOR
102	D1	PR 3'-0"x8'-0"x1 3/4"	ALUMINUM	ALUMINUM	TEMP	A,F,G,H,I,L,O	FACTORY PAINTED		ALUM. STOREFRONT SYSTEM (PREFINISHED)
105A	D3	PR 5'-0"x8'-0"x1 3/4"	WOOD			R,U,V	STAIN		BARN DOOR W/ SHOJI SCREEN
105B	D2	3'-0"x8'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		A,B,F,G,H,I	PAINT		FLUSH H.M. FRAME
106	D4	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		A,C,G,I,N	PAINT		FLUSH H.M. FRAME
107	D4	2'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		A,B,G,I,N	PAINT		FLUSH H.M. FRAME
112	D2	4'-0"x8'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		A,B,F,G,H,I	PAINT		FLUSH H.M. FRAME
116	D5	3'-0"x7'-0"x1 3/4"	WOOD	WOOD		A,D,G,I,S	PLASTIC LAMINATE		
117	D5	3'-0"x7'-0"x1 3/4"	WOOD	WOOD		A,B,G,I,N	PLASTIC LAMINATE		
118	D2	3'-0"x8'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		A,B,G,H,I,N	PAINT		FLUSH H.M. FRAME
119	D5	3'-0"x7'-0"x1 3/4"	WOOD	WOOD		A,B,G,I,N	PLASTIC LAMINATE		
120	D5	3'-0"x7'-0"x1 3/4"	WOOD	WOOD		A,G,I,L,T	PLASTIC LAMINATE		
121	D4	3'-0"x7'-0"x1 3/4"	HOLLOW METAL	HOLLOW METAL		A,B,G,I,N	PAINT		FLUSH H.M. FRAME
122	D5	3'-0"x7'-0"x1 3/4"	WOOD	WOOD		A,G,I,L,T	PLASTIC LAMINATE		

HARDWARE CODE:

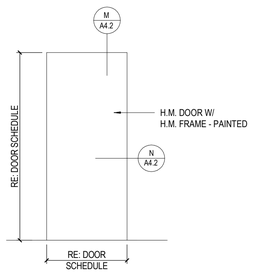
A. HINGES
B. LOCK SET - LEVER HANDLE
C. PASSAGE SET - LEVER HANDLE
D. PRIVACY SET - LEVER HANDLE
E. DEAD BOLT
F. PANIC HARDWARE
G. CLOSER
H. WEATHERSTRIP AND SILL
I. STOP
J. HEAD AND FOOT BOLTS (AUTOMATIC ACTING)
K. SMOKE SEAL AND SWEEP
L. PUSH-PULLS (PULL ONLY @ PANIC HARDWARE DOORS)
M. DOUBLE ACTION HINGE (180 DEG.)
N. MAGNETIC HOLD OPEN DEVICE
O. CYLINDER LOCK
P. HEAD AND FOOT BOLTS - MANUAL
Q. DUMMY KNOBS & ROLLING LATCHES
R. SLIDING DOOR HARDWARE
S. SOUND GASKETS - ALL 4 SIDES
T. KICK PLATE
U. REQ. HARDWARE T.B.D. BY OWNER
V. CUSTOM DOOR HARDWARE BY MANUFACTURER

ADDITIONAL NOTES

1. ALUMINUM ENTRY / STOREFRONT SYSTEM TO BE KAWNEER 450 SERIES OR AN APPROVED EQUAL.
2. ALL HARDWARE TO BE SCHLAGE MEDIUM GRADE OR AN APPROVED EQUAL.
3. HARDWARE FINISH TO BE BRUSHED STAINLESS - CONTRACTOR TO VERIFY WITH OWNER.
4. ALL DOORS AND HARDWARE TO COMPLY WITH ANSI A117.1-404
5. PANIC HARDWARE IN ACCORDANCE WITH ALL APPLICABLE CODES TO MATCH STOREFRONT.
6. ALL LOCKS, DOOR HANDLES, PULLS, LATCHES, AND OTHER OPERATING HARDWARE IS REQUIRED TO BE LOCATED BETWEEN 34" MIN. AND 48" MAX. A.F.F.
7. GLAZING TO BE LOW "E" ON ALL SIDES - CLEAR (TYPICAL)



1 DOOR DETAIL TYPE D1
EXTERIOR SCALE:3/8" = 1'-0"



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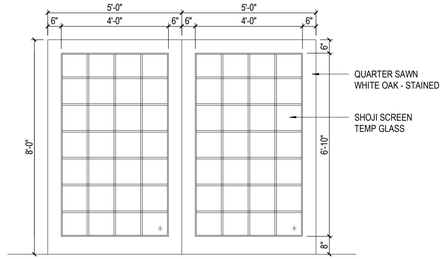
EXTERIOR SCALE:3/8" = 1'-0"



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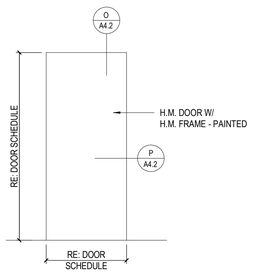
INTERIOR SCALE:3/8" = 1'-0"



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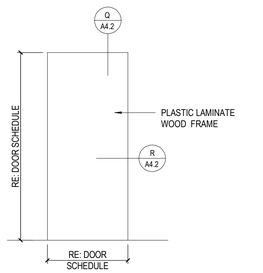
INTERIOR SCALE:3/8" = 1'-0"



5 DOOR DETAIL TYPE D5
INTERIOR SCALE:3/8" = 1'-0"

Q:\ACADFile\Chan Chinese Restaurant\$Working\Chan Chinese Restaurant.rvt

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REVISIONS

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BLOSSOM RESTAURANT
DOOR SCHEDULE AND DETAILS

03/18/2020

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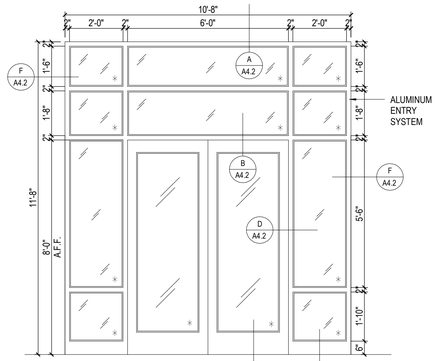
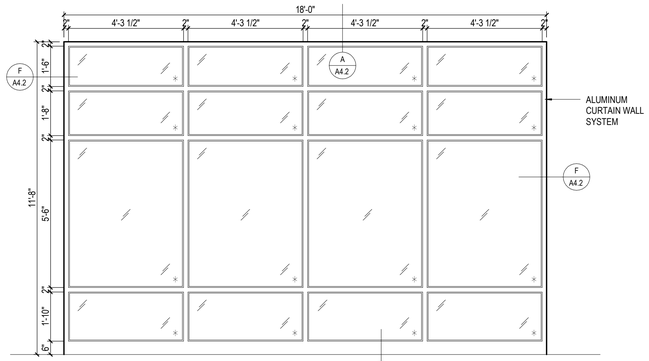
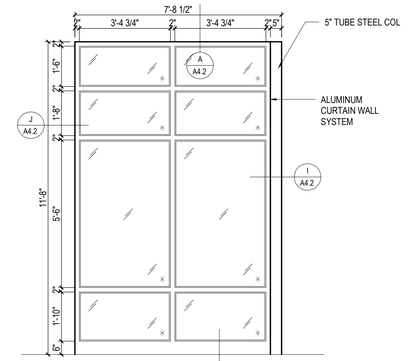


1 WINDOW DETAIL TYPE (A) — EXTERIOR — SCALE:3/8" = 1'-0"

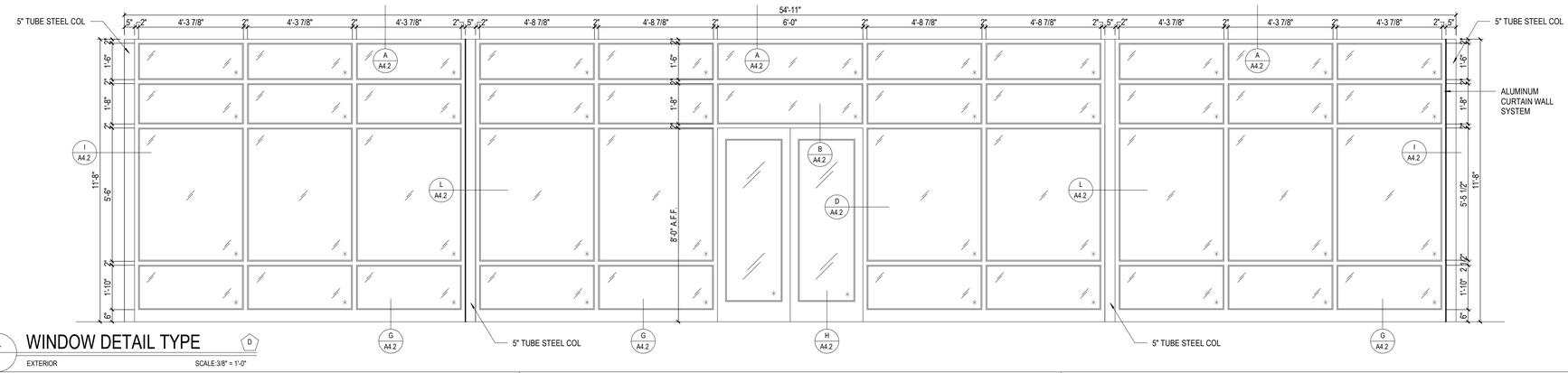


2 WINDOW DETAIL TYPE (B) — EXTERIOR — SCALE:3/8" = 1'-0"

CONTRACTOR TO VERIFY WINDOW OPENING WITH LOCATION OF EXHAUST VENTS. (3' CLEARANCE IS REQUIRED)



3 WINDOW DETAIL TYPE (C) — EXTERIOR — SCALE:3/8" = 1'-0"



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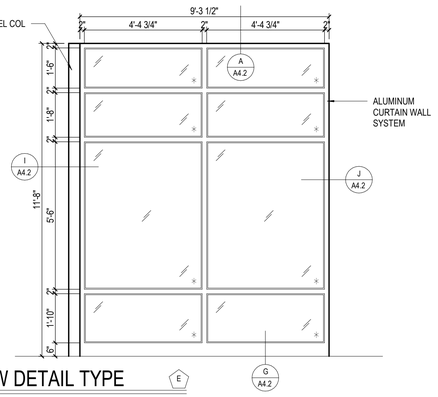
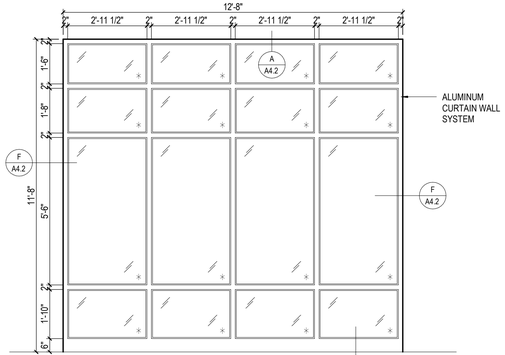


5 WINDOW DETAIL TYPE (E) — EXTERIOR — SCALE:3/8" = 1'-0"



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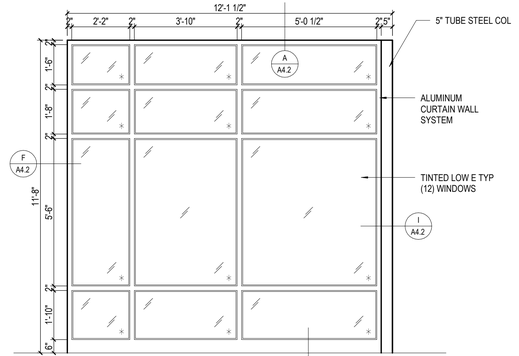

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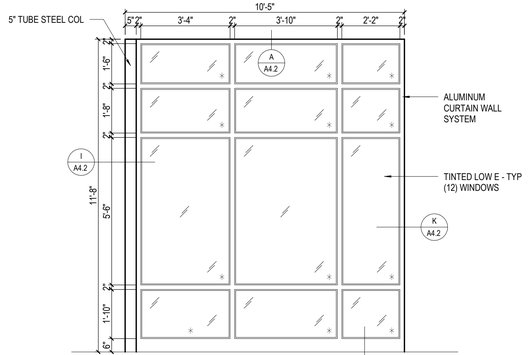

8 WINDOW DETAIL TYPE (H) — EXTERIOR — SCALE:3/8" = 1'-0"

REVISIONS

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BLOSSOM RESTAURANT

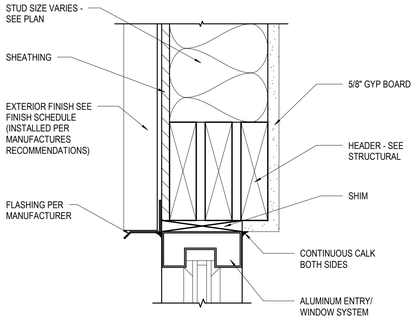
WINDOW TYPES

03/18/2020

A4.1

LICENSED ARCHITECT — CHRIS T. HARRIS — #6159001-0301 — 03/18/20 — STATE OF UTAH

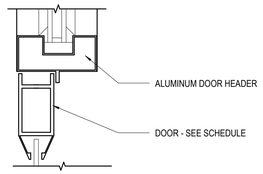
BUILDING PERMIT SET 03/18/2020



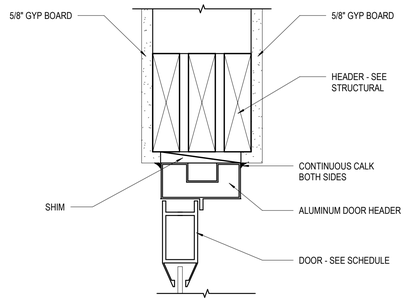
A HEAD DETAIL
SCALE: 3" = 1'-0"

NOTE: HOLLOW METAL DOOR FRAMES

THE DOOR FRAME DETAILS FOR INTERIOR WALLS DO NOT INDICATE THROAT DIMENSION TO INCLUDE ANY SHEAR WALL MATERIAL. IT IS THE RESPONSIBILITY OF THE DOOR/FRAME SUPPLIER TO REVIEW THE STRUCTURAL SHEAR WALL DRAWINGS AND ACCOUNT FOR ANY INCREASE IN DOOR FRAME THROAT DIMENSION DUE TO SHEAR WALL MATERIAL.



B HEAD DETAIL
SCALE: 3" = 1'-0"



C HEAD DETAIL
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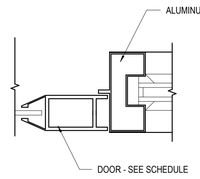
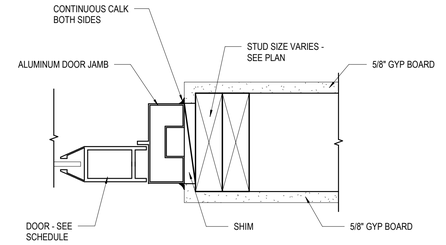


D JAMB DETAIL
SCALE: 3" = 1'-0"



E JAMB DETAIL
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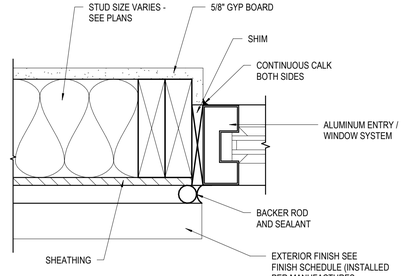

F JAMB DETAIL
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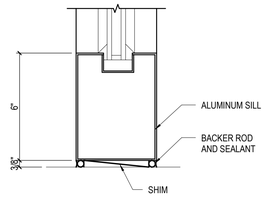

G SILL DETAIL
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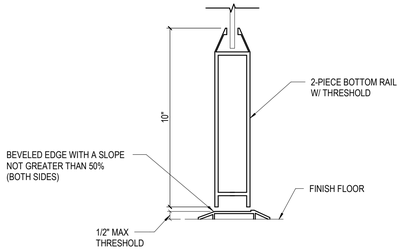

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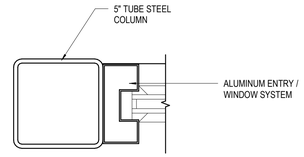

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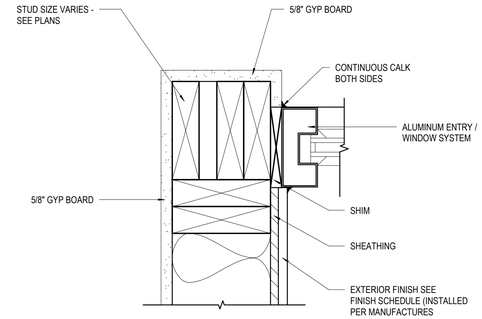

J JAMB DETAIL
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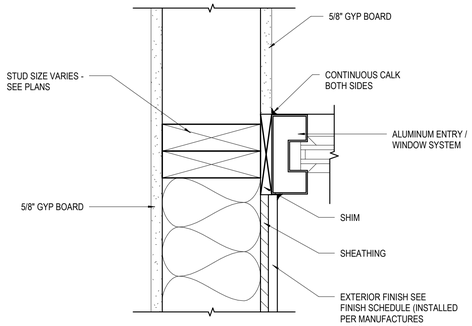

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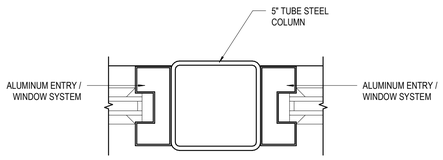
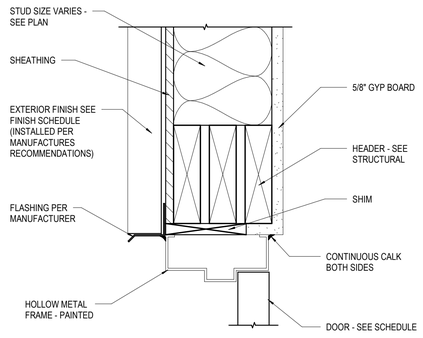
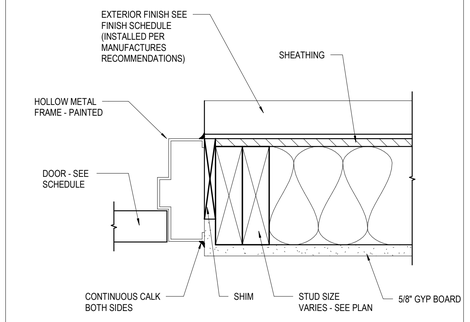


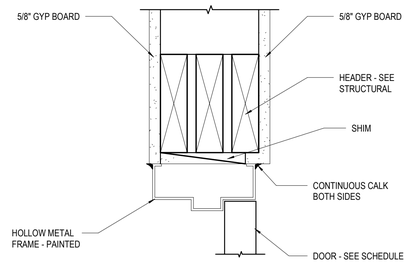
L JAMB DETAIL
SCALE: 3" = 1'-0"



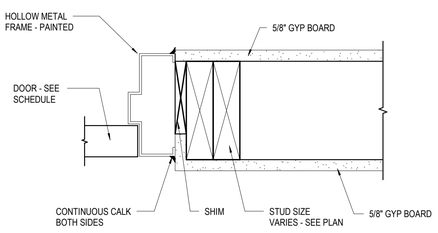
M HEAD DETAIL
SCALE: 3" = 1'-0"



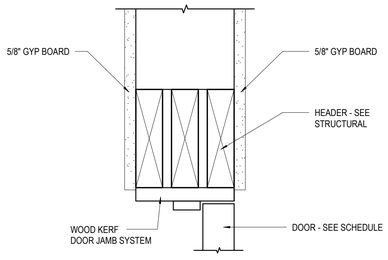
N HEAD DETAIL
SCALE: 3" = 1'-0"



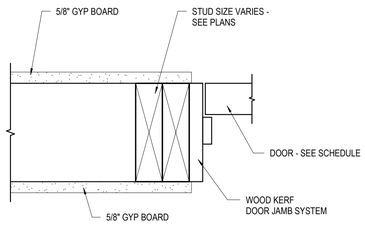
O HEAD DETAIL
SCALE: 3" = 1'-0"



P JAMB DETAIL
SCALE: 3" = 1'-0"



Q HEAD DETAIL
SCALE: 3" = 1'-0"



R JAMB DETAIL
SCALE: 3" = 1'-0"

REVISIONS

#	Date	Description

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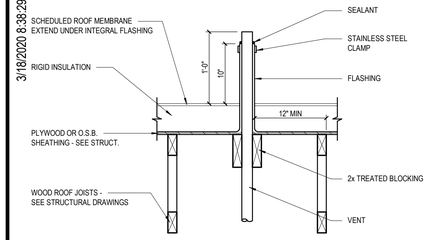
BLOSSOM RESTAURANT
DOOR DETAILS

03/18/2020

A4.2

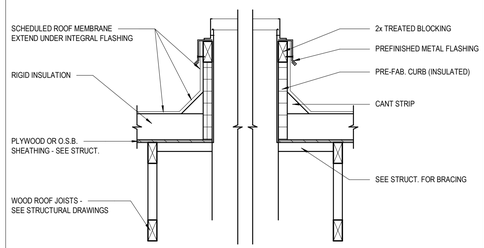
LICENSED ARCHITECT
CHRISTOPHER M. HARRIS
#6359001-0301
03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020



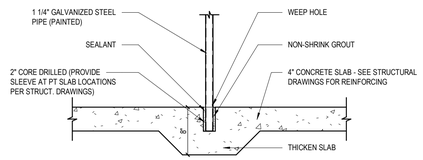
TYPICAL ROOF PENETRATION DETAIL (VERIFY W/ MECHANICAL DRAWINGS)

A A4.3 DETAIL
SCALE: N.T.S.



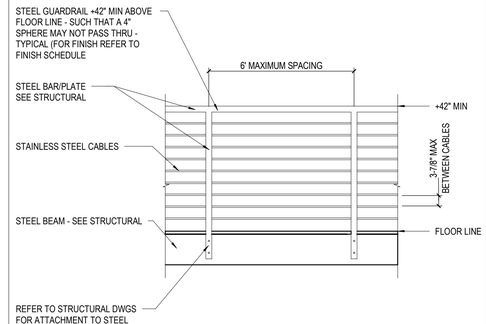
TYPICAL CURB DETAIL (VERIFY W/ MECHANICAL DWGS.)

B A4.3 DETAIL
SCALE: N.T.S.

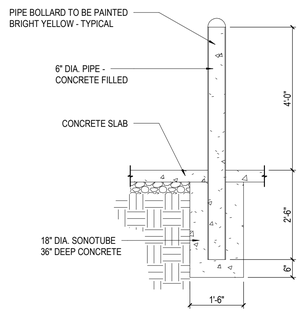


TYPICAL POST SLEEVE BASE DETAIL

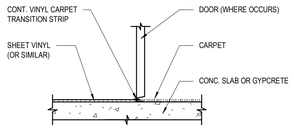
C A4.3 DETAIL
SCALE: N.T.S.



D GUARDRAIL DETAIL
SCALE: N.T.S.

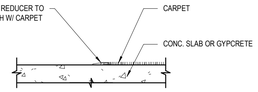


E BOLLARD DETAIL
SCALE: N.T.S.



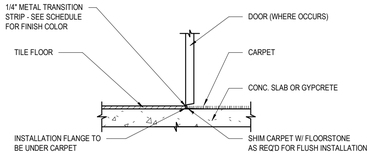
TYP. CARPET TO VINYL TRANSITION

F A4.3 DETAIL
SCALE: N.T.S.



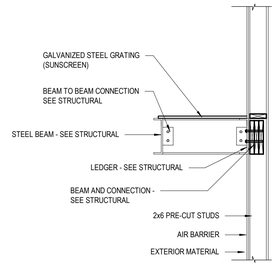
TYP. CARPET TO CONCRETE TRANSITION

G A4.3 DETAIL
SCALE: N.T.S.

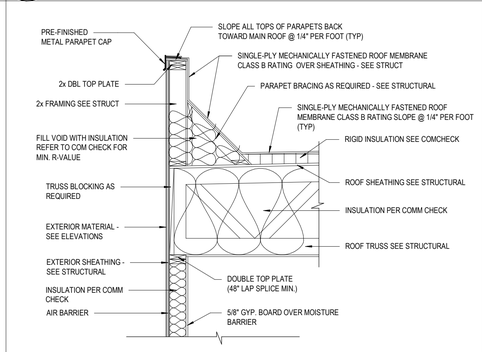


TYP. CARPET TO VINYL TRANSITION

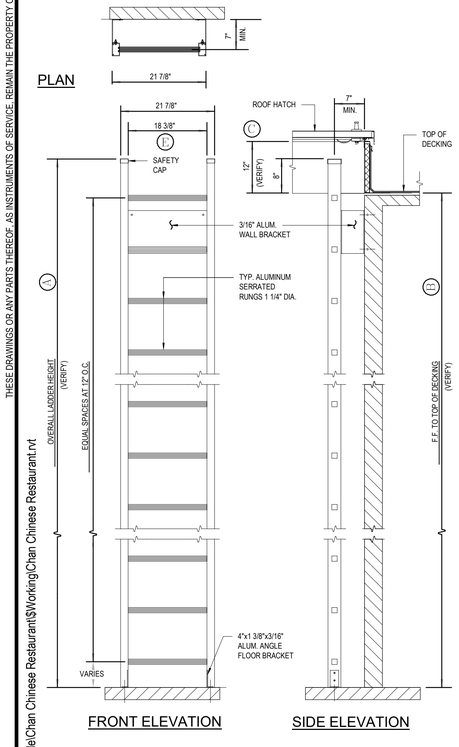
H A4.3 DETAIL
SCALE: N.T.S.



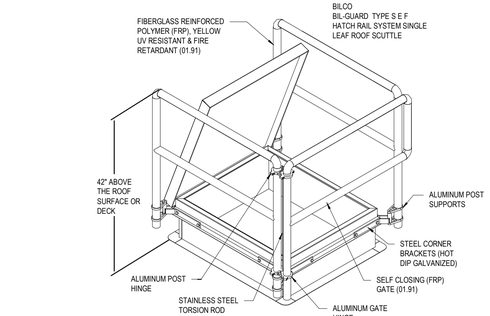
I ROOF CANOPY DETAIL
SCALE: 1/2" = 1'-0"

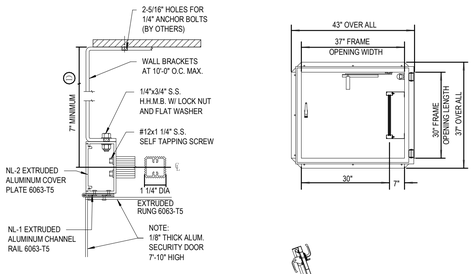


J PARAPET DETAIL
SCALE: 1/2" = 1'-0"

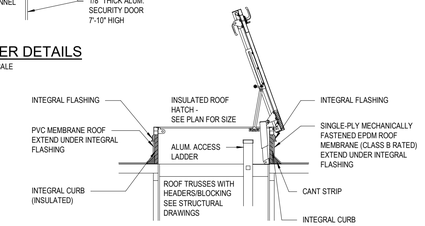


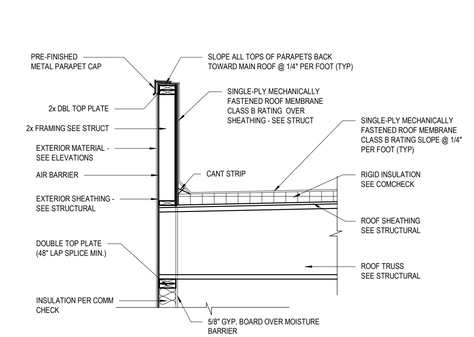
N TYPICAL LADDER / ROOF HATCH DETAILS
SCALE: N.T.S.



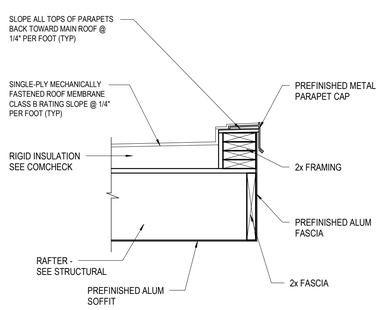


LADDER DETAILS
1/2 FULL SCALE

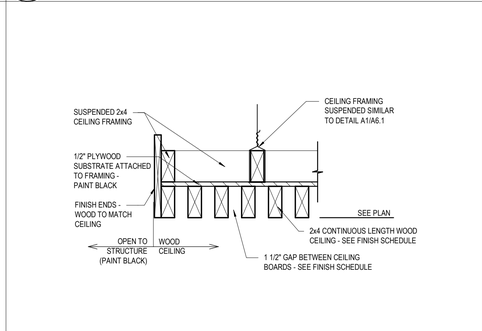




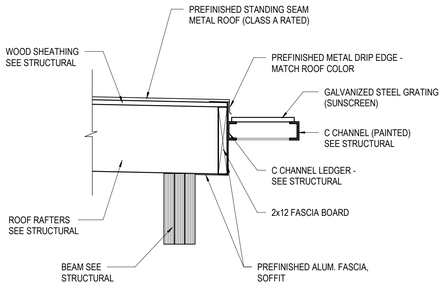
K PARAPET DETAIL
SCALE: 1/2" = 1'-0"



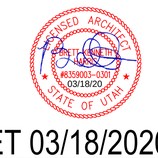
L ROOF CANOPY FASCIA
SCALE: 1" = 1'-0"



N SUSPENDED WOOD CEILING
SCALE: 1 1/2" = 1'-0"



O METAL FIN DETAIL
SCALE: 1" = 1'-0"



BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

DRAWN BY
Author

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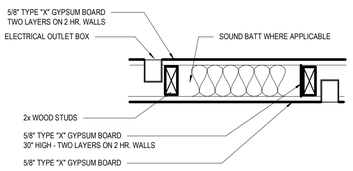
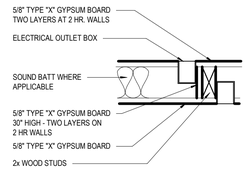
BLOSSOM RESTAURANT
CONSTRUCTION DETAILS

03/18/2020

A4.3

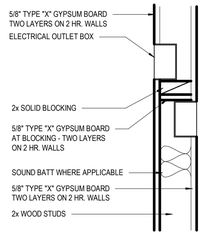


OUTLETS CLOSER THAN 24" O/C.

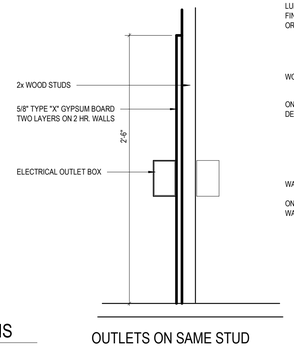


OUTLETS ON SAME STUD

PENETRATE



LIGHT FIXTURE BOXES BACK TO BACK



OUTLETS ON SAME STUD

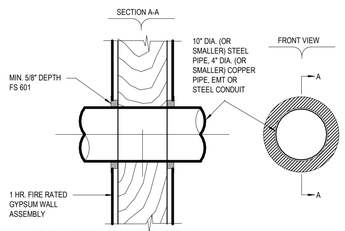
1-HR FIREWALL ELECTRICAL BOX PENETRATIONS

SCALE 1.1/2" = 1'-0"

U.L. SYSTEM No. WL1052

METAL PIPE THROUGH 1-HR. GYPSUM WALL

F RATING = 1-HR.
T RATING = 0-HR.



PENETRATION DETAIL

SCALE 1.1/2" = 1'-0"

NOTE: ANNULAR SPACE OF 3/4" REQUIRED

INSTALLATION INSTRUCTION FOR UL No. WL1052

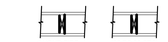
STEP 1 - PREPARATION: All surfaces must be clean, sound, dry and frost free prior to application of firestopping materials.

STEP 2 - FIRE STOP SEALANT: Apply a minimum 1.1/4" depth of FS 601 in the annular space between the wall and the pipe on both sides and tool it with a putty knife until flush with the surface. Tool excess sealant beyond the perimeter of the opening 1/2" onto each wall surface. Leave completed seal undisturbed for 48 hours.

GYPSUM WALLBOARD, WOOD STUDS

ONE LAYER 5/8" TYPE X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF 2x4 WOOD STUDS 24" O.C. WITH 6d COATED NAILS, 1.7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O/C.

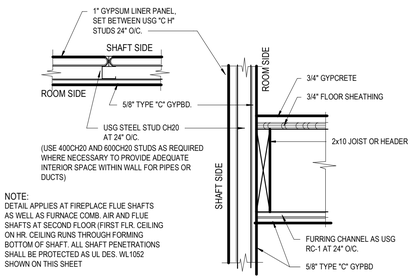
JOINTS STAGGERED 24" ON OPPOSITE SIDES. (LOAD BEARING)



1 HOUR FIRE — 35 TO 39 STC SOUND

THICKNESS:	4.7/8"
APPROX. WEIGHT:	7 PSF
FIRE TEST:	UL R3501-47, -48, 9-17-65, DESIGN U309; UL R1319-129, 7-22-70, DESIGN U314
SOUND TEST:	NGC 2404, 10-14-70

ONE HOUR RATED ASSEMBLY GA FILE #WP 3510



(USE 400CH20 AND 600CH20 STUDS AS REQUIRED WHERE NECESSARY TO PROVIDE ADEQUATE INTERIOR SPACE WITHIN WALL FOR PIPES OR DUCTS)

NOTE:
DETAIL APPLIES AT FIREPLACE FLUE SHAFTS AS WELL AS FURNACE COMB. AIR AND FLUE SHAFTS AT SECOND FLOOR (FIRST FLR. CEILING ON HR. CEILING RUNS THROUGH FORMING BOTTOM OF SHAFT. ALL SHAFT PENETRATIONS SHALL BE PROTECTED AS UL DES. WL1052 SHOWN ON THIS SHEET

ONE HOUR RATED ASSEMBLY UL DES. U465

SHAFT WALL DETAIL

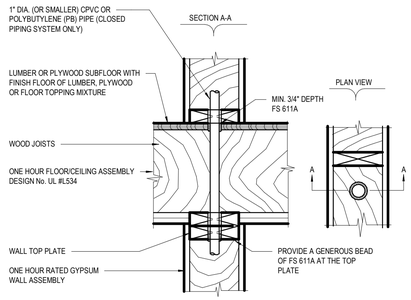
SCALE 1.1/2" = 1'-0"

OPTIONAL

U.L. SYSTEM No. FC2017

PLASTIC PIPE THROUGH 1-HR. WOOD FLOOR ASSEMBLY

F RATING = 1-HR.
T RATING = 1-HR.



NOTE: MAXIMUM DIAMETER OF FLOOR OPENING IS 2"
ANNULAR SPACE = MIN. 1/16" TO MAX. 5/8"

INSTALLATION INSTRUCTION FOR UL No. FC2017

STEP 1 - PREPARATION: All surfaces must be clean, sound, dry and frost free prior to application of firestopping materials.

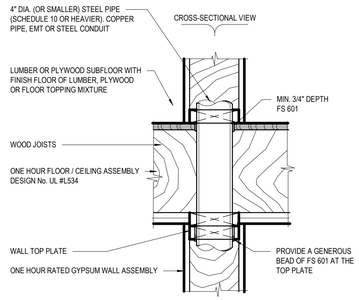
STEP 2 - FIRE STOP SEALANT AT SUBFLOOR: Apply a minimum 3/4" depth of FS 611A in the annular space between the pipe and the subfloor. Tool the sealant with a putty knife to push it in place and smooth the surface.

STEP 3 - FIRESTOP SEALANT AT TOP PLATE: Apply a generous bead of FS 611A in the annular space between the pipe and the top plate. Tool the sealant with a putty knife. Leave both completed seals undisturbed for 48 hours.

U.L. SYSTEM No. FC1008

METAL PIPE/CONDUIT THROUGH 1-HR. WOOD FLOOR ASSEMBLY

F RATING = 1-HR.
T RATING = 1-HR.



NOTE: ANNULAR SPACE = MIN. 1/8" TO MAX. 3/8"

INSTALLATION INSTRUCTION FOR UL No. FC1008

STEP 1 - PREPARATION: All surfaces must be clean, sound, dry and frost free prior to application of firestopping materials.

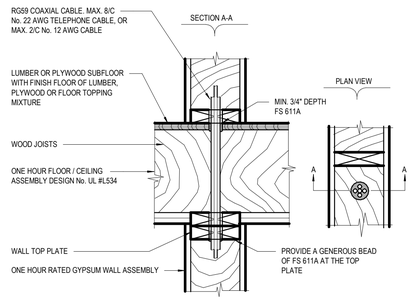
STEP 2 - FIRE STOP SEALANT AT SUBFLOOR: Apply a minimum 3/4" depth of FS 601 in the annular space between the pipe and the subfloor. Tool the sealant with a putty knife to push it in place and smooth the surface.

STEP 3 - FIRESTOP SEALANT AT TOP PLATE: Apply a generous bead of FS 601 in the annular space between the pipe and the top plate. Tool the sealant with a putty knife. Leave both completed seals undisturbed for 48 hours.

U.L. SYSTEM No. FC3011

CABLE OR CABLE BUNDLE THROUGH 1-HR. WOOD FLOOR ASSEMBLY

F RATING = 1-HR.
T RATING = 1-HR.



NOTE: MAXIMUM DIAMETER OF FLOOR OPENING IS 2"
CABLES TO FILL A MAX. OF 15% OF CROSS SECTIONAL AREA OF OPENING.

INSTALLATION INSTRUCTION FOR UL No. FC3011

STEP 1 - PREPARATION: All surfaces must be clean, sound, dry and frost free prior to application of firestopping materials.

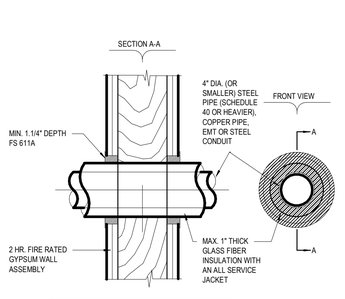
STEP 2 - FIRE STOP SEALANT AT SUBFLOOR: Apply a minimum 3/4" depth of FS 611A in the annular space between the pipe and the subfloor. Tool the sealant with a putty knife to push it in place and smooth the surface.

STEP 3 - FIRESTOP SEALANT AT TOP PLATE: Apply a generous bead of FS 611A in the annular space between the pipe and the top plate. Tool the sealant with a putty knife. Leave both completed seals undisturbed for 48 hours.

U.L. SYSTEM No. WL5029

INSULATED METAL PIPE THROUGH 2-HR. GYPSUM WALL

F RATING = 1-HR.
T RATING = 1-HR.



NOTE: MAXIMUM DIAMETER OF OPENING IS 7.5/8"
ANNULAR SPACE = MIN. 1/2" TO MAX. 3/4"

INSTALLATION INSTRUCTION FOR UL No. WL5029

STEP 1 - PREPARATION: All surfaces must be clean, sound, dry and frost free prior to application of firestopping materials.

STEP 2 - FIRE STOP SEALANT: Apply a minimum 1.1/4" depth of FS 611A in the annular space between the wall and the pipe on both sides and tool it with a putty knife until flush with the surface. Tool excess sealant beyond the perimeter of the opening 1/2" onto each wall surface. Leave completed seal undisturbed for 48 hours.

TYPICAL MOUNTING DETAILS

SCALE: N.T.S. WHERE APPLICABLE

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

DRAWN BY
Author

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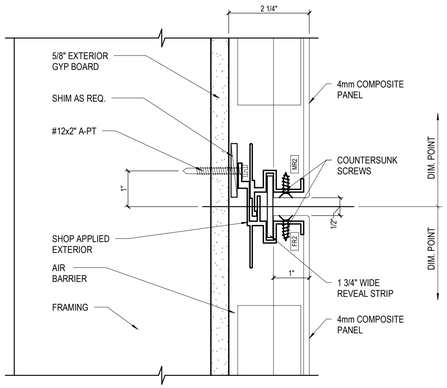
BLOSSOM RESTAURANT

PENETRATION DETAILS

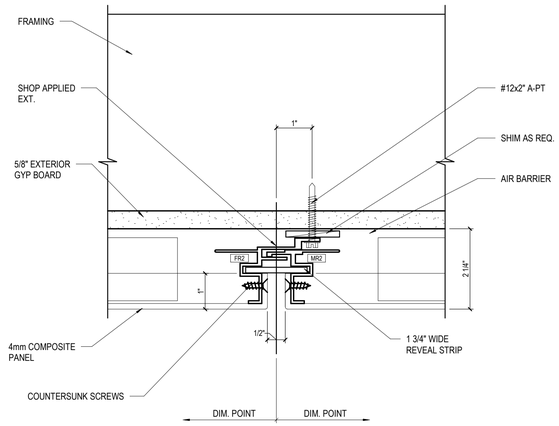
03/18/2020

A4.4



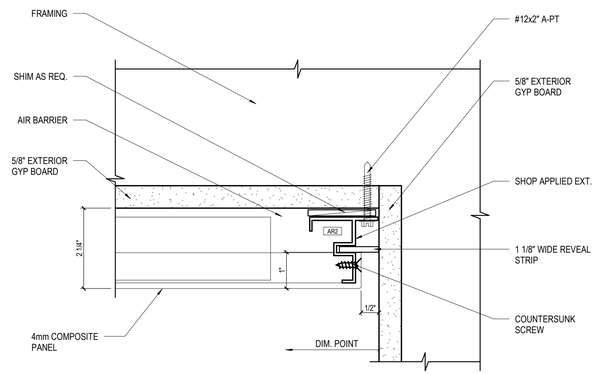
- HORIZONTAL JOINT LINE DETAIL

SCALE: HALF



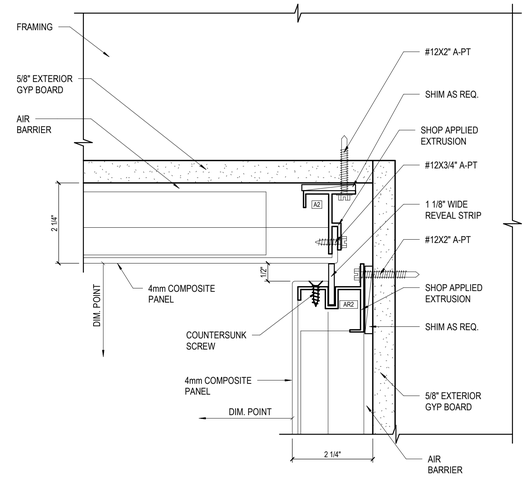
- VERTICAL JOINT LINE DETAIL

SCALE: HALF



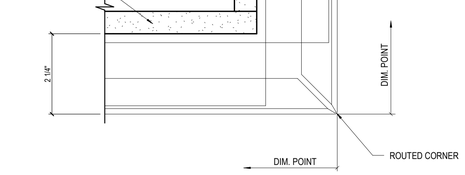
- PANEL TERMINATION @ WALL

SCALE: HALF



- INSIDE CORNER DETAIL

SCALE: HALF



- OUTSIDE CORNER DETAIL

BUILDING PERMIT SET 03/18/2020

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BLOSSOM RESTAURANT

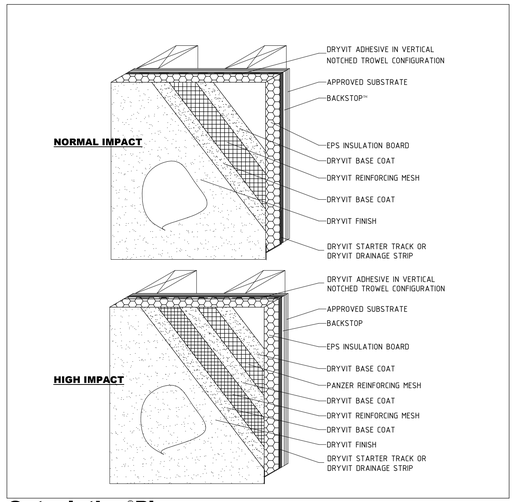
TYP ALUM COMP. METAL PANEL DETAILS

03/18/2020

A4.5

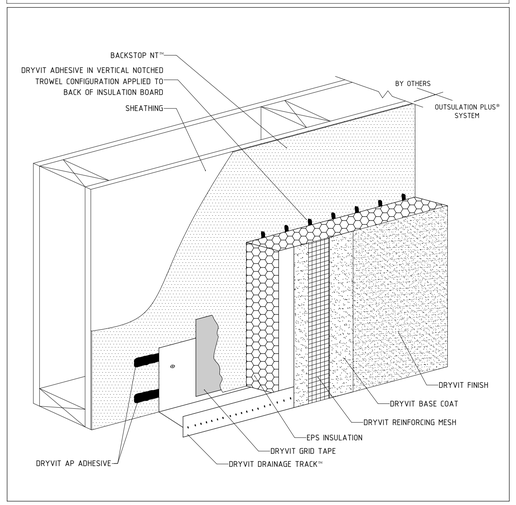
dryvit®

OPL 0.0.01



Outsulation® Plus Outsulation Plus System

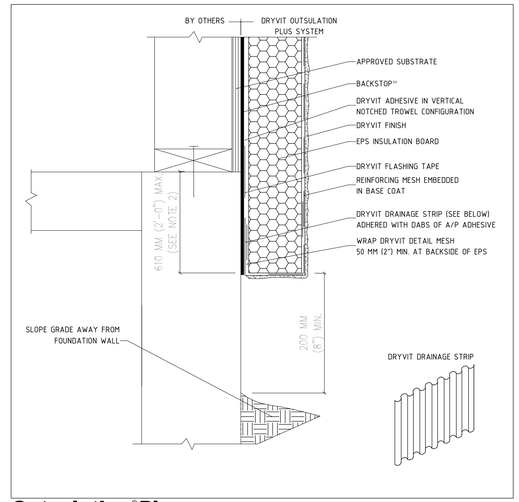
OPL 0.0.02



Outsulation® Plus Backstop NT Option

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER®MESH PRIOR TO STANDARD™OR STANDARD PLUS™MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. LIGHTLY SAND SURFACES OF TRACK TO MAXIMIZE ADHESION.

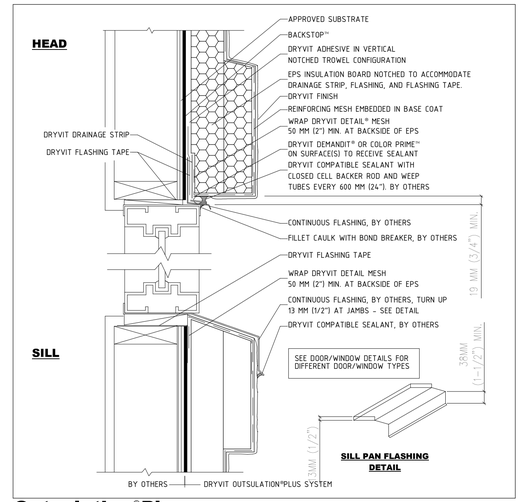
OPL 0.0.04



Outsulation® Plus Foundation With Drainage Strip

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. EXPANSION JOINT IS REQUIRED ALONG TOP OF FOUNDATION IF 610 MM (2'-0") DIMENSION IS EXCEEDED.

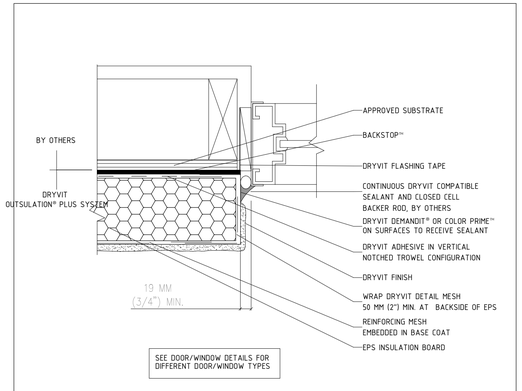
OPL 0.0.06



Outsulation® Plus Head/Sill

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. SEALANT SHOULD NOT BE IN DIRECT CONTACT WITH ASPHALTIC ADHESIVE ON DRYVIT FLASHING TAPE. COVER DRYVIT FLASHING TAPE LAPS WITH POLYETHYLENE TAPE OR BACKER ROD.

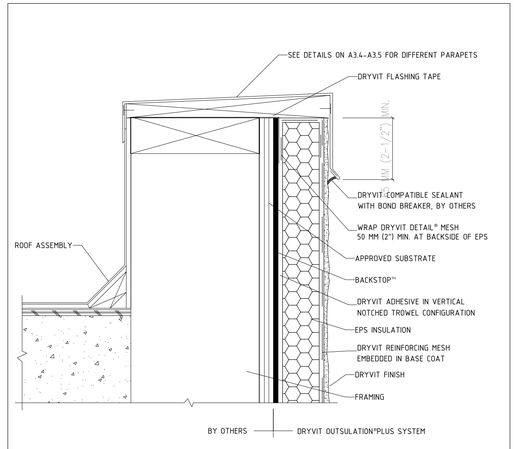
OPL 0.0.12



Outsulation® Plus Jamb

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. SEALANT SHOULD NOT BE IN DIRECT CONTACT WITH ASPHALTIC ADHESIVE ON DRYVIT FLASHING TAPE. COVER DRYVIT FLASHING TAPE LAPS WITH POLYETHYLENE TAPE OR BACKER ROD.

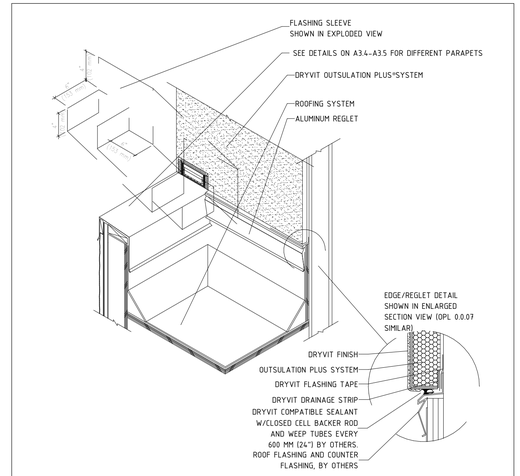
OPL 0.0.13



Outsulation® Plus Parapet - Cap Flashing

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.

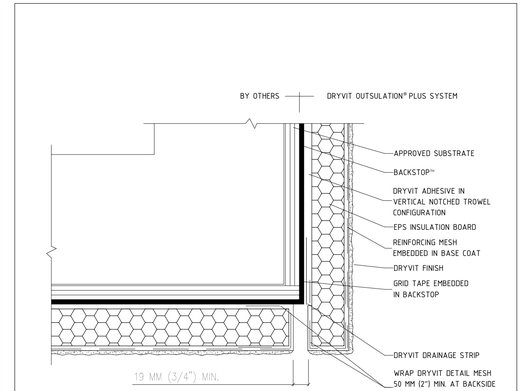
OPL 0.0.14



Outsulation® Plus Parapet/Wall Termination

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER®MESH PRIOR TO STANDARD™OR STANDARD PLUS™MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. LAP ALL FLASHING AND WATER RESISTANT BARRIERS IN SHINGLE FASHION.
3. USE FLASHING TAPE AT WALL/SLEEVE TRANSITION.

OPL 0.0.16



Outsulation® Plus Soffit/Fascia Intersection

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. BOTTOM EDGE OF DRYVIT DRAINAGE STRIP SHALL BE MASKED DURING INSTALLATION TO PREVENT CLOGGING OF DRAINAGE CHANNELS.

LICENSED ARCHITECT
CHRISTOPHER T. HARRIS
#8359003-0301
03/18/20
STATE OF UTAH

NOTE: DETAILS SHOWN ARE FOR EIFS STANDARD INSTALLATION ONLY. SEE SHEETS A3.5-A3.6 FOR JOB SPECIFIC DETAILS ON PARAPETS, WINDOWS, FOUNDATIONS, ETC...

BUILDING PERMIT SET 03/18/2020

REVISIONS

#	Date	Description

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BLOSSOM RESTAURANT

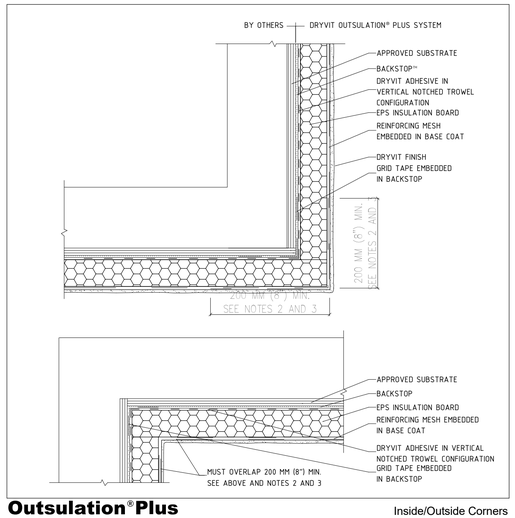
TYPICAL EIFS DETAILS

03/18/2020

A4.6

dryvit®

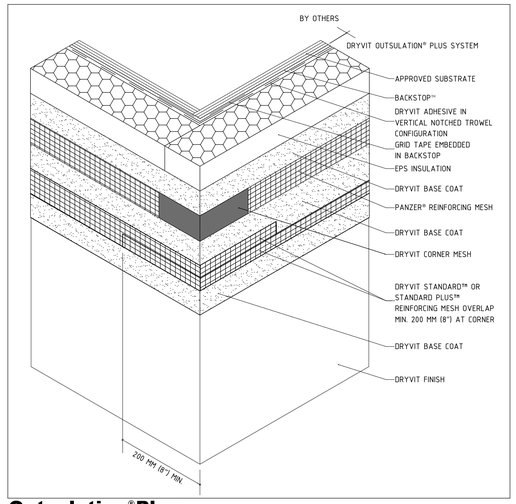
OPL 0.0.18



Outsulation® Plus — Inside/Outside Corners

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. DOUBLE WRAP OUTSIDE CORNERS WITH REINFORCING MESH OR USE CORNER MESH.
3. DO NOT LAP REINFORCING MESH WITHIN 200 MM (8") OF A CORNER.

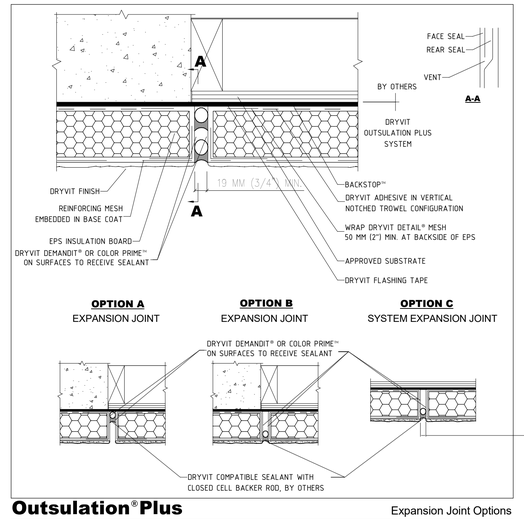
OPL 0.0.19



Outsulation® Plus — Outside Corner - High Impact

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.

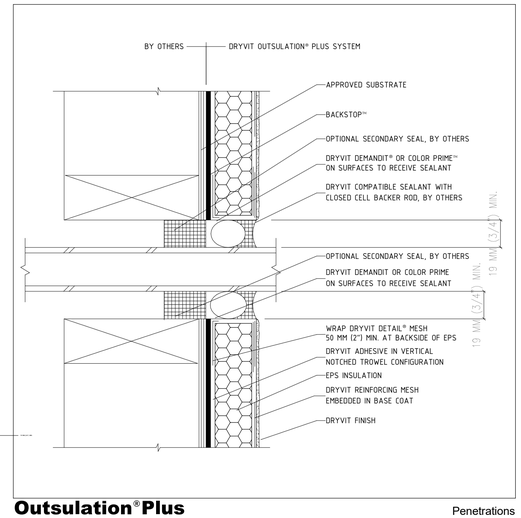
OPL 0.0.22



Outsulation® Plus — Expansion Joint Options

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. SEALANT SHOULD NO BE IN DIRECT CONTACT WITH ASPHALTIC ADHESIVE ON DRYVIT FLASHING TAPE. COVER DRYVIT FLASHING TAPE LAPS WITH POLYETHYLENE TAPE OR BACKER ROD.

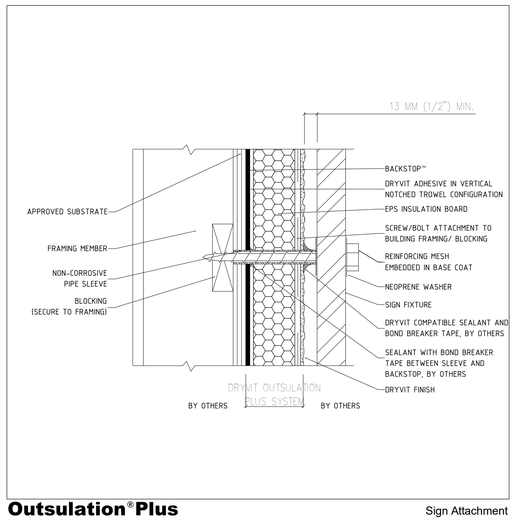
OPL 0.0.24



Outsulation® Plus — Penetrations

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.

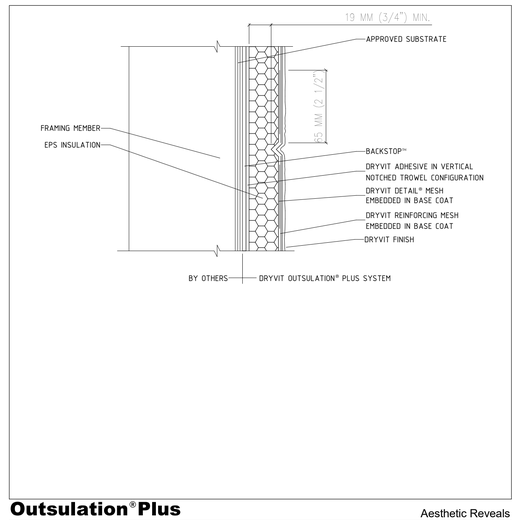
OPL 0.0.26



Outsulation® Plus — Sign Attachment

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. ENTIRE PERIMETER OF PIPE SLEEVE IS CAULKED TO PREVENT WATER ENTRY INTO WALL.

OPL 0.0.27



Outsulation® Plus — Aesthetic Reveals

NOTE:
1. DRYVIT RECOMMENDS THAT GROUND FLOOR APPLICATIONS AND ALL FACADES EXPOSED TO ABNORMAL STRESS, HIGH TRAFFIC, OR DELIBERATE IMPACT HAVE THE BASE COAT REINFORCED WITH PANZER® MESH PRIOR TO STANDARD™ OR STANDARD PLUS™ MESH. LOCATION OF HIGH IMPACT ZONES SHOULD BE INDICATED ON CONTRACT DRAWINGS.
2. SLOPE BOTTOM EDGE OF REVEAL FOR POSITIVE DRAINAGE.

LICENSED ARCHITECT — CHRISTOPHER M. HARRIS — #339003-0301 — 03/18/20 — STATE OF UTAH

NOTE: DETAILS SHOWN ARE FOR EIFS STANDARD INSTALLATION ONLY. SEE SHEETS A3.5-A3.6 FOR JOB SPECIFIC DETAILS ON PARAPETS, WINDOWS, FOUNDATIONS, ETC...

BUILDING PERMIT SET 03/18/2020

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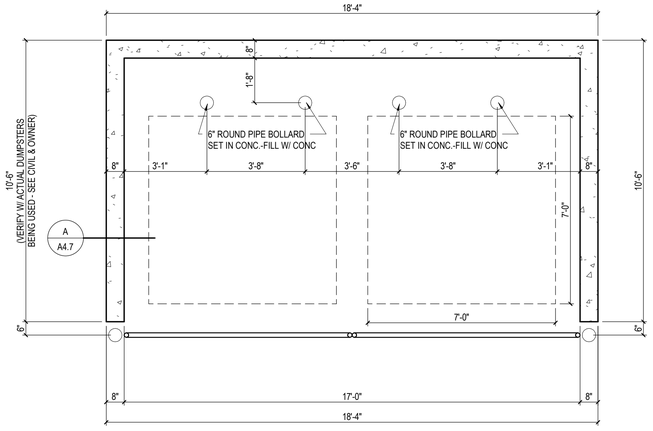
BLOSSOM RESTAURANT

TYPICAL EIFS DETAILS

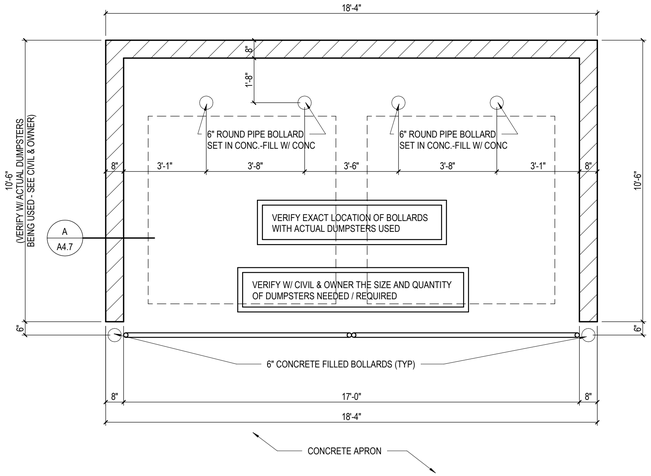
03/18/2020

A4.6A



DUMPSTER FOOTING & FOUNDATION

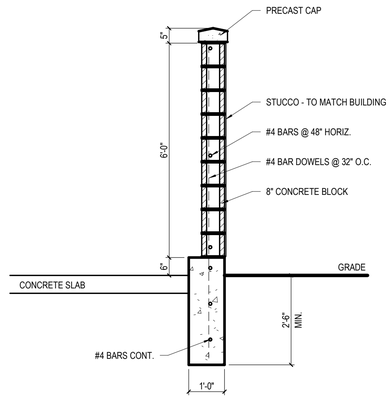
SCALE : 3/8" = 1'-0"



DUMPSTER PLAN

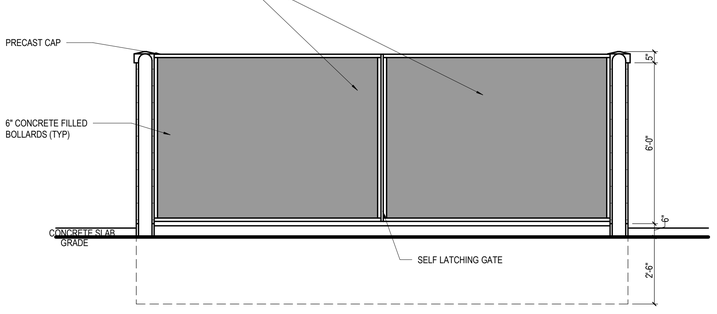
SCALE : 3/8" = 1'-0"

NOTE: VERIFY EXACT SIZE OF ENCLOSURE WITH ACTUAL DUMPSTER(S) USED (SEE CIVIL & OWNER)



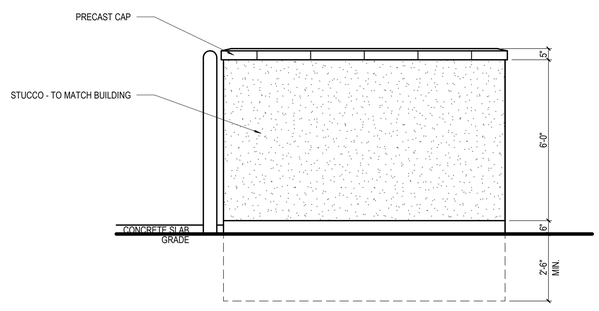
A
A4.7
Dumpster Wall Section

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



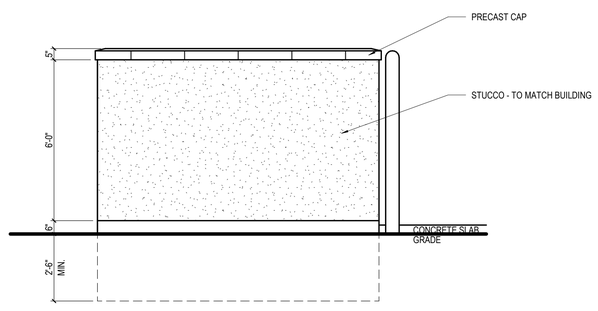
DUMPSTER FRONT ELEVATION

SCALE 3/8" = 1'-0"



DUMPSTER RIGHT ELEVATION

SCALE 3/8" = 1'-0"

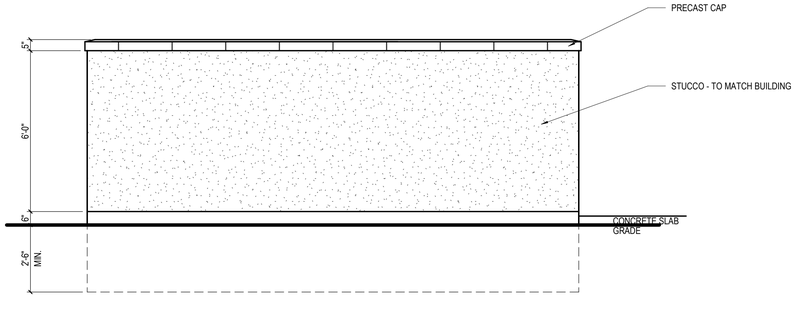


DUMPSTER LEFT ELEVATION

SCALE 3/8" = 1'-0"

DUMPSTER ENCLOSURE DRAWINGS

NOTE: COORDINATE EXACT NUMBER SIZE, AND LOCATION W/ OWNER AND W/ CIVIL DRAWINGS.



DUMPSTER REAR ELEVATION

SCALE 3/8" = 1'-0"

LICENSED ARCHITECT
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03/18/20
STATE OF UTAH

BUILDING PERMIT SET 03/18/2020

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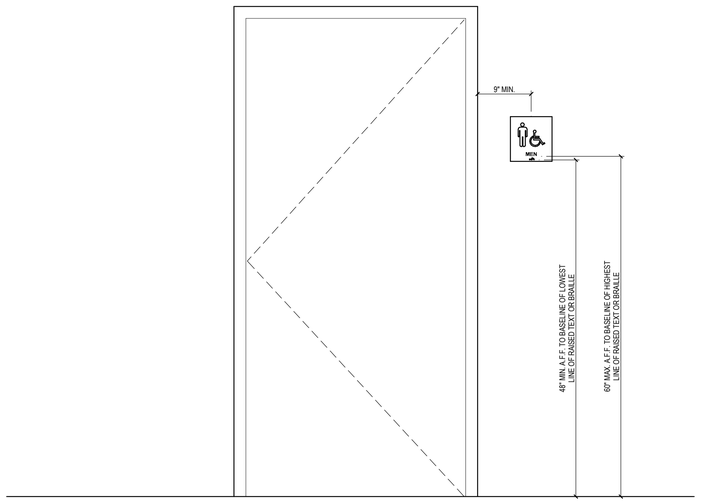
BLOSSOM RESTAURANT
DUMPSTER ENCLOSURE DETAILS

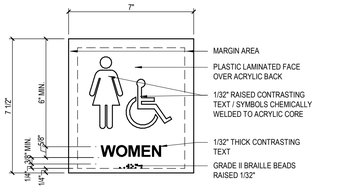
03/18/2020

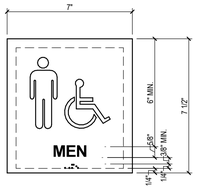
A4.7



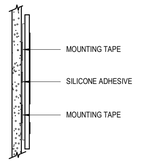
1 ACCESSIBLE SIGN MOUNTING DETAIL

SCALE: 1" = 1'-0"

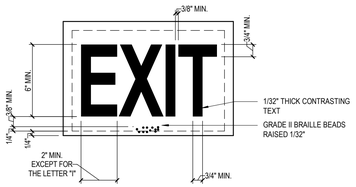




NOTE: BRAILLE SHOWN IS FOR REPRESENTATION OF LOCATION ONLY SEE MFGR. FOR ACTUAL LETTERING

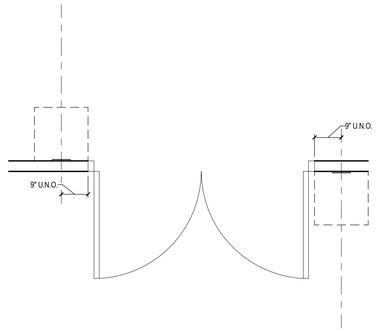


NOTE: REFER TO SIGN MFGR. FOR ANY ADDITIONAL MOUNTING ACCESSORIES OR METHODS



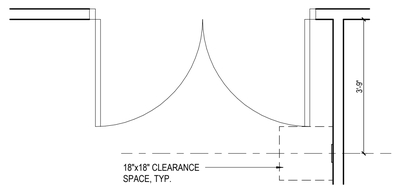
2 ACCESSIBLE SIGN DETAILS

SCALE: 3" = 1'-0"



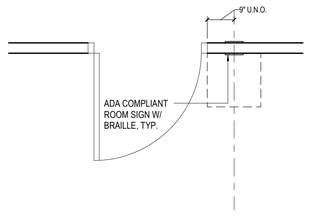
- DOUBLE DOOR

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



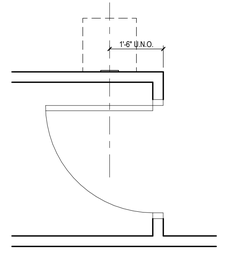
- DOUBLE DOOR

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



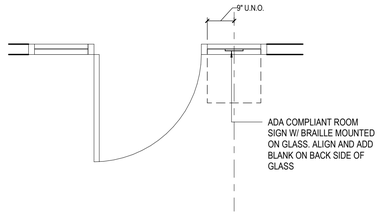
- SINGLE DOOR

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



- SINGLE DOOR

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



3 SINGLE DOOR

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

NOTE: PROVIDE TACTILE EXIT SIGNAGE AT ALL EXITS, EXIT STAIRS, AND DOORS TO EXIT DISCHARGE AS REQUIRED BY IBC 1013.4.
NOTE: PROVIDE STAIR SIGNAGE AS REQUIRED BY IBC 1023.9.
NOTE: PROVIDE ELEVATOR SIGNAGE AS REQUIRED BY IBC 3002.3.

BUILDING PERMIT SET 03/18/2020

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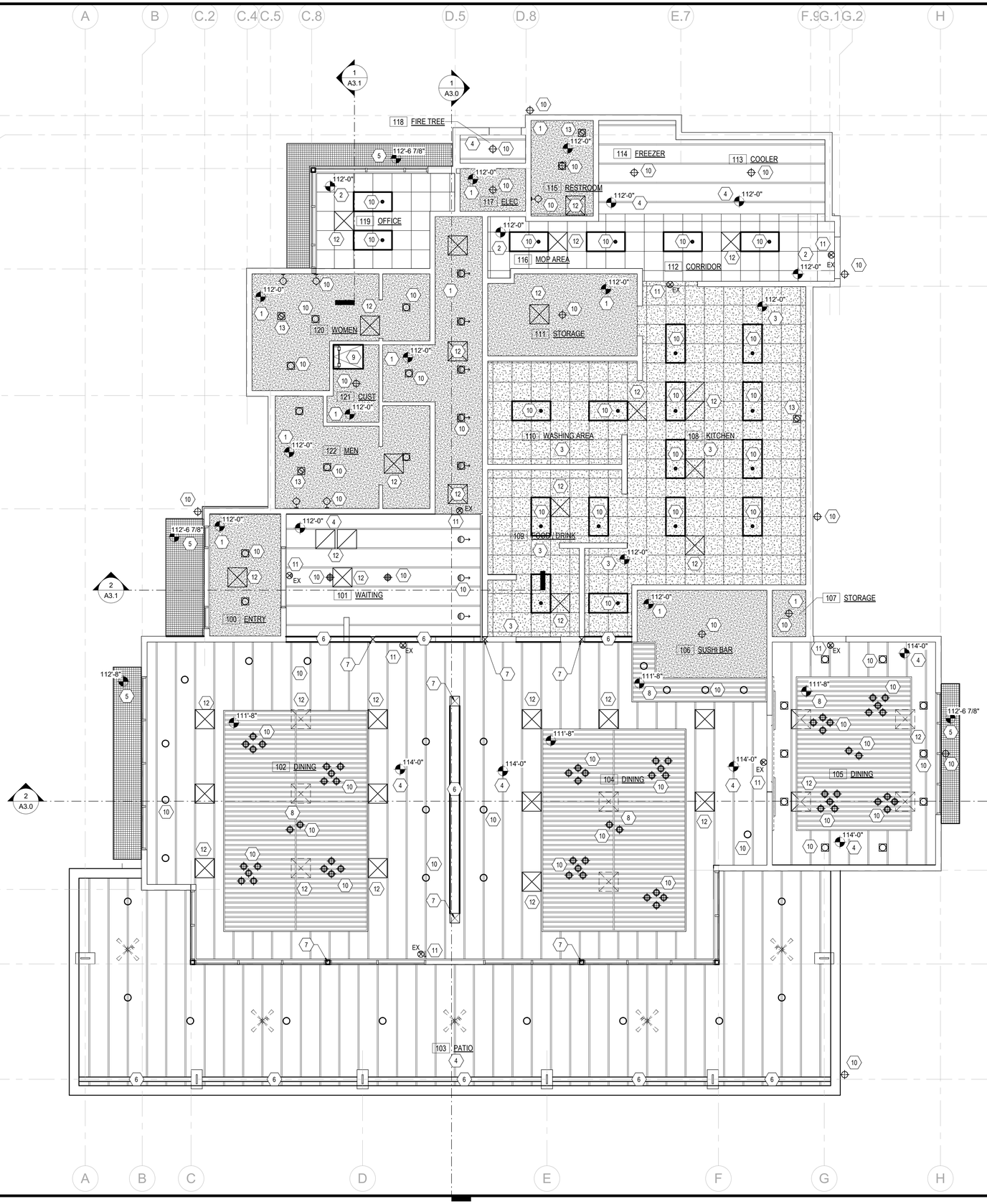
BLOSSOM RESTAURANT

SIGNAGE

03/18/2020

A4.8



REFLECTED CEILING PLAN GENERAL NOTES:

1. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL LIGHTING AND DIFFUSER INFORMATION.
2. VERIFY EXACT LOCATION OF ALL RECESSED CANS WITH FLOOR AND ROOF JOISTS.
3. ADJUST FRAMING AT ROOF TO ALLOW FOR ROOF ACCESS HATCHES.
4. ALL ITEMS THAT PENETRATE FIRE RATED CEILING (LIGHTS & ETC.) SHALL BE TENTED WITH 5/8" TYPE C GYPSUM BOARD.
5. SHEET SPECIFIC NOTE #6 TO BE USED AT DROP CEILINGS AND SHEET SPECIFIC NOTE 4 MUST RUN CONTINUOUS ABOVE DROPS AT BOTTOM OF STRUCTURE.
6. WHERE MECH. PENETRATE FIRE RATED CEILING FIRE DAMPERS ARE REQUIRED SEE MECHANICAL.
7. THIS REFLECTED CEILING PLAN IS SCHEMATIC ONLY - FOR EXACT LOCATION AND FIXTURE COUNT SEE ELECTRICAL DRAWINGS.
8. SEE DETAILS SHEET A6.1 FOR SUSPENDED CEILING DETAILS.
9. ADJUST / COORDINATE FRAMING AT FLOORS / ROOFS TO ALLOW FOR PLUMBING FIXTURE TRAPS, ROOF ACCESS, ETC.
10. LIGHTING FIXTURES MUST NOT EXTEND BELOW 80" ABOVE THE FLOOR SURFACE IN CIRCULATION PATH.
11. SEE ELECTRICAL DRAWINGS FOR FIXTURE TYPES.
12. NOTE: SEE FLOOR PLANS AND EXTERIOR ELEVATIONS FOR ALL EXTERIOR CORNICES, JULIET BALCONIES, METAL CANOPIES, CANTILEVERS, & ANY OTHER EXTERIOR PROTRUSIONS (THOSE FEATURES ARE NOT SHOWN ON THIS PLAN).

RCP KEYNOTES

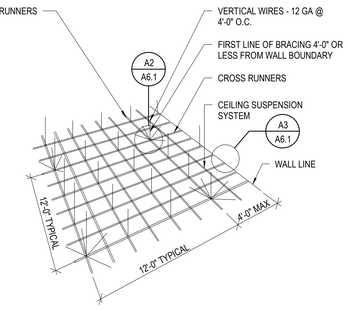
1	5/8" TYPE "X" GYP BOARD SKIP TROWEL TEXTURED AND PAINTED - NON RATED (ALSO SEE GENERAL NOTE #5 THIS SHEET IF USED AT A DROP CEILING.
2	2x2 ACT SYSTEM
3	WASHABLE 2x2 ACT SYSTEM
4	EXPOSED STRUCTURE ABOVE (PAINTED) SEE STRUCT.
5	PAINTED ALUMINUM OR STEEL (POWDER COATED) CANOPY WITH 2"x2" WIRE MESH (SEE STRUCTURAL)
6	STRUCTURAL BEAM - SEE STRUCTURAL
7	STRUCTURAL COLUMN - SEE STRUCTURAL
8	WOOD CLOUD STRUCTURE FRAMING AT 6" O.C.
9	30"x36" ROOF ACCESS HATCH. SEE ROOF ACCESS DETAILS
10	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
11	EXIT SIGN - SEE ELECTRICAL DRAWINGS
12	MECHANICAL REGISTER - SEE MECHANICAL DRAWINGS
13	EXAUHST FAN - SEE MECHANICAL DRAWINGS

FIXTURE LEGEND

SYMBOL	DESCRIPTION
	2x4 LIGHT FIXTURE
	HANGING LIGHT FIXTURE
	RECESSED CAN LIGHT FIXTURE
	STEM MOUNTED CAN LIGHT FIXTURE
	DIRECTIONAL WALL WASHER LIGHT FIXTURE
	RECESSED DIRECTIONAL WALL WASHER LIGHT FIXTURE
	PENDANT LIGHT FIXTURE
	CEILING MOUNTED LIGHT FIXTURE
	WALL MOUNTED LIGHT FIXTURE
	EXHAUST FAN
EX	EXIT SIGN

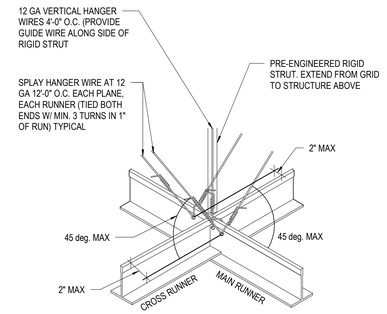
CEILING LEGEND

SYMBOL	DESCRIPTION
	GYPSUM BOARD - SMOOTH LEVEL 4 FINISH, PAINT
	ACOUSTICAL CEILING TILE ON SUSPENDED GRID SYSTEM - REVEAL EDGE
	WASHABLE ACOUSTICAL CEILING TILE ON SUSPENDED SYSTEM - REVEAL EDGE
	STRUCTURE EXPOSED - PAINTED
	SUSPENDED WOOD CLOUD STRUCTURE



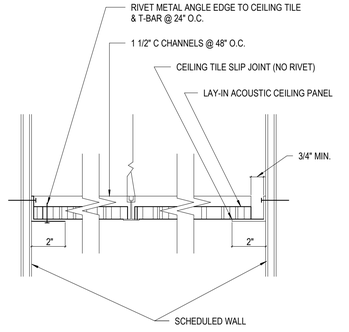
A1 A6.1 TYP. SUSPENDED GRID DETAIL

SCALE: N.T.S.



A2 A6.1 TYP. SEISMIC BRACING DETAIL

SCALE: N.T.S.



A3 A6.1 LAY IN CEILING TILE EDGE DETAIL

SCALE: N.T.S.

NOTE:
SUSPENDED CEILINGS SHALL MEET REQUIREMENTS OF CHAPTER 16 OF THE INTERNATIONAL BUILDING CODE.

HEAVY-DUTY T-BAR GRID SYSTEM SHALL BE USED.

WIDTH OF THE PERIMETER SUPPORTING CLOSURE ANGLE SHALL NOT BE LESS THAN 2 INCHES. IN EACH HORIZONTAL DIRECTION, ONE END OF THE CEILING GRID SHALL BE ATTACHED TO THE CLOSURE ANGLE. THE OTHER END IN EACH HORIZONTAL DIRECTION SHALL HAVE A 0.75-INCH CLEARANCE FROM THE WALL AND SHALL REST UPON AND BE FREE TO SLIDE ON A CLOSURE ANGLE.

FOR CEILING AREAS EXCEEDING 1,000 SQ. FT., HORIZONTAL RESTRAINT OF THE CEILING TO THE STRUCTURE SHALL BE PROVIDED AND DESIGNED TO MINIMIZE DIAPHRAGM LOADS.

FOR CEILING AREA EXCEEDING 2,500 SQ. FT., A SEISMIC SEPARATION JOINT OR FULL HEIGHT PARTITION SHALL BE PROVIDED.

SEISMIC BRACING IS REQUIRED FOR ALL CEILINGS GREATER THAN 144 SQUARE FEET IN AREA. THIS INCLUDES SPLAY WIRES AND COMPRESSION STRUT.

SPACER BARS ARE REQUIRED AT PERIMETERS.

LEVEL1 REFLECTED CEILING PLAN

SCALE: 3/16" = 1'-0"

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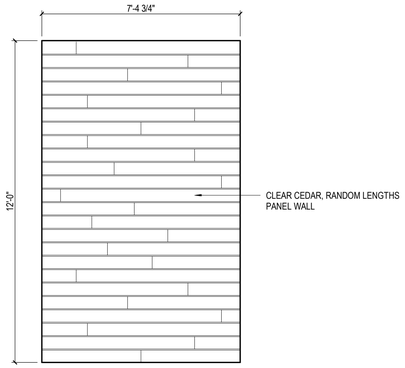
BLOSSOM RESTAURANT
LEVEL 1 R.C.P.

03/18/2020

A6.1



A ENTRY 100
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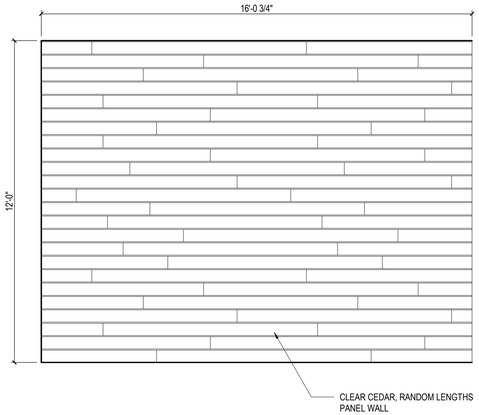

B WAITING 101
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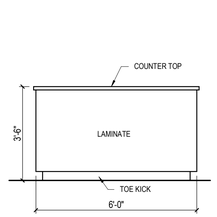

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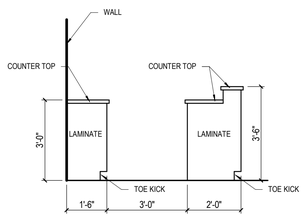

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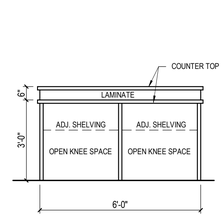

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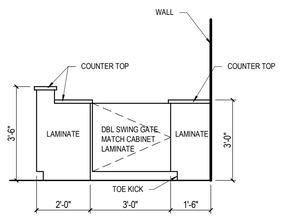

F WAITING 101
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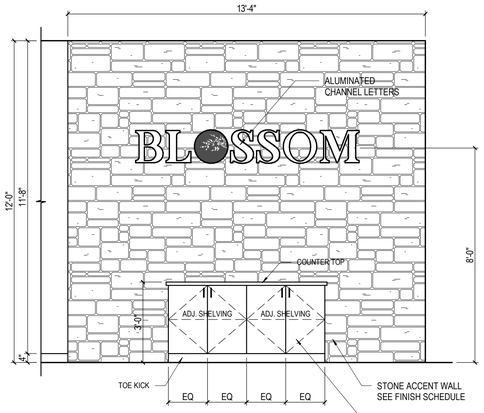

G WAITING 101
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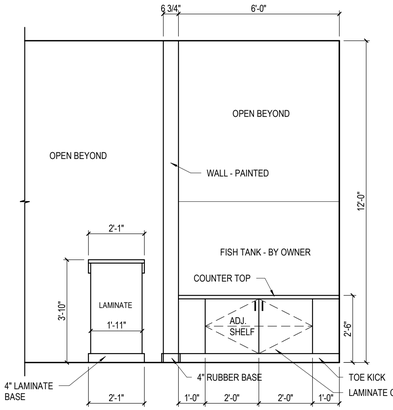
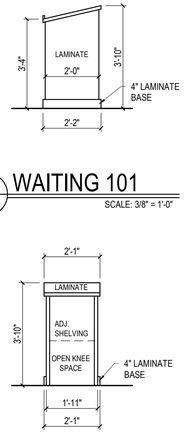
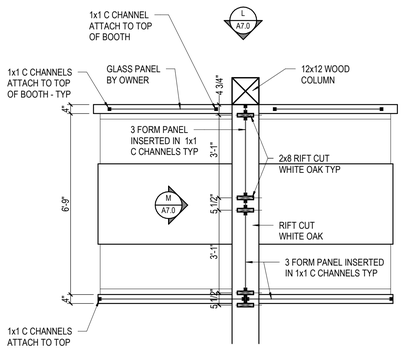


H WAITING 101
SCALE: 3/8" = 1'-0"

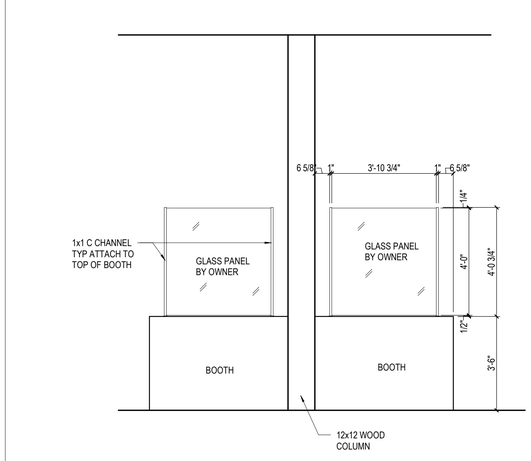


I WAITING 101
SCALE: 3/8" = 1'-0"

J WAITING 101
SCALE: 3/8" = 1'-0"



K DINING 102
SCALE: 3/8" = 1'-0"



L DINING 102
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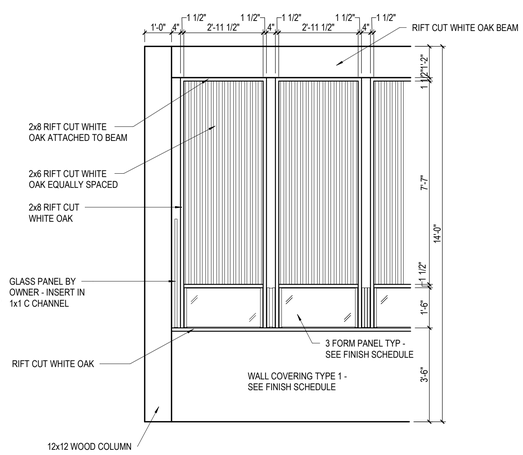

M DINING 102
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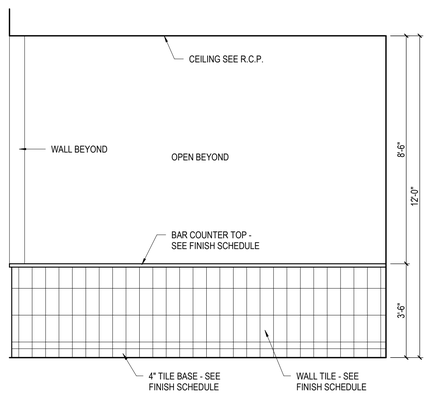
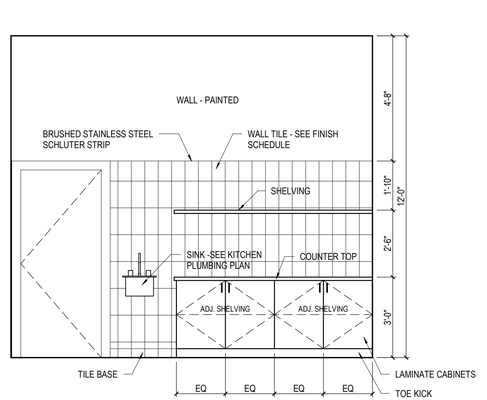
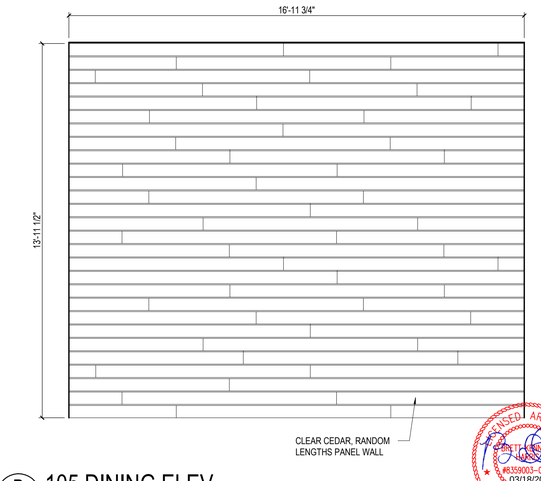


N 106 SUSHI BAR ELEV
SCALE: 3/8" = 1'-0"



O 106 SUSHI BAR ELEV
SCALE: 3/8" = 1'-0"



P 105 DINING ELEV
SCALE: 3/8" = 1'-0"

NOTE:
MILLWORK SHOP DRAWINGS ARE REQUIRED FOR OWNERS APPROVAL

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BLOSSOM RESTAURANT

INTERIOR ELEVATIONS / DETAILS

03/18/2020

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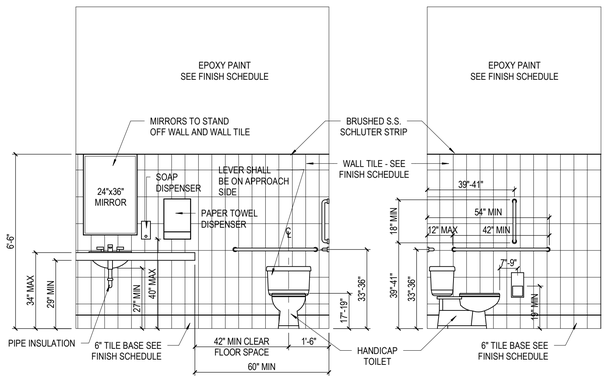
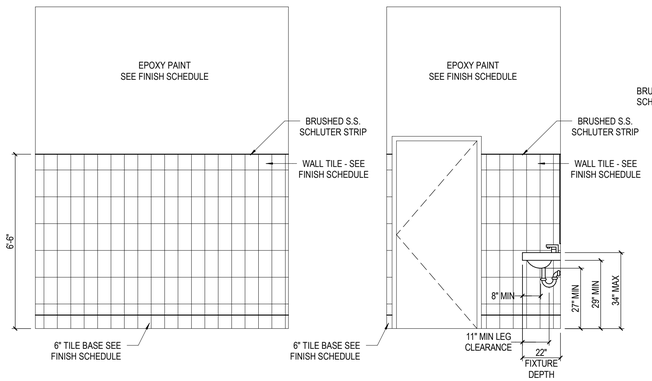


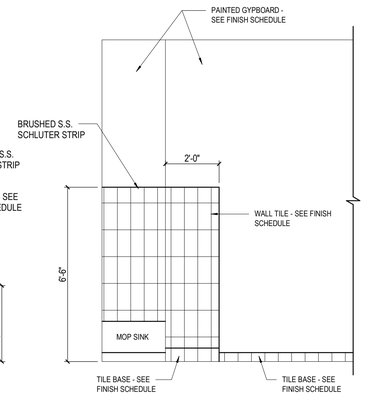
A RESTROOM 115
SCALE: 3/8" = 1'-0"



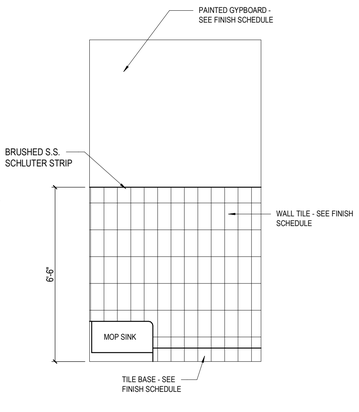
B RESTROOM 115
SCALE: 3/8" = 1'-0"

C RESTROOM 115
SCALE: 3/8" = 1'-0"

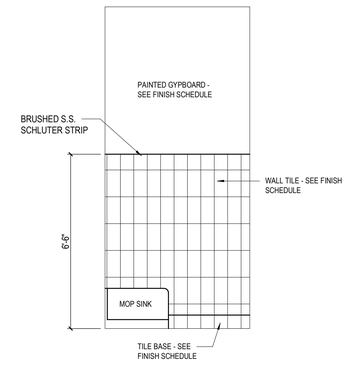
D RESTROOM 115
SCALE: 3/8" = 1'-0"



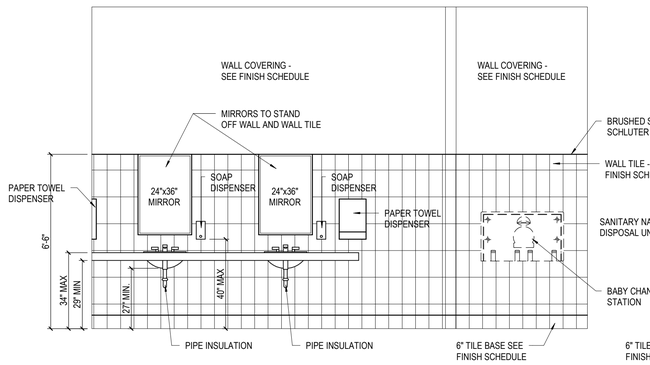
E MOP AREA 116
SCALE: 3/8" = 1'-0"



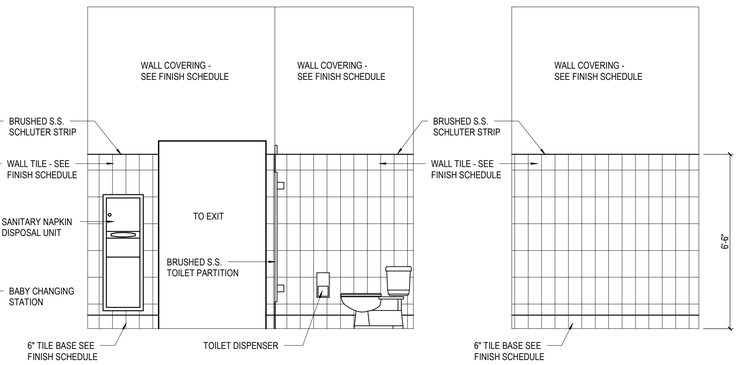
F MOP AREA 116
SCALE: 3/8" = 1'-0"



G CUST 121
SCALE: 3/8" = 1'-0"

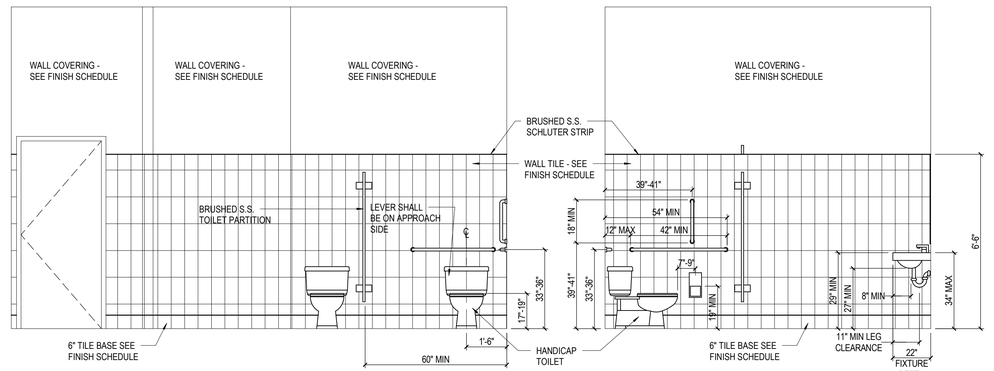


H WOMENS 120
SCALE: 3/8" = 1'-0"



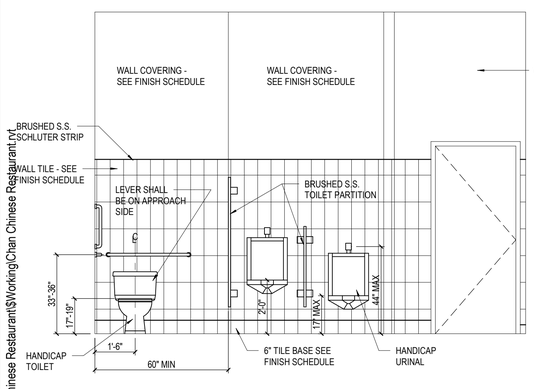
I WOMENS 120
SCALE: 3/8" = 1'-0"

J WOMENS 120
SCALE: 3/8" = 1'-0"

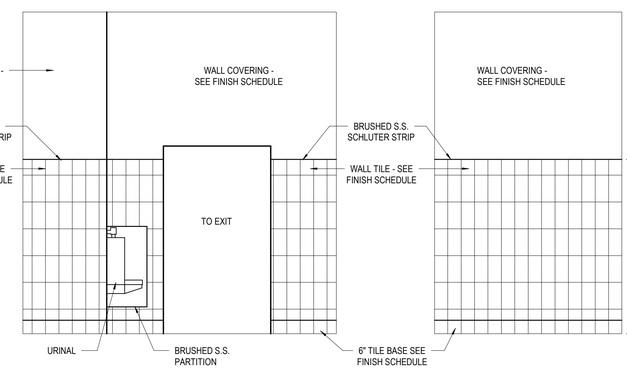


K WOMENS 120
SCALE: 3/8" = 1'-0"

L WOMENS 120
SCALE: 3/8" = 1'-0"

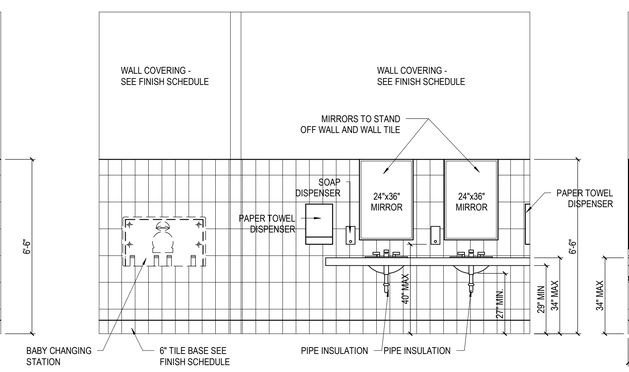


M MENS 122
SCALE: 3/8" = 1'-0"

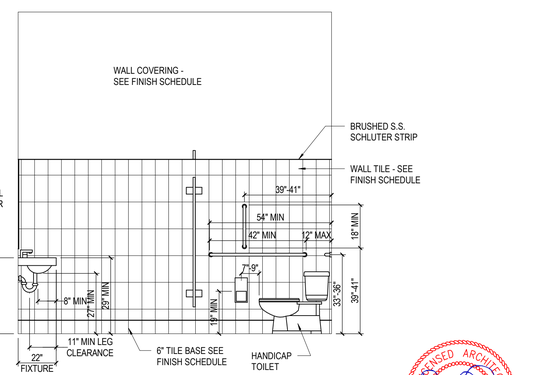


N MENS 122
SCALE: 3/8" = 1'-0"

O MENS 122
SCALE: 3/8" = 1'-0"



P MENS 122
SCALE: 3/8" = 1'-0"



Q MENS 122
SCALE: 3/8" = 1'-0"

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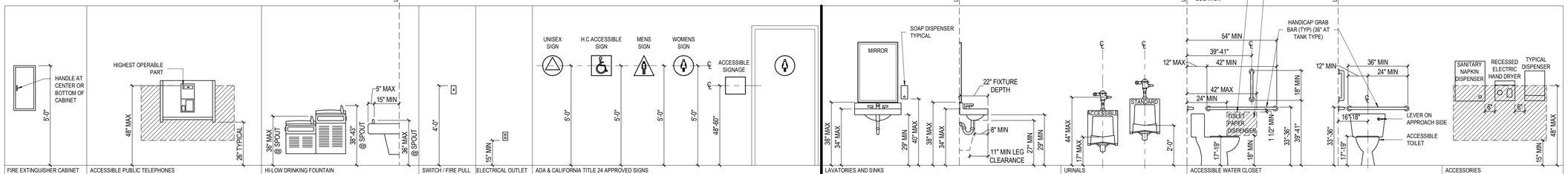
BLOSSOM RESTAURANT
INTERIOR ELEVATIONS / DETAILS

03/18/2020

A7.1



FIRE EXTINGUISHER CABINET	ACCESSIBLE PUBLIC TELEPHONES	HI-LOW DRINKING FOUNTAIN	SWITCH / FIRE PULL	ELECTRICAL OUTLET	ADA & CALIFORNIA TITLE 24 APPROVED SIGNS
NOTE: NFPA GUIDELINES STATE THAT THE DISTANCE FROM FLOOR TO TOP OF EXTINGUISHER TO BE 5' MAX IN HEIGHT.	NOTE: ALL OPERABLE PARTS TO BE BELOW 48". IF ENCLOSURES ARE USED AND PROTRUDE OUT FROM THE FACE OF WALL, THE MAX PROJECTION SHALL BE 19" AND CANNOT REDUCE THE MIN. REQUIRED CLEAR WIDTH OF AN ACCESSIBLE PATHWAY.	NOTE: ACCESSIBLE HEIGHT NOT TO EXCEED 36" MAX. STANDING HEIGHT TO BE 38"-43"			NOTE: SIGNS TO BE CENTERED ON DOORS AND TO DISTINCTLY DIFFERENT THAN DOORS IN COLOR AND CONTRAST

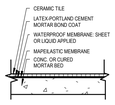
LAVATORIES AND SINKS	URINALS	ACCESSIBLE WATER CLOSET	ACCESSORIES
NOTE: WATER SUPPLY AND DRAINPIPES UNDER LAVATORIES AND SINKS SHALL BE INSULATED OR OTHERWISE CONFIGURED TO PROTECT AGAINST CONTACT. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES AND SINKS.	NOTE: URINALS SHALL BE HUNG OR STALL TYPE. WALL HUNG TO BE A MIN. OF 13.5" DEPTH FROM OUTER FACE OF URINAL TO WALL.	NOTE: 1.1/4"-1.1/2" DIA GRAB BAR MUST RESIST HORIZONTAL & VERTICAL FORCE AT ANY POINT	NOTE: ALL OPERABLE PARTS OF DISPENSER TO BE BELOW 48". 42" HEIGHT SUGGESTED

GENERAL NOTES:
1. CONTRACTOR TO PROVIDE BLOCKING AND BACKING FOR ALL ACCESSORIES (TYPICAL)
2. BLOCKING AT GRAB BARS TO WITHSTAND A 250 LB / FT LOAD
3. DRINKING FOUNTAINS, TOILETS, & URINALS ARE TO BE MOUNTED AS PER MANUFACTURER HEIGHT RECOMMENDATIONS UNLESS DESIGNATED FOR H.C. ACCESSIBLE USE. ALL ACCESSIBLE UNITS TO BE MOUNTED PER ICC A117.1-2009

TYPICAL MOUNTING DETAILS

SCALE: 3/8" = 1'-0" (WHERE APPLICABLE)

Thin - Set F122



Recommended Uses:
- Wherever a waterproof interior floor is required in conjunction with ceramic tile installed in a thin-set method.
- See page 14 NOTE for exterior uses.

Limitations:
- Deflection not to exceed 1/360 of span.
- Not recommended for sever chemical exposure.

Requirements:
- Design floor areas over which tile is to be applied to have deflection not greater than 1/360 of the span. Make allowance for live load and impact as well as all dead load, including weight of the tile and setting bed.

Materials:
- Specify type of waterproofing; e.g., sheet or liquid applied - ANSI A118.10.
- Latex-Portland cement mortar - ANSI A118.4.
- Polymer modified tile grout - ANSI A118.7.

Preparation by Other Trades:
- Maximum variation in subfloor - 1/4" in 10'-0" from the required plane.
- Slope subfloor 1/4" per foot to drain.

Preparation by Tile Trade:
- Waterproof membrane - install to comply with pertinent codes and manufacturer's directions.

Membrane Installation:
- Membrane manufacturer's directions.
- Membrane - ANSI A108.13.

Installation Specifications:
- Tile - ANSI A108.5.

Movement Joint (Architect must specify type of joint and show location and details on drawings):
- Movement Joints - Mandatory according to Method EJ171, page 44.

DETAIL 1

Cement Mortar Metal Lath F145

Recommended Uses:
- For residential use over wood floors that are structurally sound.
- Where waterproof floor is required, use waterproof membrane meeting A118.10. Contact membrane manufacturer for specific detail.

Limitations:
- 3/4" min. mortar thickness.

Requirements:
- Cleavage membrane.
- 2.5 lbs/yd2 metal lath (min.), nailed or stapled.
- design floor areas over which tile is to be applied to have a deflection not greater than 1/360 of the span when measured under 300 lb. concentrated load (see ASTM C627).

Materials:
- Mortar bed, metal lath, and cleavage membrane - ANSI A108.1A.
- Bond coat - portland cement paste on a mortar bed that is still workable, or dry-set mortar or latex - portland cement mortar on a cured bed.
- Grout - ANSI A118.6 or A118.7.

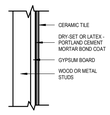
Preparation by Other Trades:
- Subfloor - 23/32" exterior glue plywood on joists at 16" o.c.
- Max. variation in plywood surface shall not exceed 1/4" in 10'-0" from the required plane.

Movement Joint (Architect must specify type of joint and show location and details on drawings):
- Movement joints - mandatory according to Method EJ171, page 44.

Installation Specifications:
- Tile - ANSI A108.1A, 1B or .1C.
- Grout - ANSI A108.10.

DETAIL 2

Gypsum Board Dry-Set Mortar or Latex Portland Cement Mortar W243



Recommended Uses:
- Dry interiors over gypsum board.
- For dry areas only.
- Over dry, well-braced wood studs or furring.
- Over well-braced metal suds.

Limitations:
- In wet areas such as tub enclosures, use Method B413.
- Do not use in areas where gypsum board is exposed to temperatures above 125 degrees F.

Requirements:
- Maximum stud spacing - 16" o.c.
- Minimum recommended metal stud depth - 3-5/8"
- metal studs - 20 gauge (0.39") or heavier.

Materials:
- Gypsum board - ASTM C-36 or C-6360.
- Dry-set mortar - ANSI A118.1.
- Latex-Portland cement mortar - ANSI A118.4.
- Grout - ANSI A118.6 or A118.7.

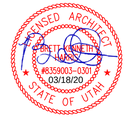
Preparation by Other Trades:
- Max. variation in the gypsum board surface - 1/4" in 10'-0" from the required plane.
- Gypsum board joints - treated with tape and joint compound, bedding coat only (no finish coats). Nail heads, one coat only.

Installation Specifications:
- Gypsum board - GA-216.
- Tile - ANSI A108.5.
- Grout - ANSI A108.10.

DETAIL 3

TYPICAL TILE INSTALLATION DETAILS

SCALE: N.T.S. (WHERE APPLICABLE)



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BLOSSOM RESTAURANT

TYPICAL DETAILS

03/18/2020

A7.2

BASIS OF DESIGN

1. GOVERNING BUILDING CODE .... 2018 IBC

2. GRAVITY DESIGN:
   ROOF DEAD LOAD.. 15 PSF

   ROOF SNOW LOAD .... 35 PSF

3. SEISMIC DESIGN:
   LATERAL SYSTEM .... SHEAR WALL
   ZONE .... D
   I 1.0
   S_s=1.042 S_1=0.377 S_{DS}=0.834 S_{D1}=0.483 R=6.5
   SITE CLASS (ASSUMED) .... D
   RISK CATEGORY II

4. WIND DESIGN:
   BASIC WIND SPEED.. 103 MPH
   EXPOSURE.. C

5. SOILS:
   SOIL BEARING PRESSURE (EARTHTEC PROJECT No 131422) .... 2500 PSF

GENERAL

1. THE GENERAL CONTRACTOR SHALL:
   A. BECOME FAMILIAR WITH ALL PORTIONS OF THE CONTRACT DOCUMENTS AND ENSURE THAT ALL SUBCONTRACTORS ARE FAMILIAR WITH THOSE PORTIONS PERTAINING TO THEIR AREA OF WORK. NO DEVIATIONS WILL BE ALLOWED UNLESS AGREED UPON BY ALL PARTIES IN WRITING PRIOR TO CONSTRUCTION OR FABRICATION.
   B. VERIFY ALL DIMENSIONS AND ELEVATIONS. COORDINATE ALL DOORS, WINDOWS, NON-BEARING INTERIOR AND EXTERIOR WALLS, ELEVATIONS, SLOPES, STAIRS, CURBS, DRAINS, RECESSES, DEPRESSIONS, RAILINGS, WATER PROOFING, FINISHES, CHAMFERS, KERFS, ETC.
   C. FIELD VERIFY ALL SIDE CONDITIONS AND IMMEDIATELY NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER REGARDING ACTUAL CONDITIONS AT THE SITE WHICH ARE NOT PER THE DRAWINGS.
   D. COORDINATE ALL WORK BETWEEN THE VARIOUS TRADES AND SUBCONTRACTORS. REPORT ANY MODIFICATIONS TO THE STRUCTURAL PORTION OF THE BUILDING BY OTHER TRADES TO THE ARCHITECT AND STRUCTURAL ENGINEER.
   E. BE RESPONSIBLE FOR SAFETY AND PROTECTION IN AND AROUND THE JOB SITE AND/OR ADJACENT PROPERTIES.

2. CONTRACT DOCUMENTS:
   A. REFER TO THE SPECIFICATIONS FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE DRAWINGS.
   B. DETAILS, SECTIONS AND NOTES SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO ALL SIMILAR SITUATIONS ELSEWHERE, UNLESS NOTED OR SHOWN OTHERWISE
   C. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTES OTHERWISE.
   D. INFORMATION ON DRAWINGS INDICATING EXISTING CONDITIONS IS BASED ON BEST PRESENT KNOWLEDGE, BUT MAY NOT BE ENTIRELY ACCURATE AND MUST BE FIELD VERIFIED.

3. BUILDING CODE COMPLIANCE:
   A. INSPECTION, TESTING, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND STANDARDS. ASTM AND IBC DESIGNATIONS SHALL BE AS AMENDED TO LATEST DATE UNLESS NOTED OTHERWISE.

4. COORDINATION:
   A. COORDINATE AND VERIFY ROOF, FLOOR, AND WALL OPENINGS REQUIRED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND/OR OTHER DRAWINGS PRIOR TO CONSTRUCTION. REPORT OPENINGS REQUIRED WHICH ARE NOT SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW.
   B. COORDINATE ANY CONSTRUCTION SITUATION NOT COVERED BY THESE PLANS, GENERAL NOTES, OR SPECIFICATIONS WITH THE ARCHITECT AND STRUCTURAL ENGINEER.

5. CONSTRUCTION SEQUENCE, SHORING, AND BRACING REQUIREMENTS:
   A. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE METHOD, MEANS AND SEQUENCE OF ALL STRUCTURAL ERECTION EXCEPT WHEN TEMPORARY SHORING AND BRACING AS HIS METHOD OF ERECTION REQUIRES TO PROVIDE ADEQUATE VERTICAL AND LATERAL SUPPORT DURING ERECTION. THIS SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT MEMBERS ARE PLACE AND ALL FINAL CONNECTIONS ARE COMPLETED, INCLUDING ALL ROOF AND FLOOR ATTACHMENTS.
   B. SHORING AND SUPPORTING FORM WORK FOR SUSPENDED CONCRETE OR MASONRY MATERIAL SHALL REMAIN IN PLACE AND SHALL NOT BE REMOVED UNTIL THE STRUCTURAL MEMBERS HAVE ACQUIRED SUFFICIENT STRENGTH TO SAFELY SUPPORT THEIR OWN WEIGHT AND ANY ADDITIONAL CONSTRUCTION, STORAGE, AND/OR OTHER LOADS TO WHICH THEY MAY BE SUBJECTED. IN NO CASE SHALL THEY BE REMOVED PRIOR TO 7 DAYS. RE-SHORING SHALL BE IMMEDIATELY INSTALLED UPON REMOVAL OF SUCH FORMS AND SHALL REMAIN IN PLACE UNTIL 28 DAYS AFTER PLACING OF MATERIAL OR UNTIL MATERIAL HAS REACHED ITS 28 DAY DESIGN STRENGTH, WHICHEVER IS LONGER. DO NOT REMOVE LARGE AREAS OF SHORING BEFORE STARTING RE-SHORING PROCEDURES.
   C. NON-BEARING INTERIOR WALLS SHALL BE ADEQUATELY BRACED TO THE STRUCTURE ABOVE WITH ALLOWANCE FOR DEFLECTION OF THE STRUCTURE ABOVE AND/OR BELOW.
   D. BUILDING WALLS WHICH RETAIN EARTH MUST BE BRACED AT THE TOP. DO NOT BACKFILL UNLESS BRACING IS PROVIDED OR UNTIL THE COMPLETE FLOOR OR ROOF SYSTEM IS IN PLACE, TYPICAL, UNLESS NOTED OTHERWISE.

6. OMISSIONS AND/OR CONFLICTS:
   A. OMISSIONS IN AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER AND SHALL BE RESOLVED BY THE SAME BEFORE PROCEEDING WITH ANY WORK INVOLVED.
   B. IN CASE OF CONFLICTS IN THE STRUCTURAL WORK, THE MOST STRINGENT REQUIREMENTS, AS DIRECTED BY THE ARCHITECT AND STRUCTURAL ENGINEER, SHALL BE IMPLEMENTED AT NO ADDITIONAL COST TO THE OWNER.

7. MISCELLANEOUS:
   A. DURING AND AFTER CONSTRUCTION, THE CONTRACTOR AND/OR OWNER SHALL KEEP THE LOADS ON THE STRUCTURE WITHIN THE LIMITS OF THE DESIGN.
   B. OBSERVATION VISITS TO THE SITE BY REPRESENTATIVES OF THE ARCHITECT AND/OR STRUCTURAL ENGINEER SHALL NOT BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.

8. SUBMITTALS:
   A. THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION, ERECTION, INSTALLATION, OR OTHERWISE BEING INCORPORATED INTO THE WORK.
      REINFORCING STEEL SHOP DRAWINGS.
      STRUCTURAL STEEL SHOP DRAWINGS.
   * THESE SUBMITTALS SHALL BE STAMPED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF UTAH.
   B. A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE REVIEW OF ALL SUBMITTALS BY THE ARCHITECT AND STRUCTURAL ENGINEER.
   C. REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER IN WRITING. REASON(S) FOR THE REQUEST AND COST DIFFERENTIALS SHALL BE INCLUDED IN THE REQUESTS, SUBSTITUTIONS ARE NOT ALLOWED UNLESS APPROVED IN WRITING BY THE ARCHITECT AND STRUCTURAL ENGINEER.

SITE PREPARATION

1. REQUIREMENTS
   A. DO NOT PLACE FOOTINGS OR FOUNDATIONS ON DISTURBED SOILS, UNDOCUMENTED FILL, DEBRIS, FROZEN SOIL, OR IN PONDED WATER.
   B. ALL UNSUITABLE SOILS AND VEGETATION, SUCH AS TOPSOIL, ORGANIC SOILS, UNDOCUMENTED FILL, DISTURBED NATIVE SOILS, AND OTHER DELETERIOUS MATERIALS, SHALL BE REMOVED FROM BELOW FOOTINGS, FOUNDATIONS, AND FLOOR SLABS.
   C. CONTRACTOR SHALL VERIFY SOIL BEARING CAPACITY AND ALL SITE PREPARATION REQUIREMENTS WITH GEOTECHNICAL REPORT. IN THE ABSENCE OF A GEOTECHNICAL REPORT INDUSTRY STANDARDS SHALL BE FOLLOWED FOR BEARING AND COMPACTION.

CONCRETE

1. CODES AND STANDARDS:
   A. CONCRETE WORK SHALL COMPLY WITH THE AMERICAN CONCRETE INSTITUTE (ACI) EDITIONS OF:
   I. ACI 301. "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".
   II. ACI 318, "BUILDING CODE REQUIREMENTS REQUIRED FOR REINFORCED CONCRETE".
   III. ACI 347, "RECOMMENDED PRACTICE FOR CONCRETE FORM WORK".

2. MATERIALS:
   A. CEMENT SHALL CONFORM TO ASTM C150, TYPE II, PORTLAND CEMENT
   B. HARD ROCK AGGREGATES SHALL CONFORM TO ASTM C33. LIGHTWEIGHT AGGREGATES SHALL CONFORM TO ASTM C330.
   C. WATER SHALL BE POTABLE.
   D. AIR ENTERTAINMENT SHALL CONFORM TO ASTM C260.
   E. FLY ASH SHALL CONFORM TO ASTM C618.
   F. CALCIUM CHLORIDE SHALL NOT BE USED.

3. MIX DESIGNS
   A. ONLY ONE TYPE OF CONCRETE SHALL BE PLACED AT THE SITE AT ANY GIVEN TIME.
   B. A MIX DESIGN THAT PRODUCES THE LOWEST SLUMP COMPATIBLE WITH PROPER PLACEMENT SHALL BE USED, 4" MAXIMUM.
   C. CONCRETE MIXES SHALL CONFORM TO THE FOLLOWING:

TYPE OF CONCRETE MEMBER	MINIMUM STRENGTH AT 28 DAYS (PSI)	MAX. W/C (RATIO)	DRY WEIGHT (PCF)	MAX AGGREGATE SIZE (INCHES)	AIR ENTERTAIN-MENT (%)	MIN. CEMENT PER YARD (LBS)
FOOTINGS:	3000	0.50	145	0'-0 3/4"	3 ±-1	517
FOUNDATION WALLS:	3000	0.45	145	0'-0 3/4"	3 ±-1	564
SLAB ON GRADE:						
INTERIOR	3000	0.45	145	0'-0 3/4"	3 ±-1	564
EXTERIOR	3000	0.45	145	0'-0 3/4"	6 ±-1	564
SLABS ON DECK						
LT. WT.*	3000	0.53	110	0'-0 3/4"	6 ±-1	564
COLUMNS:	3000	0.45	145	0'-0 3/4"	3 ±-1	564
BEAMS:	3000	0.45	145	0'-0 3/4"	3 ±-1	564

* LT. WT. CONCRETE SHALL HAVE A MIN. SPLITTING TENSILE STRENGTH OF 450 PSL.
   D. LIMIT FLY ASH TO 15% OF THE TOTAL CEMENTITIOUS MATERIAL.
   E. PEA GRAVEL AGGREGATE AND/OR PLASTICIZER MAY BE USED IN CONGESTED AREAS WHEN REQUIRED TO PROPERLY FILL ALL VOIDS AND/OR FOR WORKABILITY. (CONTRACTOR'S OPINION)

4. CONSTRUCTION:
   A. CONCRETE SHALL BE PROPERLY VIBRATED DURING PLACEMENT.
   B. PRIOR TO PLACING CONCRETE CHECK WITH ALL TRADES TO ENSURE PROPER PLACEMENT OF OPENINGS, BLOCKOUTS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, EMBEDS, DOWELS, ETC. ANCHOR BOLTS AND DOWELS SHALL BE PLACED PRIOR TO CASTING CONCRETE.
   C. CONSTRUCTION JOINTS AND BULKHEADS SHALL BE FORMED WITH A KEY WAY. ALL CONTACT SURFACES, NEW OR EXISTING, AT CONSTRUCTION JOINTS SHALL BE INTENTIONALLY ROUGHENED PRIOR TO CASTING ADJACENT POUR.
   D. OPENINGS IN FLOORS AND/OR WALLS SHALL HAVE ADDITIONAL REINFORCING AROUND ALL SIDES OF THE OPENING EQUIVALENT TO THE BARS CUT BY THE OPENING WITH HALF ON EACH SIDE OF THE OPENING WITH HALF ON EACH SIDE OF THE OPENING OR 2-#5 BARS, WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE. BARS PARALLEL TO THE PRINCIPAL REINFORCING SHALL RUN FULL LENGTH OF THE SPAN. BARS IN THE OTHER DIRECTION SHALL RUN 24 INCHES BEYOND THE EDGE OF THE OPENING OR END WITH A STANDARD HOOK. ALSO PROVIDE 2-#5x4'-0" DIAGONAL BARS AT EACH CORNER OF EACH OPENING.
   E. NO PENETRATION SHALL BE ALLOWED THROUGH ANY CONCRETE BEAM, JOIST, COLUMN, PIER, OR JAMB WITHOUT THE ARCHITECT'S AND STRUCTURAL ENGINEER'S PRIOR WRITTEN APPROVAL. PENETRATIONS SHALL BE RE-ROUTED AS REQUIRED AT THESE LOCATIONS.

5. FOOTINGS:
   A. FOOTINGS SHALL BEAR ON PROPERLY PREPARED MATERIAL. SEE THE SITE PREPARATION NOTES.
   B. FOOTINGS SHALL BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYPICAL UNLESS NOTED OTHERWISE.
   C. EXTERIOR FOOTINGS SHALL BEAR BELOW THE EFFECTS OF FROST.
   D. PROVIDE 2x4 BEVELED KEY WAYS IN ALL CONTINUOUS WALL FOOTINGS.
   E. STAGGER FOOTING CONSTRUCTION JOINTS FROM WALL CONSTRUCTION JOINTS ABOVE BY AT LEAST 6 FEET.
   F. REINFORCING IN CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AT CORNERS AND/OR INTERSECTIONS BY PROVIDING PROPER LAP LENGTHS AND/OR CORNER BARS.
   G. NO PENETRATIONS SHALL BE ALLOW THROUGH ANY CONCRETE FOOTING. WHEN CONFLICTS ARISE BETWEEN UNDERGROUND PLUMBING, UTILITIES, ETC., THE FOOTING SHALL BE STEPPED DOWN BELOW THE CONFLICT AND A CONCRETE WALL, PIER, COLUMN, ETC., SHALL BE EXTENDED TO THE FOOTING AS REQUIRED.
   H. BEARING SURFACES FOR FOOTINGS WHICH ARE, OR BECOME, UNDERMINED DURING CONSTRUCTION SHALL BE BACK FILLED WITH A LEAN-MIX CONCRETE (1000 PSI MIN).

6. SLABS ON GRADE:
   A. INTERIOR SLABS ON GRADE SHALL BE A MINIMUM OF 4 INCHES THICK, SHALL BEAR ON A 4 INCH MINIMUM LAYER OF FREE-DRAINING GRAVEL, AND MAY BE REINFORCED WITH #4 BARS AT 24" O.C. BOTH WAYS, TYPICAL UNLESS NOTED OTHERWISE. PROVIDE CHAIRS WITH SAND PLATES FOR PROPER PLACEMENT.
   B. LARGE AREAS OF INTERIOR SLABS ON GRADE SHALL BE PLACED IN STRIPS NOT TO EXCEED 120 FEET IN LENGTH NOR 30 FEET IN WIDTH WHICH ARE SUBDIVIDED BY CONSTRUCTION AND/OR CONTRACTION (CONTROL) JOINTS INTO ROUGHLY SQUARES WHO SIDES SHALL NOT EXCEED 15 FEET IN EITHER DIRECTION.
   C. SEE ARCHITECTURAL FOR EXTERIOR SLABS ON GRADE, TYPICAL, UNLESS NOTED OTHERWISE.

REINFORCING STEEL

1. CODES AND STANDARDS: REINFORCING STEEL SHALL COMPLY WITH :
   I. AMERICAN CONCRETE INSTITUTE BUILDING CODE & COMMENTARY ACI 318.
   II. AMERICAN CONCRETE INSTITUTE "DETAILING MANUAL", ACI 315 (OR SP-66).
2. MATERIALS:
   A. REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS AND SHALL CONFORM TO ASTM A615, GRADE 60, WITH A DESIGN YIELD STRENGTH OF 60,000 PSI EXCEPT AS NOTED BELOW.
      I. DOWELS TO BE BENT IN THE FIELD DURING CONSTRUCTION SHALL BE ASTM A615, GRADE 40 OR ASTM A706, GRADE 60, "LOW ALLOW STEEL".
      II. REINFORCING TO BE WELDED SHALL BE ASTM A706, GRADE 60, "LOW ALLOY STEEL"
   B. MASONRY JOINT REINFORCING SHALL BE MANUFACTURED FROM WIRE WHICH CONFORMS TO ASTM A82.
3. CONSTRUCTION:
   A. REINFORCING SHALL BE DETAILED, BOLSTERED, AND SUPPORTED PER ACI315.
   B. REINFORCING STEEL SHALL BE FREE OF LOOSE, FLAKY RUST, SCALE, GREASE, OIL, DIRT, AND OTHER MATERIALS WHICH MIGHT AFFECT OR IMPAIR BOND.
   C. REINFORCING SHALL BE CONTINUOUS IN WALLS, BEAMS, COLUMNS, SLABS, FOOTINGS, ETC.
   D. SPLICES IN CONTINUOUS REINFORCING SHALL BE MADE IN AREAS OF COMPRESSION AND/OR AT POINTS OF MINIMUM STRESS, TYPICAL UNLESS NOTED OTHERWISE. LAP SPLICES SHALL BE 40 BAR DIAMETERS LONG IN CONCRETE AND 48 BAR DIAMETERS LONG IN MASONRY. MINIMUM LAP SHALL BE 24 INCHES LONG. DOWELS SHALL HAVE A MINIMUM OF 30 BAR DIAMETERS EMBEDMENT. TENSION SPLICES SHALL BE USED IN CONCRETE WHEN SPECIFICALLY NOTED, USE A CLASS B SPLICE. SPLICES IN TOP BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT MID SPAN. SPLICES IN BOTTOM BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT SUPPORTS.
   E. BENDS SHALL BE MADE COLD. DO NOT USE HEAT. BENDS SHALL BE DONE IN THE FABRICATOR'S SHOP UNLESS SPECIFICALLY NOTED FOR THE FIELD. DO NOT UN-BEND OR RE-BEND A PREVIOUSLY BENT BAR.
   F. REINFORCING STEEL IN CONCRETE SHALL BE SECURELY ANCHORED AND TIED IN PLACE PRIOR TO PLACING CONCRETE AND SHALL BE POSITIONED WITH THE FOLLOWING MINIMUM CONCRETE COVER:

      CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH............ .3"
      CONCRETE EXPOSED TO EARTH OR WEATHER:
         #6 AND LARGER.. 2"
         #5 AND SMALLER .... 1 1/2"
      CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
         SLABS AND WALLS, #11 AND SMALLER.................................. 3/4"
         BEAMS AND COLUMNS, MAIN REINFORCING OR TIES .... 1 1/2"
         SLAB ON GRADE .... CENTER OF SLAB
   G. REINFORCING STEEL IN MASONRY SHALL BE PLACED PRIOR TO GROUTING AND SHALL BE PLACED, POSITIONED, AND LOCATED ACCORDING TO THE STRUCTURAL DRAWINGS. IT SHALL BE SECURED AGAINST DISPLACEMENT AT INTERVALS NOT TO EXCEED 200 BAR DIAMETERS OR 10 FEET.
   H. NO REINFORCING STEEL SHALL BE WELDED UNLESS SPECIFICALLY NOTED AS SUCH. USE E90XX ELECTRODES AND ASTM A706 REINFORCING. COMPLY WITH AWS REQUIREMENTS.
   I. EPOXY COATED REINFORCING BARS SHALL BE USED WHEN SPECIFICALLY NOTED. INCREASE LAP SPLICE LENGTHS AS REQUIRED BY THE IBC.

MASONRY VENEER ANCHOR TIES

1. PRODUCTS:
   A. MASONRY VENEER ANCHOR TIES SHALL BE ONE OF THE FOLLOWING:
      I. DOVETAIL ANCHORS.
      II. DX-10 SEISMIC CLIP INTERLOCK SYSTEM BY HOHMANN & BARNARD.
      III. ARCHITECT AND STRUCTURAL ENGINEER APPROVED TWO PIECE ADJUSTABLE HOT-DIPPED GALVANIZED TIES.
2. INSTALLATION:
   A. MAXIMUM SPACING SHALL BE 16" O.C. HORIZONTAL AND VERTICAL.
   B. PROVIDE CONTINUOUS HORIZONTAL GALVANIZED #9 WIRE IN CENTER THIRD OF MORTAR JOINTS AT 16" O.C. ENGAGE #9 WIRE WITH ALL ANCHOR TIES.
   C. CONSTRUCTION JOINTS IN MASONRY VENEER WALLS SHALL BE PROVIDED AS PER THE ARCHITECTURAL DRAWINGS, AND SHALL BE SPACED AT A MAXIMUM OF 15'-0" O.C. FOR MASONRY BLOCK VENEER.

GENERAL FRAMING NOTES

1. ALL JOISTS, RAFTERS, POSTS AND HEADER SHALL BE DOUGLAS FIR LARCH NO. 2 OR EQUAL U.N.O. IF TJI'S OR EQUAL ARE USED. THEY MUST BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. ALSO PROVIDE BRIDGING @ 8" O.C. FOR TIMBER FLOOR JOISTS.

2. ALL JOISTS AND RAFTERS SHALL HAVE SOLID BLOCKING AT THEIR BEARING POINTS. ROOF JOISTS TO HAVE HURRICANE CLIPS @ 24" O.C. MIN.

3. ALL WOOD/LUMBER PLACED ONTO CONCRETE SHALL BE PRESSURE TREATED OR REDWOOD.

4. ALL WOOD CONNECTIONS MUST CARRY THE CAPACITY OF THE MEMBER, CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS. IF OTHER THAN STANDARD CONNECTIONS ARE REQUIRED, SEE PROJECT ENGINEER FOR ADDITIONAL ASSISTANCE. USE SIMPSON OR EQUAL CONNECTIONS FOR WOOD TO WOOD.

5. ALL COLUMNS SHALL EXTEND DOWN THROUGH THE STRUCTURE TO THE FOUNDATION. ALL COLUMNS SHALL BE BRACED AT ALL FLOOR LEVELS. COLUMNS SHALL BE AS WIDE AS THE MEMBER THEY SUPPORT.

6. ALL EXTERIOR WALLS SHALL BE SHEATHED WITH 7/16" THICK EXP 1 SHEATHING OR EQUAL WITH 8d NAILS @ 6" O.C. EDGES AND 12" O.C. IN THE FIELD - BLOCKED, UNLESS OTHERWISE NOTED.

7. ALL FLOOR SHEATHING TO BE 3/4" THICK T&G SHEATHING GLUED AND NAILED WITH 10d COMMON NAILS OR EQUAL @ 6" O.C. EDGES AND @ 10" O.C. IN THE FIELD.

8. VERIFY ALL BEAM SIZES WITH ENGINEERING SPECIFICATIONS.

9. ALL BEAMS AND HEADERS OVER 48" SHALL BE SUPPORTED BY DOUBLE TRIMMERS UNLESS NOTED OTHERWISE.

10. TRUSS MANUFACTURER SHALL PROVIDE ENGINEERING SPECS. FOR ALL TRUSSES.

11. USE 7/16" O.S.B. OR CDX PLYWOOD WITH
    8d NAILS @ 6" O.C. AT EDGES OF ROOF
    10d NAILS @ 4" O.C. AT GABLE ENDS
    SPACE NAILS 12" O.C. ON INTERMEDIATE MEMBERS
    STAGGER SHEATHING JOINTS
    PLYWOOD PERPENDICULAR TO RAFTERS AND TRUSSES

12. SOLID BLOCK BETWEEN TRUSSES. HOLD DOWN EVERY 3RD BLOCK FOR ATTIC VENTILATION.

13. ALL OVER FRAME AREAS TO HAVE FULL ROOF SHEATHING BELOW.

14. PROVIDE SQUASH BLOCKING AT RIM JOIST BELOW ALL POSTS FROM ROOF, HEADER OR BEAM POINT LOADS.

15. PROVIDE DOUBLE FLOOR JOISTS BELOW ALL PARALLEL BEARING WALLS

16. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR OR BETTER UNLESS A HIGHER GRADE IS NOTED OTHERWISE.

17. GLULAM BEAMS SHALL BE 24F-V4 DF/DF FOR SINGLE SPANS AND 24F-V8 DF/DF FOR MULTIPLE SPANS, AND CANTILEVERED SPANS.

18. ALL RAFTERS AND JOISTS OVER THREE FEET LONG SHALL BE HANGERED IF NOT SUPPORTED BY BOTTOM BEARING. ALL HANGERS AND OTHER WOOD CONNECTIONS MUST BE DESIGNED TO CARRY THE CAPACITY OF THE MEMBER THAT THEY ARE SUPPORTING.

19. FRAMING CONNECTIONS NOTED ON THE DRAWINGS ARE SIMPSON STRONG TIE OR EQUAL. INSTALL WITH THE CATALOG DESIGNATED CONNECTOR IN EACH HOLE.

20. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY SHOWN, NOTED OR APPROVED BY ENGINEER.

21. LAG SCREWS SHALL BE INSERTED IN A DRILLED PILOT HOLE 60%-75% OF THE SHANK DIAMETER BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER. ALL NUTS, BOLTS AND LAG SCREWS SHALL BE PROVIDED WITH AN OVERSIZED WASHER.

22. NAILS TO BE COMMON WIRE UNLESS OTHERWISE NOTED.

23. ALL BOLT HOLES SHALL BE DRILLED WITH A BIT 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.

24. ALL JOINTS IN WALL SHEATHING SHALL OCCUR IN THE MIDDLE OF A PLATE OR BLOCK AND NAILED ON EACH SIDE OF THE JOINT WITH EDGE NAILING PER SHEAR WALL SCHEDULE.

25. ALL OVER BUILT ROOF RAFTERS SHALL BE BRACED VERTICALLY TO THE TRUSSES BELOW AT 4'-0" O.C. MAXIMUM IN ORDER TO SPREAD THE LOAD EVENLY OVER THE TRUSSES.

26. PROVIDE 1/2" MINIMUM CLEARANCE BETWEEN TOP PLATE OF INTERIOR PARTITIONS AND BOTTOM CHORD OF TRUSSES (TO ENSURE THAT LOADING WILL BE AS DESIGNED).

27. DOUBLE TOP PLATE WITH MINIMUM 48" LAP SPLICE.

28. COLUMNS AND POSTS LOCATED ON CONCRETE OR MASONRY FLOORS OR DECKS EXPOSED TO THE WEATHER OR TO WATER SPLASH OR IN BASEMENTS, AND WHICH SUPPORT PERMANENT STRUCTURES, SHALL BE SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING ABOVE FLOORS UNLESS APPROVED WOOD OF NATURAL RESISTANCE BO DECAY OR TREATED WOOD IS USED. THE PEDESTALS SHALL PROJECT AT LEAST 6" ABOVE EXPOSED EARTH AND AT LEAST 6" ABOVE EXPOSED EARTH AND AT LEAST 1" ABOVE SUCH FLOORS.

29. ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE IBC, AND LOCAL ORDINANCES.

30. CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO STARTING CONSTRUCTION.
31. ALL FASTENERS (I.E. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOD (I.E. SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.10.5

WOOD TRUSS NOTES

1. BOTTOM CHORDS OF TRUSSES ACTING AS CEILING MEMBERS MUST BE ABLE TO SUPPORT A 10 PSF LIVE LOAD PER CURRENT IBC REQUIREMENTS.

2. THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF THE PRE-ENGINEERED TRUSSES, AND SHALL DESIGN THE TRUSSES PER ATTACHED ENGINEERING SPECIFICATIONS.

3. THE TRUSSES SHALL BE DESIGNED TO CARRY ANY ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.

4. THE TRUSSES SHALL ALSO BE DESIGNED PER THE CURRENT IBC, AND LOCAL ORDINANCES.

5. ALL MEMBERS SHALL BE DESIGNED FOR COMBINED STRESSES, BASED ON THE WORST LOADING CONDITION.

6. THE TRUSS MANUFACTURER SHALL INDICATE PROPER BRACING OF COMPRESSION CHORD MEMBERS @ 6'-0" LONG (OR LONGER), AS WELL AS BRACING FOR TRUSS ERECTION.

7. ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TRUSSES PER THE TRUSS MANUFACTURERS RECOMMENDATIONS AND SPECIFICATIONS. NO WEB OR CHORD MEMBERS SHALL BE MODIFIED IN THE FIELD.

9. THE PROJECT ENGINEER, OR ENGINEER OF RECORD, IS NOT RESPONSIBLE FOR THE PRE-ENGINEERED TRUSSES, NOR FOR THE INSTALLATION ETC. OF THE TRUSSES. TRUSS PLANT SHALL PROVIDE LICENSED ENGINEERED PLAN. (CONTRACTOR TO VERIFY TRUSS LAYOUT IS CONSISTENT WITH THESE PLANS. ENGINEER SHOULD BE NOTIFIED OF ANY DEVIATION).

10. FABRICATION OF TRUSSES SHALL BE AS APPROVED BY TPI EXCEPT THAT THIS SPECIFICATION SHALL GOVERN WHEN IT EXCEEDS TPI REQUIREMENTS.

11. FABRICATE TRUSSES FROM APPROVED SHOP DRAWINGS.

12. FABRICATE TRUSSES IN JIGS WITH MEMBERS ACCURATELY CUT TO PROVIDE GOOD BEARING AT JOINTS. JOINTS SHALL BE ACCEPTABLE IF THE AVERAGE OPENING BETWEEN ENDS OF MEMBERS IMMEDIATELY AFTER FABRICATION IS LESS THAN 1/16", EXCEPT THAT TRUSS COMPRESSION CHORD JOINTS AT SPLICES AND RIDGES SHALL HAVE FULL CONTACT BETWEEN MEMBERS.

13. EACH CHORD SECTION SHALL BE INVOLVED IN TWO PANEL POINTS BEFORE BEING SPLICED.

14. PROVIDE 1/8" CAMBER FOR EACH 6 FEET OF TRUSS UNLESS OTHERWISE INDICATED.

15. TRUSS FABRICATORS USING METAL PLATES SHALL HAVE PLANT INSPECTED FOUR TIMES PER YEAR BY AN INDEPENDENT TESTING LABORATORY IN ACCORDANCE WITH TPI REGULATIONS AND COPIES OF INSPECTIONS MADE AVAILABLE TO OWNER UPON REQUEST.

STATE OF UTAH
JOSHUA K.S. ANDERSON
No. 4939007-2203
02-28-20
PROFESSIONAL STRUCTURAL ENGINEER

MINIMUM NAILING SCHEDULE

CONNECTION	NAILING
1. JOIST TO SILL OR GIRDER, TOENAIL	(3) 8d
2. BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d
3. 1"x6" (25mm x 152mm) SUB FLOOR OR LESS TO EACH JOIST, FACE NAIL	(2) 8d
4. WIDER 1"x6" (25mm x 152mm) SUB FLOOR TO EACH JOIST, FACE NAIL	(3) 8d
5. 2" (51mm) SUB FLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	(2) 16d
6. SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	16d @ 16" (406mm) O.C.
SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	(3) 16d PER 16" (406mm)
7. TOP PLATE TO STUD, END NAIL	(2) 16d
8. STUD TO SOLE PLATE	(4) 8d, TOENAIL OR (2) 16d, END NAIL
9. DOUBLE STUDS, FACE NAIL	16d @ 24" (610mm) O.C.
10. DOUBLE TOP PLATES, TYPICAL FACE NAIL	16d @ 16" (406mm) O.C.
DOUBLE TOP PLATES, LAP SPLICE	(8) 16d
11. BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOENAIL	(3) 8d
12. RIM JOIST TO TOP PLATE, TOENAIL	8d @ 6" (152mm) O.C.
13. TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	(2) 16d
14. CONTINUOUS HEADER, TWO PIECES	6d @ 16" (406mm) O.C. ALONG EACH EDGE
15. CEILING JOIST TO PLATE, TOENAIL	(3) 8d
16. CONTINUOUS HEADER TO STUD, TOENAIL	(4) 8d
17. CEILING JOIST LAPS OVER PARTITIONS, FACE NAIL	(3) 16d
18. CEILING JOIST TO PARALLEL RAFTERS, FACE NAIL	(3) 16d
19. RAFTERS TO PLATE, TOENAIL	(3) 16d
20. 1" (25mm) BRACE TO EACH STUD AND PLATE, FACE NAIL	(2) 8d
21. 1"x8" (25mm x 203 mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	(2) 8d
22. WIDER THAN 1"x8" (25mm x 203mm) SHEATHING TO EACH BEARING, FACE NAIL	(3) 8d
23. BUILT-UP CORNER STUDS	16d @ 24" (610mm) O.C.
24. BUILT-UP GIRDER AND BEAMS	20d @ 32" (813mm) O.C. AT TOP & BOTTOM & STAGGERED, (2) 20d AT ENDS & AT EACH SPLICE
25. 2" (51mm) PLANKS	(2) 16d AT EACH BEARING
26. WOOD STRUCTURAL PANELS AND PARTICLEBOARD: 2 SUBFLOOR AND WALL SHEATHING (TO FRAMING):	
1/2" (12.7mm) AND LESS	6d [3]
19/32" - 3/4" (15mm-19mm) 7/8" - 1" (22mm-25mm)	8d [4] OR 6d [5] 8d [3]
1 1/8" - 1 1/4" (29mm-32mm) COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING):	10d [4] OR 8d [5]
3/4" (19mm) AND LESS 7/8" - 1" (22mm-25mm)	6d [5] 8d [5]
1 1/8" - 1 1/4" (29mm-32mm)	10d [4] OR 8d [5]
27. PANEL SIDING (TO FRAMING) 2:	
1/2" (12.7mm) OR LESS 5/8" (16mm)	6d [5] 8d [5]
28. FIBERBOARD SHEATHING: 7	
1/2" (12.7mm) 25/32" (20mm)	No. 11 GA [4] 6d [8] No. 16 GA [9] No. 11 GA [4] 8d [8] No. 16 GA [9]
29. INTERIOR PANELING	
1/4" (6.4mm) 3/8" (9.5mm)	4d [10] 6d [11]

1. COMMON OR BOX NAILS MAY BE USED EXCEPT WHERE OTHERWISE STATED.
2. NAILS SPACED AT 6 INCHES (152mm) ON CENTER AT EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS EXCEPT 6 INCHES (152mm) AT ALL SUPPORTS WHERE SPANS ARE 48 INCHES (1219mm) OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPHRAGMS AND SHEAR WALLS, REFER TO SECTION 2305 NAILS FOR WALL SHEATHING MAY BE COMMON, BOX OR CASING.
3. COMMON OR DEFORMED SHANK.
4. COMMON
5. DEFORMED SHANK.
6. CORROSION-RESISTANT SIDING OR CASING NAILS.
7. FASTENERS SPACED 3 INCHES (76mm) ON CENTER AT EXTERIOR EDGES AND 6 INCHES (152mm) ON CENTER AT INTERMEDIATE SUPPORTS.
8. CORROSION-RESISTANT ROOFING NAILS WITH 7/16 INCH DIAMETER (11mm) HEAD AND 1 1/2 INCH (38mm) LENGTH FOR 1/2 INCH (12.7mm) SHEATHING AND 1 3/4 INCH (44mm) LENGTH FOR 25/32 INCH (20mm) SHEATHING.
9. CORROSION-RESISTANT STAPLES WITH NOMINAL 7/16 INCH (11mm) CROWN AND 1 1/8 INCH (29mm) LENGTH FOR 1/2 INCH (12.7mm) SHEATHING AND 1 1/2 INCH (38mm) LENGTH FOR 25/32 INCH (20mm) SHEATHING.
10. PANEL SUPPORTS AT 16 INCHES (406mm) [20 INCHES (508mm) IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED]. CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS.
11. PANEL SUPPORTS AT 24 INCHES (610mm). CASING OR FINISH NAILS SPACED 6 INCHES (152mm) ON PANEL EDGES, 12 INCHES (305mm) AT INTERMEDIATE SUPPORTS.

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BLOSSOM RESTAURANT
STRUCTURAL NOTES

Date
01/16/2020

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PLOT DATE: 2/28/2020 T:\Structural\2020 Structural Jobs\2020-2072_Blossom Restaurant\CAD\STRUC (RVT2019)\Chan Chinese Restaurant_Details.dwg

STRUCTURAL STEL

1. CODES AND STANDARDS:

   A. STRUCTURAL STEEL WORK SHALL COMPLY WITH:

      I. THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", WITH "COMMENTARY".

      II. AISC "CODE OF STANDARD PRACTICE" EXCLUDING SECTIONS 1.51, 3.3 (1ST SENTENCE), 4.2, 7.5.4, AND 7.11.5.

      III. AMERICAN WELDING SOCIETY (AWS) "STRUCTURAL WELDING CODE", EXCLUDING ITEMS CONFLICTING WITH AISC REQUIREMENTS.

2. MATERIALS:

   A. STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A572 GRADE 50 ENHANCED STEEL. STRUCTURAL STEEL PLATES SHALL CONFORM TO ASTM A36.

   B. STRUCTURAL TUBE STEEL SHALL CONFORM TO ASTM A500, GRADE B, WITH A MINIMUM YIELD STRENGTH Fy=46 KSI.

   C. STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, WITH A MINIMUM YIELD STRENGTH Fy=36 KSI.

   D. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325. ALL OTHER BOLTS SHALL CONFORM TO ASTM A307 OR BETTER.

   E. WELDED ANCHOR STUDS AND DEFORMED BAR ANCHORS SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS.

3. CONSTRUCTION:

   A. FABRICATION SHALL BE DONE IN AN APPROVED FABRICATOR'S SHOP.

   B. CAMBER IN BEAMS SHALL BE AS INDICATED ON PLANS.

   C. PROVIDE A SHOP COAT OF PAINT ON ALL STEEL ITEMS, EXCEPT AT AREAS OF WELDING AND/OR BOLTING.

   D. USE HIGH STRENGTH (8000 PSI MINIMUM AT 28 DAYS), NON-SHRINK, LIQUID EPOXY GROUT BENEATH ALL STEEL BASE PLATES AND BEARING PLATES. MIX GROUT WITH SAND OR PEA GRAVEL AS RECOMMENDED BY THE MANUFACTURER. PLACE GROUT AS SOON AS STEEL MEMBER HAS BEEN PROPERLY POSITIONED AND ALIGNED.

   E. WHERE STRUCTURAL STEEL WIDE FLANGE, PIPE, OR TUBE SECTIONS ARE EMBEDDED IN CONCRETE OR MASONRY AND REINFORCING BARS BUTT TO IT, DEFORMED BAR ANCHORS OR REINFORCING BARS WITH THE SAME SIZE AND SPACING AS THE ADJACENT REINFORCING BARS, 48 BAR DIAMETERS LONG, SHALL BE WELDED TO THE STRUCTURAL STEEL. THE MANUFACTURER'S WELDING PROCEDURES SHALL BE ADHERED TO.

4. BOLTED CONNECTIONS:

   A. BOLTS SHALL BE 3/4" DIAMETER, UNLESS NOTED OTHERWISE.

   B. BOLT SHALL BE BEARING TYPE CONNECTIONS UNLESS NOTED OTHERWISE.

   C. STEEL TO STEEL BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS AND NUTS, UNLESS NOTED OTHERWISE. BOLTS SHALL CARRY THE IDENTIFYING MARK OF THREE (3) RADIAL LINES.

   D. ALL OTHER BOLTED CONNECTIONS SHALL BE MADE WITH BOLTS AND NUTS CONFORMING TO ASTM A307 UNLESS NOTED OTHERWISE, INCLUDING ANCHOR BOLTS.

   E. BOLTED CONNECTIONS SHALL BE TIGHTENED AND SHALL HAVE WASHERS AS REQUIRED BY AISC UNLESS NOTED OTHERWISE.

   F. ENLARGING OF HOLES SHALL BE ACCOMPLISHED BY MEANS OF REAMING. DO NOT USE A TORCH ON ANY BOLT HOLES.

5. WELDED CONNECTIONS:

   A. WELDED CONNECTIONS SHALL BE MADE USING LOW HYDROGEN MATCHING FILLER MATERIAL ELECTRODES, UNLESS NOTED OTHERWISE.

   B. WELDERS SHALL BE CURRENTLY CERTIFIED ACCORDING TO AWS WITHIN THE LAST 12 MONTHS. ALL WELDING PROCEDURES SHALL BE PRE-QUALIFIED. WELDERS SHALL FOLLOW WELDING PROCEDURES.

   C. WELDING AND GAS CUTTING SHALL BE DONE PER AWS.

   D. WELDS SHALL HAVE THE SLAG REMOVED.

STEEL DECK

1. PRODUCT:

   A. STEEL DECK SHALL BE SIZE AND GAUGE AS SPECIFIED ON PLANS.

   B. STEEL DECK AND ACCESSORIES SHALL BE MANUFACTURED FROM COLD ROLLED STEEL CONFORMING TO ASTM A-446, GRADE A (GALVANIZED G-60), AND SHALL CONFORM TO THE STEEL DECK INSTITUTE AND AISC STANDARDS.

2. ATTACHMENT AND HANDLING:

   A. WELDING PATTERN SHALL BE AS SPECIFIED ON PLAN.

   B. WELD METAL DECK TO SUPPORTING FRAMING MEMBERS WITH E60XX OR E70XX ELECTRODES.

   C. PUDDLE WELD SHALL HAVE A FUSION AREA OF NOT LESS THAN 3/4" DIAMETER AT THE UPPER SURFACE. WELD METAL SHALL PENETRATE ALL LAYERS OF THE DECK MATERIAL AND SHALL HAVE PROPER FUSION TO THE SUPPORTING MEMBERS.

   D. CRIMP SIDE SEAMS BEFORE WELDING SIDE LAPS. TOP SEAM WELDS SHALL ENGAGE ALL LAYERS OF THE DECK MATERIAL.

   E. END LAPS SHALL OVERLAP AT LEAST 2" AND SHALL OCCUR OVER A SINGLE STEEL SUPPORT. PUDDLE WELDS SHALL OCCUR AT LEAST 1" AWAY FROM EITHER EDGE OF DECK.

   F. PUDDLE WELDS 3/8"x1½" LONG MAY REPLACE 3/4" DIAMETER PUDDLE WELDS WHEN ACCESS IS LIMITED.

   G. INSTALL DECK WITH A MINIMUM OF 3 SPANS WHEREVER POSSIBLE.

   H. PROVIDE ANGLE AND/OR OTHER SUPPORT AROUND THE PERIMETER OF ALL OPENINGS THROUGH METAL DECK.

   I. DO NOT BEND OR MAR DECK.

   J. STORE DECKING OFF THE GROUND WITH ONE END ELEVATED. COVER DECK WITH WATERPROOF MATERIAL AND VENTILATE TO AVOID CONDENSATION.

   K. STEEL DECKING SHALL BE FACTORY PRIMED ON BOTH FACES AS PER THE SPECIFICATIONS.

DEFERRED SUBMITTALS

THE CONTRACTOR SHALL SUBMIT THE FOLLOWING DOCUMENTS TO THE ARCHITEC/ENGINEER FOR APPROVAL. THE DOCUMENTS MAY BE SUBMITTED AFTER A PERMIT IS ISSUED IF ALLOWED BY THE GOVERNING JURISDICTION. THE DOCUMENTS SHALL BE SUBMITTED, REVIEWED, & RECEIVED BACK PRIOR TO CONSTRUCTION OR FABRICATION.

1. PRE-FABRICATED WOOD TRUSSES
2. STEEL STAIRS & HANDRAILS

SPECIAL INSPECTIONS

1. THE PROJECT OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED BELOW. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS REQUIRED BY THE BUILDING DEPARTMENT OF THE LOCAL JURISDICTION.

2. SPECIAL INSPECTIONS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE WITH APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT A PHASE OF THE WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTION SHALL BE SUBMITTED AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.

3. WHERE FABRICATION OF STRUCTURAL LOAD BEARING MEMBERS AND ASSEMBLIES IS BEING PERFORMED ON THE PREMISES OF A FABRICATORS SHOP, SPECIAL INSPECTIONS REQUIRED BELOW SHALL BE PROVIDED IN THE SHOP DURING THE FABRICATION PROCESS. THIS REQUIREMENT MAY BE EXCEPTED IF THE WORK IS DONE OR THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTION. A CERTIFICATE SHALL BE REQUIRED TO VERIFY SUCH APPROVAL. AT COMPLETION OF THE FABRICATION, THE APPROVED FABRICATOR SHALL SUBMIT A CERTIFICATE OF COMPLIANCE TO THE BUILDING OFFICIAL STATING THAT THE WORK WAS PERFORMED IN ACCORDANCE WITH THE APPROVED CONSTRUCTION DRAWINGS

4. CONTINUOUS SPECIAL INSPECTION IS REQUIRED DURING FIELD GLUING OPERATIONS OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF COMPONENTS WITHIN THE MAIN WINDFORCE-RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES, AND HOLD-DOWNS

   EXCEPTION: SPECIAL INSPECTION IN NOT REQUIRED FOR WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING, AND OTHER FASTENING TO OTHER COMPONENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM, WHERE THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4 INCHES (102 mm) ON CENTER.

REQUIRED SPECIAL INSPECTIONS:

1. FIELD WELDING OF STRUCTURAL STEEL
2. POST INSTALLED CONCRETE ANCHORS

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL CONSTRUCTION PRIOR TO BOLTING OR WELDING

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD
1. Required Special Inspections prior to bolting or			
a. Verify welding procedure specifications are available	X	-	AISC 360-10 Table N5.4-1
b. Verify manufacturer's certifications for	X	-	AISC 360-10 Table N5.4-1
c. Verify material type/grade	-	X	AISC 360-10 Table N5.4-1 and AISC 341-10
d. Verify fabricator or erector has a system by which a welder who welded a joint or member can be identified	-	X	AISC 360-10 Table N5.4-1 and AISC 341-10 Table J6-1
e. Verify the following for the fit-up of groove welds (including joint geometry)			AISC 360-10 Table N5.4-1 and AISC 341-10 Table J6-1
1) Joint preparation	-	X	
2) Dimensions (alignment, root opening, root	-	X	
3) Cleanliness (condition of steel surfaces)	-	X	
4) Tacking (tack weld quality and location)	-	X	
5) Backing type and fit (if applicable)	-	X	
f. Verify the configuration and finish of access	-	X	AISC 360-10 Table N5.4-1 and AISC 341-10
g. Verify the following for the fit-up of fillet welds			AISC 360-10 Table N5.4-1 and AISC 341-10
1) Dimensions (alignment, gaps at root)	-	X	
2) Cleanliness (condition of steel surfaces)	-	X	
3) Tacking (tack weld quality and location)	-	X	
h. Verify manufacturer's certifications available	X	-	AISC 360-10 Table N5.6-1
i. Verify fasteners are marked in accordance	-	X	AISC 360-10 Table N5.6-1
j. Verify proper fasteners are selected for the	-	X	AISC 360-10 Table N5.6-1 and AISC 341-10
k. Verify proper procedure selected for joint	-	X	AISC 360-10 Table N5.6-1 and AISC 341-10
l. Observe and document pre-installation verification testing by installation personnel for fastening assemblies and methods used.	-	X	AISC 360-10 Table N5.6-1 and AISC 341-10 Table J7-1
m. Verify proper storage is provided for bolts, nuts, washers and other fastener components.	-	X	AISC 360-10 Table N5.6-1 and AISC 341-10 Table J7-1
2. Additional required Special Inspections prior to bolting or welding in Seismic Design Categories C thru F			
a. Verify connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet the applicable requirements	-	X	AISC 341-10 Table J7-1
b. Observe and document Reduced Beam Section requirements if applicable (Contour, finish and dimensional tolerances)	X	-	AISC 341-10 Table J8-1

TABLE 1705.3: REQUIRED VERIFICATION AND INSPECTION OF CONCRETE CONSTRUCTION

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD [A]	IBC REFERENCE
1. Inspection of reinforcing steel, including prestressing tendons and placement.	-	X	ACI 318: 3.5, 7.1-7.7	1910.4
2. Inspection of reinforcing steel welding in accordance with Table 1705.2.2, Item 2b.	-	-	AWS D1.4 ACI 318: 3.5.2	-
3. Inspection of anchors cast in concrete where allowable loads have been increased or where strength design is used.	-	X	ACI 318: 8.1.3, 21.1.8	1908.5, 1909.1
4. Inspection of anchors post-installed in hardened concrete members.[B]	-	X	ACI 318: 3.8.6, 8.1.3, 21.1.8	1909.1
5. Verifying use of required design mix.	-	X	ACI 318: Ch 4, 5.2-5.4	1904.2, 1910.2
6. At the time fresh concrete is sampled to fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X	-	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8	1910.10
7. Inspection of concrete and shotcrete placement for proper application techniques.	X	-	ACI 318: 5.9, 5.10	1910.6, 1910.7
8. Inspection for maintenance of specified curing temperature and techniques.	-	X	ACI 318: 5.11-5.13	1910.9
9. Inspection of prestressed concrete: a. Application of prestressing forces. b. Grouting of bonded prestressing tendons in the seismic force-resisting system.	X X	-	ACI 318: 18.20 ACI 318: 18.18.4	-
10. Erection of precast concrete members.	-	X	ACI 318: Ch. 16	-
11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	-	X	ACI 318: 6.2	-
12. Inspect formwork for shape, location and dimensions of the concrete member being formed.	-	X	ACI 318: 6.1.1	-

FOR SI: 1 INCH = 25.4 mm
A. WHERE APPLICATION, SEE ALSO SECTION 1705.11. SPECIAL INSPECTION FOR SEISMIC RESISTANCE.
B. SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACE 355.2 OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO COMMENCEMENT OF THE WORK.

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL CONSTRUCTION DURING BOLTING OR WELDING

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD
1. Required Special Inspections during bolting or welding			
a. Verify use of qualified welders	-	X	AISC 360-10 Table N5.4-2 and AISC 341-10
b. Verify the control and handling of			AISC 360-10 Table N5.4-2 and AISC 341-10
1) Packing	-	X	
2) Exposure Control	-	X	
c. Verify no welding occurs over cracked tack welds	-	X	AISC 360-10 Table N5.4-2 and AISC 341-10 Table J6-2
d. Verify environmental conditions			AISC 360-10 Table N5.4-2 and AISC 341-10
1) Wind speed within limits	-	X	
2) Precipitation and temperature	-	X	
e. Verify weld specification procedures are followed			AISC 360-10 Table N5.4-2 and AISC 341-10 Table J6-2
1) Settings on weld equipment	-	X	
2) Travel speed	-	X	
3) Selecting weld materials	-	X	
4) Shielding gas type/flow rate	-	X	
5) Preheat applied	-	X	
6) Interpass temperature maintained (min/max)	-	X	
7) Proper position (F, V, H, OH)	-	X	
f. Verify welding techniques			AISC 360-10 Table N5.4-2 and AISC 341-10
1) Interpass and final cleaning	-	X	
2) Each pass within profile limitations	-	X	
3) Each pass meets quality requirements	-	X	
g. Verify fastener assemblies, of suitable condition, are placed in all holes and washers are positioned as required	-	X	AISC 360-10 Table N5.6-2 and AISC 341-10 Table J7-2
h. Verify joints are brought to the snug-tight condition prior to the pretensioning operation	-	X	AISC 360-10 Table N5.6-2 and AISC 341-10 Table J7-2
i. Verify fastener components not turned by the wrench are prevented from rotating	-	X	AISC 360-10 Table N5.6-2 and AISC 341-10 Table J7-2
j. Verify fastners are pretensioned in accordance with RCSC Specification progressing from the most rigid point toward the free edges	-	X	AISC 360-10 Table N5.6-2 and AISC 341-10 Table J7-2
2. Additional required Special Inspections during bolting or welding in Seismic Design Categories C thru F			
a. Verify intermix of filler metals avoided unless approved	-	X	AISC 341-10 Table J6-2

1. NOTE: SPECIAL INSPECTION IS NOT REQUIRED DURING BOLTING OF SNUG TIGHT CONNECTIONS.
2. NOTE: SPECIAL INSPECTION IS NOT REQUIRED DURING BOLTING FOR PRETENSION JOINTS OR SLIP-CRITICAL JOINTS WHEN INSTALLER IS USING THE TURNING-OF-NUT METHOD WITH MATCHMARKING TECHNIQUES, THE DIRECT TENSION INDICATOR METHOD, OR TWIST-OFF-TYPE TENSION CONTROL BOLT METHOD.

REQUIRED VERIFICATION AND INSPECTION OF STRUCTURAL STEEL CONSTRUCTION AFTER BOLTING OR WELDING

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD
1. Required Special Inspections after bolting or welding			
a. Verify welds are cleaned	-	X	AISC 360-10 Table N5.4-3 and AISC 341-10
b. Verify size, length and location of welds	X	-	AISC 360-10 Table N5.4-3 and AISC 341-10
c. Verify welds meet visual acceptance criteria			AISC 360-10 Table N5.4-3 and AISC 341-10
1) Crack prohibition	X	-	
2) Weld/base metal fusion	X	-	
3) Crater cross section	X	-	
4) Weld profiles	X	-	
5) Undercut	X	-	
6) Porosity	X	-	
d. Inspect arc strikes for cracks	X	-	AISC 360-10 Table N5.4-3
e. Visually inspect the web k-area for cracks within 3" of web doubler plates and stiffeners	X	-	AISC 360-10 Table N5.4-3
f. Verify backing bars removed (if required) and weld tabs removed	X	-	AISC 360-10 Table N5.4-3 and AISC 341-10 Table J6-3
g. Observe repair activities	X	-	AISC 360-10 Table N5.4-3 and AISC 341-10
h. Document acceptance or rejection of welded joint or member and bolted connections	X	-	AISC 360-10 Table N5.6-3
i. Verify structural steel framing is in compliance with details shown on the Construction Documents, including bracing, stiffeners, member locations, and proper application of joint details at each connection	X	-	AISC 360-10 Chapter N
2. Additional required Special Inspections after bolting or welding in Seismic Design Categories C thru F			
a. Verify placement of reinforcing or contouring fillet welds (if required)	X	-	AISC 341-10 Table J6-3
b. Verify placement of backing fillet welds (if required)	X	-	AISC 341-10 Table J6-3
c. Inspect and document protected zones have no holes and unapproved attachments	X	-	AISC 341-10 Table J8-1

TABLE 1705.6: REQUIRED VERIFICATION AND INSPECTION OF SOILS

VERIFICATION AND INSPECTION TASK	CONTINUOUS DURING TASK LISTED	PERIODIC DURING TASK LISTED
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	-	X
2. Verify excavations are extended to proper depth and have reached proper material.	-	X
3. Perform classification and testing of compacted fill materials.	-	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	-
5. Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.	-	X

TABLE 1705.2.2: REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	REFERENCED STANDARD [A]	IBC REFERENCE
1. Material verification of cold-formed steel deck:				
a. Identification markings to conform to ASTM standards specified in the approved construction documents.	-	X	Applicable ASTM material standards	
b. Manufacturer's certified test reports.	-	X		
2. Inspection of welding:				
a. Cold-formed steel deck:				
1) Floor and roof deck welds.	-	-	AWS D1.3	
b. Reinforcing steel:				
1) Verification of weldability of reinforcing steel other than ASTM A 706.	-	X	AWS D1.4 ACI 318: Section 3.5.2	-
2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	X	-		
3) Shear reinforcement.	X			
4) Other reinforcing steel.	-	X		

FOR SI: 1 INCH = 25.4 mm
A. WHERE APPLICATION, SEE ALSO SECTION 1705.11. SPECIAL INSPECTION FOR SEISMIC RESISTANCE.

STATE OF UTAH
JOSHUA K.S. ANDERSON
No. 4939007-2203
02-28-20
PROFESSIONAL STRUCTURAL ENGINEER

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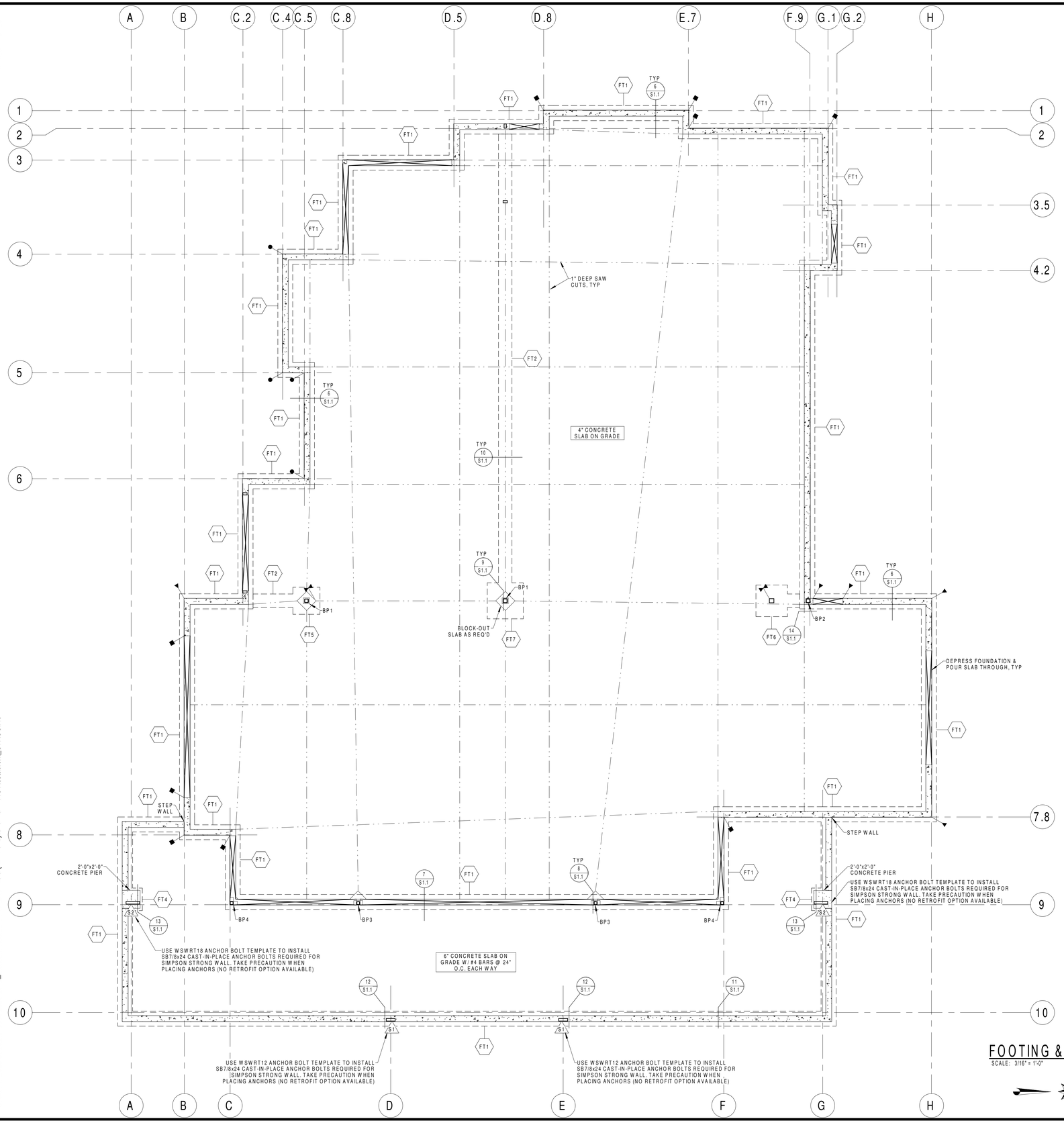
BLOSSOM RESTAURANT

STRUCTURAL NOTES

Date
01/16/2020

S0.1



FOOTING & FOUNDATION PLAN

SCALE: 3/16" = 1'-0"

FOOTING SCHEDULE (FT#)

DESIG.	LENGTH	WIDTH	DEPTH	LENGTHWISE REINFORCEMENT				CROSSWISE REINFORCEMENT				CAPACITY	NOTE
				QTY.	SIZE	LENGTH	SPACING	QTY.	SIZE	LENGTH	SPACING		
FT1	CONT.	20"	10"	2	#4	CONT.	EQ.	-	-	-	-	4167 PLF	
FT2	CONT.	18"	10"	2	#4	CONT.	EQ.	-	-	-	-	3750 PLF	SEE DETAIL 10/S1.1
FT3	24"	24"	10"	3	#4	18"	EQ.	3	#4	18"	EQ.	10000 LBS	
FT4	30"	30"	10"	3	#4	24"	EQ.	3	#4	24"	EQ.	15625 LBS	
FT5	36"	36"	10"	4	#4	30"	EQ.	4	#4	30"	EQ.	22500 LBS	
FT6	42"	42"	10"	4	#4	36"	EQ.	4	#4	36"	EQ.	30625 LBS	
FT7	48"	48"	10"	5	#4	42"	EQ.	5	#4	42"	EQ.	40000 LBS	

NOTES:
1. $f'c = 2,500$ PSI, $fy = 60,000$ PSI, NO SPECIAL INSPECTION REQUIRED.
2. FOOTING SHALL BEAR ON UNDISTURBED NATIVE SOILS OR STRUCTURAL COMPACTED FILL (95% COMPACTION), SPECIFIED AND TESTED BY A REGISTERED GEOTECHNICAL ENGINEER.
3. ALL FOOTINGS SHALL BEAR BELOW THE FROST LINE OF THE LOCALITY. (30" U.N.O.) PROVIDE 12" DIAMETER SONO-TUBE AT EXTERIOR SPOT FOOTINGS PER DETAIL 6/S1.1
4. PROVIDE J-BARS TO MATCH VERTICAL FOUNDATION WALL REINFORCEMENT WITH 24" MINIMUM LAP SPLICE INTO FOUNDATION WALL.
5. CENTER FOOTING UNDER FOUNDATION WALL U.N.O.

FOUNDATION WALL SCHEDULE

MAXIMUM HEIGHT	REINFORCEMENT
3' FOUNDATION WALL	#4 BARS @ 24" O.C. VERTICAL, (3) #4 BARS HORIZONTAL

NOTES:
1. USE 5/8" DIAMETER x 7" EMBEDMENT ANCHOR BOLTS AT 32" O.C. W/ 3"x3"x1/4" (0.229") PLATE WASHERS AT ALL EXTERIOR AND SHEAR WALLS U.N.O. (EDGE OF PLATE WASHER TO BE LOCATED WITHIN 1/2" OF SHEATHED EDGE OF SILL PLATE)
2. $f'c = 3,000$ PSI, $fy = 60,000$ PSI, NO SPECIAL INSPECTION REQUIRED.
3. PLACE (1) #4 BARS BELOWS AND ON EACH SIDE OF EACH OPENING AND (2) #4 BARS ABOVE EACH OPENING. BARS SHALL BE PLACED WITHIN 3" OF THE OPENINGS AND EXTEND 24" BEYOND THE EDGE OF THE OPENING. VERTICAL BARS MAY TERMINATE 3" FROM THE TOP OF THE CONCRETE. OPENING REINFORCEMENT IS IN ADDITION TO STANDARD WALL REINFORCEMENT.
4. TOP AND BOTTOM BARS SHALL BE WITHIN 4" OF THE TOP AND BOTTOM OF THE WALL.
5. PLACE REINFORCEMENT IN THE CENTER OF THE WALL U.N.O.

HOLDOWN SCHEDULE

SYMBOL	HOLDOWN/STRAP
●	LSTHD8/8RJ HOLDOWN SEE DETAIL 15/S4.0
■	STHD10/10RJ HOLDOWN SEE DETAIL 15/S4.0
◀	STHD14/14RJ HOLDOWN SEE DETAIL 15/S4.0
⧗	HDU4-SDS2.5 RETROFIT HOLDOWN W/ 5/8" DIA. A36 THREADED ROD ANCHOR EMBEDDED 8" INTO FOOTING W/ SIMPSON SET-XP OR AT-XP EPOXY SEE DETAIL 16/S1.1

NOTE:
REFER TO 15/1.1 FOR BASE PLATE DIMENSIONS

FOOTINGS AND FOUNDATIONS, EXCAVATIONS GRADING AND FILL SHALL COMPLY WITH THE PROVISIONS OF THE GEOTECHNICAL REPORT

REVISIONS

#	Date	Description

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Author

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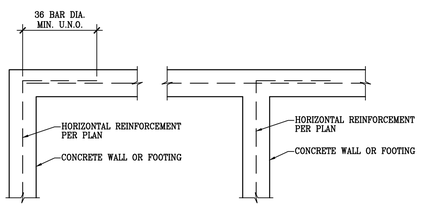
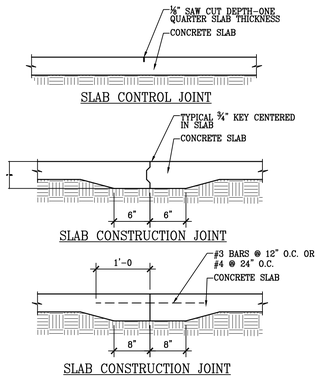
BLOSSOM RESTAURANT
FOOTING & FOUNDATION

01/16/2020

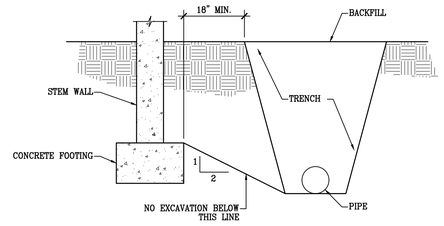
S1.0



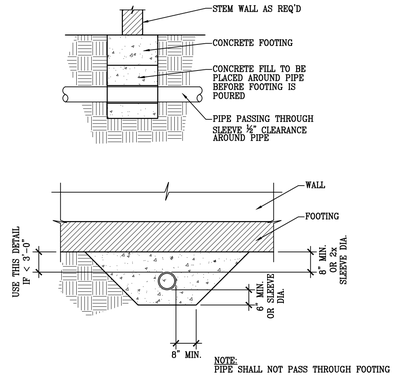
1 CONC. FOOTING CORNER & INTERSECTION REINF.



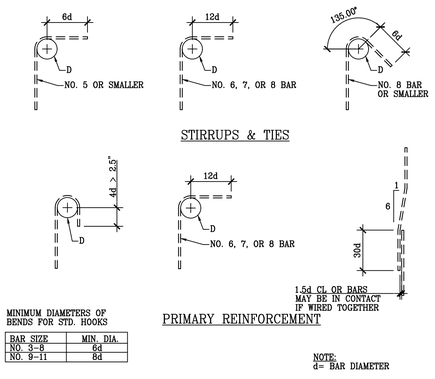
2 CONCRETE SLAB CONTROL JOINTS TYPICAL



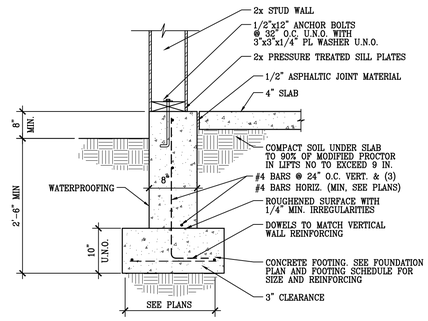
3 TRENCH ADJACENT TO CONCRETE FOOTING



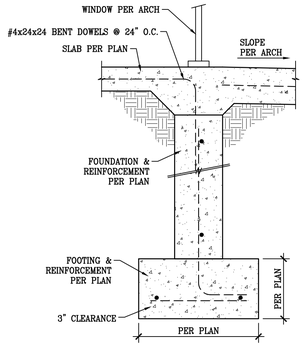
4 PIPE PASSING UNDER CONT. CONC. FOOTING TYP.



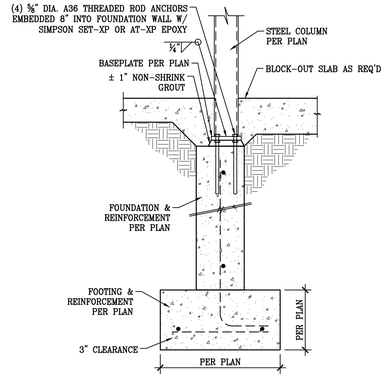
5 STANDARD BAR BENDING DETAIL



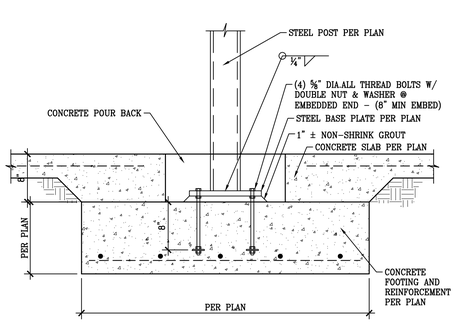
6 TYPICAL 3' FOUNDATION DETAIL



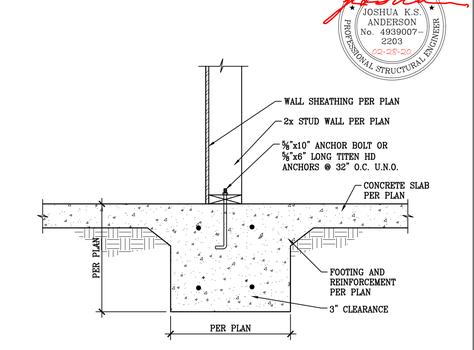
7 FOUNDATION WALL AT STORE FRONT GLASS



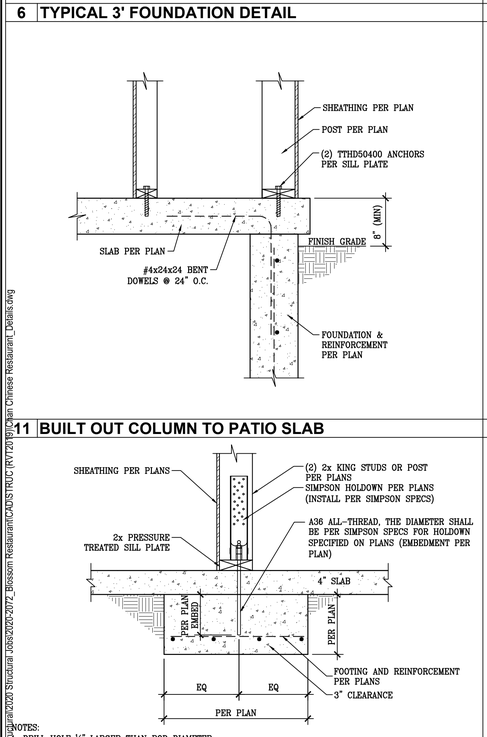
8 STEEL COLUMN TO FOUNDATION WALL



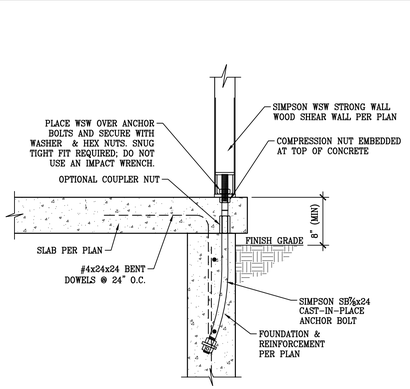
9 STEEL COLUMN AT INTERIOR FOOTING



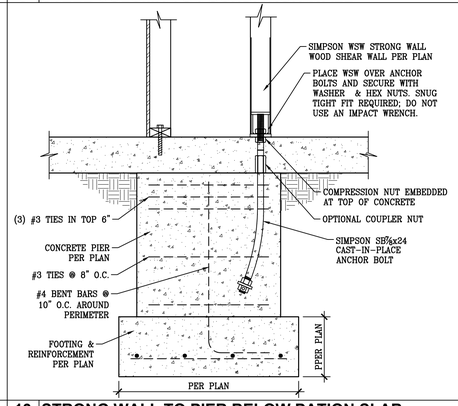
10 TYPICAL INTERIOR FOOTING



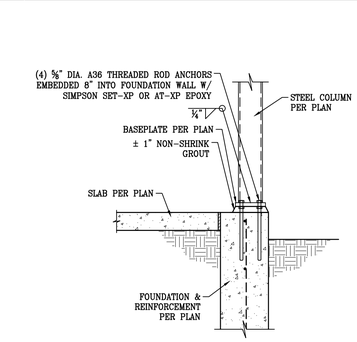
11 BUILT OUT COLUMN TO PATIO SLAB



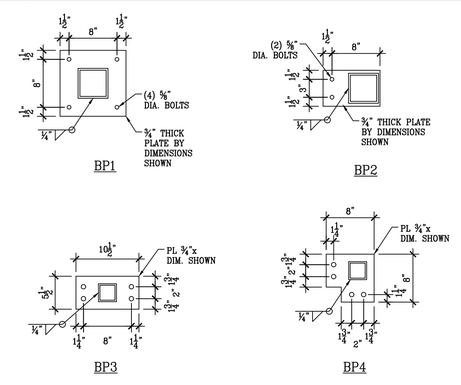
12 STRONG WALL TO FOUNDATION WALL



13 STRONG WALL TO PIER BELOW PATION SLAB



14 STEEL COLUMN TO FOUNDATION WALL



15 BASE PLATES

NOTES:
1. DRILL HOLE ⅛" LARGER THAN ROD DIAMETER.
2. BLOW WITH OIL FREE COMPRESSED AIR.
3. BRUSH HOLE.
4. BLOW WITH OIL FREE COMPRESSED AIR.
5. REPEAT STEPS 3 AND 4 PER MANUFACTURER.
6. INSTALL EPOXY FROM BOTTOM OF HOLE USING SIMPSON MIXING NOZZLE. VERIFY UNIFORM MIXTURE PRIOR TO PLACING EPOXY.
7. NOTES PROVIDED ARE A BRIEF OVERVIEW. EPOXY PLACEMENT SHALL BE PER SIMPSON SPECIFICATIONS.

16 RETROFIT HOLDOWN AT INTERIOR FOOTING

17

18

19

20

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BLOSSOM RESTAURANT

STRUCTURAL DETAILS

Date
01/16/2020

S1.1

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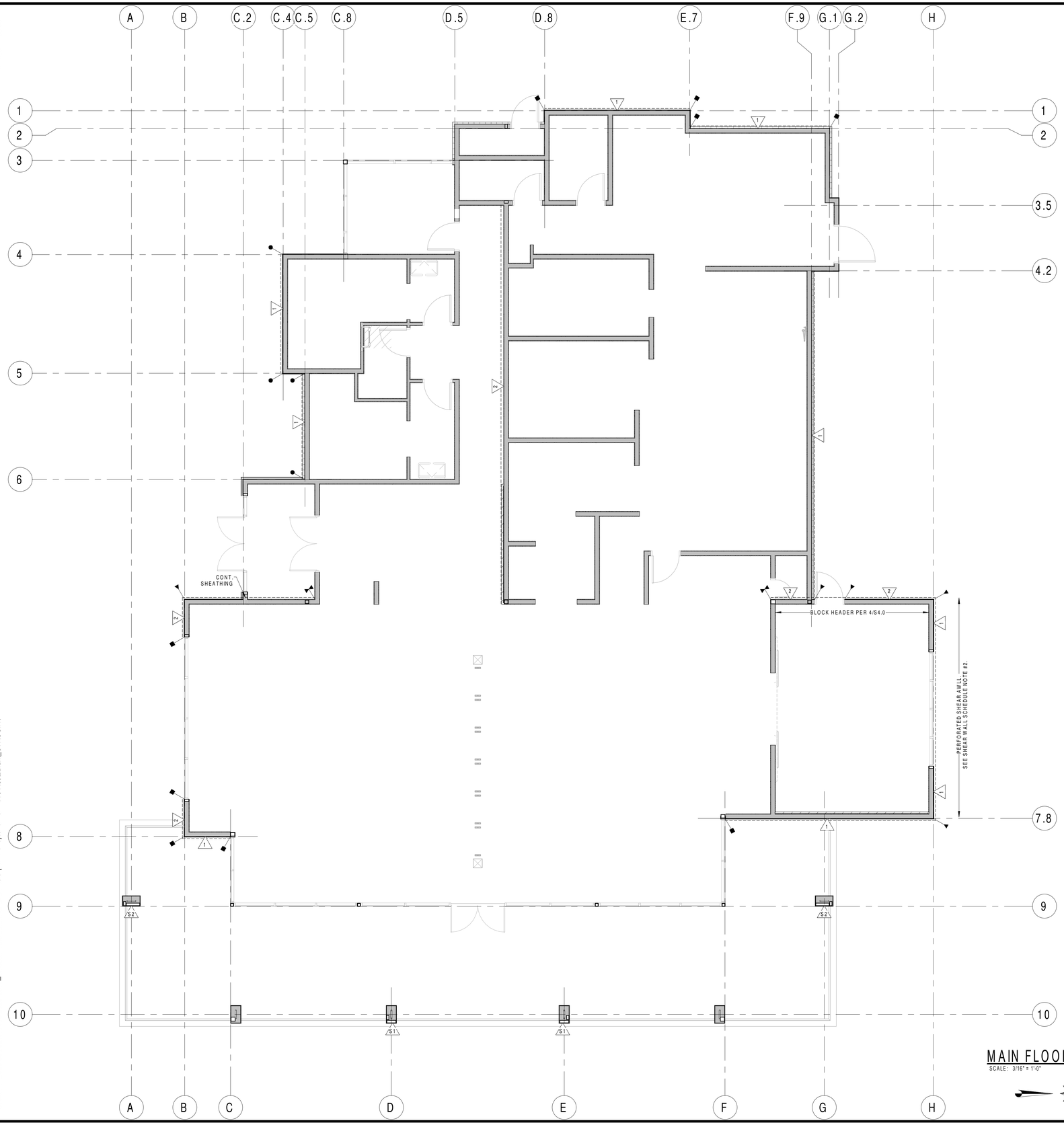

MAIN FLOOR SHEAR PLAN
SCALE: 3/16" = 1'-0"

SHEAR WALL SCHEDULE

1,3,4

DESIG.	MATERIAL	8d NAILS		1 1/2" 16 GAGE STAPLES		CAPACITY		NOTE
		EDGE	FIELD	EDGE	FIELD	WIND	SEISMIC	
1	7/16" OSB OR CDX PLYWOOD	6"	12"	3 1/2"	12"	360	260	2,5
2	7/16" OSB OR CDX PLYWOOD	4"	12"	2"	12"	530	350	2,5
3	7/16" OSB OR CDX PLYWOOD	3"	12"	-	-	685	490	2,5,6
4	7/16" OSB OR CDX PLYWOOD	2"	12"	-	-	895	640	2,5,6
S1	WSW12x12 SIMPSON WOOD STRONG WALL. SEE DETAILS 13/S4.0, 15/S4.0, 30/S4.1, 12/S1.1, & 13/S1.1							
S2	WSW18x12 SIMPSON WOOD STRONG WALL. SEE DETAILS 13/S4.0, 15/S4.0, 30/S4.1, 12/S1.1, & 13/S1.1							

NOTES:

1. WALL STUDS ARE TO BE SPACED AT 16" O.C. U.N.O.
2. SHEATH ABOVE AND BELOW OPENINGS IN PERFORATED SHEAR WALLS AS PER THE ADJACENT SHEAR WALL DESIGNATION ON EACH SIDE OF THE OPENING.
3. USE (2) KING STUDS AT EACH END OF SHEAR PANELS (SHEAR WALL CHORDS) U.N.O.
4. ALL PANEL EDGES SHALL BE BLOCKED WITH 2-INCH NOMINAL OR WIDER FRAMING WITH EDGE NAILING AT ALL SUPPORTS AND PANEL EDGES U.N.O.
5. WHERE PANELS ARE APPLIED ON BOTH FACES OF A WALL AND NAIL SPACING IS LESS THAN 6" O.C. ON EITHER SIDE, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS.
6. FRAMING AT ADJOINING PANEL EDGES AND SILL PLATES SHALL BE 3x OR WIDER FOR EDGE NAILING 3" O.C. OR LESS. NAILS AT ADJOINING PANEL EDGES AND INTO SILL PLATES SHALL BE STAGGERED. (DOUBLE 2x FRAMING STITCH-NAILED WITH STAGGERED 16d NAILS WITH SPACING EQUAL TO THE SHEAR WALL EDGE NAILING IS AN ADEQUATE SUBSTITUTE FOR 3x FRAMING.)

HOLDOWN SCHEDULE

SYMBOL	HOLDOWN/STRAP
●	LSTHD8/8RJ HOLDOWN SEE DETAIL 15/S4.0
■	STHD10/10RJ HOLDOWN SEE DETAIL 15/S4.0
◀	STHD14/14RJ HOLDOWN SEE DETAIL 15/S4.0
⧗	HDU4-SDS2.5 RETROFIT HOLDOWN W/ 5/8" DIA. A36 THREADED ROD ANCHOR EMBEDDED 8" INTO FOOTING W/ SIMPSON SET-XP OR AT-XP EPOXY SEE DETAIL 16/S1.1

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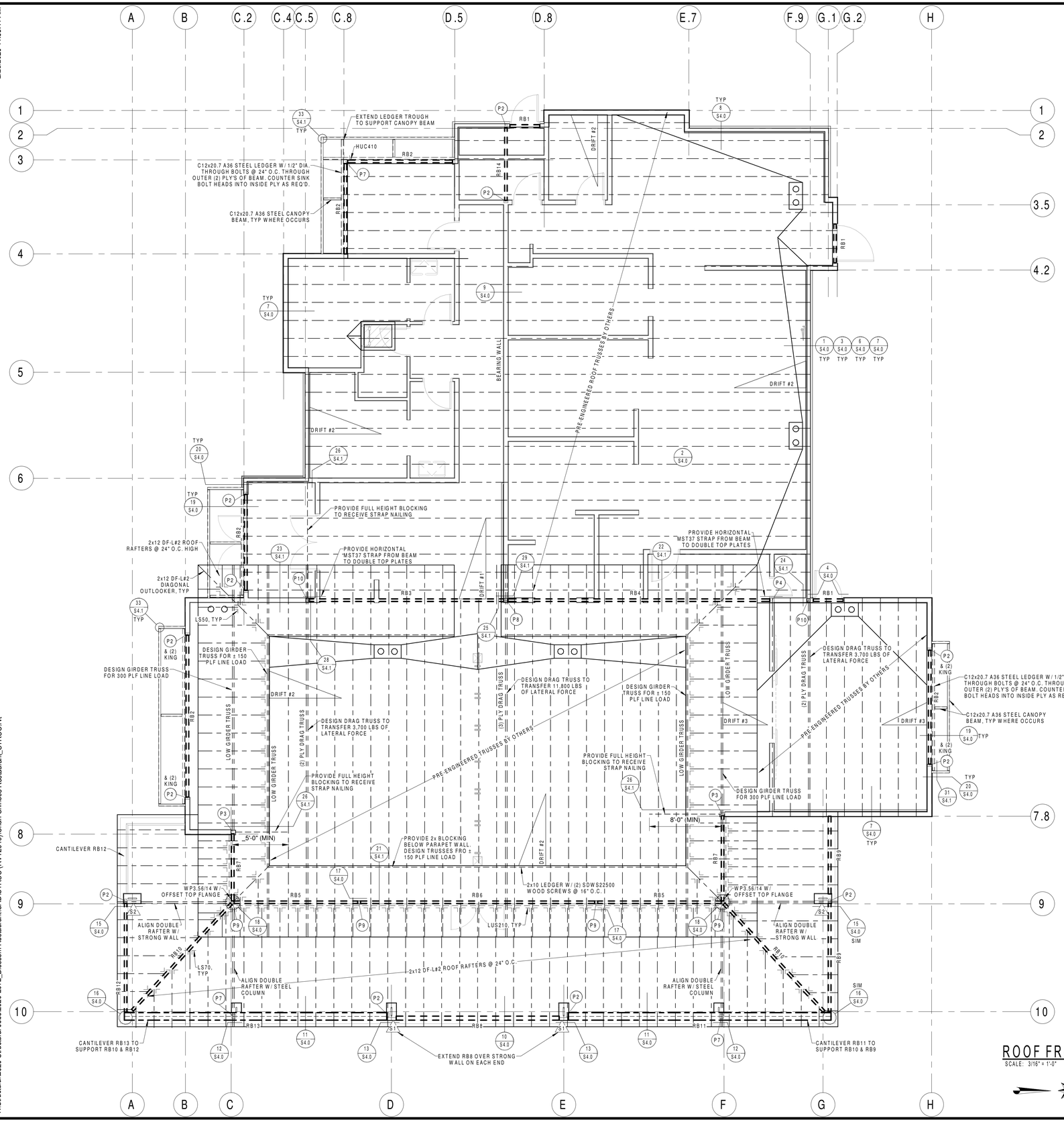
BLOSSOM RESTAURANT
MAIN FLOOR SHEAR PLAN

01/16/2020

S2.0

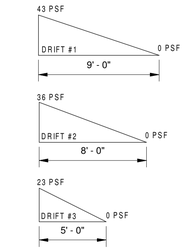


ROOF FRAMING PLAN

SCALE: 3/16" = 1'-0"

SNOW DRIFT

DRIFT LOADS ARE IN ADDITION TO UNIFORM SNOW LOADS



FRAMING NOTES

1. PLANS ARE NOT COMPLETE WITHOUT THE STRUCTURAL CALCULATIONS.
2. REFER TO SHEET S0.0 FOR THE GENERAL STRUCTURAL NOTES.
3. ROOF SHEATHING SHALL BE APA RATED 7/16" OSB OR COX PLYWOOD WITH 8d NAILS AT 6" O.C. EDGE, 12" O.C. FIELD.
4. FLOOR SHEATHING SHALL BE APA RATED 3/4" T&G WITH 10d NAILS OR SIMPSON WSNTL12LS #8 WOOD SCREWS AT 6" O.C. EDGE, 12" O.C. FIELD.
5. EXTERIOR STUD WALLS SHALL BE 2x6 DF-L @ 24" O.C U.N.O.
6. USE (17) 16d NAILS BETWEEN TOP PLATE SPLICE POINTS ON ALL EXTERIOR AND SHEAR WALLS. PROVIDE A 4'-0" MINIMUM LAP SPLICE.
7. INSTALL ALL SIMPSON HARDWARE PER MANUFACTURER'S SPECIFICATIONS.
8. HOLDOWNS SHALL BE INSTALLED ON (2) FULL HEIGHT KING STUDS (MINIMUM).
9. LAMINATE (3)-PLY BEAMS W/ (2) ROWS OF 10d NAILS @ 12" O.C. EACH FAC, U.N.O.
10. ROOF RAFTERS SHALL BE 2x6 DF-L#2 AT 24" O.C. U.N.O.
11. PROVIDE 2x SQUASH BLOCKING AT FLOOR FRAMING TO MATCH DIMENSIONS OF POST ABOVE.
12. ALL DETAILS SHALL APPLY IN ALL SIMILAR SITUATIONS.
13. ALL LUMBER NOT PERMANENTLY PROTECTED FROM THE ELEMENTS SHALL BE PRESERVATIVE TREATED OR OF A DECAY RESISTANT SPECIES. CONTACT LEI ENGINEERS AND SURVEYORS, INC. IF A DIFFERENT SPECIES IS TO BE USED.
14. 1/4" BENT PLATE MAY BE USED FOR CANOPY BEAMS AND LEDGER.

P# POST SCHEDULE

DESIG.	POST SIZE
P1	(1) 2x
P2	(2) 2x
P3	(3) 2x
P4	(4) 2x
P5	(5) 2x
P6	4x4
P7	6x6
P8	HSS5 1/2x5 1/2x3/8 A500 GR. B-46 STEEL
P9	HSS4x4x1/4 A500 GR. B-46 STEEL
P10	HSS5x5x1/4 A500 GR. B-46 STEEL

NOTES:
1. POSTS INDICATE NUMBER OF TRIMMER STUDS WHEN SPECIFIED AT HEADERS. ALL OTHER POST DESIGNATIONS REFER TO FULL HEIGHT KING STUDS U.N.O.
2. INSTALL (1) TRIMMER STUD AND (1) KING STUD EACH SIDE OF EACH OPENING U.N.O.
3. INSTALL (2) TRIMMER STUDS AT EACH SIDE OF OPENINGS GREATER THAN 6'-0" WIDE U.N.O.
4. INSTALL (2) KING STUDS EACH SIDE OF OPENINGS GREATER THAN 8'-0" WIDE U.N.O.
5. 2x BUILT-UP POSTS SHALL BE THE SAME WIDTH OF THE WALL IN WHICH THEY ARE FRAMED U.N.O.
6. NAIL EACH PLY OF 2x BUILT-UP POSTS W/ 16d NAILS @ 6" O.C. STAGGERED U.N.O.
7. POSTS THAT ARE NOT FRAMED WITHIN A STUD WALL SHALL BE BRACED WITH BC OR AC POST CAP AND PB OR ABA POST BASE U.N.O.

BEAM SCHEDULE

DESIG.	QTY.	SIZE	TYPE
RB1	2	2x8	DF-L#2
RB2	3	1 3/4"x11 7/8"	MICROLLAM
RB3	1	5 1/2"x19 1/2"	GLULAM
RB4	1	5 1/2"x30"	GLULAM
RB5	3	1 3/4"x14"	MICROLLAM
RB6	1	5 1/2"x28 1/2"	GLULAM
RB7	2	1 3/4"x14"	MICROLLAM
RB8	3	1 3/4"x11 7/8"	MICROLLAM
RB9	2	1 3/4"x11 7/8"	MICROLLAM
RB10	2	1 3/4"x11 1/4"	MICROLLAM
RB11	1	W10x49	A992-50 STEEL
RB12	3	1 3/4"x11 7/8"	MICROLLAM
RB13	1	W10x49	A992-50 STEEL
RB14	2	1 3/4"x11 7/8"	MICROLLAM

REVISIONS

#	Date	Description

DRAWN BY KGW

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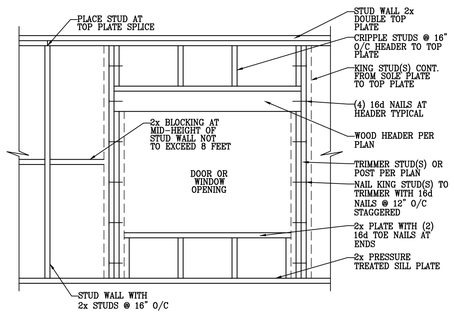
BLOSSOM RESTAURANT

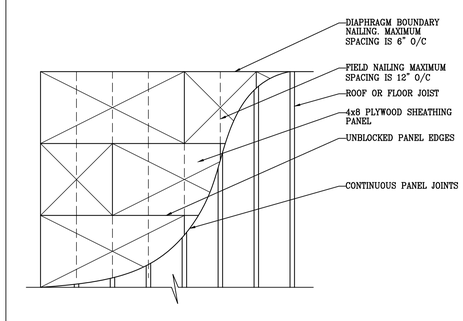
ROOF FRAMING PLAN

01/16/2020

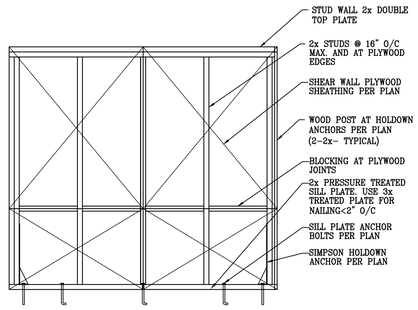
S3.0



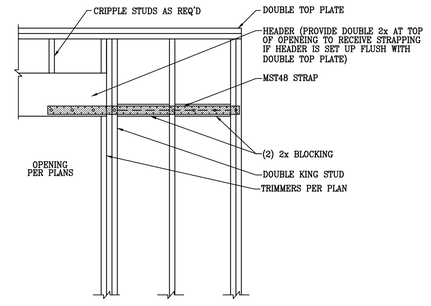
1 TYPICAL WALL FRAMING



2 TYPICAL UNBLOCKED HORIZONTAL DIAPHRAGM

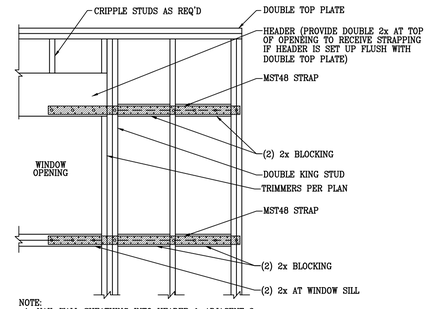


3 TYPICAL SHEAR WALL FRAMING & CONNECTION



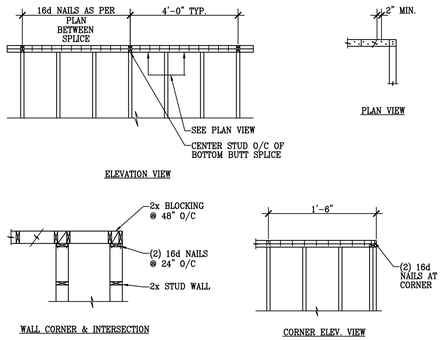
NOTE:
1. NAIL WALL SHEATHING INTO HEADER & ADJACENT 2x BLOCKING W/ 8d NAILS @ 4" O.C.
2. USE CMSTC16 STRAP AT ADJACENT OPENINGS AND LAP 16" MINIMUM ONTO HEADER.

4 HEADER BLOCKING DETAIL - PER PLANS

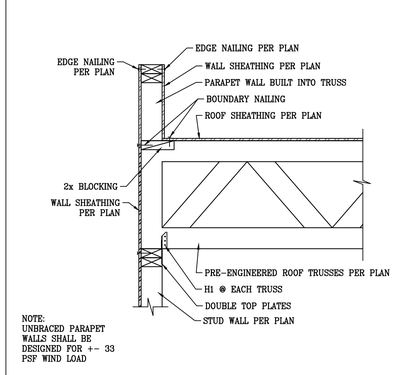


NOTE:
1. NAIL WALL SHEATHING INTO HEADER & ADJACENT 2x BLOCKING W/ 8d NAILS @ 4" O.C.
2. NAIL WALL SHEATHING INTO WINDOW SILL & ADJACENT 2x BLOCKING W/ 8d NAILS @ 4" O.C.
3. USE CMSTC16 STRAP AT ADJACENT OPENINGS AND LAP 16" MINIMUM ONTO HEADER.

5 BLOCKED HEADER & SILL - PER PLANS

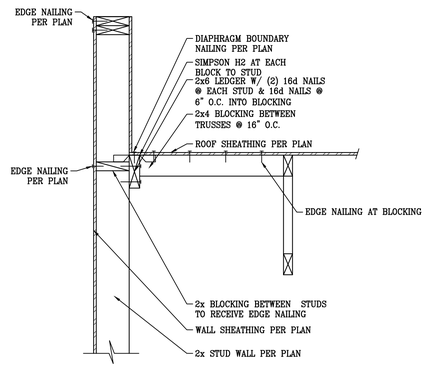


6 TYPICAL STUD WALL TOP PLATE SPLICE CONNECTION

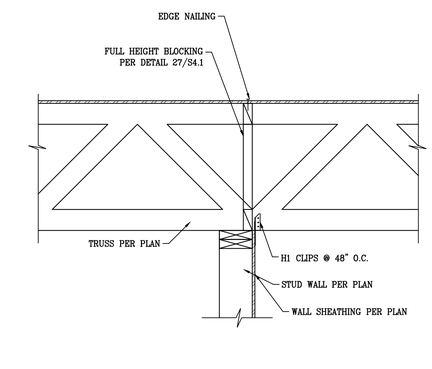


NOTE:
UNBRACED PARAPET WALLS SHALL BE DESIGNED FOR +- 33 PSF WIND LOAD

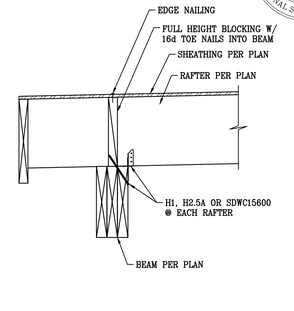
7 ROOF TRUSSES PERPENDICULAR TO STUD WALL



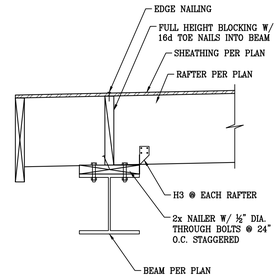
8 PARAPET WALL WITH PARALLEL TRUSS DETAIL



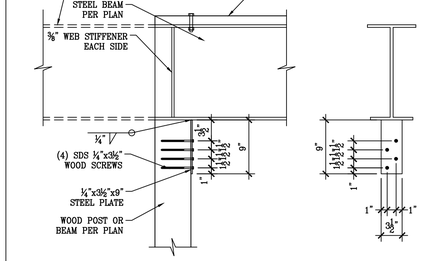
9 ROOF TRUSSES AT INTERIOR SHEAR WALL



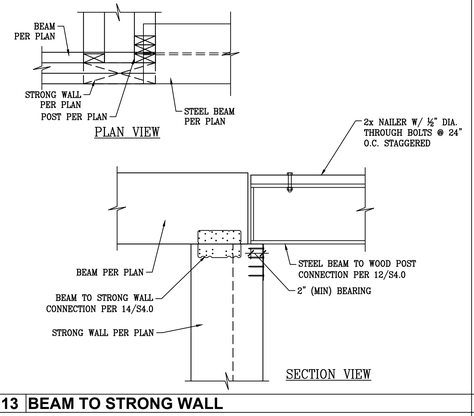
10 RAFTER TO WOOD BEAM



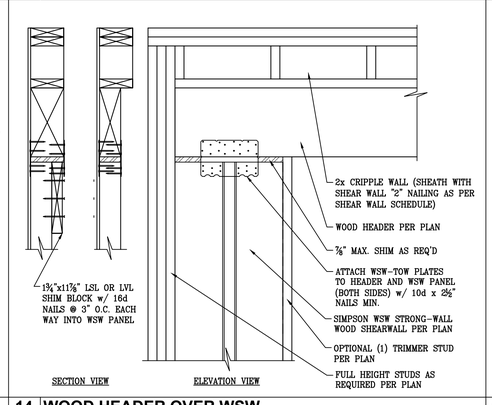
11 RAFTER TO STEEL BEAM



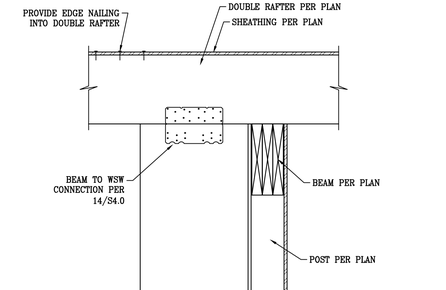
12 STEEL BEAM TO WOOD POST



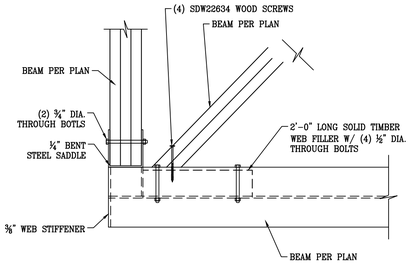
13 BEAM TO STRONG WALL



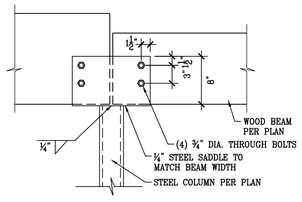
14 WOOD HEADER OVER WSW



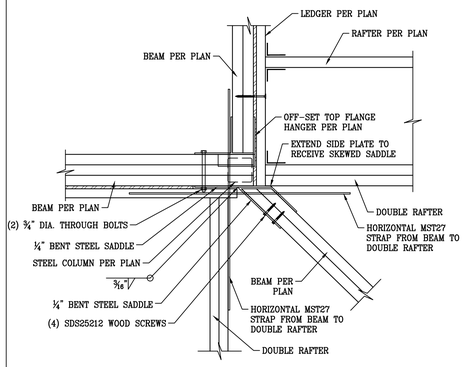
15 DOUBLE RAFTER TO WSW



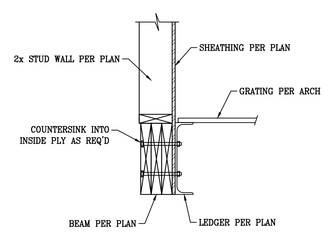
16 WOOD BEAM TO STEEL BEAM - PLAN VIEW



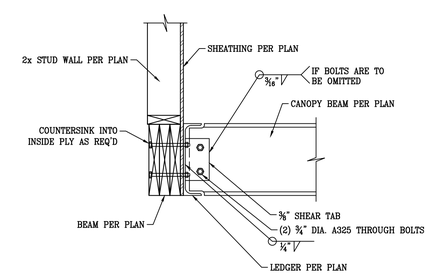
17 WOOD BEAM TO STEEL COLUMN



18 WOOD BEAMS TO STEEL COLUMN - PLAN VIEW



19 CANOPY LEDGER TO BEAM



20 CANOPY BEAM TO LEDGER CONNECTION

PLOT DATE: 2/26/2020 T:\Structural\2020 Structural Jobs\2020-2072_Blossom Restaurant\CAD\STRUCTRVT20\Plan\Chen Chinese Restaurant_Details.dwg

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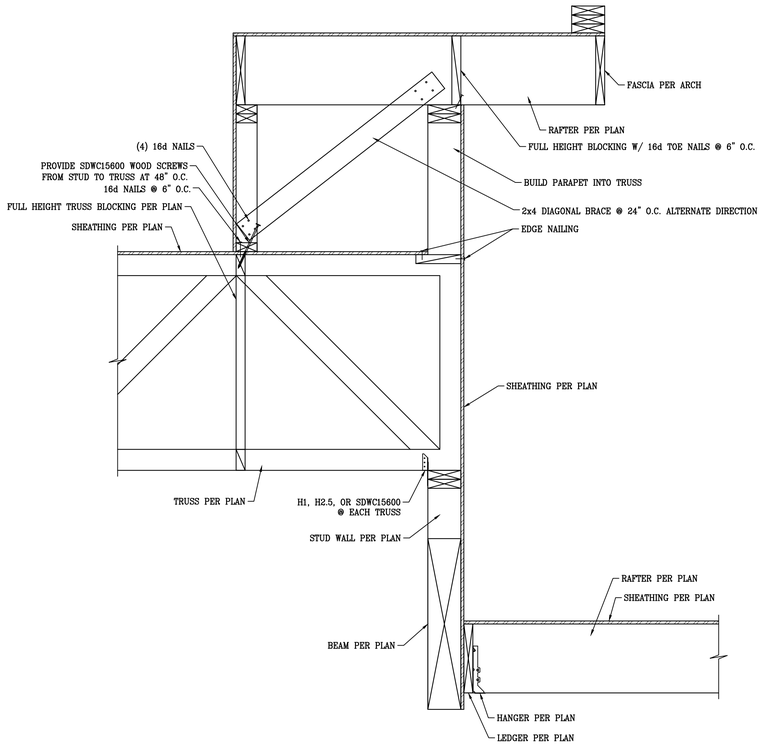
BLOSSOM RESTAURANT

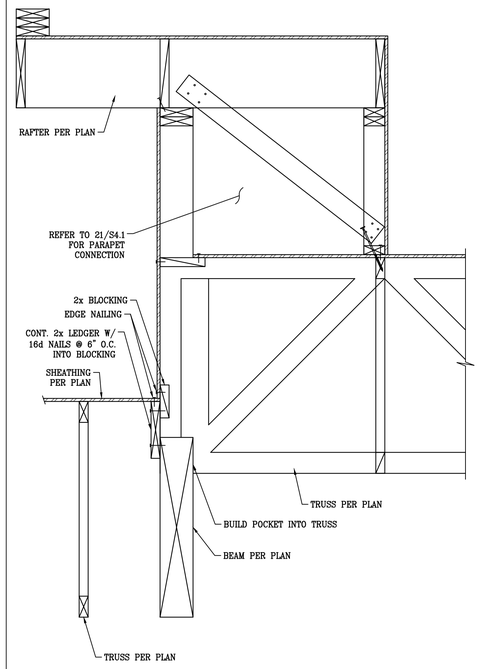
STRUCTURAL DETAILS

Date
01/16/2020

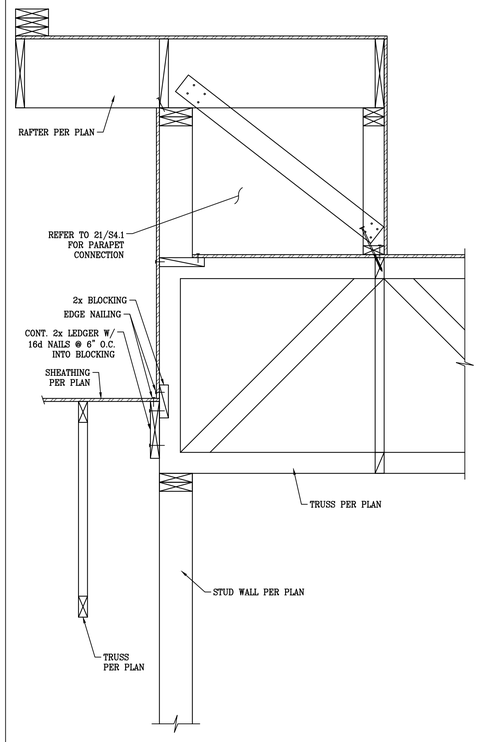
S4.0



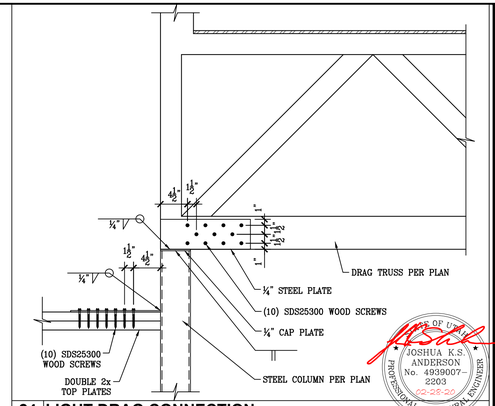
21 FRAMING SECTION



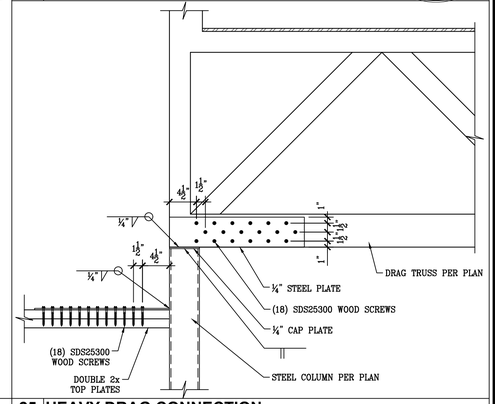
22 FRAMING SECTION



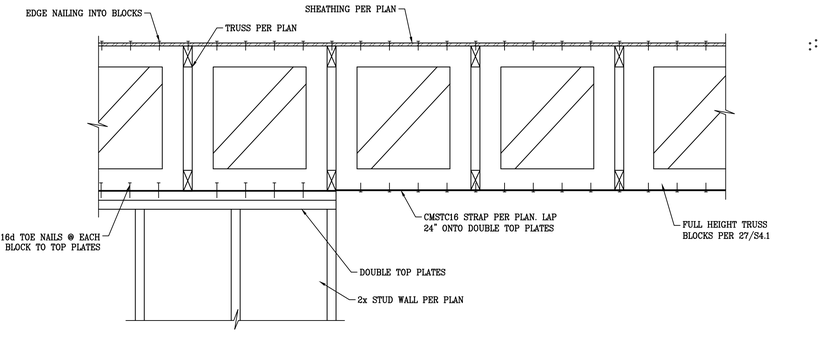
23 FRAMING SECTION



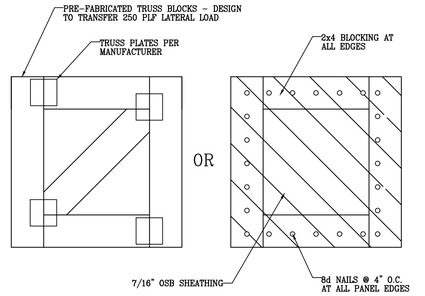
24 LIGHT DRAG CONNECTION



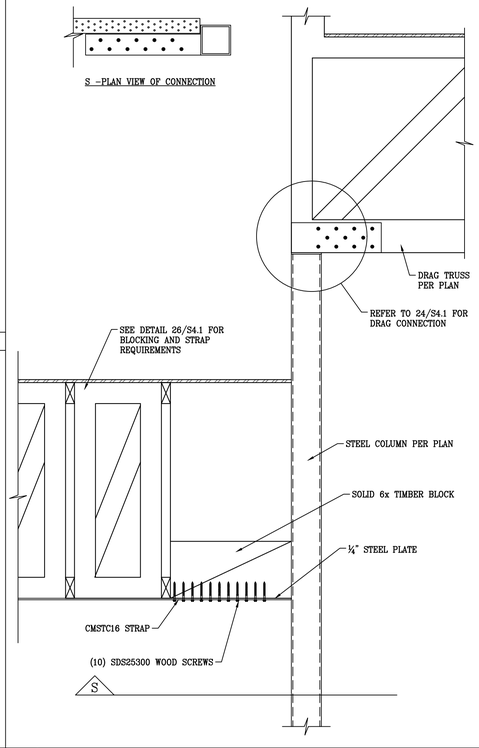
25 HEAVY DRAG CONNECTION



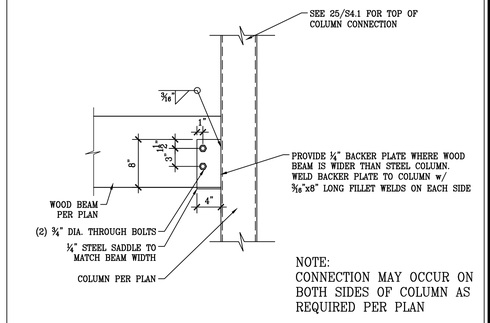
26 TRUSS BLOCK CONNECTION



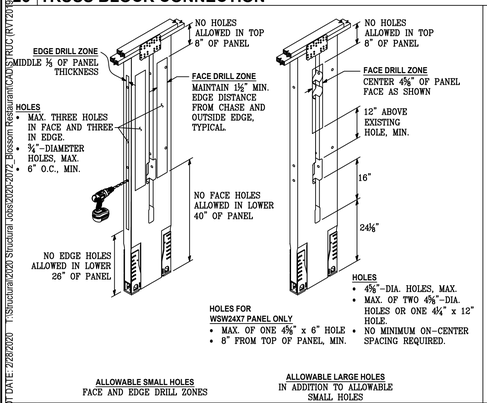
27 TRUSS BLOCKING



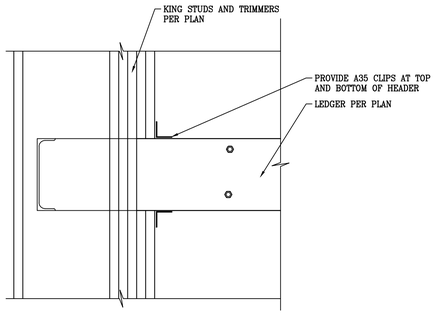
28 DRAG CONNECTION INTO BLOCKING



29 WOOD BEAM TO STEEL COLUMN

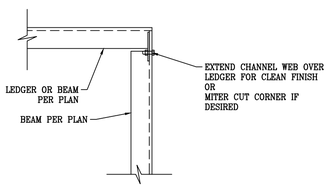


30 WSW TRIM ZONE & ALLOWABLE HOLES



31 CANOPY HEADER TO KING STUDS

32 NOT USED



33 STEEL BEAM TO STEEL BEAM - PLAN VIEW

PLOT DATE: 2/26/2020 T:\Structural\2020 Structural Jobs\2020-2072 Blossom Restaurant\CAD\STRUCTRVT20\Blossom Chinese Restaurant_Details.dwg

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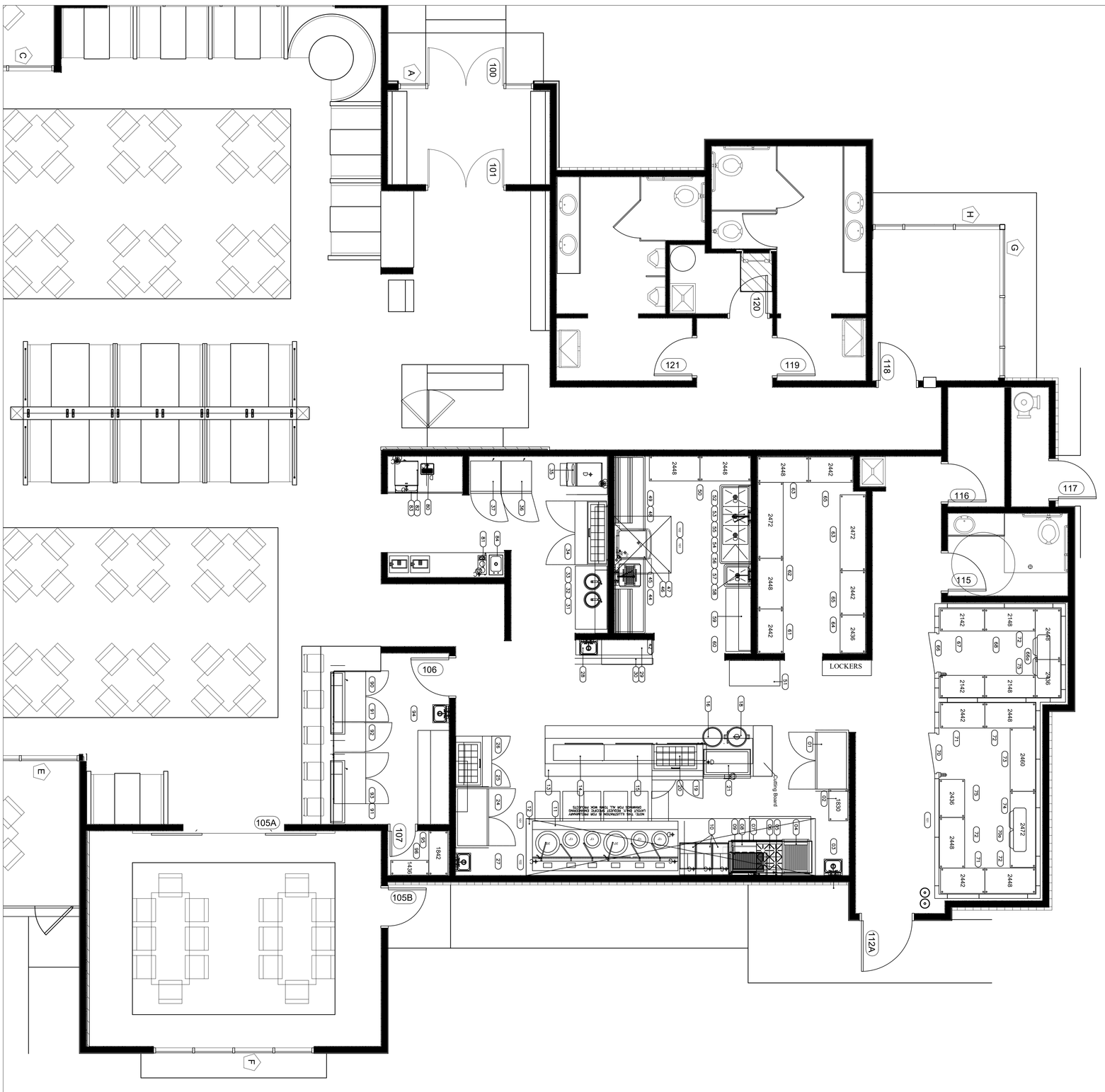
BLOSSOM RESTAURANT

STRUCTURAL DETAILS

Date
01/16/2020

S4.1



FS1	TITLE: KITCHEN EQUIPMENT PLAN JOB: Blossom - -	Restaurant & Store Equipment Co. 230 West 700 South Salt Lake City, UT 84101 (801) 364-1981 Fax (801) 355-2029	DATE / REVISIONS 20191223 Updated kitchen layout SCALE: 1/4" = 1'-0"	THIS DRAWING IS THE SOLE PROPERTY OF RESTAURANT & STORE EQUIPMENT CO. AND MAY NOT BE COPIED, ALTERED OR REPRODUCED WITH OUT WRITTEN CONSENT. APPROVED BY: DATE:	DATE: 03NOV2019 DRAWN BY: TJR DRAWING #: K1

EQUIPMENT SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	MANUFACTURER	MODEL NUMBER	EQUIPMENT REMARKS	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT PLUG	NEMA	ELECTRICAL A.F.F. (IN)	ELEC REMARKS	COLD WATER SIZE (IN)	COLD WATER A.F.F. (IN)	HOT WATER SIZE (IN)	HOT WATER A.F.F. (IN)	DIRECT DRAIN SIZE (IN)	DIRECT DRAIN A.F.F. (IN)	INDIR DRAIN SIZE (IN)	INDIR DRAIN A.F.F. (IN)	GAS SIZE (IN)	MBTUH	GAS A.F.F. (IN)	GAS ROUGH-IN	PLUMBING REMARKS	ITEM NO
01	1	REFRIGERATOR, REACH-IN	TRUE FOOD SERVICE	T-49	–	5.8	0.7	0.3	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	01
02	4	SHELVING, WIRE	CENTAUR	1830BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	02
03	1	HAND SINK, WALL MOUNT	ADVANCE TABCO	7-PS-60	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	1.5	18	–	–	–	–	–	–	–	03
04	1	BROILER, UNDER-FIRED, GAS, COUNTER	VULCAN	VACB25	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.75	72	12	–	–	04
05	1	FAUCET, WALL MOUNT	T & S BRASS	B-0594	–	–	–	–	–	–	–	–	–	–	–	0.5	20	–	–	–	–	–	–	–	–	–	–	–	05
06	1	HOT PLATE, GAS	VULCAN	VHP424	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.75	132	12	–	–	06
07	1	REFRIGERATOR, SHORTY	TRUE MANUFACTURING CO., INC.	TRCB-79	–	8.8	1.0	0.3	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	07
08	1	GRIDDLE, GAS	VULCAN	924RX	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.75	60	60	–	–	08
09	1	SALAMANDER BROILER, GAS	VULCAN	36RB-N	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.75	50	12	–	–	09
10	3	FRYER, DEEP FAT, GAS	PITCO	45C+	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	0.75	122	12	–	–	10
11	1	WOK RANGE	TOWN FOOD SERVICE EQUIPMENT	YF-6-SS	–	–	–	–	–	–	–	–	–	–	–	0.5	20	–	–	–	–	2	FS	1.25	822	12	–	–	11
12	1	TYPE 1 HOOD	CAPTIVE AIRE	HOOD VENT	–	15.0	–	–	120	1	60	– X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12
12A	1	EXHAUST FAN	CAPTIVE AIRE	EXHAUST FAN	–	–	–	7-1/2	208	3	60	– X	–	ROOF	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12A
12B	1	MAKE-UP AIR UNIT (MAU)	CAPTIVE AIRE	MAKE-UP AIR UNIT (MAU)	–	–	–	7-1/2	208	3	60	– X	–	ROOF	–	1/2	ROOF	–	–	–	–	–	–	1	80	ROOF	–	–	12B
12C	1	CURBING	CAPTIVE AIRE	CURBING	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12C
12D	1	ELECTRICAL	CAPTIVE AIRE	ELECTRICAL	–	21.0	–	7-1/2	200-240	3	60	– X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12D
12E	1	FIRE SUPRESSION	CAPTIVE AIRE	FIRE SUPRESSION	–	20.0	–	–	120	1	60	– X	–	108	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12E
13	1	COUNTER W/ DOUBLE OVERSHELF	*CUSTOM*	*CUSTOM*	–	–	–	–	–	–	–	X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	13
14	1	WARMER, FOOD OVERHEAD	HATCO	GRAH-48D3	–	10.6	2.2	–	208	1	60	X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	14
15	1	WARMER, FOOD OVERHEAD	HATCO	GRAH-48D3	–	10.6	2.2	–	208	1	60	X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	15
16	1	WARMER, RICE	WINCO	RW-S450	–	–	8.4	–	120	1	60	– X	5-15P	48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	16
17	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	17
18	1	WARMER, FOOD OVERHEAD	HATCO	GRAH-48D3	–	10.6	2.2	–	208	1	60	X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	18
19	1	REFRIGERATOR, SANDWICH/SALAD PREP	TRUE MANUFACTURING CO., INC.	TSSU-48-18M-B	–	8.6	0.6	0.3	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	19
20	1	WARMER, FOOD OVERHEAD	HATCO	GRAH-48D3	–	10.6	2.2	–	208	1	60	X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	20
21	1	DROP-IN, HOT WELLS	WELLS	HT-300	–	13.0	2.7	–	208	1	60	X	–	24	–	**ATTACH TO COUNTER**	–	–	–	1	FS	–	–	–	–	–	–	–	21
22	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	22
23	4	SHELVING, WIRE	CENTAUR	2460BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	23
24	1	REFRIGERATOR, REACH-IN	TRUE FOOD SERVICE	T-49	–	5.8	0.7	0.3	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	24
25	1	SHELF, WALL MOUNT	ADVANCE TABCO	WS-12-48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	25
26	1	REFRIGERATOR, SANDWICH/SALAD PREP	TRUE MANUFACTURING CO., INC.	TSSU-48-18M-B	–	8.6	0.6	0.3	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	26
27	1	HAND SINK, WALL MOUNT	ADVANCE TABCO	7-PS-60	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	1.5	18	–	–	–	–	–	–	–	27
28	1	HAND SINK, WALL MOUNT	ADVANCE TABCO	7-PS-60	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	1.5	18	–	–	–	–	–	–	–	28
29	1	SHELF, WALL MOUNT	ADVANCE TABCO	WS-15-72	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	29
30	1	TABLE, WORK, 18 GAUGE, FLAT TOP W/ UNDERSHELF	ADVANCE TABCO	ELAG-244-X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	30
31	4	SHELF, WALL MOUNT	ADVANCE TABCO	WS-12-60	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	31
32	1	TABLE, WORK, 18 GAUGE, FLAT TOP W/ UNDERSHELF	ADVANCE TABCO	ELAG-305-X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	32
33	2	TUREEN/KETTLE, SOUP	VOLLRATH	72175	–	7.5	0.9	–	120	1	60	– X	5-15P	48	–	–	–	–	–	–	–	–	–	–	–	–	–	–	33
34	1	REFRIGERATOR, SANDWICH/SALAD PREP	TRUE MANUFACTURING CO., INC.	TSSU-60-16	–	7.8	1.2	0.3	115	1	60	X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	34
35	1	ICE MAKER/BIN, NUGGET ICE	MANITOWOC	RNF0620A-161/D-420 BIN	–	17.0	–	–	230	1	60	X	–	60	–	0.5	72	–	–	–	–	–	0.5	FS	–	–	–	–	35
36	1	REFRIGERATOR, REACH-IN	TURBO AIR	M3R24-1	–	5.5	–	0.2	115	1	60	– X	5-15P	72	–	–	–	–	–	–	–	–	–	–	–	–	–	–	36
37	1	REFRIGERATOR, REACH-IN	TURBO AIR	M3R24-1	–	5.5	–	0.2	115	1	60	– X	5-15P	72	–	–	–	–	–	–	–	–	–	–	–	–	–	–	37
38	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	38
39	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	39
40	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	40
41	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	41
42	1	DISHTABLE, SORTING SHELF	ADVANCE TABCO	DT-6R-22	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	42
44	1	DISHTABLE, STRAIGHT, 14 GAUGE	ADVANCE TABCO	DTS-S30-72L	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.5	24	–	–	–	–	–	–	–	44
45	1	PRE-RINSE FAUCET, WALL MOUNT	T & S BRASS	B-0133-12-CR-BC	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	–	–	–	–	–	–	–	–	–	45
46	1	WAREWASHER, DOOR TYPE, HIGH TEMP	HOBART US FOODSERVICE	AM15 ELEC	–	43.0	5.0	2.0	208-240	1	60	X	–	72	–	–	–	0.75	48	–	–	1.5	FS	–	–	–	–	–	46
–	–	–	–	–	–	35.4	8.5	–	208-240	1	60	X	–	72	–	–	–	0.75	12	–	–	–	–	–	–	–	–	–	–
47	1	HOOD, TYPE 2	CAPTIVE AIRE	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	47
47A	1	EXHAUST FAN	CAPTIVE AIRE	–	–	7.0	–	1/3	115	1	60	– X	–	ROOF	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	47A
47C	1	CURBING	CAPTIVE AIRE	CURBING	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	47C
48	1	DISHTABLE, SORTING SHELF	ADVANCE TABCO	DT-6R-23	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	48
49	1	DISHTABLE, STRAIGHT, 14 GAUGE	ADVANCE TABCO	DTC-S30-72R	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	49
50	8	SHELVING, WIRE	CENTAUR	2448BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	50
51	–	Table, Work, 18 gauge, Flat Top w/ Undershelf	ADVANCE TABCO	ELAG-244-X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	51
52	1	SHELF, WALL MOUNT	ADVANCE TABCO	WS-12-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	52
53	1	SHELF, WALL MOUNT	ADVANCE TABCO	WS-12-72	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	53
54	1	SINK, NSF, 3 COMP, 16 GAUGE	ADVANCE TABCO	FC-3-1824-18R	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.5	FS	–	–	–	–	–	54
55	1	PRE-RINSE FAUCET, WALL MOUNT	T & S BRASS	B-0133-12-CR-BC	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	–	–	–	–	–	–	–	–	–	55
56	1	SHELF, WALL MOUNT	ADVANCE TABCO	WS-12-36	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	56
57	1	SINK, NSF, 1 COMP, 16 GAUGE	ADVANCE TABCO	FC-1-1620	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	1.5	FS	–	–	–	–	–	57
58	1	FAUCET, WALL MOUNT	T & S BRASS	B-0231-CC-CR	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	–	–	–	–	–	–	–	–	–	58
59	1	SHELF, WALL MOUNT	ADVANCE TABCO	WS-12-84	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	59
60	1	TABLE, WORK, 18 GAUGE, FLAT TOP W/ UNDERSHELF	ADVANCE TABCO	ELAG-245-X	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	60
61	4	SHELVING, WIRE	CENTAUR	2442BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	61
62	8	SHELVING, WIRE	CENTAUR	2448BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	62
63	4	SHELVING, WIRE	CENTAUR	2472BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	63
63	4	SHELVING, WIRE	CENTAUR	2448BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	63
64	4	SHELVING, WIRE	CENTAUR	2436BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	64
65	4	SHELVING, WIRE	CENTAUR	2442BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	65
66	1	WALK-IN FREEZER	ARCTIC	–	–	15.0	–	–	120	1	60	– X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	66
66A	1	BLOWER COIL	ARCTIC	–	–	20.0	4.0	–	208-230	1	60	– X	–	DFA	–	–	–	–	–	–	–	0.5	FS	–	–	–	–	–	66A
66B	1	FREEZER CONDENSER – REMOTE	KOLPAK	–	–	20.0	–	–	208-230	1	60	– X	–	ROOF	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	66B
67	8	SHELVING, WIRE	CENTAUR	2142BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	67
68	8	SHELVING, WIRE	CENTAUR	2148BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	68
70	1	WALK-IN COOLER	ARCTIC	–	–	15.0	–	–	120	1	60	– X	–	DFA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	70
70A	1	BLOWER COIL	ARCTIC	–	–	5.9	–	0.8	208-230	1	60	– X	–	DFA	–	–	–	–	–	–	–	0.5	FS	–	–	–	–	–	70A
70B	1	COOLER CONDENSER – REMOTE	KOLPAK	–	–	–	–	0.8	208-230	1	60	– X	–	ROOF	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	70B
71	8	SHELVING, WIRE	CENTAUR	2442BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	71
72	8	SHELVING, WIRE	CENTAUR	2448BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	72
73	4	SHELVING, WIRE	CENTAUR	2460BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	73
74	4	SHELVING, WIRE	CENTAUR	2472BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	74
75	4	SHELVING, WIRE	CENTAUR	2436BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	74
80	1	WATER STATION	T & S BRASS	5GF-8P-WS	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	–	–	1.25	FS	–	–	–	–	–	80
81	1	COFFEE MAKER, AUTOMATIC	BUNN-O-MATIC	12950.0283	–	20.0	2.4	–	120	1	60	X	–	48	–	0.25	20	–	–	–	–	–	–	–	–	–	–	–	81
82	1	ICE MAKER, NUGGET STYLE	MANITOWOC ICE	RNF0620A-161	–	8.2	–	–	115	1	60	X	–	70	–	0.38	48	–	–	–	–	0.5	FS	–	–	–	–	–	82
83	1	DISPENSER, BEVERAGE/CARBONATED & NON-CARBONATED	TBD	*PROVIDED BY SODA VENDOR*	***SEE SODA VENDOR***	–	–	–	–	–	–	–	–	–	***SEE SODA VENDOR***	–	–	–	–	–	–	–	–	–	–	–	–	***SEE SODA VENDOR***	83
84	1	SINK, DROP-IN	ADVANCE TABCO	DI-1-10SP	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	–	–	1.5	FS	–	–	–	–	–	84
86	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	86
87	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	87
88	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	88
89	–	**SPARE***	**SPARE***	**SPARE***	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	89
90	1	REFRIGERATOR, UNDERCOUNTER, ADA	TRUE MANUFACTURING CO., INC.	TUC-48-ADA-HC	–	3.0	0.6	0.2	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	90
91	2	DISPLAY CASE, REFRIGERATED, SUSHI	HOSHIZAKI AMERICA	HNC-150BA-L-SL	–	1.0	–	–	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	91
92	1	FREEZER, UNDERCOUNTER	TRUE MANUFACTURING CO., INC.	TUC-27F	–	8.3	0.6	0.3	115	1	60	– X	5-15P	12	–	–	–	–	–	–	–	–	–	–	–	–	–	–	92
93	1	DISPLAY CASE, REFRIGERATED, SUSHI	HOSHIZAKI AMERICA	HNC-150BA-L-SL	–	1.0	–	–	115	1	60	– X	5-15P	24	–	–	–	–	–	–	–	–	–	–	–	–	–	–	93
94	1	HAND SINK, WALL MOUNT	ADVANCE TABCO	7-PS-60	–	–	–	–	–	–	–	–	–	–	–	0.5	20	0.5	20	0.5	18	–	–	–	–	–	–	–	94
95	4	SHELVING, WIRE	CENTAUR	1842BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	95
96	4	SHELVING, WIRE	CENTAUR	1436BR	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	96
100	TBD	CORNER GUARDS	FABRICATION	FABRICATION	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	100
101	4	CLOSURE PANELS	FABRICATION	FABRICATION	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	101
102	2	FLASHING	FABRICATION	FABRICATION	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	102

DATE: 03NOV2019

DRAWN BY: TJR

DRAWING #: K1

DATE	REVISIONS
20200128	Initial equipment schedule
–	–
–	–
–	–
–	–

APPROVED BY: – DATE: – –

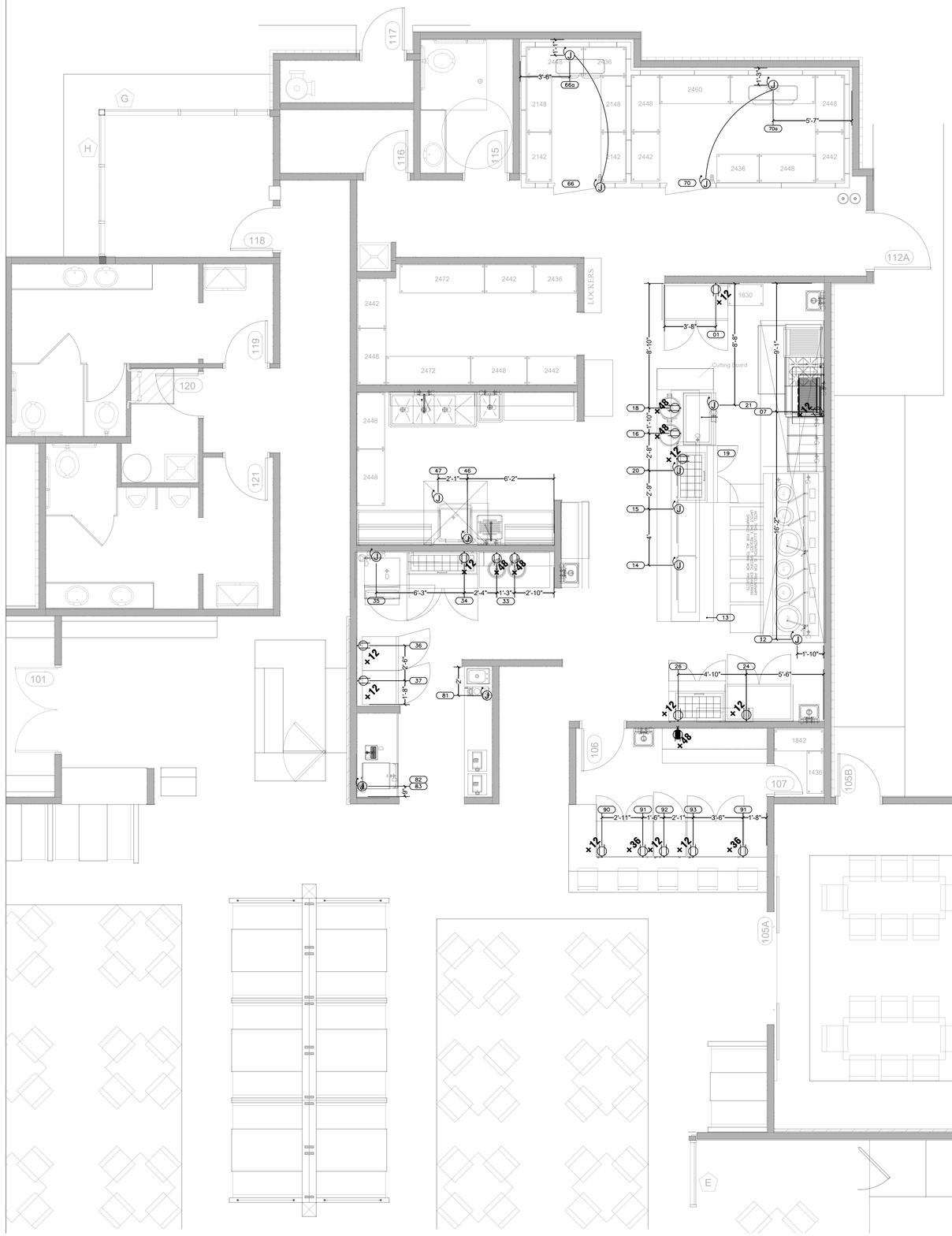
SCALE: 1/4" = 1'-0"

Restaurant & Store Equipment Co.
230 West 700 South
Salt Lake City, UT 84101
(801) 364-1981 Fax (801) 355-2029

TITLE: KITCHEN EQUIPMENT SCHEDULE

JOB: Blossom - -

FS2



EQUIPMENT SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	EQUIPMENT REMARKS	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT PLUG	NEMA	ELECTRICAL AFF (IN)	ELEC REMARKS	ITEM NO
01	1	REFRIGERATOR, REACH-IN	–	6.0	0.7	0.3	115	1	60	– X	5-15P	12	–	01
07	1	REFRIGERATOR, SHORTY	–	9.0	1.0	0.3	115	1	60	– X	5-15P	12	–	07
12	1	TYPE 1 HOOD	–	15.0	–	–	120	1	60	– X	–	DFA	–	12
12A	1	EXHAUST FAN	–	–	–	7-1/2	208	3	60	– X	–	ROOF	–	12A
12B	1	MAKE-UP AIR UNIT (MAU)	–	–	–	7-1/2	208	3	60	– X	–	ROOF	–	12B
12D	1	ELECTRICAL	–	21.0	–	7-1/2	200-240	3	60	– X	–	DFA	–	12D
12E	1	FIRE SUPRESSION	–	20.0	–	–	120	1	60	– X	–	108	–	12E
13	1	COUNTER W/ DOUBLE OVERSHELF	–	–	–	–	–	–	–	X –	–	DFA	–	13
14	1	WARMER, FOOD OVERHEAD	–	11.0	2.2	–	208	1	60	X –	–	DFA	–	14
15	1	WARMER, FOOD OVERHEAD	–	11.0	2.2	–	208	1	60	X –	–	DFA	–	15
16	1	WARMER, RICE	–	–	8.4	–	120	1	60	– X	5-15P	48	–	16
18	1	WARMER, FOOD OVERHEAD	–	11.0	2.2	–	208	1	60	X –	–	DFA	–	18
19	1	REFRIGERATOR, SANDWICH/SALAD PREP	–	9.0	0.6	0.3	115	1	60	– X	5-15P	12	–	19
20	1	WARMER, FOOD OVERHEAD	–	11.0	2.2	–	208	1	60	X –	–	DFA	–	20
21	1	DROP-IN, HOT WELLS	–	13.0	2.7	–	208	1	60	X –	–	24	**ATTACH TO COUNTER**	21
24	1	REFRIGERATOR, REACH-IN	–	6.0	0.7	0.3	115	1	60	– X	5-15P	12	–	24
26	1	REFRIGERATOR, SANDWICH/SALAD PREP	–	9.0	0.6	0.3	115	1	60	– X	5-15P	12	–	26
33	2	TUREEN/KETTLE, SOUP	–	8.0	0.9	–	120	1	60	– X	5-15P	48	–	33
34	1	REFRIGERATOR, SANDWICH/SALAD PREP	–	8.0	1.2	0.3	115	1	60	– X	5-15P	12	–	34
35	1	ICE MAKER/BIN, NUGGET ICE	–	17.0	–	–	230	1	60	X –	–	70	–	82
36	1	REFRIGERATOR, REACH-IN	–	6.0	–	0.2	115	1	60	– X	5-15P	72	–	36
37	1	REFRIGERATOR, REACH-IN	–	6.0	–	0.2	115	1	60	– X	5-15P	72	–	37
46	1	WAREWASHER, DOOR TYPE, HIGH TEMP	–	43.0	5.0	2.0	208-240	1	60	X –	–	72	–	46
–	–	–	–	36.0	8.5	–	208-240	1	60	X –	–	72	–	–
47A	1	EXHAUST FAN	–	7.0	–	1/3	115	1	60	– X	–	ROOF	–	47A
66	1	WALK-IN FREEZER	–	15.0	–	–	120	1	60	– X	–	DFA	–	66
66A	1	BLOWER COIL	–	20.0	4.0	–	208-230	1	60	– X	–	DFA	–	66A
66B	1	FREEZER CONDENSER – REMOTE	–	20.0	–	–	208-230	1	60	– X	–	ROOF	–	66B
70	1	WALK-IN COOLER	–	15.0	–	–	120	1	60	– X	–	DFA	–	70
70A	1	BLOWER COIL	–	6.0	–	0.8	208-230	1	60	– X	–	DFA	–	70A
70B	1	COOLER CONDENSER – REMOTE	–	–	–	0.8	208-230	1	60	– X	–	ROOF	–	70B
81	1	COFFEE MAKER, AUTOMATIC	–	20.0	2.4	–	120	1	60	X –	–	48	–	81
82	1	ICE MAKER, NUGGET STYLE	–	9.0	–	–	115	1	60	X –	–	70	–	82
83	1	DISPENSER, BEVERAGE/CARBONATED & NON-CARBONATED	***SEE SODA VENDOR***	–	–	–	–	–	–	– –	–	–	***SEE SODA VENDOR***	83
90	1	REFRIGERATOR, UNDERCOUNTER, ADA	–	3.0	0.6	0.2	115	1	60	– X	5-15P	12	–	90
91	1	DISPLAY CASE, REFRIGERATED, SUSHI	–	1.0	–	–	115	1	60	– X	5-15P	12	–	91
92	1	FREEZER, UNDERCOUNTER	–	9.0	0.6	0.3	115	1	60	– X	5-15P	12	–	92
93	1	DISPLAY CASE, REFRIGERATED, SUSHI	–	1.0	–	–	115	1	60	– X	5-15P	24	–	93

DATE: 03NOV2019

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DRAWN BY: TJR

DRAWING #: K1

DATE	REVISIONS	APPROVED BY:	DATE:
20200130	initial electrical layout	–	–
–	–		
–	–		
–	–		
–	–		

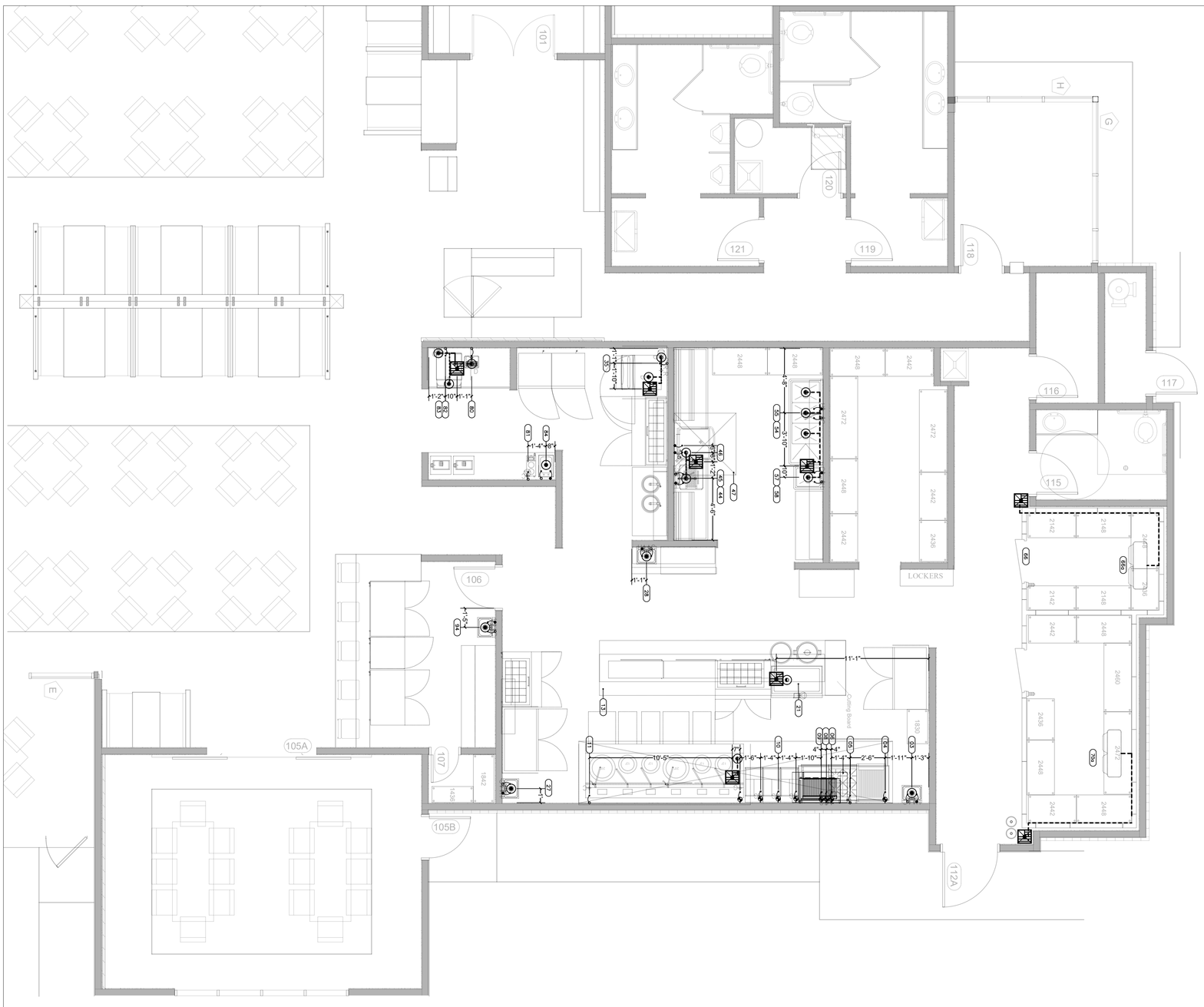
SCALE: 1/4" = 1'-0"

Restaurant & Store Equipment Co.
230 West 700 South
Salt Lake City, UT 84101
(801) 364-1981 Fax (801) 355-2029

TITLE: KITCHEN ELECTRICAL PLAN

JOB: Blossom - -

FS3



EQUIPMENT SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	EQUIPMENT REMARKS	COLD WATER SIZE (IN)	COLD WATER AFF (IN)	HOT WATER SIZE (IN)	HOT WATER AFF (IN)	DIRECT DRAIN SIZE (IN)	DIRECT DRAIN AFF (IN)	INDIR DRAIN SIZE (IN)	INDIR DRAIN AFF (IN)	GAS SIZE	MBTUH	GAS AFF (IN)	GAS ROUGH-IN	PLUMBING REMARKS	ITEM NO
03	1	HAND SINK, WALL MOUNT	-	0.5	20	0.5	20	1.5	18	-	-	0.75	72	12	-	-	03
04	1	HAND SINK, MOBILE, ART, CRAFT, CART, COUNTER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	04
05	1	FAUCET, WALL MOUNT	-	0.5	20	-	-	-	-	-	-	-	-	-	-	-	05
06	1	HOT PLATE, GAS	-	-	-	-	-	-	-	-	-	0.75	60	60	-	-	06
08	1	GRIDDLE, GAS	-	-	-	-	-	-	-	-	-	0.75	60	60	-	-	08
09	1	CHARBROILER, GAS	-	-	-	-	-	-	-	-	-	0.75	122	12	-	-	09
10	3	FRYER, DEEP FAT, GAS	-	-	-	-	-	-	-	-	-	0.75	122	12	-	-	10
11	1	WOK RANGE	-	-	-	-	-	-	-	-	-	2	822	12	-	-	11
12B	1	MAKE-UP AIR UNIT (MAU)	-	1/2	ROOF	-	-	-	-	-	-	1	80	ROOF	-	-	12B
27	1	HAND SINK, WALL MOUNT	-	0.5	20	0.5	20	1.5	18	-	-	-	-	-	-	-	27
28	1	HAND SINK, WALL MOUNT	-	0.5	20	0.5	20	1.5	18	-	-	-	-	-	-	-	28
35	1	ICE MAKER/BIN, NUGGET ICE	-	0.5	72	-	-	-	-	0.5	FS	-	-	-	-	-	35
44	1	DISPENSER, STRAIGHT, 14 GAUGE	-	-	-	-	-	1.5	24	-	-	-	-	-	-	-	44
46	1	WAREWASHER, DOOR TYPE, HIGH TEMP	-	0.5	20	0.5	20	1.5	18	-	-	-	-	-	-	-	46
47	1	HOOD, TYPE 2	-	-	-	0.75	48	-	-	1	FS	-	-	-	-	-	47
54	1	SINK, PREP, 3 COMP, 16 GAUGE	-	0.5	20	0.5	20	1.5	18	1.5	FS	-	-	-	-	-	54
55	1	PRE-RINSE FAUCET, WALL MOUNT	-	-	-	0.5	20	-	-	1.5	FS	-	-	-	-	-	55
57	1	SINK, PREP, 1 COMP, 16 GAUGE	-	0.5	20	0.5	20	1.5	18	1.5	FS	-	-	-	-	-	57
58	1	FAUCET, WALL MOUNT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	58
66A	1	BLOWER, DOL	-	-	-	-	-	-	-	0.5	FS	-	-	-	-	-	66A
80	1	WATER STATION	-	0.5	20	0.5	20	-	-	1.25	FS	-	-	-	-	-	80
81	1	COFFEE MAKER, AUTOMATIC	-	0.25	20	-	-	-	-	0.5	FS	-	-	-	-	-	81
82	1	ICE MAKER, NUGGET STYLE	****SEE SODA VENDOR****	0.38	48	-	-	-	-	0.5	FS	-	-	-	-	****SEE SODA VENDOR****	82
83	1	DISPENSER, BEVERAGE/CARBONATED & NON-CARBONATED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	83
84	1	SINK, PREP, 1 COMP, 16 GAUGE	-	0.5	20	0.5	20	1.5	18	1.5	FS	-	-	-	-	-	84
94	1	HAND SINK, WALL MOUNT	-	0.5	20	0.5	20	1.5	18	-	-	-	-	-	-	-	94

FS4

TITLE: KITCHEN PLUMBING PLAN

JOB: Blossom
-
-

Restaurant & Store Equipment Co.
230 West 700 South
Salt Lake City, UT 84101
(801) 364-1981 Fax (801) 355-2029

DATE	REVISIONS
20200203	Initial plumbing layout
–	–
–	–
–	–
–	–

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

APPROVED BY: – DATE: –

DATE: 03NOV2019

DRAWN BY: TJR

DRAWING #: K1

Part 1 – General

1. The mechanical contractor shall be an experienced firm regularly engaged in the installation of commercial mechanical systems in accordance with local codes. The owner's representative may reject any proposed contractor who cannot show evidence of such qualifications
2. Visit the jobsite prior to bidding, prior to material fabrication and prior to equipment procurement to become familiar with the existing conditions, interferences and any discrepancies.
3. The mechanical contractor shall proved all labor, material, equipment, equipment supports, diffusers and grilles for the HVAC systems finish as required to ensure a complete and operable HVAC system. Furnish all paint, labor, equipment, appliances and materials, and perform all operations in connection with the installation of the heating, ventilation, and air conditioning systems in strict accordance with the drawings. Successful, trouble-free operation of vibration-free system is a perquisite.
4. The mechanical contractor shall schedule all work so as not to interfere and/or disrupt the daily activities and/or operating hours or nearby buildings. Coordinate as required with the general contractor and the owner's representative.
5. The mechanical contractor shall obtain and pay for all fees and permits relating to his work.
6. The new HVAC systems shall be installed in accordance with state and local codes, OSHA, NFPA, SMACNA and ASHRAE guidelines.

Part 2 – Ductwork

1. All duct shall be fabricated from galvanized steel in accordance with SMANCA standards and requirements. Nonmetallic ductwork shall not be used. Concealed supply and return ductwork shall be galvanized steel.
2. Provide flexible contractors between ductwork and HVAC equipment (air handling equipment).
3. All new rectangular supply and return air ductwork shall have 1" thick acoustic duct liner insulation. Duct dimensions shown on the drawings represent inside duct size.
4. Manual balancing dampers shall be opposed blade type, galvanized steel, and shall have locking quadrant operators or extended concealed ceiling operators where access is limited and/or at gypsum board ceilings.
5. Provide turning vanes in all new rectangular supply and return air ductwork elbows. Proved volume dampers with locking quadrants at each new supply air branch take-off, seal all duct joints. Where the volume damper is not accessible, provide young No. 817A or 617B, consisting of an 3/8" square shaft, and a 3/8" regulator (length as required) for operating the volume damper from suspended ceiling.
6. The new duct lining shall be one inch thick fiberglass, 1-1/2 pounds per cubic foot density, noise attenuation factor of NRC = 0.70 with air stream surface faced with a black coated matte.
7. The required fire hazard classification is: flame spread not over 25, fuel contributed not over 50, smoke developed not over 50 when tested in accordance with ASTM E84

Duct Size:	Gauge:	Support:	Spacing:
12" and under	26 GA.	(2) 1"X 22 GA. Straps	Every 10 Ft.
13" to 30"	24 GA.	(2) 1"X 18GA. Straps	Every 10 Ft.
31" to 40"	22 GA.	(2) 1"X 18GA. Straps	Every 10 Ft.
40" and over	20 GA.	(2) 1"X 18GA. Straps	Every 10 Ft.

Part 3- Ductwork Insulation

1. All rectangular supply and return ductwork in the ceiling space shall have acoustic duct liner insulation. All round rigid metal take-off ductwork in the ceiling space shall have 1" thick external duct-wrap insulation with vapor barrier.
2. The finish duct lining shall be one inch thick fiberglass, 1-1/2 pounds per cubic foot density, noise attenuation factor of NRC =0.10 with the air stream surface faced with a black coated matte.
3. The duct-wrap insulation shall be one inch thick fiberglass 1-1/2 pounds per cubic foot density, noise attenuation facto of NRC =0.70.
4. The duct-wrap insulation shall have a thermal conductance of 0.24 BTUH per square foot per degree F. at a mean temperature of 50 degrees f.
5. The required fire hazard classification is: flame spread not over 25, fuel contributed not over 50, smoke developed not over 50 when tested in accordance with ASTM E84.
6. Insulated flexible ductwork meeting class 1 requirements of NFPA 90A and U.L. labeled may be used only at the ceiling diffuser connections in the concealed ceiling space areas and shall be insulated with 1" thick fiberglass insulation with vapor barrier with a flame spread rating of 25 or less and a smoke developed rating of 50 or less when tested in accordance with ASTM E84, and shall be limited to 5-feet in length.
7. Approved acoustic duct liner manufacturers are:
   a. Johns-Manville "Linacoustic"
8. Approved external insulation manufacturers are:
   a. Manville Microlite FSK
   b. CSG Type IV Standard Duct Insulation
   c. Owens Corning FRK
   d. Knauf (Duct Wrap FSK)
9. Install insulation in a neat and workmanlike manner with no fishtails. Finish shall be smooth with all joints properly taped, insulation shall be full thickness uncompressed except where required to pass structural interferences.

Part 4 – Line Voltage Wiring

1. Line voltage wiring and conduit is by the electrical contractor shall furnish and disconnect switches that are not provided with the mechanical equipment as required for the HVAC equipment. Coordinate as required with the electrical contractor and the general contractor.

Part 5 – Temperature Controls and Wiring

1. Automatic temperature controls and associated conduit and control wiring shall be by the mechanical contractor provide all devices, components, conduit, control wiring as required to ensure complete operable automatic temperature control systems. New furnace unit shall have new programmable thermostats with automatic changeover and night set-back control. New unit heaters shall have heating thermostats with summer fan switch control.
2. Verify thermostat rough-in locations as shown on the mechanical plan drawing with the owner's representative prior to rough-in installation.
3. All temperature controls are to be tested, adjusted and calibrated for proper operation
4. Refer to the mechanical equipment schedule for additional temperature control requirements.

Part 6 – Installation

1. Coordinate the new HVAC equipment locations with the building structure, the owner's representative, architect, structural engineer, and the general contractor as required prior to installation
2. Coordinate the equipment, controls and cutwork installations with the other trades, plumbing piping, conduit, etc., coordinate the ceiling diffuser return air grilles and exhaust grille locations, with the electrical drawings and the architectural reflected ceiling plan. Route the ductwork so as not to interfere with the structure or the removing and services of light fixtures. Changes required as a result of neglect to coordinate interferences will be made at the mechanical contractor's expense.
3. Run all new ductwork as tight as possible to the bottom of the structure in the dropped ceiling space in order to maintain the finished ceiling heights as schedules on the architectural drawings. Verify the duct height dimensions with available ceiling space and modify the duct sizes if necessary (keeping the same duct area as shown on the mechanical drawings – duct height dimension shall not be less that 8") to accommodate any interferences. Coordinate the new ductwork in the space with conduit and piping. Field verify the routing of ductwork and equipment and piping.
4. Locate all exhaust air outlets and flue vents 10'-0' minimum distance from mechanical equipment outside air intakes.
5. It is understood that while drawings are to be followed as closely as circumstances permit. The mechanical contractor will be held responsible for installation of systems according to the true intent and meaning of contract documents. Anything not clear or in conflict will be explained by making application to architect. Should condition arise where certain changes would be advisable secure approval of those changes before proceeding with work.
6. Arrange ducts and equipment to permit ready access to valves, unions, traps, starters, motors, control components, and to clear opening of doors and access panels.
7. Furnish and install hangers and supports required by the mechanical contractor unless otherwise noted. Furnish sleeves, supports, and equipment that are integral part of other contractor's work in sufficient time to be built into construction as the work proceeds. Locate these items and see that they are properly installed. Expense resulting from improper location or installation of items above shall be borne by the mechanical contractor.
8. Adjust the location of the finish ducts, equipment, etc., to eliminate interference anticipated and encountered. Determine exact route and location of ductwork prior to fabrications. Make offsets, transitions, and changes in direction of ducts as required to maintain proper clearances whether or not indicated on the drawings. Furnish and install fittings as required to effect these offsets, transitions, and changes in direction.
9. Ensure the new HVAC equipment to be furnished along with the ductwork fit in space available. Make necessary field measurements to ascertain and space requirements including those for connections and furnish and install equipment of size and shape so that final installation reflects true intent and meaning of contract documents.
10. Follow manufacturer's direction in delivery, storage, protection, and installation of equipment and materials. Promptly notify architect and/or owner's representative in writing of conflicts between requirements of contract documents and manufacturer's directions and obtain architect's and/or owner's representative written instruction before proceeding with work. Bear expenses for correcting deficiencies of work that do not comply with manufacturer's directions or written instructions.
11. Deliver equipment and material to site and tightly cover and protect against dirt, water, and chemical or mechanical injury. Equipment and material shall be readily accessible for inspection. Store items subject to moisture damage (such as controls) in a dry heated space.
12. All mechanical equipment shall be isolated from the structure with either vibration isolation pads or spring type isolators as applicable to the installation, whether motor is internally isolated or not.
13. Contractor to verify and provide mechanical piping for heating and cooling systems to be thermally insulated per IECC C403.2.10. Mechanical Contractor to verify maximum and minimum temperatures of the mechanical piping so minimum insulations requirements can be met.

Part 7 – Submittals

1. By description, catalog number and specific designation, standards are established for manufactured items such as specialties, fixtures and equipment which the contractor shall furnish as required by this section. Prior to approval is required for substitution of equipment and materials prior to bid. Substitution of products shown shall be submitted to the architect, the owner's representative or engineer for written approval.
   a. Acceptable HVAC equipment manufacturers are: York, Carrier, Lennox and Trane.
2. Shop drawings and up-to-date engineering data sheets and catalog information shall be furnished on the following items of equipment. Provide (6) copies for review.
   1) HVAC equipment
   2) Automatic temperature controls.
   3) All diffusers, grilles, etc.
   4) Ductwork fabrication methods.
   5) Exhaust fans.

Part 8 – Filters

1. Install throw-away filters at the new furnace heating and cooling unit after system start-up. Install 30% efficient 2-inch thick pleated filters – size and quality shall be in accordance with the equipment manufacturer's written instructions.

Part 9 – Cutting and Patching

1. The general contractor shall be responsible for required cutting, and patching incident to work for this division the cost of which shall be paid for by the mechanical contractor. The general contractor shall make required repairs afterwards to satisfaction of architect and/or owner's representative. Cut carefully to minimize necessity for repairs to existing work. Do no cut beams, columns or trusses. Patch and repair walls, floors, ceiling, and roofs with materials of same quality and appearance as adjacent surfaces unless otherwise shown. Surface finishes shall exactly match existing finishes of same materials.
2. The mechanical contractor shall bear expense of cutting, patching, repairing, and replacing of work of other contractors required because of its fault, error, tardiness, or because of damage done by mechanical contractor.

Part 10 – Fire Assembly Penetrations

1. Coordinate requirements with the electrical contractor, general contractor, architect, the owner's representative and the local authorities having jurisdiction.
2. Provide U.L. fire penetration system number WL1002, FC1002, FC2008, FC3001 or FC1001 for combustible construction or system number WL1002, WL2002, FA5001, or FA8001 for non-combustible construction of the U.L. building materials directory and as required by the authorities having jurisdiction.
3. All penetrations through fire rated assemblies shall comply with U.L. fire resistance directory, latest adopted edition.
4. Provide U.L. listed fire dampers with fusible links constructed to U.L. Standard 33 and U.L. listed fire/smoke dampers with smoke detectors conforming to NFPA 90A and meeting UL555 requirements as required y state and local codes, including any additional fire dampers and/or fire/smoke dampers with smoke detectors that may be required, even if not shown on the mechanical drawings. Provide firestop system as required by local codes and ordinances.
5. Provide smoke detectors and wiring control as required for operation of fire/smoke dampers.

Part 11 – Seismic Bracing

1. The mechanical contractor shall furnish and install required seismic bracing, restraints, equipment isolators, etc. for his installed equipment. All of which shall comply with PPIC and SMACNA guidelines for the local seismic zone requirements and in accordance with the authorities having jurisdiction.

Part 12 – As-Built Drawings

1. The mechanical contractor shall keep a record set of drawings neatly marked with all changes from the original design and drawings. These drawings shall be delivered to the architect and/or owner's representative at the completion of the project and prior to receiving final payment.

Part 13 – Check, Test and Start-Up

1. The Mechanical contractor shall provide material and labor required to perform start-up of each respective item of equipment and system prior to the beginning of test, adjust and balance procedures. Submit start-up report to the architect and/or owner's representative.

Part 14 – Testing, Adjusting and Balancing.

1. The Mechanical contractors shall pay for the services of an independent air balancing contractor who is certified and approved by the architect and/or the owner's representative prior to bidding to perform testing adjusting and balancing of new HVAC systems Submit air balance report and AABC standards for field measurement & instruction, latest adopted edition.
2. The mechanical contractor shall make changes to pulleys, belts and dampers as recommended by the balancing contactor.

Part 15 – Equipment Identification

1. Equipment identification: Signs made of laminated plastic with 1/8" or larger engraved letters. Signs shall e securely attached by rust proof screws or some other permanent means.
2. All HVAC equipment shall have equipment identification. Information on the signs shall include: mechanical equipment schedule symbol, name of equipment, rating, electrical characteristics and any other important data.

Part 16 – Operation and Maintenance Manuals

1. Provide three (3) sets of bound operation and maintenance manuals covering all new HVAC equipment for the owner's use. O&M manuals shall have the following format:
   a. Size: 8-1/2"X 11"
   b. Paper: Manufacturer's printed data, or neatly type written.
   c. Provide reinforced punched binder tab, bind in with text.
   d. Provide fly-leaf for each separate product, or each piece of operating equipment. Provide typed description of product, and major component parts of equipment, provide indexed tabs.
   e. Cover: Identify each volume with typed or printed title: "Operation and Maintenance instruction". List title of project, identity of general subject matter covered in the manual.
   f. Binders: Commercial quality three-ring binders with durable and cleanable plastic covers.
   g. Provide neatly typewritten table of contents, list contractor name, address and phone number. List each product by product name and other identifying symbols as set forth in contract documents.
   h. Include copy of each warranty, bond and service chart with maintenance schedule, temperature control diagrams, sequence of operation and provide logical sequence of instruction for each procedure.

Part 17 – Instructions

1. Prior to final inspection or acceptance, fully instruct the owner's designated operation and maintenance personnel in the operation, adjustment and maintenance of products, equipment and systems. (Minimum 2-hours instruction required or more if requested by the owner's representative).

Part 18 – Warranty and Guarantee

1. The mechanical contractor shall provide one (1) year parts and labor warranty for his installed work and HVAC equipment after equipment start-up and the owner's representatives acceptance. Should any trouble develop during this period due to defective materials or faulty workmanship the contractor shall furnish all necessary labor and materials to correct the trouble without any additional cost. Any materials found to be defective during the guarantee period shall be corrected immediately to the entire satisfaction of the owner.

MECHANICAL SYMBOLS

- SD# / ### — SUPPLY DIFFUSER, SD#, ### CFM ARROWS INDICATE DIRECTION OF THROUGH
- SD# / ### — SUPPLY DIFFUSER (4-WAY)
- RG# / ### — RETURN OR EXHAUST REGISTER TYPE 'RG#' ### CFM
- EG# / ### — EXHAUST REGISTER TYPE 'EG#' ### CFM
- ### / ### — SIDEWALL SUPPLY, RETURN, OR EXHAUST REGISTER TYPE ### , ### CFM
- SUPPLY DUCT UP
- SUPPLY DUCT DOWN
- RETURN DUCT UP
- RETURN DUCT DOWN
- EXHAUST DUCT UP
- EXHAUST DUCT DOWN
- AIRFLOW / SA — SUPPLY AIR BRANCH CONNECTION WITH VOLUME DAMPER
- AIRFLOW / RA/EA — RETURN AIR/EXHAUST AIR BRANCH CONNECTION WITH VOLUME DAMPER
- HORIZONTAL FIRE DAMPER
- VERTICAL FIRE DAMPER
- FS — COMBINATION FIRE/SMOKE HORIZONTAL FIRE DAMPER
- FS — COMBINATION FIRE/SMOKE VERTICAL FIRE DAMPER

MECHANICAL PHASING

(SINGLE LINES SHOWN SIMILAR FOR DOUBLE LINED WORK)

- MECHANICAL PROPOSED
- MECHANICAL EXISTING TO REMAIN
- MECHANICAL FOR DEMOLITION
- POINT OF CONNECTION BETWEEN NEW AND EXISTING
- EXTENT OF DEMOLITION

MECH. ABREVIATIONS

EXISTING	(E)
ABOVE FINISHED FLOOR	AFF
AIR HANDLING UNIT	AHU
BRITISH THERMAL UNIT	BTU
COMBUSTION AIR	CA
CUBIT FEET PER MINUTE	CFM
CONDENSING UNIT	CU
CABINET UNIT HEATER	CUH
DOWN	DN
EXHAUST AIR	EA
EXHAUST VENTILATOR	EV
FAN COIL UNIT	FCU
HORSE POWER	HP
KILOWATT	KW
1,000 BTU'S	MBH
NATURAL GAS	NG
OUTSIDE AIR	OA
PACKAGED TERMINAL AIR CONDITIONER	PTAC
RETURN AIR	RA
REFRIGERANT	REF
RETURN GRILLE	RG
RADIANT HEATER	RH
ROOF TOP UNIT	RTU
SUPPLY AIR	SA
SUPPLY DIFFUSER	SD
SUPPLY GRILLE	SG
TRANSFER GRILLE	TG
12,000 BTU'S	TON
TYPICAL	TYP
UNIT HEATER	UH
WATTS	W

CONSTRUCTION NOTES

DATE

FEBRUARY 2020

epic ENGINEERING

REVISIONS		
MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT # 00-00-000

REGISTERED PROFESSIONAL ENGINEER — No. 169278 — DON I. OLSEN — STATE OF UTAH — 3/12/20

SCALES

12" = 1'-0"

0 1" — PLOT SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST AS NECESSARY

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:

MECHANICAL GENERAL NOTES

PLAN SET: PERMIT

SHEET M0.1

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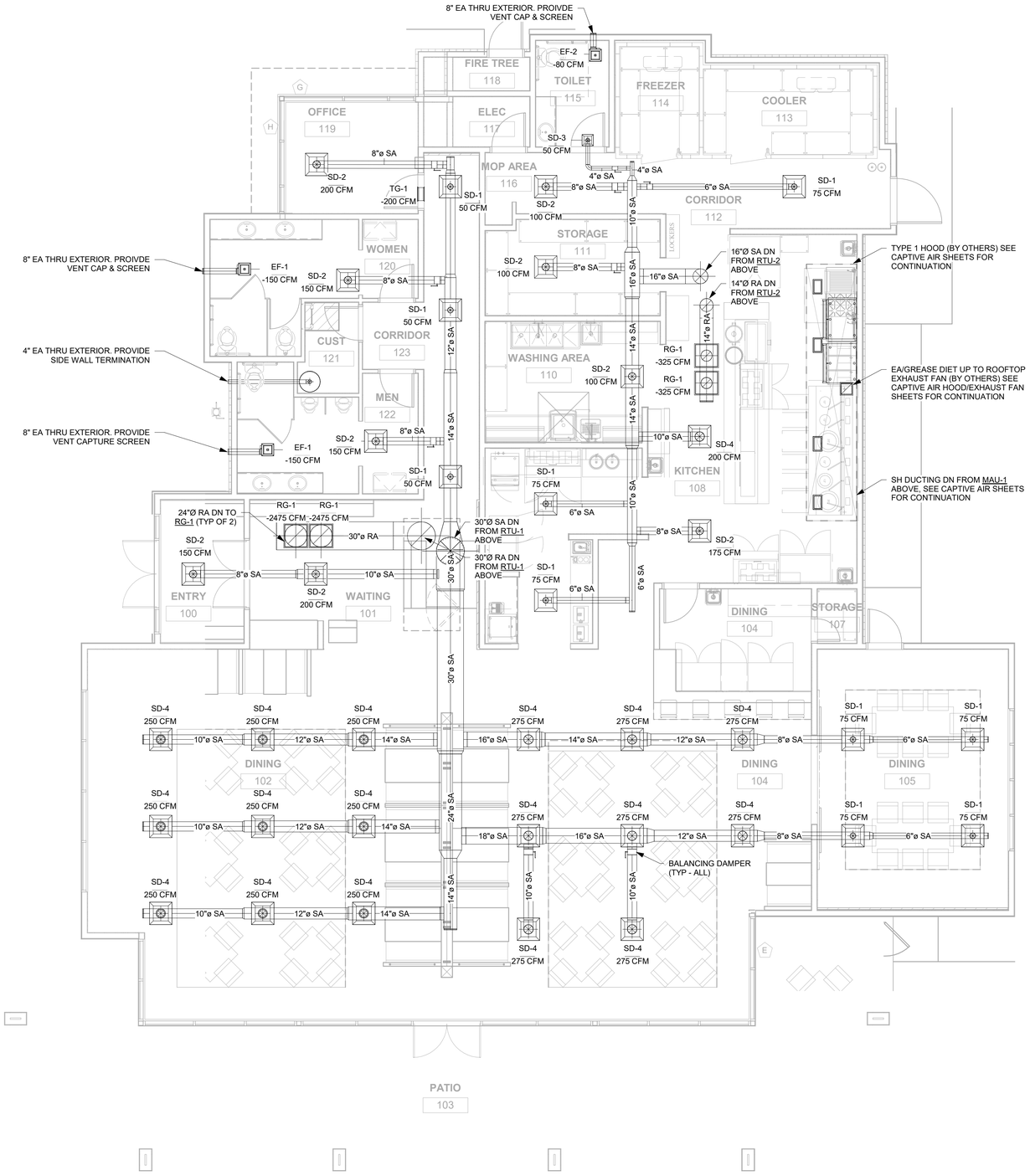

1 FIRST LEVEL MECHANICAL PLAN
3/16" = 1'-0"

MECHANICAL GENERAL NOTES

1. ALL DRAWINGS SHALL BE CONSIDERED PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL ASPECTS OF THE CONTRACT DOCUMENTS PRIOR TO SUBMITTING PRICING. ANY AND ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO AN INSTALLATION SUCH THAT CLARIFICATIONS CAN BE ISSUED.
2. ANY WORK PERFORMED OR MATERIAL USED WHICH IS SHOWN TO BE IN CONFLICT WITH THE CONTRACT DRAWINGS, SPECIFICATIONS OR ANY APPLICABLE CODE OR GOVERNING REGULATION SHALL BE REMOVED AND REPLACED OR CORRECTED AT THE CONTRACTOR'S EXPENSE.
3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE CONTRACT DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK.
4. DO NO SCALE THE DRAWINGS: ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO FABRICATION OF MATERIALS OR ERECTION OF ASSEMBLIES. IF DISCREPANCIES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION.
5. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT, TRANSPORTATION AND SERVICES REQUIRED FOR COMPLETION OF THE WORK. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE DONE IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND GOVERNING REGULATIONS.
6. ALL PERMITS AND FEES WHICH ARE REQUIRED FOR THIS WORK SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR.
7. ALL PLUMBING AND MECHANICAL INSTALLATIONS SHALL ADHERE TO THE 2015 IECC.
8. PROVIDE OPERATION AND MAINTENANCE MANUALS TO OWNER OR ALL NEWLY INSTALLED EQUIPMENT PER 2015 IECC. O&M MANUALS SHALL BE BOUND IN THREE RING BINDER UTILIZING LABELED TABS TO SEPARATE EQUIPMENT SECTIONS.
9. UNLESS NOTED OTHERWISE, ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, AND MECHANICAL ACCESSORIES SHALL REMAIN. NO CHANGES UNLESS NOTED.
10. CONTRACTOR SHALL BE RESPONSIBLE TO CLEAN THE SURFACE OF ALL SUPPLY, RETURN, EXHAUST, AND TRANSFER DIFFUSERS/GRILLES AT COMPLETION OF PROJECT.
11. DUCTWORK SHALL BE FABRICATED TO NFPA 90A STANDARDS. TYPICAL LOW PRESSURE DUCTWORK SHALL BE ASTM A653M GALVANIZED STEEL SHEET, LOCK FORMING QUALITY, HAVING ZINC COATING OF 1.25 OUNCES/SF FOR EACH SIDE PER ASTM A90.
12. FABRICATE AND SUPPORT DUCTWORK IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND ASHRAE HANDBOOKS.
13. ALL BRANCH DUCTWORK SHALL MATCH CONNECTION SIZE OF DIFFUSERS UNLESS NOTED OTHERWISE.
14. ROUTE EXPOSED SPIRAL DUCTWORK AS HIGH AS POSSIBLE TO BOTTOM OF STRUCTURE.

CONSTRUCTION NOTES

DATE
FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT #
00-00-000

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON I. OLSEN STATE OF UTAH

SCALES
As indicated
0 1" BAR SCALE MEASURES 1" IN A FULL SIZE SHEET. IF NOT, ADJUST ACCORDINGLY

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:
FIRST LEVEL MECHANICAL PLAN

PLAN SET: PERMIT
SHEET M1.1

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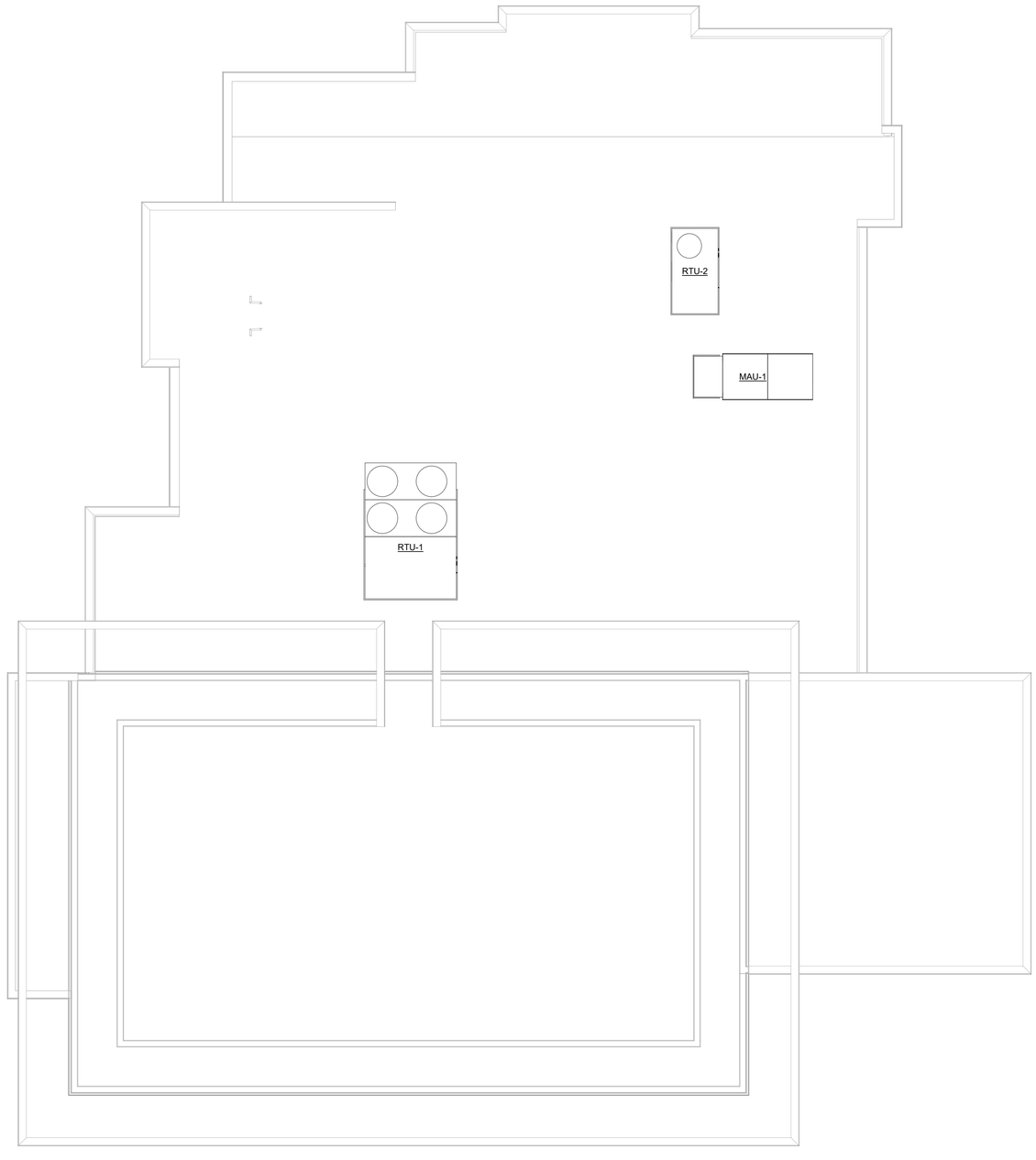

MECHANICAL GENERAL NOTES

1. ALL DRAWINGS SHALL BE CONSIDERED PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL ASPECTS OF THE CONTRACT DOCUMENTS PRIOR TO SUBMITTING PRICING. ANY AND ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO AN INSTALLATION SUCH THAT CLARIFICATIONS CAN BE ISSUED.
2. ANY WORK PERFORMED OR MATERIAL USED WHICH IS SHOWN TO BE IN CONFLICT WITH THE CONTRACT DRAWINGS, SPECIFICATIONS OR ANY APPLICABLE CODE OR GOVERNING REGULATION SHALL BE REMOVED AND REPLACED OR CORRECTED AT THE CONTRACTOR'S EXPENSE.
3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE CONTRACT DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO PROCEEDING WITH ANY WORK.
4. DO NO SCALE THE DRAWINGS: ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO FABRICATION OF MATERIALS OR ERECTION OF ASSEMBLIES. IF DISCREPANCIES ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION.
5. THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR AND EQUIPMENT, TRANSPORTATION AND SERVICES REQUIRED FOR COMPLETION OF THE WORK. ALL WORK PERFORMED AND MATERIALS INSTALLED SHALL BE DONE IN STRICT COMPLIANCE WITH ALL LOCAL CODES AND GOVERNING REGULATIONS.
6. ALL PERMITS AND FEES WHICH ARE REQUIRED FOR THIS WORK SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR.
7. ALL PLUMBING AND MECHANICAL INSTALLATIONS SHALL ADHERE TO THE 2015 IECC.
8. PROVIDE OPERATION AND MAINTENANCE MANUALS TO OWNER OR ALL NEWLY INSTALLED EQUIPMENT PER 2015 IECC. O&M MANUALS SHALL BE BOUND IN THREE RING BINDER UTILIZING LABELED TABS TO SEPARATE EQUIPMENT SECTIONS.
9. UNLESS NOTED OTHERWISE, ALL EXISTING MECHANICAL EQUIPMENT, DUCTWORK, AND MECHANICAL ACCESSORIES SHALL REMAIN. NO CHANGES UNLESS NOTED.
10. CONTRACTOR SHALL BE RESPONSIBLE TO CLEAN THE SURFACE OF ALL SUPPLY, RETURN, EXHAUST, AND TRANSFER DIFFUSERS/GRILLES AT COMPLETION OF PROJECT.
11. DUCTWORK SHALL BE FABRICATED TO NFPA 90A STANDARDS. TYPICAL LOW PRESSURE DUCTWORK SHALL BE ASTM A653M GALVANIZED STEEL SHEET, LOCK FORMING QUALITY, HAVING ZINC COATING OF 1.25 OUNCES/SF FOR EACH SIDE PER ASTM A90.
12. FABRICATE AND SUPPORT DUCTWORK IN ACCORDANCE WITH SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS AND ASHRAE HANDBOOKS.
13. ALL BRANCH DUCTWORK SHALL MATCH CONNECTION SIZE OF DIFFUSERS UNLESS NOTED OTHERWISE.
14. ROUTE EXPOSED SPIRAL DUCTWORK AS HIGH AS POSSIBLE TO BOTTOM OF STRUCTURE.

1 ROOF MECHANICAL PLAN
3/16" = 1'-0"

CONSTRUCTION NOTES

DATE

FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT #
00-00-000

REGISTERED PROFESSIONAL ENGINEER
No. 169278
DON I. OLSEN
STATE OF UTAH
3/12/20

SCALES

As indicated

0 1"
HAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST SCALE ACCORDINGLY

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:

ROOF MECHANICAL PLAN

PLAN SET: PERMIT

SHEET M1.2

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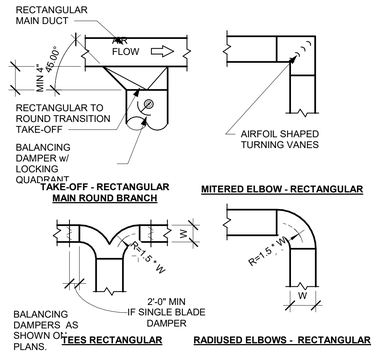
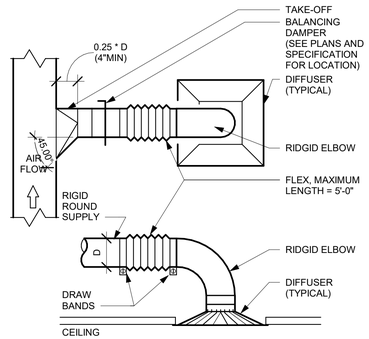


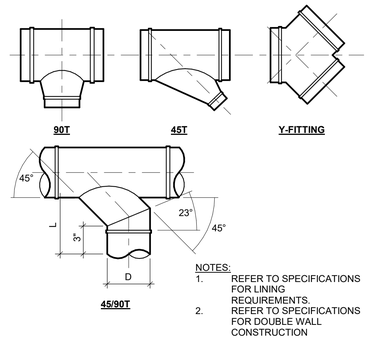
1 LOW PRESSURE RETANGULAR DUCT FITTINGS

N.T.S.



2 TYPICAL DUCT TAKE-OFF DETAIL

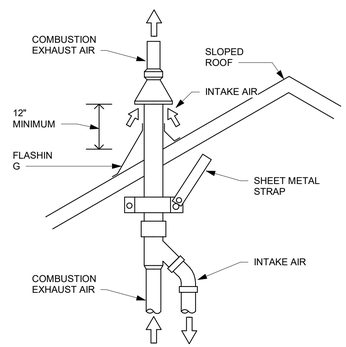
N.T.S.



NOTES:
1. REFER TO SPECIFICATIONS FOR LINING REQUIREMENTS.
2. REFER TO SPECIFICATIONS FOR DOUBLE WALL CONSTRUCTION

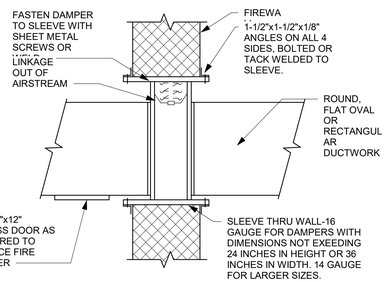
3 TYPICAL SPIRAL DUCT FITTINGS

N.T.S.



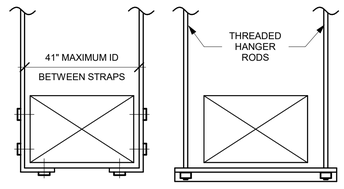
4 CONCENTRIC FLUE DETAIL (SLOPED ROOF)

N.T.S.



5 FIRE DAMPER IN WALL DETAIL

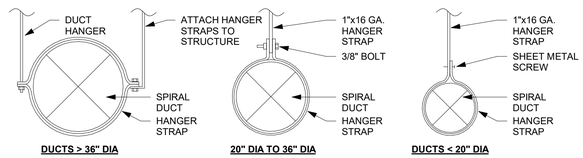
N.T.S.



NOTE:
POP RIVETS ARE NOT ALLOWED, USE SELF-TAPPING SHEETMETAL SCREWS ONLY (TYP)

6 DUCTWORK SUPPORT DETAIL

N.T.S.



NOTES:
1. POP RIVETS ARE NOT ALLOWED, USE SELF-TAPPING SHEETMETAL SCREWS ONLY (TYP)
2. HANGERS SHALL NOT DEFORM DUCT SHAPE.
3. MAXIMUM HANGER SPACING OF 10'-0" O.C.

7 ROUND DUCTWORK SUPPORT DETAIL

N.T.S.

ROOFTOP UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	NOMINAL SIZE	SUPPLY AIR	RETURN AIR	OUTSIDE AIR	E.S.P.	BTU INPUT	BTU OUTPUT	COOLING CAPCITY	EER/SEER/IEER	SYSTEM	INDOOR FAN HP	OUTDOOR FAN (#) HP	OUTDOOR FAN HP	MOP	MCA	WEIGHT	NOTES
RTU-1	LENNOX	LGH180H4BS1Y	15 ton	5750 CFM	4950 CFM	800 CFM	0.0 in-wg	260,000 Btu/h	208,000 Btu/h	172,000 Btu/h	12 / 0 / 13.5	208/3/60		(4)		100 A	81 A	2,505 lb	
RTU-2	LENNOX	LGH036S4TS1Y	3 ton	950 CFM	650 CFM	300 CFM	0.0 in-wg	65,000 Btu/h	52,000 Btu/h	35,200 Btu/h	11.6 / 15 / 0	208/3/60		(1)		30 A	23 A	762 lb	

1. OR EQUAL AS APPROVED BY SPECIFYIN ENGINEER.
2. ROOF CURB TO BE COMPLIANT WITH ALL 2018 CODE REQUIREMENTS, MOUNT RTU'S HIGH ENOUGH FOR THE LOWEST POINT OF THE INTAKE TO BE 3' MINIMUM ABOVE ROOF SURFAVE. (PROVIDE CUSTOM CURB IN ORDER TO SATISFY REQUIREMENT)
3. UNIT TO BE PROVIDED WITH AN UNPOWERED CONVENIENCE OUTLET BY MANUFACTURER. OUTLET TO BE GFCI RATED AS REQUIRED BY CODE.
4. REFER TO MANUFACTURER DATA FOR FILTER SIZES AND QUANTITY. INSTALLED FILTERS TO BE MERV 8 MINIMUM.
5. ELECTRICAL INFORMATION DOES NOT INCLUDE POWER EXHAUST REQUIREMENTS IF POWER EXHAUST IS SPECIFIED. REFER TO MANUFACTURER FOR ADDITIONAL ELECTRICAL REQUIREMENT WHEN SPECIFIED.
6. MANUFACTURER TO PROVIDE AND INSTALL SHEAVES TO ACHIEVE THE STATED AIRFLOW AT SITE ALTITUDE AND ESP INDICATED.
7. MC TO PROIVDE AND INSTALL ACCESSORIES FOR FULL FUNCTION OF RTU AND POWER EXHAUST, AND PRESSURE SENSING DEVICES.
8. THERMOSTAT TO BE 2018 IECC COMPLIANT AND BE SUBMITTED FOR ENGINEERS APPROVAL. THERMOSTAT TO BE SIMILAR TO VENSTAR 2800 SERIES.
9. ECONOMIZER AND POWER EXHAUST TO BE CAPABLE OF DELIVERING 100% OF SPECIFIED FAN AIRFLOW AT 0.3 W.C.
10. MECHANICAL CONTRACTOR TO INSTALL ROOF TOP UNIT, ROOF CURB, ECONOMIZER AND THERMOSTAT. INSTALL ACCORDING TO MANUFACTURERS DIRECTION, AND BALANCE TO VALUES SHOWN IN EQUIPMENT SCHEDULE.
11. SUBMITTED EQUIPMENT TO MEET ALL PERFORMANCE CIRTERIA SHOWN AT SITE ALTITUDE, MEET CURRENT CODE REQUIREMENTS, AND MEET CURRENT ENERGY EFFICIENCY AND ACCESSORY REQUIREMENTS.

GRILLE AND DIFFUSER SCHEDULE

TAG	MANUFACTURER	MODEL	TYPE	FACE SIZE	NECK SIZE	MOUNTING	COLOR	MATERIAL	COUNT	NOTES
RG-1	TITUS	350RL	RETURN GRILLE	25 3/4" x 25 3/4"	24"x24"	CEILING	WHITE	Steel	4	
RG-2	TITUS	350RL	RETURN GRILLE	13 3/4" x 13 3/4"	12"x12"	WALL	WHITE	Steel	1	
SD-1	TITUS	TMS	SUPPLY DIFFUSER	24" x 24"	6"ø	CEILING	WHITE	Steel	10	
SD-2	TITUS	TMS	SUPPLY DIFFUSER	24" x 24"	8"ø	CEILING	WHITE	Steel	9	
SD-3	TITUS	TMS	SUPPLY DIFFUSER	12" x 12"	4"ø	CEILING	WHITE	Steel	1	
SD-4	TITUS	TMS	SUPPLY DIFFUSER	24" x 24"	10"ø	CEILING	WHITE	Steel	18	
SG-1	TITUS	300RS	SUPPLY GRILLE	15 3/4" x 9 3/4"	14"x8"	CEILING	WHITE	Steel	4	
TG-1	TITUS	350RL	TRANSFER GRILLE	15 3/4" x 9 3/4"	8"x14"	WALL	WHITE	Steel	2	

EXHAUST FAN SCHEDULE

1. CONTROL FAN ON BATHROOM LIGHT SWITCH.

TAG	MANUFACTURER	MODEL	DUCT SIZE	MOUNTING	AIR FLOW	RPM	E.S.P.	WATTS	VOLTAGE	COUNT	NOTES
EF-1	Panasonic	FV-11-15VK1	6"	CEILING	150 CFM	664	0.00 in-wg	13 W	120/1/60	2	
EF-2	Panasonic	FV-11-15VK1	6"	CEILING	80 CFM	814	0.00 in-wg	6 W	120/1/60	1	

MAKE-UP AIR UNIT SCHEDULE

TAG	MANUFACTURER	MODEL	E.S.P. (IN. WC)	BTU INPUT	EFFICIENCY	VOLTAGE	FAN HP	NOTES
MAU-1	SEE KITCHEN SUPPLIER	SEE KITCHEN SUPPLIER	0.00 in-wg	80,000 Btu/h	96%	120/1/60	2 hp	

CONSTRUCTION NOTES

DATE

FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT # 00-00-000

REGISTERED PROFESSIONAL ENGINEER No. 169278 DONIL OLSEN STATE OF UTAH

SCALES

12" = 1'-0"

0 1"

BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST FOR REDUCTIONS

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:

MECHANICAL DETAILS

PLAN SET: PERMIT

SHEET M5.1

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Part 1 – General

1. The plumbing system shall be installed in strict accordance with local, state, and regional plumbing codes, state and local health department regulations, and OSHA regulations.
2. It shall be the responsibility of the plumbing contractor to pay for all fees and permits relating to his work.
   a. The plumbing contractor shall coordinate with the local gas company and shall arrange for the installation of the new gas meters. The new gas piping supplying the gas-fired HVAC equipment is sized for 4 ounce gas pressure.
   b. The plumbing contractor shall be an experienced firm regularly engaged in the installation of commercial plumbing systems in accordance with local codes. The owner's representative may reject any proposed contractor who cannot show evidence of such qualifications
   c. Visit the jobsite prior to bidding the project to become familiar with the existing conditions and any interference. Should a condition arise where a change would be advisable, secure approval of change before proceeding with work.

Part 2 – Piping Materials and Valves

1. Piping materials and fittings shall be as follows:
   a. New domestic water piping shall be ASTM B88 Type L hard drawn copper with ANSI B16.22 wrought copper fittings and 95-5 solder aboveground, and Type K soft copper belowground.
   b. New waste and vent piping 1-1/2" and smaller shall be ASTM A120 Grade A schedule galvanized steel pipe with threaded cast iron drainage fittings, 2" and larger shall be cast iron, ASTM A-888 'no-hub' with ASTM C-1277 standard neoprene gaskets and type 304 stainless steel connector bands aboveground or FM 1680 Class I heavy duty type 304 stainless steel connector bands capable of withstanding 125 in-lbs of torque belowground.
   c. Alternate waste and vent piping shall be either ASTM D2661 or ASTM D2665 PVC piping or fitting. The installation shall comply with IAPMO IS9. Underground ABS or PVC piping shall be laid in 6-inch deep bed of sand.
   d. New gas piping shall be ASTM A53 schedule 40 black steel pipe with ANSI 16 .3 150 lb. malleable iron fittings aboveground and polyethylene as approved by the local gas utility company for below ground installation.
2. Valves:
   All valves must be accessible. Valves located above a hard ceiling or in a wall shall have and approved access door. Valve stems shall be installed horizontal or higher than the valve. All valves shall be of the same manufacturer.
   a. Ball valves: 2" and smaller shall be rated for 125 PSIG WOG at 220 degree F., bronze construction conforming to ASTM B62, solder ends, bubble tight Teflon seat (at 100 PSIG under water), with a hard chrome plated brass or stainless steel ball. The valve shall operate with flow in either direction and shall be suitable for throttling and tight shut off. Provide watts B-6001.

Part 3 – Fixtures, Equipment, Drains and Trim

1. Approved manufacturers for fixtures and trim:
   a. Fixtures: American Standard, Kohler, Eljer, and Elkay
   b. Carriers, etc,: J.R. Smith, Josam, Wade, and Zurn.
   c. Trim: American Standard, Chicago Faucets, Elkay, Kohler and T&S Brass
   d. Flush Valves: Sloan, Delaney, and Zurn Z6000 Series.
2. All water faucets shall meet N.S.F Standard Section 9 for drinking water faucets and shallbe certified by underwriters laboratory. The product shall be manufactured from brass construction, brass components which contact within the faucet shall be from brass which contains no more than 3% lead by dry weight.
3. Water heaters shall be shown on the plumbing drawings.

Part 4 – Piping Insulation

1. Piping insulation shall conform to the current energy code as adopted by the state. No insulation shall be applied until all pressure tests are complete, leaks repaired, and the system is successfully retested. Insulation shall be ASTM C547, Class 1 Fiberglass one-piece preformed pipe insulation with an ASTM C921 all purpose (FASJ) fire retardant jacket. In lieu of fiberglass insulation, ASTM 3552, Type II, Class 2 Foam Glass or ASTM C534, Type 1 Thermacell or expanded polyurethane may be used. Fire and smoke hazard for the complete insulation system shall not exceed: Flame spread – 25, fuel contribution – 50, smoke development – 450 in accordance with ASTM E84 test methods.
2. Piping insulation thickness for new piping shall be as follows:

Pipe Sizes		
Pipe Type Branch	Up to 2"	2-1/2" & up
Dom. Hot --	1.0"	1.5"
Dom. Cold--	0.5"	0.5"

3. Insulation protection shields equal to Grinnell figure 167 shall be installed on all insulated pipe 1" and larger. Hangers shall not contact the pipe where insulation is specified. Insert insulation shall be the same thickness as the adjoining pipe insulation.

Part 5 – Installation

1. New horizontal waste pipe shall be given a grade of ¼" per foot. 1/8" per foot slope must be approved by the authority having jurisdiction. Roof drain piping shall be given a grade of 1/8" per foot.
2. Vent inlets on the floor drains and floor sinks shall be above the weir of the traps they serve.
3. All plumbing fixture supplies with stops, p-traps, and trap arms shall be chrome plated.
4. Verify the locations and sizes of the existing domestic water, gas, and waste and make necessary new connections as required. Refer to the civil engineering drawings and coordinate with the general contractor the owner's representative.
5. The plumbing contractor shall periodically remove all debris and waste related to his work in order to maintain safe working and operating conditions, and shall dispose of the same in a approved manner at the completion of work, he shall remove all his rubbish, tools, and surplus material from and about the site, leaving his work clean and the area ready for occupancy.
6. Cleanouts shall be the same size as the pipe. Where cleanouts in connection with threaded pipe are accessible, they shall be cast iron drainage T-patter 90 degree branch fitting with extra heavy brass screw plugs of the same size as the pipe (4" cleanout maximum).
7. All cleanouts shall be flush with wall or color complete with stainless steel cover plate for wall cleanouts and nickel bronze for floor cleanouts.
8. Arrange new piping to permit ready access to valves, unions, traps, and to clear opening of doors and access panels.
9. Adjust location of pipes, etc., to accommodate work from interference anticipated and encountered. Determine exact route and location of each pipe prior to fabrication. Make offsets, transition, and changes in direction of pipes as required to maintain proper head room and pitch of sloping lines whether or not indicated on drawings.
10. Insure that items to be furnished fit in space available. Make necessary field measurements to ascertain space requirements including those for connections and furnish and install equipment of size and shape so final installation shall suit true intent and meaning of contract documents.
11. Follow manufacturer's directions in delivery, storage, protection, and installation of materials. Promptly notify architect in writing of conflicts between requirements of contract documents and manufacturer's directions and obtain architects written instruction before proceeding with work. Bear expenses arising from correcting deficiencies of work that to do not comply with manufacturer's direction or such written instruction from architect and/or owner's representative.
12. Deliver material to site and tightly cover and protect against dirt, water, and chemical or mechanical injury but have readily accessible for inspection. Store items subject to moisture damage in a dry heated space.
13. Vertical piping shall be secured at sufficiently close intervals to keep pipe alignment and carry the weight of the pipe and contents. Stacks shall be supported at their bases with approved metal clamps or hangers.
14. Support horizontal piping at sufficiently close intervals to maintain alignment and preventsagging or grade reversals in accordance with local plumbing code. Support each length of pipe by an approved hanger located not more than 18" from the joint. Approved manufacturers are ITT Grinnell fee & Mason MFG. Co., B-Line, or Kin-Line, Inc.
15. Support terminal ends of all horizontal runs or branches and each change of direction or alignment by an approved hanger.
16. All exterior gas piping exposed to weather shall be painted with a gray color enamel paint with rust inhibitor.
17. Changes in direction of horizontal waste and vent shall be made with the appropriate use 45 degree wyes, half wyes, long sweep 1/4/ bends, 1/6, 1/8, or 1/16 bends, except that sanitary tees may be used on waste lines where change in direction of flow is from the horizontal to the vertical.
18. Complete the installation of each plumbing fixture including chrome-plated trap and accessories with accessible chrome-plate trap and accessories with accessible chrome-plated stop or control valve in each hot and a cold water branch supply line. Make joint between water closet and floor flange tight with approved fixture setting compound or gasket. Interior exposed pipe, valves, and completion of project. Caulk between fixtures and wall and compound, point all edges. Install fixture as per local codes and manufacturer's instructions. Do not use flexible water piping.
19. Access panels shall be provided in walls or GWB ceilings where required to access valves or concealed equipment access doors shall be hinged and constructed of metal with a screwdriver latch. All access panels shall be 18" x 18", unless otherwise noted on the drawings. Fire-rated access panels shall be installed in fire-rated assemblies. Installation shall be in neat in final appearance.

Part 6 – Submittals

1. By description, catalog number and specific designation, standards are established for manufactured items which the contractor shall furnish as required by this section. Substitutions must be submitted and approved by the architect and/or owner's representative of products prior to bid for consideration. Substitutions of products shown shall be submitted to the architect, the owner's representative or engineer for written approval.
2. Shop drawings and up-to-date engineering data sheets and catalog information shall be furnished on the following items of equipment. Provide (6) copies for review.
   a. Fixtures and trim
   b. Water heater
   c. Plumbing equipment and specialties
   d. Valves, strainers, etc.

Part 7 – Cutting and Patching

1. Cutting and patching of floors, roof and walls to facilitate the plumbing system installation shall be by the general contractor, the cost of which shall be paid for by the plumbing contractor the plumbing contractor shall coordinate all cutting and patching with the general contractor and owner's representative.
2. The plumbing contractor shall be responsible for required digging, backfilling and compaction.
3. The general contractor shall be perform the required cutting, and patching incident to this work, and make required repairs afterward to satisfaction of architect and the owner's representative. Cut carefully to minimize necessity for repairs to existing work. Do not cut beams, columns, or trusses. Patch and repair walls, floors, ceiling and roofs with materials of same quality and appearance as adjacent surfaces unless otherwise shown. Surface finishes shall exactly match existing finishes of same materials. The plumbing contractor shall bear expense of cutting, patching, repairing, and replacing of work of other contractors required because of his fault, error, tardiness, or because of damage done by the plumbing.
4. Schedule all work so as not to interfere and/or disrupt the daily activities and/or operating hours of nearby buildings or operations. Coordinate as required with general contractor and the owner's representative.

Part 8 – Fire Assembly Penetrations

1. Coordinate the requirements with other trades, general contractor, architect, the owner's representative and the local authorities having jurisdiction
2. Provide sleeve at all floor piping penetrations. Provide U.L. Fire Penetration System Number FC1002, FC2008, FC3007, FC7001, WL002 or WL2002 for combustible construction or system number FA5001, FA8001, WL1002 or WL2002 for non-combustible construction of the U.L. building materials directory and as required by authorities having jurisdiction.
3. All penetrations through fire rated assemblies shall comply with U.L. Fire Resistance Directory, latest edition.
4. Access panels shall be provided in walls or GWB ceilings where required to access dampers or concealed equipment. Access doors shall be hinged and constructed of metal with a screwdriver latch. All access panels shall be minimum of 18" x 18" unless otherwise noted on drawings, or larger if required for the removal of equipment. Fire-rated access panels shall be installed in fire-rated assemblies. Installation shall be neat in final appearance.

Part 9 - Seismic Bracing

1. The plumbing contractors shall furnish and install required seismic bracing, restraints, equipment isolators, etc. for his installed equipment, piping, etc. all of which shall comply with PPIC and SMACNA guidelines for the local seismic zone requirements and in accordance with authorities having jurisdiction.

Part 10 - As-Built Drawings

1. The plumbing contractor shall keep a record set of drawings neatly marked with changes from the original design and drawings. These drawings shall be delivered to the architect and/or owner's representative at the completion of the project and prior to receiving final payment.

Part 11 – Check, Test and Start-Up

1. All new, altered, extended or replaced plumbing shall be left uncovered and unconcealed until it has been tested or approved. Where such work has been covered or concealed before it is tested and approved, it shall be exposed at the plumbing contractor's expense for testing and approval.
2. Each system shall be adjusted to insure proper functioning and shall be left in first class operating condition. Contractor shall perform all tests in the presence of the owner's representative.
   a. Hydrostatically test the new waste and vent system indoors to hold not less than 5 PSIG or 10 feet of head pressure for 2 hours with no decrease in pressure.
   b. Test the new domestic water systems to hold not less than 100 PSIG (or 1-1/2 times the working pressure in the pipe, whichever is greater) air pressure (or hydrostatic) for 4 hours with no decrease in pressure.
   c. Gas piping shall be test at 60 PSIG for no less than 30 minutes in accordance with the local gas company's good practices. All tests shall be maintained without leaks or pressure loss for the specified time, with allowance for the temperature changes. Repair all leaks and repeat tests where required.
3. The plumbing contractor shall provide material and labor required to perform start-up of each respective item of equipment, fixtures and systems. Submit test and start-up report to the architect and/or the owner's representative as applicable.
4. Clean all piping, equipment, etc. remove all grease, dirt and stains that have accumulated during the construction period.

Part 12 – Sterilization

1. Sterilize domestic water system with solution containing 250 parts per million minimum of available chlorine. Introduce chlorinating material into system a manner approved by the architect and local department of health. Allow sterilization solution to remain for 24 hours and open and close valves and faucets several times during that time. After sterilization, flush solution from system with clean water until residual chlorine content is less than 0.2 parts per million. Water system will not be accepted until negative bacteriological test is made on water taken from system. Repeat dosing as necessary until such negative test is accomplished and is acceptable to the local department of health. Provide report to owner's representative for approval.

Part 13 – Operation and Maintenance Manuals

1. Provide three (3) sets of O& M Manuals covering all new valves, equipment and appurtenances for the owner's use as applicable. The format shall be as follows:
   a. Size: 8 1/2x11 inches
   b. Paper: Manufacturer's printed data, or neatly type-written
   c. Provide reinforced punched binder tabs, bound in with text.
   d. Provide fly-leaf for each separate product, or each piece of operating equipment. Provide typed description of product, and major component parts of equipment. Provide indexed tabs.
   e. Cover: Identify each volume with typed or printed title: "Operation and Maintenance instruction". List title of project, identity of general subject matter cover in the manual.
   f. Binders: Commercial quality three-ring binders with durable and cleanable plastic covers
   g. Provide neatly type written table of contents. List product by product name and other indentifying symbols as set for in contract documents.
   h. Include copy of each warranty, bond and service contract issued. Include parts lists, lubrication chart with maintenance schedule.

Part 14 – Instructions

1. Prior to final inspection or acceptance, fully instruct the owner's designated operation and maintenance personnel in the operation, adjustment and maintenance of products, equipment and systems. (Minimum 2-hours instruction period required or more if requested by the owner's representative).

Part 15 – Warranty and Guarantee

1. The plumbing contractor shall be responsible for the complete new plumbing systems installation and shall provide a one (1) year parts and labor warranty for his performed work after equipment start-up and the owner's representative's acceptance. Should any trouble develop during this period due to defective materials or faulty workmanship, the contractor shall furnish all necessary labor and materials to correct the trouble without any cost to the owner. Any materials found to be defective during the guarantee period shall be corrected immediately to the entire satisfaction of the owner.
2. The contract shall be responsible for all damage to any part of the premises cause by leak or breaks in pipe or equipment furnished and/or installed by this contractor for a period of (1) year from the date of acceptance of the work by the owner. The contractor shall make all necessary repairs to the owner's representative's satisfaction and at no additional cost.

PLUMBING SYMBOLS

PRESSURE REDUCING VALVE
BALL VALVE
REDUCER
GATE VALVE
GLOBE VALVE
2 WAY CONTROL VALVE
3 WAY CONTROL VALVE
CHECK VALVE
SOLENOID VALVE
BALANCE VALVE
GAS COCK
BUTTERFLY VALVE
OS & Y VALVE
STRAINER
SAFETY RELIEF VALVE
VALVE IN VERTICAL
FLOOR SINK
FLOOR DRAIN
GRADE CLEANOUT
FLOOR CLEANOUT
WALL CLEANOUT
VENT THROUGH ROOF
PIPE DOWN
PIPE UP
UNION
CAP
DOUBLE CHECK BACKFLOW PREVENTER
REDUCED PRESSURE BACKFLOW PREVENTER
POINT OF CONNECTION

PLUMBING ABREVIATIONS

EXISTING	(E)
AIR ADMITTANCE VALVE	A.A.V.
ABOVE FINISHED FLOOR	A.F.F.
CONDENSATE	COND
COLD WATER	CW
DOWN	DN
DOMESTIC	DOM
FLOOR CLEAN OUT	FCO
HOT WATER	HW
HOT WATER RETURN	HWR
NATURAL GAS	NG
REFRIGERANT	REF
SANITARY	SAN
TEMPERED WATER	TW
VENT	V
VENT THROUGH ROOF	VTR
WALL CLEAN OUT	WCO

CONSTRUCTION NOTES

DATE
FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT # 00-00-000

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON I. OLSEN STATE OF UTAH

SCALES
1 1/2" = 1'-0"
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST ACCORDINGLY

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:
PLUMBING GENERAL NOTES

PLAN SET: PERMIT
SHEET P0.1

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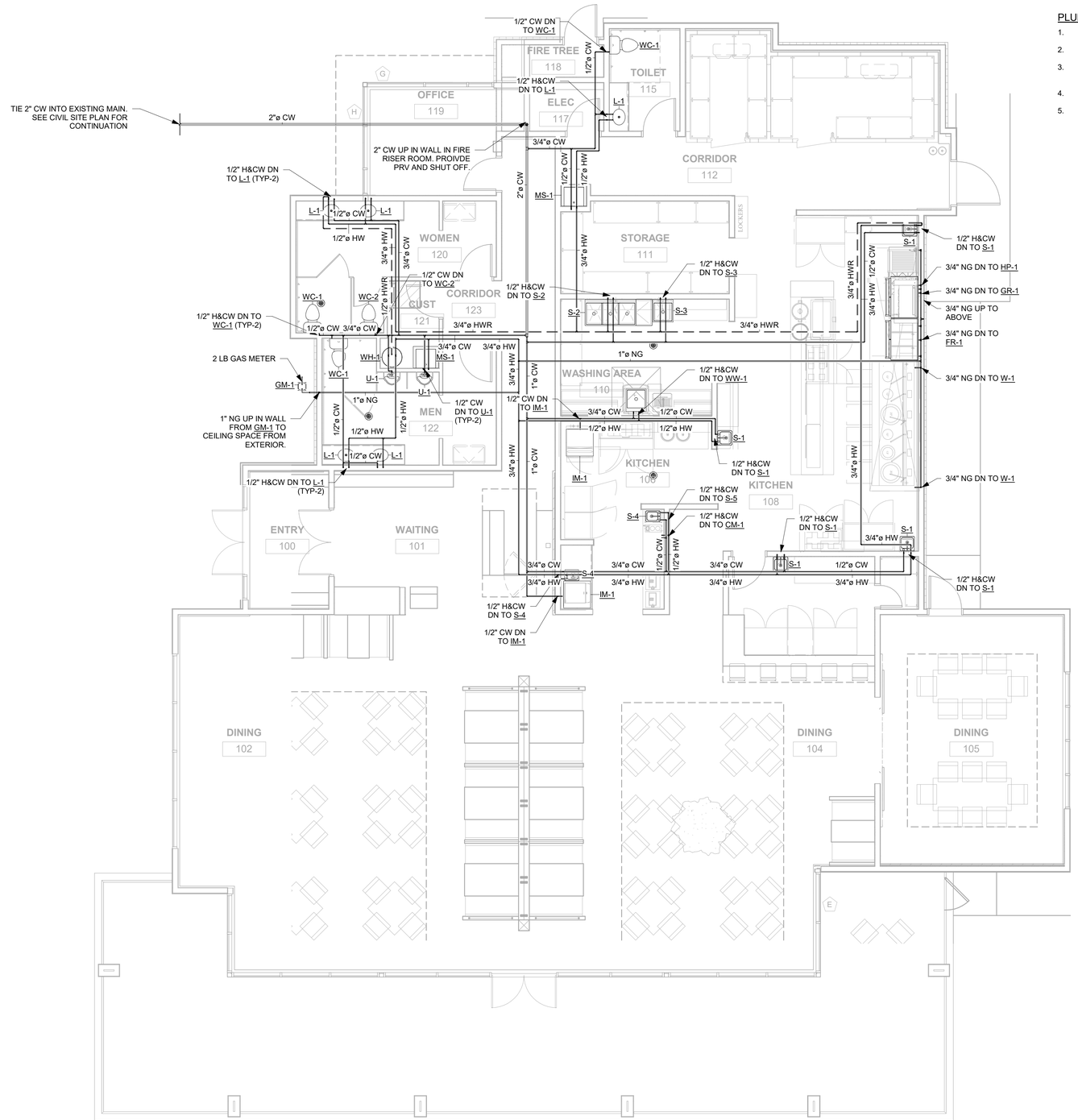

PLUMBING GENERAL NOTES

1. VERIFY EXISTING SIZES AND LOCATIONS OF ALL PIPING BEFORE BEGINING CONSTRUCTION. NOTIFY OWNER/ENGINEER OF ANY DISCREPANCIES.
2. ALL HORIZONTAL SANITARY PIPING SHOWN IS LOCATED BELOW FLOOR OF ASSOCIATED LEVEL UNLESS NOTED OTHERWISE.
3. ALL HORIZONTAL DOMESTIC, GAS, REFRIGERANT, AND VENT PIPING SHOWN IS LOCATED IN CEILING SPACE OF ASSOCIATED LEVEL UNLESS NOTED OTHERWISE.
4. BRANCH PIPE SIZE SHALL MATCH FIXTURE CONNECTION SIZE UNLESS NOTED OTHERWISE. SEE PLUMBING FIXTURE SCHEDULE FOR DETAIL.
5. PROVIDE ISOLATION VALVES ON ALL PLUMBING FIXTURES AND EQUIPMENT FOR SERVICE.

1 FIRST LEVEL PLUMBING PLAN
3/16" = 1'-0"

CONSTRUCTION NOTES

DATE

FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT # 00-00-000

REGISTERED PROFESSIONAL ENGINEER No. 169278 DONIL OLSEN STATE OF UTAH

SCALES

As indicated

0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST ACCORDINGLY FOR REDUCED SHEETS

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:

FIRST LEVEL PLUMBING PLAN

PLAN SET: PERMIT

SHEET P1.1

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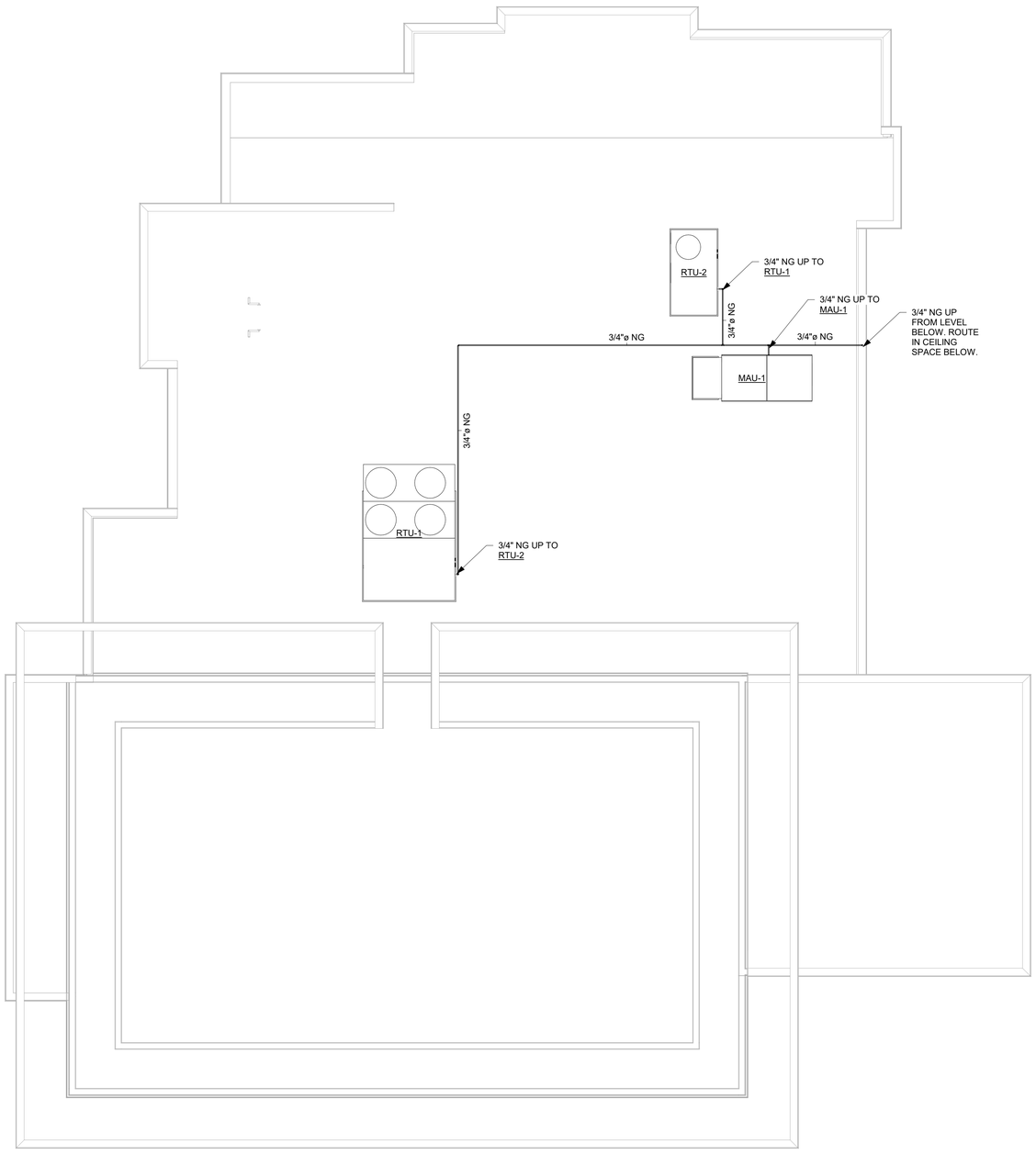

1 ROOF PLUMBING PLAN
3/16" = 1'-0"

PLUMBING GENERAL NOTES

1. VERIFY EXISTING SIZES AND LOCATIONS OF ALL PIPING BEFORE BEGINING CONSTRUCTION. NOTIFY OWNER/ENGINEER OF ANY DISCREPANCIES.
2. ALL HORIZONTAL SANITARY PIPING SHOWN IS LOCATED BELOW FLOOR OF ASSOCIATED LEVEL UNLESS NOTED OTHERWISE.
3. ALL HORIZONTAL DOMESTIC, GAS, REFRIGERANT, AND VENT PIPING SHOWN IS LOCATED IN CEILING SPACE OF ASSOCIATED LEVEL UNLESS NOTED OTHERWISE.
4. BRANCH PIPE SIZE SHALL MATCH FIXTURE CONNECTION SIZE UNLESS NOTED OTHERWISE. SEE PLUMBING FIXTURE SCHEDULE FOR DETAIL.
5. PROVIDE ISOLATION VALVES ON ALL PLUMBING FIXTURES AND EQUIPMENT FOR SERVICE.

CONSTRUCTION NOTES

DATE

FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DIO
REVIEWED: DLF

PROJECT #
00-00-000

REGISTERED PROFESSIONAL ENGINEER
No. 169278
DON I. OLSEN
STATE OF UTAH
3/12/20

SCALES

As indicated

0 1"
PAPER SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST IF PAPER IS REDUCED

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:

ROOF PLUMBING PLAN

PLAN SET: PERMIT

SHEET P1.2

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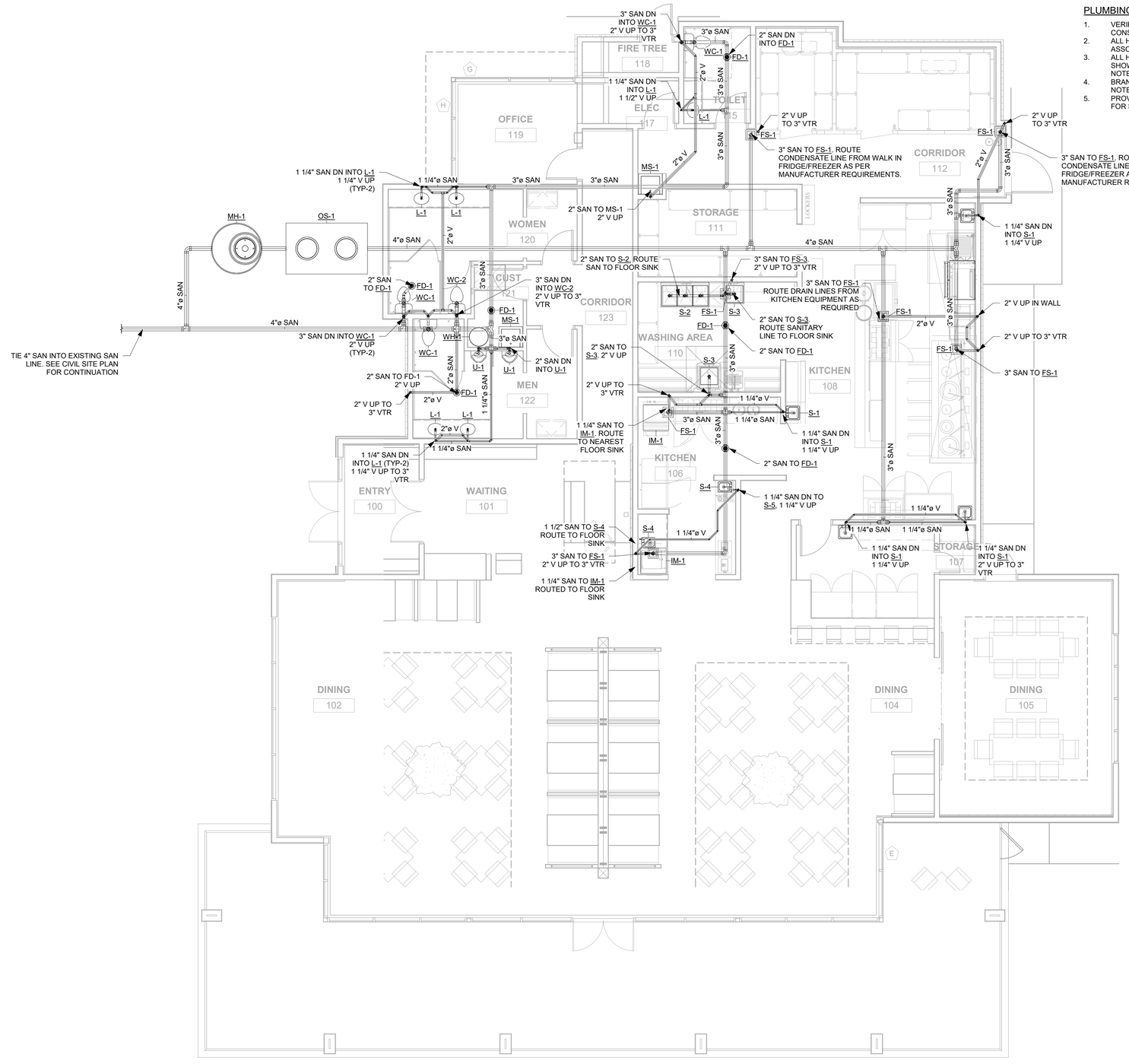

PLUMBING GENERAL NOTES

1. VERIFY EXISTING SIZES AND LOCATIONS OF ALL PIPING BEFORE BEGINING CONSTRUCTION. NOTIFY OWNER/ENGINEER OF ANY DISCREPANCIES.
2. ALL HORIZONTAL SANITARY PIPING SHOWN IS LOCATED BELOW FLOOR OF ASSOCIATED LEVEL UNLESS NOTED OTHERWISE.
3. ALL HORIZONTAL DOMESTIC, GAS, REFRIGERANT, AND VENT PIPING SHOWN IS LOCATED IN CEILING SPACE OF ASSOCIATED LEVEL UNLESS NOTED OTHERWISE.
4. BRANCH PIPE SIZE SHALL MATCH FIXTURE CONNECTION SIZE UNLESS NOTED OTHERWISE. SEE PLUMBING FIXTURE SCHEDULE FOR DETAIL.
5. PROVIDE ISOLATION VALVES ON ALL PLUMBING FIXTURES AND EQUIPMENT FOR SERVICE.

1 FIRST LEVEL SANITARY PLAN
3/16" = 1'-0"

CONSTRUCTION NOTES

DATE
FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT #
00-00-000

REGISTERED PROFESSIONAL ENGINEER
No. 169278
DON L. OLSEN
STATE OF UTAH

SCALES
As indicated
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST ACCORDINGLY.

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:
FIRST LEVEL SANITARY PLAN

PLAN SET: PERMIT
SHEET P2.1

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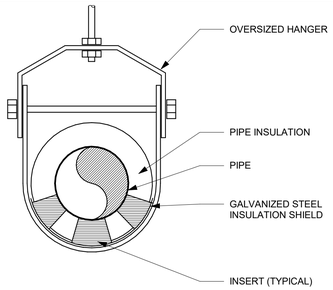
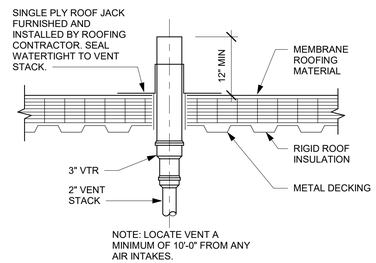


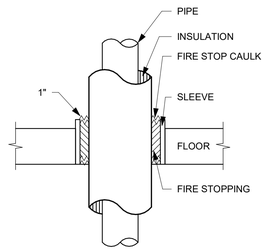
1 PIPE HANGER DETAIL

N.T.S.



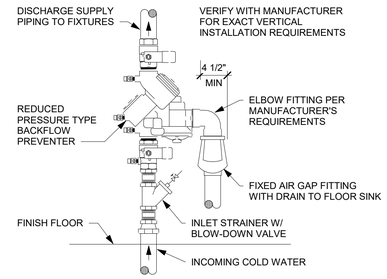
2 VENT THROUGH ROOF DETAIL

N.T.S.



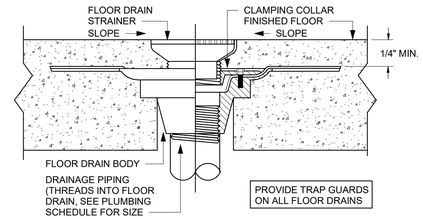
3 PIPE FLOOR PENTRATION DETAIL

N.T.S.



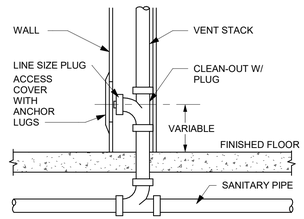
4 REDUCED PRESSURE BACKFLOW PREVENTER

N.T.S.



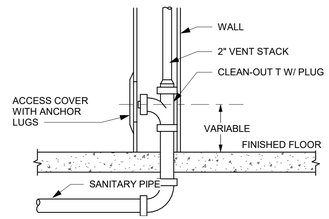
5 FLOOR DRAIN DETAIL

N.T.S.



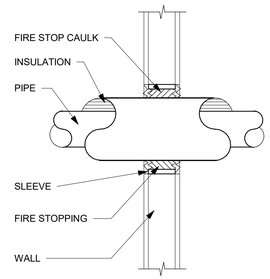
6 WALL CLEAN-OUT DETAIL (MID LINE)

N.T.S.



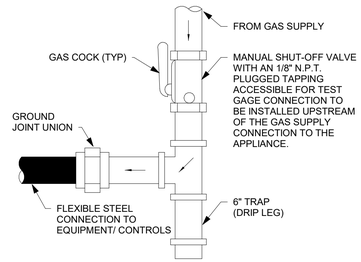
7 WALL CLEAN-OUT DETAIL (END LINE)

N.T.S.



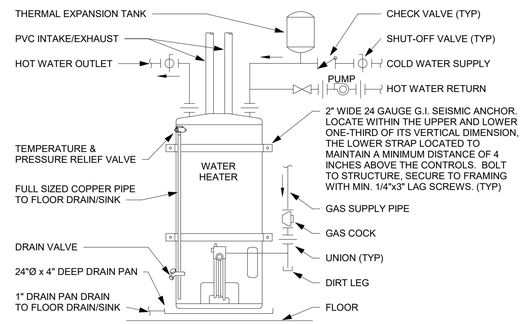
8 PIPE WALL PENTRATION DETAIL

N.T.S.



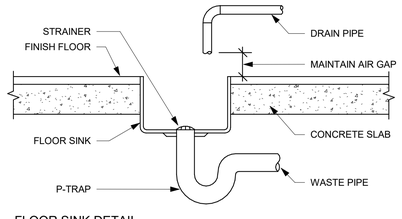
9 GAS CONNECTION

N.T.S.



10 WATER HEATER PIPING (CLOSED COMBUSTION)(RECIRCULATION) DETAIL

N.T.S.



11 FLOOR SINK DETAIL

N.T.S.

GAS SCHEDULE

GAS PIPING SIZED IN ACCORDANCE WITH 2015 IFGC TABLE 402.4(7) WITH THE FOLLOWING CRITERIA:

DEVELOPED LENGTH: 300 FT

INLET PRESSURE: < 2 PSI

PRESSURE DROP: 0.3" W.C.

SPECIFIC GRAVITY: 0.60

TAG	BTU INPUT	COUNT	BTU INPUT
FR-1	180,000 Btu/h	1	180,000 Btu/h
GR-1	180,000 Btu/h	1	180,000 Btu/h
MAU-1	80,000 Btu/h	1	80,000 Btu/h
RTU-1	260,000 Btu/h	1	260,000 Btu/h
RTU-2	65,000 Btu/h	1	65,000 Btu/h
WH-1	100,000 Btu/h	1	100,000 Btu/h
			865,000 Btu/h

PLUMBING FIXTURE SCHEDULE

GENERGAL FIXTURE NOTES:

1. THE PLUMBING CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF ALL PLUMBING EQUIPMENT AND THE RELATED ROUGH IN LOCATIONS WITH THE MECHANICAL AND ARCHITECTURAL PLANS AND SPECIFICATIONS. PROVIDE ALL ACCESSORIES AND OPTIONS REQUIRED TO PROVIDE THE OWNER A COMPLETELY FUNCTIONAL PLUMBING SYSTEM.
2. ALL WALL HUNG PLUMBING FIXTURES SHALL BE SUPPORTED BY FLOOR MOUNTED CARRIERS BY WADE, SMITH, JOSHAM, MIFAB, OR WATTS. CARRIERS SHALL BE CONSTRUCTED UTILIZING ALL METAL COMPONENTS WITH SUPPORT FEET SECURELY ANCHORED TO THE FLOOR STRUCTURE FIXTURES ARMS SHALL SUPPORT FIXTURE INDEPENDENT FROM WALL STRUCTURE.
3. EACH INDIVIDUAL FIXTURE SUPPLY SHALL BE PROVIDED WITH A CHROME-PLATED QUARTER TURN STOP VALVE BRASSCRAFT MODEL KTCR OR ENGINEER APPROVED EQUAL.
4. FIXTURES AND ACCESSORIES SHALL BE AS SCHEDULED. EACH ITEM SHALL BE COMPLETE WITH CHROME-PLATED BRASS TRIM.
5. ADA COMPLIANT FIXTURES SHALL BE INSTALLED WITH PRE-FORMED INSULATION AND PROTECTIVE COVERS ON P-TRAPS AND STOPS, COVERS TO BE MANUFACTURED BY BUCKAROOS OR TRUEBRO.
6. CAULK ALL FIXTURES TO THE WALL OR FLOOR WITH APPLICABLE SILICONE COMPOUND. UTILIZE MULTIPLE BEADS TO FILL GAPS AND FINISH TO SMOOTH, FILLETED EDGE. USE APPROPRIATE TOOLS TO PROVIDE PROFESSIONAL APPEARANCE.
7. ALL PLUMBING SHALL BE INSTALLED TO CONFORM TO THE LATEST ADOPTED EDITION OF THE INTERNATIONAL PLUMBING CODE INCLUDING LOCAL AMENDMENTS. CONSULT AUTHORITIES HAVING...
8. PROVIDE TEMPORARY TOILET FACILITIES DURING CONSTRUCTION PER IPC SECTION 311.1 AND ANSI Z4.3.
9. ALL LAVATORIES TO BE PROVIDED WITH WATER-TEMPERATURE LIMITING DEVICE IN COMPLIANCE WITH ASSE 1070
10. WATER HAMMER ARRESTORS ARE TO BE PROVIDED AT ALL QUICK CLOSING VALVES AND FLUSHOMETERS PER IPC 604.9

TAG	CW	HW	SAN	VENT	MANUFACTURER	MODEL	COUNT	DESCRIPTION
FD-1			2"	2"	BY OWNER	BY OWNER	6	FLOOR DRAIN
FS-1			3"	1 1/2"	BY OWNER	BY OWNER	8	FLOOR SINK
IM-1	1/2"		2"	2"	BY OWNER	BY OWNER	2	ICE CUBE MAKER
L-1	1/2"	1/2"	1 1/4"	1 1/4"	BY OWNER	BY OWNER	5	LAVATORY
MH-1			4"		BY OWNER	BY OWNER	1	SAMPLING MAN HOLE TO COMPLY WITH CITY REQUIREMENTS
MS-1	1/2"	1/2"	1 1/2"	1 1/2"	BY OWNER	BY OWNER	2	MOP SINK
OS-1			4"		BY OWNER	BY OWNER	1	800 GALLON GREASE TRAP TO COMPLY WITH CITY REQUIREMENTS
S-1	1/2"	1/2"	1 1/2"	1 1/2"	BY OWNER	BY OWNER	4	HAND SINK
S-2	1/2"	1/2"	2"	2"	BY OWNER	BY OWNER	1	HAND SINK
S-3	1/2"	1/2"	2"	2"	BY OWNER	BY OWNER	2	HAND SINK
S-4	1/2"	1/2"	1 1/2"	1 1/2"	BY OWNER	BY OWNER	2	HAND SINK
U-1	1/2"		2"	2"	BY OWNER	BY OWNER	2	URINAL
WC-1	1/2"		3"	2"	BY OWNER	BY OWNER	3	WATER CLOSET
WC-2	1/2"		3"	2"	BY OWNER	BY OWNER	1	ADA WATER CLOSET

CONSTRUCTION NOTES

DATE

FEBRUARY 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: DLF
REVIEWED: DIO

PROJECT # 00-00-000

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON I. OLSEN STATE OF UTAH

SCALES

As indicated

0 1"

BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST IF NOT FULL SIZE

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N HILLCREST RD SARATOGA SPRINGS, UT

SHEET TITLE:

PLUMBING DETAILS AND SCHEDULES

PLAN SET: PERMIT

SHEET P5.1

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SECTION 01 00 00 – GENERAL REQUIREMENTS

1. DRAWINGS ARE DIAGRAMMATIC AND SHOULD NOT BE SCALED FOR EXACT DIMENSIONS; EXACT DIMENSIONS AND LOCATIONS SHALL BE DETERMINED BY MEASUREMENTS IN THE FIELD AND SHALL BE SUBECT TO APPROVAL BY THE ARCHITECT/ENGINEER. THE CONTRACTOR SHALL VERIFY DIMENSION PRIOR TO ORDERING EQUIPMENT AND MATERIAL.
2. BEFORE SUBMITTING A BID, IT WILL BE NECESSARY FOR EACH CONTRACTOR TO VISIT THE SITE AND ASCERTAIN FOR HIMSELF/HERSELF THE CONDITIONS TO BE MET IN INSTALLING THE WORK AND MAKE PROVISIONS FOR THE CONDITIONS IN THE FINAL PRICE. FAILURE TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION OR FAULTY INSTALLATION OF ANY WORK. BY SUBMITTING A BID, THE CONTRACTOR IS STATING THAT THE BID COVERS ALL WORK NECESSARY TO PROPERLY INSTALL THE SYSTEM INDICATED.
3. IN CASE OF DISAGREEMENT BETWEEN THE DRAWING AND SPECIFICATIONS, OR WITHIN THE DRAWINGS OR SPECIFICATIONS, THE BID SHALL INCLUDE THE GREATER AMOUNT OF WORK AND THE MATTER SHALL BE REFERRED TO THE ARCHITECT/ENGINEER.
4. THE CONTRACTOR SHALL SECURE AND PAY ALL FEES ASSOCIATED WITH ANY AND ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS REQUIRED FOR THE WORK.
5. ALL WORK SHALL COMPLY WITH ALL PERTINENT NATIONAL, STATE AND LOCAL ORDINANCES and codes, and all American Disabilities Act (ADA) requirements, and any amendments. Nothing within the Drawings or specifications shall be construed as waiving any of the rules, regulations, or requirements of the authorities having jurisdiction. In the event of a conflict, the requirements of the authority having jurisdiction shall govern. The conflict shall be reported to the Architect/Engineer immediately, and necessary modification shall be made at no additional cost to the Owner or Architect/Engineer.
6. If the requirements of the Construction Documents are in excess of those required be Code, the provisions of the Construction Documents shall take precedence.
7. All equipment and materials for which approval standards have been established by Underwriters' Laboratories, Inc (UL), Factory Mutual (FM), and American Standard Codes shall be so approved and shall bear approval labels,
8. All work shall be in compliance with all applicable safety regulations.
9. Should any doubt arise as to the true meaning of the Drawings or specifications, reference shall be made to the Architect/Engineer, whose decision shall be final. The architect/engineer will respond within 10 business days after receipt of request for information. The contractor shall conform to these responses as part of the contract with no additional cost to the owner or architect/engineer. No alleged statement by the architect/engineer is acceptable excuse for inferior work.
10. THE LISTING OF PRODUCT MANUFACTURERS, MATERIALS AND METHODS IS INTENDED TO ESTABLISH A STANDARD OF QUALITY. PRODUCTS BY OTHER MANUFACTURERS MAY BE ACCEPTED PROVIDED THEY have the equivalent capacity, construction, and performance. The engineer shall be the sole judge of quality and equivalence of equipment, materials, and methods. However, under no circumstances shall any substitution be made without written approval of the architect/engineer prior to bidding.
11. Equipment has been chosen to fit within the available space. Where substituted or alternative equipment is proposed, it shall be the Contractor's responsibility to verify that the equipment will fit within the space available, including all required code and maintenance clearances, and to coordinate all equipment requirements with other contractors.
12. Obtain all equipment or material of each type through one source, locally when possible, from a single manufacturer.
13. Substitutions: Products of equal performance characteristics may be considered. Contractors wishing to substitute a product or material shall submit each request to the architect/engineer in writing at least 7 days prior to bids being due. Requests shall not be considered after that time. The architect/engineer shall review the request and if acceptable will issue a letter allowing the substitution. Any anticipated use of a non-specified product without written approval is strictly the risk of the contractor. If a request is rejected, the contractor shall furnish the specified product or material. Each contractor is responsible for costs incurred by other trades as a result of any substitution made by the contractor.
14. Submittals: Submit the following in accordance with Division 1 specifications and the requirements of this section for each piece of equipment and each type of component and material.
14.1. Submit product data for each type of product specified.
14.2. Submit shop/coordination drawings at a minimum scale of 1/4"=1' -0" detailing all major equipment, component, and systems in relation to work of other trades, indicating installation, code, and working clearances and access for all equipment and components.
14.3. Submit samples of color, lettering, and graphics for each identification product.
14.4. Contractor shall separate submittals to contain no more than one specification section.
14.5. Within 30 days after award of contract, the contractor shall submit a minimum of four (4) copies of each submittal with coversheet tot eh architect/engineer. If acceptable to the architect/owner, an electronic version containing the coversheet and all submittal data within one file may be submitted in lieu of the 4 copies.
14.6. Each submittal shall include the following information. Submittals that do not comply with the following requirements will be marked "rejected" and returned.
14.6.1. Coversheet: Indicating the names and address of the project, architect, engineer, and contractor, and the submittal name and number. Number shall be based on the specification section, submittal sequence number, and a revision sequence number is applicable. Ex: 262726-02-R1 is the 1st version to the 2nd submittal for section 26 27 26.
14.6.2. List of Variations: This page shall list all variations including furnished/unfurnished options and features between the submitted item and the scheduled/specified item. If there are not variations, the page shall state "no variations."
14.6.3. Product information: Clearly indicate manufacturer's name, designation, size, performance and capacity data, dimensional data, sufficient pictorial and diagrammatic data to show conformance with the Construction documents. Applicable information shall be clearly indicated and non-applicable information shall be struck-out.
14.6.4. Warranty information: Manufacturer's warranty certificate that meets or exceed the requirements of the construction documents.
14.6.5. Certification by the general and sub-contractor that material submitted is in accordance with the construction documents, signed and dated.
14.7. Submittal review time in the engineer's office will be a minimum of 10 working days per review. The contractor shall consider this review time when scheduling work.
14.8. Each submittal will be marked with one of the following:
14.8.1. No exceptions taken – submittal was reviewed and no deviations were found.
14.8.2. Exceptions noted, submit response – submittal was reviewed and found to have minor deviations or missing information. A re-submittal is not required; however, a written response to all review comments shall be submitted.
14.8.3. Exceptions noted, resubmit – submittal was reviewed and major deviations were noted. The submittal shall be revised to address the noted deviations and resubmitted.
14.8.4. Rejected – submittal was reviewed and is not in conformance or is not in the correct format. A revised submittal that is in conformance shall be resubmitted.
14.9. Inadequate or incomplete submittals will not be reviewed and will be returned marked "rejected."
14.10. the architect's/engineer's review of a submittal shall not relieve the contractor of the responsibility of errors, omissions, oversights, or deviations that may be contained within the submittal. If the contractor proceeds based on undetected errors, omissions, oversights, or deviations, it is at his/her sole responsibility. Regardless of any information contained in the submittal or the Engineer's review thereof, the contract documents shall govern the work and neither waived nor suspended by the submittal review.
14.11. Equipment and material purchased without a "no exceptions taken" submittal review is at the risk of the contractor. The cost of removal and replacement of such items which is judged unsatisfactory by the architect/engineer for any reason shall be at the contractor's expense.
15. Operations and maintenance requirements (per energy code): construction documents shall require that within 90 days after the date of system acceptance record drawings of the actual installation be provided to the building owner or the designated representative of the building owner. Record drawing shall include as a minimum the location and performance data on each piece of equipment, general configuration of duct and pipe distribution system including sizes, and the terminal air or water design flow rates.
16. Manuals. Construction documents shall require that an operating manual and a maintenance manual be provided to the building owner or the designated representative of the building owner within 90 days after the date of system acceptance. These manuals shall be in accordance with industry-accepted standards (see appendix e) and shall include, at a minimum, the following:
16.1. Submittal data stating equipment size and selected options for each piece of equipment requiring maintenance.
16.2. Operations manuals and maintenance manuals for each piece of equipment requiring maintenance, except equipment not furnished as part of the project. Required routing maintenance actions shall be clearly identified.
16.3. Names and addresses of at least one service agency.
16.4. HVAC controls system maintenance and calibration information, including wiring diagrams, schematics, and control sequence descriptions. Desired or field-determined set-points shall be permanently recorded on control drawings at control devices or, for digital control systems, in programming comments.
16.5. A complete narrative of how each system is intended to operate, including suggested set-points.
17. Record drawings: the contractor shall maintain a set of clearly marked record drawing prints at the site, which indicated all alterations and changes. Within 30 days after completion of work, the contractor shall provide a reproducible set in owner's requested format (plots, cad, pdf, etc.) with the architect's/engineer's seal struck-out and each drawing marked with the General and associated sub-contractors' names and date.
18. All equipment and material shall be installed, connected, and adjusted per the manufacturer's written instructions and recommendations.
19. The contractor shall be held responsible for coordinating with all other trades prior to system installation. The contractor shall refer to other trade plans for other work that may impact his/her work.
20. Where space requirements conflict, the following order of precedence shall be used.
20.1. Building lines and structural members.
20.2. Soil, drain, and condensate piping.
20.3. Grease – rated ductwork.
20.4. Refrigerant and vent piping.
20.5. HVAC ductwork.
20.6. HVAC and domestic water piping.
20.7. Fire protection (sprinkler & standpipe) piping.
20.8. Electrical conduit.
21. The contractor shall take care during work to avoid damage to work by other trades.
22. The contractor shall keep the premises free of debris and rubbish caused by his/her work on a daily basis. This debris and rubbish shall be removed from the building and site.
23. Guarantee: the contractor shall guarantee the entire installation to be in proper working order for a period of one (1) year, unless noted otherwise, after final acceptance and shall furnish free of charge all materials and labor necessary to comply with this guarantee.
24. Demolition: Where accessible work is to be demolished, it shall be removed in its entirety to a point of permanent concealment. Where work to be demolished is not accessible, remove system to 2" below the surface, cap, and patch surface to match existing. Where work to remain is damaged, remove the damaged portions and install new of equal capacity, quality, and function.
25. Work within existing building: construction shall be arranged to minimize the hazard and interruption to the occupants. Do not interrupt services to the occupants without written permission from the architect/owner/tenant, a minimum of 5 working days prior to the interruption. Where disruption of a service becomes necessary, provisions shall be made to provide temporary service throughout the interruption of the primary service.

SECTION 26 00 00 - GENERAL REQUIREMENTS FOR ELECTRICAL SYSTEMS

1. ALL ELECTRICAL COMPONENTS, DEVICES, AND ACCESSORIES SHALL BE LISTED AND LABELED AS DEFINED IN NFPA 70, BY A QUALIFIED TESTING AGENCY, AND MARKED FOR INTENDED LOCATION AND APPLICATION.
2. PRODUCT SELECTION FOR RESTRICTED SPACE: DRAWINGS INDICATE DIMENSIONS OF SELECTED EQUIPMENT AND ACCESSORIES INCLUDING CLEARANCES BETWEEN EQUIPMENT, ADJACENT SURFACES AND OTHER ITEMS. THE CONTRACTOR IS RESPONSIBLE TO VERIFY FIELD DIMENSIONS AND NOTIFY THE ENGINEER IF REQUIRED CLEARANCES CANNOT BE MAINTAINED.
3. DO NOT DELIVER OR INSTALL EQUIPMENT AND DEVICES UNTIL SPACES ARE ENCLOSED AND WEATHERTIGHT, WORK IN SPACES IS COMPLETE AND DRY, AND WORK ABOVE EQUIPMENT IS COMPLETE.
4. INTERRUPTION OF EXISTING ELECTRIC SERVICE: DO NOT INTERRUPT ELECTRIC SERVICE TO FACILITIES OCCUPIED BY OWNER OR OTHERS UNLESS PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE TEMPORARY ELECTRIC SERVICE ACCORDING TO REQUIREMENTS INDICATED:
4.1. NOTIFY ARCHITECT AND OWNER NO FEWER THAN FIVE BUSINESS DAYS IN ADVANCE OF PROPOSED INTERRUPTION OF ELECTRIC SERVICE.
4.2. DO NOT PROCEED WITH INTERRUPTION OF ELECTRIC SERVICE WITHOUT ARCHITECT'S OR OWNER'S WRITTEN PERMISSION.
4.3. COMPLY WITH NFPA 70E.
5. STORE EQUIPMENT, COMPONENTS, AND MATERIALS IN A CLEAN, DRY LOCATION WHICH PROVIDES PROTECTION AGAINST THE WEATHER. ITEMS WHICH BECOME DAMAGED DUE TO WEATHER OR EXPOSURE SHALL BE REPLACED PRIOR TO INSTALLATION.
6. PROVIDE ALL TEMPORARY FACILITIES REQUIRED TO SUPPLY CONSTRUCTION POWER AND LIGHTING. INSTALL AND MAINTAIN FACILITIES IN A MANNER THAT WILL PROTECT THE PUBLIC AND WORKMEN THAT COMPLIES WITH ALL APPLICABLE LAWS AND REGULATIONS. IN GENERAL, PROVIDE ONE (1) 150W INCANDESCENT LIGHT FIXTURE AND ONE (1) DUPLEX RECEPTACLE FOR EVERY 400-SQUARE FEET OF AREA (MINIMUM OF ONE EACH PER ROOM.) UPON COMPLETION OF THE WORK, REMOVE ALL TEMPORARY FACILITIES FROM THE SITE.
7. TEST ALL WIRING AND CONNECTIONS FOR PROPER CONFIGURATION PRIOR TO ENERGIZING ANY CIRCUIT.
8. VACUUM DIRT AND DEBRIS FROM WITHIN ENCLOSURES; DO NOT USE COMPRESSED AIR TO ASSIST IN CLEANING.
9. AT COMPLETION OF INSTALLATION, INSPECT EXPOSED FINISHES. REMOVE BURRS, DIRT AND CONSTRUCTION DEBRIS AND REPAIR DAMAGED FINISH, INCLUDING CHIPS, SCRATCHES, AND ABRASIONS BACK TO THE ORIGINAL FINISH.

SECTION 26 05 19 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

1. CONDUCTORS AND CABLES: COPPER SHALL BE SOFT-DRAWN, ANNEALED WITH 98% CONDUCTIVITY OR ALUMINUM WITH THHN/THWN INSULATION.
2. MULTI-CONDUCTOR CABLE: METAL-CLAD CABLE, TYPE MC ONLY. ALL MULTI-CONDUCTOR CABLES SHALL BE PROVIDED WITH AN INTERNAL EQUIPMENT GROUNDING CONDUCTOR. THE CABLE SHEATHING SHALL NOT BE USED FOR AS AN EQUIPMENT GROUND.
3. CONNECTORS AND SPLICES: UL-LISTED, FACTORY-FABRICATED CONNECTORS AND SPLICES OF SIZE, AMPACITY RATING, MATERIAL, TYPE, AND CLASS FOR APPLICATION AND SERVICE INDICATED.
4. CONDUCTOR MATERIAL APPLICATIONS:
4.1. FEEDERS: COPPER FOR FEEDERS SMALLER THAN #4 AWG; COPPER OR ALUMINUM FOR FEEDER'S #4 AWG AND LARGER. SOLID FOR #10 AWG AND SMALLER; STRANDED FOR #8 AWG AND LARGER. CONDUCTOR SIZES INDICATED ON DRAWINGS ARE COPPER UNLESS NOTED OTHERWISE.
4.2. BRANCH CIRCUITS: COPPER. SOLID FOR #10 AWG AND SMALLER; STRANDED FOR #8 AWG AND LARGER.
5. CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS:
5.1. FEEDERS (EXPOSED AND CONCEALED) & BRANCH CIRCUIT (EXPOSED): TYPE THHN/THWN, SINGLE CONDUCTORS IN RACEWAY.
5.2. BRANCH CIRCUITS - INTERIOR, CONCEALED IN CEILINGS, WALLS, AND PARTITIONS: TYPE THHN/THWN, SINGLE CONDUCTORS IN RACEWAY OR METAL-CLAD CABLE, TYPE MC.
5.2.1. TYPE MC CABLE MAY BE INSTALLED ONLY IN THE FOLLOWING INSTALLATIONS.
5.2.1.1. SINGLE-PHASE CIRCUITS ONLY.
5.2.1.2. CONNECTION TO RECESSED LIGHTING FIXTURES WITH A MAXIMUM LENGTH OF 6'.
5.2.1.3. CONNECTION TO NEMA 5-15R AND 5-20R RECEPTACLES WITH A MAXIMUM LENGTH OF THE DISTANCE BETWEEN THE RECEPTACLE AND THE FINISH CEILING PLUS 8'.
5.3. CLASS 1 CONTROL CIRCUITS: TYPE THHN/THWN, IN RACEWAY.
5.4. CLASS 2 CONTROL CIRCUITS: TYPE THHN/THWN, IN RACEWAY OR POWER-LIMITED CABLE, CONCEALED IN BUILDING FINISHES OR POWER-LIMITED TRAY CABLE, IN CABLE TRAY.
6. CONCEAL CABLES IN FINISHED WALLS, CEILINGS, AND FLOORS, UNLESS OTHERWISE INDICATED.
7. CONDUCTORS MAY BE RUN IN PARALLEL ON SIZE #1/0 THROUGH 750 KCMIL INCLUSIVE, PROVIDED ALL PARALLEL CONDUCTORS ARE THE SAME SIZE, LENGTH, AND TYPE OF INSULATION, AND THEY SHALL BE SO ARRANGED AND TERMINATED AS TO ENSURE EQUAL DIVISION OF THE TOTAL CURRENT BETWEEN ALL PARALLEL CONDUCTORS INVOLVED.
8. CONDUCTOR SIZES INDICATED IN THE CONSTRUCTION DRAWINGS ARE MINIMUM SIZES. CONTRACTOR SHALL INCREASE CONDUCTOR SIZES ABOVE THOSE INDICATED TO LIMIT THE DROP IN VOLTAGE POTENTIAL FROM THE PANELBOORD TO THE FARTHEST POINT ON THE CIRCUIT FROM EXCEEDING 3% AT MAXIMUM LOAD FOR ALL LIGHTING AND POWER BRANCH CIRCUITS.
9. INSTALL A SEPARATE GROUNDED (NEUTRAL) CONDUCTOR FOR EACH OF THE FOLLOWING BRANCH CIRCUITS SERVING OR ORIGINATING FROM A GFI DEVICE OR BREAKER.
10. KEEP CONNECTIONS AND SPLICES TO A MINIMUM. SPLICES ARE NOT PERMITTED IN FEEDER CONDUCTORS UNLESS SPECIFICALLY INDICATED ON PLAN.
11. ALL CONNECTIONS AND SPLICES SHALL OCCUR WITHIN OUTLET BOXES, JUNCTION BOXES, SPLICE BOXES, OR OTHER DEVICES APPROVED FOR THIS PURPOSE.
12. MAKE SPLICES AND TAPS THAT ARE COMPATIBLE WITH CONDUCTOR MATERIAL AND THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH, CURRENT-CARRYING, AND INSULATION RATINGS THAN UNSPLICED CONDUCTORS. USE OXIDE INHIBITOR IN EACH SPLICE AND TAP CONDUCTOR FOR ALUMINUM CONDUCTORS.

SECTION 26 05 26 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

1.1NSULATED CONDUCTORS: COPPER OR TINNED-COPPER WIRE OR CABLE INSULATED FOR 600V UNLESS OTHERWISE REQUIRED BY APPLICABLE CODE. INSTALL SOLID CONDUCTOR FOR #8 AWG AND SMALLER, AND STRANDED CONDUCTORS FOR #6 AWG AND LARGER, UNLESS OTHERWISE INDICATED.
2. BARE COPPER BONDING CABLE: 28 KCMIL, 14 STRANDS OF #17 AWG CONDUCTORS, 1/4" IN DIAMETER.
3. BARE COPPER BONDING CONDUCTOR: #4 OR #6 AWG, STRANDED CONDUCTOR.
4. BOLTED CONNECTORS FOR CONDUCTORS AND PIPES: COPPER OR COPPER ALLOY, BOLTED PRESSURE-TYPE, WITH AT LEAST TWO BOLTS, SIZE FOR CONDUCTOR AND MATERIAL/PIPE THICKNESS.
5.INSTALL INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH OIL FEEDERS AND BRANCH CIRCUITS.
6. HVAC AND PLUMBING EQUIPMENT: INSTALL A SEPARATE INSULATED EQUIPMENT GROUNDING CONDUCTOR TO EACH PIECE OF EQUIPMENT OPERATING AT 120 *V* AND MORE, INCLUDING AIR CLEANERS, HEATERS, DAMPERS, HUMIDIFIERS, WATER HEATERS, PUMPS, ETC. BAND CONDUCTOR TO EACH UNIT AND TO DUCT AND/OR CONNECTED METALLIC PIPING. INSTALL BONDING JUMPER TO BAND ACROSS FLEXIBLE CONNECTIONS TO ACHIEVE CONTINUITY.
7. ROUTE GROUNDING CONDUCTORS ALONG SHORTEST AND STRAIGHTEST PATHS POSSIBLE, UNLESS OTHERWISE INDICATED OR REQUIRED BY CODE. AVOID OBSTRUCTING ACCESS OR PLACING CONDUCTORS WHERE THEY MAY BE SUBJECTED TO STRAIN, IMPACT, OR DAMAGE.
8. BONDING STRAPS AND JUMPERS: COPPER OR TINNED-COPPER TAPE, BRAIDED CONDUCTORS, TERMINATED WITH COPPER FERRULES; 1-5/8" WIDE AND 1/16" THICK, INSTALLED IN LOCATIONS ACCESSIBLE FOR INSPECTION AND MAINTENANCE, EXCEPT WHERE ROUTED THROUGH SHORT LENGTHS OF CONDUIT.
8.1. BONDING TO STRUCTURE: BAND STRAPS DIRECTLY TO BASIC STRUCTURE, TAKING CARE NOT TO PENETRATE ANY ADJACENT PARTS.
8.2. BONDING TO EQUIPMENT MOUNTED ON VIBRATION ISOLATION HANGERS AND SUPPORTS: INSTALL SO VIBRATION IS NOT TRANSMITTED TO RIGIDLY MOUNTED EQUIPMENT

SECTION 26 05 29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

1. DESIGN SUPPORTS FOR MULTIPLE RACEWAYS AND EQUIPMENT CAPABLE OF SUPPORTING COMBINED WEIGHT OF SUPPORTED SYSTEMS, ITS CONTENTS, AND COMPONENTS; ADEQUATE TO RESIST MAXIMUM LOADS IMPOSED FOR THIS PROJECT, WITH A MINIMUM STRUCTURAL SAFETY FACTOR OF FIVE TIMES THE APPLIED FORCE.
2. STEEL SLOTTED SUPPORT SYSTEMS: HOT-DIP GALVANIZED, FACTORY-FABRICATED COMPONENTS FOR FIELD ASSEMBLY WITH CHANNEL DIMENSIONS SELECTED FOR APPLICABLE LOAD CRITERIA.
3. CONDUIT AND CABLE SUPPORT DEVICES: STEEL AND MALLEABLE-IRON HANGERS, CLAMPS, AND ASSOCIATED FITTINGS, DESIGNED FOR TYPES AND SIZES OF RACEWAY OR CABLE TO BE SUPPORTED.
4. SUPPORT FOR CONDUCTORS IN VERTICAL CONDUIT: FACTORY-FABRICATED ASSEMBLY CONSISTING OF MALLEABLE IRON, THREADED BODY AND INSULATING WEDGING PLUG OR PLUGS FOR NON-ARMORED ELECTRICAL CONDUCTORS OR CABLES IN RISER CONDUITS. PLUGS SHALL HAVE NUMBER, SIZE, AND SHAPE OF CONDUCTOR GRIPPING PIECES AS REQUIRED TO SUIT INDIVIDUAL CONDUCTORS OR CABLES SUPPORTED.
5. POWDER-ACTUATED FASTENERS: THREADED-STEEL STUD, FOR USE IN HARDENED PORTLAND CEMENT CONCRETE, STEEL, OR WOOD, WITH TENSION, SHEAR, AND PULLOUT CAPACITIES APPROPRIATE FOR SUPPORTED LOADS AND BUILDING MATERIALS WHERE USED.
6. MECHANICAL-EXPANSION ANCHORS: INSERT-WEDGE-TYPE, ZINC-COATED STEEL, FOR USE IN HARDENED PORTLAND CEMENT CONCRETE WITH TENSION, SHEAR, AND PULLOUT CAPACITIES APPROPRIATE FOR SUPPORTED LOADS AND BUILDING MATERIALS IN WHICH USED.
7. MAXIMUM SUPPORT SPACING AND MINIMUM HANGER ROD SIZE FOR RACEWAY: SPACE SUPPORTS FOR EMT, IMC, AND RMC AS NFPA 70. MINIMUM ROD SIZE SHALL BE 1/4" IN DIAMETER.
8. MULTIPLE RACEWAYS OR CABLES: INSTALL TRAPEZE-TYPE SUPPORTS FABRICATED WITH STEEL SLOTTED SUPPORT SYSTEM, SIZED SO CAPACITY CON BE INCREASED BY AT LEAST 25% IN FUTURE WITHOUT EXCEEDING SPECIFIED DESIGN LOAD LIMITS. SECURE RACEWAYS AND CABLES TO THESE SUPPORTS WITH TWO-BOLT CONDUIT CLAMPS OR SINGLE-BOLT CONDUIT CLAMPS USING SPRING FRICTION ACTION FOR RETENTION IN SUPPORT CHANNEL.
9. SPRING-STEEL CLAMPS DESIGNED FOR SUPPORTING SINGLE CONDUITS WITHOUT BOLTS MAY BE USED FOR 1-1 /2" AND SMALLER RACEWAYS SERVING BRANCH CIRCUITS AND COMMUNICATION SYSTEMS ABOVE SUSPENDED CEILINGS AND FOR FASTENING RACEWAYS TO TRAPEZE SUPPORTS.
10. STRENGTH OF SUPPORT ASSEMBLIES: SELECT SIZES OF COMPONENTS SO STRENGTH WILL BE ADEQUATE TO CARRY WEIGHT OF SUPPORTED COMPONENTS PLUS 200 LB, MINIMUM.
11. MOUNTING AND ANCHORAGE OF SURFACE-MOUNTED EQUIPMENT AND COMPONENTS: ANCHOR AND FASTEN ELECTRICAL ITEMS AND THEIR SUPPORTS TO BUILDING STRUCTURAL ELEMENTS BY THE FOLLOWING METHODS UNLESS OTHERWISE INDICATED BY CODE:
11.1. TO WOOD: FASTEN WITH LAG SCREWS OR THROUGH BOLTS.
11.2. TO EXISTING CONCRETE: EXPANSION ANCHOR FASTENERS OR POWDER-ACTUATED DRIVEN THREADED STUDS PROVIDED WITH LOCK WASHERS AND NUTS MAY BE USED IN EXISTING STANDARD-WEIGHT CONCRETE 4" THICK OR GREATER. DRILL HOLES FOR EXPANSION ANCHORS IN CONCRETE AT LOCATIONS AND TO DEPTHS THAT AVOID REINFORCING BARS.
11.3. TO STRUCTURAL STEEL: BEAM CLAMPS COMPLYING WITH MSS SP-69.
11.4. TO LIGHT STEEL: SHEET METAL SCREWS.
11.5. ITEMS MOUNTED ON HOLLOW WALLS AND NONSTRUCTURAL BUILDING SURFACES: MOUNT EQUIPMENT AND ENCLOSURES ON SLOTTED-CHANNEL RACKS ATTACHED TO SUBSTRATE.
12. CONSTRUCT CONCRETE BASES WITH 3000-PSI, 2B-DAY COMPRESSIVE-STRENGTH CONCRETE WITH DIMENSIONS INDICATED BUT NOT LESS THAN 4" LARGER IN BOTH DIRECTIONS THAN SUPPORTED UNIT.

SECTION 26 05 33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

1. INDOORS, UNLESS OTHERWISE INDICATED:
1.1. EXPOSED, NOT SUBJECT TO PHYSICAL DAMAGE: RIGID STEEL CONDUIT OR EMT.
1.2. EXPOSED AND SUBJECT TO PHYSICAL DAMAGE: RIGID STEEL CONDUIT OR IMC. INCLUDES RACEWAYS IN AREAS WITH HEAVY TRAFFIC AND MECHANICAL ROOMS.
1.3. CONCEALED IN CEILINGS AND INTERIOR WALLS AND PARTITIONS: RIGID STEEL, IMC, OR EMT. RNC MAY BE USED IN NON-ENVIRONMENTAL AIR PLENUMS.
1.4. CONNECTION TO VIBRATING EQUIPMENT (INCLUDING TRANSFORMERS AND HYDRAULIC, PNEUMATIC, ELECTRIC SOLENOID OR MOTOR-DRIVEN EQUIPMENT): FMC, EXCEPT USE LFMC IN DAMP OR WET LOCATIONS.
1.5. DAMP OR WET LOCATIONS: RIGID STEEL CONDUIT OR IMC.
1.6. BOXES: SHEET-METAL, TYPE 1, EXCEPT USE CAST-METAL, TYPE 4, IN DAMP OR WET LOCATIONS.
2. MINIMUM RACEWAY SIZE: RACEWAY SIZE SHALL BE AS FOLLOWS UNLESS OTHERWISE INDICATED:
2.1. UNDER SLAB AND UNDERGROUND: 1"
2.2. HOMERUNS TO PANELBOARDS: 3/4".
2.3. ALL OTHER RACEWAY: 1 /2".
3. METAL WIREWAYS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS INCLUDE, BUT ARE NOT LIMITED TO; COOPER B-LINE AND HOFFMAN.
3.1. DESCRIPTION: SHEET METAL WITH STANDARD ENAMEL FINISH, SIZED AND SHAPED AS INDICATED, TYPE 1 (INTERIOR) OR 3R (EXTERIOR), UNLESS OTHERWISE INDICATED.
3.2. FITTINGS AND ACCESSORIES: INCLUDE COUPLINGS, ELBOWS, ADAPTERS, END CAPS, AND OTHER FITTINGS THAT MATCH WIREWAYS AS REQUIRED FOR COMPLETE SYSTEM.
3.3. WIREWAY COVERS: SCREW-COVER TYPE, UNLESS OTHERWISE INDICATED.
4. RACEWAY FITTINGS: COMPATIBLE WITH RACEWAYS AND SUITABLE FOR USE AND LOCATION.
4.1. RIGID AND INTERMEDIATE STEEL CONDUIT: USE THREADED RIGID STEEL CONDUIT FITTINGS, UNLESS OTHERWISE INDICATED.
4.2. PVC EXTERNALLY COATED, RIGID STEEL CONDUITS: USE ONLY FITTINGS LISTED FOR USE WITH THAT MATERIAL. PATCH AND SEAL ALL JOINTS, NICKS, AND SCRAPES IN PVC COATING AFTER INSTALLING CONDUITS AND FITTINGS.
4.3. EMT CONDUITS: SET-SCREW TYPE EXCEPT IN DAMP AND WET LOCATIONS, COMPRESSION TYPE.
5. INSTALL RACEWAY LEVEL AND SQUARE AND AT PROPER ELEVATION TO PROVIDE ADEQUATE HEADROOM. KEEP RACEWAYS AT LEAST 6" AWAY FROM PARALLEL RUNS OF FLUES AND STEAM OR HOT-WATER PIPES. INSTALL HORIZONTAL RACEWAY RUNS ABOVE WATER PIPING.
6. INSTALL NO MORE THAN THE EQUIVALENT OF FOUR 90-DEGREE BENDS IN ANY CONDUIT RUN.
7. CONCEAL CONDUIT AND CABLES WITHIN FINISHED WALLS, CEILINGS, AND FLOORS, UNLESS OTHERWISE INDICATED.
8. MAKE BENDS AND OFFSETS SO THE INSIDE DIAMETER IS NAT REDUCED AND FREE FROM DENTS AND FLATTENING. KEEP LEGS OF BENDS IN THE SAME PLAN AND STRAIGHT LEGS OF OFFSETS PARALLEL.
9. INSTALL EXPOSED RACEWAYS PARALLEL TO OR AT RIGHT ANGLES TO NEARBY SURFACES OR STRUCTURE, FOLLOWING SURFACE CONTOURS AS MUCH AS PRACTICAL. COMPLETE RACEWAY INSTALLATION BEFORE STARTING CONDUCTOR INSTALLATION.
1 0. INSTALL PULL WIRES IN EMPTY RACEWAYS. USE POLYPROPYLENE OR MONOFILAMENT PLASTIC LINE WITH NOT LESS THAN 200-LB TENSILE STRENGTH. LEAVE AT LEAST 12" OF SLACK AT EACH END OF PULL WIRE.
11. INSTALL RACEWAY SEALING FITTINGS AT SUITABLE, APPROVED, AND ACCESSIBLE LOCATIONS AND FILL THEM WITH LISTED SEALING COMPOUND. FOR CONCEALED RACEWAYS, INSTALL EACH FITTING IN A FLUSH STEEL BOX WITH A BLANK COVER PLATE HAVING A FINISH SIMILAR TO THAT OF ADJACENT PLATES OR SURFACES. INSTALL RACEWAY SEALING FITTINGS WHERE CONDUITS PASS FROM WARM TO COLD LOCATIONS, SUCH AS BOUNDARIES OF REFRIGERATED SPACES AND WHERE OTHERWISE REQUIRED BY NFPA 70.
12. USE MAXIMUM OF 72" OF FLEXIBLE CONDUIT FOR EQUIPMENT SUBJECT TO VIBRATION. NOISE TRANSMISSION, OR MOVEMENT; AND FOR TRANSFORMERS AND MOTORS.
13. IN INACCESSIBLE CEILING AREAS, POSITION BOXES WITHIN 6" OF RECESSED LUMINAIRE TO BE ACCESSIBLE THROUGH THE LUMINAIRE CEILING OPENING.
14. BOXES: INSTALL JUNCTION AND OUTLET BOXES AS FOLLOWS.
14.1. PROVIDE A MINIMUM OF 6" SEPARATION BETWEEN BACK-TO-BACK BOXES IN WALLS.
14.2. PROVIDE A MINIMUM OF 24" SEPARATION AND AT LEAST ONE PARTITION STUD BETWEEN BACK-TO-BACK BOXES IN FIRE-RATED PARTITIONS (2-HOURS OR LESS). BOX OPENINGS SHALL NOT EXCEED 16 SQUARE INCHES, WITH A MAXIMUM OF 100 SQUARE INCHES OF OPENING PER 100 SQUARE FEET OF PARTITION AREA.
14.3. USE MULTI-GANG BOXES WHERE MULTIPLE WIRING DEVICES ARE TO BE INSTALLED TOGETHER. DO NOT USE SECTIONAL BOXES.
14.4. PROVIDE PHYSICAL BARRIERS TO SEPARATE WIRING OF DIFFERENT VOLTAGES.
15. INSTALL TEMPORARY CLOSURES ON ALL RACEWAYS DURING CONSTRUCTION TO AVOID DIRT, WATER, AND DEBRIS FROM ENTERING THE RACEWAY SYSTEM.
16. PROVIDE KNOCKOUT PLUGS IN ALL UNUSED OPENINGS IN BOXES, WIREWAYS, AND ENCLOSURES.
17. INSTALL SLEEVES FOR PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES UNLESS OPENINGS COMPATIBLE WITH FIRESTOP SYSTEM USED ARE FABRICATED DURING CONSTRUCTION OF FLOOR OR WALL. CUT SLEEVES TO LENGTH FOR MOUNTING FLUSH WITH BOTH WALL SURFACES AND EXTEND SLEEVES INSTALLED IN FLOORS 2" ABOVE FINISHED FLOOR LEVEL.
18. MAINTAIN REQUIRED FIRE RATING OF WALLS, PARTITIONS, CEILINGS, AND FLOORS AT RACEWAY PENETRATIONS.
19. SEAL ROOF PENETRATION OF INDIVIDUAL RACEWAYS WITH FLEXIBLE, BOOT-TYPE FLASHING UNITS APPLIED IN COORDINATION WITH ROOFING WORK.

ELECTRICAL SYMBOL LEGEND

ALL SYMBOLS MAY NOT BE USED. VERIFY WITH PLANS.
REFER TO SPECIFICATIONS AND PLAN NOTES FOR OTHER REQUIREMENTS

CONDUIT & CIRCUITRY

Symbol	Description
X-#	HOMERUN TO PANELBOARD "X" DENOTES PANELBOARD NAME – "#" DENOTES CIRCUIT NUMBER
X-#	UNDERGROUND HOMERUN TO PANELBOARD "X" DENOTES PANELBOARD NAME – "#" DENOTES CIRCUIT NUMBER
X-#	PARTIAL HOMERUN TO PANELBOARD "X" DENOTES PANELBOARD NAME – "#" DENOTES CIRCUIT NUMBER
	ABOVE / UNDERGROUND CONDUIT WITH WIRE COUNT LINE (HOT OR SWITCH LEG) NEUTRAL EQUIPMENT GROUND ISOLATED GROUND
	CONDUIT STUB-UP TO LEVEL ABOVE CONDUIT STUB-UP FROM BELOW GRADE

EQUIPMENT

Symbol	Description
	277/480 VOLT PANELBOARD – CONNECTED TO NORMAL POWER (EXISTING – NEW – DEMOLITION)
	120/208 VOLT PANELBOARD – CONNECTED TO NORMAL POWER (EXISTING – NEW – DEMOLITION)
	277/480 VOLT PANELBOARD – CONNECTED TO EMERGENCY POWER (EXISTING – NEW – DEMOLITION)
	120/208 VOLT PANELBOARD – CONNECTED TO EMERGENCY POWER (EXISTING – NEW – DEMOLITION)
	DISTRIBUTION SWITCHGEAR/SWITCHBOARD (EXISTING – NEW – DEMOLITION)
	TRANSFORMER – FLOOR-MOUNTED ON 4" HOUSEKEEPING PAD (EXISTING – NEW – DEMOLITION)
	TRANSFORMER – SUSPENDED FROM OVERHEAD STRUCTURE (EXISTING – NEW – DEMOLITION)
30A/3P/1	NON-FUSED DISCONNECT SWITCH (EXISTING – NEW – DEMOLITION) SWITCH SIZE/# OF POLES/NEMA ENCLOSURE
F 30A/3P/25A/3R	FUSED DISCONNECT SWITCH (EXISTING – NEW – DEMOLITION) SWITCH SIZE/# OF POLES/FUSE SIZE/NEMA ENCLOSURE
NEMA "00"/1	MAGNETIC MOTOR STARTER (EXISTING – NEW – DEMOLITION) NEMA STARTER SIZE/NEMA ENCLOSURE
30A/NEMA "0"/3R	COMBO STARTER/DISCONNECT (EXISTING – NEW – DEMOLITION) SWITCH SIZE/NEMA STARTER SIZE/NEMA ENCLOSURE
TC	TIMECLOCK (EXISTING – NEW – DEMOLITION)
CONT	LIGHTING CONTACTOR CABINET (EXISTING – NEW – DEMOLITION)
M	ELECTRICITY METER (UTILITY OR OWNER / KWH OR DEMAND) (EXISTING – NEW – DEMOLITION)
CT	METER CT CABINET (EXISTING – NEW – DEMOLITION)

WIRING DEVICES (REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS)

Symbol	Description	Notes
XX	5-20R SIMPLEX RECEPTACLE (EXISTING – NEW – DEMOLITION)	"XX" DENOTES CONFIG, TYPE, OR MOUNTING HEIGHT
XX	5-20R DUPLEX RECEPTACLE (EXISTING – NEW – DEMOLITION)	GFI-GROUND FAULT CIRCUIT INTERRUPTOR
XX	5-20R QUADRAPLEX RECEPTACLE (EXISTING – NEW – DEMOLITION)	WP-WEATHERPROOF IG-ISOLATED GROUND
XX	SPECIAL RECEPTACLE (EXISTING – NEW – DEMOLITION)	
	5-20R SIMPLEX FLOOR RECEPTACLE / POKE-THROUGH (EXISTING – NEW – DEMOLITION)	
	5-20R DUPLEX FLOOR RECEPTACLE / POKE-THROUGH (EXISTING – NEW – DEMOLITION)	
	5-20R QUADRAPLEX FLOOR RECEPTACLE / POKE-THROUGH (EXISTING – NEW – DEMOLITION)	
	SPECIAL FLOOR RECEPTACLE / POKE-THROUGH (EXISTING – NEW – DEMOLITION)	
J	JUNCTION BOX – FIELD DETERMINE FINAL CONNECTION (EXISTING – NEW – DEMOLITION)	
P	SERVICE POWER POLE – FIELD DETERMINE ACTUAL LENGTH (EXISTING – NEW – DEMOLITION)	
	DIRECT CONNECTION TO EQUIPMENT FIELD VERIFY EXACT CONNECTION LOCATION AND SIZE	
$a	SINGLE POLE TOGGLE SWITCH – "a" DENOTE SWITCH ZONE (EXISTING – NEW – DEMOLITION)	
$3	3-WAY TOGGLE SWITCH (EXISTING – NEW – DEMOLITION)	
$4	4-WAY TOGGLE SWITCH (EXISTING – NEW – DEMOLITION)	
$K	KEYED SINGLE POLE TOGGLE SWITCH (EXISTING – NEW – DEMOLITION)	
$D	DIMMER SWITCH – FIELD VERIFY COMPATIBILITY WITH LOAD TYPE (EXISTING – NEW – DEMOLITION)	
$O	WALL-BOX OCCUPANCY SENSOR SWITCH – FIELD ADJUST (EXISTING – NEW – DEMOLITION)	
OS	CEILING-MOUNTED OCCUPANCY SENSOR – FIELD ADJUST (EXISTING – NEW – DEMOLITION)	
PP	LOW-VOLTAGE SWITCHING POWER PACK (EXISTING – NEW – DEMOLITION)	

COMMUNICATION DEVICES (REFER TO SPECIFICATIONS FOR MOUNTING HEIGHTS)

Symbol	Description
	WALL COMM. ROUGH-IN – 1" C. WITH PULLSTRING TO A.C. (EXISTING – NEW – DEMOLITION)
	FLOOR COMM. ROUGH-IN – 1" C. WITH PULLSTRING TO A.C. (EXISTING – NEW – DEMOLITION)

LIGHTING ("X" DENOTES TYPE – REFER TO FIXTURE SCHEDULE)

Symbol	Description
X	FLUORESCENT FIXTURE – RECESSED OR SURFACE (EXISTING/NEW – DEMOLITION) (2'x4' SHOWN, OTHERS SIMILAR)
X	EMERGENCY/NIGHTLIGHT FIXTURE – RECESSED OR SURFACE (EXISTING/NEW – DEMOLITION) (2'x4' SHOWN, OTHERS SIMILAR)
X	FLUORESCENT STRIP FIXTURE (EXISTING/NEW – DEMOLITION) (4' SHOWN, OTHERS SIMILAR)
X	EMERGENCY/NIGHTLIGHT STRIP FIXTURE (EXISTING/NEW – DEMOLITION) (4' SHOWN, OTHERS SIMILAR)
X	DOWNLIGHT / WALL-WASHER – RECESSED OR SURFACE (EXISTING/NEW – DEMOLITION)
X	EMERGENCY/NIGHTLIGHT DOWNLIGHT / WALL-WASHER (EXISTING/NEW – DEMOLITION) – RECESSED OR SURFACE
X	DECORATIVE WALL SCONCE – VERIFY MOUNTING HEIGHT (EXISTING/NEW – DEMOLITION)
X	TRACK SECTION AND HEADS – PROVIDE ALL APPURTENANCES (EXISTING/NEW – DEMOLITION)
X	EXTERIOR WALL PACK – VERIFY MOUNTING HEIGHT (EXISTING/NEW – DEMOLITION)
X	EXTERIOR RECTANGULAR FIXTURE ON POLE – VERIFY CONFIG. (EXISTING/NEW – DEMOLITION)
X	EXTERIOR ROUND FIXTURE ON POLE – VERIFY CONFIG. (EXISTING/NEW – DEMOLITION)
X	EMERGENCY LIGHTING UNIT (EXISTING – NEW – DEMOLITION)
X	WALL-MOUNTED EXIT SIGN – SHADING DENOTE FACE (EXISTING – NEW – DEMOLITION) – ARROWS DENOTE CHEVRONS
X	CEILING-MOUNTED EXIT SIGN – SHADING DENOTE FACE (EXISTING – NEW – DEMOLITION) – ARROWS DENOTE CHEVRONS
X	COMBO EXIT SIGN / LIGHTING UNIT – SHADING DENOTE FACE (EXISTING – NEW – DEMOLITION) – ARROWS DENOTE CHEVRONS

FIRE ALARM

Symbol	Description
FACP	FIRE ALARM CONTROL PANEL (EXISTING – NEW – DEMOLITION)
ANN	FIRE ALARM REMOTE ANNUNCIATOR PANEL (EXISTING – NEW – DEMOLITION)
FARP	FIRE ALARM REMOTE PANEL (EXISTING – NEW – DEMOLITION)
SD	SMOKE DETECTOR – CEILING MOUNTED – CENTER IN TILE (EXISTING – NEW – DEMOLITION)
HD	HEAT DETECTOR – CEILING MOUNTED – CENTER IN TILE (EXISTING – NEW – DEMOLITION)
FD	FLAME DETECTOR – CEILING MOUNTED – CENTER IN TILE (EXISTING – NEW – DEMOLITION)
SD	SMOKE DETECTOR – DUCT/UNIT MOUNTED WITH SAMPLING TUBE (EXISTING – NEW – DEMOLITION)
F	MANUAL FIRE ALARM PULLSTATION (EXISTING – NEW – DEMOLITION)
F	FIRE FIGHTER TELEPHONE JACK (EXISTING – NEW – DEMOLITION)
FS	FIRE PROTECTION SYSTEM FLOW SWITCH (EXISTING – NEW – DEMOLITION)
TS	FIRE PROTECTION VALVE TAMPER SWITCH (EXISTING – NEW – DEMOLITION)
G	FIRE PROTECTION SYSTEM WATER GONG (EXISTING – NEW – DEMOLITION)
B	FIRE PROTECTION SYSTEM ELECTRIC BELL (EXISTING – NEW – DEMOLITION)
DH	ELECTRO-MAGNETIC DOOR HOLD (EXISTING – NEW – DEMOLITION)
V	VISUAL STROBE – WALL MOUNTED – 110cd UNO (EXISTING – NEW – DEMOLITION)
H	AUDIBLE HORN – WALL MOUNTED (EXISTING – NEW – DEMOLITION)
S	SPEAKER – WALL MOUNTED (EXISTING – NEW – DEMOLITION)
HV	COMBINATION HORN/STROBE – WALL MOUNTED – 110cd UNO (EXISTING – NEW – DEMOLITION)
SV	COMBINATION SPEAKER/STROBE – WALL MOUNTED – 110cd UNO (EXISTING – NEW – DEMOLITION)
V	VISUAL STROBE – CEILING MOUNTED – 110cd UNO (EXISTING – NEW – DEMOLITION) – CENTER IN TILE
H	AUDIBLE HORN – CEILING MOUNTED (EXISTING – NEW – DEMOLITION) – CENTER IN TILE
S	SPEAKER – CEILING MOUNTED (EXISTING – NEW – DEMOLITION) – CENTER IN TILE
HV	COMBINATION HORN/STROBE – CEILING MOUNTED – 110cd UNO (EXISTING – NEW – DEMOLITION) – CENTER IN TILE
SV	COMBINATION SPEAKER/STROBE – CLG MOUNTED – 110cd UNO (EXISTING – NEW – DEMOLITION) – CENTER IN TILE

SECURITY / ACCESS

Symbol	Description
CR	CARD READER (EXISTING – NEW – DEMOLITION)
ML	ELECTRO-MAGENTIC DOOR LOCK (EXISTING – NEW – DEMOLITION)
EL	ELECTRONIC DOOR LATCH (EXISTING – NEW – DEMOLITION)
	PUSHBUTTON (EXISTING – NEW – DEMOLITION)

CONSTRUCTION NOTES

1. ALL ELECTRICAL INSTALLATIONS SHALL COMPLY WITH THE 2017 NATIONAL ELECTRIC CODE.

DATE

MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: KDC
DESIGNER: KDC
REVIEWED: DIO

PROJECT #
18SM2079.82

REGISTERED PROFESSIONAL ENGINEER
No. 169278
DON I. OLSEN
3/12/20
STATE OF UTAH

SCALES

1" = 100'-0"

BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST FOR A HALF SIZE SHEET.

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:
ELECTRICAL SYMBOLS & NOTES

PLAN SET: PERMIT

SHEET E0.1

SECTION 26 22 00 - LOW-VOLTAGE TRANSFORMERS

1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS INCLUDE, BUT ARE NOT LIMITED TO; ACME ELECTRIC, EATON CUTLER-HAMMER, GE, SIEMENS, AND SQUARE D.
2. GENERAL TRANSFORMER REQUIREMENTS: FACTORY-ASSEMBLED AND -TESTED, AIR-COOLED UNITS FOR 60-HZ SERVICE, WITH ONE RAIN-ORIENTED, NON-AGING SILICON STEEL CORE PER LEG AND CONTINUOUS WINDINGS WITHOUT SPLICES EXCEPT FOR TAPS. CORES AND COILS SHALL BE ENCAPSULATED WITHIN RESIN COMPOUND, SEALING OUT MOISTURE AND AIR. ENCLOSURE SHALL BE VENTILATE, NEMA TYPE 2, EXCEPT FOR EXTERIOR INSTALLATION SHALL BE TYPE 3R.
3. GENERAL PURPOSE DISTRIBUTION TRANSFORMERS
3.1. WINDINGS: ONE COIL PER PHASE IN PRIMARY AND SECONDARY.
3.2. TAPS FOR TRANSFORMERS 7.5 TO 24 KVA: ONE 5 PERCENT TAP ABOVE AND ONE 5 PERCENT TOP BELOW NORMAL FULL CAPACITY.
3.3. TAPS FOR TRANSFORMERS 25 KVA AND LARGER: TWO 2.5 PERCENT TAPS ABOVE AND TWO 2.5 PERCENT TAPS BELOW NORMAL FULL CAPACITY.
3.4. INSULATION CLASS: 220 DEG C, UL -COMPONENT-RECOGNIZED INSULATION SYSTEM WITH A MAXIMUM OF 150 DEG C RISE ABOVE 40 DEG C AMBIENT TEMPERATURE.
3.5. TRANSFORMERS SHALL HAVE AN EFFICIENCY RATING IN COMPLIANCE WITH NEMA TP1, CLASS 1 EFFICIENCY LEVELS.
4. DRAWINGS INDICATE DIMENSIONS FOR SELECTED PANEL BOARDS INCLUDING CLEARANCES. COORDINATE LAYOUT AND INSTALLATION OF TRANSFORMERS WITH OTHER CONSTRUCTION THAT PENETRATES WALLS OR IS SUPPORTED BY THEM. MAINTAIN REQUIRED WORKSPACE CLEARANCES AND REQUIRED CLEARANCES FOR EQUIPMENT ACCESS DOORS AND PANELS.
5.INSTALL FLOOR-MOUNTED TRANSFORMER ON CONCRETE HOUSEKEEPING PAD WITH VIBRATION ISOLATION PADS TO PREVENT TRANSMISSION OF TRANSFORMER VIBRATION.
6. INCOMING AND OUTGOING RACEWAY SHALL BE FLEXIBLE TO PREVENT TRANSMISSION OF TRANSFORMER VIBRATION. INSTALL BANDING JUMPER ON EXTERIOR OF THE FLEXIBLE RACEWAY.
7. GROUND EQUIPMENT ACCORDING TO NFPA 70 FOR A SEPARATELY DERIVED SYSTEM AND DIVISION 26 SECTION "GROUNDING AND BANDING FOR ELECTRICAL SYSTEMS."
8. RECORD TRANSFORMER SECONDARY VOLTAGE AT EACH UNIT FOR AT LEAST 48 HOURS OF TYPICAL OCCUPANCY PERIOD. ADJUST TRANSFORMER TAPS TO PROVIDE OPTIMUM VOLTAGE CONDITIONS AT SECONDARY TERMINALS. OPTIMUM IS DEFINED AS NOT EXCEEDING NAMEPLATE VOLTAGE PLUS 10 PERCENT AND NOT BEING LOWER THAN NAMEPLATE VOLTAGE MINUS 3 PERCENT AT MAXIMUM LOAD CONDITIONS. SUBMIT RECORDING AND TAP SETTINGS AS TEST RESULTS.

SECTION 26 05 53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

1. VERIFY IDENTITY OF EACH ITEM BEFORE INSTALLING IDENTIFICATION PRODUCTS.
2. APPLY IDENTIFICATION DEVICES TO SURFACES THAT REQUIRE FINISH OR CLEANING AFTER COMPLETING WORK.
3. ATTACH SIGNS AND PLASTIC LABELS WITH MECHANICAL FASTENERS APPROPRIATE TO THE LOCATION AND SUBSTRATE.
4. IDENTIFY CONDUCTORS IN ENCLOSURES AND BOXES, USING COLOR-CODING TO IDENTIFY THE PHASE, FACTORY APPLIED OR FIELD APPLIED CONDUCTOR TAPE OR CABLE TIES FOR SIZES LARGER THAN #8 AWG. LOCATE BANDS OF TAPE OF TIES WITHIN 6" FROM TERMINATION AND AVOID OBSCURING FACTORY CABLE MARKINGS.
4.1. COLORS FOR 208/120V CIRCUITS:
4.1.1. PHASE A: BLACK.
4.1.2. PHASE B: RED,
4.1.3. PHASE C: BLUE.
4.1.4. NEUTRAL: WHITE.
4.1.5. GROUND: GREEN
4.2. COLORS FOR 480/277V CIRCUITS:
4.2.1. PHASE A: BROWN.
4.2.2. PHASE B: PURPLE.
4.2.3. PHASE C: YELLOW.
4.2.4. NEUTRAL: GRAY,
4.2.5. GROUND: GREEN
5. APPLY SELF-ADHESIVE FACTORY PRINT CIRCUIT NUMBER FOR CIRCUIT DESIGNATION AT EACH ENCLOSURE, BOX, AND DEVICE.
6. IDENTIFY THE COVERS OF EACH JUNCTION AND PULL BOX OF THE FOLLOWING SYSTEMS WITH FIELD-APPLIED PAINT. AFTER PAINT HAS BEEN APPLIED, PROVIDE PERMANENT WRITTEN IDENTIFICATION OF THE SOURCE AND CIRCUIT NUMBER, SIZES OF LETTERS SHALL BE APPROPRIATE FOR VIEWING FROM THE FLOOR. SYSTEM COLOR LEGENDS SHALL BE OS FOLLOWS:
6.1. GENERAL POWER: NO COLOR
6.2. FIRE ALARM AND PROTECTION: RED.
6.3. SECURITY SYSTEM: BLUE.
6.4. TELECOMMUNICATION: ORANGE.
7. ATTACH MARKER TAPE TO CONDUCTORS TO BE EXTENDED IN THE FUTURE AND LIST THEIR USEAGE.
8.1NSTALL 2" WIDE PRESSURE-SENSITIVE VINYL FLOOR MARKING TAPE WITH BLACK AND YELLOW' STRIPES TO SHOW WORKING CLEARANCES IN THE DIRECTION OF ACCESS TO LIVE PARTS. WORKSPACE SHALL BE AS REQUIRED BY NFPA 70 AND 29 CFR 1926.403. INSTALL WARNING LABEL ON EQUIPMENT WHICH READS "WARNING - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES." DISTANCE INDICATED SHALL BE AS DEFINED IN NFPA 70. DO NOT INSTALL FLOOR MARKINGS OR WARNING SIGNS IN FINISHED SPACES.
9. INSTALL UNDERGROUND-LINE WARNING TAPE AS RECOMMENDED BY MANUFACTURER FOR THE METHOD OF INSTALLATION AND SUITABLE TO IDENTIFY AND LOCATE UNDERGROUND POWER AND COMMUNICATIONS UTILITY LINES. USE RED-COLOR TAPES FOR ELECTRICAL WITH INSCRIPTION OF "ELECTRICAL LINE - HIGH VOLTAGE" AND ORANGE-COLORED TAPES FOR COMMUNICATION WITH INSCRIPTION OF "TELEPHONE CABLE, CAW CABLE, OR COMMUNICATION CABLE." DURING BACKFILLING OF TRENCHES INSTALL CONTINUOUS UNDERGROUND-LINE WARNING TAPE DIRECTY ABOVE LINE AT 6"-8" BELOW FINISHED GRADE.
1 0. INSTALL UNIQUE DESIGATION ENGRAVED, LAMINATED ACRYLIC OR MELAMINE LABEL WITH STAINLESS-STEEL MACHINE SCREWS WITH NUTS ON EACH PIECE OF EQUIPMENT. PROVIDE A SINGLE LINE OF TEXT WITH 1/2" HIGH LETTERS ON 1-1/2" HIGH LABEL; WHERE TWO LINES OF TEXT ARE REQUIRED, USE LABELS 2" HIGH. FOR ELEVATED COMPONENTS, INCREASE SIZES OF LABELS AND LETTERS TO THOSE APPROPRIATE FOR VIEWING FROM THE FLOOR. LABEL SHALL INDICATE EQUIPMENT OR ITEM NAME/DESIGNATION, SERVICE VOLTAGE, SOURCE OF SERVICE, AND FOR SEPARATELY DERIVED SYSTEM, EQUIPMENT SUPPLIED BY SYSTEM. LABEL THE FOLLOWING EQUIPMENT:
1 0.1. SWITCHBOARDS, SWITCHGEAR, MOTOR CONTROL CENTERS, PANELBOARDS, AND OVERCURRENT PROTECTION DEVICES WITHIN THEM.
1 0.2. CONTACTORS, PUSH-BUTTONS, ENCLOSURES, CABINETS, ENCLOSED SWITCHES AND CONTROLLERS.
1 0.3. TRANSFORMERS
1 0.4. MONITORING AND CONTROL EQUIPMENT.

SECTION 26 24 16 - PANELBOARDS

1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS INCLUDE, BUT ARE NOT LIMITED TO; EATON CUTLER-HAMMER, GE, SIEMENS, AND SQUARE D.
2. ENCLOSURES: SURFACE-MOUNTED CABINETS, RATED FOR ENVIRONMENTAL CONDITIONS AT INSTALLED LOCATION. BACK BOX AND TRIM/DOOR SHALL BE GALVANIZED STEEL, WITH MANUFACTURER'S STANDARD BAKED-ON FINISH APPLIED TO THE TRIM/DOOR.
3. TRIM/DOOR: PROVIDE TRIM WITH ENTIRE FRONT TRIM HINGED TO BOX AND WITH STANDARD DOOR WITHIN HINGED TRIM COVER. DOOR SHALL SECURE WITH VAULT-TYPE LATCH WITH TUMBLER LOCK, ALL KEYED ALIKE. PROVIDE METAL FRAMED DIRECTORY CARD WITH TRANSPARENT PROTECTIVE COVER ON INSIDE OF DOOR.
4. BUSSING: HARD-DRAWN, 98% CONDUCTIVITY COPPER OF CAPACITY INDICATED. WHERE INDICATED PROVIDE OVERSIZED NEUTRAL BUSSING. PROVIDE EQUIPMENT GROUND BUS OF ADEQUATE SIZE FOR ALL CONDUCTOR TERMINATIONS, BANDED TO BOX. WHERE INDICATED, PROVIDE ISOLATED GROUND BUS OF ADEQUATE SIZE FOR ALL CONDUCTOR TERMINATIONS, INSULATED FROM BOX.
5. MAINS: CIRCUIT BREAKER OR LUGS ONLY, AS INDICATED. CONDUCTOR CONNECTIONS SHALL BE COMPRESSION TYPE, SUITABLE FOR USE WITH CONDUCTOR MATERIAL AND SIZES. PROVIDE FEED-THROUGH LUGS AT THE OPPOSITE END OF BUS FROM INCOMING MAINS, WHERE INDICATED.
6.INSTALL SERVICE EQUIPMENT LABEL FOR PANELBOARDS WITH ONE OR MORE MAIN SERVICE DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES.
7. PANEL BOARD SHORT-CIRCUIT CURRENT RATING: RATED FOR SERIES-CONNECTED SYSTEM WITH INTEGRAL OR REMOTE UPSTREAM OVERCURRENT PROTECTIVE DEVICES.
B. BRANCH OVERCURRENT PROTECTIVE DEVICES: BOLT-ON MOLDED-CASE CIRCUIT BREAKERS. PANELBOARD SHALL HAVE MOUNTING BRACKETS, BUS CONNECTIONS, FILLER PLATES, AND NECESSARY APPURTENANCES REQUIRED FOR FUTURE INSTALLATION OF DEVICES WITHOUT DISRUPTING EXISTING DEVICES.
9. MOLDED-CASE CIRCUIT BREAKER (MCCB): WITH INTERRUPTING CAPACITY TO MEET AVAILABLE FAULT CURRENTS AND APPLICATION LISTED FOR CONNECT LOAD.
9.1. MCCB NOT LARGER THAN 400A: THERMAL-MAGNETIC CIRCUIT BREAKER, INVERSE TIME-CURRENT ELEMENT FOR LOW-LEVEL OVERLOADS, AND INSTANTANEOUS MAGNETIC TRIP ELEMENT FOR SHORT CIRCUITS. ADJUSTABLE MAGNETIC TRIP SETTING FOR CIRCUIT-BREAKER FRAME SIZES 200A AND LARGER.
9.2. MCCB 400A AND LARGER: ELECTRONIC TRIP CIRCUIT BREAKER WITH RMS SENSING, FIELD-REPLACEABLE RATING PLUG OR FIELD-REPLICABLE ELECTRONIC TRIP, AND THE FOLLOWING FIELD-ADJUSTABLE INSTANTANEOUS TRIP, LONG- AND SHORT-TIME PICKUP LEVELS, LONG- AND SHORT-TIME TIME ADJUSTMENTS, GROUND-FAULT PICKUP LEVEL, TIME DELAY, AND 12T RESPONSE.
9.3. LUGS: MECHANICAL STYLE, SUITABLE FOR NUMBER, SIZE, TRIP RATINGS, AND CONDUCTOR MATERIALS.
9.4. MULTI-POLE UNITS ENCLOSED HAVE A SINGLE HOUSING.
9.5. GROUND-FAULT CIRCUIT INTERRUPTION (GFI): WHERE INDICATED OR REQUIRED, CLASS A GROUND-FAULT PROTECTION (6-MA TRIP) INTEGRALLY MOUNTED RELAY AND TRIP UNIT WITH ADJUSTABLE PICKUP AND TIME-DELAY SETTINGS, PUSH-TO-TEST FEATURE, AND GROUND-FAULT INDICATOR.
9.6. SHUNT TRIP: WHERE INDICATED, 120V TRIP COIL ENERGIZED FROM SEPARATE CIRCUIT, SET TO TRIP AT 75% OF RATED VOLTAGE.
9.7. KEY INTERLOCK: WHERE INDICATED, EXTERNALLY MOUNTED TO PROHIBIT CIRCUIT-BREAKER OPERATION; KEY SHALL BE REMOVABLE ONLY WHEN CIRCUIT BREAKER IS IN OFF POSITION.
9.8. SET FIELD-ADJUSTABLE CIRCUIT-BREAKER TRIP RANGES AS INDICATED.
10. MOUNT PANELBOARD CABINET PLUMB AND RIGID WITHOUT DISTORTION OF BOX WITH TOP OF TRIM 72" AFF.
11. DRAWINGS INDICATE DIMENSIONS FOR SELECTED PANELBOARDS INCLUDING CLEARANCES. COORDINATE LAYOUT AND INSTALLATION OF PANELBOARDS AND COMPONENTS WITH OTHER CONSTRUCTION THAT PENETRATES WALLS OR IS SUPPORTED BY THEM. MAINTAIN REQUIRED WORKSPACE CLEARANCES AND REQUIRED CLEARANCES FOR EQUIPMENT ACCESS DOORS AND PANELS.
12. SURFACE-MOUNTED PANELBOARDS: INSTALL ENCLOSURE WITH 1/4" MINIMUM GAP BETWEEN ENCLOSURE AND WALL SURFACE.
13. INSTALL FILLER PLATES IN UNUSED SPACES.
14. WHEN ADDING NEW OVERCURRENT PROTECTION DEVICES TO EXISTING PANELBOARDS, INSTALL DEVICES OF THE SAME INTERRUPTING RATING, STYLE AND FROM THE SOME MANUFACTURER AS THE REMAINDER OF THE PANELBOARD.
15. CREATE A DIRECTORY TO INDICATE INSTALLED CIRCUIT LOADS AFTER BALANCING PANELBOARD LOADS; INCORPORATE FINAL ROOM DESIGNATIONS. USE A COMPUTER OR TYPEWRITER TO CREATE DIRECTORY.
16. LOAD BALANCING: AFTER SUBSTANTIAL COMPLETION, BUT NOT MORE THAN 60 DAYS AFTER FINAL ACCEPTANCE, MEASURE LOAD BALANCING AND MAKE CIRCUIT CHANGES TO BALANCE PHASE LOADS TO LESS THAN 20% PHASE IMBALANCE. MEASURE DURING PERIOD OF NORMAL SYSTEM LOADING. HOWEVER, PERFORM LOAD-BALANCING CIRCUIT CHANGES OUTSIDE NORMAL OCCUPANCY/WORKING SCHEDULE AT TIME DIRECTED. AFTER CIRCUIT CHANGES, RECHECK LOADS DURING NORMAL LOAD PERIOD AND RE-BALANCE AS NEEDED. RECORD ALL LOAD READINGS BEFORE AND AFTER CHANGES AND SUBMIT TEST RECORDS.

SECTION 26 27 26 - WIRING DEVICES

1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS INCLUDE, BUT ARE NOT LIMITED TO; COOPER, HUBBELL, LEVITON, LUTRON, AND PASS & SEYMOUR. THE FOLLOWING MODEL NUMBERS FOR PASS & SEYMOUR ARE FOR REFERENCE. DEVICE SHALL MATCH EXISTING BUILDING STANDARD, IF APPLICABLE. IF DEVICE STYLE IS NOT INDICATED BY THE ARCHITECT, THEY SHALL BE "DECORATOR" STYLE OS INDICATED BELOW.
2. CONVENIENCE RECEPTACLES, 125V, 20A: NEMA 5-20R, P&S #26361 (SINGLE), P&S #26352 (DUPLEX).
3. GFI RECEPTACLES, 125V, 20A: NEMA 5-20R, P&S #2094. STRAIGHT BLADE, NON-FEED-THROUGH TYPE, INCLUDING INDICATOR LIGHT THAT IS LIGHTED WHEN DEVICE IS TRIPPED.
4. SNAP SWITCHES, 120/277V, 20A: P&S #2621 (SINGLE POLE), P&S 2622 (TWO POLE), P&S 2623 (THREE WAY), P&S 2624 (FOUR WAY).
5. OCCUPANCY SENSORS
5.1. WALL-SWITCH SENSORS: HUBBELL #LHMTS1, ADAPTIVE-, DUAL TECHNOLOGY TYPE, 120/277 V, ADJUSTABLE TIME DELAY UP TO 30 MINUTES, 100-DEGREE FIELD OF VIEW, WITH A MINIMUM COVERAGE AREA OF 1000 SQ. FT.
5.2. CEILING-MOUNTED SENSORS: HUBBELL #OMNI-DT, ADAPTIVE-, DUAL TECHNOLOGY TYPE, SELF-ADJUSTING TIME DELAY UP TO 30 MINUTES, 360-DEGREE FIELD OF VIEW, WITH A MINIMUM COVERAGE OF 2000 SQ. FT. PROVIDE HUBBELL #UPI UNIVERSAL VOLTAGE POWER SWITCH PACK TO POWER SENSORS AND CONTROL LIGHTING CIRCUIT. CONNECT MULTIPLE SENSORS TO SINGLE POWER SWITCH PACK AS INDICATED.
6. WALL PLATES: SINGLE AND COMBINATION TYPES TO MATCH CORRESPONDING WIRING DEVICES. DO NOT USE OVERSIZED OR EXTRA-DEEP PLATES. REPAIR WALL FINISHES AND REMOUNT OUTLET BOXES WHEN STANDARD DEVICE PLATES DO NOT FIT FLUSH OR DO NOT COVER ROUGH WALL OPENING.
6.1. PLATE-SECURING SCREWS: METAL WITH HEAD COLOR TO MATCH PLATE FINISH.
6.2. FINISHED SPACES: SMOOTH, HIGH-IMPACT THERMOPLASTIC.
6.3. UNFINISHED SPACES: GALVANIZED STEEL.
6.4. DAMP AND WET LOCATIONS: CAST ALUMINUM WITH SPRING-LOADED LIFT COVER, AND LISTED AND LABELED FOR USE IN "WET LOCATIONS."
7. DEVICE COLOR: WIRING DEVICE CATALOG NUMBERS IN SECTION TEXT DO NOT DESIGNATE DEVICE COLOR. UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS, PROVIDE THE FOLLOWING COLORS.
7.1. DEVICES CONNECTED TO NORMAL POWER: MATCH EXISTING OR WHITE, UNLESS OTHERWISE INDICATED OR REQUIRED BY NFPA 70.
7.2. DEDICATED DEVICE CONNECTED TO NORMAL POWER: ORANGE.
8. MOUNTING HEIGHT: UNLESS INDICATED OTHERWISE, INSTALL DEVICES AT THE FOLLOWING HEIGHTS ABOVE FINISH FLOOR TO THE CENTER OF THE BOX. (VERIFY HEIGHTS WITH ARCHITECT PRIOR TO INSTALL.)
8.1. GENERAL RECEPTACLES: 18".
8.2. LIGHTING SWITCHES AND DIMMERS: 42".
8.3. ABOVE-COUNTER RECEPTACLES: 42" OR 6" ABOVE COUNTER HEIGHT, WHICHEVER IS HIGHER.
9. PROTECTION: KEEP OUTLET BOXES FREE OF PLASTER, DRYWALL JOINT COMPOUND, MORTAR, CEMENT, CONCRETE, DUST, PAINT, AND OTHER MATERIAL THAT MAY CONTAMINATE THE RACEWAY SYSTEM, CONDUCTORS, AND CABLES. INSTALL WIRING DEVICES AFTER ALL WALL PREPARATION, INCLUDING PAINTING, IS COMPLETE.
10. REPLACE ALL DEVICES THAT HAVE BEEN IN TEMPORARY USE DURING CONSTRUCTION OR THAT SHOW SIGNS THAT THEY WERE INSTALLED BEFORE BUILDING FINISHING OPERATIONS WERE COMPLETE.
11. WHEN CONDUCTORS LARGER THAN #12 AWG ARE INSTALLED ON 15A OR 20A CIRCUITS, SPLICE #12 AWG PIGTAILS FOR DEVICE CONNECTIONS.
12. WHEN MOUNTING INTO METAL BOXES, REMOVE THE FIBER OR PLASTIC WASHERS USED TO HOLD DEVICE MOUNTING SCREWS IN YOKES, ALLOWING METAL-TO-METAL CONTACT.
13. INSTALL GROUND PIN OF VERTICALLY MOUNTED RECEPTACLES UP, AND ON HORIZONTALLY MOUNTED RECEPTACLES TO THE LEFT.
14. DEVICE PLATES: DO NOT USE OVERSIZED OR EXTRA-DEEP PLATES. REPAIR WALL FINISHES AND REMOUNT OUTLET BOXES WHEN STANDARD DEVICE PLATES DO NOT FIT FLUSH OR DO NOT COVER ROUGH WALL OPENING.
15. ARRANGEMENT OF DEVICES: GROUP ADJACENT SWITCHES UNDER SINGLE, MULTIGANG WALL PLATES.
16. IDENTIFY PANELBOARD AND CIRCUIT NUMBER FROM WHICH SERVED. USE DURABLE WIRE MARKERS OR TAGS INSIDE OUTLET BOXES.
17. TEST CONVENIENCE RECEPTACLES WITH DIGITAL WIRING ANALYZER WITH DIGITAL OR LED INDICATORS.
17.1. LINE VOLTAGE: ACCEPTABLE RANGE IS 1 05V TO 132V.
17.2. PERCENT VOLTAGE DROP UNDER 15A LOAD: A VALUE OF 6% OR HIGHER IS NOT ACCEPTABLE.
17.3. GFI TRIP: TEST FOR TRIPPING VALUES SPECIFIED IN UL 1436 AND UL 943.
17.4. USING THE TEST PLUG, VERIFY THAT THE DEVICE AND ITS OUTLET BOX ARE SECURELY MOUNTED.

SECTION 26 28 13 - FUSES

1. SUBMITTAL: IN ADDITION TO THE REQUIREMENTS OF DIVISION 1 PROVIDE CURRENT-LIMITATION CURVES, TIME-CURRENT COORDINATION CURVES (AVERAGE MELT), CURRENT-LIMITATION CURVES (INSTANTANEOUS PEAK LET-THROUGH CURRENT), AND COORDINATION CHARTS AND TABLES FOR EACH TYPE AND RATING OF FUSE.
2. EXTRA MATERIALS: FURNISH EXTRA FUSES; AT LEAST 10% OF QUANTITY INSTALLED FOR EACH TYPE AND SIZE, BUT NOT LESS THAN 3 OF EACH; THAT MATCH PRODUCTS INSTALLED.
3. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS INCLUDE, BUT ARE NOT LIMITED TO; BUSSMANN AND LITTELFUSE.
4. CARTRIDGE FUSES: NONRENEWABLE CARTRIDGE FUSES WITH VOLTAGE RATINGS CONSISTENT WITH CIRCUIT VOLTAGES.
4.1. SERVICE ENTRANCE: CLASS T, FAST ACTING.
4.2. FEEDERS: CLASS RK1, FAST ACTING.
4.3. MOTOR BRANCH CIRCUITS: CLASS RK1, TIME DELAY.
4.4. OTHER BRANCH CIRCUITS: CLASS RK5, TIME DELAY.
4.5. CONTROL CIRCUITS: CLASS CC, FAST ACTING.
5. EXAMINE EQUIPMENT, FUSES, AND HOLDERS BEFORE INSTALLATION FOR CHARACTERISTICS, TOLERANCES, AND DAMAGE. REPLACE FUSES THAT ORE MOISTURE DAMAGED OR PHYSICALLY DAMAGED. INSTALL FUSES OF SIZES AND WITH CHARACTERISTICS APPROPRIATE FOR EACH PIECE OF EQUIPMENT.
6.1NSTALL FUSES IN FUSIBLE DEVICES. ARRANGE FUSES SO RATING INFORMATION IS READABLE WITHOUT REMOVING FUSE.
7. INSTALL LABELS INDICATING FUSE REPLACEMENT INFORMATION ON INSIDE DOOR OF EACH FUSED SWITCH AND ADJACENT TO EACH FUSE BLOCK, SOCKET, AND HOLDER.
8. SPARE-FUSE CABINET: WALL-MOUNTED STEEL UNIT WITH FULL-LENGTH, RECESSED PIANO-HINGED DOOR AND KEY-CODED CAM LOCK AND PULL SIZED FOR ADEQUATE STORAGE OF SPARE FUSES SPECIFIED WITH 15% SPARE CAPACITY MINIMUM. PROVIDE 2 FUSE PULLERS FOR EACH SIZE OF FUSE FROM FUSE MANUFACTURER.

SECTION 26 28 16 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

1. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS INCLUDE, BUT ARE NOT LIMITED TO; EATON CUTLER-HAMMER, GE, SIEMENS, AND SQUARE D.
2. FUSIBLE / NON-FUSIBLE SWITCHES
2.1. FUSIBLE SWITCH - HEAVY DUTY, SINGLE THROW, 600V: UL 98 AND NEMA KS 1, HORSEPOWER RATED, WITH CLIPS OR BOLT PADS TO ACCOMMODATE SPECIFIED FUSES, LOCKABLE HANDLE WITH CAPABILITY TO ACCEPT THREE PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION.
2.2. NON-FUSIBLE SWITCH - HEAVY DUTY, SINGLE THROW, 600V: UL 98 AND NEMA KS 1, HORSEPOWER RATED, LOCKABLE HANDLE WITH CAPABILITY TO ACCEPT THREE PADLOCKS, AND INTERLOCKED WITH COVER IN CLOSED POSITION.
2.3. EQUIPMENT GROUND KIT: INTERNALLY MOUNTED AND LABELED FOR COPPER AND ALUMINUM GROUND CONDUCTORS.
2.4. NEUTRAL KIT: INTERNALLY MOUNTED; INSULATED, CAPABLE OF BEING GROUNDED AND BANDED; LABELED FOR COPPER AND ALUMINUM NEUTRAL CONDUCTORS.
3. SERVICE-RATED SWITCHES: WHERE APPLICABLE, LABELED FOR USE AS SERVICE EQUIPMENT.
4. DRAWINGS INDICATE DIMENSIONS FOR SELECTED PANELBOARDS INCLUDING CLEARANCES. COORDINATE LAYOUT AND INSTALLATION OF SWITCHES AND BREAKERS WITH OTHER CONSTRUCTION THAT PENETRATES WALLS OR IS SUPPORTED BY THEM. MAINTAIN REQUIRED WORKSPACE CLEARANCES AND REQUIRED CLEARANCES FOR EQUIPMENT ACCESS DOORS AND PANELS.
5.INSTALL INDIVIDUAL WALL-MOUNTED SWITCHES AND CIRCUIT BREAKERS WITH TOPS AT UNIFORM HEIGHT UNLESS OTHERWISE INDICATED.
6.INSTALL FUSES IN FUSIBLE DEVICES.

SECTION 26 51 00 - INTERIOR LIGHTING SECTION 28 31 11 - DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

1. SUBMITTAL: IN ADDITION TO THE REQUIREMENTS OF DIVISION 1 PROVIDE FOR EACH TYPE OF LIGHTING FIXTURE, ARRANGED IN ORDER OF FIXTURE DESIGNATION, THE FOLLOWING:
1.1. EMERGENCY LIGHTING UNITS INCLUDING BATTERY AND CHARGER.
1.2. BALLAST, INCLUDING BF.
1.3. LIFE, OUTPUT (LUMENS, CCT, AND CRI), AND ENERGY-EFFICIENCY DATA FOR LAMPS.
1.4. PHOTOMETRIC DATA BASED ON LABORATORY TESTS OF EACH LIGHTING FIXTURE TYPE, BY A CERTIFIED MANUFACTURER'S LABORATORY.
1.5. SPECIAL WARRANTY.
2. SPECIAL WARRANTY PERIODS: 10 YEARS FAR EMERGENCY LIGHTING UNIT BATTERIES AND 7 YEARS FOR EMERGENCY FLUORESCENT BALLAST AND SELF-POWERED EXIT SIGN BATTERIES. WARRANTIES SHALL BE FROM DATE OF FINAL ACCEPTANCE. FULL WARRANTY SHALL APPLY FOR FIRST YEAR, AND PRORATED WARRANTY FOR THE REMAINING YEARS.
3. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, AVAILABLE PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, PRODUCT(S) INDICATED ON THE LIGHTING FIXTURE SCHEDULE.
4.DIFFUSERS, LENSES AND GLOBES: ACRYLIC SHALL BE 1/8" MINIMUM, 100 % VIRGIN UV STABILIZED ACRYLIC PLASTIC WITH A HIGH RESISTANCE TO YELLOWING AND OTHER CHANGES DUE TO AGING, EXPOSURE TO HEAT, AND UV RADIATION. GLASS SHALL BE ANNEALED CRYSTAL GLASS UNLESS OTHERWISE INDICATED.
5.FACTORY-APPLIED LABELS: INDICATE RECOMMENDED LAMPS AND BALLASTS, INCLUDING LAMP TYPE AND WATTAGE AND BALLAST TYPE. LABELS SHALL BE LOCATED WHERE THEY WILL BE READILY VISIBLE TO SERVICE PERSONNEL, BUT NOT SEEN FROM NORMAL VIEWING ANGLES WHEN LAMPS ARE IN PLACE.
6. LINEAR FLUORESCENT BALLASTS: ELECTRONIC INSTANT-START TYPE, DESIGNED FOR FULL LIGHT OUTPUT OF THE TYPE AND QUANTITY OF LAMPS SERVED. THE BALLAST FACTOR SHALL BE 0.9 OR HIGHER AND THE POWER FACTOR SHALL BE 0.98 OR HIGHER WITH LESS THAN 10% TOTAL HARMONIC DISTORTION. WHEN SERVING MULTIPLE LAMPS, BALLAST SHALL BE CONNECTED TO MAINTAIN FULL LIGHT OUTPUT ON SURVIVING LAMPS IF ONE OR MORE LAMPS FAIL.
6.1. BALLAST FOR OCCUPANCY SENSOR CONTROLLED FIXTURES: PROGRAMMED-START BALLAST.
6.2. BALLASTS FOR LOW-TEMPERATURE ENVIRONMENTS (0 DEG F AND HIGHER): ELECTRONIC TYPE RATED FOR 0 DEG F STARTING AND OPERATING TEMPERATURE WITH INDICATED LAMP TYPES.
7.COMPACT FLUORESCENT BALLASTS: ELECTRONIC-PROGRAMMED RAPID-START TYPE, DESIGNED FOR FULL LIGHT OUTPUT OF THE TYPE AND QUANTITY OF LAMPS SERVED. BALLAST SHALL HAVE LAMP END-OF-LIFE DETECTION AND SHUTDOWN CIRCUIT AND AUTOMATIC LAMP STARTING AFTER LAMP REPLACEMENT. THE BALLAST FACTOR SHALL BE 0.95 OR HIGHER AND THE POWER FACTOR SHALL BE 0.98 OR HIGHER WITH LESS THAN 20% TOTAL HARMONIC DISTORTION.
8.EMERGENCY FLUORESCENT POWER UNIT: INTERNAL, SELF-CONTAINED, MODULAR, BATTERY-INVERTER UNIT, FACTORY MOUNTED WITHIN LIGHTING FIXTURE BODY AND COMPATIBLE WITH BALLAST. NIGHTLIGHT / EMERGENCY OPERATION SHALL BE ONE LAMP CONTINUOUSLY AT O MINIMUM OUTPUT OF 1100 LUMENS. CONNECT UNSWITCHED CIRCUIT TO BATTERY-INVERTER UNIT AND SWITCHED CIRCUIT TO FIXTURE BALLAST. PROVIDE TEST BUTTON AND INDICATOR LIGHT WHERE VISIBLE AND ACCESSIBLE WITHOUT OPENING FIXTURE OR ENTERING CEILING SPACE. TEST BUTTON SHALL SIMULATE LOSS OF NORMAL POWER AND DEMONSTRATES UNIT OPERABILITY. INDICATOR LIGHT SHALL BE LED AND SHALL INDICATE NORMAL POWER "ON." 90 MINUTE BATTERY SHALL BE SEALED, MAINTENANCE-FREE, NICKEL-CADMIUM TYPE WITH FULLY AUTOMATIC, SOLID STATE, CONSTANT-CURRENT TYPE CHARGER WITH SEALED POWER TRANSFER RELAY. PROVIDE FACTORY-INSTALLED INTEGRAL SELF-TEST DEVICE TO AUTOMATICALLY INITIATE CODE-REQUIRED TEST OF UNIT EMERGENCY OPERATION OT REQUIRED INTERVALS. TEST FAILURE IS ANNUNCIATED BY AN INTEGRAL AUDIBLE ALARM AND A FLASHING RED LED. BALLAST SHALL AUTOMATICALLY ENERGIZE LAMP FROM BATTERY WHEN CIRCUIT VOLTAGE DROPS TO 80% OF NOMINAL VOLTAGE OR BELOW. WHEN NORMAL VOLTAGE IS RESTORED, BATTERY IS AUTOMATICALLY RECHARGED AND FLOATED ON CHARGER.
9.EXIT SIGNS: SELF-POWERED (BATTERY TYPE) SIGN WITH 50,000 HOURS LAMP LIFE LED SOURCE, AND INTEGRAL AUTOMATIC CHARGER IN A SELF-CONTAINED POWER POCK. 90 MINUTE BATTERY SHALL BE SEALED, MAINTENANCE-FREE, NICKEL-CADMIUM TYPE WITH FULLY AUTOMATIC, SOLID STATE, CONSTANT-CURRENT TYPE CHARGER WITH SEALED POWER TRANSFER RELAY. PROVIDE FACTORY-INSTALLED INTEGRAL SELF-TEST DEVICE TO AUTOMATICALLY INITIATE CODE-REQUIRED TEST OF UNIT EMERGENCY OPERATION AT REQUIRED INTERVALS. TEST FAILURE IS ANNUNCIATED BY AN INTEGRAL AUDIBLE ALARM AND A FLASHING RED LED. SIGN SHALL AUTOMATICALLY ENERGIZE LAMPS FROM BATTERY WHEN CIRCUIT VOLTAGE DROPS TO 80% OF NOMINAL VOLTAGE OR BELOW. WHEN NORMAL VOLTAGE IS RESTORED, BATTERY IS AUTOMATICALLY RECHARGED AND FLOATED ON CHARGER.
10. LAMPS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE GE, PHILIPS, AND OSRAM-SYLVANIA. PROVIDE LAMPS WITH MINIMUM PERFORMANCE AS INDICATED IN THE LIGHTING FIXTURE SCHEDULE. LAMP COLOR, BEAM ANGLE, WATTAGE AND OTHER PERFORMANCE CHARACTERISTIC SHALL BE CONFIRMED WITH BUILDING STANDARDS AND EXISTING FIXTURES IN THE AREA.
11. SET LUMINARIES LEVEL, PLUMB, AND SQUARE WITH CEILINGS AND WALLS UNLESS OTHERWISE INDICATED AND INSTALL LAMPS ONCE LUMINAIRE INSTALLATION IS COMPLETE.
12. LAY-IN CEILING FIXTURES MAY USE THE GRID AS TO SUPPORT ELEMENT. ADDITIONALLY, INSTALL CEILING SUPPORT SYSTEM RODS OR WIRES, INDEPENDENT OF THE CEILING SUSPENSION DEVICES, FOR EACH FIXTURE. LOCATE NOT MORE THAN 6" FROM LIGHTING FIXTURE CORNERS.
13. FIXTURES OF SIZES LESS THAN CEILING GRID: INSTALL AS INDICATED ON REFLECTED CEILING PLANS OR CENTER IN ACOUSTICAL PANEL, AND SUPPORT FIXTURES INDEPENDENTL
14. TEMPORARY LIGHTING: IF IT IS NECESSARY, AND APPROVED BY ARCHITECT, TO USE PERMANENT LUMINAIRES FOR TEMPORARY LIGHTING, INSTALL AND ENERGIZE THE MINIMUM NUMBER OF LUMINAIRES NECESSARY. WHEN CONSTRUCTION IS SUFFICIENTLY COMPLETE, REMOVE THE TEMPORARY LUMINAIRES, DISASSEMBLE, CLEAN THOROUGHLY, INSTALL NEW LAMPS, AND REINSTALL.
15. TEST EMERGENCY LIGHTING BY INTERRUPTING POWER SUPPLY TO DEMONSTRATE PROPER OPERATION. VERIFY TRANSFER FROM NORMAL POWER TO BATTERY AND RETRANSFER TO NORMAL.
16. ADJUST ALL AIMABLE LUMINAIRES IN THE PRESENCE OF ARCHITECT/OWNER. ADDITIONALLY, WHEN REQUESTED WITHIN 3 MONTHS OF DATE OF FINAL ACCEPTANCE, PROVIDE ON-SITE ASSISTANCE IN ADJUSTING AIMABLE LUMINAIRES TO SUIT ACTUAL OCCUPIED CONDITIONS.

SECTION 28 31 11 – DIGTAL, ADDRESSABLE FIRE ALARM SYSTEM

1. SYSTEM DESCRIPTION: NON-CODED ADDRESSABLE SYSTEM, WITH AUTOMATIC SENSITIVITY CONTROL OF CERTAIN SMOKE DETECTORS AND MULTIPLEXED SIGNAL TRANSMISSION, DEDICATED TO FIRE-ALARM SERVICE ONLY.
2. SUBMITTALS SHALL BE PREPARED BY PERSONS TRAINED AND CERTIFIED BY MANUFACTURER AND LICENSED BY AUTHORITIES HAVING JURISDICTION. PRIOR TO SUBMISSION TO THE ARCHITECT/ENGINEER, THE SUBMITTALS SHALL BE APPROVED BY AUTHORITIES HAVING JURISDICTION. IN ADDITION TO THE REQUIREMENTS OF DIVISION 1 PROVIDE THE FOLLOWING:
2.1. FLOOR PLANS TO INDICATE FINAL DEVICE AND APPLIANCE LOCATIONS SHOWING ADDRESS OF EACH ADDRESSABLE DEVICE.
2.2. INSTALLATION DETAILS, VOLTAGE DROP CALCULATIONS FOR NOTIFICATION APPLIANCE CIRCUITS, BATTERY-SIZE CALCULATIONS,
2.3. DRAWINGS SHOWING THE LOCATION OF EACH DETECTOR AND RATINGS OF EACH. SPACING AND SENSITIVITY CALCULATION SHALL COMPLY WITH NFPA 72.
2.4. COMPLY WITH RECOMMENDATIONS IN THE "DOCUMENTATION" SECTION OF THE "FUNDAMENTALS OF FIRE ALARM SYSTEMS" CHAPTER IN NFPA 72.
2.5. QUALIFICATION DATA FOR INSTALLER.
3. OBTAIN FIRE-ALARM SYSTEM FROM SINGLE SOURCE FROM SINGLE MANUFACTURER.
4. NFPA CERTIFICATION: OBTAIN CERTIFICATION ACCORDING TO NFPA 72 BY ON NRTL.
5. SYSTEMS OPERATIONAL DESCRIPTION
5.1. FIRE-ALARM SIGNAL INITIATION SHALL BE BY ONE OR MORE OF THE FOLLOWING DEVICES AND SYSTEMS:
5.1.1. MANUAL STATIONS.
5. 1.2. DUCT SMOKE DETECTORS.
5. 1.3. VERIFIED AUTOMATIC ALARM OPERATION OF SMOKE DETECTORS.
5.1.4. AUTOMATIC SPRINKLER SYSTEM WATER FLOW.
5. 1.5. HEAT DETECTORS IN ELEVATOR SHAFT AND PIT.
5.2. FIRE-ALARM SIGNAL SHALL INITIATE THE FOLLOWING ACTIONS:
5.2.1. CONTINUOUSLY OPERATE ALARM NOTIFICATION APPLIANCES.
5.2.2. IDENTIFY ALARM AT FIRE-ALARM CONTROL UNIT AND REMOTE ANNUNCIATORS, IF APPLICABLE.
5.2.3. TRANSMIT AN ALARM SIGNAL TO THE REMOTE ALARM RECEIVING STATION.
5.2.4. UNLOCK ELECTRIC DOOR LOCKS IN DESIGNATED EGRESS PATHS.
5.2.5. ACTIVATE VOICE/ALARM COMMUNICATION SYSTEM.
5.2.6. SWITCH HEATING, VENTILATING, AND AIR-CONDITIONING EQUIPMENT CONTROLS TO FIRE-ALARM MODE.
5.2.7. CLOSE SMOKE DAMPERS IN AIR DUCTS OF DESIGNATED AIR-CONDITIONING DUCT SYSTEMS,
5.2.8. ACTIVATE EMERGENCY SHUTOFFS FOR GAS AND FUEL SUPPLIES.
5.2.9. RECORD EVENTS IN THE SYSTEM MEMORY.Y WITH AT LEAST TWO 3/4" METAL CHANNELS SPANNING AND SECURED TO CEILING TEES.
5.3. SUPERVISORY SIGNAL INITIATION SHALL BE BY ONE OR MORE OF THE FOLLOWING DEVICES AND ACTIONS:
5.3.1. VALVE SUPERVISORY SWITCH.
5.4. SYSTEM TROUBLE SIGNAL INITIATION SHALL BE BY ONE OR MORE OF THE FOLLOWING DEVICES AND ACTIONS:
5.4.1. OPEN CIRCUITS, SHORTS, AND GROUNDS IN DESIGNATED CIRCUITS.
5.4.2. OPENING, TAMPERING WITH, OR REMOVING ALARM-INITIATING AND SUPERVISORY SIGNAL-INITIATING DEVICES.
5.4.3. LOSS OF PRIMARY POWER AT FIRE-ALARM CONTROL UNIT.
5.4.4. GROUND OR A SINGLE BREAK IN FIRE-ALARM CONTROL UNIT INTERNAL CIRCUITS.
5.4.5. ABNORMAL AC VOLTAGE AT FIRE-ALARM CONTROL UNIT.
5.4.6. BREAK IN STANDBY BATTERY CIRCUITRY.
5.4.7. FAILURE OF BATTERY CHARGING.
5.4.8. ABNORMAL POSITION OF ANY SWITCH AT FIRE-ALARM CONTROL UNIT OR ANNUNCIATOR.
5.5. SYSTEM TROUBLE AND SUPERVISORY SIGNAL ACTIONS: INITIATE NOTIFICATION APPLIANCE AND ANNUNCIATE AT FIRE-ALARM CONTROL UNIT AND REMOTE ANNUNCIATORS, IF APPLICABLE. RECORD THE EVENT ON SYSTEM PRINTER.
6. FIRE ALARM CONTROL UNIT: FIELD-PROGRAMMABLE, MICROPROCESSOR-BASED, MODULAR, POWER-LIMITED DESIGN WITH ELECTRONIC MODULES, COMPLYING WITH UL 864 AND LISTED AND LABELED BY AN NRTL. ADDRESSABLE INITIATION DEVICES THAT COMMUNICATE DEVICE IDENTITY AND STATUS AND ADDRESSABLE CONTROL CIRCUITS FOR OPERATION OF MECHANICAL EQUIPMENT. THE FOLLOWING ITEMS SHALL BE INCLUDED AS PART OF THE FIRE ALARM CONTROL UNIT:
6.1. ALPHANUMERIC DISPLAY AND SYSTEM CONTROLS: ARRANGED FOR INTERFACE BETWEEN HUMAN OPERATOR AT FIRE-ALARM CONTROL UNIT AND ADDRESSABLE SYSTEM COMPONENTS INCLUDING ANNUNCIATION AND SUPERVISION. DISPLAY ALARM. SUPERVISORY, AND COMPONENT STATUS MESSAGES AND THE PROGRAMMING AND CONTROL MENU.
6.2. INITIATING DEVICE, NOTIFICATION APPLIANCE, AND SIGNALING LINE CIRCUITS: PROVIDE STYLE 6 SIGNALING LINE CIRCUITS. INSTALL NO MORE THAN 50 ADDRESSABLE DEVICES ON EACH SIGNALING LINE CIRCUIT.
6.3. TRANSMISSION TO REMOTE ALARM RECEIVING STATION: DIGITAL ALARM COMMUNICATOR TRANSMITTER AUTOMATICALLY TRANSMITS ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO O REMOTE ALARM STATION. IF SERVICE ON THE LINE IS INTERRUPTED FOR LONGER THAN 45 SECONDS, TRANSMITTER SHALL INITIATE A LOCAL TROUBLE SIGNAL AND TRANSMIT THE SIGNAL INDICATING LOSS OF TELEPHONE LINE TO THE REMOTE ALARM RECEIVING STATION OF THE REMAINING LINE. TRANSMITTER SHALL AUTOMATICALLY REPORT TELEPHONE SERVICE RESTORATION TO THE CENTRAL STATION. THE DIGITAL DATA TRANSMISSION SHALL INCLUDE ADDRESS OF THE ALARM-INITIATING DEVICE, ADDRESS OF THE SUPERVISORY SIGNAL, ADDRESS OF THE TROUBLE-INITIATING DEVICE, LOSS OF AC SUPPLY OR LOSS OF POWER, LOW BATTERY, ABNORMAL TEST SIGNAL, AND COMMUNICATION BUS FAILURE. SECONDARY POWER SHALL BE BY MEANS OF INTEGRAL RECHARGEABLE BATTERY AND AUTOMATIC CHARGER. UNIT SHALL CONDUCT SELF-TEST EVERY 24 HOURS AND TRANSMIT REPORT TO CENTRAL STATION.
6.4. PRIMARY POWER: 24-V DC OBTAINED FROM 120-V AC SERVICE AND A POWER-SUPPLY MODULE. INITIATING DEVICES, NOTIFICATION APPLIANCES, SIGNALING LINES, TROUBLE SIGNALS, SUPERVISORY SIGNALS SHALL BE POWERED BY 24-V DC SOURCE. ALARM CURRENT DRAW OF ENTIRE FIRE-ALARM SYSTEM SHALL NOT EXCEED 80 PERCENT OF THE POWER-SUPPLY MODULE RATING.
6.5. SECONDARY POWER: 24-V DC SUPPLY SYSTEM WITH BATTERIES, AUTOMATIC BATTERY CHARGER, AND AUTOMATIC TRANSFER SWITCH. BATTERIES SHALL BE SEALED LEAD CALCIUM.
7. MANUAL FIRE-ALARM BOXES: COMPLY WITH UL 38. BOXES SHALL BE FINISHED IN RED WITH MOLDED, RAISED-LETTER OPERATING INSTRUCTIONS IN CONTRASTING COLOR: SHALL SHOW VISIBLE INDICATION OF OPERATION; AND SHALL BE MOUNTED ON RECESSED OUTLET BOX. DOUBLE-ACTION MECHANISM REQUIRING TWO ACTIONS TO INITIATE AN ALARM, PULL-LEVER TYPE: WITH INTEGRAL ADDRESSABLE MODULE ARRANGED TO COMMUNICATE MANUAL-STATION STATUS (NORMAL, ALARM, OR TROUBLE) TO FIRE-ALARM CONTROL UNIT. STATION RESET SHALL BE BY KEY OR WRENCH OPERATED SWITCH.
8. VISUAL AND AUDIBLE NOTIFICATION APPLIANCES ARE TO BE CONNECTED TO NOTIFICATION APPLIANCE SIGNAL CIRCUITS, ZONED AS REQUIRED, WITH SCREW TERMINALS FOR SYSTEM CONNECTIONS. WHERE INDICATED PROVIDE FACTORY-INTEGRATED AUDIBLE AND VISIBLE DEVICES IN A SINGLE-MOUNTING ASSEMBLY. UNITS SHALL MATCH THE EXISTING APPLIANCES IN STYLE, FINISH, AND COLOR. FOR UNITS WITH GUARDS TO PREVENT PHYSICAL DAMAGE, LIGHT OUTPUT RATINGS SHALL BE DETERMINED WITH GUARDS IN PLACE.
9. VISIBLE NOTIFICATION APPLIANCES: XENON STROBE LIGHTS COMPLY WITH UL 1971, WITH CLEAR OR NOMINAL WHITE POLYCARBONOTE LENS. THE WORD "FIRE" IS ENGRAVED IN MINIMUM 1" HIGH LETTERS ON THE FACEPLATE. STROBES SHALL BE 15/30/75/110 CD, FIELD SELECTABLE. IF NOT INDICATED OTHERWISE, RATED LIGHT OUTPUT SHOULD BE SET TO 110 CD. FLASHING SHALL BE IN A TEMPORAL PATTERN, SYNCHRONIZED WITH OTHER UNITS. INSTALL ON CEILING OR ON WALL ADJACENT TO EACH ALARM HORN AND AT LEAST 6" BELOW THE CEILING.
10. AUDIBLE HORNS: ELECTRIC-VIBRATING-POLARIZED TYPE, 24V DC; WITH PROVISION FOR HOUSING THE OPERATING MECHANISM BEHIND A GRILLE. COMPLY WITH UL 464. HORNS SHALL PRODUCE A SOUND PRESSURE LEVEL OF 90 DBA, MEASURED 10' FROM THE HORN, USING THE CODED SIGNAL PRESCRIBED IN UL 464 TEST PROTOCOL. INSTALL ON CEILING OR ON WALL NOT LESS THAN 6" BELOW THE CEILING. INSTALL BELLS AND HORNS ON FLUSH-MOUNTED BOCK BOXES WITH THE DEVICE-OPERATING MECHANISM CONCEALED BEHIND A GRILLE.
11. REMOTE ANNUNCIATOR: ANNUNCIATOR FUNCTIONS SHALL MATCH THOSE OF FIRE-ALARM CONTROL UNIT FOR ALARM, SUPERVISORY, AND TROUBLE INDICATIONS. MANUAL SWITCHING FUNCTIONS SHALL MATCH THOSE OF FIRE-ALARM CONTROL UNIT, INCLUDING ACKNOWLEDGING, SILENCING, RESETTING, AND TESTING.
12. ADDRESSABLE INTERFACE DEVICE: MICROELECTRONIC MONITOR MODULE, NRTL LISTED FOR USE IN PROVIDING A SYSTEM ADDRESS FOR ALARM-INITIATING DEVICES FOR WIRED APPLICATIONS WITH NORMALLY OPEN CONTACTS. INTEGRAL RELAY SHALL BE CAPABLE OF PROVIDING A DIRECT SIGNAL TO ELEVATOR CONTROLLER TO INITIATE ELEVATOR RECALL AND/OR TO CIRCUIT-BREAKER SHUNT TRIP FOR POWER SHUTDOWN.
13. WHERE SUBJECT TO DAMAGE OR ABUSE, PROVIDE FACTORY-FABRICATED WELDED WIRE MESH DEVICE GUARDS OF SIZE AND SHAPE FOR THE DEVICE OR APPLIANCE, WITH MATCHING FINISH AND COLOR
14. COMPLY WITH NFPA 72 FOR INSTALLATION OF FIRE-ALARM EQUIPMENT.
15. SURFACE-MOUNT CONTROL UNIT(S) AND ANNUNCIATOR(S) WITH TOPS OF CABINETS NOT MORE THAN 72 INCHES ABOVE FINISHED FLOOR.
16. VERIFY THAT HARDWARE AND DEVICES ARE NRTL LISTED FOR USE WITH FIRE-ALARM SYSTEM IN THIS SECTION BEFORE MAKING CONNECTIONS.
17. GROUND FIRE-ALARM CONTROL UNIT AND ASSOCIATED CIRCUITS; COMPLY WITH IEEE 1100. INSTALL A GROUND WIRE FROM MAIN SERVICE GROUND TO FIRE-ALARM CONTROL UNIT.
18. FIELD TESTS SHALL BE WITNESSED BY AUTHORITIES HAVING JURISDICTION AND OWNER'S REPRESENTATIVE.
19. ENGAGE A FACTORY-AUTHORIZED SERVICE REPRESENTATIVE TO INSPECT COMPONENTS, ASSEMBLIES, AND EQUIPMENT INSTALLATIONS, INCLUDING CONNECTIONS, AND TO ASSIST IN TESTING.
19.1. CONDUCT VISUAL INSPECTION PRIOR TO TESTING.
19.2. INSPECTION SHALL BE BASED ON COMPLETED RECORD DRAWINGS AND SYSTEM DOCUMENTATION THAT IS REQUIRED BY NFPA 72 IN ITS "COMPLETION DOCUMENTS, PREPARATION" TABLE IN THE "DOCUMENTATION" SECTION OF THE "FUNDAMENTALS OF FIRE ALARM SYSTEMS" CHAPTER.
19.3. COMPLY WITH "VISUAL INSPECTION FREQUENCIES" TABLE IN THE "INSPECTION" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NFPA 72; RETAIN THE "INITIAL/REACCEPTANCE" COLUMN AND LIST ONLY THE INSTALLED COMPONENTS.
19.4. SYSTEM TESTING: COMPLY WITH "TEST METHODS" TABLE IN THE "TESTING" SECTION OF THE "INSPECTION, TESTING AND MAINTENANCE" CHAPTER IN NFPA 72.
19.5. TEST VISIBLE APPLIANCES FOR THE PUBLIC OPERATING MODE ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.
1 9.6. FIRE-ALARM SYSTEM WILL BE CONSIDERED DEFECTIVE IF IT DOES NOT PASS TESTS AND INSPECTIONS.
19.7. PREPARE TEST AND INSPECTION REPORTS.

CONSTRUCTION NOTES

DATE
MARCH 2020

EPIC ENGINEERING

REVISIONS		
MARK	DATE	DESCRIPTION

DRAWN: KDC
DESIGNER: KDC
REVIEWED: DIO

PROJECT #
18SM2079.82

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON I. OLSEN STATE OF UTAH 3/12/20

SCALES
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST FOR A HALF SIZE SHEET.

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:
ELECTRICAL GENERAL NOTES

PLAN SET: PERMIT
SHEET E0.2

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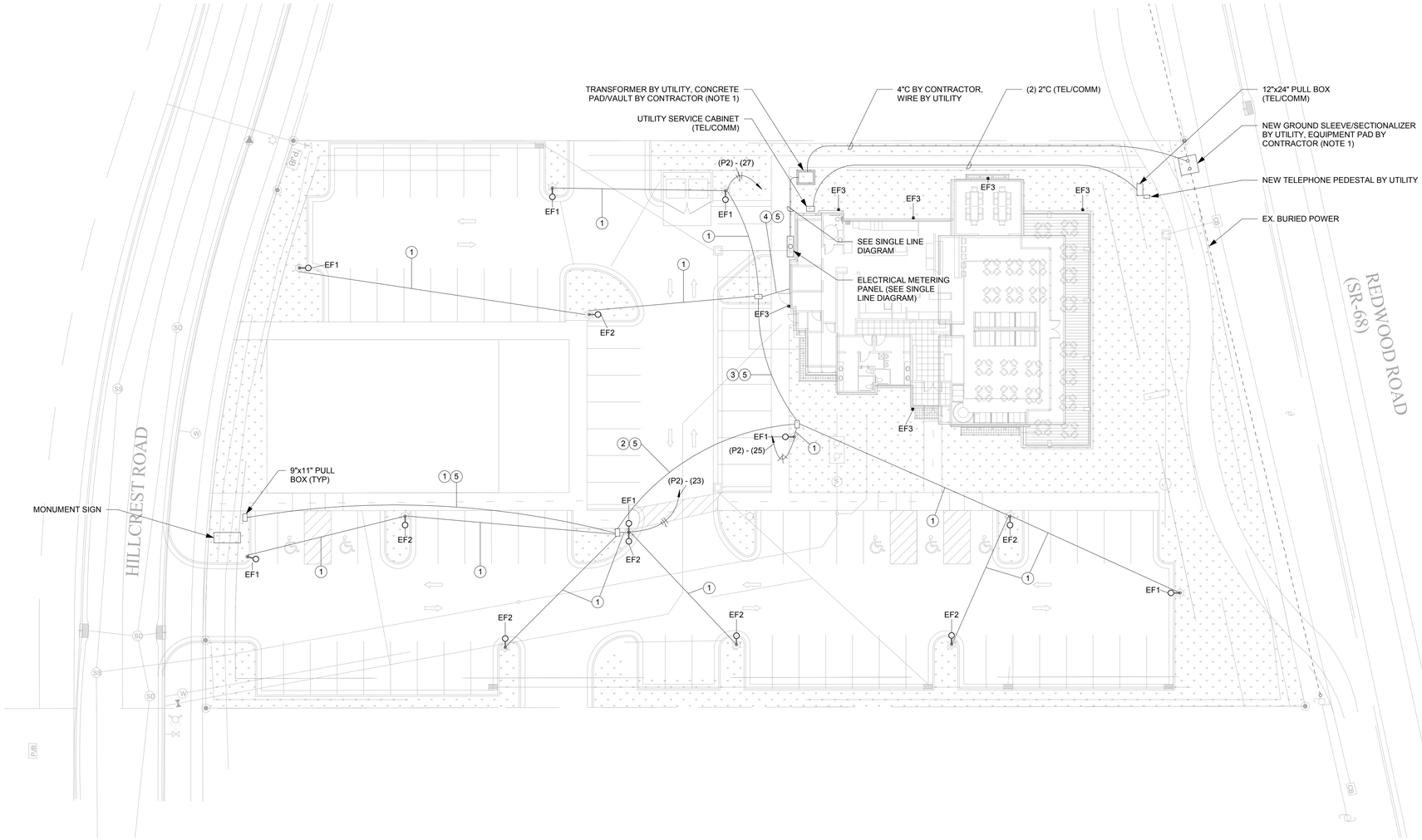
CONDUIT/CONDUCTOR SCHEDULE	
MARK	CONDUIT/CONDUCTORS
1	(2) #10, #10 GND, 1"C
2	(4) #10, #10 GND, 1"C
3	(6) #10, #10 GND, 1"C
4	(8) #10, #10 GND, 1"C
5	(2) 1"C (SPARE)

Exterior Lighting Fixture Schedule					
Mark	Manufacturer	Model	Wattage	Count	Mounting Height
EF1	EATON	EMM-E04-LED-E1-T4-SO-BK-8030 W/ VA6105 SINGLE POLE MOUNT ARM	97 W	7	16'-0"
EF2	EATON	EMM-E03-LED-E1-T3-SO-BK-8030 W/ VA6105 SINGLE POLE MOUNT ARM	97 W	7	16'-0"
EF3	KICHLER	WESLEY #49278AZTLED; 8W, 3000K	8 W	6	10'-0"

NOTE:

ONE HOUR AFTER CLOSING OR BY 11:00PM, WHICHEVER IS EARLIER, BUSINESSES MUST TURN OFF AT LEAST FIFTY PERCENT (50%) OF BUILDING LIGHTING AND LIGHTING FIXTURES IN SURFACE PARKING LOTS AND ON TOP DECKS OF PARKING STRUCTURES; HOWEVER, THOSE LIGHTING FIXTURES TURNED OFF MAY BE SET TO FUNCTION UTILIZING A MOTION DETECTOR SYSTEM. LIGHTS MAY BE TURNED BACK ON ONE HALF HOUR PRIOR TO THE FIRST EMPLOYEE SHIFT.



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

CONSTRUCTION NOTES

1. CONFIRM ALL SIZES & LOCATIONS WITH UTILITY REQUIREMENTS

DATE

MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: KDC
REVIEWED: DIO

PROJECT #
18SM2079.82

REGISTERED PROFESSIONAL ENGINEER
No. 169278
DON I. OLSEN
STATE OF UTAH

SCALES

As indicated

0 1"
PLOT SCALE VALIDITY: WHEN BAR IS NOT 1" LONG, SCALE IS INCORRECT. ADJUST PLOT SCALE ACCORDINGLY

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:

ELECTRICAL SITE PLAN

PLAN SET: PERMIT

SHEET E1.1

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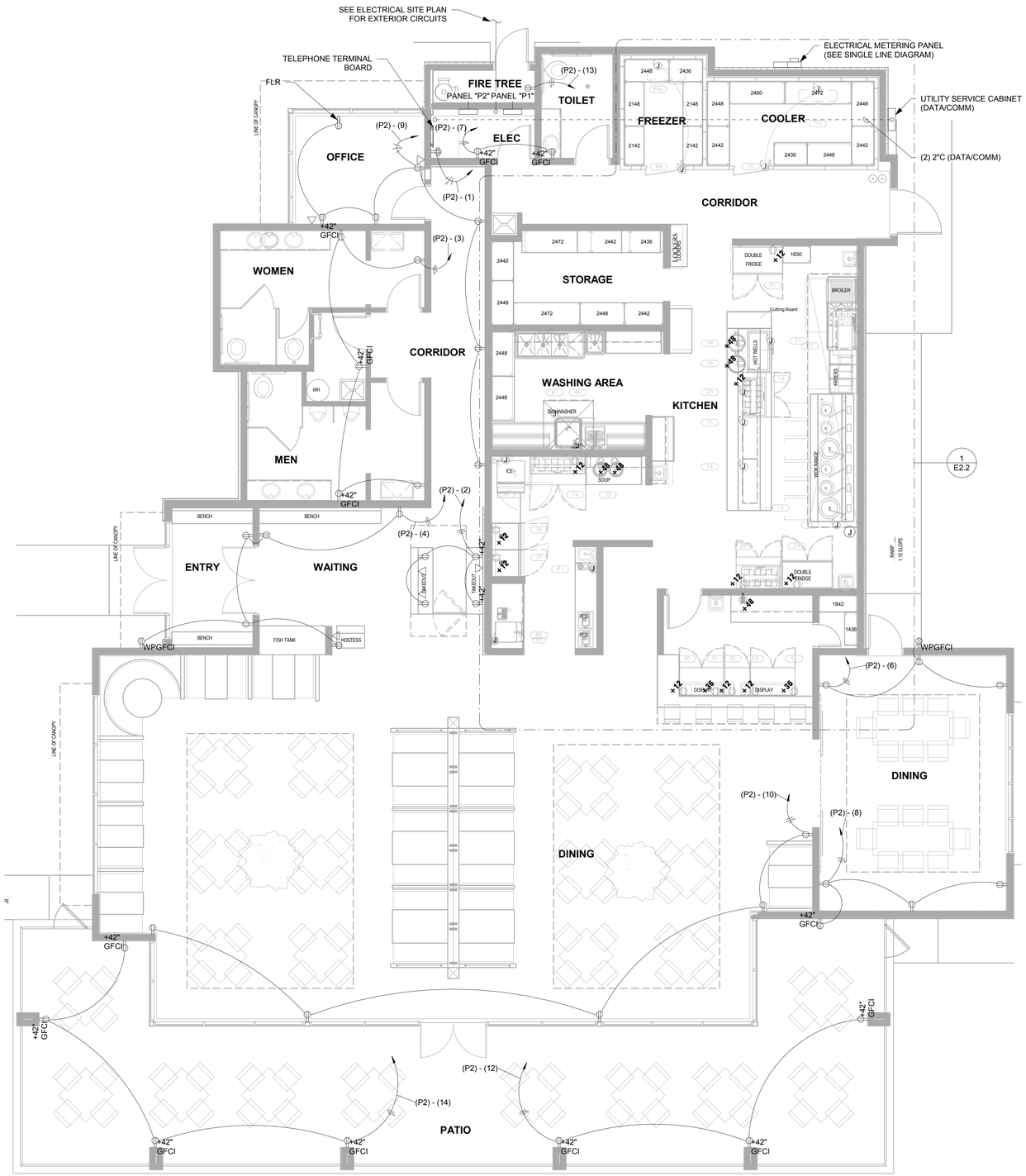
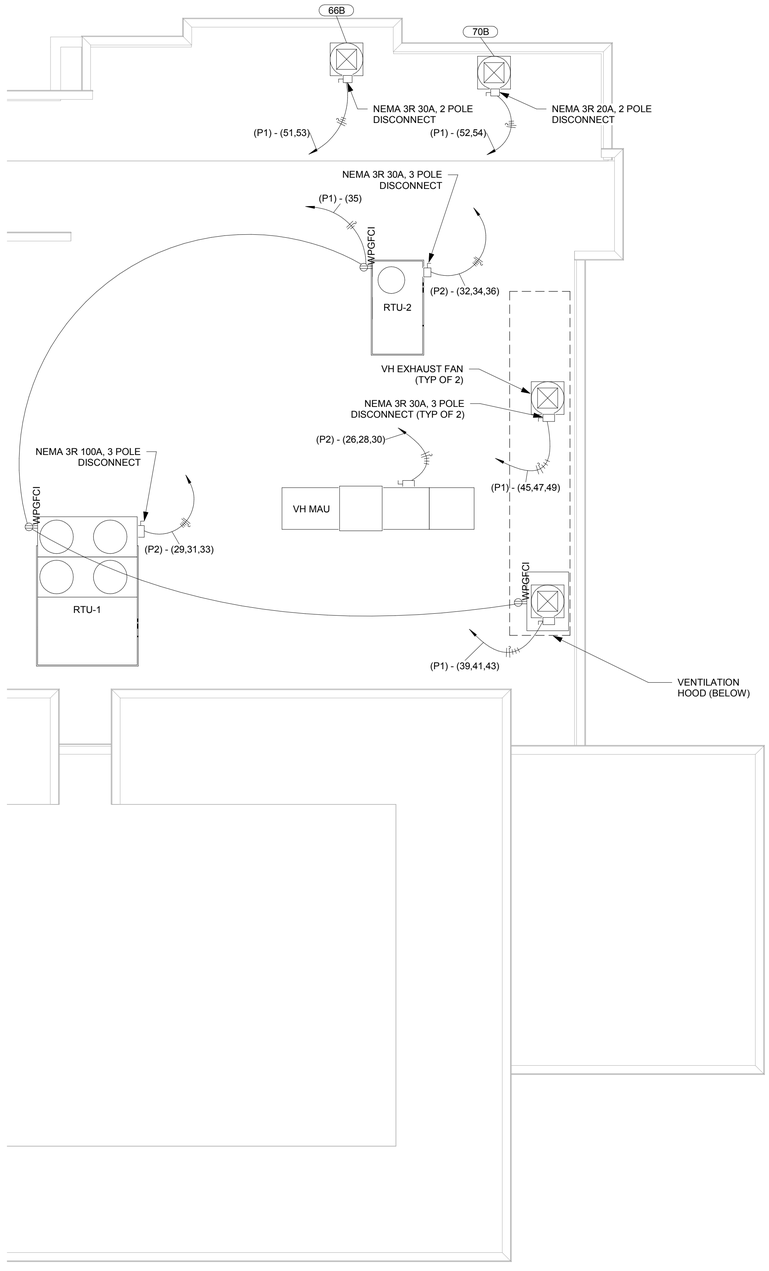


1 ELECTRICAL PLAN
3/16" = 1'-0"



3 ROOF ELECTRICAL PLAN
3/16" = 1'-0"

CONSTRUCTION NOTES

1. FIRE ALARM SYSTEM SHALL BE DESIGN BUILD BY CONTRACTOR & FIRE ALARM SYSTEM SUPPLIER.
2. ROUTE POWER CIRCUITS FOR VENT HOOD ACCESSORIES THROUGH VENT HOOD CONTROL PANEL. CONTRACTOR SHALL COMPLETE ADDITIONAL FIELD WIRING AS REQ'D INCIDENTAL TO ACCESSORY ITEMS PROVIDED WITH VENT HOOD INCLUDING LIGHTS, SWITCHES, EVAPORATIVE COOLER, VALVES, FIRE ALARM COMPONENTS, AND ALL CONTROL WIRING BETWEEN THE VENT HOOD CONTROL PANEL AND ALL ACCESSORY ITEMS.
3. CONFIRM ALL POWER & LOCAL DISCONNECT REQUIREMENTS FOR EQUIPMENT W/ MANUFACTURER INSTRUCTIONS.
4. PROVIDE FLOOR BOX WITH WATERPROOF SEAL OR HARDWIRE APPLIANCE. COORDINATE WITH OWNER FOR POWER TO ISLAND VIA SAWCUT OR CEILING DROP.

DATE
MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: KDC
DESIGNER: KDC
REVIEWED: DIO

PROJECT #
18SM2079.82

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON L. OLSEN STATE OF UTAH 5/12/2020

SCALES
As indicated
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST FOR A HALF SIZE SHEET

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N. HILLCREST RD.
SARATOGA SPRINGS, UT

SHEET TITLE:
ELECTRICAL PLAN

PLAN SET: PERMIT
SHEET E2.1

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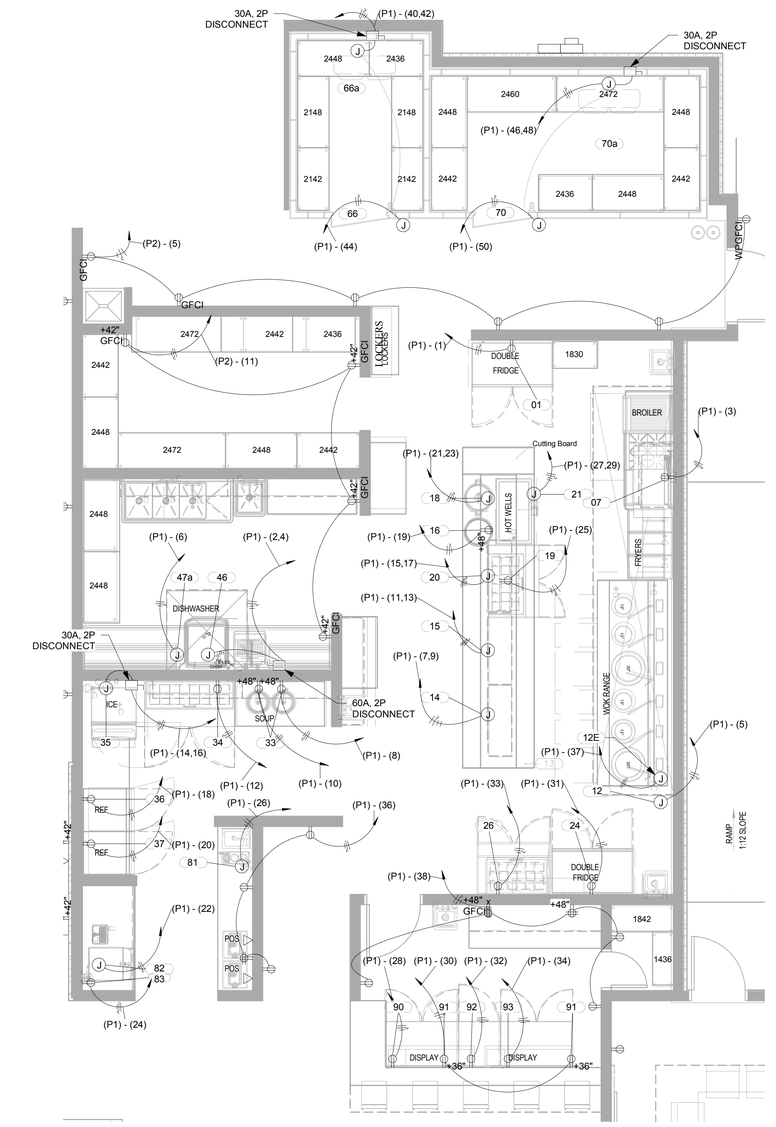
EQUIPMENT SCHEDULE

ITEM NO	QTY	EQUIPMENT CATEGORY	EQUIPMENT REMARKS	AMPS	KW	HP	VOLTS	PHASE	CYCLE	DIRECT	PLUG	NEMA	ELECTRICAL AFF (IN)	ELEC REMARKS	ITEM NO
01	1	REFRIGERATOR, REACH-IN	-	6.0	0.7	0.3	115	1	60	-	X	5-15P	12	-	01
07	1	REFRIGERATOR, SHORTY	-	9.0	1.0	0.3	115	1	60	-	X	5-15P	12	-	07
12	1	TYPE 1 HOOD	-	15.0	-	-	120	1	60	-	X	-	DFA	-	12
12A	1	EXHAUST FAN	-	-	-	7-1/2	208	3	60	-	X	-	ROOF	-	12A
12B	1	MAKE-UP AIR UNIT (MAU)	-	-	-	7-1/2	208	3	60	-	X	-	ROOF	-	12B
12D	1	ELECTRICAL	-	21.0	-	7-1/2	200-240	3	60	-	X	-	DFA	-	12D
12E	1	FIRE SUPRESSION	-	20.0	-	-	120	1	60	-	X	-	108	-	12E
13	1	COUNTER W/ DOUBLE OVERSHELF	-	-	-	-	-	-	-	X	-	-	DFA	-	13
14	1	WARMER, FOOD OVERHEAD	-	11.0	2.2	-	208	1	60	X	-	-	DFA	-	14
15	1	WARMER, FOOD OVERHEAD	-	11.0	2.2	-	208	1	60	X	-	-	DFA	-	15
16	1	WARMER, RICE	-	-	8.4	-	120	1	60	-	X	5-15P	48	-	16
18	1	WARMER, FOOD OVERHEAD	-	11.0	2.2	-	208	1	60	X	-	-	DFA	-	18
19	1	REFRIGERATOR, SANDWICH/SALAD PREP	-	9.0	0.6	0.3	115	1	60	-	X	5-15P	12	-	19
20	1	WARMER, FOOD OVERHEAD	-	11.0	2.2	-	208	1	60	X	-	-	DFA	-	20
21	1	DROP-IN, HOT WELLS	-	13.0	2.7	-	208	1	60	X	-	-	24	**ATTACH TO COUNTER**	21
24	1	REFRIGERATOR, REACH-IN	-	6.0	0.7	0.3	115	1	60	-	X	5-15P	12	-	24
26	1	REFRIGERATOR, SANDWICH/SALAD PREP	-	9.0	0.6	0.3	115	1	60	-	X	5-15P	12	-	26
33	2	TUREEN/KETTLE, SOUP	-	8.0	0.9	-	120	1	60	-	X	5-15P	48	-	33
34	1	REFRIGERATOR, SANDWICH/SALAD PREP	-	8.0	1.2	0.3	115	1	60	-	X	5-15P	12	-	34
35	1	ICE MAKER/BIN, NUGGET ICE	-	17.0	-	-	230	1	60	X	-	-	70	-	82
36	1	REFRIGERATOR, REACH-IN	-	6.0	-	0.2	115	1	60	-	X	5-15P	72	-	36
37	1	REFRIGERATOR, REACH-IN	-	6.0	-	0.2	115	1	60	-	X	5-15P	72	-	37
46	1	WAREWASHER, DOOR TYPE, HIGH TEMP	-	43.0	5.0	2.0	208-240	1	60	X	-	-	72	-	46
-	-	-	-	36.0	8.5	-	208-240	1	60	X	-	-	72	-	-
47A	1	EXHAUST FAN	-	7.0	-	1/3	115	1	60	-	X	-	ROOF	-	47A
66	1	WALK-IN FREEZER	-	15.0	-	-	120	1	60	-	X	-	DFA	-	66
66A	1	BLOWER COIL	-	20.0	4.0	-	208-230	1	60	-	X	-	DFA	-	66A
66B	1	FREEZER CONDENSER - REMOTE	-	20.0	-	-	208-230	1	60	-	X	-	ROOF	-	66B
70	1	WALK-IN COOLER	-	15.0	-	-	120	1	60	-	X	-	DFA	-	70
70A	1	BLOWER COIL	-	6.0	-	0.8	208-230	1	60	-	X	-	DFA	-	70A
70B	1	COOLER CONDENSER - REMOTE	-	-	-	0.8	208-230	1	60	-	X	-	ROOF	-	70B
81	1	COFFEE MAKER, AUTOMATIC	-	20.0	2.4	-	120	1	60	X	-	-	48	-	80
82	1	ICE MAKER, NUGGET STYLE	-	9.0	-	-	115	1	60	X	-	-	70	-	82
83	1	DISPENSER, BEVERAGE/CARBONATED & NON-CARBONATED	***SEE SODA VENDOR***	-	-	-	-	-	-	-	-	-	-	***SEE SODA VENDOR***	83
90	1	REFRIGERATOR, UNDERCOUNTER, ADA	-	3.0	0.6	0.2	115	1	60	-	X	5-15P	12	-	90
91	1	DISPLAY CASE, REFRIGERATED, SUSHI	-	1.0	-	-	115	1	60	-	X	5-15P	12	-	91
92	1	FREEZER, UNDERCOUNTER	-	9.0	0.6	0.3	115	1	60	-	X	5-15P	12	-	92
93	1	DISPLAY CASE, REFRIGERATED, SUSHI	-	1.0	-	-	115	1	60	-	X	5-15P	24	-	93



1 KITCHEN ELECTRICAL PLAN
1/4" = 1'-0"

CONSTRUCTION NOTES

1. FIRE ALARM SYSTEM SHALL BE DESIGN BUILD BY CONTRACTOR & FIRE ALARM SYSTEM SUPPLIER.
2. ROUTE POWER CIRCUITS FOR VENT HOOD ACCESSORIES THROUGH VENT HOOD CONTROL PANEL. CONTRACTOR SHALL COMPLETE ADDITIONAL FIELD WIRING AS REQU'D INCIDENTAL TO ACCESSORY ITEMS PROVIDED WITH VENT HOOD INCLUDING LIGHTS, SWITCHES, EVAPORATIVE COOLER, VALVES, FIRE ALARM COMPONENTS, AND ALL CONTROL WIRING BETWEEN THE VENT HOOD CONTROL PANEL AND ALL ACCESSORY ITEMS.
3. CONFIRM ALL POWER & LOCAL DISCONNECT REQUIREMENTS FOR EQUIPMENT W/ MANUFACTURER INSTRUCTIONS.
4. PROVIDE FLOOR BOX WITH WATERPROOF SEAL OR HARDWIRE APPLIANCE. COORDINATE WITH OWNER FOR POWER TO ISLAND VIA SAWCUT OR CEILING DROP.

DATE
MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: KDC
REVIEWED: DIO

PROJECT # 18SM2079.82

REGISTERED PROFESSIONAL ENGINEER — No. 169278 — DON I. OLSEN — STATE OF UTAH — 5/12/20

SCALES
As indicated
0 1"
PLAN SCALE MEASURES 1" IN A FULL SIZE SHEET, ADJUST AS APPROPRIATE

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:
KITCHEN ELECTRICAL PLAN

PLAN SET: PERMIT
SHEET E2.2

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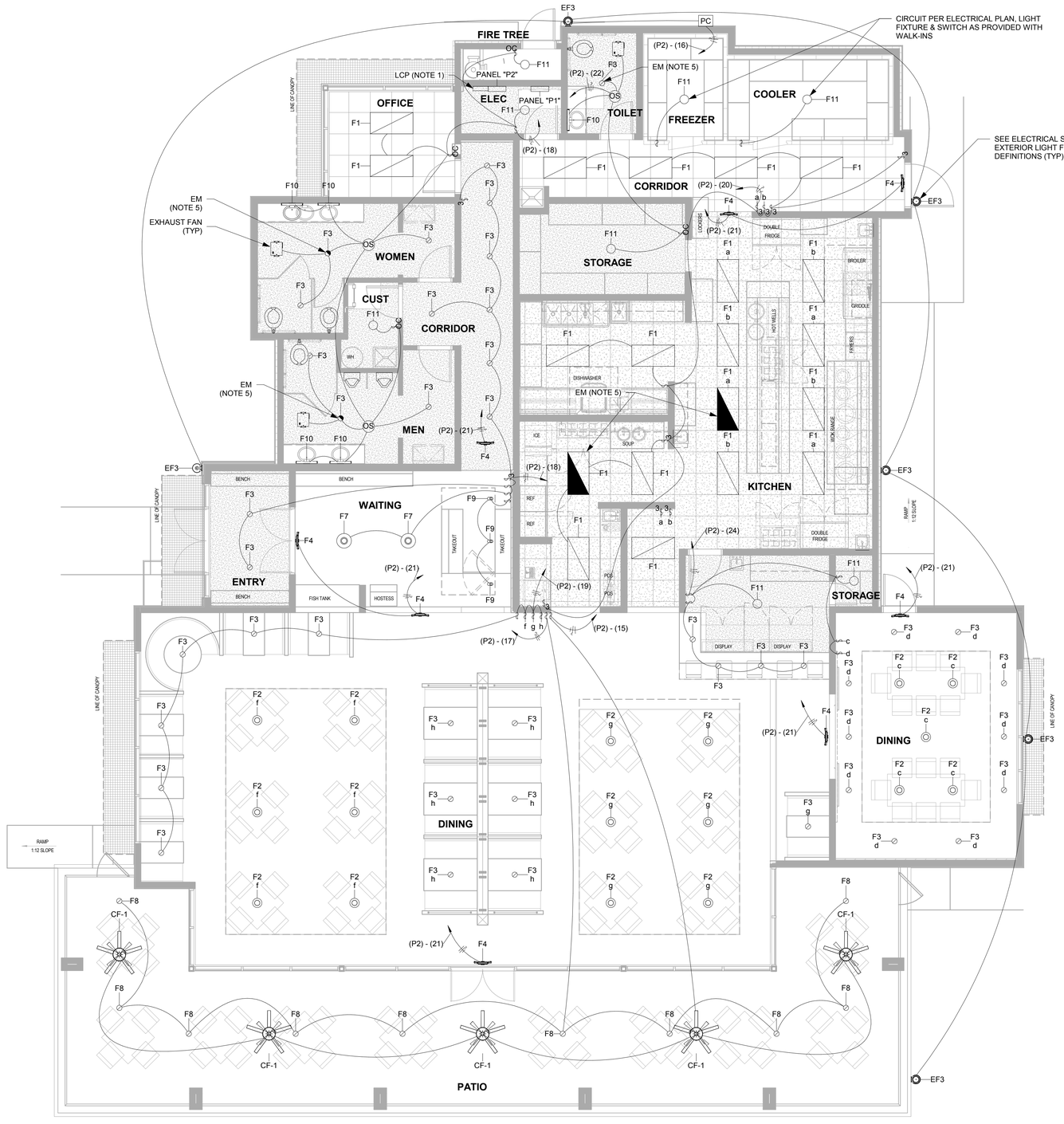

1 LIGHTING PLAN
3/16" = 1'-0"

Lighting Fixture Schedule			
Mark	Fixture Description	Max Wattage	Count
CF-1	EXTERIOR CEILING FAN	64 W	5
F1	2x4 RECESSED TROFFER (SEALED)	33 W	20
F2	PENDANT	17 W	17
F3	RECESSED CAN	17 W	43
F4	EMERGENCY/EXIT COMBO	3 W	8
F7	LARGE PENDANT/CHANDELIER	17 W	2
F8	RECESSED CAN - EXTERIOR	17 W	10
F9	DIRECTIONAL WALL WASHER	50 W	3
F10	BATH VANITY	18 W	5
F11	CEILING MOUNTED	15 W	8

NOTE: COORDINATE LIGHT FIXTURES WITH OWNER. LIGHT FIXTURE WATTAGES SHALL NOT EXCEED THOSE SHOWN.

CONSTRUCTION NOTES

1. A LIGHTING CONTROL PANEL OR TIMER SHALL BE PROVIDED FOR ALL LIGHTING CIRCUITS NOT CONTROLLED BY OCCUPANCY SENSORS WHERE AUTOMATIC SHUT-OFF WOULD NOT POSE DANGER TO PERSONNEL.
2. WALL OCCUPANCY SENSORS SHALL HAVE SELECTABLE MODES FOR AUTOMATIC AND MANUAL ON.
3. PROVIDE PHOTO SENSOR WITH AUTOMATIC DIMMING IN DAYLIGHT AREAS.
4. HARD WIRE SECURITY LIGHT FIXTURE TO REMAIN ON CONTINUOUSLY.
5. PROVIDE BATTERY BACK-UP FOR A MINIMUM OF 1100 LUMENS FOR 1 HR. ROUTE THROUGH LIGHTING CONTROL PANEL FOR COMPLIANCE WITH IECC REQUIREMENTS.
6. VERIFY THAT EXISTING EXTERIOR LIGHTING IS PROVIDED WITH EMERGENCY BACK-UP POWER FOR EMERGENCY EGRESS. PROVIDE BATTERY BACK-UP IF NEEDED.

DATE

MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: KDC
REVIEWED: DIO

PROJECT # 18SM2079.82

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON L. OLSEN STATE OF UTAH

SCALES

As indicated

BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST SCALE ACCORDINGLY

PROJECT NAME:

BLOSSOM RESTAURANT

PROJECT LOCATION:

2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:

LIGHTING PLAN

PLAN SET: PERMIT

SHEET E3.1

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BRANCH PANEL: P1

Location: ELEC 117
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

AIC Rating: 22,000
Mains Rating: 200 A
Mains Type: LUG

Notes:

CKT	Circuit Description	Trip	Wire Size	Poles	A		B		C		Poles	Wire Size	Trip	Circuit Description	CKT
1	Recept - REF, REACH-IN #01	20 A	1-#12, 1-#12, 1-#12	1	700 VA	4472 VA					2	2-#6, 1-#6, 1-#10	60 A	WAREWASHER, DOOR TYPE, HIGH TEMP #46	2
3	Recept - REF, SHORTY #07	20 A	1-#12, 1-#12, 1-#12	1			1000 VA	4472 VA							4
5	VNT HOOD - LIGHT/CONT #12	20 A	1-#10, 1-#10, 1-#10	1					1800 VA	840 VA	1	1-#12, 1-#12, 1-#12	20 A	EX FAN - WAREWASHER #47	6
7	WRMR, FD OVERHEAD #14	20 A	2-#12, 1-#12, 1-#12	2	1100 VA	960 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - TRN/KTTL, SOUP #33	8
9							1100 VA	960 VA			1	1-#12, 1-#12, 1-#12	20 A	Recept - TRN/KTTL, SOUP #33	10
11	WRMR, FD OVERHEAD #15	20 A	2-#12, 1-#12, 1-#12	2					1100 VA	1200 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - PREP #34	12
13					1100 VA	1955 VA					2	2-#12, 1-#12, 1-#12	20 A	ICE MAKER/BIN, NUGGET ICE #35	14
15	WRMR, FD OVERHEAD #20	20 A	2-#12, 1-#12, 1-#12	2			1100 VA	1955 VA							16
17									1100 VA	700 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - REF, REACH-IN #36	18
19	Recept - WARMER, RICE #16	20 A	1-#12, 1-#12, 1-#12	1	1008 VA	700 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - REF, REACH-IN #37	20
21	WRMR, FD OVERHEAD #18	20 A	2-#12, 1-#12, 1-#12	2			1100 VA	1035 VA			1	1-#12, 1-#12, 1-#12	20 A	ICE MAKER, NGGT STYLE #82	22
23									1100 VA	800 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - SODA FOUNTAIN #83	24
25	Recept - REF, SAND/SLD #19	20 A	1-#12, 1-#12, 1-#12	1	1080 VA	1920 VA					1	1-#10, 1-#10, 1-#10	20 A	COFFEE MAKER, AUTO #81	26
27	DROP-IN, HOT WELLS #21	20 A	2-#12, 1-#12, 1-#12	2			1350 VA	360 VA			1	1-#12, 1-#12, 1-#12	20 A	Recept - REF, UC/ADA #90	28
29									1350 VA	230 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - DISP, REF, SUSHI #91	30
31	Recept - REF, REACH-IN #24	20 A	1-#12, 1-#12, 1-#12	1	700 VA	1080 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - FREEZER, UC #92	32
33	Recept - PREP #26	20 A	1-#12, 1-#12, 1-#12	1			1080 VA	115 VA			1	1-#12, 1-#12, 1-#12	20 A	Recept - DISP, REF, SUSHI #93	34
35	Recept - ROOF MAU	20 A	1-#12, 1-#12, 1-#12	1					540 VA	900 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - KITCH HALL, POS	36
37	VH FIRE SUPPRESION #12E	20 A	1-#12, 1-#12, 1-#12	1	500 VA	1080 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - BAR	38
39	VH - EXHAUST FAN	15 A	3-#12, 1-#12, 1-#12	3			456 VA	2080 VA			2	2-#10, 1-#10, 1-#10	30 A	WALK-IN FREEZER #66a (condenser)	40
41									456 VA	2080 VA					42
43					456 VA	180 VA					1	1-#12, 1-#12, 1-#12	20 A	WALK-IN FREEZER #66 (lights...	44
45	VH - EXHAUST FAN	15 A	3-#12, 1-#12, 1-#12	3			456 VA	624 VA			2	2-#12, 1-#12, 1-#12	20 A	WALK-IN COOLER #70a (condenser)	46
47									456 VA	624 VA					48
49					456 VA	180 VA					1	1-#12, 1-#12, 1-#12	20 A	WALK-IN COOLER #70 (lights,...	50
51	FREEZER FAN	30 A	2-#10, 1-#10, 1-#10	2			2080 VA	624 VA			2	2-#12, 1-#12, 1-#12	20 A	COOLER FAN	52
53									2080 VA	624 VA					54
			Total Load:		19628 VA		21468 VA		17515 VA						
			Total Amps:		166 A		182 A		146 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	8146 VA	100.00%	8146 VA		
HVAC	5408 VA	100.00%	5408 VA	**Total Conn. Load:**	58564 VA
Receptacle	15193 VA	82.91%	12597 VA	**Total Est. Demand:**	45211 VA
Kitchen Equipment - Non-Dwelling Unit	30809 VA	65.00%	20026 VA	**Total Conn. Current:**	163 A
				Total Est. Demand Current:	125 A

Notes:

BRANCH PANEL: P2

Location: ELEC 117
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

AIC Rating: 22,000
Mains Rating: 200 A
Mains Type: LUG

Notes:

CKT	Circuit Description	Trip	Wire Size	Poles	A		B		C		Poles	Wire Size	Trip	Circuit Description	CKT
1	Recept - TELE. TERM. BOARD	20 A	1-#12, 1-#12, 1-#12	1	360 VA	720 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - TAKEOUT	2
3	Recept - MEN/WOMENS RSTRM	20 A	1-#12, 1-#12, 1-#12	1			900 VA	1080 VA			1	1-#12, 1-#12, 1-#12	20 A	Recept - ENTRANCE	4
5	Recept - HALLWAY KITCHEN	20 A	1-#12, 1-#12, 1-#12	1					1080 VA	720 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - DINING (E)	6
7	Recept - TOILET, ELEC RM	20 A	1-#12, 1-#12, 1-#12	1	360 VA	720 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - DINING (W)	8
9	Recept - OFFICE, HALLWAY	20 A	1-#12, 1-#12, 1-#12	1			1260 VA	900 VA			1	1-#12, 1-#12, 1-#12	20 A	Recept - LARGE DINING	10
11	Recept - KITCHEN STORAGE	20 A	1-#12, 1-#12, 1-#12	1					720 VA	540 VA	1	1-#12, 1-#12, 1-#12	20 A	Recept - DINING OUTDOOR (S)	12
13	Recept - FIRE TREE	20 A	1-#12, 1-#12, 1-#12	1	180 VA	720 VA					1	1-#12, 1-#12, 1-#12	20 A	Recept - DINING OUTDOOR (N)	14
15	EXTERIOR CEILING FAN	20 A	1-#12, 1-#12, 1-#12	1			405 VA	48 VA			1	1-#12, 1-#12, 1-#12	20 A	Light - EXTERIOR WALL LTS	16
17	Light - EXT. DINING	20 A	1-#12, 1-#12, 1-#12	1					170 VA	632 VA	1	1-#12, 1-#12, 1-#12	20 A	Light - OFF, HALLWAY, ENT	18
19	Light - DINING, MAIN	20 A	1-#12, 1-#12, 1-#12	1	425 VA	561 VA					1	1-#12, 1-#12, 1-#12	20 A	Light - KITCHEN, HALLWAY	20
21	Light - EMERGENCY	20 A	1-#12, 1-#12, 1-#12	1			26 VA	56 VA			1	1-#12, 1-#12, 1-#12	20 A	Light - RESTROOM, STORAGE	22
23	Light - EXT. POLE LIGHTS (S/W)	20 A	1-#10, 1-#10, 1-#10	1					582 VA	353 VA	1	1-#12, 1-#12, 1-#12	20 A	Light - SUSHI/ DINING (S)	24
25	Light - EXT. POLE LIGHTS (S)	20 A	1-#10, 1-#10, 1-#10	1	581 VA	1141 VA									26
27	Light - EXT. POLE LIGHTS (W)	20 A	1-#10, 1-#10, 1-#10	1			581 VA	1141 VA			3	3-#12, 1-#12, 1-#12	20 A	VH-MAU	28
29									9727 VA	1141 VA					30
31	RTU-1	100 A	3-#3, 1-#3, 1-#8	3	9727 VA	2762 VA									32
33							9727 VA	2762 VA			3	3-#10, 1-#10, 1-#10	30 A	RTU-2	34
35	Spare	20 A	--	1					0 VA	2762 VA					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
43	Spare	20 A	--	1	0 VA	0 VA					1	--	20 A	Spare	44
45	Spare	20 A	--	1			0 VA	0 VA			1	--	20 A	Spare	46
47	Space	--	--	--					0 VA	0 VA	--	--	--	Space	48
49	Space	--	--	--	0 VA	0 VA					--	--	--	Space	50
51	Space	--	--	--			0 VA	0 VA			--	--	--	Space	52
53	Space	--	--	--					0 VA	0 VA	--	--	--	Space	54
			Total Load:		18201 VA		18873 VA		18355 VA						
			Total Amps:		152 A		157 A		153 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	37489 VA	100.00%	37489 VA		
Power	3423 VA	100.00%	3423 VA	**Total Conn. Load:**	55426 VA
Lighting	3992 VA	100.00%	3992 VA	**Total Est. Demand:**	55296 VA
Receptacle	10260 VA	98.73%	10130 VA	**Total Conn. Current:**	154 A
Kitchen Equipment - Non-Dwelling Unit	400 VA	100.00%	400 VA	**Total Est. Demand Current:**	153 A

Notes:

CONSTRUCTION NOTES

DATE
MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: TMA
DESIGNER: KDC
REVIEWED: DIO

PROJECT #
18SM2079.82

REGISTERED PROFESSIONAL ENGINEER
No. 169278
DON L. OLSEN
STATE OF UTAH
5/12/20

SCALES
0 1"
BAR SCALE WILL BE 1" IN A FULL SIZE SHEET, ADJUST FOR A HALF SIZE SHEET

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:
PANEL SCHEDULE

PLAN SET: PERMIT
SHEET E4.1

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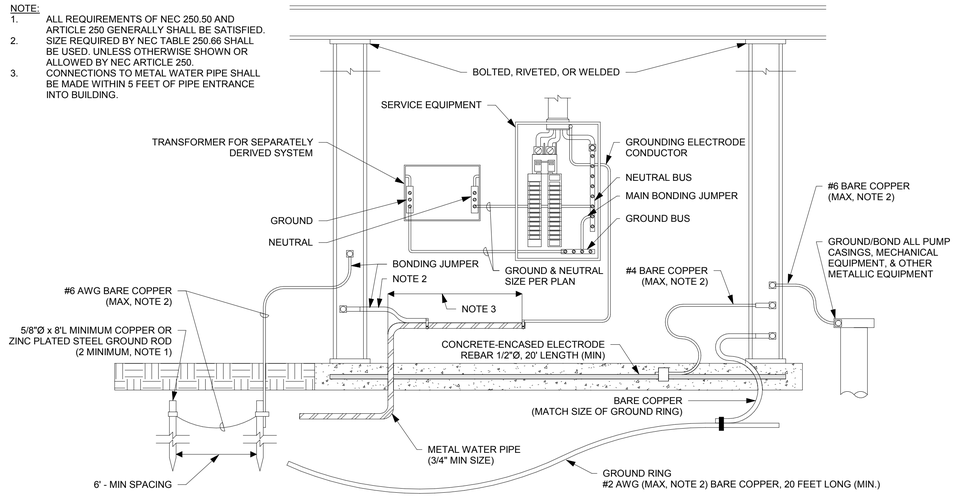
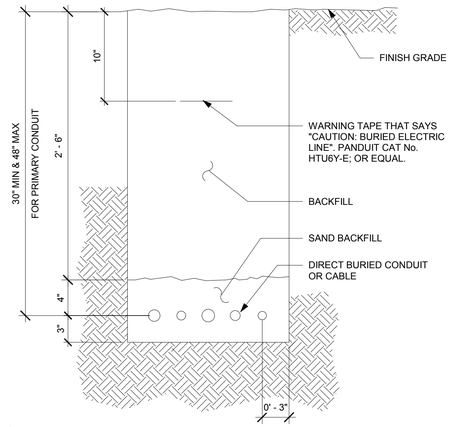
NOTE:
1. ALL REQUIREMENTS OF NEC 250.50 AND ARTICLE 250 GENERALLY SHALL BE SATISFIED.
2. SIZE REQUIRED BY NEC TABLE 250.66 SHALL BE USED. UNLESS OTHERWISE SHOWN OR ALLOWED BY NEC ARTICLE 250.
3. CONNECTIONS TO METAL WATER PIPE SHALL BE MADE WITHIN 5 FEET OF PIPE ENTRANCE INTO BUILDING.

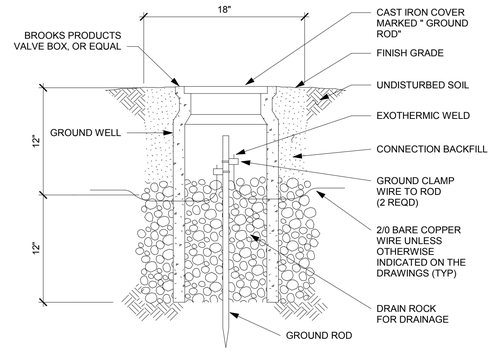


1 GROUNDING ELECTRODE CONDUCTOR
N.T.S.

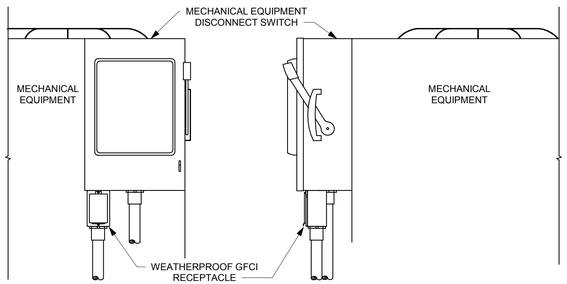


NOTES:
1. ALL DIMENSIONS ARE MINIMUM UNLESS OTHERWISE INDICATED ON THE DRAWINGS.

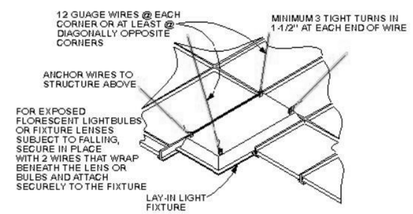
3 DIRECT BURY CONDUIT DETAIL
N.T.S.



4 GROUND ROD DETAIL
N.T.S.



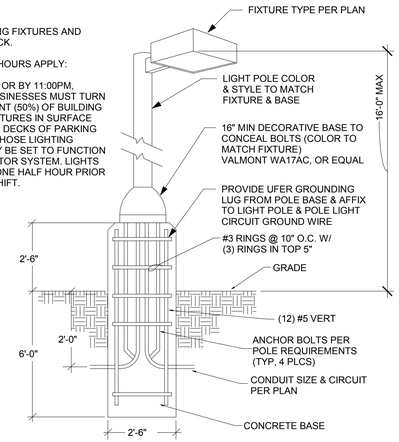
2 WEATHER PROOF RECEPTACLE MOUNTING DETAIL
N.T.S.



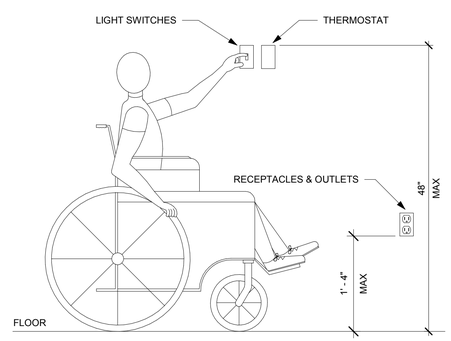
8 SUSPENDED LIGHT FIXTURE SUPPORT
N.T.S.

LIGHTING NOTES:
1. ALL FREESTANDING LIGHTING FIXTURES AND ASSEMBLIES SHALL BE BLACK.
2. THE FOLLOWING LIGHTING HOURS APPLY:

   ONE HOUR AFTER CLOSING OR BY 11:00PM, WHICHEVER IS EARLIER, BUSINESSES MUST TURN OFF AT LEAST FIFTY PERCENT (50%) OF BUILDING LIGHTING AND LIGHTING FIXTURES IN SURFACE PARKING LOTS AND ON TOP DECKS OF PARKING STRUCTURES; HOWEVER, THOSE LIGHTING FIXTURES TURNED OFF MAY BE SET TO FUNCTION UTILIZING A MOTION DETECTOR SYSTEM. LIGHTS MAY BE TURNED BACK ON ONE HALF HOUR PRIOR TO THE FIRST EMPLOYEE SHIFT.

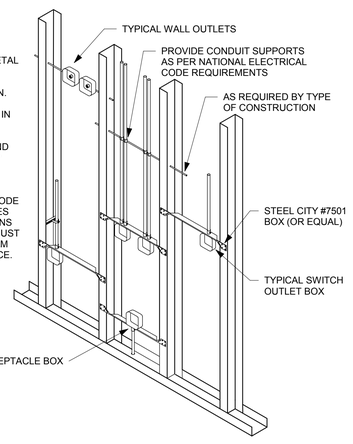


6 LIGHT POLE BASE
N.T.S.

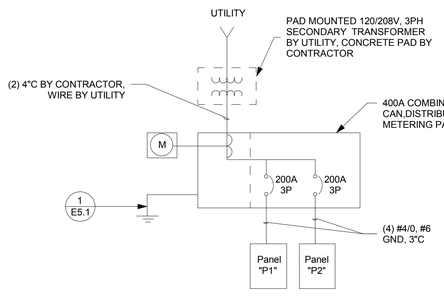


5 MOUNTING HEIGHTS DETAIL
N.T.S.

NOTES:
1. TYPICAL FOR WOOD AND METAL STUD ROUGH IN.
2. PLASTER RINGS NOT SHOWN.
3. LOCATE ALL OUTLET BOXES IN ACCORDANCE WITH ARCHITECTURAL AND MECHANICAL DRAWINGS, AND WITH ALL APPLICABLE SHOP DRAWINGS.
4. IN ACCORDANCE WITH INTERNATIONAL BUILDING CODE OUTLETS ON OPPOSITE SIDES OF THE WALLS OR PARTITIONS IN THE SAME STUD SPACE MUST BE SEPERATED BY A MINIMUM OF 24" HORIZONTAL DISTANCE.



7 TYPICAL ROUGH-IN REQUIREMENTS DETAIL
N.T.S.



NOTES:
1. ALL OVERCURRENT PROTECTION DEVICES SHALL HAVE THE SAME FAULT CURRENT AS THAT OF THE PANEL OR SWITCHGEAR THEY ARE LOCATED WITHIN.
2. AVAILABLE FAULT CURRENT SHALL BE FIELD MARKED ON ALL SERVICE EQUIPMENT IN ACCORDANCE WITH NEC 110.24.
3. ALL WIRING SHALL BE 90 DEGREE C RATED CU, SUITABLE FOR THE LOCATION INSTALLED.

9 SINGLE LINE DIAGRAM
N.T.S.

CONSTRUCTION NOTES

DATE
MARCH 2020

epic ENGINEERING

REVISIONS

MARK	DATE	DESCRIPTION

DRAWN: KDC
DESIGNER: KDC
REVIEWED: DIO
PROJECT # 18SM2079.82

REGISTERED PROFESSIONAL ENGINEER No. 169278 DON I. OLSEN STATE OF UTAH

SCALES
As indicated
0 1"
BAR SCALE MEASURES 1" ON A FULL SIZE SHEET. ADJUST SCALE ACCORDINGLY

PROJECT NAME:
BLOSSOM RESTAURANT

PROJECT LOCATION:
2082 N. HILLCREST RD. SARATOGA SPRINGS, UT

SHEET TITLE:
ELECTRICAL DETAILS

PLAN SET: PERMIT
SHEET E5.1

S:\PROJSMALL PROJECTS\2020 PROJECTS\Harris Architecture\Blossom Restaurant\Blossom Restaurant_ELEC.rvt