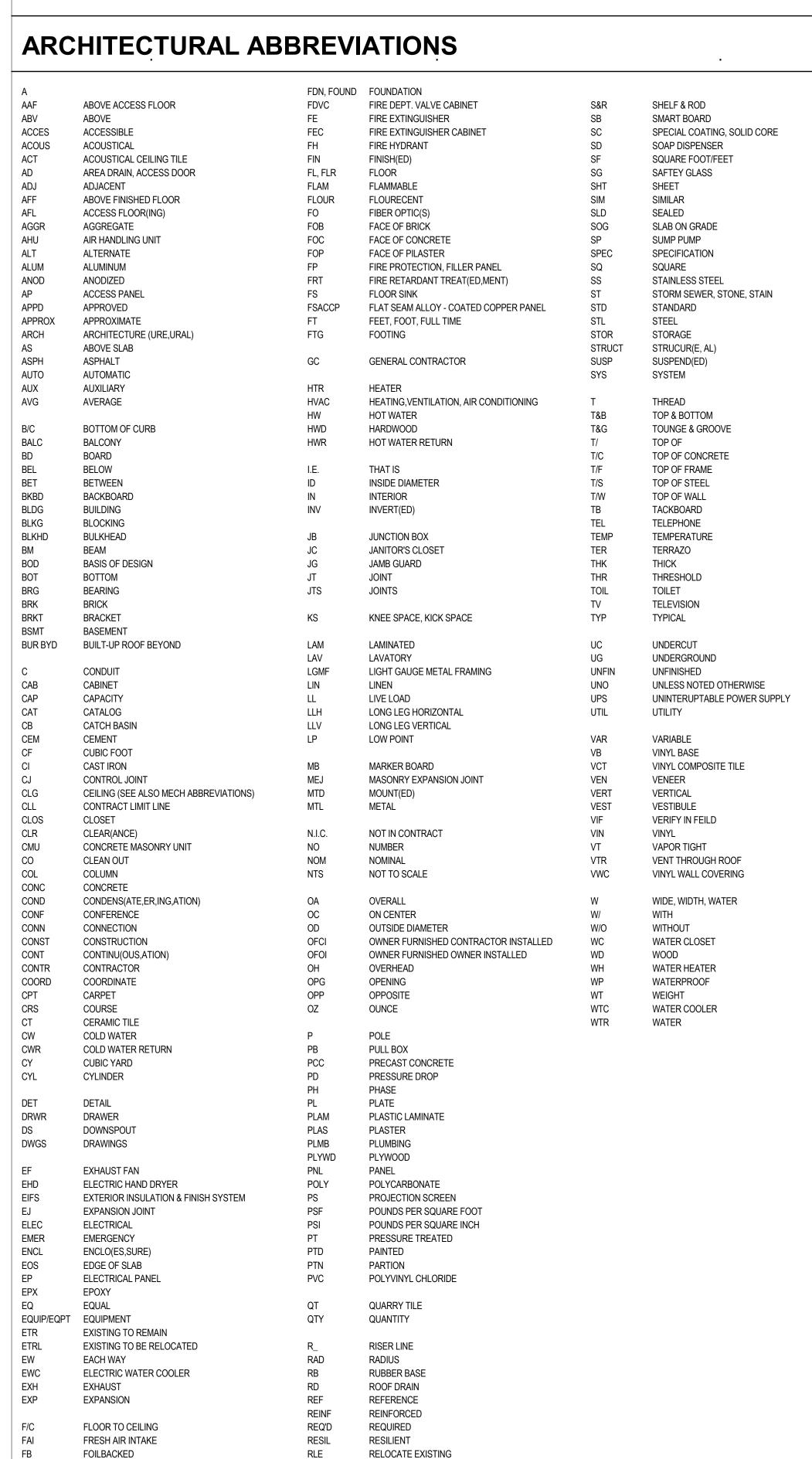


LUCK'S CANNERY -LOWER BLDG. RENNOVATION

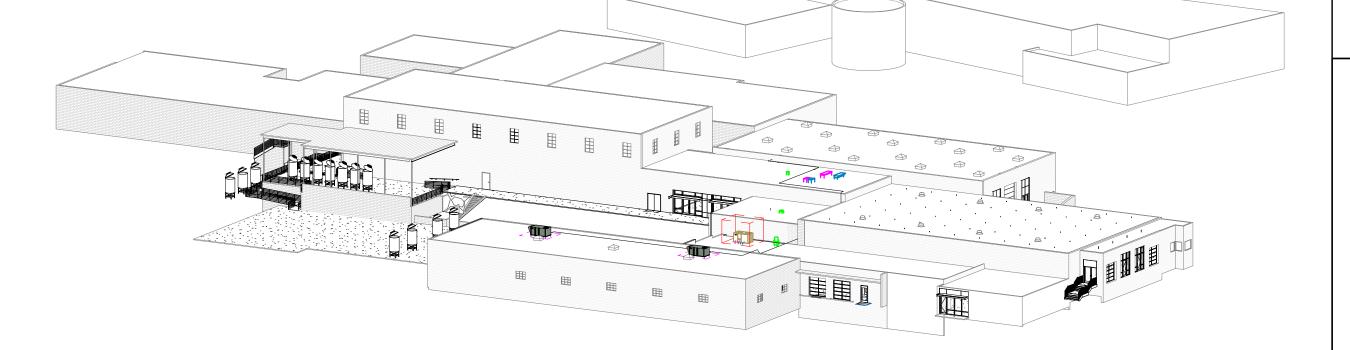
PHASE IA - 798 NC HWY, 705 SEAGROVE NC 27341

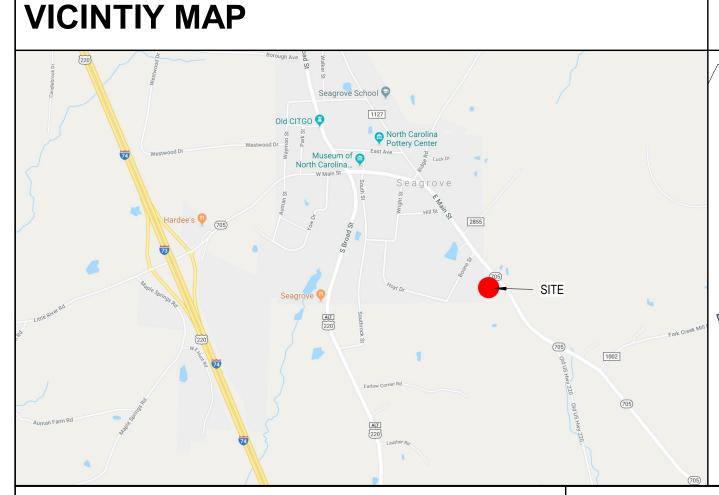


ROOM

ROOF TOP UNIT

FLOOR DRAIN, FIRE DAMPER





GENERAL NOTES:

TO THE EXISTING FIELD CONDITIONS.

SITE AND IN AN EXPEDIOUS MANNER.

AS PART OF THE BASE BID.

TO BE ANCHORED AND GROUTED.

100A

150 SF

(101)

(A1.4)

SYMBOLS LEGEND

ROOM NAME & NUMBERS

DOOR NUMBERS

COLUMN NUMBERS

WINDOW/ LOUVER

REVISION NUMBER

00.00 ELEVATION TARGET

GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF

ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE CODES AND

3. ALL DIMENSIONS LOCATING WALLS ARE TAKEN FROM OUTSIDE FACE OF

FRAMING OR SURFACE OF MASONRY UNLESS OTHERWISE INDICATED.

CONTRACTOR REMOVED ITEMS SHALL BE DISPOSED OF PROPERLY OFF-

REQUIRED TO COMPLETE THE WORK DESCRIBED IN THE CONSTRUCTION

DOCUMENTS IS CONSIDERED A METHOD OR TECHNIQUE AND IS THE SOLE

REQUIRES A LICENSED ENGINEER OR ARCHITECT TO SUPERVISE, APPROVE

RESPONSIBILITY OF THE CONTRACTOR TO CONTRACT FOR THIS SERVICE

ALL NEW PARTITIONS TO TERMINATE AT UNDERSIDE OF ROOF STRUCTURE

8. ALL EXISTING CONDITIONS DAMAGED FROM EQUIPMENT REMOVAL TO BE

9. ALL EXISTING SLAB PENETRATIONS OPENINGS NOT UTILIZED BY EXISTING

10. RATED CONSTRUCTION SHALL BE COORDINATED WITH THOSE IDENTIFIED

ON THE LIFE SAFETY DRAWINGS, IN ADDITION TO THE CONSTRUCTION

11. ALL NEW DOOR FRAMES TO BE INSTALLED WITHING EXISTING CMU WALLS

B60A — WALL/ PARTITION TYPES

02 — CONSTRUCTION KEY NOTE

FLOOR BOX

□FD FLOOR DRAIN

(WB36E30) CASEWORK TAG

⟨00000-00⟩ EQUIPMENT TAG

CT-2 — MATERIAL KEY NOTE

EQUIPMENT SHALL BE INFILLED TO MATCH ADJACENT EXISTING

PATCHED AND REPAIRED TO MATCH ADJACENT EXISTING

6. SHORING OF STRUCTURAL FOUNDATIONS, STRUCTURES, TRENCHING

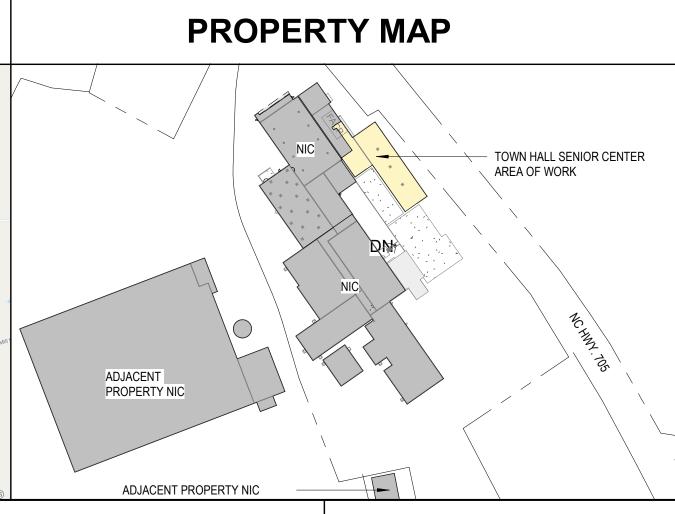
RESPONSIBILITY OF THE CONTRACTOR. IF A REGULATOR AGENCY

AND/OR PROVIDE DRAWINGS FOR SHORING, THEN IT IS THE SOLE

ORDINANCES IN PLACE WITHIN THE JURISDICTION OF THE WORK.

4. DO NOT SCALE PLANS. WRITTEN DIMENSIONS GOVERN.

ANY INCONSISTENCIES OR DISCREPANCIES WITH THE PLANS IN RELATION



ALUMINUM BATT INSULATION BRICK COMPACTED BACKFILL CONCRETE CONCRETE CONCRETE MASONRY UNITS EARTH FINISH WOOD GLASS IN ELEVATION GRANULAR FILL GYPSUM WALL BOARD OR GROUT PARTICLE BOARD/ FIBER

<u>PLYWOOD</u>

<u>INSULATION</u>

<u>CONTINUOUS)</u>

(INTERRUPTED)

STEEL

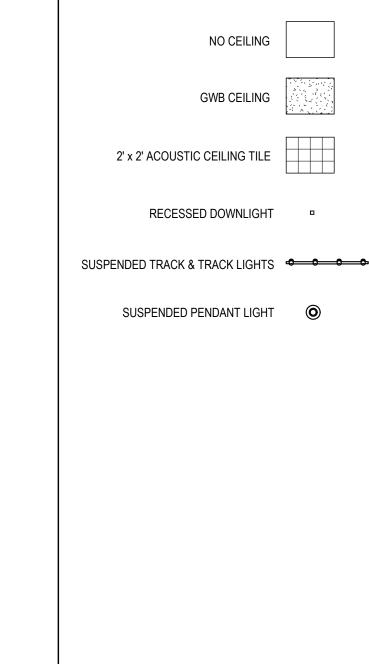
RIGID INSULATION / ROOF

ROUGH WOOD BLOCKING

ROUGH WOOD BLOCKING

STONE (CUT OR CAST)

MATERIAL INDICATIONS



RCP LEGEND

SHEET LIST

	Sheet #	Sheet Name
GENERAL	CS000	COVER SHEET
	CS100	PROJECT OVERVIEW
	CS101	APPENDIX-B
	CS102	LIFE SAFETY PLAN
	CS200	TYPICAL ACCESSIBILITY DETAILS
	CS201	TYPICAL MOUNTING HEIGHTS
DEMOLITION	D100	OVERALL BUILDING DEMOLITION PLAN
	D101A	TOWN HALL DEMOLITION PLAN
	D102A	TOWN HALL DEMOLITION RCP
MECHANICAL DEMOLITION	MD100	TOWNHALL FLOOR PLAN - DEMO - MECHANICAL
CITE DETAIL C /TVDICAL)	L300	SITE RELATED DETAILS
SITE DETAILS (TYPICAL)	L310	SITE RELATED DETAILS
	L310	SITE RELATED DETAILS
STRUCTURAL	S100	GENERAL NOTES
	S101	FOUNDATION
	S102	FRAMING PLAN
	S501	TYPICAL DETAILS
ARCHITECTURAL	A000	GENERAL NOTES & PARTITION TYPES
ANOTHEOTOTAL	A000	ARCHITECTURAL SITE PLAN (ADD ALTERNATE #1)
	A003	SITE PLAN DETAILS (ADD ALTERNATE #2)
	A100	TOWN HALL FLOOR PLAN & REFLECTED CEILING PLAN
	A101	TOWN HALL ROOF PLAN
	A200	EXTERIOR ELEVATIONS
	A300	INTERIOR ELEVATIONS
	A400	ENLARGED PLANS, ELEVATIONS, & DETAILS
	A500	WALL SECTION & DETAILS
	A501	WALL SECTIONS & DETAILS
	A600	DOOR SCHEDULE
	A601	DOOR DETAILS
	A602	DOOR SPECIFICATIONS
	A700	WINDOW SCHEDULE
	A800	FINISH SCHEDULE
ELECTRICAL	E001	LEGEND
	E002	ELECTRICAL SPECIFICATIONS
	E101	LIGHTING PLAN - FIRST FLOOR
	E201	POWER & FIRE ALARM PLAN - FIRST FLOOR
	E202	POWER PLAN - ROOF
	E501	SCHEDULES
	E601	DETAILS
MECHANICAL	M001	NOTES & LEGENDS - MECHANICAL
• • . • .	M003	MECHANICAL SPECIFICATIONS
	M100	TOWNHALL FLOOR PLAN MECHANICAL
	M101	GAS PIPING PLAN - MECHANICAL
	M201	SCHEDULES - MECHANICAL
	M301	DETAILS - MECHANICAL
DITINDING	Door	NOTES ALESENDS BULLIABILIS
PLUMBING	P001	NOTES & LEGENDS - PLUMBING
	P100	TOWNHALL FLOOR PLAN - PLUMBING

SCHEDULES & DETAILS - PLUMBING

Www.bodhilandanddesign.com

BODHI Land and Design, PLL 918 Minerva Dale Drive

Fuquay Varina, NC 27526

Plans, maps, specifications, studies, and reports not containing a red ink seal imprint accompanied by an original signature by the licensed professional may have been fraudulently altered and shall not be considered an original copy. All information should be disregarded unless verified by the professional whose signature appears below.

Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

11641

14641

14641

17641

17641

17641

17641

17641

Issue For:

CONSTRUCTION
Issue Date:

09.27.2019
REVISIONS

PRINCIPAL IN CHARGE:

D. WALKER

D. WALKER
Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove, NC 27341

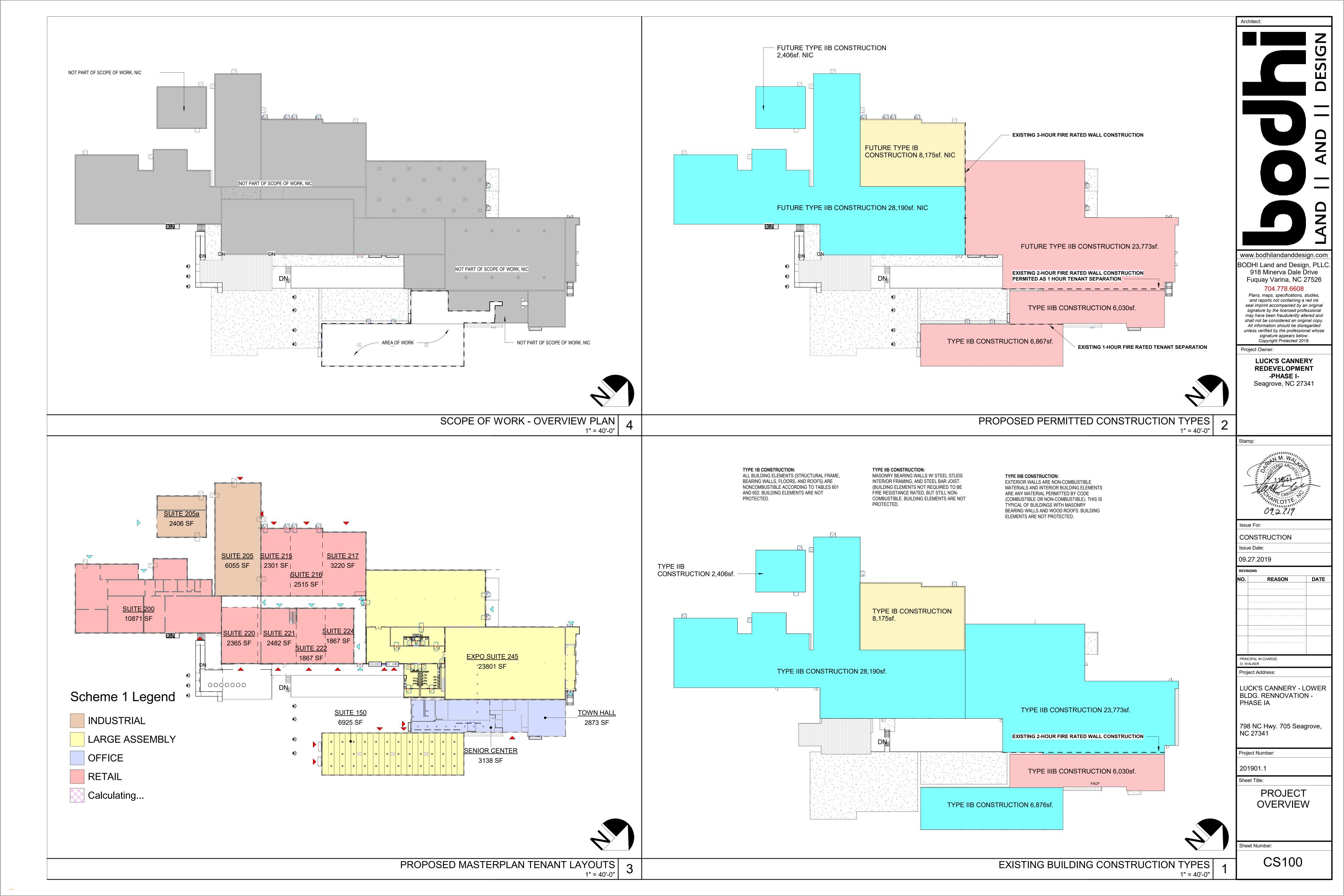
Project Number: 201901.1

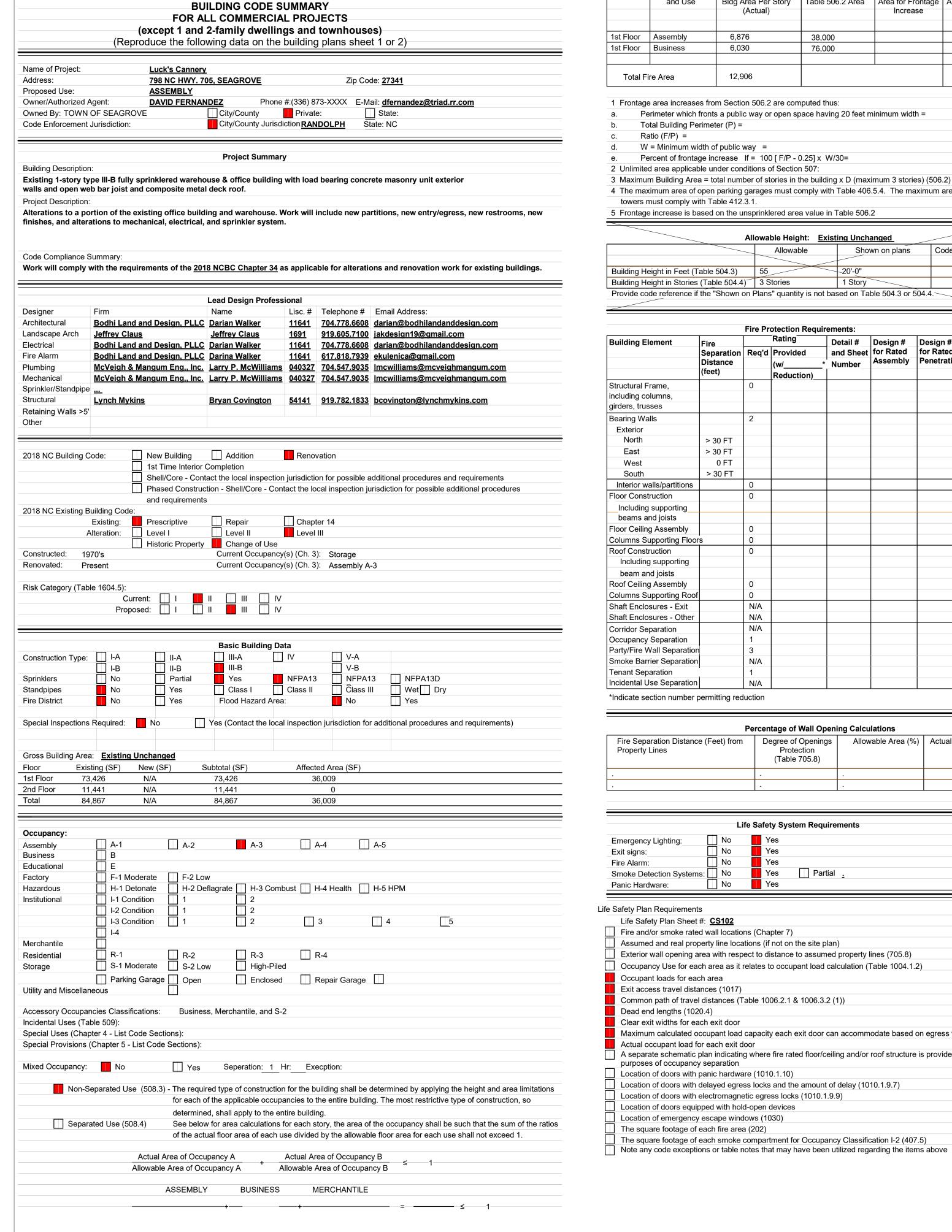
eet Title:

COVER SHEET

Sheet Number:

CS000





2015 APPENDIX B - FIRE AREA "A"

Story No. Descrip	se Bldg A	(A) Area Per (Actual)			(B) 06.2 Area	(C) Area for Fr Increa	_	(D) Allowable Area or Unlimited
1st Floor Assembly 1st Floor Business	6,8			38,00 76,00				
					<u> </u>			
Total Fire Area	12,9							
b. Total Buildingc. Ratio (F/P) =d. W = Minimun	ich fronts a publich Perimeter (P) = n width of publich ntage increase icable under coronare = total num of open parking with Table 412	way = If = 100 iditions of ber of si garages 3.1.	r open spa 0 [F/P - 0. of Section tories in the s must con	25] x W 507: e buildir	ng 20 feet n //30= ng x D (max n Table 406	imum 3 storio .5.4. The ma	es) (506	<u>'</u>
Building Height in Fee Building Height in Stor	ries (Table 504.4	55	Allowable Stories s" quantity	e	20'-0" 1 Story	wn on plans		ode reference
Building Element	Fire Separation Distance		otection F Rating	ı	Detail # and Sheet	Design # for Rated Assembly	Desigr for Ra	ted Rated Joint
Structural Frame,	(feet)	0	(w/ Reductio		Number		2011	
including columns, girders, trusses								
Bearing Walls Exterior		2						
North East	> 30 FT > 30 FT							
West	0 FT							
South Interior walls/partition	> 30 FT	0						
Floor Construction		0						
Including supporting beams and joists								
Floor Ceiling Assembly Columns Supporting F		0						
Roof Construction		0						
Including supporting beam and joists	9							
Roof Ceiling Assembly Columns Supporting R		0						
Shaft Enclosures - Exi	i	N/A						
Shaft Enclosures - Oth Corridor Separation	er	N/A N/A						
Occupancy Separation Party/Fire Wall Separa		1 3						
Smoke Barrier Separa		N/A						
Tenant Separation Incidental Use Separat	ion	1 N/A						
*Indicate section numb								
		Parcar	ntage of W	/all One	ning Calcu	lations		
Fire Separation Dist	ance (Feet) from		egree of O	penings		able Area (%) Acti	ual Shown on Plans
Property Lines			Protect (Table 70					(%)
					1		<u> </u>	
		ifo Sef	tu Quata	Po!	romerts			
Emergency Lighting:	L ☐ No		ty System ′es	rvequii	ements			
Exit signs: Fire Alarm: Smoke Detection Sys Panic Hardware:	No No No No No No	Y	′es ′es ′es [Partia	al <u>.</u>			
		<u> </u>	-					
e Safety Plan Requirem Life Safety Plan Sh								
Fire and/or smoke Assumed and real	rated wall location	•		site nic	an)			
Exterior wall openir	ng area with resp	ect to d	istance to	assume	d property I	, ,		
Occupancy Use for Occupant loads for		relates t	o occupan	it load c	alculation (1	able 1004.1.	2)	
Exit access travel of	listances (1017)	Table 40	062494	00e a c	(1))			
Common path of tra Dead end lengths (1020.4)	avie 10	υυ.∠.Ί & 1	υυ ಠ. პ.2	(1))			
Clear exit widths fo Maximum calculate		capacit	y each exi	t door c	an accomm	odate based	on eare	ss width (1005.3)
Actual occupant loa	ad for each exit o	loor						· ·
A separate schema	itic plan indicatin ancy separation	y wnere	: iiie rated	HOOF/CE	iling and/or	IOOI STRUCTURE	s is provi	iueu IOf
Location of doors w	vith panic hardwa	•		mount o	of delay (10	10.1.9.7)		

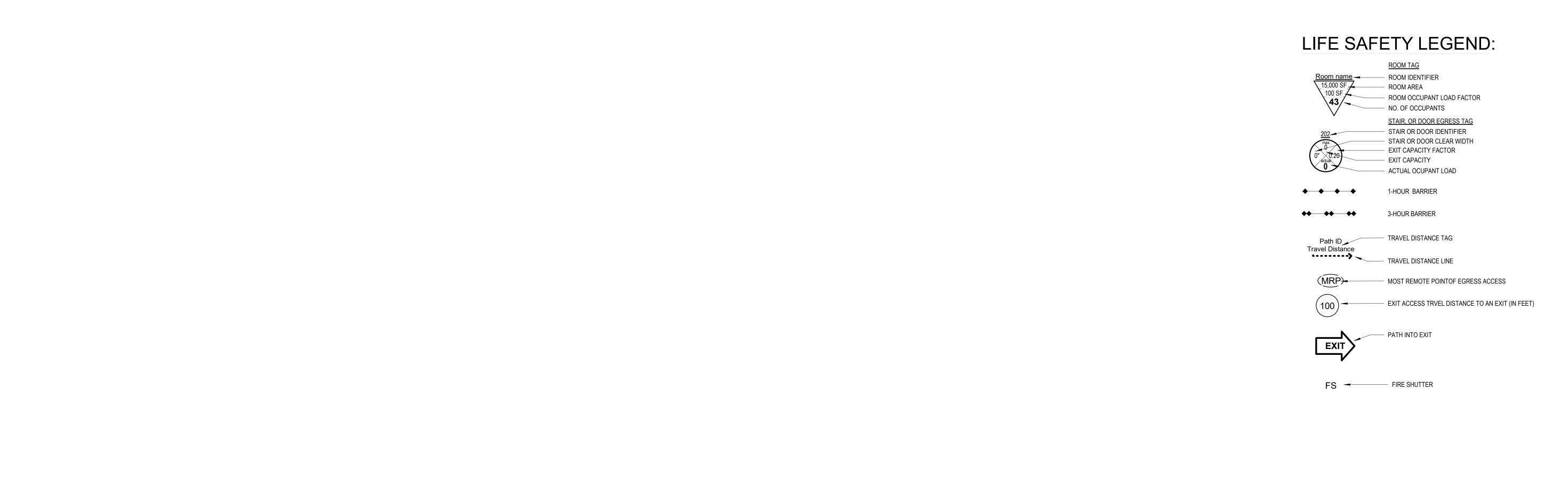
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otal	Acces	sible Acc	essible	 e	Type	A Un	•		n 1107 nits-T		Units	Tvp	e B U	nits	Tota	I Acces	sible
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					۸۵		sible Pa	arking	n DAE	T OF	SED	Λ D /	TF D	۸۲	(\C	E	
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			Plumb	oing F	ixture	Req	uiremei	nts									
					able 29		-		1.1	Ι,	4			Ī			La lu
					Water Male	Clos	et Femal	-	Urinal	Lava Male		Fei	nale	Dri		ig Foun Regular	tain Accessible
	U	SE			ired	ded	ired	ded		ired	ded	ired	pep	ired			
					Required	Provided	Required	Provided		Required	Provided	Required	Provided	Required	.		
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<u>4-3</u> В	225/se				1.79 1.21		3.45 1.21	-		1.12 0.75		1.1 0.7		1	+		
	Į T	OTAL			3	2	5	5	1	1.87	2	1.8	7 3	3		2	1
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Energy Summary - EXISTING UNCHANGED	
Energy Requirements The following shall be considered minimum and any special attribute required to meet the energy code shall also be	5
provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If	
Perfomance methos, state the annual energy cost for the standard reference design vs. annual energy cost for the proposed design.	
Existing building envelope complies with code: No Yes (The remainder of this section is not applicable)	le)
Exempt Building: No 2018 North Carolina State Building Code: Energy Section C505 - C505.1 General "Unaltered portions of the existing building or building supply systems"	
shall not be required to comply with this code."	
Climate Zone: 3 4 5 Method of Compliance: Energy Code Performance Prescriptive	\overline{z}
ASHRAE 90.1 Performance Prescriptive	
Thermal Envelope	
Roof/Ceiling Assembly (Each Assembly) Description of Assembly	
U-Value of total Assembly R-value of total Assembly	
Skylights in each Assembly U-Value of skylight	
Total Square Footage of	Z
skylights in each assembly Exterior Walls (Each Assembly)	▗ ▔▃▋ ∢
Description of Assembly U-Value of total Assembly	
R-value of Insulation Openings (windows or doors)	www.bodhilandanddesign.com
U-Value of Assembly	BODHI Land and Design, PLLC 918 Minerva Dale Drive
Solar heat gain coefficient Projection Factor	Fuquay Varina, NC 27526
Door R-Value Walls Below Grade (Each Assembly)	704.778.6608 Plans, maps, specifications, studies,
Description of Assembly U-Value of total Assembly	and reports not containing a red ink seal imprint accompanied by an original
R-value of Insulation	signature by the licensed professional may have been fraudulently altered and shall not be considered an original copy.
Floors over unconditioned spaces (each assembly) Description of Assembly	All information should be disregarded unless verified by the professional whose
U-Value of total Assembly R-value of Insulation	signature appears below. Copyright Protected 2019.
Floors slab on grade	Project Owner:
Description of Assembly U-Value of total Assembly	LUCK'S CANNERY REDEVELOPMENT
R-value of Insulation Horizontal/vertical requirement:	-PHASE I-
slab heated:	Seagrove, NC 27341
<u>Mechanical Design</u> (Provide on the Mechanical Sheets)	
Thermal Zone:	
Winter Dry Bulb	
Summer Dry Bulb Interior Design Conditions:	Stamp:
Winter Dry Bulb Summer Dry Bulb	- Milling.
Relative Humidity	AN M. WA
Building Heating Load Building Cooling Load	
Mechanical Spacing Conditioning System Unitary	- turk low
Description of Unit Heating Efficiency	OP. 27.19
Cooling Efficiency Size Category of Unit	09.27.19
Boiler	Issue For:
Size Category. If oversized, state reason: Chiller	CONSTRUCTION
Size Category. If oversized, state reason: List equipment efficiencies: Refer to Equipment Schedules	Issue Date:
	99.27.2019
Electrical Design (Provide on the Electrical Sheets)	REVISIONS
	NO. REASON DATE
Method of Compliance Energy Code: Prescriptive Performance	_
ASHRAE 90.1 Prescriptive Performance Lighting Schedule (Each Fixture Type)	
lamp type required in fixture	
number of lamps in fixture ballast type used in the fixture	_
number of ballasts in fixture total wattage per fixture	_
total interior wattage specified vs. allowed (whole building or space by space)	PRINCIPAL IN CHARGE: D. WALKER
total exterior wattage specified vs. allowed Additional Efficiency Package Options	Project Address:
(When using the 2018 NCECC; not required for ASHRAE 90.1) C406.2 More Efficient HVAC Equipment Performance	LUCK'S CANNERY - LOWER
C406.3 Reduced Lighting Power Density C406.4 Enhanced Digital Lighting Controls	BLDG. RENNOVATION -
C406.5 On-Site Renewable Energy	PHASE IA
C406.6 Dedicated Outdoor Air System C406.7 Reduced Energy Use in Service Water Heating	_
	798 NC Hwy. 705 Seagrove, NC 27341
	Project Number:
	201901.1
	Sheet Title:
	APPENDIX-B
	1

Architect:

Sheet Number:

CS101

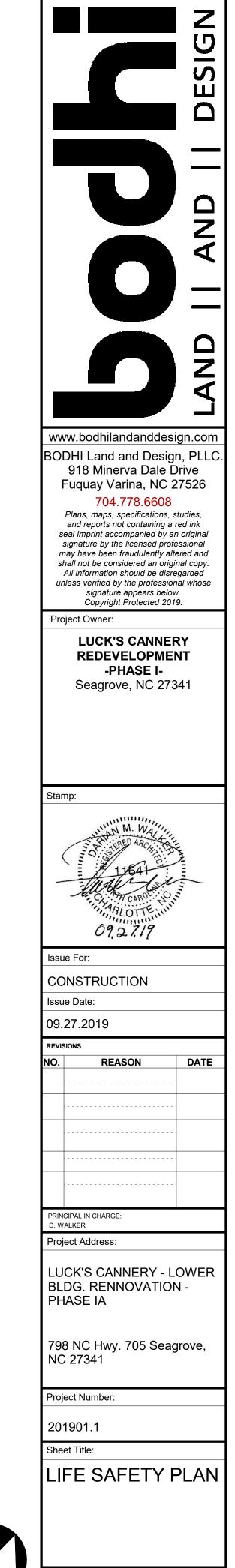


87' - 6 1/4"

ACTUAL

142 SF 300 **0.5**

36 SF 300 **0.2**



Architect:

230 SF - 100

OFFICE 244 SF 100 **2.5**

131 SF 100 1.4

WAITING ROOM
223 SF
100
2.3

heet Number:

A. PEDESTRIAN RAMPS

- ANY PATH OF TRAVEL SHALL BE CONSIDERED A RAMP IF ITS SLOPE IS GREATER THAN 1 FOOT RISE IN 20 FOOT HORIZONTAI
- 2. PEDESTRIAN RAMPS SERVING ACCESSIBLE ENTRANCES TO BUILDINGS SHALL HAVE A CLEAR WIDTH NOT LESS THAN THE
- WIDTH REQUIRED FOR WALKS. PEDESTRIAN RAMPS SERVING ACCESSIBLE ENTRANCES TO BUILDINGS SHALL BE A MINIMUM 48 INCHES CLEAR WIDTH.
- 4. PEDESTRIAN RAMPS SERVING ACCESSIBLE ENTRANCES TO
- BUILDINGS HAVING AN OCCUPANT LOAD OF 300 OR MORE SHALL HAVE A MINIMUM CLEAR WIDTH OF 60 INCHES. 5. PEDESTRIAN RAMPS SERVING ACCESSIBLE ENTRANCES TO

BUILDINGS HOUSING GROUP R OCCUPANCIES MAY BE 36 INCHES

- CLEAR WIDTH WHEN THE OCCUPANT LOAD IS 50 OR LESS. 6. THE MAXIMUM SLOPE OF A RAMP THAT SERVES ANY EXITWAY PROVIDES DISABLED ACCESS OR IS IN THE PATH OF TRAVEL SHALL BE 1 FOOT RISE IN 12 FEET OF HORIZONTAL RUN.
- THE LEAST POSSIBLE SLOPE SHALL BE USED FOR ANY RAMP . RAMP LANDINGS SHALL BE PROVIDED AT THE TOP AND BOTTOM
- INTERMEDIATE LANDINGS SHALL BE PROVIDED AT INTERVALS NOT EXCEEDING 30 INCHES OF VERTICAL RISE AND AT EACH CHANGE OF DIRECTION. LANDINGS ARE NOT CONSIDERED II
- DETERMINING THE MAXIMUM HORIZONTAL DISTANCE OF EACH
- SHALL HAVE A LENGTH OF NOT LESS THAN 60 INCHES IN THE DIRECTION OF RAMP RUN. 10. DOORS IN ANY POSITION SHALL NOT REDUCE THE MINIMUM DIMENSION OF THE RAMP LANDING TO LESS THAN 42 INCHES AND

TOP LANDINGS SHALL BE NOT LESS THAN 60 INCHES WIDE AND

- SHALL NOT REDUCE THE REQUIRED WIDTH BY MORE THAN 3-1/2 11. THE WIDTH OF THE LANDING SHALL EXTEND 24 INCHES PAST THE STRIKE EDGE OF ANY DOOR OR GATE FOR EXTERIOR RAMPS AND
- 18 INCHES PAST THE STRIKE EDGE FOR INTERIOR RAMPS. 12. INTERMEDIATE LANDINGS AT A CHANGE OF DIRECTION AND
- BOTTOM LANDINGS SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 72 INCHES.
- 13. AT BOTTOM AND INTERMEDIATE LANDINGS, THE WIDTH SHALL BE AT LEAST THE SAME AS REQUIRED FOR THE RAMPS.
- 14. OTHER INTERMEDIATE LANDINGS SHALL HAVE A DIMENSION IN THE DIRECTION OF RAMP RUN OF NOT LESS THAN 60 INCHES.
- 15. THE SLOPE ACROSS A RAMP LANDING IN ANY DIRECTION SHALL NOT EXCEED 1/4 INCH RISE IN 1 FOOT OF HORIZONTAL RUN.
- 16 HANDRAILS ARE REQUIRED ON RAMPS THAT PROVIDE DISABLED ACCESS, IF THE SLOPE EXCEEDS 1 FOOT RISE IN 20 FEET O HORIZONTAL RUN.
- 17. HANDRAILS SHALL BE PLACED ON EACH SIDE OF EACH RAMP HANDRAILS SHALL BE CONTINUOUS. THE FULL LENGTH OF THE RAMP, SHALL BE AT 34 INCHES ABOVE THE RAMP WITH A HORIZONTAL RAIL AT 27" ABOVE RAMP SURFACE WHEN INTERMEDIATE RAILING WITH MAX. OF 4" OF CLEAR SPACE IS NOT REQUIRED. LOW HORIZONTAL RAIL SHALL EXTENI SAME AS REQUIRED FOR HANDRAILS AND SHALL EXTEND A MIN OF 1 FOOT BEYOND THE TOP AND BOTTOM OF THE RAMP, AND
- THE ENDS SHALL BE RETURNED TO A WALL, FLOOR, OR POST 18. HANDRAILS PROJECTING FROM A WALL SHALL HAVE A SPACE OF NOT LESS THAN 1 1/2 INCHES BETWEEN THE WALL AND THE
- 19. THE GRIP PORTION OF THE HANDRAIL SHALL BE NOT LESS THAN 1 1/4 INCHES NOR MORE THAN 1 1/2 INCHES IN CROSS SECTIONA OUTSIDE DIMENSION. OR THE SHAPE SHALL PROVIDE AN EQUIVALENT GRIPPING SURFACE AND ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS. SEE TYPICAL ACCESSIBILITY DETAIL SHEET.
- 20. THE SURFACE ON RAMPS SHALL BE NON-SLIP MEETING A

COEFFICIENT OF FRICTION OF O.8.

R WHEEL GUIDE. SEE 21.B ABOVE.

- 21. WHEN THE RAMP SURFACE IS NOT BOUNDED BY A WALL OR FENCE AND THE RAMP EXCEEDS 10 FEET IN LENGTH. THE RAMP
- SHALL COMPLY WITH ONE OF THE FOLLOWING REQUIREMENTS: A. A GUIDE CURB A MINIMUM OF 2 INCHES IN HEIGHT SHALL BE PROVIDED AT EACH SIDE OF THE RAMP, EXCEPT WHEN ADJACENT GRADE IS 4" OR GREATER BELOW RAMP SURFACE, THEN CURB SHALL BE A MIN. 6" HIGH ABOVE RAMP SURFACE
- B. A WHEEL GUIDE RAIL SHALL BE PROVIDED, CENTERED 3 INCHES PLUS OR MINUS 1 INCH ABOVE THE SURFACE ON THE RAMP. C. SEE NOTE #T-7 FOR ADDITIONAL INFORMATIONS
- 22. WHERE A RAMP SURFACE HAS A SLOPE OF 1:20 (5%) OR GREATER AND THE ADJACENT GRADE IS GREATER THAN 4" BELOW THE RAMP SURFACE A CURB 6" HIGH ABOVE THE RAMP SURFACE SHALL BE PROVIDED ALONG SUCH OPEN SIDE OF RAMP SURFACE
- 23. WHERE AN ADJACENT GRADE IS 30" BELOW THE OPEN SIDE OF THE RAMP, A 42"-45" HIGH GUARDRAIL SHALL BE INSTALLED WITH INTERMEDIATE MEMBERS SO AN OBJECT OF 4" DIAMETER CAN NOT PASS THROUGH SUCH INTERMEDIATE MEMBERS.

B. ENTRANCES

- I. AT LEASE ONE PRIMARY ENTRANCE (NOTE: SOME GOVERNING AGENCIES MAY DEFINE EXITS AS A BLDG. ENTRANCE) TO BUILDING AND FACILITIES SHALL BE MADE ACCESSIBLE TO THE PHYSICALLY DISABLED, QUANTITY OF ACCESSIBLE ENTRANCES, ALTHOUGH, SHALL BE AS REQUIRED BY THE GOVERNING AGENCIES.
- 2. ALL DISABLED ACCESSIBLE ENTRANCES, SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN AND WITH ADDITIONAL DIRECTIONAL SIGNS VISIBLE FROM APPROACHING PEDESTRIAN
- 3 FVFRY REQUIRED ENTRANCE. "EXIT". OR PASSAGE DOORWAY SHALL BE OF A SIZE AS TO PERMIT THE INSTALLATION OF A DOOR NOT LESS THAN 3 FEET IN WIDTH AND NOT LESS THAN 6 FEET, 8 INCHES IN HEIGHT. DOORS SHALL BE CAPABLE OF OPENING AT LEAST 90 DEGREES AND SHALL BE SO MOUNTED THAT THE CLEAR WIDTH OF THE DOORWAY IS NOT LESS THAN 32 INCHES.
- 4. WHERE A PAIR OF DOORS IS UTILIZED AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
- WHEN AN AUTOMATIC DOOR OPERATOR IS UTILIZED TO OPERATE A PAIR OF DOORS, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR UNOBSTRUCTED OPENING WIDTH OF 32 INCHES WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS

LEVERS

FLOOR

- 6. LATCHING AND LOCKING DOORS THAT ARE HAND ACTIVATED AND WHICH ARE IN A PATH OF TRAVEL. SHALL BE OPERABLE WITH A SINGLE EFFORT BY LEVER TYPE HARDWARE, PANIC BARS, PUSH-PULL ACTIVATING BARS, OR OTHER HARDWARE DESIGNED TO PROVIDE PASSAGE WITHOUT REQUIRING THE ABILITY TO GRASP
- 7 HAND ACTIVATED DOOR OPENING HARDWARE SHALL BE CENTERED BETWEEN 34 INCHES AND 44 INCHES ABOVE THE
- 8. THE FLOOR OR LANDING ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE LEVEL. THE LEVEL AREA SHALL HAVE A LENGTH IN THE DIRECTION OF DOOR SWING OF AT LEAST 60 INCHES AND THE LENGTH OPPOSITE THE DIRECTION OF DOO SWING OF 48 INCHES AS MEASURED AT RIGHT ANGLES TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION.
- 9. THE WIDTH OF THE LEVEL AREA ON THE SIDE TO WHICH THE DOOR SWINGS SHALL EXTEND 24 INCHES PAST THE STRIKE EDGE OF THE DOOR FOR EXTERIOR DOORS AND 18 INCHES PAST THE STRIKE EDGE FOR INTERIOR DOORS. WHEN DOOR SWINGS IN DIRECTION OF TRAVEL AND THE DOOR HAS BOTH AT THE DOOR STRIKE EDGE OPPOSITE OF THE DOOR SWING.
- 10. THE FLOOR OR LANDING SHALL BE NOT MORE THAN 1/2 INCH LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGE IN LEVEL BETWEEN 1/4 INCH AND 1/2 INCH SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1:2.
- 11. THE BOTTOM 10 INCHES OF ALL DOORS SHALL HAVE A SMOOTH UNINTERRUPTED SURFACE TO ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRIP OR HAZARDOUS CONDITION. WHERE NARROW FRAME DOORS ARE USED, A 10 INCH HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR, WHICH WILL ALLOW THE DOOR TO BE OPENED BY A WHEELCHAIR FOOTREST WITHOUT CREATING A TRIP OR HAZARDOUS CONDITION. SEE TYPICAL ACCESSIBILITY
- 12. NOT USED
- 13. THE SPACE BETWEEN TWO CONSECUTIVE DOOR OPENINGS IN A VESTIBULE, SERVING OTHER THAN A REQUIRED EXIT STAIRWA SHALL PROVIDE A MINIMUM OF 48 INCHES OF CLEAR SPACE FROM ANY DOOR OPENING INTO SUCH VESTIBULE WHEN THE DOOR IS POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION DOORS IN A SERIES SHALL SWING FITHER IN THE SAME RECTION OR AWAY FROM THE SPACE BETWEEN THE DOORS.

14. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 8 1/2

LBS. FOR EXTERIOR DOORS AND 5 LBS. FOR INTERIOR DOORS SUCH PULL OR PUSH EFFORT BEING APPLIED AT RIGHT ANGLE TO HINGED DOORS AND AT THE CENTER PLANE OF SLIDING OR FOLDING DOORS COMPENSATING DEVICES OR ALITOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE ABOVE STANDARDS. OPERATE THE DOOR MAY BE INCREASED UP TO 15 LBS.

C. FLOORS AND LEVELS

BY PEDESTRIAN RAMPS, PASSENGER ELEVATORS AND/OR, WHEN ALLOWED, SPECIAL ACCESS LIFTS. 2. FLOORS ARE TO BE SLIP RESISTANT.

1. IN BUILDINGS AND FACILITIES, FLOORS OF ANY GIVEN SPACE SHALL

HAVE A COMMON LEVEL THROUGHOUT. OR SHALL BE CONNECTED

3. SEE "THRESHOLD/LEVEL CHANGES" DETAIL ON TYPICAL ACCESSIBILITY

D. SANITARY FACILITIES (GENERAL)

4. SEE NOTE #T-7 FOR ADDITIONAL INFORMATION

- WHEN SANITARY FACILITIES ARE LOCATED ON ACCESSIBLE FLOORS OF A BUILDING, THEY SHALL BE MADE ACCESSIBLE TO THE PHYSICALLY DISABLED.
- 2. WHERE SEPARATE FACILITIES ARE PROVIDED FOR NON-DISABLED PERSONS OF EACH SEX. SEPARATE FACILITIES SHALL BE PROVIDED FOR DISABLED PERSONS OF EACH SEX ALSO. WHERE UNISEX FACILITIES ARE PROVIDED FOR NON-DISABLED PERSONS, SUCH UNISEX FACILITIES SHALL BE PROVIDED FOR
- 3. ALL DOORWAYS LEADING TO SANITARY FACILITIES SHALL HAVE 32 INCH CLEAR UNOBSTRUCTED OPENINGS.
- ON DOORWAYS LEADING TO MEN'S SANITARY FACILITIES. AN EQUILATERAL TRIANGLE 1/4 INCH THICK WITH EDGES 12 INCHES LONG AND A VERTEX POINTING UPWARD SHALL BE PROVIDED AND ON DOORWAYS LEADING TO WOMEN'S SANITARY FACILITIES A CIRCLE 1/4 INCH THICK AND 12 INCHES IN DIAMETER SHALL BE ON THE DOOR AT A HEIGHT OF 60 INCHES AND THEIR COLOR AND CONTRAST SHALL BE DISTINCTLY DIFFERENT FROM THE COLOR AND CONTRAST OF THE DOOR. PROVIDE PICTOGRAM ON THE WALL ADJACENT TO THE DOOR LATCH SIDE AS NOTED IN THE
- 5. ON DOORWAYS LEADING TO UNISEX SANITARY FACILITIES, AN SHALL BE PROVIDED, EACH 1/4" THICK, LOCATED AS NOTED IN NOTE #4 ABOVE. PROVIDE UNISEX PICTOGRAM AS NOTED IN

E. SINGLE ACCOMMODATION TOILET FACILITIES (WHERE INDICATED)

- THERE SHALL BE SUFFICIENT SPACE IN THE TOILET ROOM FOR A WHEELCHAIR MEASURING 30 INCHES WIDE BY 48 INCHES LONG TO ENTER THE ROOM AND PERMIT THE DOOR TO CLOSE.
- 2. THE WATER CLOSET SHALL BE LOCATED IN A SPACE WHICH PROVIDES A MIN. OF 28 INCH WIDE CLEAR SPACE BETWEEN THE WATER CLOSET'S FURTHEST MOST PROTRUDING EDGE AND AN ADJACENT FIXTURE OR A 32 INCH WIDE CLEAR SPACE BETWEEN THE WATER CLOSET'S FURTHEST MOST PROTRUDING EDGE AND AN ADJACENT WALL AT ONE SIDE AND 48 INCHES OF CLEAR SPACE IN FRONT OF THE WATER CLOSET IF THE COMPARTMENT HAS AN END OPENING DOOR (FACING THE WATER CLOSET) A 60 INCH MINIMUM LENGTH CLEAR SPACE SHALL BE PROVIDED IN AN
- ACCESSIBLE COMPARTMENT WHEN THE DOOR IS LOCATED AT THE SIDE OF THE TOILET STALL COMPARTMENT. GRAB BARS SHALL NOT PROJECT MORE THAN 3 INCHES INTO THE CLEAR SPACES AS SPECIFIED ABOVE.
- 3. TURNAROUND CLEAR SPACE OF 60" DIAMETER SHALL BE PROVIDED WITHIN THE TOILET ROOM.
- 4. PROVIDE IDENTIFICATION SYMBOLS ON DOOR AND WALL. SEE IGNS/PICTOGRAMS" DETAIL AND TYPICAL TENANT IMPROVEMENT DRAWINGS.

PUSH/PULLS

ABRUPT CHANGES IN LEVEL, EXCEPT BETWEEN A WALK OR SIDEWALK AND AN ADJACENT STREET OR DRIVEWAY, EXCEEDING 4 INCHES IN A VERTICAL DIMENSION, SUCH AS AT PLANTERS. OCATED IN OR ADJACENT TO WALKS, SIDEWALKS, OR OTHER PEDESTRIAN WAYS SHALL BE IDENTIFIED BY CURBS PROJECTING AT LEAST 6 INCHES IN HEIGHT ABOVE THE WALK OF SIDEWALK SURFACE TO WARN THE BLIND OF A POTENTIAL DROP-OFF. WHEN A GUARDRAIL OR HANDRAIL IS PROVIDED. NO CURB IS REQUIRED IF A GUIDE RAIL IS PROVIDED CENTERED 3 INCHES PLUS OR MINUS ONE INCH ABOVE THE SURFACE OF THE WALK OR SIDEWALK AND, THE WALK IS 4.9 PERCENT OR LESS GRADIENT OR

8. WALL SURFACES ADJACENT TO HANDRAILS SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS. (I.E., NO STUCCO.)

J. CLEAR FLOOR OR GROUND SPACE FOR WHEELCHAIRS

- 1. THE MINIMUM CLEAR FLOOR OR GROUND SPACE REQUIRED TO ACCOMMODATE A SINGLE, STATIONARY WHEELCHAIR AND OCCUPANT IS 30 INCHES X 48 INCHES. THE MINIMUM CLEAF FLOOR OR GROUND SPACE FOR WHEELCHAIRS MAY BE POSITIONED FOR FORWARD OR PARALLEL APPROACH TO AN OBJECT, UNLESS NOTED OTHERWISE. CLEAR FLOOR OR GROUND. SPACE FOR WHEELCHAIRS MAY BE PART OF THE KNEE SPACE REQUIRED UNDER SOME OBJECTS.
- ONE FULL UNOBSTRUCTED SIDE OF THE CLEAR FLOOR OR GROUND SPACE FOR A WHEELCHAIR SHALL ADJOIN OR OVERLAP AN ACCESSIBLE ROUTE OR ADJOIN ANOTHER WHEELCHAIR CLEAR FLOOR SPACE. IF A CLEAR FLOOR SPACE IS LOCATED IN AN ALCOVE OR OTHERWISE CONFINED ON ALL OR APART OF THREE SIDES. ADDITIONAL MANEUVERING CLEARANCES SHALL
- PROVIDE AN ADDITIONAL 12 INCH WIDTH ON ONE SIDE FOR ALCOVES GREATER THAN 15 INCHES DEEP AND DESIGNED FOR RONTAL APPROACH, EXCEPT AT DRINKING FOUNTAIN ALCOVES WHICH MAY BE A MAXIMUM OF 24" DEEP BEFORE REQUIRING THE ADDITIONAL 12" CLEAR WIDTH.
- 4 PROVIDE AN ADDITIONAL 6 INCHES WIDTH ON ONE SIDE FOR ALCOVES GREATER THAN 24 INCHES DEEP AND DESIGNED FOR FRONTAL APPROACH.
- 5. IF THE CLEAR FLOOR SPACE ONLY ALLOWS FORWARD APPROACH TO AN OBJECT. THE MAXIMUM HIGH FORWARD REACH ALLOWED SHALL BE 48 INCHES AND THE LOW SIDE REACH SHALL BE NO LESS THAN 15 INCHES ABOVE THE FLOOR. IF THE HIGH FORWARD REACH IS OVER AN OBSTRUCTION, TH HORIZONTAL DIMENSION OF THE OBSTRUCTION SHALL BE LESS THAN 25 INCHES. THE MAXIMUM HIGH FORWARD REACH ALLOWED SHALL THEN BE 44 INCHES WHEN THE HORIZONTAL DIMENSION OF THE OBSTRUCTION IS BETWEEN 20 INCHES AND 25 INCHES.
- 6. IF THE CLEAR FLOOR SPACE ALLOWS PARALLEL APPROACH BY A PERSON IN A WHEELCHAIR. THE MAXIMUM HIGH SIDE REACH ALLOWED SHALL BE 54 INCHES AND THE LOW SIDE REACH SHAL BE NOTESS THAN 9 INCHES ABOVE THE FLOOR SIDE REACH IS ALLOWED OVER AN OBSTRUCTION PROVIDED THE HORIZONTAL DIMENSION OF THE OBSTRUCTION DOES NOT EXCEED 24 INCHES AND MAXIMUM HIGH REACH OVER A 24 INCH OBSTRUCTION SHALL
- K. ADDITIONAL REQUIREMENTS
- 1. THE CENTER OF RECEPTACLE OUTLETS SHALL BE NOT LESS THAN 18 INCHES ABOVE THE FLOOR OR WORKING PLATFORM
- THE CENTER OF THE GRIP OF THE OPERATING HANDLE OF SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHTING AND RECEPTACLE OUTLETS, APPLIANCES, OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE NOT LESS THAN 30" NOR MORE THAN 44"
- ABOVE THE FLOOR OR WORKING PLATFORM. 3 THE CENTER OF FIRE ALARM INITIATING DEVICES (BOXES) SHALL BE LOCATED 44 INCHES ABOVE THE LEVEL OF THE FLOOR,

WORKING PLATFORM, GROUND SURFACE OR SIDEWALK.

THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHALL BE THE STANDARD USED TO IDENTIFY FACILITIES THAT ARE ACCESSIBLE TO AND USABLE BY DISABLED PERSONS AS SET FORTH IN THE GOVERNING AGENCIES ACCESSIBILITY STANDARDS. THE SYMBOL SPECIFIED ABOVE SHALL CONSIST OF A WHITE FIGURE ON A BLUE BACKGROUND. THE BLUE SHALL BE EQUAL TO COLOR NO. 15090 IN FEDERAL STANDARD #595A. SEE "SIGNS / PICTOGRAPHS" DETAIL ON TYPICAL ACCESSIBILITY DETAIL SHEET.

L. ALARMS

- 1. VISUAL ALARMS. VISUAL ALARM SIGNAL APPLIANCES SHALL BE INTEGRATED INTO THE BUILDING OR FACILITY ALARM SYSTEM II SINGLE STATION AUDIBLE ALARMS ARE PROVIDED THEN SINGLE STATION VISUAL ALARM SIGNALS SHALL BE PROVIDED. VISUAL ALARM PHOTOMETRIC AND LOCATION FEATURES:
- A. THE LAMP SHALL BE A XERION STROBE TYPE OR EQUIVALE B. THE COLOR SHALL BE CLEAR OR NOMINAL WHITE (I.E., UNFILTERED OR CLEAR FILTERED WHITE LIGHT). C. THE MAXIMUM PULSE DURATION SHALL BE TWO-TENTHS OF ONE SECOND (0.2 SEC) WITH A MAXIMUM DUTY CYCLE OF 40 PERCENT. THE PULSE DURATION IS DEFINED AS THE TIME INTERVAL BETWEEN INITIAL AND FINAL POINTS OF 10 PERCENT OF MAXIMUM SIGNAL
- D. THE INTENSITY SHALL BE A MINIMUM OF 75 CANDELA. E. THE FLASH RATE SHALL BE A MINIMUM OF 1 HS AND A MAXIMUM OF 3 HZ.
- F. THE APPLIANCE SHALL BE PLACED 80 TN (2030 MN) ABOVE THE HIGHEST FLOOR LEVEL WITHIN THE SPACE OR 6 TN (152 MM) BELOW THE CEILING, WHICHEVER IS LOWER. G. IN GENERAL, NO PLACE IN ANY ROOM OR SPACE REQUIRED TO HAVE A VISUAL SIGNAL APPLIANCE SHALL BE MORE THAN 50 FT (15M) FROM THE SIGNAL (IN THE HORIZONTAL PLANE). IN LARGE ROOMS AND SPACES EXCEEDING 100 FT (30M) ACROSS WITHOUT OBSTRUCTIONS 6 FT (2M) ABOVE THE FINISH FLOOR, SUCH AS AUDITORIUMS, DEVICES MAY BE PLACED AROUND THE PERIMETER, SPACED A MAXIMUM 100 FT (30M) APART IN LIEU OF SUSPENDING APPLIANCES FROM THE CEILING. H. NO PLACE IN COMMON CORRIDORS OR HALLWAYS IN WHICH VISUAL ALARM SIGNALING APPLIANCES ARE REQUIRED SHALL BE MORE THAN 50 FT (15M) FROM THE SIGNAL.

H. HAZARDS AND PROTRUDING OBJECTS

ABOVE THE GROUND OR FINISHED FLOOR.

- OBJECTS PROJECTING FROM WALLS (FOR EXAMPLE) EPHONES) WITH THEIR LEADING EDGES BETWEEN 27 INCHES AND 80 INCHES ABOVE THE FINISHED FLOOR SHALL PROJECT NO MORE THAN 4 INCHES INTO WALKS, HALLS, CORRIDORS, PASSAGEWAYS OR AISLES.
- 2. OBJECTS MOUNTED WITH THEIR LEADING EDGES AT OR BELOW 27 INCHES ABOVE THE FINISHED FLOOR MAY PROTRUDE ANY
- 3. FREE-STANDING OBJECTS MOUNTED ON POSTS OR PYLONS MAY VERHANG 12 INCHES MAXIMUM FROM 27 INCHES TO 80 INCHES
- 4. PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH OF AN ACCESSIBLE ROUTE OR MANEUVERING SPACE.
- 5. ANY OBSTRUCTION OVERHANGING A PEDESTRIAN WAY SHALL BE A MINIMUM OF 80 INCHES ABOVE THE WALKING SURFACE AS MEASURED TO THE BOTTOM OF THE OBSTRUCTION
- 6. WALKS, HALLS, CORRIDORS, PASSAGEWAYS, AISLES OR OTHER CIRCULATION SPACES SHALL HAVE 80 INCHES MINIMUM CLEAR UNOBSTRUCTED HEAD ROOM (6'-8").













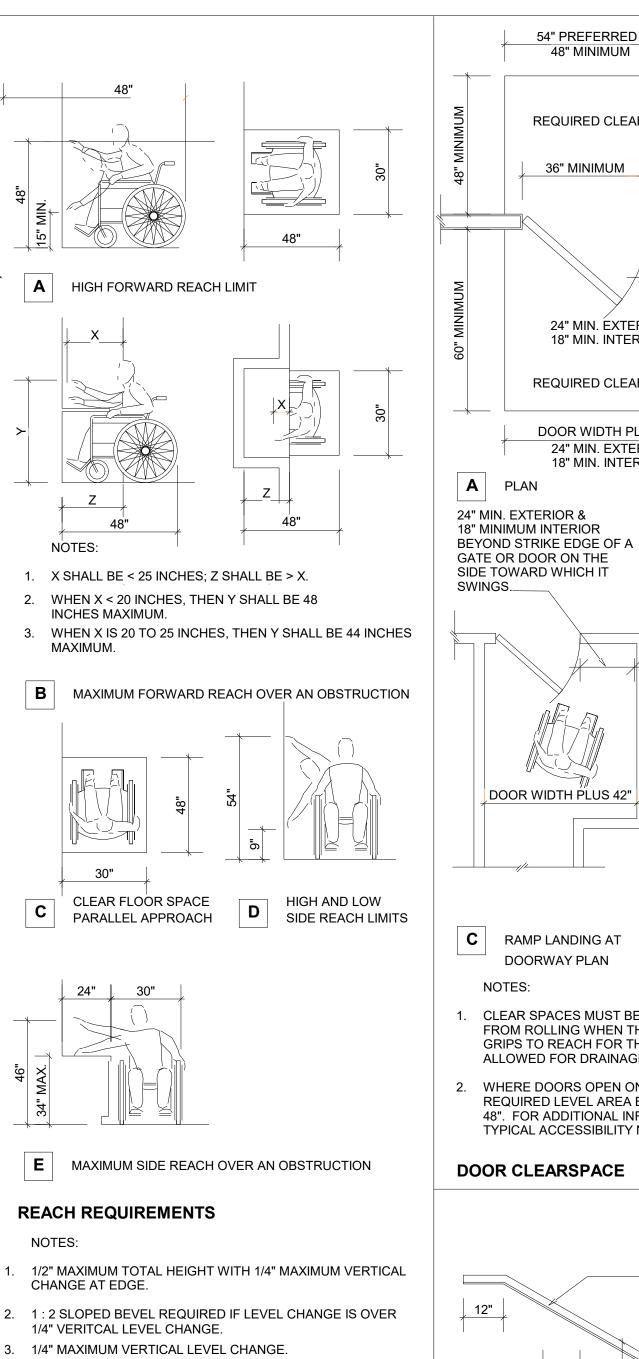




- CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.
- BE APPROVED.

BRAILLE:

- 15. USE CONTRASTED GRADE 2 BRAILLE. DOTS TO BE 0.1 INCH ON CENTER IN EACH CELL.
- 16. 0.2 INCH SPACE BETWEEN CELLS.
- 17. DOTS RAISED MINIMUM 0.025 INCH ABOVE BACKGROUND



LETTERS AND NUMBERS: WIDTH TO HEIGHT RATIO BETWEEN 3:5 AND 1:1.

WHEN DOOR SWINGS ONTO

60" MIN.

72" MIN.

60" MIN.

72" MIN

AS REQUIRED

INTERMEDIATE

PLATFORM

WHEN DOOR SWINGS ONTO

LANDING 42" MIN. PLUS -

DOOR WIDTH

60" MIN.

HIGH FORWARD REACH LIMIT

1. X SHALL BE < 25 INCHES; Z SHALL BE > X.

2. WHEN X < 20 INCHES, THEN Y SHALL BE 48

CLEAR FLOOR SPACE

PARALLEL APPROACH

REACH REQUIREMENTS

1/4" VERITCAL LEVEL CHANGE.

THRESHOLDS / LEVEL CHANGES

1/4" MAXIMUM VERTICAL LEVEL CHANGE.

CHANGE AT EDGE.

INCHES MAXIMUM.

MAXIMUM.

LANDING 42" MIN. PLUS

DOOR WIDTH -

VARIES (30' MAX.)

RISE (TYP.

VARIES (30' MAX.)_

RISE (TYP.)

RAMP DETAILS & NOTES

GUARD RAIL

AND CURB

RAMP WITH TURNING PLATFORM

RAMP SECTION

THRESHOLD

LEVEL CHANGES

RAMP WITH INTERMEDIATE SWITCH-BACK PLATFORM

VARIES (30' MAX.)

60" MIN.

INTERMEDIATE

TURNING POSITION

HANDRAIL AT RAMPS

-6" HIGH WARNING

CURBS WHEN A

4" (OR MORE)

DROP OCCURS

4" MINIMUM TO

ADJACENT HAZARD

[→]30" MAXIMUM

HORIZONTAL RAILING REQUIRED WHERE

OF 4" CLEAR SPACE BETWEEN INTERMED.

INTERMEDIATE RAILS WITH A MAXIMUM

RAILS ARE NOT REQUIRED, TYPICAL.

AS REQUIRED

60" MIN.

LANDING

- STROKE WIDTH TO HEIGHT BETWEEN 1:5 AND 1:10.
- CONTRAST CHARACTERS AND SYMBOLS WITH BACKGROUND.
- SANS SERIF CHARACTERS.

<u>SIGNS / PICTOGRAMS:</u>

PICTOGRAMS / PICTORIAL SYMBOL SIGNS SHALL BE ACCOMPANIED BY THE EQUIVALENT VERBAL DESCRIPTION PLACED DIRECTLY BELOW THE PICTOGRAM. THE BORDER DIMENSION SHALL BE 6"

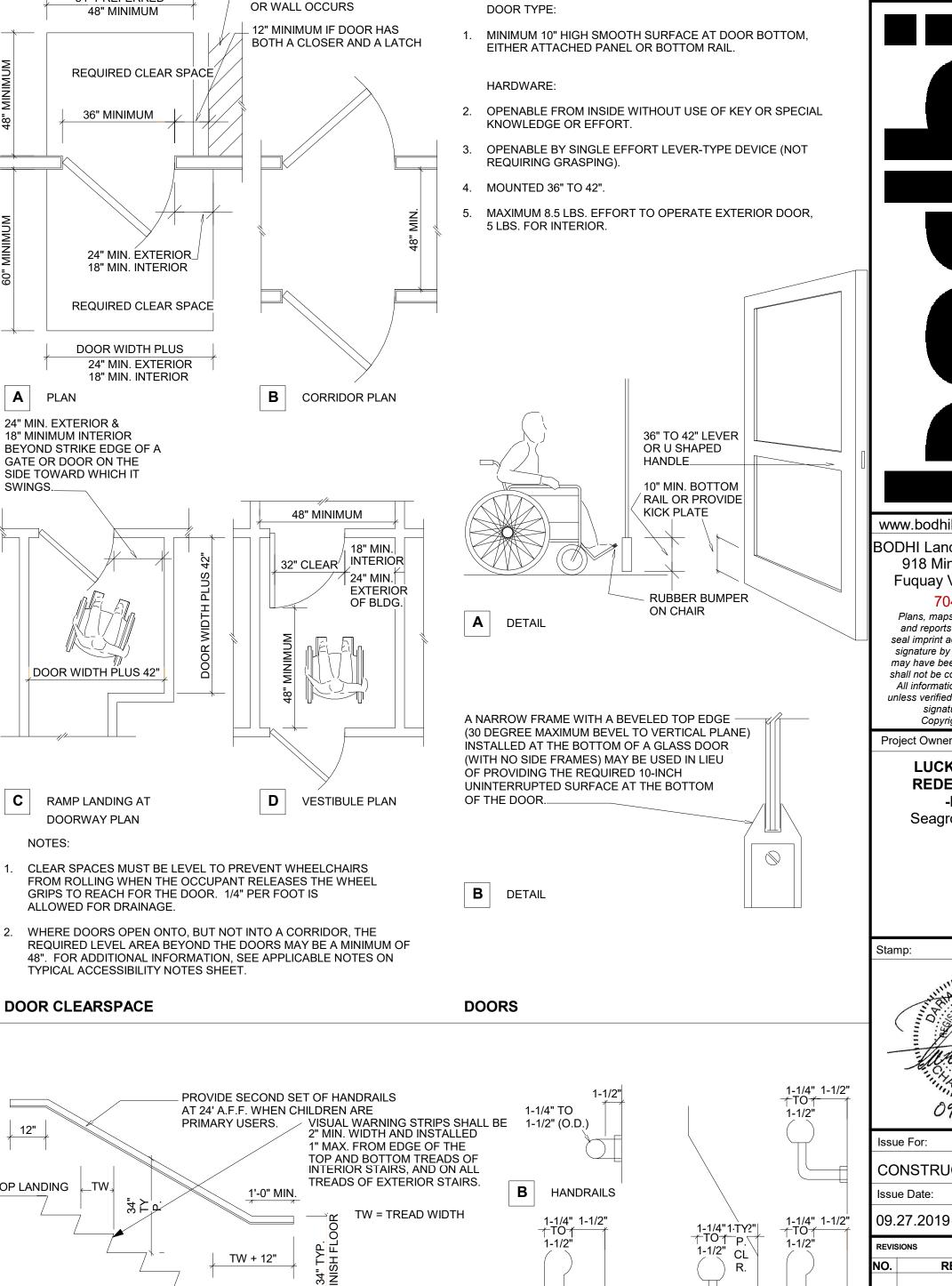
- CHARACTERS AND BACKGROUNDS SHALL BE OF NON-GLARE CONTRASTING COLORS.
- SIGNS / PICTOGRAMS SHALL BE INSTALLED ON THE WALL ADJACENT TO DOOR LEADING TO THE ROOM OR SPACE THEY DESCRIBE AND AT 60" A.F.F. TO SIGN CENTERLINE AND WHERE A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE DOOR SWING AREA.
- VERTICAL CLEARANCE AT SUSPENDED SIGNS WITH MINIMUM HEADROOM OF 80" REQUIRE MINIMUM 3" CHARACTER HEIGHT MEASURED BY USING UPPERCASE "X". CHARACTERS AND NUMBERS SHALL BE SIZED ACCORDING TO VIEWING DISTANCE FROM WHICH READ. LOWER CASE CHARACTERS PERMITTED. **SIGN LOCATIONS:**

ALL ACCESSIBLE ENTRANCES IDENTIFIED WITH MINIMUM OF ONE STANDARD SIGN.

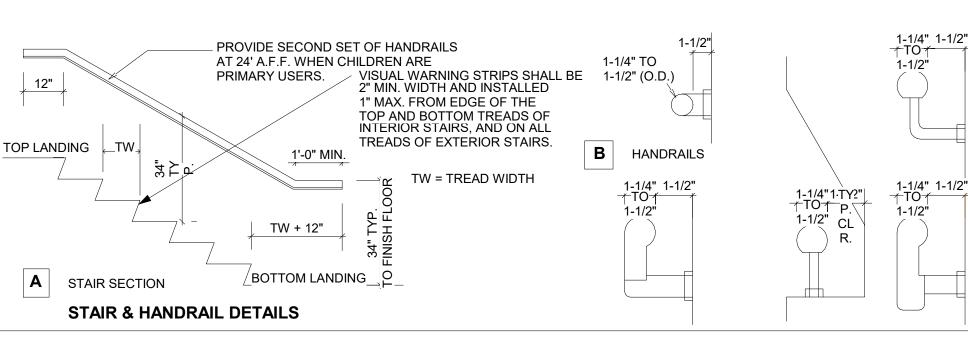
- ADDITIONAL DIRECTIONAL SIGNS ALONG ACCESSIBLE PATH OF TRAVEL ARE REQUIRED.
- BUILDINGS REMODELED TO PROVIDE ACCESSIBLE SANITARY FACILITIES FOR PUBLIC USE SHALL HAVE INFORMATION POSTED IN THE LOBBY AS PART OF THE BUILDING DIRECTORY.

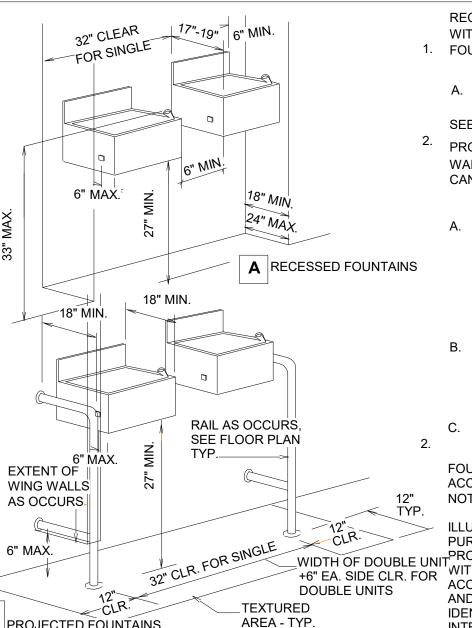
INTERNATIONAL SYMBOL OF ACCESSIBILITY:

- STANDARD USED TO IDENTIFY ACCESSIBLE FACILITIES.
- CHARACTERS AND SYMBOLS SHALL CONTRAST WITH THEIR BACKGROUND EITHER LIGHT
- WHEN ENFORCING AGENCY DETERMINES, IF APPROPRIATE, SPECIAL DESIGNS AND COLORS MAY



WHERE ADJACENT OBSTRUCTION





PROJECTED FOUNTAINS

DRINKING FOUNTAINS

RECESSED FOUNTAINS: WITHIN ALCOVES MINIMUM 18" DEEP AND LCLR. WHEN A SINGLE

FOUNTAIN IS PERMITTED CONTRACTOR SHALL COORDINATE WITH SIZE OF WATER FOUNTAIN TO BE A. USED AND SIZE ALCOVE ACCORDINGLY COMPLYING WITH REQUIREMENTS AND RECOMMENDATIONS AND COORDINATING WITH THE ARCHITECT.

SEE TYPICAL ACCESSIBILITY NOTES SHEET SECTIONS "R" & "U" PROJECTED FOUNTAINS WARNING FOR THE VISION IMPAIRED AT A PROJECTED DRINKING FOUNTAIN CAN BE PROVIDED BY EITHER OF THE FOLLOWING MEANS:

THE SURFACE OF THE FLOOR OR GROUND AT THE DRINKING A. FOUNTAIN CAN BE OF CONTRASTING COLOR WITH A TEXTURE THAT CONTRASTS IN RESILIENCY WITH THE ADJACENT FINISHED FLOOR MATERIAL, SO THAT IT CAN BE SENSED BY A CANE, WITH THE TEXTURE EXTENDING FROM THE WALL TO ONE FOOT BEYOND THE FRONT EDGE OF THE DRINKING FOUNTAIN AND ONE FOOT BEYOND EACH SIDE OF THE FOUNTAIN, OR

INSTALL WING WALLS ON EACH SIDE OF THE DRINKING FOUNTAIN TO PROJECT OUT FROM THE MAIN WALL AT LEAST AS FAR AS THE DRINKING FOUNTAIN AND TO WITHIN 6" OF THE PATH OF TRAVEL FLOOR FINISH. THERE MUST BE 32" CLEAR BETWEEN THE WING WALLS, OR

GUARDRAILS SHALL BE A MINIMUM OF 32" CLEAR BETWEEN AND PROJECT FROM THE SUPPORT WALL TO THE PROJECTING FACE OF THE FOUNTAIN

AND WITHIN 6" OF THE FINISH SURFACE OF THE PATH OF TRAVEL. FOUNTAIN & GUARDRAILS, ETC. SHALL NOT REDUCE THE REQUIRED ACCESSIBLE ROUTE/PATH WIDTH.

ILLUSTRATIONS SHOWN HERE ARE FOR DIMENSIONAL ACCESSIBILITY PURPOSES ONLY. A SECOND DRINKING FOUNTAIN SHOULD BE

_WIDTH OF DOUBLE UNIT PROVIDED AT A MOUNTING HEIGHT SUITABLE TO PERSONS WITH LIMITED PHYSICAL BENDING ABILITY, ADJACENT TO THE ACCESSIBLE FOUNTAIN, MAINTAINING MINIMUM CLEARANCES NOTED AND AS REQUIRED. PROVIDE TEXTURED AREA OF CONTRASTING COLOR TO IDENTIFY WATER FOUNTAIN LOCATION AS NOTED. WHEN FOUNTAIN IS AT AN INTERIOR LOCATION, THE TEXTURED AREA SHALL ALSO BE OF DIFFERENT RESILIENCY THAN THAT OF THE ADJACENT FLOOR SURFACE FINISH. SEE TYPICAL ACCESSIBILITY NOTES SHEET FOR ADDITIONAL REQUIREMENTS.

Architect:

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LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

Issue For:

| CONSTRUCTION Issue Date:

REASON DATE

PRINCIPAL IN CHARGE D WAIKER

Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove,

NC 27341

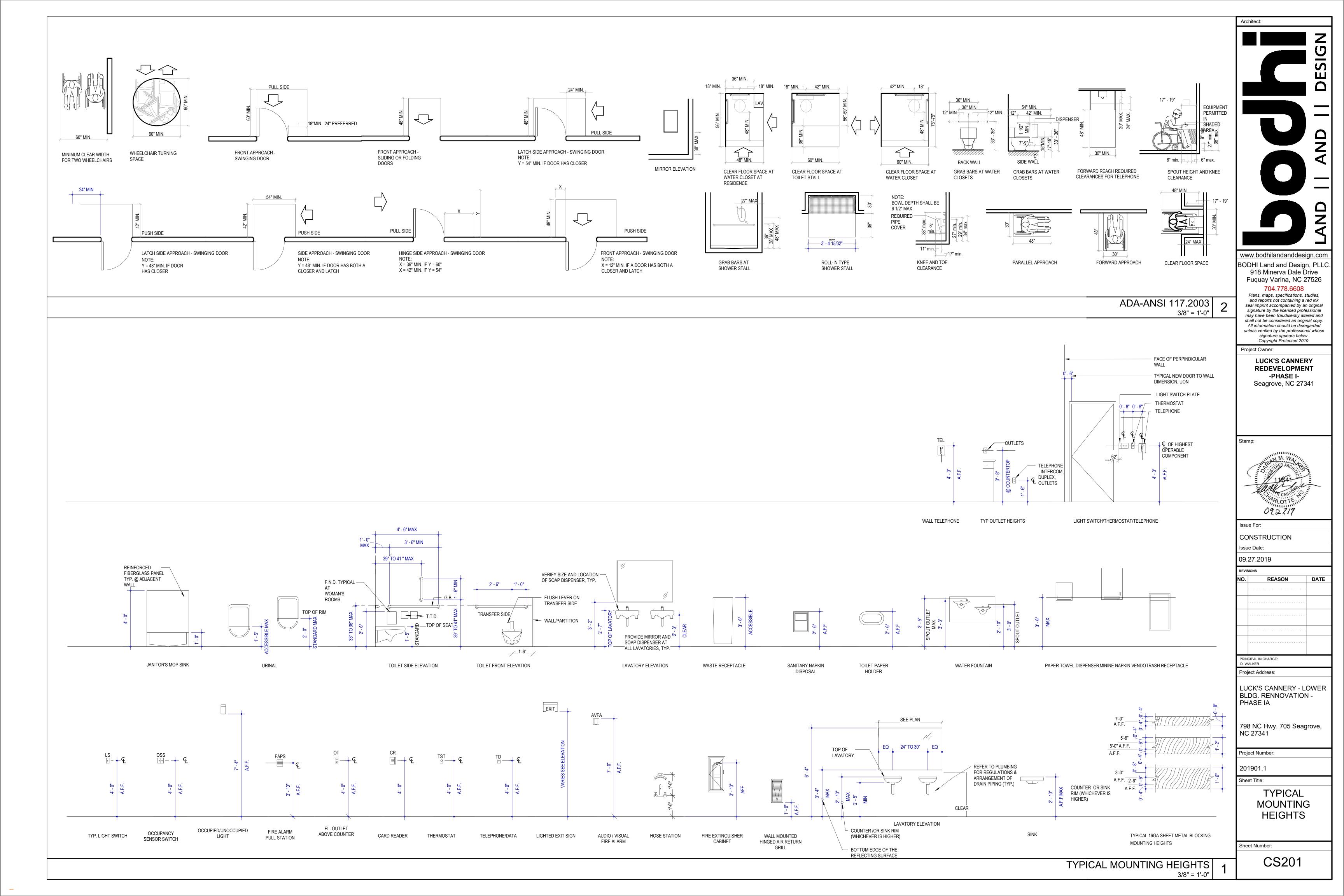
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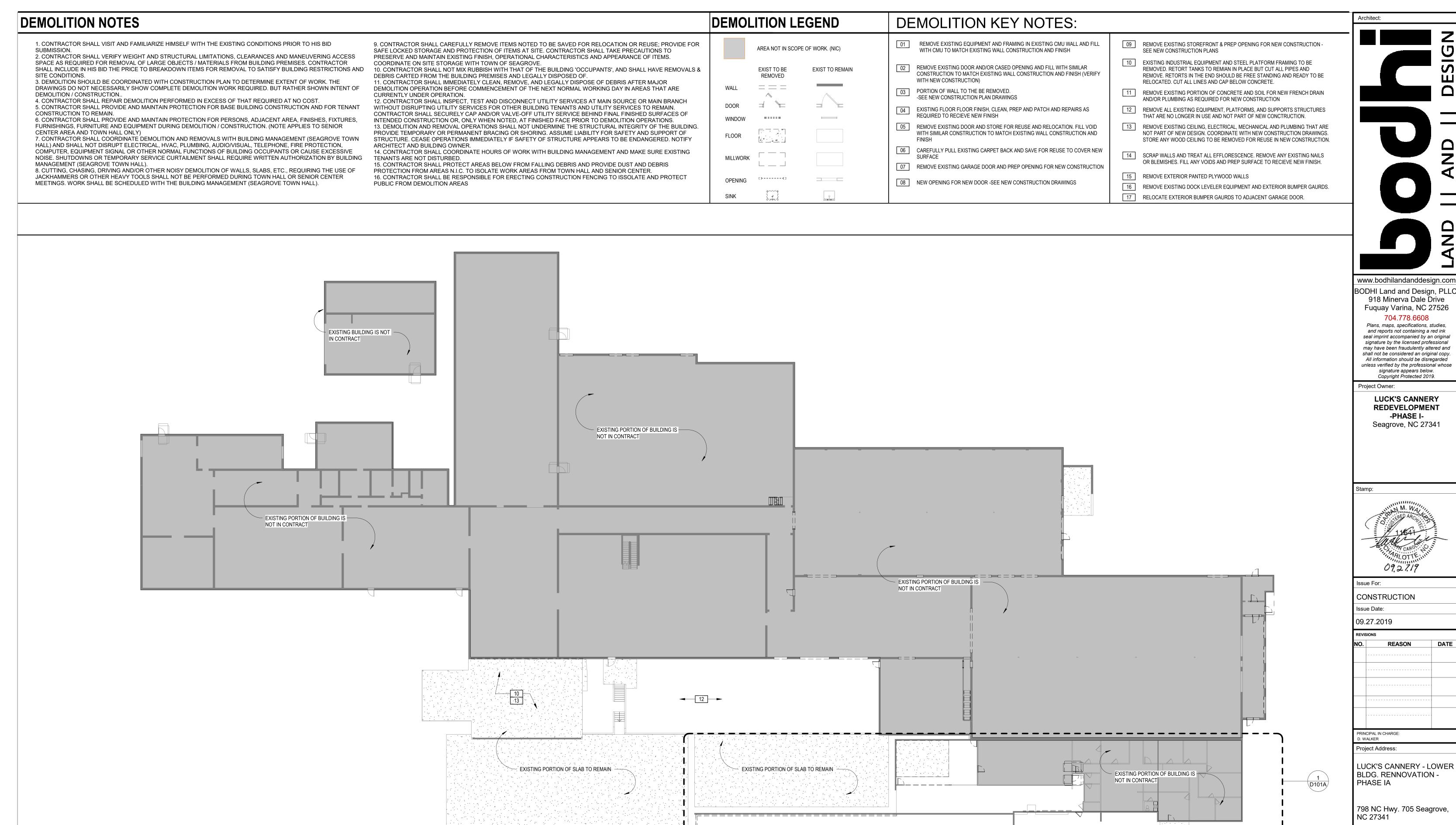
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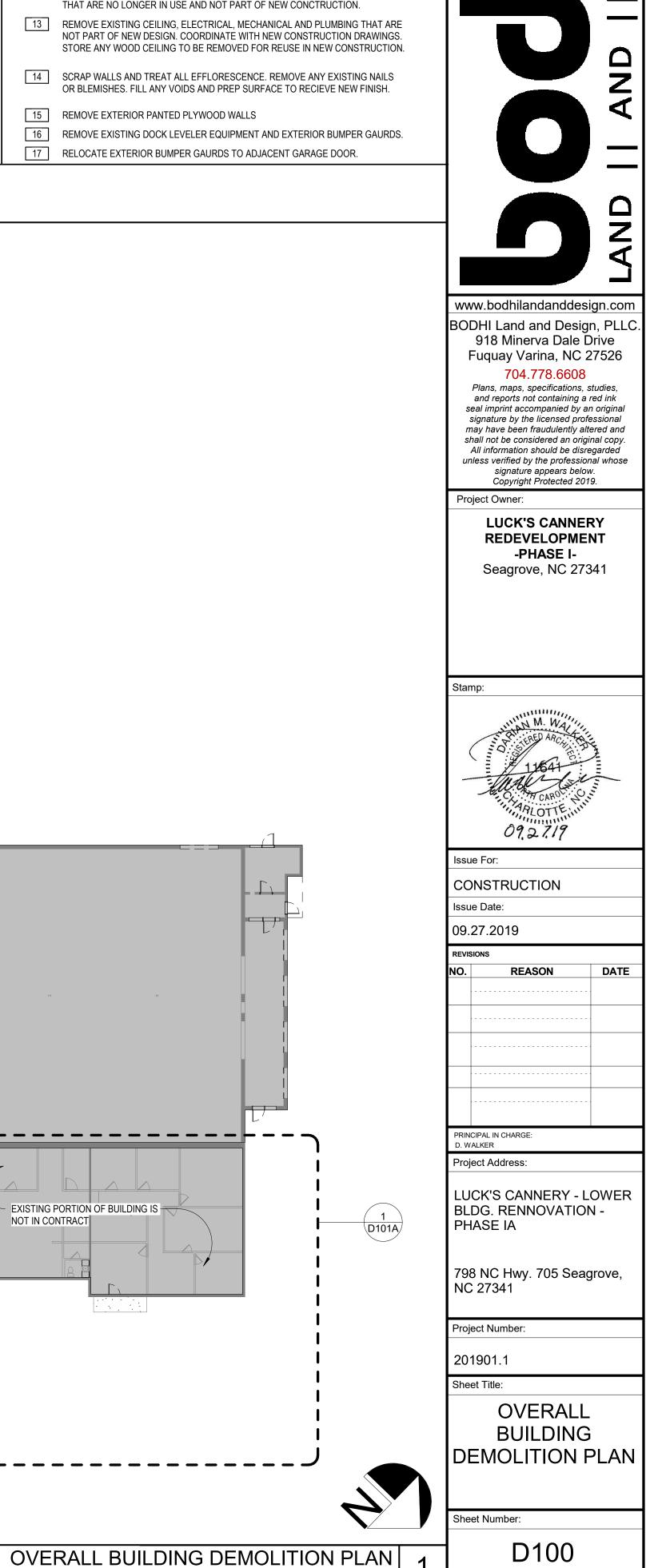
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TYPICAL ACCESSIBILITY DETAILS

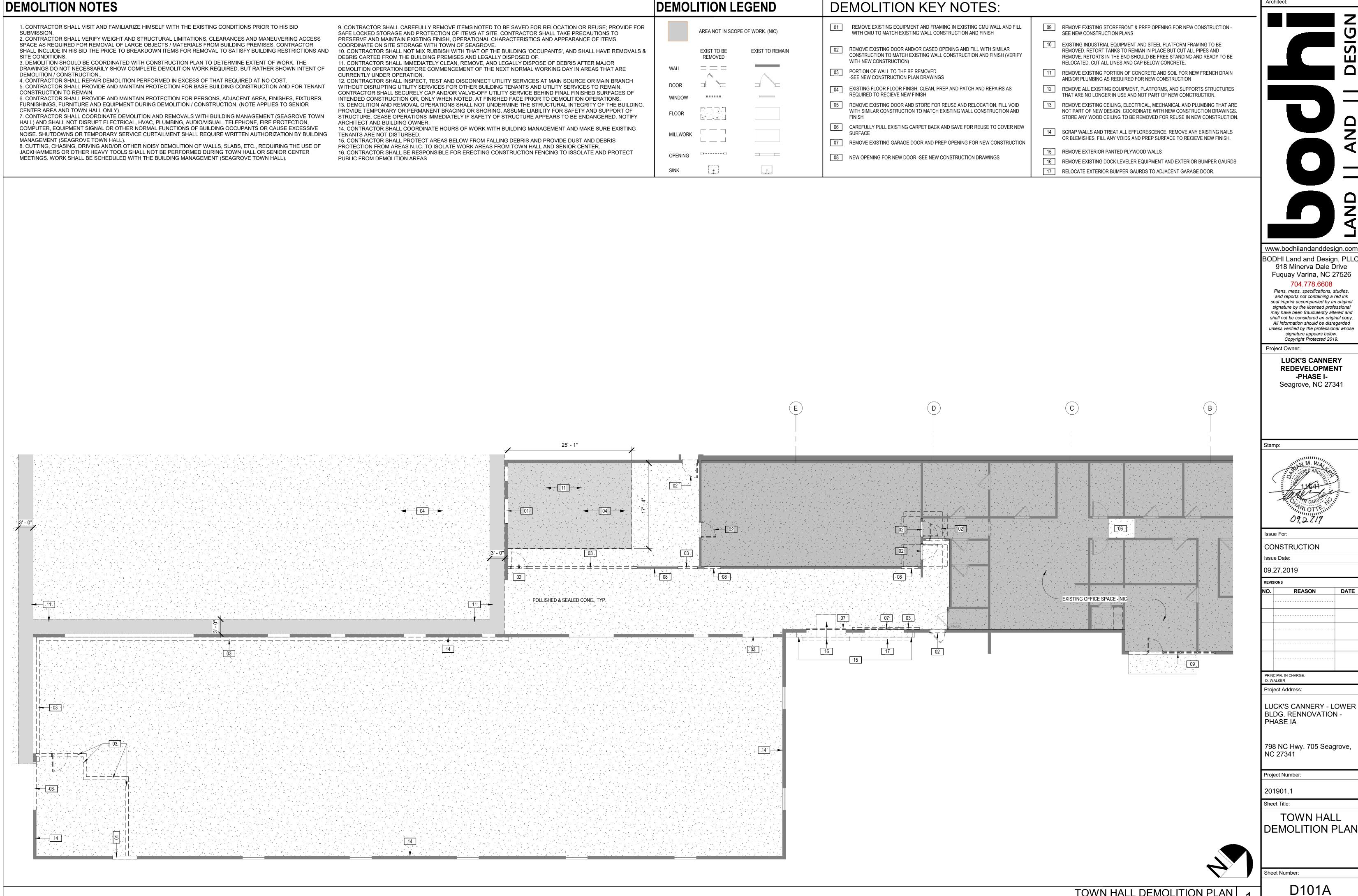
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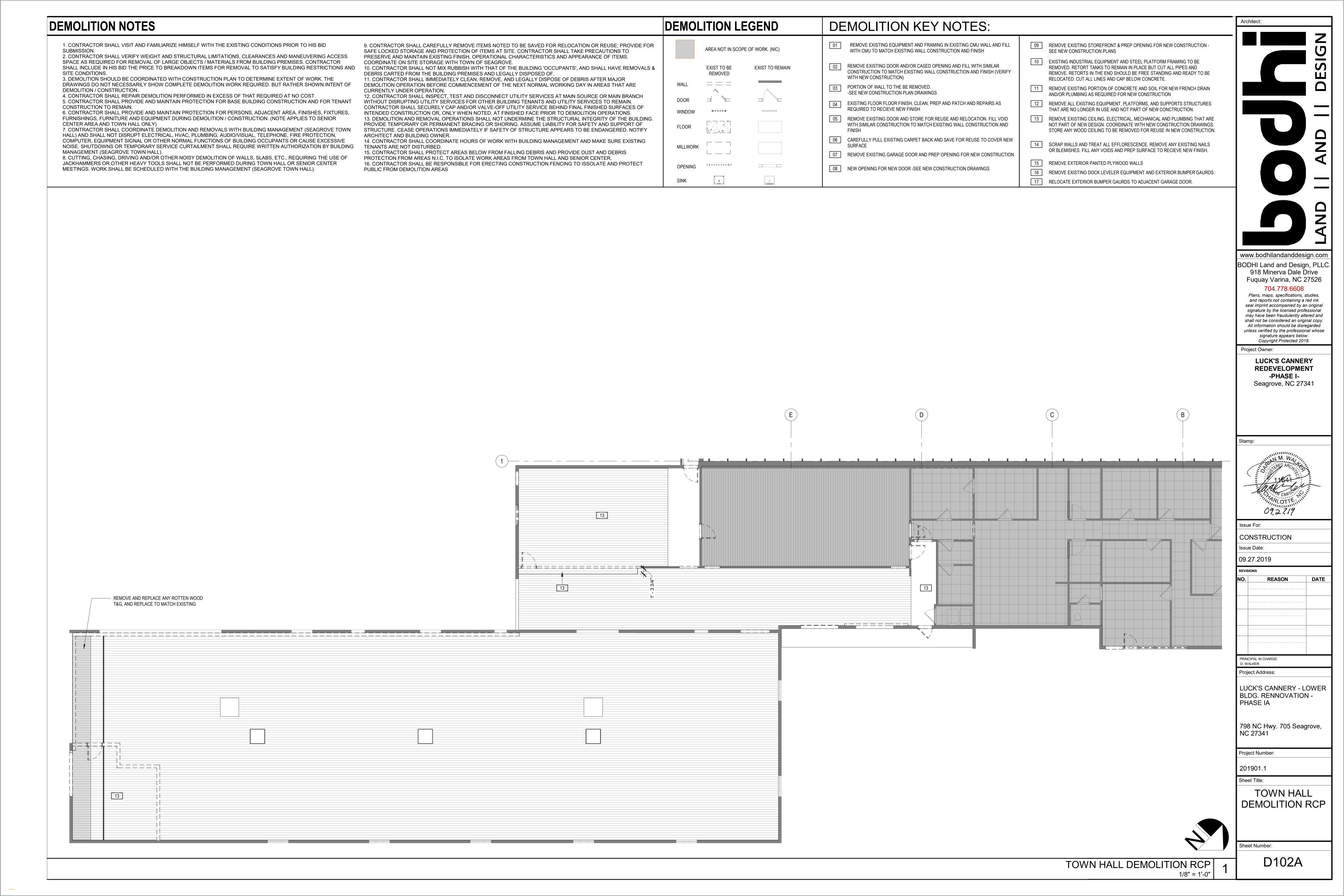




1" = 20'-0"

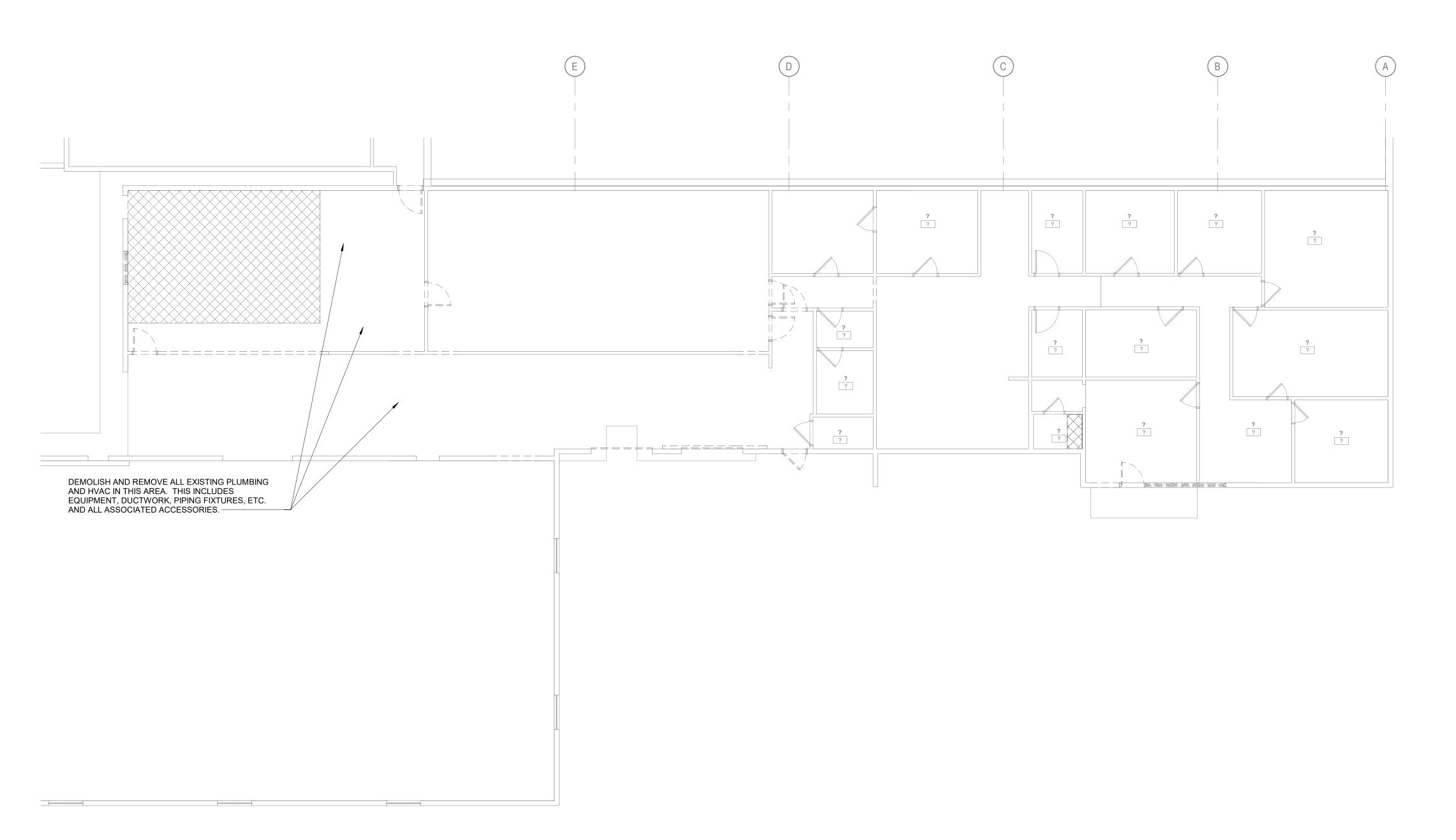


Architect: SIG



MECHANICAL DEMOLITION NOTES

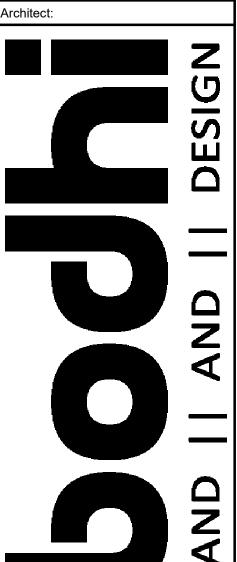
- 1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REPLACE ANY ITEM OR EQUIPMENT DAMAGED DURING DEMOLITION. ANY ITEM OR EQUIPMENT THAT IS REMOVED TO FACILITATE THE DEMOLITION SHALL BE REINSTALLED BACK TO ITS ORIGINAL CONDITION. PATCH ALL OPENINGS IN FLOOR, CEILINGS, AND WALLS MADE IN ADJACENT AREAS THAT ARE NOT BEING DEMOLISHED.
- 2. REMOVE ALL HANGERS, SUPPORTS, AND ACCESSORIES ASSOCIATED WITH ITEMS OR EQUIPMENT BEING DEMOLISHED.
- 3. EXISTING SERVICES ARE BASED ON LIMITED FIELD WORK. CONTRACTOR SHALL VERIFY EXISTING SERVICES PRIOR TO BEGINNING WORK\.
- 4. CONTRACTOR SHALL COORDINATE WITH OWNER TO SCHEDULE ANY UTILITY SHUTDOWNS. PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN ALL NECESSARY SERVICES.
- 5. IF REQUIRED, CONTRACTOR SHALL COORDINATE WITH OWNER TO DETERMINE THE SALVAGE VALUE OF DEMOLISHED ITEMS. RECYCLABLE ITEMS WITHOUT SALVAGE VALUE SHALL BE PRESENTED TO RECYCLING FACILITY.



TOWNHALL FINISHED FLOOR - MECHANICAL PLAN -







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LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

Stamp:



Issue For:

CONSTRUCTION

Issue Date: 07.27.2019

10.	REASON	DATE						

PRINCIPAL IN CHARGE: D. WALKER

Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

Project Number:

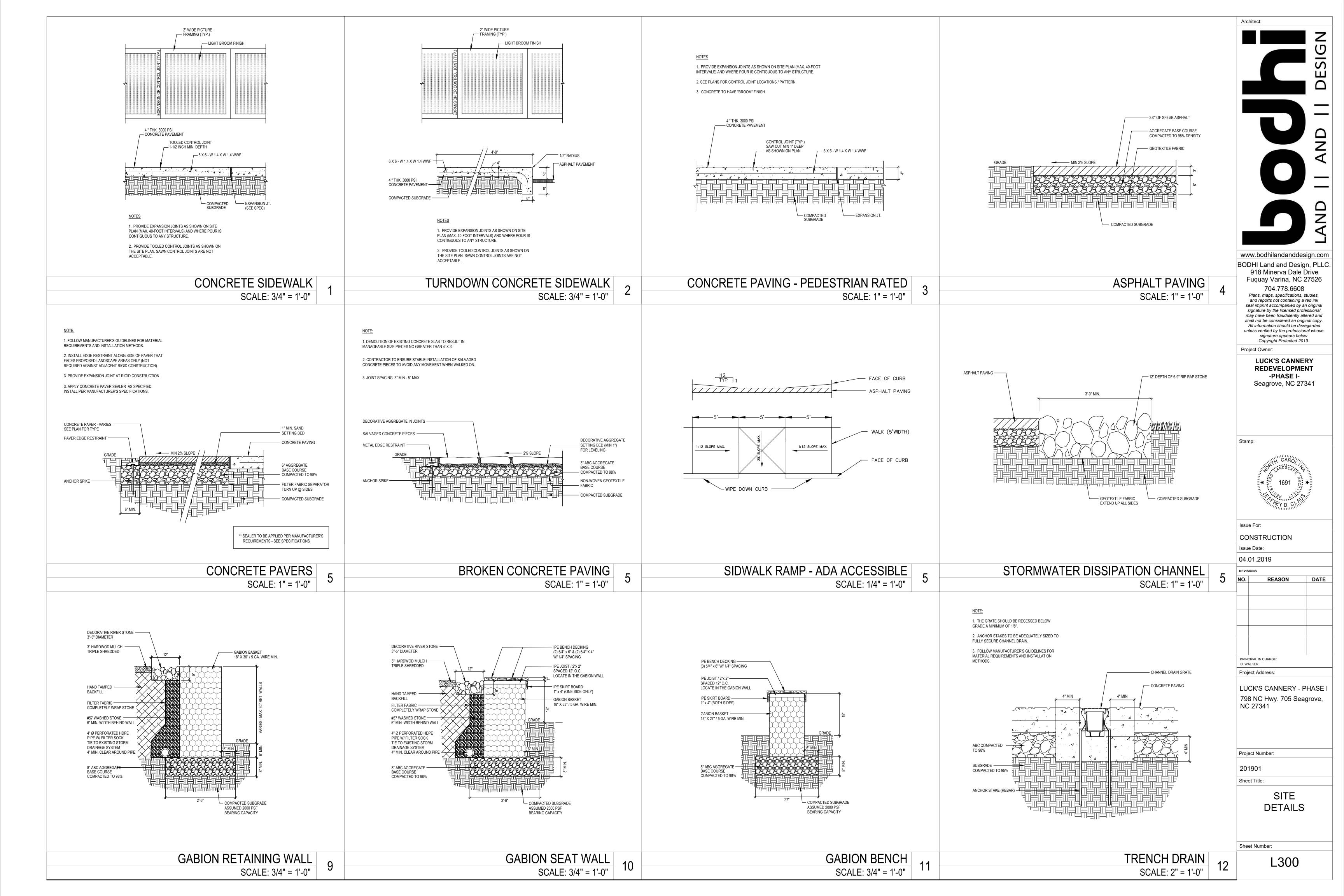
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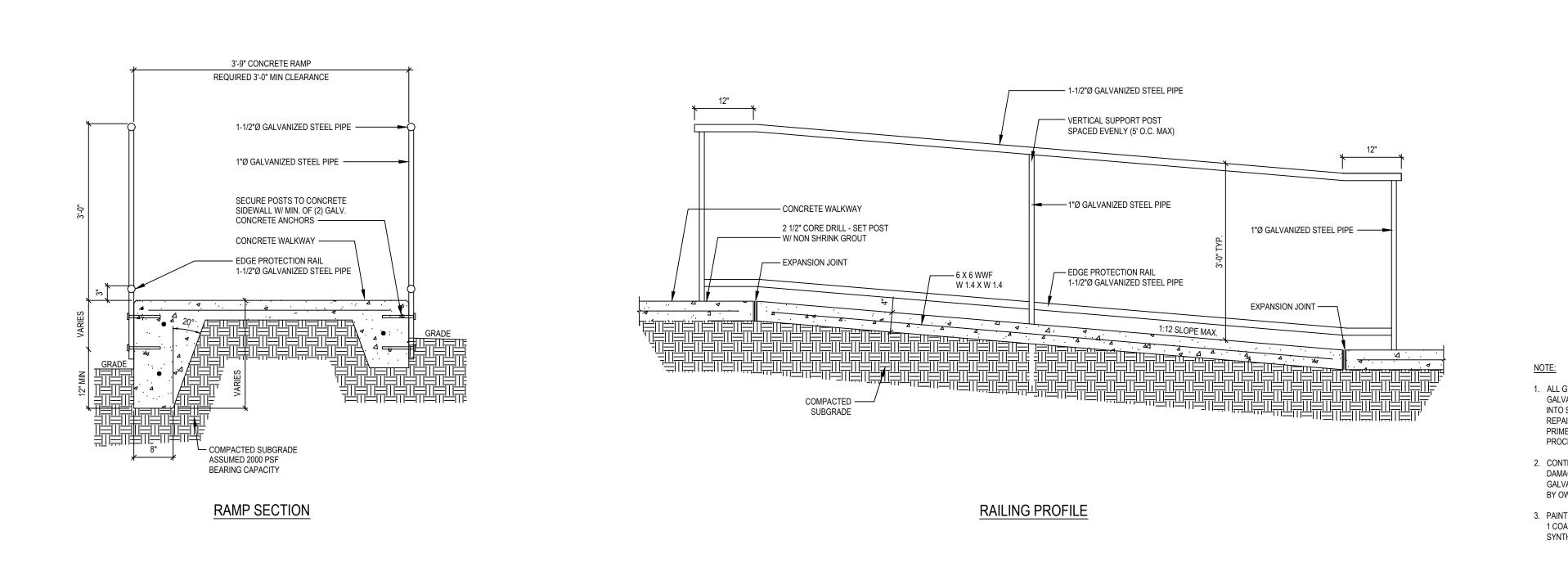
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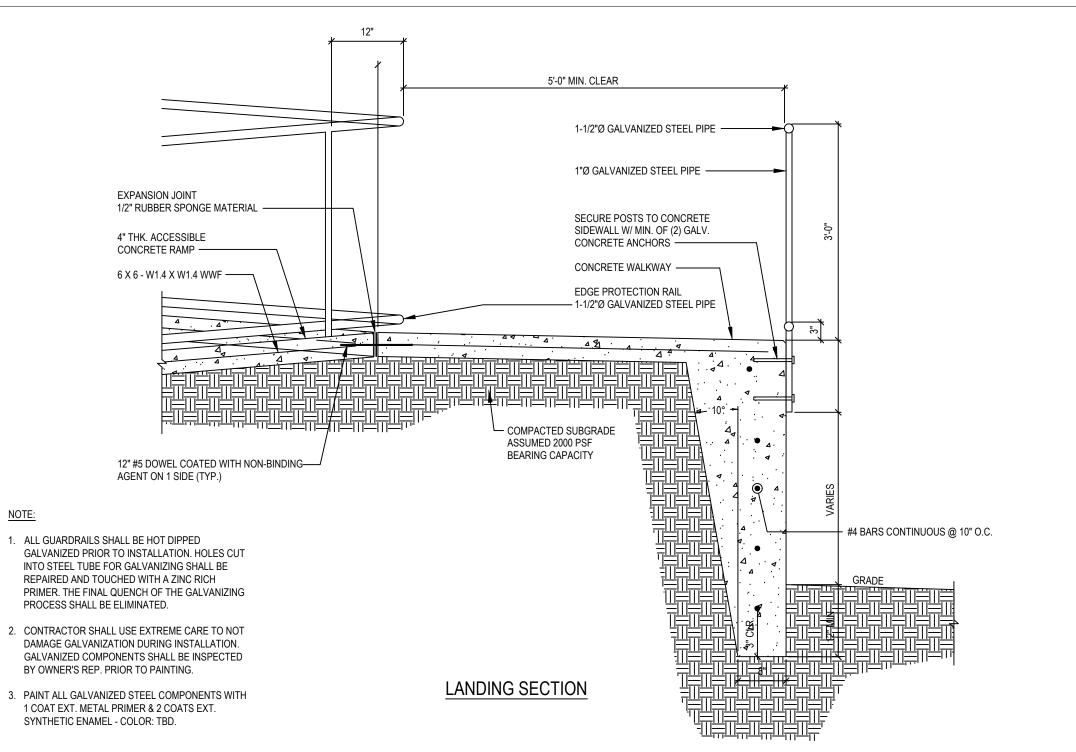
TOWNHALL FLOOR PLAN -DEMO -MECHANICAL

Sheet Number:

MD100







CONCRETE ACCESSIBLE RAMP & HANDRAILS

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

 CAP PIPE ENDS VERTICAL SUPPORT POST — CORE DRILL & SET POST W/ NON SHRINK GROUT 1-1/2"Ø GALV. STEEL PIPE — 16-3/4" --- CORE DRILL & SET POST W/ NON SHRINK GROUT — CONCRETE WALKWAY LIGHT BROOM FINISH W/ (2) 1/4" GROVES ALONG LEADING EDGE OF TREAD -1"Ø GALV. STEEL PIPE ----#3 BAR CONTINUOUS AT ----NOSING 2" CLEAR OF EDGE 1/2" CHAMFER — 1. ALL GUARDRAILS SHALL BE HOT DIPPED **EXPANSION JOINT** TREAD WIDTH GALVANIZED PRIOR TO INSTALLATION. HOLES CUT 1/2" RUBBER SPONGE MATERIAL INTO STEEL TUBE FOR GALVANIZING SHALL BE REPAIRED AND TOUCHED WITH A ZINC RICH PRIMER. THE FINAL QUENCH OF THE GALVANIZING └─ COMPACTED SUBGRADE CONCRETE WALKWAY — PROCESS SHALL BE ELIMINATED. #4 BARS @ 32" O.C. 2. CONTRACTOR SHALL USE EXTREME CARE TO NOT DAMAGE GALVANIZATION DURING INSTALLATION. CORE DRILL & SET POST W/ NON SHRINK GROUT GALVANIZED COMPONENTS SHALL BE INSPECTED - #4 BARS @ 12" CONTINUOUS BY OWNER'S REP. PRIOR TO PAINTING. 3. PAINT ALL GALVANIZED STEEL COMPONENTS WITH 1 COAT EXT. METAL PRIMER & 2 COATS EXT. SYNTHETIC ENAMEL - COLOR: TBD. #5 DOWEL - 12" LONG COATED W/ NON-BINDING AGENT ON 1 SIDE (TYP.) CONCRETE STEPS & HANDRAILS SCALE: 3/4" = 1'-0"

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341 Issue For: CONSTRUCTION Issue Date: 04.01.2019 REASON DATE PRINCIPAL IN CHARGE: D. WALKER Project Address: LUCK'S CANNERY - PHASE 798 NC Hwy. 705 Seagrove, NC 27341 Project Number: 201901

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SITE

DETAILS

Sheet Number:

L310

GENERAL NOTES:

- 1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS, AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, AND ADDITIONAL ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
- 2. THE MODIFICATIONS TO THIS STRUCTURE HAVE BEEN DESIGNED IN ACCORDANCE WITH THE PROVISIONS OF THE NORTH CAROLINA STATE EXISTING BUILDING CODE, 2018 EDITION.
- 3. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL PERMANENT SUPPORTS AND LATERAL BRACING ARE IN PLACE
- 4. PORTIONS OF THE EXISTING STRUCTURE NOT ALTERED AND NOT AFFECTED BY THE ALTERATION HAVE NOT BEEN REVIEWED FOR COMPLIANCE WITH THE CODE REQUIREMENTS FOR A NEW STRUCTURE.
- 5. BEFORE PROCEEDING WITH WORK WITHIN THE EXISTING STRUCTURE, THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE EXISTING STRUCTURAL CONDITIONS. ANY SHORING OR BRACING SHOWN IS A PARTIAL AND SCHEMATIC REPRESENTATION OF THAT REQUIRED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE DESIGN AND ERECTION OF ANY AND ALL SAFEGUARDS NECESSARY TO PROTECT THE EXISTING STRUCTURE. THE CONTRACTOR SHALL PROVIDE SHORING, BRACING, AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE STRUCTURE IN A SAFE CONDITION AT ALL TIMES DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION.
- 6. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, AND OTHER REQUIREMENTS NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE STRUCTURE TO THE EXISTING. ANY DIMENSIONS SHOWN OF EXISTING STRUCTURES SHALL BE CONSIDERED AS APPROXIMATE AND ADEQUATE FOR BIDDING PURPOSES ONLY. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR THE FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT & ENGINEER.

DESIGN CRITERIA:

CLASSIFICATION OF BUILDING RISK CATEGORY	Ш
LIVE LOADS - UNIFORM: SLAB ON GRADE	F
WIND LOADS: ULTIMATE DESIGN WIND SPEED (V _{ULT})	Н
EXPOSURE CATEGORY	В
INTERNAL PRESSURE COEFFICIENT ±0.1 COMPONENT AND CLADDING PRESSURES:	8
WALLS, ZONE 5 (10 SF) 29 PS PARAPET, END/CORNER (10 SF) 62 PS	

FOUNDATION NOTES:

- FOUNDATIONS HAVE BEEN DESIGNED FOR A NET ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF (PRESUMPTIVE).
- 2. PRIOR TO PLACING FOUNDATION CONCRETE, ALL FOUNDATION EXCAVATIONS SHALL BE INSPECTED BY THE SPECIAL INSPECTOR TO EXPLORE THE EXTENT OF LOOSE, SOFT, EXPANSIVE, OR OTHERWISE UNSATISFACTORY SOIL MATERIAL AND TO VERIFY DESIGN BEARING PRESSURE. DIRECTION FOR CORRECTIVE ACTION WILL BE PROVIDED WHERE REQUIRED.
- 3. NO UNBALANCED BACKFILLING SHALL BE DONE AGAINST MASONRY OR CONCRETE WALLS UNLESS WALLS ARE SECURELY BRACED AGAINST OVERTURNING. EITHER BY TEMPORARY CONSTRUCTION BRACING OR BY PERMANENT CONSTRUCTION.
- 4. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONTROL OF GROUNDWATER AND SURFACE RUNOFF THROUGHOUT THE CONSTRUCTION PROCESS. INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES WHICH RESULT IN DETERIORATION OF BEARING SHALL BE PREVENTED.

CAST-IN-PLACE CONCRETE NOTES:

- 1. CONCRETE SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301 AND 318.
- 2. CONCRETE SHALL BE NORMAL WEIGHT AND SHALL OBTAIN 28 DAY **COMPRESSIVE STRENGTHS AS FOLLOWS:**

A.	SLAB-ON-GRADE	3,500 PSI
B.	FOOTINGS	3,000 PSI

- 3. REINFORCING MATERIALS SHALL BE AS FOLLOWS:
- A. REINFORCING BARS ASTM A 615, GRADE 60, DEFORMED.
- B. WELDED WIRE REINFORCEMENT ASTM A 185. WELDED STEEL WIRE REINFORCEMENT; PROVIDE SHEET TYPE, ROLL TYPE IS NOT ACCEPTABLE.
- 5. ALL REINFORCING STEEL AND EMBEDDED ITEMS SUCH AS ANCHOR RODS AND WELD PLATES SHALL BE ACCURATELY PLACED AND ADEQUATELY TIED AND SUPPORTED BEFORE CONCRETE IS PLACED TO PREVENT DISPLACEMENT BEYOND PERMITTED TOLERANCES.
- 6. CONCRETE COVER TO REINFORCING STEEL SHALL CONFORM TO THE MINIMUM COVER RECOMMENDATIONS IN ACI 318, UNLESS THE DRAWINGS SHOW GREATER COVER REQUIREMENTS.
- 7. LAP CONTINUOUS REINFORCING STEEL 72XBD, UNLESS OTHERWISE NOTED:

CONCRETE MASONRY NOTES:

- CONCRETE MASONRY MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE (ACI) 530.
- 2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C 90 AND SHALL BE MADE WITH NORMAL WEIGHT AGGREGATE. MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY UNITS SHALL BE 2,000 PSI AT 28 DAYS.
- 3. COMPRESSIVE STRENGTH OF MASONRY SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD AS SET FORTH IN ACI 530.1. THE NET AREA COMPRESSIVE STRENGTH OF MASONRY, f'm, SHALL BE 2,000 PSI AT 28 DAYS.
- 4. MORTAR SHALL BE TYPE M OR S AND SHALL COMPLY WITH ASTM C270, PROPORTIONS OR PROPERTIES SPECIFICATION.
- 5. GROUT SHALL COMPLY WITH ASTM C476, PROPORTIONS SPECIFICATION. THIS MIX SHALL CONTAIN NO ADMIXTURES. WATER SHALL BE ADDED IN THE FIELD IN ORDER TO ACHIEVE A SLUMP OF 8-11 INCHES WHEN PLACED IN THE MASONRY. MORTAR, PEA-GRAVEL CONCRETE, OR "CHAT" MIXES ARE NOT ACCEPTABLE SUBSTITUTES FOR THE SPECIFIED GROUT.
- 6. REINFORCING STEEL SHALL COMPLY WITH ASTM A 615, GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE BENT OR HOOKED
- 7. ALL BOND BEAMS, REINFORCED CELLS AND CELLS WITH EXPANSION BOLTS, EMBED PLATES OR OTHER ANCHORS AND ALL CELLS BELOW GRADE SHALL BE GROUTED SOLID. GROUT PROCEDURE SHALL COMPLY WITH ACI 530.1.
- PROVIDE REINFORCING BARS OF THE GIVEN SIZE AND SPACING SHOWN. LAP CONTINUOUS REINFORCING STEEL 72 BAR DIAMETERS UNLESS OTHERWISE NOTED.
- 9. PROVIDE STANDARD 9 GAGE LADDER TYPE HORIZONTAL JOINT REINFORCING IN CMU WALLS AT 16 INCHES ON CENTER AND IN TWO JOINTS IMMEDIATELY ABOVE AND BELOW ALL OPENINGS, EXTENDING A MINIMUM OF 2 FEET BEYOND THE JAMB ON EACH SIDE OF THE OPENING, EXCEPT AT CONTROL JOINTS.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360.
- STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING SPECIFICATIONS:
 - STRUCTURAL STEEL SHAPES, PLATES AND BARS UNLESS OTHERWISE ASTM A 36, Fy = 36 KSI
 - STRUCTURAL STEEL W-SHAPES ASTM A 992, Fy = 50 KSI
 - HOLLOW STRUCTURAL SECTIONS (HSS): SQUARE AND RECTANGULAR - ASTM A 500, GRADE B, Fy = 46 KSI ROUND - ASTM A 500, GRADE B, Fy = 42 KSI
 - PIPES ASTM A53, GRADE B, Fy = 35 KSI
 - STEEL CASTINGS ASTM A 216, GRADE WCB, MEDIUM STRENGTH CARBON STEEL
 - ANCHOR RODS ASTM F 1554, GRADE [36] [55]
 - HIGH STRENGTH BOLTS ASTM A325 (TYPICAL UON)
- WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1, "STRUCTURAL WELDING CODE- STEEL." WELD ELECTRODES SHALL BE E70XX LOW HYDROGEN. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS FILLET WELDS WITH MINIMUM SIZE REQUIRED BY TABLE J2.4 AISC 360.
- HOT DIP GALVANIZE AFTER FABRICATION THE FOLLOWING:
 - ANGLES AND PLATES SUPPORTING MASONRY IN EXTERIOR WALLS.
 - LINTELS AND LINTEL ASSEMBLIES SUPPORTING MASONRY IN EXTERIOR WALLS.
 - ALL STEEL EXPOSED TO WEATHER IN THE FINAL CONSTRUCTION.
 - ITEMS IDENTIFIED AS GALVANIZED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS.

ABBREVIATIONS:

AFF ARCH	ABOVE FINISHED FLOOR ARCHITECT	HSS HT	HOLLOW STRUCTURAL SECTIONS HEIGHT
BD	BAR DIAMETER	HVY	HEAVY
BEJ	BUILDING EXPANSION JOINT	INT	INTERIOR
BLDG	BUILDING	JBE	JOIST BEARING ELEVATION
BOD	BOTTOM OF DECK	JT	JOINT
BOT, B	BOTTOM	KCJ	KEYED CONSTRUCTION JOINT
BRG	BEARING	L	LOW
BTWN	BETWEEN	LLH	LONG LEG HORIZONTAL
CTOC		LLV	LONG LEG VERTICAL
CFMF	COLD FORMED METAL FRAMIN		
CJ	CONTROL JOINT	LSV	
CL	CENTERLINE	LTWT	
CLR	CLEAR	LWC	
CMU	CONCRETE MASONRY UNIT	MAS	MASONRY
COL CONC	COLUMN CONCRETE	MATL MAX	
CONC CONN	CONCRETE	MECH	
CONSTR	CONSTRUCTION	MFR	MANUFACTURER
CONSTR	CONTINUOUS	MID	MIDDLE
COORD	COORDINATE	MIN	MINIMUM
CTR	CENTER	MOD	MODIFY
CTRD	CENTERED	MOS	MIDDEPTH OF SLAB
CW	CURTAIN WALL	NOM	NOMINAL
DBL	DOUBLE	NTS	NOT TO SCALE
DCJ	DOWELED CONSTRUCTION JOINT	OC	ON CENTER
DIA	DIAMETER	OPH	OPPOSITE HAND
DJ	DOUBLE JOIST	OPNG	OPENING
DWGS	DRAWINGS	PAF	POWDER ACTUATED FASTENER
EA	EACH	PAR	PARALLEL
EF	EACH FACE	PC	PIECE DENETRATE DENETRATION
EJ	EXPANSION JOINT ELEVATION	PEN	PENETRATE, PENETRATION PERPENDICULAR
	ELEVATION	PL	PLATE
	EMBEDMENT	R	RADIUS
	EDGE OF DECK	REF	
EOS	EDGE OF SLAB	REINF	REINFORCE, REINFORCED, REINFORCING
EQ	EQUAL	REQD	REQUIRED
EW	EACH WAY		REQUIREMENTS
	EXISTING	SCHED	
EXP	EXPANSION	SF	STEPPED FOOTING
	EXTERIOR		STEPPED GRADE BEAM
	FLOOR DRAIN	SIM	
FDN FO	FOUNDATION	SJ SL	SAWED JOINT SLOPE
	FINISHED FLOOR ELEVATION	T&B	
FIN		T&G	
	FINISHED FLOOR	THK	
	FACE OF BUILDING		TOP OF CONCRETE
FOC	FACE OF CONCRETE		TOP OF FOOTING
FOM	FACE OF CONCRETE FACE OF MASONRY	TOM	
FOS	FACE OF SLAB/ STUD	TOS	
	FRAMING	TS	
	FOOTING	TYP	
	FIELD VERIFY		UNLESS OTHERWISE NOTED
	GALVANIZED		VERTICAL
GEN GR BM	GENERAL GRADE BEAM	W/ W/D	WITH WORKING POINT
H	HIGH	WSP	WOOD STRUCTURAL PANEL(S)
HK		WWR	WELDED WIRE REINFORCING
	HORIZONTAL		
=			

PLAN LEGEND:

TOS = +x'-x''

BOS = +x'-x"	=	BOTTOM OF STEEL ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
TOM = +x'-x''	=	TOP OF MASONRY ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
(-X'-X")	=	TOP OF FOOTING ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
<-X'- X">	=	TOP OF EXISTING FOOTING ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
-X"	=	TOP OF SLAB ELEVATION MEASURED FROM REFERENCED FINISHED FIRST FLOOR ELEVATION = 0'-0"
SL	=	DIRECTION OF SLOPE
$\langle X \rangle$ or $ X $	=	PLAN KEY NOTE MARK
		SECTION/DETAIL NUMBER/LETTER
$\left(\begin{array}{c}X\\SX\end{array}\right)$	=	SECTION/DETAIL MARK
		SHEET NUMBER WHERE SECTION/DETAIL MARK IS DRAWN
WFX	=	WALL FOOTING MARK
CFX	=	COLUMN FOOTING MARK
±	=	FIELD VERIFY
S-X	=	SLAB MARK / SPAN DIRECTION
BEAM SIZE —		
W16x26	· =	COMPOSITE BEAM NOTATION

= TOP OF STEEL ELEVATION MEASURED

FLOOR ELEVATION = 0'-0"

FROM REFERENCED FINISHED FIRST



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Issue For: CONSTRUCTION

Issue Date: 07.23.2019

> REASON DATE

PRINCIPAL IN CHARGE D WALKER Project Address:

LUCK'S CANNERY - PHASE 798 NC Hwy. 705 Seagrove, NC 27341

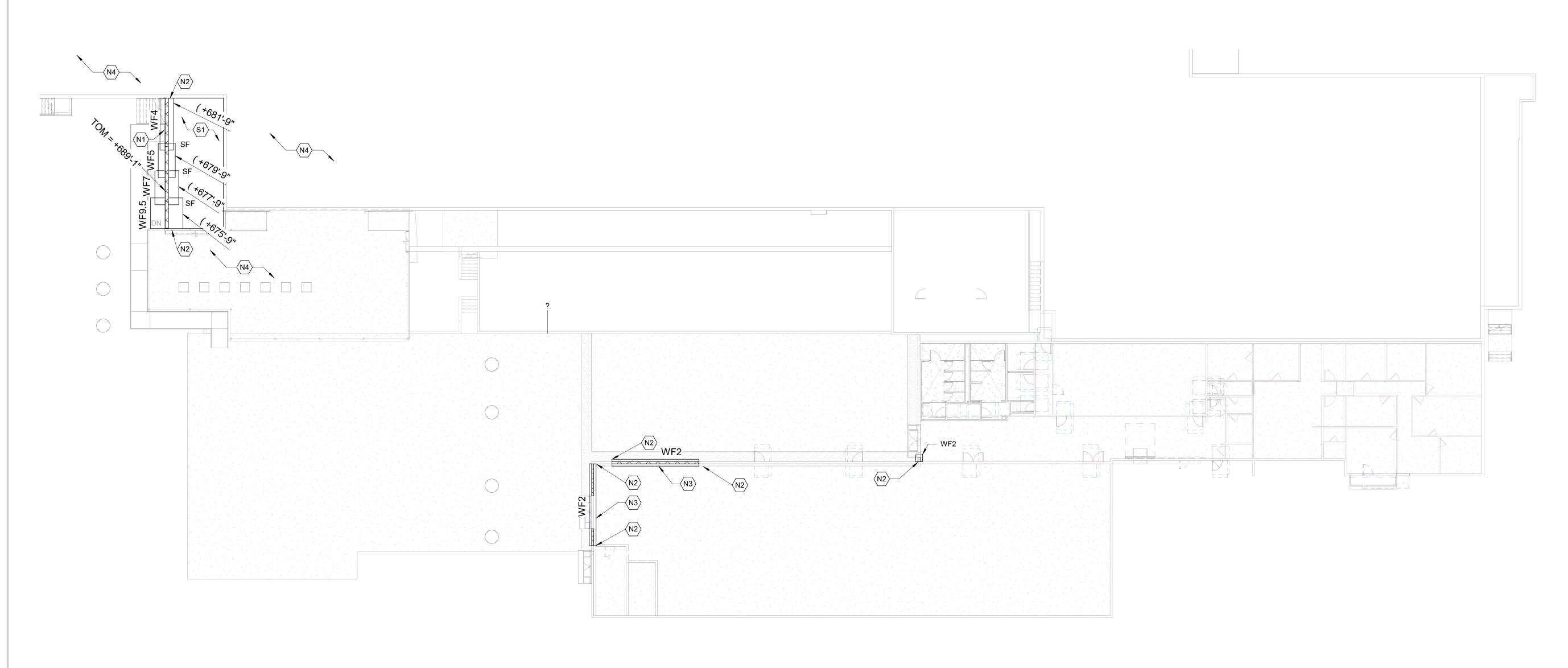
Project Number

201901

Sheet Title: **GENERAL NOTES**

Sheet Number:

S100





FOUNDATION PLAN NOTES

FOUNDATION PLAN

- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS TO NONBEARING WALLS, WALL CONTROL JOINTS AND OPENINGS.
- UNLESS OTHERWISE NOTED, ALL ELEVATIONS ARE BASED ON A FINISHED FIRST FLOOR REFERENCE OF 0'-0". ACTUAL FINISHED FLOOR ELEVATION IS 680'-9'. REFER TO ARCHITECTURAL DRAWINGS FOR FINISHED FLOOR MATERIAL.
- TOP OF ALL FOOTINGS SHALL BE AT ELEVATION -1'-4", OR AS REQ'D TO MATCH TOP OF EXISTING WALL FOOTINGS, UNLESS OTHERWISE NOTED.
- NOT ALL UTILITY LOCATIONS ARE SHOWN ON PLAN. THE CONTRACTOR SHALL COORDINATE THE LOCATIONS, SIZES, AND INVERTS OF UTILITIES. AT LOCATIONS WHERE UTILITIES PASS BELOW THE TOP OF FOOTING ELEVATION, STEP THE TOP OF FOOTING DOWN ON EACH SIDE PER THE "STEPPED FOOTING DETAIL" AND SLEEVE THE UTILITY THROUGH THE FOUNDATION WALL. THE CONTRACOTR MAY, AT HIS OPTION, SLEEVE THE UTILITY THROUGH THE FOUNDATION PER THE "UTILITY SLEEVE DETAIL.
- UNLESS OTHERWISE INDICATED, EXTEND WALL FOOTINGS A MINIMUM OF 6 INCHES BEYOND ENDS OF WALLS. REF TYP DETAILS FOR LOCATIONS WHERE NEW FOOTINGS INTERSECT EXISTING WALL FOOTINGS.

FOUNDATION PLAN KEY NOTES

- 12" THK SOLID GROUTED CMU RETAINING WALL. REF TYPICAL PATIO RETAINING WALL DETAIL.
- ATTACH NEW FOOTING TO EXISTING BY DRILLING AND EPOXY-DOWELING ALL LONGITUDINAL FOOTING BARS PER TYP DETAIL.
- GC TO FIELD VERIFY EXISTING MIN 2'-0" WIDE X 10" THK POURED CONCRETE FOOTING. GC TO INSTALL NEW FOOTING AS REQUIRED.
- GC TO VERIFY THAT EXISTING FOUNDATIONS ARE FULLY INFILLED SUCH THAT EXISTING SLABS BEAR FULLY ON GRADE.

SLAB-ON-GRADE KEY NOTES

4" CONCRETE SLAB-ON-GRADE, SLOPED PER ARCH DRAWINGS. GC IS TO FILL CAVITY BELOW SLAB WITH NO 57 WASHED STONE, FULL DEPTH OF EXCAVATION, SUCH THAT SLAB BEARS CONTINUOUSLY ON STONE BACKFILL. EARTHEN BACKFILL IS NOT PERMITTED. REINFORCE SLAB WITH 6x6 W2.1xW2.1 WELDED WIRE REINFORCING PLACED 1" CLEAR BELOW TOP OF SLAB. MAINTAIN REINFORCEMENT IN POSITION ON BOLSTERS, CHAIRS OR SPACERS DURING CONCRETE PLACEMENT.

SLAB-ON-GRADE PLAN NOTES

- SLAB-ON-GRADE JOINTS SHALL BE SAWED JOINTS.
- PLACE 1-#4 x 3'-0" IN MIDDLE OF SLAB AT REENTRANT CORNERS WHERE A SLAB CONTROL JOINT DOES NOT OCCUR.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LIMITS OF SLAB DEPRESSIONS.
- SEE ARCHITECTURAL DRAWINGS FOR SLAB SLOPES AND DRAIN LOCATIONS.

WALL FOOTING SCHEDULE								
	SI	ZE	REINFO	RCING				
MARK	WIDTH	DEPTH	CONTINUOUS	TRANSVERSE				
WF2	2' - 0"	10"	3-#4 BOT	#4 AT 48" OC BOT				
WF4	4' - 0"	1'-0"	5-#5 TOP AND BOT	#5 AT 16" OC TOP AND BOT				
WF5	5' - 0"	1'-0"	6-#5 TOP AND BOT	#5 AT 16" OC TOP AND BOT				
WF7	7' - 0"	1'-4"	9-#5 TOP AND BOT	#5 AT 8" OC TOP AND BOT				
WF9.5	9' - 6"	1'-4"	12-#5 TOP AND BOT	#5 AT 8" OC TOP AND BOT				



Structural Engineers 415 Hillsborough St., Ste 101 Raleigh, NC 27603 919.782.1833 - lynchmykins.com DESIGN

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> Fuquay Varina, NC 27526 704.778.6608

918 Minerva Dale Drive

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Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341



Issue For:

CONSTRUCTION Issue Date:

07.23.2019

REVISIONS						
NO.	REASON	DATE				

PRINCIPAL IN CHARGE: D. WALKER Project Address:

LUCK'S CANNERY - PHASE 798 NC Hwy. 705 Seagrove, NC 27341

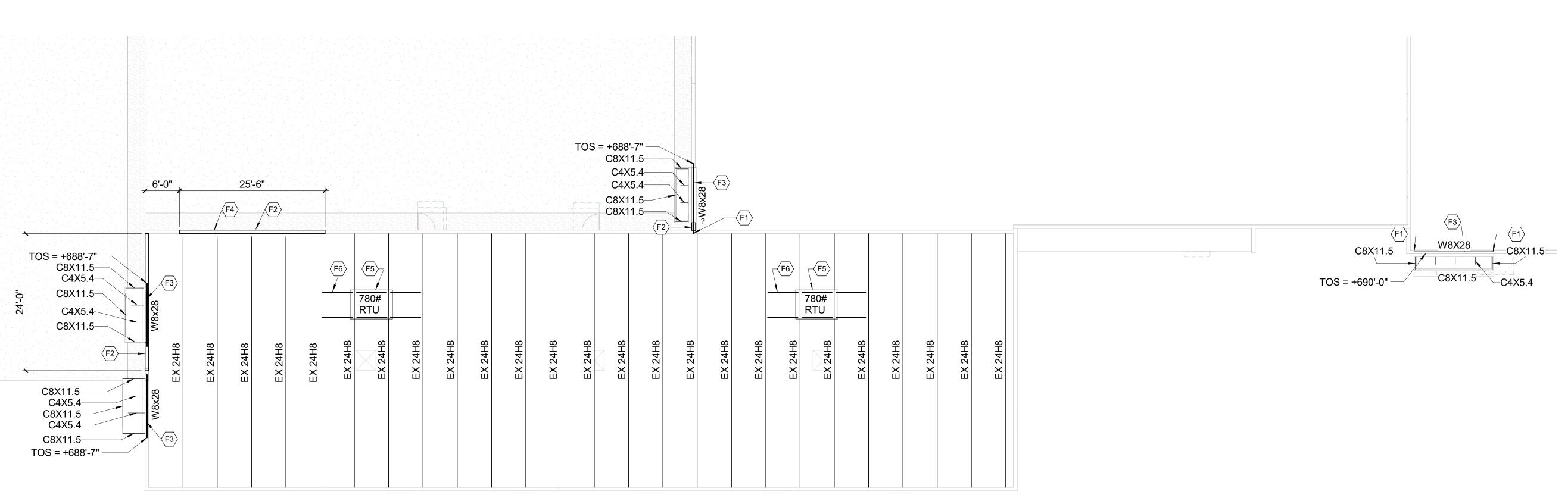
Project Number:

201901 Sheet Title:

FOUNDATION

Sheet Number:

S101





FRAMING PLAN

FLOOR FRAMING PLAN KEY NOTES

F1 EXTEND BEAM TO BEAR MIN 6" INTO EXISTING WALL.

F2 NEW 8" THK SOLID GROUTED CMU REINFORCED W/#5 AT 16" O.C. REF TYPCIAL DETAILS FOR ATTACHMENTS TO EXISTING STRUCTURE.

F3 NEW HEADER FOR STOREFRONT. EXTEND ENDS TO BEAR AS SHOWN IN

TYPICAL DETAIL.

F4 REMOVE EXISTING HEADER, EXISTING COLUMN, AND MASONRY ABOVE

F5 NEW HVAC RTU TO BE ORIENTED AND CENTERED TO BEAR EVENLY OVER 2

EXISTING JOISTS BELOW.

F6 LL4X3X5/16 SLBB ANGLE FRAMING BELOW CURBS OF NEW HVAC UNIT. 3/16" FILLET WELD ALL AROUND TO EX JOIST TOP CHORDS, TYP

Iynchmykins

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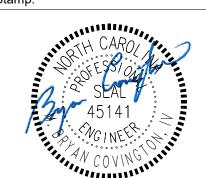
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Issue For:

CONSTRUCTION

Issue Date:

07.23.2019

REASON DATE

PRINCIPAL IN CHARGE:
D. WALKER

Project Address:

LUCK'S CANNERY - PHASE 798 NC Hwy. 705 Seagrove, NC 27341

Project Number:

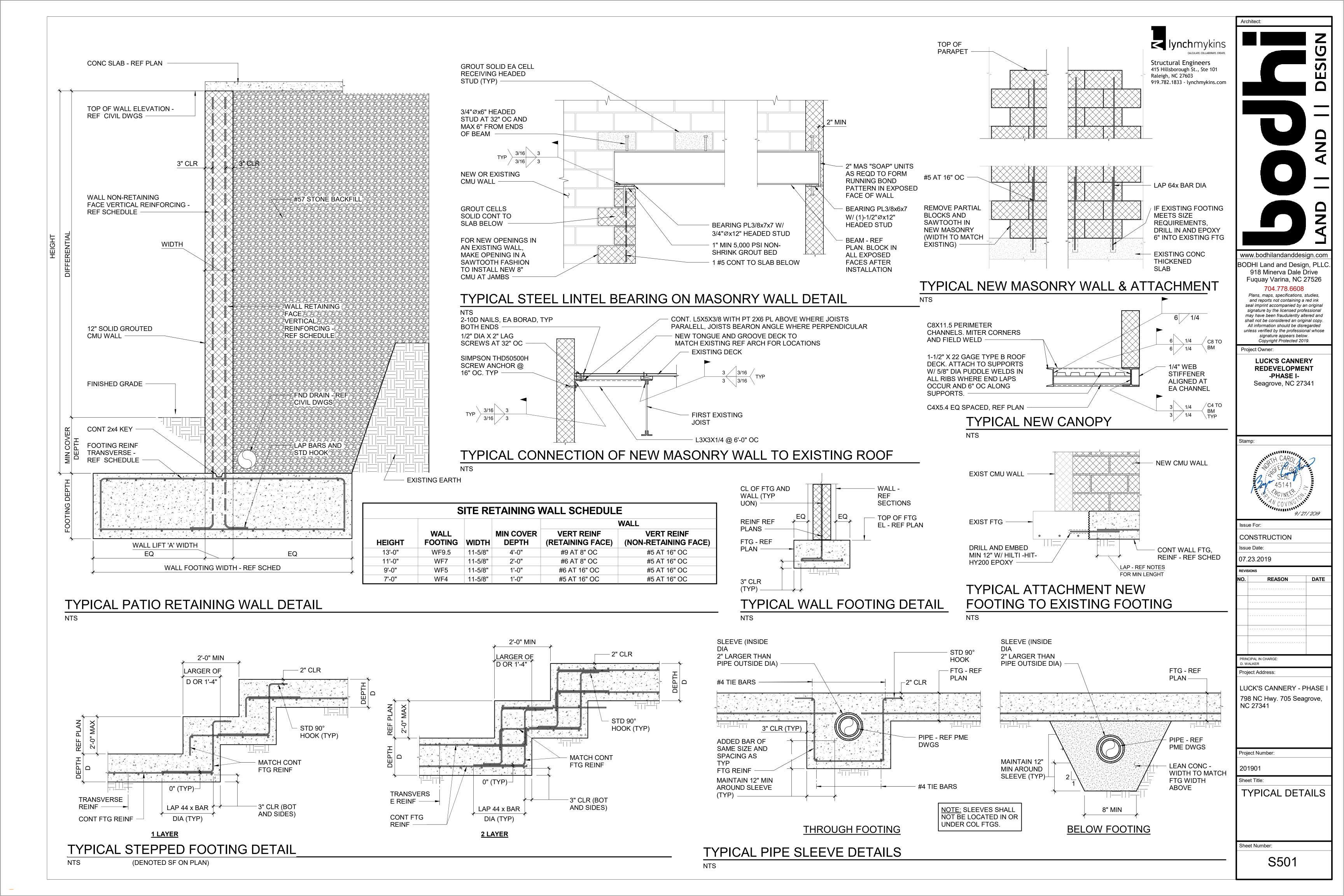
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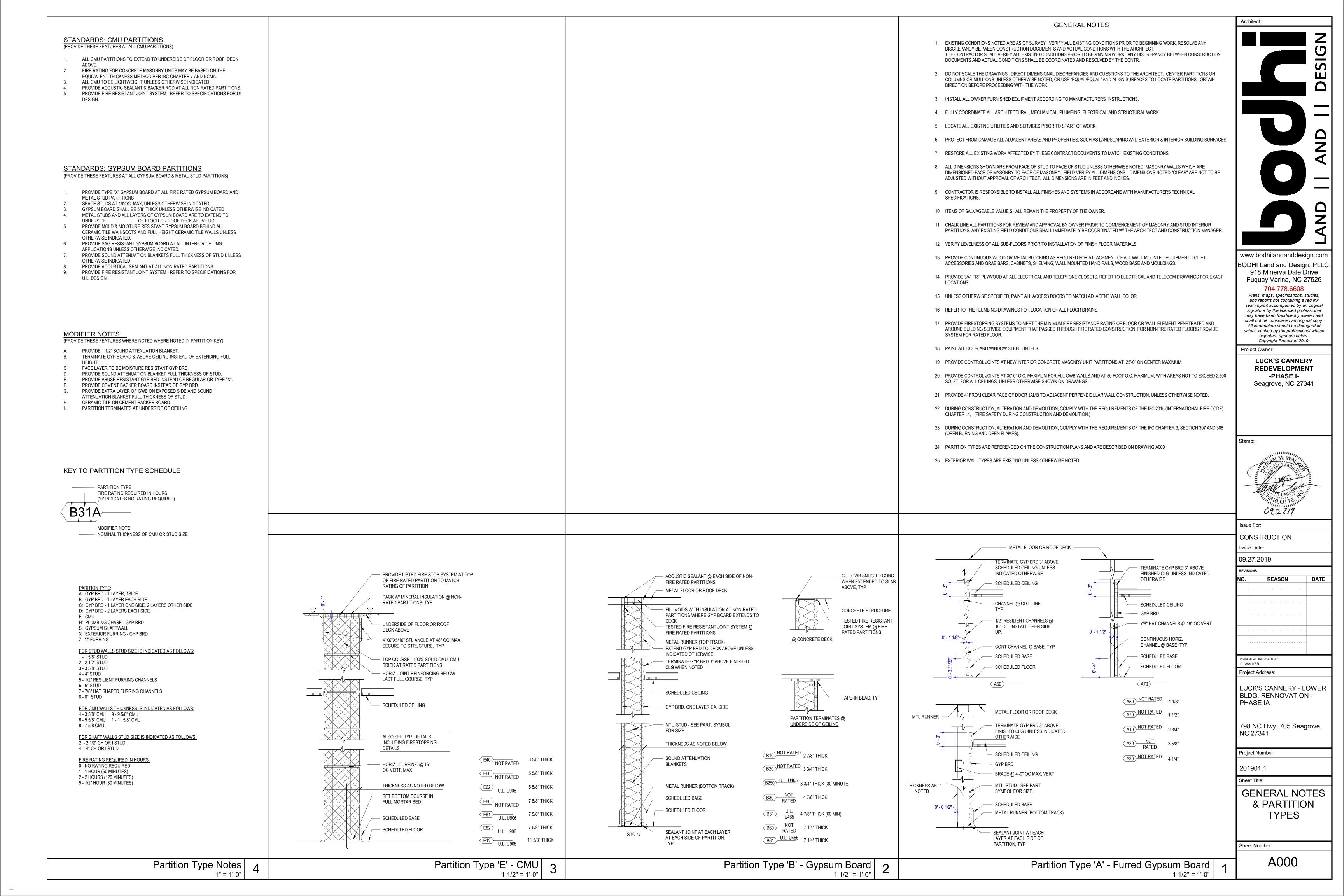
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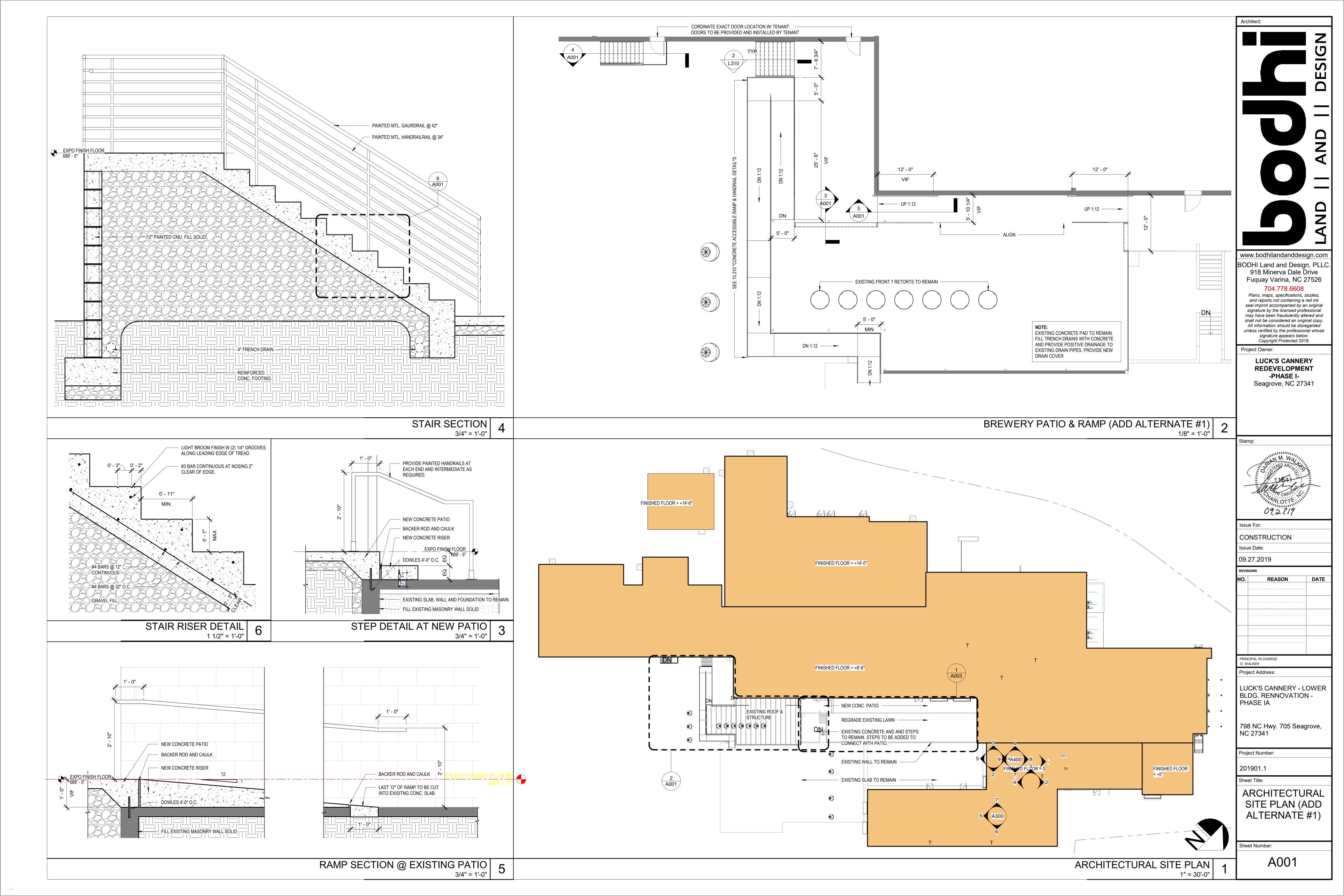
FRAMING PLAN

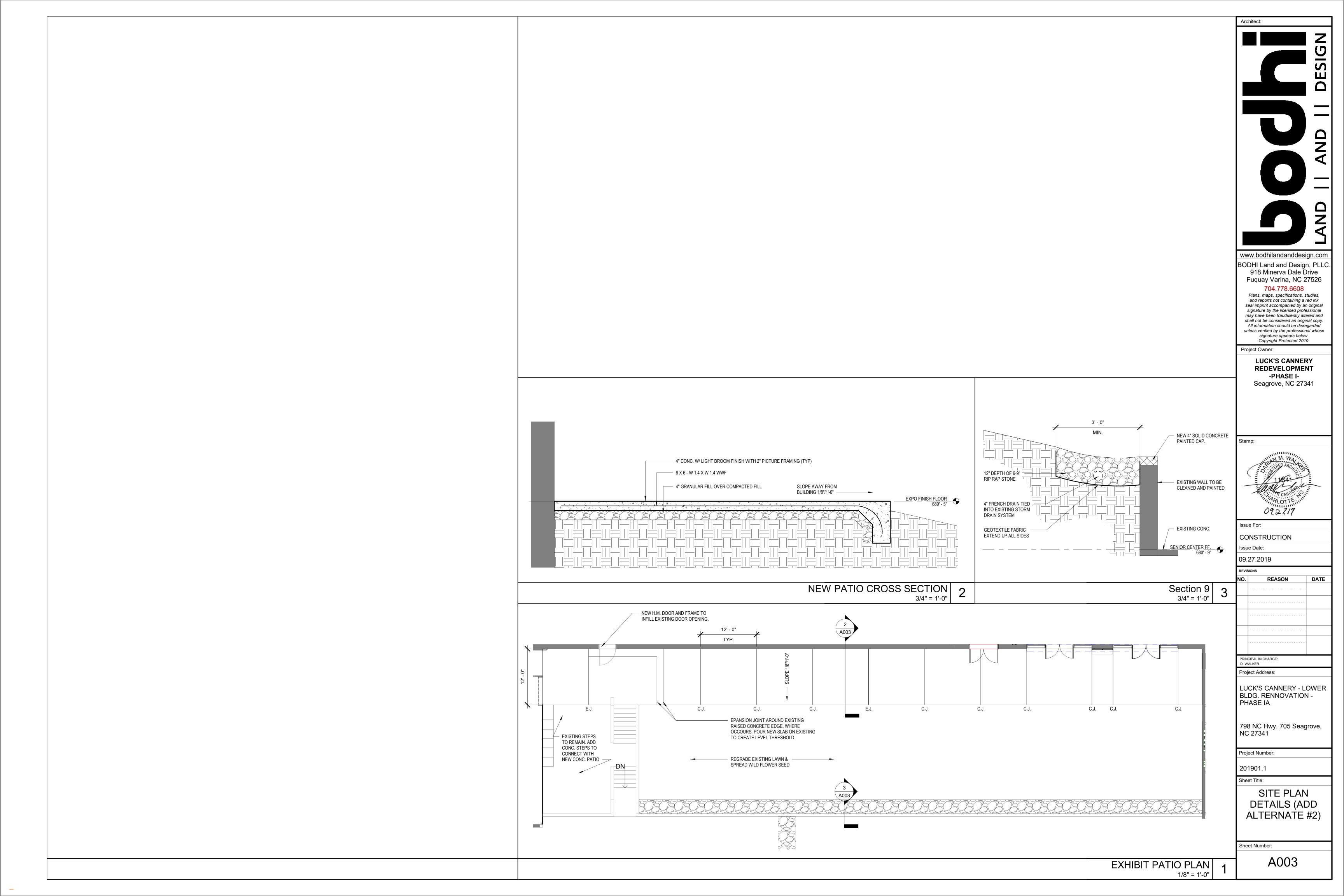
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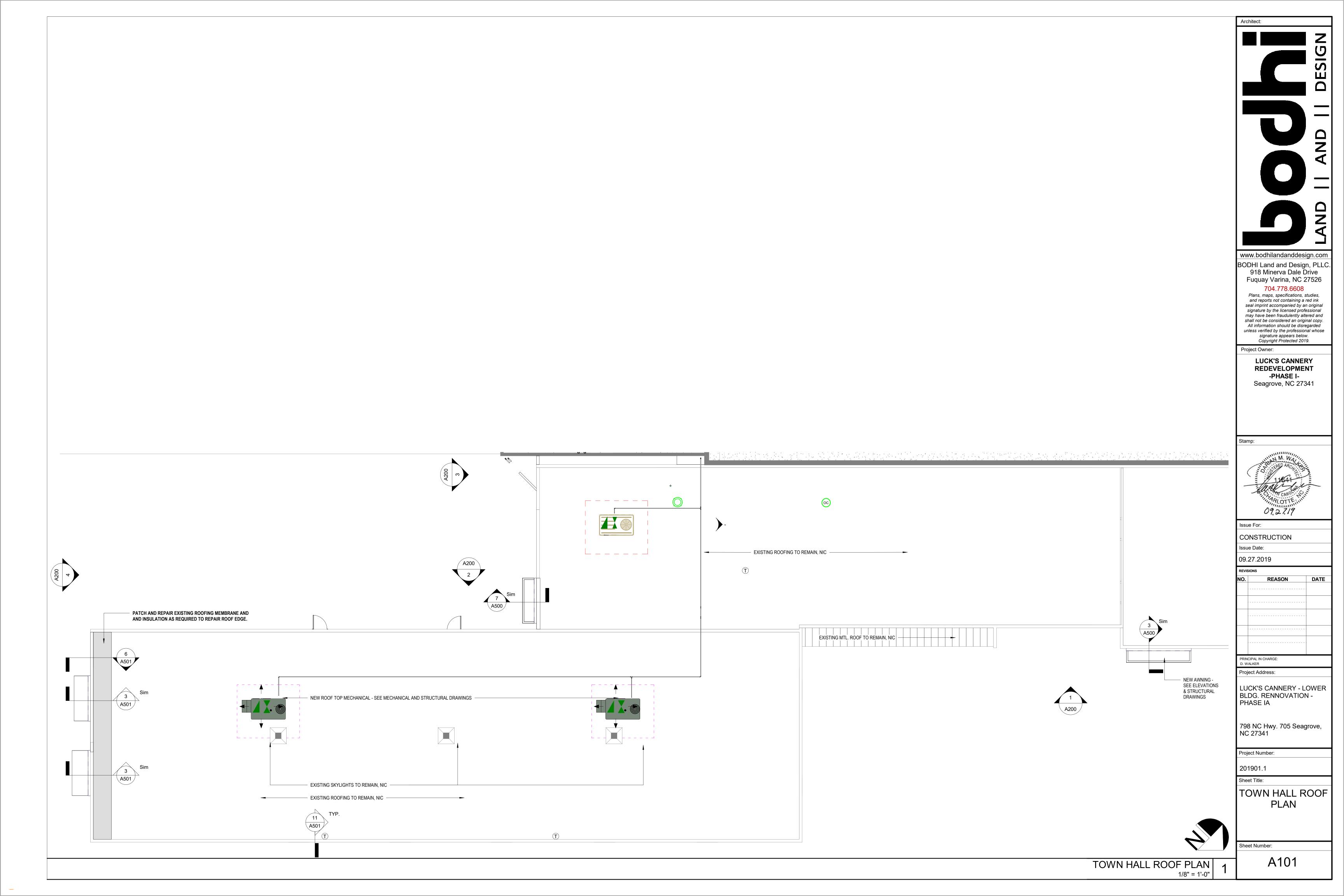


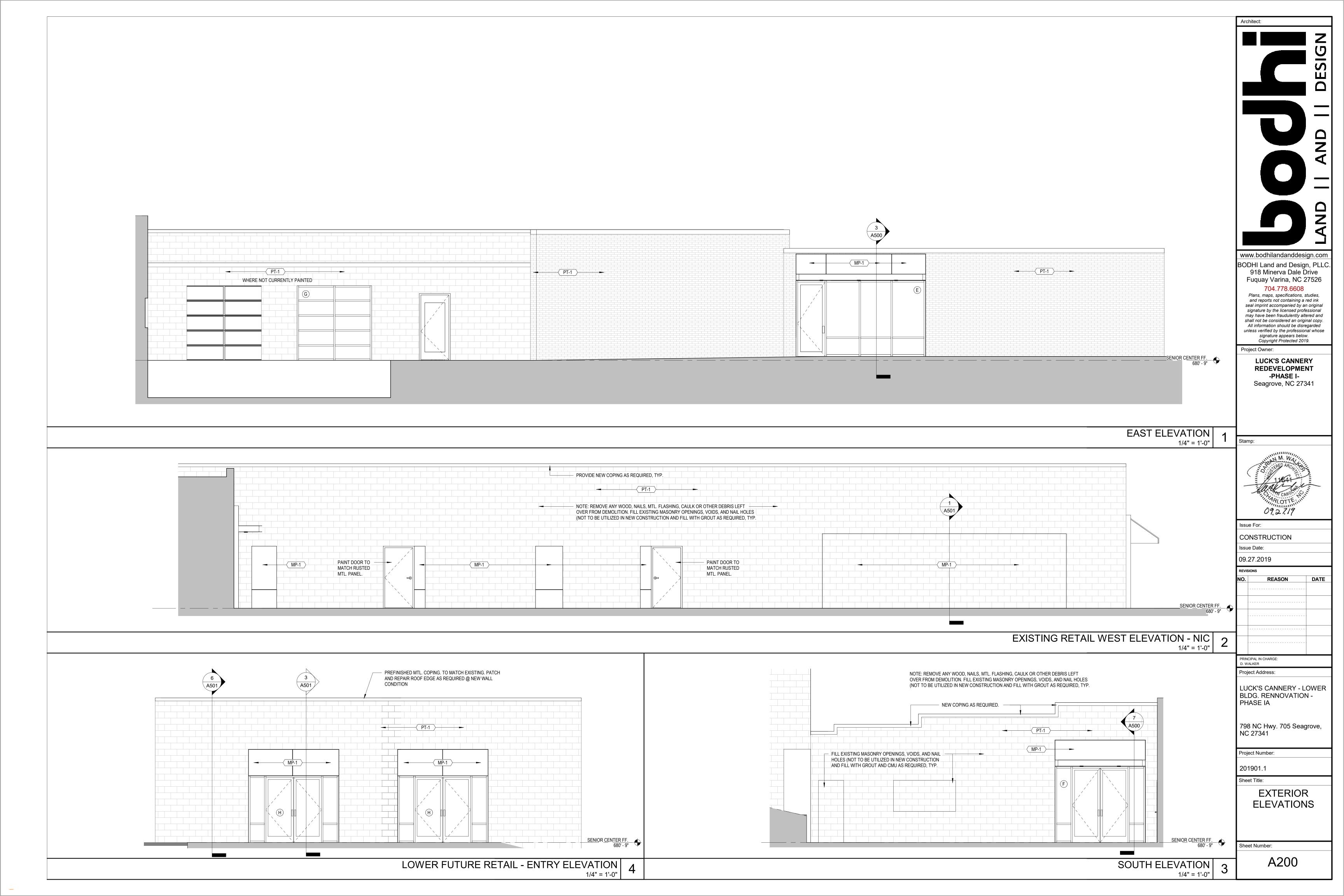


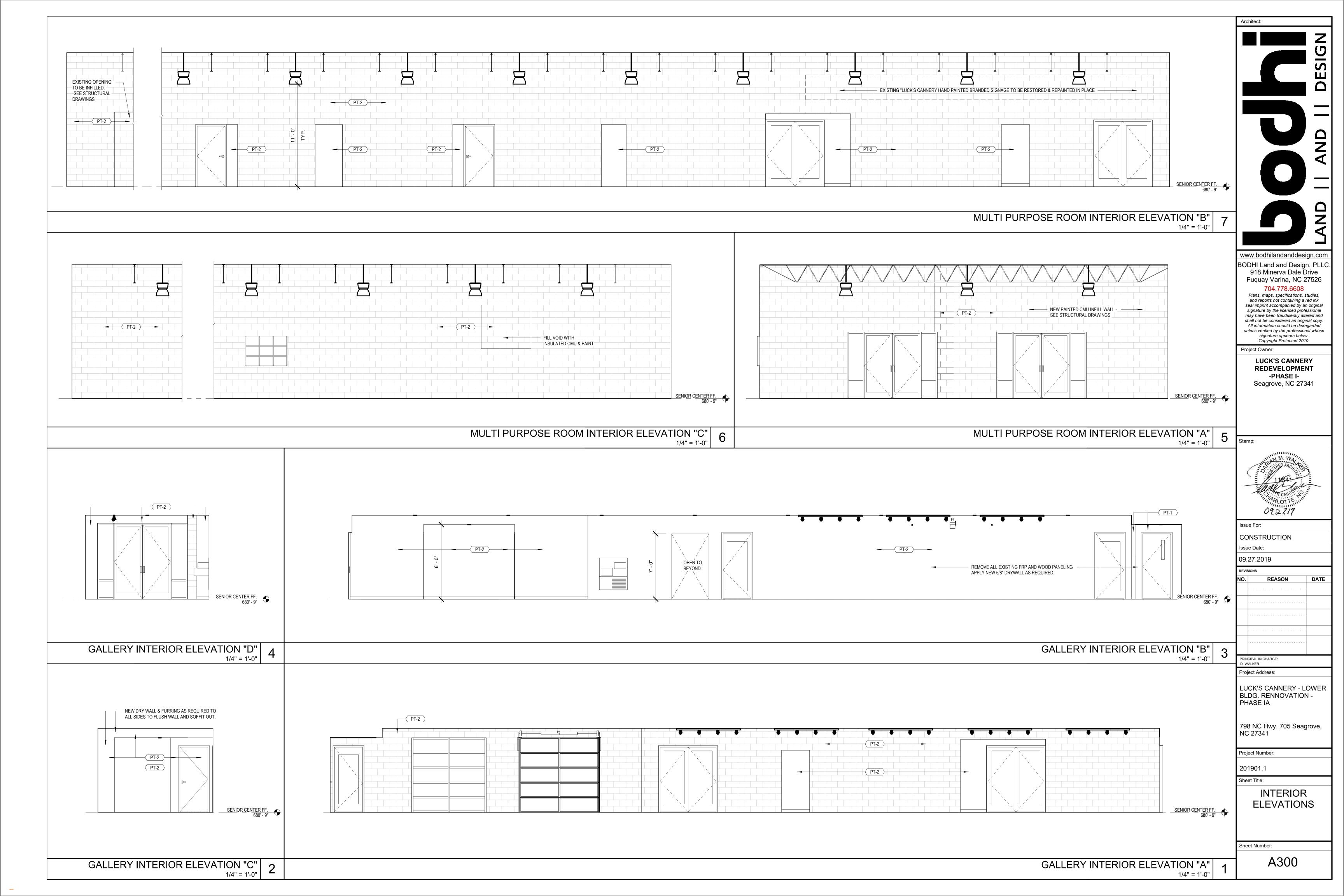


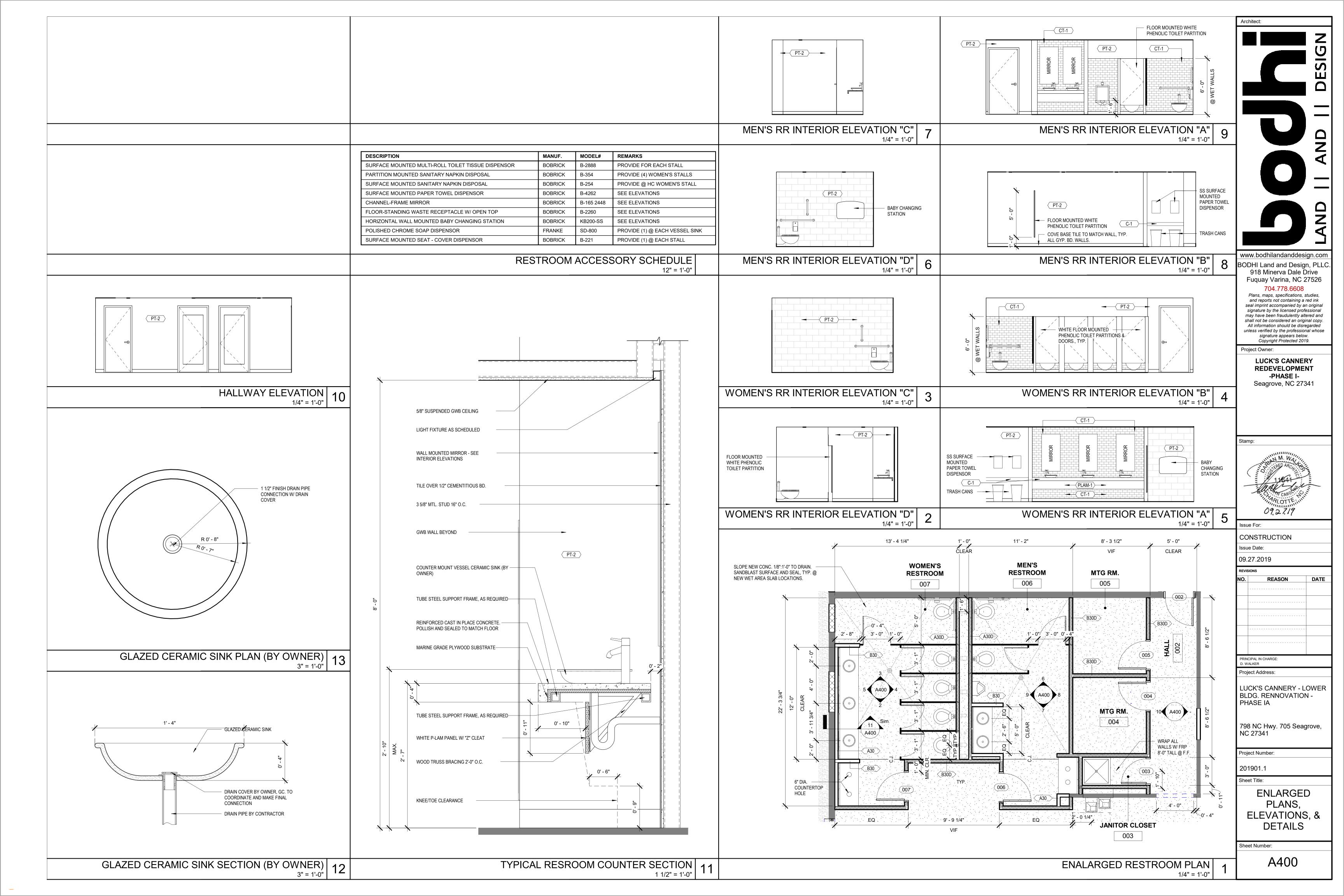


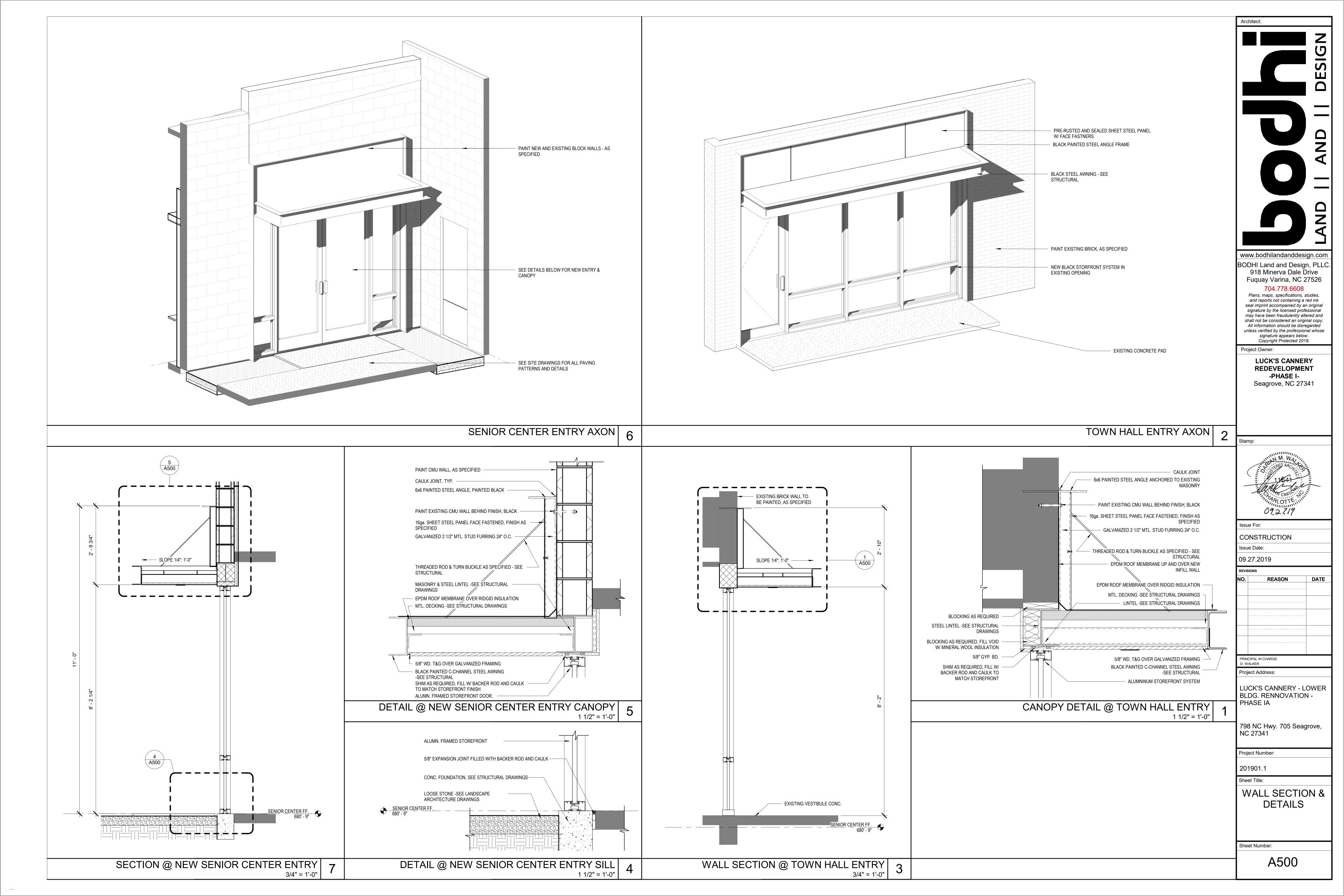


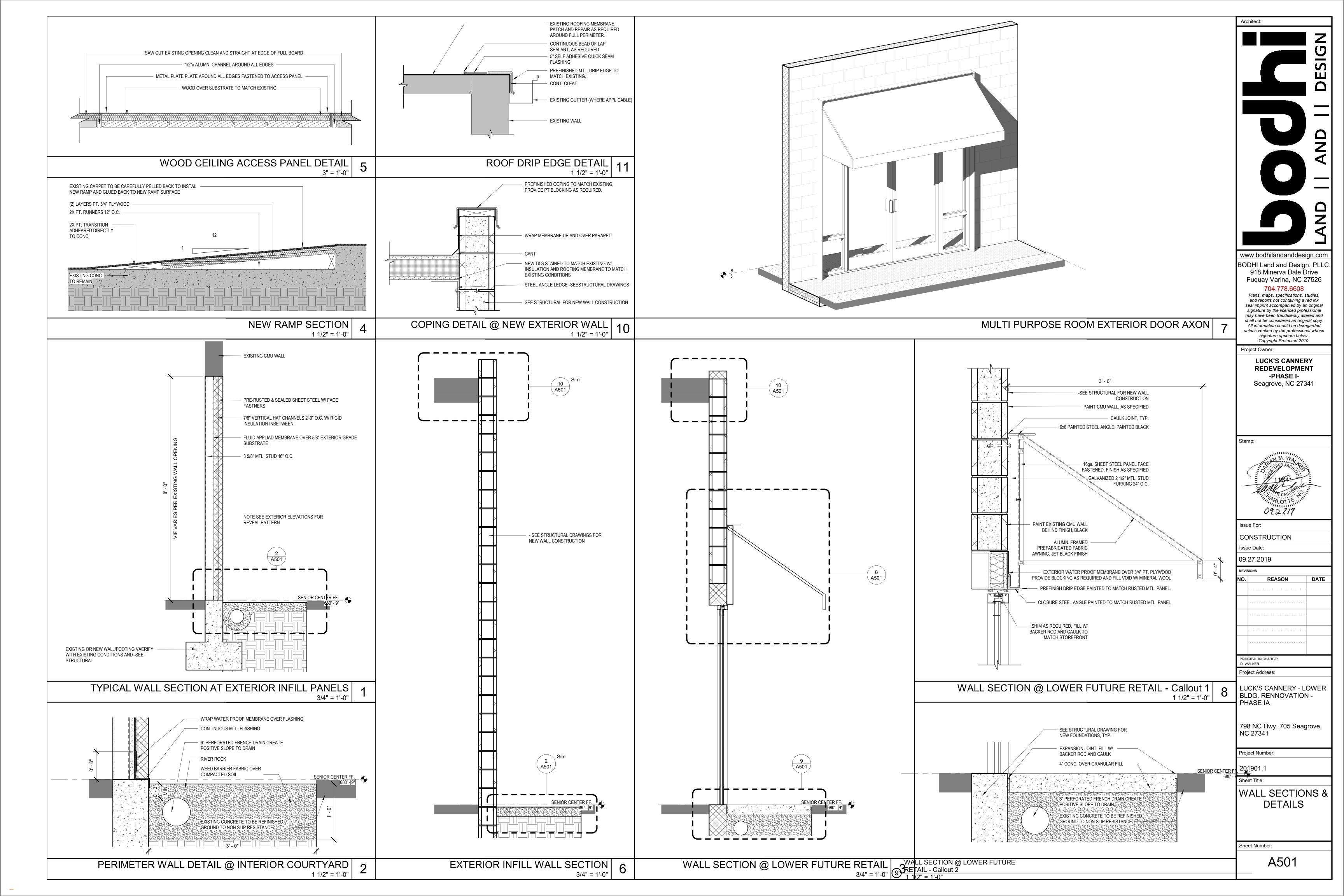












HW-01:	HW-01: PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:							
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR				
1 EA	STOREROOM LOCK	ND80TD SPA	626	SCH				
1 EA	FSIC CORE	23-030	626	SCH				
		BALANCE OF HARDWARE EXISTING						

HW-02:	HW-02: PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:						
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR			
3 EA	HINGE	5BB1 4.5 x 4.5	652	IVE			
1 EA	PASSAGE SET	ND10S SPA	626	SCH			
1 EA	WALL STOP	WS406/407CVX	630	IVE			

QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR	
1 EA	CONT. HINGE	224HD	628	IVE	
1 EA	PANIC HARDWARE	CD-35A-EO	626	VON	
1 EA	RIM CYLINDER	20-057 ICX	626	SCH	
1 EA	FSIC CORE	23-030	626	SCH	
1 EA	OH STOP	100S	630	GLY	
1 EA	SURFACE CLOSER	4050 EDA	689	LCN	
1 EA	THRESHOLD	655A-223	А	ZER	
1 EA	DOOR CONTACT	679-05HM	BLK	SCE	
		SEALS BY DOOR SUPPLIER	•		

QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR	
2 EA	CONT. HINGE	224HD	628	IVE	
1 EA	REMOVABLE MULLION	KR4954 STAB	689	VON	
1 EA	PANIC HARDWARE	CD-35A-DT	626	VON	
1 EA	PANIC HARDWARE	CD-35A-NL	626	VON	
1 EA	RIM CYLINDER	20-057 ICX	626	SCH	
3 EA	MORTISE CYLINDER	23-061	626	SCH	
1 EA	FSIC CORE	23-030	626	SCH	
2 EA	OH STOP	100S	630	GLY	
2 EA	SURFACE CLOSER	4050 EDA	689	LCN	
1 EA	THRESHOLD	655A-223	А	ZER	
1 EA	MULLION SEAL	8780NBK PSA	ВК	ZER	
2 EA	DOOR CONTACT	679-05HM	BLK	SCE	

QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR	
6 EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE	
1 SET	CONT LATCHING BOLT	FB61P	630	IVE	
1 EA	DUST PROOF STRIKE	DP2	626	IVE	
1 EA	STORMROOM LOCK	ND80TD SPA	626	SCH	
1 EA	FSIC CORE	20-030	626	SCH	
1 EA	COORDINATOR	COR X FL	628	IVE	
2 EA	SURFACE CLOSER	4050 SCUSH	689	LCN	
2 EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE	
1 EA	GASKETING	188SBK PSA	ВК	ZER	
2 EA	MEETING STILE	328AA-S	AA	ZER	

HW-06:	HW-06: PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:						
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR			
3 EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE			
1 SET	STOREROOM LOCK	ND80TD SPA	626	SCH			
1 EA	FSIC CORE	23-030	626	SCH			
1 EA	WALL STOP	WS406/407CVX	630	IVE			

HW-07:	HW-07: PROVIDE EACH PR DOOR(S) WITH THE FOLLOWING:					
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR		
6 EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE		
2 SET	MANUAL FLUSH BOLT	FB458	626	IVE		
1 EA	DUST PROOF STRIKE	DP2	626	IVE		
1 EA	STORMROOM LOCK	ND80TD SPA	626	SCH		
1 EA	FSIC CORE	20-030	626	SCH		
2 EA	WALL STOP	WS406/407CVX	630	IVE		

HW-08:	PROVIDE EACH RU DOOR(S) WITH THE F			
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR
		HARDWARE BY MANUFACTURER		

						DOORS	S - SCHED	ULE			
OPENING				DO	OOR				FRAME	RATING	
NO.	WIDTH	HEIGHT	THICK.	TYPE	MTL	FINISH	TYPE	MTL	FINISH	MIN.	HARDWARE & COMMENTS
SENIOR CENTER FF.											
000	3' - 0"	8'-0"	1 3/4"	D5	ALUM/GL	BLACK		ALUM	BLACK		HW-03
001A	6' - 0"	8'-0"	1 3/4"	D5	ALUM/GL	BLACK		ALUM	BLACK		HW-04 (PROVIDE ALTERNATE FOR ELECTRONIC FOB SYSTEM)
001B	8' - 0"	8'-0"	1 3/4"	D6	ALUM/GL	BLACK		ALUM	BLACK		HW-08
001C	3' - 0"	7'-0"	1 3/4"	D1	WD	PT-2	F1	НМ	PT-2		HW-06
001D	3' - 0"	7'-0"	1 3/4"	D10	WD	BLACK	F1	НМ	PT-2		HW-10
001E	3' - 0"	7'-0"	1 3/4"	D10	WD	BLACK	F1	НМ	PT-2		HW-10
001F	3' - 0"	7'-0"	1 3/4"	D4	ALUM/GL	BLACK	F1	НМ	BLACK		HW-04 (PROVIDE ALTERNATE FOR ELECTRONIC FOB SYSTEM)
002	3' - 0"	7'-0"	1 3/4"	D2	HM	PT-2	F1	НМ	PT-2	45	HW-02
003	2' - 8"	7'-0"	1 3/4"	D1	WD	PT-2	F1	НМ	PT-2		HW-09
004	3' - 0"	7'-0"	1 3/4"	D10	ALUM/GL	BLACK	F1	НМ	BLACK		HW-10
005	3' - 0"	7'-0"	1 3/4"	D10	ALUM/GL	BLACK	F1	НМ	BLACK		HW-10
006	3' - 0"	7'-0"	1 3/4"	D1	WD	BLACK	F1	НМ	BLACK		HW-12
007	3' - 0"	7'-0"	1 3/4"	D1	WD	BLACK	F1	НМ	BLACK		HW-12
008A	6' - 0"	7'-0"	1 3/4"	D5	ALUM/GL	BLACK		ALUM	BLACK		HW-04
008B	6' - 0"	7'-0"	1 3/4"	D5	ALUM/GL	BLACK		ALUM	BLACK		HW-04
008C	3' - 0"	6'-6"	1 3/4"	D2	HM	PAINTED TO MATCH RUSTED MTL. PANEL	F3	НМ	PAINTED TO MATCH RUSTED MTL. PANEL		HW-03
008D	3' - 0"	6'-6"	1 3/4"	D2	HM	PAINTED TO MATCH RUSTED MTL. PANEL	F3	НМ	PAINTED TO MATCH RUSTED MTL. PANEL		HW-03
008E	6' - 0"	7'-0"	1 3/4"	D5	ALUM/GL	BLACK	F2	НМ	BLACK		HW-04
008F	6' - 0"	7'-0"	1 3/4"	D5	ALUM/GL	BLACK	F2	НМ	BLACK		HW-04
008G	3' - 0"	7'-0"	1 3/4"	D4	ALUM/GL	BLACK	F1	НМ	BLACK		HW-04

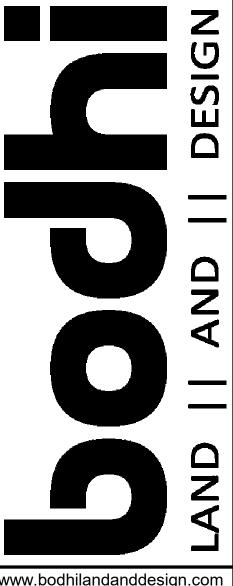
HW-09:	HW-09: PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:						
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR			
3 EA	HINGE	5BB1 4.5 X 4.5	652	IVE			
1 EA	PRIVACY LOCK	ND40S SPA	626	SCH			
1 EA	SURFACE CLOSER	4050 REG OR PA AS REQ	689	LCN			
1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE			
1 EA	WALL STOP	WS406/407CVX	630	IVE			

HW-10:	HW-10: PROVIDE EACH SGL DOOR(S) WITH THE FOLLOWING:							
QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR				
3 EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE				
1 EA	CLASSROOM LOCK	ND40S SPA	626	SCH				
1 EA	FCIS CORE	23-030	626	SCH				
1 EA	SURFACE CLOSER	4050 SCUSH	689	LCN				
1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE				

QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR
6 EA	HINGE	5BB1 4.5 X 4.5 NRP	652	IVE
1 EA	PANIC HARDWARE	CD-3527A-DT-LBL	626	VON
1 EA	PANIC HARDWARE	CD-3527A-TL-LBR	626	VON
1 EA	RIM CYLINDER	20-057 ICX	626	SCH
2 EA	MORTISE CYLINDER	20-061	626	SCH
1 EA	FSIC CORE	20-030	626	SCH
2 EA	SURFACE CLOSER	4050 SCUSH	689	LCN
2 EA	KICK PLATE	8400 10" X 1" LDW B-CS	630	IVE

QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR	
3 EA	HINGE	5BB1 4.5 X 4.5	652	IVE	
1 EA	PUSH PLATE	8200 6" X 16"	630	IVE	
1 EA	PULL PLATE	8303 10" 4" X 16"	630	IVE	
1 EA	SURFACE CLOSER	4050 REG OR PA AS REQ	689	LCN	
1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE	
1 EA	WALL STOP	WS406/407CVX	630	IVE	

QTY	DESCIPTION	CATALOG NUMBER	FINISH	MFR
3 EA	HINGE	5BB1 4.5 X 4.5	652	IVE
1 EA	PUSH PLATE	8200 6" X 16"	630	IVE
1 EA	PULL PLATE	8303 10" 4" X 16"	630	IVE
1 EA	OH STOP	90S	630	GLY
1 EA	SURFACE CLOSER	4050 REG OR PA AS REQ	689	LCN
1 EA	KICK PLATE	8400 10" X 2" LDW B-CS	630	IVE



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Project Owner:

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Issue For: CONSTRUCTION Issue Date:

09.27.2019

DATE REASON

PRINCIPAL IN CHARGE: D. WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove, NC 27341

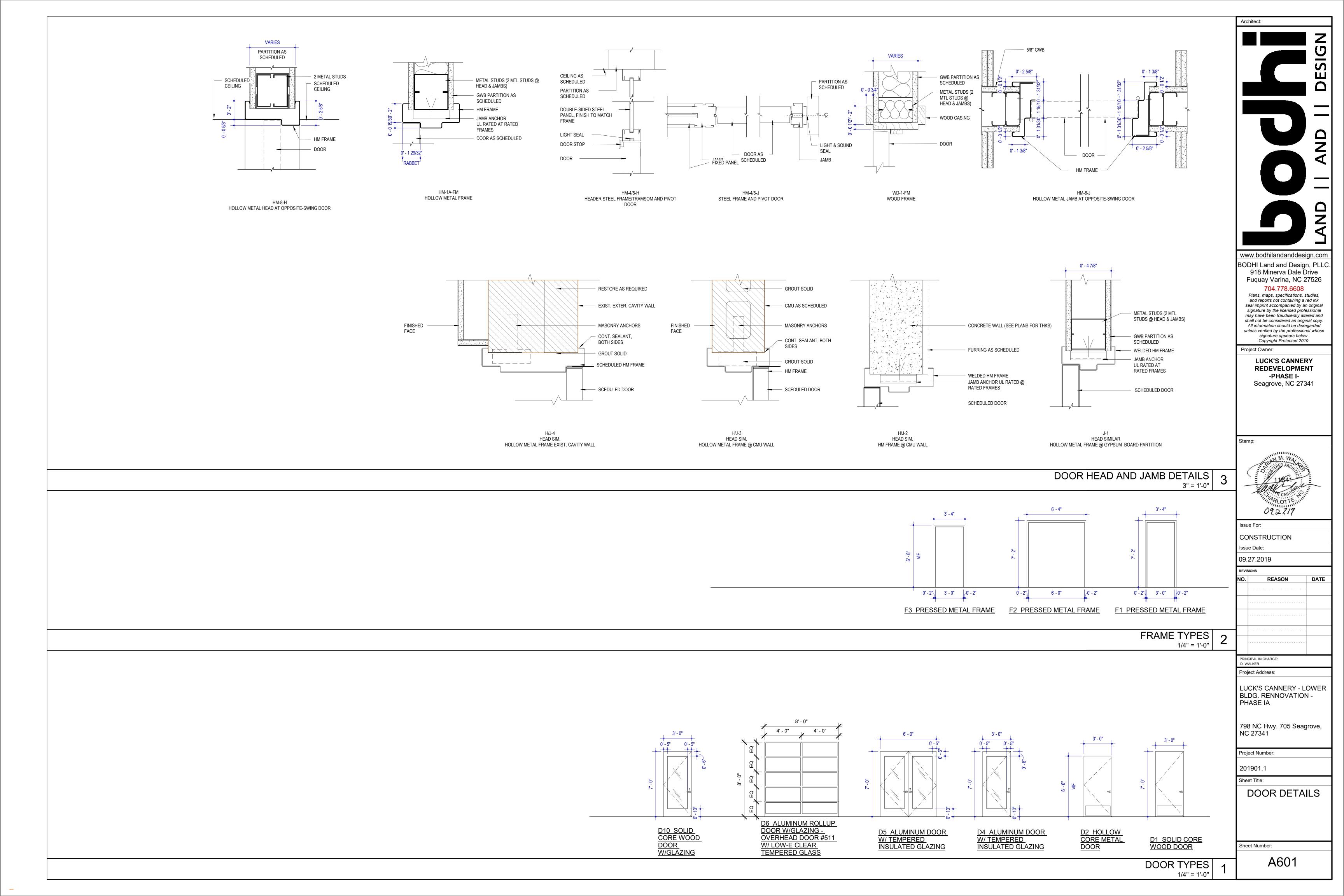
Project Number:

201901.1 Sheet Title:

DOOR SCHEDULE

Sheet Number:

A600



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SECTION 08 71 00 - DOOR HARDWARE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Quantity: Furnish in the following quantities:
PART 1 - GENERAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Change (Day) Keys: 3 per cylinder/core.
                                                                                                                                                                                                                 1.08
                                                                                                                                                                                                                          WARRANTY
1.01 RELATED DOCUMENTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Permanent Control Keys: 3.
                                                                                                                                                                                                                                    Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of door hardware that fail in materials or workmanship within specified warranty
                  Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Master Keys: 6.
1.02 SUMMARY
                                                                                                                                                                                                                                                                                                                                                                                                                                     2.09 DOOR CLOSERS
                                                                                                                                                                                                                                     Warranty Period: Beginning from date of Substantial Completion, for durations indicated.
         A. Section includes:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manufacturers and Products:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scheduled Manufacturer and Product: LCN 4050 series.
                             Mechanical door hardware for:
                                                                                                                                                                                                                                               Mechanical: 25 years.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Requirements:
                                                                                                                                                                                                                                               Exit Devices:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide door closers conforming to ANSI/BHMA A156.4 Grade 1 requirements by BHMA certified independent testing laboratory. ISO 9000 certify closers. Stamp units with date of
                             Field verification, preparation and modification of existing doors and frames to receive new door hardware.
                                                                                                                                                                                                                                               Mechanical: 3 years.
                             The intent of the hardware specification is to specify the hardware for interior and exterior doors, and to establish a type, continuity, and standard
                                                                                                                                                                                                                                                                                                                                                                                                                                                manufacture code
                                                                                                                                                                                                                                               Locksets:
         However, it is the door hardware supplier's responsibility to thoroughly review existing conditions, schedules, specifications, drawings,
                                                                                                                                                               and other Contract Documents to verify
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide door closers with fully hydraulic, full rack and pinion action with cast aluminum cylinder
                                                                                                                                                                                                                                               Mechanical: 10 years.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Closer Body: 1-1/2 inch (38 mm) diameter with 11/16 inch (17 mm) diameter heat-treated pinion journal and full complement bearings.
         the suitability of the hardware specified.
                                                                                                                                                                                                                                               Continuous Hinges: Lifetime warranty.
                  Exclusions: Unless specifically listed in hardware sets, hardware is not specified in this section for
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hydraulic Fluid: Fireproof, passing requirements of UL10C, and all weather requiring no seasonal closer adjustment for temperatures ranging from 120 degrees F to -30 degrees F.
                                                                                                                                                                                                                                               Kev Blanks: Lifetime
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Spring Power: Continuously adjustable over full range of closer sizes, and providing reduced opening force as required by accessibility codes and standards.
                             Windows
                                                                                                                                                                                                                                     Warranty does not cover damage or faulty operation due to improper installation, improper use or abuse
                             Cabinets (casework), including locks in cabinets
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hydraulic Regulation: By tamper-proof, non-critical valves, with separate adjustment for latch speed, general speed, and back check.
                                                                                                                                                                                                                 1.09 MAINTENANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Pressure Relief Valve (PRV) Technology: Not permitted.
                              Signage
                                                                                                                                                                                                                                   Maintenance Tools: Furnish complete set of special tools required for maintenance and adjustment of hardware, including changing of cylinders
                              Toilet accessories
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide stick on templates, special templates, drop plates, mounting brackets, or adapters for arms as required for details, overhead stops, and other door hardware items interfering with
                                                                                                                                                                                                                 PART 2 - PRODUCTS
                             Overhead doors
                                                                                                                                                                                                                2.01 MATERIALS
                                                                                                                                                                                                                                                                                                                                                                                                                                     2.10 DOOR TRIM
                   Related Sections:
                                                                                                                                                                                                                                    Fasteners
                             Division 01 Section "Alternates" for alternates affecting this section
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manufacturers:
                                                                                                                                                                                                                                     Provide hardware manufactured to conform to published templates, generally prepared for machine screw installation.
                             Division 07 Section "Joint Sealants" for sealant requirements applicable to threshold installation specified in this section.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scheduled Manufacturer: Ives.
                                                                                                                                                                                                                                     Furnish screws for installation with each hardware item. Finish exposed (exposed under any condition) screws to match hardware finish, or, if exposed in surfaces of other work, to match
                             Division 09 sections for touchup, finishing or refinishing of existing openings modified by this section.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Requirements
                                                                                                                                                                                                                            finish of this other work including prepared for paint surfaces to receive painted finish.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide push plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick and beveled 4 edges. Where width of door stile prevents use of 4 inches (102 mm)
1.03 REFERENCES
                                                                                                                                                                                                                                    Provide concealed fasteners for hardware units exposed when door is closed except when no standard units of type specified are available with concealed fasteners. Do not use thru-bolts

 A. UL - Underwriters Laboratories

                                                                                                                                                                                                                                                                                                                                                                                                                                               wide plate, adjust width to fit.
                                                                                                                                                                                                                           for installation where bolt head or nut on opposite face is exposed in other work unless thru-bolts are required to fasten hardware securely. Review door specification and advise Architect if thru-bolts
                             UL 10B - Fire Test of Door Assemblies
                                                                                                                                                                                                                           are required.
                             UL 10C - Positive Pressure Test of Fire Door Assemblies
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide pulls of solid bar stock, diameter and length as scheduled. Where required, mount back to back with push bar.
                                                                                                                                                                                                                                    Install hardware with fasteners provided by hardware manufacturer.
                             UL 1784 - Air Leakage Tests of Door Assemblies
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide pull plates 4 inches (102 mm) wide by 16 inches (406 mm) high by 0.050 inch (1 mm) thick, beveled 4 edges, and prepped for pull. Where width of door stile prevents use of 4
                                                                                                                                                                                                                                     Modification and Preparation of Existing Doors: Where existing door hardware is indicated to be removed and reinstalled.
                             UL 305 - Panic Hardware
                                                                                                                                                                                                                                                                                                                                                                                                                                                inches (102 mm) wide plate, adjust width to fit.
                                                                                                                                                                                                                                     Provide necessary fillers, Dutchmen, reinforcements, and fasteners, compatible with existing materials, as required for mounting new opening hardware and to cover existing door and
                                                                                                                                                                                                                                                                                                                                                                                                                                     2.11 PROTECTION PLATES
                   DHI - Door and Hardware Institute
                                                                                                                                                                                                                            frame preparations.
                              Sequence and Format for the Hardware Schedule
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manufacturers:
                                                                                                                                                                                                                                     Use materials which match materials of adjacent modified areas.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scheduled Manufacturer: Ives.
                             Recommended Locations for Builders Hardware
                                                                                                                                                                                                                                      When modifying existing fire-rated openings, provide materials permitted by NFPA 80 as required to maintain fire-rating.
                             Key Systems and Nomenclature
                                                                                                                                                                                                                                     Provide screws, bolts, expansion shields, drop plates and other devices necessary for hardware installation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide kick plates, mop plates, and armor plates minimum of 0.050 inch (1 mm) thick, beveled four edges as scheduled. Furnish with sheet metal or wood screws, finished to match
                   ANSI - American National Standards Institute
                                                                                                                                                                                                                                      Where fasteners are exposed to view: Finish to match adjacent door hardware material.
                             ANSI/BHMA A156.1 - A156.29, and ANSI/BHMA A156.31 - Standards for Hardware and Specialties
                                                                                                                                                                                                                2.02 HINGES
1.04 SUBMITTALS
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sizes of plates:
                                                                                                                                                                                                                                     Manufacturers and Products:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         a. Kick Plates: 10 inches (254 mm) high by 2 inches (51 mm) less width of door on single doors, 1 inch (25 mm) less width of door on pairs
                   General:
                                                                                                                                                                                                                                     Scheduled Manufacturer and Product: Ives 5BB series.
                                                                                                                                                                                                                                                                                                                                                                                                                                     2.12 OVERHEAD STOPS AND OVERHEAD STOP/HOLDERS
                             Submit in accordance with Conditions of Contract and Division 01 requirements.
                                                                                                                                                                                                                                      Requirements:
                             Highlight, encircle, or otherwise specifically identify on submittals deviations from Contract Documents, issues of incompatibility or other issues
                                                                                                                                                                                             which
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Manufacturers:
                                                                                                                                                                                                                                     Provide hinges conforming to ANSI/BHMA A156.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scheduled Manufacturers: Glynn-Johnson.
                                                                                                                                                                                                                                     1-3/4 inch (44 mm) thick doors, up to and including 36 inches (914 mm) wide:
                            Prior to forwarding submittal, comply with procedures for verifying existing door and frame compatibility for new hardware, as specified in PART 3,
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Requirements:
                                                                                                                                                                                                                                              Exterior: Standard weight, bronze or stainless steel, 4-1/2 inches (114 mm) high
                    "EXAMINATION" article, herein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide heavy duty concealed mounted overhead stop or holder as specified for exterior and interior vestibule single acting doors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        www.bodhilandanddesign.com
                                                                                                                                                                                                                                              Interior: Standard weight, steel, 4-1/2 inches (114 mm) high
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide heavy duty concealed mounted overhead stop or holder as specified for double acting doors.
                                                                                                                                                                                                                                    1-3/4 inch (44 mm) thick doors over 36 inches (914 mm) wide:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide heavy or medium duty and concealed or surface mounted overhead stop or holder for interior doors as specified. Provide medium duty surface mounted overhead stop for interior
                            Product Data: Technical product data for each item of door hardware, installation instructions, maintenance of operating parts and finish, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      BODHI Land and Design, PLL(
                                                                                                                                                                                                                                              Exterior: Heavy weight, bronze/stainless steel, 5 inches (127 mm) high
                                                                                                                                                                                                                                                                                                                                                                                                                                               doors and at any door that swings more than 140 degrees before striking wall, open against equipment, casework, sidelights, and where conditions do not allow wall stop or floor stop presents
         information necessary to show compliance with requirements.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            918 Minerva Dale Drive
                                                                                                                                                                                                                                               Interior: Heavy weight, steel, 5 inches (127 mm) high
                  2. Samples for Verification: If requested by Architect, submit production sample or sample installations of each type of exposed hardware unit in
                                                                                                                                                                                                                                                                                                                                                                                                                                               tripping hazard.
                                                                                                                                                                                                                                     Provide three hinges per door leaf for doors 90 inches (2286 mm) or less in height, and one additional hinge for each 30 inches (762 mm) of additional door height.
         indicated, and tagged with full description for coordination with schedule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Where overhead holders are specified provide friction type at doors without closer and positive type at doors with closer.
                                                                                                                                                                                                                                      Where new hinges are specified for existing doors or existing frames, provide new hinges of identical size to hinge preparation present in existing door or existing frame.
                             a. Samples will be returned to supplier. Units that are acceptable to Architect may, after final check of operations, be incorporated into
                                                                                                                                                                                             Work.
                                                                                                                                                                                                                                                                                                                                                                                                                                     2.13 DOOR STOPS AND HOLDERS
                                                                                                                                                                                                                                     Hinge Pins: Except as otherwise indicated, provide hinge pins as follows:
                    within limitations of key coordination requirements.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manufacturers:
                                                                                                                                                                                                                                               Steel Hinges: Steel pins
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Scheduled Manufacturer: Ives.
                            Door Hardware Schedule: Submit schedule with hardware sets in vertical format as illustrated by Sequence of Format for the Hardware Schedule
                                                                                                                                                                                                                                               Non-Ferrous Hinges: Stainless steel pins
         published by the Door and Hardware Institute. Indicate complete designations of each item required for each door or opening, include:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide door stops at each door leaf:
                                                                                                                                                                                                                                               Out-Swinging Exterior Doors: Non-removable pins
                                       Door Index; include door number, heading number, and Architects hardware set number.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide wall stops wherever possible. Provide convex type where mortise type locks are used and concave type where cylindrical type locks are used.
                                                                                                                                                                                                                                               Out-Swinging Interior Lockable Doors: Non-removable pins
                                       Opening Lock Function Spreadsheet: List locking device and function for each opening.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Where a wall stop cannot be used, provide universal floor stops for low or high rise options.
                                                                                                                                                                                                                                               Interior Non-lockable Doors: Non-rising pins
                                       Quantity, type, style, function, size, and finish of each hardware item.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Where wall or floor stop cannot be used, provide medium duty surface mounted overhead stop.
                                                                                                                                                                                                                                     Width of hinges: 4-1/2 inches (114 mm) at 1-3/4 inch (44 mm) thick doors. Adjust hinge width as required for door, frame, and wall conditions to allow proper degree of opening.
                                                                                                                                                                                                                                                                                                                                                                                                                                      2.14 THRESHOLDS, SEALS, DOOR SWEEPS, AUTOMATIC DOOR BOTTOMS, AND GASKETING
                                       Name and manufacturer of each item.
                                                                                                                                                                                                                          CONTINUOUS HINGES
                                       Fastenings and other pertinent information
                                                                                                                                                                                                                                     Aluminum Geared
                                       Location of each hardware set cross-referenced to indications on Drawings.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scheduled Manufacturer: Zero International.
                                                                                                                                                                                                                                     Manufacturers:
                                       Explanation of all abbreviations, symbols, and codes contained in schedule.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Requirements
                                                                                                                                                                                                                                              Scheduled Manufacturer: Ives.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Project Owner:
                                        Mounting locations for hardware.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide thresholds, weather-stripping (including door sweeps, seals, and astragals) and gasketing systems (including smoke, sound, and light) as specified and per architectural details.
                                                                                                                                                                                                                                     Requirements:
                                       Door and frame sizes and materials.
                                                                                                                                                                                                                                               Provide aluminum geared continuous hinges conforming to ANSI/BHMA A156.26, Grade 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LUCK'S CANNERY
                                        Name and phone number for local manufacturer's representative for each product.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Smoke- and Draft-Control Door Assemblies: Where smoke- and draft-control door assemblies are required, provide door hardware that meets requirements of assemblies tested according
                                                                                                                                                                                                                                               Provide aluminum geared continuous hinges, where specified in the hardware sets, fabricated from 6063-T6 aluminum.
                                                                                                                                                                                                                                                                                                                                                                                                                                               to UL 1784 and installed in compliance with NFPA 105.
                                                                                                                                                                                                                                               Provide split nylon bearings at each hinge knuckle for quiet, smooth, self-lubricating operation.
                                      After Keying Conference, provide keying schedule listing levels of keying as well as explanation of key system's function, key symbols
                                                                                                                                                                                             used and
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Size of thresholds:
                                                                                                                                                                                                                                               Provide hinges capable of supporting door weights up to 450 pounds, and successfully tested for 1,500,000 cycles.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Saddle Thresholds: 1/2 inch (13 mm) high by jamb width by door width
                    door numbers controlled.
                                                                                                                                                                                                                                               On fire-rated doors, provide aluminum geared continuous hinges that are classified for use on rated doors by testing agency acceptable to authority having jurisdiction.
                            b. Use ANSI/BHMA A156.28 "Recommended Practices for Keying Systems" as guideline for nomenclature, definitions, and approach for
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide door sweeps, seals, astragals, and auto door bottoms only of type where resilient or flexible seal strip is easily replaceable and readily available.
                                                                                                                                                                                             selecting
                                                                                                                                                                                                                                               Install hinges with fasteners supplied by manufacturer.
                    optimal keying system.
                                                                                                                                                                                                                                                                                                                                                                                                                                     2.15 SILENCERS
                                                                                                                                                                                                                                               Provide hinges 1 inch (25 mm) shorter in length than nominal height of door, unless otherwise noted or door details require shorter length and with symmetrical hole pattern.
                                       Provide 3 copies of keying schedule for review prepared and detailed in accordance with referenced DHI publication. Include schematic
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manufacturers:
                                                                                                                                                                                                                2.04 FLUSH BOLTS
                             keying diagram and index each key to unique door designations.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scheduled Manufacturer: Ives.
                                                                                                                                                                                                                                    Manufacturers:
                                       Index keying schedule by door number, keyset, hardware heading number, cross keying instructions, and special key stamping
                                                                                                                                                                                                                                      Scheduled Manufacturer: Ives.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide "push-in" type silencers for hollow metal or wood frames
                             instructions.
                                                                                                                                                                                                                                     Acceptable Manufacturers: Burns, Rockwood.
                                      Provide one complete bitting list of key cuts and one key system schematic illustrating system usage and expansion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide one silencer per 30 inches (762 mm) of height on each single frame, and two for each pair frame.
                                               Forward bitting list, key cuts and key system schematic directly to Owner, by means as directed by Owner.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Omit where gasketing is specified.
                                                                                                                                                                                                                                     Provide automatic, constant latching, and manual flush bolts with forged bronze or stainless-steel face plates, extruded brass levers, and with wrought brass guides and strikes. Provide 12
                                                                                                                                                                                                                                                                                                                                                                                                                                    2.16 DOOR POSITION SWITCHES
                                        Prepare key schedule by or under supervision of supplier, detailing Owner's final keying instructions for locks.
                                                                                                                                                                                                                            inch (305 mm) steel or brass rods at doors up to 90 inches (2286 mm) in height. For doors over 90 inches (2286 mm) in height increase top rods by 6 inches (152 mm) for each additional 6 inches
                              Templates: After final approval of hardware schedule, provide templates for doors, frames and other work specified to be factory or shop prepared
                                                                                                                                                                                             for door
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Manufacturers:
                                                                                                                                                                                                                            (152 mm) of door height. Provide dust-proof strikes at each bottom flush bolt.
         hardware installation
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Scheduled Manufacturer: Schlage.
                                                                                                                                                                                                                          CYLINDRICAL LOCKS – GRADE 1
                                                                                                                                                                                                                                     Manufacturers and Products:
                                        Qualification Data: For Supplier, Installer and Architectural Hardware Consultant.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Provide recessed or surface mounted type door position switches as specified.
                                                                                                                                                                                                                                     Scheduled Manufacturer and Product: Schlage ND series.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Coordinate door and frame preparations with door and frame suppliers. If switches are being used with magnetic locking device, provide minimum of 4 inches (102 mm) between switch
                                       Product data for electrified door hardware:
                                                                                                                                                                                                                                      Requirements:
                                        a. Certify that door hardware approved for use on types and sizes of labeled fire-rated doors complies with listed fire-rated door
                                                                                                                                                                                                                                      Provide cylindrical locks conforming to ANSI/BHMA A156.2 Series 4000, Grade 1, and UL Listed for 3 hour fire doors.
                                                                                                                                                                                                                                                                                                                                                                                                                                    2.17 FINISHES
                              assemblies.
                                                                                                                                                                                                                                     Cylinders: Refer to "KEYING" article, herein.
                             Certificates of Compliance:
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Finish: BHMA 626/652 (US26D); except:
                                                                                                                                                                                                                                      Provide locks with standard 2-3/4 inches (70 mm) backset, unless noted otherwise, with 1/2 inch latch throw. Provide proper latch throw for UL listing at pairs.
                             UL listings for fire-rated hardware and installation instructions if requested by Architect or Authority Having Jurisdiction.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hinges at Exterior Doors: BHMA 630 (US32D)
                                                                                                                                                                                                                                      Provide locksets with separate anti-rotation thru-bolts, and no exposed screws.
                                                                                                                                                                                                                                                                                                                                                                                                                                                        Continuous Hinges: BHMA 630 (US32D)
                              Installer Training Meeting Certification: Letter of compliance, signed by Contractor, attesting to completion of installer training meeting specified in "QUALITY ASSURANCE"
                                                                                                                                                                                                                                      Provide independently operating levers with two external return spring cassettes mounted under roses to prevent lever sag.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Continuous Hinges: BHMA 628 (US28)
                   article, herein.
                                                                                                                                                                                                                                      Provide standard ASA strikes unless extended lip strikes are necessary to protect trim.
                   Warranty: Special warranty specified in this Section.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Push Plates, Pulls, and Push Bars: BHMA 630 (US32D)
                                                                                                                                                                                                                                      Provide electrified options as scheduled in the hardware sets.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Protection Plates: BHMA 630 (US32D)
                   Closeout Submittals:
                                                                                                                                                                                                                                     Lever Trim: Solid cast levers without plastic inserts and wrought roses on both sides.
                   Operations and Maintenance Data: Provide in accordance with Division 01 and include:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Overhead Stops and Holders: BHMA 630 (US32D)
                                                                                                                                                                                                                                              Lever Design: Schlage Sparta
                             Complete information on care, maintenance, and adjustment; data on repair and replacement parts, and information on preservation of finishes.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Door Closers: Powder Coat to Match
                                                                                                                                                                                                                                               Tactile Warning (Knurling): Where required by authority having jurisdiction. Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wall Stops: BHMA 630 (US32D)
                             Catalog pages for each product
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Issue For:
                                                                                                                                                                                                                2.06 EXIT DEVICES
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Latch Protectors: BHMA 630 (US32D)
                              Factory order acknowledgement numbers (for warranty and service)
                                                                                                                                                                                                                                     Manufacturers and Products:
                             Name, address, and phone number of local representative for each manufacturer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Weatherstripping: Clear Anodized Aluminum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      CONSTRUCTION
                                                                                                                                                                                                                                     Scheduled Manufacturer and Product: Von Duprin 35 series.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thresholds: Mill Finish Aluminum
                             Parts list for each product.
                                                                                                                                                                                                                                     Requirements:
                             Final approved hardware schedule, edited to reflect conditions as-installed.
                                                                                                                                                                                                                                                                                                                                                                                                                                      PART 3 - EXECUTION
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Issue Date:
                                                                                                                                                                                                                                      Provide exit devices tested to ANSI/BHMA A156.3 Grade 1 and UL listed for Panic Exit or Fire Exit Hardware.
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.01 EXAMINATION
                             Final keying schedule
                                                                                                                                                                                                                                      Cylinders: Refer to "KEYING" article, herein.
                             Copies of floor plans with keying nomenclature
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Prior to installation of hardware, examine doors and frames, with Installer present, for compliance with requirements for installation tolerances, labeled fire-rated door assembly
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      09.27.2019
                                                                                                                                                                                                                                      Provide touchpad type exit devices, fabricated of brass, bronze, stainless steel, or aluminum, plated to standard architectural finishes to match balance of door hardware.
                             Copy of warranties including appropriate reference numbers for manufacturers to identify project.
                                                                                                                                                                                                                                                                                                                                                                                                                                               construction, wall and floor construction, and other conditions affecting performance.
                                                                                                                                                                                                                                      Touchpad must extend a minimum of one half of door width. No plastic inserts are allowed in touchpads.
1.05 QUALITY ASSURANCE
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Field verify existing doors and frames receiving new hardware and existing conditions receiving new openings. Verify that new hardware is compatible with existing door and frame
                                                                                                                                                                                                                                      Provide exit devices with deadlatching feature for security and for future addition of alarm kits and/or other electrified requirements.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       REVISIONS
                   Supplier Qualifications and Responsibilities: Recognized architectural hardware supplier with record of successful in-service performance for supplying door hardware similar in quantity,
                                                                                                                                                                                                                                                                                                                                                                                                                                               preparation and existing conditions.
                                                                                                                                                                                                                                      Provide flush end caps for exit devices.
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Proceed with installation only after unsatisfactory conditions have been corrected.
         type, and quality to that indicated for this Project and that provides certified Architectural Hardware Consultant (AHC) available to Owner, Architect, and Contractor, at reasonable times during the
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      REASON
                                                                                                                                                                                                                                     Provide exit devices with manufacturer's approved strikes.
         Work for consultation
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.02 PREPARATION
                                                                                                                                                                                                                                     Provide exit devices cut to door width and height. Install exit devices at height recommended by exit device manufacturer, allowable by governing building codes, and approved by
                   Warehousing Facilities: In Project's vicinity
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Where on-site modification of doors and frames is required:
                   Scheduling Responsibility: Preparation of door hardware and keying schedules.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Carefully remove existing door hardware and components being reused. Clean, protect, tag, and store in accordance with storage and handling requirements specified herein.
                                                                                                                                                                                                                                     Mount mechanism case flush on face of doors, or provide spacers to fill gaps behind devices. Where glass trim or molding projects off face of door, provide glass bead kits.
                   Architectural Hardware Consultant Qualifications: Person who is experienced in providing consulting services for door hardware installations that are comparable in material, design, and
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Field modify and prepare existing door and frame for new hardware being installed.
                                                                                                                                                                                                                                     Provide cylinder or hex-key dogging as specified at non fire-rated openings.
         extent to that indicated for this Project and meets these requirements:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         When modifications are exposed to view, use concealed fasteners, when possible.
                                                                                                                                                                                                                                     Removable Mullions: 2 inches (51 mm) x 3 inches (76 mm) steel tube. Where scheduled as keyed removable mullion, provide type that can be removed by use of a keyed cylinder, which
                   For door hardware, DHI-certified, Architectural Hardware Consultant (AHC).
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Prepare hardware locations and reinstall in accordance with installation requirements for new door hardware and with:
                                                                                                                                                                                                                           is self-locking when re-installed
                   Can provide installation and technical data to Architect and other related subcontractors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Steel Doors and Frames: For surface applied door hardware, drill and tap doors and frames according to ANSI/SDI A250.6.
                                                                                                                                                                                                                                     Top latch mounting: double or single tab mount for steel doors, face mount for aluminum doors eliminating requirement of tabs, and double tab mount for wood doors.
                   Can inspect and verify components are in working order upon completion of installation.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Wood Doors: DHI WDHS.5 "Recommended Hardware Reinforcement Locations for Mineral Core Wood Flush Doors."
                                                                                                                                                                                                                                    Provide exit devices with optional trim designs to match other lever and pull designs used on the project.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Doors in rated assemblies: NFPA 80 for restrictions on on-site door hardware preparation.
                   Capable of producing wiring diagrams.
                                                                                                                                                                                                                                              Tactile Warning (Knurling): Where required by authority having jurisdiction. Provide on levers on exterior (secure side) of doors serving rooms considered to be hazardous.
                    Capable of coordinating installation of electrified hardware with Architect and electrical engineers.
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.03 INSTALLATION
                                                                                                                                                                                                                         CYLINDERS
                    Single Source Responsibility: Obtain each type of door hardware from single manufacturer.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mount door hardware units at heights to comply with the following, unless otherwise indicated or required to comply with governing regulations
                                                                                                                                                                                                                                    Manufacturers and Products:
                   Fire-Rated Door Openings: Provide door hardware for fire-rated openings that complies with NFPA 80 and requirements of authorities having jurisdiction. Provide only items of door
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Standard Steel Doors and Frames: ANSI/SDI A250.8.
                                                                                                                                                                                                                                     Scheduled Manufacturer and Product: Schlage Everest 29 S.
          hardware that are listed products tested by Underwriters Laboratories, Intertek Testing Services, or other testing and inspecting organizations acceptable to authorities having jurisdiction for use on
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Custom Steel Doors and Frames: HMMA 831.
                                                                                                                                                                                                                                      Requirements:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PRINCIPAL IN CHARGE
          types and sizes of doors indicated, based on testing at positive pressure and according to NFPA 252 or UL 10C and in compliance with requirements of fire-rated door and door frame labels.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Wood Doors: DHI WDHS.3, "Recommended Locations for Architectural Hardware for Wood Flush Doors."
                                                                                                                                                                                                                                      Provide cylinders/cores from the same manufacturer of locksets, compliant with ANSI/BHMA A156.5; latest revision; cylinder face finished to match lockset, manufacturer's series as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        D WAIKER
                   Accessibility Requirements: For door hardware on doors in an accessible route, comply with governing accessibility regulations cited in "REFERENCES" article, herein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Install each hardware item in compliance with manufacturer's instructions and recommendations, using only fasteners provided by manufacturer.
                                                                                                                                                                                                                            indicated. Refer to "KEYING" article, herein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Do not install surface mounted items until finishes have been completed on substrate. Protect all installed hardware during painting.
                   Keying Conference
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Project Address:
                                                                                                                                                                                                                                     Provide cylinders in the below-listed configuration(s), distributed throughout the Project as indicated.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Set units level, plumb and true to line and location. Adjust and reinforce attachment substrate as necessary for proper installation and operation.
                   Incorporate keying conference decisions into final keying schedule after reviewing door hardware keying system including:
                                                                                                                                                                                                                                              Conventional Patented Open: cylinder with interchangeable core with open keyway.
                             Function of building, flow of traffic, purpose of each area, degree of security required, and plans for future expansion.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
                                                                                                                                                                                                                                     Patent Protection: Cylinders/cores requiring use of restricted, patented keys, patent-protected.
                              Preliminary key system schematic diagram.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Install operating parts so they move freely and smoothly without binding, sticking, or excessive clearance.
                                                                                                                                                                                                                                     Nickel silver bottom pins.
                             Requirements for key control system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Hinges: Install types and in quantities indicated in door hardware schedule but not fewer than quantity recommended by manufacturer for application indicated or one hinge for every 30
                                                                                                                                                                                                                                      Replaceable Construction Cores.
                             Requirements for access control.
                                                                                                                                                                                                                                                                                                                                                                                                                                               inches (750 mm) of door height, whichever is more stringent, unless other equivalent means of support for door, such as spring hinges or pivots, are provided.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PHASE IA
                                                                                                                                                                                                                                               Provide temporary construction cores replaceable by permanent cores, furnished in accordance with the following requirements.
                             Address for delivery of keys.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Lock Cylinders: Install construction cores to secure building and areas during construction period.
                   Pre-installation Conference
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Replace construction cores with permanent cores as indicated in keying section.
                                                                                                                                                                                                                                               12 construction change (day) keys.
                    Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Door Closers: Mount closers on room side of corridor doors, inside of exterior doors, and stair side of stairway doors from corridors. Mount closers so they are not visible in corridors,
                                                                                                                                                                                                                2.08 KEYING
                   Inspect and discuss preparatory work performed by other trades.
                                                                                                                                                                                                                                                                                                                                                                                                                                               lobbies and other public spaces unless approved by Architect.
                                                                                                                                                                                                                                      Provide a factory registered keying system, complying with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
                    Inspect and discuss electrical roughing-in for electrified door hardware.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Thresholds: Set thresholds in full bed of sealant complying with requirements specified in Division 07 Section "Joint Sealants."
                                                                                                                                                                                                                                     Comply with guidelines in ANSI/BHMA A156.28, incorporating decisions made at keying conference.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NC 27341
                    Review sequence of operation for each type of electrified door hardware.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Stops: Provide floor stops for doors unless wall or other type stops are indicated in door hardware schedule. Do not mount floor stops where they may impede traffic or present tripping
                                                                                                                                                                                                                                      Requirements
                    Review required testing, inspecting, and certifying procedures.
                                                                                                                                                                                                                                     Provide permanent cylinders/cores keyed by the manufacturer according to the following key system.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Perimeter Gasketing: Apply to head and jamb, forming seal between door and frame.
                    Coordination Conferences:
                                                                                                                                                                                                                                              Master Keying system as directed by the Owner.
                    Installation Coordination Conference: Prior to hardware installation, schedule and hold meeting to review questions or concerns related to proper installation and adjustment of door
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Meeting Stile Gasketing: Fasten to meeting stiles, forming seal when doors are closed.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Project Number
                                                                                                                                                                                                                                    Forward bitting list and keys separately from cylinders, by means as directed by Owner. Failure to comply with forwarding requirements will be cause for replacement of cylinders/cores
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.04 FIELD QUALITY CONTROL
         hardware
                                                                                                                                                                                                                            involved at no additional cost to Owner.
1.06 DELIVERY, STORAGE, AND HANDLING
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Engage qualified manufacturer trained representative to perform inspections and to prepare inspection reports.
                                                                                                                                                                                                                                    Provide keys with the following features:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      201901.1
                    Inventory door hardware on receipt and provide secure lock-up for hardware delivered to Project site.
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Representative will inspect door hardware and state in each report whether installed work complies with or deviates from requirements, including whether door hardware is properly
                                                                                                                                                                                                                                               Material: Nickel silver; minimum thickness of .107-inch (2.3mm)
                    Tag each item or package separately with identification coordinated with final door hardware schedule, and include installation instructions, templates, and necessary fasteners with each
                                                                                                                                                                                                                                                                                                                                                                                                                                               installed and adjusted.
                                                                                                                                                                                                                                               Patent Protection: Keys and blanks protected by one or more utility patent(s)
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.05
                                                                                                                                                                                                                                                                                                                                                                                                                                             ADJUSTING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sheet Title:
         item or package.
                                                                                                                                                                                                                                    Identification:
                                                                                                                                                                                                                                                                                                                                                                                                                                              Initial Adjustment: Adjust and check each operating item of door hardware and each door to
                   Deliver each article of hardware in manufacturer's original packaging.
                                                                                                                                                                                                                                    a. Mark permanent cylinders/cores and keys with applicable blind code per DHI publication "Keying Systems and Nomenclature" for identification. Do not provide blind code marks
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      DOOR
                                                                                                                                                                                                                                     with actual key cuts.
                   Maintain manufacturer-recommended environmental conditions throughout storage and installation periods.
                                                                                                                                                                                                                                              Identification stamping provisions must be approved by the Architect and Owner.
                   Provide secure lock-up for door hardware delivered to Project. Control handling and installation of hardware items so that completion of Work will not be delayed by hardware losses both
                                                                                                                                                                                                                                               Stamp cylinders/cores and keys with Owner's unique key system facility code as established by the manufacturer; key symbol and embossed or stamped with "DO NOT
         before and after installation.
                                                                                                                                                                                                                                     DUPLICATE" along with the "PATENTED" or patent number to enforce the patent protection.
                   Protection and Damage:
                    Promptly replace products damaged during shipping.
                   Handle hardware in manner to avoid damage, marring, or scratching. Correct, replace or repair products damaged during Work
                   Protect products against malfunction due to paint, solvent, cleanser, or any chemical agent.
1.07 COORDINATION
                   Coordinate layout and installation of floor-recessed door hardware with floor construction. Cast anchoring inserts into concrete.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sheet Number:
                   Installation Templates: Distribute for doors, frames, and other work specified to be factory or shop prepared. Check Shop Drawings of other work to confirm that adequate provisions are
         made for locating and installing door hardware to comply with indicated requirements.
          C. Existing Openings: Where existing doors, frames and/or hardware are to remain, field verify existing functions, conditions and preparations and coordinate to suit opening conditions and to
```

provide proper door operation.

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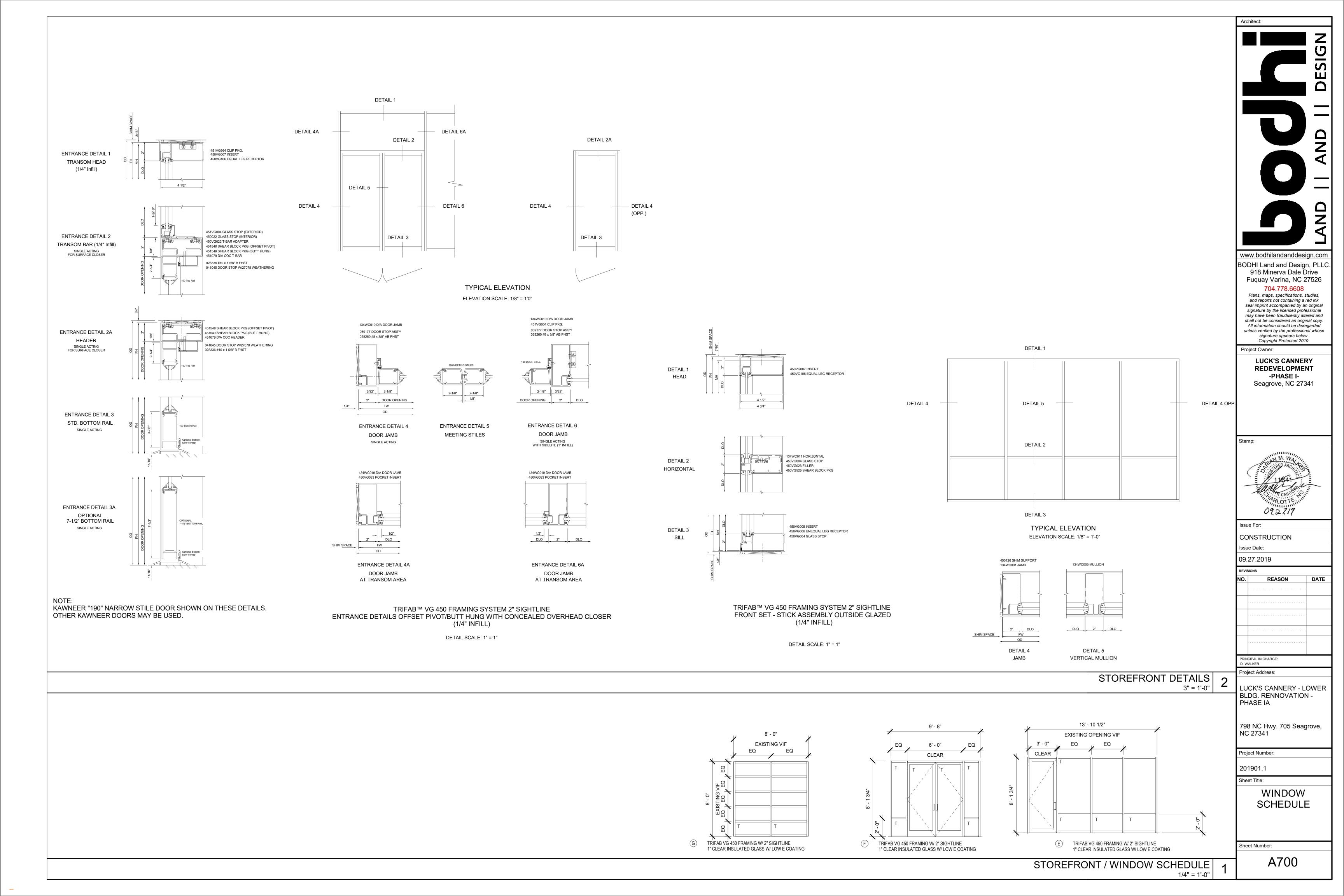
DATE

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -

798 NC Hwy. 705 Seagrove,

SPECIFICATIONS

A602



KEY NAME	MATERIAL	MANUFACTURER	SERIES.MODEL	COLOR	SIZE	REMARKS
PLAM	WHITE PLASTIC LAMINATE	FORMICA	459	BRITE WHITE		
LOOR						
C-1	POLLISHED & SEALED CONCRETE	TBD	TBD	NATURAL	N/A	MATCH EXISTING TOWN HALL FLOOR
	,	1	- '	,	1	·
BASE						
3-1	RUBBER BASE	TBD	TBD	TBD	1/8" THICK, 4" HIGH	STORAGE AREA AND MATCH EXISTING BASE IN TOWN HALL MEETING ROOM FOR ALL OTHER SENIOR CENTER AREAS
-2	WOOD BASE	POPLAR	TBD	PAINTED P-2	3/4" THICK, 4" HIGH	FOR DRYWALL IN VESTIBULE
CT-2	CERAMIC BASE TILE	DALTILE	TBD	COLOR TO MATCH (SAIL AP06 - WHITE)	4"x8"	PROVIDE BULLNOSE TOPE EDGE - ALL RESTROOM & SHOWER AREAS
VALL						
CT-1	CERAMIC WALL TILE	DALTILE	ANNAPOLIS	SAIL AP06 - WHITE	6"x16"	
ЛР-1	18 MIN. GAUGE SHEET STEEL	(PROVIDED BY OWNER)		PRE-RUSTED AND SEALED	SEE ELEVATIONS	SEE PRE-RUSTING INSTRUCTIONS BELOW. PROVIDED BY OWNER AND INSTALLED BY CONTRACTOR
PT-1	PAINT TO MATCH EXISTING	BENJAMINE MOORE		SEA PEARL OC-19	N/A	USE WATER PROOFING EXTERIOR PAINT
PT-2	EGGSHELL WALLPAINT - FLAT CEILING PAINT	BENJAMINE MOORE		WHITE OC-151		USE WATER PROOFING PAINT FOR INTERIOR/EXTERIOR MASONRY WALLS
EILING						
ACP-1	ACOUSTICAL CEILING PANEL	ARMSTRONG	OPTIMA TEGULAR	WHITE	24"x24	6" TALL AXIOM TRIM FINISH RAL 9005 FOR FLOATING CLOUDS IN EXPO VESTIBULE
SAC-1	K-13 SPRAY ACCOUSTIC INSULATION	TBD	TBD	WHITE	2" THICK MIN.	O TALE FOR THE THROTTO LEGISTRES SECOND IN EACH STEEL THROTTO LEGISTRES SECOND IN EACH SEC
A(1	WOOD T&G	EXIST	EXIST	EXIST-STAINED	EXIST	EXISTING TO REMAIN PATCH AND REPAIR TO MATCH EXISTING AS REQUIRED

- SHLUTER BULL NOSE CAP

TILE BASE TILE OVER 1/2"

CEMENTITIOUS BD.

CLEAN RAW SHEET STEEL PANEL WITH DEGREASER

IF APPLYING A PATTERN, TAPE OFF PATTERN & SPRAY AREAS THAT YOU DO NOT WANT TO RUST WITH CLEAR SEALER

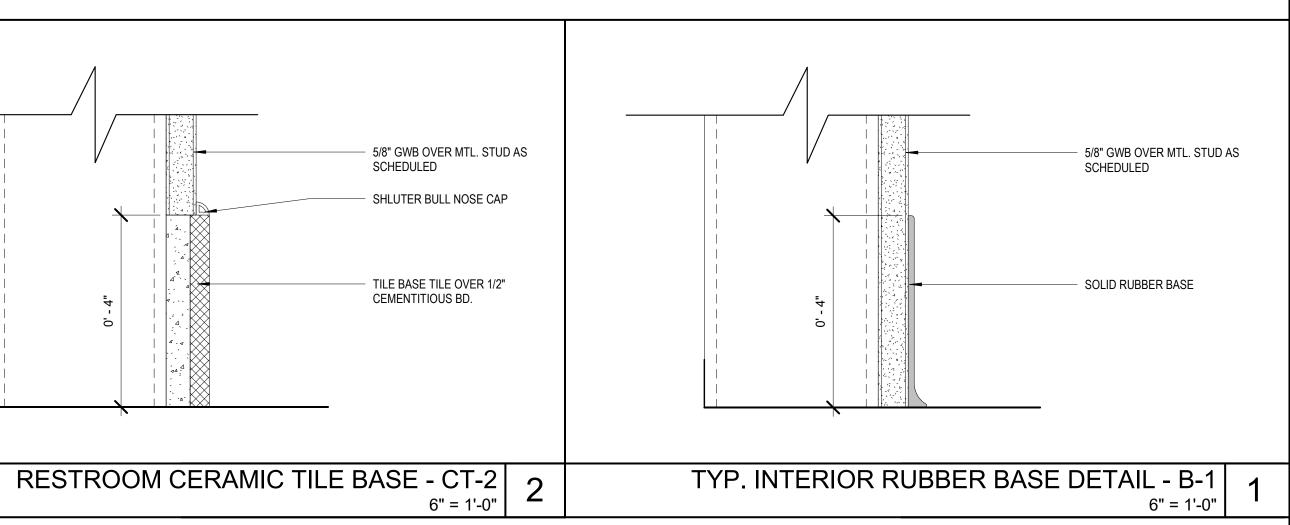
LET DRY, AND PULL TAPE OFF

SPRAY SHEET STEEL WITH VINAGER TO GET FULL COVERAGE AND LET SIT FOR FIVE MINUTES MIN.

SPRAY SHEET STEEL WITH HYDROGEN PEROXIDE (W/ DISOLVED SALT IN PEROXIDE MIXTURE) TO GET FULL COVERAGE AND LET SIT FOR 5 MINUTES MIN.

HOSE OFF MIXTURE AND LET AIR DRY

APPLY CLEAR SEALER.

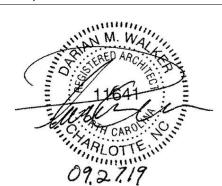


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Project Owner: **LUCK'S CANNERY** REDEVELOPMENT -PHASE I-Seagrove, NC 27341



Issue For:

CONSTRUCTION

Issue Date: 09.27.2019

О.	REASON	DAT
	CIPAL IN CHARGE:	

Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove, NC 27341

Project Number:

201901.1

Sheet Title:

FINISH SCHEDULE

Sheet Number:

A800

LIGHTING

2' X 2' "F1"

LINEAR LIGHT FIXTURE DENOTES FIXTURE TYPE DENOTES CIRCUIT NUMBER

EXIT LIGHT FIXTURES-CEILING MOUNTED

-SHADING INDICATES SIDE OF ILLUMINATION -ARROWS INDICATES DIRECTION

EMERGENCY BATTERY UNIT, UL RATED FOR 90MIN

EXIT LIGHT FIXTURES-WALL MOUNTED -SHADING INDICATES SIDE OF ILLUMINATION -ARROWS INDICATE DIRECTION

SWITCHING & CONTROLS SWITCH-SINGLE POLE MOUNTED 48" A.F.F. UNLESS NOTED OTHERWISE

SWITCH-THREE WAY

OCCUPANCY SENSOR DUAL TECHNOLOGY, EXTENDED RANGE - CEILING MOUNTED.

DAYLIGHT SENSOR CLOSED LOOP - CEILING MOUNTED.

LIGHTING CONTROL POWER PACK LETTER SUBSCRIPT DENOTES SWITCH CONTROL, MULTIPLE LETTER SUBSCRIPT DENOTES DUAL RELAY REQUIRED. NUMBER SUBSCRIPT DENOTES CIRCUIT NUMBER

R - SUBSCRIPT DENOTES SWITCH CONTROL FOR RECEPTACLE LOADS

LIGHTING SENSOR DEVICE SCHEDULE NOTES:

ALL DEVICES ABOVE BY SENSOR SWITCH (OR APPROVED EQUAL)

OCCUPANCY SENSOR SWITCHING DURATION: CLASSROOMS, "ON" FOR 20 MINUTES RESTROOMS, "ON" FOR 15 MINUTES OFFICES, "ON" FOR 10 MINUTES CORRIDORS/STAIRWELLS, "ON" FOR 10 MINUTES

ONE LINE

FEEDER TAG. REFER TO FEEDER SCHEDULE

HOOK WITH TAG INDICATES FEEDER SCHEDULE DESIGNATION

DRY TYPE ENERGY EFFICIENT TRANSFORMER "2" INDICATES SIZE, REFER TO DRY TYPE TRANSFORMER SCHEDULE

SURGE PROTECTION DEVICE

VARIABLE FREQUENCY DRIVE

POWER QUALITY METER

CUSTOMER METER WITH LINK TO MASTER METER AT SWITCHBOARD CUSTOMER MASTER METER. RUN DATA CABLE FROM THIS

ML1 120/208V 50A MCB

PANELBOARD

ELECTRICAL DISCIPLINE —— SERIES/GROUP NUMBER — DRAWING NUMBER

GENERAL (INDEX, SYMBOLS, ABBREVIATIONS, LEGEND)

E002 SITE PLAN E100 LIGHTING PLANS POWER AND SYSTEMS PLANS E300 LOW VOLTAGE SYSTEMS E400 RISER DIAGRAMS

E500 SCHEDULES E600 ELECTRICAL DETAILS & ENLARGED PLANS LIGHTING CALCULATIONS PLANS E700

KEYED NOTE:

KEYED NOTE REFERENCE SYMBOL. ONLY REFERS TO 1 KEYED NOTE ON SAME DRAWING. KEYED NOTES APPLY ONLY WHERE REFERENCED ON PLAN.

WIRING AND EQUIPMENT NOTES:

1. ALTHOUGH NOT ALL BRANCH CIRCUIT WIRE AND RACEWAY ARE SHOWN, IT IS THE INTENT OF THESE DOCUMENTS THAT A COMPLETE BRANCH CIRCUIT WIRING SYSTEM BE

2. RACEWAYS SHALL BE LIMITED TO SIX CURRENT CARRYING CONDUCTORS FOR 20A CIRCUITS ONLY (THREE PHASE AND THREE NEUTRALS) AND GROUNDING CONDUCTOR, UNLESS OTHERWISE INDICATED. FOR ALL OTHER MULTIPLE CIRCUIT RACEWAYS DERATE CONDUCTORS AS REQUIRED BY NEC ARTICLE 310.15. A GREEN GROUND CONDUCTOR SHALL BE RUN WITH ALL BRANCH CIRCUITS AND FEEDERS. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH SINGLE PHASE CIRCUIT. SHARED NEUTRAL WILL NOT BE ALLOWED.

ALL ELECTRICAL SYSTEMS SHALL BE SUITABLY GROUNDED, INCLUDING ALL NON-CURRENT 3. CARRYING METALLIC COMPONENTS OF ALL EQUIPMENT AND METALLIC CONDUITS.

LOAD SERVED HAS PROVISIONS FOR, OR REQUIRES A NEUTRAL.

GROUNDING SHALL BE ACCOMPLISHED AS REQUIRED BY THE NATIONAL ELECTRIC CODE. WIRING INDICATED BY CIRCUIT NUMBER SYMBOL SHALL INCLUDE A NEUTRAL WHEN THE

PRIOR TO INSTALLATION OF ANY OUTLETS, COORDINATE WITH ARCHITECTURE DRAWINGS FOR EXACT LOCATIONS.

6 ALL 20A OUTLETS SHALL BE WIRED WITH #12 AWG WIRE EXCEPT FOR CIRCUITS OVER 125 FEET IN LENGTH SHALL BE #10 AWG WIRE.

PROVIDE TRANSPARENT LABEL ON ALL OUTLET COVERPLATES INDICATING PANEL AND CIRCUIT DESIGNATION, COORDINATE WITH IDENTIFICATION SPEC 260553.

8 MECHANICAL EQUIPMENT STARTERS, DISCONNECTS ETC. ARE INDICATED ON THE MECHANICAL EQUIPMENT SCHEDULE ONLY. EQUIPMENT TAGS ONLY ARE SHOWN ON THE PLAN. COORDINATE EQUIPMENT LOCATIONS WITH MECHANICAL PLANS AND CONTRACTOR

FIRE ALARM

EMERGENCY RESPONDER RADIO COVERAGE SYSTEM

FIRE ALARM ANNUNCIATOR PANEL

FIREFIGHTERS SMOKE CONTROL PANEL

ASDP AIR SAMPLING DETECTION CONTROL PANEL

ADDRESSABLE INPUT MODULE

ADDRESSABLE OUTPUT MODULE

ADDRESSABLE RELAY MODULE

CEILING MOUNTED SPEAKER

CEILING MOUNTED SPEAKER/STROBE, # CANDELA RATING

WALL MOUNTED SPEAKER

WALL MOUNTED SPEAKER/STROBE, # CANDELA RATING

FIRE ALARM CONTROL PANEL FACP

FIRE ALARM NOTIFICATION APPLIANCE POWER SUPPLY

MANUAL PULL STATION AT 48" AFF

FLOW DETECTOR SWITCH

LEVEL DETECTOR SWITCH

PRESSURE DETECTOR SWITCH

VALVE SUPERVISORY TAMPER SWITCH

FATC FIRE ALARM TERMINAL CABINET

CEILING MOUNTED STROBE

WALL MOUNTED STROBE

REMOTE INDICATOR LIGHT

SMOKE DETECTOR - AIR SAMPLING

SMOKE DETECTOR - PHOTOELECTRIC

SMOKE DETECTOR - PHOTOELECTRIC, HARDWIRED

SMOKE/CARBON MONOXIDE DETECTOR, HARDWIRED

SMOKE DETECTOR - MULTI CRITERIA

COMBINATION SMOKE/HEAT DETECTOR

HEAT DETECTOR

KNOX BOX

DUCT SMOKE DETECTOR W/ REMOTE ALARM INDICATING AND TEST SWITCH

24V ELECTRIC BELL FOR SPRINKLER SYSTEM

EXTERIOR ROTATING BEACON

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Architect:

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Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

Issue For:

CONSTRUCTION Issue Date:

09.27.2019

REASON DATE

PRINCIPAL IN CHARGE D WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove,

NC 27341

Project Number

201901.1 Sheet Title:

Legend

Sheet Number:

PART 1 GENERAL

RELATED DOCUMENTS: THE ELECTRICAL DRAWINGS APPLY TO THE WORK OF THIS SECTION. THE CONTRACTOR SHALL NOTE THE DRAWINGS ARE DIAGRAMMATIC, AND INDICATE THE GENERAL INTENT OF THE PROJECT SCOPE. REFER TO

DRAWINGS FROM OTHER DISCIPLINES FOR EQUIPMENT LOCATIONS AND/OR MOUNTING HEIGHTS. WORK INCLUDED: PROVIDE ALL MATERIAL AND LABOR TO COMPLETE THE WORK OF THIS SECTION, AND TO ENSURE THE SYSTEMS ARE COMPLETE AND FULLY OPERATIONAL. THE SCOPE OF WORK SHALL INCLUDE, BUT IS NOT LIMITED TO: NAMEPLATES AND IDENTIFICATION, RACEWAYS AND CONDUIT, WIRE AND CABLE, OUTLET AND JUNCTION BOXES, WIRING DEVICES, PANELBOARDS, SAFETY DISCONNECT SWITCHES AND MOTOR STARTERS, LIGHTING FIXTURES (INCLUDING LAMPS AND BALLASTS), SITE LIGHTING, LOW VOLTAGE LIGHTING CONTROL SYSTEM, DRY TYPE TRANSFORMERS, FIRE ALARM AND VOICE, COMMUNICATION SYSTEM, BUILDING GROUNDING SYSTEM, TELEPHONE/ CABLE TV OUTLETS AND ASSOCIATED WIRING, FIRE-STOPPING SEALANT, PRE-CAST HANDHOLES AND MANHOLES, TESTING AND COMMISSIONING OF ALL ELECTRICAL EQUIPMENT AND SYSTEMS, RECORD DRAWINGS, WIRING OF ALL MOTORIZED EQUIPMENT AND

RELATED WORK OF OTHER SECTIONS: THE CONTRACTOR SHALL NOTE THE FOLLOWING SCOPE ITEM ARE NOT INCLUDED IN THIS SECTION, BUT WILL BE PROVIDED UNDER OTHER SECTIONS: TEMPORARY CONSTRUCTION LIGHTING AND POWER

PAINTING FLASHING ASSOCIATED WITH ROOF AND/OR WALL PENETRATIONS.

OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND INSPECTIONS AS REQUIRED BY THE LOCAL AHJ. COMPLY WITH ALL NATIONAL, STATE AND MUNICIPAL LAWS, CODES AND ORDINANCES RELATING TO BUILDING AND PUBLIC SAFETY. PROVIDE ANY REQUIRED TEMPORARY POWER AND UTILITIES FOR ALL TRADES. PROVIDE TEMPORARY CONSTRUCTION LIGHTING AND POWER AS REQUIRED. ALL TEMPORARY POWER AND LIGHTING SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH OSHA STANDARDS. THE COST OF THIS WORK IS TO BE INCLUDED IN THE BASE ELECTRICAL BID FOR

THE PROJECT APPLICABLE CODES INCLUDE BUT ARE NOT LIMITED TO THE MASSACHUSETTS STATE BUILDING CODE 780 CMR, INTERNATIONAL BUILDING CODE, MASSACHUSETTS ELECTRICAL CODE, INTERNATIONAL ENERGY CONSERVATION CODE, ADA, ANSI, NEMA, NFPA, UL, AND ALL OTHER APPLICABLE CODES AND REGULATIONS HAVING JURISDICTION. CONTRACTOR SHALL NOTE THE RULES AND REGULATIONS OF THE CODE(S) PROVIDE THE MINIMUM ALLOWABLE REQUIREMENTS. THE CONSTRUCTION DOCUMENTS DEPICT THE DESIGN INTENT WHICH MAY EXCEED MINIMUM CODE

THE DRAWINGS ARE SCHEMATIC AND DIAGRAMMATIC IN NATURE AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL EQUIPMENT. COORDINATE THE INSTALLATION OF ELECTRICAL EQUIPMENT WITH THE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND PLUMBING SYSTEMS, FIRE ALARM, FIRE PROTECTION SYSTEMS, TELECOM AND THE OWNER'S REPRESENTATIVE IN ORDER TO DETERMINE EXACT LOCATIONS. CONFIRM DIMENSIONS AND LOCATIONS IN THE FIELD. IF CONFLICTING DIMENSIONS ARE SHOWN, USE LARGER DIMENSIONS AND VERIFY WITH ARCHITECT. SEE

ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATION OF FIXTURES AND WALL MOUNTED DEVICES. ANY DISCREPANCIES BETWEEN DRAWINGS AND SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATIONS. ADVISE THE ENGINEER IN WRITING (RFI) PRIOR TO PROCEEDING WITH PROCUREMENT OR INSTALLATION THAT THE DESIGN INTENT IS UNCLEAR OR THAT CONSTRUCTION DOCUMENTS DO NOT COINCIDE WITH MANUCATURER'S RECCOMENDATIONS. ALL COSTS FOR REWORK NECESSARY TO RESOLVE DISCREPANCIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

REQUEST FOR INFORMATION: RFI ISSUED TO RESOLVE A CONFLICT OR DISCREPENCY SHALL BE PROVIDED WITH THE PREFFERED SOLUTION VIA WRITTEN DESCRIPTION OR SKETCH.

1.04 STANDARDS FOR MATERIALS, WORKMANSHIP AND COORDINATION

ALL MATERIAL SHALL BE NEW (UNLESS SPECIFICALLY INDICATED TO BE REUSED), AND LISTED BY THE UNDERWRITERS LABORATORIES, INC. MATERIAL INSTALLATION SHALL COMPLY WITH NEC REQUIREMENTS AND BE PERFORMED BY CRAFTSMAN SKILLED IN THIS PARTICULAR WORK.

THE CONTRACTOR IS REQUIRED TO FIELD COORDINATE THE MINIMUM WORKING CLEARANCE REQUIREMENTS BY NEC THE PUBLISHED STANDARDS AND REQUIREMENTS OF THE NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATIONS, THE

AMERICAN NATIONAL STANDARDS INSTITUTE, THE INSTITUTES OF ELECTRICAL ANDBELECTRONIC ENGINEERS AND THE AMERICAN SOCIETY OF TESTING MATERIALS SHALL APPLY WHERE APPLICABLE.

SPECIFIED CATALOG NUMBERS AND TRADE NAMES ARE INTENDED TO DESCRIBE THE MATERIAL, DEVICES OR APPARATUS DESIRED. SIMILAR MATERIALS FROM OTHER MANUFACTURERS, IF OF EQUAL QUALITY, CAPACITY OR CHARACTER, MAY BE USED UPON OWNER AND ELECTRICAL ENGINEER'S APPROVAL

THE INSTALLATION SHALL COMPLY WITH THE BASE BUILDING STANDARDS. ALL LABOR SHALL BE EXECUTED IN A NEAT, WORKMAN LIKE MANNER AND SHALL BE PERFORMED SKILLS TRADESMEN. DEFECTIVE EQUIPMENT, DEVICES AND MATERIAL DAMAGED IN THE COURSE OF INSTALLATION OR TESTING SHALL BE REPLACED AND/OR REPAIRED IN A MANNER MEETING THE APPROVAL OF THE ENGINEER.

DRAWINGS ACROSS ALL TRADES PRIOR TO ROUGH-INS FOR REVIEW AND APPROVAL

ALL SYSTEMS SHALL BE COMPLETE, TESTED, AND WORKING AT COMPLETION OF CONSTRUCTION. COORDINATE WORK WITH OTHER SUB-CONTRACTORS. NOTIFY ARCHITECT EARLY OF ANY APPARENT CONFLICT TO EXPEDITE CONSTRUCTION. DUE TO UNFORESEEN JOB CONDITIONS THE DRAWINGS DO NOT GIVE EXACT DETAILS AS TO ELEVATIONS, LOCATION OF VARIOUS PIPES, FITTINGS, SUPPORTS, CONDUITS AND DO NOT SHOW OFFSETS AND OTHER INSTALLATION DETAILS WHICH MAY BE REQUIRED. FIELD COORDINATE LOCATIONS AND PROVIDE COORDINATED

ELECTRICAL WORK REQUIRING INTERRUPTION OF ELECTRICAL POWER WHICH WOULD ADVERSELY AFFECT THE NORMAL OPERATION OF ANY PORTION OF THE OWNER'S PROPERTY SHALL BE DONE AT A TIME OTHER THAN NORMAL WORKING HOURS. NORMAL WORKING HOURS SHALL BE CONSIDERED EIGHT AM TO FIVE PM MONDAY THROUGH FRIDAY. SCHEDULE ALL OUTAGES WITH THE OWNER'S REPRESENTATIVE AND BUILDING MANAGEMENT PRIOR TO SHUTDOWN.

PRIOR TO COMMENCEMENT OF WORK, VISIT THE SITE OF THE WORK TO BECOME AWARE OF THE EXISTING CONDITIONS WHICH MAY AFFECT THE COST OF THE WORK. REVIEW THE SCOPE OF DEMOLITION AND NEW CONSTRUCTION. NO ADDITIONAL COSTS SHALL BE BROUGHT UPON THE OWNER FOR LACK OF THIS REVIEW.

PRIOR TO COMMENCEMENT OF RENOVATION WORK, ELECTRICAL CONTRACTOR SHALL COORDINATE WITH BUILDING MANAGEMENT AND PROVIDE THE MAXIMUM POWER DEMAND DATA IN (kVA OR AMPS AND VOLTAGE) FOR THE PAST 12 MONTHS AS REQUIRED BY NEC 2011 ARTICLE 220.87. IF SUCH DATA IS NOT AVAILABLE, THE ELECTRICAL CONTRACTOR SHALL METER THE ALL PANELS IMPACTED BY THIS RENOVATION FOR A MINIMUM 30 DAY PERIOD MEASURED ON AVERAGE POWER DEMAND OVER A 15 MINUTE PERIOD USING A RECORDING POWER METER. PRESENT TABULATED RECORDED DATA TO ELECTRICAL ENGINEER FOR REVIEW AND APPROVING THE COMMENCEMENT OF WORK. DELAY IN PROVIDING SUCH INFORMATION WILL RESULT IN DELAYED PROJECT SCHEDULE AND WILL BE AT THE CONTRACTOR'S RISK. COMMENCEMENT OF WORK WILL NOT BE PERMITTED UNLESS WRITTEN APPROVAL IS PROVIDED BY THE

ELECTRICAL ENGINEER. WHERE WORK UNDER THIS PROJECT REQUIRES EXTENSION, RELOCATION, RECONNECTION OR MODIFICATIONS TO THE EXISTING EQUIPMENT OR WIRING SYSTEMS, THE EXISTING SYSTEMS OR EQUIPMENT SHALL BE RESTORED TO THEIR ORIGINAL AND FULLY OPERABLE CONDITION. EXTEND NEW HOMERUNS OR CIRCUITEXTENSIONS WHERE REQUIRED. DISCONNECT AND REMOVE ALL EQUIPMENT INDICATED TO BE DEMOLISHED INCLUDING OUTLETS, DEVICES, RACEWAY, SUPPORTS AND CONDUCTORS BACK TO THE BRANCH CIRCUIT BREAKER.

PROVIDE ALL SAWING, CORING, CUTTING AND PATCHING TO EXISTING WALLS, FLOORS, ETC. REQUIRED FOR ACCESS,

REMOVAL OF EXISTING WORK OR INSTALLATION OF NEW WORK. PROVIDE FOR ISOLATION OF WORK AREAS AND DAILY REMOVAL OF DEBRIS. CLEAN ALL EQUIPMENT AND FIXTURE LENSES. TOUCH UP WITH PAINT WHERE REQUIRED: TOUCH-UP PAINT COLOR SHALL MATCH SURROUNDING COLOR.

EXISTING OUTLETS AND CIRCUITING NOT IN CONFLICT WITH NEW WORK SHALL REMAIN INTACT

COORDINATION WITH OTHER TRADES: THIS CONTRACTOR SHALL COOPERATE TO THE FULLEST EXTENT WITH OTHER TRADES. THE WORK EFFORT OF THIS SECTION SHALL BE PLANNED SO AS NOT TO DELAY ANY OTHER TRADES OR HINDER THE PROGRES OF THE WORK.

SEISMIC RESTRAINT REQUIREMENTS: PROVIDE SEISMIC RESTRAINTS AS REQUIRED IN ACCORDANCE WITH THE STATE BUILDING CODE. A REGISTERED PROFESSIONAL STRUCTURAL ENGINEER, LICENSED IN THE APPLICABLE STATE FOR THE PREPARE THE SEISMIC RESTRAINT DESIGN AND CERTIFY THAT THE DESIGN IS IN COMPLIANCE WITH THE STATE BUILDING CODE REQUIREMENTS.

INSPECTION OF SITE: PROSPECTIVE BIDDERS SHALL VISIT THE SITE AND EXAMINE EXISTING CONDITIONS ASSOCIATED WITH THE PROJECT SCOPE PRIOR TO SUBMISSION OF BIDS.

PART 2 PRODUCTS

THE COMPONENTS OF THE ELECTRICAL SYSTEM SHALL BE WARRANTED FOR A PERIOD OF ONE YEAR FROM THE DATE OF B. ACCEPTANCE THEREOF EITHER FOR BENEFICIAL USE OR FINAL ACCEPTANCE, WHICHEVER IS EARLIER, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP. MATERIALS OF THE SAME TYPE SHALL BE THE PRODUCT OF ONE MANUFACTURER

CONTRACTOR SHALL MINIMIZE CUTTING AND PATCHING BY INSTALLING CONDUIT PRIOR TO CEILING/WALL/PARTITION

2.02 RACEWAYS AND BOXES:

CONCEALED CONDUITS SHALL BE ELECTRICAL METALLIC TUBING (EMT) AS MANUFACTURED BY ALLIED OR WHEATLAND.

MINIMUM CONDUIT SIZE 3/4 INCH. TYPE "MC" METAL CLAD CABLE WITH GREEN GROUND WIRE IS ACCEPTABLE IF APPROVED BY THE LOCAL AUTHORITY. "MC" CABLE, IF APPROVED, HOWEVER SHALL BE USED ONLY FOR CONCEALED DROPS TO RECEPTACLES, LIGHT SWITCHES, AND LIGHT FIXTURES, AND SHALL BE LIMITED IN LENGTH TO 8 FEET OR LESS. HOMERUN CIRCUITS TO PANELS

SHALL BE IN CONDUIT. "MC" HOMERUNS TO PANELS ARE NOT ACCEPTABLE. TYPE "AC" ARMORED CABLE (COMMONLY REFERRED TO AS "BX") IS NOT ACCEPTABLE AND SHALL NOT BE USED. MAKE FINAL CONNECTIONS TO MOTORS, TRANSFORMERS AND OTHER EQUIPMENT WITH FLEXIBLE METAL CONDUIT (FMC)

OF GALVANIZED STEEL. USE FITTINGS LISTED FOR USE WITH FLEXIBLE METAL CONDUIT OF ELECTRO ZINC GALVANIZED MALLEABLE IRON OR STEEL CONSTRUCTION. USE LIQUID TIGHT FLEXIBLE CONDUIT FOR ALL FLEXIBLE EXTERIOR LOCATIONS, WET LOCATIONS AND CONNECTIONS TO PUMPS. CONCEAL ALL ELECTRICAL RACEWAYS, BOXES, CABLING, CONDUCTORS AND THE LIKE IN WALLS, BELOW FLOORS, SLABS

OR ABOVE FINISHED CEILING SPACES. ELECTRICAL EQUIPMENT RACEWAYS CAN BE EXPOSED IN ELECTRICAL ROOMS, MECHANICAL ROOMS, TELECOMMUNICATION ROOMS OR WHERE SPECIFICALLY NOTED. IN MECHANICAL ROOMS, UTILIZE RIGID GALVANIZED CONDUITS WHERE RACEWAYS ARE INSTALLED 8 FEET ABOVE FINISHED FLOOR ALL CONDUITS PASSING THROUGH RATED WALLS, FLOORS OR CEILINGS SHALL BE SLEEVED AND PACKED WITH U.L.

LISTED SEALANT TO MAINTAIN RATING. WHERE SIZES OF RACEWAYS OR BOXES ARE NOT INDICATED, THE CONTRACTOR SHALL SIZE THESE ITEMS AS REQUIRED

BY NEC FOR THE INSTALLATION EVERY CONDUIT SYSTEM SHALL BE INSTALLED COMPLETE BEFORE ANY CONDUCTORS ARE DRAWN IN. WIRE PULLING LUBRICANTS, WHEN UTILIZED, SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF UNDERWRITER'S LABORATORIES,

INC., MANUFACTURER APPROVED PULLING COMPOUND OR LUBRICANT, APPLICABLE TO THE SPECIFIC CONDUCTOR OR CABLE INSULATION AND RACEWAY MATERIAL. ALL VERTICAL RUNS OF CONDUIT OR TUBING SHALL BE PROTECTED FROM THE ENTRANCE OF FOREIGN MATERIAL AND RODENTS PRIOR TO THE INSTALLATION OF CONDUCTORS

PROVIDE PULL AND JUNCTION BOXES AS REQUIRED PER NEC REQUIREMENTS RATED FOR THE ENVIRONMENT INSTALLED. BRANCH CIRCUIT JUNCTION BOXES TO BE ELECTRO-GALVANIZED, 4" SQUARE BY 1 1/2" DEEP MINIMUM FOR USE IN INTERIOR AREAS. DO NOT INSTALL BOXES BACK-TO-BACK IN WALLS. PROVIDE SEPARATION TO MINIMIZE SOUND TRANSFER. PROVIDE FIRE RATED PADS TO COVER EACH BOX IN FIRE RATED WALLS WHERE NECESSARY TO MAINTAIN FIRE WALL RATING

PROVIDE JUNCTION, OUTLET AND PULL BOXES FOR WIRING DEVICES, FIXTURES, CONNECTIONS TO EQUIPMENT AND AS REQUIRED BY THE NEC. BOXES SHALL BE STEEL UNLESS REQUIRED OTHERWISE BY ENVIRONMENT. BOXES SHALL BE INSTALLED TO AVOID EXCESSIVE RUNS AND BENDS.

PROVIDE HOT-DIPPED GALVANIZED CAST IRON WEATHERPROOF OUTLET WIRING BOXES, OF THE TYPE, SHAPE, AND SIZE, INCLUDING DEPTH OF BOX, WITH THREADED CONDUIT ENDS, CAST METAL COVERPLATE WITH SPRING-HINGED WATERPROOF CAPS SUITABLY CONFIGURED FOR EACH APPLICATION, INCLUDING

FACE PLATE GASKET AND CORROSION RESISTANT FASTENERS.

CONTRACTOR SHALL PROVIDE ALL STRUCTURAL SUPPORTS, HANGERS, SLEEVES AND SEALS FOR THE PROPER ATTACHMENT OF EQUIPMENT, CONDUIT AND DEVICES INSTALLED

WALL MOUNTED EQUIPMENT SHALL BE DIRECTLY SECURED TO WALL BY MEANS OF STEEL BOLTS. MAINTAIN AT LEAST 1/4" AIR SPACE BETWEEN EQUIPMENT AND SUPPORTING WALL. PREFABRICATED STEEL CHANNELS PROVIDING A HIGH DEGREE OF MOUNTING FLEXIBILITY, SUCH AS THOSE MANUFACTURED BY KINDORF AND UNISTRUT, SHALL BE USED FOR MOUNTING ARRAYS OF EQUIPMENT

ALL FASTENINGS, SUPPORTS, HANGERS, ANCHORS, ETC. SHALL BE OF TYPE MADE FOR THE SPECIFIC PURPOSE. SCREWS WITH WOODEN PLUGS OR ANCHORS ARE NOT ACCEPTABLE ON ANY PART OF THE WORK. SECURE ALL EQUIPMENT TO THE BUILDING STRUCTURE INDEPENDENTLY. DO NOT SECURE TO WORK OF

ACCEPTABLE MANUFACTURERS ARE SOUTHWIRE, ALCAN, AMERICAN INSULATED WIRE CO., CERRO WIRE, GENERAL CABLE, OKONITE, REPUBLIC WIRE, SOUTHWIRE

OTHER TRADES SUCH AS PIPING, CONDUIT, DUCTWORK UNLESS SPECIFIED OR NOTED OTHERWISE.

ALL WIRING SHALL BE COPPER CONDUCTORS, 600 VOLT, MINIMUM OF 98% CONDUCTIVITY, TYPE THHW,THWN OR XHHW AS APPLICABLE AND REQUIRED BY NEC 2011. ALUMINUM CONDUCTORS ARE NOT ALLOWED. ALL WIRES MUST BE THHN 75 DEGREES °C RATED OR BETTER.

EMERGENCY AND NORMAL CIRCUITS MUST BE INSTALLED IN SEPARATE CONDUIT AND DEVICE BOXES PER NEC ARTICLE 700.10(B). EMERGENCY LIGHTING WIRING SHALL BE #10AWG MINIMUM. WIRE #10 AND SMALLER SHALL BE SOLID #8 OR LARGER SHALL BE STRANDED.

ALL CONDUCTORS SHALL BE CONTINUOUS RUNS WITHOUT SPLICING BETWEEN JUNCTION BOXES, DEVICE BOXES, ETC. NO SPLICING WILL BE PERMITTED IN PANELBOARDS, SAFETY SWITCHES, ETC. MINIMUM CONDUCTOR SIZE #12 EXCEPT CONTROLS MAY BE #14. USE #10 CONDUCTORS FOR 20 AMPERE, 120 VOLT BRANCH CIRCUITS LONGER THAN 100 FEET MEASURED FROM PANELBOARDS TO FURTHEST OUTLETS. USE #10 CONDUCTORS FOR 20 AMPERE, 277 VOLT BRANCH CIRCUITS LONGER THAN 200 FEET MEASURED

FROM PANELBOARDS TO FURTHEST OUTLETS DO NOT EXCEED MANUFACTURER'S RECOMMENDED MAXIMUM PULLING TENSIONS AND SIDE PRESSURE

2.04 WIRING DEVICES:

WALL SWITCHES SHALL BE COMMERCIAL GRADE, 120 VOLTS, 20A: SINGLE POLE (LUTRON DECORA STYLE SWITCHES OR APPROVED EQUAL), THREE WAY (LUTRON DECORA STYLE SWITCHES OR APPROVED EQUAL), (LUTRON DECORA STYLE SWITCHES OR APPROVED EQUAL) WHERE TWO OR MORE DEVICES OCCUR, THEY SHALL BE MULTI-GANGED IN ONE-PIECE COVERPLATE FOR UP

DUPLEX RECEPTACLES SHALL BE COMMERCIAL GRADE, 125 VOLT, 20A, NEMA 5-20R UNLESS NOTED OTHERWISE. ALL RECEPTACLES SHALL BE GROUNDING TYPE.

PROVIDE DUPLEX RECEPTACLES WITH GROUND FAULT CURRENT INTERRUPTER (GFCI) WHERE REQUIRED BY NEC 2011. GFCI RECEPTACLES SHALL BE READILY ACCESSIBLE.

COLOR OF DEVICES, AND COLOR OF COVERPLATES SHALL BE AS SELECTED BY ARCHITECT. WALL OCCUPANCY SENSORS EXACT LOCATIONSAS PER MANUFACTURER'S RECOMMENDATIONS.

PROVIDE ALL LIGHTING FIXTURES, TRIM, ETC. AS INDICATED IN THE LIGHTING FIXTURE SCHEDULE AND REFLECTED CEILING PLANS. FIXTURES SHALL BE COMPLETE WITH REQUIRED SOCKETS, WIRING, REFLECTORS, HANGERS, FITTINGS AND MOUNTING TRIM. FIXTURES SHALL BE CLEANED AND COMPLETELY

PROVIDE PROPER TRIM, FRAMES, MOUNTING DEVICES, CONFIGURATION AND ACCESSORIES REQUIRED TO PROPERLY INSTALL FIXTURES. CATALOG NUMBERS OF FIXTURES SCHEDULED ARE TO ESTABLISH A TYPE OF FIXTURE, NOT TO DETERMINE A METHOD OF MOUNTING.

CONFIRM ALL CEILING TYPES BEFORE ORDERING NEW LIGHTING FIXTURES AND PROVIDE MOUNTING TRIM SUITABLE FOR THE CEILING FINISH IN WHICH FIXTURE IS INSTALLED. COORDINATE LIGHTING LAYOUT WITH ARCHITECTURAL REFLECTED CEILING PLANS. PROVIDE LAMPS WITH A MINIMUM COLOR RENDERING INDEX (CRI) OF 80. LED LAMPS SHALL BE 120 VAC

RATING. ALL LED MODULES SHALL BE THE SAME COLOR TEMPERATURE. DIMMING DRIVERS WHERE INDICATED, SHALL BE FLICKER FREE, LOW INRUSH, 89% EFFICIENT OR BETTER PROVIDE THE REQUIRED 90 MINUTE BATTERY PACKS IN THE LIGHT FIXTURES SPECIFIED IN THE LIGHT FIXTURE SCHEDULE. BATTERY PACKS SHALL BE INTEGRAL TO THE LIGHT FIXTURES AND PROVIDED WITH

INTEGRAL OR REMOTE TEST SWITCHES AS NOTED IN THE LIGHT FIXTURE SCHEDULE OR ON THE PLANS. RECESSED FIXTURES SHALL BE FURNISHED WITH COMPLETE MOUNTING DEVICES AND ACCESSORIES. WHERE NECESSARY TO MEET CODE REQUIREMENTS, ENCLOSURE HOUSING SHALL BE SUITABLE FOR A 1-HOUR FIRE RATING WHERE REQUIRED. ATTACHMENT DEVICES INCLUDING BRACKETS, PLASTER RINGS, SADDLE HANGERS, AND TIE-BARS SHALL BE MADE OF FORMED OR ROLLED METAL SHAPES WITH THE

REQUISITE RIGIDITY AND STRENGTH TO MAINTAIN CONTINUOUS ALIGNMENT OF THE INSTALLED FIXTURE RECESSED LAY-IN FIXTURES SHALL BE SUPPORTED BY TWO INDEPENDENT SUPPORT AT OPPOSITE CORNERS OF THE FIXTURE TO THE OVERHEAD STRUCTURE WITH 12 GA HANGER WIRES AND INDEPENDENT FROM LAY-IN CEILING WIRE SUPPORTS

LED'S USED IN LED LUMINAIRES SHALL BE HIGH BRIGHTNESS AND OF PROVEN QUALITY FROM ESTABLISHED AND REPUTABLE LED MANUFACTURERS. LIGHTING FIXTURES PERFORMANCE AND CONSTRUCTION SHALL MEET MINIMUM REQUIREMENTS OF UTILITY G.

2.06 LOW VOLTAGE LIGHTING CONTROL SYSTEM:

COMPANY REBATE PROGRAM.

PROVIDE AN INTEGRATED, ENERGY SAVING NETWORK LIGHTING CONTROL SYSTEM INCLUDING LIGHTING CONTROL PANELS, OCCUPANCY SENSORS, AND DAY LIGHTING CONTROLS FROM A SINGLE SUPPLIER. CONTRACTOR IS RESPONSIBLE FOR CONFIRMING THAT THE PANELS AND SENSORS INTER-OPERATE AS A SINGLE SYSTEM.

2.07 SAFETY SWITCHES: SAFETY SWITCHES SHALL BE HEAVY DUTY TYPE, SIZE AND RATING AS REQUIRED FOR LEAD SERVICE. SAFETY SWITCHES SHALL BE FUSED OR UNFUSED AS SHOWN AND/OR AS REQUIRED. SAFETY SWITCHES SERVING MOTOR LOADS SHALL BE HORSEPOWER RATED FOR LOAD SERVED.

SWITCH ENCLOSURES SHALL BE NEMA 1 IN INDOOR LOCATIONS AND NEMA 3R IN OUTDOOR LOCATIONS

UNLESS SPECIFICALLY OTHERWISE INDICATED ON THE DRAWINGS.

FUSE HOLDERS SHALL BE UL CLASS J TYPE SUITABLE FOR USE WITH BOTH UL CLASS J AND R (DUAL

ALL SAFETY SWITCHES SHALL BE PROVIDED WITH EQUIPMENT GROUNDING KIT PROVIDE CLASS RK1 FUSE IN SWITCHBOARD WITH AIC RATING TO MATCH EXISTING EQUIPMENT.

MAGNETIC: MAGNETIC STARTERS SHALL BE U.L. LISTED, NEMA RATED, FULL VOLTAGE, NON-REVERSING, SINGLE SPEED 3-POLE CONTACTORS WITH THERMAL OVERLOAD PROTECTION UNLESS SPECIFICALLY OTHERWISE INDICATED ON THE DRAWINGS. FRACTIONAL OR DEFINITE PURPOSE STARTERS ARE NOT ACCEPTABLE. OVERLOAD PROTECTION SHALL BE MELTING ALLOY TYPE WITH HEATER ELEMENTS PERMANENTLY JOINED TO THE SOLDER POT AND MANUAL RESET. OVERLOAD RELAY HEATER UNITS SHALL BE PROVIDED WITH EACH STARTER SIZED FOR 115% OF THE INSTALLED MOTOR NAMEPLATE FULL-LOAD CURRENT. ALL STARTERS SHALL BE PROTECTED WITH ADJUSTABLE TRIP THERMAL MAGNETIC CIRCUIT BREAKERS OR MOTOR CIRCUIT PROTECTORS (MCP) U.L. LISTED FOR A MINIMUM OF 22,000 AMPS RMS SYMMETRICAL FAULT INTERRUPTING CAPACITY.

PROVIDE STEP-DOWN CONTROL TRANSFORMER WITH 120-VOLT SECONDARY FOR EACH STARTER. BOND ONE SECONDARY CONDUCTOR TERMINAL TO GROUND. PROVIDE A SINGLE CONTROL CIRCUIT FUSE ON THE UNGROUNDED SECONDARY CONDUCTOR BETWEEN THE CONTROL TRANSFORMER AND THE FIRST CONTROL DEVICE. FUSE SHALL BE SIZED FOR THE MAXIMUM RATED TRANSFORMER, ER SECONDARY CURRENT OR LESS. PROVIDE STARTER ENCLOSURE DOOR MOUNTED CONTROL DEVICES AS INDICATED IN THE STARTER SCHEDULE.

PROVIDE MULTI-POLE, REVERSIBLE POLE CONTROL RELAYS, INCLUDING TIME DELAY RELAYS, AS NECESSARY OR AS INDICATED ON THE DRAWINGS.

MANUAL STARTERS: PROVIDE ENCLOSED MANUAL MOTOR STARTERS WITH DOUBLE-BREAK CONTACTS, PADLOCK PROVISIONS, AND TOGGLE OR PUSH BUTTON OPERATORS WITH ONE-PIECE MELTING ALLOY MANUAL RESET THERMAL OVERLOAD PROTECTION FOR ALL SINGLE-PHASE MOTORS 1/2-HORSEPOWER AND LOWER, EXCEPT INHERENTLY PROTECTED 120-VOLT MOTORS 1/4-HORSEPOWER OR SMALLER, AND WITH OR WITHOUT ONE-PIECE MELTING ALLOY ANUAL RESET THERMAL OVERLOAD PROTECTION FOR SINGLE- OR THREE-PHASE MOTORS LARGER THAN 1/2-HORSEPOWER AS SPECIFICALLY INDICATED ON THE DRAWINGS.

PROVIDE AND INSTALL NEMA PB1; UL 489, BOLT-ON CIRCUIT BREAKERS HAVING A MINIMUM SHORT-CIRCUIT CURRENT RATING EQUAL TO THE SHORT-CIRCUIT CURRENT RATING OF THE PANELBOARD IN WHICH THE CIRCUIT BREAKER SHALL BE MOUNTED. PROVIDE CIRCUIT BREAKER OF THE RATING AND CONFIGURATION AS SHOWN ON THE SINGLE LINE DIAGRAM AND PANEL SCHEDULES.

PROVIDE FILLER PLATE AS REQUIRED TO COVER AND PROTECT EXPOSED BUSSED SPACES.

PROVIDE DRY TYPE ELECTRO-STATIC SHIELDED TRANSFORMERS, COMPLYING WITH LATEST DOE ENERGY REQUIREMENTS. TRANSFORMERS SHALL HAVE SEPARATE PRIMARY AND SECONDARY WINDINGS. TRANSFORMERS 15KVA AND ABOVE SHALL BE UL LISTED INSULATION SYSTEMS OF 220 DEGREES C., WITH 115 DEGREES C. TEMPERATURE RISE ABOVE 40 DEGREE C. AMBIENT, EXCEPT SIZES LESS THAN 10 KVA MAY BE 185 DEGREES C., UL LISTED INSULATION SYSTEM WITH 115 DEGREES C. TEMPERATURE RISE ABOVE AN AMBIENT OF 40 DEG C. TRANSFORMERS LARGER THAN 10 KVA SHALL BE OF VENTILATED TYPE.

PROVIDE A COMPLETE ADDRESSABLE FIRE DETECTION ALARM AND CONTROL SYSTEM WITH NOTIFICATION APPLIANCES IN COMPLICANCE WITH ALL APPLICABLE CODES AND LOCAL ORDINANCES. ALL NEW COMPONENTS SHALL BE UL LISTED FOR THEIR INTENDED PURPOSE AND CROSS-LISTED FOR USE ON THE SYSTEM. NEW DEVICES SHALL BE PROGRAMMED TO INITIATE ACTION IN ACCORDANCE WITH THE SEQUENCE OF OPERATION INCLUDED ON THE PLANS. SYSTEM SUBMITTAL SHALL INCLUDE AN INPUT/OUTPUT MATRIX CLEARLY DEFINING THE SEQUENCE FOR EACH DEVICE.

EQUIPMENT SHALL BE BY FIRE-LITE ALARMS, EDWARDS SYSTEMS TECHNOLOGY (EST), GAMEWELL-FCI, NOTIFIER, OR CERBERUS

THE FACP SHALL BE A MICROPROCESSOR BASED SYSTEM UL LISTED FOR FIRE ALARM APPLICATIONS. THE PROCESSOR SHALL SUPPORT ANALOG SENSING TECHNIQUES TO MONITOR INDIVIDUAL DEVICES AND INITIATE MAINTENANCE ALERTS FOR DIRTY SENSORS. THE INSTALLED SYSTEM SHALL BE SUPPORTED BY THE MANUFACTURER FOR A MINIMUM OF 10 YEARS AFTER INSTALLATION, I.E. NO PLANNED DISCONTINUATION OF FACTORY SUPPORT OR AVAILABILITY OF NEW REPLACEMENT OR REPAIR PARTS. THE FACP SHALL SUPPORT A MINIMUM OF 500 SUPERVISED ANALOG ADDRESSABLE DEVICES, 4 DEDICATED NAC CIRCUITS AND PANEL TO PANEL NETWORKING FOR GLOBAL ANNUNCIATION AND CONTROL. THE FACP SHALL BE ENCLOSED IN A SEMI-FLUSH LOCKABLE ENCLOSURE WITH STATUS INDICATORS CLEARLY VISIBLE WITH DOOR CLOSED. AN ALARM AND SUPERVISORY DISPLAY SHALL BE A MINIMUM OF 80 CHARACTER LCD. PROVIDE INDIVIDUAL ALARM LEDS FOR ZONED ALARMING OF EACH FLOOR AND DEVICE TYPE. PROVIDE OFF/AUTOMATIC SWITCHES OR EACH HVAC UNIT SPECIFIED WITH DUCT SMOKE DETECTION FOR FIRE

DEPARTMENT OFF OVER-RIDE CONTROL BATTERIES SHALL BE MOUNTED INTEGRAL TO THE FACP AND REMOTE POWER SUPPLY CABINETS. POWER SUPPLIES/AMPLIFIERS SHALL BE SIZED TO ACCOMMODATE THE DESIGN LOAD PLUS RESERVE CAPACITY OF 50% OR 1 WATT/1,000 SF, WHICHEVER IS GREATER. STANDBY BATTERIES SHALL SUPPORT THE SYSTEM IN THE EVENT OF A LOSS OF PRIMARY POWER FOR 24 HOURS OF FULL SUPERVISORY OPERATION FOLLOWED BY 15 MINUTES OF ALARM. PROVIDE DISTRIBUTION INTELLIGENT POWER SUPPLIES TO ACCOMMODATE THE POWER REQUIREMENTS OF NAC CIRCUITS AS

INDICATED ON THE RISER AND FLOOR PLANS. POWER SUPPLIES SHALL COMMUNICATE WITH THE FACP VIA DATA COMMUNICATIONS, WHEREBY EACH POWER SUPPLY SHALL REPORT A LOSS OF AC POWER, BATTERY FAIL OR GROUND FAULT, AND EACH NOTIFICATION APPLIANCE CIRCUIT SERVED SHALL BE INDIVIDUALLY MONITORED FOR WIRING INTEGRITY. PROVIDE FIR ALARM TERMINAL CABINETS WHERE NECESSARY. THE CABINETS SHALL HAVE A REMOVABLE HINGED OVER WITH LOCK AND HIGH BARRIER TERMINAL STRIPS WITH 64 OR 128 POINT CAPACITY MOUNTED TO A PLYWOOD BACKBOARD. TERMINAL CABINETS SHALL BE RED AND LABELED WITH PERMANENT WHITE LETTERING.

NOTIFICATION APPLIANCE CIRCUITS AND SIGNALING LINE CIRCUITS (SLC) SHALL BE WIRED IN ACCORDANCE WITH THE CLASS IDENTIFIED ON THE RISER DIAGRAM. ISOLATION MODULES SHALL BE PROVIDED TO MAINTAIN SLC INTEGRITY A MINIMUM OF EVERY 25 DEVICES OR ONE SET PER FLOOR, WHICHEVER IS GREATER. WHERE CLASS B IS SPECIFIED, END OF LINE RESISTORS SHALL BE PLACED WITHIN THE FACP OR FIRE ALARM TERMINAL CABINETS.

REMOTE ANNUNCIATOR SHALL BE AN 80 CHARACTER ALPHANUMERICAL LCD DISPLAY WITH COMMON LED INDICATORS OF POWER ON, TROUBLE, SUPERVISORY AND ALARM CONDITIONS. WHERE REMOTE SYSTEM CONTROL FUNCTION SARE REQUIRED, THE ANNUNCIATOR SHALL PROVIDE KEY-ENABLED ALARM SILENCE, TROUBLE SILENCE, DRILL/TEST AND RESET SWITCHES. AN 11 INCH BY 17 INCH GRAPHIC DEPICTING THE ARCHITECTURAL LAYOUT OF THE FACILITY WITH STAIRWELL, CORRIDORS, ELEVATORS AND EGRESS POINTS CLEARLY SHOWN SHALL BE FRAMED AND PERMANENTLY MOUNTED ADJACENT TO THE ANNUNCIATOR. ALPHANUMERIC DESCRIPTORS FOR EACH INITIATING DEVICE SHALL CORRESPOND TO DESCRIPTORS INCLUDED ON THE GRAPHIC.

PROVIDE ADDRESSABLE DETECTION AS ILLUSTRATED ON THE PLANS. ALL COMMON TYPES OF DETECTION SHALL BE INTERCHANGEABLE ON COMMON BASES. SMOKE DETECTORS SHALL BE ANALOG ADDRESSABLE AND SHALL ALLOW FOR AUTOMATIC AND MANUAL CHANGES TO SENSITIVITY VIA THE FACP. DUCT SMOKE DETECTORS SHALL BE ANALOG ADDRESSABLE AND SHALL ALLOW FOR AUTOMATIC AND MANUAL CHANGES TO SENSITIVITY VIA THE FACP, EACH PROVIDED WITH HOUSING, SAMPLING TUBE SIZED TO DUCT DIMENSIONS AND REMOTE TEST/INDICATION STATION. HEAT DETECTION SHALL BE ANALOG FROM 32 TO 158 DEGREES F, WITH CAPABILITY TO SELECT FIXED OR RATE OF RISE AT THE FACP.

PROVIDE ADDRESSABLE MONITORING MODULES FOR CONNECTING ALL CONVENTIONAL DEVICES TO THE SLC, SUCH AS FIRE SUPPRESSION WATER FLOW, PRESSURE, TAMPER SWITCHES, FIRE SUPPRESSION SYSTEM CONTROL PANELS, ETC. MANUAL PULL STATIONS SHALL BE ADDRESSABLE DUAL ACTION TYPE. PROVIDE RED CAST BOX WHERE SURFACE MOUNTED. WHERE ALARMED COVERS (EQUAL TO STOPPER) ARE SPECIFIED TO MINIMIZE VANDALISM AND FALSE ALARMS, SINGLE ACTION

PULL STATIONS SHALL BE PROVIDED AT THOSE LOCATIONS ONLY. VISUAL SIGNAL SHALL BE SELF-SYNCHRONIZING XENON STROBES RATED BY UL 1971 TEST CRITERIA AND IN ACCORDANCE WITH NFPA 72. VISUAL SIGNALS SHALL HAVE A MINIMUM EFFECTIVE INTENSITY OF 15 CANDELA (CD) OR AS OTHERWISE SPECIFIED ON THE DRAWINGS. MULTIPLE STROBES VISIBLE FROM A SINGLE LOCATION SHALL BE SYNCHRONIZED. PROVIDE RED CAST BOX WHERE SURFACE MOUNTED.

AUDIBLE SIGNALS FROM HORNS SHALL PRODUCE A MINIMUM REVERBERANT SOUND LEVEL OF 85dB OR 15dB ABOVE AMBIENT WHICHEVER IS GREATER OR AUDIBLE SIGNALS FROM SPEAKERS SHALL PRODUCE A MINIMUM REVERBERANT SOUND LEVEL OF 85dB AT 10 FEET ON THE 1 WATT TAP; NOT TO EXCEED 110dB AT THE NEAREST HEARING DISTANCE. AUDIBLE NOTIFICATION SHALL

SUBMITTALS: PROVIDE THE FOLLOWING DOCUMENTS FOR REVIEW AND EVALUATION 1) POINT TO POINT WIRING DIAGRAMS OF THE PROPOSED MODIFICATION INCLUDING ALL CONDUCTOR QUANTITY AND SIZING 2) PANÉL LAYOUTS INDICATING MODULE PACEMENT AND SPARE CAPACITY ALLOWANCE FOR FUTURE EXPANSION 3) MANUFACTURERS CATALOG CUT SHEETS OF ALL COMPONENTS AND DEVICES WITH INTERCONNECTION DIAGRAMS 4) BATTERY CAPACITY CALCULATIONS INDICATING REQUIRED AND SPARE CAPACITY 5) POWER SUPPLY CAPACITY CALCULATIONS INCLUDING EACH CIRCUIT LOAD, VOLTAGE DROP AND SPARE CAPACITY 6) WRITTEN TEST REPORT FOR NOTIFICATION OF SUCCESSFUL COMPLETION OF EACH REQUIRED TEST AND SYSTEM RECORD OF COMPLETION 7) AS-BUILT DRAWINGS INCLUDING ALL DEVICE ADDRESSES AND ALPHANUMERIC DESCRIPTORS ASSIGNED IN THE CONTROL PANEL.

PART 3 EXECUTION

A. COOPERATE AND CAREFULLY COORDINATE WITH OTHER TRADES AS NECESSARY TO ACCOMPLISH THE FULL INTENT OF THE DOCUMENTS.

BEFORE ANY PIPING, CONDUIT, OUTLETS, EQUIPMENT OR LIGHTING FIXTURES ARE LOCATED IN ANY AREA, COORDINATE THE SPACE REQUIREMENTS OF ALL TRADES. SUCH SHALL BE ARRANGED SO THAT SPACE CONDITIONS WILL ALLOW ALL TRADES TO INSTALL THEIR WORK, AND WILL ALSO PERMIT ACCESS FOR FUTURE MAINTENANCE AND REPAIR. WORK IN, ABOVE, BELOW OR NEAR OCCUPIED AREAS SHALL BE AT OWNER'S CONVENIENCE AND MAY BE DURING EVENINGS OR

COORDINATE CHASES, SLOTS, INSERTS, SLEEVES, OPENINGS, AND BLOCKING WITH THE GENERAL CONSTRUCTION WORK DURING PROGRESS OF CONSTRUCTION TO FACILITATE THE ELECTRICAL INSTALLATIONS THAT FOLLOW: SET INSERTS AND SLEEVES IN POURED-IN-PLACE CONCRETE, MASONRY WORK, AND OTHER STRUCTURAL COMPONENTS AS THEY ARE CONSTRUCTED. COORDINATE LOCATION OF ACCESS PANELS AND DOORS FOR ELECTRICAL ITEMS THAT ARE CONCEALED BY FINISHED SURFACES.

WEEKENDS. SCHEDULE ALL REQUIRED POWER OUTAGES A MINIMUM OF 14 DAYS IN ADVANCE WITH OWNER REPRESENTATIVE. . DO

IDENTIFICATION DEVICES WITH COMPLETION OF FINISHED SURFACE. WHEN THE TRADE(S) FURNISHING EQUIPMENT WILL PROVIDE DISCONNECT SWITCHES, MOTOR STARTERS, AND MAKE FINAL EQUIPMENT CONNECTIONS. ELECTRICAL CONTRACTOR WILL ONLY MAKE LINE SIDE CONNECTIONS TO DISCONNECT SWITCHES AND/OR MOTOR STARTERS.

WHERE ELECTRICAL IDENTIFICATION DEVICES ARE APPLIED TO FIELD-FINISHED SURFACES, COORDINATE INSTALLATION OF

ALL CONDUIT AND OTHER OPENINGS SHALL BE KEPT PROTECTED TO PREVENT ENTRY OF FOREIGN MATTER. FIXTURES, EQUIPMENT AND APPARATUS SHALL BE KEPT COVERED FOR PROTECTION AGAINST DIRT, WATER, CHEMICAL OR MECHANICAL

THE ORIGINAL FINISH, INCLUDING SHOP COAT OF PAINT OF FIXTURE, APPARATUS OR EQUIPMENT THAT HAS BEEN DAMAGED, SHALL BE RESTORED.

C. PROTECT EQUIPMENT AND WORK FROM DAMAGE DURING HANDLING AND INSTALLATION UNTIL COMPLETION OF CONSTRUCTION.

ALL CONDUIT SHALL BE INSTALLED CONCEALED EXCEPT IN UNFINISHED SPACES OR WHERE SHOWN OTHERWISE MAKE CONDUIT BENDS AND OFFSETS SO INTERNAL DIAMETER IS NOT REDUCED. KEEP LEGS OF BENDS IN THE SAME PLANE AND STRAIGHT LEGS OF OFFSETS PARALLEL. UNLESS OTHERWISE INDICATED

USE RACEWAY AND CABLE FITTINGS COMPATIBLE WITH RACEWAYS AND CABLES AND SUITABLE FOR USE AND LOCATION. COMPRESSION TYPE FITTINGS SHALL BE USED FOR EMT.

DAMAGE BEFORE AND DURING CONSTRUCTION.

INSTALL PULL WIRES IN EMPTY RACEWAYS. INSTALL LEVEL, PLUMB, AND PARALLEL AND PERPENDICULAR TO OTHER SYSTEMS AND COMPONENTS, UNLESS OTHERWISE INDICATED.

HOMERUN DESIGNATIONS INDICATED ON THE DRAWINGS ARE DIAGRAMMATIC. PROVIDE COMPLETE CIRCUITRY FROM POWER SOURCE TO LOAD. ALL CIRCUITS SHALL INCLUDE A FULL SIZE GROUNDING CONDUCTOR. CONDUCTORS FOR SHALL HAVE COLOR CODED JACKETS. THE WIRING SHALL BE COLOR CODED WITH THE SAME COLOR USED WITH IT'S RESPECTIVE PHASE THROUGH THE ENTIRE JOB AS FOLLOWS UNLESS OTHERWISE MANDATED BY LOCAL JURISDICTION:

> 120/208V 480/277V PHASE A - BLACK PHASE A - BROWN PHASE B - RED PHASE B - ORANGE PHACE C - YELLOW PHASE C - BLUE **NEUTRAL - WHITE** NEUTRAL - GRAY **GROUND - GREEN GROUND - GREEN**

LIGHTING FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE WITH THREADED ROD AND/OR SAFETY JACK CHAIN. SUPPORT FROM OTHER BUILDING SYSTEMS, (e.g. CONDUIT, PIPING, DUCTWORK, etc.) IS NOT ALLOWED. LIGHTING FIXTURES SHALL REMAIN COVERED/PROTECTED UPON INSTALLATION TO PREVENT DUST AND DEBRIS FROM ENTERING

THE FIXTURE. ALL LIGHTING FIXTURES SHALL BE CLEANED - WIPED FREE OF DUST AND DEBRIS AT PROJECT COMPLETION.

ALL WIRES SHALL BE IDENTIFIED BY CIRCUITS IN ALL CABINETS, BOXES, WIRING TROUGHS AND OTHER ENCLOSURES, AND AT ALL TERMINAL POINTS, I.E., RECEPTACLES, ETC. BRANCH CIRCUIT CONDUCTORS SHALL BE IDENTIFIED IN EACH JUNCTION BOX AND PULL BOX WITH WIRE MARKERS TO INDICATE PANEL/CIRCUIT NUMBER

THE CIRCUIT DESIGNATIONS SHALL BE AS SHOWN ON THE CONTRACT DRAWINGS, OR AS DIRECTED BY THE ENGINEER. TAGS SHALL BE ATTACHED TO WIRES SO THAT THEY WILL BE READILY VISIBLE. DEVICE PLATES FOR SWITCHES AND RECEPTACLES SHALL IDENTIFY THE PANELBOARD AND BRANCH CIRCUIT NUMBER FROM WHICH SERVED ON THE FRONT OF THE DEVICE PLATE WITH MACHINE PRINTED VINYL SELF-ADHESIVE LABELS. LOCATE ALL LABELS

AT THE BOTTOM OF THE PLATE IN THE SAME LOCATION THROUGHOUT. PROVIDE PERMANENT PHENOLIC PLASTIC NAMEPLATES FOR ALL SAFETY SWITCHES AND STARTERS FOR IDENTIFICATION OF EQUIPMENT CONTROLLED SERVICES. NAMEPLATES SHALL BE ENGRAVED, SECURELY AND PERMANENTLY ATTACHED TO EQUIPMENT. NAMEPLATES SHALL INCLUDE THE NAME OF THE EQUIPMENT AND WHERE IT IS FED FROM.

JUNCTION AND PULL BOXES SHALL HAVE ACCESSIBLE COVERS, AND BE EQUIPPED WITH AN ENGRAVED PLASTIC NAMEPLATE

PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES IN EACH PANELBOARD TO INDICATE THE LOAD TYPE AND THE OWNER'S ROOM

NAMES/NUMBERS (NOT THE CONSTRUCTION DOCUMENT ROOM NAMES/NUMBERS). DO NOT SIMPLY USE COPIES OF DESIGN PANEL

INDICATING POWER SOURCE AND/OR LOAD INFORMATION AND CIRCUIT NUMBERS. COORDINATE NAMES, ABBREVIATIONS, COLORS, AND OTHER DESIGNATIONS USED FOR ELECTRICAL IDENTIFICATION WITH CORRESPONDING DESIGNATIONS INDICATED IN THE CONTRACT DOCUMENTS OR REQUIRED BY CODES AND STANDARDS. USE CONSISTENT DESIGNATIONS THROUGHOUT PROJECT.

SCHEDULES FROM DRAWINGS. HANDWRITTEN CIRCUIT DIRECTORIES ARE NOT ALLOWED. PANEL NAMEPLATES SHALL BE ENGRAVED THREE-LAYER LAMINATED PLASTIC, WHITE LETTERS ON BLACK BACKGROUND FOR NORMAL POWER, SECURE NAMEPLATES TO EQUIPMENT USING SCREWS OR RIVETS.

GROUNDING SHALL BE EFFECTIVE, PERMANENT AND IN ACCORDANCE WITH ARTICLE 250 OF THE NEC. IN ADDITION, THE FOLLOWING REQUIREMENTS PROVIDE INSULATED GREEN EQUIPMENT GROUNDING CONDUCTOR WITH ALL POWER AND RECEPTACLE AND LIGHTING

GROUNDING CONDUCTORS SHALL BE INSTALLED AS TO PERMIT THE SHORTEST AND MOST DIRECT PATH FROM EQUIPMENT TO GROUND. EQUIPMENT GROUND CONTINUITY SHALT BE MAINTAINED THROUGH FLEXIBLE METAL CONDUIT.

ALL WIRING DEVICES EQUIPPED WITH GROUNDING CONNECTION SHALL BE SOLIDLY GROUNDED TO GROUND SYSTEM WITH GROUNDING

ALL EQUIPMENT ENCLOSURES, AND NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY

SHALL BE EFFECTIVELY AND ADEQUATELY BONDED TO GROUND. ALL EQUIPMENT ENCLOSURES, AND NON-CURRENT-CARRYING METALLIC PARTS OF ELECTRICAL EQUIPMENT, RACEWAY SYSTEMS, ETC., SHALL BE EFFECTIVELY AND ADEQUATELY BONDED TO GROUND.

RACEWAYS, BOXES, OUTLETS AND CABINETS SHALL BE BOUND TOGETHER TO FORM A CONTINUOUS METALLIC

ACCORDANCE WITH NEC 250. SIZE OF GROUNDING CONDUCTOR TO BE PER NEC UNLESS NOTED AS LARGER ON DRAWINGS A SEPARATE GROUND CONDUCTOR SHALL BE PROVIDED FOR EACH BRANCH CIRCUIT IN EACH CONDUIT HOMERUN TO A EXTENDED TO CONNECT TO EACH DEVICE. GROUNDING CONDUCTORS SHALL BE CONNECTED TO EQUIPMENT GROUNDING BUS IN PANELBOARD

AND SECURELY ATTACHED AND GROUNDED TO THE DEVICE OR ENCLOSURE AT THE OTHER END.

CUT, CHANNEL, CHASE, AND DRILL FLOORS, WALLS, PARTITIONS, CEILINGS, AND OTHER SURFACES REQUIRED TO PERMIT ELECTRICAL

INSTALLATIONS. PERFORM CUTTING BY SKILLED MECHANICS OF TRADES INVOLVED. REPAIR AND REFINISH DISTURBED FINISH MATERIALS AND OTHER SURFACES TO MATCH ADJACENT UNDISTURBED SURFACES. REPAIR AND REFINISH MATERIALS AND OTHER SURFACES BY SKILLED MECHANICS OF TRADES INVOLVED.

ALL CUTTING AND PATCHING REQUIRED FOR EQUIPMENT INCLUDED ON THESE SPECIFICATIONS SHALL BE DONE BY THIS CONTRACTOR. IF CUTTING

IS DONE DUE TO FAILURE TO PERFORM PRELIMINARY ROUGHING WORK, THIS CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF THE IN THOSE PORTIONS OF THE BUILDING WHERE NEW FLOORS, OR WALLS, OR PARTITIONS ARE REQUIRED TO BE CONSTRUCTED, THE CONTRACTOR SHALL FURNISH AND LOCATE ALL REQUIRED SLEEVES AND INSERTS BEFORE THE FLOORS, WALLS OR PARTITIONS ARE CONSTRUCTED. WHERE

SLEEVES AND INSERTS WERE NOT INSTALLED OR WHERE SLEEVES AND INSERTS WERE INCORRECTLY LOCATED, THE CONTRACTOR SHALL BE

RESPONSIBLE FOR THE COST OF ANY REQUIRED CUTTING AND PATCHING CLEAN DAMAGED AND DISTURBED AREAS AND APPLY PRIMER, INTERMEDIATE, AND FINISH COATS TO SUIT THE DEGREE OF DAMAGE AT EACH LOCATION. FOLLOW PAINT MANUFACTURER'S WRITTEN INSTRUCTIONS FOR SURFACE PREPARATION AND FOR TIMING AND APPLICATION OF

APPLY UL LISTED FIRE STOPPING MATERIALS TO CABLE AND RACEWAY PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES TO ACHIEVE FIRE-RESISTANCE RATING OF THE ASSEMBLY. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF FIRE RATED FLOORS, WALLS, CEILINGS AND FIRESTOPPING SHALL BE AN ASBESTQS-FREE MATERIAL CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME, GASES AND

TEMPERATURE. FIRESTOPPING MATERIAL SHALL BE NON-COMBUSTIBLE AND NON-TOXIC DURING INSTALLATION PERIOD, AND/OR DURING FIRE FIRESTOPPING MATERIALS SHALL HAVE A RATING AT LEAST EQUAL TO THE FIRE-RATING OF THE FIRE WALL OR FLOOR

PENETRATED OPENINGS ARE TO BE PROTECTED. FIRESTOPPING SHALL BE AS MANUFACTURED BY HILTI, 3M, OR APPROVED EQUAL.

INSTALLATION PERSONNEL SHALL BE SUPERVISED BY PERSONS WHO ARE QUALIFIED AND EXPERIENCED IN THE INSTALLATION, INSPECTION, AND TESTING OF FIRE ALARM SYSTEMS, (i.e. FACTORY TRAINED/CERTIFIED PERSONNEL, AND/OR NICET FIRE ALARM LEVEL II CERTIFIED PERSONNEL). FIRE ALARM CIRCUITRY SHALL BE INSTALLED IN CONDUIT WHERE EXPOSED. TYPE-MC CABLE MARKED WITH RED IDENTIFIER STRIPE MAY BE USED WHERE CONCEALED WITHIN WALL PARTITIONS, AND/OR FINISHED CEILING PLENUMS. THE USE OF PLENUM RATED LOW VOLTAGE FIRE ALARM CABLE

FIRE ALARM CIRCUITRY SHALL NOT BE INSTALLED IN BOXES OR CONDUITS WITH CONDUCTORS OF OTHER SYSTEMS.

LOCAL FIRE DEPARTMENT PRIOR TO SUBMISSION OF BID.

CONDUIT COUPLINGS AND JUNCTION BOXES FOR FIRE ALARM CIRCUITRY SHALL BE SPRAY PAINTED RED. EACH DETECTOR SHALL BE PROVIDED WITH APPROPRIATE MOUNTING HARDWARE AS REQUIRED FOR ITS MOUNTING LOCATION. DETECTORS SHALL BE AT LEAST 12" FROM ANY PART OF ANY LIGHTING FIXTURE, AND AT LEAST 36" FROM AIR HANDLING DIFFUSERS

CIRCUIT BREAKERS SCHEDULED TO SERVE FIRE ALARM EQUIPMENT, (e.g. FIRE ALARM CONTROL PANEL, NAC POWER SUPPLIES. etc.), SHALL BE COLOR RED, AND EQUIPPED WITH A LOCKABLE HANDLE. PAY ALL CHARGES ASSOCIATED WITH FIRE ALARM PLAN REVIEW AND/OR ANY FIRE ALARM PERMIT FEES. COOROINATE/CONFIRM CHARGES WITH

PROVIDE THE SERVICES OF A FACTORY AUTHORIZED SERVICE REPRESENTATIVE TO SUPERVISE THE FIELD ASSEMBLY / CONNECTION OF COMPONENTS, PRE-TESTING, TESTING AND ADJUSTMENT OF THE SYSTEM. FURNISH ALL INSTRUMENTS AND PERSONNEL REQUIRED FOR THE FIRE ALARM SYSTEM TESTS. THE TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE WHERE APPLICABLE.

PRELIMINARY TESTING: DETERMINE THROUGH PRE-TESTING THE CONFORMANCE OF THE FIRE ALARM SYSTEM TO THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. CORRECT DEFICIENCIES OBSERVED IN PRE-TESTING. REPLACE MALFUNCTIONING OR DAMAGED ITEMS WITH NEW, AND RE-TEST UNTIL SATISFACTORY PERFORMANCE AND CONDITIONS ARE ACHIEVED. SUBMIT A WRITTEN REPORT DETAILING THE RESULTS OF THE FINAL TESTING: PROVIDE FIRE ALARM SYSTEM TESTING IN ACCORDANCE WITH NFPA 72. THE LISTED TESTS SHALL BE CONDUCTED AS WELL AS ANY

DESIGNATED MANUFACTURER PROCEDURES SPECIFIC TO THE PROJECT. THE RESULTS OF THE TESTING SHALL CONFIRM THE CIRCUITS AND COMPONENTS ARE ELECTRICALLY SUPERVISED AND OPERATE AS INTENDED. PROVIDE A WRITTEN REPORT OF INSPECTIONS, TESTS, AND DETAILED TEST RESULTS FOR THE PROJECT RECORD - INCLUDE IN THE O&M MANUAL

CORRECT DEFICIENCIES INDICATED BY FINAL TESTING AND COMPLETELY RE-TEST WORK AFFECTED BY SUCH DEFICIENCIES. VERIFY BY THE SYSTEM TEST THAT THE ENTIRE SYSTEM MEETS THE SPECIFICATIONS. AND COMPLIES WITH APPLICABLE STANDARDS PROVIDE THE SERVICES OF A FACTORY AUTHORIZED SERVICE REPRESENTATIVE TO DEMONSTRATE THE SYSTEM AND TRAIN OWNER'S

MAINTENANCE PERSONNEL

OWNER REQUIREMENTS.

RECEPTACLE SHALL BE CONFIRMED.

ILLUSTRATE AND INDICATE STYLE, MATERIAL, STRENGTH, FASTENING PROVISION, OPTIONS AND ACCESSORIES, AND FINISH FOR EACH TYPE AND SIZE OF ELECTRICAL SUPPORT COMPONENT USED FOR EACH PRODUCT DATA. INCLUDE MANUFACTURER'S NAME AND CATALOG DATA LISTING TYPE. MODEL NO., CATALOG NO., MATERIALS, STYLES, AND FINISH. SUBMIT ELECTRONIC COPIES OF SHOP DRAWINGS INCLUDING WIRING DIAGRAMS OF PRODUCTS SCHEDULED TO ENGINEER FOR REVIEW AND

APPROVAL. DO NOT ORDER EQUIPMENT BEFORE RECEIVING APPROVED SHOPS DRAWINGS BY THE ENGINEER. SHOP DRAWINGS SHALL BE SUBMITTED FOR SAFETY SWITCHES, CIRCUIT BREAKERS, MOTOR STARTERS, LIGHTING, WIRING DEVICES, OCCUPANCY SENSORS, COVER PLATES, CONDUITS, HANGERS AND SUPPORTS, CONDUCTORS, BOXES ETC. THESE MAY CONSIST OF THE MANUFACTURER'S

STANDARD CATALOG OR TEAR SHEETS AND SHALL HAVE THE EXACT ITEMS BEING OFFERED CLEARLY IDENTIFIED IN ACCORDANCE WITH FLOOR PROVIDE DESCRIPTIVE INFORMATION THAT STATES CONFORMANCE TO BUILDING CODES AND RECOGNIZED TESTING AND MANUFACTURING STANDARDS. CONTRACTOR SHALL NOTE AND HIGHLIGHT ANY DEVIATIONS FROM THE REQUIREMENTS OF THE CONTRACT PLANS AND

SPECIFICATIONS ON THE SUBMITTAL. REVIEW SUBMITTALS FOR EQUIPMENT FURNISHED UNDER OTHER SECTIONS PRIOR TO INSTALLATION AND ELECTRICAL ROUGH_IN. VERIFY

LOCATION, SIZE, AND TYPE OF CONNECTIONS. COORDINATE DETAILS OF EQUIPMENT CONNECTIONS WITH SUPPLIER AND INSTALLER. PROVIDE SPECIFIED MATERIALS AND EQUIPMENT UNLESS "EQUAL" OR "APPROVED EQUAL" IS EXPLICITLY INDICATED ON THE DRAWINGS. DEVIATIONS TO SPECIFIED MATERIALS SHALL BE AT THE SOLE RISK OF THE CONTRACTOR, WHO SHALL BE RESPONSIBLE FOR ALL ASSOCIATED CHANGES TO THIS AND OTHER TRADES. SUBMITTALS SHALL INDICATE REVIEW AND APPROVAL BY THE RESPONSIBLE CONTRACTOR. SUBMIT FOR REVIEW AND APPROVAL BY THE RESPONSIBLE CONTRACTOR. ALLOW ENGINEER A MINIMUM OF 10 DAYS FOR PROCESSING AND REVIEW OF EACH SUBMISSION.

THE ELECTRICAL CONTRACTOR SHALL CONDUCT AN OPERATING TEST. SYSTEM SHALL TEST FREE FROM GROUNDS, SHORTS AND OTHER FAULTS. ALL CONNECTIONS AS POSSIBLE SHALL BE THOROUGHLY CHECKED FOR POSITIVE ELECTRICAL CONNECTION AND CONTINUITY. ALL EQUIPMENT SHALL BE DEMONSTRATED TO OPERATE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THESE SPECIFICATIONS AND SHOWN

ON THE DRAWINGS. OCCUPANCY SENSORS AND OTHER LIGHTING CONTROL EQUIPMENT AND DEVICES SHALL BE TESTED BY THE CONTRACTOR TO VERIFY DEVICES ARE CALIBRATED, ADJUSTED AND PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH CONSTRUCTION DOCUMENTS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS. CONTRACTOR SHALL VERIFY DEVICE SENSITIVITY AND TIME-OUT ADJUSTMENTS CONFORM TO

PERFORM ALL TESTS IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL FURNISH ALL PERSONNEL AND TEST INSTRUMENTS FOR USE IN THE TEST. TEST ALL WIRES AND CABLES INSTALLED UNDER THIS CONTRACT WITH A 1,000 VOLT MEGOHMMETER. FURNISH THE ENGINEER WITH A COPY OF THE RESULTS TOGETHER WITH AN OUTLINE OF THE METHOD USED. INDICATE AND INTERPRET TEST RESULTS FOR COMPLIANCE WITH PERFORMANCE

SHOULD THE FOREGOING TESTS REVEALS ANY DEFECTS, PROMPTLY CORRECT SUCH DEFECTS AND RE-RUN THE TESTS UNTIL THE ENTIRE

REQUIREMENTS. CONTRACTOR SHALL DELIVER A WRITTEN REPORT CERTIFYING THAT EVERY RECEPTACLE HAS BEEN TESTED AS FOLLOWS AND FOUND ACCEPTABLE: THE PHYSICAL INTEGRITY OF EACH RECEPTACLE SHALL BE CONFIRMED BY VISUAL INSPECTION, THE CONTINUITY OF THE GROUNDING CIRCUIT IN EACH ELECTRICAL RECEPTACLE SHALL BE VERIFIED, CORRECT POLARITY OF THE HOT AND NEUTRAL CONNECTIONS IN EACH ELECTRICAL

INSTALLATION IS SATISFACTORY IN ALL RESPECTS.

PROTECT EQUIPMENT AND INSTALLATIONS AND MAINTAIN CONDITIONS TO ENSURE THAT COATINGS, FINISHES, AND CABINETS ARE WITHOUT DAMAGE OR DETERIORATION AT TIME OF SUBSTANTIAL COMPLETION.

PROVIDE ALL LOCK OUT/TAG OUT PROCEDURES TO CONFORM WITH ALL OSHA AND NEC REQUIREMENTS. KEEP THE SITE CLEAN OF DEBRIS AND ISOLATE AREAS OF WORK. ON COMPLETION OF INSTALLATION, INSPECT AND CLEAN ALL ELECTRICAL EQUIPMENT, DEVICES AND ENCLOSURES, LIGHT FIXTURES AND LENSES,

OUTLET BOXES, FITTINGS, AND WIRING DEVICES. REMOVE BURRS, DIRT, PAINT SPOTS, AND CONSTRUCTION DEBRIS. TOUCH UP SCRATCHES WITH THE CONTRACTOR, BEFORE FINAL ACCEPTANCE WILL BE GRANTED, SHALL CLEAN ALL DEVICE PLATES, SERVICE FITTINGS AND OTHER ITEMS FURNISHED UNDER THIS CONTRACT AND SHALL ENSURE THAT ALL DIRECTORIES ARE IN PLACE WITH COMPLETED SCHEDULES AND ALL

IDENTIFICATIONS AND MARKINGS OF EQUIPMENT, CABLES AND OTHER ITEMS, ARE COMPLETED.

PROVIDE "AS-BUILT" DRAWINGS AT THE COMPLETION OF THE PROJECT TO THE ARCHITECT /ENGINEER FOR REVIEW. THESE DRAWINGS MUST SHOW THE ACTUAL ROUTING OF THE BRANCH-CIRCUITS, CIRCUIT NUMBERS, DETAILS, ETC. SUBMIT ONE HARD COPY FULL-SIZE SET FOR REVIEW AND APPROVAL BY THE ENGINEER. UPON APPROVAL, SUBMIT ONE HARD COPY FULL-SIZE SET AND CD-ROM(S) WITH ELECTRONIC CAD FILES OF THE CONSTRUCTION DOCUMENTS. DRAWING FILES SHALL BE AUTOCAD .DWG FILE FORMAT.

OPERATION & MAINTENANCE MANUALS: SUBMIT (3) O&M MANUALS IN BOUND 8-1/2 X 11 INCH TEXT PAGES FOR APPROVAL PRIOR COMPLETION OF THE PROJECT. ALL MAJOR EQUIPMENT, MATERIALS AND SYSTEMS SHALL BE REPRESENTED. PREPARE BINDER COVER WITH PRINTED TITLE "OPERATIONS AND MAINTENANCE INSTRUCTIONS", NAME OF PROJECT, AND SUBJECT MATTER OF BINDER. INTERNALLY DIVIDE BINDER CONTENTS, AND PROVIDE TABLE OF CONTENTS.

CONTRACTOR GUARANTEES BY HIS/HER ACCEPTANCE OF THE CONTRACT THAT WORK INSTALLED IS FREE FROM DEFECTS IN WORKMANSHIP AND/OR MATERIALS, AND THAT THE SYSTEM(S) WILL DEVELOP CAPACITIES AND CHARACTERISTICS SPECIFIED FOR A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AND ACCEPTANCE OF OWNER AND ENGINEER. GUARANTEE SHALL INCLUDE: ALL LABOR, PARTS, TRAVEL, SOFTWARE CHANGES/RE-PROGRAMMING, ETC

IF, DURING THE PERIOD OF ONE YEAR OR AS OTHERWISE SPECIFIED FROM DATE OF SUBSTANTIAL COMPLETION, DEFECTS IN WORKMANSHIP, MATERIAL OR PERFORMANCE APPEAR, HE/SHE WILL, WITHOUT COST TO THE OWNER, REMEDY SUCH DEFECTS WITHIN A REASONABLE TIME TO BE SPECIFIED IN NOTICE FROM ARCHITECT /ENGINEER. SHOULD THE CONTRACTOR FAIL TO COMPLY, THE OWNER MAY HAVE SUCH WORK DONE AND CHARGE COST TO CONTRACTOR.

OBTAIN FROM THE VARIOUS MANUFACTURERS OR VENDORS GUARANTEES OR WARRANTIES FOR THE PARTICULAR EQUIPMENT/DEVICE AND DELIVER

GROUNDING CIRCUIT IN

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LUCK'S CANNERY

Project Owner:

REDEVELOPMENT -PHASE I-Seagrove, NC 27341

Issue For: CONSTRUCTION

Issue Date:

09.27.2019 REASON

DATE

PRINCIPAL IN CHARGE D WALKER Project Address:

PHASE IA

798 NC Hwy. 705 Seagrove,

BLDG. RENNOVATION -

LUCK'S CANNERY - LOWER

Project Number

NC 27341

201901.1

Sheet Title: Electrical

Sheet Number

- 1 THE ELECTRICAL CODE REFERRED TO SHALL BE THE STATE'S ELECTRIC CODE LATEST EDITION AS WELL AS ALL LOCAL CODE REQUIREMENTS. RESOLVE ALL CODE ISSUES AND REQUIREMENTS WITH AUTHORITIES HAVING JURISDICTION AND ENGINEER PRIOR TO MAKING BID.
- 2 EC SHALL OBTAIN AND PAY FOR ALL PERMITS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE THAT ALL WORK BY THE SUBCONTRACTORS IS INSTALLED AND COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND THAT ALL ELECTRICAL WORK IS 100% COMPLETE AT THE TIME OF BENEFICIAL OCCUPANCY.
- 4 THE WORK SHALL INCLUDE PROVIDING ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES TO CONSTRUCT AND INSTALL THE EQUIPMENT AND SYSTEMS NECESSARY TO COMPLETE THE WORK INDICATED ON DRAWINGS.
- PRIOR TO SUBMITTING BIDS, VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS WHERE WORK WILL BE PERFORMED. REVIEW ALL DRAWINGS SHOWING WORK OF OTHER TRADES TO DETERMINE COMPLETE SCOPE OF WORK. TAKE ALL NECESSARY MEASUREMENTS, MAKE SURVEYS, AND NOTE CAPACITIES OF EQUIPMENT AND SYSTEMS WHICH WILL AFFECT INSTALLATION, DETERMINE CLEARANCES, INTERFERENCE WITH EXISTING ELEMENTS AND COORDINATE WORK WITH WORK BY OTHER TRADES AND OWNER.
- IT IS THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE A WORKING INSTALLATION IN EVERY DETAIL AND ALL ITEMS REQUIRED FOR SUCH AN INSTALLATION SHALL BE PROVIDED WETHER OR NOT SPECIFICALLY INDICATED OR MENTIONED.
- 7 COORDINATE WITH THE GENERAL CONTRACTOR OTHER TRADES AND MANUFACTURE'S SHOP DRAWINGS. COORDINATE EXACT LOCATION AND ROUGHING IN DIMENSIONS OF ALL EQUIPMENT AND MAKE ALL FINAL CONNECTIONS AS REQUIRED BY CODES AND AUTHORITIES.
- ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH OSHA, NFPA STANDARDS, THE ELECTRIC CODE AND THE LOCAL GOVERNING AUTHORITIES. THE DRAWINGS AND SPECIFICATIONS DO NOT ATTEMPT TO INDICATE ALL WORK REQUIRED BY CODES AND AUTHORITIES.
- 9 TEST ALL EQUIPMENT AND SYSTEMS INSTALLED TO CERTIFY COMPLIANCE WITH DRAWINGS, SPECIFICATIONS, CODES, LOCAL AUTHORITIES AND REGULATIONS, INCLUDE LABOR AND COSTS FOR TESTING, REVIEWS, APPROVALS AND CERTIFICATIONS.
- 10 PROVIDE TRAINING TO OWNER ON ALL EQUIPMENT AND SYSTEMS INSTALLED.
- 11 IN GENERAL DRAWINGS ARE DIAGRAMMATIC ONLY, EXACT LOCATION, MOUNTING HEIGHTS OF EQUIPMENT AND ROUTING OF RACEWAYS SHALL BE COORDINATED WITH THE EQUIPMENT REQUIREMENTS AND FIELD CONDITIONS.

- 12 CIRCUIT NUMBERS ARE SHOWN FOR IDENTIFICATION PURPOSES ONLY. EXACT CIRCUIT NUMBERS SHALL BE DETERMINED IN THE FIELD. EC SHALL PROVIDE TYPEWRITTEN CIRCUIT DIRECTORIES IN PANELBOARDS WITH LOADS BEING SERVED.
- 13 PROVIDE ALL INCIDENTAL ACCESSORIES NECESSARY TO MAKE THE ELECTRICAL WORK COMPLETE
- 14 SUPPORT ALL WORK FROM THE BUILDING STRUCTURE, INDEPENDENTLY FROM OTHER TRADES.
- ELECTRICAL WORK SHALL BE RECESSED INTO WALLS OR INSTALLED ABOVE HUNG CEILINGS, EXCEPT UTILITY TYPE ROOMS, UNLESS OTHERWISE INDICATED.
- ELECTRIC METALLIC TUBING SHALL BE USED FOR BRANCH CIRCUIT HOMERUNS AND FEEDERS. PROVIDE RIGID STEEL CONDUIT BELOW 8 FEET AND IN AREAS SUBJECT TO ABUSE. FLEXIBLE METAL CONDUIT WITH PVC COATING (LIQUID-TIGHT) SHALL BE USED FOR CONNECTIONS TO WET LOCATIONS, MOTORS AND VIBRATING EQUIPMENT.
- 17 COMPRESSION TYPE FITTINGS SHALL BE USED ON EMT OR FLEXIBLE METAL CONDUITS, UNLESS OTHERWISE INDICATED.
- 18 DO NOT INSTALL OUTLETS BACK TO BACK. PROVIDE ONE STUD BAY SEPARATION. WHERE SEPARATE BAYS CANT BE ACHIEVED PROVIDE FIRE PATTY PADS ENCLOSING THE BOXES.
- PROVIDE ELECTRICAL OUTLET PLATE GASKETS SEALS AT RECEPTACLES, SWITCHES AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES.
- WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGHOUT CIRCUIT, UNLESS NOTED OTHERWISE.
- PROVIDE STARTERS, VFD'S AND CODE REQUIRED DISCONNECTS.
- MECHANICAL/PLUMBING EQUIPMENT STARTERS, DISCONNECTS ETC. ARE INDICATED ON THE MECHANICAL EQUIPMENT SCHEDULE ONLY. ONLY EQUIPMENT TAGS ARE SHOWN ON PLANS. COORDINATE EQUIPMENT LOCATIONS WITH MECHANICAL/PLUMBING CONTRACTOR IN THE FIELD PRIOR TO ROUGH-IN.
- PROVIDE WEATHER-TIGHT SEAL AT PENETRATIONS ABOVE GRADE. PROVIDE WATERTIGHT AND GASTIGHT SEALS INSIDE AND OUTSIDE OF CONDUITS THAT PENETRATE THE BUILDING BELOW GRADE, O.Z. GEDNEY SEALS OR APPROVED EQUAL.
- PROVIDE NRTL LISTED SMOKE AND FIRE SEALS AT ALL PENETRATIONS THROUGH FLOORS OR FULL HEIGHT (SLAB TO SLAB) WALLS.

- 25 USE CAUTION TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL WORKING IN THESE AREAS.
- TEMPORARY LIGHTING AND POWER SHALL BE PROVIDED AS REQUIRED BY OSHA, CODES AND LOCAL AUTHORITIES. REMOVE ALL TEMPORARY FACILITIES AT PROJECT COMPLETION.
- THE WORD "EQUIPMENT", U.O.I. DESIGNATES A GENERAL FORM, INCLUDING FITTINGS, DEVICES, APPLIANCES, LUMINARIES, APPARATUS, MACHINERY AND THE LIKE USED AS A PART OF, OR IN CONNECTION WITH AN ELECTRICAL INSTALLATION.
- 28 THE WORD "WIRING" DESIGNATES A COMPLETE WIRING SYSTEM (i.e. RACEWAY AND CONDUCTORS; STEEL JACKETED, MULTI-CONDUCTOR CABLE ASSEMBLY, ETC.)
- THE WORD "PROVIDE" DESIGNATES TO FURNISH, INSTALL AND WIRE A COMPLETE AND READY FOR THE INTENDED OPERATION.
- REFER TO THE PROJECT "FRONT END" FOR ALL INFORMATION RELATED TO ADMINISTRATION OF THE CONTRACT, RULES, PROCEDURES, AND POLICIES INCLUDING WITHOUT LIMITATION; BIDDING PROCEDURES, SUBMITTAL REQUIREMENTS, SUBSTITUTION REQUIREMENTS, RECORD DOCUMENT
- REQUIREMENTS, MAINTENANCE MANUAL REQUIREMENTS, DEFINITIONS OF TERMS, INSTRUCTION OF OWNER'S PERSONNEL, GENERAL WARRANTY INFORMATION, ETC.
- IN ADDITION TO SEALS FOR NEW WORK, PROVIDE ALL SEALS FOR EXISTING OPENINGS IN ALL EXISTING ELECTRICAL ROOMS AND CLOSETS WITH EQUIPMENT UTILIZED FOR THIS PROJECT AND/OR WHERE WIRING SYSTEMS FOR THIS PROJECT PASS THROUGH THESE ROOMS.
- ALL CONSTRUCTION PHASING AND, MAINTAINING OF ELECTRICAL POWER TO ALL BUILDING AREAS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL INSTALLER.
- COORDINATE ANY SHUTDOWN, ANY DISRUPTION OF SERVICE AND ANY WORK OUTSIDE OF RENOVATED AREAS FOR THIS PROJECT WITH OWNER FACILITIES, OWNER PROJECT DELIVERY STANDARDS AND CONSTRUCTION MANAGER.
- 34 ALL EXITS/EMERGENCY LIGHTING SHALL BE DIRECTORIES WITH NEW LOADS BEING SERVED. ON UNSWITCHED SOURCE.
- 35 ALL EMERGENCY LIGHTING WITH A LOCAL SWITCH CONTROL SHALL BE PROVIDED WITH BY-PASS TRANSFER RELAYS. REFER TO EMERGENCY LIGHTING BYPASS WIRING DIAGRAM.
- EMERGENCY LIGHTING IN CORRIDORS, STAIRS & RESTROOMS SHALL BE CONSTANT ON UNSWITCHED. SELF CONTAINED BATTERY UNIT WIRED AHEAD OF ALL SWITCH CONTROL IN EACH

- 37 PROVIDE NEW ADDRESSABLE FIRE ALARM DEVICES. COORDINATE ADDING NEW ADDRESSABLE DEVICES TO THE EXISTING ADDRESSABLE FIRE ALARM SYSTEM. PROVIDE ALL NECESSARY WIRING, RELAYS, CONDUITS AND APPURTENANCES FOR FULLY FUNCTIONAL SYSTEM.
- 38 COORDINATE FIRE ALARM DEVICE INSTALLATION WITH LOCAL FIRE DEPARTMENT.

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Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

Issue For:

Issue Date: 09.27.2019

REASON

PRINCIPAL IN CHARGE: D. WALKER **Project Address**

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

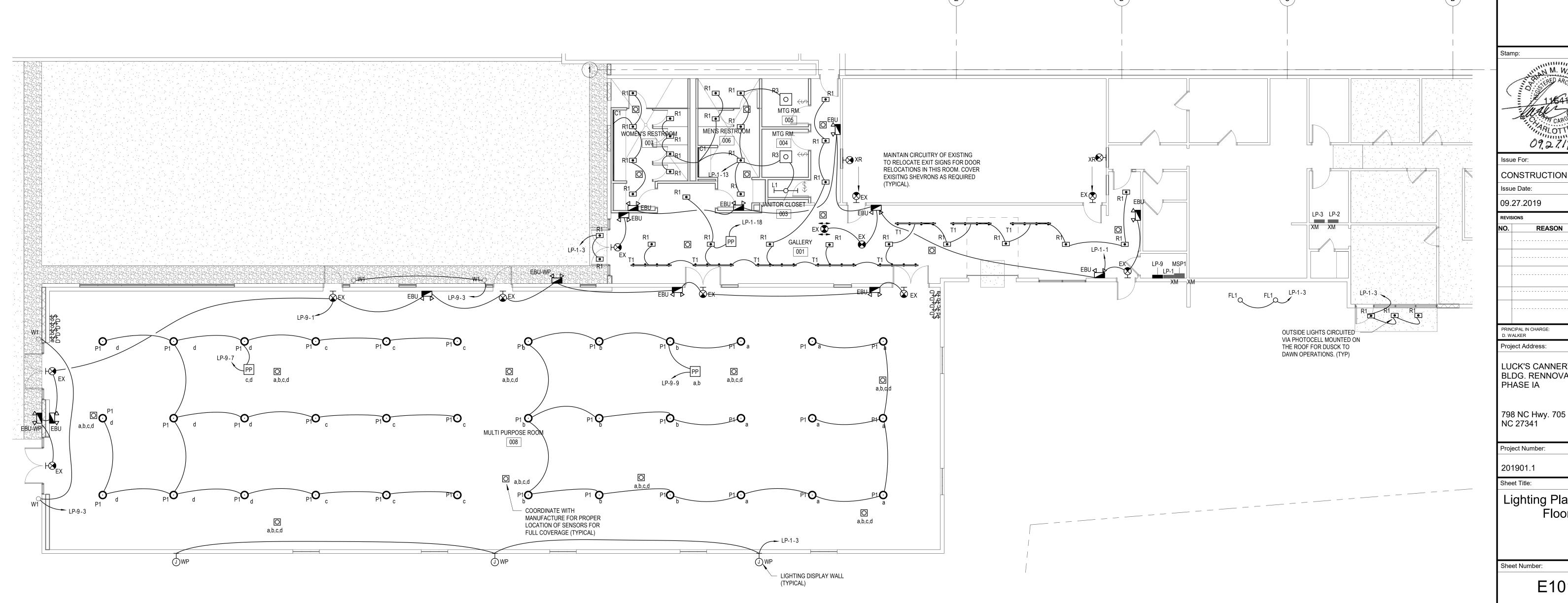
798 NC Hwy. 705 Seagrove, NC 27341

Project Number

Sheet Title:

Lighting Plan - First Floor

Sheet Number:



GENERAL NOTES:

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- 2 EC SHALL OBTAIN AND PAY FOR ALL PERMITS.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO ASSURE THAT ALL WORK BY THE SUBCONTRACTORS IS INSTALLED AND COMPLETED IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS AND THAT ALL ELECTRICAL WORK IS 100% COMPLETE AT THE TIME OF BENEFICIAL OCCUPANCY
- THE WORK SHALL INCLUDE PROVIDING ALL LABOR, MATERIAL, EQUIPMENT AND SERVICES TO CONSTRUCT AND INSTALL THE EQUIPMENT AND SYSTEMS NECESSARY TO COMPLETE THE WORK INDICATED ON DRAWINGS.
- PRIOR TO SUBMITTING BIDS, VISIT THE SITE AND BECOME FAMILIAR WITH THE EXISTING CONDITIONS WHERE WORK WILL BE PERFORMED. REVIEW ALL DRAWINGS SHOWING WORK OF OTHER TRADES TO DETERMINE COMPLETE SCOPE OF WORK. TAKE ALL NECESSARY MEASUREMENTS, MAKE SURVEYS, AND NOTE CAPACITIES OF EQUIPMENT AND SYSTEMS WHICH WILL AFFECT INSTALLATION, DETERMINE CLEARANCES, INTERFERENCE WITH EXISTING ELEMENTS AND COORDINATE WORK WITH WORK BY OTHER TRADES AND OWNER.
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- 17 COMPRESSION TYPE FITTINGS SHALL BE USED ON EMT OR FLEXIBLE METAL CONDUITS, UNLESS OTHERWISE INDICATED.
- DO NOT INSTALL OUTLETS BACK TO BACK. PROVIDE ONE STUD BAY SEPARATION. WHERE SEPARATE BAYS CANT BE ACHIEVED PROVIDE FIRE PATTY PADS ENCLOSING THE BOXES.
- 19 PROVIDE ELECTRICAL OUTLET PLATE GASKETS SEALS AT RECEPTACLES, SWITCHES AND OTHER ELECTRICAL BOXES ON EXTERIOR WALLS AND INTERIOR WALLS BETWEEN CONDITIONED AND NON-CONDITIONED SPACES
- WIRE AND CONDUIT SIZES INDICATED ON HOMERUNS SHALL BE CONTINUOUS THROUGHOUT CIRCUIT, UNLESS NOTED OTHERWISE.
- 21 PROVIDE STARTERS, VFD'S AND CODE REQUIRED DISCONNECTS.
- MECHANICAL/PLUMBING EQUIPMENT STARTERS, DISCONNECTS ETC. ARE INDICATED ON THE MECHANICAL EQUIPMENT SCHEDULE ONLY. ONLY EQUIPMENT TAGS ARE SHOWN ON PLANS. COORDINATE EQUIPMENT LOCATIONS WITH MECHANICAL/PLUMBING CONTRACTOR IN THE FIELD PRIOR TO ROUGH-IN.
- PROVIDE WEATHER-TIGHT SEAL AT PENETRATIONS ABOVE GRADE. PROVIDE WATERTIGHT AND GASTIGHT SEALS INSIDE AND OUTSIDE OF CONDUITS THAT PENETRATE THE BUILDING BELOW GRADE, O.Z. GEDNEY SEALS OR APPROVED EQUAL.
- 24 PROVIDE NRTL LISTED SMOKE AND FIRE SEALS AT ALL PENETRATIONS THROUGH FLOORS OR FULL HEIGHT (SLAB TO SLAB) WALLS.

- USE CAUTION TO AVOID DAMAGE TO EXISTING UTILITY LINES AND/OR HARM TO PERSONNEL WORKING IN THESE AREAS.
- TEMPORARY LIGHTING AND POWER SHALL BE PROVIDED AS REQUIRED BY OSHA, CODES AND LOCAL AUTHORITIES. REMOVE ALL TEMPORARY FACILITIES AT PROJECT COMPLETION.
- THE WORD "EQUIPMENT", U.O.I. DESIGNATES A GENERAL FORM, INCLUDING FITTINGS, DEVICES, APPLIANCES, LUMINARIES, APPARATUS, MACHINERY AND THE LIKE USED AS A PART OF, OR IN CONNECTION WITH AN ELECTRICAL INSTALLATION.
- THE WORD "WIRING" DESIGNATES A COMPLETE WIRING SYSTEM (i.e. RACEWAY AND CONDUCTORS; STEEL JACKETED, MULTI-CONDUCTOR CABLE ASSEMBLY, ETC.)
- THE WORD "PROVIDE" DESIGNATES TO FURNISH, INSTALL AND WIRE A COMPLETE AND READY FOR THE INTENDED OPERATION.
- REFER TO THE PROJECT "FRONT END" FOR ALL INFORMATION RELATED TO ADMINISTRATION OF THE CONTRACT, RULES, PROCEDURES, AND POLICIES INCLUDING WITHOUT LIMITATION; BIDDING PROCEDURES, SUBMITTAL REQUIREMENTS, SUBSTITUTION REQUIREMENTS, RECORD DOCUMENT REQUIREMENTS, MAINTENANCE MANUAL REQUIREMENTS, DEFINITIONS OF TERMS, INSTRUCTION OF OWNER'S PERSONNEL, GENERAL WARRANTY INFORMATION, ETC.
- IN ADDITION TO SEALS FOR NEW WORK, PROVIDE ALL SEALS FOR EXISTING OPENINGS IN ALL EXISTING ELECTRICAL ROOMS AND CLOSETS WITH EQUIPMENT UTILIZED FOR THIS PROJECT AND/OR WHERE WIRING SYSTEMS FOR THIS PROJECT PASS THROUGH THESE ROOMS.
- 32 ALL CONSTRUCTION PHASING AND, MAINTAINING OF ELECTRICAL POWER TO ALL BUILDING AREAS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL INSTALLER.
- COORDINATE ANY SHUTDOWN, ANY DISRUPTION OF SERVICE AND ANY WORK OUTSIDE OF RENOVATED AREAS FOR THIS PROJECT WITH OWNER FACILITIES, OWNER PROJECT DELIVERY STANDARDS AND CONSTRUCTION MANAGER.
- 34 ALL EXITS/EMERGENCY LIGHTING SHALL BE DIRECTORIES WITH NEW LOADS BEING SERVED. ON UNSWITCHED SOURCE.
- 35 ALL EMERGENCY LIGHTING WITH A LOCAL SWITCH CONTROL SHALL BE PROVIDED WITH BY-PASS TRANSFER RELAYS. REFER TO EMERGENCY LIGHTING BYPASS WIRING DIAGRAM.
- 36 EMERGENCY LIGHTING IN CORRIDORS, STAIRS & RESTROOMS SHALL BE CONSTANT ON UNSWITCHED. SELF CONTAINED BATTERY UNIT WIRED AHEAD OF ALL SWITCH CONTROL IN EACH

- PROVIDE NEW ADDRESSABLE FIRE ALARM DEVICES. COORDINATE ADDING NEW ADDRESSABLE DEVICES TO THE EXISTING ADDRESSABLE FIRE ALARM SYSTEM. PROVIDE ALL NECESSARY WIRING, RELAYS, CONDUITS AND APPURTENANCES FOR FULLY FUNCTIONAL SYSTEM.
- 38 COORDINATE FIRE ALARM DEVICE INSTALLATION WITH LOCAL FIRE DEPARTMENT.

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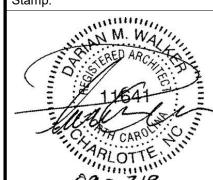
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LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

Stamp:



Issue For:

CONSTRUCTION

09.27.2019

Issue Date:

REVISIONS

PRINCIPAL IN CHARGE:

D. WALKER

Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove, NC 27341

Project Number:

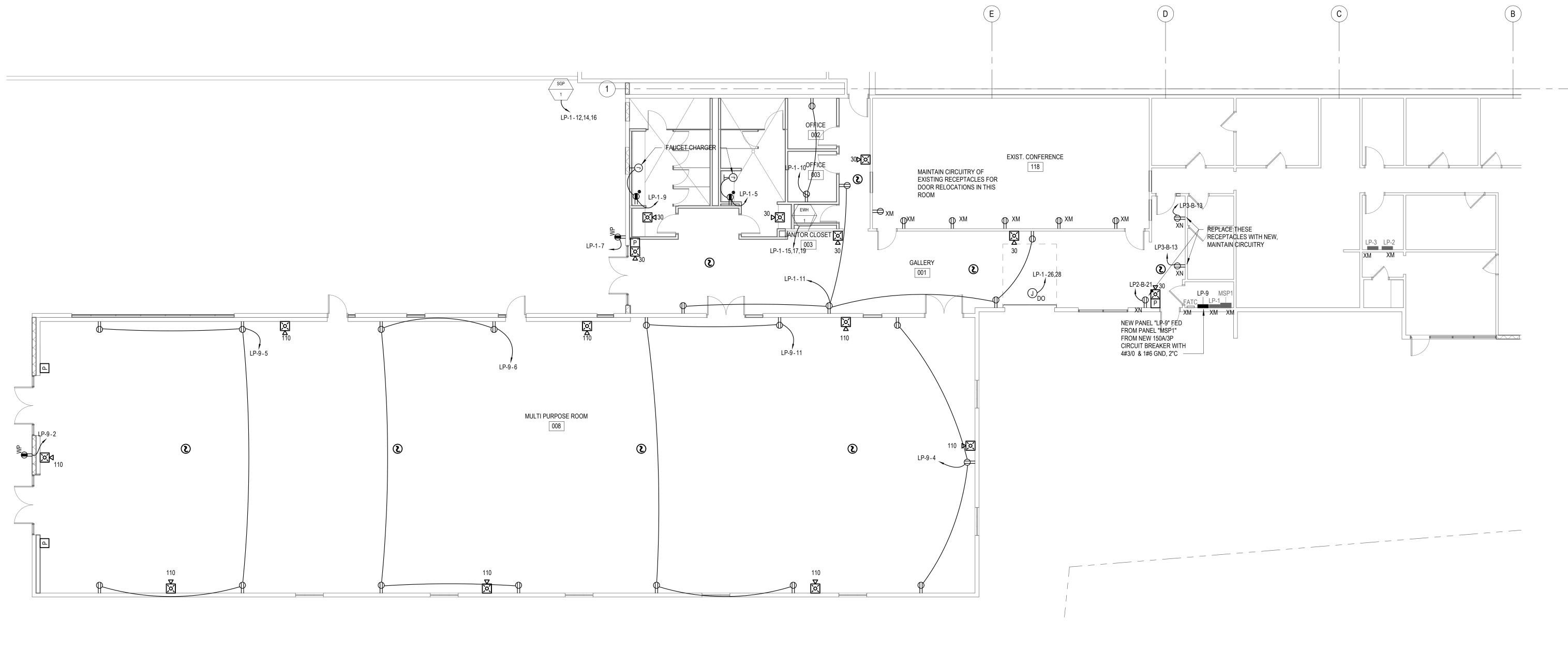
201901.1

Sheet Title:

Power & Fire Alarm Plan - First Floor

Sheet Number:

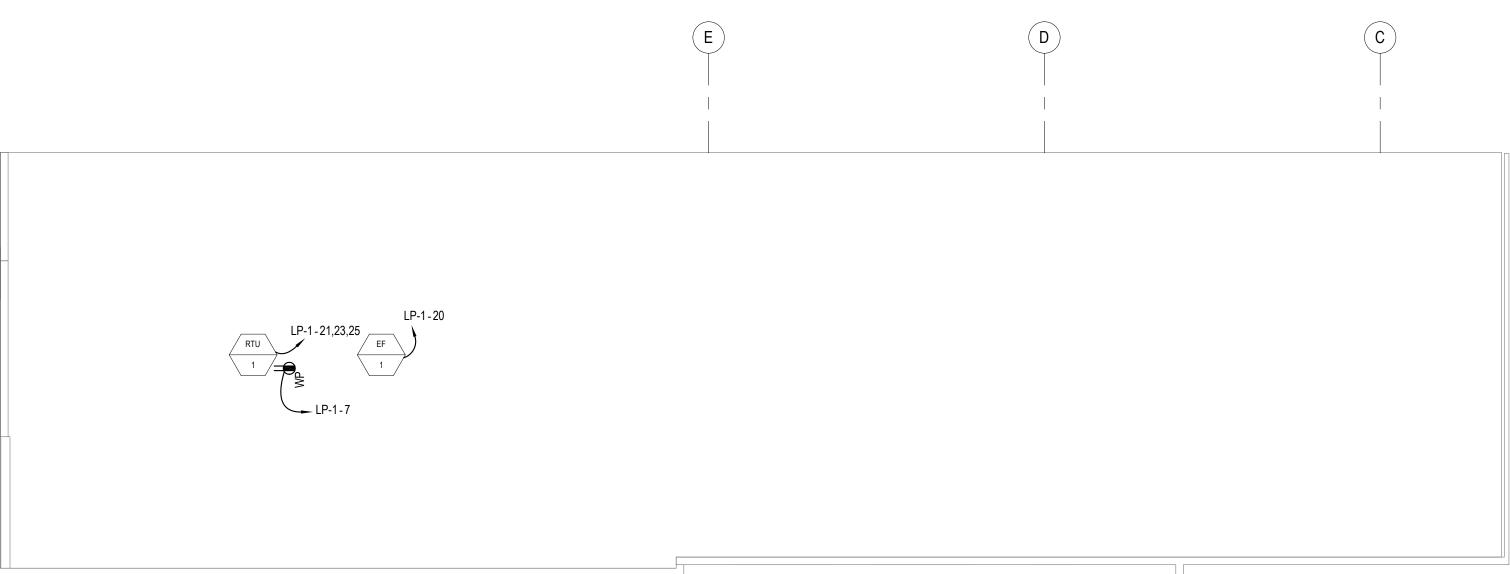
E201

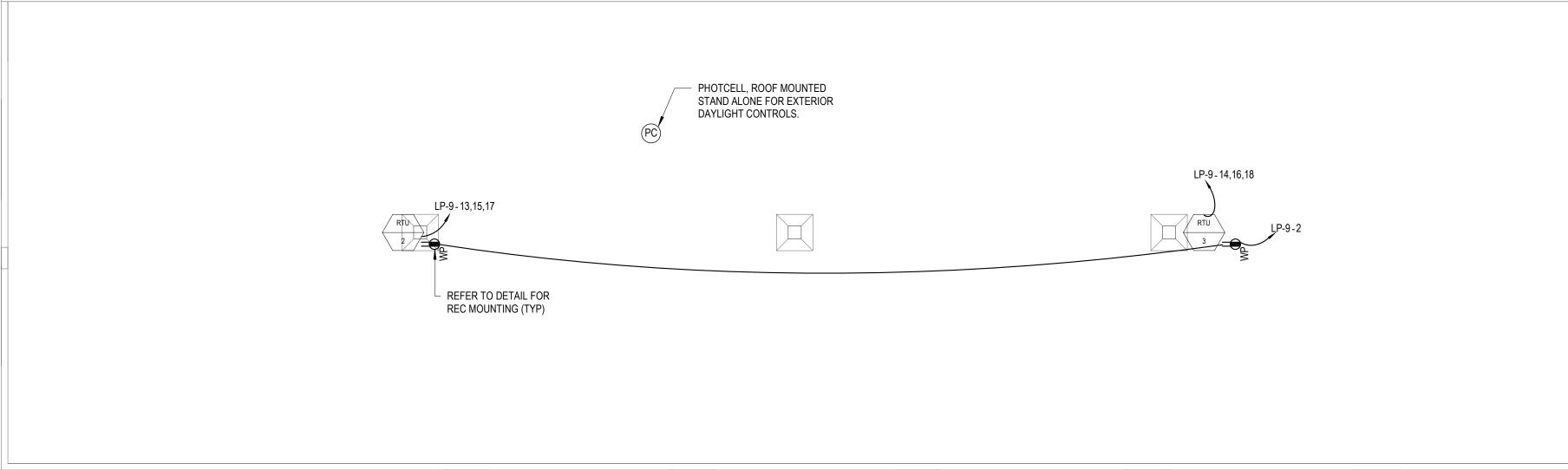


SPACE.

GENERAL NOTES:

- COORDINATE WITH HVAC FOR EXACT EQUIPMENT LOCATION PRIOR TO ROUGH-IN.
- PHOTOCELL TO BE INSTALLED ON STAND ALONE UNISTRUTS. MOUNT PHOTOCELL FACING NORTH, AWAY FROM HVAC EQUIPMENT TO AVOID SHADOWS. OUTSIDE LIGHTING SHALL BE WIRED VIA PHOTOCELL FOR DUSK TO DAWN OPERATIONS.
- COORDINATW WITH ROOFER FOR ALL ROOF PENETRATIONS FOR PROPER INSULATION.





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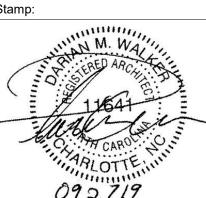
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Issue For:

CONSTRUCTION

Issue Date:

09.27.2019

NO.	REASON	DATE

PRINCIPAL IN CHARGE: D. WALKER

Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove, NC 27341

Project Number:

201901.1

Sheet Title:

Power PLan - Roof

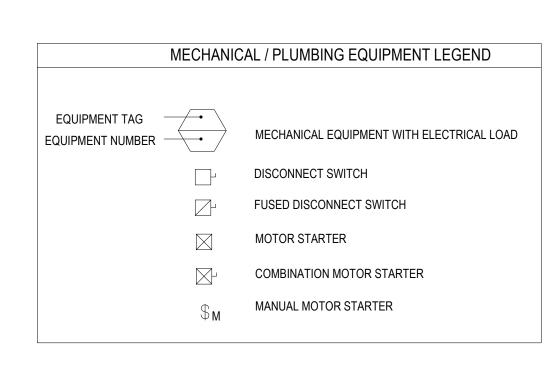
Sheet Number:

		LUMIN	AIRE SCH	EDULE			-
TYPE	DESCRIPTION	LAMP	WATTAGE	VOLTAGE	MANUFACTURER	MODEL	KEYED NOTES
C1	PERIMTER LED LIGHT. COORDINATE WITH ARCH DWG FOR SLOT DIMMENSIONS	LED	15.0 VA	120 V	LEDALITE	490-8-L-B-E-Q-S-N-(LENGTH PER PLAN)-7-D-E-S-S	
EBU	EMERGENCY LED BATTERY UNIT	LED	2.0 VA	120 V	PHILIPS CHLORIDE	VLTUR	
EBU-WP	EMERGENCY LED BATTERY UNIT	LED	2.0 VA	120 V	PHILIPS CHLORIDE	VLTUR/VLL2RGO - (WEATHER PROOF)	
EX	EXIT LIGHTING FIXTURE - SINGLE FACE	LED	5.0 VA	120 V	MULE LIGHTING	MD-B-1(OR 2)-R-BA-SD	
FL1	SMALL FLOODLIGHT WITH VISOR	LED	43.0 VA	120 V	GARDCO	FLDS-A02-740-RMF-SLF-UNV-VPA-BK/VSR-(F)	
L1	PENDANT/SURFACE MOUNTED LIGHT STRIP	LED	32.0 VA	120 V	DAY-BRITE	FSWEZ-4-40L-835-UNV	
P1	INDUSTRIAL HIGH BAY LED	LED	87.0 VA	120 V	DAY-BRITE	RBX-10L-835-UNV-WT-ARR165	
R1	4" ROUND DOWNLIGHT -3500K	LED	10.5 VA	120 V	VENTAGELTG	V4OFCR-11-35K-F4060-SGC	
R3	SHALLOW RECESSED LED LIGHTING FIXTURE	LED	23.0 VA	120 V	DAY-BRITE	2-T-G-20L-835-2-FS-02F-UNV-DIM	
T1	LED TRACK LIGHTING WITH CYLINDER HEADS	LED	16.3 VA	120 V	LIGHTOLIER	TH-10-9-30-NF-1-W / BUS 6008NWH (LENGTH PER PLANS, QUANTITY OF HEADS PER PLAN)	
W1	WALL MOUNTED LIGHTING FIXTURE	LED	17.0 VA	120 V	MULE LIGHTING	MERU-LD-ACEM-DB	

<u>LUMINAIRE NOTES:</u>

- THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL LIGHTING FIXTURES COMPLETE WITH MOUNTING ACCESSORIES TO MEET JOB REQUIREMENTS.
- 2. THE ELECTRICAL CONTRACTOR SHALL VERIFY FIXTURE MOUNTING AND LOCATION AGAINST PLANS, ELEVATIONS AND DETAIL DRAWINGS. EXACT LOCATION AND ELEVATION OF ALL FIXTURES SHALL BE CONFIRMED WITH THE ARCHITECT PRIOR TO ROUGHING IN.
- FIXTURE LETTERS SHOWN ONCE A CONTINUOUS ROW OF FIXTURES SHALL BE TYPICAL FOR THAT ROW UNLESS OTHERWISE NOTED.
- 4. ALL FIXTURES SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE, INDEPENDENT OF HUNG CEILINGS.
- 5. ALL LED DRIVERS SHALL BE 0-10V DIMMABLE, UON
- ALL FIXTURES THAT ARE MOUNTED IN GYPSUM BOARD CEILING SHALL HAVE ALL NECESSARY MOUNTING HARDWARE. COORDINATE WITH ARCHITECT FOR SLOPE DEGREE CEILING ADDAPTOR PRIOR TO ORDERING WHEN FIXTURE IS SHWON ON SLOPE CEILING.
- 7. AIRCRAFT CABLE PENDANT LENGTH PER ARCHITECT. REFER TO FLOOR PLANS FOR FIXTURE LENGTH AND CIRCUITRY REQUIREMENTS. POWER FEED SHALL BE STRAIGHT CABLE STYLE.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL 'GRID BOX' WHERE PENDANT FIXTURES ARE INDICATED TO BE CENTERED ON THE CEILING GRID. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATIONS OF ALL
- WHERE MULTIPLE UNDER COUNTER LIGHTING FIXTURES ARE INDICATED TO BE MOUNTED TOGETHER, FURNISH ONE FIXTURE WITH A ROCKER SWITCH FOR ENTIRE ROW.
- 10. EXIT SIGNS SHALL BE RED LETTER ON CLEAR BACKGROUND. IN THE CASE OF DOUBLE FACED EXIT SIGNS, COLORING SHALL BE RED LETTER ON MIRROR BACKGROUND. PROVIDE ARROWS AS INDICATED ON FLOOR PLANS.
- PROVIDE UNSWITCHED HOT LEG FOR BATTERY CHARGING AND MONITORING FOR OPERATION OF BATTERY BALLAST UPON LOSS OF NORMAL POWER FOR EMERGENCY EXIT SIGNS AND EMERGENCY BATTERY BOXES.
- 12. FURNISH AND INSTALL ALL NECESSARY FILLERS, EXTENSIONS AND END PLATES NECESSARY FOR A CONTINUOUS WALL-TO-WALL APPEARANCE, WHERE REQUIRED, PROVIDE VARIOUS LENGTHS TO PROVIDE AS MUCH OF A CONTINUOUS LIGHT APPEARANCE AS POSSIBLE.
- FINAL FIXTURE COLOR SHALL BE APPROVED BY ARCHITECT. COLOR OF FIXTURE FRAME TO MATCH ADJACENT METALLIC CEILING OR COLOR TO BE SELECTED BY ARCHITECT PRIOR TO
- 14. ELECTRICAL CONTRACTOR TO PROVIDE LENGTH AS INDICATED ON ARCHITECTURAL DRAWINGS. WHEN REMOTE TRANSFORMERS NEEDED, ELECTRICAL CONTRACTOR TO PROVIDE SIZE AND QUANTITY AS REQUIRED. ALL LIGHTING FIXTURES RUN IN CONTINUOUS ROWS SHALL BE TANDEM WIRED UNLESS NOTED OTHERWISE.
- ONE POWER PACK IS NEEDED PER CIRCUIT/ ZONE TO BE LOW VOLTAGE SENSORS. POWER PACK PLACEMENT ON DRAWINGS IS FOR COUNTING ONLY. FINAL PLACEMENT OF POWER PACK IS UP TO CONTRACTOR/ENGINEER. PLEASE RECHECK COUNTS TO VERIFY THE NUMBER OF POWER PACKS NEEDED TO MAKE A COMPLETE SYSTEM.
- SENSORS ON DRAWINGS WERE PLACED WITH CURRENT INFORMATION. ADDITIONAL SENSORS MAY BE REQUIRED TO PROVIDE COMPLETE COVERAGE DEPENDING ON CHANGES, FINAL PARTITION HEIGHT/ PLACEMENT, FURNITURE PLACEMENT, EQUIPMENT HEIGHT/ PLACEMENT AND SHELVING HEIGHT/ PLACEMENT.
- 17. SENSOR MASKING KITS MAY BE REQUIRED TO LIMIT COVERAGE DEPENDING ON SENSOR

								MECHAN	IICAL EQU	IIPMENT S	SCHEDULE						
EQUIPMENT DESIGNATION	EQUIPMENT NUMBER	EQUIPMENT DESCRIPTION	VOLTAGE	PHASE	HP	KVA	F.L.A.	MOCP	MCA	PANEL	CIRCUIT NUMBER	BREAKER	BRANCH WIRING	DISCONNECT SWITCH	DEVICE RATING	PLAN REF.	KEYED NOTES
EF	1	EXHAUST FAN	120 V	1	1/10	0.42	3.5	6	4.375	LP-1	20	20	2#12, 1#12 GND, 3/4" C	Υ	20	E202	9
EWH	1	ELECTRIC WATER HEATER	208 V	3		5.181696	14.4	25	18	LP-1	15,17,19	30	3#10, 1#10 GND, 3/4" C		30		
RTU	1	ROOF TOP UNIT	208 V	3		10.651264	29.6	50	37	LP-1	21,23,25	50	3#6, 1#10GND, 3/4"C	Y	50	E202	9
RTU	2	ROOF TOP UNIT	208 V	3		8.924032	24.8	45	31	LP-9	13,15,17	45	3#8, 1#10GND, 3/4"C	Y	50	E202	9
RTU	3	ROOF TOP UNIT	208 V	3		8.924032	24.8	45	31	LP-9	14,16,18	45	3#8, 1#10GND, 3/4"C	Y	50	E202	9
SGP	1	SEWAGE GRINDER PUMP	208 V	3	2	3.886272	10.8	19	13.5	LP-1	12,14,16	30	3#10, 1#10 GND, 3/4" C	Y	30	E201	3,5



GENERAL NOTES:

- 1. ALL MECHANICAL/PLUMBING EQUIPMENT VFD'S, MOTOR STARTERS, AND DISCONNECT SWITCHES SHALL BE FURNISHED AND INSTALLED BY THE RESPECTIVE TRADE, AND WIRED BY THE ELECTRICAL CONTRACTOR, UNLESS NOTED OTHERWISE.
- 2. SINGLE POINT ELECTRICAL CONNECTIONS INDICATED IN THE MECHANICAL/PLUMBING EQUIPMENT SCHEDULE AND KEYED NOTES REFER TO THE ELECTRICAL CONTRACTOR BEING RESPONSIBLE FOR MAKING THE SINGLE POINT OF ELECTRICAL CONNECTION, AND ALL REMAINING INTERNAL EQUIPMENT DISCONNECTS, STARTERS, VFD'S, AND ASSOCIATED WIRING DOWN STREAM OF THE SINGLE POINT ELECTRICAL CONNECTION SHALL BE FURNISHED AND INSTALLED BY THE EQUIPMENT MANUFACTURER OR HVAC CONTRACTOR. ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL HVAC EQUIPMENT MANUFACTURER SINGLE POINT ELECTRICAL CONNECTIONS PRIOR TO ROUGH-IN.

- 1 STARTER OR VFD INTEGRAL TO EQUIPMENT FURNISHED BY THIS EQUIPMENT MANUFACTURER.
- 2 STARTER OR VFD FURNISHED & INSTALLED BY HVAC CONTRACTOR. WIRED BY ELECTRICAL CONTRACTOR.
- 3 STARTER OR VFD FURNISHED & INSTALLED BY PLUMBING CONTRACTOR. WIRED BY ELECTRICAL CONTRACTOR.
- 4 ALL DEVICES & WIRING METHODS AT THE MOTOR SHALL BE NEMA 3R.
- DISCONNECT SWITCH INTEGRAL TO PLUMBING EQUIPMENT. WIRED BY ELECTRICAL CONTRACTOR.
- 6 TWO SPEED STARTER FURNISHED, INSTALLED & WIRED BY ELECTRICAL CONTRACTOR.
- INDOOR AC UNIT ARE FED FROM OUTSIDE ACCU UNITS. EC SHALL FURNISH AND INSTALL 1" CONDUIT FOR POWER AND WIRE AC UNIT FROM ACCU UNIT. EC SHALL FURNISH AND INSTALL 1" CONDUIT FOR CONTROLS AND WIRE AC UNIT TO ACCU UNIT. EC SHALL COMPLY WITH MANUFACTURE RECOMMENDATIONS BEFORE INSTALLATION. COORDINATE ALL WORK WITH HVAC CONTRACTOR PRIOR TO ROUGH-IN.
- B DISCONNECT SWITCH FURNISHED, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR. E.C. SHALL PROVIDE WIRING AND CONDUITS FROM DISCONNECTS TO VFD/CONTROLLER/EQUIPMENT.
- 9 STARTER, VFD FURNISHED OR DISCONNECT FURNISHED & INSTALLED BY ELECTRICAL CONTRACTOR. WIRED BY ELECTRICAL CONTRACTOR.

nel: LP-9	IEDV I		DI DO	5 11/		400/0001	A./				D # 00000 AIO		
		.OWER	BLDG		•		/vye				· ·		
										5.			
nting: SURFACE				Wires:		4				Mains	Rating: 150 A		
ly From: MSP1				Neutral I	Rating:	100.000%	6						
Circuit Description	Trip	Poles		4		В		С	Poles	Trip	Circuit Description	СК	
EXIT Signs & EBU	20 A	1	0 kVA	0.5 kVA					1	20 A	Outside Rec	2	
		1			0.1 kVA	0.5 kV			1	20 A		4	
		1					0.7 kVA	0.7 kVA	1	20 A		6	
		1	1.6 kVA	0 kVA					1			8	
		1			1.6 kVA	0 kVA			1			10	
RM 105B - Rec	20 A	1					0.7 kVA	0 kVA	1	20 A	Spare	12	
			3 kVA	3 kVA								14	
RTU-2	45 A	3			3 kVA	3 kVA			3	45 A	RTU-3	16	
							3 kVA	3 kVA				18	
		1	0 kVA	0 kVA					1			20	
		1			0 kVA	0 kVA			1			22	
		1					0 kVA	0 kVA	1			24	
		1	0 kVA	0 kVA					1			26	
		1			0 kVA	0 kVA			1			28	
		1	0.1374	01114			0 kVA	0 kVA	1			30	
		1	0 kVA	0 kVA	0.11/4	011/4			1			32	
		1			0 kVA	0 kVA		011/4	1			34	
•		1	011/4	011/4			U KVA	U KVA	1			36	
		1	U KVA	U KVA	0.1374	017.4			1			38	
		1			UKVA	UKVA		01377	1			40	
Spare		1 1	0.4	1 \ / A	0.4	11/4			1	20 A	Spare	42	
	I otal	Load:	8.1	KVA	8.1	KVA	8.1	KVA					
Classification			Connecte	d Load	Demand	Factor	Estimated D	emand			Danal Tatala		
<u> </u>			17848.	1 VA	100.00	00%	17848.1	VA			Panel Totals		
	ct: LUCK'S CANN ion: ELECTRICAL tting: SURFACE ly From: MSP1 Circuit Description EXIT Signs & EBU Lights Outside RM 105B - Rec Lights RM 105b Lights RM 105b RM 105B - Rec Spare	ct: LUCK'S CANNERY - L cion: ELECTRICAL ROOM sting: SURFACE ly From: MSP1 Circuit Description Trip EXIT Signs & EBU 20 A Lights Outside 20 A RM 105B - Rec 20 A Lights RM 105b 20 A RM 105B - Rec 20 A RTU-2 45 A Spare 20 A Sp	ct: LUCK'S CANNERY - LOWER cion: ELECTRICAL ROOM sting: SURFACE ly From: MSP1 Circuit Description Trip Poles EXIT Signs & EBU 20 A 1 Lights Outside 20 A 1 RM 105B - Rec 20 A 1 Lights RM 105b 20 A 1 RM 105B - Rec 20 A 1 RTU-2 45 A 3 Spare 20 A 1 Spare 20 A 1 <t< td=""><td> Circuit Circ</td><td> Ct: LUCK'S CANNERY - LOWER BLDG Panel Voltano: ELECTRICAL ROOM Phases: Wires: Neutral I </td><td>ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: ction: ELECTRICAL ROOM Phases: ting: SURFACE Wires: ly From: MSP1 A EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA Lights Outside 20 A 1 0 kVA 0.1 kVA RM 105B - Rec 20 A 1 1.6 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA RM 105B - Rec 20 A 1 3 kVA 3 kVA RTU-2 45 A 3 3 kVA 3 kVA Spare 20 A 1 0 kVA 0 kVA Spare</td><td>ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 \ Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.0009 Circuit Description Trip Poles A B EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA Lights Outside 20 A 1 0 kVA 0.5 kVA RM 105B - Rec 20 A 1 0 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA RTU-2 45 A 3 3 kVA 3 kVA Spare 20 A 1 0 kVA 0 kVA</td><td>ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye ciion: ELECTRICAL ROOM Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.000% Circuit Description Trip Poles A B C EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA L Lights Outside 20 A 1 0 kVA 0.5 kVA 0.7 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA RTU-2 45 A 3 3 kVA 3 kVA 3 kVA Spare 20 A 1 0 kVA 0 kVA Spare 20 A 1 0 kVA 0 kVA Spare 20 A 1 0 kVA 0 kVA Spare<</td><td>ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye tion: ELECTRICAL ROOM Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.000% Circuit Description Trip Poles A B C EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA 0.5 kVA Lights Outside 20 A 1 0 kVA 0.5 kVA 0.7 kVA 0.7 kVA RM 105B - Rec 20 A 1 1 kVA 0 kVA 0 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0 kVA</td><td>ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye tion: ELECTRICAL ROOM Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.000% Circuit Description Trip Poles EXIT Signs & EBU 20 A 1 O kVA 0.1 kVA 0.5 kVA 1 EXIT Signs & EBU 20 A 1 O kVA 0.5 kVA 1 EXIT Signs & EBU 20 A 1 O kVA 0.5 kVA 1 EXIT Signs & EBU 20 A 1 O kVA 0.5 kVA 0.7 kVA 0.7 kVA 0.7 kVA 1 EXIT Signs & EBU 20 A 1 0.6 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0.7 kVA <th cols<="" td=""><td>ct: LUCKS CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye A.I.C. dion: ELECTRICAL ROOM Phases: 3 Mains sting: SURFACE Wires: 4 Mains EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA 1 20 A Lights Outside 20 A 1 0 kVA 0.5 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 0 kVA 0 kVA 0 kVA 1 20 A RTU-2 45 A 3 3 kVA 3 kVA 3 kVA 3 kVA 3 kVA <tr< td=""><td> Circuit Description Trip Poles A Neutral Rating: 100.000% </td></tr<></td></th></td></t<>	Circuit Circ	Ct: LUCK'S CANNERY - LOWER BLDG Panel Voltano: ELECTRICAL ROOM Phases: Wires: Neutral I	ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: ction: ELECTRICAL ROOM Phases: ting: SURFACE Wires: ly From: MSP1 A EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA Lights Outside 20 A 1 0 kVA 0.1 kVA RM 105B - Rec 20 A 1 1.6 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA RM 105B - Rec 20 A 1 3 kVA 3 kVA RTU-2 45 A 3 3 kVA 3 kVA Spare 20 A 1 0 kVA 0 kVA Spare	ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 \ Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.0009 Circuit Description Trip Poles A B EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA Lights Outside 20 A 1 0 kVA 0.5 kVA RM 105B - Rec 20 A 1 0 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA RTU-2 45 A 3 3 kVA 3 kVA Spare 20 A 1 0 kVA 0 kVA	ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye ciion: ELECTRICAL ROOM Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.000% Circuit Description Trip Poles A B C EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA L Lights Outside 20 A 1 0 kVA 0.5 kVA 0.7 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA RTU-2 45 A 3 3 kVA 3 kVA 3 kVA Spare 20 A 1 0 kVA 0 kVA Spare 20 A 1 0 kVA 0 kVA Spare 20 A 1 0 kVA 0 kVA Spare<	ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye tion: ELECTRICAL ROOM Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.000% Circuit Description Trip Poles A B C EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA 0.5 kVA Lights Outside 20 A 1 0 kVA 0.5 kVA 0.7 kVA 0.7 kVA RM 105B - Rec 20 A 1 1 kVA 0 kVA 0 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0 kVA	ct: LUCK'S CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye tion: ELECTRICAL ROOM Phases: 3 ting: SURFACE Wires: 4 ly From: MSP1 Neutral Rating: 100.000% Circuit Description Trip Poles EXIT Signs & EBU 20 A 1 O kVA 0.1 kVA 0.5 kVA 1 EXIT Signs & EBU 20 A 1 O kVA 0.5 kVA 1 EXIT Signs & EBU 20 A 1 O kVA 0.5 kVA 1 EXIT Signs & EBU 20 A 1 O kVA 0.5 kVA 0.7 kVA 0.7 kVA 0.7 kVA 1 EXIT Signs & EBU 20 A 1 0.6 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0.7 kVA 0.7 kVA <th cols<="" td=""><td>ct: LUCKS CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye A.I.C. dion: ELECTRICAL ROOM Phases: 3 Mains sting: SURFACE Wires: 4 Mains EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA 1 20 A Lights Outside 20 A 1 0 kVA 0.5 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 0 kVA 0 kVA 0 kVA 1 20 A RTU-2 45 A 3 3 kVA 3 kVA 3 kVA 3 kVA 3 kVA <tr< td=""><td> Circuit Description Trip Poles A Neutral Rating: 100.000% </td></tr<></td></th>	<td>ct: LUCKS CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye A.I.C. dion: ELECTRICAL ROOM Phases: 3 Mains sting: SURFACE Wires: 4 Mains EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA 1 20 A Lights Outside 20 A 1 0 kVA 0.5 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 0 kVA 0 kVA 0 kVA 1 20 A RTU-2 45 A 3 3 kVA 3 kVA 3 kVA 3 kVA 3 kVA <tr< td=""><td> Circuit Description Trip Poles A Neutral Rating: 100.000% </td></tr<></td>	ct: LUCKS CANNERY - LOWER BLDG Panel Voltage: 120/208 Wye A.I.C. dion: ELECTRICAL ROOM Phases: 3 Mains sting: SURFACE Wires: 4 Mains EXIT Signs & EBU 20 A 1 0 kVA 0.5 kVA 1 20 A Lights Outside 20 A 1 0 kVA 0.5 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A Lights RM 105b 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 1.6 kVA 0 kVA 0 kVA 1 20 A RM 105B - Rec 20 A 1 0 kVA 0 kVA 0 kVA 1 20 A RTU-2 45 A 3 3 kVA 3 kVA 3 kVA 3 kVA 3 kVA <tr< td=""><td> Circuit Description Trip Poles A Neutral Rating: 100.000% </td></tr<>	Circuit Description Trip Poles A Neutral Rating: 100.000%

125.000%

100.000%

4045.9 VA

3240.0 VA

Total Conn. Load:

Total Est. Demand:

Spare Load: Total Demand Load: +25% C/B Derating:

100 A

3236.7 VA

3240.0 VA

Notes: Receptacle Load = 1st 10KVA @ 100% + Remainder @ 50%

Proje			.OWER	BLDG	Panel Vo	ltage:	120/208 V	/ye				Rating:	22000 AIC MCB	
	ocation: ELECTRICAL ROOM				Phases:		3							
	nting: SURFACE				Wires:		4				Mains	Rating:	100 A	
Supp	ly From: MSP1				Neutral F	Rating:	100.000%					1		
СКТ	Circuit Description	Trip	Poles	,	4		В			Poles	Trip	Circuit I	Description	СКТ
1	Lighting	20 A	1	0 kVA	0 kVA					1	20 A	Electrical RM		2
3	Lighting	20 A	1			0.7 kVA	0 kVA			1	20 A	Hall E-Light,	Door Light *	4
5	Men RR	20 A	1					0.2 kVA	0 kVA	1	20 A	Offices E/Ex	t Lights *	6
7	Outside Rec	20 A	1	0.4 kVA	0 kVA					1	20 A	Spare in Atti	J-Box *	8
9	Women RR	20 A	1			0.2 kVA	0.4 kVA			1	20 A	Office 002, 0	03 - Rec	10
11	Receptacles Gallery 001	20 A	1					0.9 kVA	1.3 kVA					12
13	Lights 003, 004, 005, 006,	20 A	1	0.5 kVA	1.3 kVA					3	30 A	SGP-1		14
15						1.7 kVA	1.3 kVA							16
17	EWH-1	30 A	3					1.7 kVA	0 kVA	1	20 A	Lighting 001		18
19				1.7 kVA	0.4 kVA					1	20 A	EF-1		20
21						3.6 kVA	0 kVA			1	20 A	Spare		22
23	RTU-1	50 A	3					3.6 kVA	0 kVA	1	20 A	Spare		24
25				3.6 kVA	0.2 kVA					2	20. 4	Door Operat	~=	26
27	Spare	20 A	1			0 kVA	0.2 kVA] ~	20 A	Door Operate	OI .	28
29	Spare	20 A	1					0 kVA	0 kVA	1	20 A	Fire Alarm P	anel *	30
		Total	Load:	8.0	kVA	8.0	kVA	7.7	kVA					
_oad	Classification			Connecte	d Load	Demand	Factor I	Estimated D	emand			Daniel Ta	4-1-	
IVAC				14957.	5 VA	100.00	00%	14957.5	VA			Panel To	tais	
ighti				643.7		125.00		804.6 V		Tota	al Con	n. Load:	23.7 kVA	
	Power			900.0	VA	100.00	00%	900.0 V	Ά	Total	Est. D	emand:	22.8 kVA	
Receptacle			1980.0) VA	100.00	00%	1980.0 \	/A			re Load:	13 A		
Pluml				5181.7	7 VA	80.00	0%	4145.4 \	/A	Total I		d Load:	76 A	
											C/B D	erating:	95 A	

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Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341

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CONSTRUCTION Issue Date:

09.27.2019

Issue For:

REASON DATE

PRINCIPAL IN CHARGE: D WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

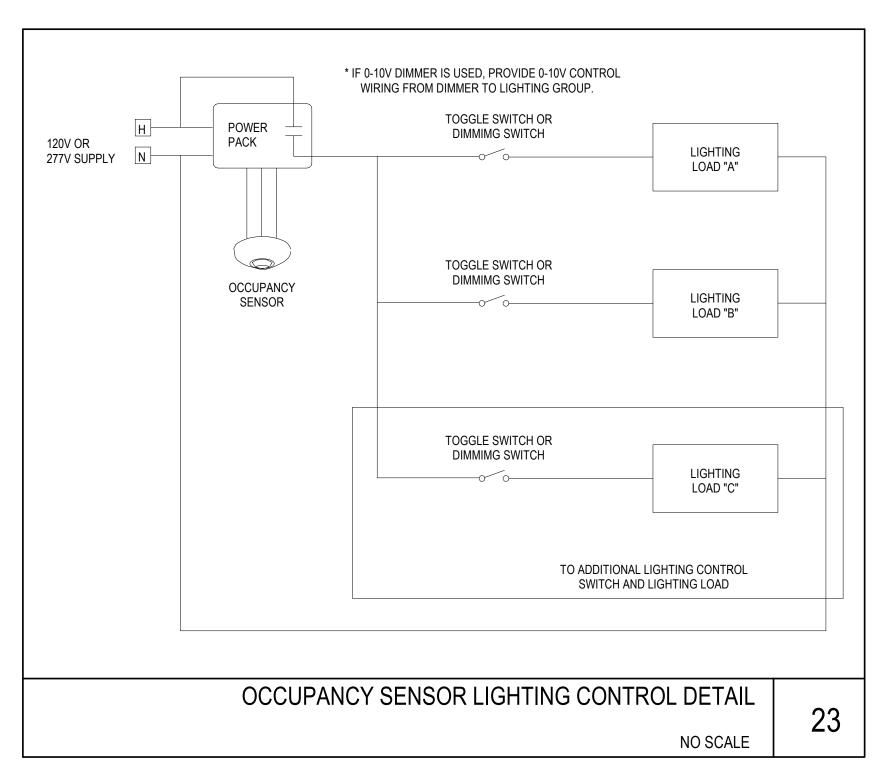
798 NC Hwy. 705 Seagrove, NC 27341

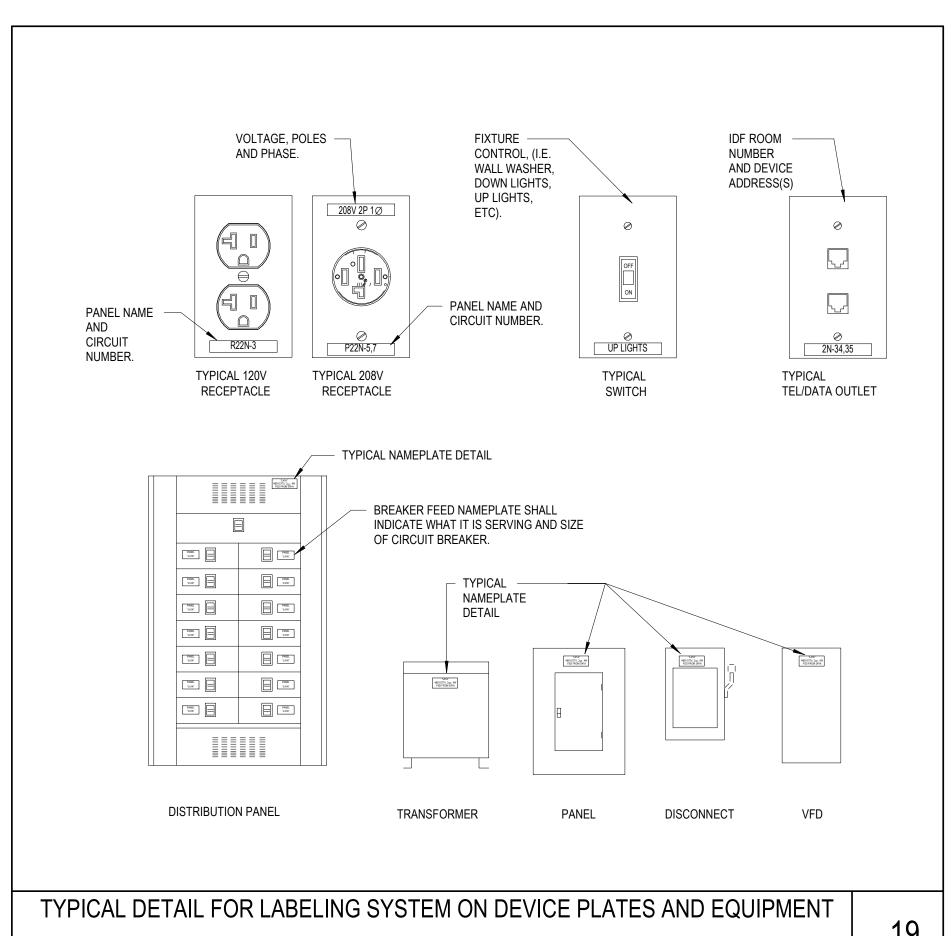
Project Number:

201901.1

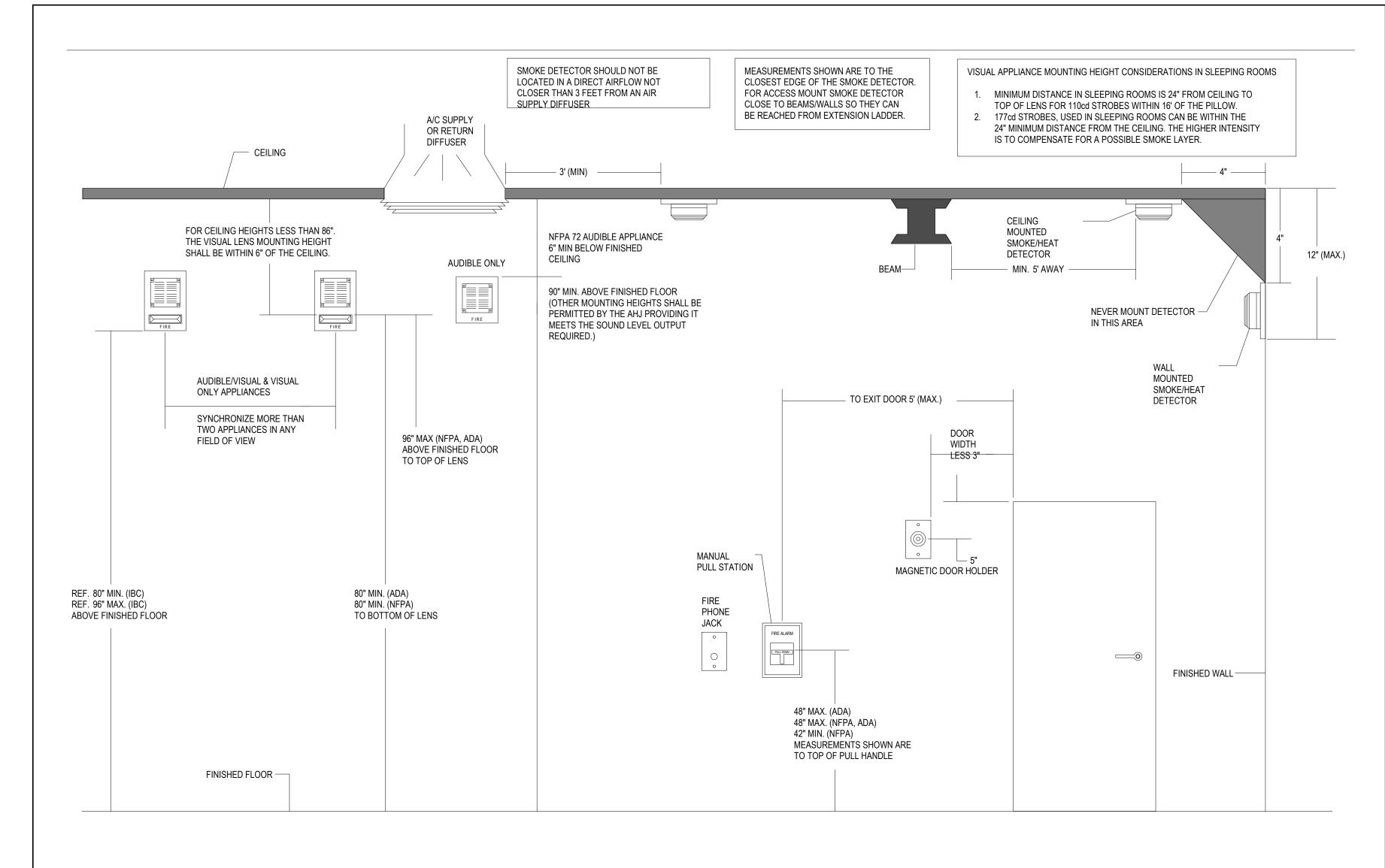
Sheet Title: Schedules

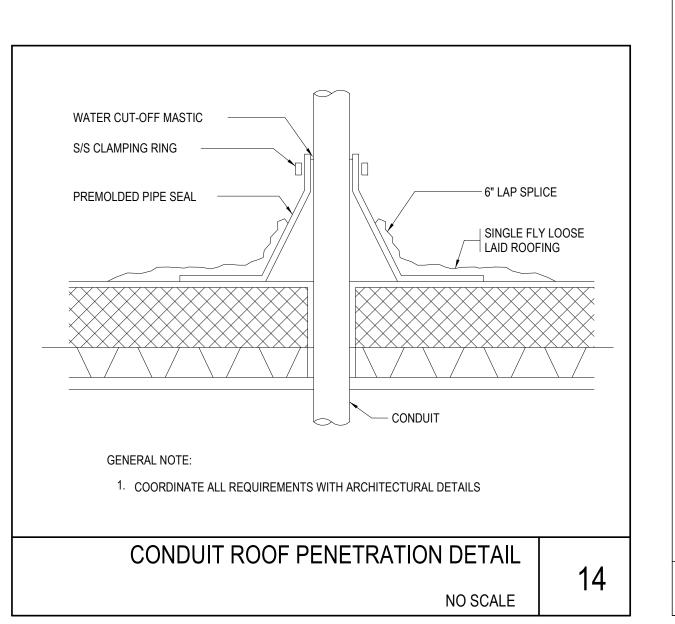
Sheet Number:

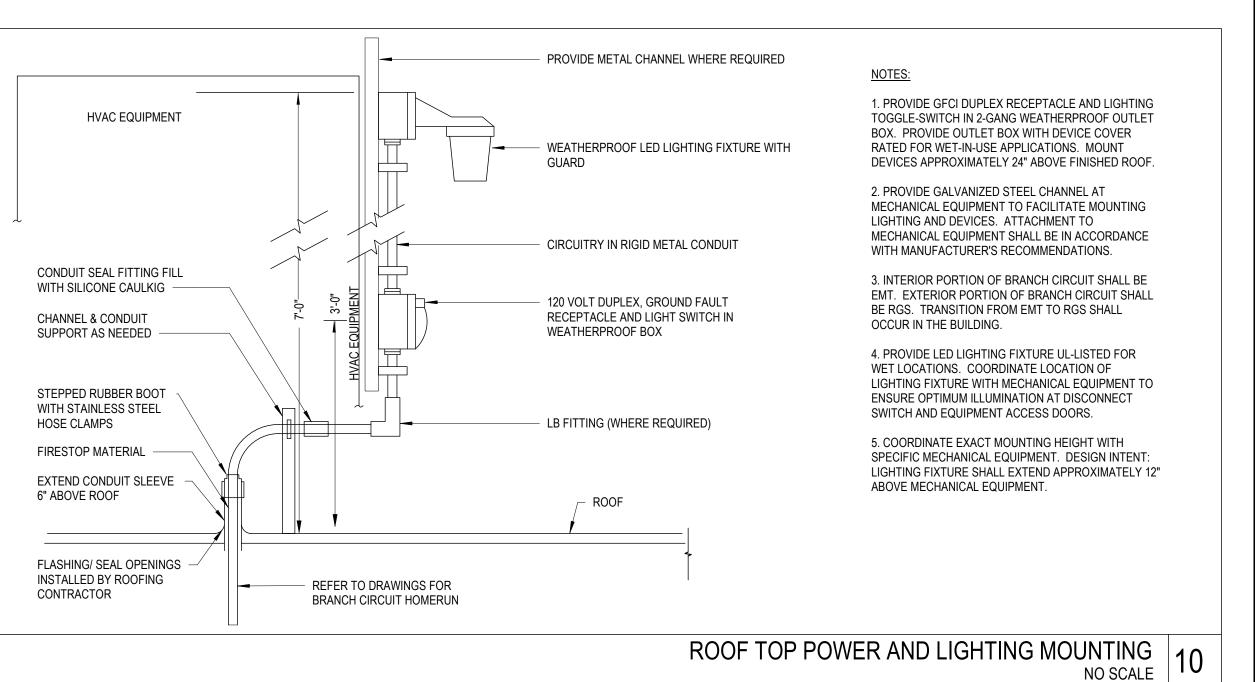




NO SCALE







FIRE ALARM DEVICE MOUNTING HEIGHT REFERENCE (PER NFPA-72)

SIGN AND

Architect:

www.bodhilandanddesign.com BODHI Land and Design, PLLC

918 Minerva Dale Drive

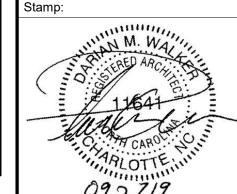
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NO SCALE



Issue For: CONSTRUCTION

Issue Date:

09.27.2019

REASON DATE

PRINCIPAL IN CHARGE: D. WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

798 NC Hwy. 705 Seagrove, NC 27341

Project Number:

201901.1

Sheet Title:

Details

Sheet Number:

ASHRAE 62.1		itions Using Appen	dix D Equations				
USER INPUT							
			lored fields are constants provider b				
ink fields are	e auto-calculate		election. Grey values are auto-calcul				v.
SHRAE Equa	itian		er return air and outside air, Consta	nt Valume Suppl	y Air, Constant Volum	e Outside Air 🔻	
расе Туре		Conference / m	eeting				
Z		1.0 - Cetting sup	ply of high velocity warm air 15% be	low space Temp	and celling return	_	Į.
rea (Sq.Ft.)		6616	Number of People	332			
upply Air (C	FM.)	4000	Emission Rate/ Person (µg/min)	260			
		ion of Space Conta ition Rate Procedu	The state of the s			of Space Contamin Procedure (IAQP) (
RP Outside erson	Air Rate per	6.20	CFM	IAQP Outsid Person	e Air Rate per	2.40	CFM
pace Airflov	vs	CFM	L/Min	Space Airflo	ws	CFM	L/min
upply Air		4,000	113,280	Supply Air		4,000	113,280
utside Air		2,058.40	58,293.89	Outside Air		796.80	22,565.38
eturn Air		1,941.60	54,986.11	Return Air		3,203.20	90,714.62
	C bz = 1	I + Ez Voz Co Ez (Voz + R)	(1 - Ef) Vr Ef)		C bz = N	Ez Voz Co(1	- Ef)
ariable D	escription	Value	Units	Variable	Description	Value	Units
G	ontaminant ieneration ate	86,320	μg/min	N	Contaminant Generation Rate	86,320	µg/min
z D	one Air istribution ifectiveness	1.0		Ez	Zone Air Distribution Effectiveness	1.0	
oz	utdoor Air low Rate	58,293.89	L/min	Vez	Outdoor Air Flow Rate	22,565.38	L/min
17	ilter fficiency	0		Ef	Filter Efficiency	0.68	
o 0	ontaminant oncentration, A	1.2	µg/m³	Co	Contaminant Concentration, OA	1.2	µg/m³
FI	ecirculation low Variable Vr/(Vo+Vr)	0.49		R	Recirculation Flow Variable -Vr/(Vo-Vr)	0.80	
	eturn Air low Rate	54,986,11	L/min	Vr.	Return Air Flow Rate	90,714,62	L/min
oz G	ontaminant oncentration, one	2.131	ppm	Cbz	Contaminant Concentration, zone	1.725	ppm
	the MOD save	il or less than Cbz f		Yes	1		

GENERAL NOTES

- 1. IN PREPARATION OF THESE PLANS, THE ENGINEER HAS USED CERTAIN ABBREVIATIONS, CONVENTIONS, AND SYMBOLS, THE MEANING OF WHICH ARE ILLUSTRATED AND EXPLAINED WITHIN THE LEGEND.
- PLANS ARE DIAGRAMMATIC ONLY. THEY ARE INTENDED TO INDICATE CAPACITY, SIZE, LOCATION, DIRECTION, AND GENERAL ARRANGEMENT, BUT NOT EXACT DETAILS OF CONSTRUCTION. THE FACT THAT ONLY CERTAIN FEATURES OF THE INSTALLATION ARE INDICATED MUST NOT BE TAKEN TO MEAN THAT OTHER FEATURES WILL NOT BE REQUIRED.
- COORDINATE WITH THE OTHER TRADES TO INSURE THAT EACH TRADE SHALL HAVE SUFFICIENT SPACE TO INSTALL THEIR EQUIPMENT (DUCTWORK, PIPING, ELECTRICAL WORK, ETC.).
- 4. IN GENERAL, ALL PIPING AND DUCTWORK SHALL BE RUN IN THE CEILING SPACE UNLESS NOTED OR INDICATED OTHERWISE.
- 5. VERIFY ALL DIMENSIONS FROM ARCHITECTURAL PLANS AND FIELD DIMENSIONS.
- 6. DUCT DIMENSIONS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
- 7. ALL RISES AND DROPS IN PIPING AND DUCTWORK MAY NOT NECESSARILY HAVE BEEN SHOWN. CONTRACTOR TO VERIFY.
- 8. PROVIDE ALL STRUCTURAL MEMBERS, SUPPORT BRACKETS, FLASHING, HARDWARE, ETC. REQUIRED TO INSTALL A COMPLETE SYSTEM.
- DIFFUSERS AND REGISTER LOCATIONS SHALL BE COORDINATED WITH LIGHT FIXTURE AND OTHER CEILING DEVICE LOCATIONS. FIELD VERIFY.
- 10. MOUNT ALL THERMOSTATS AND/OR SENSORS 4 FEET ABOVE FINISHED FLOOR, UNLESS OTHERWISE NOTED.

MECHANICAL SYSTEMS, SERVICE AND EQUIPMENT

2018 METHOD OF COMPLIANCE:	
THERMAL ZONE WINTER DRY BULB	21.6
SUMMER DRY BULB	94.2
INTERIOR DESIGN CONDITIONS	
WINTER DRY BULB	70 F
SUMMER DRY BULB	75 F
RELATIVE HUMIDITY	50 %
BUILDING HEATING LOAD	EXISTING
BUILDING COOLING LOAD	EXISTING
MECHANICAL SPACE CONDITIONING SYSTEM UNITARY	
DESCRIPTION OF UNIT	SEE EQUIPMENT SCHEDULE
HEATING EFFICIENCY	SEE EQUIPMENT SCHEDULE
COOLING EFFICIENCY	SEE EQUIPMENT SCHEDULE
SIZE CATEGORY OF UNIT	SEE EQUIPMENT SCHEDULE
BOILER	FACON
SIZE CATEGORY. IF OVER SIZED, STATE R	EASON N/A
CHILLER	
SIZE CATEGORY. IF OVER SIZED, STATE R	N/A
	13// \

SEE EQUIPMENT SCHEDULES

CEILING SUPPLY DIFFUSER CEILING RETURN GRILLE **CEILING EXHAUST GRILLE** CEILING EXHAUST FAN IN-LINE EXHAUST FAN __WALL DYNAMIC FIRE DAMPER STYLE 'B' FIRE DAMPER DUCT FD STYLE 'CR' FIRE DAMPER FOR ROUND DUCTS DYNAMIC SMOKE DAMPER DUCT COMBINATION DYNAMIC FIRE/SMOKE DAMPER DUCT DUCT SMOKE DETECTOR RETURN/EXHAUST DUCT TURNING DOWN RETURN/EXHAUST DUCT TURNING UP SUPPLY DUCT TURNING DOWN SUPPLY DUCT TURNING UP EXISTING DUCT 1 TRANSFER OPENING IN WALL ABOVE CEILING UC ———— 3/4" UNDERCUT BELOW DOOR RD RADIANT DAMPER (RD) CONNECT TO EXISTING DISCONNECT FROM EXISTING SIDE WALL SUPPLY GRILLE **─** SIDE WALL RETURN GRILLE <u>A-12x12</u> 200 CFM AIR DEVICE TYPE AND SIZE AIR FLOW CFM T THERMOSTAT **₹**—R— REFRIGERANT PIPING (LINE SET) **—**c—~ CONDENSATE DRAIN PIPING **}** PIPE TURNING UP \leftarrow PIPE TURNING DOWN M 2 POSITION MOTORIZED DAMPER MANUAL VOLUME DAMPER

MECHANICAL SYMBOLS LEGEND

Α	AMPERES
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
BHP	BRAKE HORSEPOWER
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
CLG	CEILING
CD	CONDENSATE DRAIN
CU	CONDENSING UNIT
DB	DRY BULB
DN	DOWN
DX	DIRECT EXPANSION
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EL	ELEVATION
EXH	EXHAUST
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
FB	FILTER BOX
FD	FIRE DAMPER
FLEX	FLEXIBLE
FLR OR FL	FLOOR
FPI	FINS PER INCH
FPM	FEET PER MINUTE
GALV	GALVANIZED
HP	HORSEPOWER
KW	KILOWATT
LBS	POUNDS
MAX	MAXIMUM
MBH	THOUSAND BTU/H
MIN	MINIMUM
OA	OUTSIDE AIR
RA	RETURN AIR AND/OR ROOM AIR
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
TEMP	TEMPERATURE
TYP	TYPICAL
UC	UNDERCUT
VD	MANUAL VOLUME DAMPER
V	VOLTS
WB	WET BULB
Ø	ROUND
OBD	OPPOSED BLADE DAMPER
	SQUARE FEET
SQFT TAD	TRANSFER AIR DUCT

GENERAL SYMBOLS								
	— PLAN OR DETAIL NO — SHEET NUMBER							
1	KEYED NOTE TO PLAN							
1	REVISION NUMBER							
N N	NORTH ARROW							

HVAC CONTROLS SEQUENCE:

LIST EQUPMENT EFFIENCIES

- 1. THE ROOFTOP UNIT SUPPLY FAN SHALL OPERATE DURING OCCUPIED HOURS. THE RESPECTIVE COMPRESSOR/GAS FURNACE SHALL CYCLE ON/OFF BY A PROGRAMMABLE THERMOSTAT TO MAINTAIN A ROOM TEMPERATURE SET POINT (COOLING) 75°F, (HEATING) 70°F AND ROOM HUMIDITY SET POINT (55%).
- 2. DURING UNOCCUPIED TIMES, THE ROOFTOP UNIT SUPPLY FAN MAY BE OVERRIDDEN THROUGH THE PROGRAMMABLE THERMOSTAT.
- 3. THE ECONOMIZER AIR DAMPER SHALL BE OPEN TO MINIMUM OA POSITION WHEN FAN IS ENERGIZED. WHEN OUTDOOR AIR TEMPERATURE AND ENTHALPY CONDITIONS ARE CORRECT, ECONOMIZER SHALL BE ENABLED. DAMPER SHALL CLOSE WHEN FAN IS DE-ENERGIZED. DAMPER SHALL FAIL OPEN.

				2018 N	IORTH CAP	ROLINA	<u>MECHANI</u>	CAL C	ODE - VENTILAT	ION CALCULAT	ΓΙΟΝ				
							Luc	k's Can	inery						
SPACE NAME	AREA (SF)	OCCUPANCY CLASSIFICATION	DEFAULT OCCUPANCY (QTY/1000 SF)	CALCULATED OCCUPANCY (PEOPLE)	Rp VENT. RATE (CFM / P)	Vbzp (CFM)	Ra VENT. RATE (CFM / SF)	Vbza (CFM)	Vbz BREATHING ZONE OUTDOOR AIRFLOW (CFM)	Ez ZONE AIR DISTRIBUTION EFFECTIVENESS	Voz ZONE OUTDOOR AIRFLOW (CFM)	Vpz MIN. ZONE SUPPLY AIRFLOW (CFM)	Zp PRIMARY OUTDOOR AIR FRACTION	Vou UNCORRECTED OUTDOOR AIR INTAKE (CFM)	EXHAUST RATE (CFM)
Hallway	107	Corridors					0.06	6.4	6	0.8	8	50	0.16	6	
Janitor	22	Toilet rooms - public										-			50
restroom	466	Toilet rooms - public										-			600
Meeting Room	128	Conference rooms	50	6	5	30	0.06	7.7	38	0.8	47	150	0.31	28	
Gallery	1,186	Main entry lobbies	10	12	5	60	0.06	71.2	131	0.8	164	1520	0.11	112	
Multipurpose	6,646	Conference/meeting	50	332	5	1660	0.06	398.8	2059	0.8	2573	3500	0.74	800	
TOTAL	8,555										219			947	650

OUTDOOR AIR INTAKE FLOW RATE (Vot) 1132 715 TOTAL EXH. RATE PLUS 10% FOR PRESSURIZATION FINAL VENT. AIR REQUIREMENT (Greater of Above) 1130 =

1. COMPARISON OF THE TOTAL EXHAUST TO THE TOTAL VENTILATION IS TO ENSURE THAT THE VENTILATION AIR IS A MINIMUM OF 10% GREATER THAN THE EXHAUST AIR. 2. OA REQUIRED FOR MULTIPURPOSE ASSEMBLY HAS BEEN REDUCED USING ASHRAE IAQ METHOD. SEE CALCULATION THIS SHEET.

MAX Zp = Ev = 0.84

System Population Sum of Zones Occupant Diversity



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Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341



Issue For: CONSTRUCTION

Issue Date: 07.27.2019 DATE REASON

PRINCIPAL IN CHARGE: D. WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

Project Number:

201901.1 Sheet Title:

NOTES & LEGENDS -**MECHANICAL**

Sheet Number:

1.01 INSTRUCTIONS

SCOPE OF WORK SHALL INCLUDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING INSTALLATION IN ACCORDANCE WITH LOCAL AND STATE CODES, AND CONTRACT DRAWINGS AND SPECIFICATIONS.

1.02 LOCAL CONDITIONS CONTRACTOR SHALL VISIT THE SITE AND OBSERVE ALL EXISTING LOCAL CONDITIONS WHICH WOULD AFFECT WORK UNDER THIS CONTRACT. CONTRACTOR SHALL EXAMINE ALL PLANS AND SPECIFICATIONS FOR THIS PROJECT AND CONSULT THEM FOR INSTRUCTIONS PERTAINING TO WORK OF THIS SECTION.

1.03 PERMITS AND FEES

CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND INSPECTIONS REQUIRED FOR PERTAINING TO WORK UNDER THIS CONTRACT AND PAY ALL CHARGES INCIDENTAL THERETO. DELIVER TO ARCHITECT ALL CERTIFICATES OF INSPECTION ISSUED BY AUTHORITIES HAVING JURISDICTION.

1.04 CODES AND STANDARDS

A. FURNISH AND INSTALL MECHANICAL SYSTEMS TO MEET ALL CURRENT REQUIREMENTS OF NATIONAL, STATE AND MUNICIPAL CODES, RULES REGULATIONS, LAWS, AND STANDARDS AS THEY ARE ADOPTED BY THE GOVERNING AGENCY AND AS THEY MAY APPLY.

NORTH CAROLINA BUILDING CODE 2018 EDITION NORTH CAROLINA MECHANICAL CODE 2018 EDITION

NORTH CAROLINA PLUMBING CODE 2018 EDITION

NORTH CAROLINA ENERGY CONSERVATION CODE 2018 EDITION NORTH CAROLINA FIRE PREVENTION CODE 2018 EDITION

STANDARD FOR THE INSTALLATION OF A/C AND VENT SYSTEMS, NFPA 90A (2012 ED.) UNDERWRITERS LABORATORIES

1.05 SUBMITTALS

MATERIAL LIST: WITHIN TWENTY (20) DAYS OF AWARD OF CONTRACT, CONTRACTOR SHALL SUBMIT TO ARCHITECT A COMPLETE LIST OF MATERIALS TO BE PROVIDED FOR THE HVAC WORK. THE LIST SHALL INCLUDE SUPPLIERS' NAMES AND MANUFACTURERS' NAMES AND NUMBER OR SERIES FOR EACH ITEM ON

SHOP DRAWINGS: SUBMIT TO THE ARCHITECT FOR APPROVAL, BEFORE COMMENCING WORK, SHOP DRAWINGS FOR ALL MATERIALS AND EQUIPMENT TO BE PROVIDED UNDER THIS CONTRACT. THE FOLLOWING APPLIES TO THE SHOP DRAWINGS: CONTRACTOR SHALL SUBMIT WITHIN 30-DAYS AFTER AWARD OF CONTRACT, DRAWINGS AND/OR

CUT SHEETS OF ALL MATERIALS AND EQUIPMENT, AND 1/4" SCALE EQUIPMENT ROOM DRAWINGS FOR APPROVAL BY ARCHITECT-ENGINEER. SUCH SUBMITTALS MUST CONTAIN OUTLINE DIMENSIONS, OPERATING CLEARANCES, INSTALLATION, OPERATING AND MAINTENANCE INFORMATION AND SUFFICIENT ENGINEERING DATA TO INDICATE SUBSTANTIAL COMPLIANCE WITH SPECIFICATIONS. ALL SHOP DRAWINGS FOR ONE SECTION OF WORK OR ONE MECHANICAL SYSTEM SHALL BE SUBMITTED AT ONE TIME IN LOOSE-LEAF 3-RING BINDERS; NO APPROVAL WILL BE GIVEN IF SUBMITTED PIECEMEAL.

WHERE CONTRACTOR CONSIDERS ADDITIONAL DETAIL OR SHOP DRAWINGS ESSENTIAL TO PROPER FABRICATION OR INSTALLATION OF EQUIPMENT, DUCTWORK, AND PIPING HE SHALL PREPARE SUCH CONSISTENT WITH CURRENT INDUSTRY METHODS AND STANDARDS. ENGINEER RESERVES THE RIGHT TO DIRECT REMOVAL AND REPLACEMENT OF ANY ITEMS WHICH, IN HIS OPINION, DO NOT PRESENT AN ORDERLY AND REASONABLY NEAT AND WORKMANLIKE APPEARANCE, PROVIDED SUCH AN ORDERLY INSTALLATION CAN BE MADE USING CUSTOMARY TRADE METHODS. REMOVAL AND REPLACEMENT SHALL BE DONE WHEN DIRECTED IN WRITING BY ENGINEER AT THE CONTRACTOR'S EXPENSE AND WITHOUT ADDITIONAL EXPENSE TO OWNER.

APPROVAL GRANTED ON SHOP DRAWINGS IS RENDERED AS A SERVICE ONLY AND SHALL NOT BE CONSIDERED AS GUARANTEE OF MEASUREMENTS OF BUILDING

CONDITIONS; NOR SHALL IT BE CONSTRUED AS RELIEVING THE MECHANICAL

ADDITIONAL COST TO THE OWNER.

CONTRACTOR OF BASIC RESPONSIBILITIES UNDER THIS CONTRACT CHANGES IN FOUNDATIONS, BASES, CONNECTIONS, PIPING, CONTROLS, STARTERS, ELECTRICAL EQUIPMENT, WIRING AND CONDUIT, SPACE OPENINGS, WALLS AND CEILINGS, AND VIBRATION ISOLATION IN ORDER TO ACCOMMODATE SUBSTITUTE EQUIPMENT SHALL BE MADE AT NO

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND RECEIVE ENGINEER'S APPROVAL BEFORE INSTALLING MATERIALS OR EQUIPMENT. ANY EQUIPMENT OR MATERIALS INSTALLED PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS FROM ENGINEER SHALL BE SUBJECT TO REMOVAL AND/ OR ALTERATION AT THE DISCRETION OF THE MECHANICAL ENGINEER AT NO ADDITIONAL COST. APPROVAL OF ANY SUBMITTED DATA OR SHOP DRAWINGS FOR MATERIALS, EQUIPMENT APPARATUS DEVICES, ARRANGEMENTS AND/OR LAYOUTS WILL NOT RELIEVE THE CONTRACTOR FROM RESPONSIBILITY OF FURNISHING SAME OF PROPER DIMENSIONS, CAPACITIES, SIZES,

OF CONTRACT. SUCH APPROVAL SHALL NOT RELIEVE CONTRACTOR FROM RESPONSIBILITY FOR ANY ELECTRICAL DEVIATIONS BETWEEN THE CONTRACT DOCUMENTS AND THE FURNISHED EQUIPMENT MUST BE SEPARATELY ACKNOWLEDGED BY A SUBSTITUTION REQUEST AND ADDITIONALLY NOTED ON

QUANTITIES AND INSTALLATION DETAILS TO EFFICIENTLY PERFORM REQUIREMENTS AND INTENT

THE SUBMITTAL. PROVIDE MECHANICAL SHOP DRAWINGS FOR: AIR HANDLING UNITS, CONDENSING UNITS, VENTILATORS, AIR INLETS AND OUTLETS, DUCT ACCESSORIES, DUCT INSULATION, PIPE INSULATION. TEMPERATURE CONTROLS, DUCT MATERIALS, REFRIGERANT PIPING, CONDENSATE PIPING.

1.06 CONNECTING TO WORK OF OTHERS

A. BEFORE STARTING HIS WORK, AND FROM TIME TO TIME AS WORK PROGRESSES, MECHANICAL CONTRACTOR SHALL EXAMINE WORK AND MATERIALS INSTALLED BY OTHERS INSOFAR AS THEY APPLY TO HIS WORK AND SHALL NOTIFY ENGINEER IMMEDIATELY IN WRITING IF CONDITIONS EXIST WHICH WILL

PREVENT SATISFACTORY RESULTS IN INSTALLATION OF SYSTEM. B. SHOULD CONTRACTOR START HIS WORK WITHOUT SUCH NOTIFICATION. IT SHALL BE CONSTRUED AS AN ACCEPTANCE BY HIM OF ALL CLAIMS OR QUESTIONS AS TO SUITABILITY OR WORK OF OTHERS TO RECEIVE HIS WORK. HE SHALL REMOVE AND REPLACE, AT HIS OWN EXPENSE, ALL WORK UNDER THIS

1.07 CONTRACT DRAWINGS

A. IT IS THE INTENT OF DRAWINGS AND SPECIFICATIONS TO OBTAIN A COMPLETE AND FULLY OPERATIONAL AND SATISFACTORY INSTALLATION, AN ATTEMPT HAS BEEN MADE TO SEPARATE AND COMPLETELY DEFINE WORK UNDER THIS CONTRACT. HOWEVER, SUCH SEPARATE DIVISIONAL DRAWINGS AND SPECIFICATIONS SHALL NOT RELIEVE CONTRACTOR FROM FULL RESPONSIBILITY OF COMPLIANCE WITH WORK OF HIS TRADE WHICH MAY BE

CONTRACT WHICH MAY HAVE TO BE REMOVED ON ACCOUNT OF SUCH DEFECTS.

INDICATED ON ANY DRAWING OR IN ANY SECTION OF THE SPECIFICATIONS. CONTRACTOR SHALL CAREFULLY EXAMINE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS PRIOR TO SUBMITTING BID. CONTRACTOR WILL BE REQUIRED TO FURNISH, INSTALL AND CONNECT WITH APPROPRIATE SERVICES ALL ITEMS SHOWN ON ANY DRAWINGS WITHOUT ADDITIONAL EXPENSE TO OWNER ARCHITECT SHALL BE NOTIFIED PRIOR TO BID DATE OF ANY DISCREPANCIES. OMISSIONS, CONFLICTS OR INTERFERENCES WHICH OCCUR BETWEEN DRAWINGS OR BETWEEN DRAWINGS AND SPECIFICATIONS. IF SUCH NOTIFICATION IS RECEIVED IN ADEQUATE TIME, ADDITIONAL DATA OR CHANGES WILL BE ISSUED BY ADDENDUM TO ALL BIDDERS. SUBMITTAL OF BID BY CONTRACTOR SHALL INDICATE THE CONTRACTOR'S ACKNOWLEDGEMENT AND ACCEPTANCE TO PROVIDE ALL NECESSARY EQUIPMENT, MATERIALS AND LABOR TO MEET THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IN

ACCORDANCE WITH ALL CODE REQUIREMENTS. ARCHITECTURAL DRAWINGS SHALL TAKE PRECEDENCE OVER MECHANICAL DRAWINGS WITH REFERENCE TO BUILDING CONSTRUCTION. MECHANICAL DRAWINGS ARE DIAGRAMMATIC BUT SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION OF BUILDING AND WORK OF OTHER TRADES WILL PERMIT. WHERE LOCATIONS OF EQUIPMENT, DEVICES OR FIXTURES ARE CONTROLLED BY ARCHITECTURAL FEATURES ESTABLISH SUCH LOCATIONS BY REFERRING TO DIMENSIONS ON ARCHITECTURAL DRAWINGS. AND NOT BY SCALING DRAWINGS. CHANGES FROM DRAWINGS NECESSARY TO MAKE WORK OF CONTRACTOR CONFORM WITH BUILDING AS CONSTRUCTED AND TO FIT WORK OF OTHER TRADES OR RULES OF BODIES HAVING JURISDICTION SHALL BE MADE BY CONTRACTOR AT HIS OWN EXPENSE. SOME DRAWINGS MAY HAVE BEEN PREPARED FROM EXISTING DRAWINGS WITH INTENT OF PROVIDING THE CONTRACTOR WITH INFORMATION CONCERNING THE EXISTING CONDITIONS. DATA SHOWN HAS NOT BEEN COMPLETELY VERIFIED BY ARCHITECT/ENGINEER AND NO GUARANTEE OF ACCURACY OF THIS INFORMATION IS GIVEN OR INTENDED. IT SHALL BE THE RESPONSIBILITY OF CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS. DATA WHICH IS SHOWN BUT PROVES TO BE INCORRECT SHALL IN NO WAY RELIEVE THE CONTRACTOR FROM INSTALLING HIS WORK WITHIN THE INTENT OF PLANS AND SPECIFICATIONS, NOR SHALL IT CONSTITUTE BASIS FOR A CHANGE ORDER UNLESS, IN THE OPINION OF THE ARCHITECT/ENGINEER IT IS DETERMINED TO BE AN EXTRA COST OVER AND ABOVE THE BASIC INTENT OF THESE PLANS AND

SPECIFICATIONS.

A. CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER PROTECTIVE MEASURES WHEN WORKING OVERHEAD OR IN FINISHED AREAS. HE/SHE SHALL REPAIR, REPLACE OR TOUCH-UP ALL FINISHED SURFACES WHICH MAY BE DAMAGED AS A RESULT OF HIS OPERATIONS.

1.09 STORAGE AND WORK AREAS A. ALL EQUIPMENT AND MATERIALS SHALL BE PROTECTED FROM THE WEATHER, DAMAGE, MOISTURE, DIRT. DEBRIS, ETC. USE OF CARDBOARD, VISQUEEN, OR OTHER SIMILAR MATERIALS WHILE STORED OUTSIDE IS NOT ACCEPTABLE. DO NOT INSTALL DAMAGED EQUIPMENT.

1.10 APPROVAL OF MATERIAL A. EQUIPMENT OTHER THAN SPECIFIED IN THE CONTRACT DOCUMENTS REQUIRES APPROVAL FROM ENGINEER 10 DAYS PRIOR TO BID DATE.

WRITTEN REQUEST FOR PRIOR APPROVAL MUST BE RECEIVED IN ENGINEER'S OFFICE BY CLOSE OF BUSINESS NO LATER THAN 10 DAYS PRIOR TO SCHEDULED BID DATE. REQUEST SHALL CONTAIN DETAILED INFORMATION ON THE PROPOSED ITEM. THIS SHALL INCLUDE: CATALOG CUTS SHEETS

DETAILED SPECIFICATIONS

DESCRIPTION OF DEVIATION FROM SPECIFIED ITEM. AN ADDENDA SHALL BE ISSUED LISTING ALL PROSPECTIVE CONTRACTORS LISTING ALL PRIOR APPROVED MANUFACTURERS AND PRODUCTS.

PART 2 - PRODUCTS

2.01 PACKAGED GAS/ELECTRIC ROOFTOP UNITS

A. GENERAL: FURNISH AND INSTALL ROOFTOP UNITS OF THE CAPACITY, OPERATING CHARACTERISTICS, AND ELECTRICAL CHARACTERISTICS INDICATED ON THE DRAWINGS AND SPECIFIED HEREIN.

MANUFACTURER: TRANE, CARRIER, OR YORK MAY BE SUBMITTED FOR APPROVAL PROVIDED THEY CONFORM TO ALL REQUIREMENTS OF THESE SPECIFICATIONS.

WARRANTY: CONTRACTOR SHALL INCLUDE IN HIS PRICE THE COST OF ONE YEAR'S WARRANTY ON ENTIRE SYSTEM PLUS AN ADDITIONAL FOUR YEARS WARRANTY ON COMPRESSOR. THE CONTRACTOR SHALL WARRANT EACH SYSTEM IN ITS ENTIRETY FOR ONE (1) FULL YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL ALSO PROVIDE AN ADDITIONAL FOUR-YEAR WARRANTY ON EACH COMPRESSOR TO INCLUDE PARTS, REFRIGERANT AND OIL, EXCLUSIVE OF LABOR.

2.03 LIGHT DUTY CEILING EXHAUST FANS

SUBMITTED FOR REVIEW.

PROVIDE FANS OF THE SIZE, CAPACITY, AND ELECTRICAL CHARACTERISTICS INDICATED ON THE DRAWINGS. FANS SHALL BE AMCA CERTIFIED AS TO BOTH SOUND AND PERFORMANCE RATINGS. MANUFACTURER: PRODUCTS OF LOREN COOK, ACME, GREENHECK, OR PENN MAY BE

2 04 AIR DISTRIBUTION SYSTEMS A. LOW PRESSURE SHEET METAL DUCTWORK: LOW PRESSURE SHEET METAL DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET STEEL. CONSTRUCTION OF JOINT CONNECTIONS, CROSS-BREAKING, AND BRACING SHALL CONFORM TO THE LATEST EDITION OF THE SMACNA "LOW PRESSURE DUCT CONSTRUCTION STANDARDS".

B. LOW PRESSURE FLEXIBLE DUCTS: FLEXIBLE DUCT SHALL CONSIST OF A ZINC COATED SPRING STEEL HELIX PERMANENTLY BONDED TO A FULL INTERIOR LINER TO FORM THE DUCT CORE WITH POSITIVE INTERIOR AIR SEAL. CORE SHALL BE COVERED WITH FACTORY APPLIED ONE INCH, ONE POUND PER CUBIC FOOT FIBERGLASS INSULATION OF 0.25 THERMAL CONDUCTANCE SHEATHED IN A SEAMLESS EXTERIOR CLASS 1 VAPOR BARRIER JACKET WITH A VAPOR CUFF ON BOTH ENDS. DUCT SHALL BE MADE FOR USE WITH QUADRANT DAMPERED TWIST IN TYPE FITTINGS WITH EXTRACTOR SCOOPS SUITABLE FOR SHEET METAL OR FIBROUS GLASS DUCTWORK DUCT SHALL BE NEPA 90A. CLASS 1 (UL-181). PROVIDE IN FACTORY FINISHED LENGTHS NOT IN EXCESS OF LENGTHS REQUIRED TO MAKE SUITABLE CONNECTIONS WITH MINIMUM PRESSURE DROP. ACCEPTABLE: GENFLEX TYPE SLR WITH STAINLESS STEEL HOSE COUPLINGS AND WITH FACTORY INSTALLED CROWN 3200-DS SPIN IN FITTING (FOR GLASS FIBER DUCTWORK), EACH TYPE WITH INTEGRAL VOLUME DAMPER AT CONNECTION TO RECTANGULAR MAIN DUCT BRANCH OR EQUIVALENT PRODUCTS OF ATCO.

C. DUCT SYSTEM ACCESSORIES:

1. GENERAL: PROVIDE ALL NECESSARY DUCT SYSTEM ACCESSORIES TO ASSURE PROPER BALANCE, QUIET AND DRAFTLESS DISTRIBUTION AND CONVEYANCE, AND MINIMIZATION OF TURBULENCE, NOISE AND PRESSURE DROP FOR ALL SUPPLY, RETURN, EXHAUST AND VENTILATION AIR QUANTITIES INDICATED. ACCESSORIES SHALL BE RECOMMENDED BY THEIR MANUFACTURER FOR EACH

2. FLEXIBLE DUCT CONNECTIONS: PROVIDE WHERE AIR HANDLERS, FANS AND BLOWERS CONNECT TO THEIR DUCTWORK. SHALL BE AT LEAST 4-INCHES LONG CONNECTED ON EACH SIDE TO METAL (EITHER METAL DUCTWORK, AIR HANDLING APPARATUS, OR HEAVY GAUGE STEEL SLEEVES), AND BE SUITABLE FOR USE IN MEDIUM AND/OR LOW PRESSURE DUCT SYSTEMS. PROVIDE BRAIDED COPPER BRIDGE STRAP EQUAL TO THOMPSON LIGHTNING PROTECTION. INC. NO. 588 ACROSS EACH CONNECTION. ACCEPTABLE: VENTFABRICS, INC. "VENTGLAS METAL- EDGE" OR PRIOR APPROVED EQUAL.

3. LOW PRESSURE METAL TURNING VANES: PROVIDE IN ALL ELBOWS, BENDS AND TEES OF ALL LOW VELOCITY SUPPLY AIR DUCTS WHETHER OR NOT SHOWN IN DETAIL; PROVIDE IN ALL ELBOWS, BENDS AND TEES OF ALL OTHER LOW VELOCITY DUCTS WHERE PORTIONS OF SUCH DUCTS CONVEYAIR AT GREATER THAN 700 FPM AVERAGE VELOCITY. UNIT TO BE OF THE PERMANENT FIXED TYPE, HAVING ADEQUATE RIGIDITY AND STRENGTH TO BE COMPLETELY FLUTTER-PROOF, ALUMINUM, OR STEEL WITH CORROSION RESISTANT COATING, OR GALVANIZED STEEL. AIRFOIL TYPE IN ALL MITERED ELBOWS, MITERED BENDS AND MITERED TEES. AIR FOIL TYPE MUST BE MANUFACTURED BY TUTTLE & BAILEY, ANEMOSTAT, METALAIRE, BARBER-COLMAN OR OTHER APPROVED MANUFACTURER AND MUST BE EQUAL TO BARBER-COLMAN "AIRTURNS", TUTTLE & BAILEY "DUCTURNS", OR DURA-DYNE "VR" WITH 24-GAUGE RAILS AND HOLLOW VANES.

4. MANUAL VOLUME DAMPERS (OTHER THAN THOSE SPECIFIED AS BEING INTEGRAL WITH EACH REGISTER, DIFFUSER AND OTHER AIR OUTLET OR INLET): PROVIDED IN THE COMPLETE AIR DISTRIBUTION SYSTEM(S) (INCLUDING DUCTWORK, RETURN AIR PLENUMS, ETC.) TO ALLOW COMPLETE BALANCING OF THE AIR SUPPLY, RETURN, VENTILATION AND EXHAUST SYSTEM(S). DAMPERS SHALL BE OPPOSED BLADE TYPE WITH 8-INCH MAXIMUM BLADE WIDTH. DAMPERS SHALL BE MADE OF GALVANIZED STEEL, OR STEEL WITH A SPRAYED OR DIPPED ALUMINUM RUST RESISTANT FINISH AND BE FLUTTER- PROOF. USE IN LOW PRESSURE DUCT SYSTEMS ONLY. BASED UPON LOCATION OF THE DUCT IN WHICH THE DAMPER IS TO BE INSTALLED, PROVIDE THE FOLLOWING TYPES OF OPERATORS: DAMPERS IN DUCTS WHICH ARE EXPOSED OR LOCATED ABOVE "LAY-IN" OR "ACCESSIBLE CEILINGS": YOUNG REGULATOR COMPANY MODEL 817. DAMPERS IN DUCTS CONCEALED ABOVE PLASTER CEILINGS OR BEHIND DRY WALL CONSTRUCTION; YOUNG REGULATOR COMPANY MODEL 817A. ACCEPTABLE: PRODUCTS OF TUTTLE & BAILEY, ANEMOSTAT, METALAIRE, KRUEGER, OR BARBER-COLMAN

5. FIRE DAMPERS: PROVIDE FIRE DAMPERS WHERE INDICATED ON DRAWINGS AND/OR WHERE OTHERWISE NECESSARY. FIRE DAMPERS SHALL BE UL LABELED CLUSTERED BLADE TYPE, SPRING ACTUATED, FOR HORIZONTAL OR VERTICAL MOUNTING AS REQUIRED. DAMPER BLADES SHALL BE HELD IN POSITION BY A 165 DEGREE F FUSIBLE LINK. DAMPER SLEEVES SHALL BE 14-GAUGE MINIMUM AND ALL OTHER DETAILS OF INSTALLATION SHALL COMPLY WITH THE UL INSTALLATION DATA SHEETS FURNISHED WITH THE DAMPERS. OPENINGS BETWEEN THE FIRE DAMPER SLEEVES AND THE WALL OR FLOOR OPENINGS SHALL BE FILLED WITH FIBERGLASS BATTING TO PREVENT SOUND FLANKING. CLUSTER BLADES SHALL COMPLETELY OUTSIDE AIR

STREAM FOR ALL DUCT SYSTEMS (TYPE B). ACCEPTABLE: RUSKIN, AIR BALANCE; AMERICAN WARMING AND VENTILATING; TUTTLE & BAILEY; UNITED SHEET METAL; OR APPROVED EQUAL. LOW PRESSURE DUCT ACCESS DOORS: PROVIDED FOR EACH MANUAL AND MOTORIZED DAMPER; FIRE DAMPER; ELECTRIC DUCT HEATER; AND WHERE ACCESS IS OTHERWISE NECESSARY. FACTORY PREFABRICATED DOUBLE WALL INSULATED TYPE OF 24-GAUGE GALVANIZED

STEEL (OF SAME OR THICKER GAUGE THAN DUCTWORK PANEL IN WHICH INSTALLED, WHICHEVER IS GREATER. MINIMUM SIZE SHALL BE AS LARGE AS IS COMPATIBLE WITH DUCT SIZE BUT IN NO CASE LESS THAN THE FOLLOWING (PROVIDE LARGER SIZES IF NECESSARY TO PERMIT PROPER ACCESS OPERATION)

ACCESS DOOR SIZE MAXIMUM DUCT DIMENSIONS 11" AND LESS MAXIMUM DUCT DIMENSIONS X 12" 12" THROUGH 16'

17" AND OVER 6 X 24" DOORS SHALL BE PROVIDED WITH HAND OPERATED ADJUSTABLE TENSION CATCHES AND SHALL BE COMPLETELY GASKETED AROUND THEIR PERIMETERS. DOORS SHALL BE VENTLOK "ACCESS DOORS" INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS USING VENTLOK #360 SEALANT

AIR DISTRIBUTION DEVICES: 1. SCOPE: PROVIDE ALL AIR DISTRIBUTION DEVICES AS INDICATED ON THE DRAWINGS AND AS SPECIFIED HEREIN FOR A COMPLETE AND OPERABLE SYSTEM FREE FROM DRAFTS AND EXCESSIVE NOISE. 2. RELATION TO OTHER WORK: COORDINATE WITH WORK OF THE CEILING, DRYWALL AND PLASTERING TRADES AS REQUIRED TO INSURE AN ORDERLY PROGRESSION OF WORK AND FIRST CLASS FINISHED

SYSTEM WITH RESPECT TO PLACEMENT, ALIGNMENT, FINISH AND GENERAL FIT. DESIGN CONDITIONS:

ACOUSTICAL: COORDINATE AIR DISTRIBUTION DEVICES, SOUND ATTENUATION MEASURES, AND EQUIPMENT ACTUALLY PROVIDED TO INSURE THAT THE DESIGN GOALS ARE NOT EXCEEDED BY

B. PRESSURE DROP ACROSS ANY AIR DISTRIBUTION DEVICE SHALL NOT EXCEED 0.15 IN W.G. STATIC

PRESSURE UNI ESS OTHERWISE INDICATED. GUARANTY: AIR DISTRIBUTION EQUIPMENT SHALL BE GUARANTEED BY THE MANUFACTURER TO OPERATE WITHOUT EXCESSIVE NOISE AND WITH VELOCITIES IN THE FIVE FOOT OCCUPANCY ZONE, WHEN HANDLING AIR WITH TEMPERATURE DIFFERENTIALS AS HIGH AS 25 DEGREES, NOT TO EXCEED 30 FPM AT A 2 DEGREE DIFFERENCE, 50 FPM AT 1-1/2 DEGREE DIFFERENCE, OR 75 FPM AT A 1 DEGREE DIFFERENCE WHEN OPERATING WITH AN AVERAGE 75 DEGREE ROOM TEMPERATURE AND MEASURED NO CLOSER THAN 6 INCHES FROM A WALL SURFACE.

4. MANUFACTURER: TITUS, METAL*AIRE, CARNES, KRUEGER, PRICE OR TUTTLE & BAILEY. MANUFACTURERS MODEL NUMBERS INDICATED ARE EXAMPLES OF PRODUCTS TO BE PROVIDED.

5. MANUFACTURERS MUST BE MEMBERS OF THE AIR DISTRIBUTION COUNCIL UNLESS OTHERWISE INDICATED

6. ALL AIR DISTRIBUTION DEVICES SHALL BE CONSTRUCTED OF EXTRUDED ALUMINUM UNLESS OTHERWISE INDICATED.

7. WHERE CONTINUOUS LINEAR SUPPLY AND RETURN DEVICES ARE SHOWN AS ABUTTING ONE ANOTHER IN A SINGLE DIRECTION, THEN THE TOTAL UNBROKEN VISIBLE LENGTH OF THE LINEAR

SUPPLY/RETURN DEVICE SHALL EQUAL THE SUM OF THE NOMINAL LENGTHS OF THE ABUTTING DEVICES. 8. EACH AIR DISTRIBUTION DEVICE WHICH HAS A PORTION THEREOF (FRAME, CORE, ETC.) EXPOSED TO VIEW IN THE FINISHED AREA SHALL HAVE A FACTORY APPLIED FINISH WHICH MATCHES AND IS COMPATIBLE WITH THE COLOR OF THE SURROUNDING SURFACE ON WHICH THE DEVICE IS INSTALLED.

COLORS MUST BE APPROVED BY ARCHITECT PRIOR TO DEVICE FABRICATION. 9. ALL DAMPERS, BLANK-OFF BAFFLES AND OTHER COMPANION DEVICES WHICH FORM AN INTEGRAL PART OF AN AIR DISTRIBUTION DEVICE SHALL BE FACTORY MADE ITEMS PRODUCED BY THE MANUFACTURER

PART 3 - EXECUTION

3.01 METAL DUCTWORK

A. APPLICATION: SELECT METAL DUCT FOR ALL DUCTWORK. B. EXPOSED DUCTWORK SHALL BE SINGLE WALL SPIRAL WITH 1" INTERNAL INSULATION. INSULATION SHALL BE FOUAL TO JOHNS MANVILLE SPIRACOUSTIC PLUS

SEAM AND JOINT SEALING: SEAL ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS

3.02 AIR DISTRIBUTION SYSTEMS

A. GENERAL: CONSTRUCT ALL DUCTWORK AND ACCESSORIES IN ACCORDANCE WITH LATEST EDITIONS OF APPLICABLE SMACNA MANUALS. STREAMLINE ALL DUCTWORK TO THE FULL EXTENT PRACTICAL AND EQUIP WITH PROPER AND ADEQUATE DEVICES TO ASSURE PROPER BALANCE AND QUIET DRAFTLESS DISTRIBUTION OF INDICATED AIR QUANTITIES. PROTECT ALL DUCTWORK AND SYSTEM ACCESSORIES FROM DAMAGE DURING CONSTRUCTION UNTIL ARCHITECT'S FINAL ACCEPTANCE OF PROJECT. PRIOR TO DUCTWORK FABRICATION, VERIFY IF ALL DUCTWORK AS DIMENSIONED AND GENERALLY SHOWN WILL SATISFACTORILY FIT ALLOCATED SPACES. TAKE PRECAUTIONS TO AVOID SPACE INTERFERENCE WITH BEAMS, COLUMNS, JOISTS, PIPES, LIGHTS, CONDUIT, OTHER DUCTS, EQUIPMENT, ETC. NOTIFY ARCHITECT IF ANY SPATIAL CONFLICTS EXIST, AND THEN OBTAIN ARCHITECT'S APPROVAL OF NECESSARY ROUTING. MAKE ANY SUCH NECESSARY REVISIONS WHICH ARE MINOR AT NO ADDITIONAL COST. CAREFULLY CORRELATE ALL DUCT CONNECTIONS TO AIR HANDLING UNITS AND FANS TO PROVIDE PROPER CONNECTIONS, ELBOWS AND BENDS WHICH MINIMIZE NOISE AND PRESSURE DROP. PROVIDE ALL CURVED ELBOWS WITH RADIUS RATIOS OF NOT LESS THAN 1.5 UNLESS OTHERWISE SHOWN OR APPROVED BY ARCHITECT. PROVIDE ALL MITERED ELBOWS WITH TURNING VANES. COORDINATE ANY AND ALL DIMENSIONS AT INTERFACES OF DISSIMILAR TYPE OF DUCTWORK AND AT INTERFACES OF DUCTWORK WITH EQUIPMENT SO THAT PROPER OVERLAPS, INTERFACES, ETC., OF INSULATION AND CONTINUITY OF VAPOR BARRIERS ARE MAINTAINED. IF NECESSARY. WHERE INTERFACING DIFFERENT TYPES OF INSULATION PROVIDE TRANSITIONS SO THAT INTERNAL FREE AREA OF DUCT REMAINS UNCHANGED. INSTALL HORIZONTAL RIGID DUCTWORK AS HIGH AS PRACTICAL ABOVE SUSPENDED CEILINGS SO THAT MOVABLE LIGHT FIXTURES MAY BE RELOCATED WITHOUT INTERFERENCE TO MEET ANY FUTURE PARTITION RELOCATION REQUIREMENTS.

B. HANGERS AND SUPPORTS:

A. SHEET METAL DUCT HANGERS: SUPPORT DUCTS FROM THE BUILDING STRUCTURE WITH GALVANIZED STEEL HANGERS TO EACH SIDE OF THE DUCT. HANGERS FOR DUCT TO 60-IN. SHALL BE 1" X 1/8" GALVANIZED STEEL BAND, SPACE HANGERS APPROXIMATELY 8- ET. (8') ALONG THE LENGTH OF DUCT. HANGERS SHALL EXTEND DOWN THE SIDE OF DUCT AND TURN UNDER. SHALL BE SECURED TO DUCT BY TWO OR MORE #14 SHEET METAL SCREWS. WHERE SPRAYED FIRE-PROOFING OCCURS, INSTALL HANGERS BEFORE APPLICATION OF SUCH TREATMENT AND WITHHOLD INSTALLATION OF DUCTS UNTIL AFTER APPLICATION. FLEXIBLE DUCT: INSTALL ALL FLEXIBLE ROUND DUCT WITHOUT KINKS OR SIMILAR

OBSTRUCTIONS SO THAT PRESSURE DROP IS MINIMIZED. CUT AND REMOVE EXCESS LENGTHS AS NECESSARY

CHANGE IN SHAPE OR DIMENSION: WHERE DUCT SIZE OR SHAPE IS CHANGED TO EFFECT A CHANGE IN AREA, THE FOLLOWING SHALL APPLY: WHERE THE AREA AT THE END OF THE TRANSFORMATION RESULTS IN AN INCREASE IN AREA OVER THAT AT THE BEGINNING, THE SLOPE OF THE TRANSFORMATION SHALL NOT

EXCEED ONE INCH IN SEVEN INCHES. 2. WHERE THE AREA AT THE END OF THE TRANSFORMATION RESULTS IN A DECREASE IN AREA FROM THAT AT THE BEGINNING, THE SLOPE OF THE TRANSFORMATION MAY BE ONE INCH IN FOUR INCHES, BUT ONE INCH IN SEVEN INCHES IS PREFERABLE, SPACE

PERMITTING 3. THE ANGLE OF TRANSFORMATION AT CONNECTIONS TO HEATING COILS OR OTHER EQUIPMENT SHALL NOT EXCEED THIRTY DEGREES FROM A LINE PARALLEL TO THE AIR FLOW ON THE ENTERING SIDE OF THE EQUIPMENT, NOR FIFTEEN DEGREES ON THE LEAVING SIDE. THE ANGLE OF APPROACH MAY BE INCREASED TO SUIT LIMITED SPACE CONDITIONS WHEN THE TRANSFORMATION IS PROVIDED WITH VANES APPROVED BY THE

4. ALL CHANGES IN SHAPE OR DIMENSION MUST BE APPROVED BY ENGINEER BEFORE INSTALLATION OF DUCT.

D. CHANGES IN DIRECTION: CHANGES IN DIRECTION SHALL BE BASICALLY AS INDICATED ON THE DRAWINGS AND THE FOLLOWING SHALL APPLY: 1. SUPPLY DUCT TURNS OF NINETY DEGREES IN LOW PRESSURE DUCT SHALL BE MADE WITH MITERED ELBOWS FITTED WITH CLOSELY SPACED TURNING VANES DESIGNED FOR

MAINTAINING A CONSTANT VELOCITY THROUGH THE ELBOW. RETURN AND EXHAUST DUCT TURNS OF NINETY DEGREES IN LOW PRESSURE DUCT SHALL BE MADE WITH MITERED ELBOWS, AS SPECIFIED HEREINBEFORE, FOR SUPPLY DUCTS, UNLESS RADIUS ELBOWS ARE INDICATED IN WHICH CASE THEY SHALL BE VANED AND CONSTRUCTED WITH A THROAT RADIUS THREE-QUARTERS THE DUCT WIDTH AND A FULL RADIUS HEEL.

3. TEES IN LOW PRESSURE DUCT SHALL CONFORM TO THE DESIGN REQUIREMENTS SPECIFIED HEREINBEFORE FOR ELBOWS.

BRANCH TAKE-OFFS IN LOW PRESSURE DUCT SHALL BE MADE WITH SPLITTER DAMPERS,

AS INDICATED, IN SQUARE TAKE OFFS. BRANCH TAKE-OFFS IN HIGH PRESSURE DUCT SHALL BE MADE WITH CONICAL TAPS. LOW PRESSURE GLASS FIBER DUCTWORK: MITER ALL LONGITUDINAL CORNERS (EXCEPT SEAMS) WITH JACKET UNDISTURBED. PROVIDE SHIP LAP CONSTRUCTION WITH 1-1/2 INCH MINIMUM TAPE OVERLAP ON ALL SIDES OF ALL LONGITUDINAL SEAMS AND TRANSVERSE JOINTS PROVIDE ALL REINFORCEMENT, BRACING, SUSPENSION, WORKMANSHIP AND CONSTRUCTION DETAILS FOR THIS DUCTWORK AND ITS ACCESSORIES IN STRICT ACCORD WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE SHEET METAL AND AIR CONDITIONING CONTRACTOR'S NATIONAL ASSOCIATION'S LATEST EDITION OF THE FIBROUS GLASS DUCT CONSTRUCTION STANDARDS, WHICHEVER IS MORE STRINGENT COMPLETED DUCT SYSTEM(S) SHALL BE STABLE AND AIRTIGHT AT 2 INCHES W.G. INTERNAL STATIC PRESSURE. ENTIRE DUCT SYSTEM(S) SHALL BE INSTALLED BY AN A/E APPROVED, MANUFACTURER'S LICENSED CONTRACTOR. ENTIRELY COMPLY WITH NFPA BULLETIN 90A AND BE U.L.-181, CLASS I. TAPED JOINTS ON FIBERGLASS DUCTWORK SHALL BE MADE BY FIRST TAPING THE JOINT, THEN STAPLING THROUGH THE TAPE ON BOTH SIDES OF THE JOINT INTERFACE, AND THEN ADDING ANOTHER LAYER OF TAPE OVER THE STAPLED AND TAPED JOINT. STAPLES SHALL BE IN PAIRS WITH ONE STAPLE ON EACH SIDE OF THE JOINT INTERFACE AND WITH A DISTANCE BETWEEN STAPLE PAIRS OF NOT GREATER THAN 3 INCHES AS MEASURED AROUND THE PERIMETER OF THE TAPED JOINTS. STAPLES SHALL BE MINIMUM 1/2" X 1/2". PROVIDE MASTIC MINIMUM TWO INCHES ON EITHER

SIDE OF CLOSURE TAPE.

3.03 OPENINGS, CUTTING AND PATCHING

 A. GENERAL: CONTRACTOR SHALL SET IN POSITION ALL SLEEVES AND INSERTS REQUIRED IN WALLS, PARTITIONS, CEILINGS, OR FLOORS, AND SHALL HAVE A REPRESENTATIVE ON-SITE DURING POURING OF CONCRETE TO MAINTAIN POSITION OF SLEEVES AND INSERTS UNTIL CONCRETE IS SET. CLOSE COORDINATION IS REQUIRED TO INSURE THAT ALL SLEEVES ARE PROPERLY SET. CORRECTNESS OF SIZE AND LOCATION OF OPENINGS SHALL BE VERIFIED BY CONTRACTOR AFTER FRAMING IS IN PLACE. CONTRACTOR SHALL DO ALL CUTTING AND PATCHING OF EXISTING AND/OR NEW BUILDING MATERIALS REQUIRED FOR INSTALLATION OF WORK HEREIN SPECIFIED. NO STRUCTURAL MEMBERS SHALL BE CUT WITHOUT APPROVAL OF STRUCTURAL ENGINEER AND ALL SUCH CUTTING SHALL BE DONE IN A NEAT AND WORKMANLIKE MANNER, MEETING WITH APPROVAL OF STRUCTURAL ENGINEER TO MATCH ADJOINING SURFACES AND FINISHES. BY MECHANICS OF PARTICULAR TRADE INVOLVED. SLEEVES AND OPENINGS NOT USED DURING CONSTRUCTION SHALL BE SEALED WITH GROUT BY CONTRACTOR. OPENINGS BETWEEN PIPES AND SLEEVES THROUGH FIRE AND SMOKE WALLS OR FLOORS SHALL BE SEALED TO PREVENT PASSAGE OF SMOKE OR HEAT USING AN UNDERWRITERS' LABORATORIES APPROVED METHOD RATED AT LEAST EQUAL TO THE BARRIER BEING PENETRATED. METHOD OF SEALING SHALL BE SUBMITTED WITH PROOF OF U.L. APPROVAL WITH OTHER SUBMITTALS. ALL OPENINGS REQUIRED IN CONCRETE WHICH WERE OMITTED WHEN CONCRETE WAS POURED SHALL BE CAREFULLY MADE BY USE OF CORE BORING OPERATION WITH 5-IN. MAXIMUM HOLE SIZE UNLESS LARGER SIZE IS APPROVED BY STRUCTURAL ENGINEER. CUT NO OPENINGS IN PRESTRESSED OR PRECAST MEMBERS WITHOUT APPROVAL OF STRUCTURAL ENGINEER. B. SLEEVES:

WALLS AND PARTITIONS:

A. PIPE SLEEVES 8-INCH DIAMETER AND SMALLER (ABOVE GRADE): SLEEVES SHALL BE MILD STEEL PIPE OR PLASTIC SLEEVES BUILT INTO WALL, PARTITION OR BEAM, SIZED TO PASS PIPE AND COVERING, LEAVING A CLEAR SPACE OF 1/4-INCH MINIMUM BETWEEN COVERING AND SLEEVE PENETRATIONS OF FIRE RATED BARRIERS SHALL HAVE MILD STEEL SLEEVES.

PIPE SLEEVES INSTALLED IN EXTERIOR WALLS BELOW GRADE: SCHEDULE 40 STEEL HOT DIPPED GALVANIZED AFTER FABRICATION OR CAST IRON SLEEVE WITH 1/4-INCH X 3-INCH CENTER FLANGE (WATER STOP) AROUND

2. PIPE SLEEVES IN FLOORS (ABOVE GRADE): SLEEVES SHALL BE 14 GAUGE GALVANIZED SHEET STEEL OR PLASTIC, SET BEFORE FLOOR IS POURED, SIZED TO PASS PIPE AND COVERING, LEAVING A CLEAR SPACE OF 1/4-INCH BETWEEN COVERING AND SLEEVE, AND SHALL EXTEND 1/2-INCH ABOVE FINISHED FLOOR.

DUCT SLEEVES: SLEEVES OR OPENINGS SIZED TO PASS MECHANICAL DUCTS AND COVERING SHALL BE OF FRAMED CONSTRUCTION IN ROOF, WALL, OR PARTITIONS.

1. SLEEVES BELOW GRADE: CAULK ANNULAR SPACE BETWEEN PIPE AND SLEEVE USING OAKUM AND POURED LEAD BOTH SIDES MINIMUM ONE INCH DEEP TO MAKE WALL PENETRATION WATER TIGHT.

2. SLEEVES ABOVE GRADE: OPENINGS AROUND PIPES, DUCT, ETC., PASSING THROUGH SLEEVES SHALL BE MADE DRAFT FREE AND VERMIN-PROOF BY PACKING SOLIDLY WITH MINERAL WOOL OR FIBERGLASS.

SEALING OF SLEEVES THROUGH FIRE RATED BARRIERS: OPENINGS AROUND PIPES, ETC., THROUGH FIRE RATED BARRIERS SHALL BE SEALED USING AN U.L. APPROVED METHOD RATED AT LEAST EQUAL TO THE WALL BEING PENETRATED.

3.04 REMOVAL OF RUBBISH: CONTRACTOR SHALL AT ALL TIMES KEEP PREMISES FREE FROM ACCUMULATIONS OF WASTE MATERIAL OR RUBBISH GENERATED BY WORK UNDER THIS CONTRACT.

3.05 EXCAVATION, BACKFILLING AND COMPACTION:

ALL EXCAVATION, BACKFILLING, COMPACTION, TESTING, ETC. REQUIRED FOR THE INSTALLATION OF UNDERGROUND PIPING IN THIS DIVISION OF THE SPECIFICATIONS SHALL BE DONE BY THE MECHANICAL CONTRACTOR. THIS WORK SHALL BE DONE IN STRICT ACCORDANCE WITH EXCAVATION AND BACKFILLING SECTION OF DIVISION 2. 3.06 CLEANING AND ADJUSTMENTS:

UPON COMPLETION OF WORK, CONTRACTOR SHALL CLEAN, OIL AND GREASE ALL FANS, MOTORS AND OTHER RUNNING EQUIPMENT AND APPARATUS WHICH HE INSTALLS AND MAKE CERTAIN ALL SUCH APPARATUS AND MECHANISMS ARE IN PROPER WORKING ORDER AND READY FOR TEST. REFER TO SECTION ENTITLED "SYSTEMS COMPLETION".

3.07 AS-BUILT DRAWINGS: UPON COMPLETION OF INSTALLATION, THE CONTRACTOR SHALL FURNISH TO THE ARCHITECT A SET OF DRAWINGS, MARKED TO SCALE, INDICATING THE SIZE AND LOCATION OF PIPING AND DUCTS, AND NOTING ALL MAJOR CHANGES MADE DURING CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN THE DRAWINGS FROM THE ARCHITECT AND SHALL BEAR ALL COSTS IN OBTAINING THE DRAWINGS AND PROVIDING THE AS-BUILT DRAWINGS. THE CONTRACTOR SHALL DELIVER THE DRAWINGS PLUS TWO SETS OF AS-BUILT DRAWINGS TO THE ARCHITECT, EACH SHEET IN EACH SET SHALL BE SIGNED BY A PRINCIPAL REPRESENTATIVE OF THE CONTRACTOR, DATED AND HAVE "AS-BUILT" STAMPED NEAR THE

SIGNATURE. DRAWINGS SHALL GIVE ACCURATE DIMENSIONS MEASURED FROM COLUMNS, WALLS, BEAMS AND OTHER FIXED PARTS OF THE BUILDING TO THE CONCEALED MATERIALS. THE CONTRACTOR SHALL MAINTAIN A SET OF DRAWINGS AT THE SITE AND EACH DAY SHALL RECORD INSTALLATION OF PIPE, DUCTS, ETC. TO INSURE ACCURATE "AS-BUILT" DRAWINGS. THE CONTRACTOR SHALL ALSO FURNISH A SET OF DRAWINGS AND TWO SETS OF CONTRACTOR SIGNED AND DATED AS-BUILT DRAWINGS OF THE CONTROLS.

3.08 GUARANTEE AND SERVICE: A. IN ADDITION TO THE GUARANTEE OF EQUIPMENT BY THE MANUFACTURER OF EACH PIECE OF EQUIPMENT SPECIFIED HEREIN. THE MECHANICAL CONTRACTOR SHALL ALSO GUARANTEE SUCH EQUIPMENT AND SHALL BE HELD RESPONSIBLE FOR A PERIOD OF ONE YEAR FROM FINAL ACCEPTANCE FOR NECESSARY ADJUSTMENTS AND/OR REPLACEMENTS OF ALL DEFECTIVE EQUIPMENT, MATERIALS AND WORKMANSHIP WITHOUT EXPENSE TO THE OWNER. PROVIDE A LETTER TO THE OWNER STATING THE CONTRACTOR'S GUARANTEE AND DATES OF GUARANTEE

CLEANING OF PERMANENT TYPE FILTERS; LUBRICATION, AND CLEANING OF STRAINERS SHALL

BE TO 30-DAYS AFTER THE FINAL ACCEPTANCE. THE CONTRACTOR SHALL PROVIDE FOR A REPRESENTATIVE OF HIS FIRM, THE CONTROL SYSTEM CONTRACTOR, AND THE OWNER'S REPRESENTATIVE TO RETURN TO THE JOB AT THE CHANGE OF SEASONS, (SUMMER TO WINTER OR WINTER TO SUMMER) FOR THE FIRST YEAR ONLY, TO ADJUST THE AIR CONDITIONING SYSTEMS AND RECHECK OR RECALIBRATE CONTROLS AS MAY BE REQUIRED OF THE SEASON CHANGE FROM COOLING TO HEATING OR VICE VERSA.

3.09 ACCEPTANCE

A. AS A PREREQUISITE TO REQUESTING FINAL INSPECTION, CONTRACTOR SHALL: 1. EMPLOY THE SERVICES OF A NEBB OR AABC CERTIFIED TEST AND BALANCE CONTRACTOR TO TEST AND BALANCE EACH SYSTEM TO ASSURE DESIGN PERFORMANCE AND PROVIDE ARCHITECT AND ENGINEER WITH PRELIMINARY TEST RESULTS.

FURNISH LETTER FROM AUTHORIZED REPRESENTATIVE OF CONTROL MANUFACTURER THAT ALL CONTROLS HAVE BEEN CHECKED FOR OPERATION AND CALIBRATION AND THAT

ALL SYSTEMS ARE OPERATING AS INTENDED. ACCEPTANCE WILL BE MADE BY THE ARCHITECT-ENGINEER OR HIS REPRESENTATIVE ON THE BASIS OF TESTS AND INSPECTION OF THE JOB. CONTRACTOR SHALL FURNISH THE NECESSARY MECHANICS TO OPERATE SYSTEMS, MAKE ANY NECESSARY ADJUSTMENTS AND ASSIST WITH THE FINAL INSPECTION.

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Issue For:

07.27.2019

Issue Date:

CONSTRUCTION

REASON DATE

PRINCIPAL IN CHARGE D. WALKER

Project Address:

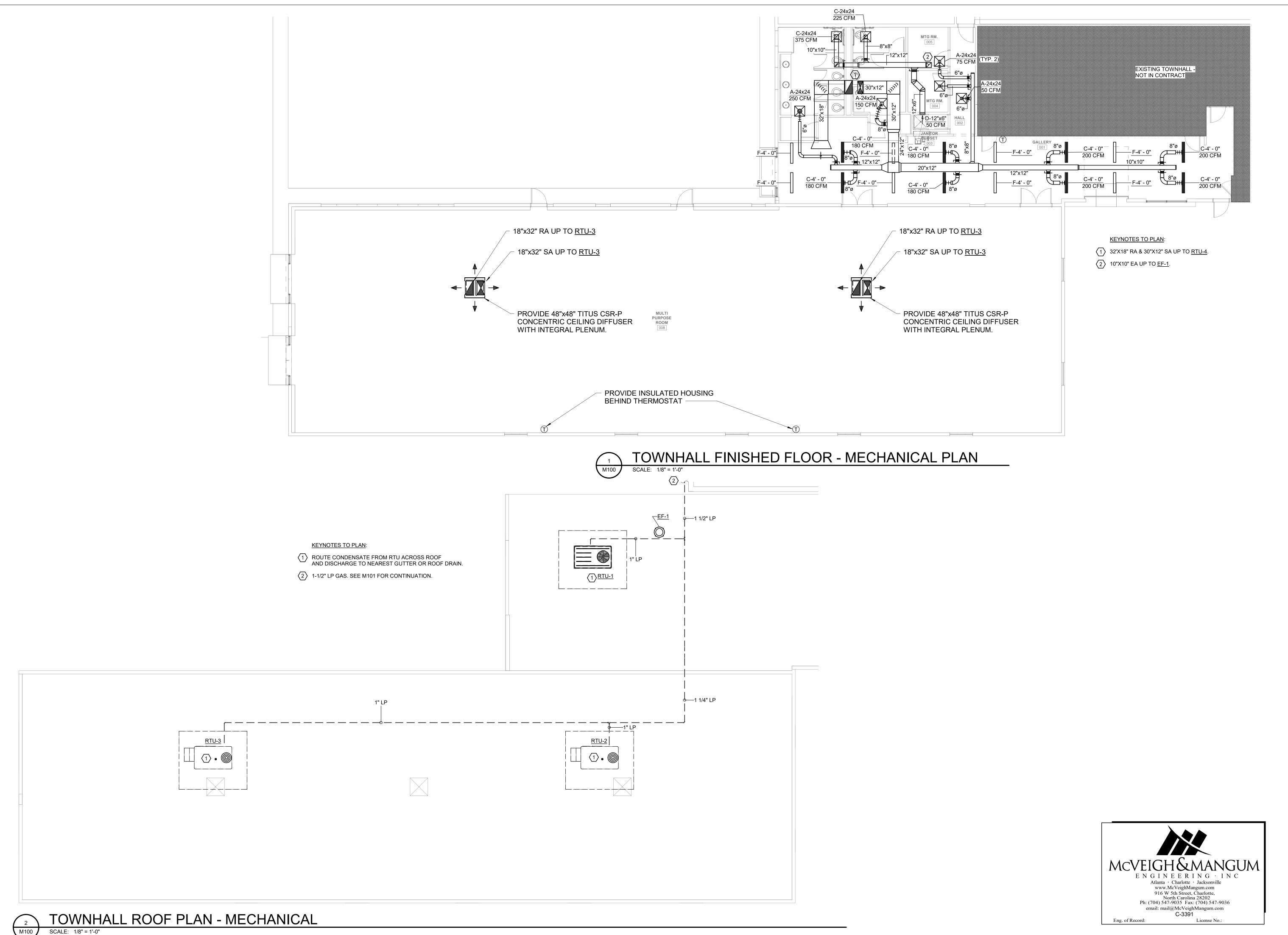
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Project Number

Sheet Title:

MECHANICAL **SPECIFICATIONS**

Sheet Number:



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VISIONS

D. REASON DATE

PRINCIPAL IN CHARGE:
D. WALKER
Project Address:

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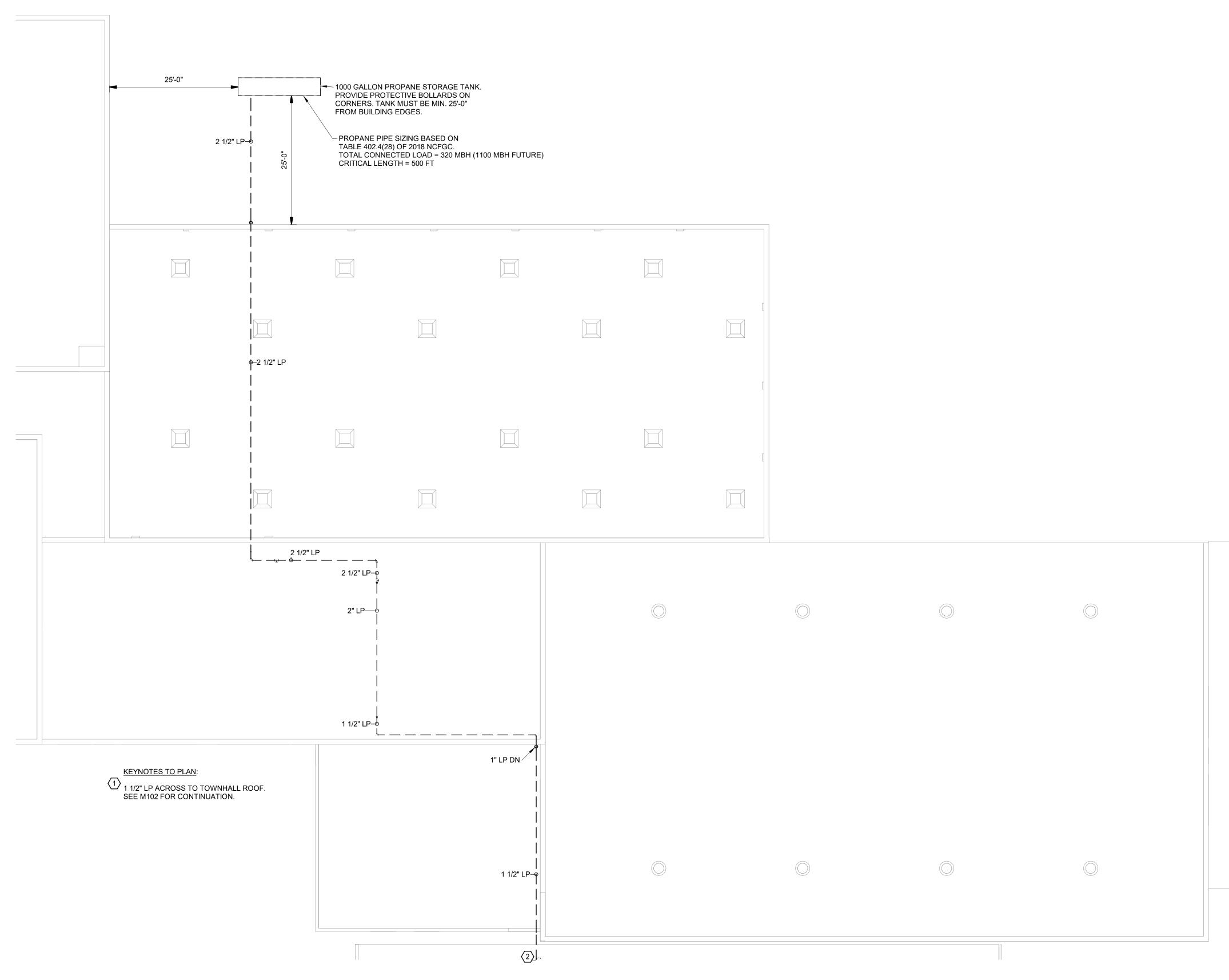
Project Number:

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Sheet Title:

TOWNHALL FLOOR PLAN -MECHANICAL

Sheet Number:



GAS PIPING PLAN - MECHANICAL

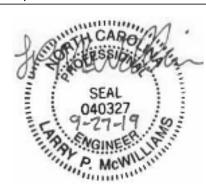


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Project Number:

201901.1

Sheet Title:

GAS PIPING PLAN - MECHANICAL

Sheet Number:

EXHAUST FAN SCHEDULE							
ESIGNATION	EF-1						
OCATION	ROOF						
IRFLOW (CFM)	650						
RIVE TYPE	DIRECT						
XT. STATIC (IN. W.G.)	0.25						
AN SPEED (RPM)	1261						
IOTOR HP (INPUT WATTS)	1/10						
OLTAGE/PHASE	115/1						
ONTROL TYPE	1						
IANUFACTURER	GREENHECK						
IODEL NO.	G-090-VG						
CCESSORIES	A,B,C,D,E						

CONTROL TYPE:

1. INTERLOCK WITH TIMECLOCK TO RUN DURING OCCUPIED TIMES

ACCESSORIES:

A. BACKDRAFT DAMPER

B. PREWIRED DISCONNECT

C. ECM MOTOR WITH MOTOR MOUNTED CONTROL DIAL

D. 14" ROOF CURB WITH DAMPER TRAY

E. ALUMINUM BIRDSCREEN

PACKAGED	ROOFTOP A	AIR CONDITI	ONER SCH	EDULE
DESIGNATION	RTU-1	RTU-2	RTU-3	
AREA SREVED	GALLERY	MULTIPURPOSE	MULTIPURPOSE	
MANUFACTURER	TRANE	TRANE	TRANE	
MODEL NO.	YHC074H	YHC060H	YHC060H	
NOMINAL TONS	6	5	5	
SUPPLY AIRFLOW (CFM)	2150	2000	2000	
MIN. O/A AIR FLOW (CFM	350	400	400	
MAX. O/A AIRFLOW (CFM)	-	-	-	
EXT. STATIC PRESSURE. (IN. W.G.)	1	1	1	
FAN HORSEPOWER	1	1	1	
COMPRESSOR QTY.	2	1	1	
COMP. R.L.A. (EA)	14.6 / 7.1	15.9	15.9	
CONDENSOR FAN QTY.	1	1	1	
COND. FAN F.L.A. (EA)	3.5	2.5	2.5	
UNIT MIN. CIRC. AMPACITY (MCA)	37	30	30	
MAX. FUSE SIZE (AMPS)	50	45	45	
VOLTAGE/PHASE	208/3	208/3	208/3	
GROSS TOTAL COOLING (BTU/H)	70,500	61,000	61,000	
GROSS SENSIBLE COOLING (BTU/H)	53,000	45,800	45,800	
ENTERING AIRTEMP. (DB/WB)	80/67	80/67	80/67	
UNIT S.E.E.R.	16	16.2	16.2	
LP GAS HEAT INPUT (MBH)	120	100	100	
LP GAS HEAT OUTPUT (MBH)	96	81	81	
UNIT WEIGHT, INCLUDING CURB (LBS.)	1100	900	900	
REMARKS	1 THRU 8	1 THRU 10	1 THRU 10	

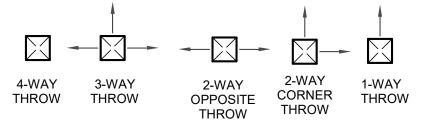
- 1. PROVIDE WITH 14" HIGH INSULATED ROOF CURB.
- 2. PROVIDE WITH SINGLE POINT ELECTRICAL CONNECTION KIT.
- 3. PROVIDE WITH 100% ECONOMIZER WITH DIFFERENTIAL ENTHALPY CONTROL AND BAROMETRIC RELIEF.
- 4. PROVIDE FACTORY MOUNTED NON FUSE DISCONNECT.
- 5. PROVIDE FACTORY MOUNTED AND POWERED 120V WEATHERPROOF GFI SERVICE RECEPTACLE FOR EACH UNIT...
- 6. PROVIDE WITH SINGLE ZONE VAV CONTROL.
- 7. PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT WITH HUMIDITY CONTROL.
- 8. PROVIDE WITH HOT GAS REHEAT
- 9. PROVIDE WITH WALL MOUNTED CO2 SENSOR FOR MIN/MAX OA CONTROL
- 10. PROVIDE BI-POLAR IONIZATION BY GLOBAL PLASMA OR EQUAL.

AIR DISTRIBUTION DEVICE SCHEDULE

- A TITUS MODEL OMNI-AA LOUVER-FACED CEILING DIFFUSER
- B TITUS MODEL 50F RETURN/EXHAUST EGGCRATE GRILLE
- C TITUS MODEL ML-38 (2 3/4" SLOTS) LINEAR SLOT DIFFUSER W/ MPI-38 INSULATED PLENUM (W/O.B.D)
- D TITUS MODEL 350FS SIDEWALL RETURN GRILLE (W/O.B.D.)
- E NOT USED
- F TITUS MODEL MLR-38 (2 3/4" SLOTS) LINEAR SLOT RETURN GRILLE

- COLOR TO BE SPECIFIED BY ARCHITECT.
- 2. NECK SIZES TO MATCH SIZE OF DUCTWORK TO EACH AIR DEVICE.

EACH AIR DEVICE SHALL HAVE A VOLUME DAMPER IN THE DUCT CONNECTED TO THE DEVICE UNLESS NOTED OTHERWISE. IF AIR DEVICE IS LOCATED IN AN INACCESSIBLE CEILING, VOLUME DAMPER SHALL BE INTEGRAL WITH THE AIR DEVICE.

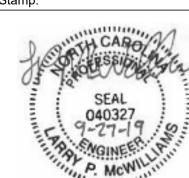


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LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341



Issue For: CONSTRUCTION

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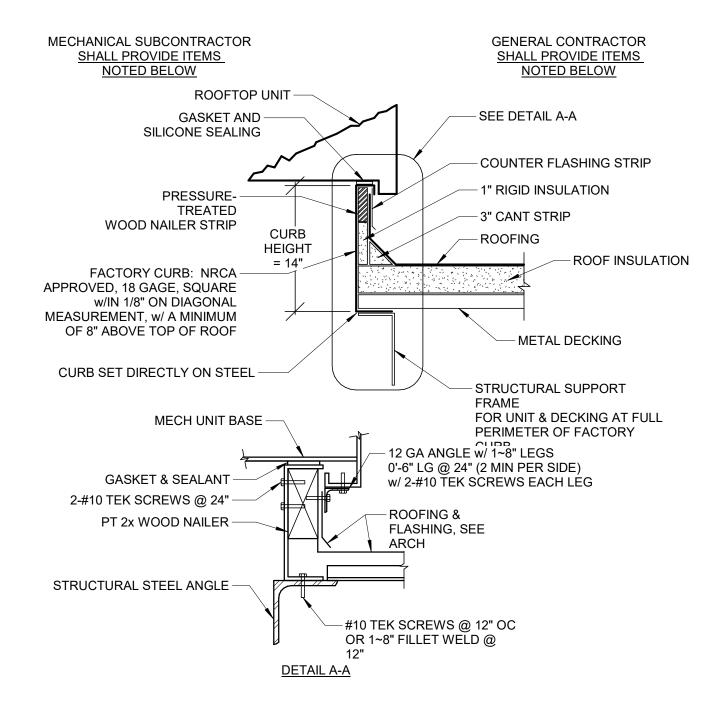
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Sheet Title:

SCHEDULES -**MECHANICAL**

Sheet Number:





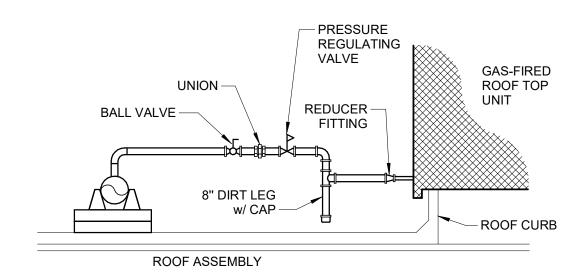
1. MECHANICAL SUBCONTRACTOR SHALL FURNISH ROOF OPENING SIZES & LOCATIONS, FOR STRUCTURAL SUPPORT FRAMING BY GENERAL CONTRACTOR.

2. THIS CURB DETAIL WILL ALLOW THE UNIT TO SLOPE W/ THE SLOPE OF THE ROOF PITCH. THIS DETAIL CAN ONLY BE USED (A) IF THE CONDENSATE DRAIN PAN OUTLET IS ON THE LOW SIDE OF THE UNIT, (B) IF THE CONDENSATE DRAIN PAN IS NOT AFFECTED BY SLOPE. HIS DETAIL CAN NOT BE USED IF THE CONDENSATE DRAIN CONNECTION IS ON THE HIGH SIDE OF THE UNIT.

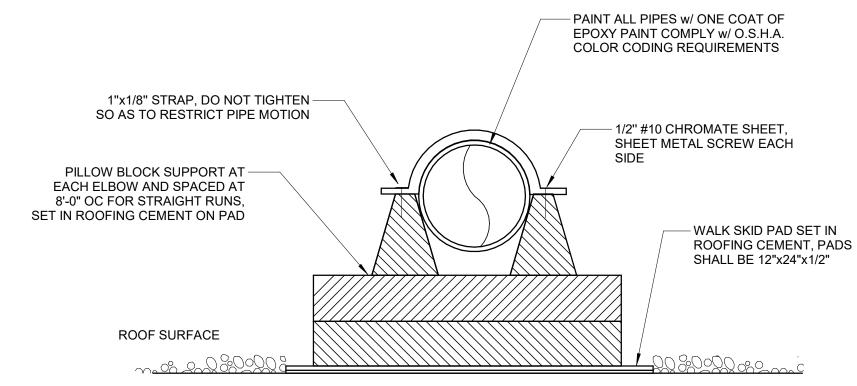
3. COORDINATE THIS DETAIL W/ ARCHITECTURAL APPLICATIONS FOR THE ROOF.







GAS PIPING CONNECTION DETAIL

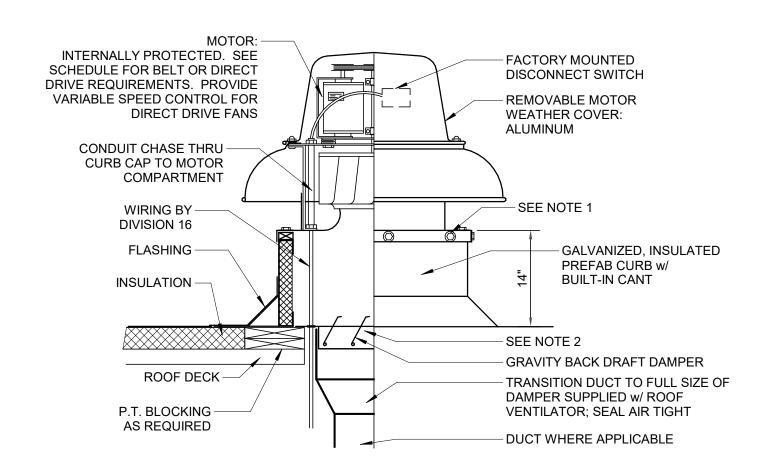


GAS PIPING SUPPORT DETAIL SCALE: NTS

M301

REMOVABLE CAP: FOR CLEAN OF THE TRAP & DRAIN LINE TEE CONNECTION REMOVABLE CAP: w/ 1/4" HOLE DRILLED IN CAP FOR CLEAN-OUT. VENT OF DRAIN PIPING, AND OVER-FLOW OF DRAIN PIPING DRAIN PAN TEE CONNECTION DRAIN PIPING AND RUBBER SUPPORT BLOCKING SPACED AT 6'-0" OC DUCT **ROOF CONSTRUCTION** FACTORY -CURB

RTU CONDENSATE DRAIN DETAIL

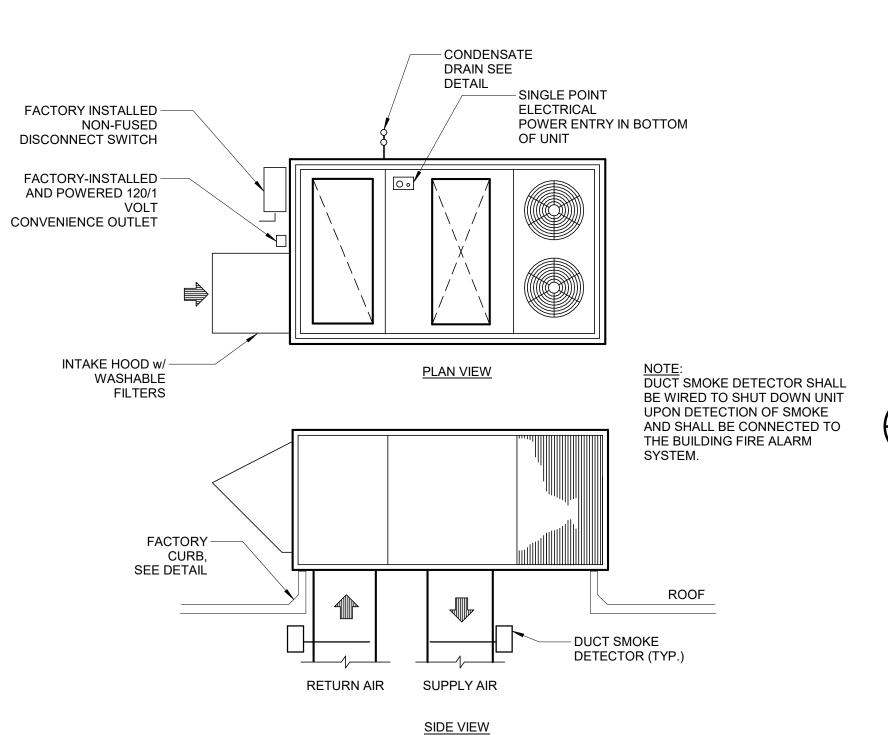


1. SECURE CURB CAP TO WOOD NAILING STRIP w/ 1/4" STAINLESS STEEL LAG BOLTS NOT OVER 12" ON CENTER.

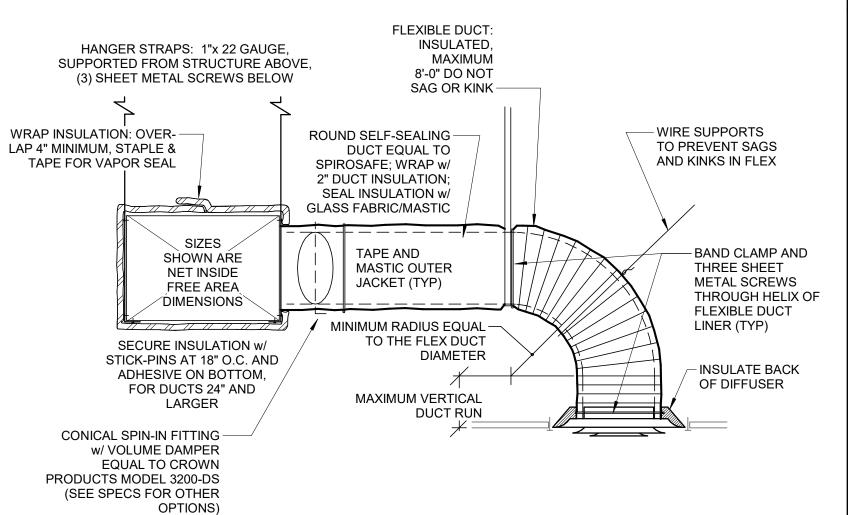
SECURE ROOF CURB, DUCT WORK AND DAMPER TO ROOF W/ EXPANSION BOLTS (CONCRETE ROOF) OR RUST RESISTANT BOLTS (METAL DECK AND BAR JOIST ROOF) 3. SIZE OF DUCT THROUGH ROOF SHALL NOT BE LARGER THAN CURB SUPPLIED w/ ROOF

4. RUN ELECTRIC LINES THROUGH CLEARANCE HOLE PROVIDED IN GRAVITY DAMPER, THEN THROUGH VENTILATOR ELECTRICAL CONDUIT GUIDE.

CENTRIFUGAL ROOF EXHAUST FAN DETAIL M301







1. DUCTS SHALL BE FABRICATED & INSTALLED PER THE LATEST EDITION OF SMACNA DUCT

CONSTRUCTION STANDARDS. 2. ALTERNATE INTERPRETATIONS OF SMACNA DUCT MATERIAL, HANGERS AND REINFORCEMENTS ARE SUBJECT TO ENGINEER APPROVAL, AND REQUIRE SEPARATE SUBMITTAL OF THE ALTERNATES.

FLEXIBLE DUCT CONNECTORS SHALL BE PROVIDED WHERE SHOWN ON THE PLAN. 4. SUPPLY AIR DROPS FROM ROOF TOP UNITS SHALL TRANSITION FROM THE UNIT OPENING SIZE TO SQUARE NECK ELBOWS, w/ SIZES AS SHOWN ON THE PLAN. IF TWO SUPPLY AIR DUCT RUNS ARE AT THE UNIT, THEN TWO SEPARATE DROPS & ELBOWS SHALL BE PROVIDED. 5. RETURN AIR DROPS FROM THE ROOF TOP UNITS SHALL BE FULL SIZE OF THE UNIT OPENING.

6. ELBOWS SHALL BE SQUARE NECK (SAME IN OUT DIMENSION) w/ 2" DOUBLE THICKNESS TURNING 7. OFFSETS SHALL NOT REDUCE THE FREE AREA, AND SHALL NOT EXCEED 30°. A RADIUS HEEL SHALL BE PROVIDED ON 30° OFFSETS. SMALLER OFFSETS SHALL BE MITERED AT BOTH THE HEEL &

8. TRANSITIONS SHALL NOT EXCEED 1:3 RATIO (4" TRANSITION PER FOOT SINGLE SIDED TRANSITION, AND 8" PER FOOT DOUBLE SIDED TRANSITION).

9. INSULATION SHALL BE NFPA 90 APPROVED, w/ MINIMUM R-VALUE OF 6.0. WRAP INSULATION SHALL BE 2" THICK W/ ALUMINUM FOIL FACING. LINER SHALL BE 1" THICK, 1-1/2 PCF DENSITY. 10. RECTANGULAR BRANCH CONNECTIONS SHALL BE 45° ENTRY TYPE PER SMACNA FIGURE 2-6.

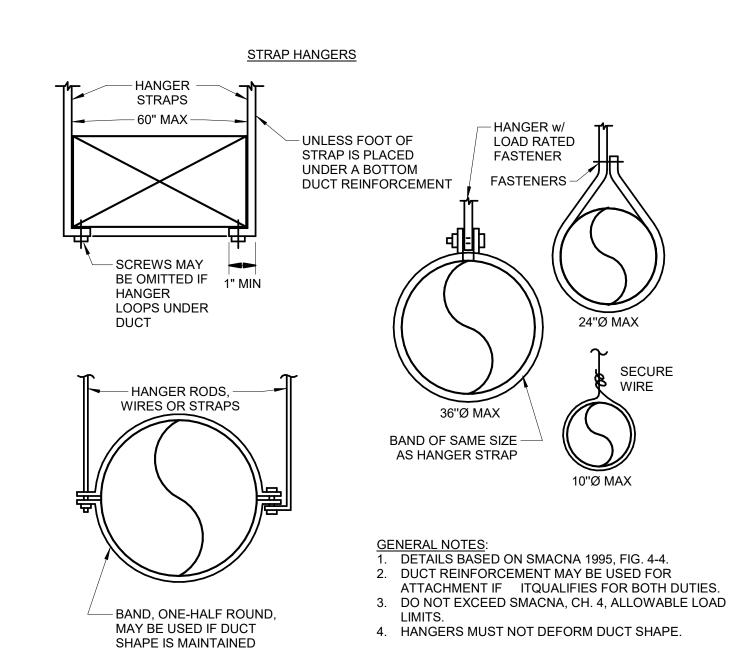
DAMPER AND HANDLE. SPRAY PAINT LOCATIONS OF HANDLES. 12. FLEXIBLE DUCT SHALL INCLUDE AN INNER POLYETHYLENE LINER, A SPRING HELIX, 1-1/4" BLANKET

11. ROUND DUCT CONNECTIONS SHALL BE w/ "CROWN PRODUCTS COMPANY" 3200-DS FITTINGS,

INSULATION (R-6.0), A FOIL OUTER VAPOR BARRIER, AND BE UL LISTED CLASS I AIR DUCT. 13. SEAL ALL SUPPLY, RETURN & OUTSIDE AIR DUCT JOINTS w/ DUCT SEALER; SEAL ALL INSULATION JOISTS w/ GLASS FABRIC AND MASTIC.

M301

CONCEALED DUCTWORK INSTALLATION DETAIL



DUCT SUPPORT DETAIL M301



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Sheet Title:

DETAILS -**MECHANICAL**

Sheet Number:

PLUMBING LEGEND						
	COLD WATER PIPE					
	HOT WATER PIPE					
	HOT WATER RETURN PIPE					
	EXISTING COLD WATER PIPE					
	EXISTING HOT WATER PIPE					
	EXISTING HOT WATER RETURN PIPE					
	SOIL OR WASTE PIPE					
	EXISTING SOIL OR WASTE PIPE					
	VENT PIPE					
	EXISTING VENT PIPE					
	STORM					
	FIRE					
	TURNED UP					
C+	TURNED DOWN					
	TEE, OUTLET DOWN					
	TEE, OUTLET UP					
T&P	TEMPERATURE AND PRESSURE RELIEF DRAIN PIPING					
———ED———	EMERGENCY DRAIN PAN PIPING					
	GATE VALVE					
₹	PRESSURE RELIEF VALVE					
——————————————————————————————————————	BALL VALVE					
<u>FIXTURE</u>	PLUMBING FIXTURE DESIGNATION (UNDER LINED)					
\oplus	CONNECT TO EXISTING					
\bigcirc	DISCONNECT FROM EXISTING					
	NATURAL GAS PIPE					

ABBREV	ABBREVIATIONS						
A/C	ABOVE CEILING						
AFF	ABOVE FINISHED FLOOR						
AFG	ABOVE FINISHED GRADE						
BFF	BELOW FINISHED FLOOR						
BFG	BELOW FINISHED GRADE						
BTU	BRITISH THERMAL UNIT						
СО	CLEANOUT						
CONN	CONNECTION						
CW	COLD WATER						
DN	DOWN						
DFU	DRAINAGE FIXTURE UNIT						
ED	EQUIPMENT DRAIN						
EX	EXISTING						
FU	FIXTURE UNIT						
FL	FLOOR						
FCO	FLOOR CLEANOUT						
GPM	GALLONS PER MINUTE						
GC	GENERAL CONTRACTOR						
GCO	GRADE CLEANOUT						
GW	GREASE WASTE						
HW	HOT WATER						
HWR	HOT WATER RETURN						
IN	INCHES						
MIN	MINIMUM						
PC	PLUMBING CONTRACTOR						
SAN OR S	SANITARY						
SSD	SECONDARY STORM DRAIN						
SD	STORM DRAIN						
V	VENT						
VTR	VENT TO ROOF						
WCO	WALL CLEANOUT						
W	WASTE						
WTR	WATER						
WSFU	WATER SUPPLY FIXTURE UNIT						
W/	WITH						
W/O	WITHOUT						

GENERA	GENERAL SYMBOLS							
	PLAN OR DETAIL NO SHEET NUMBER							
1	KEYED NOTE TO PLAN							
1	REVISION NUMBER							
N	NORTH ARROW							

Project Name: Project No.: Date:	Luck's Cannery CLT18214 September 25, 2019											RENOVATION FLUSH VALVE
FIXTURE	DESCRIPTION	OCCUPANCY	QTY.	DRAINAGE	SUB-	LOAD VA	LUES IN WATE	R (EACH)	LOAD VAI	LUES IN WATE	R (TOTAL)	Remarks
				FIXTURE	TOTAL	SUPPLY FIXTURE UNITS (WSFU)			SUPPLY FIXTURE UNITS (WSFU)			
				UNITS		COLD	HOT	TOTAL	COLD	HOT	TOTAL	
WC	Water Closet, Flush Valve, 1.6 GPF	Public	7	4	28	10.0	-	10.0	70	0	70	
UR	Urinal, 3/4" Flush Valve, 1.0 GPF	Public	1	2	2	5.0	-	5.0	5	0	5	
LAV2	Lavatory, Countertop	Public	5	1	5	1.5	1.5	2.0	7.5	7.5	10	
SH	Shower, HC	Public	0	2	0	3.0	3.0	4.0	0	0	0	
MS	Mop (Service) Sink	Offices, etc.	1	2	2	2.3	2.3	3.0	2.25	2.25	3	
EWC	Electric Water Cooler (Drinking Fountain)	Offices, etc.	1	0.5	0.5	0.3	-	0.3	0.25	0	0.25	
FD1	Floor Drain - General / Restroom		2	2	4	0.0	0.0	0.0	0	0	0	
НВ	Hose Bibb	Public or Private	1	0	0	2.0	-	2.0	2	0	2	
TOTALS					41.5	DFU			87	9.75	90.25	WSFU
DFU = DRAINAGE	FIXTURE UNITS				EIGHTH	INCH SLOPE	PER FOOT		63.4	25.4	64.4	GPM
WSFU = WATER	SUPPLY FIXTURE UNITS				4	DIAMETER O	E DIDE (INCHES	2)	2.5	2	2.5	INCHES REQ'D.

PLUMBING MATERIALS AND NOTES

DOMESTIC WATER PIPING:

- DOMESTIC WATER PIPING AND JOINTS <u>BELOW GRADE</u>: PROVIDE TYPE 'K' SOFT ANNEALED SEAMLESS COPPER TUBING (ASTM B 88) WITH NO JOINTS FOR PIPING 2 1/2" AND SMALLER.
- DOMESTIC WATER PIPING AND JOINTS <u>ABOVE GRADE</u> : PROVIDE TYPE 'L' HARD DRAWN SEAMLESS COPPER tubing (astm b 88) and cast copper alloy fittings (asme b16.18). Joints 1" and smaller shall be LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32), JOINTS 11/4" AND LARGER SHALL BE BCUP SILVER/PHOSPHORUS/COPPER BRAZED JOINTS (AWS A5.8).
- . Sterilize the domestic water system in accordance with the american water works ASSOCIATION'S SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
- I. INSULATE DOMESTIC WATER PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH PREFORMED MINERAL FIBER PIPE INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTUH x SQ. FT. FOLLOW SCHEDULE BELOW: **INSULATION THICKNESS**

DOMESTIC HOT WATER & CIRCULATION 1/2" - 1 1/4" DOMESTIC HOT WATER & CIRCULATION 11/2" - 4" 1 1/2" DOMESTIC COLD WATER 1/2" - 1 1/4" 1 1/2" - 4" DOMESTIC COLD WATER

- DOMESTIC WATER PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE required to meet a flame-spread rating of 25 or less and a smoke-developed rating of 50 or less, AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED.
- PROVIDE FULL PORT, BALL TYPE SHUT-OFF VALVES AND INSTALL IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
- . PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.
- . PROTECT COPPER PIPING AGAINST CONTACT WITH ALL MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
- 9. DOMESTIC WATER PIPING SHALL BE SLOPED FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT LOW POINTS. SANITARY WASTE / VENT PIPING:
- . Sanitary waste piping <u>below</u> grade: provide service weight cast iron hub AND SPIGOT PIPE (ASTM A 74) WITH COMPRESSION JOINTS (CISPI HSN) AND NEOPRENE GASKETS (ASTM C 564) OR NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET/STAINLESS STEEL CLAMP JOINTS (CISPI 310) OR PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD
- JOINTS (ASTM D2855). FOAM CORE PVC PIPE IS NOT APPROVED. . Sanitary waste/vent piping <u>above</u> grade: provide service weight cast iron no-hub pipe and FITTINGS (CISPI 301) WITH NEOPRENE GASKET AND STAINLESS STEEL CLAMP JOINTS (CISPI 310) OR PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD JOINTS
- SLOPE SANITARY WASTE PIPING AT 1/4" PER FOOT MINIMUM FOR PIPING 2 1/2" AND SMALLER AND 1/8" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE.

(ASTM D2855). FOAM CORE PIPE IS <u>NOT</u> APPROVED. DO <u>NOT</u> INSTALL PVC PIPING IN RETURN AIR PLENUMS.

- 4. PROVIDE CLEAN-OUTS AT THE BASE OF SANITARY WASTE STACKS AND STORM DRAIN RISERS AND AT EVERY TURN IN PIPING IN EXCESS OF 45° AND NO FURTHER THAN 100'-0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
- PROVIDE FLOOR CLEANOUTS WITH TOPS DESIGNED TO MATCH SPECIFIC FLOOR FINISHES SUCH AS CARPET, TILE, ETC. YARD CLEANOUTS SHALL BE PROVIDED IN AN 18"x18"x6" CONCRETE PAD.
- . Where waste piping is exposed in rest room areas, provide chrome plated brass piping, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.
- INSULATE MECHANICAL ROOM FLOOR DRAIN BODIES, P-TRAP AND HORIZONTAL DRAIN PIPING ABOVE GRADE WITH 1" THICK GLASS FIBER INSULATION WITH VAPOR BARRIER AND JACKET.
- PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES ARE REQUIRED TO MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS, AS TESTED BY ASTM E84 (NFPA 255) METHOD.
- 9. SUMP PUMP DISCHARGE PIPING: PROVIDE SCHEDULE 80 PVC/CPVC (ASTM A53) AND FITTINGS (ASME B16.3) WITH THREADED JOINTS. SLOPE SUMP DISCHARGE LINE AT 1% SLOPE TOWARDS SUMP PUMP

- NATURAL GAS PIPING AND FITTINGS <u>ABOVE</u> GRADE: SCHEDULE 40 BLACK STEEL PIPING, TYPE S, SEAMLESS, GRADE B (ASTM A 53) AND 150 PSI MALLEABLE BLACK IRON FITTINGS, GRADE 32510, (ASTM B 16.3) OR FORGED STEEL WELDING TYPE FITTINGS (ASTM A234). PROVIDE THREADED JOINTS FOR PIPE 2" AND SMALLER, PROVIDE WELDED JOINTS (ASME B31.9) FOR PIPE 2 1/2" AND LARGER.
- NATURAL GAS PIPING AND FITTINGS OUTSIDE <u>BELOW</u> GRADE: POLYETHYLENE, SDR-11, ASTM D2513 PIPE AND FITTINGS WITH HEAT FUSION SOCKET JOINTS. POLYETHYLENE PIPE AND FITTING MATERIALS SHALL BE COMPATIBLE AND BY SAME MANUFACTURER TO ENSURE UNIFORM MELTING AND PROPER BOND. FABRICATED FITTINGS SHALL NOT BE USED.
- PROVIDE CONNECTION BETWEEN BURIED PLASTIC GAS SERVICE PIPING AND METALLIC RISER IN ACCORDANCE WITH THE GAS CODE. PROVIDE METALLIC RISER CONSISTING OF HDPE FUSED COATING ON STEEL PIPE FOR CONNECTION TO ABOVE GROUND BUILDING DISTRIBUTION PIPING. UNDERGROUND HORIZONTAL METALLIC PORTION OF RISER SHALL BE AT LEAST TWENTY FOUR INCHES IN LENGTH BEFORE CONNECTING TO THE PLASTIC SERVICE PIPE. AN APPROVED TRANSITION FITTING OR ADAPTOR MEETING DESIGN PRESSURE RATING AND PLASTIC PIPE MANUFACTURERS RECOMMENDATIONS SHALL BE USED WHERE THE PLASTIC JOINS THE METALLIC RISER.
- 4. GAS PIPING SHALL BE INSTALLED TO THE REQUIREMENTS OF THE STATE BUILDING CODE AND NFPA STANDARD NO. 54. SPACE GAS PIPING HANGER RODS 8'-0" ON CENTER MAXIMUM AND SPACE TRANSVERSE BRACING 20'-0" ON CENTER MAXIMUM. TRANSVERSE BRACING FOR ONE SECTION MAY ACT AS LONGITUDINAL BRACING FOR THE PIPE SECTION CONNECTED TO IT IF THE BRACING IS INSTALLED WITHIN 24" OF THE ELBOW OR TEE. PIPING SHALL BE SUPPORTED BY ROD HANGERS IN THE PIPE RUN 12" OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE PER THE STATE BUILDING CODE AND ASCE 7. COORDINATE HANGER LOCATIONS WITH STRUCTURAL DRAWING DETAILS.
- PROVIDE A.G.A. CERTIFIED SHUT-OFF VALVES MINIMUM, 125 PSI RATED, NON- LUBRICATED PLUG TYPE WITH BRONZE BODY AND BRONZE PLUG, STRAINERS AND REGULATORS (AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER) FOR ALL EQUIPMENT CONNECTED TO THE NATURAL GAS SYSTEM.
- 6. GAS PRESSURE REGULATORS SHALL BE CSA CERTIFIED (Z21.80) FOR 2 PSI INLET PRESSURE, OUTLET PRESSURE RANGE OF 7 TO 11 INCHES WATER COLUMN. WHEN USING VENTLESS REGULATORS, MOUNT REGULATOR IN A HORIZONTAL UPRIGHT POSITION. IF VENTED TYPE REGULATORS ARE USED, INSTALL VENT PIPING (FULL SIZE OPENING) FROM GAS PRESSURE REGULATORS TO OUTDOORS AND TERMINATE IN WEATHERPROOF HOOD.
- PAINT ALL EXTERIOR GAS PIPING WITH 2 COATS OF YELLOW ENAMEL PAINT APPLIED WITH A BRUSH (2 MIL THICKNESS MINIMUM). STENCIL "GAS" ON PIPE AT 12'-0" CENTERS FOR ALL LOW PRESSURE PIPING (0.5 PSI). STENCIL "2-PSI GAS" ON PIPE AT 6'-0" CENTERS FOR 2 PSI GAS PIPING.

PLUMBING GENERAL NOTES

GENERAL REQUIREMENTS:

- 1. PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE SOUTH CAROLINA STATE PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
- GENERAL AND SPECIAL CONDITIONS ARE HEREBY MADE AN INTEGRAL PART OF THE PLUMBING SPECIFICATIONS INSOFAR AS THE GENERAL AND SPECIAL CONDITIONS ARE APPLICABLE TO THE PLUMBING WORK, UNLESS OTHERWISE SPECIFIED.
- SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
- 4. PERMITS: APPLY AND PAY FOR ALL NECESSARY PERMITS, FEES AND INSPECTIONS REQUIRED BY ANY PUBLIC AUTHORITY HAVING JURISDICTION. ACREAGE CHARGES, FACILITIES CHARGES AND BOND PROPERTY ASSESSMENTS ARE NOT TO BE CONSTRUED TO BE A PART OF THIS CONTRACT.
- WARRANTY: PROVIDE A ONE YEAR WARRANTY, FROM THE DATE OF ACCEPTANCE OF WORK BY THE OWNER, FOR ALL PLUMBING MATERIALS AND EQUIPMENT.
- 6. COORDINATE ALL PLUMBING PIPING LOCATIONS, ROUGH-IN LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. FINAL PIPING AND EQUIPMENT LOCATIONS SHALL BE A CODE COMPLIANT INSTALLATION FOR ALL TRADES.
- FIELD VERIFY PROPER OPERATION OF EXISTING SYSTEMS BEFORE STARTING CONSTRUCTION. NOTIFY THE ARCHITECT / ENGINEER OF RECORD OF ANY PROBLEMS OR DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED
- 8. CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE HELD TO A MINIMUM. PATCH AND FINISH SURFACES TO MATCH ADJOINING SURFACES.

BEFORE CONTINUING WORK IN THE EFFECTED AREAS.

- 9. PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR ALL LOCATIONS OF PLUMBING FIXTURES, WALLS, DOORS, WINDOWS, ETC. 10. PLUMBING PIPING SHALL BE LOCATED CONCEALED IN WALLS, PARTITIONS OR ABOVE CEILINGS UNLESS
- NOTED OTHERWISE. PLUMBING PIPING IN EXPOSED AREAS SHALL BE RUN TIGHT TO UNDERSIDE OF STRUCTURE. . PLUMBING PIPING, VENTS, ETC. EXTENDING THROUGH EXTERIOR WALLS AND/OR THE ROOF SHALL BE FLASHED
- AND COUNTER FLASHED IN A WATERPROOF MANNER. COORDINATE FLASHING WITH THE GENERAL CONTRACTOR.
- 2. DO <u>NOT</u> INSTALL PLUMBING PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PLUMBING PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
- 13. PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.
- 14. ATTACH HANGERS TO STRUCTURE, HANGERS SHALL NOT ATTACH TO THE DECK.
- 15. PROVIDE ACCESS DOORS FOR VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC. CONCEALED IN MASONRY WALLS, GYPBOARD WALLS AND/OR CEILINGS THAT WILL REQUIRE MAINTENANCE ACCESS. ACCESS DOORS SHALL BE LOCATED IN CEILILING ONLY.
- 16. PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: PLUMBING FIXTURES AND EQUIPMENT, FIRE STOPPING, SEISMIC BRACING, PIPE IDENTIFICATION, DOMESTIC WATER SYSTEM, SANITARY WASTE AND VENT SYSTEM, STORM DRAIN SYSTEM, NATURAL GAS SYSTEM
- 17. REFER TO UNIT PLANS FOR LOCATION OF STACKS AND RISERS. COORDINATE LOCATION WITH 2X6 WALLS NOTED ON ARCHITECTURAL PLANS.
- 18. PC SHALL SUBMIT FIXTURE AND EQUIPMENT SUBMITTALS AS FOLLOWS: FIXTURES AND EQUIPMENT FOR UNITS, FIXTURE AND EQUIPMENT FOR AMENITY AREAS AND ALL OTHER PUBLIC SPACES. INDIVIDUAL FIXTURE SUBMITTALS WILL NOT BE REVIEWED. PC SHALL SUBMIT SPECIFIED FIXTURES AS INDICATED BY OWNER AND ID DRAWINGS. DEVIATIONS FROM SPECIFIED FIXTURES SHALL HAVE A WRITTEN EXPLINATION ALONG WITH FIXTURE SUBMITTAL FOR REVIEW.

PLUMBING FIXTURES AND EQUIPMENT:

- PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC.
- 2. PLUMBING FIXTURES AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S RECOMMENDATIONS AND INSTALLATION INSTRUCTIONS.
- THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO; PROVIDING MAINTENANCE ACCESS CLEARANCE, PIPING, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. AND ANY MODIFICATIONS TO ASSOCIATED MECHANICAL, ELECTRICAL OR PLUMBING SYSTEMS REQUIRED BY THE EQUIPMENTS INSTALLATION INSTRUCTIONS. ALL COSTS ASSOCIATED WITH SUBSTITUTIONS SHALL BE INCLUDED IN THE ORIGINAL BASE BID.

FIRE STOPPING:

FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED. REFER TO ARCHITECTURAL PLANS FOR WALL AND FLOOR TYPES.

SEISMIC BRACING:

PROPERLY SUPPORT AND BRACE VERTICALLY AND HORIZONTALLY ALL PIPING, APPARATUS, EQUIPMENT, ETC. IN ACCORDANCE WITH APPLICABLE CODES TO PREVENT EXCESSIVE MOVEMENT DURING SEISMIC

	SHOCK	ARRESTO	or sizin	G TABLE
DRAWING SYMBOL	fixture units	PDI WH201 STANDARD DESIGNATION	ARRESTOR SIZE	APPROVED MANUFACTURERS
<u>SA-A</u>	1-11	А	1/2"	- SIOUX CHIEF
<u>SA-B</u>	12-32	В	3/4"	- WATTS - PPP INC.
<u>SA-C</u>	33-60	C	1"	111 1170.
<u>SA-D</u>	61-113	D	1 1/4"	REMARKS
<u>SA-E</u>	114-154	E	1 1/2"	INSTALL SHOCK ARRESTORS
<u>SA-F</u>	155-330	F	2"	PER PDI WH201 GUIDELINES



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Project Owner:

LUCK'S CANNERY REDEVELOPMENT -PHASE I-Seagrove, NC 27341



Issue For:

CONSTRUCTION

Issue Date: 07.27.2019

> REASON DATE

PRINCIPAL IN CHARGE D. WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

Project Number

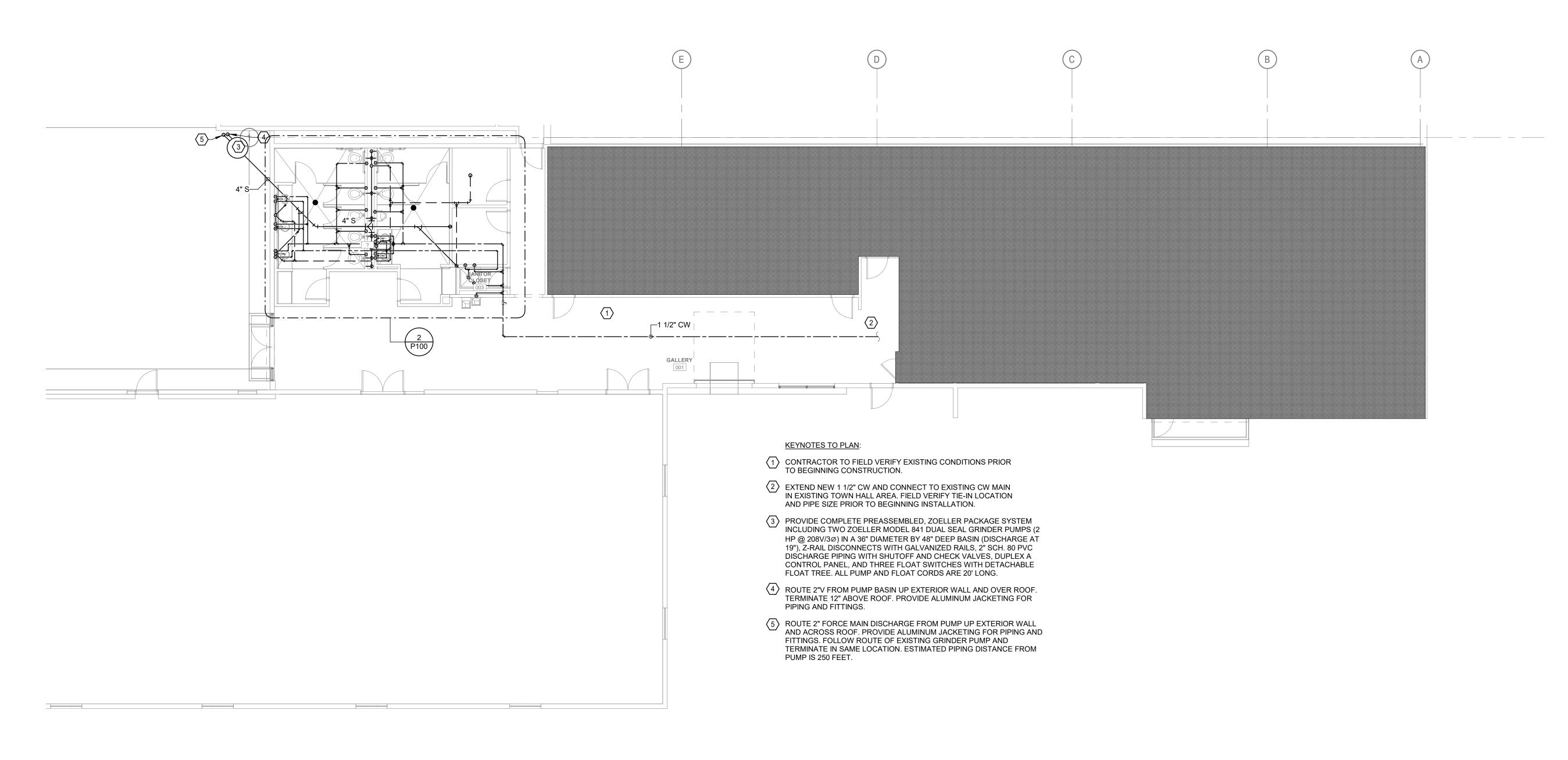
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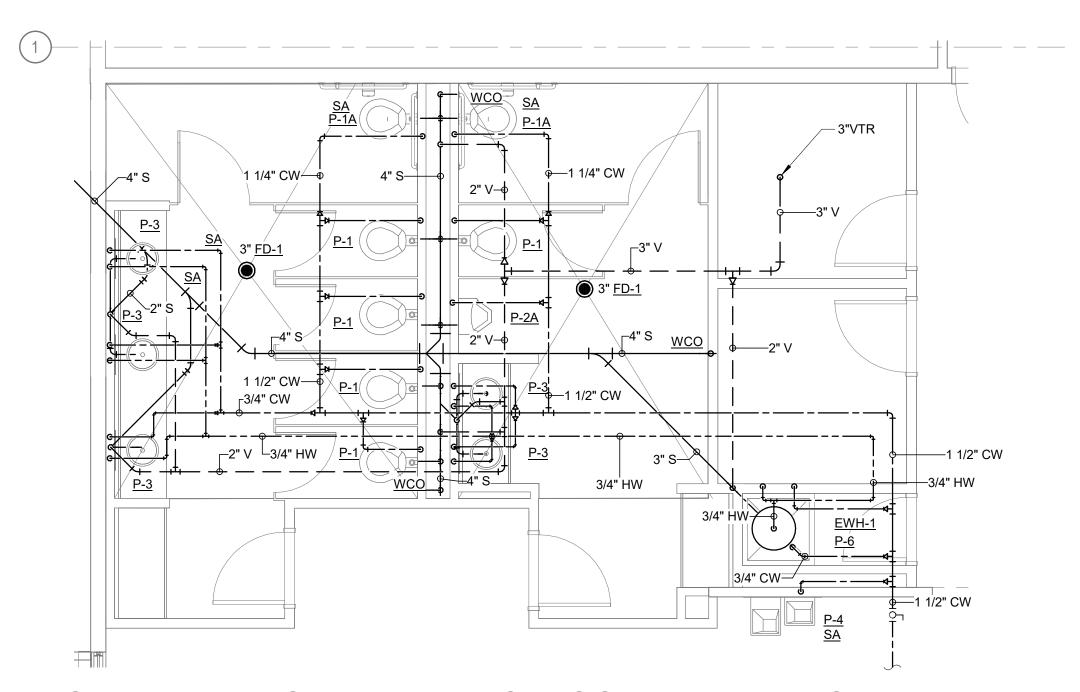
NOTES & LEGENDS -**PLUMBING**

Sheet Number:

P001



TOWNHALL FINISHED FLOOR - PLUMBING PLAN



ENLARGED PLAN - TOWNHALL RESTROOM - PLUMBING

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LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

Project Number:

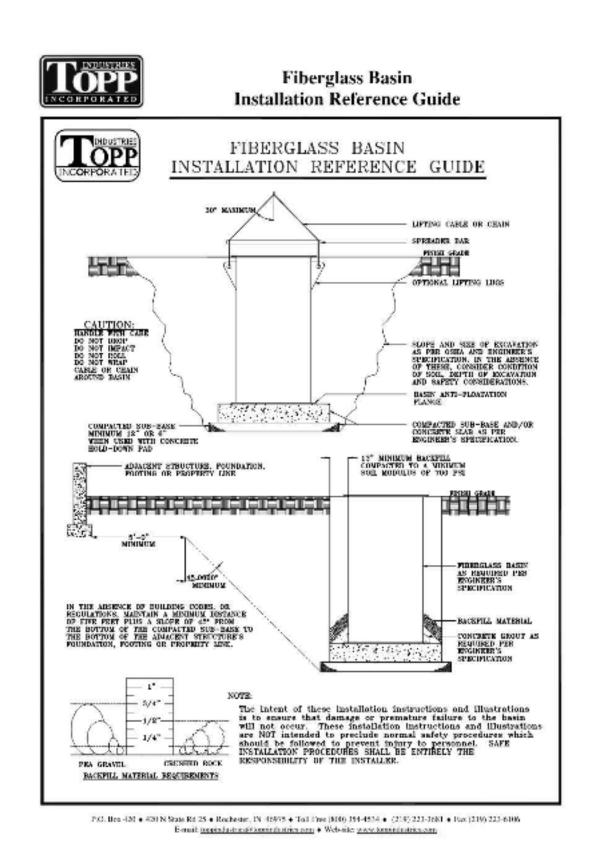
201901.1

Sheet Title:

TOWNHALL FLOOR PLAN -**PLUMBING**

Sheet Number:

P100

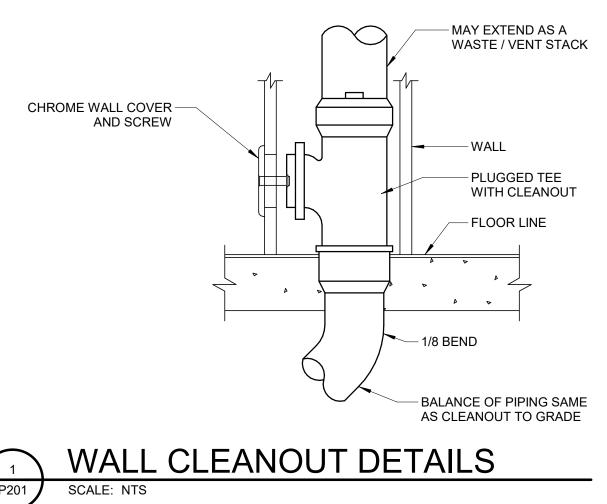


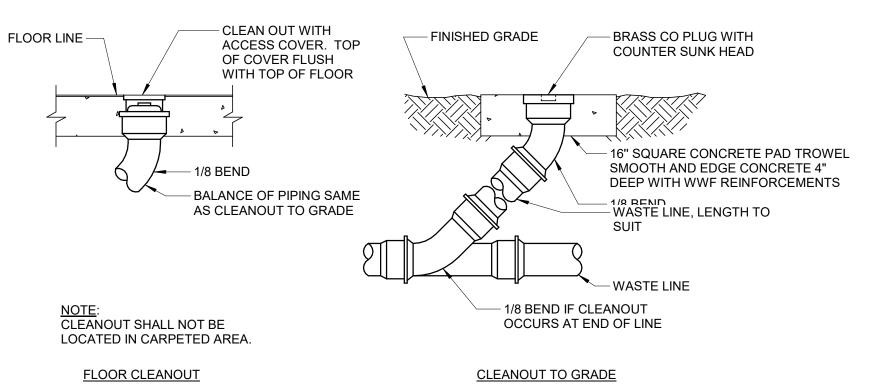
- HOT WATER TO FIXTURES (WHERE APPLICABLE) COLD WATER SUPPLY EXPANSION TANK EQUAL TO AMTROL BALL VALVE (TYP) VACUUM BREAKER ELECTRIC WATER HEATER MOUNTED AS HIGH AS POSSIBLE ABOVE SINK - A.S.M.E. RATED PRESSURE & TEMP. RELIEF VALVE PIPE P&T RELIEF VALVE DWV COPPER FULL SIZE TO SAFEPAN HEAT TRAP - 1/2" GALVANIZED ALL THREADED ROD. CONNECT TO STRUCTURE ABOVE (4 REQUIRED) PROVIDE DIELECTRIC UNION AT HOT AND COLD WATER CONNECTIONS TO HEATER PROVIDE A 2" HIGH PLASTIC SAFEPAN FOR ALL WATER HEATERS - 1" GALVANIZED ANGLE STEEL FRAME WITH 16 GAUGE GALVANIZED BOTTOM. SIZE TO FIT DRAIN PAN MOP SINK FAUCET 48" ABOVE FLOOR PROVIDE ESCUTCHEONS AT ALL WALL PENETRATIONS DISCHARGE PRESS/TEMP AND DRAIN PAN PIPING INDIRECTLY INTO MOP BASIN - MOP BASIN _____ WATER HEATER DIAGRAM



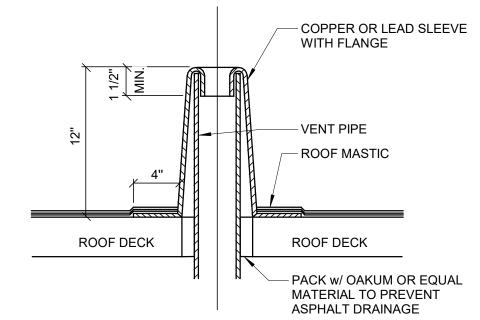
GRINDER PUMP BASIN INSTALLATION DETAIL

		PLU	MBING FIXTURE SCHEDULE						
DESIGNATION	MANUFACTURER	MODEL#	FIXTURE DESCRIPTION	CONNECTION SCHEDULE					
DEGIGITATION	MARGIAGIORER	model "	TEXTORE BEGOTTE HON	WASTE	VENT	cw	HW		
<u>P-1</u>	AMERICAN STANDARD	"AFWALL" 2257.101	WALL-HUNG VITREOUS CHINA WATER CLOSET W/ ELONGATED BOWL MOUNT TOP OF RIM AT 14" A.F.F. FLUSH VALVE - SLOAN G2 8111 SENSOR (BATTERY) SEAT - (NO LID) - CHURCH MODEL 9500-SSC LOW WATER CONSUMPTION (1.28 GALLONS PER FLUSH)	3"	2"	1"			
<u>P-1A</u>	AMERICAN STANDARD	" AWFALL" 2257.101	WALL-HUNG VITREOUS CHINA WATER CLOSET W/ ELONGATED BOWL (ADA) MOUNT TOP OF RIM AT 17" A.F.F. TO MEET A.D.A. FLUSH VALVE - SLOAN G2 8111 SENSOR (BATTERY) SEAT - (NO LID) - CHURCH MODEL 9500-SSC LOW WATER CONSUMPTION (1.28 GALLONS PER FLUSH) LOCATE FLUSH CONTROL ON WIDE SIDE OF STALL	3"	2"	1"			
<u>P-2A</u>	AMERICAN STANDARD	"WASHBROOK" 6590.001	WALL- HUNG, VITREOUS CHINA, FLUSH VALVE URINAL (ADA) FLUSH VALVE - SLOAN ECOS 8186 (BATTERY) LOW WATER CONSUMPTION (0.125 GALLONS PER FLUSH) MOUNT TOP OF FRONT RIM AT 17" A.F.F. TO MEET A.D.A. PROVIDE SUITABLE FIXTURE CARRIER	2"	2"	3/4"			
<u>P-3</u>	BY ARCH	BY ARCH	LAVATORY SPECIFIED BY ARCHITECT FAUCET - SLOAN OPTIMA EAF-250 SENSOR (BATTERY) TRAP - 1 1/4" CAST BRASS WITH C.O. PLUG SUPPLY - 3/8" ANGLE -TYPE WITH STOPS	2"	1 1/4"	1/2"	1/2"		
<u>P-4</u>	ELKAY	LMABFTL8WSSK	ELECTRIC WATER COOLER W/DUAL SPLIT-LEVEL BASINS (BARRIER FREE) WITH BOTTLE FILLLING STATION, STAINLESS STEEL FINISH 7.5 GPH CAPACITY, 3.7 F.L.A.120-1-60.	2"	1 1/4"	1/2"			
<u>P-6</u>	FIAT	TSB3012	36"x36" FLOOR-MOUNTED TERAZZO MOP BASIN FAUCET- FIAT 830-AA FURNISH WALL- MOUNTED MOP HANGER, STAINLESS STEEL BUMPERGUARDS	3"	2"	1/2"	1/2"		
<u>EWH-1</u>	A.O. SMITH	DEL-20-3	20-GALLON, LOW-BOY COMMERCIAL ELECTRIC WATER HEATER 3.0 KW, 208-1-60, 14.4 AMPS SET WATER TEMP. CONTROL TO 110° F			3/4"	3/4"		
SA	ZURN	Z-1700 SERIES	WATER HAMMER ARRESTOR. SIZE PER P.D.I. WH-201 VERIFY THAT COMPONENT IS ACCESIBLE.		-				
<u>HB1</u>	WOODFORD	24	INDOOR, CHROME PLATED BRASS, ANTI-SIPHON WALL HYDRANT WITH LOOSE KEY		-	1/2"			
FD1	ZURN	Z-415 W/ TYPE "B" STRAINER	FLOOR DRAIN W/ 5" NICKALOY STRAINER TOP SEE FLOOR PLANS FOR DRAIN SIZES. PROVIDE MIFAB "MI-GUARD" TRAP GUARD DEVICE						
WCO	ZURN	Z-1446	WALL CLEANOUT - PROVIDE SCREW COVER MATCH SIZE OF PIPE.						
YCO	ZURN	Z-1402	YARD CLEANOUT - PROVIDE SCREW COVER MATCH SIZE OF PIPE. PROVIDE 18"X18"X6" CONCRETE PAD						













Architect:

www.bodhilandanddesign.com

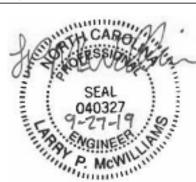
BODHI Land and Design, PLLC 918 Minerva Dale Drive Fuquay Varina, NC 27526 704.778.6608 Plans, maps, specifications, studies, and reports not containing a red ink seal imprint accompanied by an original signature by the licensed professional may have been fraudulently altered and shall not be considered an original copy.

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LUCK'S CANNERY REDEVELOPMENT -PHASE I-

Seagrove, NC 27341



Issue For: CONSTRUCTION

Issue Date: 07.27.2019

> REASON DATE

PRINCIPAL IN CHARGE: D. WALKER Project Address:

LUCK'S CANNERY - LOWER BLDG. RENNOVATION -PHASE IA

Project Number:

201901.1

Sheet Title:

SCHEDULES & **DETAILS** -**PLUMBING**

Sheet Number:

P201