HILLSBOROUGH COUNTY SHERIFF'S OFFICE PINEBROOKE OFFICE PARK - FIRING RANGE AND WORKOUT GYM

PERMIT DOCUMENTS

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Tampa, Florida 33605.3607

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wilderarchitecture.com

AA26000655

PROJECT TEAM

ANSTON-GREENLEES, INC. 1315 W. FLETCHER AVE. TAMPA, FL 33612

MILLER STRUCTURAL ENGINEERING 320 W. KENNEDY BLVD. STE. 700 TAMPA, FL 33606

> HILLSBOROUGH COUNTY SHERIFF'S OFFICE 2008 EAST 8TH AVENUE TAMPA, FLORIDA 33605

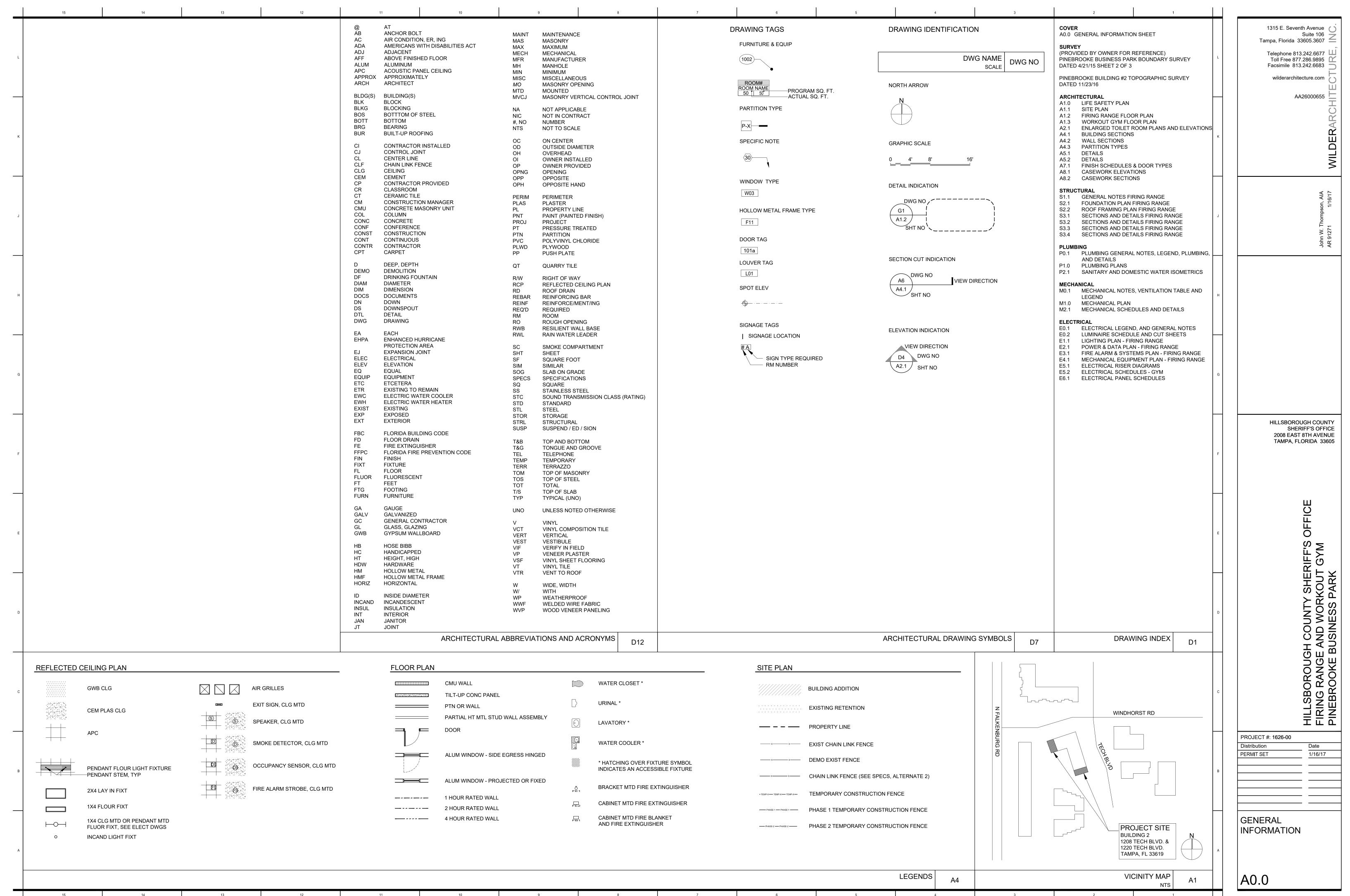
> > HILLSBOROUGH COUNTY SHERIFF'S OFFICE FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

PROJECT #: 1626-00

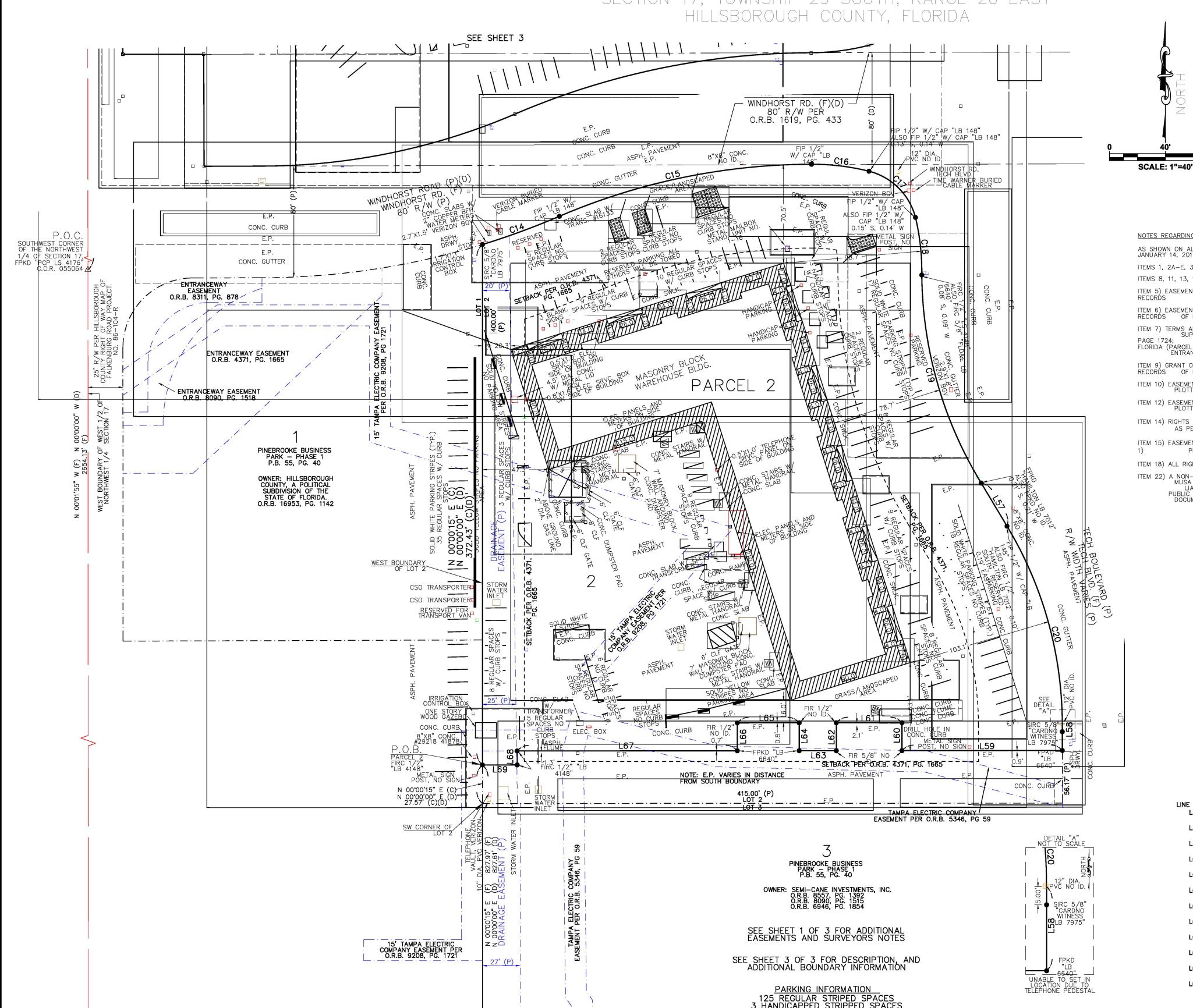
PERMIT SET

1/16/17

WILDERARCHITECTURE, INC.







NOTES REGARDING SCHEDULE B-11 EXCEPTIONS:

AS SHOWN ON ALTA TITLE COMMITMENT, AGENT'S FILE REFERENCE: 2014661, ISSUED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, EFFECTIVE DATE OF OCTOBER 3, 2014 — REVISED JANUARY 14, 2015.

ITEMS 1, 2A-E, 3, AND 4 ARE NOT OF SURVEY MATTER AND NOT ADDRESSED BY THIS SURVEY AND / OR MAP.

ITEMS 8, 11, 13, 16, 17, 19, 20, AND 21 WERE DELETED FROM THE ALTA TITLE COMMITMENT - REVISED JANUARY 14, 2015.

ITEM 5) EASEMENTS, RESTRICTIONS, CONDITIONS, AND OTHER MATTERS AS SHOWN ON PLAT OF PINBROOKE BUSINSS PARK PHASE I, AS RECORDED IN PLAT BOOK 55, PAGE 40, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA (AS TO PARCEL 1). PLOTTED AND SHOWN HEREON.

ITEM 6) EASEMENTS, RESTRICTIONS, CONDITIONS, AND OTHER MATTERS AS SHOWN ON PLAT OF PINBROOKE BUSINSS PARK PHASE II, AS RECORDED IN PLAT BOOK 57, PAGE 27, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA (AS TO PARCEL 2). PLOTTED AND SHOWN HEREON.

ITEM 7) TERMS AND CONDITIONS OF DECLARATION OF PROTECTIVE COVENANTS, BUILDING STANDARDS AND EASEMENTS AS RECORDED IN O.R. BOOK 4371, PAGE 1665; AS SUPPLEMENTED BY

SUPPLEMENTAL DECLARATION AS RECORDED IN O.R. BOK 4554, PAGE 1288; MODIFIED IN O.R. BOOK 4817, PAGE 1309; ASSIGNMENT OF RIGHTS AS SET FORTH IN O.R. BOOK 7631,
PAGE 1724; AND COLUMN AND COLU FLORIDA (PARCEL 1 AND 2).
ENTRANCEWAY EASEMENTS AND SETBACKS PLOTTED AND SHOWN HEREON.

ITEM 9) GRANT OF EASEMENT IN FAVOR OF PINEBROOKE HOMEOWNERS ASSOCIATION, INC., AS SET FORTH IN O.R. BOOK 8090, PAGE 1518; AMENDED IN O.R. BOOK 8311, PAGE 878, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA (PARCEL 1 AND 2). PLOTTED AND SHOWN HEREON.

ITEM 10) EASEMENT IN FAVOR OF TAMPA ELECTRIC COMPANY, INC., AS RECORDED IN O.R. BOOK 9208, PAGE 1915, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA. (PARCEL 2) PLOTTED AND SHOWN HEREON.

ITEM 12) EASEMENT IN FAVOR OF TAMPA ELECTRIC COMPANY, INC., AS RECORDED IN O.R. BOOK 5346, PAGE 59, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA. PLOTTED AND SHOWN HEREON.

ITEM 14) RIGHTS OF OTHERS IN AND TO THE USE OF ANY DRAINS AND/OR DITCHES LOCATED OVER, ACROSS, IN OR UNDER THE INSURED PREMISES (AS TO EASEMENT PARCEL). AS PERTAINS TO EASEMENT PARCEL AS SHOWN.

ITEM 15) EASEMENT GRANTED UNTO TAMPA ELECTRIC COMPANY, INC., AS SET FORTH IN O.R. BOOK 9208, PAGE 1721, OF THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA. (AS TO PARCEL PLOTTED AND SHOWN HEREON.

ITEM 18) ALL RIGHTS, TITLE AND INTEREST OF PARTIES IN POSSESSION. IMPROVEMENTS SHOWN FOR DETERMINATION.

ITEM 22) A NON-EXCLUSIVE VEHICULAR AND PEDESTRIAN ACCESS, INGRESS AND EGRESS EASEMENT CREATED IN FAVOR OF MOUTAIN HIGH PINEBROOKE, LLC, A FLORIDA LIMITED LIABILITY COMPANY, MUSA AT PINEBROOKE, LLC, A FLORIDA LIMITED LIABILITY COMPANY, MINOR PINEBROOKE, LLC, A FLORIDA LIMITED LIABILITY COMPANY, RAMAEKERS PINEBROOKE, LLC, A FLORIDA LIMITED LIABILITY COMPANY, TSL PINEBROOKE, LLC, A FLORIDA LIMITED LIABILITY COMPANY, TO BE RECORDED IN THE PUBLIC RECORDS OF HILLSBOROUGH COUNTY, FLORIDA DOCUMENT NOT RECORDED TO SURVEYORS KNOWLEDGE AT THE TIME OF THIS SURVEY — NOT SHOWN.

	LINE TABLE						CURVE	TABLE				
LINE NAME	BEARING	DISTANCE	CURVE NAME	DELTA		ARC LEI		RADIL	JS	CHORD BEA	RING CH	ORD DISTANCE
L57	S 30'52'18" E (F)	35.96' (F)(P)(D)	C14	06"3"16" ((C)	58.63	(C)	540.00'	(C)(P)(D)	N 69°49'17"	E (C)	58.60' (C)
	S 31'04'59" E (P)([))		06"4'18" ((P)	58.80	(P)(D)			N 69°53'18"		58.77' (P)(D)
L58	S 00.08,00, E (C)	18.47' (C)	C15	23°06'21" ((F)(P)(D)1	185.50'	(F)(P)(D)	460.00'	(C)(P)(D)	N 7819'50"	E (C)	184.25'
	S 00'00'00" W (P)(D) 18.60' (D)	(F)(P)(D)									
L59	S 89'57'22" W (F)	114.78' (F)(D)								N 7819'19"		
	N 90°00'00" W (D)		C16	14°20'38" ((F)(P)(D)	41.56	(F)(P)(D)	166.00'	(F)(P)(D)	S 83°04'08"	E (F)	41.45'
L60	N 00°00'15" E (F)	20.00' (F)(D)	(F)(P)(D)									
	N 00°00'00" E (D)			2 20 0		400		100		S 82°57'12"		9
L61	S 89°57'22" W (F)	47.00' (F)(D)	C17	61"18'43" ((F)(P)(D)	49.22	(F)(P)(D)	46.00	(F)(P)(D)	S 45°09'40"	E (F)	46.91'
	N 90°00'00" W (D)		(F)(P)(D)									
L62	S 00°00'15" W (F)	20.00' (F)(D)				2550 (245)us •		AND AND THE PROPERTY OF THE PARTY OF THE PAR		S 45°07'31"		Pro 19 Zindowen
	S 00°00'00" W (D)		C18	14*20′38″ ((F)(P)(D)	41.56	(F)(P)(D)	166.00	(F)(P)(D)	S 06"5'53"	E (F)	41.45'
L63	S 89°57'22" W (F)	26.53' (F)(D)	(F)(P)(D)							**** *********************************		
	N 90°00'00" W (D)							D1_00 101 414		S 0717'50"		
L64	N 00°00'15" E (F)	20.00' (F)(D)	C19	30'57'28"	(F)(P)(D)			156.69	(F)(P)(D)	290.00' (F)	(D)(P)	S 15°57'02" E
	N 00'00'00" E (D)		(F) 154.79' (F))(P)(D)							_	
L65	S 89'57'22" W (F)	44.33' (F)(D)			/=\/=\/=\		(=)(=)(=)	:	(=)(=)(=)	S 15'36'15"		4.4!
	N 90'00'00" W (D)		C20	31*04*59** ((F)(P)(D)1	149.38	(F)(P)(D)	275.35	(F)(P)(D)	S 15°33'10"	E (F)	147.55
L66	S 00'00'15" W (F)	20.00' (F)(D)	(F)(P)(D)							0.45470/007	E (D)(D)	
	S 00'00'00" W (D)									S 15'32'29"	E (P)(D)	
L67	S 89°57'22" W (F)	157.51' (F)(D)										
	N 90'00'00" W (D)											
L68	S 00'00'15" W (F)	10.00' (F)(D)										
	S 00'00'00" W (D)											

Cardno 4803 George Road President's Plaza Suite 350 Tampa, FL 33634 www.cardno.com - 727.531.3505 Licensed Business No. 7975

4/21/1

REVISED TITLE BLOCK PARCEL NUMBERS

REVISIONS DESCRIPTION

SEE SHEET 1

HILLSBOROUGH COUNTY, FLORIDA PUBLIC WORKS DEPARTMENT, GEOMATICS SECTION SURVEY & MAPPING County Center, 23rd Floor, 601 E. Kennedy Blvd., Tampa Fl. 33602 p:813.307.4755 | f. 813.272.6459 | w: http://www.hillsboroughcounty.org

PINEBROOKE BUSINESS PARK BOUNDARY SURVEY - PARCELS 1, 2, 3 & ALTA/ACSM LAND TITLE SURVEY

	DRAWN BY:	E. HUNT	ER	SURVEY DIVISION PROJECT No.					
1	CHECKED BY:	D. HILL		F15-0016					
4	APPROVED BY:	E. CONN	OLLY	SHEET NO.	FIELD BOOK NO				
	17	295	20E	2 OF 3	C-1473				
	SEC:	TWP:	RNG:	2 01 0	0 1470				

CIP/CIT PROJECT NO.:

GEOMATICS PROJ. NO.: \$17-0124

Surveyor's Notes

- 1) This is a Topographic Survey of a portion of Hillsborough County Folio 067913.0050 within an area as delineated by client.
- 2) Property lines as shown hereon were taken from a Boundary Survey performed by Cardno for Hillsborough County titled "PINEBROOKE BUSINESS PARK BOUNDARY SURVEY -PARCELS 1, 2, 3, & 4", Project No. F15-0016, last revision dated 04/21/2015.
- 3) Bearings as shown hereon are referenced to the Florida State Plane Coordinate System, Florida West Zone, North American Datum 1983 Adjustment 2011 as per, and based on ties to Boundary Survey by Cardno as outlined in Note 2 above.
- 4) Elevations as shown hereon are referenced to North American Vertical Datum 1988 (NAVD88) expressed in feet and are based on Hillsborough County Control Station VB-455 (published elevation 42.49 feet).
- 5) Surveyor makes no guarantee as to the exact species, or the health of each tree depicted hereon. If this information is necessary, a certified arborist should be contacted. Sizes (diameter) of trees as shown hereon are expressed in inches.
- 6) No subsurface investigation to locate underground foundations, utilities, and/or other installations was performed as a part of this survey. Surveyor did not contact subsurface utility locator service.
- 7) Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.
- 8) Hillsborough County is self-insured in accordance with Florida statutes.

<u>ABBREV</u>	<u> 'IATIONS:</u>		
ALUM.	= ALUMINUM	NO. OR	#= NUMBER
ASSOC.	= ASSOCIATE(S)	(NR)	= NON RADIAL
BFP	= BACKFLOW PREVENTER	OHW	= OVERHEAD WIRE
вот.	= BOTTOM	0.R.	= OFFICIAL RECORD BOOK
(C)	= CALCULATED DIMENSION	(P)	= PLAT REFERENCE
C/0	= CLEAN OUT	P.B.	= PLAT BOOK
CONC.	= CONCRETE	PG.	= PAGE
COR.	= CORNER	PLS	= PROFESSIONAL LAND SURVEYOR
D	= DEPTH	P.O.	= POST OFFICE
(D)	= DEED DIMENSION	P.O.B.	= POINT OF BEGINNING
DIA.	= DIAMETER	P.O.C.	= POINT OF COMMENCEMENT
D.I.P.	= DUCTILE IRON PIPE	PRM	= PERMANENT REFERENCE
EL.	= ELEVATION		MONUMENT
ELEC.	= ELECTRIC	PVC	= POLYVINYL CHLORIDE
(F)	= FIELD MEASURED DIMENSION	REG.	= REGISTERED
FCIP	= FOUND CAPPED IRON PIPE	R/W	= RIGHT-OF-WAY
FCIR	= FOUND CAPPED IRON ROD	SAN.	= SANITARY
FMND	= FOUND MAG NAIL AND DISK	SCIP	= SET CAPPED IRON PIPE
FPKND	= FOUND PARKER KAYLON	SCIR	= SET CAPPED IRON ROD
FFF	NAIL AND DISK	SMND	= SET MAG NAIL AND DISK
FFE	= FINISH FLOOR ELEVATION	S/W	= SIDEWALK
H	= HEIGHT	ТВМ	= TEMPORARY BENCHMARK
).= HILLSBOROUGH COUNTY	ТОВ	= TOP OF BANK
ID.	= IDENTIFICATION	UNK.	= UNKNOWN
INC.	= INCORPORATED	W	= WIDTH
INV.	= INVERT	W/	= WITH
LB	= LICENSED BUSINESS	WPF	= WOOD PRIVACY FENCE

SYMBOL LEGEND:

OAK TREE (W/ DIAMETER)

SPRINKLER

SPOT ELEVATION (HARD SURFACE)

SPOT ELEVATION (GROUND)

Topographic Survey Last Date of Field Survey

Professional Surveyor & Mapper Florida Certificate # 5894

SURVEY MAP OR COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER



TOPOGRAPHIC SURVEY

HILLSBOROUGH COUNTY, FLORIDA PUBLIC WORKS DEPARTMENT - GEOMATICS SECTION SURVEY & MAPPING COUNTY CENTER, 23RD FLOOR, 601 EAST KENNEDY BOULEVARD, TAMPA, FL 33602 PHONE: (813) 272-5810 FAX: (813) 272-6459
www.hillsboroughcounty.org

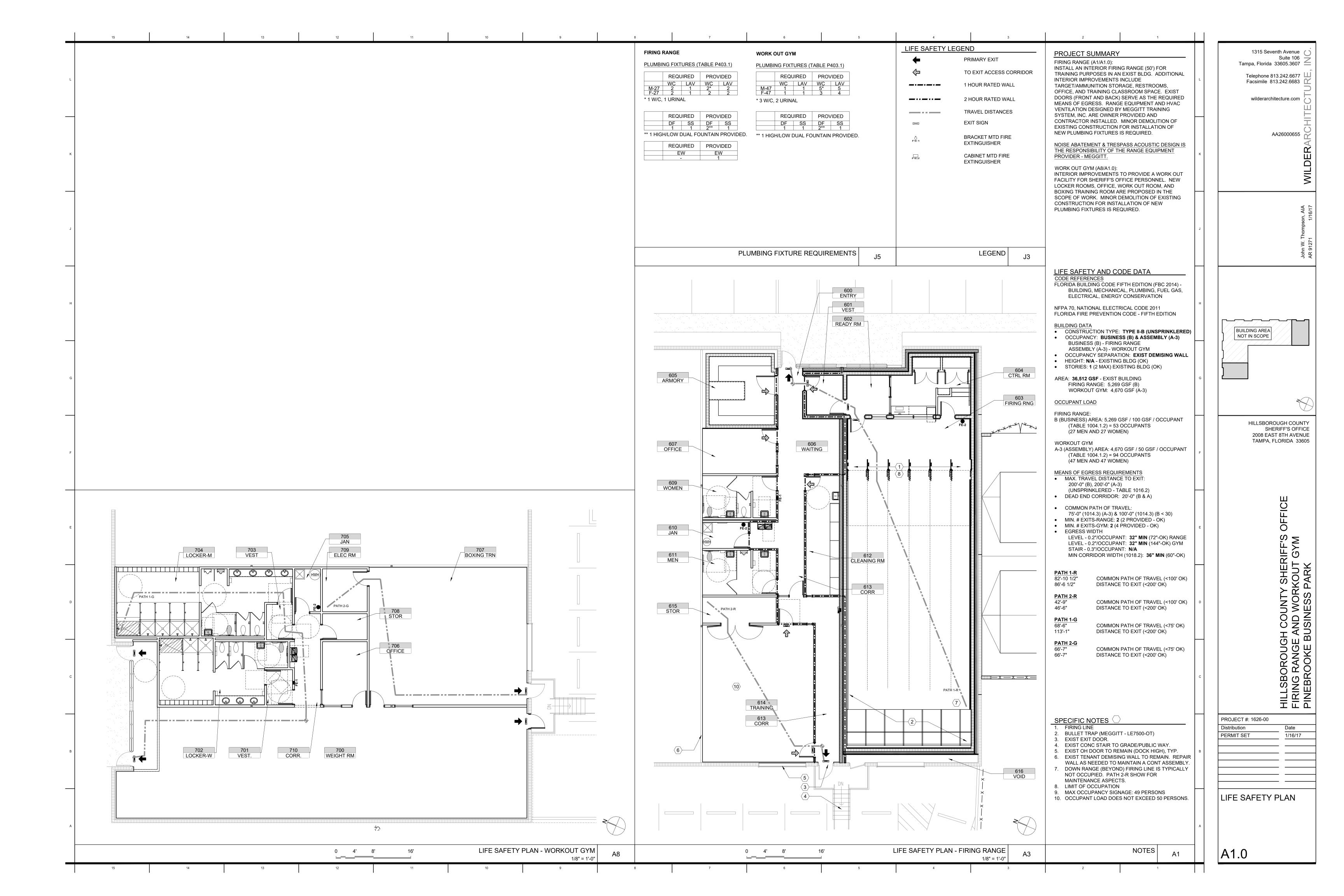
REVISION DESCRIPTION DATE BY APV'D

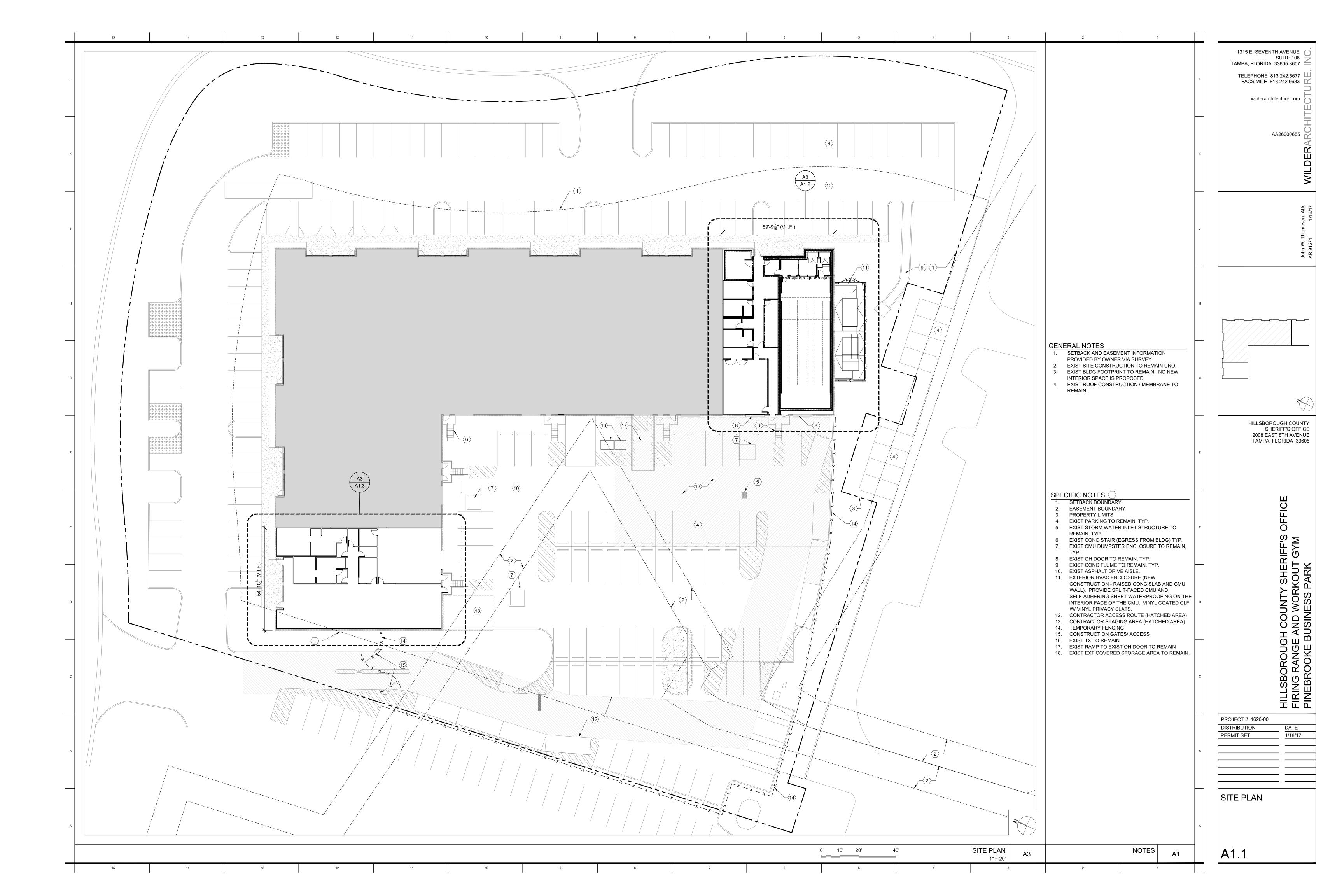
PINEBROOKE BUILDING #2 TOPOGRAPHIC SURVEY

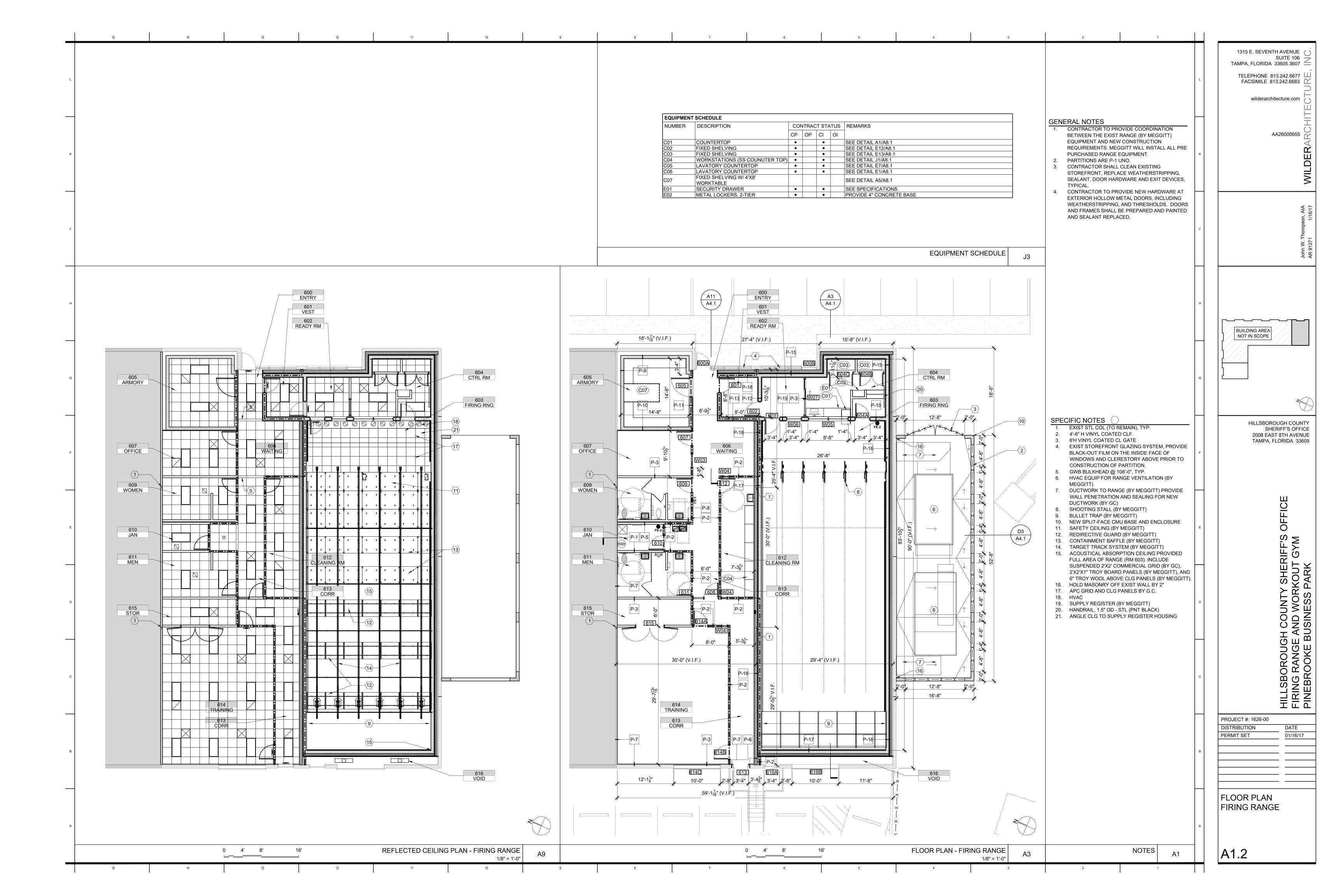
PREPARED: ARCF 12/06/2016 FIELD BOOK PGS.: 41-45 SCALE: CHECKED: 12/06/2016 JC TOWNSHIP APPROVED: SECTION

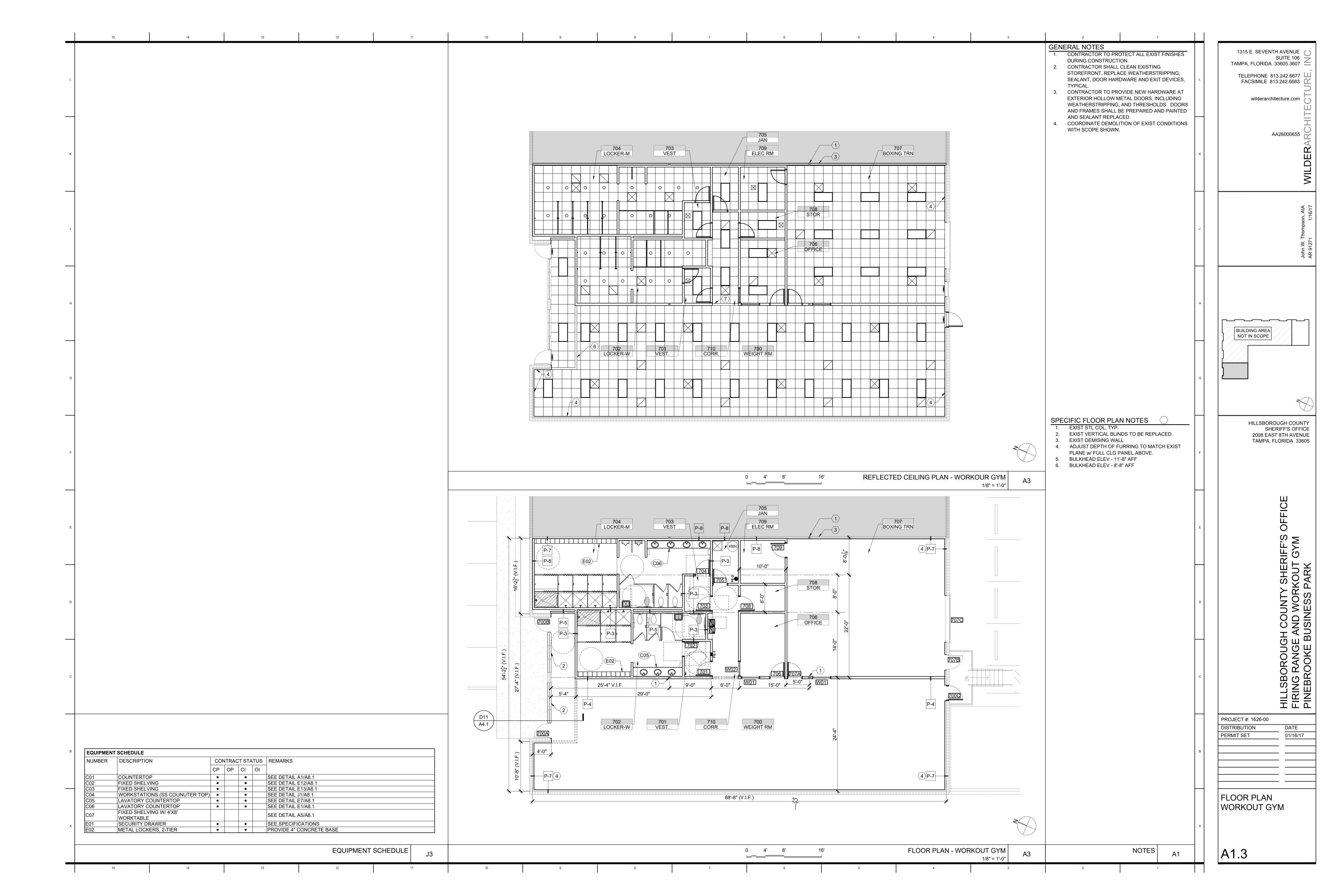
FIELD BOOK NO.: 706 GEOMATICS PROJ. NO. S17-0124 29 S. 20 E.

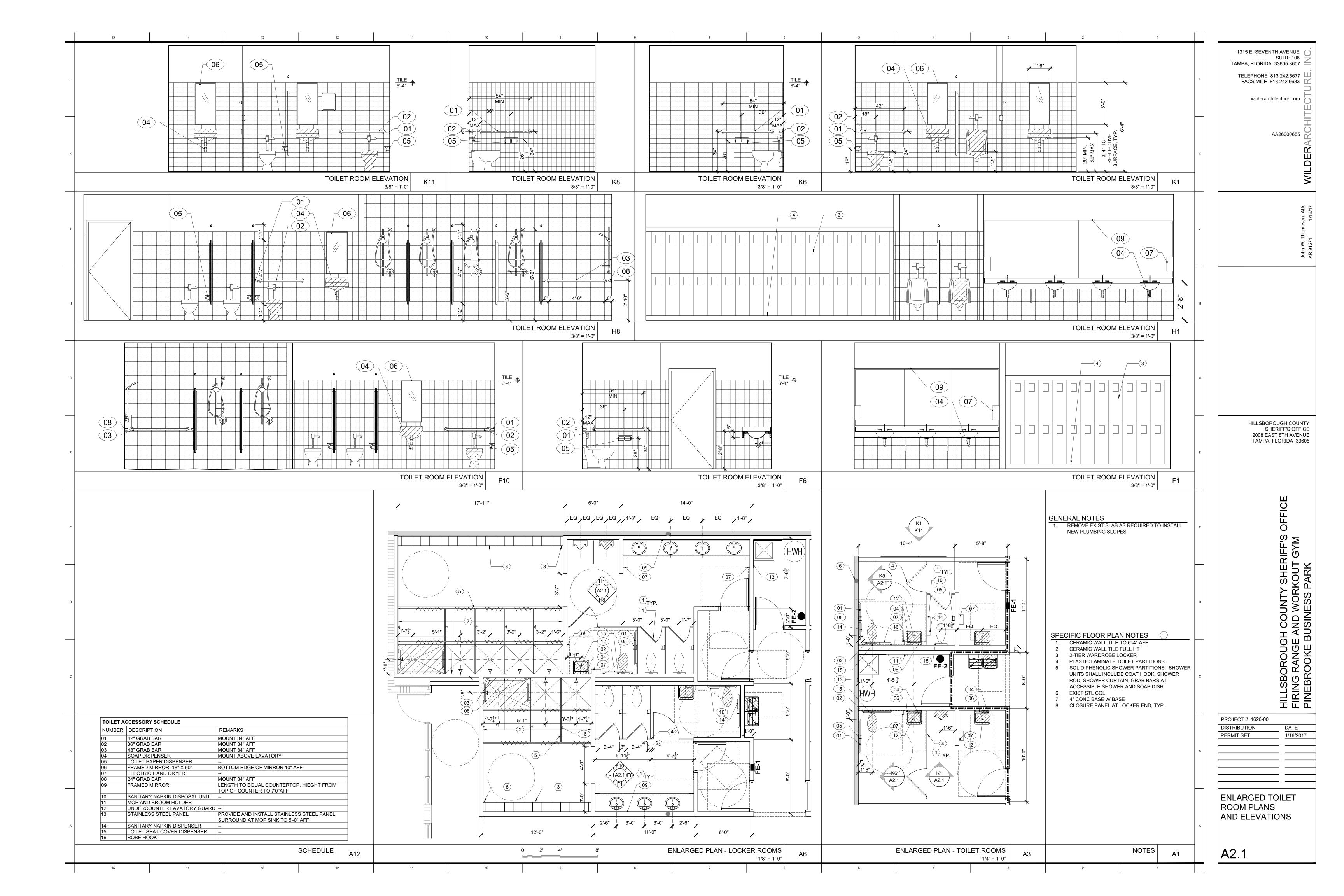
RANGE

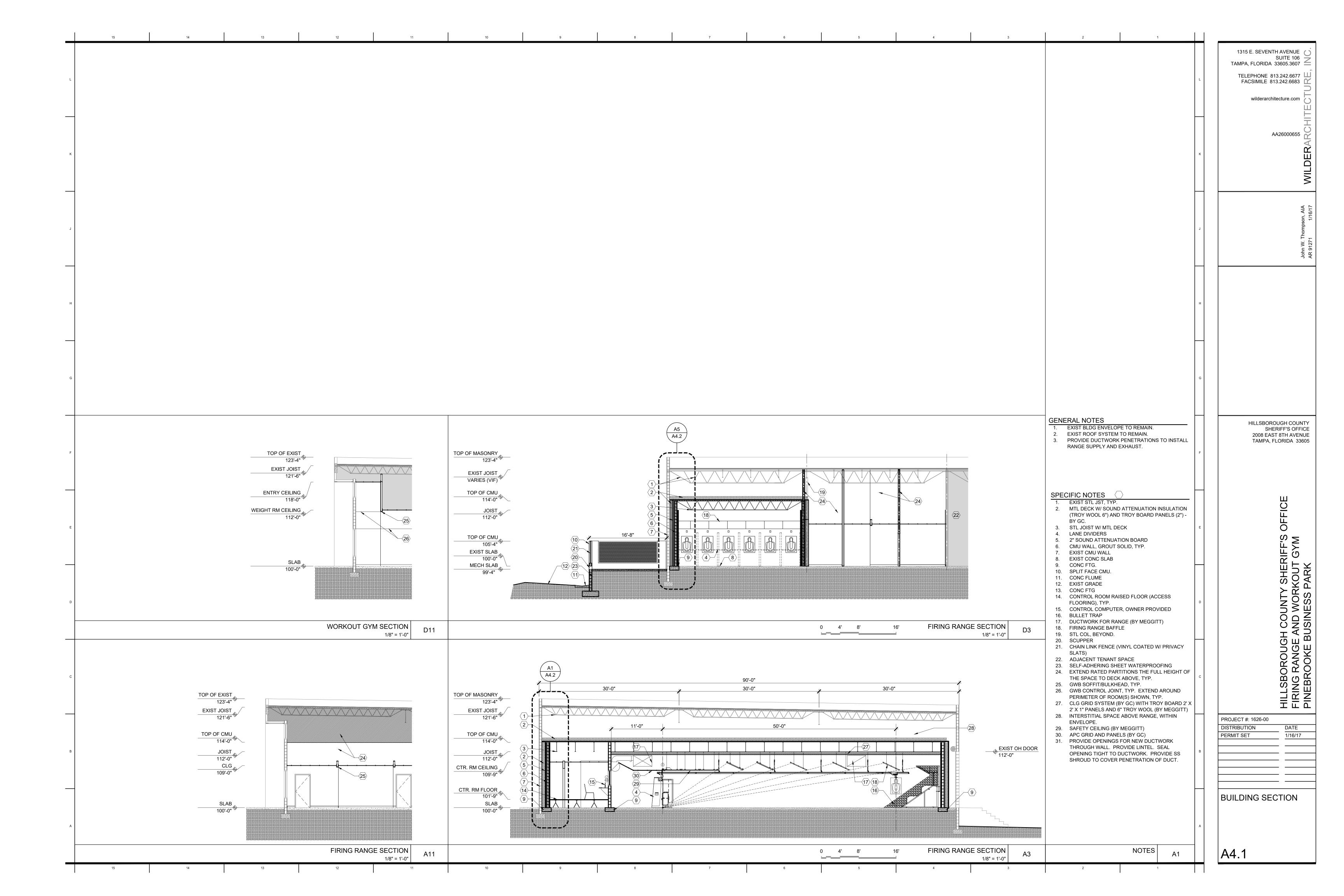


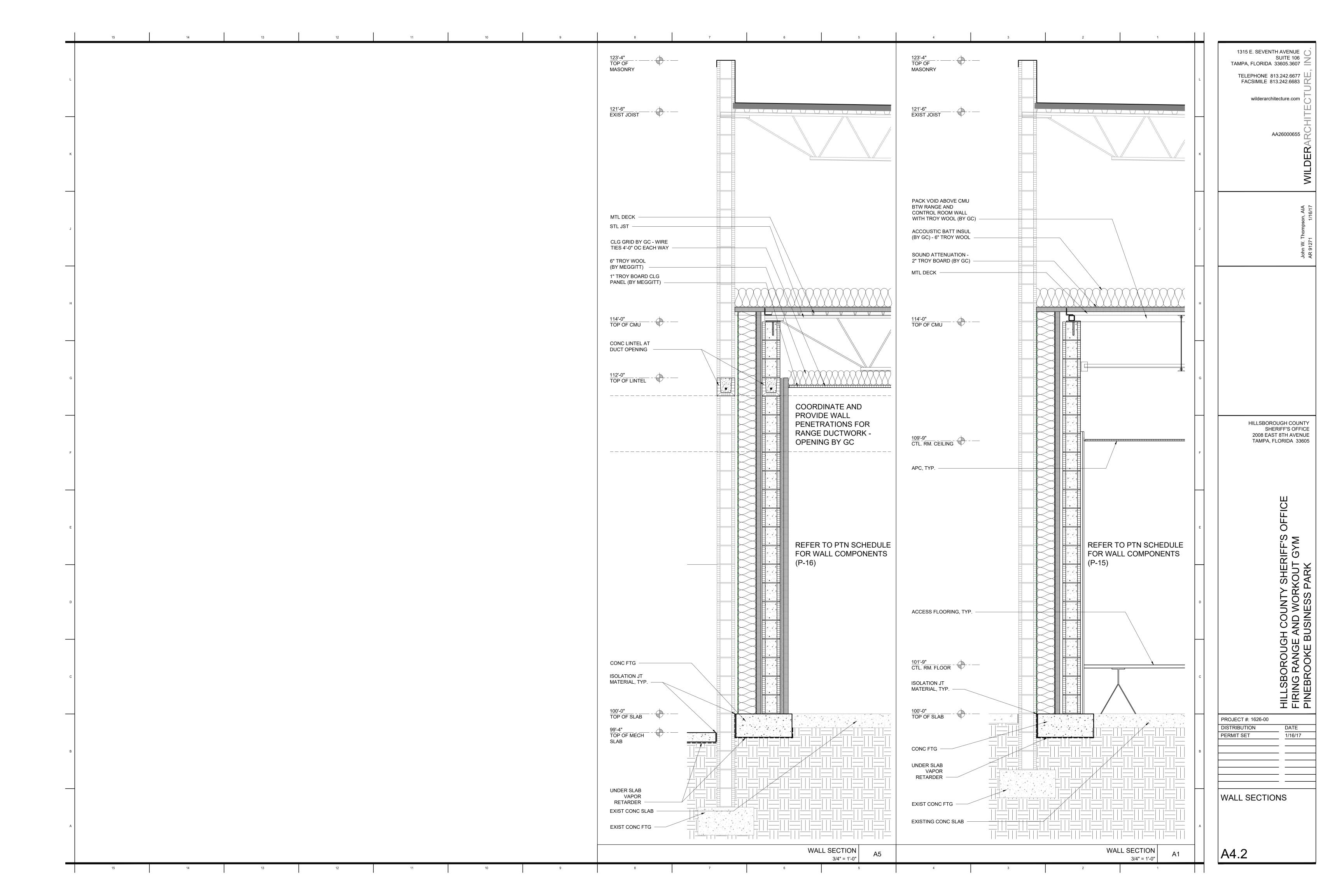




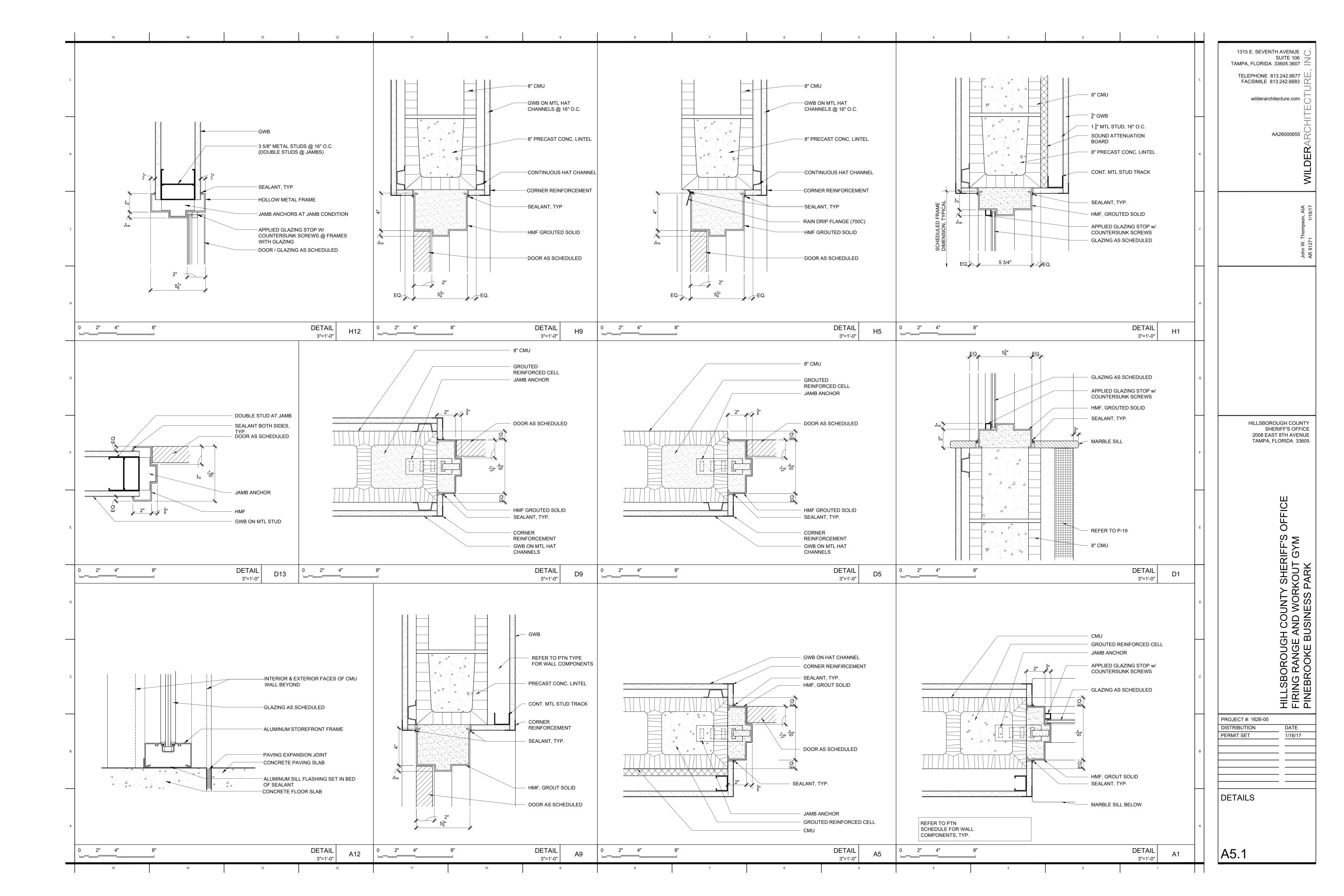


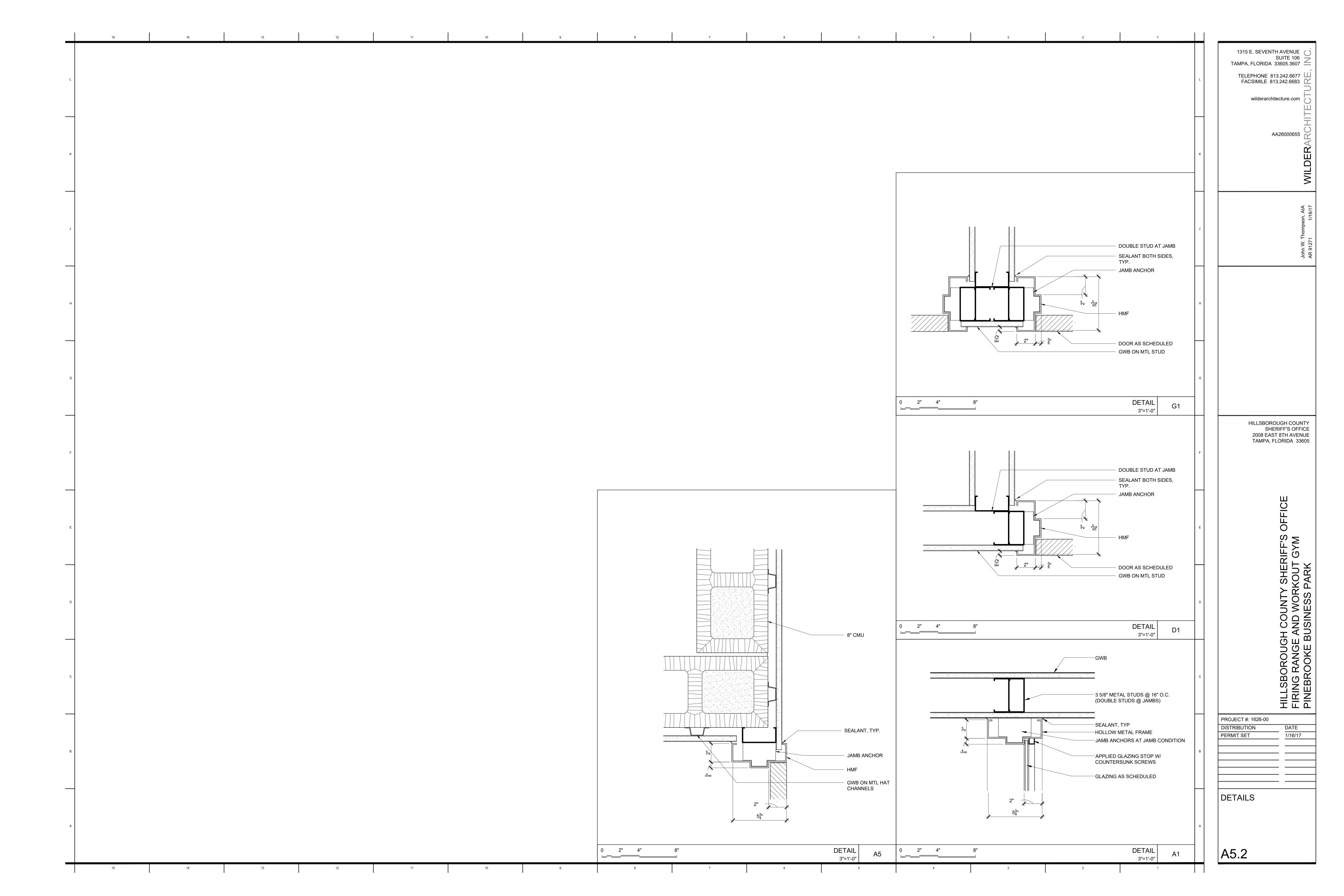


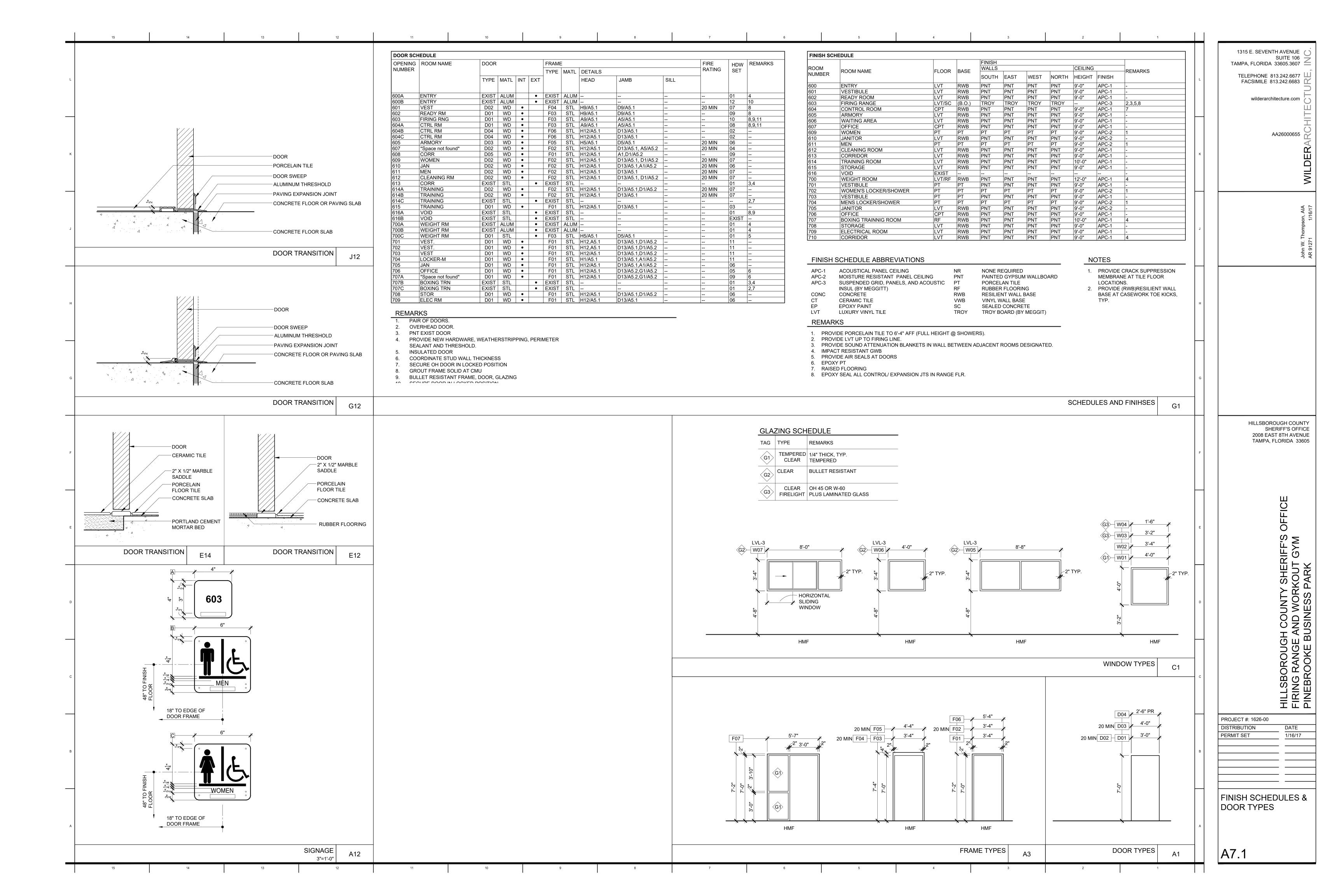


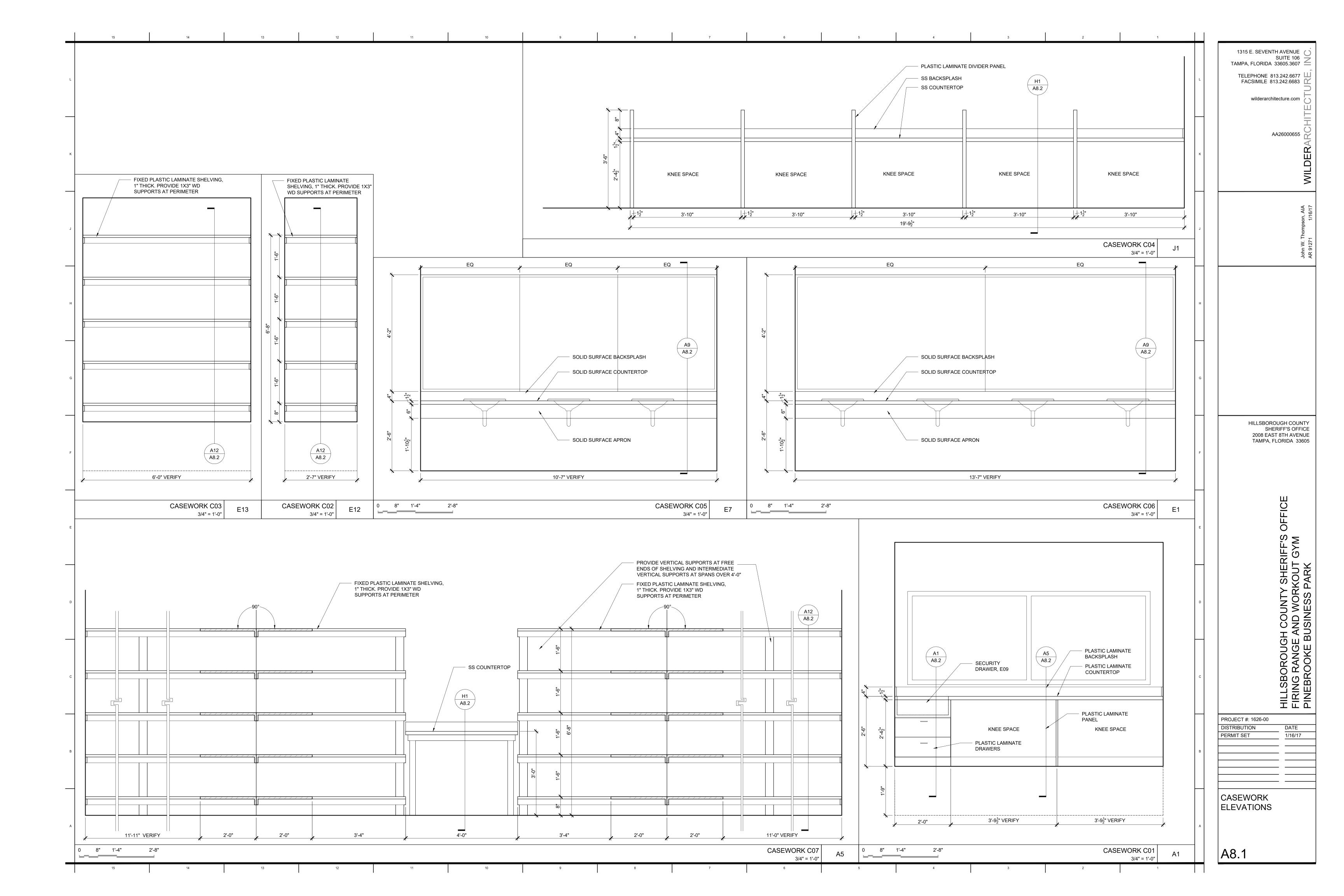


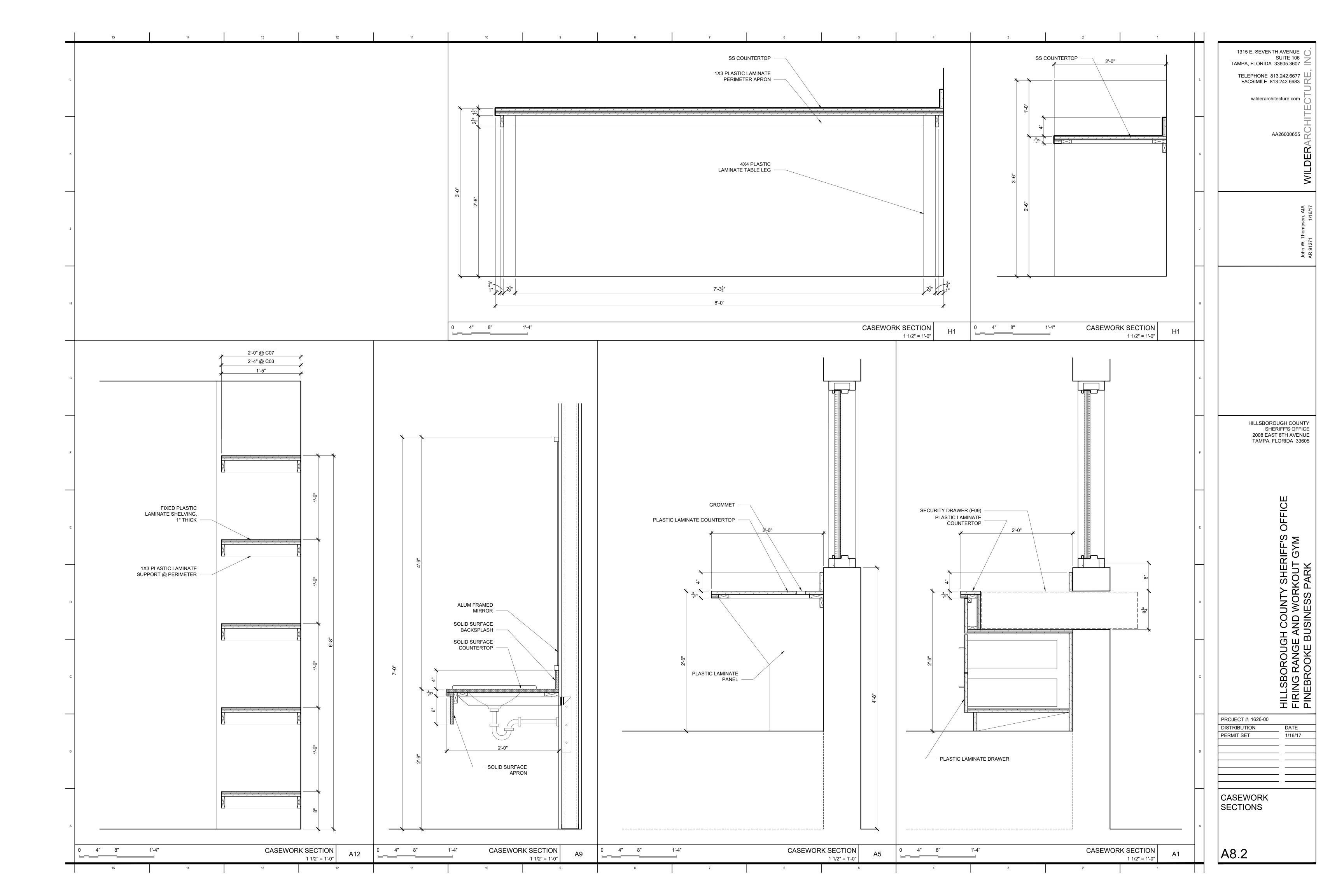
PARTITION			FIRE RATED PARTITIONS	WALL TYPE			FIRE RATED PARTITIONS	PARTITION SCHEDULE NOTES	1315 E. SEVENTH AVEN
TYPE	PLAN SECTION	DESCRIPTION	RATING DETAIL	- WALL THE	PLAN SECTION	DESCRIPTION	RATING DETAIL	A. WALLS WITHOUT WALL TAGS ARE TYPE P-1, TYP. B. THE FOLLOWING INTERIOR WALL FINISH SUBSTRATES ARE TO BE PROVIDED IN LIEU OF GYPSUM BOARD (IN LIKE THICKNESSES):	SUITE 1 TAMPA, FLORIDA 33605.36
								MOISTURE RESISTANT GYPSUM BOARD ON FIXTURE SIDE OF ALL PLUMBING WALLS	TELEPHONE 813.242.6 FACSIMILE 813.242.6
P-1		3-5/8" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON EACH SIDE						SILICONE IMPREGNATED TILE BACKER BOARD ON SIDE OF WALLS SCHEDULED TO RECEIVE CERAMIC TILE	wilderarchitecture.
		(EXTEND GWB 4" ABOVE HIGHEST FIN CLG HEIGHT) (PROVIDE TOP TRACK CONNECTION TO STRUCTURE TO SECURE THE FULL HEIGHT OF THE PTN)				EXIST 8" CMU WITH CEM PLAS EXTERIOR WALL SYSTEM		ABUSE AND IMPACT RESISTANT GYPSUM BOARD WHERE INDICATED ON FLOOR PLAN	
				_		(REMOVE EXIST INTERIOR GWB, FURRING, AND INSULATION TO INSTALL NEW CONSTRUCTION)		C. REFERENCES HEREIN TO FIRE RATINGS APPLY ONLY TO WALLS GRAPHICALLY DESIGNATED IN PLAN TO BE	AA2600
P-2		3-5/8" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON EACH SIDE AND 3-1/2" BLANKET INSULATION	1 HOUR					FIRE RATED IN ACCORDANCE WITH THE "WALL LEGEND." D. WALL TYPE INDICATED SHALL CONTINUE OVER	
		INSCENTION				8" MTL STUDS ON (16" OC) WITH MEGGITT INSULATION		DOOR OPENINGS AND OVER/BELOW GLAZED OPENINGS OR WINDOWS AS REQ'D. COORDINATE WITH FRAME DETAILS.	
	The state of the s	3-5/8" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON EACH SIDE AND 3-1/2" BLANKET				2" TROY BOARD (TECTUM PANEL) 1" AIR SPACE		E. WALL TYPES LISTED HEREIN WITH AN STC RATING ARE CONSIDERED TO BE "ACOUSTIC WALLS." F. STC RATINGS INDICATED HEREIN ARE DERIVED	
P-3		INSULATION AT AN EXT WALL PROVIDE BATT INCLUDENCE.		P-15				FROM THE LABORATORY TEST INDICATED IN THE "DESIGN REFERENCE" COLUMN. TEST SOURCES ARE AS FOLLOWS:	
		STC: 49 SA-870717 • WHERE SCHEDULED AT AN EXT WALL PROVIDE BATT INSULATION, FACED - WITH THE FACING TO THE EXT SIDE.				8" CMU (CELLS GROUTED SOLID) WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING (16" OC) ON ONE SIDE AND		USG, SA, BBN: UNITED STATES GYPSUM NGC: NATIONAL GYPSUM COMPANY	
D.4		6" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON EACH SIDE AND 3-1/2" BLANKET INSULATION						KAL: KODARS ACOUSTRICAL LABS TL: ETL-SEMKO	
P-4								G. CONSTRUCT ACOUSTIC WALLS TO COMPLY WITH THE FOLLOWING REQUIREMENTS:	
						EXIST 8" CMU WITH CEM PLAS EXTERIOR WALL SYSTEM (REMOVE EXIST INTERIOR GWB, FURRING, AND INSULATION TO INSTALL NEW CONSTRUCTION)		FILL ALL WALL PENETRATIONS W/ BATT INSULATION AND SEAL W/ ACOUSTICAL SEALANT.	
		3-5/8" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON ONE SIDE (FACE TO FACE DIM VARIES - REFER TO PLAN)				AIR & VAPOR BARRIER (LIQUID APPLIED)		STAGGER ELECTRICAL AND COMMUNICATIONS BOXES A MINIMUM OF 16" HORIZONTALLY. APPLY ACOUSTIC SEALANT AT PERIMETER OF	
P-5		3-5/8" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON ONE SIDE AND 3-1/2" BLANKET INSULATION				8" MTL STUDS ON (16" OC) WITH MEGGITT INSULATION		STUD WALLS, TYP. 4. GYPSUM BOARD FASTENERS MUST NOT CONTACT MASONRY ON CMU WALLS HAVING	
				_				GYP BD ON FURRING STRIPS. H. METAL STUD & GYPSUM BOARD WALLS WITH	
		0" METAL CTUDO © 40" OC MUTU E/2" OVER UN DO 100 OVER 100				2" TROY BOARD (TECTUM PANEL) 1" AIR SPACE		EQUIVALENT OR BETTER FIRE & STC RATINGS MAY BE SUBSTITUTED FOR CMU WALLS ABOVE THE CEILING LEVEL. THE INTEGRITY OF SOUND & FIRE	
P-6		8" METAL STUDS @ 16" OC WITH 5/8" GYPSUM BOARD ON EACH SIDE AND 8" MEGGITT INSULATION.		P-16		8" CMU (CELLS GROUTED SOLID) WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING		RATINGS MUST BE MAINTAINED. I. EXTEND RATED PARTITIONS TO THE UNDERSIDE OF THE ROOF DECK.	
						(16" OC) ON ONE SIDE AND 1 1/2" 'Z' CHANNEL 24" OC (RUN HORIZONTALLY) WITH 2" TROY WOOL IN BAYS OF 'Z' CHANNEL		G	
		EXIST GWB PARTITION WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING (16" OC) ON ONE SIDE (PROVIDE ALTERNATIVE DEPTH TO ALIGN WITH CEILING WHERE INDICATED IN PLAN) (EXTEND GWB 4" ABOVE HIGHEST FIN CLG HEIGHT)				(BY MEGGITT) 2" TROY BOARD ATTACHED TO Z-CHANNEL (BY MEGGITT)			
P-7		WHERE SCHEDULED AT AN EXIST EXT WALL PROVIDE INSULATION SIM TO THE EXIST CONSTRUCTION AT THE NEW CONSTRUCTION. WHERE SCHEDULED AT AN EXIST EXT WALL MAINTAIN THE AIR/VAPOR BARRIER OF THE							HILLSBOROUG
		EXIST CONSTRUCTION.		_		8" MTL STUDS ON (16" OC) WITH MEGGITT INSULATION WITH 5/8" GYPSUM BOARD			SHERIFF 2008 EAST 8TH TAMPA, FLORI
P-8								F	
		EXIST GWB PARTITION WITH 5/8" GYPSUM BOARD ON 3 5/8" METAL STUDS (16" OC) ON ONE SIDE (EXTEND GWB 4" ABOVE HIGHEST FIN CLG HEIGHT)				2" TROY BOARD (TECTUM PANEL) 1" AIR SPACE			
				P-17		8" CMU (CELLS GROUTED SOLID) WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING			
						(16" OC) ON ONE SIDE AND 1 1/2" 'Z' CHANNEL 24" OC (RUN HORIZONTALLY) WITH 2" TROY WOOL IN BAYS OF 'Z' CHANNEL			
P-9		8" CMU				(BY MEGGITT) 2" TROY BOARD ATTACHED TO Z-CHANNEL (BY MEGGITT)		E	
	711111111111111111111111111111111111111								ָטָ בַּ
P-10		8" CMU WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING (16" OC) ON ONE SIDE (EXTEND GWB 4" ABOVE HIGHEST FIN CLG HEIGHT)						GENERAL NOTES - DIMENSIONING 1. DIMENSIONS LOCATING NEW EXTERIOR MASONRY	
		(EXTEND GWD 4 ADOVETHIOTIEST FIN CEG TIEIGHT)				8" MTL STUDS ON (16" OC) WITH MEGGITT INSULATION WITH 5/8" GYPSUM BOARD		WALLS ARE TO EXTERIOR FACE OF MASONRY SUBSTRATE. 2. DIMENSIONS LOCATING NEW EXTERIOR STUD WALLS	
	7/11/11/11/11/11/11/11/11/11/11/11/11/11					2" TROY BOARD (TECTUM PANEL)		ARE TO EXTERIOR FACE OF THE STUDS. 3. DIMENSIONS LOCATING NEW INTERIOR MASONRY WALLS ARE TO FACE OF MASONRY.	<u>}</u>
P-11		8" CMU WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING (16" OC) ON ONE SIDE	1 HOUR	P-18		1" AIR SPACE		4. DIMENSIONS LOCATING NEW INTERIOR STUD WALLS ARE TO FINISHED WALL SURFACES. 5. OPENINGS NOT LOCATED BY DIMENSION IN INTERIOR	ALM IO
		(EXTEND GWB 4" ABOVE HIGHEST FIN CLG HEIGHT)				8" CMU (CELLS GROUTED SOLID) - (RATED CONDITION IS DERIVED FROM THE CMU WALL)	1 HOUR	WALLS AND NOT ABUTTING ADJACENT WALLS ARE TO BE CENTERED ON THE WALL, UNLESS INDICATED OTHERWISE.	
				-		1 1/2" 'Z' CHANNEL 24" OC (RUN HORIZONTALLY) WITH 2" TROY WOOL IN BAYS OF 'Z' CHANNEL (BY MEGGITT) 2" TROY BOARD ATTACHED TO Z-CHANNEL (BY MEGGITT)		6. IF THE LOCATION OF ANY BUILDING ELEMENT IS NOT OBVIOUS OR CANNOT BE DETERMINED BY DIMENSION, MATHEMATICS, OR AS NOTED ABOVE,	
								CONTACT THE ARCHITECT PRIOR TO LOCATING THE ELEMENT.	
P-12		8" CMU WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING (16" OC) ON BOTH SIDES							
				_		8" CMU (CELLS GROUTED SOLID) WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING			
			1 HOUR	P-19		(16" OC) ON ONE SIDE			PROJECT #: 1626-00 DISTRIBUTION
P-13		8" CMU WITH 5/8" GYPSUM BOARD ON 7/8" METAL FURRING (16" OC) ON BOTH SIDES (EXTEND GWB 4" ABOVE HIGHEST FIN CLG HEIGHT)				1 1/2" 'Z' CHANNEL 24" OC (RUN HORIZONTALLY) WITH 2" TROY WOOL IN BAYS OF 'Z' CHANNEL (BY MEGGITT) 2" TROY BOARD ATTACHED TO Z-CHANNEL (BY MEGGITT)			PERMIT SET
								В	
				P-20	RESERVED				
P-14	RESERVED								PARTITION TYP
				-					
						PARTITION TYPE SO	CHEDULE	NOTES A1	Λ / 2
							NTS A3	NOTES A1	A4.3











DESIGN CRITERIA NOTES:

1. THE INTENDED DESIGN STANDARDS AND/OR CRITERIA ARE AS FOLLOWS:

GENERAL FLORIDA BUILDING CODE—2014

CONCRETE ACI 318
MASONRY ACI 530
STRUCTURAL STEEL AISC
STEEL JOISTS/GIRDERS SJI
METAL DECK SDI

COLD-FORMED METAL AISI

2. DESIGN GRAVITY <u>LIVE LOADS</u> USED IN THE DESIGN OF THIS STRUCTURE ARE AS FOLLOWS:

ROOF, TYPICAL 20 PSF MIN.

HANDRAILS/GUARDRAIL 50 PLF/200LB POINT LOAD

DESIGN WIND CRITERIA

1. DESIGN <u>WIND LOADS</u> USED IN THE DESIGN OF THIS STRUCTURE ARE BASED ON THE 2014 FLORIDA BUILDING CODE: WIND SPEED V(ult) = 145 MPH (ULTIMATE)

V(asd) = 112 MPH (NOMINAL)
RISK CATEGORY II—III
EXPOSURE—C

INTERNAL PRESSURE COEFFICIENT: ENCLOSED BUILDING =(+/-)0.18

2. COMPONENTS AND CLADDING PRESSURES SEE TABLE BELOW.

DESIGN GEOTECHNICAL CRITERIA

1. DESIGN SOIL LOAD BEARING CAPACITY = 2,000 PSF (ASSUMED)

TERMITE PROTECTION:

1. ALL BUILDINGS SHALL HAVE PRECONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES. TERMITE PROTECTION MUST BE IN ACCORDANCE WITH THE FBC 2014

GENERAL STRUCTURAL NOTES:

- 1. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS OF ALL OTHER DISCIPLINES AND THE SPECIFICATIONS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE WORK. THE ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS AND PROGRAMS.
- 3. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHODS OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STRUCTURE IN PROPER ALIGNMENT UNTIL ALL STRUCTURAL WORK AND CONNECTIONS HAVE BEEN COMPLETED. THE INVESTIGATION, DESIGN, SAFETY, ADEQUACY AND INSPECTION OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, ETC., IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE METHODS, TECHNIQUES AND SEQUENCES OF PROCEDURES TO PERFORM THE WORK. THE SUPERVISION OF THE WORK IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- 5. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED, SUBJECT TO APPROVAL BY THE ENGINEER.
- 6. LOADING APPLIED TO THE STRUCTURE DURING THE PROCESS OF CONSTRUCTION SHALL NOT EXCEED THE SAFE LOAD—CARRYING CAPACITY OF THE STRUCTURAL MEMBERS. THE LIVE LOADING USED IN THE DESIGN OF THIS STRUCTURE ARE INDICATED IN THE "DESIGN CRITERIA NOTES". DO NOT APPLY ANY CONSTRUCTION LOADS UNTIL STRUCTURAL FRAMING IS PROPERLY CONNECTED TOGETHER AND UNTIL ALL TEMPORARY BRACING IS IN PLACE.
- 7. SHOP DRAWINGS AND OTHER ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO FABRICATION. ALL SHOP DRAWINGS SHALL BE REVIEWED AND SIGNED BY THE GENERAL CONTRACTOR BEFORE SUBMITTAL. THE ENGINEER'S REVIEW IS TO BE FOR CONFORMANCE WITH THE DESIGN CONCEPT AND GENERAL COMPLIANCE WITH THE RELEVANT CONTRACT DOCUMENTS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW, CHECK AND COORDINATE THE SHOP DRAWINGS PRIOR TO SUBMISSION. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, QUANTITIES, DIMENSIONS, ETC.
- 8. SUBMIT SHOP DRAWINGS IN ELECTRONIC FORMAT FOR REVIEW.
 THE CONTRACTOR WILL MAKE COPIES IF ADDITIONAL SETS ARE REQUIRED.
 IN NO CASE SHALL REPRODUCTION OF THE CONTRACT DRAWINGS BE
 USED AS SHOP DRAWINGS. SUBMIT THE FOLLOWING ITEMS FOR REVIEW:
- A. CONCRETE MIX DESIGNS INCLUDING MASONRY GROUT.
- B. MASONRY CONSTRUCTION MATERIAL CERTIFICATES.C. MATERIAL TEST REPORTS FOR MASONRY UNIT STRENGTH f'm.
- D. REINFORCING STEEL SHOP DRAWINGS.
- E. STEEL JOIST/GIRDER SHOP DRAWINGS. (*)F. METAL DECKING SHOP DRAWINGS.

ITEMS MARKED (*) SHALL HAVE SHOP DRAWINGS AND CALCULATIONS SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

SITE PREPARATION NOTES:

- 1. THE BUILDING SITE SHALL BE PREPARED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS ENGINEER AND PROJECT SPECIFICATIONS. REFER TO OWNERS GEOTECHNICAL REPORT.
- 2. REFER TO THE GEOTECHNICAL SOILS REPORT FOR SITE DENSIFICATION REQUIREMENTS IF REQUIRED.
- 3. ALL FILL MATERIAL SHALL BE EVALUATED FOR ACCEPTANCE BY THE PROJECT GEOTECHNICAL ENGINEER OR PROJECT TESTING LABORATORY.

FOUNDATION NOTES:

- 1. THE BUILDING SITE SHALL BE PREPARED AND TESTED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS ENGINEER AND PROJECT SPECIFICATIONS. REFER TO OWNERS GEOTECHNICAL REPORT. DE-WATERING OR FORMING FOUNDATIONS IN LOOSE SOILS, IF REQUIRED, IS TO BE DETERMINED BY THE CONTRACTOR.
- 2. THE CONTRACTOR IS TO NOTIFY THE ARCHITECT/ENGINEER IF SOIL CONDITIONS ARE UNCOVERED THAT PREVENT THE REQUIRED SOIL BEARING PRESSURE FROM BEING OBTAINED.
- HORIZONTAL CONSTRUCTION JOINTS IN FOOTINGS WILL NOT BE PERMITTED. WHERE VERTICAL CONSTRUCTION JOINTS OCCUR IN CONTINUOUS FOOTINGS, PROVIDE A CONTINUOUS 2" X 4" KEYWAY.
- 4. ALL FOOTINGS SHALL BEAR ON UNDISTURBED, FIRM NATURAL SOIL OR COMPACTED FILL. ALL FOUNDATION EXCAVATIONS SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER/TESTING AGENCY PRIOR TO POURING FOUNDATION CONCRETE.
- 5. TOP OF FOOTING ELEVATION SHALL BE AS SHOWN ON PLANS AND SECTIONS. ON SLOPING SITES THESE ELEVATIONS SHOULD BE LOWERED AS REQUIRED TO MAINTAIN THE TOP OF THE FOOTING AT A MINIMUM OF 8" BELOW FINAL GRADE.
- 6. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS". HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306
- 7. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60.
- 8. UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR FOUNDATION REINFORCEMENT.

A) CONCRETE CAST AGAINST EARTH-3"

- 9. ALL REINFORCING SHALL BE LAPPED 48 X BAR DIAMETERS AT SPLICES AND CORNERS UNLESS OTHERWISE NOTED.
- 10. NO UNBALANCED BACKFILLING SHALL BE DONE AGAINST FOUNDATION WALLS UNLESS WALLS ARE SECURELY BRACED AGAINST OVERTURNING, EITHER BY TEMPORARY BRACING OR BY PERMANENT CONSTRUCTION.
- 11. PRIOR TO COMMENCING ANY FOUNDATION WORK, COORDINATE WORK WITH NEW AND EXISTING UTILITIES. FOUNDATIONS SHALL BE LOWERED WHERE REQUIRED TO AVOID UTILITIES. SEE STEPPED FOOTING DETAIL.

SLAB ON GRADE NOTES:

1. PROVIDE CONCRETE SLABS OVER VAPOR BARRIER. SEE ARCHITECTURAL SPECIFICATION FOR VAPOR BARRIER. IF NOT SPECIFIED USE THE FOLLOWING AS A MINIMUM.

15 MIL VAPOR BARRIER ASTM E 1745 MEETING CLASSES A,B&C (GRIFFOLYN VAPOR BARRIER OR EQUAL)

6" SLAB REINFORCED WITH 6X6-W4.0 X W4.0 WELDED WIRE FABRIC CHAIRED AT 3FT O/C

2. FOR ALL SLABS ON GRADE THE CONTRACTOR IS TO VERIFY THE FOLLOWING:

-PROPER COMPACTION OF BASE MATERIAL
-MIX DESIGN WITH LIMITED SLUMP
-REINFORCEMENT PLACEMENT
-PROPER CONCRETE PLACEMENT WITH NO WATER ADDED
-TIMELY CONTRACTION JOINT CUTTING AND VERIFICATION OF CUT DEPTH
SEE PLANS AND TYPICAL DETAILS
-PROMPT CONTINUOUS CURING

- 3. ALL WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A-185. (FLAT SHEETS ONLY) LAP ADJOINING PIECES AT LEAST ONE FULL MESH.
- 4. SLABS ARE TO BE CURED WITH A WATER BASED DISSIPATING CURING COMPOUND AS SOON AS POSSIBLE.
- 5. SLAB JOINTS SHALL BE FILLED WITH AN ELASTOMERIC JOINT SEALER. UNLESS NOT REQUIRED BY THE ARCHITECT.
 THIS SHOULD TAKE PLACE AS LATE AS POSSIBLE, PREFERABLY 4
 TO 6 WEEKS AFTER THE SLAB HAS BEEN CAST. PRIOR TO FILLING, REMOVE ALL DEBRIS FROM THE SLAB JOINTS, THEN FILL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 6. UNLESS OTHERWISE APPROVED, ALL WELDED WIRE FABRIC SHALL BE CHAIRED AT 3FT O/C INTO POSITION INDICATED.
- 7. WALKWAYS AND OTHER EXTERIOR SLABS ARE NOT INDICATED ON THE STRUCTURAL DRAWINGS. SEE THE SITE PLAN AND ARCHITECTURAL DRAWINGS FOR LOCATIONS, DIMENSIONS, ELEVATIONS, JOINTING DETAILS AND FINISH DETAILS. PROVIDE 4" WALKS REINFORCED WITH 6X6 W1.4 X W1.4WWF UNLESS OTHERWISE NOTED.
- 8. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS". GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" ACI 302. HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE W/ ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE W/ ACI 306.
- 9. SEE THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS OF DEPRESSED SLAB AREAS AND DRAINS. SLOPE SLAB TO DRAINS WHERE SHOWN, COORDINATE WITH MEP.
 COORDINATE ALL DEPRESSED SLAB DIMENSIONS WITH FINAL FLOOR SYSTEM SHOP DRAWINGS.
- 10. SLABS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING FLATNESS/LEVELNESS REQUIREMENTS:

SLAB CATEGORY SPECIFIED LOCAL MINIMUM
MODERATELY FLAT Ff=25 FI=20 Ff=17 FI=15

CAST-IN-PLACE CONCRETE NOTES:

- 1. CONCRETE MIXES SHALL BE DESIGNED PER ACI 301, USING PORTLAND CEMENT CONFORMING TO ASTM C-150, AGGREGATE CONFORMING TO ASTM C-33, AND ADMIXTURES CONFORMING TO ASTM C-494, C-1017, C-618, C-989 AND C-260. CONCRETE SHALL BE READY-MIXED IN ACCORDANCE WITH ASTM C-94.
- 2. CONCRETE SHALL CONFORM TO THE FOLLOWING COMPRESSIVE STRENGTH, SLUMP AND WATER/CEMENT RATIO REQUIREMENTS:

 TYPE
 MIN. f'c (28 DAYS)
 SLUMP
 AGG SIZE

 FOOTINGS
 3000 PSI
 3" TO 5"
 #57

 SLABS-ON-GRADE
 3500PSI
 3" TO 5"
 #57

FOR CONCRETE EXPOSED TO WATER: IE BALCONIES, EXTERIOR SLABS THE MAXIMUM W/C RATIO IS .50

- AT CONTRACTOR'S OPTION, AN APPROVED ADMIXTURE (SUPER PLASTICIZER) MAY BE USED TO PRODUCE FLOWABLE CONCRETE. MAXIMUM SLUMP SHALL NOT EXCEED 8 INCHES. THE CONTRACTOR SHALL SUBMIT TEST RESULTS OF THE PROPOSED CONCRETE MIXES ALONG WITH THE MANUFACTURER'S TECHNICAL DATA FOR APPROVAL PRIOR TO POURING CONCRETE.
- 3. ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF ACI 301, "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS". HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 306.
- 4. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615, GRADE 60. ALL WELDING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH AWS DI.4.
- 5. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A-185 (FLAT SHEETS ONLY).
- 6. ALL REINFORCING STEEL SHALL BE SET AND TIED IN PLACE PRIOR TO POURING OF CONCRETE.
- 7. REINFORCING STEEL, INCLUDING HOOKS AND BENDS, SHALL BE DETAILED IN ACCORDANCE WITH ACI 315. ALL REINFORCING STEEL INDICATED AS BEING CONTINUOUS (CONT) SHALL BE LAPPED 48 X BAR DIAMETER. LAP CONTINUOUS BOTTOM BARS OVER SUPPORTS, LAP CONTINUOUS TOP BARS AT MID—SPAN UNLESS OTHERWISE NOTED.
- 8. UNLESS OTHERWISE NOTED, THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCEMENT:

A) CONCRETE EXPOSED TO WEATHER:
#6 THROUGH #18 BARS - 2"
#5 BAR, & SMALLER - 1 ½"

B) CONCRETE NOT EXPOSED TO EARTH OR WEATHER: WALLS, ELEVATED SLABS (& JOISTS) — 1"
BEAMS AND COLUMNS — 1 ½"

C) FOUNDATIONS CAST AGAINST EARTH — 3"

- 9. BAR SUPPORTS AND HOLDING BARS SHALL BE PROVIDED FOR ALL REINFORCING STEEL TO ENSURE MINIMUM CONCRETE COVER. BAR SUPPORTS SHALL BE PLASTIC TIPPED OR STAINLESS STEEL.
- 10. ALL EDGES OF PERMANENTLY EXPOSED CONCRETE SURFACES SHALL BE CHAMFERED 3/4" UNLESS OTHERWISE NOTED.
- 11. FORMWORK FOR LOADBEARING SPANNING MEMBERS
 SHALL REMAIN IN PLACE UNTIL CONCRETE HAS
 OBTAINED AT LEAST 90% OF ITS 28 DAY COMPRESSIVE STRENGTH.
 THE CONTRACTOR SHALL PROVIDE ALL SHORING AND RESHORING.
- 12. WHERE REINFORCEMENT OR ANCHOR BOLTS ARE MISPLACED,
 A DRILLED AND EPOXY SYSTEM MAY BE USED WITH ENGINEERS
 APPROVAL:
 USE A TWO COMPONENT EPOXY SYSTEM MEETING ASTM C881
 HILTI HY 200/SIMPSON—SET/ALLIED A—100/ULTRA BOND/OR EQUAL:
- HOLE DIAMETER = BAR/ANCHOR DIAMETER + 1/8"

 HOLE DEPTH = 15 X BAR/ANCHOR DIAMETER

 FOLLOW MANUFACTURER'S INSTALLATION PROCEDURES, I.E. BLOW

 OUT HOLES WITH COMPRESSED AIR AND BRUSH CLEAN.

 A REBAR LOCATION SERVICE MAY BE REQUIRED.

STRUCTURAL STEEL NOTES:

- 1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE "MANUAL OF STEEL CONSTRUCTION" OF THE AISC.
- 2. UNLESS OTHERWISE NOTED, ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING ASTM SPECIFICATIONS:

MEMBER	ASTM	MIN. STRENGT
STRUCTURAL STEEL SHA	PES A992	50KSI
CHANNELS, ANGLES, PLA	ATES A36	36KSI
STRUCTURAL TUBING HS	S A500 (GRADE B)	46KSI
STEEL PIPE	A53 (GRADE B)	35KSI
CONNECTION BOLTS	A325	92KSI
ANCHOR BOLTS	A307	
THREADED RODS	A36	36KSI
STAINLESS STEEL	F 593	AISI 316
NONSHRINK GROUT	C1107	8000PSI
	0.1.0.	0000.0.

- 3. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 USING E70XX ELECTRODES. UNLESS OTHERWISE NOTED, PROVIDE CONT. MIN. SIZED FILLET WELDS PER AISC REQUIREMENTS. ALL FILLER MATERIAL SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI. ALL WELDING SHALL BE DONE BY A CURRENTLY CERTIFIED WELDER IN ACCORDANCE WITH "AWS".
- 4. HOLES IN STEEL FOR OTHER TRADES SHALL BE DRILLED OR PUNCHED AND DETAILED ON THE SHOP DRAWINGS. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED.
- 5. U.O.N. ALL STRUCTURAL STEEL SHALL BE SHOP PAINTED WITH ONE COAT OF TYPE I, RED OXIDE PRIMER PAINT, SEE SPECIFICATIONS. IF APPLICABLE, VERIFY THAT PRIMER COATINGS ARE COMPATIBLE WITH SPRAYED ON FIRE PROOFING.
- 6. UNLESS OTHERWISE NOTED, ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER, INCLUDING ALL BRICK SHELF ANGLES SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 /A123M.

7. PROTECTION COATINGS DAMAGED DURING THE TRANSPORTING,

DRAWINGS.

THE FIELD TO MATCH THE SHOP APPLIED COATING.

8. PROVIDE ANGLE L4X4X1/4" FRAMES AT ALL ROOF OPENINGS AND MECHANICAL ROOFTOP UNITS PER TYPICAL DETAILS ON

ERECTING AND FIELD WELDING PROCESSES SHALL BE REPAIRED IN

MASONRY NOTES:

- 1. MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATION FOR MASONRY STRUCTURES (ACI 530.1)" PUBLISHED BY THE AMERICAN CONCRETE INSTITUTE. SEE "TESTING AND INSPECTION NOTES" FOR ADDITIONAL INFORMATION.
- 2. HOLLOW LOAD—BEARING MASONRY UNITS SHALL CONFORM TO ASTM C-90, AND BE MADE WITH NORMAL WEIGHT AGGREGATE. UNIT COMPRESSIVE STRENGTH OF 2000 PSI ON NET SECTION TO PROVIDE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF MASONRY (f'm) OF 1,500 PSI, AS DETERMINED BY THE UNIT STRENGTH METHOD OF ACI 530.1.
- 3. FILL ALL BOND BEAMS AND REINFORCED CELLS SOLIDLY WITH GROUT. GROUT SHALL CONFORM TO ASTM C-476 AND SHALL OBTAIN A MIN. 28 DAY COMPRESSIVE STRENGTH OF 2,500 PSI, 8-11" SLUMP, TESTED PER ASTM C-1019 EACH 5,000 SF. GROUT STOPS ARE TO BE MESH OR SCREEN TYPE, FELT PAPER IS NOT ALLOWED. CONSOLIDATE AND RECONSOLIDATE BY VIBRATOR ALL GROUT POURS. GROUT POUR HEIGHTS SHALL NOT EXCEED 24FT, PLACED IN 5FT MAXIMUM LIFT HEIGHTS. PROVIDE CLEANOUTS FOR EACH GROUT POUR EXCEEDING 5FT, WHERE CMU WALLS WILL BE FINISH SURFACE, LIMIT POURS TO 5FT SO THAT CLEAN-OUTS WILL NOT BE REQUIRED.

 SELF-CONSOLIDATING GROUT (SCG) MAY BE USED WITH A TESTED GROUT SPREAD (SLUMP) IS TO BE WITHIN 26" -30"
- 4. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A—615, GRADE 60. SHOP FABRICATE REINFORCING BARS WHICH ARE SHOWN TO BE HOOKED OR BENT. DOWELS SHALL HAVE STANDARD 90 DEGREE HOOKS AND LAPPED WITH FIRST LIFT OF REINFORCING. PROVIDE MINIMUM LAP: #5 = 30", #7 = 36"
- 5. MORTAR SHALL CONFORM TO ASTM C-270, TYPE S. ALL MORTAR SHALL MEET THE "PROPORTION SPECIFICATION" OF ASTM C-270 AND EVALUATED IN ACCORDANCE WITH ASTM C-780. A4 MORTAR-AGGREGATE RATIO TEST METHOD.
- 6. UNLESS OTHERWISE INDICATED, ALL WALLS SHALL BE LAID IN RUNNING BOND. BOND CORNERS AND INTERSECTIONS OF ALL LOAD—BEARING WALLS. INTERSECTING NON—LOADBEARING WALLS SHALL BE CONNECTED BY PREFABRICATED TEE AND CORNER HORIZONTAL JOINT REINFORCEMENT @ 16" O/C. USE TEE JOINT REINF AND BACKER ROD WITH CAULK WHERE NON—LOADBEARING AND LOAD BEARING WALLS
- 7. PROVIDE VERTICAL REINFORCING BARS OF THE GIVEN SIZE AND SPACING AS INDICATED. PROVIDE BARS AT ALL WALL CORNERS, INTERSECTIONS AND OPENING EDGES. PROVIDE STD HOOKS INTO UPPER MOST BEAM.
- 9. PROVIDE STANDARD 9 GAUGE LADDER TYPE HORIZONTAL JOINT REINFORCING AT 16" ON CENTER GALVANIZED PER ASTM A153 (1.5oz/ft2). LAP JOINTS 6", STOP ALL HORIZONTAL JOINT REINFORCING AT CONTROL JOINTS.
- 10. PROVIDE PRECAST LINTELS, COMPLYING WITH ACI530 & ACI318, ABOVE ALL WALL OPENINGS INCLUDING HVAC DUCTS. SEE DRAWINGS FOR LOCATIONS OF ALL OPENINGS. UNLESS NOTED OTHERWISE ON PLAN PROVIDE PRECAST LINTELS AS SHOWN IN THE LINTEL SCHEDULE AS A MINIMUM. PROVIDE ONE REINFORCED CELL EACH SIDE OF OPENING W/ 8" LINTEL BEARING
- 11. PROVIDE CMU CONTROL JOINTS IN ALL EXTERIOR AND INTERIOR WALLS AS INDICATED.
- 12. UNLESS NOTED OTHERWISE, EXTEND ALL NON-LOADBEARING MASONRY WALLS TO UNDERSIDE OF METAL DECK. CAP WALL WITH KNOCK-OUT BOND BEAM COURSE W/1-#5. VERTICAL REINFORCEMENT 1-#5 @ 8FT O/C. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT WALL HEIGHTS. IF WALL HEIGHTS ARE TO BE 8" ABOVE FINISHED CEILINGS BRACE AS FOLLOWS. WALLS WHICH SPAN MORE THAN 24FT BETWEEN INTERSECTING WALLS SHALL BE BRACED WITH A DIAGONAL L3X3X1/4" WELDED TO THE TOP CHORD OF THE BAR JOIST AND ATTACHED TO THE BOND BEAM WITH A CLIP ANGLE L4X4X1/4"-6" W/2-5/8" WEDGE ANCHORS.
- 13. THE MASONRY CONTRACTOR SHALL PROVIDE ALL REQUIRED TEMPORARY WALL BRACING DURING CONSTRUCTION (SEE 'GENERAL STRUCTURAL NOTES').

STEEL JOIST NOTES:

- ALL STEEL JOISTS SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH SJI STANDARD SPECIFICATIONS.
- 2. JOIST BRIDGING SHALL CONFORM TO SJI SPECIFICATIONS.
 FIELD WELD BRIDGING AT ENDS AND INTERSECTIONS.
- 3. JOIST BRIDGING AND CONNECTIONS SHALL BE COMPLETELY INSTALLED PRIOR TO PLACING ANY CONSTRUCTION LOADS ON THE JOISTS. CONSTRUCTION LOADING SHALL NOT EXCEED THE JOIST DESIGN LOAD.
- 4. ALL JOISTS SHALL BE SHOP PAINTED IN ACCORDANCE WITH SJI REQUIREMENTS.
- 5. THE JOIST MANUFACTURER SHALL SUBMIT CALCULATIONS FOR ALL SPECIAL JOISTS NOTED AS "SP" TO THE ENGINEER FOR RECORD PURPOSES PRIOR TO FABRICATION. "SP" JOIST SHALL BE DESIGNED FOR THE ADDITIONAL POINT LOADS SHOWN ON PLAN. THESE CALCULATIONS SHALL BEAR THE SIGNED AND DATED SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
- 6. THE JOIST MANUFACTURER SHALL BE A SJI CERTIFIED SHOP AND MAINTAIN APPROVED FABRICATION PROCEDURES.
- 7. MINIMUM BEARING: ON MASONRY OR CONCRETE: (K-SERIES = 4")
- 8. MINIMUM WELDS:

 (K-SERIES) 3/16" FILLET WELDS, 3" LONG, EACH SIDE.

STEEL DECK NOTES:

- 1. ALL STEEL DECK SHALL BE MANUFACTURED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE "DESIGN MANUAL FOR COMPOSITE DECKS, FORM DECKS AND ROOF DECKS" BY THE STEEL DECK INSTITUTE (SDI).
- 2. ALL ROOF DECKING SHALL BE AS FOLLOWS:
- * 1 ½" DEEP, 22 GAUGE, WIDE RIB "TYPE B" DECK, GALVANIZED—G90 IF A LIGHT WEIGHT INSULATING CONCRETE ROOF SYSTEM IS USED
- SLOT VENT DECK 0.5% MINIMUM, COORDINATE % WITH LWC MANUFACTURER

 * ASTM A924-94 GRADE 33 OR HIGHER / GALV A924-96

 * MIN. I=0.169 IN4 / FT AND Sp=0.186 IN3 / FT
- * SPANNING PERPENDICULAR TO SUPPORTS/ 3—SPAN CONDITION MIN.
 * MINIMUM BEARING 2" / MINIMUM LAP 2"
- * INTERIOR & END SUPPORTS 5/8" PUDDLE WELDS 36/7 PATTERN
 OR MECHANICALLY FASTENED WITH HILITI X-EDN19 PINS
- * SIDE LAPS (3) #10 TEK SCREWS BETWEEN SUPPORTS

 * PERIMETER ANGLE EDGE WELDS 5/8" PUDDLE WELDS @ 6" O/C
 OR MECHANICALLY FASTENED WITH HILTI X—EDN19 PINS
- 3. UNLESS NOTED OTHERWISE ON PLAN, SUPPORT ALL PERIMETER EDGES OF STEEL DECK @ THE CMU WALL INTERFACE WITH A CONTINUOUS L3X3X1/4". REFER TO DETAILS FOR ATTACHMENTS.
- 4. SUPPORT ALL DECK OPENINGS GREATER THAN 8" DIAMETER WITH L4X4X1/4" ALL SIDES, COPE ANGLES AND WELD TO TOP CHORD OF JOIST. COORDINATE ALL OPENINGS WITH MEP SHOP
- 5. ALL STEEL DECK WELDING SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY SPECIFICATION D1.3.
- 6. SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS AND OTHER PERMANENT SUSPENDED LOADS SHALL NOT BE SUPPORTED BY THE STEEL DECKING.
- 7. ALL DECKING SHALL BE GALVANIZED G90. ALL DECK WELDS SHALL BE WIRE BRUSHED CLEAN AND TOUCHED UP WITH GALVANIZING REPAIR PAINT FOR GALVANIZED DECKS.
- 8. SUBMIT DETAILED SHOP DRAWINGS PRIOR TO FABRICATION SHOWING LAYOUT, SPAN CONDITIONS, TYPE OF METAL DECK UNITS, CONNECTION DETAILS, ACCESSORIES AND OTHER RELATED ITEMS.

TESTING AND INSPECTION NOTES:

AN INDEPENDENT TESTING LABORATORY SHALL PERFORM THE FOLLOWING TEST, AS A MINIMUM, UNLESS OTHERWISE NOTED IN THE SPECIFICATIONS.

- 1. GEOTECHNICAL / FOUNDATIONS / SITE:
 * FOOTINGS: TEST EACH COLUMN FTG AND EVERY 50 LF OF WALL FTG
- * SOG AND FILL MATERIAL: TEST EVERY 2,500 SF PER LIFT * ACCEPTABILITY OF FILL MATERIAL
- * REFER TO OWNERS GEOTECHNICAL REPORT.

 2. CONCRETE:
- * COMPRESSIVE STRENGTH TEST, 1-SET OF CYLINDERS AND SLUMP TEST PER 50CY OF CONCRETE.
- * BOLTED CONNECTIONS SHALL BE INSPECTED FOR PROPER TENSIONING PER A.I.S.C.
- * WELDS SHALL BE INSPECTED BY A QUALIFIED "AWS WELDING INSPECTOR"
- 4. MASONRY:

 * REFERENCE ACI 530 SECTION 1.6 QUALITY ASSURANCE.

 * BLOCK STRENGTH PER THE UNIT STRENGTH METHOD ASTM C-140

* GROUT STRENGTH TEST PER ASTM C-1019 EVERY 5,000 SF OF WALL

- * MORTAR TEST PER ASTM C-780 EVERY 5,000 SF OF WALL

 5. MASONRY INSPECTION: BY THE OWNERS DESIGNATED INSPECTOR OR BY THE GOVERNING LOCAL AUTHORITY. MASONRY INSPECTION SHALL
- MEET ACI 530 "LEVEL B QUALITY ASSURANCE" AS A MINIMUM VERIFY THE FOLLOWING:
- * PROPORTIONS OF MORTAR
 * CONSTRUCTION OF MORTAR JOINTS
- * LOCATION AND SIZE OF REINFORCEMENT AND EMBEDMENTS

 * GROUT MIX AND 8"-11" SLUMP REQUIREMENT
- * MINIMUM GROUT SPACE REQUIREMENT OF 3"X3" CLEAR
 * GROUT POUR HEIGHT, LIFT HEIGHT, PLACEMENT AND CONSOLIDATION
- * GROUT POUR HEIGHT, LIFT HEIGHT, PLACEMENT AND CONSOLIDATION
 * OBSERVE PREPARATION OF GROUT/MORTAR SPECIMENS

EXISTING CONSTRUCTION NOTES:

1. BEFORE PROCEEDING WITH ANY WORK WITHIN THE EXISTING FACILITY, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING STRUCTURAL CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACING, SHORING AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING WORK WHICH ARE TO REMAIN.

2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, ETC., NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE WORK TO THE EXISTING WORK. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND ERECTION OF ALL SHORING NECESSARY TO SAFEGUARD THE EXISTING STRUCTURE. THE CONTRACTOR SHALL SUBMIT A DETAILED PLAN FOR SHORING, BRACING AND PROTECTION OF THE EXISTING CONSTRUCTION. THE PLAN SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN FLORIDA. THIS SUBMITTAL IS FOR RECORD PURPOSES AND AS SUCH, IT WILL NOT BE REVIEWED OR APPROVED BY THE ENGINEER FOR SAFETY.

4. ANY NEW OPENINGS IN EXISTING WALLS REQUIRED FOR DOORS, WINDOWS OR AC UNITS MUST BE SAW CUT CLEAN AND A NEW PRECAST LINTEL INSTALLED WITH A MINIMUM 8" BEARING. OPENINGS GREATER THAN 3'-0" WILL REQUIRE THE LINTEL TO BE REINF W/1-#5 GROUTED SOLID ALONG WITH EACH SIDE CELL. IF BRICK VENEER EXISTS A GALVANIZED STEEL L4X4X8" W/ 3/4" EPOXY ANCHORS @ 24" O/C SHOULD BE INSTALLED. SHORE FOR SAFETY.

5. ANY NEW OPENINGS IN ROOF DECKS MUST BE FRAMED WITH

L4X4X4", COPED AND WELDED TO THE EXISTING FRAMING.

COLUMN REMOVAL NOTES AT GYM

- 1. SEE ARCHITECTURAL DRAWINGS FOR COLUMNS TO BE REMOVED.
- 2. CHIP OUT SLAB AROUND COLUMN BASE TO SAW COLUMN BELOW SLAB.
- 4. SAW CUT COLUMN BELOW BOTTOM CHORD OF JOIST.

3. PATCH SLAB WITH SELF LEVELING FLOOR PATCH.

5. DO NOT CUT ANY JOIST MEMBERS.

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MILLER STRUCTURAL ENGINEERING

320 W. KENNEDY BLVD STE 700 TAMPA, FLORIDA 33606 813 - 259 - 9116 LICENSE: C.A. NO: 7789 LICENSE: P.E. NO: 37984 WALTER W. MILLER, P.E.

> HILLSBOROUGH COUNTY SHERIFF'S OFFICE 2008 EAST 8TH AVENUE TAMPA, FLORIDA 33605

> > HILLSBOROUGH COUNTY SHERIFF'S OF FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

> > > / MSE 17-002

DATE

1/16/17

GENERAL NOTES

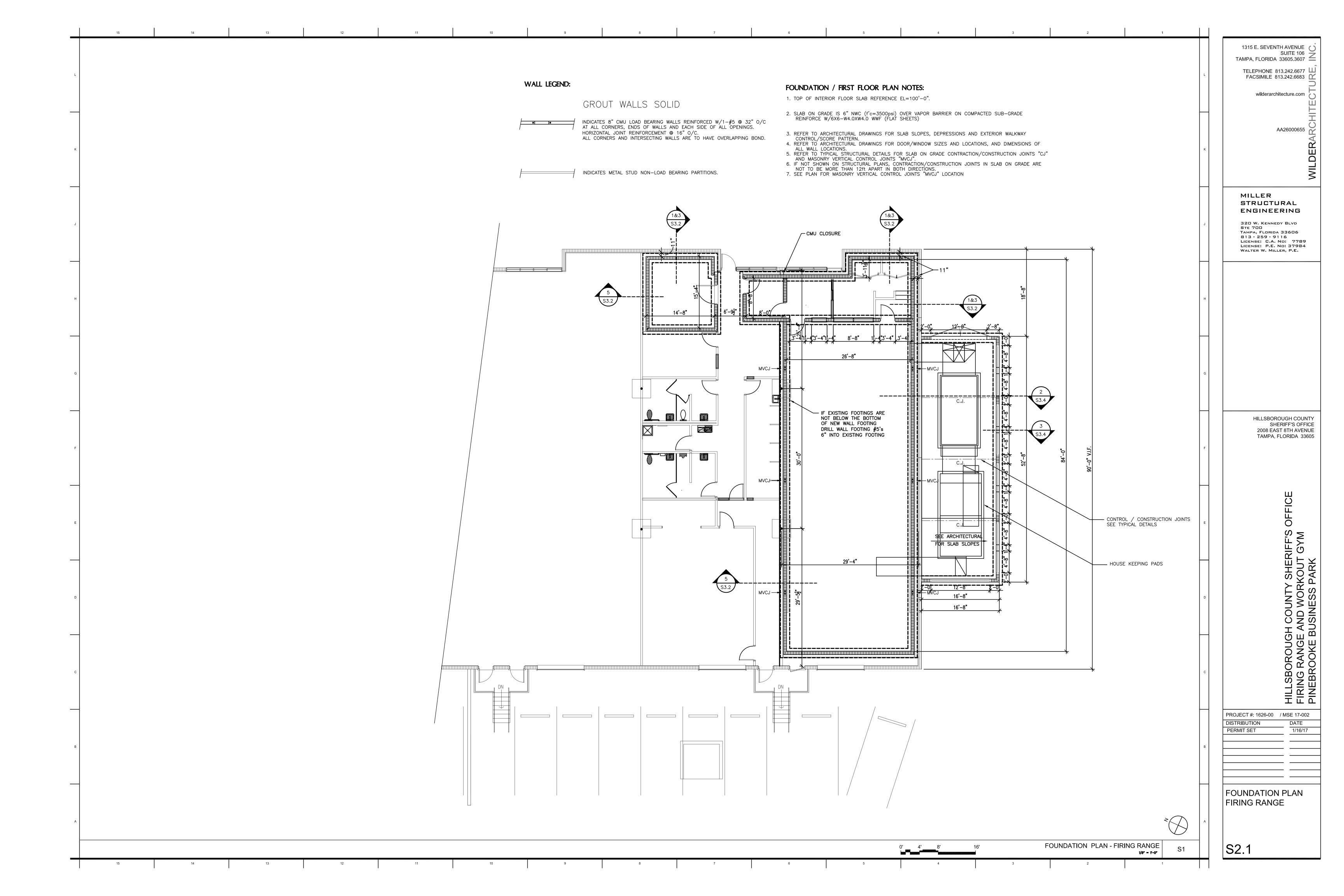
FIRING RANGE

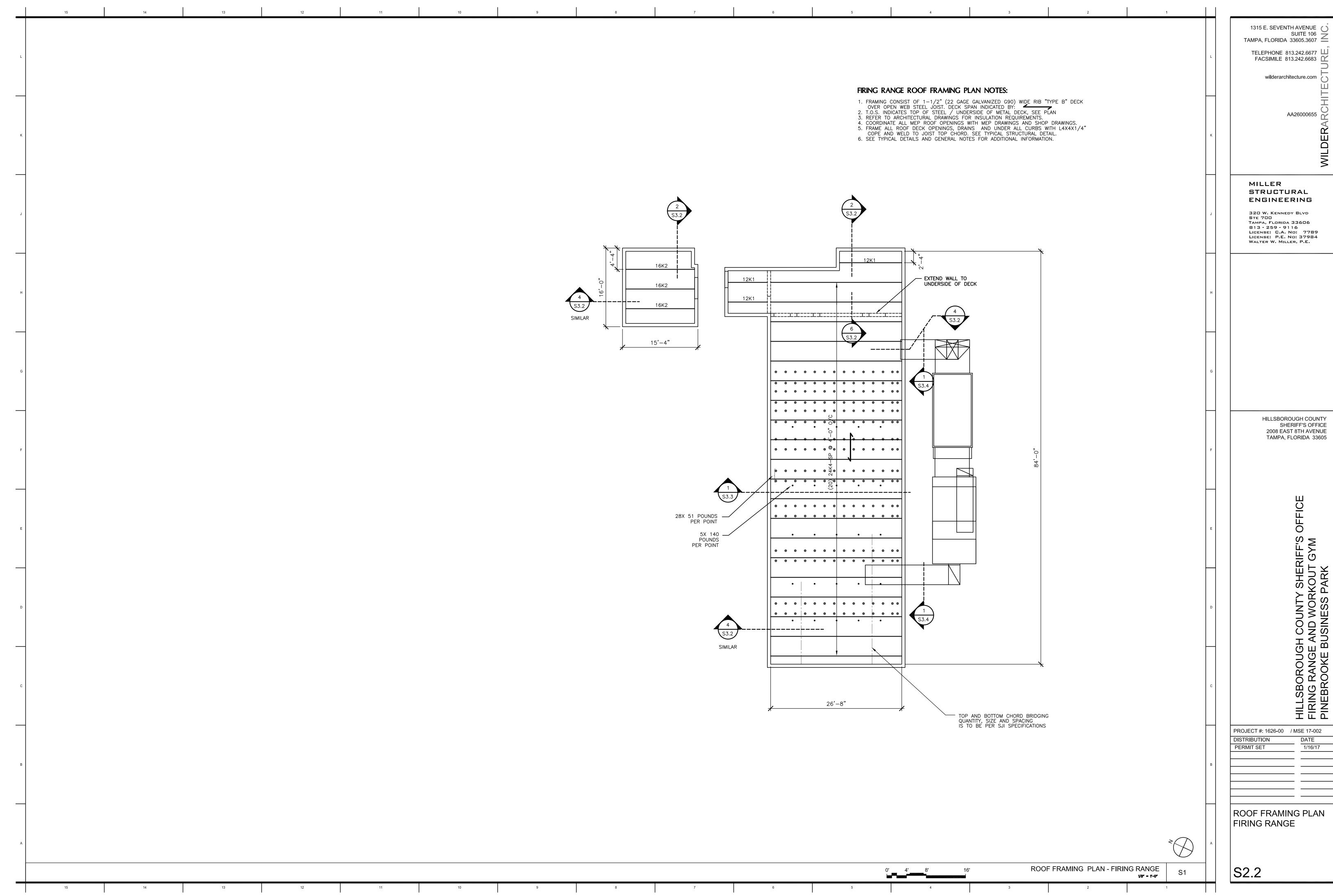
PROJECT #: 1626-00

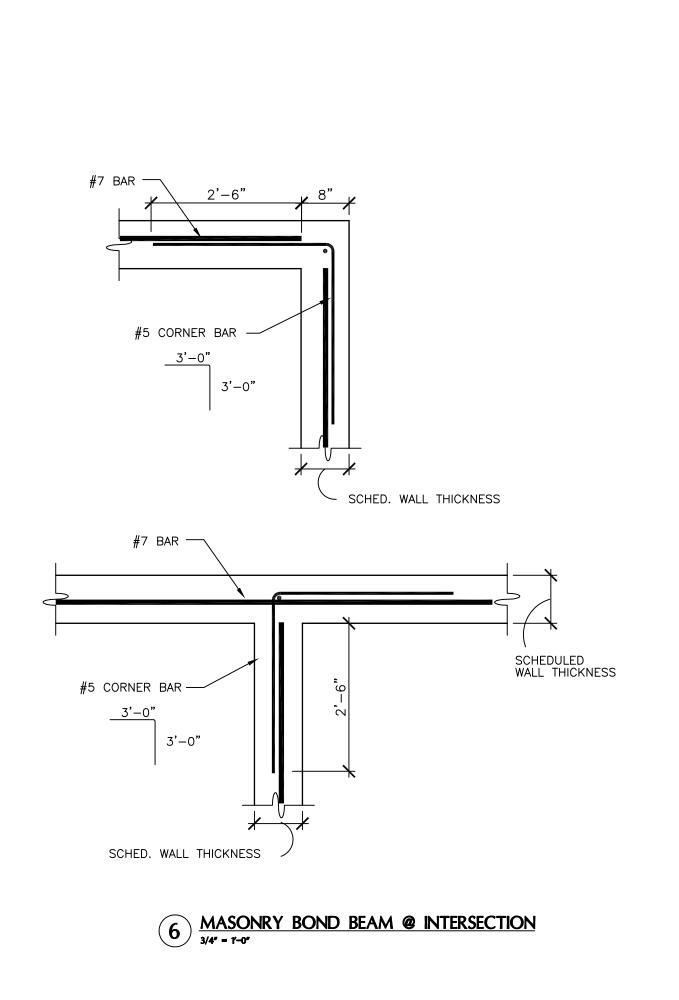
DISTRIBUTION

PERMIT SET

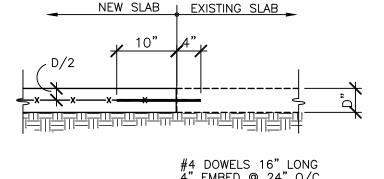
C1 /











NEW SLAB

EXISTING SLAB

#4 DOWELS 16" LONG 4" EMBED @ 24" O/C

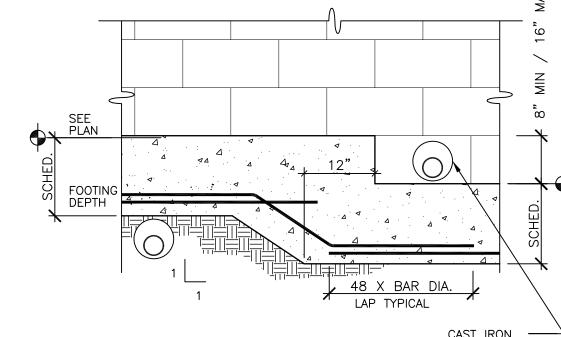
8 TYPICAL NEW SLAB INFILL @ NEW PLUMBING

ALTERNATE EACH SIDE

EXISTING SLAB

#4 DOWELS 16" LONG 4" EMBED @ 24" O/C





- SAND CHAIR AS WIRE MESH

SUPPORT @ 3' O/C GRID PATTERN

1. SAW CUT CONTRACTION JOINTS WITHIN 4HRS AFTER FINISHING IS COMPLETE.

2. IF NOT SHOWN ON PLAN, MAXIMUM JOINT SPACING

FOR SLAB INFORMATION.

3. FILL JOINTS WITH ELASTOMERIC SEALANT (ASTM C1193)
4. "D" INDICATES SLAB THICKNESS SEE PLAN NOTES

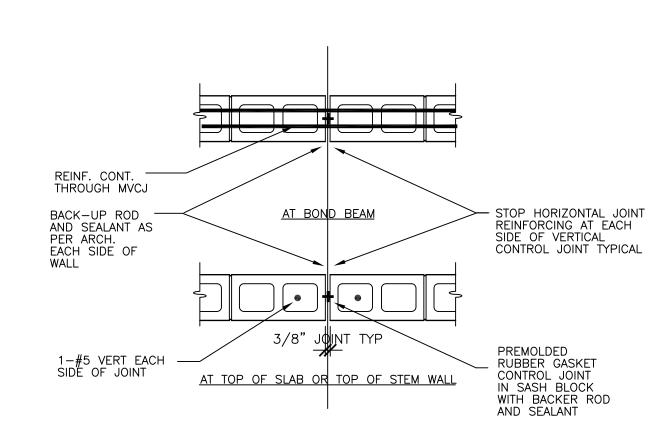
5 TYPICAL CONTRACTION JOINT "CJ" DETAIL

3/4" - 1'-0"

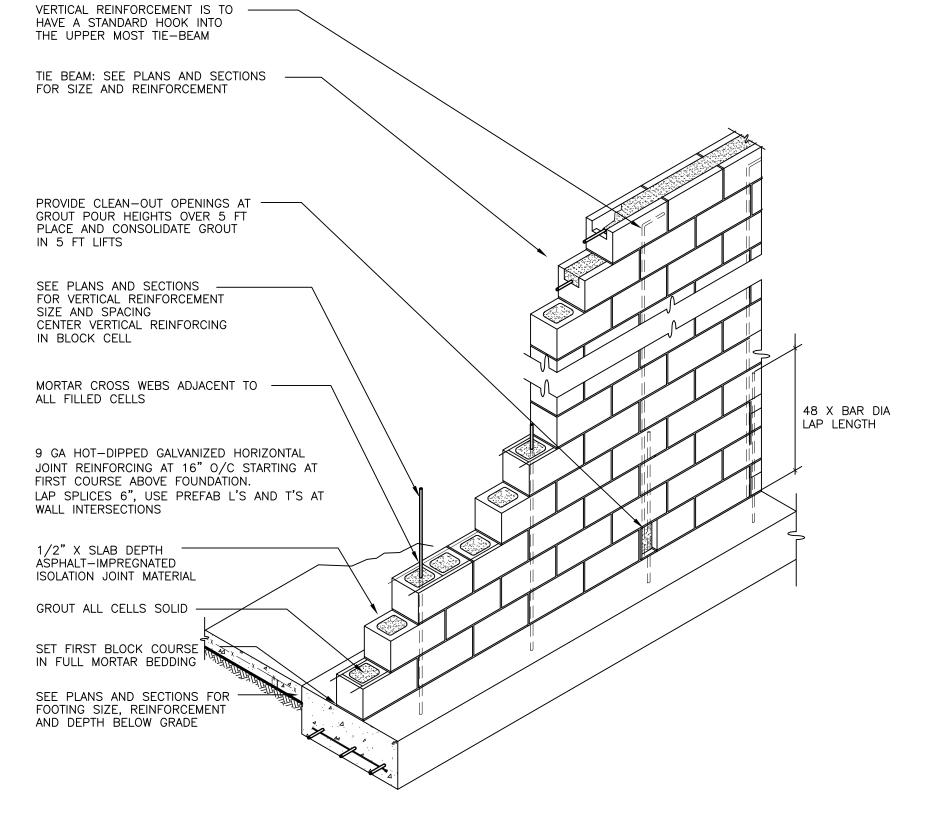
_ D/4 SAW CUT

STEP FOOTING AS REQUIRED BY SITE SLOPES TO MAINTAIN TOP OF FOOTING TO BE 8" BELOW





3 MASONRY VERTICAL CONTROL JOINT "MVCJ" 3/4" - 1"-0"



TYPICAL VERTICAL REINF SPACING ABOVE & BELOW

EL = TOP OF WALL

OR TIE BEAM

- EXTEND LINTEL REINF 8" PAST OPENING

HORIZONTAL JOINT REINF TYPICAL @ 16" O/C

6FT WIDE AND LARGER

UNDER ALL WINDOW SILLS EXTEND 8" PAST OPENING

EL = TOP OF SLAB/ FTG

- VERTCAL REINF EACH SIDE
OF ALL OPENINGS SEE PLANS
- 2-VERTICAL BARS @ OPENINGS

#5 HORIZONTAL IN KO-COURSE

HORIZONTAL JOINT REINF @ 16"o/c STARTING FIRST COURSE ABOVE FTG

ALL VERTICAL REINFORCEMENT
IS TO HAVE STD HOOKS
INTO UPPER MOST BOND

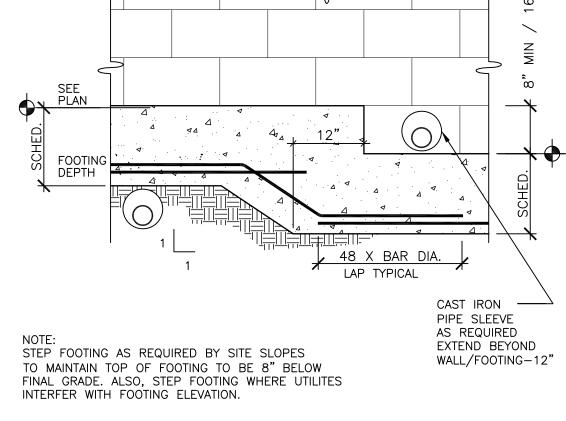
, OPENINGS

PRECAST LINTEL SEE — SCHEDULES FOR REINF

2 NEW WALL REINFORCEMENT PLACEMENT DETAIL
3/8" - 1-0"

DOWELS AT LINTELS—
TO HAVE STD HOOKS

#7 HORIZONTAL IN KO-COURSE



4 STEPPED FOOTING & SLEEVE DETAIL 3/4" - 1'-0"

TYPICAL VERTICAL REINF SPACING SEE PLAN

/ MSE 17-002 PROJECT #: 1626-00 DATE DISTRIBUTION PERMIT SET 1/16/17

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STRUCTURAL

ENGINEERING

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TAMPA, FLORIDA 33605

OFFICE

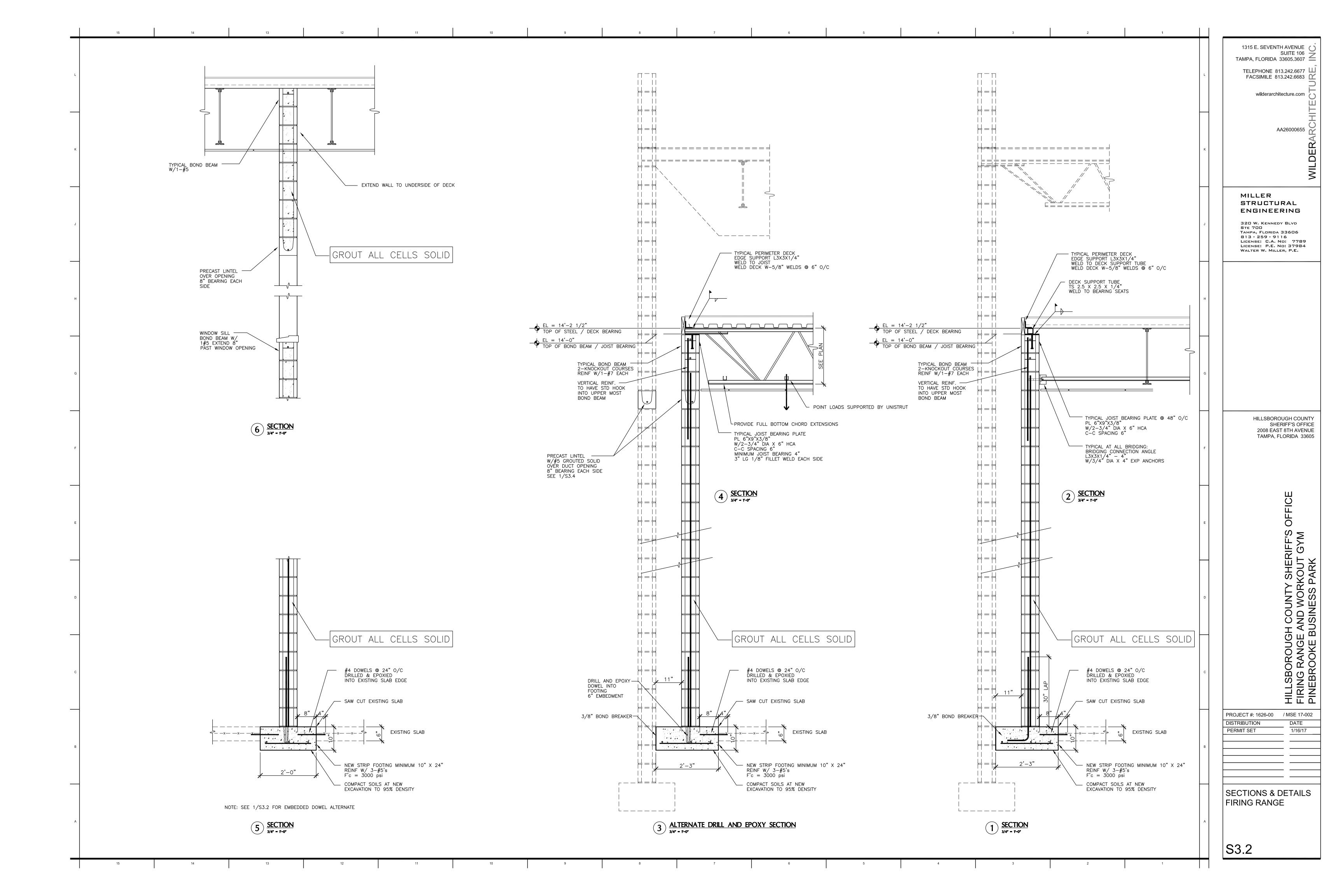
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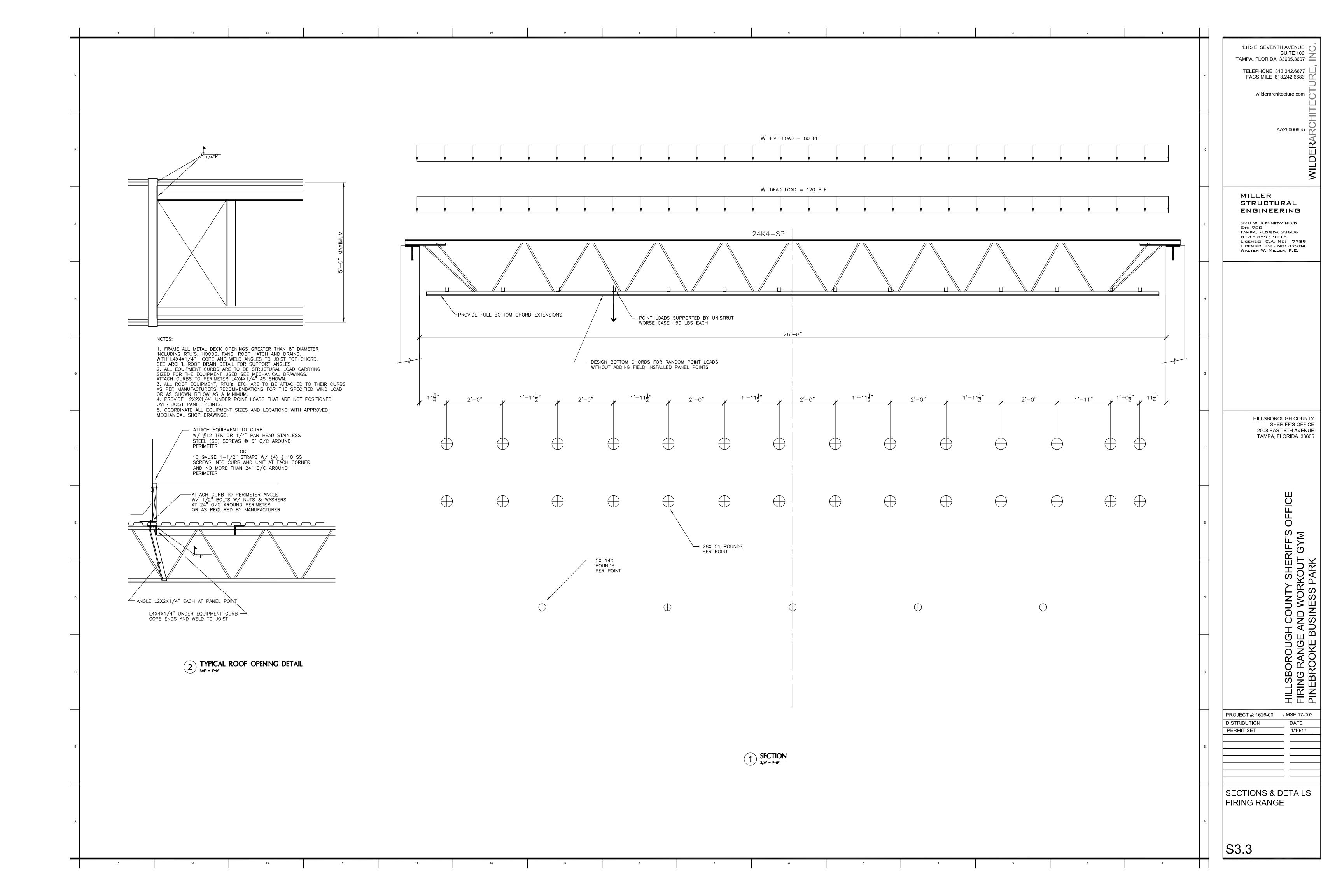
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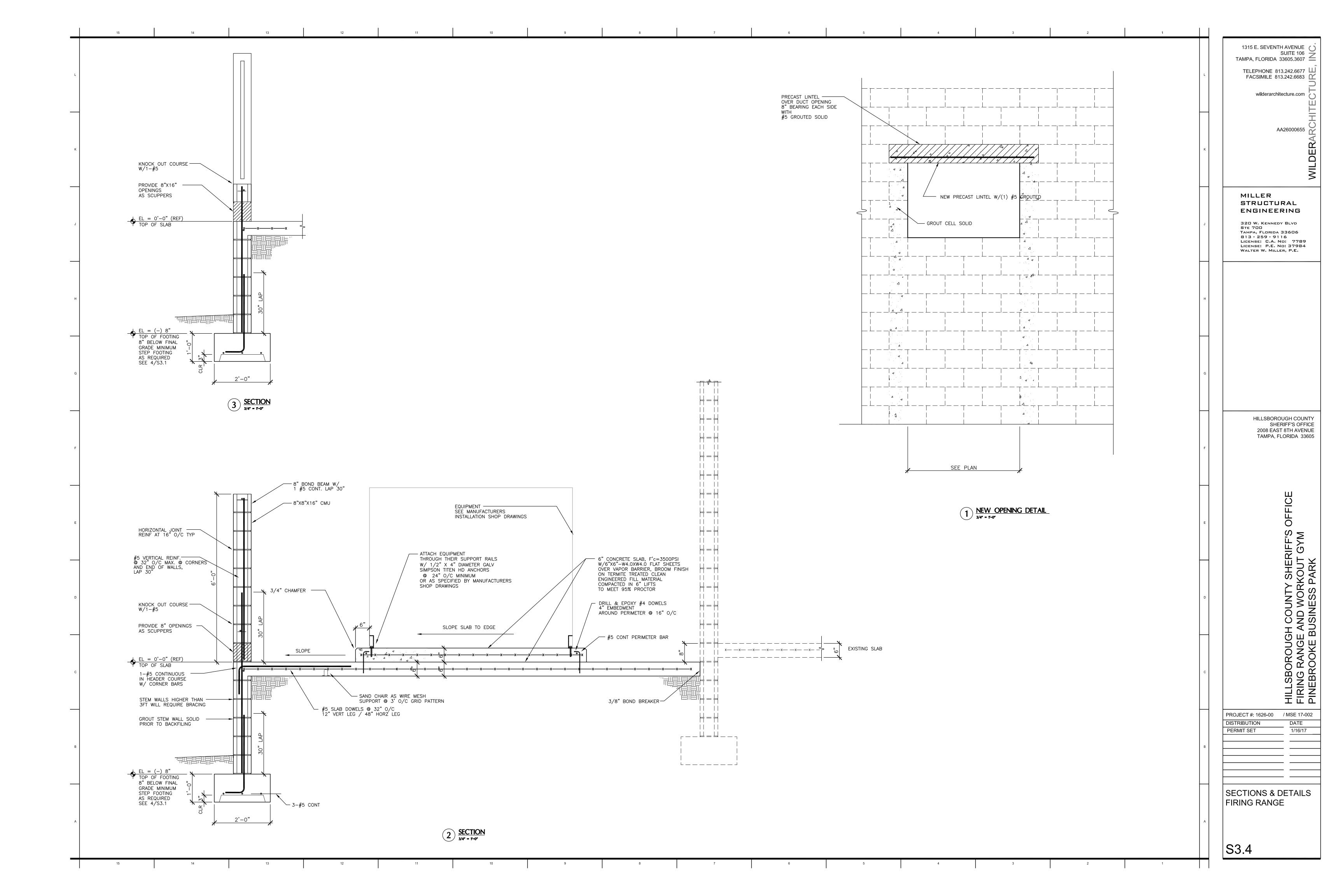
SECTIONS & DETAILS FIRING RANGE

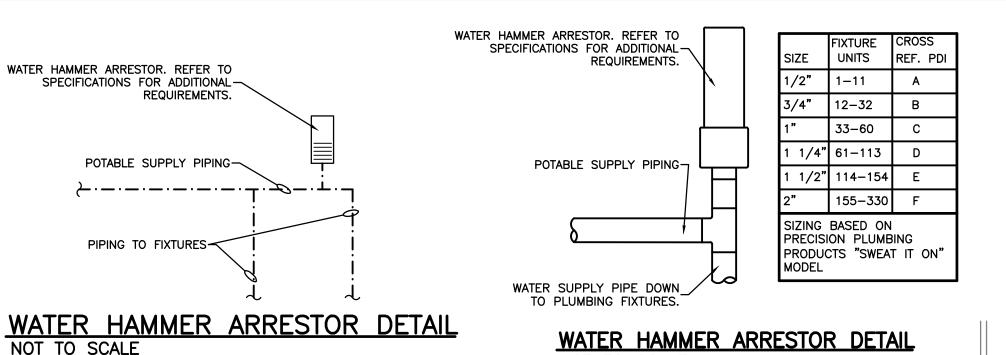
S3.

1 NEW MASONRY WALL SECTION
12" - 1'-0"







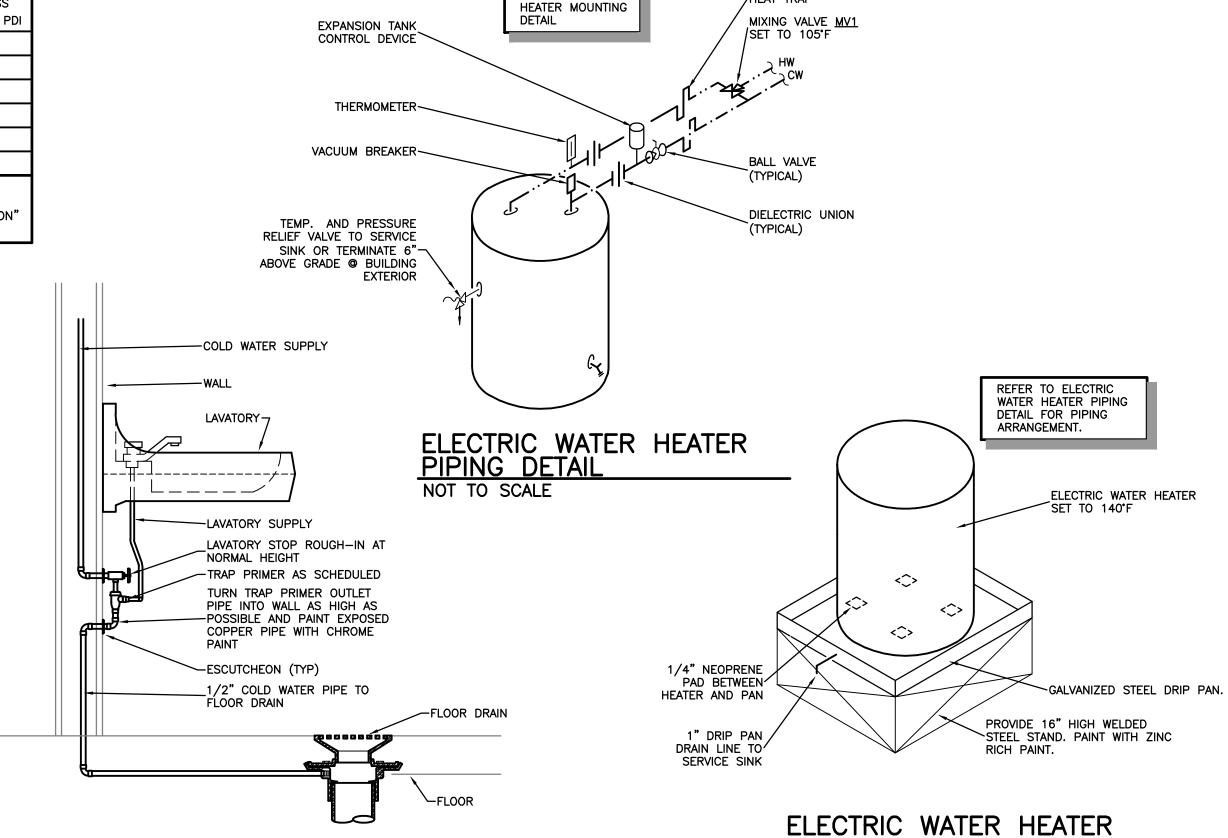


PLUMBING EQUIPMENT SCHEDULE										
MARK	DESCRIPTION	SELECTION	w or s	TRAP	VENT	HW	cw			
FD1	FLOOR DRAIN 3" FLOOR DRAIN WITH TRAP PRIMER CONNECTED TO DOMESTIC COLD WATER LINE AT LAVATORY. NICKEL BRONZE TOP. 6" ROUND. CAST IRON BODY WITH FLASHING COLLAR AND ADJUSTABLE STRAINER.	SMITH 2005-A-6"	3"	3"	1-1/2"	_	-			
HB1	HOSE BIBB LOOSE KEY CHROME PLATE SILL FAUCET WITH 3/4" FLANGED FEMALE INLET, TEE HANDLE AND 3/4" HOSE THREAD OUTLET. PROVIDE WITH VACUUM BREAKER. COORDINATE MOUNTING HEIGHT WITH GRADING PLAN AT EXTERIOR LOCATIONS AND MOUNT AT 24" AFF AT INTERIOR LOCATIONS.	CHICAGO 387 CHICAGO 293-6 WATTS 8AC	_	-	-	-	3/4"			
wco	CAST IRON TEE WALL CLEAN-OUT WITH BRONZE PLUG AND ROUND STAINLESS STEEL COVER PLATE. SIZE C.O. SAME AS LINE SIZE (2-1/2" MINIMUM). PROVIDE PVC TO NO-HUB ADAPTERS FOR PVC DWV APPLICATIONS.	SMITH 4351S-Y	2-1/2" MIN.	-	-	-	-			
VTR	VENT THROUGH ROOF WITH VANDALPROOF VENT CAP SIZE AS INDICATED ON DRAWINGS.	WADE W-3680	-	_	-	_	-			
TP	PRESSURE DROP ACTIVATED TRAP PRIMER INSTALLED UNDER LAVATORY OR SINK, EXPOSED FOR MAINTENANCE. ALL EXPOSED PIPING TO TRAP PRIMER SHALL HAVE A CHROME FINISH.	MIFAB M-500	_	-	-	-	-			
EWH1	ELECTRIC WATER HEATER 3,000 WATTS, 208 VOLT, SINGLE PHASE, 10 GALLON ELECTRIC WATER HEATER.	RHEEM EGSP10	_	_	_	3/4"	3/4"			
EWH2	ELECTRIC WATER HEATER 6,000 WATTS, 208 VOLT, THREE PHASE, 50 GALLON	RHEEM ELD52	_	_	_	1-1/4"	1-1/4			

THE ASSOCIATED LAVATORY WHERE APPLICABLE.

CONNECT COLD WATER SUPPLY LINE TO HOT AND COLD WATER FIXTURE CONNECTIONS. PROVIDE TWO COLD WATER INDEXES WHERE POSSIBLE

ELECTRIC WATER HEATER.



HEAT TRAP

FLOOR MOUNTED DETAIL

NOT TO SCALE

PLUMBING FIXTURE SCHEDULE VENT DESCRIPTION **SELECTION** W OR S TRAP VENT HW CW MARK DESCRIPTION SELECTION TRAP HW BOWL: WHITE, SELF RIMMING, VITREOUS CHINA, OVAL, 4 CENTER LAVATORY WITH OVERFLOW. 1-1/4" | 1-1/4" | 1/2" | 1/2" AMERICAN STANDARD BOWL: WHITE FLOOR MOUNTED WITH BOTTOM OUTLET, VITREOUS CHINA, SIPHON-JET, ELONGATED BOWL, 14" **LAVATORY** AQUALYN 0476.028 CLOSET BRIGGS 7714 FAUCET: SINGLE LEVER HANDLE, VANDAL RESISTANT, 0.5 DELTA 500-DST DRAIN: PERFORATED STRAINER, CHROME FINISH, 1-1/4" FLUSH (1.6 GPF). BOWL AND SEAT DIMENSIONS MUST MCGUIRE 155-A2 MATCH WITHIN 1/4". SEAT: WHITE SOLID PLASTIC, HEAVY DUTY, ELONGATED, OPEN FRONT (WITHOUT COVER), STAINLESS STEEL P-TRAP: CHROME FINISHED WITH TWO UNIONS, 1-1/4" INLET AND 1-1/2" OUTLET, CLEANOUT PLUG, WALL MCGUIRE 8088 BENEKE 523-SS NCH SELF-SUSTAINING CHECK HINGES, INTEGRAL MOLDED ESCUTCHEON SUPPLY: TWO REQUIRED, CHROME PLATED, LOOSE KEY ANGLE VALVE, WALL ESCUTCHEON, FLEXIBLE TUBE RISER, 3/8" INLET AND OUTLET CONNECTIONS. MCGUIRE 2165CCLK FLUSH VALVE ASSEMBLY: 11-1/2" HIGH ABOVE RIM, EXPOSED DIAPHRAGM VALVE (1.6 GALLON FLUSH), CHROME FINISH, ADA COMPLIANT NON-HOLD-OPEN HANDLE, 1" INLET, 1-1/2" OUTLET, INTEGRAL 111-1.6-YB-YK SCREWDRIVER ADJUSTABLE ANGLE STOP AND CHECK 1-1/4" 1-1/4" 1/2" 1/2" AMERICAN STANDARD VALVE WITH COVER, VACUUM BREAKER, WALL AND SPUD BOWL: WHITE, WALL MOUNTED, VITREOUS CHINA, 20"x18"
4" CENTERS, PROVIDE FLOOR MOUNTED WALL CARRIER LAVATORY LUCERNE 0356.012 FLANGES, SWEAT SOLDER ADAPTER KIT, SOLID RING PIPE SUPPORT. WITH CONCEALED ARMS. MOUNT AS FOLLOWS: APPLICATION ADULT APRON(MIN) RIM(MAX) HANDICAPPED** BOWL: WHITE FLOOR MOUNTED WITH BOTTOM OUTLET, VITREOUS CHINA, SIPHON-JET, ELONGATED BOWL, 18" INT. WATER FAUCET: SINGLE LEVER HANDLE, VANDAL RESISTANT, 0.5 DELTA 500-DST CLOSET GPM, NON-AERATED SPRAY, CHROME FINISH. AFF TO RIM, BOLT CAPS WITH CAULK, LOW CONSUMPTION <u>DRAIN:</u> PERFORATED STAINER, CHROME FINISH, 1-1/4" OUTLET WITH ADA COMPLIANT OFFSET TAILPIECE. PROVIDE FLUSH (1.6 GPF). BOWL AND SEAT DIMENSIONS MUST BENEKE 523-SS NCH PROTECTIVE INSULATION AS REQUIRED BY ADA. MCGUIRE 155WC SEAT: WHITE SOLID PLASTIC, HEAVY DUTY, ELONGATED, OPEN FRONT (WITHOUT COVER), STAINLESS STEEL P-TRAP: CHROME FINISHED WITH TWO UNIONS, 1-1/4" INLET AND 1-1/2" OUTLET, CLEANOUT PLUG, WALL MCGUIRE 8088 SELF-SUSTAINING CHECK HINGES, INTEGRAL MOLDED **ESCUTCHEON** SUPPLY: TWO REQUIRED, CHROME PLATED, LOOSE KEY ANGLE VALVE, WALL ESCUTCHEON, FLEXIBLE TUBE RISER, 3/8" INLET AND OUTLET CONNECTIONS. PROVIDE FLUSH VALVE ASSEMBLY: 11-1/2" HIGH ABOVE RIM, EXPOSED DIAPHRAGM VALVE (1.6 GALLON FLUSH), MCGUIRE 2165CCLK 111-1.6-YB-YK CHROME FINISH, ADA COMPLIÀNT NON-HOLD-OPEN PROTECTIVE INSULATION AS REQUIRED BY ADA**. PLUMBEREX "PRO-2000" HANDLE, 1" INLET, 1-1/2" OUTLET, INTEGRAL SCREWDRIVER ADJUSTABLE ANGLE STOP AND CHECK VALVE WITH COVER, VACUUM BREAKER, WALL AND SPUD FLANGES, SWEAT SOLDER ADAPTER KIT, SOLID RING PIPE HANDICAPPED** TWO LEVEL ELECTRIC WATER COOLER SUPPORT. ROUGH-IN DIMENSION MUST ALLOW FOR ELKAY LZSTL8WSVR*K 1-1/4" 1-1/4" WHEELCHAIR ACCESS ELECTRIC WATER COOLER FLUSH VALVE CLEARANCE OF HANDICAPPED GRAB BAR NON-RECESSED, STAINLESS STEEL TOP AND SIDES, WHERE APPLICABLE, OR OFFSET FITTING MAY BE COOLER WITH FRONT AND SIDE PRESSBARS, GRID STRAINER AND REQUIRED. SAFETY BUBBLER. 4.4 GPH @ 30°F TEMPERATURE DIFFERENCE. 4.8AMPS @ 120V/1ø/60HZ. 1-1/4" P-TRAP, CAST BRASS WITH CLEAN OUT. 1/2" STOP NON-HANDICAPPED BOWL: WHITE, WALL HUNG VITREOUS CHINA, SIPHON-JET, 14" PROJECTION, 24" TO LIP, FLOOR INT. **URINAL** 1-1/2 MOUNT WITH BUBBLER AT 30" & 36" AFF. WITH BOTTLE FILLING STATION. MOUNTED CARRIER WITH CONCEALED BACK, LOW SMITH 637 CONSUMPTION FLUSH (1.0 GPF), 304 STAINLESS STEEL MCGUIRE 2165CCLK BOLTS AND WASHERS FIAT MSB 2424 ONE-PIECE CONSTRUCTION, 24"x24"x10", FLOOR SERVICE FLUSH VALVE ASSEMBLY: 10" HIGH, EXPOSED DIAPHRAGM VALVE 1.0 GALLON FLUSH, CHROME FINISH, 1" INLET, 1-1/4" OUTLET, INTEGRAL SCREW DRIVER 180-1-YB-YK MOUNTED. FAUCET WITH PAIL HOOK AND HOSE END, VACUUM BREAKER, INTEGRAL STOPS, VANDAL PROOF SINK FIAT 830-AA FIAT 889-CC HANDLE MOP HANGER, 24"x3", 18 GA. STAINLESS STEEL ADJUSTABLE ANGLE STOP AND CHECK VALVE WITH BUMPER GUARD. 12 OZ. SILICONE SEALANT. 30" HOSE COVER, VACUUM BREAKER, WALL AND SPUD FLANGES, AND BRACKET COMBINATION. SWEAT SOLDER KIT, AND WALL BRACKET 1/2" CONCEALED PRESSURE BALANCING VOLUME CONTROL SYMMONS 25-500-B30 HANDICAPPED ** BOWL: WHITE, WALL HUNG VITREOUS CHINA, SIPHON—JET, 14" PROJECTION, 17" TO LIP, FLOOR MOUNTED CARRIER 3"/4" VALVE WITH SINGLE BLADE HANDLE AND SHOWER HEAD INT. URINAL SPRAY HEAD WITH 5' HOSE, SPRAY HEAD, 30" VERTICAL CHROME BAR WITH ADJUSTABLE SLIDE, IN-LINE VACUUM WITH CONCEALED BACK, LOW CONSUMPTION FLUSH (1.0 BREAKER, WALL CONNECTION AND FLANGE. STRAINER GPF), 304 STAINLESS STEEL BOLTS AND WASHERS FLUSH VALVE ASSEMBLY: PROVIDE LOW HEIGHT OUTLET TUBE (SO THAT HANDLE IS NO HIGHER THAN SHOWN SHOWER GRATE. 2.5 GPM FLOW RESTRICTOR. P10 BELOW), EXPOSED DIAPHRAGM VALVE 1.0 GALLON FLUSH, UTILITY TUB 180-1-YB-YK HIGH STRENGTH ONE-PIECE MOLDED CONSTRUCTION, MUSTEE 18F UTILATUB CHROME FINISH, ADA COMPLIANT. NON-HOLD-OPEN 34"x20"x24", FLOOR MOUNTED TYPE. 18 GALLON HANDLE, 1" INLET, 1-1/4" OUTLET, INTEGRAL SCREW CAPACITY, EXTRA DEEP 13" TUB WITH SMOOTH DRIVER ADJUSTABLE ANGLE STOP AND CHECK VALVE WITH SURFACE. LEAKPROOF, INTEGRALLY MOLDED-IN DRAIN COVER, VACUUM BREAKER, WALL AND SPUD FLANGES, SWEAT SOLDER KIT, AND WALL BRACKET. WITH STOPPER, MOLD AND MILDEW-RESISTANT COMPONENTS. COLOR—FAST, MARBLEIZED WHITE FINISH. FAUCET — CHROME FINISH, 4" CENTER SET WITH 6" SWING SPOUT WITH AERATOR AND HOSE END. MOUNT AS FOLLOWS: MUSTEE MODEL 93.600 APPLICATION LIP(MIN) HANDLE(MAX)
ADULT 17" 44" P11 BARRIER FREE, TYPE 304 CORROSION RESISTANT BRADLEY S19214BSS STAINLESS STEEL, HINGED DUST COVERS

FIXTURE AND ALL ATTACHMENTS SHALL COMPLY WITH CHAPTER 11 OF THE FLORIDA BUILDING CODE AND THE AMERICANS WITH DISABILITIES ACT. FIXTURE TO BE MOUNTED PER THIS SCHEDULE UNLESS NOTED OTHERWISE IN PLAN. FLUSH VALVE IS TO BE ON THE SIDE TOWARDS

TRAP PRIMER DETAIL

PLUMBING LEGEND

The image of the property of

BE FIELD VERIFIED.

SANITARY

WASTE

VENT

ABOVE FINISHED FLOOR

BELOW FINISHED FLOOR

EXISTING - EXACT SIZE AND LOCATION TO

GENERAL PLUMBING NOTES

- 1. ALL PLUMBING WORK SHALL MEET ALL OF THE REQUIREMENTS OF THE FOLLOWING:
- A. FLORIDA BUILDING CODE (FBC) 5TH EDITION (2014): THIS CODE INCLUDES THE 2014 FBC BUILDING, MECHANICAL, PLUMBING, FUEL GAS AND ENERGY CONSERVATION VOLUMES. FURTHER, SEE "REFERENCED STANDARDS" IN THE FBC, BUILDING CHAPTER 35; FBC, PLUMBING CHAPTER 14; FBC, MECHANICAL CHAPTER 15; FBC, FUEL GAS CHAPTER 8, FBC, ENERGY CONSERVATION CHAPTER 5.) (EFFECTIVE JUNE 30, 2015)
- B. 5TH EDITION OF THE FLORIDA FIRE PREVENTION CODE (FFPC): (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.) (EFFECTIVE DECEMBER 31, 2014)
 C. 2011 NATIONAL ELECTRIC CODE
- C. 2011 NATIONAL ELECTRIC CODE

 2. PROVIDE COMPLETE PLUMBING SYSTEMS AS DETAILED. WORK CONSISTS OF FURNISHING ALL
- MATERIALS, EQUIPMENT, AND SERVICES REQUIRED FOR COMPLETE SYSTEMS.

 3. CONDITIONS SHOWN AS EXISTING ARE BASED ON AVAILABLE DATA AND SHOULD BE INTERPRETED TO BE APPROXIMATE. VERIFY EXISTING CONDITIONS IN THE FIELD.
- 4. COORDINATE WITH OTHER TRADES TO AVOID CONFLICTS.
- 5. COORDINATE LOCATIONS OF FLOOR DRAINS AND CLEAN OUTS WITH THE ARCHITECTURAL
- 6. UNLESS OTHERWISE NOTED, ALL PIPING SHALL BE RUN IN CONCEALED SPACES. HOWEVER, NO PIPING SHALL BE CHASED OR CUT INTO THE TENANT DEMISING WALLS.
- 7. WATER PIPING SHALL BE HARD DRAWN COPPER TYPE L WITH WROUGHT COPPER FITTINGS AND 95-5 SOLDER
- 8. ALL SOIL, WASTE, AND VENT PIPING SHALL BE SCHEDULE 40 PVC DWV.
- 9. SANITARY PIPING BELOW THE GROUND FLOOR SLAB SHALL BE SCHEDULE 40 DWV PVC SOIL
- 10. VENT THROUGH ROOF TERMINALS SHALL BE LOCATED 10'-0" AWAY FROM ANY BUILDING INTAKE
- OPENINGS. COORDINATE WITH THE MECHANICAL CONTRACTOR.
- 11. GATE VALVES SHALL BE #125 BRONZE WITH UNION BONNET.
- 12. PROVIDE TRAP PRIMERS WHERE REQUIRED BY CODE.
- 13. UNLESS NOTED OTHERWISE, ALL PLUMBING EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL BE GUARANTEED FOR A ONE YEAR PERIOD FROM DATE OF ACCEPTANCE.
- 14. PROVIDE ALL CUTTING REQUIRED FOR THE INSTALLATION OF PLUMBING WORK. FINISH PATCHING SHALL BE COORDINATED WITH THE GENERAL CONTRACTOR/CONSTRUCTION MANAGER.
- 15. ALL SOIL AND WASTE PIPING 2-1/2" AND SMALLER SHALL BE SLOPED AT 1/4" PER FOOT.
- LARGER WASTE PIPING SHALL BE SLOPED AT 1/8" PER FOOT.

 16. ALL WATER PIPING SHALL BE SUPPORTED RIGIDLY AND IN LINE FROM THE BUILDING
- STRUCTURE. OFFSET PIPING TO AVOID STRUCTURAL MEMBERS, CANTS, FLASHING, MECHANICAL AND ELECTRICAL EQUIPMENT, ETC.

 17. PRIOR TO COMMENCING ANY PLUMBING ROUGH—IN, THE EXISTING SANITARY PIPING SHALL BE
- 7. PRIOR TO COMMENCING ANY PLUMBING ROUGH—IN, THE EXISTING SANITARY PIPING SHALL BE EXCAVATED. VERIFY THE EXACT SIZE, LOCATION, INVERT AND DIRECTION OF FLOW. NOTIFY THE ENGINEER IMMEDIATELY IF THE DRAIN IS SMALLER THAN INDICATED OR IF THE INVERT WILL NOT BE LOW ENOUGH FOR THE NEW PLUMBING ROUGH—IN. CONNECT NEW SANITARY LINES TO EXISTING SANITARY LINES AS INDICATED. PATCH THE FLOOR AS DIRECTED BY THE ARCHITECT.
- 18. VERIFY ALL SITE RELATED SANITARY & WATER CONNECTIONS PRIOR TO STARTING WORK.
 SHOULD DEPTHS BE DIFFERENT THAN THAT SHOWN HEREIN ADVISE ENGINEER IMMEDIATELY.
- 19. PRIOR TO SITE UTILITIES WORK, CALCULATE THE INVERTS FOR ALL SANITARY WASTE CONNECTIONS BASED ON ACTUAL CONDITIONS. COORDINATE SANITARY WASTE LOCATIONS AND INVERTS WITH SITE UTILITIES CONTRACTOR.
- 20. WASTE LINES RECEIVING BELOW AMBIENT TEMPERATURE CONDENSATE SHALL BE INSULATED WITH 1/2" FLEXIBLE UNICELLULAR FOAM (ARMAFLEX OR EQUIVALENT) INSULATION TO GRADE.
- 21. ALL EXISTING LINES TO REMAIN SHALL BE VISUALLY INSPECTED AND MACHINE CLEANED.
- 22. REMOVE ALL UNUSED WASTE AND VENT PIPING.
- 23. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

COORDINATE AND VERIFY EXACT LOCATIONS OF ALL PLUMBING FIXTURES WITH ARCHITECTURAL DRAWINGS

REFER TO RISER ON DRAWING P2.1 FOR DOMESTIC WATER AND WASTE AND VENT LINE SIZING

PLUMBING DRAWING INDEX

PLUMBING GENERAL NOTES, LEGEND, SCHEDULES

AND DETAILS
P1.1 PLUMBING PLANS

P1.1 PLUMBING PLANS
P2.1 SANITARY AND DOMESTIC WATER ISOMETRICS

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HILLSBOROUGH COUNTY SHERIFF'S OFFICE 2008 EAST 8TH AVENUE TAMPA, FLORIDA 33605

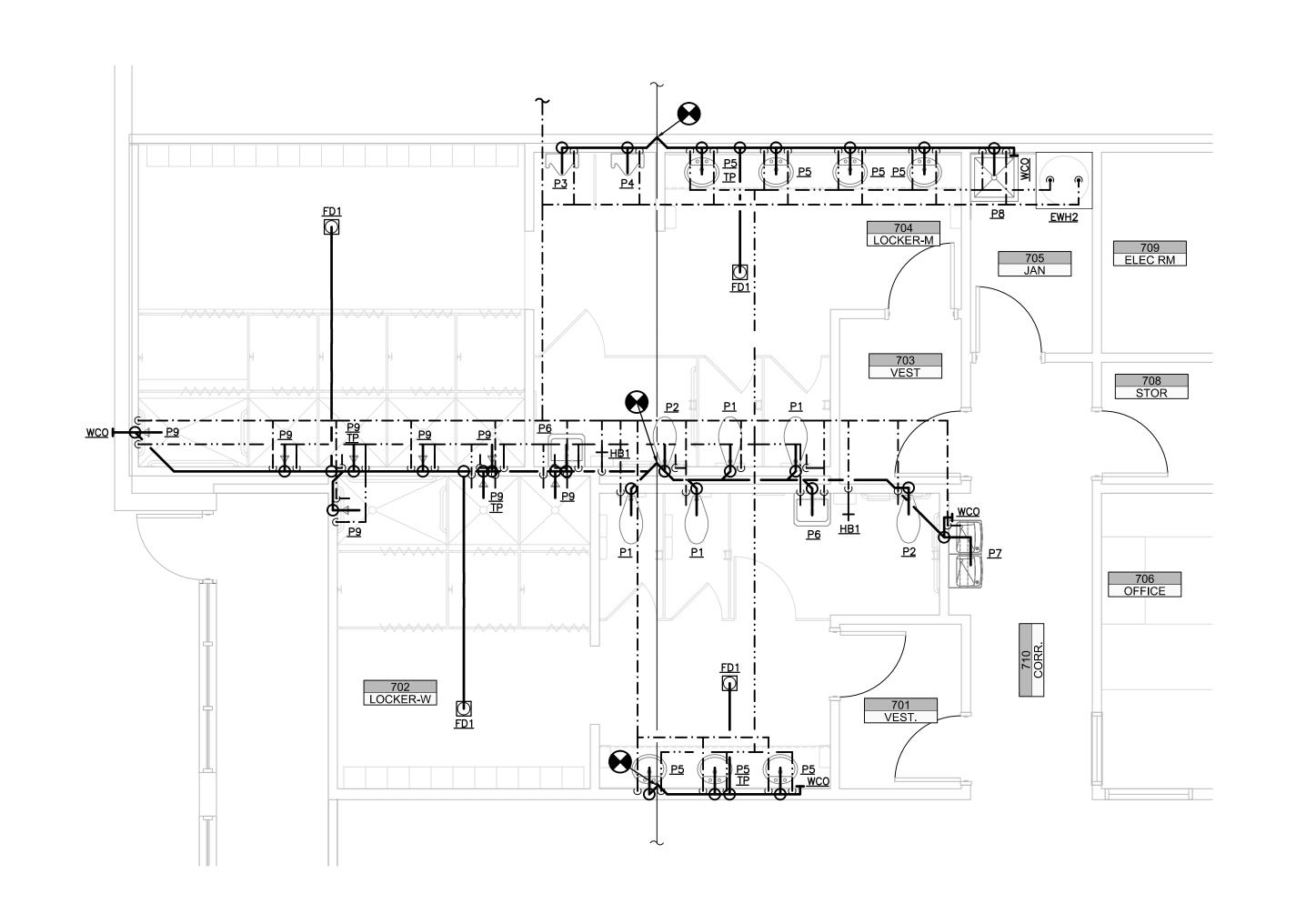
> HILLSBOROUGH COUNTY SHERIFF'S OFF FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

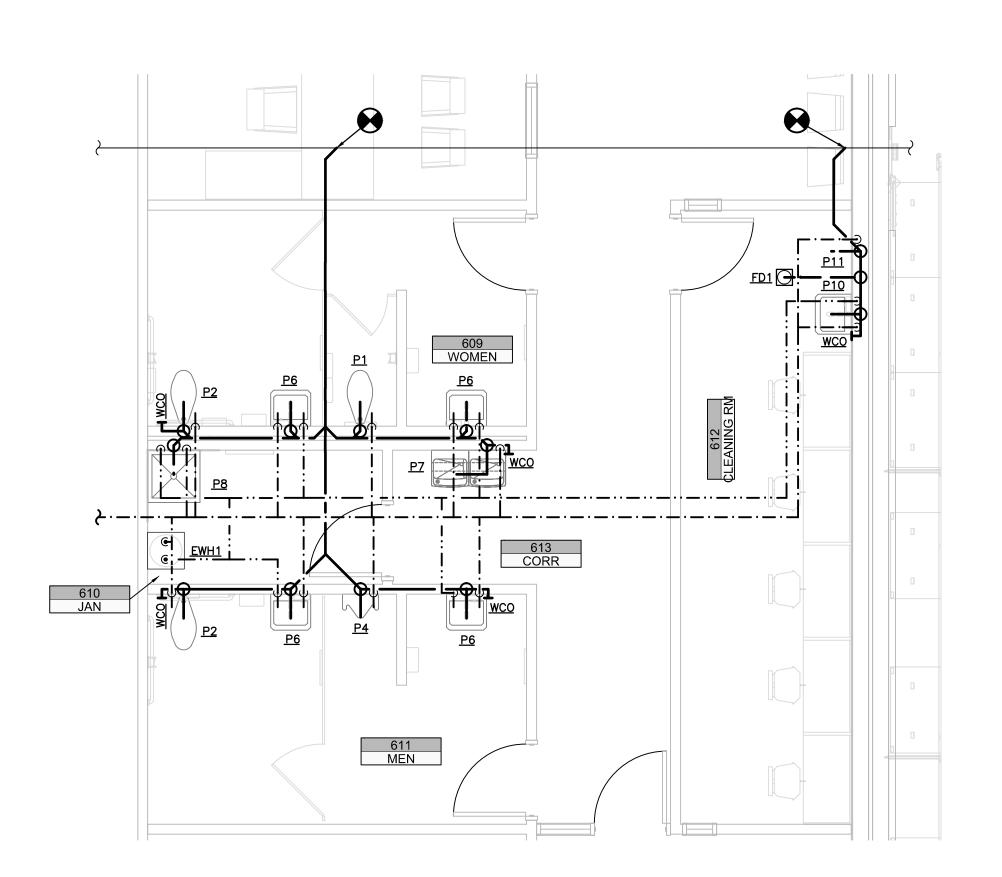
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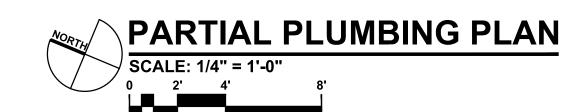
PLUMBING GENERAL NOTES, LEGEND, SCHEDULES AND DETAILS

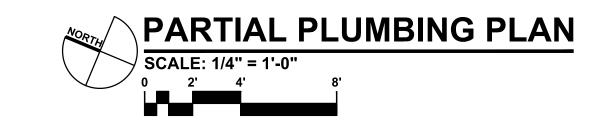
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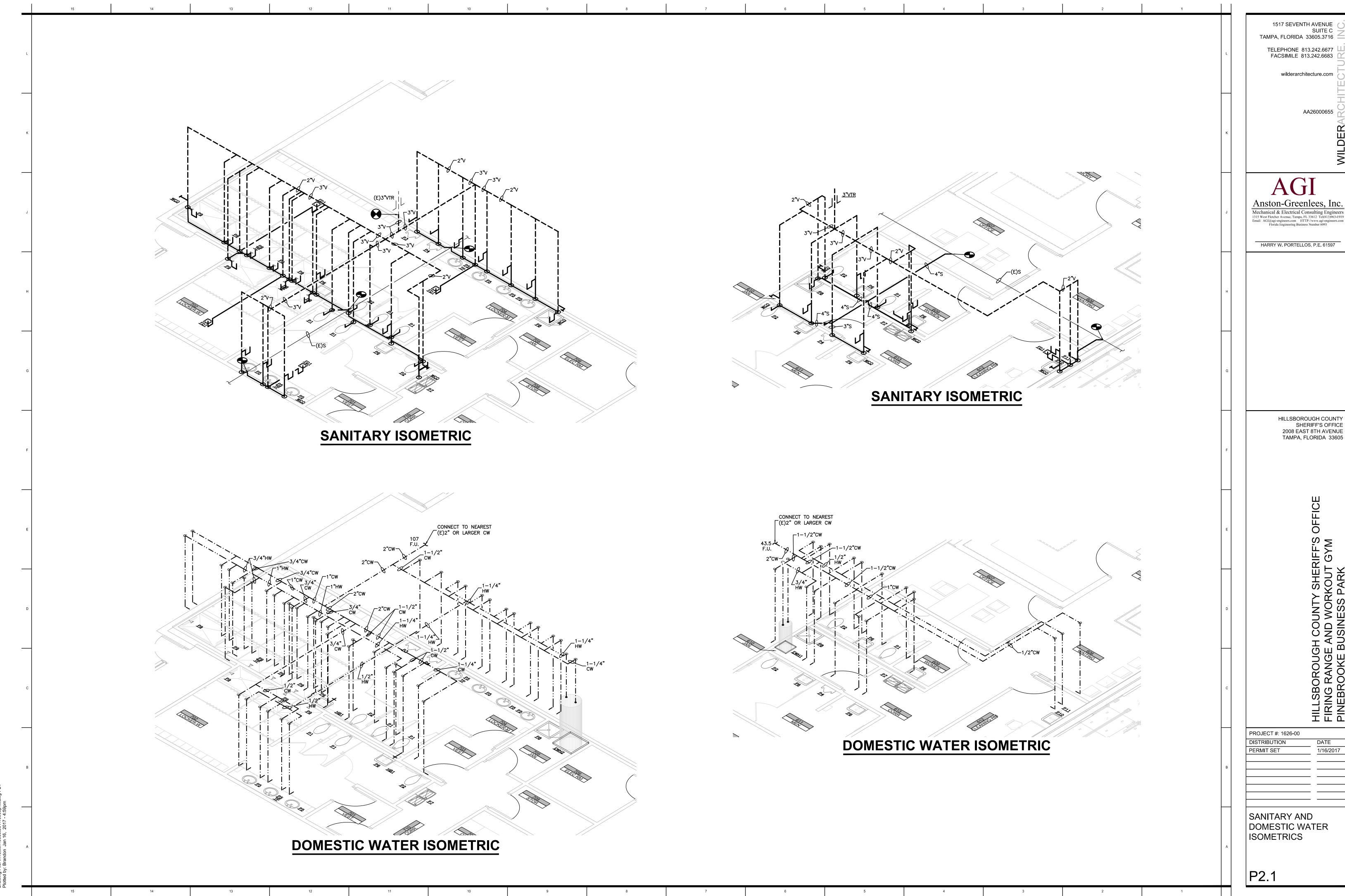
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GENERAL MECHANICAL NOTES

- 1. ALL MECHANICAL WORK SHALL MEET ALL OF THE REQUIREMENTS OF THE FOLLOWING:
- A. FLORIDA BUILDING CODE (FBC) 5TH EDITION (2014): THIS CODE INCLUDES THE 2014 FBC BUILDING, MECHANICAL, PLUMBING, FUEL GAS AND ENERGY CONSERVATION VOLUMES. FURTHER, SEE "REFERENCED STANDARDS" IN THE FBC, BUILDING CHAPTER 35; FBC, PLUMBING CHAPTER 14; FBC, MECHANICAL CHAPTER 15; FBC, FUEL GAS CHAPTER 8, FBC, ENERGY CONSERVATION CHAPTER 5.) (EFFECTIVE JUNE 30, 2015)
- B. 5TH EDITION OF THE FLORIDA FIRE PREVENTION CODE (FFPC): (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.) (EFFECTIVE DECEMBER 31, 2014) C. 2011 NATIONAL ELECTRIC CODE
- D. 2014 STATE REQUIREMENTS FOR EDUCATIONAL FACILITIES (SREF): (EFFECTIVE NOVEMBER 4,
- 2. VERIFY, BY VISITING THE SITE, THE LOCATION OF UTILITIES IN ALL AREAS BEFORE COMMENCING WORK.
- 3. COORDINATE ALL WORK WITH OTHER AFFECTED TRADES. THE MECHANICAL CONTRACTOR SHALL FORWARD TO THE ELECTRICAL CONTRACTOR AN APPROVED COPY OF ALL EQUIPMENT SHOP DRAWINGS FOR
- ELECTRICAL POWER/CONTROL INTERFACE. 4. COVER ALL ELECTRICAL AND MECHANICAL EQUIPMENT TO PROTECT THEM FROM DUST AND DAMAGE DURING CONSTRUCTION. RESTORE ALL FACTORY PAINTED SURFACES TO NEW CONDITION, REPAIR ALL SCRATCHES, DENTS AND ABRASIONS. THOROUGHLY CLEAN ALL SURFACES OF DUST DEBRIS, AND FOREIGN MATTER. THE EQUIPMENT, WHEN TURNED OVER TO THE OWNER, SHALL BE CLEAN AND FREE
- 5. PRIOR TO SUBSTANTIAL COMPLETION, A COMPLETE CERTIFIED TEST AND BALANCE REPORT SHALL BE
- SUBMITTED TO THE ENGINEER FOR REVIEW. REFER TO THE SPECIFICATIONS FOR REQUIREMENTS. 6. THE CONDENSATE DRAIN LINE SHALL HAVE A TRAP AT THE RTU. TRAP SHALL BE AS DETAILED AND SHALL HAVE A WATER SEAL EQUAL TO 2" + THE UNITS' STATIC PRESSURE. PROVIDE CLEAN OUTS IN ALL CHANGES OF DIRECTION. MINIMUM PITCH 1/8" PER FOOT. CONDENSATE DRAIN LINE SHALL BE PVC AND RUN TO THE NEAREST ROOF DRAIN.
- 7. PROVIDE INSULATION FOR NEW DUCTWORK TO AND FROM THE UNIT WITH GLASS FIBER DUCT WRAP INSULATION. FACTORY APPLIED FOIL FACED VAPOR BARRIER, ASTM 518 AND ASTM E84 CERTIFIED TESTING PROCEDURES. JOINT TAPE SHALL BE MINIMUM 3" WIDE FOIL REINFORCED KRAFT TYPE. INSULATION THICKNESS SHALL BE A MINIMUM 2" THICK.
- 8. IN GENERAL, PLANS ARE SCHEMATIC ONLY AND SHOULD NOT BE SCALED.
- 9. ALL DUCTWORK SHALL MEET THE STANDARDS SET FORTH BY THE LATEST EDITION OF SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE FABRICATED FROM SHEET METAL. ALL ROUND DUCT SHALL BE SHEET METAL UNLESS OTHERWISE NOTED. PROVIDE TURNING VANES IN ALL 90° DUCT ELBOWS.
- 10. SUPPLY AIR DUCT FULL SIZE OF UNIT DISCHARGE. TRANSITION TO SIZE INDICATED ON DRAWINGS.
- RETURN AIR DUCT IS TO TRANSITION FROM SIZE INDICATED ON DRAWINGS TO FULL SIZE OF UNIT INLET. 11. ALL DUCT DIMENSIONS ARE CLEAR INSIDE DIMENSIONS (FREE AREA).
- 12. VERIFY ALL CLEARANCES AND DIMENSIONS BEFORE FABRICATION OF DUCTWORK AND PROVIDE ADDITIONAL OFFSETS TO MEET FIELD CONDITIONS. ADJUST LOCATIONS OF ALL EQUIPMENT AND DUCTWORK, AS NECESSARY TO AVOID INTERFERENCES WITH STRUCTURAL AND OTHER BUILDING COMPONENTS.
- 13. UNLESS NOTED OTHERWISE, INSTALL DUCTWORK AS HIGH AS POSSIBLE, TIGHT TO UNDERSIDE OF STRUCTURE. COORDINATE DUCT ELEVATION WITH RAIN LEADERS, WATER PIPING, DRAINS, AND MAJOR ELECTRICAL CONDUITS AND LIGHTS. PROVIDE OFFSETS AND TRANSITIONS AS REQUIRED TO KEEP DUCTWORK TIGHT TO THE STRUCTURE AND MAINTAIN CEILING ELEVATIONS AS INDICATED IN THE ARCHITECTURAL DRAWINGS. DUCTWORK MAY BE FLATTENED TO A 4:1 HEIGHT RATIO MAINTAINING THE DUCT FREE AREA SIZE AS INDICATED IN THE DRAWINGS. DUCTWORK SHAPE MAY HAVE TO BE ADJUSTED (I.E. ROUND TO RECTANGULAR) AS SPACE DICTATES. MULTIPLE SMALLER RUNS MAY BE REQUIRED IN PLACE OF A SINGLE RUN. DUCT RECONFIGURATION SHALL BE INDICATED IN THE DUCT FABRICATION DRAWINGS AND FIELD VERIFIED PRIOR TO SUBMITTAL FOR ENGINEER'S REVIEW.
- 14. DUCTWORK, DIFFUSERS, REGISTERS, GRILLES, AND OTHER ITEMS OF THE AIR HANDLING SYSTEM SHALL NOT BE SUPPORTED BY THE CEILING OR CEILING SUSPENSION SYSTEM.
- 15. ALL SUPPLY DUCTWORK SHALL BE 2" W.G. PRESSURE CLASS. ALL OTHER DUCTWORK SHALL BE 1" W.G. ALL SHEET METAL DUCTWORK SHALL HAVE A CLASS C SEAL.
- 16. PROVIDE SUPPLEMENTARY STEEL AS REQUIRED TO INSTALL MECHANICAL EQUIPMENT AND MATERIALS.
- 17. VERIFY PROPER OPERATION OF ALL FIRE SMOKE DAMPERS IN CONJUNCTION WITH THE FIRE ALARM
- SYSTEM IN THE DESIGNATED CONSTRUCTION AREA. 18. THE OWNER SHALL BE GIVEN ONE WEEK PRIOR NOTICE FOR ALL PERIODS OF HVAC SYSTEMS DOWNTIME.

- 19. IN ADDITION TO THE REQUIREMENTS OF THE SPECIFICATIONS, THE AIR HANDLERS MAY ONLY BE STARTED IF THE FOLLOWING CONDITIONS ARE MET:
- A. ALL OPENINGS FROM THE CONDITIONED SPACE DIRECTLY TO THE OUTSIDE MUST BE CLOSED. TEMPORARY CLOSURE METHODS MAY BE USED SUCH AS THE UTILIZATION OF PLASTIC SHEETS AND
- B. MOP CLEAN ALL CONSTRUCTION DEBRIS AND DUST FROM THE FLOOR. PROVIDE DOOR MATS AT ALL ENTRANCES INTO THE BUILDING.
- TEMPORARY BARRIERS ARE TO BE PROVIDED AROUND AREAS THAT WILL HAVE ANY CONCRETE GRINDING OPERATION, DRYWALL WORK, PAINTING OR ANY OTHER PARTICULATE PRODUCING PROCESSES. ALL AIR DISTRIBUTION DEVICES IN THESE AREAS OF CONTAINMENT ARE TO BE COVERED AND SEALED AIR TIGHT.
- D. ALL RETURN GRILLES SHALL HAVE MERV-8 FILTER MEDIA TAPED OVER THEM PRIOR TO AIR HANDLER STARTUP AND SHALL REMAIN IN PLACE UNTIL ALL DUST PRODUCING OPERATIONS HAVE BEEN COMPLETED AND PRIOR TO TEST AND BALANCE. CLEAN ALL TAPE RESIDUE FROM THE
- E. ONCE THE UNIT IS STARTED, FILTERS IN THE AIR HANDLERS ARE TO BE SHAKEN CLEAN DAILY. 22. OMIT INSULATION ON TRANSFER DUCT SYSTEM. TRANSFER DUCT SYSTEMS ARE CONNECTED TO "XG#" TYPE AIR DISTRIBUTION DEVICES.
- 23. SUBMIT DUCT FABRICATION DRAWINGS AND MECHANICAL ROOM LAYOUTS PER SPECIFICATIONS PRIOR TO ANY FRAMING WORK. ALL CHASE SIZES, FLOOR DRAINS IN MECHANICAL ROOMS/CLOSETS, AND ELECTRICAL PANEL LOCATIONS SHALL BE FIELD VERIFIED, COORDINATED, AND INDICATED IN THE SUBMITTAL. THE DOORS TO FAN COIL CLOSETS SHALL BE PLACED IN FRONT OF THE FAN COIL TO MAXIMIZE ACCESSIBILITY TO ALL POINTS OF MAINTENANCE.
- 24. ALL DUCT MOUNTED MANUAL BALANCING DAMPERS SHALL HAVE A TWO FOOT LONG, YELLOW STRIP OF MATERIAL ATTACHED TO THE DAMPER HANDLE FOR EASY VISUAL IDENTIFICATION.
- 25. ALL FIRE STOPPING SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S U.L. DETAILS OF THE PRODUCTS USED SPECIFICALLY ON THIS PROJECT. APPLICABLE U.L. DETAILS SHALL BE SUBMITTED FOR THE ENGINEER'S REVIEW AND A COPY SHALL BE AVAILABLE ON SITE FOR USE BY THE AUTHORITY HAVING JURISDICTION.
- 26. CONTROLS CONDUITS SHALL CONFORM TO ALL REQUIREMENTS FOR DIVISION 16 CONDUITS. REFER TO DIVISION 16 SPECIFICATIONS AND DRAWINGS.
- 27. CONCRETE SLAB/PAD IS TO HAVE NO CONTACT WITH ANY METAL PORTION OF THE EQUIPMENT OR THAT EQUIPMENT'S SUPPORT. PROVIDE 1/4" THICK RED, OR BLACK, RUBBER PAD UNDER THE ENTIRE METAL SURFACE INTENDED TO REST ON THE CONCRETE PAD.
- 28. PROVIDE DIELECTRIC UNIONS/PROTECTION AT ALL POINTS OF CONNECTION BETWEEN DISSIMILAR METALS; PIPE, PIPE HANGERS, CONNECTIONS TO STRUCTURAL STEEL, ETC.
- 29. ROUND FLEX DUCT SHALL BE A MAXIMUM LENGTH OF 6 FEET. ALL RUNS OF FLEX DUCT ARE TO BE SUPPORTED WITH THE APPROPRIATE HANGERS. FLEX DUCT SHALL NOT SAG OR BE CRIMPED.
- 30. AIR CONDITIONING FILTERS ARE TO BE PROVIDED AND CHANGED BY THE CONTRACTOR UP TO AND ON THE DATE OF SUBSTANTIAL COMPLETION ACCEPTANCE. FROM THAT TIME ON, THE OWNER WILL RETAIN ALL RESPONSIBILITY FOR FILTER MAINTENANCE. THREE SETS OF FILTERS SHALL BE PROVIDED; INSTALL ONE SET OF FILTERS DURING CONSTRUCTION/START-UP AT COMPLETION OF AIR HANDLING SYSTEM WORK, INSTALL ONE SET THE DAY OF TESTING, ADJUSTING, AND BALANCING WORK, AND THIRD SET SHALL BE TURNED OVER TO THE OWNER. OBTAIN RECEIPT FROM OWNER THAT NEW FILTERS HAVE BEEN INSTALLED, AND THE EXTRA SET HAS BEEN RECEIVED.
- 31. PROVIDE PROTECTION FOR ALL OPENINGS IN THE ROOF DURING THE CONSTRUCTION PERIOD, INCLUDING ROOF TOP A/C UNIT OPENINGS, EXHAUST FANS, CONDUITS, ETC. PROVIDE PROTECTION FOR ALL INTERIOR AREAS OF THE BUILDING INCLUDING THE FLOORING, CEILINGS, WALLS, STRUCTURE, ETC. ANY DAMAGE TO THESE AREAS OR ANY OTHER EXISTING AREAS SHALL BE REPAIRED TO NEW CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 32. FALL PROTECTION SYSTEMS: OSHA REQUIRES THAT ONE OF THE FOLLOWING SYSTEMS MUST BE IN
- PLACE WHENEVER AN EMPLOYEE IS EXPOSED TO A FALL GREATER THAN SIX FEET: A. GUARDRAIL SYSTEMS
- B. PERSONAL FALL PROTECTIVE SYSTEMS CONSISTING OF THE FOLLOWING:
- PERSONAL PROTECTIVE EQUIPMENT
- CONNECTING DEVICES ANCHORAGE
- WARNING LINE SYSTEMS AND CONTROLLED ACCESS ZONES: GUIDELINES FOR THE IMPLEMENTATION OF WARNING LINE SYSTEMS AND WORK IN CONTROLLED ACCESS ZONES MUST BE DEVELOPED IN ACCORDANCE WITH OSHA REGULATION 1926.502 AND APPROVED BY OSHA BEFORE EMPLOYEES ARE EXPOSED TO FALL HAZARDS.
- 34. CONTRACTOR WILL BE RESPONSIBLE FOR CURB ADAPTERS.

35. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

EXAMINATION OF EXISTING CONDITIONS

ALL BIDDERS ARE ENCOURAGED TO VISIT THE SITE AND THOROUGHLY FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND ARE REQUIRED TO ATTEND THE MANDATORY PREBID MEETING PRIOR TO SUBMITTING THEIR BID. NO ALLOWANCES WILL BE MADE FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS, INCLUDING THE PRESENCE OF ASBESTOS. THE OWNER SHALL REMOVE FROM THE SITE ALL CURRENTLY KNOWN SOURCES OF ASBESTOS PRIOR TO COMMENCEMENT OF THE WORK TO BE PERFORMED BY THE CONTRACTOR. IF DURING THE COURSE OF CONSTRUCTION, THERE IS REASON TO SUSPECT THE PRESENCE OF ADDITIONAL ASBESTOS, IMMEDIATELY NOTIFY THE ARCHITECT. THE ARCHITECT SHALL NOTIFY THE OWNER WITH REASONABLE PROMPTNESS TO ALLOW THE OWNER, AT THE OWNER'S EXPENSE, TO HAVE THE MATERIAL TESTED USING RECOGNIZED TESTING METHODS COMMONLY APPROVED IN THE INDUSTRY. SHOULD THE MATERIAL TEST POSITIVE FOR ASBESTOS, THE OWNER SHALL ARRANGE FOR THE ABATEMENT AND DISPOSAL OF THE MATERIAL AT THE OWNER'S EXPENSE. CONSTRUCTION MAY BE SUSPENDED DURING THE PERIOD REQUIRED TO COMPLETE SUCH TESTING AND REMOVAL OF ASBESTOS. SHOULD THE OWNER FAIL, WITHIN A REASONABLE TIME, TO REMOVE ALL THE ASBESTOS FROM THE SITE OR FAIL TO VERIFY TO THE SATISFACTION OF THE ARCHITECT AND CONTRACTOR THAT NO ASBESTOS IS PRESENT, THEN THE CONTRACTOR SHALL BE RELIEVED OF ANY FURTHER OBLIGATION REGARDING CONSTRUCTION.

HVAC LEGEND SUPPLY AIR DUCT (UP & DOWN) RETURN AIR DUCT (UP & DOWN) EXHAUST AIR DUCT (UP & DOWN) VOLUME DAMPER OPPOSED BLADE VOLUME DAMPER WALL MTD THERMOSTAT OR TEMPERATURE SENSOR BELLMOUTH "SPIN-IN" FITTING WITH LOCKING QUADRANT DAMPER FLEX DUCT AIR DEVICE MARK. TOP LINE INDICATES TYPE, REFER TO SCHEDULE. SECOND LINE INDICATES AIR QUANTITY CFM. THIRD LINE INDICATES NECK SIZE AND DUCT 12x12/8"ø CONNECTION SIZE. UNDERCUT DOOR BY 3/4" AFF UNLESS OTHERWISE INDICATED COORDINATE WITH ARCHITECTURAL DRAWINGS.

DUCT MOUNTED SMOKE DETECTOR

DESIGN CRITERIA

DEGIGIT GITTE	
Location: Latitude: Longitude: Elevation: Barometric Pressure:	TAMPA 28.0° 82.0° 19 ft. 29.9 in. Hg
DESIGN TEMPERATURES: Ambient Summer Design Dry Bulb: Ambient Summer Design Wet Bulb: Ambient Winter Design Dry Bulb: Space Setpoint — cooling Space Setpoint — heating Space Setpoint — humidity Kitchen Space Setpoint	94°F 80°F 36°F 76°F 70°F 50% RH 78°F

DUCTWORK MATERIALS

- 1. FLEX DUCT SHALL NOT EXCEED 6 LINEAR FEET.
- 2. THE USE OF SNAP LOCK DUCT IS NOT PERMITTED.
- HVAC PLANS

	MECH	ANICAL	DRAWING	INDEX
•	MO 1	HVAC GENERAL	NOTES AND LEGEN	<u> </u>

HVAC GENERAL NOTES AND LEGEND HVAC SCHEDULES AND DETAILS

> HVAC GENERAL NOTES AND LEGEND

DATE

1/16/2017

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SUITE C

BUILDING	AIR	BALANCE		
OUTSIDE AIR INTO BUILDING		EXHAUST AIR OUT OF BUILDING		NET
SOURCE	CFM	SOURCE	CFM	NET CFM
RT01	580	EF1	100	
		EF2	100	
		EF3	75	
		EF4	150	
		EF5	150	
	580		575	
ZONE PRESSURIZATION ((580 OA - 575 E	XH) / 2	,400 SA) x 100 = 0.20%		
OUTSIDE AIR INTO BUILDING		EXHAUST AIR OUT OF BUILDING		NE
SOURCE	CFM	SOURCE	CFM	NET CFN
RT15	765	EF6	575	
	765		575	19
ZONE PRESSURIZATION ((765 OA – 575 E	XH) / 4	,800 SA) x 100 = 3.96%		•

OUTDOOR AIR VENTILATION RATES														
Description of Area	Space Classification	People Outdoor Air Rate cfm / person	x	Occupants Each (Oz)	=	People (Rp x Pz) cfm	Area Outdoor Air Rate (Ra) cfm / Sq. Ft.	x	Total Sq. Ft. (Az)	=	Area (Ra x Az) cfm	People cfm + Area cfm = uncorrected OA cfm (Vbz)	Air Distribution Effectiveness	Required Outside Air (CFM)
	RT01													
600 Entry	_	0	×	0	=	0	0	×	58	=	0	0	1.0	0
601 Vestibule	_	0	×	0	=	0	0.06	×	67	=	4	4	1.0	4
602 Ready Rm	OFFICE: Reception Area	5	×	6	=	30	0.06	×	81	=	5	35	1.0	35
604 Ctrl Rm	OFFICE: Office space	5	×	2	=	10	0.06	×	182	=	11	21	1.0	21
605 Armory	OFFICE: Occupiable Stor.	0	×	0	=	0	0.06	×	225	=	14	14	1.0	14
606 Waiting	Office: Main Entry Lobby	5	×	5	=	25	0.06	×	153	=	9	34	1.0	34
607 Office	OFFICE: Office space	5	×	1	=	5	0.06	×	152	=	9	14	1.0	14
608 Corridor	General: Corridor	5	×	0	=	0	0.06	×	402	=	24	24	1.0	24
609 Women	-	5	×	0	=	0	0	×	149	=	0	0	1.0	0
611 Men	-	5	×	0	=	0	0	×	140	=	0	0	1.0	0
612 Cleaning Room	OFFICE: Office space	5	×	5	=	25	0.06	×	182	=	11	36	1.0	36
614 Training	GENERAL: Conference/meeting	5	×	30	=	150	0.06	×	700	=	42	192	1.0	192
615 Storage	OFFICE: Occupiable Stor.	0	X	0	=	0	0.06	X	88	=	5	5	1.0	5
													ed Outside Air:	379
												Outsid	e Air Provided:	580
RT15								_						
700 Weight Room	_	20	×	20	=	400	0.06	×	2,141	=	128	528	1.0	0
701 Vestibule		0	x	0	=	0	0	×	45	=	0	0	1.0	4
702 Women's Locker	OFFICE: Reception Area	0	×	0	=	0	0	×	118	=	0	0	1.0	35
703 Vestibule	OFFICE: Office space	0	X	0	=	0	0	×	14	=	0	0	1.0	21
704 Men's Locker	OFFICE: Occupiable Stor.	0	×	0	=	0	0	×	380	=	0	0	1.0	14
706 Office	Office: Main Entry Lobby	5	×	1	=	5	0.06	×	115	=	7	12	1.0	34
707 Boxing Training	OFFICE: Office space	20	×	5	=	100	0.06	×	657	=	39	139	1.0	14
708 Storage	General: Corridor	0	×	0	=	0	0.06	×	59	=	4	4	1.0	24
709 Elec Room	_	0	×	0	=	0	0	×	97	=	0	0	1.0	0
710 Corridor	_	0	X	0	=	0	0.06	X	127	=	8	8	1.0	0
													ed Outside Air:	691
												<u> </u>	e Air Provided:	765

DEMOLITION GENERAL NOTES:

605 ARMORY

607 OFFICE

609 WOMEN

610 JAN

611 MEN

615 STOR

- ALL MECHANICAL EQUIPMENT IN GYM AREA AND FIRING RANGE OFFICE AREA SHALL BE COMPLETELY REMOVED.
- ALL DUCTWORK IN GYM AREA AND FIRING RANGE OFFICE AREA SHALL BE COMPLETELY REMOVED.

600 ENTRY

601 VEST

602 READY RM

3. REUSE EXISTING ROOF CURBS AND OPENINGS FOR NEW EQUIPMENT WHERE APPLICABLE.

613 CORR

KEYED HVAC NOTES:

- EXISTING MECHANICAL UNIT SHALL BE REMOVED AND NEW INSTALLED IN THE SAME LOCATION. REUSE EXISTING ROOF CURB AND PROVIDE CURB ADAPTER.
- 2 EXISTING EXHAUST FAN AND ROOF CURB TO BE REMOVED AND NEW EXHAUST FAN TO BE PROVIDED IN THE SAME LOCATION. PROVIDE ROOF CURB FOR NEW EXHAUST FAN.
- (3) ROOF MOUNTED EXHAUST OUTLET, REFER TO DETAIL.
- FIRING RANGE VENTILATION SYSTEM SHALL BE PROVIDED BY OTHERS. SYSTEM SHALL MAINTAIN MINIMUM OF 0.05" WC NEGATIVE PRESSURE WHEN IN USE.

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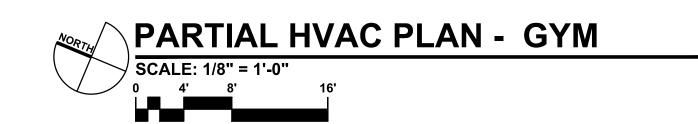
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HVAC PLAN -

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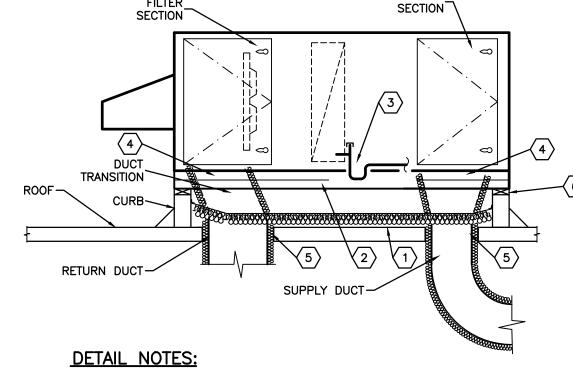
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PARTIAL HVAC PLAN - FIRING RANGE

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

16'



1 LINE INSIDE ROOF CURB AT DECK WITH 1 LB LAGGING WITH QUILTED SOUND

PROVIDE CONDENSATE TRAP AT UNIT AND ROUTE LINE TO NEAREST DOWN SPOUT OR ROOF DRAIN. PROVIDE LINE ROOF SUPPORT SADDLES.

COMPRESSORS AND THE INDOOR FAN, PROVIDE FLEXIBLE CANVAS DUCT

MINIMUM BUT SHALL NOT COME INTO CONTACT WITH THE DUCT INSULATION.

5 OPENINGS THROUGH ROOF DECK WITHIN THE CURB SHALL BE KEPT TO A

2 INSTALL CURB AS SPECIFIED. THE CURB SHALL BE SECURED TO THE STRUCTURE AS DIRECTED BY THE STRUCTURAL ENGINEER.

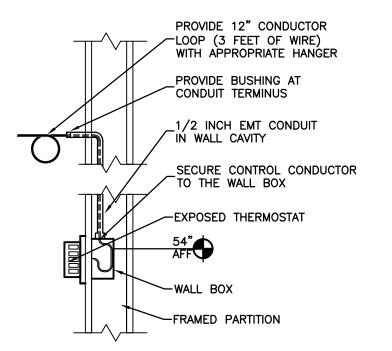
 $\langle 4 \rangle$ if the unit does not have internal vibration isolators at the

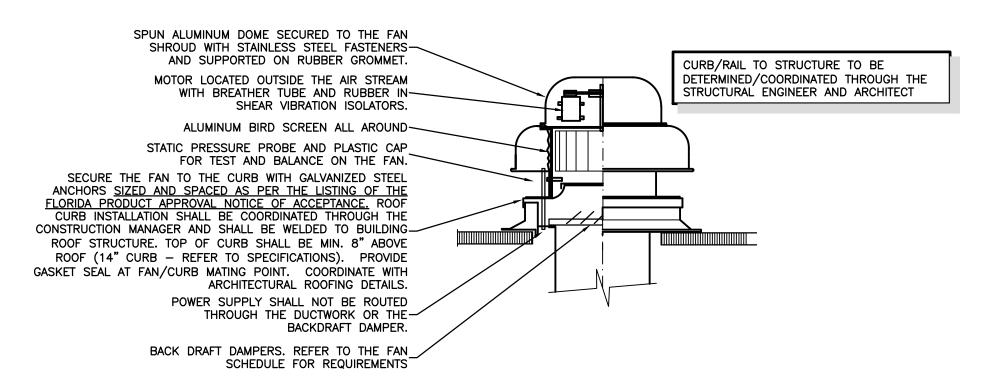
CONNECTORS AT THE SUPPLY AND RETURN DUCT CONNECTIONS.

CURB WALL, DUCTWORK, AND CONDUIT/PIPING.

(6) PROVIDE VIBRATION ISOLATION CURB. SEE ALTERNATE.

ABSORBER EQUIVALENT TO SOUND SEAL #B10-LAG QFA9, TAPED TO INSIDE





ROOM THERMOSTAT IN GYPBOARD WALI NOT TO SCALE

ROUND FLEX DUCT SHALL BE A

SPECIFICATIONS OR 105% OF

THE DISTANCE BETWEEN THE

TWO SHEET METAL DUCT/GRILLE

CONNECTIONS, WHICHEVER IS

ARE TO BE SUPPORTED WITH

FLEX DUCT SHALL NOT SAG OR

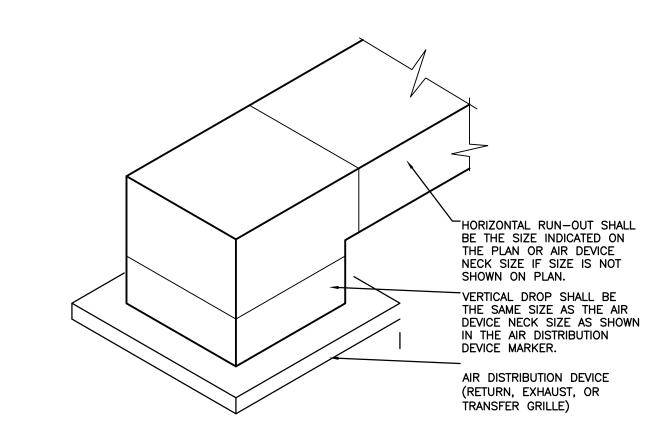
THE APPROPRIATE HANGERS.

BE CRIMPED.

LESS. ALL RUNS OF FLEX DUCT

MAXIMUM LENGTH PER

CENTRIFUGAL ROOF EXHAUST FAN



TRANSFER DUCT CONNECTIONS

THREADED RODS FASTENED TO BUILDING-STRUCTURE DUCT SIZE AS_ SHOWN -DUCT SIZE AS SHOWN BACKDRAFT DAMPER-TO OUTSIDE AIR LOUVER **→** 1' OR ROOF MOUNT FROM EXHAUST INLINE FAN WITH RELIEF VENT GRILLE(S) SPEED CONTROLLER 30° MAX. (ANY SIDE)-SPRING ISOLATORS FLEX CONNECTOR TRANSITION TO FULL SIZE OF STEEL CHANNEL (TYP.

MOUNTED EXHAUST OUTLET

NOT TO SCALE

INLINE FAN DETAIL NOT TO SCALE

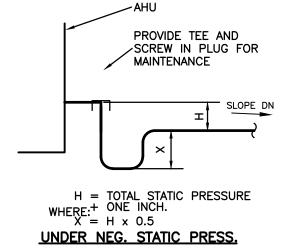
	AIR DISTRIBUTION DEVICE SCHEDULE											
MARK		CD1	CD2	RR1	EG1	XG1	OA1					
NECK SIZE	INCH	-	-	22×22	-	_	16x16					
MODULE/FACE SIZE	INCH	24x24/24x24	12x12/12x12	24x24/23x23	-/-	24x24/23x23	1.45 SF THROAT					
MANUFACTURER	_	PRICE	PRICE	PRICE	PRICE	PRICE	RUSKIN					
MODEL	_	AMCD	AMCD	APDDR	80	APDDR	PR					
MANUFACTURER	_	J&J	J&J	TITUS	TITUS	TITUS	GREENHECK					
MODEL NUMBER	_	AL1444-33-TR	AL1444-33-TR	PAR-AA	50F	PAR-AA						
CONSTRUCTION	_	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM	ALUMINUM					
NOTES	_	1, 2, 3	1, 2, 3	1, 4, 14	1, 2, 4, 5	1, 3, 5	6,7					

NECK SIZE OF DEVICE IS EQUAL TO THE DUCT SIZE INDICATED ON THE DRAWING.

- 2. PROVIDE WITH SQUARE TO ROUND ADAPTER. REFER TO PLANS FOR SIZE.
- 3. SEE PLANS FOR SIZE.
- 4. WHERE GRILLE IS INDICATED TO BE LOCATED IN LAY-IN CEILINGS, PROVIDE 24x24 LAY-IN PANEL BORDER, WHITE
- 5. PAINT INSIDE OF DUCT & GRILLE FLAT BLACK WHEN CAN BE SEEN THROUGH FACE OF GRILLE.
- 6. PROVIDE WITH MANUFACTURER'S STANDARD 14" ROOF CURB AND BIRD SCREEN.
- INTAKE/RELIEF TO BE CONSTRUCTED OF 18 GAUGE METAL OR THICKER, OR IT SHALL COMPLY WITH SSTD 12-99 OR MIAMI-DADE PA 201, USING FLORIDA BUILDING CODE'S TEST PROTOCOL TAS 125-03, SECTION 7.4.2 WHICH REQUIRES MISSILE IMPACT TESTING IN CONFORMANCE WITH FLORIDA BUILDING CODE'S TEST PROTOCOL TAS 201 (IMPACT TEST PROCEDURES)

REMARKS:

- REFER TO PLANS FOR EXACT LOCATIONS OF ALL DIFFUSERS, GRILLES AND REGISTERS.
- B. COORDINATE FRAME STYLES WITH CEILING SYSTEM ACTUALLY FURNISHED.
- C. NC VALUES FOR DIFFUSERS, GRILLES AND REGISTERS SHALL NOT EXCEED 35 WITH A ROOM ABSORPTION RATE OF 10db ie., 10-12 WATTS.
- D. REFER TO THE MECHANICAL LEGEND FOR A DESCRIPTION OF THE AIR DEVICE MARK.
- WHERE THE CONNECTING DUCT OR PLENUM CAN BE OBSERVED THROUGH THE FACE OF THE GRILLE, THE VISIBLE DUCTWORK SHALL BE PAINTED FLAT BLACK.



CONDENSATE DRAIN TRAP NOT TO SCALE

FLEXIBLE DUCT RUN-OUTS TO AIR DEVICE NOT TO SCALE

2. REFER TO SPECIFICATIONS FOR MAXIMUM FLEXIBLE DUCT LENGTH. 3. SUSPEND AIR DEVICE FROM ABOVE, DO NOT SUPPORT FROM CEILING. 4. INTERIOR OF DEVICE TO BE PAINTED FLAT BLACK.

_INSULATED_SUPPLY_AIR_DUCT SUSPENDED_FROM_ROOF_STRUCTURE

TAKE OFF WITH LOCKING QUADRANT

`—CEILING

NOTES:

1. REFER TO THE AIR DISTRIBUTION DEVICE SCHEDULE FOR ADDITIONAL REQUIREMENTS.

-DAMPER (UNLESS PROVIDED WITH

AIR DEVICE)

✓ DUCT CLAMP

	FAN SCHEDULE														
MARK	SERVES	СҒМ	DRIVE	FAN	S.P.	ELECTRICAL	MOTOR HP SONES	NES MANUFACTURER	MODEL	MOUNTING	WEIGHT	INTERLOCK	NOTES		
IVIZITA	SERVES	CI IVI	DIVIVE	RPM	IN. H ₂ 0	VOLT/ø/Hz	BHP/HP(WATTS)	SONES	WANTACTORER	NUMBER	LOCATION	WEIGHT	INTEREOCK	NOTES	
EF1	FIRING RANGE TOILET	100	DIRECT	950	0.375	120/1/60	(80)	2.7	GREENHECK	SP-B110	CEILING	11	LIGHTS	1,2,3,5	
EF2	FIRING RANGE TOILET	100	DIRECT	950	0.375	120/1/60	(80)	2.7	GREENHECK	SP-B110	CEILING	11	LIGHTS	1,2,3,5	
EF3	FIRING RANGE JANITOR	75	DIRECT	767	0.375	120/1/60	(80)	1.5	GREENHECK	SP-B110	CEILING	11	LIGHTS	1,2,3,5	
EF4	CLEANING ROOM	150	DIRECT	1,681	0.375	120/1/60	0.03 / 0.033	5.5	GREENHECK	SQ-70-VG	ABOVE CEILING	34	LIGHTS	1,2,3,5	
EF5	ARMORY	150	DIRECT	1,681	0.375	120/1/60	0.03 / 0.033	5.5	GREENHECK	SQ-70-VG	ABOVE CEILING	34	CONTINUOUS	1,2,3,5	
EF6	LOCKER ROOMS	525	DIRECT	1,620	0.500	120/1/60	0.110 / 0.250	8.1	GREENHECK	G-090-VG	ROOF CURB	26	RT15	1,2,3,4,5	

INSULATED GALV.

INTERIOR PAINTED

FLAT BLACK.

DUCT CLAMP

-INSULATION

AIR DISTRIBUTION

STEEL LONG RADIUS ELBOW

- 1. PROVIDE WITH FACTORY DISCONNECT.
- 2. PROVIDE REQUIRED CONTACTS AND RELAYS FOR INTERLOCKING FAN WITH LIGHTS, TIME CLOCK OR RTU AS SCHEDULED.
- 3. PROVIDE WITH ELECTRIC FAN SPEED CONTROL.
- 4. PROVIDE WITH 14" ROOF CURB (REFER TO SPECIFICATIONS). INSTALLATION SHALL BE COORDINATED THROUGH THE CONSTRUCTION MANAGER. PROVIDE GASKET SEAL BETWEEN FAN AND CURB.
- PROVIDE BACKDRAFT DAMPER.

CONTINUOUS = FAN SHALL RUN CONTINUOUSLY DURING OCCUPANCY.

								PACK	KAGED	ROOF	TOP	UNIT	SCH	EDULI	 E										
L NG) (SENSIBLE COOLING LOAD (NET MBH)	TOTAL SUPPLY AIR FLOWRATE (CFM)	OUTSIDE AIR FLOWRATE (CFM)	OUTSIDE AIR TEMPERATURE (*F DB/*F WB)	ENTERING COIL AIR TEMP. (*F DB/*F WB)	LEAVING COIL AIR TEMP. (*F DB/*F WB)	EXTERNAL STATIC PRESSURE	ELECTRICAL V/ø/HZ)	COMPRESSORS (QTY @ RLA)	INDOOR FANS (QTY BHP)	OUTDOOR FANS (QTY@HP)	(MDM)	ELECTRIC HEAT (KW/STEPS)	UNIT MIN. CIRCUIT AMPS (MCA)	MAXIMUM OVERCURRENT PROTECTION (FUSE)	HOT GAS REHEAT CAPACITY (NET MBH)	REHEAT AIR TEMP ENT/LVG ('F DB/'F WB)	FILTER TYPE & EFFICIENCY	MINIMUM EFFICIENCY SEER / EER / IPLV)	REFRIGERANT	UNIT WEIGHT LBS. (CURB NOT INCL.)	UNIT DIMENSIONS (LXWXH)	MANUFACTURER	MODEL NUMBER	NOTES
.8	60.6	2,400	580	91.0/80.0	79.1/67.0	55.7/54.7	1.30	208/3/60	2@15.9	1@1.44	1@0.75	92.2	27 /2	81.0	90.0	-	55.0/82.3	Merv8	-/11.2/11.4	R-410	1,228	88.5x53.25x47.0	TRANE	THC092	1-23
.9	115.6	4,800	765	91.0/80.0	78.0/65.6	54.0/53.0	1.50	208/3/60	2@25.0	1@3.36	2@1.0	184.4	54 /4	155.0	175.0	_	55.4/77.6	Merv8	-/11.0/11.2	R-410	2,293	122x84.5x64.5	TRANE	THD180	1-23

RT01

RT15

1. PROVIDE UNIT WITH MICROPROCESSOR CONTROLS.

AREA SERVED

SHOOTING RANGE ANCILLARY SPACES

- 2. PROVIDE FOIL FACE INTERNAL CABINET INSULATION.
- 3. PROVIDE HINGED ACCESS DOOR WITH TOOL-LESS HANDLES.
- 4. PROVIDE BELT DRIVE FANS.

GYM

- 5. PROVIDE STAINLESS STEEL IAQ DRAIN PAN.
- PROVIDE R410A REFRIGERANT (NO EXCEPTIONS).
- 7. PROVIDE FREEZE STATS ON EVAPORATOR COILS.
- 8. PROVIDE UNIT WITH FACTORY INSTALLED TXV OR EXV. OTHER EXPANSION DEVICES ARE NOT ACCEPTABLE.

COOLING

(NET MBH)

89.8

165.9

- 9. PROVIDE BOTH HIGH PRESSURE AND LOW PRESSURE REFRIGERANT SAFETY SWITCHES.
- 10. PROVIDE ANTI-CYCLE TIMER, TIME DELAY RELAY AND HEAD PRESSURE CONTROL.
- 11. PROVIDE LOW AMBIENT CONTROL TO 35°F. 12. PROVIDE VINYL COATED COIL GUARD.
- 13. PROVIDE MANUAL OUTDOOR AIR DAMPER.

- 14. PROVIDE WITH MOTORIZED OUTDOOR AIR DAMPER. OUTDOOR AIR DAMPER SHALL BE INTERLOCKED WITH THE SYSTEM TO PROVIDE COMPLETE CLOSURE WHEN SYSTEM IS DISABLED AND/OR DURING UNOCCUPIED TIMES.
- 15. NEW UNIT SHALL REUSE EXISTING ROOF CURB. PROVIDE CURB ADAPTOR AS REQUIRED. CURB ADAPTOR MANUFACTURE SHALL PROVIDE ENGINEERED DRAWINGS FOR HVWZ REQUIREMENTS SIGNED AND SEALED BY A FLORIDA REGISTERED ENGINEER. VERIFY THAT CURB IS ATTACHED TO STRUCTURE IN ACCORDANCE WITH DETAIL. ATTACH UNIT TO CURB IN ACCORDANCE WITH DETAIL.
- 16. PROVIDE WITH 2" 30% FILTERS.
- 17. PROVIDE SINGLE POINT POWER CONNECTION. COORDINATE WITH ELECTRICAL CONTRACTOR.
- 18. PROVIDE UNIT MOUNTED NON-FUSED DISCONNECT SWITCH.
- 19. UNIT SELECTION SHALL BE MADE WITH CONDENSING AMBIENT TEMPERATURE @ 95°F.PROVIDE FACTORY MOUNTED CONTROLS.
- 20. PROVIDE PROGRAMMABLE THERMOSTAT EQUIVALENT TO VENSTAR MODEL T2900SCH. THE THERMOSTAT SHALL AN OVER-RIDE BUTTON TO OPERATE THE AC SYSTEM DURING UNOCCUPIED TIMES (WEEKENDS, HOLIDAYS, AND SO ON) FOR PERIODS OF 2 HOURS. THIS
- DEVICE TO BE PROGRAMMED TO OPERATE THE SUPPLY FAN CONTINUOUSLY DURING OCCUPIED HOURS. 21. COIL SPACING SHALL NOT EXCEED 15 FINS PER INCH.
- 22. UNIT SHALL BE LOCATED TO ENSURE NO PLUMBING VENTS OR BUILDING EXHAUST AIR OUTLETS ARE WITHIN A 10 FT. RADIUS AROUND FRESH AIR INTAKE.
- 23. PROVIDE UNIT WITH FACTORY MOUNTED HOT GAS REHEAT WITH DUCT MOUNTED HUMIDITY SENSOR AND ALL RELATED CONTROLS.

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SUITE C

PROJECT #: 1626-00	
DISTRIBUTION	DATE
PERMIT SET	1/16/2017
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HVAC SCHEDULES AND DETAILS

	ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION	MOUNTING
	BRANCH CIRCUIT CONDUIT AND WIRE CONCEALED ABOVE CEILING OR BEHIND FINISHED WALL	N/A
<u></u>	BRANCH CIRCUIT CONDUIT AND WIRE CONCEALED BELOW FINISHED FLOOR OR UNDERGROUND.	N/A
	RACEWAY EXPOSED ON WALL OR CEILING	N/A
LA-1,3,5 EG VIG	HOMERUN TO PANELBOARD — LETTER INDICATES PANEL, NUMBER INDICATES CIRCUIT, MINIMUM 3/4" CONDUIT. NOTE: ANY HOMERUN WITHOUT FURTHER DESIGNATION INDICATES TWO #12 AWG AND #12 AWG EQUIPMENT GROUND. PC OUTLET REQUIRES SEPARATE NEUTRAL, MIN. #10 AWG. DEDICATED CIRCUIT REQUIRES SEPARATE NEUTRAL	N/A
OUP DOWN	RACEWAY RISER, UP OR DOWN AS NOTED	N/A
 j	CONDUIT CAPPED	N/A
A	LED DOWNLIGHT LUMINAIRE, LETTER INDICATES TYPE	CEILING — SEE FIXTURE SCHEDULE
A (LED DOWNLIGHT LUMINAIRE WITH EMERGENCY BATTERY PACK, LETTER INDICATES TYPE.	CEILING — SEE FIXTURE SCHEDULE
1 °	FLUORESCENT LUMINAIRE, LETTER INDICATES TYPE. 1 = CKT. NO. , a = SWITCH DESIGNATION, NL = NIGHT LIGHT	CEILING — SEE FIXTURE SCHEDULE
	FLUORESCENT LUMINAIRE WITH EMERGENCY BATTERY PACK, LETTER INDICATES TYPE.	CEILING — SEE FIXTURE SCHEDULE
	LED STRIP LIGHT, LETTER INDICATES TYPE.	CEILING — SEE FIXTURE SCHEDULE
<u> </u>	LED WALL MOUNT LUMINAIRE, LETTER INDICATES TYPE	WALL — SEE FIXTURE SCHEDULE
×⊗ ×⊗	EXIT LIGHT, LETTER INDICATES TYPE SINGLE OR DUAL FACED AS INDICATED ON DRAWINGS	SEE FIXTURE SCHEDULE
6 6	OCCUPANCY SENSOR. OS = OCCUPANCY TYPE (AUTO ON/AUTO OFF) VS = VACANCY TYPE (MANUAL ON/AUTO OFF)	CEILING
\$ ^M	MOTOR/HP RATED TOGGLE SWITCH SIZED PER MOTOR MANUFACTURER'S RECOMMENDATION, MINIMUM 20 AMP.	SURFACE, ADJACENT TO OR ON MOTOR
Ф	LIGHTING CONTROL WALL SWITCH WITH 0-10V DIMMING CONTROL. PUSH BUTTON MANUAL ON/AUTO OFF. LETTER INDICATES FIXTURE GROUPING BY SWITCH. SENSOR SWITCH SPODM-D, OR APPROVED EQUAL.	M.H. 48" AFF TO TOP
\$	SINGLE POLE SWITCH	M.H. 48" AFF TO TOP
\$ ³	THREE WAY SWITCH	M.H. 48" AFF TO TOP
\$ ^{os}	PUSH BUTTON WALL SWITCH/OCCUPANCY SENSOR. AUTO ON/AUTO OFF. SENSOR SWITCH #WSD-PDT, OR APPROVED EQUIVALENT.	M.H. 48" AFF TO TOP
₽a	LIGHTING CONTROL WALL SWITCH. PUSH BUTTON MANUAL ON/AUTO OFF. LETTER INDICATES FIXTURE GROUPING BY SWITCH. SENSOR SWITCH #SPODM—SA, OR APPROVED EQUIVALENT.	M.H. 48" AFF TO TOP
#a #3	THREE WAY LIGHTING CONTROL WALL SWITCH. PUSH BUTTON MANUAL ON/AUTO OFF. LETTER INDICATES FIXTURE GROUPING BY SWITCH. SENSOR SWITCH #SPODM—SA—3X, OR APPROVED EQUIVALENT.	M.H. 48" AFF TO TOP
₿VS	WALL SWITCH VACANCY SENSOR. PUSH BUTTON MANUAL ON/AUTO OFF. LETTER INDICATES FIXTURE GROUPING BY SWITCH. SENSOR SWITCH #WSD-PDT-SA, OR APPROVED EQUIVALENT.	M.H. 48" AFF TO TOP
Θ	SINGLE RECEPTACLE - 120VAC	M.H. 16" AFF TO BOTTOM
WP GFI	DUPLEX RECEPTACLE — 120VAC, "WP" DENOTES WEATHERPROOF "GFI" DENOTES GROUND FAULT PROTECTION.	M.H. 16" AFF TO BOTTOM
⊖	DUPLEX RECEPTACLE - 120VAC	MOUNTED 42" AFF TO BOTTOM OR AS NOTED
•	DOUBLE DUPLEX RECEPTACLE - 120VAC	M.H. 16" AFF TO BOTTOM
•	DOUBLE DUPLEX RECEPTACLE — 120VAC	M.H. 42" AFF TO BOTTOM
₩	30 AMP, 208 VOLT, SINGLE PHASE RECEPTACLE NEMA 6-30R, OR AS INDICATED.	M.H. 42" AFF TO BOTTOM
H	SPECIAL RECEPTACLE, AMPERAGE, NEMA TYPE AS INDICATED.	M.H. 42" AFF TO BOTTOM
₩	4"x4"x2-1/8" DEEP OUTLET BOX FOR COMMUNICATIONS WITH 1" CONDUIT TO ACCESSIBLE CEILING SPACE. CABLING AND DATA JACKS BY OWNER.	M.H. 16" AFF TO BOTTOM OR AS NOTED (VERIFY MOUNTING HEIGHTS WITH OWNER PRIOR TO ROUGH—IN AT ALL COUNTER LOCATIONS)
0	COMBINATION COMMUNICATION/POWER FLOOR BOX. ROUND FULLY ADJUSTABLE, DEEP, TWO-GANG WITH BRASS FLANGE.	FLUSH MOUNTED IN FLOOR
()	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	AS NOTED
Ū.	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	WALL MOUNTED
J HD	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX, FOR HAND DRYER ELECTRICAL CONNECTION.	M.H. 44" AFF TO CENTER
<u> </u>	APPLIECEND NOT ALL DEVICES SHOWN ARE LISED IN THESE DOCUME	1

SYMBOL	DESCRIPTION	MOUNTING
₩	TV OUTLET BOX WITH TV JACK, 3/4" CONDUIT W/BUSHING STUBBED INTO CEILING SPACE.	M.H. 60" AFF TO BOTTON OR AS NOTED
22	120/208V. PANELBOARD	M.H. 6'-0" TO TOP OR AS NOTED
괍	NON-FUSIBLE SAFETY SWITCH	M.H. 6'-0" TO TOP OR AS NOTED
	FUSIBLE SAFETY SWITCH	M.H. 6'-0" TO TOP OR ON EQUIPMENT
⊠ ¬	COMBINATION MOTOR STARTER	AS NOTED
	MAGNETIC MOTOR STARTER	AS NOTED
<u> </u>	JUNCTION BOX OR OUTLET BOX, 4" SQUARE BOX UNLESS OTHERWISE NOTED	AS NOTED
Ø	MOTOR CONNECTION	AS NOTED
M	ELECTRIC HEAT STRIP	IN VAV BOX INDICATED
	MOMENTARY SWITCH WITH RED 2" MUSHROOM HEAD BUTTON, WITH COVER, OR AS NOTED	M.H. 48" A.F.F. TO TOP OR AS NOTED
F	FIRE ALARM MANUAL PULL STATION	M.H. 48" AFF TO TOP
F _{RI}	FIRE ALARM REMOTE INDICATOR	TOP 6" BELOW CEILING OR 80" A.F.F. WHICHEVER IS LOWER
F	FIRE ALARM FLOW SWITCH	AS NOTED
F _{TS}	FIRE ALARM TAMPER SWITCH	AS NOTED
F _D	FIRE ALARM MAGNETIC DOOR HOLDER COORDINATE MOUNTING HEIGHT WITH DOOR SUPPLIER	WALL MOUNTED
F _S	FIRE ALARM SMOKE DETECTOR	CEILING MOUNTED
F _H	FIRE ALARM HEAT DETECTOR	CEILING MOUNTED
FR	FIRE ALARM RELAY TO SHUT DOWN AIR HANDLER UNITS	SEE PLANS
FRT	FIRE ALARM DUCT DETECTOR REMOTE TEST STATION	M.H. 64" AFF TO BOTTOM
F _{SD}	FIRE ALARM SMOKE DETECTOR IN A/C DUCT	DUCT MOUNTED (SEE MECH. DWGS.)
©F	FIRE ALARM SPEAKER (VOICE SYSTEM), LETTER IN CIRCLE INDICATES TYPE: B=BELL, C=CHIME, H=HORN, S=SPEAKER	TOP 6" BELOW CEILING OR 80" A.F.F. WHICHEVER IS LOWER
ÞF	FIRE ALARM STROBE LIGHT ONLY	TOP 6" BELOW CEILING OR 80" A.F.F. WHICHEVER IS LOWER
ΦF ××	FIRE ALARM SPEAKER (VOICE SYSTEM) WITH STROBE, C=CHIME, B=BELL, H=HORN, S=SPEAKER xx = CANDELA RATING (ASSUME 75 CANDELA MINIMUM U.O.N.)	TOP 6" BELOW CEILING OR 80" A.F.F. WHICHEVER IS LOWER
OF.	FIRE ALARM TROUBLE BELL (SEE F.A. ONE LINE DIAGRAM)	AS NOTED
FATC	FIRE ALARM TERMINAL CABINET	M.H. 6'-6" AFF TO TOP
FAA	FIRE ALARM ANNUNCIATOR PANEL	M.H. 4'-6" AFF TO TOP
FACP	FIRE ALARM MAIN CONTROL PANEL	M.H. 6'-6" AFF TO TOP
	END OF LINE RESISTOR	SEE PLANS

	ELECTRICAL LEGEND (EXISTING DEV	
SYMBOL	DESCRIPTION	MOUNTING
€	EXISTING LOCATION FOR DUPLEX RECEPTACLE - 120VAC	M.H. 16"/24" AFF TO BOTTOM
\$	EXISTING LOCATION FOR DUPLEX RECEPTACLE— 120VAC	MOUNTED 42" AFF TO BOTTOM OR AS NOTED
E] _s	EXISTING/REINSTALLED FIRE ALARM SMOKE DETECTOR	CEILING MOUNTED
[F] _H	EXISTING/REINSTALLED FIRE ALARM HEAT DETECTOR	CEILING MOUNTED
F	EXISTING/REINSTALLED FIRE ALARM PULL STATION	WALL MOUNTED
FH)	EXISTING/REINSTALLED FIRE ALARM INDICATION APPLIANCE	WALL MOUNTED
C=3	EXISTING PANEL LOCATION	WALL MOUNTED
٢3	EXISTING DISCONNECT LOCATION	WALL MOUNTED
[6]	EXISTING CONTACTOR/CONTROLER	N/A

THIS IS A STANDARD LEGEND. NOT ALL DEVICES SHOWN ARE USED IN THESE DOCUMENTS. ALL DEVICES SHOWN AS EXISTING, ARE TO REMAIN UNLESS OTHERWISE NOTED

ABBRE\	VIATIONS:		
AFF	ABOVE FINISHED FLOOR	GWB	GYPSUM WALL BOARD
AFG	ABOVE FINISHED GRADE	H.D.	HAND DRYER
E	EXISTING	INT	INTERCOM/PAGING CABINET
ETR	EXISTING TO REMAIN	MTG	MOUNTING
EWC	ELECTRIC WATER COOLER	MTD	MOUNTED
EWH	ELECTRIC WATER HEATER	M.H.	MOUNTING HEIGHT
EG	EQUIPMENT GROUND	N/A	NOT APPLICABLE
ESB	ENERGY SAVING BALLAST	PROJ	PROJECTOR LOCATION
EXP	EXPLOSION PROOF	U.O.N.	UNLESS OTHERWISE NOTED
FACP	FIRE ALARM CONTROL PANEL	R	REMOVE
FATC	FIRE ALARM TERMINAL CABINET	RL	RELOCATED
GFI	GROUND FAULT PROTECTION	WP	WEATHER PROOF
G, GND	GROUND		

VOLTAGE DROP

PROVIDE LARGER CONDUCTOR SIZES WHERE NECESSARY ON FEEDER AND BRANCH CIRCUIT CONDUCTORS IN ORDER TO COMPLY WITH THE 2015 FLORIDA ENERGY CONSERVATION CODE, CHAPTER 4, SECTION C405.7.3.

ELECTRICAL GENERAL NOTES: (THESE NOTES APPLY TO ALL SHEETS)

- 1. ALL ELECTRICAL WORK SHALL MEET ALL OF THE REQUIREMENTS OF THE FOLLOWING:
 - A. FLORIDA BUILDING CODE (FBC) 5TH EDITION (2014): THIS CODE INCLUDES THE 2014 FBC BUILDING, MECHANICAL, PLUMBING, FUEL GAS AND ENERGY CONSERVATION VOLUMES. FURTHER, SEE "REFERENCED STANDARDS" IN THE FBC, BUILDING CHAPTER 35; FBC, PLUMBING CHAPTER 14; FBC, MECHANICAL CHAPTER 15; FBC, FUEL GAS CHAPTER 8, FBC, ENERGY CONSERVATION CHAPTER 5.) (EFFECTIVE JUNE 30,
- B. 5TH EDITION OF THE FLORIDA FIRE PREVENTION CODE (FFPC): (THIS CODE ALSO INCLUDES THE FLORIDA VERSIONS OF NFPA 1 AND NFPA 101.) (EFFECTIVE DECEMBER 31, 2014)
- C. 2011 NATIONAL ELECTRIC CODE
- 2. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND VERIFY THE EXISTING CONDITIONS TO GAIN KNOWLEDGE OF THE SCOPE OF WORK INVOLVED.
- 3. "PROVIDE" SHALL MEAN "FURNISH AND INSTALL".
- 4. IN GENERAL, THESE DRAWINGS ARE SCHEMATIC IN NATURE AND SHOULD NOT BE SCALED. IT SHALL NOT BE THE INTENT OF THESE PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. PROVIDE ALL ITEMS NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM.
- 5. ELECTRICAL INSTALLATION SHALL BE CLOSELY COORDINATED WITH ALL OTHER TRADES. REVIEW THE ENTIRE SET OF DOCUMENTS FOR COORDINATION. NO COST SHALL BE ASSOCIATED WITH ILL-TIMED INSTALLATION INCLUDING ANY REPAIRS OR REPLACEMENTS.
- 6. ALL CONDUITS AND BOXES SHALL BE CONCEALED UNLESS OTHERWISE NOTED. ALL CONDUIT RUNS ARE SCHEMATIC IN NATURE. EXACT ROUTING TO BE DETERMINED IN THE FIELD UNLESS OTHERWISE NOTED.
- 7. APPLY A BITUMASTIC COATING FOR ALL CONDUITS PENETRATING FLOOR SLABS FROM BELOW GRADE.
- 8. PROVIDE ALL REQUIRED PULL BOXES, JUNCTION BOXES, ETC. FOR A COMPLETE INSTALLATION.
- 9. PATCH, REPAIR AND REPAINT ALL WALLS THAT HAVE BEEN DAMAGED DUE TO ELECTRICAL ROUGH-IN. REMOVE ANY UNUSED CONDUIT AND WIRE.
- 10. PROVIDE FIRE-STOPPING AT ALL FIRE WALL PENETRATIONS. USE A U.L. APPROVED SYSTEM LISTED FOR THE ASSOCIATED INSTALLATION.
- 11. ALL CONDUCTORS SHALL BE STRANDED COPPER, THHN/THWN, MINIMUM #12 AWG. ALL CONDUCTORS SHALL BE IN CONDUIT. FLEXIBLE CONDUIT SHALL BE LIMITED TO A MAXIMUM OF 6'-0" IN LENGTH.
- 12. MC CABLE OR OTHER PREMANUFACTURED CABLING SHALL NOT BE USED UNLESS APPROVED BY THE OWNER AND ENGINEER.
- 13. ALL CIRCUITS SHALL CONTAIN A SEPARATE, GREEN, COPPER GROUNDING
- 14. ALL RECEPTACLES SHALL HAVE A GROUND TERMINAL.
- 15. WHEN REUSING OR EXTENDING EXISTING CIRCUITS, VERIFY ALL CIRCUIT NUMBERS AND VERIFY ANY EXISTING LOAD. CIRCUITS MAY BE PICKED UP AT AN EXISTING JUNCTION BOX IF AVAILABLE RATHER THAN PROVIDING A SEPARATE HOMERUN TO A PANEL.
- 16. RECESSED LIGHTING FIXTURES SHALL BE SUPPORTED FROM THE STRUCTURE AT (4) POINTS. DO NOT SUPPORT FIXTURES FROM THE CEILING GRID, MECHÁNICAL PIPING, DUCTWORK, CONDUIT OR OTHER NON-STRUCTURAL BUILDING MEMBERS. PROVIDE SUPPLEMENTAL STEEL AS REQUIRED FOR
- 17. THE COLOR OF ALL RECEPTACLES, TOGGLE SWITCHES AND COVERPLATES SHALL BE VERIFIED WITH THE ARCHITECT PRIOR TO ORDERING.
- 18. PANELBOARDS SHALL BE ACCURATELY LABELED TO IDENTIFY FINAL CIRCUIT NUMBERS UTILIZED, THEIR LOAD AND LOCATION.
- 19. BRANCH CIRCUIT SHALL NOT BE RUN UNDERGROUND UNLESS SPECIFIED OR APPROVED BY THE OWNER AND ENGINEER. ROUTE CONCEALED IN WALL AND ABOVE CEILINGS. DISTRIBUTION FEEDERS FROM THE MAIN SWITCHBOARD MAY BE RUN UNDERGROUND.
- 20. PROVIDE FIRE RETARDANT U.L. APPROVED SEALANT ON ALL PENETRATIONS OF FIRE RATED PARTITIONS, WALLS AND STRUCTURAL SLABS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY, PRIOR TO SUBMITTING BID, LOCATIONS OF ALL SUCH FIRE RATED PARTITIONS, WALL AND STRUCTURAL SLABS.
- 21. PROVIDE HANDLE TIES FOR 2 OR MORE SINGLE POLE WITH SHARED NEUTRALS TO COMPLY WITH NEC 210.4 (B)
- 22. SEE SPECIFICATIONS

ELECTRICAL DRAWING INDEX

- EO.1 ELECTRICAL LEGEND, AND GENERAL NOTES
- E0.2 LUMINAIRE SCHEDULE AND CUT SHEETS E1.1 LIGHTING PLANS - FIRING RANGE/GYM
- E2.1 POWER & DATA PLANS FIRING RANGE/GYM FIRE ALARM & SYSTEMS PLANS - FIRING RANGE/GYM
- E4.1 ELECTRICAL RISER DIAGRAMS
- E5.1 ELECTRICAL SCHEDULES FIRING RANGE
- E5.2 ELECTRICAL SCHEDULES GYM
- E6.1 ELECTRICAL DETAILS

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1517 SEVENTH AVENUE

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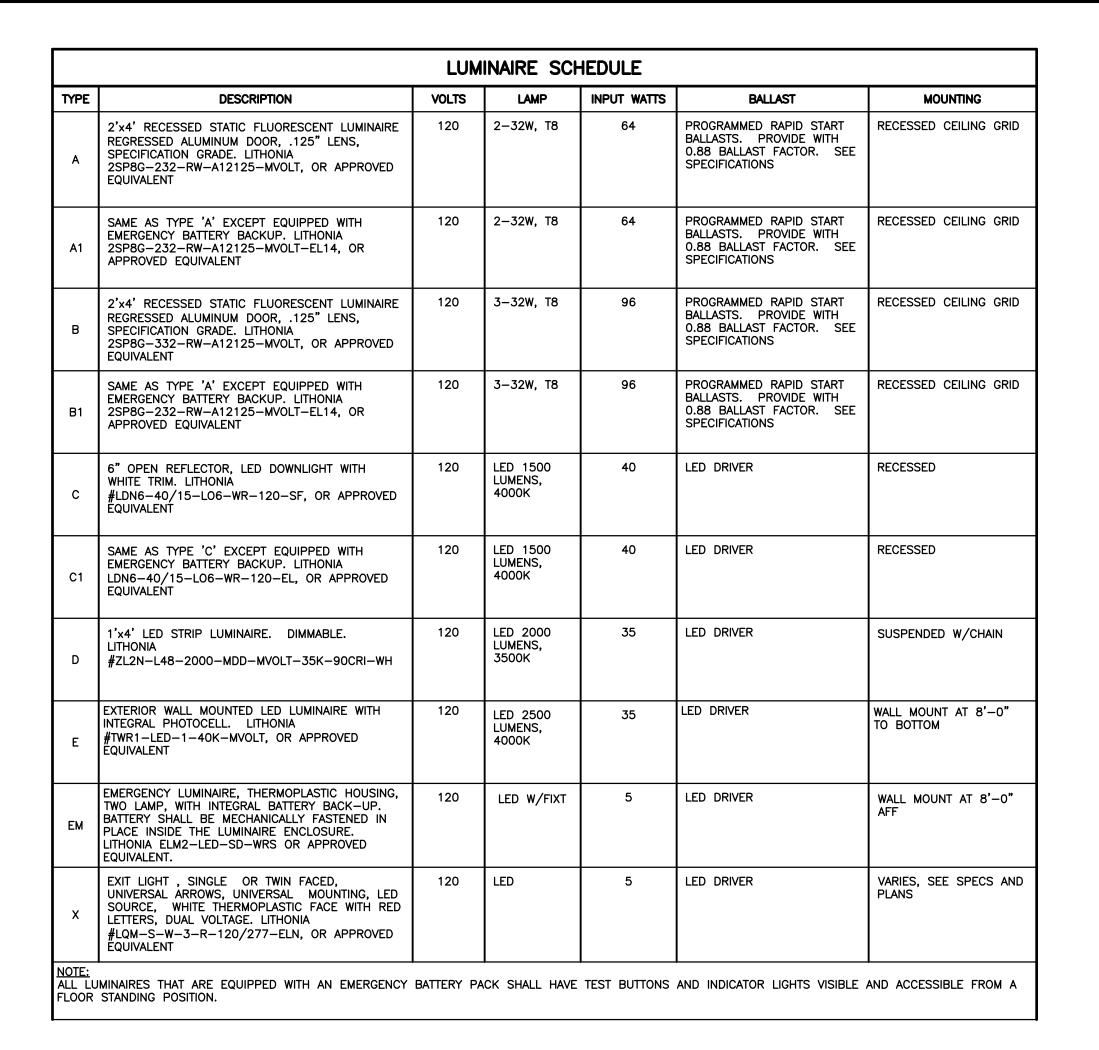
SUITE C

HILLSBOROUGH COUNTY SHERIFF'S OFFICE 2008 EAST 8TH AVENUE TAMPA, FLORIDA 33605

PROJECT #: 1626-00 DISTRIBUTION DATE 1/16/2017

ELECTRICAL LEGEND, AND GENERAL NOTES

THIS IS A STANDARD LEGEND. NOT ALL DEVICES SHOWN ARE USED IN THESE DOCUMENTS.



/A LITHONIA LIGHTING®

INTENDED USE — Sharing many popular Z Series elements, this solid-state strip offers long main-

tenance-free life, several color temperatures, lumen outputs and lengths. Ideal for new construction and retrofit applications in T5 and T8 lengths. Ideal for uplight and downlight in commercial, retail,

CONSTRUCTION — Compact-design channel and cover are formed from code-gauge, cold-rolled steel.

Finish: Paint options include high-gloss, baked white enamel (WH), galvanized (GALV), matte black

(MB) and smoke gray (SKGY). Five-stage iron phosphate pre-treatment ensures superior paint adhesion

ELECTRICAL — Utilizes high-output LEDs integrated on a two-layer circuit board, ensuring cool-running

operation. Internal pluggable wiring harness prevents wiring errors. Electronic LED driver is rated for 75

input and 0-10V dimming standard. This fixture is designed to withstand a maximum line surge of

1.5kV at 0.75kA combination wave for indoor locations, for applications requiring higher level of protec-

Lumen output ranges from 2100 to 6000 lumens. Beam angle is 110 FWHM (full width at half maximum).

Lumen output up to 1,300 lumens per foot. In 86°F (30°C) ambient environments, L70 is predicted to

be 100,000+ hours, L85 at 44,000 hours. Luminaire should be installed in applications where ambient

temperatures do not exceed 86°F (30°C). Ambient temperatures that exceed 86°F (30°C) will result in

Fixture may be surface, pendant or stem mounted. Three-point aligner locks in place for easy continuous

LISTINGS — UL Listed. CSA certified to US and Canadian safety standards. For use in damp locations

times will vary depending on options selected. Consult with your sales representative.

MDD Medium diffuse

CS1W Straight plug, 120V

CS3W Twist-lock, 120V

CS7W Straight plug, 277V CS11W Twist-lock, 277V

CS25W Twist-lock, 347V

CS97W Twist-lock, 480V

LZL2 XX MDIF Medium-diffuse lens. Specify length 24 or 48 (example: LZL2 24 MDIF)8

CS93W 600V SE00W white cord, no plug (no voltage required)

ZSD Zebra striped lens

L24 24" 2000LM 2,000 lumens

L48 48" 3000LM 3,000 lumens

2000LM 2,000 lumens

5000LM 5,000 lumens

input watts maximum (see Operational Data on page two for actual wattage consumption), **multi-volt**

OPTICS — Replaceable medium diffuse lens (up to 10%) offer ingress protection from debris.

Lensed LED Striplight

24" and 48" Lengths

Example: ZL2N L48 3000LM MDD MVOLT 40K 80CRI WH

35K 3500 K

50K 5000 K

See Operational Data on page 2 for actual lumens.
 Not available with L24, 24" fixture.

4 Use ZSPRG for surface mounting when order this option.

7 Cordsets exit back of fixture unless OUTEND option is specified.

Page 1 of 4

3 See ordering information on page 3.

5 Specify voltage, 120 or 277.

6 Output is 1400 lumens.

8 XX denotes length.

WH White

GALV Galvanized

MB Matte black

SKGY Smoke gray

MVOLT 120-277V 40K 4000 K

FEATURES & SPECIFICATIONS

manufacturing, warehouse, cove and display applications.

tion additional surge protection must be provided.

reduced life and will void warranty.

between -4°F (-20°C) and 86°F (30°C).

ZL2N Lensed LED striplight

ZACVH Aircraft cable with hook

ZSPRG For 15/16" T-grid only

LSXR Sensor Switch® LSXR occupancy sensor³

HC36 Hanger chain, 36"

INDUSTRIAL

80CRI 80 CRI

90CRI 90 CRI

LEDs provide 83 CRI at 3000 K, 3500 K,4000 K or 5000 K.

INSTALLATION — Tool-less channel cover for easy installation.

WARRANTY — 5-year limited warranty. Complete warranty terms located at:

www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Note: Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

PLR Plug-in wiring³

PLR1LVG Plug-in wiring low voltage⁴

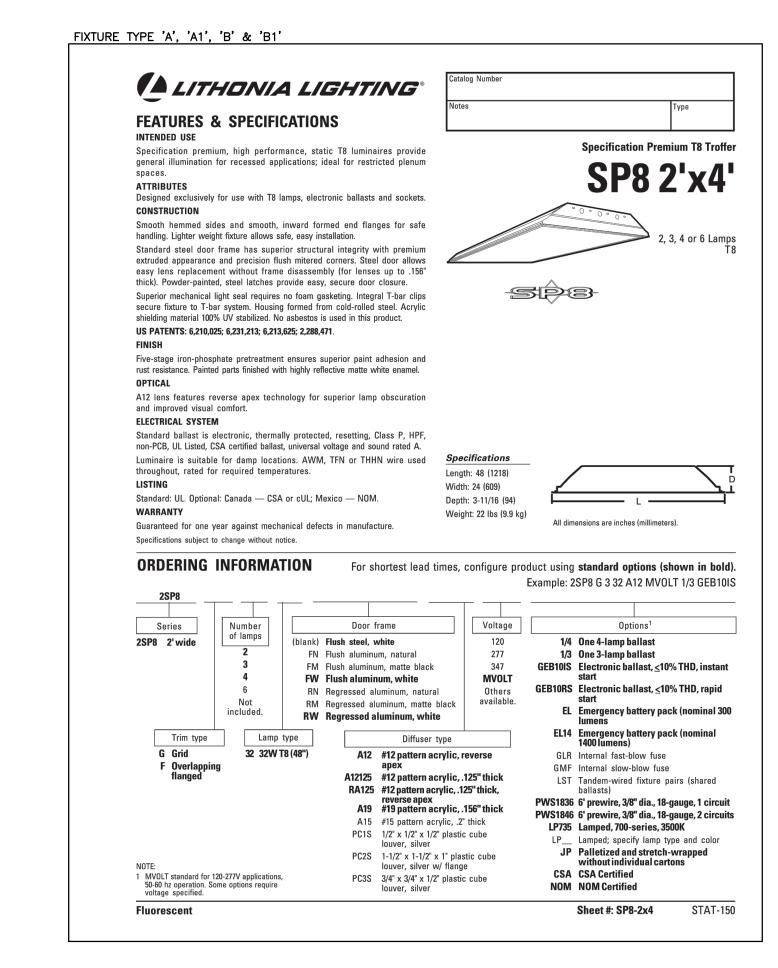
BSL722 Emergency battery pack^{2,5,6}

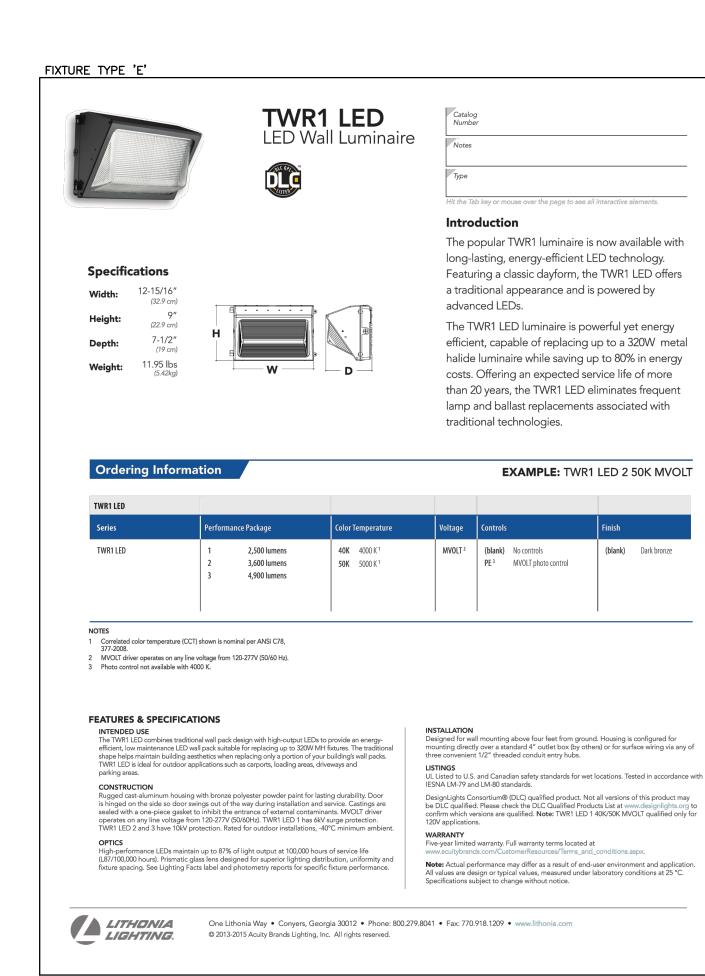
OUTEND Cord set to exit endplate of fixture

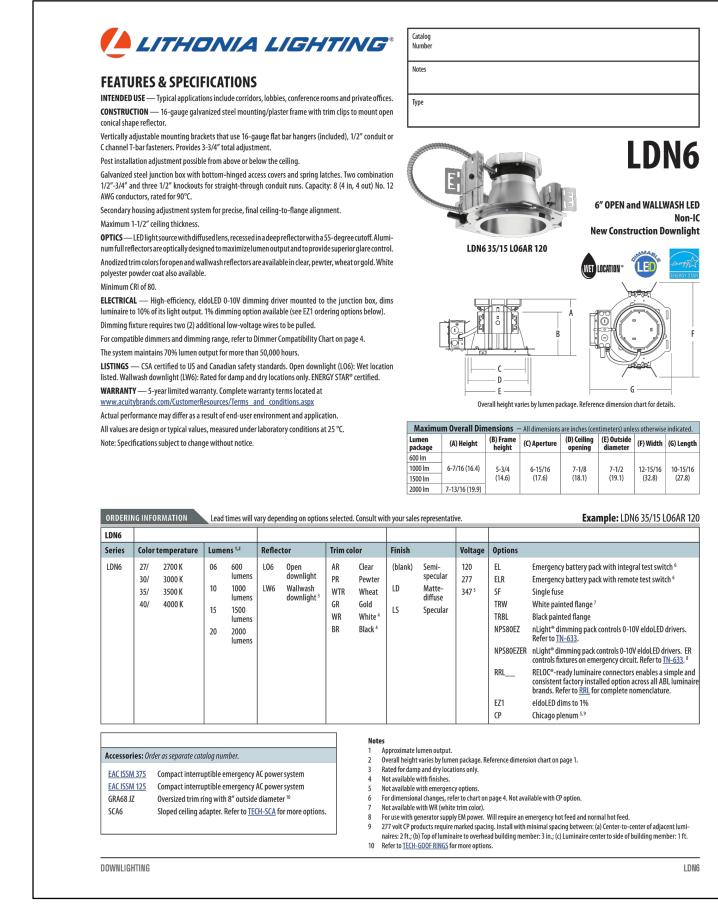
and rust resistance.

Improved easy "snap 'n' lock" end plates allow for quick attachment.

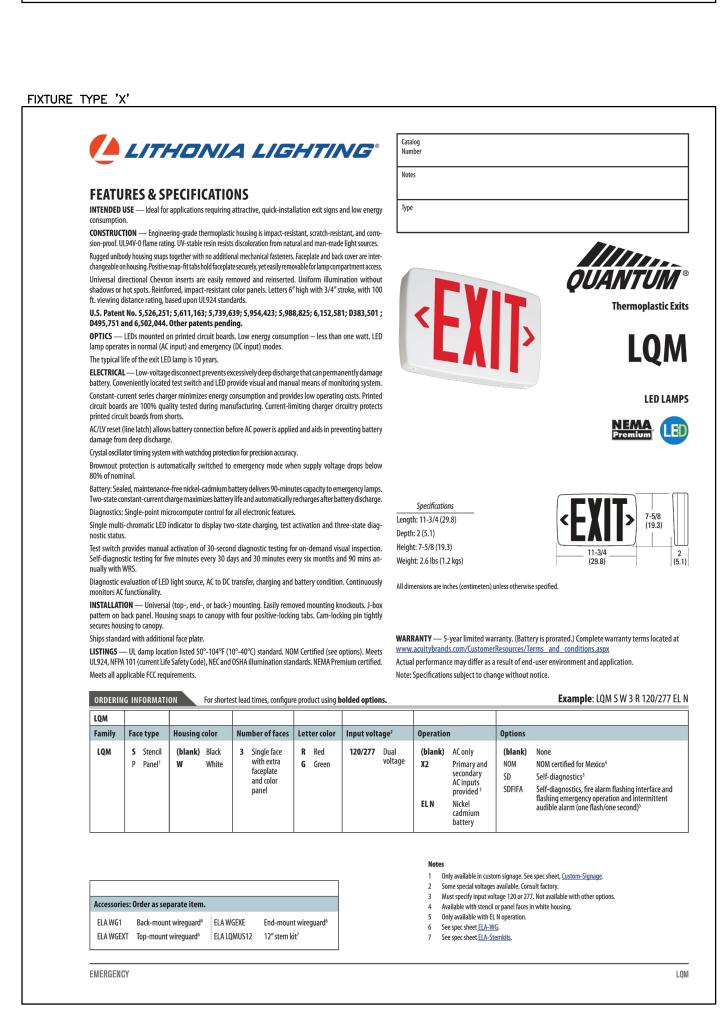
FIXTURE TYPE 'D'







FIXTURE TYPE 'C' & 'C1'



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HILLSBOROUGH COUNTY SHERIFF'S OFF FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

PROJECT #: 1626-00

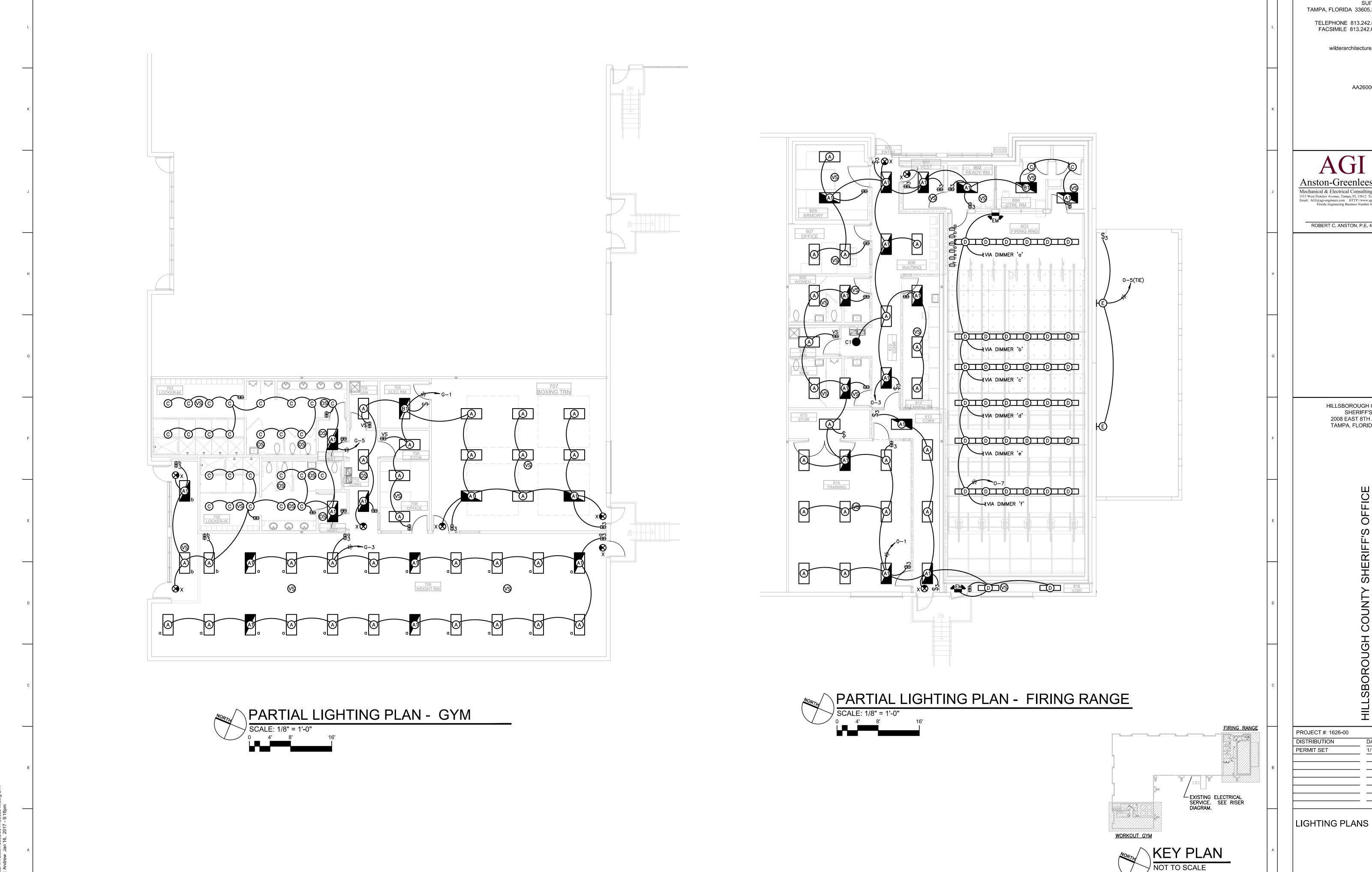
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LUMINAIRE SCHEDULE AND CUT SHEETS

F₀ 2

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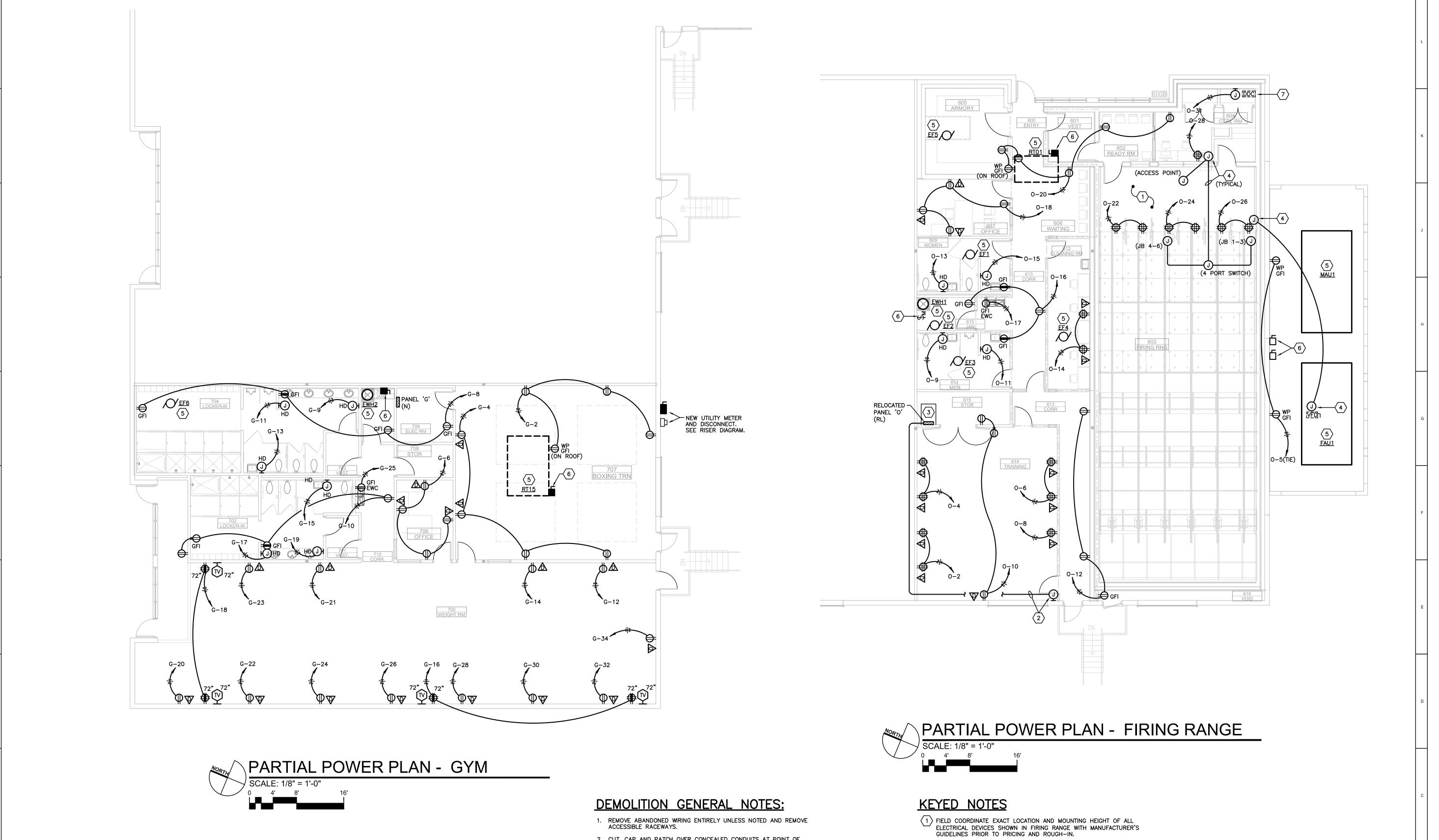
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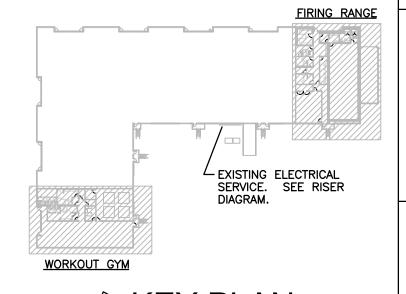
DATE 1/16/2017

E1.1



- 2. CUT, CAP AND PATCH OVER CONCEALED CONDUITS AT POINT OF EMERGENCE.
- 3. EXISTING EQUIPMENT AND MATERIALS THAT ARE REMOVED SHALL NOT BE REUSED EXCEPT WHERE SPECIFICALLY NOTED.
- PROVIDE ALL REQUIRED DEMOLITION ASSOCIATED WITH THE NEW WORK AND REMOVE ALL EQUIPMENT, RACEWAYS, BOXES, WIRING, ETC. THAT IS RENDERED OUT OF SERVICE OR OBSOLETE.
- 5. DISPOSE OF SCRAP AND DEBRIS.
- 6. MAINTAIN ELECTRICAL CONTINUITY TO EQUIPMENT/DEVICES WHICH
- 7. WHERE EQUIPMENT IS REMOVED, CONTRACTOR SHALL ALSO REMOVE ASSOCIATED CONDUIT, CONDUCTORS, AND MOUNTING HARDWARE. EXCEPTION TO THIS REQUIREMENT MAY BE WHERE CONTRACTOR PROPOSES TO RE-USE CONCEALED CONDUIT IF APPROVED IN ADVANCE BY THE OWNER/ENGINEER.

- PROVIDE SURFACE MOUNT JUNCTION BOX SIZED PER NEC AND SPLICE/EXTEND EXISTING FEEDER AS REQUIRED TO RELOCATE PANEL
- PROVIDE CAUTION MARKINGS ON FLOORING TO INDICATE REQUIRED WORKING CLEARANCE FOR ELECTRICAL PANEL.
- PROVIDE ALL REQUIRED OUTLET BOXES AND CONDUIT FOR A COMPLETE INSTALLATION. REFER TO MANUFACTURER'S INSTALLATION GUIDELINES FOR FURTHER INSTRUCTION PRIOR TO PRICING AND ROUGH—IN. PROVIDE ALL CABLING INDICATED ON FIRING RANGE MANUFACTURER'S INSTALLATION DRAWINGS.
- FOR ELECTRICAL REQUIREMENTS OF MECHANICAL EQUIPMENT SHOWN ON THIS PLAN.
- 6 MOUNT DISCONNECT IN A MANNER TO PROVIDE AMINIMUM OF 3'-0" WORKING CLEARANCE. DO NOT MOUNT DIRECTLY ON HVAC UNIT. PROVIDE SUPPLEMENTAL STEEL AS REQUIRED.
- 7 CONTRACTOR TO PROVIDE OUTLET BOXES FOR REQUIRED DATA CONNECTIONS TO DDC CONTROLS (PROVIDED WITH UNIT). DATA CABLING BY OTHERS.



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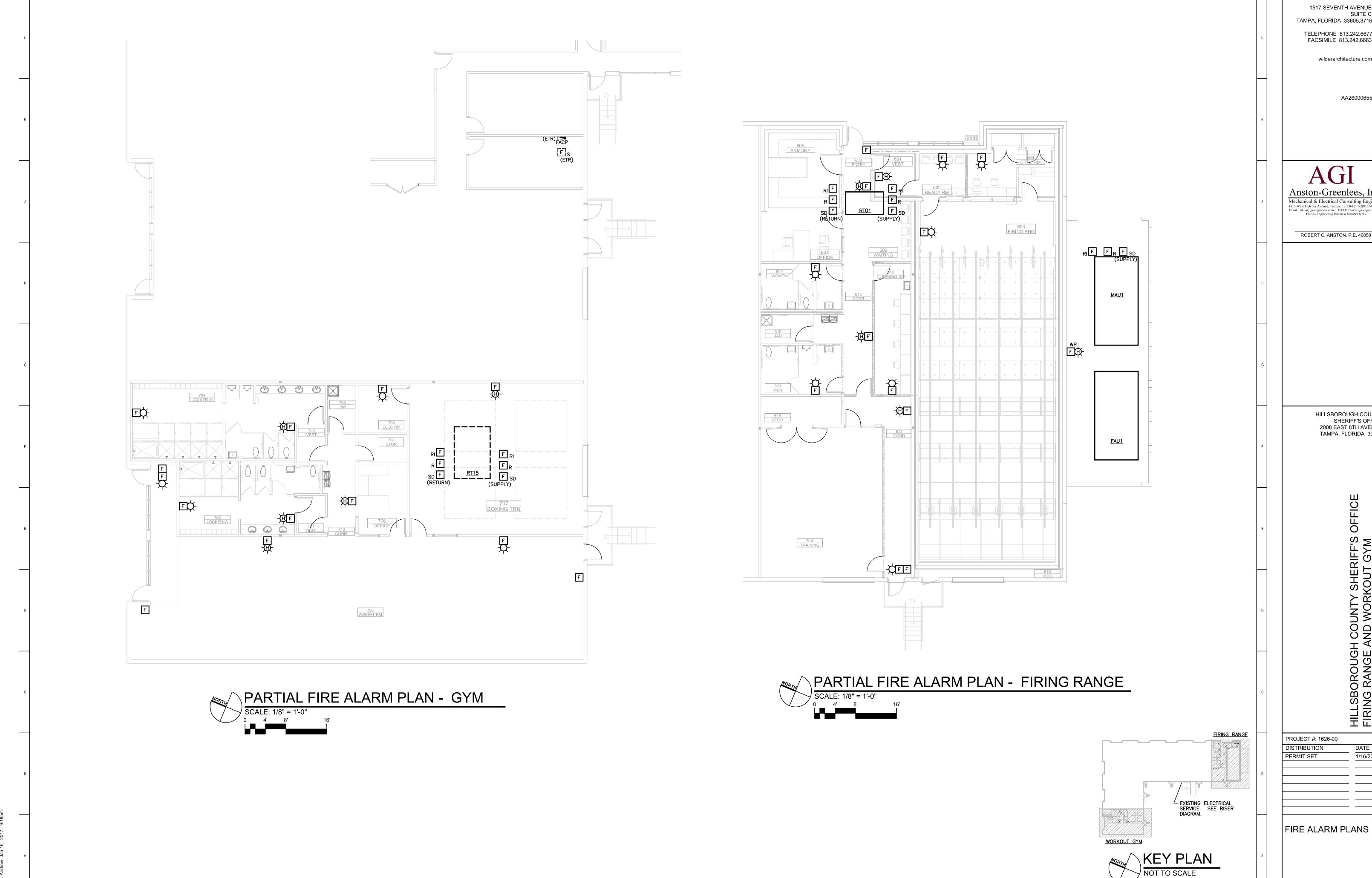
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POWER PLANS



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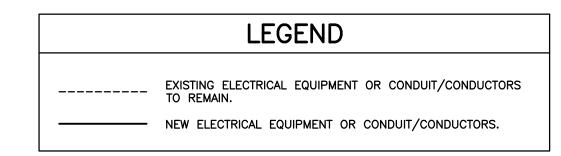
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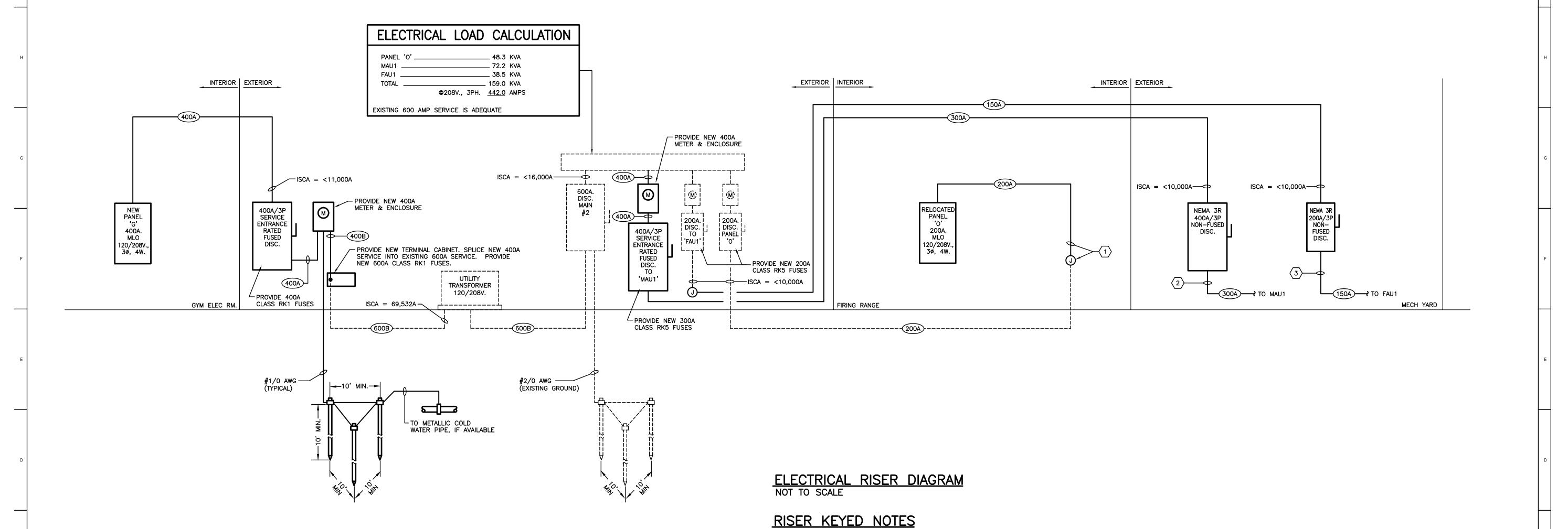
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DATE 1/16/2017

E3.1



	FEEDER SCHEDULE										
AMPS	CONDUIT & CABLING										
100A	1-1/4"C; 3-#3, 1-#3 NEUTRAL, 1-#8 GROUND										
150A	2"C; 3-#1/0, 1-#1/0 NEUTRAL, 1-#6 GROUND										
200A	2"C; 3-#3/0, 1-#3/0 NEUTRAL, 1-#6 GROUND										
300A	3-1/2"C; 3-#350 KCMIL, 1-#350 KCMIL NEUTRAL, 1-#4 GROUND										
400A	TWO(2) 2"C; EACH WITH 3-#3/0, 1-#3/0 NEUTRAL, 1-#3 GROUND										
400B	TWO(2) 2"C; EACH WITH 3-#3/0, 1-#3/0 NEUTRAL										
600B	TWO(2) 3-1/2"C; EACH WITH 3-#350 KCMIL, 1-#350 KCMIL NEUTRAL										



PROVIDE SURFACE MOUNT JUNCTION BOX SIZED PER NEC AND SPLICE/EXTEND EXISTING FEEDERS AS REQUIRED TO RELOCATE

 $\langle 2 \rangle$ ROUTE CIRCUIT VIA CONTROL PANEL PROVIDED WITH UNIT.

3 ROUTE CIRCUIT VIA VFD PROVIDED WITH UNIT.

PANEL 'O' AS SHOWN.

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> HILLSBOROUGH COUNTY SHERIFF'S OFFICE FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

PROJECT #: 1626-00

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ELECTRICAL RISER DIAGRAMS

E4.1

									DIS	CONNECT SV	VITCH/COMB	INATION STAF	TER	
MARK	VOLTAGE/PHASE	HEAT KW	HP	FLA	MCA	BREAKER	HOMERUN CIRCUIT	CONDUIT & CABLING	SIZE AMPS	POLES	FUSE	STARTER SIZE	NEMA RATING	INTERLOCK/REMARKS
XHAUST FA	NS				Į.	•		-				Į.		
EF01	120V/1ø	-	-	1.0	1.25	20	INTERLOCK W/LIGHTS	3/4"C; 2 #12, 1 #12 EG	DIV15	-	-	_	-	INTERLOCK WITH LIGHTS
EF02	120V/1ø	1	ı	1.0	1.25	20	INTERLOCK W/LIGHTS	3/4"C; 2 #12, 1 #12 EG	DIV15	ı	-	_	-	INTERLOCK WITH LIGHTS
EF03	120V/1ø	ı	-	1.0	1.25	20	INTERLOCK W/LIGHTS	3/4"C; 2 #12, 1 #12 EG	DIV15	-	-	_	-	INTERLOCK WITH LIGHTS
EF04	120V/1ø	-	-	1.0	1.25	20	INTERLOCK W/LIGHTS	3/4"C; 2 #12, 1 #12 EG	DIV15	-	-	_	-	INTERLOCK WITH LIGHTS
EF05	120V/1ø	-	-	1.0	1.25	20	INTERLOCK W/LIGHTS	3/4"C; 2 #12, 1 #12 EG	DIV15	-	_	_	-	INTERLOCK WITH LIGHTS
VAC UNITS				•	•				•			•		
RT01	208V/3ø	12.0	_	64.8	81.0	90	0-37,39,41	1-1/4"C; 3 #3, 1 #8 EG	100	3	MFS	_	3R	_
MAU1	208V/3ø	_	-	200.6	250.7	N/A	SEE RISER DIAGRAM	3"C; 3 #350 KCMIL, 1 #4 EG	400	3	NF	_	3R	NOTE #1
FAU1	208V/3ø	-	-	107.0	133.8	N/A	SEE RISER DIAGRAM	3/4°C; 3 #1/0, 1 #6 EG	200	3	NF	_	3R	NOTE #1
LECTRIC WA	ATER HEATER			•		•		•	•			•		
EWH1	208V/1ø	3.0	_	14.4	18.0	20	0-33,35	3/4"C; 2 #12, 1 #12 EG	20	2	MRS	_	1	-

EXISTING (RELOCATED) PA	NEL									NI 0 0 11170
AIC RATING: 10,00 SERVICE: 120/	00 AMPS 208 V.,				3PH,4W					MLO: 0 AMPS MCB: 200 AMPS
DESCRIPTION	KVA	BKR	CKT	Α	В	С	CKT	BKR	KVA	DESCRIPTION
R LTG; TRAINING/TOILETS	1.3	20	1				2	20	0.7	REC; TRAINING
R LTG; CORR/OFFICE/CTRL	1.2	20	3				4	20	0.7	REC; TRAINING
R LTG; MECH & GFI'S	0.7	20	5				6	20	0.7	REC; TRAINING
R LTG; FIRING RANGE	1.3	20	7				8	20	0.7	REC; TRAINING
R EQ; MEN HAND DRYER	1.5	20	9				10	20	0.5	REC; TRAINING
R EQ; MEN HAND DRYER	1.5	20	11				12	20	0.5	REC; CORRIDOR
R EQ; WOMEN HAND DRYER	1.5	20	13				14	20	0.7	REC; CLEANING RM
R EQ; WOMEN HAND DRYER	1.5	20	15				16	20	0.7	REC; CORR/TOILETS
R EQ; EWC	0.5	20	17				18	20	0.7	REC; OFFICE
S SPARE	0	2P	19				20	20	0.9	REC; ARMRY/WAIT'G/CT
S SPARE	0	30	21				22	20	0.7	REC; FIRING RANGE
S SPARE	0	20	23				24	20	0.7	REC; FIRING RANGE
S SPARE	0	20	25				26	20	0.7	REC; FIRING RANGE
S SPARE	0	20	27				28	20	0.4	REC; FIRING RANGE CN
S SPARE	0	20	29				30	20	0	SPARE
R EQ; DDC CONTROLS	0.4	20	31				32	20	0	SPARE
D EQ; EWH1	1.5	2P	33				34	20	0	SPARE
D EQ; EWH1	1.5	20	35				36	20	0	SPARE
D A/C; RT01	7.8	3P	37				38	3P	0	SPD
D A/C; RT01	7.8	90	39				40	30	0	SPD
D A/C; RT01	7.8	,,	41				42	,,	0	SPD
	A PH =	16.0	ō	В	PH = 1	6.50		С	PH = 14	60
SERVES	CONN LOA	D f	ACTOR		FEED	D	IVERSI	ΓΥ	KVAD	PANEL KV
LIGHTING	4.50	Х	1.25	=	5.63	×		=		
RECEPT	9.30	×	*	=	9.30	×		=		
MISC EQUIP	9.90	×	1.00	=	9.90	×		=		
A/C	23.40	×	1.00	=	23.40	×		=		
HEATING	0.00	×	1.00	=	0.00	×		=		
LARGEST MOTOR	0.00	×	1.25	=	0.00	×		=		
OTHER MOTORS	0.00	×	1.00	=	0.00	×		=		
OTHER	0.00	×	1.00	=	0.00	×		=		
SPARE					23.74					
TOTALS	47.10	KVA	<u> </u>		71.97	KVA				•

* PER N.E.C. TABLE 220.44

ALL PANELBOARDS SHALL BE ACCURATELY LABELED AND NUMBERED TO IDENTIFY FINAL CIRCUIT NUMBERS UTILIZED, THEIR LOAD AND LOCATION.

E = EXISTING CIRCUIT TO REMAIN.

N = NEW BREAKER AND CIRCUIT.

R = REUSE EXISTING CIRCUIT BREAKER TO FEED NEW CIRCUIT.

S = SPARE OUT EXISTING BREAKER. REMOVE ALL ABANDONED CONDUCTORS AND CONDUIT.

D = REMOVE EXISTING CIRCUIT BREAKER AND PROVIDE NEW BREAKER, CONDUIT AND WIRE.

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HILLSBOROUGH COUNTY SHERIFF'S OFFICE FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

PROJECT #: 1626-00	
DISTRIBUTION	DATE
PERMIT SET	1/16/2017

ELECTRICAL SCHEDULES - FIRING RANGE

E5.1

^{1.} PROVIDE NON-FUSED NEMA 3R DISCONNECT SWITCH IN MECHANICAL YARD TO SERVE LOCAL DISCONNECTING MEANS. MAKE ALL NECESSARY CONNECTION TO OWNER PROVIDED HVAC UNIT AND ASSOCIATED EQUIPMENT FOR A COMPLETE INSTALLATION PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

	MECHANICAL EQUIPMENT CONNECTION SCHEDULE													
						DISCONNECT SWITCH/COMBINATION STARTER								
MARK	VOLTAGE/PHASE	HEAT KW	HP	FLA	MCA	BREAKER	HOMERUN CIRCUIT	CONDUIT & CABLING	SIZE AMPS	POLES	FUSE	STARTER SIZE	NEMA RATING	INTERLOCK/REMARKS
EXHAUST FANS														
EF06	120V/1ø	_	1/4	5.8	7.3	20	G-5	3/4"C; 2 #12, 1 #12 EG	DIV15	-	_	_	-	INTERLOCK WITH AH15
HVAC UNITS														
RT15	208V/3ø	24.0	_	101.6	127.0	175	G-37,39,41	2"C; 3 #2/0, 1 #6 EG	200	3	MFS	_	3R	_
ELECTRIC WA	LECTRIC WATER HEATER													
EWH1	208V/3ø	6.0	_	16.7	20.8	30	G-29,31,33	3/4"C; 2 #10, 1 #10 EG	30	3	MFS	_	1	_

MFS = MANUFACTURER'S RECOMMENDED FUSE SIZE
MRS = MOTOR RATED TOGGLE SWITCH BY DIVISION 15
VFD = VARIABLE FREQUENCY DRIVE (FURNISHED BY DIVISION 15) INSTALLED BY DIVISION 16

NF = NON-FUSEDDIV15 = DISCONNECTING MEANS PROVIDED BY THE MANUFACTURER OR DIVISION 15 CONTRACTOR

NEW PANEL										
PANEL: G AIC RATING: 22,00 0 SERVICE: 120/2					3PH,4W					MLO: 400 AMPS MCB: 0 AMPS
DESCRIPTION	KVA	BKR	CKT	Α	В	С	CKT	BKR	KVA	DESCRIPTION
LTG; ELEC/BOXING/OFFICE	1.1	20	1				2	20	0.5	REC; BOXING
LTG; WEIGHT ROOM	1.3	20	3				4	20	0.7	REC; BOXING
LTG; M TOILET/SHOWERS	1.4	20	5				6	20	0.7	REC; OFFICE
LTG; W TOILET/SHOWERS	0.8	20	7				8	20	0.7	REC; ELEC/M TOILET
EQ; M TOILET HAND DRYER	1.5	20	9				10	20	0.7	REC; CORR/M TOILET
EQ; M TOILET HAND DRYER	1.5	20	11				12	20	1	EQ; WEIGHT RM
EQ; M TOILET HAND DRYER	1.5	20	13				14	20	1	EQ; WEIGHT RM
EQ; W TOILET HAND DRYER	1.5	20	15				16	20	0.7	REC; WEIGHT RM TV
EQ; W TOILET HAND DRYER	1.5	20	17				18	20	0.7	REC; WEIGHT RM TV
EQ; W TOILET HAND DRYER	1.5	20	19				20	20	1	EQ; WEIGHT RM
EQ; WEIGHT RM	1	20	21				22	20	1	EQ; WEIGHT RM
EQ; WEIGHT RM	1	20	23				24	20	1	EQ; WEIGHT RM
SPARE	0	20	25				26	20	1	EQ; WEIGHT RM
SPARE	0	20	27				28	20	1	EQ; WEIGHT RM
EQ; EWH2	2	3P	29				30	20	1	EQ; WEIGHT RM
EQ; EWH2	2	30	31				32	20	1	EQ; WEIGHT RM
EQ; EWH2	2	,,	33				34	20	1	EQ; WEIGHT RM
MTR; EF4	0.6	20	35				36	20	0	SPARE
A/C; RT15	12.2	3P	37				38	3P	0	SPD
A/C; RT15	12.2	175	39				40	30	0	SPD
A/C; RT15	12.2	,,	41				42	,,	0	SPD
	A PH =	24.3	0	В	PH = 2	4.60		CI	PH = 24	.60
SERVES C	ONN LOA	D F	ACTOR		FEED	D	IVERSI	ſΥ	KVAD	PANEL KVAD
LIGHTING	4.60	Х	1.25	=	5.75	×		=		
RECEPT	4.70	x	*	=	4.70	×		=		
MISC EQUIP	27.00	x	1.00	=	27.00	×		=		
A/C	36.60	x	1.00	=	36.60	×		=		
HEATING	0.00	×	1.00	=	0.00	×		=		
LARGEST MOTOR	0.60	×	1.25	=	0.75	×		=		
OTHER MOTORS	0.00	×	1.00	=	0.00	×		=		
OTHER	0.00	×	1.00	=	0.00	×		=		
SPARE					69.14					
TOTALS	73.50	KVA	·		143.94	KVA				

* PER N.E.C. TABLE 220.44

ALL PANELBOARDS SHALL BE ACCURATELY LABELED AND NUMBERED TO IDENTIFY FINAL CIRCUIT NUMBERS UTILIZED, THEIR LOAD AND LOCATION.

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HILLSBOROUGH COUNTY SHERIFF'S OFFICE 2008 EAST 8TH AVENUE TAMPA, FLORIDA 33605

HILLSBOROUGH COUNTY SHERIFF'S OFFICE FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

PROJECT #: 1626-00 DATE 1/16/2017 PERMIT SET

ELECTRICAL SCHEDULES - GYM AND RISER DIAGRAM

E5.2

NOTES:

 CONTRACTOR SHALL SUBMIT SENSOR MANUFACTURER'S LAYOUT DRAWING FOR APPROVAL. PROVIDE ADDITIONAL OCCUPANCY SENSORS AS REQUIRED TO PROVIDE TOTAL COVERAGE OF AREA.

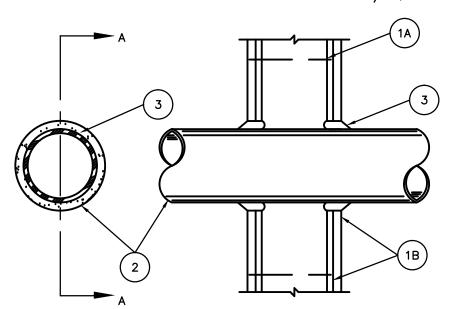
2. PROVIDE FOR DUAL SWITCHING WHERE INDICATED ON DRAWING.

TYPICAL OCCUPANCY SENSOR WIRING DIAGRAM

SYSTEM NO. W-L-1001

JUNE 15, 2005

F RATINGS — 1, 2, 3 AND 4 HR (SEE ITEMS 2 AND 3)
T RATINGS — 0, 1, 2, 3, AND 4 HR (SEE ITEM 3)
L RATING AT AMBIENT — LESS THAN 1 CFM/SQ FT
L RATING AT 400 F — LESS THAN 1 CFM/SQ FT



SECTION A-A

FIRE-RATED WALL PENETRATION DETAIL FOR PIPE OR CONDUIT

NOT TO SCALE

- 1. WALL ASSEMBLY THE 1, 2, 3 OR 4 HR FIRE—RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:
- A. STUDS WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX 2 H FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER SPACED 16 IN. (406 MM) OC WITH NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8 IN. (92 MM) WIDE BY 1-3/8 IN. (35 MM) DEEP CHANNELS SPACED MAX 24 IN. (610 MM) OC.
- B. GYPSUM BOARD* NOM 1/2 OR 5/8 IN. (13 OR 16 MM) THICK, 4 FT. (122 CM) WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 26 IN. (660 MM).
- 2. THROUGH-PENETRANT ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MIN OF 0 IN / (0 MM). (POINT CONTACT) TO MAX 2 IN. (51 MM) PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:
- A. STEEL PIPE NOM 24 IN. (610 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.
- B. IRON PIPE NOM 24 IN. (610 MM) DIAM (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOM 12 IN (305 MM) DIAM (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE
- C. CONDUIT NOM 6 IN. (152 MM) DIAM (OR SMALLER) STEEL CONDUIT OR NOM 4 IN (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING
- D. COPPER TUBING NOM 6 IN. (152 MM) DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING
- E. COPPER PIPE NOM 6 IN. (152 MM) DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- F. THROUGH PENETRATING PRODUCT* FLEXIBLE METAL PIPING THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:
- 1. NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

 OMEGA FLEX INC

- NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
 GASTITE, DIV OF TITEFLEX
- 3. NOM 1 IN. (25 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

 WARD MFG L L C
- 3. FILL, VOID OR CAVITY MATERIAL* CAULK OR SEALANT MIN 5/8. , 1-1/4,1-7/8 AND 2-1/2 IN. (16, 32, 48 AND 64 MM) THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

Max Pipe or Conduit Diam. In (mm)	F Rating Hr	T Rating Hr				
1 (25)	1 or 2	0+, 1 or 2				
1 (25)	3 or 4	3 or 4				
4 (102)	1 or 2	0				
6 (152)	3 or 4	0				
12 (305)	1 or 2	0				

+WHEN COPPER PIPE IS USED, T RATING IS 0 HR.

- 3M COMPANY CP 25WB+ OR FB-3000 WT.
- * INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.
- LAST UPDATED ON 2005-06-15

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HILLSBOROUGH COUNTY SHERIFF'S OFFICE 2008 EAST 8TH AVENUE TAMPA, FLORIDA 33605

> HILLSBOROUGH COUNTY SHERIFF'S OFF FIRING RANGE AND WORKOUT GYM PINEBROOKE BUSINESS PARK

PROJECT #: 1626-00	
DISTRIBUTION	DATE
PERMIT SET	1/16/2017

ELECTRICAL DETAILS

6 1

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