

Location Map

Contract Drawings For

HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION Project No.: SHYQ192003

HDR Project No. 10173455

Issued for Bids May 5, 2020



<u>GENERAL</u> 00G-000 00G-001 00G-002	COVER SHEET AND I ABBREVIATIONS GENERAL LEGEND
00G-101 00G-102 00G-103	CODE ANALYSIS CODE COMPLIANCE LIFE SAFETY PLAN
00C-101 00C-102 00C-103 00C-104	TOPOGRAPHIC SURV SITE DEMOLITION PL CIVIL LEGEND SITE LAYOUT PLAN SITE GRADING PLAN SITE UTILITY PLAN EROSION AND SEDIN SITE DETAILS, SOIL E EROSION AND SEDIN EROSION AND SEDIN
STRUCTURAL 00S-001 00S-101 00S-102 00S-501 00S-502 00S-503 00S-504	SIMULATOR BUILDING SIMULATOR BUILDING SIMULATOR BUILDING SIMULATOR BUILDING SIMULATOR BUILDING SIMULATOR BUILDING
ARCHITECTURA 00A-101 00A-102 00A-103 00A-104 00A-105 00A-201 00A-202 00A-301 00A-302 00A-302 00A-401 00A-501 00A-502 00A-601	AL SIMULATOR BUILDING SIMULATOR BUILDING

INDEX OF DRAWINGS

FJS

INDEX

E SITE PLAN

RVEY PLAN

IMENT CONTROL PLAN BORING LOCATION PLAN AND BORING LOGS IMENT CONTROL GENERAL NOTES IMENT SITE DETAILS

- NG GENERAL STRUCTURAL NOTES
- NG FOUNDATION PLAN
- NG SECOND LEVEL FRAMING PLAN NG - STRUCTURAL SECTIONS AND DETAILS
- NG STRUCTURAL SECTIONS AND DETAILS NG - STRUCTURAL SECTIONS AND DETAILS
- NG STRUCTURAL SECTIONS AND DETAILS
- NG FIRST FLOOR PLAN
- NG SECOND FLOOR PLAN
- NG ROOF PLAN
- NG FIRST FLOOR REFLECTED CEILING PLAN
- NG SECOND FLOOR REFLECTED CEILING PLAN NG - EXTERIOR ELEVATIONS
- NG EXTERIOR ELEVATIONS
- NG BUILDING SECTIONS
- NG WALL SECTIONS
- NG ENLARGED STAIR PLANS AND SECTION
- NG ENLARGE NG - DETAILS
- NG DETAILS
- SIMULATOR BUILDING SCHEDULES, DOOR, FRAME, AND WALL TYPES

INDEX OF DRAWINGS

MECHANICAL00M-001MECHANICAL LEGEND00M-101SIMULATOR BUILDING - FIRST FLOOR HVAC PLAN00M-102SIMULATOR BUILDING - SECOND FLOOR HVAC PLAN00M-501SIMULATOR BUILDING - MECHANICAL DETAILS00M-502SIMULATOR BUILDING - MECHANICAL DETAILS00M-601SIMULATOR BUILDING - MECHANICAL SCHEDULES00M-602SIMULATOR BUILDING - MECHANICAL CONTROLS00M-603SIMULATOR BUILDING - MECHANICAL CONTROLS00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLANELECTRICALELECTRICAL LEGEND00E-002ELECTRICAL LEGEND	
00M-101SIMULATOR BUILDING - FIRST FLOOR HVAC PLAN00M-102SIMULATOR BUILDING - SECOND FLOOR HVAC PLAN00M-501SIMULATOR BUILDING - MECHANICAL DETAILS00M-502SIMULATOR BUILDING - MECHANICAL DETAILS00M-601SIMULATOR BUILDING - MECHANICAL SCHEDULES00M-602SIMULATOR BUILDING - MECHANICAL CONTROLS00M-603SIMULATOR BUILDING - MECHANICAL CONTROLS PLUMBING 00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLAN ELECTRICAL 00E-001ELECTRICAL LEGEND	
00M-102SIMULATOR BUILDING - SECOND FLOOR HVAC PLAN00M-501SIMULATOR BUILDING - MECHANICAL DETAILS00M-502SIMULATOR BUILDING - MECHANICAL DETAILS00M-601SIMULATOR BUILDING - MECHANICAL SCHEDULES00M-602SIMULATOR BUILDING - MECHANICAL CONTROLS00M-603SIMULATOR BUILDING - MECHANICAL CONTROLS00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLANELECTRICALELECTRICAL LEGEND	
00M-501SIMULATOR BUILDING - MECHANICAL DETAILS00M-502SIMULATOR BUILDING - MECHANICAL DETAILS00M-601SIMULATOR BUILDING - MECHANICAL SCHEDULES00M-602SIMULATOR BUILDING - MECHANICAL CONTROLS00M-603SIMULATOR BUILDING - MECHANICAL CONTROLS PLUMBING 00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLAN ELECTRICAL 00E-001ELECTRICAL LEGEND	
00M-502SIMULATOR BUILDING - MECHANICAL DETAILS00M-601SIMULATOR BUILDING - MECHANICAL SCHEDULES00M-602SIMULATOR BUILDING - MECHANICAL CONTROLS00M-603SIMULATOR BUILDING - MECHANICAL CONTROLS PLUMBING 00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLAN ELECTRICAL 00E-001ELECTRICAL LEGEND	
00M-601SIMULATOR BUILDING - MECHANICAL SCHEDULES00M-602SIMULATOR BUILDING - MECHANICAL CONTROLS00M-603SIMULATOR BUILDING - MECHANICAL CONTROLS PLUMBING 00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLAN ELECTRICAL 00E-001ELECTRICAL LEGEND	
00M-602 SIMULATOR BUILDING - MECHANICAL CONTROLS 00M-603 SIMULATOR BUILDING - MECHANICAL CONTROLS PLUMBING OOP-101 SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLAN ELECTRICAL 00E-001 ELECTRICAL LEGEND	
00M-603SIMULATOR BUILDING - MECHANICAL CONTROLSPLUMBING 00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLANELECTRICAL 00E-001ELECTRICAL LEGEND	
PLUMBING SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLAN ELECTRICAL ELECTRICAL LEGEND	
00P-101SIMULATOR BUILDING - FIRST FLOOR PLUMBING PLANELECTRICALELECTRICAL LEGEND	
ELECTRICAL 00E-001 ELECTRICAL LEGEND	
00E-001 ELECTRICAL LEGEND	
00E-002 ELECTRICAL LEGEND	
00E-100 SIMULATOR BUILDING - ELECTRICAL SITE PLAN	
00E-101 SIMULATOR BUILDING - FIRST FLOOR POWER PLAN	
00E-102 SIMULATOR BUILDING - SECOND FLOOR POWER PLAN	
00E-111 SIMULATOR BUILDING - FIRST FLOOR LIGHTING PLAN	
00E-112 SIMULATOR BUILDING - SECOND FLOOR LIGHTING PLAN	
00E-121 SIMULATOR BUILDING - FIRST FLOOR AUXILIARY SYSTEMS PLAN	
00E-122 SIMULATOR BUILDING - SECOND FLOOR AUXILIARY SYSTEMS PLA	١N
00E-501 SIMULATOR BUILDING - ELECTRICAL SCHEDULES AND DIAGRAMS	j.
00E-502 SIMULATOR BUILDING - ELECTRICAL SCHEDULES AND DIAGRAMS	į
00E-503 SIMULATOR BUILDING - ELECTRICAL DETAILS	
FIRE PROTECTION	
00F-001 SIMULATOR BUILDING - FIRE PROTECTION GENERAL NOTES	
00FA-101 SIMULATOR BUILDING - FIRE ALARM PLAN FIRST FLOOR	
00FA-102 SIMULATOR BUILDING - FIRE ALARM PLAN SECOND FLOOR	
00FA-501 SIMULATOR BUILDING - FIRE ALARM DETAILS	
00FP-101 SIMULATOR BUILDING - FIRE PROTECTION PLAN FIRST FLOOR	
00FP-102 SIMULATOR BUILDING - FIRE PROTECTION PLAN SECOND FLOOR	
00FP-501 SIMULATOR BUILDING - FIRE PROTECTION DETAILS	

A/C	AIR CONDITIONING	CJ	CONSTRUCTION JOINT	EWEF
A/E A	ARCHITECT/ENGINEER AMPERE	CKT CL	CIRCUIT CENTERLINE, CLASS, CLOSE	EWTB EXC
AB	ANCHOR BOLT	CLG	CEILING	EXH
ABAN ABC	ABANDON AGGREGATE BASE COURSE	CLKG CLR	CAULKING CLEAR	EXP EXST
ABT AC	ABOUT ALTERNATING CURRENT	CMH CMP	COMMUNICATION MANHOLE CORRUGATED METAL PIPE	EXT
ACK	ACKNOWLEDGE	CMU	CONCRETE MASONRY UNIT	F TO F
ACP	ACOUSTIC CEILING PANEL, ASPHALTIC CONCRETE PAVEMENT	CO COL	CLEANOUT, CONCRETE OPENING COLUMN	F&B FAB
ACST	ACOUSTIC	СОМ	COMMON	FB
ACT AD	ACOUSTICAL CEILING TILE ADDENDUM, AREA DRAIN	COMB COMM	COMBINATION COMMUNICATION	FBD FBG
ADDL	ADDITIONAL	COMP	COMPOSITION, COMPRESSIBLE, COMPOSITE	FBM
ADH ADJ	ADHESIVE ADJUSTABLE, ADJACENT	CON	COMPOSITE	FBO FC
ADW AF	AVERAGE DRY WEATER AMP FRAME, AMP FUSE	CONC CONN	CONCRETE CONNECTION	FCA FD
AFF	ABOVE FINISH FLOOR	CONST	CONSTRUCTION	FDC
AFG AGGR	ABOVE FINISH GRADE AGGREGATE	CONT COOR	CONTINUOUS COORDINATE	FDR FDTN
AI	AREA INLET, ANALOG INPUT	CORR		FE
AIC ALIG	AMPS INTERRUPTING CAPACITY ALIGNMENT	CP CPLG	CHECKER PLATE, CONTROL POINT COUPLING	FEC FES
ALT ALUM	ALTERNATE, ALTITUDE ALUMINUM	CRL CSC	CORROSION-RESISTANT LINING COMPRESSION SLEEVE COUPLING	FEXT FF
AM	ACOUSTICAL MATERIAL	CSK	COUNTERSINK	FG
AMB ANC	AMBIENT ANCHOR	CSS CT	CLINIC SERVICE SINK CERAMIC TILE	FH FIG
AO	ANALOG OUTPUT	CTJ	CONTRACTION JOINT	FIN
AP APRX	ACCESS PANEL APPROXIMATE	CTR CTRL	CENTER CONTROL	FJT FL
APVD ARCH	APPROVED ARCHITECTURAL	CVT CU	CULVERT COPPER, CUBIC	FLEX FLG
ASSY	ASSEMBLY	CW	CLOCKWISE	FLOR
AT ATM	ACOUSTICAL TILE, AMP TRIP ATMOSPHERE	CY	CUBIC YARD	FLR FLS
AUTO	AUTOMATIC	d	PENNY (NAIL MEASURE)	FN
AUX AVE	AUXILIARY AVENUE	D DB	DEEP, DIFFUSER, DRAIN DUCT BANK, DECIBEL, DRY BULB	FO FOB
AVG AWG		DBA DBL	DEFORMED BAR ANCHOR	FOC
AWG	AMERICAN WIRE GAGE ACOUSTICAL WALL TILE	DBL	DOUBLE DIRECT CURRENT	FOF FOM
В ТО В	BACK TO BACK	DEG DEG C	DEGREE DEGREE CENTIGRADE	FOS FOT
BAL	BALANCE	DEG F	DEGREE FAHRENHEIT	FPT
BBD BC	BULLETIN BOARD BASE CABINET, BOTTOM CHORD,	DEMO DEP	DEMOLITION DEPRESSED	FR FRP
	BOLT CENTER, BOLT CIRCLE	DEPT	DEPARTMENT	FRTM
BD BE	BOARD BOTH ENDS, BELL END	DET DI	DETAIL DROP INLET, DUCTILE IRON, DIGITAL INPUT	FS FT
BF	BOTH FACES, BOTTOM FACE, BLIND FLANGE, BOARD FEET	DIA DIAG	DIAMETER DIAGONAL, DIAGRAM	FTG FUR
BITUM	BITUMINOUS	DIFF	DIFFERENTIAL, DIFFERENCE	FURN
BKG BL	BACKING BASE LINE	DIM DISCH	DIMENSION DISCHARGE	FUT FV
BLDG	BUILDING	DIST	DISTANCE, DISTRIBUTION	FW
BLK BLKG	BLOCK BLOCKING	DIV DL	DIVISION DEAD LOAD	FWD FWE
BM BOC	BENCHMARK, BEAM BACK OF CURB	DMJ DMPF	DOUBLE MECHANICAL JOINT DAMP PROOFING	FXTR
BOD	BOTTOM OF DUCT	DN	DOWN	G
BOG BOL	BOTTOM OF GRILLE BOTTOM OF LOUVER, BOLLARD	DO DP	DISSOLVED OXYGEN, DIGITAL OUTPUT, DITTO DEPTH	GA GAL
BOP BOR	BOTTOM OF PIPE	DPDT DPST		GALV GB
BOT	BOTTOM OF REGISTER BOTTOM	DPST	DOUBLE POLE, SINGLE THROW DOWN SPOUT	GC
BOU BP	BOTTOM OF UNIT BASE PLATE	DT DUP	DOUBLE TEE, DRIP TRAP ASSEMBLY DUPLICATE	GD GEN
BRG	BEARING	DWG	DRAWING	GFCI
BRGP BRKT	BEARING PLATE BRACKET	DWL DWR	DOWEL DRAWER	GFMU GG
BS BTU	BOTH SIDES BRITISH THERMAL UNIT	E	EAST	GJ GL
BTW	BETWEEN	EA	EACH, EXHAUST AIR	GLB
BTWLD BU	BUTT WELD BELL UP, BUILT-UP	EC ECC	ELECTRICAL CONTRACTOR ECCENTRIC	GND GP
BUR	BUILT-UP ROOFING	ED	EQUIPMENT DRAIN	GR
BW BYP	BOTH WAYS BYPASS	EDB EE	ELECTRICAL DUCT BANK EACH END	GRTG GSB
стос	CENTER TO CENTER	EF EFF	EACH FACE EFFLUENT, EFFICIENCY	GT GVL
C&G	CURB AND GUTTER	EHH	ELECTRICAL HANDHOLE	GW
C CAB	CHANNEL SHAPE, CENTIGRADE, CONDUIT CABINET	EIFS	EXTERIOR INSULATION & FINISH SYSTEM	GWB GB
CAP	CAPACITY	EJ	EXPANSION JOINT	
CAT CAV	CATALOG, CATALOGIORY CAVITY	EL ELEC	ELBOW, ELEVATION ELECTRICAL	H HB
CB CCB	CATCH BASIN CONCRETE BLOCK	EMBD EMER	EMBEDDED EMERGENCY	HBD HC
CCW	COUNTER CLOCKWISE	EMH	ELECTRICAL MANHOLE	
CDF CE	CONTROLLED-DENSITY FILL CONCRETE EDGE	ENCL ENGR	ENCLOSURE ENGINEER	HD HDR
CER	CERAMIC	ENTR	ENTRANCE	HDW
CF CFL	CUBIC FEET (FOOT) COUNTER FLASHING	EOP EQ	EDGE OF PAVEMENT EQUAL	HEX HGR
CHBD CHD	CHALKBOARD CHORD	EQUIP EQUIV	EQUIPMENT EQUIVALENT	HH HID
CHFR	CHAMFER	EQUIV	EACH SIDE, EQUAL SPACE,	НМ
CHH CI	COMMUNICATION HANDHOLE CURB INLET	ESEW	EMERGENCY SHOWER EMERGENCY SHOWER AND EYE WASH	HORIZ HP
CIP	CAST-IN-PLACE	EST	ESTIMATE	HPC
CIPB	CONCRETE INTERLOCKING PAVER BALLAST	EW	EACH WAY, EMERGENCY EYE/FACE WASH	HPS HPT
CIRC	CIRCULATION, CIRCULAR	EWC	ELECTRIC WATER COOLER	HR

ed for Bids

EACH WAY, EACH FACE	HS	HEADED STUD, HIGH STRENGTH	MON	MONUMENT
EACH WAY, TOP AND BOTTOM EXCAVATION	HSS HT	HOLLOW STRUCTURAL SHAPE HEIGHT	MPT MRGWB	MALE PIPE THREAD MOISTURE-RESISTANT
EXHAUST	HTG	HEATING	WINGVID	GYPSUM WALLBOARD
EXPANSION, EXPOSED	HV	HIGH VOLTAGE	MS	MOP SINK
EXISTING EXTERIOR, EXTERNAL, EXTENSION	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	MSL MT	MEAN SEA LEVEL MOUNT
	HWD	HARDWOOD	MU	MASONRY UNIT, MAKE-UP AIR UNIT
FACE TO FACE	HWL	HIGH WATER LEVEL	MULL	MULLION
FACE AND BYPASS FABRICATE	HYD HZ	HYDRAULIC HERTZ, CYCLES PER SECOND	MV MW	MEDIUM VOLTAGE MONITORING WELL
FLOOR BEAM	112	HERTZ, CTOLES FER SECOND		
FIBERBOARD	ID	INSIDE DIAMETER, INTERIOR DIMENSION	N	NORTH, NEUTRAL
FIBERGLASS BOARD FOOT MEASURE	IE IF	INVERT ELEVATION, FOR EXAMPLE INSIDE FACE	NA NAT	NOT APPLICABLE NATURAL, NATIONAL
FURNISHED BY OWNER	IH	INTAKE HOOD	NC	NORMALLY CLOSED
FLUSHING CONNECTION	IMP	IMPACT	NEG	NEGATIVE
FLANGED COUPLING ADAPTER FLOOR DRAIN	IN INC	INCH INCLUDE, INCANDESCENT	NF NIC	NEAR FACE, NON-FUSED NOT IN CONTRACT
FLEXIBLE DUCT CONNECTION	INF	INFLUENT	NO	NORMALLY OPEN, NUMBER
FEEDER	INSTR		NOM	
FOUNDATION FLANGED END	INSUL INT	INSULATION INTERIOR, INTERSECTION	NPS NPT	NOMINAL PIPE SIZE NATIONAL PIPE THREAD
FIRE EXTINGUISHER CABINET	INTR	INTERMEDIATE, INTERIOR	NS	NEAR SIDE
	INV IPS	INVERT IRON PIPE SIZE	NTS	
FIRE EXTINGUISHER FAR FACE, FACTORY FINISH, FLAT FACE	IPT	INTERNAL PIPE THREAD	NWL	NORMAL WATER LEVEL
FINISHED GRADE	IR	INSIDE RADIUS, IRON ROD	O TO O	OUT TO OUT
FIRE HYDRANT	IRR ISO	IRRIGATION	OA OC	OUTSIDE AIR, OVERALL ON CENTER
FIGURE FINISH	150	ISOMETRIC	OCPD	OVER CURRENT PROTECTION DEVICE
FLUSH JOINT	JB	JUNCTION BOX	OD	OUTSIDE DIAMETER
FLOW, FLOW LINE FLEXIBLE	JCT JF	JUNCTION JOINT FILLER	OED OF	OPEN END DUCT OUTSIDE FACE, OFFICE FURNISHING
FLEXIBLE	JST	JOIST	OFCI	OWNER FURNISHED CONTRACTOR
FLUORESCENT	JT	JOINT		INSTALLED
FLOOR FLASHING, FLUSH	к	KIP	OFOI OG	OWNER FURNISHED OWNER INSTALLED ORIGINAL GROUND
FENCE	KB	KNEE BRACE	OG	OVERHEAD
FINISHED OPENING, FIBER OPTIC	KCMIL	THOUSAND CIRCULAR MILS	OPNG	OPENING
FLAT ON BOTTOM FACE OF CONCRETE, FACE OF CURB	KD KO	KNOCK DOWN KNOCK OUT	OPP OPT	OPPOSITE OPTIONAL
FACE OF FINISH	KSI	KIPS PER SQUARE INCH	OR	OUTSIDE RADIUS
FACE OF MASONRY	KW	KILOWATT	ORD	OVERFLOW ROOF DRAIN
FACE OF STUDS FLAT ON TOP	1.	ANGLE, LENGTH, LAVATORY, LINTEL	ORIG OVFL	ORIGINAL OVERFLOW
FEMALE PIPE THREAD	LAD	LADDER	OVHG	OVERHANG
FRAME	LAM	LAMINATE	OZ	OUNCE
FIBERGLASS REINFORCED PLASTIC FIRE RETARDANT TREATED MATERIAL	LATL LB	LATERAL LAG BOLT, POUND	Р	PAINT
FLOOR SINK, FAR SIDE	LCTB	LIQUID CHALK AND TACK BOARD	PA	PUBLIC ADDRESS
FEET, FOOT	LDG	LANDING	PAR	PARALLEL, PARAPET
FOOTING, FITTING FURRED, FURRING	LDR LE	LEADER LIFTING EYE	PB PBD	PANIC BAR, PULL BOX PARTICLE BOARD
FURNITURE, FURNISH	LF	LINEAR FOOT	PC	POINT OF CURVE, PIECE, PRECAST
	LG	LONG	PCC	POINT OF COMPOUND CURVATURE
FACE VELOCITY FIELD WELD, FIRE WALL	LH LIN	LEFT HAND LINEAR	PCF PCT	POUNDS PER CUBIC FOOT PERCENT
FORWARD	LIQ	LIQUID	PE	PLAIN END
FURNISHED WITH EQUIPMENT FIXTURE	LLH LLV	LONG LEG HORIZONTAL	PED PEN	PEDESTAL
FIATURE		LONG LEG VERTICAL LIQUID MARKER LECTURE UNIT	PERF	PENETRATION PERFORATED
GRILLE, GROUND	LNG	LONGITUDINAL	PERM	PERMANENT
GAGE (METAL THICKNESS) GALLON	LOC LP	LOCATION LOW POINT	PERP PF	PERPENDICULAR POWER FACTOR
GALVANIZED	LPS	LOW-PRESSURE SODIUM	PFMU	PREFACED MASONRY UNIT
GRAB BAR, GRADE BREAK	LR	LONG RADIUS	PH	PHASE
GROOVED COUPLING GUARD	LT LTD	LEFT LIMITED	PHWW PI	PEAK HOUR WET WEATHER POINT OF INTERSECTION
GENERAL	LTG	LIGHTING	PKG	PACKAGE
GROUND FAULT CIRCUIT INTERRUPTER	LTL	LINTEL	PL	PLATE, PROPERTY LINE,
GROUND FACE MASONRY UNIT GUTTER GRADE	LTNG LV	LIGHTNING LOW VOLTAGE	PLAS	PRECAST LINTEL PLASTER
GROOVED JOINT	LVL	LAMINATED VENEER LUMBER	PLAT	PLATFORM
GLASS	LVR	LOUVER	PLBG	
GLASS BLOCK, GLULAM BEAM GROUND	LW LWC	LIGHTWEIGHT LIGHTWEIGHT CONCRETE	PLF PNEU	POUNDS PER LINEAR FOOT PNEUMATIC
GUY POLE	LWL	LOW WATER LEVEL	POL	POLISH
GRADE			POS	POSITIVE, POSITION
GRATING GYPSUM SHEATHING BOARD	MA MACH	MIXED AIR MACHINED	PP PRC	POLYPROPYLENE, POWER POLE POINT OF REVERSE CURVATURE
GREASE TRAP	MAINT	MAINTENANCE	PREF	PREFINISHED
GRAVEL GUY WIRE	MAN	MANUAL	PREFAB	PREFABRICATED
GYPSUM WALLBOARD	MATL MAX	MATERIAL MAXIMUM	PRELIM PREP	PRELIMINARY PREPARE
GYPSUM BOARD	MB	MACHINE BOLT	PRES	PRESSURE
HIGH	MBR MC	MEMBER MECHANICAL CONTRACTOR,	PRI PROP	PRIMARY PROPERTY, PROPOSED
HOSE BIBB	IVIC	MECHANICAL CONTRACTOR, MECHANICAL COUPLING,	PROT	PROTECTION
HARDBOARD		MOMENT CONNECTION	PS	PIPE SUPPORT
HANDICAPPED, HOLLOW CORE, HORIZONTAL CURVE, HORIZONTAL CENTERLINE	MCB MCJ	METAL CORNER BEAD MASONRY CONTROL JOINT	PSF PSI	POUNDS PER SQUARE FOOT POUNDS PER SQUARE INCH
HEAD, HOT DIP	MDMJ	MODIFIED DOUBLE MECHANICAL JOINT	PSIA	POUNDS PER SQUARE INCH ABSOLUTE
HEADER	MECH	MECHANICAL	PSIG	POUNDS PER SQUARE INCH GAGE
HARDWARE HEXAGONAL	MED MFR	MEDIUM MANUFACTURER	PST PT	PRESTRESSED POINT, POINT OF TANGENCY
HANGER	MH	MANUFACTORER MANHOLE, METAL HALIDE	PTN	PARTITION
	MIN	MINIMUM	PVC	POLYVINYL CHLORIDE, POINT OF
HIGH-INTENSITY DISCHARGE HOLLOW METAL	MIR MISC	MIRROR MISCELLANEOUS	PVMT	VERTICAL CURVE PAVEMENT
HORIZONTAL	MJ	MECHANICAL JOINT	PWD	PLYWOOD
HIGH POINT, HORSEPOWER	ML		PWJ	PLYWOOD WEB JOIST
HORIZONTAL POINT OF CURVATURE HIGH-PRESSURE SODIUM	MLO MMB	MAIN LUGS ONLY MEMBRANE	PZ	PIEZOMETER
HORIZONTAL POINT OF TANGENCY	МО	MASONRY OPENING	Q	RATE OF FLOW
HOSE REEL, HOUR	MOD	MODULAR, MODIFY	QT QTR	QUARRY TILE QUARTER
	1			

PROJECT MANAGER	TOM SVOBODA
CIVIL	B. WECKERLIN
STRUCTURAL	J. LENZ
ARCHITECT	S. HEANEY
MECHANICAL	J. LEWIS
ELECTRICAL	W. DAVIDSON
FIRE PROTECTION	A. NOWKA
PROJECT NUMBER	10173455
	CIVIL STRUCTURAL ARCHITECT MECHANICAL ELECTRICAL FIRE PROTECTION



HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003

6

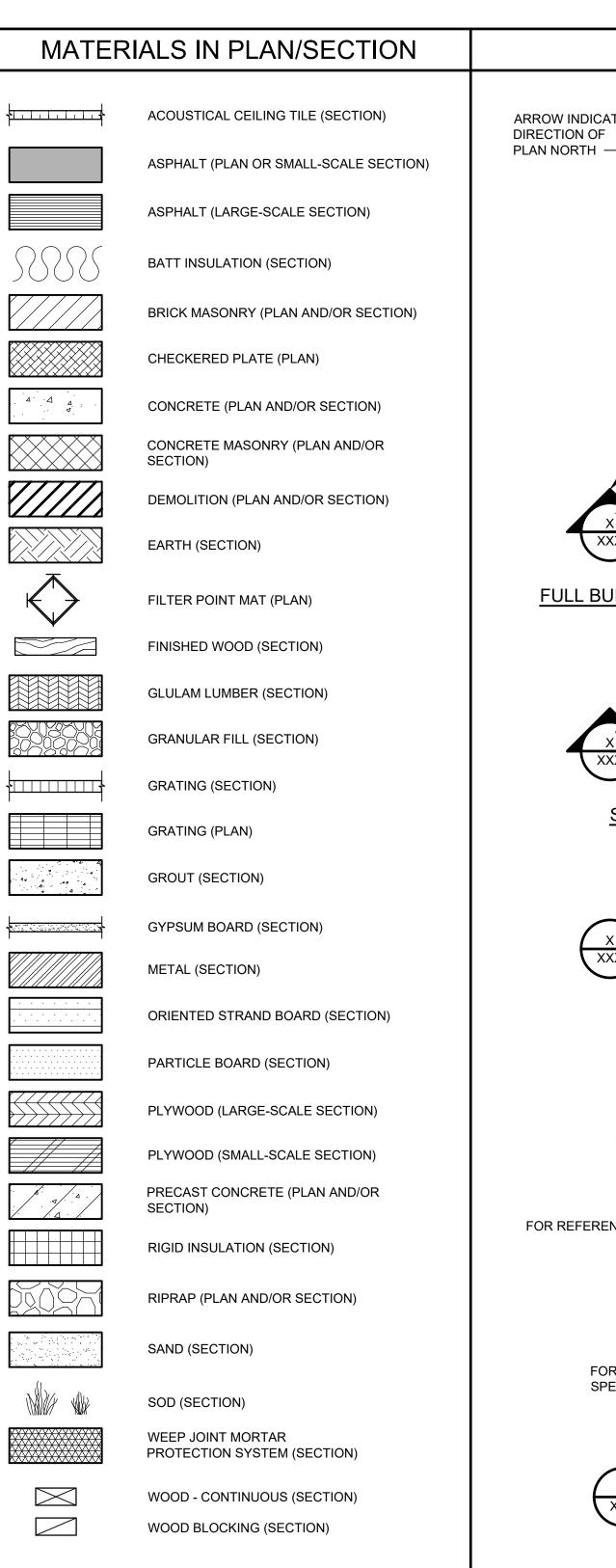
QTY QUAL	QUANTITY QUALITY	THK THRESH	THICK THRESHOLD
		TKBD	TACK BOARD
R&R R&S	REMOVE AND REPLACE REMOVE AND SALVAGE	TO TOB	TOP OF TOP OF BOLT, TOP OF BANK,
R RA	RADIUS, REGISTER, RISER RETURN AIR	TOC	TOP OF BEAM, TOP OF BERM TOP OF CURB, TOP OF CONCRETE
RB RCPT	RESILIENT BASE, ROCK BERM RECEPTACLE	TOD TOF	TOP OF DUCT TOP OF FOOTING
RD	ROOF DRAIN	TOG	TOP OF GRATING
REC RECD	RECESS RECEIVED	TOL TOM	TOLERANCE, TOP OF LEDGER TOP OF MASONRY
RECT RED	RECTANGULAR REDUCER	TOP TOPO	TOP OF PLATE TOPOGRAPHY
REF	REFERENCE	TOS	TOP OF SLAB, TOP OF STEEL,
REINF REM	REINFORCING REMOVE	TOW	TOE OF SLOPE TOP OF WALL
REQD RESIL	REQUIRED RESILIENT	ТР	TOILET PARTITION, TELEPHONE POLE, TOE PLATE, TRAP PRIMER
RET	RETAINING, RETURN	TPD	TOILET PAPER DISPENSER
REV RF	REVISION, REVERSE RESILIENT FLOORING	TPG TR	TOPPING, THROUGH PLATE GIRDER TRANSOM
RFG RFL	ROOFING REFLECTED, REFLECTOR	TRANS TRD	TRANSITION TRENCH DRAIN
RGH	ROUGH	ТҮР	TYPICAL
RGS RGS-PVC	RIGID GALVANIZED STEEL PVC COATED RGS	U	URINAL
RH	RELIEF HOOD, RIGHT HAND, RELATIVE HUMIDITY	UG ULT	UNDERGROUND ULTIMATE
RL	REQUIRED LAP	UNFN	UNFINISHED
RLFA RND	RELIEF AIR ROUND	UNO UTIL	UNLESS NOTED OTHERWISE UTILITY
RNG RO	RUNNING ROUGH OPENING	V	VENT, VELOCITY, VOLT
ROW	RIGHT-OF-WAY	VA	VOLT AMPERE
RPM	REVOLUTIONS PER MINUTE, ROOT PRODUCTION METHOD	VAC VAR	VACUUM VARNISH, VARIABLE,
RR	RAILROAD		VOLT AMPERES REACTIVE
RSP RT	ROCK SLOPE PROTECTION RIGHT	VB	VAPOR BARRIER, VINYL BASE, VALVE BOX
RVT RY	RESILIENT VINYL TILE READY	VC VCP	VERTICAL CURVE VITRIFIED CLAY PIPE
		VCT	VINYL COMPOSITION TILE,
S SA	SOUTH, SINK SUPPLY AIR	VEL	VERTICAL CENTERLINE VELOCITY
SAMU SAN	SOUND-ABSORBING MASONRY UNIT SANITARY	VENT VERT	VENTILATION VERTICAL
SB	SPLASH BLOCK	VERTS	VERTICAL REINFORCING
SC SCH	SOLID CORE SCHEDULE	VG VIF	VERTICAL GRAIN VERIFY IN FIELD
SCHEM	SCHEMATIC	VIN	VINYL
SCN SE	SCREEN STEEL/ALUMINUM EDGE	VOL VPC	VOLUME VERTICAL POINT OF CURVATURE
SEC SECT	SECONDARY, SECONDS SECTION	VPI VPT	VERTICAL POINT OF INTERSECTION VERTICAL POINT OF TANGENCY
SEP	SEPARATE	VS	VERSUS, VAPOR SEAL
SF SG	SQUARE FOOT, SILT FENCE SHEET GLASS, SEALANT GROOVE	VTR VWC	VENT THROUGH ROOF VINYL WALL COVERING
SH SHT	SHOWER SHEET	W/	WITH
SHTG	SHEATHING	W/O	WITHOUT
SIL SIM	SILENCE SIMILAR	W	WATT, WEST, WIDE, WINDOW, WIRE, WIDE FLANGE BEAM
SJ	SLAB JOINT	WB	WOOD BASE
SL SLTD	SLOPE, STEEL LINTEL SLOTTED	WC WD	WATER CLOSET, WATER COLUMN WOOD, WIDTH
SLV SMLS	SLEEVE SEAMLESS	WF WG	WIDE FLANGE, WASH FOUNTAIN WIRE GLASS, WATER GAGE
SOG	SLAB ON GRADE	WH	WALL HYDRANT, WEEP HOLE
SP SPA	SOUNDPROOF, STANDPIPE SPACING	WI WL	WROUGHT IRON WATER LEVEL
SPEC SPLY	SPECIFICATION SUPPLY	WLD WM	WELDED WIRE MESH
SPST	SINGLE POLE SINGLE THROW	WP	WEATHERPROOF
SPT SQ	SET POINT SQUARE	WS WSCT	WATERSTOP, WATER SURFACE WAINSCOT
SR	SHORT RADIUS	WT	WEIGHT, WATER TIGHT
SS SST	SERVICE SINK STAINLESS STEEL	WTHP WWF	WATERPROOF, WORKING POINT WELDED WIRE FABRIC
ST STA	STREET STATION	XP	EXPLOSION-PROOF
STD	STANDARD	XS	EXTRA STRONG
STIF STIR	STIFFENER STIRRUP	XSECT XXS	CROSS SECTION DOUBLE EXTRA STRONG
STL	STEEL		
STOR STR	STORAGE STRUCTURAL, STRAIGHT, STAIR	YH YS	YARD HYDRANT YIELD STRENGTH
SUB SUC	SUBSTITUTE SUCTION		
SUSP	SUSPENDED	<u>GENERAL N</u>	IOTES:
SY SYM	SQUARE YARD SYMBOL	1. THESE ABBRE	EVIATIONS APPLY TO THE ENTIRE SET
SYMM	SYMMETRICAL	OF CONTRACT	
SYN SYS	SYNTHETIC SYSTEM		BREVIATIONS DOES NOT IMPLY THAT
T&B	TOP AND BOTTOM	ALL ABBREVIA DRAWINGS.	ATIONS ARE USED IN THE CONTRACT
T&G	TONGUE AND GROOVE		
T TA	TILE, TREAD TOILET ACCESSORY, TEMPERED AIR		NS SHOWN ON THIS SHEET INCLUDE DF A WORD. FOR EXAMPLE, "MOD"
TAN	TANGENT	MAY MEAN MO	DDIFY OR MODIFICATION; "INC" MAY
TBM TCE	TEMPORARY BENCHMARK TEMPORARY CONSTRUCTION EASEMENT		ED OR INCLUDING AND "REINF" MAY REINFORCE OR REINFORCING.
TEF	TROWELED EPOXY FLOORING		_ SYMBOLS, PROJECT PIPING SYSTEMS AND
TEMP THD	TEMPORARY, TEMPERATURE THREAD	EQUIPMENT I	DENTIFICATIONS SHEET FOR
			CIFIC EQUIPMENT SYMBOLS, BBREVIATIONS, AND PIPING SYSTEM
		ABBREVIATIO	

7 8

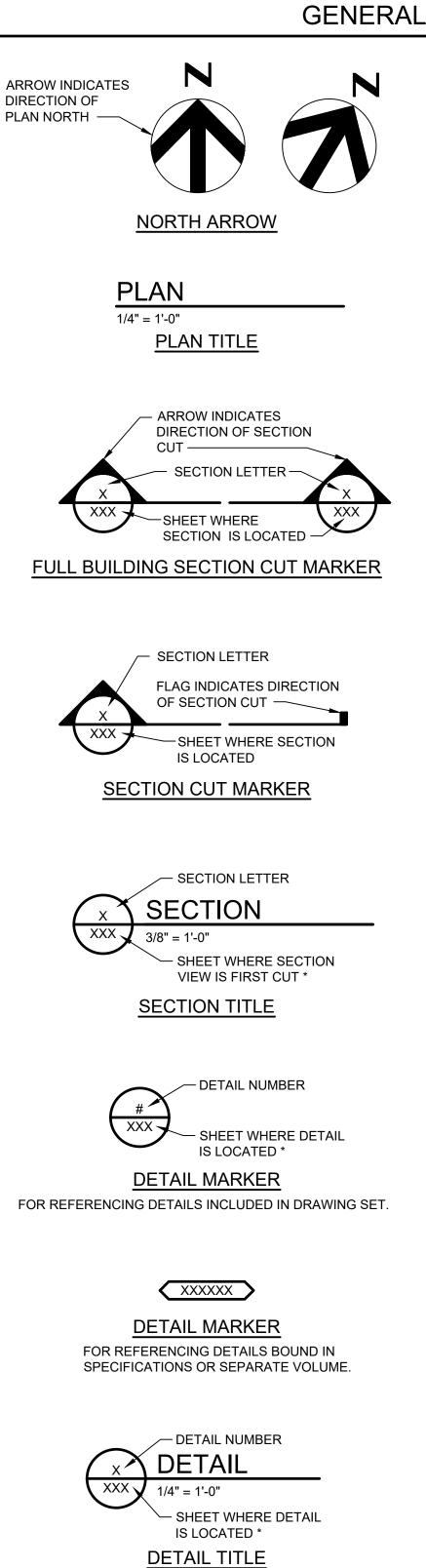
ABBREVIATIONS

FILENAME 00G-001.DWG SCALE NONE

SHEET 00G-001



2



3

* EXCEPTIONS WHERE THE SHEET NUMBER IS REPLACED BY A DASH (1) FOR COMMON DETAILS, SECTIONS, ELEVATIONS OR DETAILS THA ARE CUT OR CALLED OUT ON MULTIPLE SHEETS. 2) SECTIONS, ELEVATIONS OR DETAILS THAT ARE LOCATED ON THE SAME SHEET THEY ARE CUT OR CALLED OUT ON.

ISSUE	DATE	DESCRIPTION	
А	5/5/2020	Issued for Bids	

	SYMBOLOGY	IDENTIFICATION SYMBOLOGY	SHEET
		<u>PIPING</u>	
BANDER DETERNE DELLAWIDE ALLANDER SENCE	ELEVATION NUMBER	FIGURE 36"-PLE EXAMPLE	TO BE EDITED ON THE PROJECT MA
		LINE SIZE 36"	
		SERVICE PLANT EFFLUENT	02 BUILDING OF
		EQUIPMENT IDENTIFICATION	DISCIPLINE D
	X	ALTERNATIVE 1	
		NPWP2023 FIGURE EXAMPLE	C CIV
	INDICATES SHEET WHERE		U MUI
	×		A ARC D PRC
LEEVATED PUMP 23 LEEVATED ALTERNATIVE 2 DEEVATED PUMP 23 LEEVATED PUMP 23	MOLTIFEE ELEVATION OR FHOTO MARKER	BUILDING OR	P PLU
NUMBER ALTERNATIVE 2 ARCHITECTURAL NON-0710° ARCHITECTURAL NON-0710° NUMBER ACCHITECTURAL NUMBER ACCHITECTURAL NUMBER ACCHITECTURAL NUMBER ACCHITECTURAL NUMBER ACCHITECTURAL NUMBER ACCHITECTURAL NUMBER COLUMN GRID LINE SCOMMERIANDON COLUMN GRID LINE		NUMBER	E ELE
Image: Second Secon	NUMBER	NUMBER POMP 23	
Image: Number Point or work 1<		NPWP-23	DRAWING TY
Beneficial in the symbol of th	SHEET WHERE POINT OF VIEW	FIGURE EXAMPLE	1 PLA
PAGE COLUMN GRID LINE CENTERLINE			3 SEC 4 LAR
PUMP23 9 50 EXAMPLE COUNTY HOLE ARCHITECTURAL ROOM NUMBER COUNTY HOLE ROOM NUMBER COUNTY HOLE ROOM NUMBER COUNTY HOLE ROOM NUMBER COUNTY HOLE ROOM NUMBER COUNTY HOLE COUNTY HOLE ROOM NUMBER COUNTY HOLE COUNTY HOLE SHEET NUMBER COUNTY HOLE SHEET NUMBER SHEET NUMBER COUNTY HOLE SHEET NUMBER COUNTY HOLE SHEET NUMBER COUNTY HOLE SHEET NUMBER COUNTY HOLE SHEET NUMBER COUNTY HOLE SHEET NUMBER SHEET N			6 SCH
ARCHITECTURAL CRAMPLE ARCHITECTURAL CRAMPLE ROOM ROOM NUMBER ROOM ROOM NUMBER ROOM COLUMN GRID LINE ROOM ROUNN GRID LINE ROOM WALL TYPE ROOM WINDOW TYPE ROOM ROOM NICHLANEOUNT FIRE ROOM ROOM NICHLANEOUNT FIRE ROOM ROOM NICHLANEOUNT FIRE ROOM ROOM NICHLANEOUNT FIRE ROOM WINDER SAMPLE SHEET SAMPLE SHEET SAMPLE SHEET SAMPLE SHEET SAMPLE SHEET SAMPLE SHEET SAMPLE SHEET	TARGET ELEVATION		
ARCHITECTURAL 0 2 AREA DESIGNAT AREA DESIGNAT DISOPUNE DESIGNATION SHEET TUMBER Image: Market Symposities SHEET TURBER Image: Marke			EXAMPLE
ARCHITECTURAL NOOM NAME COM NAME NAME COM NAME NAME NAME NAME NAME NAME NAME NAM	$\mathbf{\Psi}$		GRAVITY THICKE
NAME NOM XXXX ROOM NUMBER Image: Street Number Street			0 2 AREA DESIGNAT
NAME ROOM NUMBER Image: Sheet Type Destrict the symbol line Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrict the symbol line Image: Sheet Type Destrist the symbol line Image: S			
Image: Control of the second secon	NAME		
COLUMN GRID LINE COLUMN GRID LINE/CENTERLINE COLUMN GRID LINE/CENTERLINE	KOOM NUMBER		SHEET TYPE DES
A COLUMN GRID LINE X WALL TYPE X UNDOW TYPE X LOUVER X LOUVER X ACCESSORY, FURNITURE, ACCESSORY, FURNITURE, EQUIPMENT IDENTIFIER KEY NOTE DESIGNATION KEY NOTE DESIGNATION V KEY NOTE NUMBER GENERAL LINE SYMBOLOGY 4-HOUR FIRE RATED WALL 3-HOUR FIRE RATED WALL 2-HOUR FIRE RATED WALL 1-HOUR FIRE RATED WALL			LI SHEET NUMBER
Image: Second	A COLUMN GRID LINE		0 2 SAMPLE SHEET I
X LOUVER X ACCESSORY, FURNITURE, AND MISCELLANEOUS EQUIPMENT IDENTIFIER KEY NOTE DESIGNATION KEY NOTE NUMBER Image: State of the symbol Image: State of the symbol GENERAL LINE SYMBOLOGY Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State of the symbol Image: State	X WALL TYPE		
ACCESSORY, FURNITURE, AND MISCELLANEOUS EQUIPMENT IDENTIFIER KEY NOTE DESIGNATION KEY NOTE NUMBER GENERAL LINE SYMBOLOGY 4-HOUR FIRE RATED WALL 3-HOUR FIRE RATED WALL 2-HOUR FIRE RATED WALL 1-HOUR FIRE RATED WALL COLUMN GRID LINE/CENTERLINE	X WINDOW TYPE		
ADD MISCELLANEOUS EQUIPMENT IDENTIFIER KEY NOTE DESIGNATION KEY NOTE NUMBER GENERAL LINE SYMBOLOGY 4-HOUR FIRE RATED WALL 3-HOUR FIRE RATED WALL 2-HOUR FIRE RATED WALL 1-HOUR FIRE RATED WALL COLUMN GRID LINE/CENTERLINE	X LOUVER		
Column Grid Line/CenterLine	AND MISCELLANEOUS		
Column Grid Line/CenterLine			
# GENERAL LINE SYMBOLOGY 4-HOUR FIRE RATED WALL 3-HOUR FIRE RATED WALL 2-HOUR FIRE RATED WALL 1-HOUR FIRE RATED WALL 1-HOUR FIRE RATED WALL COLUMN GRID LINE/CENTERLINE			
(-). (-).	#		
(-). (-).	GENERAL LINE SYMBOLOGY		
(-). (-).			
(-). (-).	4-HOUR FIRE RATED WALL		
(-). IAT COLUMN GRID LINE/CENTERLINE	3-HOUR FIRE RATED WALL		
(-) COLUMN GRID LINE/CENTERLINE	2-HOUR FIRE RATED WALL		
IAT	1-HOUR FIRE RATED WALL		

PROJECT MANAGER	TOM SVOBODA
CIVIL	B. WECKERLIN
 STRUCTURAL	J. LENZ
 ARCHITECT	S. HEANEY
 MECHANICAL	J. LEWIS
ELECTRICAL	W. DAVIDSON
 FIRE PROTECTION	A. NOWKA
PROJECT NUMBER	10173455



HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003

T NAMING CONVENTION		
GNATION		
N AN A PROJECT BASIS. TO BE DETERMINED BY IANAGER, THEN ADDED TO THE GENERAL LEGEND.		
OR AREA NAME OR AREA NAME OR AREA NAME		D
DESIGNATOR & DISCIPLINE ORDER		
ENERAL URVEYING/MAPPING EMOLITION IVIL		
ANDSCAPING ULTI-DISCIPLINE TRUCTURAL RCHITECTURAL ROCESS		
ECHANICAL (HVAC) LUMBING		
RE PROTECTION LECTRICAL ISTRUMENTATION		
YPE DESIGNATOR		
ENERAL (SYMBOLS, LEGENDS) LANS LEVATIONS		
ECTIONS ARGE SCALE VIEWS ETAILS		
CHEDULES AND DIAGRAMS ROFILES D REPRESENTATIONS		С
KENER ARCHITECTURAL SECTION, SHEET 01		
DISCIPLINE SIGNATOR 3 SECTION SHEET TYPE		
ESIGNATOR		
R A 3 0 1		
T NUMBER		
		В
	GENERAL NOTES:	
	 THIS IS A STANDARD SHEET SHOWING COMMON SYMBOLOGY. ALL SYMBOLS ARE NOT NECESSARILY USED ON THIS PROJECT. 	
	2. SCREENING OR SHADING OF WORK IS USED TO INDICATE EXISTING COMPONENTS OR TO DE-EMPHASIZE PROPOSED IMPROVEMENTS TO	A
	HIGHLIGHT SELECTED TRADE WORK. REFER TO CONTEXT OF EACH SHEET FOR USAGE.	

7

8



FILENAME 00G-001.DWG SCALE NONE

SHEET 00G-002

FIRE PROTECTION / LIFE SAFETY CODE ANALYSIS THE SCOPE OF WORK INCLUDES AN BUILDING ADDITION TO BUILDING 82. THE EXISTING BUILDING UTILITIE THE THE ADDITION TO SERVE THE NEW AREAS. THE PROJECT ADDITION IS FOR THE OPERATION OF A NEV FLIGHT SIMULATOR. THE BUILDING WILL TREATED AS A SINGLE BUILDING. THE 35 PERCENT DESIGN DELI OF 2019. PER UFC 1-200-01 1-5 THIS DATE SETS THE APPLICABLE STANDARDS FOR THE PROJECT. ALL AR COMPLY WITH NEW CODE REQUIREMENTS.	V LOCKHEED MARTIN C-130J VERABLE WAS SEPTEMBER
REFERENCED CODES AND STANDARDS:AIR FORCE OCCUPATIONAL SAFETY AND HEALTH STANDARDAFMAN 91-203AIR FORCE OCCUPATIONAL SAFETY, FIRE AND HEALTH STANDARDS	
UNIFIED FACILITIES CRITERIA (UFC)UFC 1-200-01(JUNE 20, 2016, CHANGE 2, NOV 1, 2018) DOD BUILDING CODE (GENERAL REQUIREMEUFC 3-230-01(NOV 1, 2012, CHANGE 2, JULY 1, 2014) WATER STORAGE, DISTRIBUTION AND TRANSMUFC 3-600-01(AUGUST 8, 2016, CHANGE 3, MAY 10, 2019) FIRE PROTECTION ENGINEERING FOR FACUFC 4-010-01(DECEMBER 12, 2018) DOD MINIMUM ANTITERRORISM STANDARDS FOR BUILDINGSUFC 4-021-01(APRIL 9, 2008) DESIGN AND 0&M: MASS NOTIFICATION SYSTEMSUFC 4-021-01(OCTOBER 25, 2018) ECB - NEW REQUIREMENTS FOR VISUAL NOTIFICATION FOR MASSAF ETL 01-18(OCT 14, 2001) ELECTRONIC EQUIPMENT INSTALLATIONANG ETL 01-1-1(2004) AIR NATIONAL GUARD DESIGN POLICYANG ETL 15-01-03(MAY 01, 2015) FIRE PROTECTION DESIGN GUIDANCE	AISSION CILITIES
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)NFPA 1FIRE CODE, 2018 EDITIONNFPA 10STANDARD FOR PORTABLE FIRE EXTINGUISHERS, 2018 EDITIONNFPA 13STANDARD FOR THE INSTALLATION OF AUTOMATIC SPRINKLERS, 2019 EDITIONNFPA 24STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCNFPA 51BSTANDARD FOR FIRE PREVENTION DURING WELDING, CUTTING AND OTHER HOT WORK, 2019 EDNFPA 54NATIONAL FUEL GAS CODE, 2018 EDITIONNFPA 70NATIONAL FUEL GAS CODE, 2017 EDITIONNFPA 72NATIONAL FIRE ALARM CODE, 2019 EDITIONNFPA 75PROTECTION OF INFORMATION TECHNOLOGY EQUIPMENT, 2017 EDITIONNFPA 76PROTECTION OF TELECOMMUNICATION FACILITIES, 2016 EDITIONNFPA 76PROTECTION OF THE INSTALLATION OF AIR-CONDITIONING AND VENTILATION SYSTEMS, 2018 EDNFPA 101LIFE SAFETY CODE, 2018 EDITION.NFPA 102STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATION SYSTEMS, 2018 EDNFPA 103STANDARD FOR THE INSTALLATION OF AIR-CONDITIONING AND VENTILATION SYSTEMS, 2018 EDNFPA 104LIFE SAFETY CODE, 2018 EDITION.NFPA 205STANDARD ON TYPES OF BUILDING CONSTRUCTION, 2018 EDITIONNFPA 216SAFEGUARDS DURING CONSTRUCTION, 2019 EDITIONNFPA 229RECOMMEND PRACTICE FOR FIRE FLOW TESTING AND MARKING OF HYDRANTS, 2019 EDITIONNFPA 220STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENTNFPA 221SAFEGUARDS DURING CONSTRUCTION, 2019 EDITIONNFPA 221SAFEGUARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENTNFPA 220STAND	NITION
OTHER REFERENCES INTERNATIONAL CODE COUNCIL, INTERNATIONAL BUILDING CODE (IBC), 2015 EDITION (AS MODIFIED BY UFC OSHA STANDARD 1910.1000 OCCUPATIONAL SAFETY AND HEALTH STANDARDS, TOXIC AND HAZARDOUS SU C-1300J MAINTENANCE AND AIRCREW TRAINING SYSTEMS (MATS) III - CDRL 1008 TRAINING FACILITIES REPO EC/EM WEAPON SYSTEMS TRAINER (WST) #14 HARRISBURG AIR NATIONAL GUARD (ANG) REV - 24 JULY 2019	BSTANCES ORT,
IBC CHAPTER 3 AND UFC 3-600-01 APPLY.IBC APPLIES TO OCCUPANCY CLASSIFICATION AS IT RELATES TO BUILDING HEIGHT, BUILDING AREA, BUILDING SEPARATION AND OCCUPANCY SEPARATION.• IBC OCCUPANCY CLASSIFICATIONS - MIXED USE AND OCCUPANCY - NON-SEPARATED OCCUPANCY: GROUP B GROUP F-1BUSINESS BUSINESSGROUP F-1	UFC 1-200-01 § 2-3 UFC 3-600-01 § 3-2.1.2 IBC § 508.3 IBC § 304 (BUSINESS) IBC § 306 (FACTORY)
USE AND OCCUPANCY CLASSIFICATION: NFPA 101 APPLIES TO OCCUPANCY CLASSIFICATION AS IT RELATES TO FIRE/SMOKE RESISTANCE RATING OF INTERIOR NON-LOAD BEARING PARTITIONS (OTHER THAN OCCUPANCY SEPARATION), INTERIOR FINISH, FIRE PROTECTION FEATURES AND MEANS OF EGRESS. • NFPA OCCUPANCY CLASSIFICATIONS - MIXED OCCUPANCIES: NEW BUSINESS INDUSTRIAL OCCUPANCIES ORDINARY HAZARD	UFC 3-600-01 § 3-3.1.2 NFPA 101 § 6.1.14.3 NFPA 101 CHAPTER 38 NFPA 101 CHAPTER 40
 GENERAL BUILDING HEIGHTS AND AREAS: IBC CHAPTER 5 AND UFC 3-600-01 APPLY. TYPE IIB CONSTRUCTION (IBC) - (000) PER NFPA 220 BUILDING IS FULLY PROTECTED WITH AUTOMATIC SPRINKLERS. ALLOWABLE GROSS SQUARE FEET OF BUILDING:46500 GSF ACTUAL EXITING BUILDING 82 BUILDING AREA: 3,497 SF: LEVEL ONE: 3,497 SF; LEVEL TWO: N/A ACTUAL NEW BUILDING AREA: 4,964 SF: LEVEL ONE: 3,923 SF; LEVEL TWO: 1,041 SF TOTAL BUILDING AREA (NEW AND EXISTING) 8,461 SF ALLOWABLE HEIGHT: 75 FT AND 3 STORIES (SPRINKLED GROUP B, AND F-1 BUILDINGS) ACTUAL BUILDING HEIGHT AND STORIES: 45 FT AND 2 STORIES NO BUILDING AREA FRONTAGE INCREASE REQUIRED OR PROVIDED PER IBC 506.2.4. 	UFC 1-200-01 § 2-5 IBC § 602 & TABLE 601 IBC § 503 & 504 IBC § 503 & 504 TABLE 504.3 & IBC § 504.4 IBC § 506 BUILDING AREA
TYPES OF CONSTRUCTION:IBC CHAPTER 6 AND UFC 3-600-01 APPLY.• TYPE IIB CONSTRUCTION (IBC) - (000) PER NFPA 220REQUIRED STRUCTURAL ELEMENTS:• STRUCTURAL FRAME (INCLUDING COLUMNS, GIRDERS, AND TRUSSES): 0 HOUR• BEARING WALLS - EXTERIOR SEPARATION DISTANCE >30 FT: 0 HOUR• BEARING WALLS - INTERIOR:0 HOUR• NON-BEARING WALLS - EXTERIOR SEPARATION DISTANCE >30 FT: 0 HOUR• NON-BEARING WALLS & PARTITIONS - INTERIOR:0 HOUR• FLOOR CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS): 0 HOUR• ROOF CONSTRUCTION (INCLUDING SUPPORTING BEAMS AND JOISTS): 0 HOUR	UFC 1-200-01 § 2-6 IBC § 602 & TABLE 601
FIRE AND SMOKE PROTECTION FEATURES: IBC CHAPTER 7 AND UFC 3-600-01 APPLY CONFORM TO THE REQUIREMENTS OF NFPA 101 CHAPTER 8, EXCEPT WHERE IBC CHAPTERS 5 AND 6 SPECIFICALLY REFERENCE IBC CHAPTER 7.	UFC 1-200-01 § 2-7 UFC 3-600-01 § 7-1
 ROOM SEPARATION: A SMOKE PARTITON WILL BE PROVIDED TO SEPARATE AN AREA HAVING A DEGREE OF HAZARD GREATER THAN THAT NORMAL TO THE GENERAL OCCUPANCY WHERE AUTOMATIC SPRINKLER PROTECTION IS PROVIDED. APPLICABLE AREAS: JANITOR CLOSETS, TOOL ROOMS, STORAGE ROOMS AND MECHANICAL ROOMS 	NFPA 101 § 8,7,1,2 (1), 38.3.2.1
INTERIOR FINISHES: USE UFC 3-600-01 AND UFC 3-120-10 IN LIEU OF IBC CHAPTER 8. CONFORM TO THE REQUIREMENTS OF NFPA 101 CHAPTER 10.	UFC 1-200-01 § 2-8 UFC 3-600-01 § 8-1
OPENINGS AND PENETRATIONS: THROUGH PENETRATIONS OF FIRE RESISTANCE RATED CONSTRUCTION PROTECTED BY AN APPROVED FIRE STOP SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E 814 OR UL 1479 REQUIRED.	NFPA 101 § 8.3.5 IBC 714

1

ISSUE	DATE	DESCRIPTION	
Α	5/5/2020	Issued for Bids	

FIRE PROTECTION SYSTEMS: USE UFC 3-600-01 IN LIEU OF IBC CHAPTER 9.	UFC 1-200-01 § 2-9	 ACCESS-CONTROLLED EGRESS DOOR ASSEMBLIES DOOR ASSEMBLIES IN THE MEANS OF EGRESS WILL BE PERMITTED TO BE EQUIPPED WITH ELECTRICAL LOCKING HARDWARE THAT PREVENTS EGRESS, PROVIDED THAT THE FOLLOWING ARE MET: SENSOR WILL BE PROVIDED ON THE EGRESS SIDE, ARRANGED TO UNLOCK THE DOOR IN THE DIRECTION 	NFPA 101 § 7.2.1.6.2 NFPA 101 § 7.2.1.6.2(1)
FIRE DEPARTMENT VEHICLE ACCESS (SEE CODE COMPLIANCE SITE PLAN) • ONE MEANS OF PAVED ALL-WEATHER GROUND ACCESS TO ALLOW EMERGENCY VEHICLES UNIMPEDED	UFC 3-600-01 § 9-1.1	 SENSOR WILL BE FROMDED ON THE EGRESS SIDE, ARRANGED TO UNLOCK THE DOOR IN THE DIRECTION OF EGRESS UPON DETECTION OF APPROACHING OCCUPANT. DOOR LEAVE WILL AUTOMATICALLY UNLOCK IN THE DIRECTION OF TRAVEL UPON LOSS OF POWER TO 	NFPA 101 § 7.2.1.6.2(1)
ACCESS TO THE FACILITY WILL BE PROVIDED. • ALL-WEATHER PAVED ACCESS WILL START AT THE ROAD AND TERMINATE NO FARTHER THAN 33 FT	UFC 3-600-01 § 9-1.1	 THE SENSOR OR TO THE PART OF THE SYSTEM THAT LOCKS THE DOOR. DOOR LOCKS WILL BE ARRANGED TO UNLOCK IN THE DIRECTION OF EGRESS FROM A MANUAL RELEASE 	NFPA 101 § 7.2.1.6.2(3)
FROM AN EXTERIOR DOOR ACCESSIBLE TO FIRE DEPARTMENT INGRESS. • DIMENSIONS OF FIRE LANES AND TURNAROUNDS WILL COMPLY WITH NFPA 1. • ALL-WEATHER GROUND ACCESS WILL BE LOCATED WITHIN 150 FT OF FIRE DEPARTMENT CONNECTIONS.	UFC 3-600-01 § 9-1.3 UFC 3-600-01 § 9-1.4	 DEVICE COMPLYING WITH THE FOLLOWING: MANUAL RELEASE DEVICE WILL BE LOCATED ON THE EGRESS SIDE 40 IN TO 48 IN ABOVE THE FLOOR AND WITHIN 60 IN. OF THE SECURED DOOR OPENING. 	NIT / 101 g / 2.1.0.2(0)
FIRE FLOW FOR FACILITIES		 THE MANUAL RELEASE DEVICE WILL BE READILY ACCESSIBLE AND CLEARLY IDENTIFIED BY A SIGN THAT READS "PUSH TO EXIT". 	
 FIRE FLOW FOR SPRINKLERED FACILITIES MUST BE A MINIMUM OF 1,000 GPM AT 20 PSI. FIRE FLOW IS INDEPENDENT OF SPRINKLER SYSTEM DEMAND. 	UFC 3-600-01 § 9-2.1 UFC 3-600-01 § 9-2.1	 WHEN OPERATED, THE MANUAL RELEASE DEVICE WILL RESULT IN DIRECT INTERRUPTION OF POWER TO THE LOCK, INDEPENDENT OF LOCKING SYSTEM ELECTRONICS. 	
 SERVICE MAINS AND LATERALS SERVICE MAINS AND SERVICE LATERALS MUST COMPLY WITH AWWA M31, NFPA 24 AND UFC 3-230-01. 	UFC 3-600-01 § 9-3.1.1	 ACTIVATION OF THE BUILDING SPRINKLER SYSTEM OR FIRE PROTECTION SIGNALING SYSTEM WILL UNLOCK THE EGRESS DOORS IN THE DIRECTION OF EGRESS AND THEY WILL REMAIN UNLOCKED UNTIL THE FIRE PROTECTIVE SIGNALING SYSTEM IS MANUALLY RESET. 	NFPA 101 § 7.2.1.6.2(6)
 SERVICE MAINS MUST BE SIZED TO CARRY FIRE FLOW AND DOMESTIC AND INDUSTRIAL DEMANDS. SERVICE MAINS MUST NOT BE DEAD-ENDED AND MUST BE LOOPED TO PROVIDE AT LEAST 50 PERCENT OF THE REQUIRED FIRE FLOW IN CASE OF A SINGLE BREAK. 	UFC 3-600-01 § 9-3.2.1 UFC 3-600-01 § 9-3.2.2-3	 THE EGRESS SIDE OF ACCESS-CONTROLLED EGRESS DOORS WILL BE PROVIDED WITH EMERGENCY LIGHTING IN ACCORDANCE WITH NFPA 101 § 7.9. 	NFPA 101 § 7.2.1.6.2(7)
 NOT MORE THAN 2 HYDRANTS CAN BE LOCATED ON A SERVICE LATERAL. MINIMUM SERVICE LATERAL FOR SPRINKLER SYSTEMS MUST NOT BE LESS THAN 6 IN. 	UFC 3-600-01 § 9-3.3.1 UFC 3-600-01 § 9-3.3.2	DOOR LEAF SWING DIRECTION	
 MINIMUM RESIDUAL PRESSURE IN A SERVICE LATERAL MUST NOT BE LESS THAN 20 PSI AT THE GREATER OF FIRE FLOW OR SPRINKLER SYSTEM DEMAND. 	UFC 3-600-01 § 9-3.3.3	 DOORS WILL SWING IN THE DIRECTION OF TRAVEL WHERE SERVING MORE THAN 50 PERSONS. DOOR LEAF ENCROACHMENT 	NFPA 101 § 7.2.1.4.2 (1)
 FIRE HYDRANT PLACEMENT AND COVERAGE (SEE CODE COMPLIANCE SITE PLAN) HYDRANTS WILL NOT BE LOCATED LESS THAN 40 FT. FROM BUILDINGS. NFPA 24 § 7.2.3 		 DOOR LEAVES SWINGING INTO THE THE MEANS OF EGRESS WILL LEAVE NOT LESS THAN ONE HALF OF THE REQUIRED EGRESS WIDTH. 	NFPA 101 § 7.2.1.4.3.1
 HYRANTS MUST BE INSTALLED ADJACENT TO PAVED AREAS, ACCESSIBLE TO FIRE DEPARTMENT APPARATUS. BOLLARDS, FENCING, LANDSCAPING AND SIMILAR OBSTRUCTIONS WILL BE LOCATED AT LEAST 24 IN 	UFC 3-600-01 § 9-3.5.7(B) UFC 3-600-01 § 9-3.5.7(G)	 OCCUPANCY LOAD FACTORS (SEE LIFE SAFETY PLAN FOR ACTUAL OCCUPANT LOADS) ASSEMBLY USE: 15 SQ FT/PERSON GROSS FLOOR AREA 	NFPA 101 § 7.3.1.2
 FROM HYDRANTS. ALL PARTS OF THE FACILITY EXTERIOR MUST BE WITHIN 350 FT OF A HYDRANT WITH CONSIDERATION 	UFC 3-600-01 § 9-3.5.8.2	 BUSINESS USE: 150 SQ FT/PERSON GROSS FLOOR AREA MECHANICAL/ELECTRICAL ROOMS: 500 SQ FT/PERSON GROSS FLOOR AREA 	NFPA 101 § 7.3.1.2 UFC 3-600-01, TABLE 10-1
 GIVEN TO ACCESSIBILITY AND OBSTRUCTIONS (INCLUDING FENCES). AT LEAST ONE HYDRANT MUST BE LOCATED WITHIN 150 FT OF THE FIRE DEPARTMENT CONNECTION. 	UFC 3-600-01 § 9-3.5.8.4	REMOTENESS OF EXITS	
 EXTERIOR STORAGE AND MILITARY/TACTICAL EQUIPMENT/VEHICLE PARKING MUST BE PROVIDED WITH HYDRANTS SPACED AT 300 FT MAXIMUM. 		 MINIMUM DISTANCE SEPARATION BETWEEN EXITS AND EXIT ACCESS DOORS WILL BE NOT LESS THAN 1/3RD THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE BUILDING OR AREA TO BE SERVED. 	NFPA 101 § 7.5.1.3.3
 AUTOMATIC SPRINKLER PROTECTION: AUTOMATIC SPRINKLER PROTECTION IS REQUIRED THROUGHOUT. 		 TRAVEL DISTANCE TO AN EXIT (SEE LIFE SAFETY PLAN FOR PROVIDED) NEW BUSINESS (SPRINKLERED) ALLOWED FROM A SECOND FLOOR: 100 FT 	NFPA 101 § 38.2.4.5
 AUTOMATIC SPRINKLER PROTECTION IS REQUIRED FOR SINGLE STORY TYPE I OR II CONSTRUCTION EXCEEDING 15,000 SQFT. 	UFC 3-600-01 § 9-7.2.1.1	NEW BUSINESS (SPRINKLERED): GENERAL INDUSTRIAL USE (SPRINKLERED): 250 FT	NFPA 101 § 38.2.6.3 NFPA 101 § 40.2.6.1
 ALL WATER BASED SYSTEM MUST HAVE TEST VALVES LOCATED DOWNSTREAM OF THE BACKFLOW PREVENTER WATER SUPPLY REQUIREMENTS: FIRE HYDRANT FLOW TEST(CURRENT) STATIC: 54 PSI 	UFC 3-600-01 § 9.6.6.5.1	COMMON PATH OF TRAVEL (SEE LIFE SAFETY PLAN FOR PROVIDED) NEW BUSINESS (SPRINKLERED): 100 FT	NFPA 101 § 38.2.5.3.1
RESIDUAL: 43 PSI FLOW: 1,048 GPM		GENERAL INDUSTRIAL USE (SPRINKLERED): 100 FT	NFPA 101 § 40.2.5.1
DATE: 06-25-2019 SOURCE: HDR INC. FIRE FLOW:		 DEAD-END LIMITS (SEE LIFE SAFETY PLAN FOR PROVIDED) NEW BUSINESS (SPRINKLERED): 50 FT 	NFPA 101 § 38.2.5.2.1
THE FLOW. THE FLOW HYDRANT WAS LOCATED EAST OF BUILDING 81(WEST CORNER OF BOX CAR ROAD AND OLMSTEAD BLV LOCATED EAST OF BUILDING 79 (WEST SIDE OF OLMSTEAD BLVD). PRELIMINARY SPRINKLER SYSTEM CALCULATIC WATER SUPPLY WILL PROVIDE ADEQUATE WATER PRESSURE AND FLOW FOR THE ANTICIPATED SPRINKLER SYST	ONS INDICATE THAT THE EXISTING	GENERAL INDUSTRIAL USE (SPRINKLERED): 50 FT ILLUMINATION OF MEANS OF EGRESS (SEE LIFE SAFETY PLAN FOR PROVIDED)	NFPA 101 § 40.2.5.1
STANDPIPE SYSTEMS		 MINIMUM ILLUMINATION FOR MEANS OF EGRESS WILL BE AT LEAST 10 FC (MEASURED FROM WALKING SURFACE). MINIMUM ILLUMINATION FOR FLOORS AND OTHER WALKING SURFACES WILL BE AT LEAST 1 FC. 	NFPA 101 § 7.8.1.3 (1) NFPA 101 § 7.8.1.3 (2)
 STANDPIPE SYSTEM IS NOT REQUIRED. THE BUILDING DOES NOT EXCEED 4 STORIES. UFC 3-600-01 § 9-10.2.1 THE DISTANCE FROM EXTERIOR DOORS TO ANY PORTION OF THE BUILDING DOES NOT EXCEED 450 FT. 	UFC 3-600-01 § 9-10.2.2	 MARKING MEANS OF EGRESS (SEE LIFE SAFETY PLAN FOR PROVIDED) EXITS OTHER THAN MAIN EXTERIOR EXIT DOORS THAT ARE OBVIOUSLY AND CLEARLY IDENTIFIED AS EXITS, WILL BE MARKED BY APPROVED SIGNS. 	NFPA 101 § 7.10.1.2.1
PORTABLE FIRE EXTINGUISHERS	-	 ACCESS TO EXITS WILL BE MARKED BY APPROVED, READILY VISIBLE SIGNS IN ALL CASES WHERE THE EXIT OR WAY TO REACH EXITIS NOT READILY APPARENT TO OCCUPANTS. 	NFPA 101 § 7.10.1.5.1
 GENERAL PURPOSE FIRE EXTINGUISHERS ARE NOT REQUIRED FOR FULLY SPRINKLERED BUILDINGS, EXCEPT FOR SPECIAL USES. HARRISBURG ANG FIRE DEPARTMENT REQUESTS THAT EXTINGUISHER BE PROVI 		 A SIGN WITH DIRECTIONAL INDICATOR SHOWING DIRECTION OF TRAVEL WILL BE PLACED IN LOCATIONS WHERE DIRECTION OF TRAVEL TO REACH THE NEAREST EXIT IS NOT APPARENT. 	NFPA 101 § 7.10.2.1
 PORTABLE FIRE EXTINGUISHERS WILL BE LOCATED IN ACCORDANCE WITH NFPA 10. CLEAN AGENT EXTINGUISHERS WILL BE PROVIDED IN ELECTRONIC EQUIPMENT AREAS MECHANICAL ROOMS WILL HAVE BRACKET MOUNTED FIRE EXTINGUISHERS. 	UFC 3-600-01 § 9-17.2.1 UFC 3-600-01 § 9-17.2.2 UFC 3-600-01 § 9-17.3.2	EVERY EXIT OR DIRECTIONAL SIGN WILL BE ILLUMINATED BY A RELIABLE LIGHT SOURCE.	NFPA 101 § 7.10.5.1
 SMOKE CONTROL NOT REQUIRED, (UFC 3-600-01, NFPA 92) 			
SMOKE DETECTION			
 SMOKE DETECTOR ABOVE FIRE ALARM CONTROL UNIT, NOTIFICATION APPLIANCE CIRCUIT POWER EXTENDER AND SUPERVISING STATION TRANSMITTING EQUIPMENT REQUIRED (NFPA 72, SECTION 10.4.4) DUCT SMOKE DETECTION ON AIR HANDLING UNITS GREATER THAN 2,000 CFM SUPPLY AIR CAPACITY REQUIRE FULL AREA SMOKE DETECTION NOT REQUIRED ULTRA-SENSITIVE SMOKE DETECTION (VESDA) IN SIMULATOR BAY. 			
FIRE ALARM AND MASS NOTIFICATION SYSTEM (MNS)			
FIRE ALARM SYSTEM IS REQUIRED THROUGHOUT. • BUSINESS OCCUPANCY - FIRE ALARM REQUIRED FOR OCCUPANT LOAD > 300 PERSONS. OR WITH MORE THAN 50 OCCUPANTS ABOVE OR BELOW LEVEL OF EXIT DISCHARGE.	NFPA 101 § 38.3.4.1		
 MASS NOTIFICIATION SYSTEM IS REQUIRED THROUGHOUT. BUILDING TO BE INHABITED (ROUTINELY OCCUPIED BY 11 OR MORE OCCUPANTS). 	UFC 4-011 § 1-8		
 FIRE ALARM SYSTEM TO BE INSTALL IN ACCORDANCE WITH UFC-3-600-01, NFPA 70, NFPA 72 AND ABA. MASS NOTIFICIATION SYSTEM TO BE INSTALLED IN ACCORDANCE WITH UFC 4-021-01. ANALOG / ADDRESSABLE FIRE ALARM SYSTEM WILL BE PROVIDED. 	UFC 3-600-01 § 9-18.3.1 UFC 3-600-01 § 9-18.4 UFC 3-600-01 § 9-18.4		
 REMOTE ANNUNCIATOR PROVIDED AT DESIGNATED FIRE DEPARTMENT ENTRANCE. MANUAL PULL STATION AT ALL EXIT DOORS. UFC 3-600-01 § 9-18.7.4 	UFC 3-600-01 § 9-18.4.4		
 SPRINKLER WATERFLOW MONITORING - SEPARATE ADDRESS FOR EACH WATERFLOW SWITCH. SPRINKLER VALVE SUPERVISION - SEPARATE ADDRESS FOR EACH VALVE. 	UFC 3-600-01 § 9-18.7.1 UFC 3-600-01 § 9-18.7.3		
 NOTIFICIATION TO BE PROVIDED THROUGHOUT ENTIRE BUILDING. MASS NOTIFICATION SYSTEM PROVIDED WHERE OCCUPANT LOAD IS 11 OR MORE PERSONS. 	UFC 3-600-01 § 9-18.6.1 UFC 4-010-01 § B-4.6		
 LOCAL OPERATOR CONSOLE (LOC) INSTALLED SO OCCUPANTS DO NOT NEED TO TRAVEL MORE THAN 200 FT OR TRAVEL TO OTHER FLOORS TO ACCESS LOC. 	UFC 4-021-01 § 4-5.1		
 VOICE INTELLIGIBILITY TO BE PROVIDED THROUGHOUT (CIS >0.8 OR STI > 0.70). AT ANY AREA WITHIN THE LARGE CAVERNOUS AREA WITHIN FLIGHT SIMULATOR BAY SHALL MAINTAIN NOT 			
 THE FIRE ALARM EVACUATION SIGNAL WILL BROADCAST OVER THE MNS SYSTEM. BREAKER LOCK WILL BE PROVIDED FOR FIRE ALARM AND MNS IAW UFC 3-520-01. SUBCE PROTECTION DEVICE WILL BE PROVIDED FOR ALL 120 VAC DOWERED FIRE ALARM AND 	UFC 3-600-01 § 9-18.1.2.1 UFC 3-600-01 § 9-18.11.1		
 SURGE PROTECTION DEVICE WILL BE PROVIDED FOR ALL 120 VAC POWERED FIRE ALARM AND MNS EQUIPMENT. PROVIDE FIRE ALARM SHUT DOWN OF HVLS FAN / DESTRATIFICATION FAN UPON FLOW SWITCH OPERATION. 	UFC 3-600-01 § 9-18.11.2		
MEANS OF EGRESS (SEE LIFE SAFETY PLANS):			
 USE UFC 3-600-01 IN LIEU OF IBC CHAPTER 10. DO NOT USE IBC CHAPTER 10, EXCEPT WHERE REFERENCED BY ARCHITECTURAL BARRIERS ACT (ABA) S⁻ WHERE ABA STANDARDS REFERENCES PREVIOUS VERSIONS OF IBC, THE APPLICABLE REQUIREMENTS O IBC ARE ACCEPTABLE 			
IBC ARE ACCPETABLE. NFPA 101 EXIT ACCESS CORRIDORS • WHERE AN APPROVED, SUPERVISED AUTOMATIC SPRINKLER SYSTEM IS PROVIDED THROUGHOUT, CORRIDORS NEED NOT BE PROTECTED WITH FIRE RATED CONSTRUCTION.	NFPA 101 § 7.1.3.1 (2), 38.3.6.1.		

7

6

5

4

PROJECT MANAGER	TOM SVOBODA
 CIVIL	B. WECKERLIN
 STRUCTURAL	J. LENZ
 ARCHITECT	S. HEANEY
MECHANICAL	J. LEWIS
 ELECTRICAL	W. DAVIDSON
 FIRE PROTECTION	A. NOWKA
PROJECT NUMBER	10173455



HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003

CODE ANALYSIS

FILENAME 00G-101.DWG SCALE NO SCALE

SHEET 00G-101 Α

С

8

EXISTING 6 IN COMBINED WATER SERVICE

EXISTING POST INDICATOR VALVE TO BUILDING 82 WITH TAMPER SWITCH

1

EXISTING FIRE HYDRANT

2

FIRE HYDRANT TO FDC DISTANCE 83 FT

EXISTING FIRE DEPARTMENT CONNECTION

EXISTING FIRE SPRINKLER RISER

ALL WEATHER Store ALL WEATHER OF OCTOBER OF OF OCTOBEROFOCTOBER OF O EXISTING 10-IN LOOPED WATER MAIN

TURNING RADIUS 15 FT

FIRE DEPARTMENT ACCESS

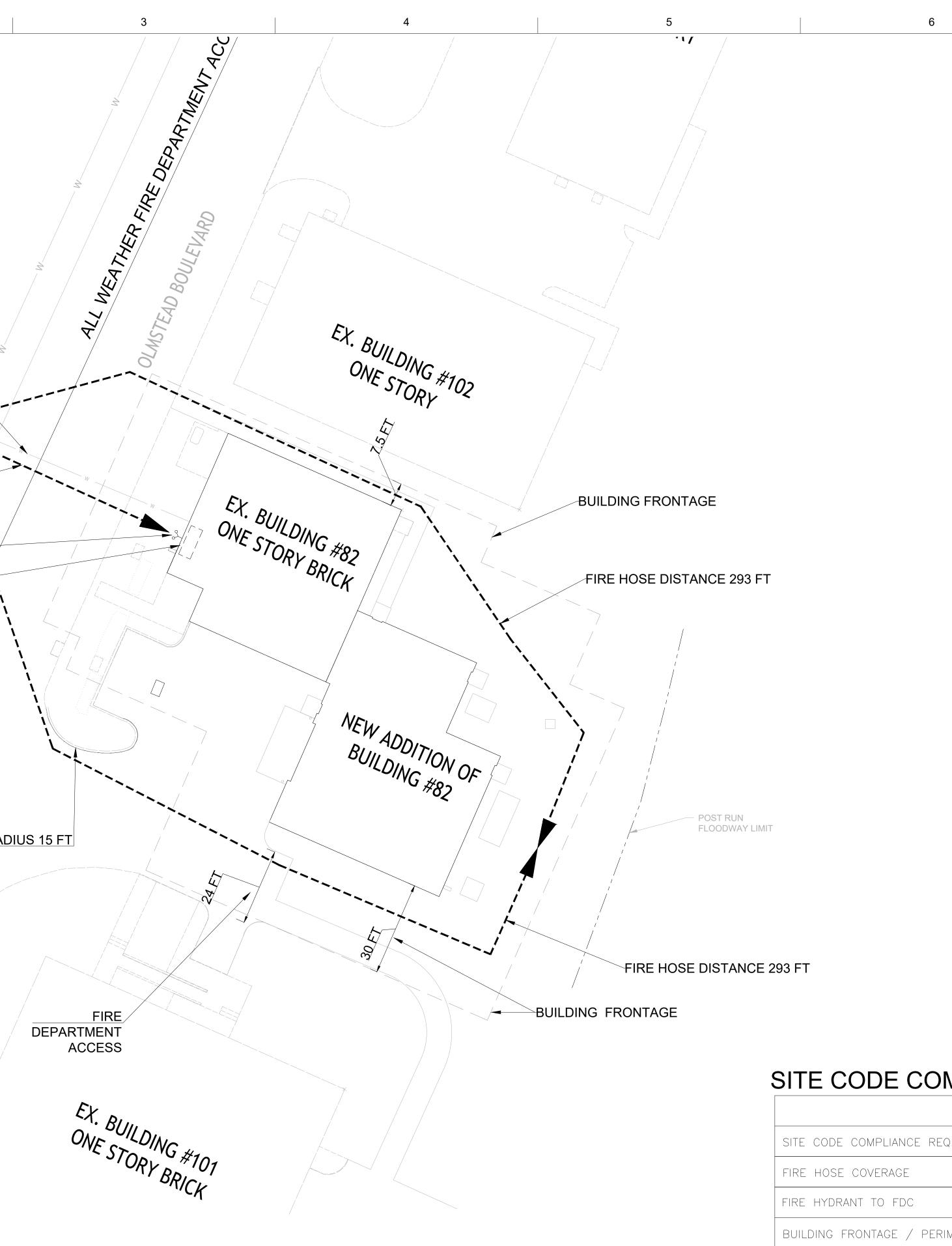
3





+45.ET

A	5/5/2020	Issued for Bids	
ISSUE	DATE	DESCRIPTION	



FIRE	DEPARTMENT	ACCESS

PROJECT MANAGER	TOM SVOBODA
CIVIL	B. WECKERLIN
 STRUCTURAL	J. LENZ
 ARCHITECT	S. HEANEY
MECHANICAL	J. LEWIS
 ELECTRICAL	W. DAVIDSON
 FIRE PROTECTION	A. NOWKA

PROJECT NUMBER 10173455





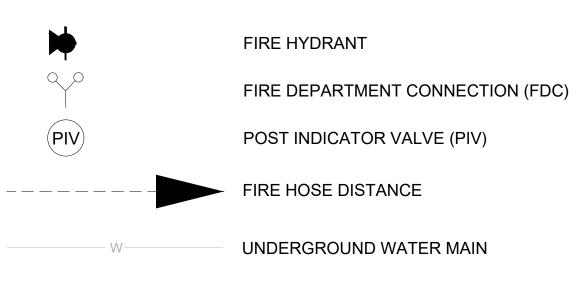
BUILDING CODE SUMMARY

7

UFC 1-200-01 (20 JUN 2016) WITH CHANGE 2 UFC 3-600-01 (8 AUG 2016) WITH CHANGE 3 2015 IBC AS AMENDED BY UFC 1-200-01 2015 IEBC AS AMENDED BY UFC 3-600-01 2018 NFPA 1 FIRE CODE 2018 NFPA 101 LIFE SAFETY CODE

8

SITE CODE COMPLIANCE SYMBOLS



SITE CODE COMPLIANCE DISTANCES

	REQUIRED/ALLOWED	ACTUAL	UFC 3-600-01
QUIREMENTS (UFC -3-600-01 1-7.2.4.2)			
	350 FEET	293 FEET	9-3.5.8.2
	100 FEET	83 FEET	9-3.5.8.4
IMETER	O FEET (NO FRONTAGE REQUIRED)	30 FEET & 7.5 FEET	IBC - 506.2.4
	20 FEET	24 FEET	NFPA 1 – 18.2.3.5.1.1

HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003

CODE COMPLIANCE SITE PLAN

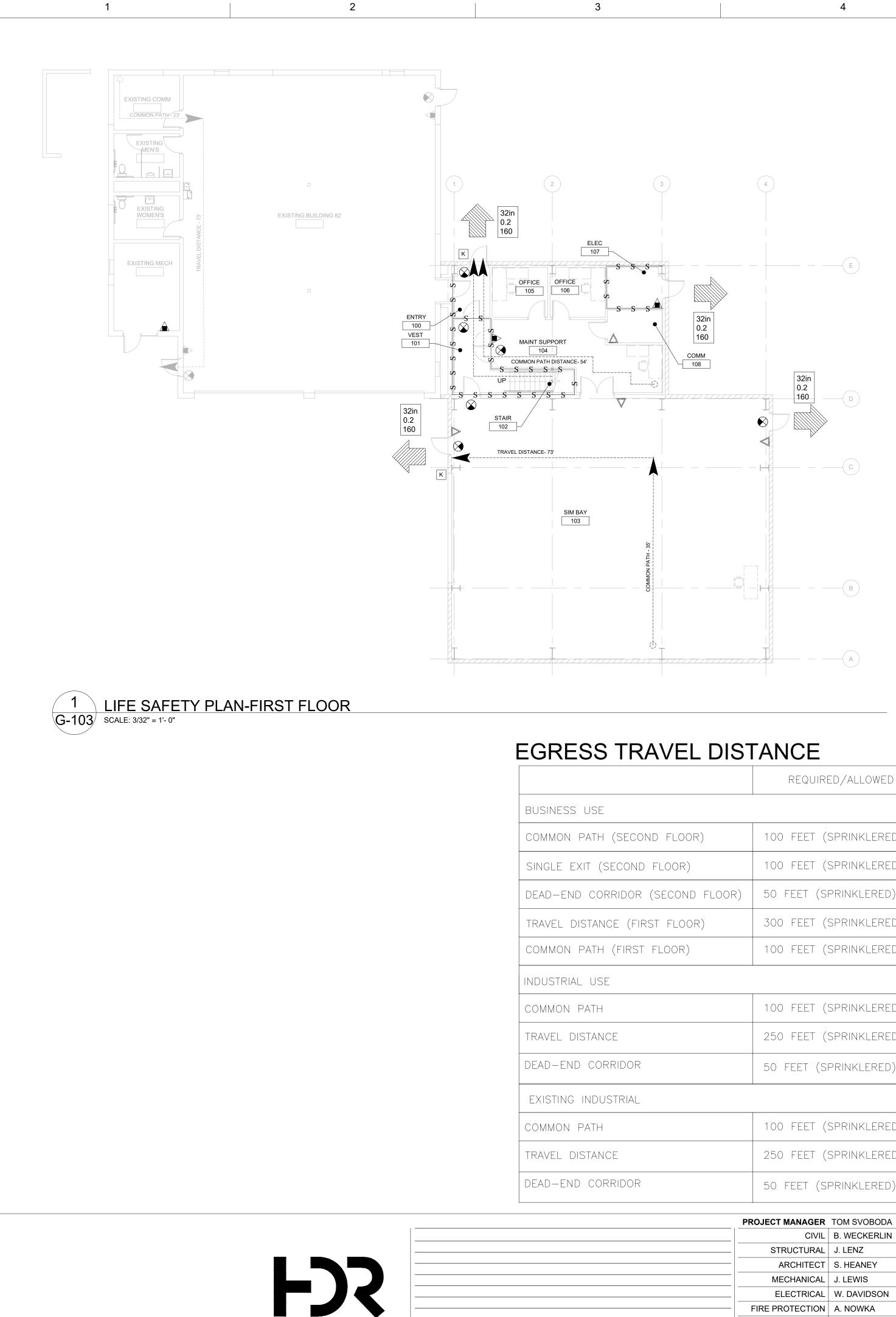


FILENAME 00G-102.DWG **SCALE** 1"=20'



С

D



Α

ISSUE

5/5/2020

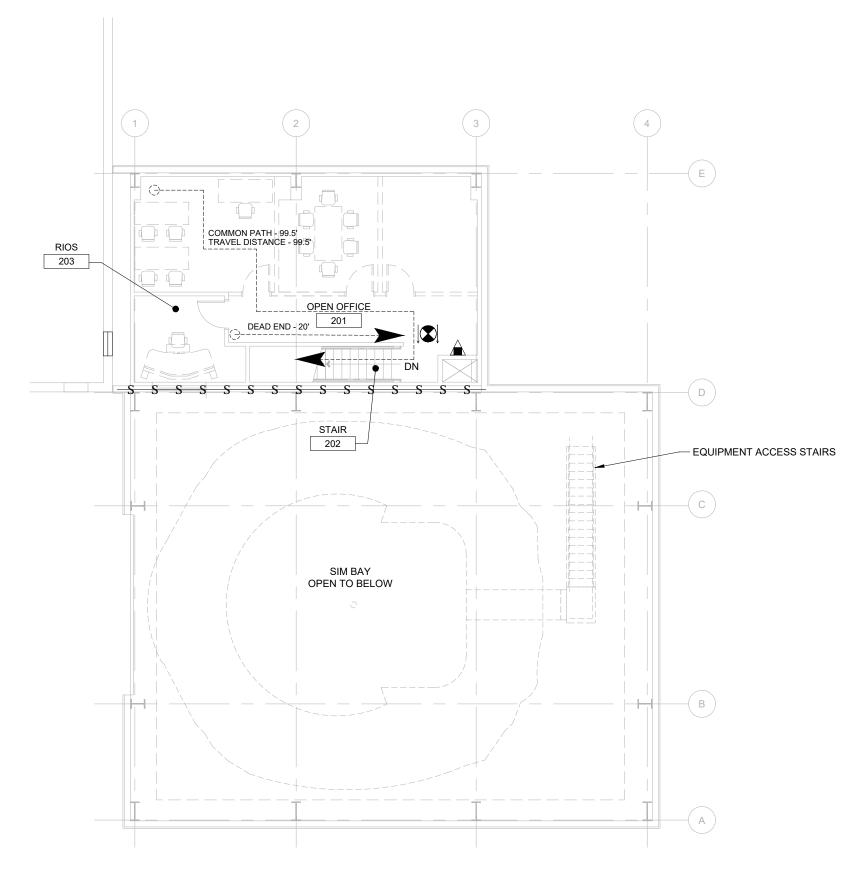
DATE

Issued for Bids

DESCRIPTION

3

1



5



REQUIRED/ALLOWED		ACTUAL	NFPA 101 REF.
(SECOND FLOOR)	100 FEET (SPRINKLERED)	99.5 FEET	38.2.5.3.1
ECOND FLOOR)	100 FEET (SPRINKLERED)	99.5 FEET	38.2.4.5 & .6
RIDOR (SECOND FLOOR)	50 FEET (SPRINKLERED)	20 FEET	38.2.5.2
E (FIRST FLOOR)	300 FEET (SPRINKLERED)	54 FEET	38.2.6
(FIRST FLOOR)	100 FEET (SPRINKLERED)	54 FEET	38.2.5.3.1
	100 FEET (SPRINKLERED)	51 FEET	40.2.5
E	250 FEET (SPRINKLERED)	73 FEET	40.2.6
RIDOR	50 FEET (SPRINKLERED)	N/A	40.2.5
TRIAL	1		
	100 FEET (SPRINKLERED)	N/A	40.2.5
E	250 FEET (SPRINKLERED)	73 FEET	40.2.5
RIDOR	50 FEET (SPRINKLERED)	N/A	42.2.5

 STRUCTURAL	J. LENZ
 ARCHITECT	S. HEANEY
MECHANICAL	J. LEWIS
 ELECTRICAL	W. DAVIDSON
 FIRE PROTECTION	A. NOWKA
PROJECT NUMBER	10173455



OCCU	PANT LOAD				
ROOM	AREA TYPE	LOAD FACTOR	NET AREA	LOAD	NFPA 101 REF.
100	BUSINESS USE	150 SF/ OCC.	60	1	TABLE 7.3.1.2
101	BUSINESS USE	150 SF/ OCC.	103	1	TABLE 7.3.1.2
102	BUSINESS USE	150 SF/ OCC.	41	1	TABLE 7.3.1.2
103	GENERAL INDUSTRIAL USE	100 SF/ OCC.	2768	28	TABLE 7.3.1.2
104	BUSINESS USE	150 SF/ OCC.	297	2	TABLE 7.3.1.2
105	BUSINESS USE	150 SF/ OCC.	93	1	TABLE 7.3.1.2
106	BUSINESS USE	150 SF/ OCC.	91	1	TABLE 7.3.1.2
107	ELECTRICAL ROOM USE	500 SF/ OCC.	73	1	UFC 3-600-01 TABLE 10.1
108	ELECTRICAL ROOM USE	500 SF/ OCC.	61	1	UFC 3-600-01 TABLE 10.1
201	BUSINESS USE	150 SF/ OCC.	661	5	TABLE 7.3.1.2
202	BUSINESS USE	150 SF/ OCC.	115	1	TABLE 7.3.1.2
203	BUSINESS USE	150 SF/ OCC.	106	1	TABLE 7.3.1.2
TOTAL NET			4964	44	

BUILDING CODE SUMMARY



6

UFC 1-200-01 (20 JUN 2016) WITH CHANGE 2
UFC 3-600-01 (8 AUG 2016) WITH CHANGE 3
2015 IBC AS AMENDED BY UFC 1-200-01
2015 IEBC AS AMENDED BY UFC 3-600-01
2018 NFPA 1 FIRE CODE
2018 NFPA 101 LIFE SAFETY CODE

PROJECT AREA

7

FLOOR	BUILDING AREA (GSF) EXISTING	BUILDING AREA (GSF) NEW
1st Level	3497	3923
2nd Level	N/A	1041
SUBTOTAL	3497	4964
TOTAL	84	61

OCCUPANCY:

MIXED USE / NON-SEPARATED WITH: BUSINESS GROUP B (NEW BUSINESS USE) FACTORY GROUP F-1 (GENERAL INDUSTRIAL USE)

LIFE SAFETY SYMBOLS

	EGRESS TRAVEL DISTANCE EGRESS DEAD END LENGTH
	EXIT DISCHARGE
XXin XXX XXX	-EXIT WIDTH -CAPACITY FACTOR -EXIT CAPACITY
\bigotimes	EXIT SIGN
Κ	KNOX BOX
	FIRE EXTINGUISHER
	CLEAN AGENT FIRE EXTINGUISH
	P

AN AGENT FIRE EXTINGUISHER

WALL RATING LEGEND

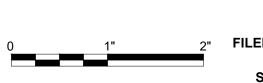
uuuu

1 HOUR FIRE BARRIER WITH 3/4 HOUR DOORS

<u>ssss</u> SMOKE PARTITION

N.	ΤL	0	A)

HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003



LIFE SAFETY PLAN

FILENAME 00G-103 **SCALE** 3/32" = 1'-0"



D

С

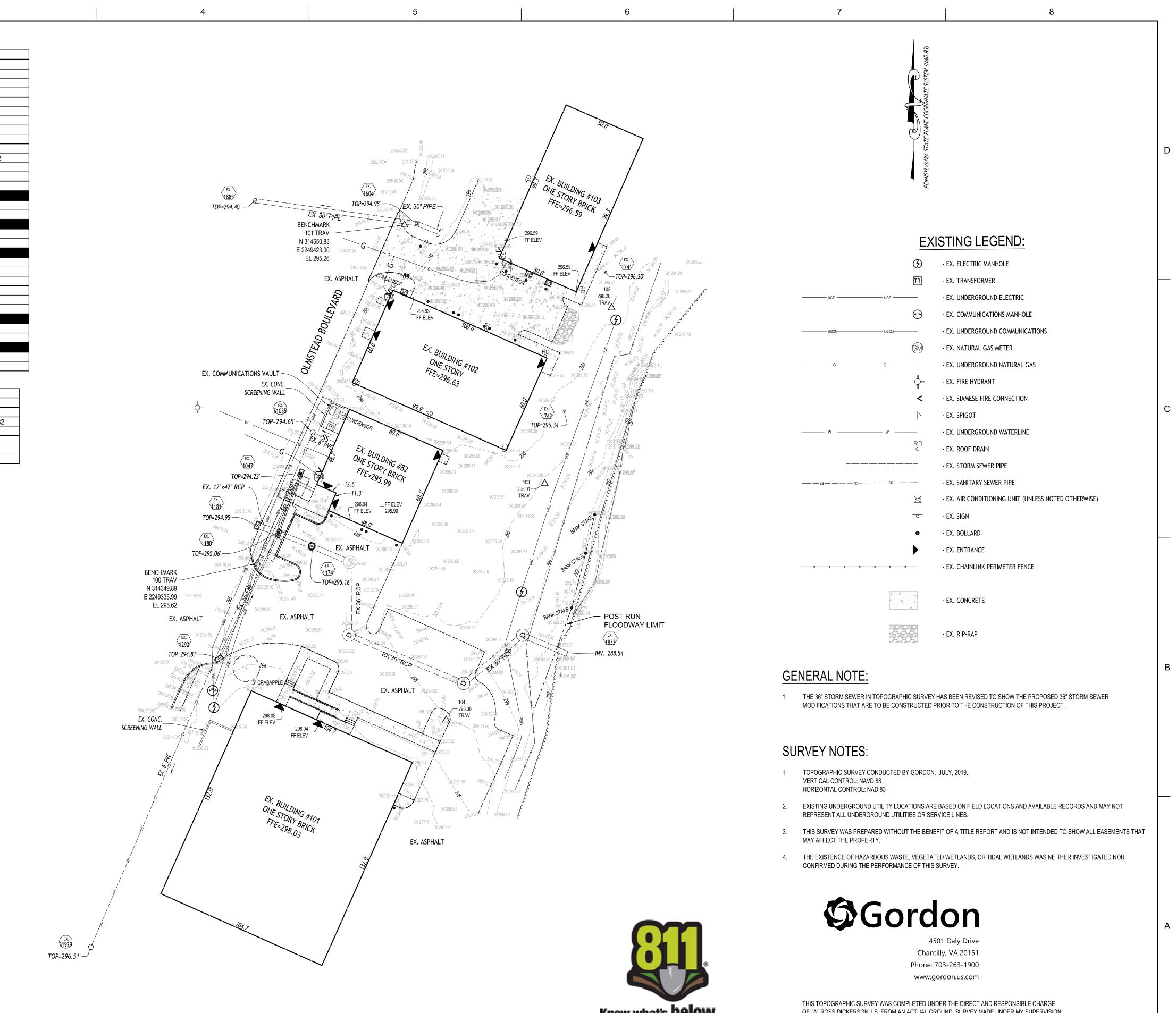


2	1	З
Z		5

	STORM SE	WER AS-BUILT
STRUCTURE	ELEVATION (FT.)	DESCRIPTION
EX. 1181	TOP = 294.95	EX. GRATE INLET
	INVERT IN = 289.20	30" RCP
	INVERT OUT = 288.98	12"X42" RCP TO EX. 1180
EX. 1180	TOP = 295.06	EX. GRATE INLET
	INVERT IN = 291.44	12" CMP FROM EX. 1292
	INVERT IN = 289.82	12" CMP FROM EX. 1047
	INVERT IN = 288.95	12"x42" RCP FROM EX. 1181
	INVERT OUT = 288.94	33" RCP TO EX. 1174
EX. 1174	TOP = 295.16	EX. GRATE INLET
	INVERT IN = 291.27	6" PVC FROM EX. BUILDING #82
	INVERT IN = 289.12	33" RCP FROM EX. 1180
	INVERT OUT = 289.09	36" RCP TO EX. 1832
EX. 1832	INVERT= 288.54	36" RCP OUTFALL
EX. 1292	TOP = 294.81	EX. GRATE INLET
	INVERT OUT = 292.14	12" CMP TO EX. 1180
EX. 1047	TOP = 294.22	EX. GRATE INLET
	INVERT OUT = 292.28	12" CMP TO EX. 1180
EX. 1885	TOP = 294.40	EX. GRATE INLET
	INVERT IN = 288.90	30" PIPE
	INVERT OUT = 288.60	30" PIPE TO EX. 1604
EX. 1604	TOP = 294.98	EX. GRATE INLET
	INVERT IN = 288.93	30" PIPE FROM EX. 1885
	INVERT OUT = 288.84	30" PIPE TO ??
EX. 1741	TOP = 296.30	EX. YARD INLET
	INVERT = 292.30	BOTTOM OF STRUCTURE
EX. 1742	TOP = 295.34	EX. YARD INLET
	INVERT= 291.99	BOTTOM OF STRUCTURE

	SANITARY SEWER	AS-BUILT
STRUCTURE	ELEVATION (FT.)	DESCRIPTION
EX. S1035	TOP = 294.65	EX. SANITARY MANHOLE
	INVERT IN = 291.87	EX. 6" PVC FROM BUILDING #82
	INVERT OUT = 291.83	EX. 6" PVC TO EX. 1929
EX. S1929	TOP = 296.51	EX. SANITARY MANHOLE
	INVERT IN = 288.44	EX. 6" PVC FROM EX. 1035
	INVERT OUT = 288.36	EX. 6" PVC TOWARDS WEST

	5/5/2020 DATE	Issued for Bids DESCRIPTION	
	E (E 100000		





HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003

PROJECT MANAGER	TOM SVOBODA
CIVIL	B. WECKERLIN
 STRUCTURAL	J. LENZ
 ARCHITECT	S. HEANEY
MECHANICAL	J. LEWIS
 ELECTRICAL	W. DAVIDSON
 FIRE PROTECTION	A. NOWKA
PROJECT NUMBER	10173455

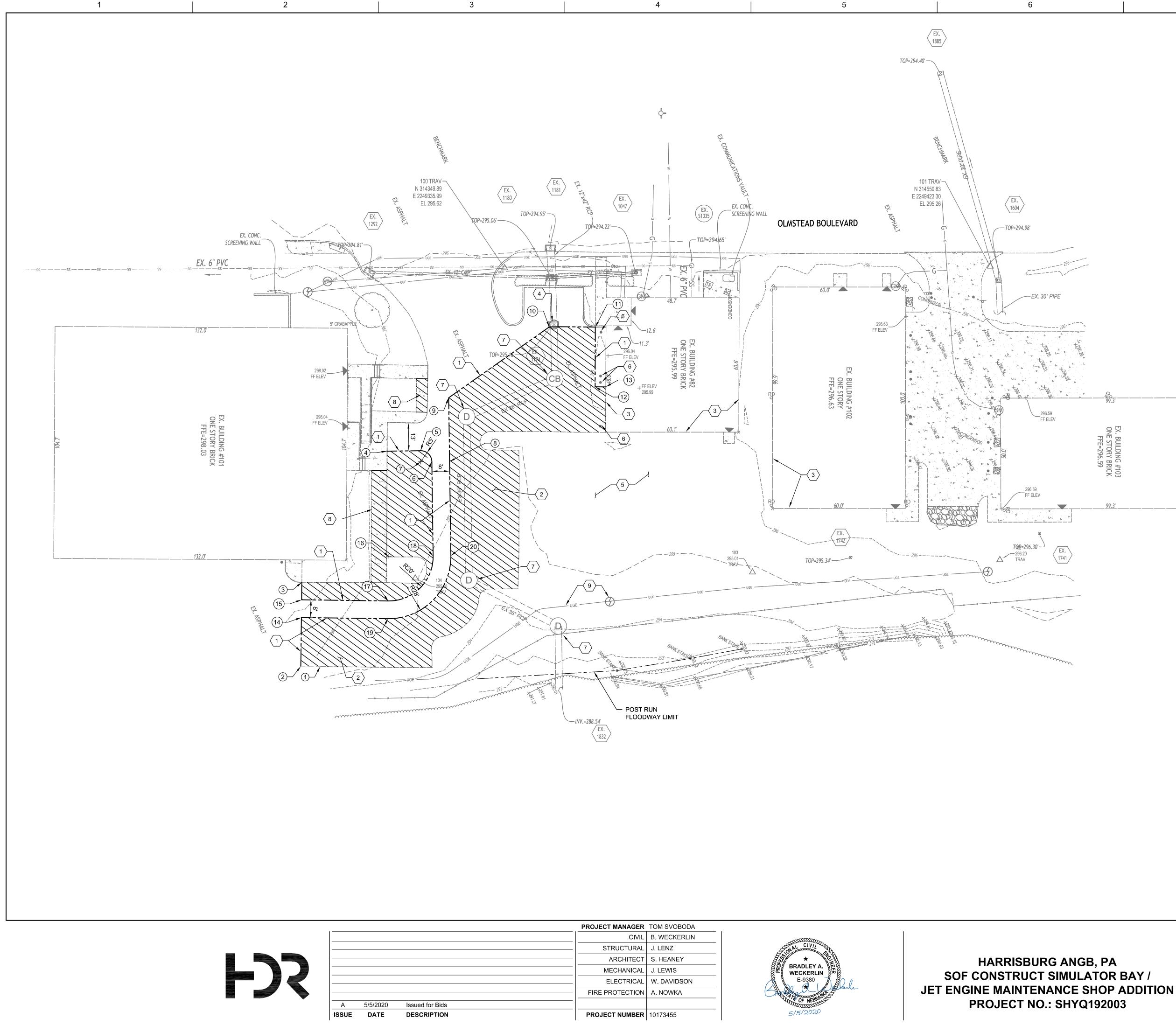
Know what's **below. Call before you dig.**

OF, W. ROSS DICKERSON, LS FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON ______, ____ AND ⁻ THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM _ AND THAT ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

TOPOGRAPHIC SURVEY

FILENAME 00V-001.DWG **SCALE** 1"=30'

SHEET 00V-001

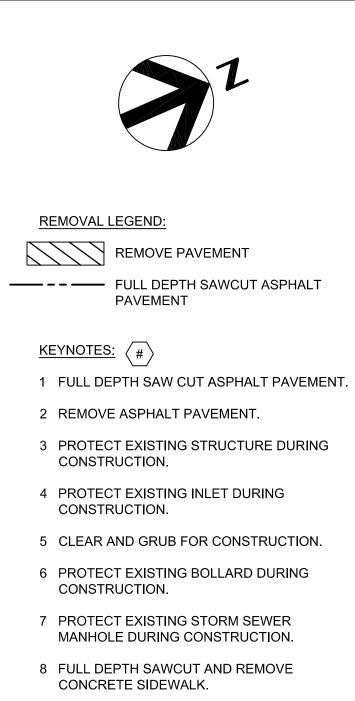




D

С

В



9 PROTECT EXISTING UNDERGROUND ELECTRICAL.

GENERAL NOTES:

1. CONTRACTOR WILL COORDINATE THE LOCATION OF THE SOIL STOCKPILE ON BASE TO USE FOR EXCESS CUT MATERIALS PRIOR TO COMMENCING GRADING OPERATIONS.

		OORDINAT	E POINTS TABLE
POINT NO.	NORTHING	EASTING	DESCRIPTION
1	314201.52	2249467.20	SAWCUT
2	314193.53	2249463.58	SAWCUT
3	314209.17	2249429.07	SAWCUT
4	314268.13	2249390.30	SAWCUT
5	314282.10	2249396.19	POINT OF CURVATURE
6	314284.76	2249402.74	POINT OF TANGENCY
7	314280.15	2249400.80	5' RADIUS POINT
8	314292.10	2249405.92	SAWCUT
9	314303.29	2249379.40	SAWCUT
10	314357.67	2249368.38	SAWCUT
11	314376.70	2249376.74	SAWCUT
12	314365.78	2249401.43	SAWCUT
13	314370.15	2249403.36	SAWCUT
14	314202.60	2249443.53	SAWCUT
15	314205.91	2249436.25	SAWCUT
16	314249.76	2249434.22	SAWCUT
17	314241.49	2249452.42	SAWCUT
18	314268.19	2249441.99	SAWCUT
19	314238.18	2249459.71	SAWCUT
20	314275.56	2249445.11	SAWCUT



SITE DEMOLITION PLAN

FILENAME 00X-101 **SCALE** 1"=20'

SHEET 00X-101

PROJECT NO.: SHYQ192003

·----

- \ 1741 /

H:V

H:V

 \times

 \triangle

 \odot

 Φ_{x}

 $\Theta_{\rm x}$

 \emptyset_{X}

 $\frac{\nabla}{\overline{-}}$

 \bigcirc

 \leftarrow

 \bigcirc^{X}

 $\overbrace{\times\times\times}$

 $\langle \gamma \rangle$ (XXX)

XXX

E

0

 O_{x}

 \bigotimes

مرا

l'n

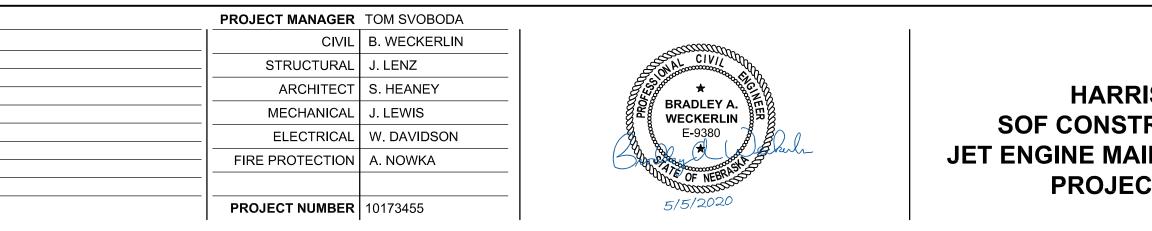
Ā

 \bigtriangleup

€CP-X

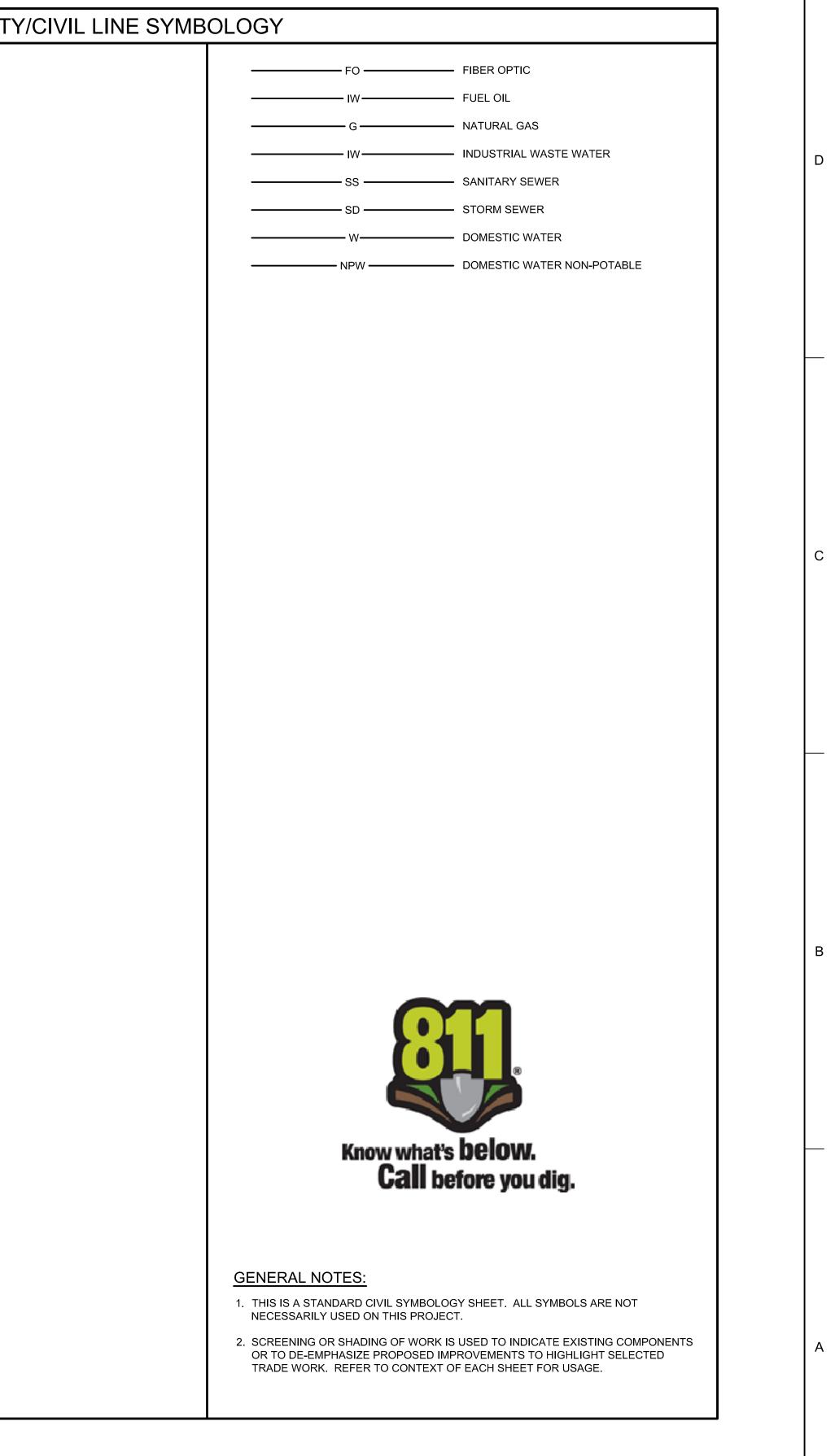
ۍ کې

|--|--|--|--|--|--|--|--|





8

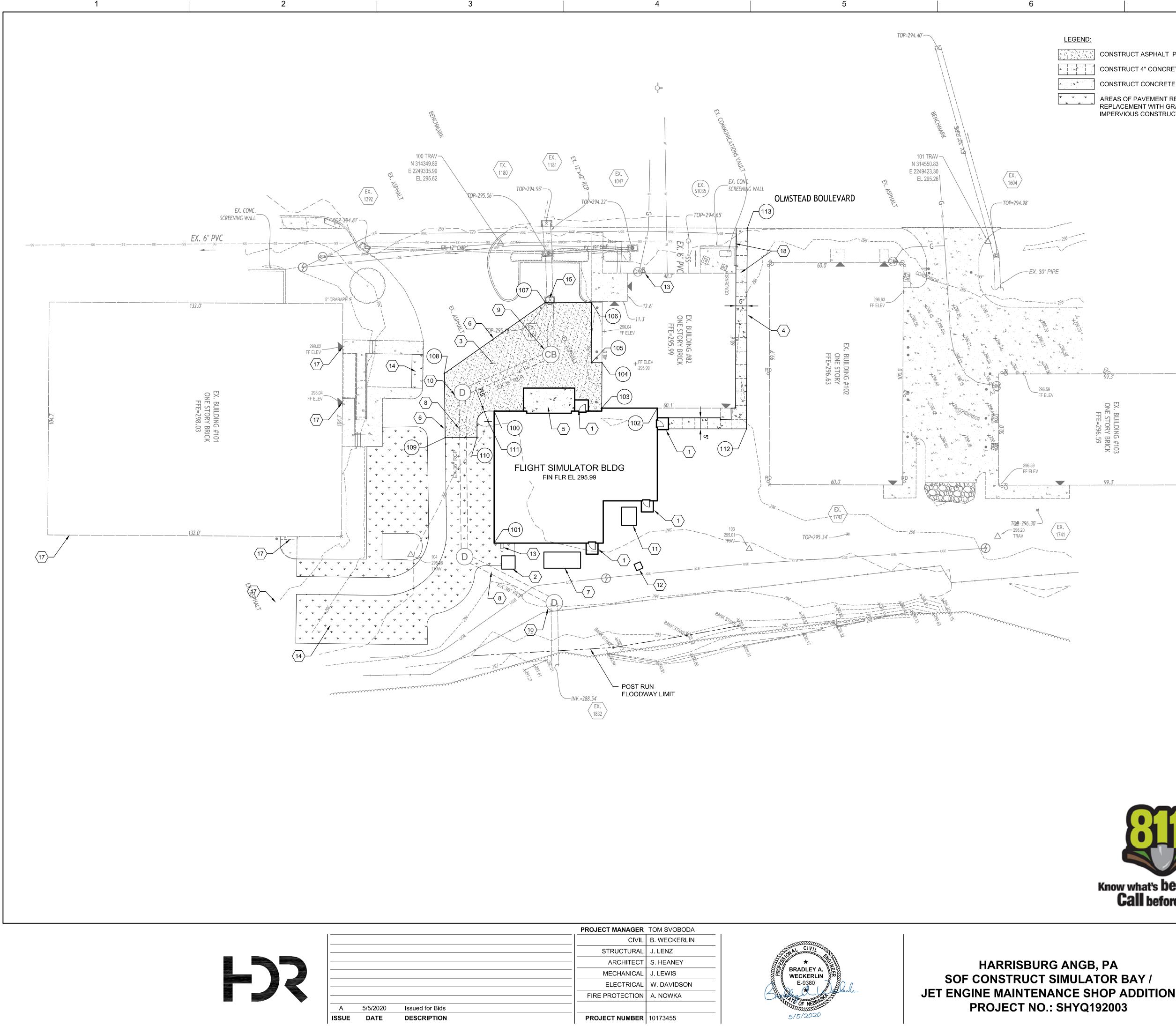


HARRISBURG ANGB, PA SOF CONSTRUCT SIMULATOR BAY / JET ENGINE MAINTENANCE SHOP ADDITION PROJECT NO.: SHYQ192003



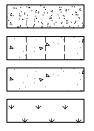
FILENAME 00G-002 SCALE NONE

SHEET 00C-001



LEGEND:

6



CONSTRUCT ASPHALT PAVEMENT

CONSTRUCT 4" CONCRETE SIDEWALK

CONSTRUCT CONCRETE APPROACH

AREAS OF PAVEMENT REMOVAL AND REPLACEMENT WITH GRASS FOR NEW IMPERVIOUS CONSTRUCTION OFFSET



NOTES:

- 1. THE GEOTECHNICAL MEMORANDUM DATED 23 MAY 2002, BY GANNETT FLEMING ENGINEERS AND PLANNERS LOCATED AFTER SECTION 31 00 00 IN THE PROJECT SPECIFICATIONS PROVIDES TO THE FOLLOWING ASPHALTIC CONCRETE MIX DESIGN STANDARDS THAT SHALL APPLY FOR THIS PROJECT: A. COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF TRANSPORTATION PUBLICATION 408 SPECIFICATIONS:
- 1. SECTION 305, BITUMINOUS CONCRETE BASE COURSE (BCBC)
- 2. SECTION 420, BITUMINOUS WEARING COURSE ID-2

KEYNOTES:

- 1 CONSTRUCT STRUCTURAL STOOP, SEE STRUCTURAL PLANS FOR DETAILS.
- 2 CONCRETE EQUIPMENT PAD FOR SIMULATOR COOLING UNIT. COOLING UNIT TO BE PROVIDED BY OTHERS SEE DETAIL 5/00S-501.
- 3 CONSTRUCT 7 1/2" ASPHALT PAVEMENT WITH 12" SUBBASE, SEE DETAIL 1/00C-501.
- 4 CONSTRUCT 4" CONCRETE SIDEWALK, SEE DETAILS 2/00C-501 AND 3/00C-501.
- 5 CONSTRUCT CONCRETE APPROACH, SEE DETAIL 2/00S-501.
- 6 APPLY TACK COAT TO EXISTING ASPHALT PRIOR TO INSTALLING NEW ASPHALT PAVEMENT.
- 7 AHU-02 EQUIPMENT PAD, SEE DETAIL 5/00S-501.
- 8 PROTECT EXISTING STORM PIPES DURING CONSTRUCTION.
- 9 ADJUST EXISTING CATCH BASIN FRAME AND COVER TO GRADE.
- 10 ADJUST EXISTING MANHOLE FRAME AND COVER TO GRADE.
- 11 AHU-01 FOUNDATION PAD, SEE DETAIL 5/00S-501.
- 12 TRANSFORMER FOUNDATION PAD, SEE DETAIL 3/00S-503.
- 13 SPLASH BLOCK. SEE FIRE PROTECTION PLAN, SHEET 00FP-101.
- 14 SCARIFY SUBGRADE 12 INCHES IN DEPTH AND RE-COMPACT THE SOIL AS RECOMMENDED BY THE GEOTECHNICAL REPORT BT GANNETT FLEMMING ENGINEERS AND SURVEYORS TO ALLOW STORMWATER INFILTRATION AND MINIMIZE SETTLEMENT IN ALL AREAS WHERE EXISTING PAVEMENT HAS BEEN REMOVED AND IS TO BE SEEDED. FURNISH AND INSTALL 4" MINIMUM TOPSOIL, STARTER FERTILIZER, SEED AND MULCH IN THE AREAS WHERE PAVEMENT HAS BEEN PERMANENTLY REMOVED TO MITIGATE FOR NEW IMPERVIOUS CONSTRUCTION. COMPACT TOPSOIL TO MINIMIZE SETTLEMENT AND PONDING BUT TO STILL ALLOW STORMWATER INFILTRATION.
- 15 CONTRACTOR SHALL PROTECT THE EXISTING CATCH BASIN DURING CONSTRUCTION.
- 16 CONTRACTOR SHALL BLOCK ACCESS TO THE ACCESSIBLE PARKING STALL AND ASSOCIATED SIDEWALK FOR THE DURATION OF CONSTRUCTION.
- 17 THE CONTRACTOR SHALL NOT RESTRICT EMERGENCY INGRESS AND EGRESS TO BUILDING 101'S EXTERIOR DOORS, DOCK BAYS AND FIRE LANE.
- 18 CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF THE BURIED ELECTRICAL CONDUIT IN THE AREA OF THE SIDEWALK PRIOR TO CONSTRUCTION TO VERIFY THAT THERE ARE NO CONFLICTS.

SITE LAYOUT COORDINATE POINTS TABLE					
POINT NO.	NORTHING	EASTING	DESCRIPTION		
100	314317.05	2249403.83	BUILDING CORNER		
101	314293.22	2249458.17	BUILDING CORNER		
102	314384.74	2249432.06	BUILDING CORNER		
103	314361.85	2249422.02	EDGE OF PAVEMENT		
104	314370.15	2249403.36	EDGE OF PAVEMENT		
105	314365.78	2249401.43	EDGE OF PAVEMENT		
106	314376.69	2249376.76	EDGE OF PAVEMENT		
107	314357.67	2249368.38	EDGE OF PAVEMENT		
108	314303.29	2249379.40	EDGE OF PAVEMENT		
109	314292.10	2249405.92	EDGE OF PAVEMENT		
110	314305.27	2249411.48	EDGE OF PAVEMENT		
111	314312.69	2249407.00	RADIUS POINT		
112	314417.71	2249456.71	EDGE SIDEWALK		
113	314454.21	2249374.27	EDGE SIDEWALK		



HARRISBURG ANGB, PA PROJECT NO.: SHYQ192003

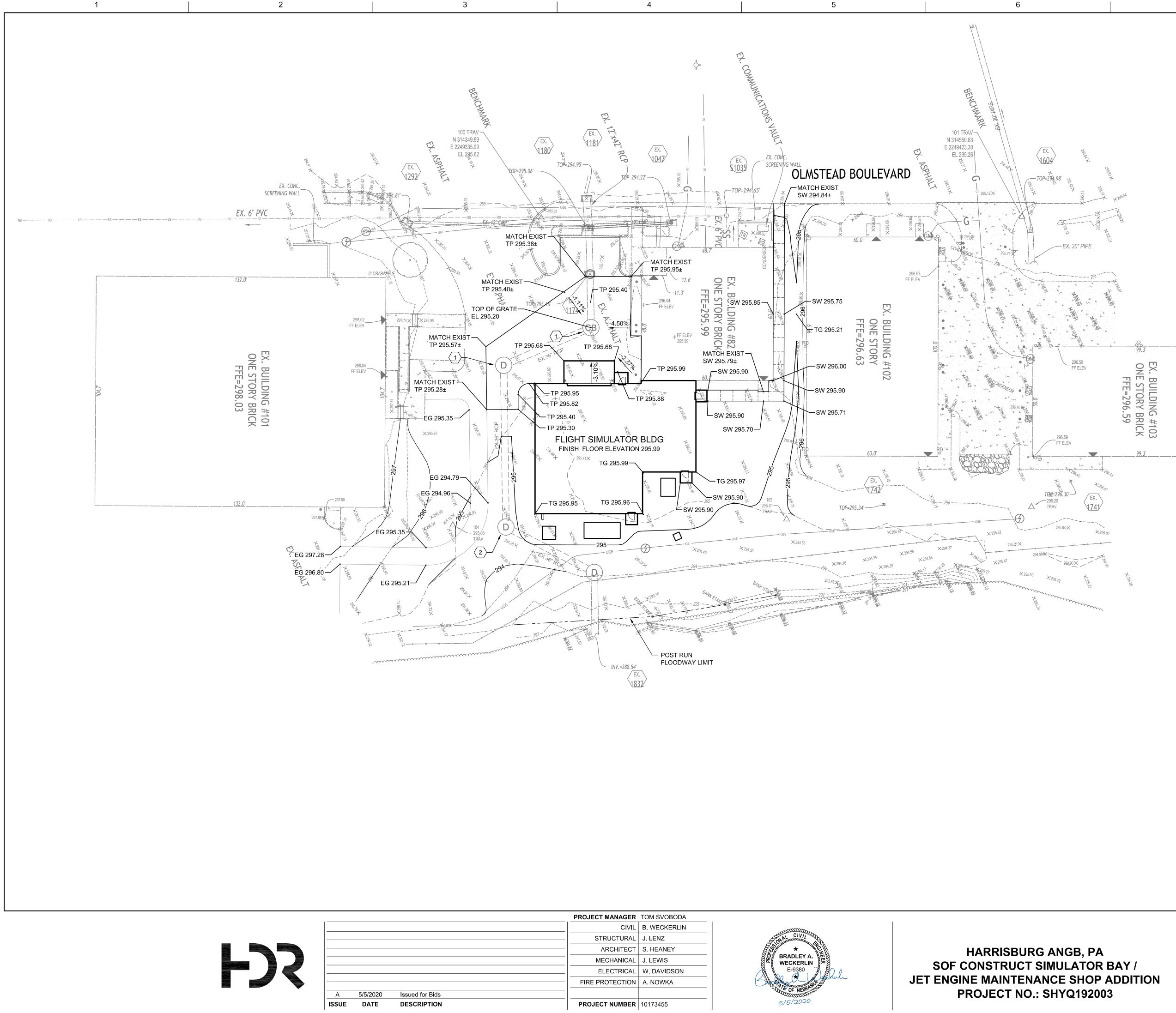
99.3

SITE LAYOUT PLAN

FILENAME 00C-101.dwg

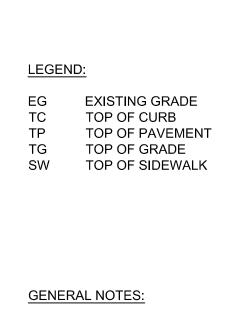
SCALE 1"=20'

С



PROJECT MANAGER	TOM SVOBODA		
CIVIL	B. WECKERLIN		
 STRUCTURAL	J. LENZ	CIVIL CIVIL	
 ARCHITECT S. HEANEY	S. HEANEY	*	HARRISBU
 MECHANICAL	J. LEWIS	BRADLEY A.	SOF CONSTRUC
ELECTRICAL	W. DAVIDSON		
 FIRE PROTECTION	A. NOWKA	A start and a start	
		OF NEBRISS	PROJECT NO
PROJECT NUMBER	10173455	5/5/2020	





1. FLIGHT SIMULATOR BUILDING WILL HAVE AN 8" TALL INTERIOR CONCRETE CURB WHICH ALLOWS FOR FILL UP TO FINISHED FLOOR ELEVATION.

 $\underline{\mathsf{KEY NOTES:}} \langle \# \rangle$

- 1 FIELD ADJUST MANHOLE RIM AND CATCH BASIN GRATE ELEVATIONS PRIOR TO CONSTRUCTION. ADJUST GRADING TO PROVIDE POSITIVE DRAINAGE TO GRATE INLETS AS REQUIRED AND ADJUST MANHOLE FRAMES TO GRADE AS REQUIRED.
- 2 PROTECT EXISTING MANHOLE FRAME AND GRATE DURING CONSTRUCTION. ADJUST FRAME HEIGHT TO PLACE RIM 6" ABOVE FINISH GRADE. POUR CONCRETE COLLAR TO RETAIN THE FRAME IN PLACE.



SITE GRADNG PLAN



SHEET 00C-102 С

В

D