TECHNOLOGY SYSTEMS GENERAL NOTES

- I. REFER TO SPECIFICATION SECTION "TECHNOLOGY GENERAL PROVISIONS" FOR MORE INFORMATION ABOUT DRAWINGS AND BID DOCUMENTS. MANY SYMBOLS USED IN THIS PROJECT HAVE A TYPE ASSOCIATED WITH THEM. SEE SHEETS WITH DETAILS AND PROJECT SPECIFICATIONS FOR MORE INFORMATION ON THE DESCRIPTION OF EACH TYPE.
- 3. ALL CONDUIT FOR TECHNOLOGY SYSTEMS INDOOR ABOVE GRADE SHALL BE EMT AND ALL CONDUIT FOR BELOW GRADE SHALL BE PVC.
- I. SEE LIFE SAFETY PLANS FOR LOCATIONS OF FIRE RATED PARTITIONS IN THIS PROJECT. PROVIDE AN APPROVED FIRE STOP SYSTEMS FOR EACH RACEWAY OR CABLE GOING THROUGH A RATED WALL. SEE SPECIFICATION "RACEWAYS FOR TECHNOLOGY" FOR MORE INFORMATION.
- . WORKING CLEARANCES AROUND ELECTRICAL EQUIPMENT SHALL BE MAINTAINED IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 110. COORDINATE EQUIPMENT INSTALLATION TO MAINTAIN REQUIRED CLEARANCES.
- . SYMBOLS USED ON THE TECHNOLOGY DRAWINGS ARE NOT THE SAME SIZE AS THE ACTUAL OBJECT BEING REPRESENTED. THEREFORE LOCATIONS OF THE SYMBOLS ON THE FLOOR PLANS ARE AN APPROXIMATION TO THE ACTUAL LOCATION OF THE DEVICE AND NEED TO BE CAREFULLY COORDINATED WITH OTHER ELEMENTS IN THE VICINITY. AS A GENERAL GUIDELINE:
- A. VOICE/DATA OUTLET FOR WORK-AREAS SHALL BE INSTALLED WITHIN 6 INCHES OF A POWER OUTLET INDICATED IN ELECTRICAL DRAWINGS. B. TV OUTLETS SHALL BE INSTALLED WITHIN 6 INCHES OF A POWER OUTLET SHOWN ON THE ELECTRICAL DRAWINGS. C. WHEN MULTIPLE TECHNOLOGY SYSTEMS OUTLETS ARE INDICATED NEXT TO EACH OTHER WITH SYMBOLS, THE SPACING BETWEEN OUTLETS SHALL BE
- CONSISTENT IF NO ELEVATION IS SHOWN ON THE DRAWINGS. D. WHEN INSTALLER IS NOT CERTAIN ABOUT SPECIFIC ADJACENCIES OF A DEVICE, THE QUESTION SHALL BE ASKED TO THE ENGINEER PRIOR TO INSTALLATION.
- FOR EXACT LOCATION OF CEILING MOUNTED EQUIPMENT REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN. LOCATIONS OF EQUIPMENT NOT INCLUDED ON THE REFLECTED CEILING PLAN SHALL BE COORDINATED WITH THOSE ITEMS SHOWN. COORDINATION OF CEILING MOUNTED EQUIPMENT SHALL BE PRIOR TO ANY ROUGH-IN. NOTIFY ENGINEER OF ANY DISCREPANCY.
- . LOCATIONS OF FLOOR BOXES AND FLOOR PENETRATIONS SHALL NOT BE MEASURED FROM THIS SET OF DRAWINGS, INSTALLER SHALL REQUEST PRECISE LOCATIONS FROM ARCHITECT.
- EACH VOICE/DATA RJ45 JACK SHALL BE CONNECTED TO A DEDICATED 4 PR CABLE.
- 0. THE RESPONSIBILITY OF RACEWAY INSTALLATION SHALL BE AS DIRECTED BY THE CONSTRUCTION MANAGER OR GENERAL CONTRACTOR, BUT ALL RACEWAYS FOR TECHNOLOGY ARE TO BE INCLUDED IN THIS CONTRACT.
- I. WHEN CONDUIT RUNS ARE INDICATED ABOVE GRADE OR BELOW GRADE ON THESE DRAWINGS, NOT EVERY SINGLE JUNCTION BOX (OR COMMUNICATIONS VAULT) REQUIRED IS INDICATED ON THE DRAWINGS. TYPICALLY ONLY END POINT LOCATIONS OR SPECIFIC PASS-THROUGH LOCATIONS WHERE THE ENGINEER DESIRES A BOX ARE SHOWN ON THE DRAWINGS. SEE SPECIFICATION "RACEWAYS FOR TECHNOLOGY" FOR REQUIREMENTS THAT INDICATE ADDITIONAL JUNCTION BOXES OR COMMUNICATION VAULTS THAT SHALL BE PROVIDED UNDER THIS CONTRACT. SUCH REQUIREMENTS INCLUDE ADDITIONAL BOXES REQUIRED BECAUSE OF NUMBER OF CONDUIT BENDS OR CHANGES IN ELEVATION.
- 2. SOME SYMBOLS INCLUDED IN THE SYMBOL LEGEND MAY NOT BE USED IN THESE PROJECT DRAWINGS.
- 3. UNDER NO CONDITIONS, CONDUITS FOR LOW VOLTAGE FOR FLOOR BOXES SHALL BE DAISY CHAINED TOGETHER BETWEEN ADJACENT FLOOR BOXES. ALL CONDUITS FOR FLOOR BOXES SHALL BE HOME RUNS TO NEAREST ACCESSIBLE CEILING SPACE.
- 4. THIS SET OF DRAWINGS DOES NOT INDICATE ALL GROUNDING AND BONDING REQUIREMENTS FOR TECHNOLOGY SYSTEMS. REFER TO SPECIFICATION SECTION "GROUNDING FOR TELECOMMUNICATION SYSTEM" FOR ADDITIONAL REQUIREMENTS.
- 5. ALL CABLES FOR TECHNOLOGY SYSTEMS RUN UNDER SLAB OR BELOW GRADE IN CONDUITS STUBBING UP INSIDE THE TELECOM ROOM SHALL BE INDOOR/OUTDOOR RATED. FOR CONDUITS STUBBING UP IN OTHER LOCATIONS DIFFERENT FROM TELECOM ROOMS AND FURTHER THAN 50 FT. FROM A TELECOM ROOM, DO NOT USE INDOOR/OUTDOOR RATED CABLES.
- 6. GRAPHICS USED FOR EQUIPMENT IN ELEVATIONS AND CHANNELS (LINE DRAWINGS) DO NOT NECESSARILY REPRESENT THE PART NUMBER OF THE EQUIPMENT SPECIFIED. THE PART NUMBERS LISTED IN THE DRAWINGS AND SPECIFICATIONS ARE TO BE FOLLOWED FOR BASIS OF DESIGN, NOT THE GRAPHICS.
- 7. THE TECHNOLOGY DRAWINGS DO NOT SHOW ALL REQUIRED CONDUITS/RACEWAYS TO BE PROVIDED UNDER THIS CONTRACT. TYPICALLY CONDUIT SLEEVES SMALLER THAN 2" ARE NOT SHOWN ON THE DRAWINGS. SEE SPECIFICATIONS "RACEWAYS FOR TECHNOLOGY" AND DRAWING DETAILS FOR ADDITIONAL RACEWAY REQUIREMENTS.
- 18. DEFINITION OF ACRONYMS USED IN THESE DRAWINGS:
- A. NIC (N.I.C.) NOT IN CONTRACT B. OFE (O.F.E.) = OWNER FURNISHED EQUIPMENT. SEE RESPONSIBILITY MATRIX FOR MORE INFORMATION.
- C. DHI (D.H.I.) = DOOR HARDWARE INSTALLER
- D. USC (U.S.C.) = UNDER SEPARATE CONTRACT.

19. ALL REQUIRED WALL PENETRATIONS, EXISTING AND NEW, SHALL MAINTAIN THE NEW WALL RATING AFTER CABLING HAS BEEN INSTALLED OR REMOVED. 20. ALL SPEAKERS MOUNTED IN A CEILING TILE SHALL BE CENTERED IN THE CEILING TILE.

SECURITY SYSTEM GENERAL NOTES

- SYMBOLS USED TO REPRESENT DEVICES SUCH AS CCTV CAMERAS, INTERCOM STATIONS, SECURITY WORKSTATIONS, CALL STATIONS, AND EMERGENCY PHONE STATIONS REQUIRE ONE (1) DATA DROP FOR SUCH DEVICE. THIS DATA DROP IS NOT SHOWN ON THE VOICE/DATA FLOOR PLANS, BUT SHALL BE PROVIDED FOLLOWING ALL REQUIREMENTS FOR VOICE/DATA DROPS INDICATED IN THE DRAWING DETAILS AND IN THE SPECIFICATION "STRUCTURED CABLING SYSTEM".
- . ANY DATA DROPS FOR SECURITY DEVICES EXCEEDING 295 FT. OF PERMANENT LINK DISTANCE TO THE TELECOM ROOM WHERE CAMERA WILL BE WIRED TO, SHALL BE WIRED WITH FIBER OPTICS FOR HORIZONTAL CABLING AND A 2 CONDUCTOR AWG-16 CL2(P) CABLE. THE FIBER CABLE SHALL BE AS DESCRIBED IN SPECIFICATION "STRUCTURED CABLING SYSTEM". IF NO INDICATION IN SUCH SPECIFICATION, FIBER OPTIC CABLE SHALL BE A 2-STRAND OM1 CABLE WITH A SUITABLE JACKET FOR THE APPLICATION.
- . ALL DOUBLE DOORS THAT ARE SHOWN WITH TWO DOOR POSITIONS SWITCHES ARE TO RECEIVE (1) DOOR POSITION SWITCH ON EACH DOOR LEAF AND SHALL REPORT AS ONE ALARM POINT.
- . ALL CAMERAS, CARD READERS AND/OR KEYPADS DEDICATED FOR ELEVATOR FLOOR SELECTION CONTROL ARE SHOWN INSIDE THE ELEVATOR CAB ON THE LOWEST LEVEL FLOOR PLAN TO WHICH THE ELEVATOR TRAVELS.
- . LOCATION OF SURVEILLANCE CAMERAS SHALL BE CLOSELY COORDINATED WITH OTHER TRADES TO AVOID OBSTRUCTIONS IN THE FIELD OF VIEW. IT IS NOT REQUIRED FOR CAMERAS TO BE MOUNTED IN CENTER OF A CEILING TILE (OR CENTER OF A HALLWAY) IF THAT LOCATION CAUSES AN OBSTRUCTION IN THE FIELD OF VIEW OF THE CAMERA. ALL CAMERAS ARE TO BE INSTALLED AS TO MINIMIZE THE OBSTRUCTIONS IN THE FIELD OF VIEW WITHIN A 4' RADIUS OF THE SPECIFIED LOCATION.
- . SURVEILLANCE CAMERAS INDICATED IN THE CORNER OF A ROOM SHALL BE INSTALLED AS CLOSE AS PHYSICALLY POSSIBLE TO THE CORNER OF THE ROOM TO GAIN THE BEST FIELD OF VIEW FOR THAT CAMERA.
- . EACH ACCESS CONTROLLED DOOR IN THE PROJECT HAS A DOOR IDENTIFIER SYMBOL THAT ASSOCIATES THE DOOR TO A CORRESPONDING ROUGH-IN DETAIL IN THE DRAWINGS AND A SPECIFIC FUNCTIONALITY OF THE DOOR IN THE SECURITY SPECIFICATIONS.

TECHNOLOGY DRAWING INDEX

SHEET	DESCRIPTION		
T001	TECHNOLOGY SYMBOLS, LEGEND, NOTES AND INDEX		
T002	TECHNOLOGY RESPONSIBILITY MATRIX		
T101	SITE PLAN - TECHNOLOGY		
T102	ENLARGED SITE PLANS - TECHNOLOGY		
T201	FLOOR PLAN - TECHNOLOGY		
T501	TECHNOLOGY RISER DIAGRAMS		
T701	TECHNOLOGY DETAILS		
T702	TECHNOLOGY DETAILS		
T711	SECURITY DOOR DETAILS		

BASIC MATERIA

- CONDUIT TURNED DOWN CAPPED CONDUIT
- ----- CONDUIT STUBBED AND BUSHED INTO ACCESSIBLE CEIL CONDUIT CONTINUED
 - CONDUIT SLEEVES
 - X= QTY OF SLEEVES Y= SIZE OF CONDUITS SLEEVES PENETRATING WALL
- [<u>X</u>] IF NO QUANTITY INDICATED USE AS MANY SLEEVES / SECTIONAL AREA OF CABLE TRAY NEXT TO SLEEVE.
- TUBULAR RUNWAY, HUNG ABOVE CEILING OR AS NOTED
- EXAMPLE CABLE TRAY (TYPE), HUNG ABOVE CEILING OR AS NOTE SURFACE MOUNTED ENCLOSED TECHNOLOGY SYSTEMS
- JUNCTION BOX WALL MOUNTED. SIZE PER NEC IF NOT IN J INTERIOR, NEMA 4X FOR EXTERIOR USE WITH HINGED C
- JUNCTION BOX CEILING MOUNTED. SIZE PER NEC IF NOT J INTERIOR, NEMA 4X FOR EXTERIOR USE WITH HINGED C
- TELECOMMUNICATIONS GROUND VAULT. SEE DETAILS A
- V_X X= BOX TYPE. IF NOT SHOWN, ONLY ONE TYPE IN PROJE TELECOMMUNICATIONS PULLBOX. SEE DETAILS AND SP
- $\begin{array}{c} \hline PB \\ X \end{array} X = BOX TYPE. IF NOT SHOWN, ONLY ONE TYPE IN PROJECT$
- TP TECHNOLOGY POLE. SEE SHEETS WITH DETAILS FOR AD

GENERAL

- NEW EQUIPMENT EXISTING WORK AND/OR EQUIPMENT REFERENCE, SHO
- DEVICE TO BE REMOVED (DEMO PLANS) UNDERFLOOR
- --- MATCH LINE REFERENCING CONTINUATION ON OTHER D
- ---- DETAIL AND/OR SECTION REFERENCE
- ---- CABLE ROUTING BOUNDARY
- FUTURE WORK

DRAWING NOTES AND D

DRAWING KEYED NOTES $\langle X \rangle$

- CABLE ROUTING NOTES $\langle X \rangle$
- $\frac{X}{X}$ DETAIL OR SECTION REFERENCE TAG

VOICE AND DA

W,WP XNYZ U +H		X= MOUNTING: (E= EXISTING, F= FLUSH, S= SURFAC P= POLE, L= FLOOR, R= RACEWAY) N= NUMBER OF DATA CABLES IN THE FACEPLATE Y= NOT USED Z= NUMBER OF FIBER OPTIC STRANDS IN THE FACE U= USER(IF APPLICABLE) +H= INSTALLATION HEIGHT IN INCHES AT CENTER O ELECTRICAL. IF NOT SHOWN INSTALL AT TYPICAL RE W= WALL TELEPHONE FACEPLATE WITH SUPPORT S OF OUTLET AND 12" FROM EDGE OF WALL. WP=WEATHERPROOF
		EXAMPLE: F2 = TWO DATA JACKS IN A SINGLE FACE
MECH SY U +H	OU' Y: A U: A +H=	LET FOR MECHANICAL/ ELECTRICAL/ FIRE ALARM/ E S DESCRIBED FOR TELECOMMUNICATIONS OUTLET S DESCRIBED FOR TELECOMMUNICATIONS OUTLET F NOT SHOWN, COORDINATE EXACT LOCATION WI
O XY U	CEI XY: U: A	LING MOUNTED INFORMATION OUTLET, MOUNTED C AS DESCRIBED FOR TELECOMMUNICATIONS OUTLE AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET
WAP XY U +H	OU ⁻ Y: A U: A +H=	LET FOR WIRELESS ACCESS POINT, WALL MOUNTE S DESCRIBED FOR TELECOMMUNICATIONS OUTLET S DESCRIBED FOR TELECOMMUNICATIONS OUTLET MOUNTING HEIGHT IN INCHES AT CENTER OF OUTL
E U WAP	OU XY: U: A	LET FOR WIRELESS ACCESS POINT, MOUNTED ON A AS DESCRIBED FOR TELECOMMUNICATIONS OUTLE S DESCRIBED FOR TELECOMMUNICATIONS OUTLET
	YZ	FLOOR BOX FOR TECHNOLOGY SYSTEMS AND POW FLOORBOX SCHEDULE FOR MORE INFORMATION
		F= FLOOR CONDITION: (C= CONCRETE TYPE, G= GR Y= DENOTES # OF GANGS (1,2,3) Z= DENOTES PLATE TYPE (A,B,C), A= NO AUDIO/VI LN= AS DESCRIBED FOR TELECOMMUNICATIONS OUT U: AS DESCRIBED FOR TELECOMMUNICATIONS OUT
	Ź	POKE-THRU FOR TECHNOLOGY SYSTEMS AND POW FLOOR BOX SCHEDULE FOR MORE INFORMATION
	IN	Y= DENOTES POKE-THRU SIZE (4=4", 6=6" 8=8") Z= DENOTES PLATE TYPE (A,B,C), A= NO AUDIO/VI LN= AS DESCRIBED FOR TELECOMMUNICATIONS OU U: AS DESCRIBED FOR TELECOMMUNICATIONS OUT
FF	WA	LL MOUNTED FURNITURE FEED USED TO FEED CABI
(FF) _X	FLC X=	OR BOX USED TO FEED CABLES TO MODULAR FURN TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
(FP) _X	POI X=	(E-THRU USED TO FEED CABLES TO MODULAR FURI TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT
-AG XY U +H	AV RO G= XY= U: <i>A</i> +H=	BACKBOX, INSTALLED BEHIND DISPLAY/ CREDENZA I JGH-IN. REFER TO DETAIL & SCHEDULE FOR MORE I DENOTES # OF GANGS AS DESCRIBED FOR TELECOMMUNICATIONS OUTLE S DESCRIBED FOR TELECOMMUNICATIONS OUTLET MOUNTING HEIGHT IN INCHES AT CENTER OF DEVIC
- <u>RG</u> XY U	REO RO G=	ESS IN-WALL STORAGE BOX, INSTALLED BEHIND DI JGH-IN. REFER TO DETAIL & SCHEDULE FOR MORE I DENOTES # OF GANGS

+H XY= AS DESCRIBED FOR TELECOMMUNICATIONS OUTLE U: AS DESCRIBED FOR TELECOMMUNICATIONS OUTLET +H= MOUNTING HEIGHT IN INCHES AT CENTER OF DEVIC

S	BROADBAND TELEVISION SYSTEM	ELECTRONIC SECURITY SYSTEM	
		CR CARD READER, WALL MOUNTED	
		CK CARD READER WITH INTEGRATED KEYPAD, WALL MOUNTED	
	Ϋ́ TX ANTENNA	BR BIOMETRIC ACCESS CONTROL DEVICE, WALL MOUNTED	
NG CAVITY	T TX/RX ANTENNA	KP KEYPAD, WALL MOUNTED	
		IP WIRED IP LOCK, DOOR MOUNTED	
		WM WIRELESS MORTISE LOCK, DOOR MOUNTED	
ABOVE CEILING SPACE.	- = 4 WAY SPLITTER	WC WIRELESS CYLINDRICAL LOCK, DOOR MOUNTED	
S REQUIRED TO MATCH CROSS	- 8 WAY SPLITTER		
	(SD) SATELLITE DISH		
)			
. SEE SHEETS WITH DETAILS FOR	T = TEST PORT X= AMPLIFIER TYPE - SP: SERVICE PROVIDER, H: HEADEND AMPLIFIER, D: DISTRBUTION AMPLIFIER		
DICATED ON DRAWING. NEMA 1 FOR			
OVER AND LOCKING COVER	I= INPUT LEG O= OUTPUT LEG		
INDICATED ON DRAWING. NEMA 1 FOR OVER AND LOCKING COVER	T= TAP LEGS, QTY AS INDICATED IN RISER		
ND SPECS FOR MORE INFORMATION	T DIRECTIONAL COUPLER	ELECTRIC DOOR OPERATOR (ACTUATOR ARM)	
		DPS DOOR POSITION SWITCH	
T	CATV TAP DEFINITION TAG	BMS BALANCED MAGNETIC SWITCH	
DITIONAL INFORMATION	XX-Y X = NUMBER OF TAP LEGS	-IWG PIM MODULE FOR WIRELESS LOCKS, WALL MOUNTED	
		+H = MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF	
	X= EQUALIZING VALUE IN dB	H +H = MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF	
	EQ O= OUTPUT LEG		
N ON MULTIPLE DRAWINGS		+H +TH INDUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF	
)NDUIT (NEW PLANS)	- SURGE SUPRESSOR AT BUILDING ENTRY POINT	+ +H = MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF	
D DETAIL	TELEVISION OUTLET, COORDINATE ROUGH-IN WITH TV MOUNT INSTALLER, CEILING MOUNTED	ASSISTANCE STATION, WALL MOUNTED	
AWINGS	\sim_{χ} x= denotes type of outlet, see detail for more information \cup U=USER(IF APPLICABLE). THIS ONLY APPLIES TO DATA AND FIBER NOT COAX	+H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF	
	+H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF	ASSISTANCE STATION (BLUE LIGHT), TOWER STATION	
	-TV I ELEVISION OUTLET, COORDINATE ROUGH-IN WITH TV MOUNT INSTALLER, WALL MOUNTED X = DENOTES TYPE OF OUTLET, SEE DETAIL FOR MORE INFORMATION	INTERCOM SUBSTATION (DOOR STATION). WALL MOUNTED	
	U U=USER(IF APPLICABLE). THIS ONLY APPLIES TO DATA AND FIBER NOT COAX +H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET IF NOT SHOWN INSTALL AT 7' O" AFE	X = TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO RISER FOR TYPE	
IGNATIONS		INTERCOM MASTER STATION. DESK MOUNTED	
	AUDIO VISUAL EQUIPMENT	X = TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT, REFER TO RISER FOR TYPE	
	CEILING MOUNTED SPEAKER	INTERCOM MASTER STATION, WAII MOUNTED	
	X= SPEAKER TYPE	+H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF	
	Y-Z Z= DENOTES SPEAKER # IN ZONE	CALL STATION (THROUGH PHONE LINE) FOR BUILDING ENTRY, WALL MOUNTED	
STEM	NO ZONE INDICATES LOCAL ZONE FOR A/V SYSTEM IN ROOM	DOOR TYPE IDENTIFIER	
	WALL MOUNTED SPEAKER	X= TYPE (A1,C3,B6) REFER TO SECURITY DOOR DETAILS	
	X= SPEAKER TYPE TEXT Y= SPEAKER ZONE	DOOR RELEASE BUTTON, WALL MOUNTED A X= A: ADA ACCESSIBLE - (PALM ACTUATOR), W: HAND WAVE. NO TYPE: REGULAR PUSH BUTTON	
"- WODULAN FURINI UKE ADAPTEK,	Y-Z Z= DENOTES SPEAKER # IN ZONE	O DOOR RELEASE BUTTON, DESK MOUNTED	
	W W= DENOTES SPEAKER WATTAGE TAP +H MOUNTING HEIGHT IN INCHES AT CENTER OF DEVICE	REX REQUEST TO EXIT DEVICE (IR SENSOR), MOUNT CENTERED ABOVE DOOR FRAME	
ATE	NO ZONE INDICATES LOCAL ZONE FOR A/V SYSTEM IN ROOM	GLASS BREAK SENSOR, WALL MOUNTED	
		+H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 7'-0" AFF	
DS, INSTALLED AT 48" AFF AT CENTER	FT FLIP TOP DEVICE MOUNTED ON TABLE	GATE PEDESTAL	
	SENS MICROPHONE FOR AMBIENT NOISE, WALL MOUNTED		
TE. FLUSH MOUNTED	+H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF	DURESS PANIC BUTTON. WALL MOUNTED	
VATOR/ STAR CONNECTION		+H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 4'-0" AFF	
	X= TYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT	DURESS PANIC BUTTON, MOUNTED UNDER DESK	
DEVICE		MOTION DETECTOR, WALL MOUNTED, MOUNT 6" BELOW CEILING OR 8'-0" AFF MAX	
INISHED CEILING	+H X= DENOTES TYPE OF OUTLET, IF NOT SHOWN, ONLY ONE TYPE +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET	(MD) MOTION DETECTOR, 360 DEGREE SENSOR, CEILING MOUNTED	
		$_{ m constant}$ LINE BETWEEN SECURITY DEVICES, INDICATES ASSOCIATED EQUIPMENT	
	✓X X= LYPE, IF NOT SHOWN, ONLY ONE TYPE IN PROJECT WIRELESS ANTENNA FOR WIRELESS MICRRHONE WALL MOUNTED		
	-WA +H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF		
, IF NOT SHOWN, INSTALL AT 8'-0" AFF SHED CEILING		FREE - NO ACCESS CONTROL	
	TOUCH SCREEN FOR AUDIO/VIDEO CONTROL. WALL MOUNTED. INCLUDES BACK BOX	AL CR - CARD READER BIOMETRIC - BIOMETRIC READER	
	X = DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE	CR/KP - CARD READER AND KEYPAD	
UUILETS. REFER TO POKE-THRU/	CAMERA FOR AV SYSTEM. WALL MOUNTED		
R= RAISED FLOOR, W= WOOD)		VIDEO SURVEILLANCE SYSTEMS	
	$\begin{array}{c} & & & \\ \hline \hline \\ & & \\ \hline \hline \\ \hline & & \\ \hline \hline \\ \hline \\$		
ET	X= DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE	$U_{X,C}$ X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
		PAN/TILT/ZOOM CCTV CAMERA, CEILING MOUNTED	
OUTLETS. REFER TO POKE-THRU &	ROOM SCHEDULING PANEL, WALL MOUNTED, INCLUDES BACK BOX	$-x_{1,0}$ $x_{2,0}$ $x_{3,0}$ $x_{$	
	X = DENOTES TYPE OF OUTLET, SEE RISER FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE	$V_{X,C}$ X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
L	OCCUPANCY SENSOR, CEILING MOUNTED	FIXED CCTV CAMERA, CEILING MOUNTED $X_{,C} X$ = CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION. C = CAMERA NUMBER	
T	X= TYPE, C= CRESNET, E= ETHERNET	180° CCTV CAMERA, WALL MOUNTED	
		\bigvee X,C X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
	$\underset{+YY}{\longrightarrow} XX = SCREEN SIZE$	180° CC IV CAMERA, CEILING MOUNTED X,C X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION. C = CAMERA NUMBER	
NL, NEFER IU DETAIL SHEET	YY= HEIGHT TO CENTER OF SCREEN	180° MULTI-IMAGER CCTV CAMERA, WALL MOUNTED	
IRE, REFER TO DETAIL SHEET		\bigvee X,C X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
	= XX + YY XX = SCREEN SIZE	$\mathbb{P}_{X,C}$ X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
RMATION	YY= HEIGHT TO CENTER OF SCREEN	360° CCTV CAMERA, WALL MOUNTED	
	OVERHEAD PROJECTOR WITH MOUNT	\bigvee X,C X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
	Y= LENS THROW RATIO	$\mathbb{O}_{X,C}$ X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	
AY, COORDINATE BACKBOX PRIOR TO		- 360° MULTI-IMAGER CCTV CAMERA, WALL MOUNTED	
DRMATION	_ x MOTORIZED PROJECTION SCREEN	$X_{,C}$ X= CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	This it
	X= DIAGONAL DIMENSION IN INCHES	$(\bigotimes)_{X,C} X$ = CAMERA TYPE (1,2,3), SEE DETAIL SHEETS FOR MORE INFORMATION, C = CAMERA NUMBER	sealed by, E
	S _{LV} WALL SWITCH FOR MOTORIZED SCREEN		PE on the on the to the seal. F
	PODIUM FOR AV EQUIPMENT, REFER TO DETAIL SHEETS X= DENOTES TYPE OF OUTLET, IF NOT SHOWN. ONLY ONE TYPE IN PROJECT	+YY YY= HEIGHT TO CENTER OF SCREEN	of this docu considere
	AV PLATE OUTLET, REFER TO DETAIL SHEETS	PC SECURITY SYSTEM WORKSTATION, DESK MOUNTED	sealed and f
	 X = DENOTES TYPE OF OUTLET, SEE DETAIL FOR MORE INFO, IF NOT SHOWN, ONLY ONE TYPE +H +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET. IF NOT SHOWN. INSTALL AT 1'-6" AFF 	X X= IYPE	elect
		· · · · · · · · · · · · · · · · · · ·	

SOUND BAR WITH CAMERA, WALL MOUNTED

+ +H= MOUNTING HEIGHT IN INCHES AT CENTER OF OUTLET, IF NOT SHOWN, INSTALL AT 8'-0" AFF

- SB

13099 S. Cleveland Avenue,

THINK. LISTEN. CREATE.

Fort Myers, FL 33907

P 239.275.4240

Suite 500

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TLC No.:721030

No. Description Date

		LeeTran Park & Ride Expansion			
		DESIGN AND CONSTRUCTION RESPONSIBILITIES			
ITEM	SYSTEM	SCOPE	DESIGN RESPONSIBILITY	PROCUREMENT RESPONSIBILITY	CONSTRUCTION RESPONSIBILITY
1.00		VOICE SYSTEM (TELEPHONE COMMUNICATIONS SYSTEM ALL AREAS)			
1.01 RA	CEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
1.02 INS	SIDE PREMISE WIRING	Structured cabling system, including patch cords	A&E	GC	GC
1.03 OU	ITSIDE PREMISE WIRING IN PRIVATE CAMPUS	Structured cabling system	A&E	GC	GC
1.04 OU	ITSIDE PREMISE WIRING FROM SERVICE PROVIDERS	Fiber and copper for services	A&E/OWNER	S.P.	S.P.
1.05 CO	DUNTY FIBER BACKBONE TO DISTRICT FIBER LOOP (OFF-SITE FIBER)	Fiber, conduit, pullboxes, etc.	OWNER/VENDOR	VENDOR	VENDOR
1.06 PA	TCHING OF VOICE LINES	labor only of patching at racks and work areas	A&E	N.A.	OWNER
1.07 PH	IONE SWITCH - ADMIN PHONES	Equipment selection, sizing, equipment layout, RFP	OWNER	OWNER	OWNER
2.00		DATA SYSTEM (COMPUTER NETWORKS ALL AREAS)			
2.01 RA	CEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
2.02 INS	SIDE PREMISE WIRING	Structured cabling system, including patch cords	A&E	GC	GC
2.03 PA	TCHING OF DATA LINES	labor only of patching at racks and work areas	A&E	N.A.	OWNER
2.04 AC	TIVE ELECTRONICS (NETWORKING EQUIPMENT, SWITCHES, ROUTERS, SERVERS AND COMPUTERS)	Equipment selection, sizing, equipment layout, RFP	OWNER	OWNER	OWNER
2.05 WIF	RELESS SURVEY	Modeling to predict location of WAPs, including measured survey after building shell is completed	A&E	N.A.	OWNER
2.06 WA	APs	Wireless access points, including installation labor, support materials	OWNER	OWNER	GC
2.07 HA	RDENED POE NETWORK SWITCHES	Hardended POE network switches, power supplies	OWNER	OWNER	GC
3.00		TELECOM ROOM OUTFIT			
3.01 PLY	YWOOD AND WALL SLEEVES	Plywood and sleeves for cables	A&E	GC	GC
3.02 GR	ROUNDING SYSTEM	Ground bar and ground bus	A&E	GC	GC
3.03 RA(CKS, WIRE MANAGERS AND LADDER TRAY	Racks and all passive elements	A&E	GC	GC
4.00		CATV DISTRIBUTION (CABLE TV FOR ALL AREAS)			
4.01 RA	CEWAYS	Conduit, boxes, cable tray, etc.	A&E	GC	GC
4.02 INS			A&E	GC	GC
4.03 DIS	STRIBUTION DEVICES	Taps, amplifiers, splitters, etc.	S.P	S.P	S.P
4.04 DIS	SPLAYS	Displays/Monitors/TVs	A&E/OWNER	GC	GC
4.05 MO	DUNTS FOR TVS	Mounts for the TVS	A&E/OWNER	GC	GC
5.00		PAGING SYSTEM & DIGITAL SIGNAGE		00	
5.01 RA		Conduit, boxes, cable tray, etc.	A&E	GC	GC
5.02 INS		Wiring for paging and digital signage systems	A&E	GC	GC
5.03 AC		Paging system	A&E/OWNER	GC	GC
5.04 WA	AYSIDE SIGNAGE, TICKET VENDING MACHINE, DISPLAYS FOR CLEVER SYSTEM, BUS ROUTE KIOSKS	Wayside signage with buttons for visually impaired, displays for clever system, ticket vending machines, bus route kiosk signs. Refer to architectural drawings for more information on these items.	A&E/OWNER	GC	GC
6.00 6.01 DA	OCIMANO	BUILDING CCTV, ACCESS CONTROL, AND INTRUSION ALARM		00	
		Conduit, boxes, cable tray, etc.	AQE	GC	GC
6.03 CC		Cameras and mounts			
6.05 0.00					
0.00 CC					OWNER
0.00 AC		Access control panels, readers, etc	AQE	GC	GC
6.07 LOC			AQE	GC	GC
0.08 AC	CESS CONTROL ACTIVE ELECTRONICS		A&E	GC	GC
7.00 7.01 PC			٨٤ ⊏	60	60
7.07 FO			AdL	60	GC
8 00		FIRE ALARM AND BLIIL DING MANAGEMENT SYSTEM			
8.01 RA	CEWAYS		۵۶۶	GC	GC
8.02 INC			A&F	GC	GC.
8.03 40		Data gathering panels sensors etc.		GC	GC
9,00		DISTRIBUTED ANTENNA SYSTEM (PUBLIC SAFETY)	/\\\		
9.01 RA	CEWAYS	Conduit, boxes, cable tray, etc.	A&F	GC	GC
9.02 INS	SIDE PREMISE WIRING	Cabling, grounding	A&E	GC	GC
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NOTES: A&E: ARCHITECT AND ALL CONSULTANTS WORKING UNDER ARCHITECT, LIKE TLC ENGINEERING SOLUTIONS

GC: GENERAL CONTRACTOR S.P.: SERVICE PROVIDER

VENDOR: A SYSTEM INSTALLER HIRED DIRECTLY BY THE OWNER FOR A SPECIFIC SYSTEM

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SECURITY CAMERA SCHEDULE - SITE					
CAMERA No.	RESOLUTION	LENS	Туре	Comments	
C01	4 MP w/ 32x Optical Zoom	4.3-137 mm	TYPE 51 - Pole Mount	SITE	
C02	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 52 - Pole Mount	SITE	
C03	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 52 - Pole Mount	SITE	
C04	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 52 - Pole Mount	SITE	
C05	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 52 - Pole Mount	SITE	
C06	4 MP w/ 32x Optical Zoom	4.3-137 mm	TYPE 51 - Pole Mount	SITE	
C07	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 52 - Pole Mount	SITE	

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

<u>KEYNOTES ():</u>

- PROVIDE POLYMER CONCRETE COMMUNICATIONS VAULT. THE DIMENSIONS SHALL BE A MINIMUM OF 3'-0" L X 2'-0" W X 2'-0" D. ENGRAVE ON TOP LID "COMMUNICATIONS" IN 2" LETTERS. REFER TO "TELECOMMUNICATIONS VAULT - POLYMER CONCRETE WITH OPEN BOTTOM" DETAIL AND SPECIFICATION 270528 FOR MORE INFORMATION.
- PROVIDE 20" L X 12" W X 20" D POLYMER CONCRETE VAULT. ENGRAVE "COMMUNICATIONS" IN 2" LETTERS ON LID.REFER TO "TELECOMMUNICATIONS VAULT - POLYMER CONCRETE WITH OPEN BOTTOM" DETAIL AND SPECIFICATION 270528 FOR MORE INFORMATION.
- PROVIDE THREE (2) 2" CONDUITS AND ONE (1) 4" CONDUIT TO I.T. ROOM. REFER TO FLOOR PLAN FOR STUB UP LOCATION.
- 4. PROVIDE TWO (2) 2" CONDUITS.
- 5. PROVIDE ONE (1) 2" CONDUIT.
- 6. 20" X 16" X 8" NEMA 4X ENCLOSURE MOUNTED ON SITE POLE. REFER TO "NEMA 4X ENCLOSURE ON SITE POLES W/ WAP AND SECURITY CAMERAS" DETAIL ON SHEET T702 FOR MORE INFORMATION. LOW VOLTAGE CABLING TO POLE MOUNTED DEVICES SHALL BE CONCEALED INSIDE POLE IN A RACEWAY PHYSICALLY SEPARATED FROM CABLING FOR LIGHT FIXTURE; COORDINATE CONDUITS/RACEWAYS TO LOW VOLTAGE DEVICES MOUNTED ON POLE WITH POLE MANUFACTURER.
- 7. PROVIDE ONE (1) 1" CONDUIT.
- 8. 20" X 16" X 8" NEMA 4X ENCLOSURE MOUNTED ON SITE POLE. REFER TO "NEMA 4X ENCLOSURE ON SITE POLE W/ SECURITY CAMERA ONLY" DETAIL ON SHEET T702 FOR MORE INFORMATION. LOW VOLTAGE CABLING TO POLE MOUNTED DEVICES SHALL BE CONCEALED INSIDE POLE IN A RACEWAY PHYSICALLY SEPARATED FROM CABLING FOR LIGHT FIXTURE; COORDINATE CONDUITS/RACEWAYS TO LOW VOLTAGE DEVICES MOUNTED ON POLE WITH POLE MANUFACTURER.

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CAMERA No.	RESOLUTION	LENS	Туре	Comments
C08	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C09	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C10	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 61 - Surface Ceiling Mount	ENLARGED
C11	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C12	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C13	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C14	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C15	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C16	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C17	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C18	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C19	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C20	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C21	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C22	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C23	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C24	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C25	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 61 - Surface Ceiling Mount	ENLARGED
C26	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED
C27	5 MP	Varifocal, 3-8 mm	TYPE 62 - Surface Ceiling Mount	ENLARGED

ENLARGED PLAN - SIDE 2 CANOPY - TECHNOLOGY

ENLARGED PLAN - MAIN 1 CANOPY - TECHNOLOGY

GENERAL NOTES:

1. PROVIDE SURGE SUPRESSION DEVICES IN THE IT ROOM FOR ALL HORITZONTAL 4-PAIR UTP CABLES ROUTED OUTSIDE OF BUILDING OR TO DEVICES ON THE EXTERIOR OF THE BUILDING. 2. CANOPY HATCH IS NOT SHOWN ON THIS PLAN TO MAINTAIN LEGIBILITY OF SYMBOLS AND TAGS.

REFER TO ARCHITECTURAL DRAWINGS FOR CANOPY OUTLINE.

<u>KEYNOTES</u>

- 1. DATA DEDICATED FOR BUS ROUTE DIGITAL DISPLAY. PROVIDE 6"X 6" JUNCTION BOX WITH SINGLE GANG DEVICE ADAPTER AND A SURFACE MOUNT OUTLET (BISCUIT JACK) WITH SINGLE CATEGORY JACK MOUNTED INSIDE.
- 2. PROVIDE JUNCTION BOX (SIZE AS REQUIRED TO ACCOMDATE CABLES AND THE NUMBER OF CONDUITS ENTERING). JUNCTION BOX TO SERVE AS PULL BOX FOR LOW VOLTAGE CABLING FROM NEARBY DATA DROPS.
- 3. PROVIDE 1.5" UNDERGROUND CONDUIT TO IT ROOM 7.
- 4. PROVIDE 1" CONDUIT TO NEAREST JUNCTION BOX THAT IS TO BE USED TO ROUTE LOW VOLTAGE CABLING TO THE I.T. ROOM. TYPICAL OF ALL.
- 5. PROVIDE 1.5" UNDERGROUND CONDUIT FROM ELECTRICAL ROOM TO INGROUND BOX FOR FUTURE EV BUS CHARGING STATION. COORDINATE LOCATION WITH ARCHITECT PRIOR TO INSTALL. THIS CONDUIT IS DEDICATED FOR LOW VOLTAGE CABLING FROM THE EV POWER CABINET TO THE CHARGING STATION.
- 6. DATA DEDICATED FOR BUS ROUTE KIOSK SIGNS. COORDINATE DATA OUTLET WITH KIOSK INSTALLER PRIOR TO INSTALLATION.

7. PROVIDE 1" UNDERGROUND CONDUIT TO JUNCTION BOX.

HORIZONTAL DISTRIBUTION NOTES

1. TERMINATE STRUCTURED TELECOMMUNICATIONS DATA CABLING IN THIS AREA ON PATCH PANEL INSTALLED IN RACKS IN I.T. ROOM, UNLESS OTHERWISE NOTED.

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SECURITY CAMERA SCHEDULE - FLOOR PLAN				
CAMERA No.	RESOLUTION	LENS	Туре	Comments
C28	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 71 - Corner Mount	FLOOR PLAN
C29	15 MP (4 x Quad HD)	Varifocal, 3-6 mm	TYPE 71 - Corner Mount	FLOOR PLAN
C31	5 MP	Varifocal, 3-8 mm	TYPE 11 - Recessed Ceiling Mount	FLOOR PLAN
C32	12 MP FISHEYE	1.65 mm	TYPE 63 - Surface Ceiling Mount	FLOOR PLAN

2 I.T. ROOM 7 ENLARGED PLAN 1/2" = 1'-0"

GENERAL NOTES:

1. PROVIDE SURGE SUPRESSION DEVICES IN THE IT ROOM FOR ALL HORITZONTAL 4-PAIR UTP CABLES ROUTED OUTSIDE OF BUILDING OR TO DEVICES ON THE EXTERIOR OF THE BUILDING.

<u>KEYNOTES :</u>

- 1. LOCATE CONDUIT STUBS FROM COMMUNICATION VAULT TYPE 1 HERE AND AS CLOSE TO WALL AS POSSIBLE TO ELIMINATE INTERFERING WITH EQUIPMENT CLEARANCES.
- 2. PROVIDE CHANNEL RACK WITH 6" VERTICAL WIRE MANAGERS ON EACH SIDE. REFER TO SPECFICATION FOR MORE INFORMATION.
- 3. PROVIDE GROUND BUSBAR.
- 4. PROVIDE 8' H X 4' W X 3/4" D PLYWOOD. INSTALL AT 4" AFF TO 8'-4" AFF.
- 5. SPACE DEDICATED FOR WALL MOUNTED ACCESS CONTROL EQUIPMENT AND INTRUSION ALARM.
- 6. SPACE DEDICATED FOR DEMARC / SERVICE PROVIDER EQUIPMENT.
- 7. DATA DEDICATED FOR VENDING MACHINE.
- 8. DATA DEDICATED FOR TICKET VENDING MACHINE.
- 9. DATA DEDICATED FOR DISPLAY DEDIDCATED TO CLEVER SYSTEM.
- 10. LOCATE CONDUIT STUBS FROM COMMUNICATION VAULT TYPE 2 HERE AND AS CLOSE TO WALL AS POSSIBLE TO

ELIMINATE INTERFERING WITH EQUIPMENT CLEARANCES. 11. LOCATE 1-1/2" CONDUIT STUBS FROM CANOPY DEVICES HERE AND AS CLOSE TO WALL AS POSSIBLE TO ELIMINATE

- INTERFERING WITH EQUIPMENT CLEARANCES.
- 12. THIS TV OUTLET HAS DATA AND COAX CABLING. REFER TO TV OUTLET DETAIL FOR MORE INFORMATION.
- 13. PROVIDE DOUBLE POLE DOOR POSITION SWITCH. THE DPS ON THIS DOOR SHALL BE WIRED TO THE ACCESS CONTROL SYSTEM AND INTRUSION ALARM SYSTEM.
- 14. PROVIDE 12" TUBULAR LADDER TRAY, MOUNTED AT 7'-6" ABOVE FINISHED FLOOR.
- 15. PROVIDE VERTICAL CABLE RUNWAY AT CONDUIT STUBS/FIRE RATED ASSEMBLIES THROUGH FLOOR TO SUPPORT CABLING TO HORIZONTAL RUNWAY.

16. PROVIDE THREE (3) 3" CONDUIT SLEEVES.

HORIZONTAL DISTRIBUTION NOTES

- 1. TERMINATE STRUCTURED TELECOMMUNICATIONS DATA CABLING IN THIS AREA ON PATCH PANEL INSTALLED IN RACKS IN I.T. ROOM, UNLESS OTHERWISE NOTED.
- 2. TERMINATE SECURITY SYSTEM CABLING IN THIS AREA AT SECURITY EQUIPMENT INSTALLED IN I.T. ROOM, UNLESS OTHERWISE NOTED.

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SYMBOL	DEVICE	BACKBOX	MOUNTING HEIGHT	CONDUITS
-116	WALL MOUNTED INTRUSION ALARM KEYPAD	PROVIDE 4-11/16" SQUARE BOX 2-1/8" DEEP WITH SINGLE GANG DEVICE RING ADAPTER.	48" AFF	PROVIDE 1" CONDUIT TO ACCESSIBLE CEILING.
-SA]	WALL MOUNTED SIREN ALARM	PROVIDE 4-11/16" SQUARE BOX 2-1/8" DEEP WITH SINGLE GANG DEVICE RING ADAPTER.	96" AFF	PROVIDE 1" CONDUIT TO ACCESSIBLE CEILING.



KEYED NOTES

1. PROVIDE NEMA 4X ENCLOSURE, NVENT WS201608SS WITH NVENT ACCESSORY PANEL AP20P16 AND PADLOCK HANDLE KIT, NVENT WSHPL. INSTALL 2'-0" ABOVE GROUND, MEASURED FROM THE BOTTOM OF THE ENCLOSURE.

- 2. PROVIDE GROUND BUSBAR.
- 3. PROVIDE HORIZONTAL 4-PAIR CABLE PATCH CORD INSIDE POLE. LENGTH AND QUANTITY AS REQUIRED PER POLE. REFER TO SPECIFICATION 271000 FOR CABLE REQUIREMENTS.
- 4. PROVIDE **PANDUIT CBXQ6**-AY** SURFACE MOUNT BOX WITH FIBER OPTIC SCS JACK.
- 5. PROVIDE FIBER OPTIC CABLE. REFER TO FIBER OPTIC RISER DIAGRAM AND PECIFICATION 271000 FOR CABLE REQUIREMENTS
- 6. PROVIDE CONDUIT FOR FIBER OPTIC CABLE TO HEAD END. REFER TO TECHNOLOGY SITE PLAN FOR MORE INFORMATION.
- 7. PROVIDE GROMMET HOLE FOR COPPER PATCH CORD(S).
- 8. 1" CONDUIT FOR ELECTRICAL CABLING. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 9. QUAD POWER RECEPTACLE. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.
- 10. DIN RAIL MOUNTED NETWORK SWITCH POWER SUPPLY.
- 11. PROVIDE A 1" POLYISO INSULATION COVER IN THE INSIDE OF THE ENCLOSURE AND THE DOOR AT ALL SIDES AND PROTECT WITH ALUMINUM FOIL IN ALL EXPOSED SURFACES.
- 12. PROVIDE DIN RAIL FOR SUPPORT EQUIPMENT.
- 13. DIN RAIL MOUNTED HARDENED NETWORK SWITCH.

NEMA 4X ENCLOSURE ON SITE POLES W/ WAP AND SECURITY 5 CAMERAS N.T.S.

KEYED NOTES

1. PROVIDE NEMA 4X ENCLOSURE, NVENT WS201608SS WITH NVENT ACCESSORY PANEL AP20P16 AND PADLOCK HANDLE KIT, NVENT WSHPL.

2. PROVIDE GROUND BAR.

3. PROVIDE HORIZONTAL 4-PAIR CABLE PATCH CORD INSIDE POLE. LENGTH AND QUANTITY AS REQUIRED PER POLE. REFER TO SPECIFICATION 271000 FOR CABLE REQUIREMENTS

4. PROVIDE **PANDUIT CBXQ6**-AY** SURFACE MOUNT BOX WITH FIBER OPTIC SCS JACK.

5. PROVIDE FIBER OPTIC CABLE. REFER TO FIBER OPTIC RISER DIAGRAM AND SPECIFICATION 271000 FOR CABLE REQUIREMENTS.

6. PROVIDE CONDUIT FOR FIBER OPTIC CABLE TO HEAD END.

7. PROVIDE GROMMET HOLE FOR COPPER PATCH CORD.

8. SPACE DEDICATED FOR FIBER/COPPER TRANSCEIVER, QUANTITY AS NEEDED.

9. 1" CONDUIT FOR ELECTRICAL CABLES. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.

10. DUPLEX POWER RECEPTACLE. REFER TO ELECTRICAL DRAWINGS FOR MORE INFORMATION.

11. SPACE DEDICATED FOR DIN MOUNTED POWER SUPPLY.

NEMA 4X ENCLOSURE ON SITE POLE W/ SECURITY CAMERA 4 ONLY N.T.S.

SYMBOL USED

2 CEILING MOUNTED N.T.S.

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5. SEE FLOOR PLANS FOR PRECISE LOCATION OF CARD READER AND/OR PUSHBUTTON IN REFERENCE TO THE SIDE OF THE DOOR WHERE THEY ARE TO BE INSTALLED. 6. THE HANDING OF THE DOOR ELEVATIONS SHOWN ON THIS SHEET DOES NOT NECESSARILY MATCH THE HANDING OF THE DOORS IN THE FLOOR PLANS. ADJUSTMENT ARE REQUIRED TO EACH DOOR TO LOCATE DEVICES ON THE CORRECT LOCATION BASED ON THESE ELEVATION. 7. ELECTRIC LOCKSET CAN BE ELECTRIC MORTISE OR ELECTRIC CYLINDRICAL LOCK. REFER TO DIV 8 SPECIFICATIONS FOR PERCISE MODELS. 8. POWER TRANSFER CAN BE A SEPARATE POWER TRANSFER DEVICE OR AN ELECTRIC HINGE. REFER TO DIV 8 SPECIFICATIONS FOR PERCISE MODELS.

-PROVIDE JUNCTION BOX

/---MUD BOX INSIDE FRAME -PROVIDE 3/4" CONDUIT

(TYP)

3. THE PURPOSE OF THESE DETAILS IS TO INDICATE ROUGH IN REQUIREMENTS. DOOR HARDWARE IS SHOWN ONLY FOR GRAPHICAL ILLUSTRATION. REFERENCE DIVISION 8 HARDWARE SCHEDULE FOR ACTUAL HARDWARE SETS IN EACH DOOR TYPE. 4. REFER TO ARCHITECTS WALL ELEVATION FOR FINAL LOCATION OF ALL BOXES PRIOR TO ROUGH-IN.

2. ALL CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.

1. CABLE TYPE AND SIZE MUST COMPLY WITH ALL ESTABLISHED REQUIREMENTS AND APPLICABLE CODES.

THESE NOTES APPLY TO ALL DOORS ON THIS SHEET:

1" CONDUIT TO TELECOM

-CEILING

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