TECHNOLOGY MATERIAL LIST

THE SYMBOLS AND THE MATERIAL LIST ARE FOR THE CONVENIENCE OF THE CONTRACTOR. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF QUANTITIES AND SHALL FURNISH ALL MATERIAL REQUIRED, WHETHER SPECIFIED OR NOT, TO PRODUCE A SATISFACTORY WORKING SYSTEM.

CATALOG NUMBERS SHALL NOT BE CONSIDERED COMPLETE BUT ARE GIVEN ONLY TO AID THE CONTRACTOR IN THE SEARCH FOR MATERIAL. NO MATERIAL SHALL BE ORDERED BY MANUFACTURER AND CATALOG NUMBER ONLY. EACH CONTRACTOR SHALL FIRST READ THE COMPLETE DESCRIPTION OF THE MATERIAL ON THESE DRAWINGS AND SPECIFICATIONS. THE FIRST MANUFACTURER LISTED IS THE BASIS OF DESIGN. "STANDARD COLOR" INDICATES FACTORY FINISH AVAILABLE AT NO ADDITIONAL CHARGE.

ITEM NO.	SYMBOL	DESCRIPTION	SPECIFICATIONS SECTION
1		INFORMATION OUTLET, WALL MOUNT, 2, 4–PORT COVERPLATE AS INDICATED ON DRAWINGS, REFER TO INFORMATION OUTLET SCHEDULE ON E–3002–7.3 FOR PIN CONFIGURATION. " # " INDICATES INFORMATION OUTLET FACEPLATE CONFIGURATION AS INDICATED ON THE PLANS. REFER TO INFORMATION OUTLET SCHEDULE ON E–3002–7.3. INSTALL INFORMATION OUTLET IN A 4" SQUARE BACKBOX WITH A SINGLE GANG PLASTER RING. INSTALL A 1" EMT CONDUIT TO ABOVE ACCESSIBLE CEILING UNLESS OTHERWISE NOTED. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.	27 10 00
2	W	INFORMATION OUTLET, WALL MOUNT, FACEPLATE WITH PHONE STUDS AS INDICATED ON DRAWINGS, REFER TO INFORMATION OUTLET SCHEDULE ON E–3002–7.3 FOR PIN CONFIGURATION. " W " PROVIDE (1) RJ–45 JACK FOR VOICE AT +48" AFF FOR WALL HUNG PHONE. PROVIDE WITH STAINLESS STEEL FACEPLATE, MATING LUGS. INSTALL INFORMATION OUTLET IN A 4" SQUARE BACKBOX WITH A SINGLE GANG PLASTER RING. INSTALL A 1" EMT CONDUIT TO ABOVE ACCESSIBLE CEILING UNLESS OTHERWISE NOTED. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION.	27 10 00
3	MPP 1	MODULAR PATCH PANEL, 48 MODULAR RJ–45 TERMINATIONS, MOUNTS DIRECTLY TO EIA/TIA STANDARD 19" RELAY RACK, PORT IDENTIFICATION NUMBERS, PROVIDED WITH COLOR CODING AND LABEL HOLDER KITS, U.L. LISTED. REQUIRES (2) 1.75" MOUNTING SPACES.	27 31 00
4	$	REFER TO CLOSED CIRCUIT (CCTV) INDIVIDUAL CAMERA TYPE SCHEDULE ON E–3002–7.6 FOR INDIVIDUAL CAMERA REQUIREMENTS. REFER TO SPECIFICATION SECTION 28 23 00 FOR COMPLETE INFORMATION.	28 23 00
5	FDC 1	OPTICAL FIBER DISTRIBUTION CABINET, COMBINATION SHELF, 24 FIBER CAPACITY, SLIDE OUT RAILS TO FACILITATE FRONT ACCESS, JUMPER TROUGHS IN CONNECTOR PANELS TO REDUCE MOUNTING SPACE, PROVIDE WITH CLAMP AND GROUNDING KIT, COUPLING PANELS, SC CONNECTORS, COUPLINGS AND JUMPERS. REQUIRES (2) 1.75" MOUNTING SPACES.	27 31 00
6	CPP 2	CABLE PROTECTOR PANEL, 25–PAIR SURGE PROTECTION MODULE, 110 TYPE INPUT AND OUTPUT TERMINATIONS, PROVIDE WITH MANUFACTURE RECOMMENDED HOUSING. POPULATE WITH ANALOG GAS PROTECTOR UNITS WITH PTC.	27 31 00
7	NS 1	24 PORT GIGABIT LAYER 2/LAYER 3 SWITCH. FEATURES INCLUDE: POE 802.3AF, ROUTING (RIP V1/V2, OSPF V1/V2/V3), VLAN SUPPORT AND RESILIENT STACKING SUPPORT, IGMP SNOOP V2 CAPABILITIES. CONTRACTOR SHALL PROVIDE AND INSTALL REDUNDANT POWER SUPPLY, AND DUAL–PORT 10GBE UPLINK MODULE WITH 1 SHORT RANGE 10GBE OPTICAL LC XFP.	28 23 00
8	HWM 2	HORIZONTAL WIRE MANAGEMENT, 1.5" X 1.75" PRE–ASSEMBLED D–RINGS ON FRONT, 1.5" X 3" PRE–ASSEMBLED D–RINGS ON REAR. PROVIDE WITH COVER. REQUIRES (1) 1.75" MOUNTING SPACE.	27 10 00
9	MPP 2	MODULAR PATCH PANEL, 24 MODULAR RJ–45 TERMINATIONS, MOUNTS DIRECTLY TO EIA/TIA STANDARD 19" RELAY RACK, PORT IDENTIFICATION NUMBERS, PROVIDED WITH COLOR CODING AND LABEL HOLDER KITS, U.L. LISTED. REQUIRES (1) 1.75" MOUNTING SPACES.	27 10 00

TECHNOLOGY MATERIAL LIST (CONTINUED)

10	ER 1	EQUIPMENT RACK, 84" HIGH, STANDARD 19" MOUNTING SPACE, 4" WIDE X 6" DEEP UPRIGHTS FEATURING PASS–THRU HOLES ON FRONT AND SIDES FOR CABLE MANAGEMENT PROVIDE TWO PER RACK, MODULAR D–RINGS ON FRONT OF VERTICAL ORGANIZERS, METAL HINGED DOORS PROVIDE TWO PER RACK, TOP CENTER WATERFALL, TOP CHANNEL PATHWAY FOR LADDER RACK, DURABLE BLACK POWDER COAT FINISH, MEETS EIA–310–E REQUIREMENT, PROVIDES (45) 1.75" MOUNTING SPACES.	27 31 00
11	PS 1	POWER STRIP, HORIZONTALLY MOUNTS IN A STANDARD EIA/TIA 19" RACK, (10) REAR RECEPTACLES, 125VAC/60HZ, PROVIDE WITH 10'–0" CORD., INTERNAL CIRCUIT BREAKER, U.L. LISTED. REQUIRES (1) 1.75" MOUNTING SPACE.	27 31 00
12	TTB 1	TELECOMMUNICATIONS TERMINAL BOARD, 4' X 8' X 3/4" A–C GRADE FIRE–RATED PLYWOOD. EXPOSED SIDE SHALL BE SMOOTH. MOUNT VERTICALLY WITH TOP OF PLYWOOD AT 8'–6" A.F.F.	*
13	GND 1	WALL–MOUNT GROUND BAR. 4" H X 12" L X 1/4" D COPPER, ELECTRICALLY ISOLATED BY INSULATORS INTEGRAL TO MOUNTING BRACKETS. PROVIDE UNIT CONFIGURED WITH SIXTEEN (16) SETS OF 5/16" HOLES SPACED 5/8" ON CENTER TO ACCOMMODATE "A" SPACED TWO–HOLE COMPRESSION LUGS AND THREE (3) SETS OF 7/16" HOLES SPACED 1" ON CENTER TO ACCOMMODATE "C" SPACED TWO–HOLE COMPRESSION LUGS. ANSI/EIA/TIA–607 AND BICSI COMPLIANT. UL LISTED. REFER TO 3/E–3002–7.3 FOR ADDITIONAL INFORMATION.	27 05 26
14	KP	SECURITY KEYPAD. ILLUMINATED 10 KEY KEYPAD WITH LCD PANEL TO SHOW STATUS OF THE SECURITY SYSTEM. PROVIDE FLUSH MOUNT KIT (PART # D54C–1260).	28 16 11
15		SURFACE MOUNTED MOTION DETECTOR, PIR, AUTOMATIC TEMPERATURE COMPENSATION. MOUNTING HEIGHT SHALL BE APPROXIMATELY 6" BELOW FINISHED CEILING. INSTALL ACCORDING TO MANUFACTURES SPECIFICATIONS.	28 16 11
16	SEC CONT	INTRUSION DETECTION SECURITY CONTROL PANEL, 75 POINT PANEL WITH UP TO 67 RF POINTS, UP TO 8 SUPERVISED KEYPADS, UL AND FM LISTED. PROVIDE WITH (2) BATTERIES AND BATTERY CHARGER MODULE, BATTERY ENCLOSURE, LOCK AND KEY SET FOR ALL PANELS AND ANY NECESSARY ACCESSORIES FOR COMPLETE INSTALLATION.	28 16 11
17	CAB 1	ENCLOSED CABINET, 35"(H) X 28"(D), WALL MOUNT, 300 LB WEIGHT CAPACITY. SWINGING FRONT ZERO CLEARANCE LATCH ALLOWS SIDE BY SIDE OR INTERIOR CORNER MOUNTING, FRONT PLEXIGLAS DOOR, PROVIDE WITH ACTIVE COOLING AND THERMOSTATIC FAN CONTROLLER. PROVIDES (16) 1.75" RACK MOUNTING SPACES. COORDINATE WITH BUILDER ON REQUIRED BACKING TO SUPPORT WEIGHT CAPACITY.	27 10 00
18	MNT 1	WALL MOUNT VERTICAL BRACKET. WALL BRACKET TO MOUNT 19" RACK EQUIPMENT VERTICALLY. PROVIDES (5) RACK UNITS.	27 10 00
19	HWM 2	HORIZONTAL WIRE MANAGEMENT, 1.5" X 1.75" PRE–ASSEMBLED D–RINGS ON FRONT, 1.5" X 3" PRE–ASSEMBLED D–RINGS ON REAR. PROVIDE WITH COVER. REQUIRES (1) 1.75" MOUNTING SPACE.	27 10 00
20	VS IR–2	INDOOR/OUTDOOR RATED IR ILLUMINATOR. LIGHT IS ADJUSTABLE FROM 10 TO 180 DEGREES, LED, CAN COVER RANGE OF 28M AT NARROW/WIDE ANGLE. REQUIRES 12V AC. REFER TO FLOOR PLANS FOR ADDITIONAL INFORMATION. INSTALL A 4" SQUARE BACKBOX WITH SINGLE GANG PLASTER RING. REFER TO FLOOR PLANS FOR ADDITIONAL CONDUIT ROUTING INFORMATION.	28 23 00

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Revisions	Date

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I hearby certify that this Plan, Specification, or Report was prepared by me, or under my direct supervision and that I am a duly licensed Professional Engineer under the laws of the State of Oregon.

Signature:
Name: Lee D. VanOpdorp
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NATIONAL CEMETERY ADMINISTRATION

Drawing Title: TECHNOLOGY MATERIAL LIST	Project Title: REPLACE ADMINISTRATION AND MAINTENANCE BUILDING AND SITE IMPROVEMENTS		Date: 7-1-2011
Approved: Director, Office of Construction Management	Building Number: 3002	Checked: PETMCG / Drawn: JAYSTI	Project No.: 906CM3009
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