

ADDENDUM #1 POLICE DEPARTMENT DISPATCH REMODEL BID # 20/21-009 / PWP # WA-2021-153 BIDS DUE NO LATER THAN: 1:45 PM ON FEBRUARY 24, 2021 PUBLIC BID OPENING: 2:00 PM ON FEBRUARY 24, 2021

This addendum is to notify all potential proposers of clarifications made to the Bid documents as stated below.

- 1. Pre-Bid Meeting Agenda and Sign-In Sheet
 - a. Attached is the prebid meeting agenda and sign-in sheet from the February 11 meeting.
- 2. RFI question responses:
 - a. Is a Builders Risk policy required?
 - i. No. All insurance requirements are detailed in Bid Book General Conditions, Section 29 (Starting on Page 21 of the book).
 - b. Is the schedule 60 or 120 days? Liquidated damages section states 120.
 - i. All work shall be completed within sixty (60) calendar days from the time of the Notice to Proceed per Section 4 of the Special Provisions (Page 36). The Section 5 Liquidated Damages (Page 37) listed one hundred twenty (120) calendar days is incorrect. It shall read "ONE THOUSAND DOLLARS (\$1,000.00) for each and every calendar day delay after the sixty (60) calendar day completion time limit."
 - c. Is any asbestos present that needs abatement? Is so, who is performing abatement?
 - i. Asbestos testing was performed, and no hazardous materials were present therefore no abatement is required.
 - d. Is AWI or WI Cabinet certification required?
 - i. The cabinetry shall be Architectural Woodwork Institute (AWI) certified.
 - e. In the specs on MP001, nor on any other mechanical sheet indicates what specific R-value or application/procedure of installation of external duct wrap. Please advise.
 - i. Contractor shall provide R-8 insulation for the ductwork.
 - f. Sheet Keynote P06 on electrical drawing e201 seems to only reference one (1) floor box at nine (9) different locations. However, electrical drawing e201 shows three (3) different floor boxes per the Electrical Symbols on electrical drawing e001. Are we to provide (3) different floor boxes at each of the typical 9 locations, or just (1) quad floor box at each of the typical 9 locations?

- i. Provide (1) 4-gang floor box per the drawings at each dispatch console, for a total of nine (9) locations that will be fed from below accessible floor. Final receptacle quantities and configuration at consoles to be coordinated with final FF&E (console workstation RFP) submittals. Please see revised drawings for additional clarity. See attached revised Sheet E201.
- g. Are the floor boxes being mounted to the removable floor panels with a flexible whip?
 - i. The floor boxes are to be mounted to removable floor panel and will serve as a poke thru for the whips to the console mounted wiring devices. See the revised sheet e201 for more details.
- h. Sheet E201 Note P06 specs a 4-gang box with 5 receptacles, 2 data spots and a whip for console furniture. Is there supposed to be multiple floor boxes or are these plugs part of the furniture?
 - i. The plugs are part of the furniture and shall be coordinated with the final FF&E submittals. The floor box is a 4-gang poke-thru.
- i. Electrical Specification 4.1 on Electrical Drawing e002 is requesting a Design/Build Fire Alarm System. Can we have the make and model of the existing Fire Alarm System?
 - i. Fire alarm design is not included in the scope of this project. See attached revised Sheet E002.
- j. Page A201 detail #6 calls for "PLAM cabinets", however, finish note #8 calls for "compact laminate". The price increase for the "compact laminate" is quite significant, which we came to realize last minute when working on the City Hall bid. We just want to clarify so everyone is bidding the same products.
 - i. The cabinets shall be compact laminate per the finish note #8 on Sheet A201.
- k. Please indicate carpet tile pattern install method.
 - i. Carpet tile pattern shall be determined during submittal approval process based on the sample products provided.
- 1. Please indicate LVT pattern install method.
 - i. LVT pattern shall be determined during submittal approval process based on the sample products provided.
- 3. **COVID-19 Precautions** Due to the City's response to the COVID-19 virus and associated reduction in staff, in-person staff availability is limited. Bidders wishing to physically deliver their bids on the bid due date shall note that the Purchasing Office will receive bids in the lobby of City Hall beginning at 1PM on February 17th. Bids are due no later than 1:45PM. Bids may also be delivered to the Purchasing Department physical dropbox/mailbox, also located in the lobby of City Hall.

Please note and adjust your bid according to the revisions, additions, deletions, clarifications or modifications as presented on this Addendum #1, which are made a part of this bid. NOTE: To avoid disqualification, this Addendum 1 (and any other addenda) must be signed by an authorized representative of the bidding firm in the space provided and must be submitted with your firm's sealed proposal. Failure to return this addendum, duly signed, may be cause for rejection of the bid. ALL

ADDENDA SHOULD BE SIGNED AND PLACED IN SEQUENTIAL ORDER AND ATTACHED TO THE FRONT OF THE BID PACKAGE, COMPLETE WITH ALL REQUIRED DOCUMENTS.

CONTRACTOR BUSINESS NAME	Dan Marran, C.P.M., CPPO Contracts and Risk Manager
XAuthorized Signature	February 19, 2021
Printed Name of Person Signing	

<u>CITY OF SPARKS</u> POLICE DEPARTMENT DISPATCH REMODEL

NON-MANDATORY PRE-BID MEETING AGENDA

February 11, 2021 9:00 A.M. BID #20/21-009, PWP #WA-2021-153 Project 20-1011

ADMINISTRATION

- 1. Sign In
- 2. Contacts:
 - a. Robert R. Bidart, PE City of Sparks (224-2976) Project Manager
- 3. Bid Date February 24, 2021 by 1:45 pm., bids must be in the hands of the Contracts and Risk Manager at 431 Prater Way, Sparks, Nevada NO LATER THAN the above mention date and time. On bid date the Purchasing Office will receive bids in the lobby of City Hall beginning at 1 PM. Bids are due no later than 1:45 PM.
- 4. Engineer's Estimate (Base Bid) \$140,000
- 5. Bid Bond Required 5% of Bid Amount (Refer to General Conditions #26 (Page 19))
- 6. Subcontractors Exceeding 5 and 1% Forms (Pages 8 & 9) The prime contractor (bidder) shall list themselves on both lists.
- 7. Prevailing Wage Rates Applies for State requirements (>\$100,000). This is not a Federally Funded Project therefore Davis Bacon does not apply. (Refer to General Conditions #21 (Page 17))
- 8. Apprenticeship Utilization Act does apply. (Refer to General Conditions #22 (Page 18))
- 9. Bidder's Preference DOES NOT Apply (Refer to General Conditions #33 (Page 29))
- 10. Bid Award Council Meeting March 22, 2021
- 11. Start Construction No earlier than May 3, 2021
- 12. Contract Time –60 calendar days (Liquidated Damages would go into effect after 60 calendar days.)
- 13. Contract and Construction Bonds (Performance and Payment) (Refer to General Conditions #27 (Page 19))
- 14. Issue Notice to Proceed at Pre-Construction Meeting (Refer to Special Provisions Sections 4 and 14 (Pages 36 and 38))
- 15. Liquidated Damages \$1,000/day (Refer to Special Provisions Section 5 (Page 37))
- 16. Addendums There will be an addendum coming out on Tuesday. Bidders should check the bid site prior to submitting bid. RFIs shall be submitted no later than end of business day on Wednesday, February 17, 2021. RFIs can be sent to me at: rbidart@cityofsparks.us.
- 17. Submittals (Approved prior to Ordering)

BID SCHEDULE

1. Scope of Work: The base bid work includes but is not limited to the remodel and expansion of the existing Dispatch Center at the Sparks Police Department at 1701 E. Prater Way. The remodel upgrades to the Dispatch Center will include removal of existing walls/doors, restroom plumbing, ceiling, lighting fixtures, HVAC ductwork, and

carpet, and construction of new walls/doors, installation electrical conduit and wiring from normal power and UPS power panels, HVAC duct reconfiguration, installation of new ceiling, furnish and install new LED lighting fixtures, furnish new flooring materials, including installation of carpet on new raised flooring tiles, plumbing modifications, furnish and install breakroom counter and cabinets with sink, garbage disposal, and independent domestic water faucet with filter system, all to meet current ADA Standards and other miscellaneous associated work activities necessary to complete the project as stated in the plans and bid documents. Contractor shall coordinate with the City for removal of existing raised floor carpeted tiles and the installation of the new raised floor tiles including the modification of the tiles for electrical/network to new proposed Dispatch console layout.

- 2. Network wiring will be performed by others.
- 3. Base Bid Item Questions

CONSTRUCTION

- 1. Schedule
- 2. Material Submittals
- 3. Questions

SIGN-IN SHEET

<u>CITY OF SPARKS</u> POLICE DEPARTMENT DISPATCH REMODEL

Pre-Bid Meeting

Thursday, February 11, 2021 9:00 AM

FIRM	NAME/ADDRESS	PHONE/EMAIL	COMMENTS
CITT OF	POB BIODAT	(775)224-2976	
SMARKS		PBIPMATECHT OF SPAMES	s
Teleduda	Mike Pristow	7785601769	
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Enterprises	Mike Knier	530 308 1214	
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Enterprises	Patrick Donald	775 557 6116	
Crroup Vest	Kyle Jarboe	775-317-7758	
construction	1 Tall ac	Mylc@goopsestire.	'an
SLATER	Carles Hermande	630 -551-58	
Construction	Carles Hermanat	Carlos & CR9. Les	y
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SIL CLI	11111	775 313 6868	1
Sullivan Strutures	Colton Venzon	Venzon, colton@gmail.co	^

FIRM	NAME/ADDRESS	PHONE/EMAIL	COMMENTS
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ELECTRICAL SPECIFICATIONS

PART ONE - GENERAL

1.1. THE WORK: ALL WORK SHALL BE NEW UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL PROVIDE THE WORK SHOWN ON THE DRAWINGS AND SPECIFIED FOR ITS INDIVIDUAL SECTIONS OF WORK. THE WORD "WORK" IS DEFINED AS ALL LABOR, TRANSPORTATION, MATERIAL, EQUIPMENT, TOOLS, INSTALLATION, SUPERVISION AND ANY OTHER INCIDENTAL ITEMS OR SERVICES NECESSARY FOR THE PROPER INSTALLATION AND OPERATION OF THE COMPLETE SYSTEMS, WHICH SHALL BE PROVIDED BY THIS CONTRACTOR WHETHER OR NOT SPECIFICALLY INDICATED

OR NOTED.

1.2. RESPONSIBILITY: THIS CONTRACTOR IS SOLELY RESPONSIBLE FOR THE ACTIONS OF ITS PERSONNEL, SUPPLIERS, AND SUB-CONTRACTORS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL WORK AS MAY BE REQUIRED TO ACCOMMODATE OR SUPPORT THE ELECTRICAL WORK. EXAMPLES: PAINTING, STRUCTURAL SUPPORTS, CUTTING AND PATCHING, EXCAVATION AND BACKFILL, CONCRETE PADS, ROOF JACKS, ETC. REQUIRING THIS CONTRACTOR'S ENGAGEMENT OF APPROPRIATE TRADES TO PERFORM SUCH WORK FOR THE PROPER INSTALLATION AND OPERATION OF COMPLETE ELECTRICAL SYSTEMS.

1.3. MINIMUM REQUIREMENTS: THESE SPECIFICATIONS ESTABLISH THE MINIMUM REQUIREMENTS FOR THE WORK AND MATERIALS, EQUIPMENT AND METHODS TO BE PROVIDED. THE DRAWINGS MAY INDICATE REQUIREMENTS WHICH EXCEED THESE MINIMUMS.

1.4. GENERAL CONDITIONS: ALL GENERAL CONDITIONS, SPECIAL REQUIREMENTS OR GENERAL REQUIREMENTS OF THE CONSTRUCTION SPECIFICATIONS ARE MADE PART OF THIS SPECIFICATION AND HAVE THE SAME FORCE AND EFFECT AS IF COMPLETELY REPRODUCED.

1.5. <u>DEFINITIONS</u>:
AHJ: AUTHORITY HAVING JURISDICTION.

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ASSEMBLY: AN INSTALLATION OR SYSTEM OF MULTIPLE COMPONENTS REQUIRING MULTIPLE CONNECTIONS. (EXAMPLES: TRASH COMPACTOR, MOTORIZED DOOR, HVAC SPLIT SYSTEM, ETC.). EQUAL: ACCEPTED BY THE ENGINEER AS EQUAL.

FF&E: FURNISHINGS, FIXTURES AND EQUIPMENT - PROVIDED BY OTHERS AT JOBSITE. RECEIVE, PROTECT, STORE, ASSEMBLE, INSTALL AND CONNECT. PROVIDE MINIMUM 5x STRUCTURAL BACKING. (EXAMPLES: CHANDELIERS, PROJECTORS, ETC.).

PROVIDE: FURNISH, INSTALL, ACTIVATE, AND COMMISSION.

1.6. <u>CODES</u>: ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE 2017 EDITION OF THE NATIONAL ELECTRICAL CODE (NEC), THE 2015 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION CODE (IECC), AND ALL OTHER ADOPTED APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

1.7. PERMITS: PAY ALL FEES AND OBTAIN ALL PERMITS AND INSPECTIONS REQUIRED FOR THE WORK.

1.8. <u>DRAWINGS</u>: DRAWINGS ARE DIAGRAMMATIC AND SCHEMATIC IN NATURE, AND INDICATE THE TYPE, SIZE, ARRANGEMENT AND LOCATIONS OF MATERIALS AND EQUIPMENT. WORK INCLUDES CERTAIN COMPONENTS, APPURTENANCES, AND RELATED SPECIALTIES THAT MAY NOT BE SHOWN. PROVIDE ALL NECESSARY ITEMS TO COMPLETE THE WORK ACCORDING TO INDUSTRY STANDARDS. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS TO REQUIRE FINISHED WORK, TESTED AND READY FOR OPERATION. DO NOT SCALE DRAWINGS. ARRANGEMENT OF EQUIPMENT AND ROUTING OF FEEDERS AND BRANCH CIRCUITING SHALL BE PLUMB AND AT RIGHT ANGLES TO BUILDING CONSTRUCTION, AND MAY REQUIRE MODIFICATION DUE TO UNFORESEEN CONDITIONS REQUIRING ONSITE REVISIONS DURING CONSTRUCTION. (SEE ALSO "BIDDING").

1.9. COORDINATION: THIS PROJECT REQUIRES A HIGH LEVEL OF COORDINATION AND COOPERATION WITH OWNER, ARCHITECT, OTHER TRADES, VENDORS, AND SPECIALTY CONTRACTORS. CAREFULLY EXAMINE ALL CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, SHOP DRAWINGS, ETC. FOR ALL GENERAL CONSTRUCTION, STRUCTURAL, MECHANICAL, PLUMBING, ELECTRICAL, AND SPECIALTY CONTRACTOR WORK. PRIOR TO ROUGH-IN, COORDINATE THE WORK WITH ALL OTHER TRADES, TAKING RESPONSIBILITY FOR THE PROPER FITTING OF MATERIAL INTO THE BUILDING AS PLANNED WITHOUT INTERFERENCE WITH OTHER WORK. ESTABLISH AND VERIFY LOCATIONS, HEIGHTS, CONNECTION METHODS, ETC. WITH EQUIPMENT INSTALLER (AND OWNER, ARCHITECT, AND/OR INTERIOR DESIGNER FOR FF&E ITEMS), AND MAKE REASONABLE MODIFICATIONS IN THE LAYOUTS NEEDED TO PREVENT CONFLICTS WITH OTHER TRADES IN ORDER TO PROVIDE ACCESS FOR THE PROPER EXECUTION OF THE WORK.

1.10. <u>IDENTICAL</u>: ALL WORK REQUIRED FOR IDENTICAL ITEMS AND ASSEMBLIES OF THE PROJECT SHALL BE PROVIDED, ALTHOUGH EACH SPECIFIC IDENTICAL ITEM MAY NOT BE SHOWN IN DETAIL.

1.11. <u>VERIFICATION</u>: CHECK AND VERIFY ALL SIZES, DIMENSIONS, AND CONDITIONS BEFORE STARTING ANY WORK. ANY DEVIATION(S) OR PROBLEM(S) SHALL BE TRANSMITTED TO THE ENGINEER FOR REVIEW.

1.12. CONNECTIONS: CONNECT ALL EQUIPMENT, SYSTEMS, AND ASSEMBLIES PROVIDED BY OTHERS INCLUDING CONTROLS, SAFETY DEVICES AND INTERCONNECTIONS. EXCEPTION: DO NOT INTERCONNECT THE CONTROL SYSTEMS OF THOSE MECHANICAL AND PLUMBING SYSTEMS WHICH ARE SPECIFICALLY NOTED TO BE THE RESPONSIBILITY OF THOSE TRADES. PROVIDE FUSIBLE DISCONNECT SWITCHES AND MOTOR STARTERS FOR ALL EQUIPMENT EXCEPT THOSE ITEMS WHICH ARE SPECIFICALLY LISTED WITH INTEGRAL STARTERS/DISCONNECT SWITCHES. WHERE STARTERS AND/OR DISCONNECT SWITCHES ARE FURNISHED TOGETHER WITH EQUIPMENT, RECEIVE, INSTALL, AND CONNECT THOSE ITEMS.

1.13. <u>SUBMITTAL</u>: SUBMIT TO THE ENGINEER COMPLETE ELECTRONIC SETS OF SHOP DRAWINGS AND TECHNICAL DATA SHEETS FOR ALL EQUIPMENT AND MATERIALS SPECIFIED HEREIN. THE ENGINEER SHALL REVIEW SHOP DRAWINGS AND TECHNICAL DATA SHEETS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS AND ISSUE A WRITTEN ASSESSMENT TO THE OWNER PRIOR TO COMMENCEMENT OF WORK. THE ENGINEER'S FAILURE TO CORRECT ERRORS IN THE SUBMITTAL SHALL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATION TO PERFORM THE WORK AS SHOWN AND/OR SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ENGINEERING FEES NECESSARY TO CHANGE PROJECT DOCUMENTS BASED ON ALTERNATE SUBMITTAL PACKAGES/EQUIPMENT SUBSTITUTIONS.

1.14. OR-EQUAL SUBSTITUTIONS: ALL PROPOSED "OR EQUAL" SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER FOR CONSIDERATION PRIOR TO BIDDING AND AFTER ALL REQUIREMENTS ASSOCIATED WITH SUBSTITUTED EQUIPMENT AND/OR MATERIALS HAVE BEEN COORDINATED WITH OTHER BUILDING TRADES, INCLUDING ALL MECHANICAL, STRUCTURAL, AND/OR ARCHITECTURAL ELEMENTS. THE OWNER'S REPRESENTATIVE SHALL PRE-APPROVE ANY PROPOSED SUBSTITUTION IN WRITING. IDENTIFY AND ANNOTATE ALL REVISED REQUIREMENTS PER BUILDING TRADE ON THE SHOP DRAWINGS. ALSO IDENTIFY ALL COST DEBITS OR CREDITS IN WRITING FOR THE PROPOSED CHANGES PER BUILDING TRADE AND SUMMARIZE THESE AS A TOTAL NET-TO-OWNER CHARGE OR CREDIT FOR CONSIDERATION.

1.15. <u>AS-BUILT</u>: UPON COMPLETION OF CONSTRUCTION, SUPPLY THE ENGINEER WITH AS-BUILT DOCUMENTS ACCURATELY SHOWING THE MATERIALS AND EQUIPMENT AS INSTALLED. PROVIDE OPERATION AND MAINTENANCE MANUAL(S) CONTAINING APPROVED SHOP DRAWINGS, OPERATING AND MAINTENANCE INSTRUCTION FOR SWITCHGEAR, LIGHTING FIXTURES, CONTROLS, AND SPECIALTY EQUIPMENT.

1.16. <u>GUARANTEE</u>: ALL MATERIALS AND WORKMANSHIP SHALL BE GUARANTEED FOR A MINIMUM OF ONE (1) YEAR FROM DATE OF ACCEPTANCE BY OWNER (LONGER IF REQUIRED BY GENERAL AND/OR SPECIAL CONDITIONS). IN ADDITION, THE INSTALLATION SHALL BE GUARANTEED TO PERFORM AS SPECIFIED AND FULFILL EACH AND EVERY REQUIREMENT OF THE DRAWINGS AND SPECIFICATIONS WHEN OPERATED IN ACCORDANCE WITH THE CONTRACTOR'S INSTRUCTIONS. SHOULD THE INSTALLATION IN ANY WAY FAIL TO DO SO, THE CONTRACTOR WILL, WITHOUT DELAY AND WITHOUT COST TO THE OWNER, PROVIDE WHATEVER ADDITIONAL EQUIPMENT, MATERIAL, AND LABOR REQUIRED TO CORRECT THE DEFICIENCY AND COMPLY WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS. WHERE SPECIFIED EQUIPMENT HAS A LONGER GUARANTEE PERIOD, THE TERMS OF THAT GUARANTEE SHALL GOVERN (EXAMPLE: LED SYSTEM WITH 5 YEAR GUARANTEE). INCANDESCENT LAMPS ARE EXEMPT BUT SHALL BE NEW AND UNUSED AT THE TIME OF FINAL ACCEPTANCE.

1.18. IECC COMPLIANCE: COMPLY WITH ALL REQUIREMENTS SET FORTH IN THE IECC COMPLIANCE
CERTIFICATE INCLUDED IN THESE DOCUMENTS. HIRE A COMMISSIONING AGENT TO COMPLY WITH
AND PERFORM ALL ASPECTS OF SECTION C408 OF THE 2012 IECC.

BIDDING

1.19. SITE VISIT: CONTRACT DOCUMENTS INDICATE NEW WORK TO BE PERFORMED AND DO NOT PURPORT TO SHOW ALL EXISTING CONDITIONS. VISIT THE SITE PRIOR TO SUBMITTING A BID TO BECOME FAMILIAR WITH EXISTING CONDITIONS. COMPARE THE WORK SPECIFIED IN THE CONTRACT DOCUMENTS AGAINST EXISTING CONDITIONS, AND IDENTIFY AND ANNOTATE ALL WORK OR CONDITIONS THAT ARE DIFFERENT FROM THE CONTRACT DOCUMENTS OR THEIR INTENT. UPON DISCOVERY, IMMEDIATELY NOTIFY AND REPORT IN WRITING ANY DISCREPANCIES TO THE ENGINEER. NO EXTRAS OR CHANGE ORDERS WILL BE ALLOWED FOR FAILURE TO DEPENDENT OF THE PRESID SITE VISIT

PERFORM THE PRE-BID SITE VISIT.

1.20. BASIS OF PROPOSAL: PROPOSAL SHALL BE BASED ON MANUFACTURERS AND MODELS AS LISTED UNLESS "OR EQUAL" IS INDICATED. PROVIDE SUBSTITUTION REQUESTS A MINIMUM OF FIVE (5) BUSINESS DAYS PRIOR TO BID DATE CLOSING TO ALLOW TIME FOR DUE CONSIDERATION OF PROPOSED ALTERNATE AND SUBSEQUENT NOTIFICATION TO ALL OTHER BIDDERS IN THE EVENT SUBSTITUTION IS DEEMED ACCEPTABLE. DETERMINATION OF SUBSTITUTION EQUALITY RESTS SOLELY WITH THE ENGINEER.

1.21. VALUE ENGINEERING (V.E.) INITIATIVES: IN ADDITION TO THE "AS SPECIFIED/OR EQUAL" BASE BID, A COST REDUCTION INITIATIVE(S) MAY BE PROPOSED BASED ON SUBSTITUTIONS OF EQUIPMENT, MATERIALS, AND/OR METHODS. EACH SUCH PROPOSAL SHALL INCLUDE A DATA SHEET(S) ON THE SPECIFIED ITEM(S), THE PROPOSED SUBSTITUTE(S), AND THE NET CREDIT TO THE OWNER, INCLUDING ALL CREDITS AND CHARGES FROM ALL MEMBERS OF THE CONSTRUCTION TEAM. THE ENGINEER WILL REVIEW AND RENDER AN OPINION TO THE OWNER. IF THE V.E. INITIATIVE IS DECLINED, PROVIDE THE SPECIFIED EQUIPMENT/MATERIAL/METHOD. IF THE V.E. INITIATIVE IS ACCEPTED, AND IF SUCH ACCEPTANCE RESULTS IN A REQUIREMENT TO REVISE ANY DESIGN DOCUMENTS, THE CHARGES FOR THESE REVISIONS SHALL BE BILLED TO THE CONTRACTOR AND THE INVOICING SHALL BE SETTLED BEFORE THE PROJECT IS SIGNED OFF FOR FINAL ACCEPTANCE.

1.22. <u>BIDDING</u>: THE CIVIL, ARCHITECTURAL, MECHANICAL, KITCHEN, AND/OR INTERIOR DRAWINGS CONTAIN DETAILED DESCRIPTIONS, CIRCUITING, AND CONNECTION REQUIREMENTS WHICH ARE PART OF THIS CONTRACTOR'S RESPONSIBILITIES. <u>DO NOT</u> SUBMIT BIDS ON THIS PROJECT PRIOR TO REVIEWING ALL PROJECT DRAWINGS, SPECIFICATIONS, AND ADDENDA.

1.23. SPECIFICATIONS BOOK: THE SPECIFICATIONS CONTAIN SIGNIFICANT INFORMATION, CONDITIONS, AND PROCEDURES WHICH MAY HAVE A SUBSTANTIAL IMPACT ON THIS CONTRACTOR'S COSTS. DO NOT SUBMIT A BID ON THIS PROJECT UNLESS THE SPECIFICATIONS HAVE BEEN THOROUGHLY REVIEWED. THE GENERAL NOTES CONTAINED HEREIN ARE COMPLIMENTARY TO THE SPECIFICATIONS BOOK, AND IN COMPARISON THE MORE STRINGENT REQUIREMENT(S) SHALL COVERN

2.1. EQUIPMENT STANDARDS: ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND OF THE HIGHEST QUALITY AVAILABLE ("SPECIFICATION GRADE"). EQUIPMENT SHALL BE CONSTRUCTED TO NEMA STANDARDS AND SHALL BE LABELED FOR THEIR INTENDED PURPOSE BY A RECOGNIZED TESTING AGENCY ACCEPTABLE TO THE AHJ (U.L., CSA, ETL, ETC.).

2.2. ACCEPTABLE MANUFACTURERS AND SUPPLIERS: WHERE EQUIPMENT AND MATERIALS ARE NOT SPECIFIED BY NAME THEY ARE DEEMED TO GENERIC, SUBJECT TO THE REQUIREMENTS LISTED HEREIN. THESE MANUFACTURERS ARE CONSIDERED CAPABLE OF OFFERING EQUIVALENT PRODUCTS. MINIMUM STANDARD IN ALL INSTANCES IS COMMERCIAL GRADE: SWITCHGEAR: EATON, GENERAL ELECTRIC, SIEMENS, SQUARE D

LIGHT FIXTURES: ACUITY, COOPER, HUBBELL, THOMAS
WIRING DEVICES: HUBBELL, LEVITON, LEGRAND, WIREMOLD

2.3. <u>CIRCUITING</u>: ALL WIRING SHALL BE IN CONDUIT, CONCEALED WHERE POSSIBLE EXCEPT WHERE NOTED. EMT WITH STEEL INSULATED THROAT SET SCREW FITTINGS MAY BE USED IN DRY, PROTECTED INTERIOR LOCATIONS. PVC SCHEDULE 40 SHALL BE USED BELOW GRADE AT MINIMUM -24". WRAPPED RIGID ELBOWS AND RISERS SHALL BE USED FOR ALL THROUGH-GRADE TRANSITIONS AND STUB-UPS. RGS OR IMC CONDUIT WITH THREADED FITTINGS SHALL BE USED IN ALL LOCATIONS WHERE EXPOSED TO THE ELEMENTS OR SUBJECT TO PHYSICAL DAMAGE. IMC OR RIGID CONDUIT BELOW GRADE SHALL BE HALF-LAP WRAPPED WITH 20 MIL PVC TAPE. TYPE ENT RACEWAY IS NOT ALLOWED. CONNECT RECESSED AND SUSPENDED LIGHTING FIXTURES, MOTORIZED AND/OR VIBRATING EQUIPMENT WITH STEEL FLEX OR SEALTITE CONDUIT. ALL CONDUIT SHALL HAVE PULL CORD IF OTHERWISE EMPTY.

2.4. MC CABLE: MC CABLE MAY BE USED ONLY WITH SPECIFIC PERMISSION FROM THE ENGINEER. MC CABLE USE SHALL BE LIMITED TO CIRCUITING SOLUTIONS IN TIGHT CONDITIONS WHERE CONDUIT AND WIRE CIRCUITING CANNOT FIT. HOMERUNS AND FEEDERS SHALL BE CONDUIT AND WIRE.
2.6. WIRING: ALL WIRE SHALL BE COPPER UNLESS OTHERWISE NOTED. ALL WIRE SHALL BE STRANDED IN SIZES #8 AWG AND LARGER. SINGLE PHASE BRANCH CIRCUITS SHALL INCLUDE A SEPARATE NEUTRAL WIRE WITH EACH PHASE WIRE. NEUTRAL SHALL BE WHITE WITH COLOR STRIPE

MATCHING COLOR OF PHASE WIRE. HOMERUNS TO PANELBOARDS SHALL BE MINIMUM #12 AWG

CU IN 3/4" CONDUIT UNLESS OTHERWISE NOTED.

2.8. FUSES AND CIRCUIT BREAKERS: FUSES AND CIRCUIT BREAKERS SHALL BE SIZED PER ACTUAL RESPECTIVE APPLICATION (i.e., MOTOR CIRCUIT PROTECTOR, GROUND FAULT CIRCUIT INTERRUPTER, ARC FAULT CIRCUIT INTERRUPTER, ETC.). FUSES SHALL BE DUAL ELEMENT, CURRENT-LIMITING, AND SHALL BE INTERCHANGEABLE BETWEEN FRAME SIZES WITH STANDARD FACTORY FUSE REDUCERS. PROVIDE LOCKABLE SPARE FUSE CABINET WITH (3) SPARE FUSES OF EACH SIZE USED.

2.9. <u>DISTRIBUTION SWITCHGEAR</u>: SWITCHGEAR SHALL HAVE COPPER BUS AND HEAVY GAUGE HOUSINGS. SWITCHGEAR IN LOCATIONS OTHER THAN LOCKED ELECTRIC ROOMS SHALL HAVE LOCKABLE COVERS. SWITCHGEAR SHALL HAVE NO LESS THAN 20% SPARE BUSSED AND USABLE SPACE, MEASURED AS A PERCENTAGE OF THE SPACE OCCUPIED BY SPECIFIED CIRCUIT BREAKERS, SWITCHES, ETC.

2.10. <u>SERVICE SWITCHGEAR</u>: IN ADDITION TO THE ABOVE, SERVICE SWITCHGEAR SHALL MEET THE REQUIREMENTS OF THE SERVING UTILITY.

2.11. <u>PANELBOARDS</u>: PANELS SHALL HAVE COPPER BUS AND HARDWARE, BOLT-ON CIRCUIT BREAKERS, FLUSH MONO-FLAT TRIM, PIANO HINGED DOORS AND COVER (DOOR-IN-DOOR) WITH LOCKABLE MASTER-KEYED FLUSH LATCHES. FLUSH-MOUNTED PANELS SHALL HAVE EMPTY CONDUITS STUBBED TO ACCESSIBLE ATTIC SPACE: (1) 3/4" CONDUIT FOR EACH THREE (3) SPARE/SPACE CIRCUITS.

2.12. <u>SAFETY SWITCHES</u>: SWITCHES SHALL BE GENERAL DUTY UP TO 250 VOLTS, HEAVY DUTY ABOVE 250 VOLTS. FUSIBLE SWITCHES SHALL BE FUSED PER THE NAMEPLATE REQUIREMENTS OF THE

EQUIPMENT BEING CONNECTED.

2.13. MOTOR STARTERS: STARTERS SHALL BE MINIMUM NEMA SIZE 1 WITH INTEGRAL CONTROL TRANSFORMER, RED NEON "RUN" PILOT LIGHT AND "ON-OFF-AUTO" SELECTOR SWITCH ON COVER. OVERLOAD DEVICES SHALL BE SIZED PER THE NAMEPLATE AMPERAGE OF THE EQUIPMENT BEING CONTROLLED.

2.14. <u>CONTACTORS</u>: CONTACTORS SHALL BE ELECTRICALLY HELD WITH "ON-OFF-AUTO" SELECTOR SWITCH ON COVER.

2.15. <u>RATINGS</u>: ALL ELECTRICAL EQUIPMENT SHALL BE FULLY RATED FOR BRACING IN EXCESS OF THE MAXIMUM AVAILABLE FAULT CURRENT CALCULATED AND SHOWN AT THE EQUIPMENT CONNECTION POINT WITHIN THE DISTRIBUTION SYSTEM. MINIMUM RATING SHALL BE 10K AIC.

2.16. <u>WIRING DEVICES</u>: WIRING DEVICES (SWITCHES, RECEPTACLES, ETC.) SHALL BE SPECIFICATION GRADE "DECORA" STYLE, MINIMUM 20-AMP RATED. COVER PLATES SHALL BE NYLON. DEVICE AND PLATE COLOR(S) SHALL BE AS SPECIFIED BY ARCHITECT OR INTERIOR DESIGNER - VERIFY PRIOR TO COMMENCEMENT OF WORK. WIRING DEVICES EXPOSED TO THE ELEMENTS SHALL HAVE WEATHERPROOF-IN-USE LOCKABLE COVERS. RAISED STEEL BOX COVERS MAY BE USED IN UTILITY AREAS. REFER TO FOOD SERVICE NOTES (IF APPLICABLE TO THIS PROJECT) FOR ADDITIONAL REQUIREMENTS.

2.17. TRANSFORMERS: TRANSFORMERS SHALL BE TYPE TP-1 MINIMUM, WITH ALUMINUM WINDINGS, RATED FOR 150°C RISE (UNLESS OTHERWISE NOTED), MOUNTED ON RUBBER-IN-SHEAR VIBRATION ISOLATORS, CONNECTED WITH FLEXIBLE CONDUIT. PUBLISHED AND MEASURED NOISE RATING SHALL NOT EXCEED NEMA TP-20 MAXIMUM.

2.18. <u>LIGHTING FIXTURES</u>: LIGHT FIXTURES SHALL BE PROVIDED WITH ALL ASSOCIATED HARDWARE (HANGER BARS, PENDANTS, STEMS, RESTRAINTS, CHAINS, CORDS, LAMPS, ETC.). LENSES SHALL BE ACRYLIC, REFLECTORS SHALL BE ANODIZED. FLUORESCENT BALLASTS SHALL BE ELECTRONIC, PROGRAM RAPID START, THD LESS THAN 10%. FLUORESCENT LAMPS SHALL HAVE MINIMUM CRI OF 80%. INCANDESCENT LAMPS SHALL BE 130 VOLT, INSIDE FROST, MINIMUM 2000 HOUR LIFE. LOW VOLTAGE INCANDESCENT LAMPS SHALL BE HIR HALOGEN, MINIMUM 3000 HOUR LIFE. EXTERIOR LIGHTING FIXTURES SHALL BE INSTALLED TO PREVENT WATER, DUST AND INSECT INTRUSION, WITH GASKETING FOR DOOR/BACKPLATE AND SEALANT AT THE WIRING ENTRY POINT. REFER TO LIGHTING FIXTURE SCHEDULE WITHIN PLAN SET FOR ADDITIONAL REQUIREMENTS (LED CRITERIA, ETC.).

2.17. TAMPERPROOF: ALL EQUIPMENT AND CIRCUITING ACCESSIBLE BY THE PUBLIC SHALL BE DEMONSTRATED TO BE TAMPERPROOF AND VANDAL RESISTANT. OPENABLE DEVICES AND EQUIPMENT SHALL BE PAD LOCKABLE.

PART THREE - EXECUTION

PART THREE - EXECUTION

3.1. GROUNDING: GROUND ALL EQUIPMENT AND SYSTEM NEUTRAL IN ACCORDANCE WITH THE
REQUIREMENTS OF NEC ARTICLE 250. PROVIDE CODE-SIZED EQUIPMENT GROUNDING
CONDUCTOR IN ALL FEEDERS AND BRANCH CIRCUIT RACEWAYS. WHERE ISOLATED GROUNDS
ARE INDICATED, PROVIDE INSULATED CONDUCTOR (GREEN WITH YELLOW STRIPE).

3.2. <u>UTILITY SERVICES</u>: PROVIDE POWER AND COMMUNICATIONS SYSTEM SERVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE SERVING UTILITIES. CONTRACTOR TO PROVIDE ARC FLASH STUDY AND LABELLING ON ALL NEW EQUIPMENT IN ACCORDANCE WITH NEC. PROVIDE EXCAVATION, RACEWAY, STRUCTURES, GROUNDING, ETC. AS DIRECTED. POWER SERVICES AND DISTRIBUTION SYSTEM AIC RATING SHALL EXCEED MAXIMUM AVAILABLE FAULT CURRENT THROUGH UTILITY SERVICE TRANSFORMER. CONTACT SERVING UTILITIES AND OBTAIN THEIR REQUIREMENTS PRIOR TO BID. (UTILITY SERVICE AND LINE EXTENSION CHARGES PAID BY OTHERS).

3.3. <u>TEMPORARY CONSTRUCTION POWER</u>: PROVIDE TEMPORARY ELECTRICAL POWER DISTRIBUTION AND LIGHTING AS REQUIRED FOR ALL TRADES THAT REQUIRE SERVICE DURING THE COURSE OF THIS PROJECT IN COMPLIANCE WITH ALL NEC AND OSHA REQUIREMENTS. OWNER SHALL NOT BE RESPONSIBLE FOR TEMPORARY POWER CHARGES.

3.4. LOCATIONS: INDICATED LOCATIONS OF ALL OUTLETS AND EQUIPMENT ARE SUBJECT TO CHANGE. SHIFT/RELOCATE/RECONFIGURE ANY OUTLET, EQUIPMENT OR CONNECTION POINT UP TO 10' AS DIRECTED BY ENGINEER AT NO ADDED COST.

3.5. WORKMANSHIP: THE WORK SHALL BE INSTALLED PARALLEL AND AT RIGHT ANGLES TO THE BUILDING LINES, LEVEL AND PLUMB. THE WORK SHALL BE WELL SUPPORTED AND SOLIDLY MOUNTED. DRESS AND TIE WIRING IN PANELBOARDS AND SWITCHGEAR. THE WORK SHALL BE LEFT CLEAN WITH NO DIRT, DENTS, ABRASIONS, PAINT SPLATTERS, OR OTHER IRREGULARITIES.

3.6. FIRE STOPPING: ALL PENETRATED FIRE RATED SURFACES SHALL BE FIRE SEALED WITH APPROVED U.L. LISTED SEALANTS AS LISTED WITHIN ARCHITECTURAL SPECIFICATIONS. DO NOT EXCEED MAXIMUM ALLOWABLE SURFACE PENETRATIONS DEPENDENT ON RATING OF SURFACES. REFER TO ARCHITECTURAL DRAWINGS FOR DETERMINATION OF PENETRATION LOCATIONS THROUGH FIRE RATED ASSEMBLIES.

3.7. <u>SUPPORTS AND HANGERS</u>: PROVIDE 3" HIGH HOUSEKEEPING CONCRETE PAD BENEATH FLOOR MOUNTED EQUIPMENT, EXTENDING 3" BEYOND EQUIPMENT FOOTPRINT. SUPPORT AND ALIGN ALL RACEWAYS, CABINETS, BOXES, BACK BOXES, FIXTURES, AND EQUIPMENT FROM STRUCTURE. SECURE ALL SUPPORTING METHODS BY MEANS OF TOGGLE BOLTS IN HOLLOW MASONRY, EXPANSION BOLTS IN SOLID MASONRY, CONCRETE PRESET INSERTS OR EXPANSION BOLTS IN CONCRETE, MACHINE SCREWS OR BOLTS IN METAL, AND WOOD SCREWS IN WOOD CONSTRUCTION. ALL SUPPORTING SYSTEMS AND COMPONENTS SHALL BE RATED FOR A MINIMUM OF FIVE (5) TIMES THE ACTUAL LOAD.

3.8. <u>SLEEVES AND PENETRATIONS</u>: PENETRATIONS OF ALL SURFACES SHALL BE PROVIDED WITH SLEEVES THAT SHALL BE SEALED WITH LIKE MATERIALS AND SHALL BE FINISHED WITH ESCUTCHEON PLATES. PENETRATIONS BELOW GRADE LEVEL SHALL BE WATERTIGHT. PENETRATIONS AT EXTERIOR WALLS SHALL BE WEATHERPROOF. ROOF PENETRATIONS SHALL BE FLASHED AND COUNTER FLASHED.

3.9. <u>EXPANSION AND CONTRACTION</u>: RACEWAYS PASSING THROUGH BUILDING EXPANSION JOINTS, ON ROOF, AND IN AREAS OF TEMPERATURE VARIATIONS GREATER THAN 30°F SHALL BE INSTALLED WITH EXPANSION FITTINGS.

3.10. <u>IDENTIFICATION</u>: IDENTIFY ALL EQUIPMENT, SWITCHBOARD CIRCUITS AND ELECTRICALLY-CONNECTED EQUIPMENT WITH ENGRAVED NAMEPLATES. BOXES SHALL BE MARKED WITH PANEL AND CIRCUIT NUMBERS (PERMANENT PEN ACCEPTABLE ABOVE CEILING). NAMEPLATES SHALL BE FASTENED WITH A MINIMUM OF TWO (2) SCREWS. PANEL DIRECTORIES SHALL BE TYPED. CONDUCTORS SHALL BE TAGGED WITH CIRCUIT NUMBERS AT SOURCE, JUNCTION BOXES, AND ALL OUTLET BOXES WITH PERMANENT ADHESIVE MARKER STRIP. PANEL DIRECTORIES SHALL BE TYPED. IDENTIFY WIRING DEVICES WITH SELF ADHESIVE CLEAR SATIN FINISH LABELS WITH SOURCE AND CIRCUIT NUMBER.

3.11. ELECTRIC ROOM CODE COMPLIANCE: DUE TO THE DIAGRAMMATIC NATURE OF THE DESIGN DOCUMENTS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE SPRINKLER, ETC.), COORDINATE WITH ALL OTHER SUBCONTRACTORS AT THE START OF THIS PROJECT TO INFORM AND VERIFY THAT NO FOREIGN SYSTEMS OR EQUIPMENT ARE MOUNTED ABOVE ELECTRICAL EQUIPMENT OR PASS THROUGH THE DESIGNATED ELECTRIC ROOMS, AND THAT A MINIMUM OF 7'-0" IS PROVIDED AS CLEAR HEADROOM ALONG ACCESS PATHS TO ELECTRIC ROOMS. ANY REROUTING OR RELOCATION OF SYSTEMS THAT A SUBCONTRACTOR FEELS WILL COMPROMISE THE DESIGN INTENT SHALL BE DESCRIBED IN WRITING AND FORWARDED TO THE DESIGN ENGINEER FOR FURTHER REVIEW. ALL PIPING TO HVAC UNITS THAT COOL ELECTRIC ROOMS SHALL BE LOCATED ABOVE ENTRY DOOR. THE SPRINKLER PIPING TO PROVIDE PROTECTION FOR THE ELECTRIC ROOM IS PREFERRED TO ENTER THE ROOM ABOVE THE ENTRY DOOR AND RUN DOWN THE AISLE SPACES OF THE ROOM. ALL INSTALLATIONS SHALL BE FULLY COORDINATED AMONGST ALL TRADES.

3.12. ELECTRICALLY-OPERATED EQUIPMENT: VERIFICATION AND SUBSTITUTION: FEEDERS AND OVER-CURRENT DEVICES (INCLUDING STARTERS, DISCONNECTS, ETC.) HAVE BEEN DESIGNED BASED ON INFORMATION PROVIDED BY THE RESPONSIBLE CONSULTANT AND/OR DESIGNATED SUPPLIER. PRIOR TO ROUGH-IN, COORDINATE WITH THE APPROPRIATE TRADE AND/OR INSTALLER TO DETERMINE THAT THE ACTUAL NAMEPLATE ELECTRICAL REQUIREMENTS MATCH THIS DESIGN. ALL ADDITIONAL ELECTRICAL COSTS RELATED TO THE CONNECTION OF EQUIPMENT WHICH VARIES FROM THE ORIGINAL SPECIFICATIONS SHALL BE RESOLVED WITHIN THE CONSTRUCTION TEAM AT NO ADDITIONAL COST TO THE OWNER.

3.13. ADDITIONAL SYSTEMS AND EQUIPMENT CONNECTIONS: IN ADDITION TO EQUIPMENT POWER FEEDERS AND CONNECTIONS INDICATED ON THE ELECTRICAL DRAWINGS, PROVIDE 120V CONTROL POWER CONNECTIONS TO SMOKE/FIRE DAMPERS, VAV BOXES, TEMPERATURE CONTROL, FIRE ALARM PANELS, DOOR HOLDING/LATCHING DEVICES, ETC. AS INDICATED IN THE PROJECT DRAWINGS AND SPECIFICATIONS AS WELL AS ALL DESIGN-BUILD SYSTEM DRAWING.

ITEMPOWER SOURCE20A CIRCUITPROVIDE SMOKEFIRE/SMOKE DAMPEREMERGENCY10YESVAV TERMINAL (NO FAN)NORMAL (VERIFY)10NOTEMPERATURE CONTROL PANELEMERGENCY (VERIFY)1NOFIRE ALARM PANELEMERGENCY1NO

DOOR HOLDING/LATCHING DEVICES EMERGENCY 10 NO
3.14. HOURS OF OPERATION: CONDUCT WORK TO MINIMIZE DISRUPTION OF OWNER'S ONGOING
BUSINESS OPERATIONS. PROVIDE BARRICADES, NOISE ABATEMENT, AND DUST CONTAINMENT
MEASURES TO ENSURE THE SAFETY AND COMFORT OF PATRONS, STAFF, AND WORKERS.
INTERRUPTIONS OF EXISTING POWER, COMMUNICATIONS, AND/OR FIRE ALARM SYSTEMS SHALL
BE PERFORMED ONLY AT SUCH TIMES AS DIRECTED BY OWNER OR RESIDENT ENGINEER.
OUTAGES SHALL BE MOMENTARY IN NATURE, EACH SUCH OUTAGE (OR OPERATION WHICH MAY
POSE RISK OF AN ACCIDENTAL OUTAGE) SHALL BE SCHEDULED A MINIMUM OF FORTY-EIGHT (48)

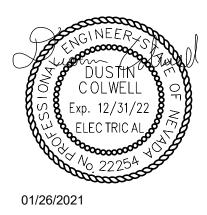
HOURS IN ADVANCE.
3.15. COMMUNICATIONS SYSTEMS: THE ELECTRICAL CONTRACTOR SHALL PROVIDE OUTLETS AND RACEWAYS FOR COMMUNICATION SYSTEMS AS INDICATED HEREIN, INCLUDING TELEPHONE, DATA, POINT-OF-SALE, SOUND, SECURITY, AUDIO/VISUAL, CCTV, MATV, ETC. CABLING AND DEVICES SHALL BE INSTALLED AND TERMINATED BY OTHERS.

2 PARTYFOURY SPECIAL SYSTEMS

THURB PARTY TESTING: PROVIDE ALL ASSOCIATED COSTS FOR THIRD PARTY TESTING OF ALL EQUIPMENT, CONDUCTORS, GROUND FAULT, GROUND FAULT COORDINATION STUDY WITH REPORT PREPARATION, ETC. AS REQUIRED BY THE NEC, AHJ, AND ALL OTHER GOVERNING ALL THORITIES

4.3. <u>SIDA SYSTEM</u>: PROVIDE ALL CONDUIT AND CONDUCTORS FOR THE ASPER/PITKIN COUNTY AIR TERMINAL SIDA. ALL ADDITIONS AND ALTERNATIONS TO THE SIDA SYSTEM SHALL INTEGRATE WITH EXISTING SYSTEM FOR COMPLETEAND FUNCTIONAL OPERATION.

MLEY-HORN AND ASSOCIATES, I



ELECTRICAL SPECIFICATIONS

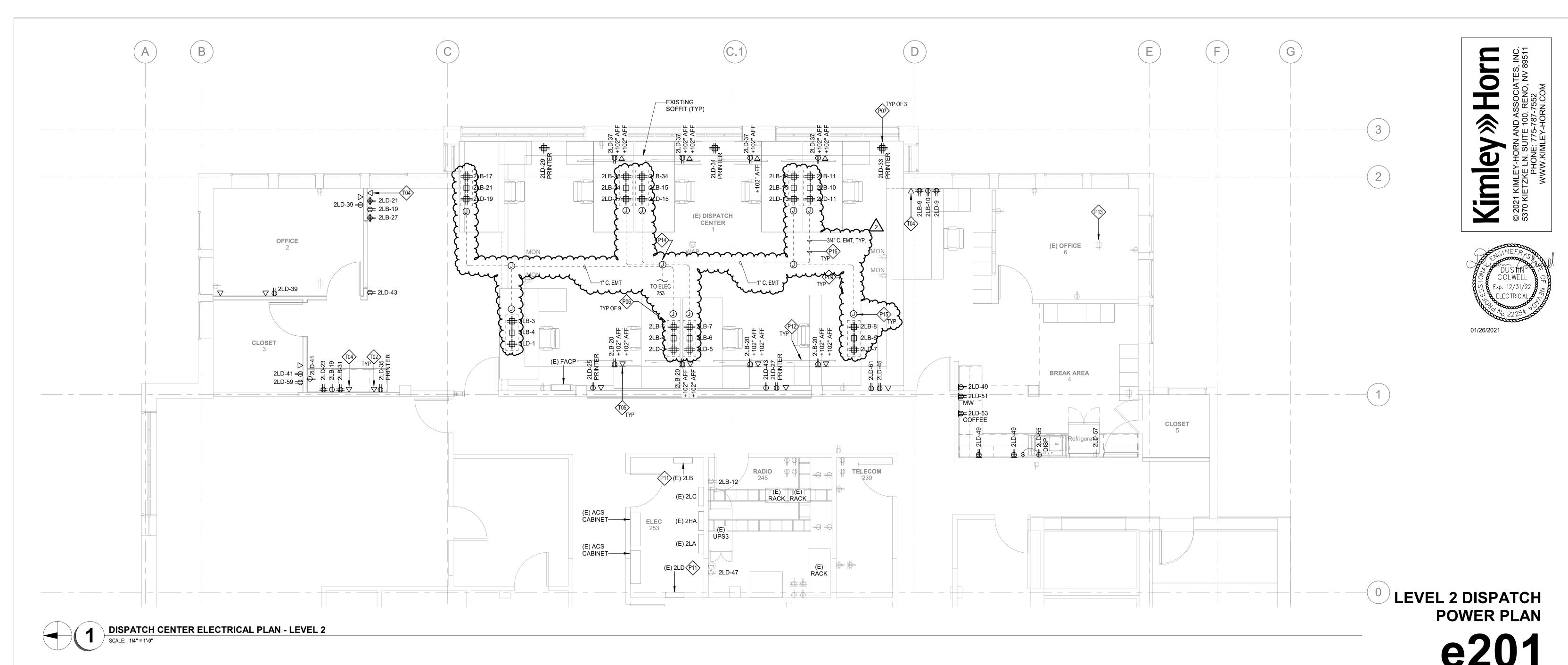
SPARKS PD DISPATCH REMODEL

1701 E PRATER WAY SPARKS NV 89434

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GENERAL NOTES

1. COORDINATE ALL NEW OR PROPOSED WORK WITH EXISTING CONDITIONS. FIELD CONFLICTS AND/OR DISCREPANCIES IN THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD FOR RESOLUTION BEFORE PROCEEDING WITH THE WORK.

- 2. EXISTING CONDITIONS ARE INDICATED ON THE DRAWINGS WITH HALF-TONE LINE WORK, DEMOLITION WORK IS INDICATED WITH FULL-TONE, DASHED LINE WORK, AND NEW OR PROPOSED WORK IS INDICATED WITH FULL-TONE, SOLID LINE WORK.
- 3. FOR PANELBOARD SCHEDULES, FINAL CONDITIONS AFTER NEW WORK IS COMPLETED ARE SHOWN. FOR RETROFITS ON EXISTING EQUIPMENT, EXISTING CONDITIONS ARE INDICATED WITH NORMAL TYPE FACE AND/OR THE NOTATION (E). MODIFICATIONS ARE INDICATED IN THE DRAWINGS IN BOLD TYPE FACE.
- 4. ALL WORK SHALL COMPLY WITH THE 2017 NFPA 70 NATIONAL ELECTRICAL CODE.

◆ SHEET KEYNOTES

P06 ELECTRICAL FLOOR BOX FOR POWER AND COMMUNICATIONS. PROVIDE HUBBELL CF84G30 WITH ELECTRICAL WHIPS FOR CONNECTION TO OWNER FURNISHED DISPATCH CONSOLE FURNITURE MOUNTED RECEPTACLES. COORDINATE EXACT REQUIREMENTS AND LOCATION WITH FINAL FF&E SUBMITTALS. PROVIDE (1) UPS BACKUP CIRCUIT FOR A QUAD RECEPTACLE, (1) UPS BACKUP CIRCUIT FOR A DUPLEX RECEPTACLE, AND (1) NORMAL CIRCUIT FOR A QUAD RECEPTACLE FOR NON CRITICAL LOADS. POKE-THRU SHALL BE MOUNTED TO RAISED FLOOR TILE. CONTRACTOR SHALL ROUTE WHIPS VIA POKE-THRU AT THE LOCATIONS SHOWN AND PROVIDE (10) FEET OF FMC TO PROVIDE FLEXIBILITY FOR LOCATING THE POKE-THRU IN THE DISPATCH CENTER. COORDINATE FINAL CONDUIT ROUTINGS WITH OWNER. TELECOMMUNICATIONS DEVICES, CABLING, AND TERMINATIONS FOR CONSOLES BY OTHERS.

P07 ELECTRICAL FLOOR BOX: PROVIDE HUBBELL CFB2G30 WITH (1) DUPLEX OUTLET FOR POWER AND (1) SINGLE GANG BOX RESERVED FOR COMMUNICATIONS, BY OTHERS.

- P09 DISPATCH CONSOLE DESKS, BY OTHERS.
- P11 REFER TO PANEL SCHEDULES FOR DETAILS ON PANEL MODIFICATIONS.
- P12 FLAT SCREEN TV MONITORS, BY OTHERS.
- P13 PROVIDE NEW BRASS DUPLEX LIFT-LID COVER PLATE ON THE EXISTING FLOOR MOUNTED OUTLET. FIELD VERIFY REQUIREMENTS.
- P14 PROVIDE JUNCTION BOX BENEATH ACCESSIBLE RAISED FLOOR IN THIS LOCATION.
 ROUTE ALL BELOW FLOOR CRITICAL AND NORMAL POWER FEEDS SERVING THE
 DISPATCH CONSOLES THROUGH THIS JUNCTION BOX. COORDINATE EXACT
 LOCATION WITH FINAL RAISED FLOOR INSTALLER AND OWNER. FIELD VERIFY.
- P15 PROVIDE JUNCTION BOX BENEATH ACCESSIBLE RAISED FLOOR IN THIS LOCATION. COORDINATE EXACT LOCATION WITH FINAL RAISED FLOOR INSTALLER AND OWNER. FIELD VERIFY.
- P16 PROVIDE CONDUIT RACEWAY BENEATH ACCESSIBLE RAISED FLOOR IN THIS LOCATION. COORDINATE EXACT LOCATION AND CONDUIT SWEEPS WITH FINAL RAISED FLOOR INSTALLER AND OWNER. FIELD VERIFY.

- TO2 TELECOMMUNICATIONS DEVICE. PROVIDE SINGLE GANG JUNCTION BOX WITH MUD RING AT +18" AFF AND 1" C. EMT FROM BOX TO +6" ABOVE FINISHED CEILING. TELECOMMUNICATIONS EQUIPMENT CONNECTIONS BY OTHERS.
- TO4 TELECOMMUNICATIONS DEVICE. PROVIDE 4-SQUARE JUNCTION BOX WITH MUD RING AT +18" AFF AND (2) 1" C. EMT FROM BOX TO +6" ABOVE FINISHED CEILING. TELECOMMUNICATIONS CABLING, DEVICES, AND CONNECTIONS BY OTHERS.
- TOS TELECOMMUNICATIONS DEVICE. PROVIDE SINGLE GANG JUNCTION BOX WITH MUD RING AT MOUNTING HEIGHT INDICATED AND 1" C. EMT FROM BOX TO +6" ABOVE FINISHED CEILING. TELECOMMUNICATIONS EQUIPMENT CONNECTIONS BY OTHERS.

DISPATCH CONSOLE PROPOSED CRITICAL LOADS AT EACH DISPATCH STATION

OTY	EQUIPMENT	LOAD (W)
1	WEST COMMUNICATIONS 911810-1	250
1	HARRIS R9063 REV C	4
1	HP Z2SFF G4 WORKSTATION DISPATCH	400
6	HP PRODISPLAY P221 MONITOR	132
1	HP ELITEDISPLAY E271I LED BACKLIT DISPLAY	40
1	SHS2900-01 HEADSET DOCK	5
1	HARRIS DDC100 DIGITAL DESKTOP CONTROLLER	4
1	INTRADO CONSOLE	250
1	CPU CABINET COOLING FAN	36
TOTAL	-	1121

DISPATCH CONSOLE PROPOSED NORMAL LOADS AT EACH DISPATCH STATION

QTY	EQUIPMENT	LOAD (W
1	XYBIX T4 TABLE	60
1	MYCLIMATE PERSONAL CLIMATE CONTROL	49
1	TASK LIGHTING	1

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