

ATTACHMENT #4

PART II: SCOPE OF WORK SPECIFICATIONS

ATTACHMENT II - OUTLINE SPECIFICATIONS

A. PERFORMANCE SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

1.01 General

- A. The work to be performed under this lease consists of furnishing all design work (all elements of design shall be made in consultation with COUNTY personnel) and construction work including labor, materials, equipment, transportation, and services necessary to complete this project in accordance with all attached exhibits and any other lease attachment so the project will be complete and ready for occupancy by the COUNTY.
- B. The LANDLORD shall be responsible for the preparation and coordination of all Construction Documents necessary for the Public Bidding process.
- C. The LANDLORD will show certification from the COUNTY that the work performed has been reviewed, inspected, and approved by the COUNTY.

1.02 Permits

- A. LANDLORD is to coordinate and provide for all health, accessibility, building, and life safety requirements pursuant to all local, state, and federal codes.
 - 1. Construction shall not be initiated until all permits and approvals are complete. Provide copies of permits and approvals to COUNTY.
 - 2. It is the intent of the COUNTY to lease facilities that are energy efficient and that exceed the current (as of the date of submission of plans to the building department) minimum State of California Title 24 energy requirements.

1.03 Fees

- A. All expenses related to the preparation of construction drawings, permits and fees are to be provided at LANDLORD'S expense.

1.04 Specifications

- A. The intent of these work specifications are to describe the minimum acceptable quality and quantity standards for design, materials, construction, workmanship, finish, and performance for facilities to be leased by COUNTY
 - 1. Minimum quality and quantity standards apply to new buildings and additions, alterations/remodels, and repairs to existing buildings or any combination thereof.
 - 2. On all items listed with Performance Specifications, COUNTY is to select and/or approve all colors, textures, types, models, styles, etc., used on and within the facility. LANDLORD is to coordinate and provide for all health, accessibility, building, and safety and fire requirements pursuant to all county state and federal codes.

1.05 Substitution

- A. The Project Program and associated Specifications assumes new material, new construction. The LANDLORD may submit a Substitution Request. Substitutions may include, but are not necessarily limited to:
 - 1. Re-use of existing services, materials or components.
 - 2. Modification to Program criteria.
- B. Substitution Requests must be submitted to the COUNTY 45 days prior to the designated Request for Proposal (RFP) due date. Approved substitution requests will be distributed as an addendum to this RFP to all proposers.

1.06 Addenda

- A. No addenda shall be issued within 48 hours of the designated Request for Proposal (RFP) opening time. Any addenda resulting in material changes, addition, or deletion shall be issued at least 72 hours before the designated Request for Proposal (RFP) opening time, otherwise the Request for Proposal (RFP) time shall be extended by not less than 72 hours.
- B. Addendums to this Request for Proposal (RFP) shall be posted on the County of Humboldt's official Bids and Request for Proposals website. Proposers may submit the following information to Tom deAge, Department of Public Works, 1106 Second Street, Eureka, CA. 95501, tdeage1@co.humboldt.ca.us, if they wish to be notified of addendums individually via email. Please provide:
 - 1. Proposer's name
 - 2. Phone number
 - 3. Physical address
 - 4. Email Address
- C. It is the responsibility of the Proposer to verify that they have all addendums via the County of Humboldt's official Bids and Requests for Proposals website prior to submittal, and to verify such in their proposal.

1.07 Restrooms

- A. For Program purposes, restrooms are defined as follows
 - 1. Restrooms:
 - a. Comply with restrooms as required by the most current local, state and federal codes.

1.08 Multi-Level Building

- A. Multi-level buildings are acceptable.
- B. For multi-level buildings, programs adjustments shall include, but not necessarily limited to:
 - 1. Program relationships.
 - 2. Equal distribution of code required restrooms per level, centrally located.
 - 3. To include elevator to all levels.

1.09 Natural Lights

- A. Occupied Areas.
 - 1. Offices
 - 2. Open work areas
 - 3. Conference rooms
 - 4. Kitchen/breakroom
 - 5. Public-serving areas
- B. Maximize layout for natural light.
- C. Natural light access required for areas removed from perimeter.
 - 1. Provide 20 square feet of glass per 10 lineal feet of partition for every partition separating occupied areas most removed from perimeter.
 - a. Use textured obscure glass.
 - 2. Skylights may be used in lieu of partition glass if practical.
 - a. Provide 4 square feet of skylight area for every 150 square feet of floor area served.

1.10 COUNTY furnished Products

- A. Cubicles/Modular Furniture (TYPE "D", TYPE "E" and at the Reception Area in the lobby)
 - 1. Cubicles/modular furniture components identified in Cubicle (Type "D", "E" and located at the Reception Area in the Lobby areas are NOT provided by proposer.

- a. COUNTY/user is responsible for all modular/furniture cost associated with purchase and delivery.
 - 2. Proposer's responsibilities include but are not necessarily limited to:
 - a. Provide all finished service connections to modular/furniture components.
 - b. Provide design coordination for layout of modular/furniture with COUNTY and furniture supplier.
 - c. Provide delivery and installation coordination with COUNTY and furniture supplier.
- B. Telephone Equipment
 - 1. COUNTY/user is responsible for all cost associated with telephone equipment and antenna purchase and delivery.
 - a. Equipment components identified in Division 16.08 to be provided by the proposer.
 - 2. Proposer's responsibilities include but not necessarily limited to:
 - a. Provide all finished service connections to equipment components.
 - b. Provide design coordination for layout and placement with COUNTY.
 - c. Provide delivery and installation, coordination with COUNTY and telephone supplier prior to the COUNTY's occupancy of the premise.

DIVISION 2 - SITE

2.01 Communications

- A. Wireless broadcast and reception.
 - 1. Provide area for satellite dishes, antennae, and associated equipment.
 - 2. Coordinate with Division 16 CATV.
 - a. Include provisions for installing protection as necessary and/or as required by code to prevent vehicles from hitting devices.
 - 3. Coordinate with Division 16 telecommunications.
 - a. Include provisions for roof access and use.

2.02 Parking

- A. General Information
 - 1. Parking shall conform to all applicable zoning laws and codes.
 - 2. Access roads, driveways, alleys, and approaches leading to parking shall be paved.
 - 3. Parking signage shall read "Parking for County employees and Visitors Only" in English and Spanish.
 - 4. Parking areas shall be suitably paved and lit by outside security lighting.
 - 5. There shall be ten (10) parking spaces labeled for visitors.
 - 6. Entrance/exit to parking area is to be clearly marked and directional arrows shall be provided to conform to parking pattern.
 - 7. Provide ADA/accessible parking and signage per all applicable laws and codes for use and location.
 - 8. Provide one bike rack with 6 slots for bikes in a secured (lockable) covered area.
 - 9. Mark parking stalls with four (4) inch painted white stripes.
 - 10. Coordinate space for one (1) trash bin and two (2) recycling bins in parking lot.

DIVISION 3 - CONCRETE

3.01 Not Used

DIVISION 4 – MASONRY

4.01 Not Used

DIVISION 5 – METALS

5.01 Not Used

DIVISION 6 - WOODS

6.01 Plywood Sheathing

- A. ½ inch plywood sheathing (SP-1):
 - 1. Location: Public lobby and as specified. Sheathing to be provided behind finishes for mounting of bulletin boards, light weight cabinets and/or shelving, etc.
 - 2. Coordinate with Division 9, gypsum wallboard assemblies and security partitions.

6.02 Interior Architectural Woodwork

- A. Submittals
 - 1. Prior to fabricating or installing interior architectural woodwork, verify with COUNTY aesthetic effects as well as qualities of materials.
 - 2. Product Data: For each type of applicable material/product used.
 - a. Include volatile organic compounds (VOC's) information.
 - b. Include Material Safety Data Sheets (MSDS).
- B. Quality Standard
 - 1. AWI (Architectural Woodwork Institute) Standard: **Custom Grade**, as defined by the latest edition of the AWI *Architectural Woodwork Standards* for grades of interior architectural woodwork, construction, finishes, and other requirements.
 - a. Include Material Safety Data Sheets (MSDS).
 - b. Plastic laminates
 - c. Transparent finishes
 - d. Opaque finishes
 - e. Cabinet hardware
- C. Cabinet Schedule (See also Outline Program Specification Schedule for quantities).
 - 1. CAB-1: Counter
 - a. Locations: Restrooms and as specified.
 - b. 24 " deep counter, 30" finish height including countertop and provide ADA (Americans with Disabilities Act) finish height & knee space as required.
 - c. Countertop, colorcore laminate with rounded corners, and 4" back splash.
 - d. Coordinate with Division 15 plumbing.
 - 2. CAB-2: Base Cabinet
 - a. Locations: Typical resource area, kitchen/break room and as specified.
 - b. 24 " deep base cabinets, 34" finish height including countertop.
 - c. Adjustable shelves ¾"- thick Melamine.
 - d. Countertop, colorcore laminate with rounded corners, and 4" back splash.
 - e. Wire type pulls.
 - f. Locks on all cabinet doors and drawers.
 - 3. CAB-3: Upper Cabinet
 - a. Location: As specified.
 - b. 12" deep wall hung cabinets.
 - c. Adjustable shelves ¾"- thick Melamine.
 - d. Wire type pulls.
 - e. Locks on all cabinet doors.
 - 4. Mailboxes
 - a. Provide a minimum of forty (40) mailboxes at minimum size of 6.5 inches in height, 11 inches wide and 12.5 in depth.
 - b. Location: Coordinate with COUNTY.
 - c. Doors and locks each mailbox
 - d. Load from back or coordinate slot size with COUNTY to assure confidentiality.

DIVISION 7 - THERMAL & MOISTURE PROTECTION

7.01 Skylights

- A. As may be required to comply with Project Program for natural light.
 - 1. Provide system capable of controlling or preventing glare.

DIVISION 8 - DOORS & WINDOWS

8.01 Doors

- A. Submittals
 - 1. Prior to installing doors, verify with COUNTY aesthetic effects as well as qualities of materials.
- B. Interior doors:
 - 1. Flush, 3 ft. wide x 7 ft. high x 1 - 3/4 in. thick solid core.
 - 2. Clear finish hard wood veneer.
 - 3. Existing doors may be used with prior written approval by COUNTY.
 - 4. All frames shall be metal.
 - 5. View windows will be required at certain doors, and may be required to be fire rated.
- C. Exterior doors:
 - 1. 3 ft. wide x 7 ft. high x 1 - 3/4 in. thick.
 - 2. All frames shall be metal.
 - 3. Acceptable door construction:
 - a. Wood
 - b. Metal
 - 4. Existing doors may be used with prior written approval by COUNTY.
 - 5. Storefronts may be used at main entrance.
 - a. Convenient accessibility is very important; provide automatic door opener.

8.02 Windows

- A. Interior & Exterior:
 - 1. Acceptable window construction:
 - a. Wood
 - b. Metal with thermal break
 - 2. Exterior windows should be designed operable with screens.
 - 3. Recycled windows may be used with prior written approval by COUNTY.

8.03 Hardware

- A. Submittal:
 - 1. Final hardware schedule coordinated with doors, frames, and related work to ensure proper size, thickness, function, finish and keying information.
 - a. All non-storefront exterior doors shall have metal lock guards protecting the lock bolt/strike force entry.
- B. Keyed Locksets:
 - 1. Minimum quality to be equal to Schlage 'D' series.
- C. Keying:
 - 1. Review the keying system with the COUNTY and provide the type required (master, grandmaster or great-grandmaster) system.
 - 2. Comply with COUNTY's instructions for keying and, except as otherwise indicated, provide individual change key for each lock that is not designated to be keyed alike.
 - a. Provide three keys for each lockset.
 - 3. On the exterior of the building there shall be a Knox box installed.
- D. Security Locksets:
 - 1. Coordinate security locksets with Division 8 doors, frames and hardware.
 - 2. Coordinate security locksets with Division 16 access control systems.
 - 3. Coordinate security locksets with Division 16 for remote release application.
 - 4. Building access and COUNTY lease area access shall be provided by electric or proximity card swipe or type security hardware.
 - a. Provide with key override option.

5. Provide for remote electric strike release with card swipe type security hardware.
6. Electric or proximity card swipe type security hardware shall be linked to building and COUNTY security system.
- E. Review hardware requirements with COUNTY prior to proceeding with any portion of this work.

8.04 Glazing

- A. Exterior:
 1. Glass system shall be capable of controlling.
- B. Interior:
 1. Textured obscure glass.
 2. Clear Glass.

DIVISION 9 - FINISHES

9.01 Gypsum Board Assemblies

- A. Quality Assurance
 1. American National Standards Instituted Standard Specification for the Application and Finishing of Gypsum Wallboard ANSI A 97.1
 2. Independent Testing Laboratory, Sound Transmission Class.
Sound Transmission Characteristics: For gypsum board assemblies indicated to have STC ratings, provide materials and construction identical to those of assemblies whose STC ratings were determined per ASTM E 90 and classified per ASTM E 413 by a qualified independent testing agency.
- B. Finishing Gypsum Board Assemblies
 1. Level 4 for gypsum board surfaces, for non-public, unoccupied areas such as closets and storage rooms.
 2. Troweled finish for gypsum board surfaces for all exposed occupied areas unless otherwise indicated.
- C. Gypsum Board Surface Texture Finish
 1. SmoothTroweled, unless otherwise indicated
- D. Acoustical Rating Schedule
 1. All rooms and spaces shall have an acoustical rating based on STC ratings.
 - a. Class I; rating STC 59 or better.
 - b. Class II; rating STC 50 or better.
 - c. Class III; rating STC 45 or better.

9.02 Acoustical Panel Ceilings

- A. Submittals
 1. Prior to final installation verify with COUNTY aesthetic effects as well as qualities of materials.
- B. Acoustical Ceiling Panel Schedule
 1. ACT-1
 - a. 24 inch x 48 inch x 5/8 inch, square edge panel
 - b. Standard suspension system
 2. ACT-2
 - a. 24 inch x 24 inch panel
 - b. Fine Line 9/16 grid with Armstrong Dune Panels

9.03 Vinyl Composition Tile

- A. Submittals
 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
 2. Product Data: For each type of applicable material/product used.

- a. Include volatile organic compounds (VOC's) information.
 - b. Include Material Safety Data Sheets (MSDS).
- B. Vinyl Composition Tile Schedule
 - 1. VT-1
 - a. 12 inch x 12- inch x 1/8 inch thick
 - b. One (1) color pattern & layout
 - 2. VT-2
 - a. 12 inch x 12 inch x 1/8 inch thick
 - b. Two (2) color pattern & layout

9.04 Ceramic Tile

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
- B. Ceramic Tile Schedule.
 - 1. CT-1: Floor
 - a. 2 (two) colors.
 - b. 2" x 2", unglazed.
 - 2. CT-2: Floor
 - a. 1 (one) color
 - b. 12" x 12", glazed with recommended slip resistance for location
 - c. Non-slip walk off area at entry doors.
 - 3. CT-3: Wall
 - a. 2 (two) colors
 - b. 4-1/4" x 4-1/4", glazed.

9.05 Sheet Vinyl

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
 - 2. Product Data: For each type of applicable material/product used.
 - a. Include volatile organic compounds (VOC's) information.
 - b. Include Material Safety Data Sheets (MSDS).
- B. Sheet Vinyl Schedule
 - 1. SV-1
 - a. Non-slip sheet vinyl, heat welded seams.
 - b. Coved base

9.06 Resilient Wall Base And Accessories

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
 - 2. Product Data: For each type of applicable material/product used.
 - a. Include volatile organic compounds (VOC's) information.
 - b. Include Material Safety Data Sheets (MSDS).
- B. Resilient (rubber/vinyl) Wall Base Schedule
 - 1. RB-1
 - a. Style: Cove with top-set toe.
 - b. Minimum Thickness: 1/8"nominal.
 - c. Height: 4 inches.

9.07 Painting

- A. Submittals

1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
 2. Product Data: For each type of applicable material/product used.
 - a. Include volatile organic compounds (VOC's) information.
 - b. Include Material Safety Data Sheets (MSDS).
- B. Quality Control
1. All surfaces shall receive semi-gloss finish.
 - a. Exception: restrooms shall receive gloss finish
 2. All painted surfaces shall receive 1 prime coat and 2 finish coats, or equal.
 3. Repainting of existing buildings:
 - a. The entire existing building shall be repainted in accordance with this specification section.
 - b. Repaint/refinish all walls, soffits, wood and metal trim/flushing, and other surfaces that are presently painted or are unfinished but will become exposed due to remodel work.
 - c. Provide color mock-ups sufficient enough for COUNTY to determine aesthetic effects.
 - d. Exterior and interior paint colors to be approved by COUNTY.
- C. Paint Schedule
1. PT-1; 1 color per room.
 2. PT-2; 2 colors per room.
 3. PT-3; 3 colors per room.
 4. PT-4; 4 colors per room.
 5. PT-5; 5 colors per room.

DIVISION 10 - SPECIALTIES

10.01 Signage

- A. Submittals
1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
- B. Signage Schedule
1. Provide building address numerals and exterior signage identifying the occupying COUNTY agency.
 - a. Signs shall be professionally manufactured, have good appearance and be readily visible from the street during day and night time hours.
 2. Provide signage at or near the front entry which identifies the agency.
 - a. Place signage on glass window or door as directed by COUNTY.
 3. Provide interior signage including but not limited to the identification of all public-serving rooms and restrooms. Provide room numbers at all doors. Provide wayfinding signage as necessary.
 4. Provide Parking signage as noted in Division 2
 5. Comply with State Accessibility Standards, Title 24, and the Americans with Disabilities Act (ADA) for type, size and location of site signs and interior signs.

10.02 Fire Extinguisher

- A. Fire extinguisher of the portable hand-held multipurpose dry chemical type.
1. Type suitable for extinguishing:
 - a. Class A fires (paper, wood, cloth, etc.).
 - b. Class B fires (burning liquids)
 - c. Class C fires in live electrical equipment where a non-conductive extinguishing agent is required.
 2. The extinguisher shall have an approximate weight of ten pounds and shall be placed in a cabinet designed for fire extinguisher.

- a. Cabinet shall be recessed except when conditions prohibit recessing.
 - b. Cabinet shall have a break glass door with pull handle and key lock.
 - c. Installation height of fire extinguisher top shall not exceed 48 inches nor be less than 40 inches; 48 inches is preferred.
 - d. Cabinets shall not encroach more than 4 inches into a circulation path and shall comply with California Building Code Section 11B-307.
- B. Fire extinguisher schedule.
 - 1. Additional fire extinguisher requirement, which may be beyond code and Fire Marshal requirements.
 - a. Communication room: Clean Guard extinguisher or equal type extinguisher.
 - b. Kitchenette and Kitchen Demonstration Room: Class A, B & C
- C. Carbon Monoxide Monitoring as recommended by mechanical engineer.

10.03 Accessories

- A. Women's Restrooms accessories shall be Bobrick or equal, style and color approved by COUNTY.
 - 1. Grab bars as required by code
 - 2. Paper towel dispensers
 - 3. Waste receptacles
 - 4. 1 Napkin dispenser
 - 5. Seat cover dispensers
 - 6. Napkin disposal units
 - 7. Soap dispensers
 - 8. Mirror and shelf units
 - 9. Rolled toilet paper dispenser
 - 10. Exhaust fan
 - 11. Baby Changing Station at Public Restroom.
- B. Men's Restrooms shall be Bobrick or equal, style and color approved by COUNTY.
 - 1. Grab bars as required by code
 - 2. Paper towel dispensers
 - 3. Waste receptacles
 - 4. Seat cover dispensers
 - 5. Soap dispensers
 - 6. Mirror and shelf units
 - 7. Rolled toilet paper dispenser
 - 8. Exhaust fan
 - 9. Baby Changing Station at Public Restroom.
- C. Kitchen and Kitchenette
 - 1. Paper towel dispensers
 - 2. Soap dispensers
 - 3. Waste receptacle
- D. Double Coat Hooks
 - 1. All Office doors
- E. If required by code, accessories shall comply with State Accessibility Standards, Title 24, and the Americans with Disabilities Act (ADA) for maneuvering clearances, heights and reach ranges.

DIVISION 11 - EQUIPMENT

11.01 Kitchen Equipment

- A. Kitchen equipment shall be commercial quality.
- B. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
- C. Equipment Schedule
 - 1. Minimum required design features:
 - a. Refrigerator - 35 cubic feet
 - b. Freezer – 18.6 cubic feet
 - c. Microwave - Minimum size: 1 cubic foot.
 - d. Four-burner electric cooktop
 - e. Range hood over cooktop that exhausts to the exterior
 - f. Electric oven, self cleaning – 30 inch
 - g. In-sink garbage disposal.
 - h. Dishwasher

11.02 Kitchenette

- A. Requirements similar to section 11.01 above. Supply Refrigerator, Microwave and in-sink garbage disposal only.

11.03 Laundry Room Equipment

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as quality of materials
- B. Comply with State Accessibility Standards, Title 24 and the Americans with Disabilities Act (ADA for maneuvering clearances, heights and reach ranges).
- C. Equipment Schedule
 - 1. Minimum required design features
 - a. Large capacity, heavy duty clothes washer, non-commercial.
 - b. Large capacity, heavy duty electric clothes dryer, non-commercial.

11.04 Conference Room Projector Mount

- A. Install COUNTY supplied LCD projector ceiling mount in the conference room. Provide sufficient blocking as recommended for installation location.

DIVISION 12 – FURNISHINGS

12.01 Window Treatment

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as quality of materials
- B. Window Treatment Schedule
 - 1. Vinyl blinds on all exterior windows.
 - 2. Vinyl blinds on all interior windows below 6 feet.
 - 3. Vinyl blinds are to be lead free.

DIVISION 13 – SPECIAL CONSTRUCTION

13.01 Playground

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as quality of materials
- B. Equipment Schedule
 - 1. All play system elements must meet and/or exceed all federal, CPSC, ASTM & IPEMA guidelines.

2. Play system must include unitary rubber tile surfacing throughout the entire playground
3. Rubber surface to be sufficient to protect from an 8 foot fall height throughout entire play area.
4. Play system features
 - a. One structure/play area designed for ages 2 to 5 suitable for allocated space.
 - b. One structure/play area designed for ages 5 to 12 suitable for allocated space.
5. Preferred play system qualities
 - a. All play system elements must demonstrate the highest level of durability in materials and finishes selected in consideration of child health and safety
 - b. "Green" construction practices and materials are highly desired.
 - c. Structures should provide a variety of built-in activity panels and climbers.
6. Four foot high enclosure fence.

DIVISION 14 – CONVEYING SYSTEMS

14.01 Elevators

- A. As required to comply with Request For Proposal.
- B. Coordinate with Division 1

DIVISION 15 - MECHANICAL

15.01 Fire Sprinkler

- A. Approval and acceptance required by Fire Marshal and Insurance carrier.
- B. Use alternate to wet sprinkler system where permitted by code and Fire Marshal in the following areas, but not necessarily limited to:
 1. Communication Room.

15.02 Plumbing

- A. Stainless steel sink, double basin.
 1. Kitchen
- B. Stainless steel sink, single basin.
 1. Kitchenette
- C. Drinking fountains as required by code.
- D. Floor mount mop sink, minimum one (1) each floor.

15.03 HVAC

- A. Comply with ASHRAE recommendations for air quality in each of the COUNTY uses specified.
- B. HVAC supply and return.
 1. All rooms to have air conditioning supply and return with design layout compatible with room layout and use.
 - a. All supply registers with adjustable louvers.
- C. Thermostat Control
 1. Common uses in common zones may be controlled by common thermostat with prior COUNTY approval required.
 - a. Example of common use:
 - (1) Offices
 - (2) Conference room, lobby
 - (3) Corridors, hallways, work areas
 - b. Example of common zone:
 - (1) North side of building
 - (2) South side of building
 - (3) East side of building
 - (4) West side of building
- D. Independent Air Conditioner and Thermostat Control (and equipment as required)

1. Communication room
- E. Thermostat Access
 1. Thermostats enclosed in metal lock boxes.
 2. Lock boxes not to project more than 4" into circulation pathways.
- F. Balancing and Testing
 1. Balancing and test reports for wet and dry systems shall be submitted and accepted by the COUNTY prior to occupancy.

DIVISION 16 -ELECTRICAL

16.01 Electrical General

- A. Cabling Standard, minimum at ALL walls.
 1. Power supply and, telephone/ computer jacks.
 2. Every 10 lineal feet, minimum one of each for walls less than 10 lineal feet.
 - a. Exception: Kitchen/breakroom requires power as specified and one (1) telephone jack.
 - b. Exception: Cabling standard not applicable in storage rooms or restrooms.
 3. Additional to cabling standard at wall:
 - a. Provide cabling for ceiling projectors in conference room.
- B. Cabling Standard, open furniture areas
 1. Power supply and cabled telephone/ computer jacks.
 - a. LANDLORD to coordinate and install cabling standard to all open furniture locations using power poles.
- C. Junction and Outlet Boxes
 1. Provide recessed boxes wherever possible.
- D. Grounding and Bonding
 1. Provide grounding and bonding in accordance with code. Permanently and effectively ground non-current carrying metallic parts of electrical equipment.
 2. Provide insulated equipment grounding conductor in all 120/208 volt branch circuits that serve convenience outlets and receptacles. Where isolated ground receptacles or connections are required, run an isolated ground conductor along with circuit conductors and the equipment ground conductor.
- E. Electrical Power
 1. Power supplies shall conform to the requirements of uses and equipment programmed for use in the facility.
- F. Dedicated circuits
 1. Provide dedicated circuits that meet code, requirements of uses and equipment programmed for use in the facility.
 2. Areas that require dedicated circuits are, but not necessarily limited to:
 - a. Communication room: Six (6) 20 amp, 120 volt and one (1) 30 amp, 110-130 volt with twist type lock.
 - b. Kitchen and Kitchenette: As required
 - c. Resource areas: As required (printer/fax/copiers)
- G. Circuit loads
 1. Verify all load requirements by use and user equipment.
- H. Circuit identification
 1. Clearly identify and label all circuits at both panel and outlet plate.
- I. Low voltage
 1. Verify potential low voltage requirements with user.
- J. Data outlets location
 1. At all data outlet locations there shall be double duplex outlets with cabling supplied and installed to each jack.
- K. Comply with State Accessibility Standards, Title 24, and the Americans with Disabilities Act (ADA)

16.02 Lighting

- A. Submittals
 - 1. Prior to final design or installation verify with COUNTY aesthetic effects as well as qualities of materials.
- B. Light Quality
 - 1. All areas shall have sufficient lighting fixtures properly spaced to provide reasonably uniform lighting at task levels.
 - 2. Indirect lighting is preferred.
 - 3. Building should be designed to accommodate full-spectrum lighting where possible.
- C. Switching
 - 1. All lights shall be controlled by wall switches conveniently located near entrance and exits to the areas served.
 - a. Provide three-way switches where areas are entered by two or more directions.
 - b. Comply with Title 24 lighting controls.
 - 2. All rooms to have separate lighting controls (switches or sensors).
 - 3. Dimmer switch; provide dimmer switch capability in the following areas:
 - a. Conference room.
 - b. Lobby
- D. Emergency back-up lighting
 - 1. The building should be equipped with an emergency back-up lighting system.
- E. Provide switches that can turn off portion of lights as needed.

16.03 Fire Detection and Alarm

- A. Provide new or extension of an existing fire detection and alarm system.
- B. Provide fire alarm equipment and devices in accordance-with the NEC, NFPA 72, local and state codes.

16.04 Security Electronics

- A. Access Control
 - 1. Provide an electronic security system that is integrated with the building security.
 - a. Cable Connection shall be to rack at controller PC
 - (1) 350 MHz, Category 6 cabling
 - 2. System Type:
 - a. Building access, COUNTY lease area access and certain interior staff/public access shall be provided by electric card swipe type security hardware with key override option.
 - (1) Refer to Division 8 security hardware.
 - 3. System Scope
 - a. Lock/unlock control for secure access into COUNTY lease areas.
 - b. Lock/unlock control of security doors to allow passage across the interior staff/public security envelope.
 - (1) Include a remote release control function from secure side of reception area for, but not necessarily limited to:
 - i. Public lobby/public restrooms access.
 - ii. Public lobby/conference room access.
 - iii. Public lobby/staff area access.
 - c. Intrusion alarms to detect unauthorized persons entering the building after business hours.
 - (1) Alarms shall be transmitted to a central station for after-hour monitoring.
 - (2) Provide electronic security monitoring for, but not necessarily limited to:
 - i. Building access
 - ii. COUNTY area access.

- B. Duress Alarms
 - 1. Alarms shall be internally monitored and transmit to specified locations to be determined.
 - a. Allow for three (3) monitoring locations.
 - 2. Provide duress buttons at specified locations to be determined.
 - a. Allow for twelve (12) duress button locations.
 - b. Security Cable Connection shall be to rack at controller PC
 - (1) 350 MHz, Category 6 cabling

16.05 Sound and Paging System

- A. Performance
 - 1. Provide 6 dB sound level above ambient level of 80 dB.
- B. System Architecture
 - 1. System shall be digital, time division multiplex, voice/data/ip telephone system that will allow paging to be done from the telephone system.
- C. System Scope
 - 1. BY OTHERS Part of Phone System

16.06 Structured Data Cabling

- A. Cable and Components Standards
 - 1. All cabling and components used must adhere to the ANSI/TIA/EIA-568-B category 6 standard.
 - 2. All data cabling wires and terminations will be tested to the EIA/TIA 568-B defined standards and meet end to end category 6 cabling system certification.
 - 3. Horizontal cabling as defined in ANSI/TIA/EIA-568-B will not exceed 90 meters in length for each run, including lengths utilized in patch cables at the workstation area and the telecom room patch panel.
- B. Horizontal cabling will be installed without splicing, and will be continuously supported.
- C. All data cable will be of a different color than cable used for telephone cabling system.
- D. Data and Communications Rack
 - 1. Provide four post rack located in communications room.
- E. Install 4 Category 6 network cables in the conference room. One network Connection should be placed on each wall.
- F. Outlet device
 - 1. Provide outlet and jack layout based on cabling standard as scheduled in Division 16.1
 - 2. Provide stainless steel face plates.
- G. System
 - 1. Provide complete connection between each device and communication room.
- H. Labeling
 - 1. Label both ends of each run between device and communication room to uniquely identify each run.
 - 2. Label jacks and patch panel terminations.
- I. Testing
 - 1. Provide written category 6 certification for each "end to end cable run" as defined in Annex B of the EIA/TIA guidelines after installation. Documentation will include identification of each channel or cable run tested and certified.
- J. Special ground requirements.
 - 1. Provide isolated ground wire to enable needed system cabinet grounding
- K. Multi-level structures, buildings where occupancy will occur on more than one level.
 - 1. Each floor should have a primary cabling deployment races to each major area (trays or delivery systems) that support additional future cabling additions/changes.
 - 2. Provide a data wiring system that reflects:
 - a. A horizontal cable run from each work area or data jack back to a communications closet located on the same floor, and terminating at a 110 type patch panel.

- b. A vertical or backbone cable run that connects communications closet(s) to an identified main communication room with no less than 3 (three) terminated cable runs between each communication closet and the main communication room.
- c. Cabling shall be 6-strand multi-mode fiber.

16.07 CATV (Cable Access TV)

- A. Cable and Components Standards
 - 1. Provide TASCO grade 1 picture at all tap locations.
 - 2. Horizontal cabling will be installed with minimum splicing, and will be continuously supported.
 - 3. All CATV cable will be of a different color than cable used for telephone and data cabling system.
- B. Outlet device
 - 1. Provide outlet and jack layout based on cabling standard as scheduled in 16.1 Electrical.
 - 2. Provide stainless steel face plates.
- C. Signal service.
 - 1. Cable Television: Current Local Vendor
 - a. Provide head end service to communication room.
 - 2. Satellite-receiving dish (COUNTY provided equipment)
 - a. Provide for installation of a 10' wide satellite-receiving dish adjacent to or on the building.
 - b. Provide waterproof cable/conduit for cable feed.
 - c. Provide head end service to communication room.
 - d. Coordinate with Division 2 communications.
- D. Distribution system
 - 1. Provide complete connection between each tap device and communication room
 - 2. Device locations shall be, but not necessarily limited to:
 - a. Conference room.
- E. Labeling
 - 1. Label both ends of each run between device and communication room to uniquely identify each run.
- F. Testing
 - 1. Provide written certification for each "end to end cable run". Documentation will include identification of each channel or cable run tested and certified.

16.08 Telephone System

- A. Outlet device
 - 1. Provide outlet and jack layout based on cabling standard as scheduled in section 16.01 Electrical.
 - 2. Provide stainless steel face plates.
- B. Cable
 - 1. 350 MHz, Category 6 cabling
- C. System
 - 1. Provide complete connection between each device and communication room.
 - 2. Provide patch panel termination in the communication room.
 - 3. Jacks and patch panel terminations shall be laid out in a corresponding sequential manner.
- D. Labeling
 - 1. Label both ends of each run between jack and patch panel to uniquely identify each run.
 - 2. Label jacks and patch panel terminations.
- E. Testing
 - 1. Provide written results of the tests of the cable after installation with a record of pass/fail for each pair.
- F. Backboard
 - 1. 4 foot x 8 foot x 5/8-inch plywood attached securely to wall in communication room.

- G. Wireless antenna.
 - 1. Provide for installation of a 5' tall-galvanized mast/tripod (similar to a Rohn Tri-mast) directional wireless LAN antenna.
 - 2. Mount as high up the roof as allowable.
 - 3. Provide waterproof cable/conduit with cable from antenna to wireless network bridge device in communication room
 - 4. Coordinate with Division 2 communications.

16.09 Conference Room Wiring

- A. Install HDMI and VGA cabling from the projector mount area to the audio-visual equipment area (as designated by COUNTY staff).
- B. Install 4 audio cables for speakers from the ceiling to the audio-visual equipment area (16 gauge).
- C. Install a single Cat. 6 network connection and electrical outlet near the ceiling in the conference room to facilitate the installation of a wireless access point.
- D. Install an electrical connection for a powered projector screen and install a control switch for the powered projector screen near the audio-visual equipment area.
- E. Install four cables from the communications closet to the conference room for uses as ISDN videoconferencing lines. Terminate with RJ-45 connections on both ends.
- F. Install 4 Category 6 network cables in the conference room. One network Connection should be placed on each wall.
- G. Install an electrical outlet in the ceiling for use by the LCD Projector. Outlet must provide some form of surge suppression to protect the projector.
- H. Provide a 2" conduit from the conference room to the satellite dish to allow for satellite receiver cabling.
- I. Install CATV cabling to the audio-visual equipment area (as designated by County staff).

AREA	FLOOR	BASE	WALL	FINISH	CEILING	ACOUSTIC RATE	COMMENTS
Typical Office:TYPE A	VT-1/(C-1)	WD.	G.B.	PT-1	G.B./ACT-2	II	
Typical Office:TYPE B	VT-1/(C-1)	RB-1	G.B.	PT-1	ACT-2	II	
Typical Office:TYPE C	VT-1/(C-1)	RB-1	G.B.	PT-1	ACT-2	II	
Work Area #1	VT-1/(C-1)	RB-1	G.B.	PT-1	ACT-1	II	
Work Area #2	VT-1/(C-1)	RB-1	G.B.	PT-1	ACT-1	II	
Work Area #3	VT-1/(C-1)	RB-1	G.B.	PT-1	ACT-1	II	
Lobby with Reception	CT-2	T-1	SP-1/G.B.	PT-2	G.B./ACT-2	III	
Large Conference Room	VT-2	WD.	G.B.	PT-1	G.B./ACT-2	II	
Small Conference Room	VT-1	WD.	G.B.	PT-1	G.B./ACT-2	II	
Visitation	VT-1/(C-1)	WD.	G.B.	PT-2	G.B./ACT-2	II	
Infant/Toddler Classroom	VT-1	WD.	G.B.	PT-2	G.B./ACT-2	III	
Meeting Room	VT-1	WD.	G.B.	PT-2	ACT-2	II	
Exam Room	SV-1	RB-1	G.B.	PT-1	ACT-1	II	
Resource Room	VT-1	RB-1	G.B.	PT-1	ACT-1	III	1
Kitchen Demo Room	SV-1	RB-1	G.B.	PT-1	G.B./ACT-2	III	3
Kitchenette	SV-1	RB-1	G.B.	PT-1	G.B./ACT-2	III	6
Laundry Room	SV-1	RB-1	G.B.	PT-1	ACT-1	III	5
Storage	VT-1	RB-1	G.B.	PT-1	ACT-1	NA	
Janitor Area	SV-1	RB-1	G.B.	PT-1	G.B.	NA	
Communication Room	SV-1	RB-1	G.B.	PT-1	ACT-1	III	
Public Restrooms	CT-1	CT-3	G.B./CT-3	PT-1	G.B.	III	4
Staff Restrooms/Shower	CT-1	CT-3	G.B./CT-3	PT-1	G.B.	III	2

COMMENTS KEY:

- 1 20 lineal feet cabinet type CAB-2 and CAB-3
- 2 Cabinet type CAB-1.
- 3 26 lineal feet cabinet type CAB-2 and CAB-3
- 4 Changing Station each room
- 5 6 lineal feet cabinet type 2
- 6 8 lineal feet cabinet type CAB-2, and 3 lineal feel CAB-3