

Gonzales Community Center Complex

PART 4 – PROGRAM SUMMARY

100% DESIGN CRITERIA DOCUMENTS

MARCH 31, 2022

Architect's Project Number 21566-01

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City of Gonzales
**Gonzales Community Center
Program Summary**

March 31, 2022





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PROJECT OVERVIEW

With a forward-thinking vision for shared spaces and joint programming across library, recreation, and community amenities, the Gonzales Community Center Complex will bring a new level of service and vibrancy to the community of 8,000. Centrally located in Gonzales, directly adjacent to the public schools and walkable from nearby neighborhoods, the project includes a ~ 23,300 sf center that includes a 1)~6,000 sf library to be operated by Monterey County Free Libraries, a 2) ~3,500 sf Teen Innovation Center, and 3)~13,800 sf Community Center that includes additional program, staff, and support spaces all organized around a central courtyard for indoor-outdoor connections. A stand-alone gymnasium is included as an alternate. See 1-2 Alternates for additional information.

As the gathering place for the community, the courtyard will weave each of the program components together through shared outdoor collaboration, fitness, and meeting spaces, as well as through an amphitheater that can operate in conjunction with a 3,500 sf community hall for events, weddings, and performances. The site has also been planned for a free-standing gymnasium (alternate A1) that will complement the other community spaces and will include an indoor multi court, restrooms, lobby, storage and support space.

Two rounds of community engagement were held in fall of 2021 to collect input on programs and activities, outreach events were conducted at the local supermarket, Starbucks, formal community meetings, and community events. In addition, stakeholder groups, including library staff, seniors, teens, and theater representatives have provided input into the programming process.

Based on extensive outreach and City Council approval of findings and program approval, the following building program summary and design criteria is the minimum building program; the DBE may introduce value-added enhancements to increase the approved building program.

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PROJECT ALTERNATES

A1: Pre-Engineered Gymnasium

Base: No gymnasium

Alternate: Pre-engineered 10,000 SF to 12,000 SF gymnasium building with lobby, restrooms, and storage. Refer to Design Criteria Building Program Summary, 2-4 Structural Systems Criteria Narrative, and Design Criteria Drawings.

S1: Hybrid Wood Structural System

Base: Steel Structural System

Alternate: Timber structural system (with steel where required). Refer to 2-4 Structural Systems Criteria Narrative.

M1: Hydronic HVAC System

Base: VRV HVAC System

Alternate: Hydronic HVAC System; additional information regarding this alternate is forthcoming.

E1: Rooftop Photovoltaic System

Base: Stanchions connected to bare metal structural deck, with provisions for add alternate PV racking system attachment. Refer to Systems Criteria – Electrical, Lighting, Low Voltage for additional information.

Alternate: Rooftop Photovoltaic Panels and mounting system. Mounting system (not in Base) to include: S-5 clips for standing seam metal roof and racking system attached to base project stanchions connected to bare metal structural deck for TPO roofs. Refer to Systems Criteria – Electrical, Lighting, Low Voltage for additional information.

E2: Battery Backup System for Library and Community Center

Base: No battery backup system

Alternate: Battery back-up system. Refer to Systems Criteria – Electrical, Lighting, Low Voltage for additional information.

E3: Additional EV charging station infrastructure and stations

Base:

25 EV ready spaces (infrastructure)

6 of the above 25 will be equipped with EV charging stations

- 1 dual-head Level III (fast charge) charging station to service 2 spaces
- 2 dual-head Level II charging stations to service 4 spaces

Alternate: 2023 CALGreen Tier 1 voluntary level for EV ready and EV charging station spaces. Based on ~117 planned parking spaces:

13 additional EV ready spaces (infrastructure)

7 additional EV charging stations

- 1 dual-head Level III (fast charge) charging station to service 2 spaces
- 2 dual-head Level II charging stations to service 4 spaces
- 1 single-head Level II charging stations to service 1 space



BUILDING PROGRAM SUMMARY

The following narrative describes key uses and functional needs of the various Community Center Complex spaces. Information in the Design Criteria narratives shall be complementary to the Drawings and Specifications.

REFERENCES

For regulatory requirements, refer to Specifications and Drawings, including but not limited to: Specification Section 01 41 00 Regulatory Requirements and A0.3 and A0.4 series drawings. Architectural: For additional information on building exterior finishes and architectural requirements, see Systems Criteria Section 2-3 for Architectural Narrative. See also 1-3 Building Summary for additional information.

Civil: For additional information on Civil requirements, including but not limited to: site demolition, utilities, and drainage, see Systems Criteria Section 2-1 for Civil Narrative.

Landscape: For additional information on Landscape requirements, including but no limited to: hardscape, plantings, courtyard, amphitheater and exterior fences and gates, see Systems Criteria Section 2-2 for Landscape Narrative.

Structural: For additional information on Structural System requirements, see Systems Criteria Section 2-4 for Structural Narrative.

Mechanical: For additional information on Mechanical System requirements, including but not limited to: Heating and Cooling, Ventilation and Exhaust

systems, Energy Management and Temperature Control Systems, Acoustic and vibration control for mechanical systems, see Systems Criteria Section 2-5 for Mechanical Systems Narrative.

Plumbing: For additional information on Plumbing System requirements, including but not limited to Sanitary and Storm Drainage, Domestic Hot and Cold Water, and Fire Protection Systems, see Systems Criteria Section 2-5 for Plumbing System Narrative.

Electrical: For additional information on Electrical System and Equipment requirements including but not limited to requirements for power distribution, backup power, energy monitoring, receptacle controls, electric vehicle charging, Fire Detection and Alarm System, Renewable Energy Systems and Emergency Radio Responder Communication System/ Distributed Antennae Systems, see Systems Criteria Section 2-6 for Electrical Narrative.

Lighting: For additional information on lighting and lighting control systems requirements, see Systems Criteria Section 2-6 for Lighting Narrative.

Audio Visual: For additional information on audio visual equipment and requirements, including but not limited to: Broadband System, Room Scheduling System, Public Address System, Assistive Listening and room-specific Audio Visual Systems and Equipment, see Systems Criteria Section 2-6 for Audio Visual narrative.

Communications: For additional information on communications equipment and systems requirements, including but not limited to structured cabling, telecom room (TR)/ Main distribution Facility (MDF) requirements, voice services and systems, two-way communications systems, and Cellular DAS using City Provided WiFi System provisioned to support VoWiFi, see Systems Criteria Section 2-6 for Communications narrative.

Electronic Security Systems: For additional information on electronic security systems, including but not limited to: Access Control Systems, Intrusion Detection and Duress Alarm Systems, and Video Surveillance Systems, see Systems Criteria Section 2-6 for Electronic Security Narrative.

GENERAL REQUIREMENTS

The following narrative describes the key uses and functional needs of the various Community Center, Teen Center, and Library spaces. Information provided in the Design Criteria narratives is complementary to the Drawings and Specifications.

GENERAL DESCRIPTION:

Refer to Design Criteria Building Program Summary for each space for general description.

OCCUPANCY:

Refer to Design Criteria Building Program Summary for each space for occupancy.

RELATIONSHIPS AND ADJACENCIES:

Relationships and adjacency requirements described in the Design Criteria Building Program Summary shall be maintained to achieve project's operational, programmatic, and functional goals. Refer to Design Criteria Building Program Summary for each space for required relationships and adjacencies.

LIGHTING AND VIEWS:

1. For public and staff spaces, natural daylight shall be utilized as much as possible while staying consistent with the exterior façade design to help minimize overhead lighting costs.
2. Glazing at entryways to public rooms shall be provided for an inviting entryway and for general visibility into the room for safety.
3. Energy-efficient LED lighting shall be provided throughout the project.
4. Window shades shall be provided as indicated in Performance Criteria Specifications. Where feasible, preference is for shade housing to be recessed/integrated within ceiling. Where top of window is not located adjacent to the ceiling, window shade roll shall be concealed within a shade pocket or fascia with end caps.
5. Light filtering 1% shade fabrics for all motorized and manual shades shall be coordinated with Audio Visual equipment to ensure adequate legibility of projection screen or flat screen TV and display monitors. See specifications for shade fabric filtering requirements.
6. Exterior curtainwall/storefront mounted metal sunshade systems are included in the project at key locations based on daylighting model analyses. See Design Criteria drawings for locations.

ACCESS AND SECURITY:

1. Provide and locate two (2) knox boxes per Gonzales Fire Department requirements.
2. All exterior doors shall be monitored and provided with door position switches, with requests to exits at regularly occupied spaces. Doors within the egress path of travel shall be provided with panic hardware with electrical and low voltage infrastructure and cabling provided for fully functional system. Hardware devices shall be provided so that color and finishes are complementary to door finish.
3. Card Reader access shall be provided where indicated on the Design Criteria drawings.

4. Full length Handicap push button actuators shall be provided where indicated on the Design Criteria Drawings. Provide on/off capabilities to allow accessible door entry via handicap push buttons to prevent door operation after hours.
5. Refer to Design Criteria Building Program Summary and 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for access and security requirements.

MATERIALS AND FINISHES :

Interior finishes shall be consistent with the aesthetic of the exterior and complement the exterior finish colors, while remaining extremely durable to withstand high use by the public and easy to maintain for facility staff. See Architectural finish plans for types and locations.

Floors:

1. Floor finishes selected shall be appropriate for the room's function and shall be durable and cleanable. Patterns and colors that conceal stains are required; avoid solid color carpets that will not hide stains well.
2. Provide recessed entry floor grilles or walk-off carpet at all public exterior entrances. See Architectural finish plans for locations.
3. Refer to Architectural Drawings Finish Floor plans and Design Criteria Building Program Summary for floor finishes for each space.

Floor base:

1. All rooms shall receive a resilient floor base; at wood flooring, provide vented resilient floor base as required by flooring manufacturer.
2. Refer to Architectural Drawings Finish Floor plans.

Walls:

1. Refer to Design Criteria Building Program Summary for wall finishes for each space.
2. Specialty finishes, such as markerboard, tackboard, and mirror walls shall align with the top of door frame for the room and run the full width of the wall where possible.
3. Bumper rails shall be provided in all storage rooms to protect walls from furniture/equipment.

Ceilings:

1. Ceilings provided shall be appropriate for the function of the space and shall be located so as to not be below top of mullion of clerestory windows
2. For "open ceilings" with exposed structure and equipment, minimize exposed piping, ductwork and equipment where possible. Where

exposed, these elements shall be painted and neatly organized for an orderly, monochromatic aesthetic.

3. Refer to Architectural Drawings – Reflected Ceiling Plans and Design Criteria Building Program Summary for ceiling finishes in each space.

Built-in Architectural Woodwork:

1. Built-in architectural woodwork shall be provided as indicated in the Design Criteria Documents, in accordance with Woodwork Institute requirements. Provide base and upper cabinets with quartz countertop, tall storage cabinets, cubbies and benches, and other architectural woodwork per the Design Criteria documents. Refer to 06 41 00 Architectural Woodwork specification. All built-in architectural woodwork shall meet disabled access compliance requirements for height and reach ranges. All cabinets and drawers shall be lockable.
2. Top of upper cabinets and tall cabinets, where required, shall align with the top of door frame for the room.

Sinks:

1. All counter-mounted sinks shall be “under-mount,” mounted underneath the countertop, with sink depth and apron installation (including garbage disposal where specified) meeting accessible knee clearance requirements.
2. Refer to plumbing drawings and specifications for additional information.

Doors

1. Doors for use by the public shall be distinguished from doors used by staff. Doors to storage rooms, and back-of-house spaces used by staff shall be integrated with adjacent wall finishes to deter the general public from entering.
2. Door heights shall be consistent throughout the project and aligned with project datums.
3. Thresholds shall comply with accessibility, code requirements for changes in level.
4. Refer to A2.6 Door Schedule, drawings and specifications for additional information.

FF&E:

1. Furniture, Fixtures, and Equipment (FF&E) layout, selection, coordination, procurement, and installation shall be provided by the DBE for the following spaces: Community Center (including fitness room), Teen Innovation Center, Outdoor furnishings, and Outdoor Fitness equipment. The DBE shall work within the City-established FF&E budget for each space.

2. Refer to Design Criteria Furniture Drawings, Landscape Drawings, and Building Program Summary for additional information. Library loose furniture, stacks, and office furniture are not included in the project; the Library shall furnish and install all Library-associated FF&E, including furniture and stacks.
3. All furniture (indoor and outdoor, for public and staff) selected for this project shall be extremely durable, able to withstand public use for many years, be easy to clean and maintain, and have servicing/replacement parts readily available. All furniture selected for this project shall have high stability, be heavy enough to withstand intense use but light enough to move around easily (if necessary), afford ease in sitting and standing up (for chairs), be intuitive to use, and be accessible for a wide range of mobility levels. The furniture shall be comfortable for the intended users and fit in the overall design aesthetic. Prior to selection, the City shall test and approve each furniture piece, using the criteria listed above, as well as additional criteria determined by the City.
4. For upholstered furniture, all fabrics shall be contract grade, with “krypton” or similar finish for optimal maintainability. Coated fabrics, such as vinyl, are also acceptable, although in general, non-coated fabrics should be used to maintain a warm and inviting feel in the library spaces. Fabrics shall be cleanable with soap and water, and preferably bleach cleanable. All finishes shall be highly durable, have a high double rub count, and be easy to maintain. Finishes and fabrics shall be specified with a common grade or with a stated dollar-per-yard allowance.
5. The general quantity and location for power/data to the furniture (where required) shall be coordinated (locations to be confirmed by City and DBE after furniture selection, prior to rough-in). For the Teen Center and Library, power shall be provided at each cluster of seating, either via a side table, the seat itself, or adjacent wall outlet. Power and data shall be provided to all computer tables in the Library. Provide tabletop power to all reader tables for patrons to charge devices and also for task lighting as required. Although the Library furniture OFCI, the DBE shall coordinate the Library furniture and stacks with power requirements.
6. Metal shelving for storage spaces shall be provided. Locations, dimensions, and shelf quantities for metal shelving have not yet been determined; the DBE shall work with the City to confirm metal shelving requirements. The DBE shall coordinate metal shelving requirements with the storage spaces available and other storage requirements (such as storage for tables, chairs, equipment, and supplies).
7. Commercial kitchen equipment, including selection, procurement, and installation shall be provided as part of the DBE’s scope of work. Refer to Design Criteria Building Program Summary for additional information.

8. Fitness equipment (cardio and weight equipment) for the fitness room, as well as outdoor fitness equipment, including selection, procurement, and installation shall be provided as part of the DBE's scope of work. Refer to Design Criteria Building Program Summary for additional information.
9. Residential appliances, including refrigerators, dishwashers, microwaves, and coffee-makers, etc. in the Teen Center and Community Center shall be provided as part of the project scope. The selection of the appliances shall be coordinated with the countertop and casework dimensions to ensure a proper fit and compliance with accessibility and code requirements. All residential appliances for the Library are OFCI.

TECHNOLOGY & POWER:

1. Wall and ceiling devices shall be grouped and aligned for an organized room aesthetic.
2. Wall devices and wall-mounted equipment, including but not limited to power and data receptacles, lighting and shade control switches, thermostats, occupancy sensors, AV controls, cameras, etc. shall match or be complementary to the surrounding wall color and be consistent throughout
3. Ceiling devices, including but not limited to speakers, cameras, occupancy and daylight sensors, etc. shall match or be complementary to the surrounding ceiling color and be consistent throughout.
4. Floor boxes and covers shall be provided as appropriate for flooring specified and be complementary in color to floor and room finishes and consistent within each space.
5. Floor box covers:
 - At carpet: flange cover with carpet insert
 - At resilient flooring: no flange cover, cover to sit flush with finish floor
 - At rubber flooring: : no flange cover, cover to sit flush with finish floor
 - At wood flooring: no flange cover, route wood floor to allow cover to sit flush with finish floor
 - At concrete floor: no flange cover, cover to sit flush with finish floor
6. Refer to A0.6 mounting sheet in the Architectural Design Criteria Drawings.

STRUCTURAL:

1. All public and staff spaces require column-free spaces with clear spans for excellent sightlines and maximum flexibility. Exposed columns within 12" of perimeter walls are acceptable.
2. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing.

3. The community room shall not have exposed brace frames or any other exposed structure other than columns.
4. All interior columns shall be square tube steel. Exterior columns that support the building roof structure shall be square tube steel. Exterior columns that support the courtyard walkway shall be round.
5. Refer to the Design Criteria Building Program Summary for structural requirements for each space and 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT:

1. Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS:

1. Locate wall clean-outs in conspicuous locations and align with adjacent works for organized aesthetic.
2. Fire sprinkler heads finish shall be selected to be complementary to ceiling finish and placed to align with adjacent ceiling fixtures and equipment to provide an organized aesthetic.
3. Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

SIGNAGE

1. Code required interior and exterior signage shall be provided per Specification 10 14 00 Signage. Where multiple signs are located adjacent to each other, install signs at same elevation for organized aesthetics and alignment with other wall mounted devices and equipment.
2. Code required and wayfinding signed shall be designed by the DBE with aesthetics, colors palette, and materials that complement the building architecture. Signage shall have a strong hierarchy that promotes wayfinding and easily signifies public versus staff/back-of-house spaces. Site signage, including parking signage, shall be integrated with the color palette of the overall signage package wherever allowable by code.
3. The DBE shall confirm all signage requirements with the City, including, but not limited to: locations, dimensions, quantity (where applicable), text (such as room numbers and room names) and provisions for multiple languages.
4. Wayfinding signage shall be provided at the following locations:
 - **Digital monumental site sign** at driveway (size to be determined, but digital content must be legible for vehicular traffic along 5th Street). Monumental sign shall complement exterior building architecture in design, color, and material palette.

- **Complex entrance sign** at entry canopy with illuminated pin letters of “Gonzales Community Center” shall be provided. Sign shall be soffit-mounted and suspended from the entry canopy. See renderings for general look.
- **Freestanding complex directory** at entry to complex shall be provided, with integrated lighting and diagrammatic site map showing indoor and outdoor complex amenities.
- **Wayfinding signs** shall be provided for the Library, Teen Innovation Center, Community Hall, and Fitness Center that are exterior wall or canopy-mounted, with illuminated pin letters that contrast with the wall behind.

ACOUSTICS

1. An acoustic analysis of each space shall be conducted by the DBE and each space shall be designed to meet or exceed industry best practices for acoustics, reverberation, and sound attenuation for the functionality of each space with the appropriate quantity and placement of acoustic wall treatment. Acoustic study and analysis shall determine proper sound attenuation for interior and exterior walls, glazing, ceilings and HVAC system (including ductwork and grilles/registers). In particular, careful analysis shall be provided for the storefront and walls from street side noise intrusion into the Library.
2. Since an acoustic analysis has not yet been conducted, as a basis of design, acoustic wall panels shall exceed 30% of interior wall surface area for each public space shall be provided. Where acoustic wall panels are placed at “eye-level,” tackable acoustic wall panel may be provided where tackboard is also required. Wall devices such as but not limited to lighting, shade and audio visual control switches, thermostat and CO2 sensors, fire alarm strobes and pull stations shall be located to avoid installation of devices where acoustic wall panels are to be located.
3. See acoustical wall panel specification for material and performance properties of basis of design acoustical wall panel.

The following Design Criteria Building Program Summary provides information for specific requirements for each room/space in the community center complex, including the Library, Teen Center, and Community Center. All rooms/spaces shall comply with general requirements above.

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COMMUNITY HALL



Example images of space – see below for program

ROOM NUMBER: B112 (COMMUNITY HALL)
 B108 (FOOD SERVICE ALCOVE)
 SQUARE FOOTAGE: ~4,500 SF (COMMUNITY HALL)
 ~150 SF (FOOD SERVICE ALCOVE)

GENERAL DESCRIPTION

The community hall will serve the entire community center complex, supporting Community Center programs as well as providing reservable space for weddings, parties, dance and fitness classes, music performances, small theater performances, meetings, seminars, lectures, and events hosted by individuals, community groups, local organizations, and outside vendors. In addition, the community room will be reservable by the Teen Innovation Center for teen programming and the Library for special events. Joint programming opportunities between the Community Center, Teen Innovation Center, and Library for this space are being explored. The community hall shall be a high-volume space, divisible into two smaller independently programmable spaces via an operable partition. At the south end, a raised platform is centered between two storage spaces, the larger of which serves as a backstage “dressing” or “staging” room to support performances. At the north end is the after-hours special events entry that is directly connected to the parking lot and provides for independent use of the community hall with good access to the parking. Aluminum-framed glass exterior folding doors on the west side connect the community room to the amphitheater in the shared courtyard, providing the opportunity for indoor-outdoor events and gatherings.

OCCUPANCY

Assembly seating for ~three hundred and fifty (350) people, dining for ~ two hundred and fifty (250) people.

RELATIONSHIPS AND ADJACENCIES

The community room shall be prominently located and highly visible from the shared central courtyard as well as the parking lot for intuitive wayfinding. An outdoor amphitheater located within the shared courtyard shall be located directly adjacent to the community room for indoor/outdoor programming opportunities. The commercial kitchen shall be located directly adjacent to the

community hall with direct interior access to/from this space. Restrooms shall be within close proximity to the room for ease of use during normal operating hours as well as after hours rentals.

LIGHTING AND VIEWS

Ample windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. Exterior window shall also be provided on the west side of the room, facing the plaza space and parking beyond. All exterior windows shall include motorized light-filtering shades for light/view control when needed. Exterior doors with glazing shall include manual light-filtering shades. Shading devices shall mitigate daylight and glare in the space for audiovisual presentations. Housing for window shading devices shall be pocketed within or above the ceiling and the housing color shall match the ceiling color. Pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Infrastructure for rentable theater lighting shall be provided. Lighting and shading controls shall be provided to allow for independent operation of each room when the operable partition is deployed and allow for integrated operation when the operable partition is retracted and the room functions as a whole. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

During regular business hours, this room shall be accessible by the public and staff via doors from the shared central courtyard. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card.

For after-hours use when the rest of the Community Center complex is closed and the main entry gate is locked, this room shall be accessible from the exterior "after-hours" lobby patio on the northeast corner of the room, adjacent to the parking lot. The after-hours entry shall also be lockable by staff and programmed via key card. The west-facing doors of the community room that lead to the shared courtyard shall allow exiting to the courtyard (and re-entry) for use of the public restrooms during after-hours community room use.

The interior doors between the community room and adjacent commercial kitchen shall be lockable by staff and programmed via key card to allow or disallow entry to the kitchen from the community room, depending on the programmed event/activity.

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Engineered wood or sprung wood floor w/ vented resilient wall base. Sprung wood floor is preferred for comfort and flexibility for dance/

aerobics. See specifications for both engineered wood and sprung wood floors for basis of design requirements.

- **Walls:** Paint; Acoustic wall panels shall be provided as required to meet acoustic requirements of the space
- **Ceiling:** Wood slat ceiling with black acoustic backing shall be provided. Refer to Architectural Design Criteria drawings. Recessed and surface mounted ceiling devices such as diffusers, speakers, sprinkler heads, etc. shall be black, dark colored to integrate seamlessly into wood slat ceiling.
- **Amenities:** The community room shall include a raised platform at the south end for performances. The platform shall be accessed by both stairs and accessible via a ramp located on the north side of the room. Approach via stairs and accessible ramp shall be equally prominent to promote an equitable experience in access to the platform. The ramp shall be equipped with code-required handrails; handrails shall be minimal and unobtrusive to maintain excellent sight lines to the platform.

The community room shall be divisible into two smaller rooms by a manual operable partition with acoustic panels, allowing each smaller room to be programmed independently. The overhead suspension track for the operable partition system shall be located flush with or above the ceiling plane to minimize its appearance.

Aluminum-framed glass exterior folding doors located on the west side of the room shall provide a seamless indoor-outdoor connection from the community room to the amphitheater in the central courtyard. The track for the folding doors shall be recessed. One "bay" of the exterior folding doors shall function as one of the code-required exits for the room, and comply with all exiting and egress code requirements, including but not limited to dimensions, hardware, and signage.

The community room food service alcove shall be equipped with a quartz countertop with wood veneer lockable lower and upper cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink with a garbage disposal. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Refer to Architectural Design Criteria drawings for additional information.

FF & E

Flip-top nesting tables with lockable casters and ganging capabilities along with nesting meeting chairs shall be provided for both "lecture" and "assembly" style furniture layouts. Rolling chair dollies to be provided stacking chairs.

TECHNOLOGY AND POWER

The room shall be equipped with infrastructure for a ceiling-mounted projector and screen. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information. The housing for the screen shall be located

flush with the ceiling and match the ceiling color to minimize appearance. The audiovisual equipment (projector and screen) shall be Owner Furnished, Contractor Installed (OFCl). In addition to conveniently placed wall outlets, flush-mounted floor boxes shall be provided for power. A ceiling mounted lighting truss will be provided at the front of the stage with ample power to support a variety of stage lighting. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

The adjacent storage rooms (B111, B115, B119) shall be coordinated with the community room furniture to ensure that the storage room layout fits all furniture (tables and chairs). The storage room shall be capable of storing all community room furniture so the community room can function for programs that require a clear room with no furniture, or where rented furniture is used.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. The community room shall not have exposed brace frames or any other exposed structure other than columns. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

COMMERCIAL KITCHEN AND STORAGE



Example images of space – see below for program

ROOM NUMBER: B109 (COMMERCIAL KITCHEN)
B110 (KITCHEN STORAGE)
SQUARE FOOTAGE: ~400 SF (COMMERCIAL KITCHEN)
~100 SF (KITCHEN STORAGE)

GENERAL DESCRIPTION

The all-electric commercial kitchen and dry storage room shall provide the community center complex, and especially the community hall, the ability to provide food service preparation and/or catering to events and gatherings. In addition, the commercial kitchen will be a learning environment to allow small groups of 6-8 people, seated around a large center island with stool seating, to participate in nutrition classes and like programs for interactive learning. The commercial kitchen shall border the community room and have direct access to the exterior parking lot and trash enclosure. It shall also have direct access to the Community Hall and central courtyard via the Drink Alcove. The commercial kitchen and dry storage room shall comply with all Monterey County Health Department requirements, including but not limited to layout, equipment, clearances, and finishes. DBE to obtain permit, approval from Monterey County Health Department.

OCCUPANCY

Six to eight (6-8) people depending on use and configuration.

RELATIONSHIPS AND ADJACENCIES

The commercial kitchen shall have direct access to the community hall, to the shared central courtyard, and to the parking lot for operational flexibility and independent access to support all community center spaces. Direct access to the courtyard and the parking area enable the kitchen to operate when the community hall is all or partially closed. The commercial kitchen shall be located in close proximity to the parking lot (and dedicated loading space) for deliveries/loading/unloading, as well as to the trash enclosure. It is preferred to limit sight lines from the kitchen door to the Community Room to mitigate noise and visibility into the kitchen from the Community Room.

LIGHTING AND VIEWS

Ceiling-mounted LED lighting shall be distributed throughout the space for even lighting levels. Light fixtures approved for use in food service preparation environments, with shatter-proof lenses, shall be provided. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

During regular business hours and after-hours, this room shall be accessible by staff and staff-authorized personnel (such as caterer or food service vendor) via doors from the shared central courtyard, the community room, or from the east side of the building. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff when the room is not in use to control entry, programmed via key card.

The interior doors between the commercial kitchen and adjacent community room shall be lockable by staff and programmed via key card in both directions to allow or disallow entry to the kitchen from the community hall and to allow or disallow entry to the community hall from the kitchen, depending on the programmed event/activity.

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

Provide cleanable surfaces in compliance with the Monterey County Health Department.

- **Floor:** Resinous epoxy flooring with integral cove base min 6" high or as required by Monterey County Health Department (rough for general areas, smooth under equipment against walls)
- **Walls:** Full Height- Floor to Ceiling FRP (fiber-reinforced plastic panels); Stainless Steel wall panels full width of "backsplash" at kitchen hood
- **Ceiling:** 2'x4' water-repellent ACT, washable "kitchen zone"
- **Amenities:** The commercial kitchen shall be outfitted with all-electric equipment (no gas). A kitchen layout and size that meets Monterey County Health Department's requirements, including compliance with storage requires and separate zones for: food preparation, cooking, plating, and cleaning and allows for non-disruptive flow ((i.e. avoid unnecessary traffic at the stove) shall be provided. The following commercial-grade kitchen equipment shall be provided at a minimum; equipment list, specifications, and placement shall be reviewed and confirmed with the Owner:
 - 4-half door reach-in freezer

- 4-half door reach-in refrigerator
- Ice machine
- 2-deck convection oven
- 8-burner electric range/oven
- Exhaust hood (Type-I)
- Dish washing machine
- Pot sink
- Work table(s) with sink(s)
- Mobile work station(s)
- Wall cabinets
- Wall shelving
- Utensil racks
- Fire suppression system
- large center island with stool seating along one side to function as “learning kitchen”, seating capacity 6-8 observing students

Refer to Architectural Design Criteria drawings for additional information regarding finishes.

FF&E

All commercial kitchen furniture shall be provided as part of “kitchen equipment.” Mobile work stations/ center table with stools for learning shall be provided as part of the project scope.

TECHNOLOGY AND POWER

Adequate power to all appliances and work surfaces at required voltages shall be provided. Wet/dish areas shall have vapor-proof components. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

STORAGE

The adjacent kitchen storage room (B110) is intended for dry storage and shall meet all Monterey County Health Department standards.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for ease of food preparation. Exposed brace frames shall not be placed in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

COMMUNITY CENTER

CLASSROOM



Example images of space – see below for program

ROOM NUMBER: A123 (CLASSROOM)
A124 (STORAGE)
SQUARE FOOTAGE: ~900 SF

GENERAL DESCRIPTION

The classroom will serve the entire community center complex, supporting Community Center programs as well as providing reservable space for meetings, seminars, lectures, and events hosted by community groups and local organizations. In addition, the classroom space will be reservable by the Teen Innovation Center for teen programming and the Library for special events and story time. Joint programming opportunities between the Community Center, Teen Innovation Center, and Library for this space are being explored. The classroom shall provide the space and technology for a multi-purpose “soft” classroom environment.

OCCUPANCY

Thirty to thirty-six (30-36) people seated at tables, or ninety (90) people seated assembly style in chairs.

RELATIONSHIPS AND ADJACENCIES

The classroom shall be located adjacent to a suite of other smaller community meeting spaces, including two consultation rooms and a conference room. The classroom shall also be adjacent to the teen lounge, enabling ease of cross-functional programming between these two spaces. Informal outdoor meeting space located in the courtyard directly adjacent to the classroom shall be provided to allow for programming in tandem with the classroom.

LIGHTING AND VIEWS

Ample windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. All exterior windows shall include motorized light-filtering shades for light/view control when needed. Exterior doors with glazing shall include manual light-filtering shades. Shading devices shall mitigate daylight and glare in the space for audiovisual presentations. Housing for window

shading devices shall be pocketed within or above the ceiling and the housing color shall match the ceiling color. Linear pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This room shall be accessible by the public and staff via doors from the shared central courtyard. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint

Along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room.

- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)
- **Amenities:** The classroom shall be equipped with a quartz countertop with wood veneer lockable lower and upper cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Aluminum-framed glass exterior folding doors located on the north side of the room shall provide a seamless indoor-outdoor connection from the classroom to the outdoor meeting space in the central courtyard. The track for the folding doors shall be recessed. One "bay" of the exterior folding doors shall function as one of the code-required exits for the room, and comply with all exiting and egress code requirements, including but not limited to dimensions, hardware, and signage.

Refer to Architectural Design Criteria drawings for additional information.

FF & E

Flip-top nesting tables with lockable casters and nesting meeting chairs shall be provided for both "lecture" and "assembly" style furniture layouts. Rolling chair dollies shall be provided for stacking chairs.

TECHNOLOGY AND POWER

The classroom shall be equipped with infrastructure for a ceiling-mounted projector and screen. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information. The housing for the screen shall be located flush with the ceiling and match the ceiling color to minimize appearance. The audiovisual equipment (projector and screen) shall be Owner Furnished, Contractor Installed (OFCI). In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

The adjacent storage room (A124) shall be coordinated with the classroom furniture to ensure that the storage room layout fits all furniture (tables and chairs). The storage room shall be capable of storing all classroom furniture so the classroom can function for programs that require a clear room with no furniture.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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CONFERENCE ROOM



Example images of space – see below for program

ROOM NUMBER: A130
SQUARE FOOTAGE: ~300 SF

GENERAL DESCRIPTION

The conference room will provide the Community Center with reservable space for small meetings, presentations, collaborations, and teleconferences for community groups and organizations as well as local businesses. The room will also be reservable by the Library and the Teen Innovation Center.

OCCUPANCY

Eight to ten (8-10) occupants, seated at a shared conference table.

RELATIONSHIPS AND ADJACENCIES

The conference room shall be located adjacent to a suite of other community meeting spaces of various sizes, including two consultation rooms and a classroom. Informal outdoor meeting space located in the courtyard directly adjacent to the conference room shall be provided to allow for programming in tandem with this space.

LIGHTING AND VIEWS

Windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. All exterior windows shall include manual light-filtering shades for light/view control when needed. Shading devices shall mitigate daylight and glare in the space for audiovisual presentations. Housing for window shading devices shall be pocketed within the ceiling and the housing color shall match the ceiling color. Pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This room shall be accessible by the public and staff via doors from the shared central courtyard. Handicap push button actuator shall be provided at the

primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint

Along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)
- **Amenities:** The conference room shall be equipped a quartz countertop with wood veneer lockable lower cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Conference table and meeting chairs with casters shall be provided. Conference table shall be equipped with power to the table-top for users to charge laptops, cell phones, etc.

TECHNOLOGY AND POWER

The conference room shall be equipped with infrastructure for a wall-mounted flat screen TV. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TV) shall be Owner Furnished, Contractor Installed (OFICI). In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Placement of floor box(es) shall be coordinated with conference table to bring power through the table leg to the tabletop; exposed electrical cords between the tabletop and floor are not acceptable. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

No additional storage requirements beyond cabinetry storage (see Section 6 Materials and Finishes above).

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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FITNESS ROOM



Example images of space – see below for program

ROOM NUMBER: B106 (FITNESS ROOM)
B107 (STORAGE)
SQUARE FOOTAGE: ~2,000 SF (FITNESS ROOM)
~200 SF (STORAGE)

GENERAL DESCRIPTION

The fitness room will contain cardio (such as treadmills and elliptical machines) and weight equipment and may either be operated by the community center or by a third-party vendor in cooperation with the community center. Fitness equipment selection, quantity, and layout shall be reviewed and confirmed with the Owner. Special acoustical attenuation and vibration isolation requirements of this room shall be reviewed and confirmed with the Owner. The door at the north side will provide access to an outdoor programmable fitness area and enable independent access of this space.

OCCUPANCY

Depending on equipment and room configuration the room occupancy shall be between forty to sixty (40-60) people.

RELATIONSHIPS AND ADJACENCIES

The fitness room shall be located on the northeast side of building, in close proximity to the parking lot for potential independent and after-hours operations via a door in the north wall of the room. A dedicated fitness courtyard, located directly adjacent to the room on the north side, shall be provided to allow for indoor-outdoor programming.

LIGHTING AND VIEWS

Ample windows facing the courtyard and to the east shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. Through the glazing at the east side, this room shall have clear views of both the drop-off plaza and the parking lot. All exterior windows shall include motorized light-filtering shades for light/view control when needed. Exterior doors with glazing shall include manual light-filtering shades. Shading devices shall mitigate direct sunlight and glare into the space. Housing for window shading devices shall be pocketed within or above the

ceiling and the housing color shall match the ceiling color. Linear pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

During regular business hours, this room shall be accessible by the public and staff via doors from the shared central courtyard. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card.

For after-hours use when the rest of the Community Center complex is closed and the main entry gate is locked, this room shall be accessible from the exterior fitness patio on the north side of the room, adjacent to the parking lot. The after-hours entry shall also be controllable/lockable by staff and authorized personnel and programmed via key card. The south-facing doors of the fitness room that lead to the shared courtyard shall allow exiting to the courtyard (and re-entry) for use of the public restrooms during after-hours fitness room use. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Rubber Flooring with resilient base
- **Walls:** Paint; full-length mirror shall be provided along the full width of one wall. The top of mirror shall align with the top of door frame.
- **Ceiling:** Exposed structure painted black with black acoustic insulation
- **Amenities:** The fitness room shall be equipped with wood veneer open cubbies and a wood veneer built-in benches.

Aluminum-framed glass exterior folding doors located on the north and south sides of the room shall provide a seamless indoor-outdoor connection from the fitness room to the fitness patio and the shared central courtyard. The track for the folding doors shall be recessed. One "bay" of the exterior folding doors shall function as one of the code-required exits for the room, and comply with all exiting and egress code requirements, including but not limited to dimensions, hardware, and signage.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

FF&E for the fitness room shall include fitness equipment. Fitness room equipment shall be reviewed and confirmed with the Owner, and coordinated with electrical requirements and rubber floor finish type(s).

TECHNOLOGY AND POWER

The fitness room shall be equipped with infrastructure for wall-mounted flat screen TV(s). Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TV(s)) shall be Owner Furnished, Contractor Installed (OFCI). In addition to conveniently placed wall outlets, additional wall outlets and flush-mounted floor boxes shall be provided to power fitness equipment. Wall outlet and floor box locations and power type shall be coordinated with fitness equipment layout and power requirements. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

The fitness room storage requirements shall be confirmed by the Owner and coordinated with the adjacent storage room (B107) to ensure that the storage room layout fits the required storage needs of the Owner.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information. Depending on the selection of fitness equipment some additional structural supports may be required either in the walls (ballet barres) or the ceiling (TRX).

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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CONSULTATION ROOMS



Example images of space – see below for program

ROOM NUMBER: A126, A128
SQUARE FOOTAGE: ~150 SF EACH

GENERAL DESCRIPTION

Two consultation rooms will provide the Community Center with space for individual and small group consultation services, such as physical and mental health, taxes, resume-building, career coaching, etc. The rooms can also be adapted as group study space or for other community center programming as needed. In addition, these rooms will be reservable for small meetings, collaborations, and teleconferences for the community. The rooms will also be reservable by the Library and the Teen Innovation Center.

OCCUPANCY

Four to six (4-6) occupants, seated at a shared table.

RELATIONSHIPS AND ADJACENCIES

The consultation rooms shall be located adjacent to a suite of other community meeting spaces of various sizes, including a conference room and a classroom. Informal outdoor meeting space located in the courtyard directly adjacent to the conference room shall be provided to allow for programming in tandem with these spaces.

LIGHTING AND VIEWS

Windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. All exterior windows shall include manual light-filtering shades for light/view control when needed. Shading devices shall mitigate daylight and glare in the space for audiovisual presentations. Housing for window shading devices shall be pocketed within the ceiling and the housing color shall match the ceiling color. Pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This room shall be accessible by the public and staff via doors from the shared central courtyard. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint: Along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)
- **Amenities:** None

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Table and meeting chairs with casters shall be provided. Table shall be equipped with power to the table-top for users to charge laptops, cell phones, etc.

TECHNOLOGY AND POWER

Each consultation room shall be equipped with infrastructure for a wall-mounted flat screen TV. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TV) shall be Owner Furnished, Contractor Installed (OFCI). In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Placement of floor or wall box(es) shall be coordinated with the table to bring power through the table leg to the tabletop; exposed electrical cords traversing between the tabletop and floor are not acceptable. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

No storage requirements.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace

frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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STAFF OFFICE



Example images of space – see below for program

ROOM NUMBER: B101 (STAFF OFFICE)
 B102 (BREAK ROOM), B105 (CONFERENCE)
 SQUARE FOOTAGE: 650 SF (STAFF OFFICE),
 100 SF (BREAK ROOM), 120 SF (CONFERENCE)

GENERAL DESCRIPTION

The office includes a public/staff interaction window with counter, workstations for community center staff, and adjacent amenities of a staff conference room, break room, and staff restroom. The office is strategically located at the entry plaza with high visibility to the plaza, drop-off area, and shared courtyard.

OCCUPANCY

The space shall be designed to accommodate six to eight (6-8) workstations.

RELATIONSHIPS AND ADJACENCIES

The staff office shall be located at the entry plaza of the community center complex and shall include doors open that open directly to the entry plaza as well as the courtyard. The west wall facing the entry plaza shall have an operable public interaction window and counter for community members to sign up for programming, sign in for activities, and ask questions. The staff conference room, break room, and staff restroom shall be located directly adjacent to the staff office. The staff conference room shall also have direct access to the central courtyard space for flexibility of use; staff may want to use this room to meet with contract workers, consultants, or the public.

LIGHTING AND VIEWS

Windows facing west toward the entry plaza, north toward the drop-off, and south toward the courtyard shall be provided for critical sightlines and surveillance of the complex, the public entering and exiting, and natural daylighting. All exterior and interior windows shall include manual light-filtering shades for light/view control when needed. Shading devices shall mitigate daylight and glare. Housing for window shading devices shall be pocketed within the ceiling and the housing color shall match the ceiling color. Linear pendant, ceiling-hung LED lighting shall be distributed throughout the

space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

The staff office shall include direct access from the building exterior. The staff office shall be accessible by staff and authorized personnel via exterior doors programmed via key card. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

The office and conference room shall include:

- **Floor:** Carpet Tile
- **Walls:** Paint
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)
- **Amenities:** None

The staff break room shall include:

- **Floor:** Resilient floor
- **Walls:** Paint
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)

The staff break room shall be equipped with a quartz countertop with wood veneer lockable lower and upper cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink with a garbage disposal. A refrigerator and an under-counter dishwasher shall be provided. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Office systems furniture shall be provided. Each workstation, at a minimum, shall include a worksurface, task chair, mobile file pedestal with casters, overhead storage, and lockable cabinet with hook for coat and personal belongings. Office systems furniture requirements and quantity shall be reviewed and confirmed with the Owner.

TECHNOLOGY AND POWER

In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power as needed. Placement of floor and wall box(es) shall be coordinated with workstation systems furniture. Workstation systems furniture shall be powered via raceways in the workstations.

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

Storage needs for the staff office space shall be reviewed and confirmed with the Owner. The office should have storage capacity (either room or casework) for general office supplies.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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TEEN INNOVATION CENTER

TEEN LOUNGE/GAME ROOM



Example images of space – see below for program

ROOM NUMBER: A120 (TEEN LOUNGE/GAME ROOM)
 A121 (STORAGE)
 SQUARE FOOTAGE: ~1,700 SF (TEEN LOUNGE/GAME ROOM)
 ~90 SF (STORAGE)

GENERAL DESCRIPTION

The Teen Lounge/Game room will provide teens with a dedicated after-school hangout, game, and homework space. When in use, the room will be staffed and programmed with activities and events specifically for teens. It will include age-appropriate furnishings and respond to the programmatic needs of the space for lounging with friends, studying, playing games (includes video games, board games, and pool/foosball/ping-pong), collaborating, enjoying snacks, and participating in programmed events.

OCCUPANCY

Twenty-five to thirty (25-30) people seated

RELATIONSHIPS AND ADJACENCIES

The Teen Lounge/Game room shall be internally connected to the Teen Innovation Lab. Outdoor gathering space located in the shared courtyard directly adjacent to the Teen Lounge/Game room shall be provided for indoor/outdoor programming. The Teen Lounge/Game room shall be adjacent to the teen lounge, enabling ease of cross-functional programming between these two spaces.

LIGHTING AND VIEWS

Ample windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. All exterior windows shall include motorized light-filtering shades for light/view control when needed. Exterior doors with glazing shall include manual light-filtering shades. Shading devices shall mitigate daylight and glare in the space. Housing for window shading devices shall be pocketed within or above the ceiling and the housing color shall match the ceiling color. Pendant, ceiling-hung LED lighting shall be distributed throughout the space for even

lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This room shall be accessible by the public and staff via doors from the shared central courtyard. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile, Resilient Floor
- **Walls:** Paint;

Along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room

- **Ceiling:** Exposed structure painted white with white perforated acoustic metal deck. Decking screw type and length shall be coordinated with acoustic metal deck; decking screws shall only penetrate through the top flutes and not penetrate through to the underside face of deck; underside of deck shall have no exposed decking screws.
- **Amenities:** This room shall be equipped with a quartz countertop with wood veneer lockable lower and upper cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Aluminum-framed glass exterior folding doors located on the east side of the room shall provide a seamless indoor-outdoor connection from the Teen Lounge/Game room to the outdoor meeting space in the central courtyard. The track for the folding doors shall be recessed. One "bay" of the exterior folding doors shall function as one of the code-required exits for the room, and comply with all exiting and egress code requirements, including but not limited to dimensions, hardware, and signage.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Furniture for the Teen Lounge/Game room shall be confirmed with the Owner. Furniture for the Teen Lounge/Game room shall be age appropriate and respond to the programmatic needs of the space for lounging with friends,

studying, playing games (includes video games, board games, and pool/ foosball/ping-pong), collaborating, enjoying snacks, and participating in programmed events.

TECHNOLOGY AND POWER

The Teen Lounge/Game Room shall be equipped with infrastructure for three (3) wall-mounted flat screen TVs. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TVs) shall be Owner Furnished, Contractor Installed (OFI). In addition to conveniently placed wall outlets, flush-mounted floor boxes (with carpet tile inlay in carpeted areas) shall be provided for power. Placement of floor box(es) shall be coordinated with furniture placement. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

The storage requirements of the Teen Lounge/Game room shall be confirmed by the Owner and coordinated with the adjacent storage room (A121) to ensure that the storage room layout fits the required storage needs of the Owner. The storage room shall provide infrastructure for an apartment-size refrigerator. The refrigerator shall be Owner Furnished, Contractor Installed (OFI).

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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TEEN INNOVATION LAB



Example images of space – see below for program

ROOM NUMBER: A119 (TEEN INNOVATION LAB)
 A118 (STORAGE)
 SQUARE FOOTAGE: ~1,200 SF (TEEN INNOVATION LAB)
 ~300 SF (STORAGE)

GENERAL DESCRIPTION

The Innovation Lab is a flexible multipurpose “messy” classroom space for a variety of activities and programs, including fine arts and crafts, digital arts, carpentry, science experiments, tinkering, recording, and DIY classes. When not in use for teen programming, this space will be reservable by the Library and Community Center. Joint programming opportunities between the Teen Innovation Center, Community Center, and Library for this space are being explored.

OCCUPANCY

Thirty to thirty-six (30-36) people seated at tables, or ninety (90) people seated assembly style in chairs.

RELATIONSHIPS AND ADJACENCIES

The Innovation Lab shall be internally connected to the Teen Lounge/Game room. Outdoor gathering space located in the shared courtyard directly adjacent to the Innovation Lab shall be provided for indoor/outdoor programming.

LIGHTING AND VIEWS

Ample windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. All exterior windows shall include motorized light-filtering shades for light/view control when needed. Exterior doors with glazing shall include manual light-filtering shades. Shading devices shall mitigate daylight and glare in the space for audiovisual presentations. Housing for window shading devices shall be pocketed within or above the ceiling and the housing color shall match the ceiling color. Linear pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Pendant lighting location and height shall be coordinated with location and height of

ceiling-mounted electrical power reels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This room shall be accessible by the public and staff via doors from the shared central courtyard. Handicap push button actuator shall be provided at the primary entry door for accessible operation during normal business hours. After-hours, handicap push button shall be turned off to prevent after hours access. The doors shall be lockable by staff after-hours and when the room is not in use to control public entry, programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Resilient Floor
- **Walls:** Paint; along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room
- **Ceiling:** Exposed structure painted black with black acoustic insulation
- **Amenities:** The Teen Innovation Lab shall be equipped with quartz countertop with wood veneer lockable lower and upper cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Aluminum-framed glass exterior folding doors located on the east side of the room shall provide a seamless indoor-outdoor connection from the classroom to the outdoor meeting space in the central courtyard. The track for the folding doors shall be recessed. One "bay" of the exterior folding doors shall function as one of the code-required exits for the room, and comply with all exiting and egress code requirements, including but not limited to dimensions, hardware, and signage.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Flip-top nesting tables with lockable casters and nesting meeting chairs shall be provided for both "lecture" and "assembly" style furniture layouts. Rolling chair dollies shall be provided for stacking chairs. Additional FF&E requirements shall be confirmed with the Owner.

TECHNOLOGY AND POWER

The Teen Innovation Lab shall be equipped with infrastructure for a ceiling-mounted projector and screen. Refer to 2-6 Electrical, Lighting and Low

Voltage Systems Criteria Narrative for additional information. The housing for the screen shall be located flush with the ceiling and match the ceiling color to minimize appearance. The audiovisual equipment (projector and screen) shall be Owner Furnished, Contractor Installed (OFICI). In addition to conveniently placed wall outlets, overhead ceiling-mounted electrical power cord reels shall be provided for power that can be pulled from the reel to table and floor height. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

The storage requirements of the Teen Innovation Lab shall be confirmed by the Owner and coordinated with the adjacent storage room (A118) to ensure that the storage room layout fits the required storage needs of the Owner.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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COMMUNITY CENTER

RESTROOMS

ROOM NUMBER: SHARED COMMUNITY CENTER COMPLEX: B123, B124, B125 (PUBLIC), B104 (STAFF)
LIBRARY: A107, A108, A109 (PUBLIC), A106 (STAFF)
SQUARE FOOTAGE: AS REQUIRED TO ACCOMMODATE CODE-REQUIRED FIXTURES AND ACCOMMODATIONS

GENERAL DESCRIPTION

A women's restroom, a men's restrooms and a family restroom located at the south corner of the complex, next to the back exit, will serve the entire community center complex. The community center staff restroom in the office will be for staff use only. Within the Library, another set of women's, men's restroom, family restrooms and staff restroom will be provided.

OCCUPANCY

The restrooms are not regularly occupied spaces.

RELATIONSHIPS AND ADJACENCIES

Shared community center complex public restrooms shall have direct exterior access to the courtyard and be centrally located. Library public restrooms shall be located within the Library, adjacent to the marketplace and near the staff service desk. Staff restrooms for both the Community Center and Library staff spaces shall be located directly adjacent to staff areas.

LIGHTING AND VIEWS

The restrooms may include natural daylighting via clerestory or translucent glazing, but may not include views into these spaces. LED lighting shall be distributed throughout the spaces for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

Public restrooms shall be open and accessible to the public during regular business hours and after-hours when one or more of the community center complex (community complex restrooms) or Library (Library restrooms) spaces is open.

MATERIALS AND FINISHES

- **Floor:** Large-format porcelain tile to minimize grout.
- **Walls:** Large-format porcelain tile to minimize grout, height from floor to top of door frame for public restrooms and from floor to 4'-0" for staff restrooms; Semi-gloss paint, trim finish to be complementary to room finishes. Avoid access panels where possible within wall tiles. Where required, provide lockable stainless steel access panels, located centered and aligned with adjacent elements.

- **Ceiling:** Gypsum board, Semi-gloss paint
- **Amenities:** Refer to Architectural Design Criteria drawing for more information.
 - At public restrooms: trough-style sink with integrated automatic faucet, hand soap dispenser and hand dryer. Refer to plumbing drawings and specifications. Frameless mirror shall be provided over trough-style sink, for full width of sink
 - At staff restrooms: wall mounted lavatory sink with lavatory-mounted automatic faucet and hand soap dispenser. Refer to plumbing drawings and specifications. Min 36" wide mirror above wall mounted porcelain lavatory.
 - At all restrooms:
 - automatic paper towel dispenser and paper towel/trash receptacle combo unit
 - electric hand dryer
 - baby changing station
 - At multi-accommodation restrooms, provide solid surface urinal partition and toilet partitions with privacy, gap free door, hardware. Within each stall, provide:
 - coat hooks at each restroom/stall
 - toilet paper and seat cover combination unit
 - sanitary napkin/trash dispenser for women's restrooms

Refer to Architectural Design Criteria drawings for additional information.

FF&E

None

TECHNOLOGY AND POWER

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative.

STORAGE

None

STRUCTURAL

Location of structural elements, including but not limited to columns and brace frames, shall be coordinated with the location of restroom fixtures and equipment. Code-required clearances shall be maintained. Refer to 2-4 Structural Systems Criteria and 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narratives for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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ELECTRICAL ROOMS

ROOM NUMBER: A122 (ELECTRICAL ROOM #1)
B121 (ELECTRICAL ROOM #2)
SQUARE FOOTAGE: ~225 SF (ELECTRICAL ROOM #1)
~90 SF (ELECTRICAL ROOM #2)

GENERAL DESCRIPTION

An electrical room shall be provided to service each building (A and B) in the community center complex. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

OCCUPANCY

The electrical rooms are not regularly occupied spaces.

RELATIONSHIPS AND ADJACENCIES

The electrical rooms shall be co-located with other back-of-house spaces on the west side of the building and be accessible from the west side of the building by staff and authorized personnel. The larger electrical room shall be located in close proximity to the transformer at the northwest corner of the building. The electrical rooms shall be discreetly located away from prominent public view and public path of travel.

LIGHTING AND VIEWS

The electrical rooms shall not include natural daylighting or views. LED lighting shall be distributed throughout the spaces for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

The electrical rooms shall include direct access from the building exterior. The electrical rooms shall be accessible by staff and authorized personnel via exterior door. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. Public access to these spaces is not permitted.

MATERIALS AND FINISHES

- **Floor:** Sealed concrete with resilient wall base
- **Walls:** Paint; backing as required for wall mounted equipment
- **Ceiling:** Exposed to structure above
- **Amenities:** Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

None

TECHNOLOGY AND POWER

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative.

STORAGE

None

STRUCTURAL

Location of structural elements, including but not limited to columns and brace frames, shall be coordinated with the location of electrical equipment and required clearances for access. Refer to 2-4 Structural Systems Criteria and 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narratives for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

COMMUNITY CENTER

MECHANICAL ROOMS

ROOM NUMBER:	A125 (MECHANICAL ROOM #1) B118 (MECHANICAL ROOM #2)
SQUARE FOOTAGE:	~120 SF (MECHANICAL ROOM #1) ~150 SF (MECHANICAL ROOM #2)

GENERAL DESCRIPTION

A mechanical room shall be provided to service each building (A and B) in the community center complex. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative for additional information.

OCCUPANCY

The mechanical rooms are not regularly occupied spaces.

RELATIONSHIPS AND ADJACENCIES

The mechanical rooms shall be co-located with other back-of-house spaces on the south side of the building and be accessible from the south side of the building by staff and authorized personnel. The mechanical rooms shall be discreetly located away from prominent public view and public path of travel.

LIGHTING AND VIEWS

The mechanical rooms shall not include natural daylighting or views. LED lighting shall be distributed throughout the spaces for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

The mechanical rooms shall include direct access from the building exterior. The mechanical rooms shall be accessible by staff and authorized personnel via exterior doors. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. Public access to these spaces is not permitted.

MATERIALS AND FINISHES

- **Floor:** Sealed concrete with resilient wall base
- **Walls:** Paint
- **Ceiling:** Exposed to structure above
- **Amenities:** Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative

Refer to Architectural Design Criteria drawings for additional information.

FF&E

None

TECHNOLOGY AND POWER

Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria and 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narratives.

STORAGE

None

STRUCTURAL

Location of structural elements, including but not limited to columns and brace frames, shall be coordinated with the location of mechanical equipment and required clearances for access. Refer to 2-4 Structural Systems Criteria and 2-5 Mechanical, Plumbing and Fire Systems Criteria Narratives for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

COMMUNITY CENTER

TELECOMMUNICATIONS ROOMS

ROOM NUMBER:	A129 (TELECOMM #1) B116 (TELECOMM #2) A112 (TELECOMM #3)
SQUARE FOOTAGE:	~110 SF (TELECOMM #1) ~100 SF (TELECOMM #2) ~80 SF (TELECOMM #3)

GENERAL DESCRIPTION

A telecommunications room shall be provided to service each building (A and B) in the community center complex. In addition, a telecommunications room for the Library shall be provided. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

OCCUPANCY

The telecommunications rooms are not regularly occupied spaces.

RELATIONSHIPS AND ADJACENCIES

The telecommunications rooms shall be co-located with other back-of-house spaces be accessible by staff and authorized personnel. The telecommunications rooms shall be discreetly located away from prominent public view and public path of travel.

LIGHTING AND VIEWS

The telecommunications rooms shall not include natural daylighting or views. LED lighting shall be distributed throughout the spaces for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

The telecommunications rooms that service buildings A and B shall include direct access from the building exterior. The telecommunications room located within the Library may have interior access from the Library. The telecommunications rooms shall be accessible by staff and authorized personnel via exterior doors programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. Public access to these spaces is not permitted.

MATERIALS AND FINISHES

- **FF&E:** Floor: Sealed concrete with resilient wall base
- **Walls:** Paint, Plywood backing as required for wall mounted equipment
- **Ceiling:** Exposed to structure above
- **Amenities:** Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

None

TECHNOLOGY AND POWER

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative.

STORAGE

None

STRUCTURAL

Location of structural elements, including but not limited to columns and brace frames, shall be coordinated with the location of telecommunications equipment and required clearances for access. Refer to 2-4 Structural Systems Criteria and 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

COMMUNITY CENTER

FIRE RISER ROOM

ROOM NUMBER:	A127 (FIRE RISER ROOM #1) B117 (FIRE RISER ROOM #2)
SQUARE FOOTAGE:	~75 SF (FIRE RISER ROOM #1) ~50 SF (FIRE RISER ROOM #2)

GENERAL DESCRIPTION

A fire riser room shall be provided to service each building (A and B) in the community center complex. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative for additional information.

OCCUPANCY

The fire riser rooms are not regularly occupied spaces.

RELATIONSHIPS AND ADJACENCIES

The fire riser rooms shall be co-located with other back-of-house spaces on the south side of the building and be accessible from the south side of the building by staff and authorized personnel. The fire riser rooms shall be discreetly located away from prominent public view and public path of travel.

LIGHTING AND VIEWS

The fire riser rooms shall not include natural daylighting or views. LED lighting shall be distributed throughout the spaces for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

The fire riser rooms shall include direct access from the building exterior. The fire riser rooms shall be accessible by staff and authorized personnel via exterior doors. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. Public access to these spaces is not permitted.

MATERIALS AND FINISHES

- **Floor:** Sealed concrete with resilient wall base
- **Walls:** Paint
- **Ceiling:** Exposed to structure above
- **Amenities:** Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative

Refer to Architectural Design Criteria drawings for additional information.

FF&E

None

TECHNOLOGY AND POWER

Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative and 2-5 Mechanical, Plumbing and Fire Systems Criteria Narratives.

STORAGE

None

STRUCTURAL

Location of structural elements, including but not limited to columns and brace frames, shall be coordinated with the location of the fire riser and required clearances for access. Refer to 2-4 Structural Systems Criteria and 2-5 Mechanical, Plumbing and Fire Systems Criteria Narratives for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

COMMUNITY CENTER

BUILDING STORAGE

ROOM NUMBER: COMMUNITY CENTER: B103, B107, B111, B115, B119, A124/
TEEN CENTER: A118, A121
LIBRARY: A113
SQUARE FOOTAGE: REFER TO ARCHITECTURAL DESIGN CRITERIA DRAWINGS FOR
SQUARE FOOTAGES OF EACH ROOM.

GENERAL DESCRIPTION

Refer to the Building Program Summary and Architectural Design Criteria drawings for each space that a storage room services for additional information.

OCCUPANCY

Storage rooms are not regularly occupied spaces.

RELATIONSHIPS AND ADJACENCIES

Refer to the Building Program Summary and Architectural Design Criteria drawings for each space that a storage room services for relationships and adjacencies.

LIGHTING AND VIEWS

Storage rooms shall not include natural daylighting or views. LED lighting shall be distributed throughout the spaces for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

Storage rooms shall be directly accessible to the room they service via door(s) that are wide enough for stored items to be easily removed or put back. Storage rooms shall be lockable via a manual key.

MATERIALS AND FINISHES

- **Floor:** Sealed concrete with resilient wall base
- **Walls:** Paint; bumper rails shall be provided along the full widths of all storage room to protect walls from damage from furniture and equipment being stored, except where metal shelving is located
- **Ceiling:** Exposed to structure above
- **Amenities:** None

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Storage rooms shall be coordinated with furniture and equipment required to be stored to ensure that the storage room layout fits all items. Refer to the Building Program Summary for each space that a storage room services for

additional information. Storage rooms may require metal shelving. The DBE shall work with the City on required metal shelving needs for each space.

TECHNOLOGY AND POWER

No special requirements.

STRUCTURAL

Location of structural elements, including but not limited to columns and brace frames, shall be coordinated with the location of furniture and equipment to store. Refer to 2-4 Structural Systems Criteria for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

LIBRARY

MARKETPLACE



Example images of space – see below for program

ROOM NUMBER: A101
 SQUARE FOOTAGE: ~1200 SF

GENERAL DESCRIPTION

The marketplace or “main street” of the Library is articulated as a wide, high bay space, cutting through the center of the Library to welcome visitors in and through the space. The marketplace should house new books, media, popular and seasonal displays and collections, computers, a printing station, and a staff service point.

OCCUPANCY

8-15 people

RELATIONSHIPS AND ADJACENCIES

The marketplace is the central hub of the Library, and should be adjacent to all other areas of the library, including the Teen, Adult, Children, Homework, staff, and support spaces.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint
- **Ceiling:** Exposed structure painted white with white perforated acoustic metal deck. Decking screw type and length shall be coordinated with acoustic metal deck; decking screws shall only penetrate through the top flutes and not penetrate through to the underside face of deck; underside of deck shall have no exposed decking screws.
- **Amenities:**
 - Wood Slat Wall (location to be determined by Library)
 - Wall Mounted shelf for historic displays. Confirm location with Library and provide size/weight limitations for items that could be displayed securely per Building Department requirements.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Selection, procurement, and installation of FF&E (or re-use of existing), including but not limited to library stacks, public and staff furniture, and equipment, shall be provided by the Library and is not included in the project scope. Infrastructure, including placement floor and wall power, shall be coordinated with the Library's selected furniture pieces.

TECHNOLOGY AND POWER

The marketplace shall be equipped with infrastructure for a wall-mounted flat screen TV near the staff service desk. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TV) shall be Owner Furnished, Contractor Installed (OFCI). In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Placement of floor or wall box(es) shall be coordinated with Library-provided furniture. Furniture plans provided are for reference only and do not depict final furniture types or locations. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

None

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

LIBRARY

CHILDREN, ADULT, AND TEEN AREAS



Example images of space – see below for program

ROOM NUMBER:	A115 (CHILDREN) A117 (ADULT) A110 (TEEN)
SQUARE FOOTAGE:	~1,000 SF (CHILDREN) ~1,000 SF (ADULT) ~350 SF (TEEN)

GENERAL DESCRIPTION + RELATIONSHIPS AND ADJACENCIES

The interior spaces and various collections are designed to be destinations for each library user group:

Children. The proposed location of the children's area is on the northwest side of the building, with direct access to the marketplace and the Library courtyard. The Children's area should be appropriately scaled for children and (and their parents), and use color, shapes, and child-size elements that both stimulate and educate youth and create a unique environment that is all their own. A Children's reading area is designed to fit in the northwest corner, with proposed raised seating (soft play furniture). Direct exterior access should be provided from the Children's area to the outdoor Library courtyard, with strong visual connections from indoors-out for staff oversight. New books and media for children should spill into the shared marketplace.

Adult. The adult area is located on the southwest side of the building, with direct access to the marketplace. The Adult area should include a reading area and study area. This area should be acoustically zoned to have lower noise levels. Adult new books, media, and the popular collection should spill into the marketplace.

Teen. The Teen space should celebrate the multiple facets of teen life with a collection, technology, and seating that supports academic and recreational activities in both individual and collaborative settings. The teen area is prominently located in the southeast corner adjacent to the marketplace for high visibility as well as the homework center.

OCCUPANCY

20 -50 people

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint
- **Ceiling:** Exposed structure painted white with white perforated acoustic metal deck. Decking screw type and length shall be coordinated with acoustic metal deck; decking screws shall only penetrate through the top flutes and not penetrate through to the underside face of deck; underside of deck shall have no exposed decking screws.
- **Amenities:** None

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Selection, procurement, and installation of FF&E (or re-use of existing), including but not limited to library stacks, public and staff furniture, and equipment, shall be provided by the Library and is not included in the project scope. Infrastructure, including placement floor and wall power, shall be coordinated with the Library's selected furniture pieces.

TECHNOLOGY AND POWER

In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Placement of floor or wall box(es) shall be coordinated with Library-provided furniture. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

None

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

GROUP STUDY



Example images of space – see below for program

ROOM NUMBER: A116
 SQUARE FOOTAGE: ~120 SF

GENERAL DESCRIPTION

The group study room is an enclosed space within the Library with reservable space for small meetings, collaborations, tutoring, and teleconferences

OCCUPANCY

Four- six (4-6) occupants, seated at a shared table.

RELATIONSHIPS AND ADJACENCIES

The group study room shall be conveniently located in the Library, directly adjacent to the Children and Adult spaces, and with direct sightlines to the staff service desk.

LIGHTING AND VIEWS

Windows facing 5th Street shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors. Interior windows shall provide a visual connection to the rest of the Library and also provide staff ample views into the group study room for surveillance. All exterior windows shall include manual light-filtering shades for light/view control when needed. Shading devices shall mitigate daylight and glare in the space. Housing for window shading devices shall be pocketed within the ceiling and the housing color shall match the ceiling color. Pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This room shall be accessible by the public via doors in the main Library space. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint; Interior Storefront with laminated glass or Insulated Glass Unit for enhanced acoustic performance, isolation from main library space
Along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)
- **Amenities:** None

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Selection, procurement, and installation of FF&E (or re-use of existing), including but not limited to library stacks, public and staff furniture, and equipment, shall be provided by the Library and is not included in the project scope. Infrastructure, including placement floor and wall power, shall be coordinated with the Library's selected furniture pieces. For the group study room, the Library should plan to provide a table, meeting chairs with casters, and power to the table-top for users to charge laptops, cell phones, etc.

TECHNOLOGY AND POWER

The group study room shall be equipped with infrastructure for a wall-mounted flat screen TV. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TV) shall be Owner Furnished, Contractor Installed (OFCl). In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Placement of floor or wall box(es) shall be coordinated with the table to bring power through the table leg to the tabletop; exposed electrical cords traversing between the tabletop and floor are not acceptable. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

No storage requirements.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for excellent sightlines and maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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LIBRARY

HOMEWORK CENTER



Example images of space – see below for program

ROOM NUMBER: A111
 SQUARE FOOTAGE: ~400 SF

GENERAL DESCRIPTION

The homework center will be a semi-acoustically separated space for homework assistance, tutoring, and group and individual study, as well as flexible public space that can be used informally by the public when not programmed.

OCCUPANCY

Eight to twelve (8-12) people seated at tables

RELATIONSHIPS AND ADJACENCIES

The Homework Center shall be directly accessible from the marketplace, and adjacent to the teen space, with high visibility from the staff service desk.

LIGHTING AND VIEWS

Windows facing the courtyard shall provide natural daylighting to the space, as well as views in/out for connectivity to the outdoors and the rest of the complex. All exterior windows shall include manual light-filtering shades for light/view control when needed. Shading devices shall mitigate daylight and glare in the space. Housing for window shading devices shall be pocketed within the ceiling and the housing color shall match the ceiling color. Pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

This space shall be accessible by the public and staff via the marketplace.

MATERIALS AND FINISHES

- **Floor:** Carpet Tile
- **Walls:** Paint; along the full width of one wall, provide glass markerboard (2/3 of surface area) and tackboard (1/3 of surface area); bottom of

markerboard/tackboard shall align with the top of the floor base; top of markerboard/tackboard shall align with the top of door frame datum for the room

- **Ceiling:** Exposed structure painted white with white perforated acoustic metal deck. Decking screw type and length shall be coordinated with acoustic metal deck; decking screws shall only penetrate through the top flutes and not penetrate through to the underside face of deck; underside of deck shall have no exposed decking screws.
- **Amenities:** None

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Selection, procurement, and installation of FF&E (or re-use of existing), including but not limited to library stacks, public and staff furniture, and equipment, shall be provided by the Library and is not included in the project scope. Infrastructure, including placement floor and wall power, shall be coordinated with the Library's selected furniture pieces.

TECHNOLOGY AND POWER

The Homework Center shall be equipped with infrastructure for a wall-mounted flat screen TV. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information. The audiovisual equipment (flat screen TV) shall be furnished and installed by the Library. In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power. Placement of floor box(es) shall be coordinated with Library furniture to bring power through the table leg to the tabletop; exposed electrical cords between the tabletop and floor are not acceptable. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

None

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed at the head of the room or in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

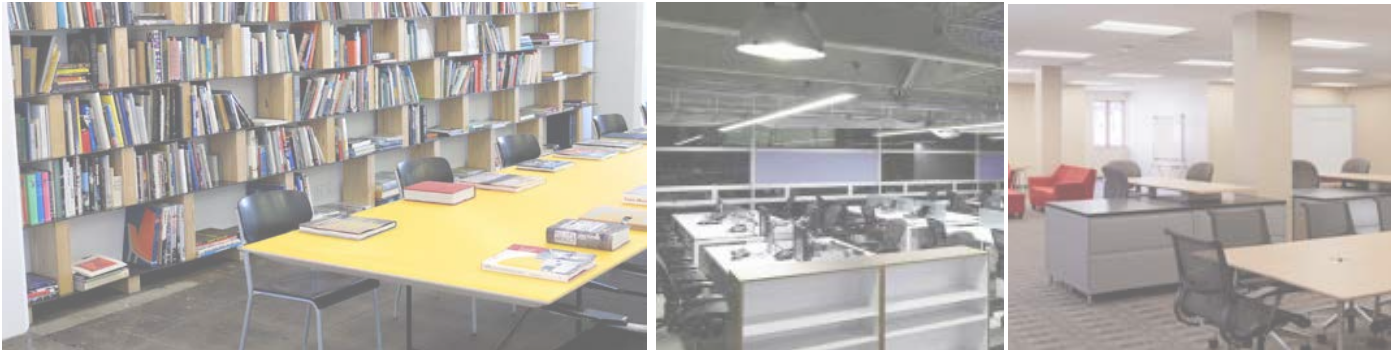
PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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LIBRARY

STAFF OFFICE



Example images of space – see below for program

ROOM NUMBER: A104 (OPEN OFFICE)
 A103 (ENCLOSED OFFICE), A105 (BREAK AREA), A102 (BOOK DROP CLOSET)
 SQUARE FOOTAGE: ~300 SF (OPEN OFFICE)
 ~120 SF (ENCLOSED OFFICE), 100 SF (BREAK AREA), 60 SF (BOOK DROP CLOSET)

GENERAL DESCRIPTION

The Library office includes workstations for Library staff, a manual book drop accessible by the public from the building’s exterior, and adjacent amenities of a staff break room, enclosed office, and staff restroom. The office is strategically located near the entry to the Library as well as the entry plaza for the community center complex.

OCCUPANCY

Two to four (2-4) staff workstations

RELATIONSHIPS AND ADJACENCIES

The staff office shall be located near the entry plaza of the community center complex, as well as near the marketplace and entry of the Library interior. The staff break room, enclosed office, and staff restroom shall be located directly adjacent to the staff office.

LIGHTING AND VIEWS

Windows facing east toward the entry plaza shall be provided for views and connection with the main entry, as well as natural daylighting. All exterior windows shall include manual light-filtering shades for light/view control when needed. Shading devices shall mitigate daylight and glare. Housing for window shading devices shall be pocketed within the ceiling and the housing color shall match the ceiling color. Linear pendant, ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

The staff office shall include direct access from the building exterior. The staff office shall be accessible by staff and authorized personnel via exterior doors

programmed via key card. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

MATERIALS AND FINISHES

The open office and enclosed office shall include:

- **Floor:** Carpet Tile
- **Walls:** Paint
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)
- **Amenities:** None

The staff break area shall include:

- **Floor:** Resilient floor
- **Walls:** Paint
- **Ceiling:** 2'x4' Acoustic Tile Ceiling (ACT)

The staff break room shall be equipped with a quartz countertop with wood veneer lockable lower and upper cabinets. Lower cabinets may also include drawers. Cabinetry storage and layout shall be coordinated with Owner. The countertop shall include a sink with a garbage disposal. Space for a refrigerator (OFCL) and an under-counter dishwasher (OFCL) shall be provided. Refer to 2-5 Mechanical, Plumbing and Fire Systems Criteria Narrative.

Refer to Architectural Design Criteria drawings for additional information.

FF&E

Selection, procurement, and installation of FF&E (or re-use of existing), including office systems furniture and equipment, shall be provided by the Library and is not included in the project scope. Infrastructure, including placement floor and wall power, shall be coordinated with the Library's selected furniture pieces. Architectural woodwork base and upper cabinets and countertop are to be provided in the staff break room.

TECHNOLOGY AND POWER

In addition to conveniently placed wall outlets, flush-mounted floor boxes with carpet tile inlay shall be provided for power as needed. Placement of floor and wall box(es) shall be coordinated with workstation systems furniture. Workstation systems furniture shall be powered via raceways in the workstations. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

Storage needs for the staff office space shall be reviewed and confirmed with the Owner. The office should have storage capacity (either room or casework) for general office supplies.

STRUCTURAL

The function of this room requires an open, column-free space with clear spans for maximum flexibility. All exposed structure shall be AESS (Architecturally Exposed Structural Steel) and painted. Exposed brace frames shall not be placed in front of glazing. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Provide accessible sink with garbage disposal along with water connection for OFCI refrigerator and dishwasher at staff breakroom. Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

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STAND-ALONE GYMNASIUM

GYMNASIUM (ADD ALTERNATE)



Example images of space – see below for program

ROOM NUMBER: N/A
 SQUARE FOOTAGE: 10,000-12,000 SF

GENERAL DESCRIPTION

The free-standing, pre-engineered gymnasium building will include a gym, small lobby, restrooms, storage, janitor's closet and support spaces. The gym will include a high-school sized basketball court with two smaller cross courts, bleacher seating will be provided on one side to accommodate ~ 100 people. The gym will be striped for two volleyball courts, and three pickle ball courts, and will include six ceiling mounted electrically retractable basketball goals with glass backboards, sleeves for volleyball and pickle ball posts set in the floor.

OCCUPANCY

Assembly occupancy 800-900 people.

RELATIONSHIPS AND ADJACENCIES

The gymnasium building will be near the community center complex and parking. The entrance/lobby to the gym shall be easily identifiable from the exterior for intuitive wayfinding and will support the campus design of the community center complex with a shared exterior gathering/activity space.

LIGHTING AND VIEWS

Indirect lighting in the gymnasium is preferred to eliminate glare. Lighting should be provided by LED indirect lights that is supplemented by indirect daylighting.

The lobby should be welcoming and include exterior windows that face the entry court. Ceiling-hung LED lighting shall be distributed throughout the space for even lighting levels. Refer to 2-6 Electrical, Lighting, and Low Voltage Systems Criteria Narrative for additional information.

ACCESS AND SECURITY

During regular business hours, this room shall be accessible by the public and staff via doors from the shared central courtyard. The doors shall be lockable by staff when the room is not in use to control public entry, programmed via key card.

MATERIALS AND FINISHES

- **Floor:** Lobby: resilient floor; gymnasium: sprung wood floor sport court; restrooms: porcelain tile; storage and back-of-house spaces: sealed concrete
- **Walls:** Paint
- **Ceiling:** Exposed structure painted white with white perforated acoustic metal deck
- **Amenities:** Built-in pull-out bleachers

Refer to Architectural Design Criteria drawings for additional information.

FF&E

None

TECHNOLOGY AND POWER

The gymnasium shall be equipped with wall-mounted score boards and infrastructure for audiovisual equipment including a projector and screen and flat screen TV(s). Audiovisual equipment shall be Owner Furnished, Contractor Installed (OFICI). Conveniently placed wall outlets shall be provided. Refer to 2-6 Electrical, Lighting and Low Voltage Systems Criteria Narrative for additional information regarding technology and power.

STORAGE

Storage for sports equipment. Coordinate with Owner

STRUCTURAL

Pre- engineered or modular building. Refer to 2-4 Structural Systems Criteria Narrative for additional information.

HVAC AND THERMAL COMFORT

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

PLUMBING AND FIRE SYSTEMS

Refer to 2-5 Mechanical, Plumbing, and Fire Systems Criteria Narrative for additional information.

2

SYSTEMS CRITERIA

2-1 Civil

2-2 Landscape

2-3 Architecture

2-4 Structural

2-5 Mechanical, Plumbing, Fire

2-6 Electrical, Lighting, Low Voltage

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SYSTEMS CRITERIA- CIVIL

EXECUTIVE SUMMARY

The Project is located at a vacant site at Gabilan Court in Gonzales, California and proposes to construct a new community center that consists of two (2) separate buildings around a central exterior courtyard and an optional gymnasium facility (Alternate A1) with surface parking. Soil information and hardscape sections were based on the geotechnical report "Geotechnical Investigations for Proposed Community Center in Gonzales, California" by Kleinfelder in July, 2012. Project design and construction shall comply with City of Gonzales Municipal Code & Gonzales 1995 Design Standards & Specifications.

EXISTING SITE CONDITIONS

The project limit is approximately 3.70 acres and fronts 5th Avenue. The City has indicated that Gabilan Court will be vacated as a public street and be incorporated into the overall developable parcel. The site is bound by 5th Street to the west, single-family residential to the north and east, and an educational facility to the south. This site was formerly residential before being demolished, with an existing gravel and asphalt parking lot still remaining.

Topographic information and survey were provided by Monterey Bay Engineers, field survey completed on July 16, 2012. Removal of all existing site hardscape will be necessary, including Gabilan Court and the gravel/asphalt parking lots and walkways. All existing utilities that remain on-site will need to be removed, in order to accommodate the project. In addition, existing poles and overhead lines may need to be disconnected and removed. In Gabilan Court there is an existing set of parallel sanitary sewer lines, a water main and hydrant, and a deactivated gas line that should also be removed or abandoned.

OFF-SITE IMPROVEMENTS

New sidewalk, curb and gutter, driveway closures/openings and utility laterals are anticipated to be installed in the City right-of-way, along the project frontage of 5th Street. The City and Monterey Salinas Transit (MST) are currently evaluating the proposed 5th Street bus route, bus stop, shelter, and concrete pad along the new community center complex frontage. The bus stop, shelter, concrete pad, and safe pedestrian access to/from the stop are subject to refinement, modification, and/or relocation as determined by the City and MST. The DBE shall be responsible confirming bus stop direction from the City and MST, and designing the bus stop to comply with this direction, as well as City and MST standards and guidelines. An existing pedestrian activated rectangular rapid flashing beacon (RRFB) and mid-block crosswalk will be relocated to the south leg of the new project entrance at 5th Street. Directional ADA ramps will be added where feasible and a portion of the southern neighbor's driveway will be reconstructed due to the curb line shift in 5th Street. Minor grading elevations will be modified along this curb line and additional asphalt, to match existing conditions, will extend to the new curb and gutter.

It should be noted that dry utilities (joint trench, electric, communications, etc.) may need to be relocated from the existing sidewalk due to the curb line shift in 5th Street.

GRADING

The site presently falls in a westerly direction, with a variety of grade breaks throughout the site. It is expected that the proposed finish floor for the ground floor of the various buildings will be set at an elevation to stay above the top of curb elevations along 5th Street. The Community Center finished floor elevation is set approximately 2.3 feet above the adjacent curb elevation. To reduce the amount of site grading and conforms at adjacent streets and parcels, the proposed site would be designed to slope as it presently does west toward 5th Street. A trash enclosure structure has been located at the rear (east side) of the site. Building foundations were assumed to be continuous footings and hardscape sections were based on the geotechnical recommendations provided by the geotechnical report dated June 20, 2012. Based on the preliminary grading study and geotechnical information available to the design team, it is anticipated that the project will result in 4,000 CY of cut and 2,700 CY of fill, resulting in a net export of 1,300 CY. This estimate does not include soil excavated for clear and grub purposes or trench spoils from utilities as it will allow the Contractor flexibility to re-use these soils for site purposes.

The vertical difference in grade area from the east to the west side of the site is approximately 6'±. Given the length of the site, that equates to an average slope of 1%. In order to accommodate flat building pads along the southern property line, existing grade conforms may require some retaining headers (max 1'). A retaining wall with a 6" vertical curb on top (max 2.5') is required along the project walkway adjacent to the parking drive aisle to conform to existing street grades and maintain high building finished floors to reduce the net export. The parking and circulation area at the north and east sides of the project have more flexibility to conform, with slopes that can range between 2% to 5% in asphalt and 0.5% to 5% in concrete. 6" steps are required for the utility rooms along the southern portion of the building due to existing grade conforms and bioretention areas.

STORM DRAINAGE

The majority of the property currently drains overland into 5th Street, where existing curb and gutter directs flows to the City storm drain system. There are currently no City storm drain mains within 5th Street, along the project frontage. The closest storm drain inlets are located 700 feet south of the project and these inlets discharge into the slough that runs adjacent to Elko Street. The subject site is approximately 25% impervious, and that redevelopment will increase the amount of impervious surfaces significantly to 80%. This project will trigger retention requirements (see Stormwater Treatment section in this report) which will result in the reduction of stormwater discharge from the site. In the absence of a storm drain main connection, it is anticipated that new storm drain laterals into 5th Street will discharge via curb drains, following the existing drainage patterns of the site. An alternative solution would be to construct an approximately 800-foot, 12" main extension from the slough at Elko Street to the site. Additional surveying and potholing of existing utilities along that alignment would be required to confirm feasibility.

There are two storm drain pipe systems on this project: untreated and treated. The untreated storm drain pipe system will collect "dirty" stormwater runoff directly from impervious surfaces and discharge to their designated stormwater treatment measures. The treated storm drain pipe system will collect the "clean" water from the stormwater treatment measures and discharge offsite through curb drain laterals in 5th Street. The stormwater will flow down 5th Street and follow the existing drainage pattern for the street to a curb inlet approximately 300' away from the site. The curb inlet will collect the stormwater and discharge it to the existing public storm drain main.

STORMWATER TREATMENT

The proposed development will conform to the City's stormwater requirements, which also include requirements listed in the Monterey Regional Stormwater Management Program and the California Water Boards – Central Coast Region 3. Based on evaluation of site-specific stormwater characteristics, the project is sited in Watershed Management Zone 4 – Groundwater Basin. The project also creates and/or replaces more than 15,000 SF of impervious area, is classified as a redevelopment project and may qualify as an Urban Sustainability Area. Therefore, the project must comply with site stormwater requirement tiers that include appropriate design measures (Tier 1), treatment measures (Tier 2) and retention design (Tier 3).

To meet Tier 1 requirements, the project strives to reduce impervious areas as much as possible and building downspouts are to be either disconnected from the storm drain pipe and discharged over landscape areas or can be hard piped directly to bioretention areas. To meet Tier 2 requirements, landscape-based bioretention areas have been used and all site impervious areas are routed via the "dirty" storm drain system to these areas. To meet Tier 3 requirements, the project will need to reconfirm near-surface infiltration rates. Groundwater levels are deep enough to allow infiltration, where the project should be able to accommodate Tier 3 requirements via the deepening of bioretention areas to detain and infiltrate the design rain event within 48 hours. Soil infiltration calculations were based on information from the Monterey County Public geotechnical information and the 2012 geotechnical report classifying the soil as Sandy Lean Clay, Class C/D. In the event that additional geotechnical data may limit the ability to infiltrate stormwater, the project may utilize porous asphalt to decrease the amount of impervious area or drywells to increase the rate of stormwater infiltration.

DOMESTIC, FIRE, & IRRIGATION WATER

A 10-inch cast-iron City water main is located along the project frontage, adjacent to the existing curb and gutter along 5th Street. The closest existing hydrant is located 250 feet south of the project. The project will require at least six new water connections consisting of one combined fire service, two fire hydrant services, two domestic water

services and one irrigation water service. Backflows have been shown in strategic locations to provide visibility to 5th Street while avoiding aesthetic impacts to the front of the building.

A fire flow test was provided by the City, performed in January, 2022 at the existing hydrant located in Gabilan Court. Static/residual pressures were tested at 89 and 76 psi, respectively, with 1,244 GPM (3,065 GPM @ 20 psi) Currently, it is assumed that the building fire sprinkler services and private site fire hydrants will be served off of a dead-end run. All drive aisles and curb radii have been shown to accommodate on-site circulation of fire trucks vehicles. Upgrades to the public water mains are not likely at this time based on the fire flow test information and coordination with the Plumbing Engineer and Fire Sprinkler Engineer. Design-Build Contractor to provide site water demand information to the city to confirm main capacity is sufficient.

SANITARY SEWER

There is an existing vitrified clay sanitary sewer main that starts as a 6-inch along the project frontage that increases to 8-inches at manhole. The project proposes one (1) new lateral connection to utilize an existing manhole location. The lateral will discharge to a 6” main. If there any capacity concerns, the sewer later can be rerouted and discharge to the 8” main. Per coordination with the Plumbing Engineer, the sewer demand for the site is low and the 6” main should be sufficient. Design- Build Contractor to provide site sewer demand information to the city to confirm main capacity is sufficient.

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SYSTEMS CRITERIA- LANDSCAPE

PART 1 – OVERVIEW

- A. This section identifies an overall design direction and provides the minimum requirements for the areas identified as landscape-site features and elements including:
1. Library Courtyard
 2. Entry Plaza
 3. Central Courtyard Spaces
 - a. Fitness Courtyard
 - b. Teen Lounge
 - c. Outdoor Classrooms and Informal Gathering Space
 - d. Interactive Art Mound
 - e. Amphitheater
 4. Central Plaza Spaces
 - a. General Central Plaza
 - b. Patio Space
 - c. Picnic Area
 5. Parking Areas and Circulation
- B. The site program is intended to complement the Community Center programming, provide break out spaces, and provide additional program elements.
- C. Site improvements and landscape shall provide a cohesive aesthetic that is complimentary of the building architecture and meets site planning goals and objectives as well as code requirements.

PART 2 - DESIGN PRINCIPLES

- A. Provide high quality, cost effective, and sustainable design of the landscape site features and landscaping that supports the Community Center Complex programming and design aesthetic.
- B. Achieve high standards of sustainability through the use of durable, cost effective and innovative materials, furnishings, lighting, construction techniques and low maintenance landscape strategies.
- C. Planting design shall compliment the building architecture, meet code requirements as applicable, be low water use and indicative of the region, and be low maintenance to reduce long term maintenance burden on the city. Planting and irrigation design shall adhere to State and local codes, be low water use, and conform to MWELo guidelines. Additionally, planting design shall take into account the unique microclimates of the city and site, be wind resistant and staked appropriately to encourage proper form/growth, and shall provide wind breaks in and around public spaces to maximize comfort level of users.

PART 3 – LIBRARY COURTYARD

A. **Program:** The program for the library courtyard shall complement the adjacent interior uses. In general, the program for the courtyard shall be split between a children’s reading nook and a reading lounge. The entire courtyard shall be enclosed with a decorative metal fence, a minimum of 4 feet tall, that compliments the architecture and provides visual and physical enclosure for the courtyard with two alarmed emergency single gates with bi-lingual signage and emergency egress point. The reading nook shall provide a variety of colorful seating options for small groups and individuals while the lounge shall provide more comfortable deep back cushioned seating. A small fountain is recommended to provide beneficial white noise.

B. **Materials and Details:** The courtyard fencing provides an opportunity for design character. It shall complement the architectural style and provide an interesting pattern. The same fencing style and height shall be utilized throughout the courtyard spaces for consistency. The fence shall be metal for maintainability, be a minimum of 4 foot tall, and provide filtered visual and physical enclosure for the courtyard. Paving shall be

colored concrete with a tighter score joint spacing. Furniture can be movable since this is an enclosed space and shall support the desired program (reading nook and lounge). Festoon lighting with posts integrated into the fence posts, twinkle lighting in the trees, seatwall lighting, or some other form of lighting is encouraged to provide interest and for use of the space at night.

C. **Planting:** Foundation shrubs on the outside of the fence shall work to soften the appearance of the fence. Interior planting shall be visually striking as viewed from the interior spaces and can be finer in design due to the protection it will receive from the fence. Trees are encouraged within the courtyard to provide a canopy for shade and further wind protection.

PART 4 – ENTRY PLAZA

- A. **Program:** The Entry Plaza and adjacent area functions as the Community Center’s front door and shall lead visitors to the entry courtyard and various building entries. A generous drop-off and pick-up area are sited adjacent to the entry plaza with a curved seatwall and groupings of conversational seating. Loading area shall meet ADA guidelines and include detectable warning surface and bollards. The plaza shall accommodate a coffee cart and related café seating as well as bike racks.
- B. **Materials and Details:** Standard concrete paving with integral color and medium broom finish for drop-off area and plaza. Entry plaza shall have a tighter score joint spacing to highlight the space and lead visitors to the entry courtyard. Cast in place concrete seatwalls, lounge style furniture in conversational seating clusters, and café style tables and chairs shall be located in the plaza. Bike racks shall be strategically located adjacent to the entrance. Entry gate shall be a minimum 8’ high sliding gate utilizing the same decorative metal pattern as the courtyard fencing. The decorative metal double gate and fencing, at the rear entry to the courtyard, shall be a minimum of 8’ high utilizing the same decorative metal pattern as mentioned above.
- C. **Planting:** Front entrance trees shall have attributes for the area of high use and visibility, providing seasonal interest, primarily deciduous, fairly transparent and tolerant of the wind conditions. Parking area trees shall have large canopies and a variety of tree types. The ground plane planting shall have plants with movement and seasonal accent colors that are complementary to the building colors and materials.

PART 5 – FITNESS COURTYARD

- A. **Program:** The program for the fitness courtyard shall complement the adjacent interior uses. The program for the courtyard shall provide a flexible space to hold outdoor classes. The entire courtyard shall be enclosed with a decorative metal fence, a minimum of 4 feet tall, that compliments the architecture and provides visual and physical enclosure for the courtyard with two gates and emergency egress points.
- B. **Materials and Details:** See the library courtyard fencing description. Paving shall be a resilient rubber surfacing to support outdoor fitness classes. Festoon lighting or some other form of lighting is encouraged to provide interest and for use of the space at night.
- C. **Planting:** Foundation shrubs on the outside of the fence shall work to soften the appearance of the fence. Interior planting shall be kept to a minimum to maximize the space’s flexibility for classes.

PART 6 – TEEN LOUNGE

- A. **Program:** The program for the teen lounge shall complement the adjacent teen center interior program. The space shall be fun and reflective of the interests and activities of teens. Group chat seating areas provide for small group gathering spaces, lounge seating for hang out space, outdoor ping pong tables for recreation, and synthetic turf surfacing to create a unique sense of place.
- B. **Materials and Details:** Surfacing will be a combination of scored colored concrete paving and synthetic turf. The curved group chat seating areas shall be wood and provide a back for more comfort, picnic tables shall be made for the outdoors and be movable for increased flexibility, and the lounge shall provide more comfortable deep back cushioned seating. Trees wrapped in twinkle lights or some other form of lighting is encouraged to provide interest and for use of the space at night.

- C. **Planting:** There shall be a continuous planting area to separate the teen courtyard from the rest of the courtyard spaces. Trees shall provide seasonal interest and provide sun and wind protection.

PART 7 – OUTDOOR CLASSROOMS AND INFORMAL GATHERING SPACE

- A. **Program:** The outdoor classroom shall provide an extension of the adjacent interior classroom spaces and support additional classroom and teen center functions. Seating shall be more group style clusters. The informal gathering space can provide similar functions as the outdoor classroom but with much more relaxed less formal seating clusters.
- B. **Materials and Details:** Surfacing would be colored concrete paving. The outdoor classroom shall have clusters of tables and chairs for small and large group discussions and classes. The informal gathering space shall have more relaxed clusters of deep backed cushioned seating. Seating shall be movable to allow for flexibility in seating configurations.
- C. **Planting:** There shall be a continuous planting area to separate the outdoor classrooms and informal gathering space from the teen lounge. Trees shall provide seasonal interest and provide sun and wind protection.

PART 8 – INTERACTIVE ART MOUND

- A. **Program:** The interactive art mound is meant to provide a space for small children to play in a safe environment, without the use of formal play equipment, while at the same time providing visual interest for the courtyard. The use of synthetic turf will break up the concrete, compliment the teen lounge surfacing and provide a safe play surface. The surfacing shall be mounded to provide informal play and the space shall include a small play sculpture that kids can climb on. Built in seatwalls on the perimeter will help contain the kids and provide seating for families.
- B. **Materials and Details:** Surfacing would be synthetic turf with mounding. The play sculpture can be a catalogue item but must provide visual interest and not appear to be a traditional item of play equipment. The perimeter seatwalls shall be poured concrete. The entire area must meet applicable standards/requirements for play areas.
- C. **Planting:** There would be a couple of small planting areas protected from cross traffic into the play area with placements of seatwalls. Trees shall provide seasonal interest and provide sun and wind protection.

PART 9 – AMPHITHEATER

- A. **Program:** The amphitheater space is meant to complement the indoor community room and provide for additional program space for small events, concerts, etc. A small performance area identifiable through accent paving would be up against the building and at grade with the rest of the courtyard. A projection screen shall be incorporated into the eaves of the building canopy. The amphitheater shall accommodate up to 200 to 300 people through a combination of seatwalls, open synthetic turf areas, and spill over to adjacent spaces. Various seating zones shall be elevated by 7 inches or lowered by seven inches from courtyard grade with additional seating zones at grade for accessibility.
- B. **Materials and Details:** Surfacing would be a combination of scored colored concrete and synthetic turf. Drainage for this area will flow and be collected within a nearby bio-retention, refer to civil plan for additional information on drainage. The performance area shall be identifiable through color and tighter scoring pattern. Low concrete curbs will be required to provide various levels of seating zones and adjacent concrete seatwalls will provide for additional seating. Projection screen shall be placed on center above the performance area. Festoon lighting, trees wrapped in twinkle lights or some other form of lighting is encouraged to provide interest and for use of the space at night.
- C. **Planting:** See adjacent areas for planting. No planting within the amphitheater space.

PART 10 – GENERAL CENTRAL PLAZA

- A. **Program:** In general, the central plaza is located between the community center and the proposed gymnasium. It provides circulation between the two buildings along with connections to the existing adjacent school gymnasium for shared uses. However, in addition to circulation, the plaza does include several other uses including patio spaces, picnic zone, central plaza for events and Christmas tree placement, and large bioretention areas.
- B. **Materials and Details:** Surfacing would be scored colored concrete with the circular central plaza space having a contrasting color and enhanced scoring for identification. The plaza would also have a circular concrete seatwall for seating and separation from the treatment area. The concrete seatwall will also be protected with skateboard deterrents to avoid any types of unwanted damage. Area lighting and trees wrapped in twinkle lights is encouraged to provide interest and for use of the space at night.
- C. **Planting:** Trees shall provide seasonal interest, provide sun and wind protection, and highlight the connections to the adjacent gymnasium. Planting areas adjacent to the building would provide foundation plantings and additional interest. The large bioretention area would include plantings that provide interest and are appropriate for the function and design of the bioretention area.

PART 11 – PATIO SPACE

- A. **Program:** This patio space provides for outdoor seating in close proximity to the community room and classrooms. It provides for additional flexible programming and group seating.
- B. **Materials and Details:** Surfacing would be scored colored concrete. Clusters of tables and chairs would provide for small group seating. These would not be protected by fencing so it is recommended to be bolted down and not moveable.
- C. **Planting:** See adjacent areas for planting. No planting within the patio space.

PART 12 – PICNIC AREA

- A. **Program:** This picnic area provides for outdoor seating in close proximity to the community room. It is identifiable with softer decomposed granite paving, picnic style tables and chairs, and tree plantings to provide for shade and wind protection.
- B. **Materials and Details:** Surfacing would be stabilized decomposed granite in a complementary color to adjacent concrete. Clusters of tables and chairs would provide for small group seating. These would not be protected by fencing so it is recommended to be bolted down and not moveable. Area lighting, trees wrapped with twinkle lights, or some other form of lighting is encouraged to provide interest and for use of the space at night.
- C. **Planting:** Trees shall provide seasonal interest and provide sun and wind protection.

PART 13 – PARKING AREAS AND CIRCULATION

- A. **Program:** Refer to Civil plans for parking layout. Supporting walkways will provide connectivity from parking to building entrances and supporting elements such as the trash enclosure. Throughout the parking and adjacent spaces will be planting areas and bioretention planting areas along with street trees. Refer to electrical plans for electric vehicle charging stations and parking lot lighting.
- B. **Materials and Details:** Walkway surfacing would be scored concrete paving.
- C. **Planting:** Parking area trees shall have large canopies and a variety of tree types. Trees shall provide seasonal interest and provide sun and wind protection. Planting areas adjacent to buildings would provide foundation plantings and additional interest. The narrow planting area along the gymnasium wall could support vines if trellises are proposed to soften that building face. Bioretention areas would include plantings that provide interest and are appropriate for the function and design of the bioretention area.

END OF SECTION

SYSTEMS CRITERIA – ARCHITECTURE

SITE

1. Refer to 2-1 Civil Systems Criteria and 2-2 Landscape Systems Criteria narratives along with drawings and specifications for additional information.
2. A free-standing CMU trash enclosure with standing seam metal shed roof with external gutter and downspout(s) shall be provided, located and sized to meet program requirements and City of Gonzales and Tri-Waste requirements for trash, recycling and compost requirements. Trash enclosure shall include curbs within enclosure to protect walls from damage along with floor drain and hose bibb for cleaning. Provide man door and gate sized per City of Gonzales and Tri-Waste requirements to allow easy access and maneuvering of bins for disposal and pick-up. Trash enclosure shall have exterior stucco finish over CMU walls with perforated metal screen or grille infill between top of CMU wall and sloped shed roof. Trash enclosure gate shall be of durable construction to prevent damage from vehicular or bin impacts and shall be screened to prevent sightlines into the trash enclosure. All finishes shall be complementary to building exterior finishes and colors.
3. An aluminum, ground-mounted flagpole with cast-in-place concrete base and foundation shall be provided adjacent to, but not obscuring, the entry plaza. The flagpole shall be up-lit for proper illumination of the flag when dark, so that the flag can remain displayed through the night. The up lighting shall be programmable on a timer.
4. Ground-mounted utilities, including but not limited to: transformers, back-flow preventers, mechanical equipment, and battery back-up equipment (alternate E2) shall be screened from public view with attractive metal screens/fencing, landscaping, or a combination of both.
5. Attractive, decorative metal fences and with gates shall be provided at the site in the locations indicated below and on the drawings. The fences and gates shall complement the architecture of the building and be welcoming to the public; gates shall be ADA compliant. See below for Basis of Design selection. See drawings and specifications for more information.
 - a. **Library Courtyard and Fitness Courtyard:** 4 foot high decorative fence (with gates with 'Post Fence A' system and decorative fence 3/16 inch aluminum powder coat panels); design model 'B21' modular fence system manufactured by Bok Modern, 'B21' model pattern shall be custom modified to "50% percent open". Finish color: 'Satin/Statuary Bronze' #38/60080.
 - b. **Central Courtyard:** B. 8 foot high decorative fence (with gates with 'Post Fence A' system and decorative fence 3/16 inch aluminum powder coat panels); design model 'B21' modular fence system manufactured by Bok Modern, 'B21' model pattern shall be custom modified to "50% percent open". Finish color: 'Satin/Statuary Bronze' #38/60080.

BUILDING EXTERIOR

1. The building massing shall relate in scale to the neighborhood setting and be configured around a shared central exterior courtyard. The building mass shall provide wind protection to the shared courtyard space. Articulation of the building massing shall accentuate key interior spaces within the building. Roof orientation shall be used to draw attention to main entry and lobby, and key program spaces. Multiple roof planes shall be incorporated to break up the mass.

2. The exterior materials palette shall be timeless materials that are attuned to the community's values and the building's setting. The exterior material palette and assemblies shall be of highly durable, high-quality material and construction which requires minimal maintenance, only requiring periodic cleaning. Graffiti resistant system shall be provided.
3. Concealed fastener systems are preferred over exposed fastener attachment. Where exposed fasteners are required, fasteners shall be the same color and of the same metal as being fastened with the same finish system or compatible metal with equal or better durability.
4. The following materials and systems are used as the Basis-of-Design (B.O.D.):
 - a. **Exterior Wall Assemblies:** min. R-Value R-19 or per indicated assembly below, whichever is more stringent.
 - i. **Typical Exterior Wall Material:** EIFS (4" thickness). B.O.D.: Dryvit, color: "105 Suede," finish: Finesse
 - ii. **Accent #1 Exterior Wall Material:** Vertical metal panel system, B.O.D.: Kingspan Concealed fastener series, W-12, color: "Zinc Gray"
 - iii. **Accent #2 Exterior Wall Material:** Wood-look phenolic horizontal panel system, B.O.D.: Trespa Pura, staggered joint layout, color: "Romantic Walnut"
 - iv. **Accent #3 Exterior Wall Material:** Colored phenolic panel system, B.O.D.: Trespa Meteor, concealed fastener system, Four (4) colors (selected from Unicolor series): "Rusty Red," "Pacific," "Verdigris," "Turf Green", finish: "Satin"
 - v. **Accent #4 Exterior Wall Material:** ACM between vertical metal panel (Accent #1) and curtainwall/wood-look phenolic panel system (Accent #2): North Clad, The ACM Composite Panel Series, Color: PVDF custom color to match curtainwall mullion, "Night Hawk Gray"
 - b. **Glazing & Window System:**
 - i. Thermally broken storefront glazing system, curtainwall glazing system, and punched windows with aluminum framing with kynar finish and custom color. Interior and exterior mullions shall be the same color; B.O.D. color: Kawneer "Night Hawk Gray," although custom color may be selected.
 - ii. Windows shall be provided and located for optimal solar orientation, daylight harvesting and maximizing desirable views and relationships based on the space's functional needs. Refer to building program and room summary for additional information.
 - iii. Exterior glazing shall be high performance insulated glass units with low-e coating, ultra-clear. Tempered glazing shall be provided per CBC requirements. (Interior window glazing shall also be ultra-clear to match exterior glazing "color")
 - iv. **Window Glazing – Exterior**
 - a. **Type A:** 1" Insulated Glazing Unit with Vitro Solarban 72 on Starphire glass. Type A shall be installed at all exterior windows, except where Type AT applies.
 - b. **Type AT:** Tempered 1" Insulated Glazing Unit with Vitro Solarban 72 on Starphire glass. Type AT shall be installed at all exterior glazing conditions at eye-level and for transoms and sidelites above and adjacent to doors.

- c. **Type S:** Curtainwall Insulated Infill Metal Seamless Structurally Glazed (SSG) Panel. Basis of Design: Mapes insulated SSG with wrapped edges. Color: custom to match mullion color.
- v. **Window Glazing – Interior**
 - d. **Type B:** 1” Insulated Glazing Unit. Type B shall be installed at all interior storefront conditions, including Room A116 – Group Study Room.
 - e. **Type C:** Not Used
 - f. **Type D:** Not Used
 - g. **Type DL:** 1/4” Laminated Float Glass. Type DL shall be installed at all interior glazing conditions, except where Type B applies.
 - h. **Type DT:** Not Used
- vi. **Door Glazing**
 - i. **Type a:** 1” Insulated Glazing Unit with Vitro Solarban 72 on Starphire glass, tempered
 - j. **Type b:** ¼” float tempered clear
- c. **Roof Assemblies:** Min. R-Value R-36 or per indicated assembly below, whichever is more stringent.
 - i. **Roof #1a (Parapeted Roofs):** TPO roofing, fully adhered to coverboard over 8.75” EPS insulation base layer plus additional tapered EPS insulation for localized drainage, over structural metal deck. Roof-penetrating stanchions at 8’ OC both directions as supports for add alternate PV system. Provide white TPO walk pads from roof hatch to fall arrest tie in points as well as areas requiring maintenance.
 - ii. **Roof #1b (Parapeted Roofs Mechanical Wells):** TPO roofing, fully adhered to coverboard over 8.75” EPS insulation base layer plus additional tapered EPS insulation for localized drainage, over concrete-filled metal deck. Refer to structural drawings and narrative for additional information. Provide mechanical equipment screening system to conceal all MEP equipment and supports. Mechanical Screen shall be complementary to building massing, finishes and colors. Provide white TPO walk pads from roof hatch to fall arrest tie in points as well as areas requiring maintenance.
 - iii. **Roof #2a (Sloped Pavilion Roofs):** Standing seam metal roof, mechanically seamed, over HT self-adhered membrane over 8.75” EPS insulation over metal deck.
 - iv. **Roof #2b (Sloped Pavilion Roofs w acoustic deck):** Standing seam metal roof, mechanically seamed, over HT self-adhered membrane over 8.75” EPS insulation over acoustic metal deck.
- d. **Exterior Soffit:** Linear plank metal panel with decorated wood-look finish for Library, Teen Center, and Community Hall Pavilion soffits; B.O.D.: Certainteed Linear Plank Metal Panel with Decorated Wood-Look Powder Coat; Basis of Design Color: Certainteed “8422 Fonthill Cherry”
- e. **Exterior Roof Facia:** Aluminum Composite Material (ACM) with kynar finish and custom color, dry-sealed installation. North Clad, The ACM Composite Panel Series,

Color: selected from the Classic Collection Alucobond Color Chart, PVDF 2 “Bone White”

- f. **Covered Walkway Canopy in Courtyard:** Soffit shall be non-corrugated metal panel. Exposed columns and beam supports and canopies shall be Architecturally Exposed Structural Steel (AESS).
 - i. **Covered Walkway Soffit:** Linear plank metal panel with powder coat finish walkway soffit; Architect to select from manufacturer’s full range of premium custom colors; match Roof Fascia color of Alucobond Color Chart, PVDF 2 “Bone White”
5. The exterior wall and roof assemblies shall meet or exceed the thermal performance guidelines as described in the Design Criteria Documents. Roof surface shall meet cool roof requirements to reduce urban heat island effect and reduce energy use.
6. The building envelope shall be weather-tight. Provide exterior wall, fenestration, openings and roof assemblies with exterior finishes/materials, waterproofing assemblies, compatible substrates, flashing, sealants and all accessories required for a weather-tight building that is installed and tested per performance specifications.
7. Provide 6” high concrete curbs at exterior walls, typical.
8. Window shades shall be provided for solar and privacy control as indicated in the design criteria documents.
9. The use of architectural features such as trellises shall be used to promote easy wayfinding and orienting pedestrian to building entrances in addition to providing solar control.
10. Where non-architectural elements such as mechanical and electrical equipment is located outside the building envelope, provide screen walls that integrate with the building architecture to fully conceal equipment from general view. Provide secured gate/ door access at equipment enclosure that allows for access to equipment and future repairs and replacement.
11. Where louvers are required, provide architectural wall louvers and screens that blends seamlessly with the building architecture. Where possible, select colors that match adjacent finish.
12. Roof Drainage:
 - a. At standing seam metal roof covered walkway at interior courtyard, provide external gutter and locate downspouts along covered walkway structural columns.
 - b. At standing seam metal roof overhang on the north side of Fitness Room, provide external gutter with downspout(s) running vertically down along solid section of wall.
 - c. At Library standing seam roof, provide TPO cricket at valley of butterfly roof that drains north and south to roof drain and overflow drains that pipes concealed within exterior wall.
 - d. At Teens and Community Hall standing seam roof, provide external gutter at low slope of shed roof, with downspouts running vertically down along solid section of exterior wall.
 - e. At TPO roofs, provide tapered insulation crickets below TPO with minimum 1/8” slope to properly drain towards roof and overflow drains. Conceal piping from public view. Daylight overflow drain.
13. Provide roof access required to maintain building systems and equipment, including but not limited to roof drains, mechanical, electrical, plumbing equipment, and future photovoltaic panel systems. In addition, roof access, hatches and ladders shall comply with Authorities Having

Jurisdiction, including approval by the Gonzales Fire Department. Roof access hatches and ladders shall be located in back-of-house/storage rooms to prevent unauthorized access to the roof and shall be located away from roof edges to avoid visible roof hatches, guardrails and extension posts from the ground and adjacent neighboring buildings.

14. Provide roof protection measures, such as TPO walk pads in primary path of travel from roof access hatches and ladders to equipment requiring maintenance. Provide fall protection system in compliance with Occupational Safety and Health Administration (OSHA) requirements that integrates with architectural aesthetics and maximizes available roof areas for future Photovoltaic panels installation.
15. It is anticipated that the Gonzales Department will require an Emergency Responder Radio Distributed Antennae System. A fully coordinated functional system, including but not limited to the rated pathway and enclosures shall be provided as required by the Authority Having Jurisdiction. The exterior antennae shall be located to be hidden or minimally visible from public view. See Section 2-6 for electrical.
16. Roof top equipment shall be concealed from public view via use of mechanical wells and/or mechanical screen enclosures.

BUILDING INTERIOR

See Building Program Summary.

MOCK-UPS

1. Definition: Full-size, physical example assemblies to illustrate finishes and materials. Mockups are used to verify selections made under Sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Accepted mockups establish the standard by which the Work will be judged.
2. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - a. Build mockups in location and of size indicated in Design Criteria Documents.
 - b. Notify Architect and Construction Manager 7 calendar days in advance of dates and times when mockups will be constructed.
 - c. Employ supervisory personnel who will oversee mockup construction. Employ workers that will be employed to perform same tasks during the construction at Project.
 - i. Allow 7 calendar days for initial review and each re-review of each mockup.
 - d. Demonstrate the proposed range of aesthetic effects and workmanship.
3. Obtain Architect's and Construction Manager's approval of mockups before starting work, fabrication, or construction.
4. Assemble and erect specified items, with specified attachment and anchorage devices, flashings, seals, and finishes.

5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
6. Demolish and remove mockups when directed, unless otherwise indicated.
7. Where mock-up is specified in individual Sections to be removed, clear area after mock-up has been accepted by Architect and Construction Manager.
8. Refer to individual specification sections for mock-up requirements. In addition to compliance with mock-up requirements as described in the specifications, the DBE shall provide mock-ups of the vertical and horizontal exterior material transitions below. The arrow → indicates a critical transition in material that shall be constructed in the mock-up for review. Selected colors and finishes for each material shall be included – the mock-up shall be an accurate representation of the exterior materials and construction execution.

a. **Vertical Transitions**

- i. Wall section 1 in drawings: Curtainwall → SSG metal panel → Curtainwall → Composite metal panel system → Vertical metal panel system → Wood-look linear metal exterior soffit → Fascia → Roof
- ii. Wall section 2 in drawings: Phenolic wood-look horizontal rainscreen system → Composite metal panel system → Vertical metal wall panel system → Wood-look linear metal exterior soffit → Fascia → Roof
- iii. EIFS → Punched window → EIFS → Parapet (include reveals in EIFS)

b. **Horizontal Transitions.** Transitions below may be combined into fewer mock-ups that accurately showcase multiple conditions at the same time.

- i. Color phenolic rainscreen system → Curtainwall
- ii. Color phenolic rainscreen system → Phenolic wood-look horizontal rainscreen system
- iii. Color phenolic rainscreen system → Vertical metal wall panel system
- iv. Color phenolic rainscreen system → Composite metal panel system
- v. Color phenolic rainscreen system → EIFS
- vi. EIFS → Phenolic wood-look horizontal rainscreen
- vii. EIFS → Vertical metal wall panel system
- viii. EIFS → Composite metal panel system
- ix. Phenolic wood-look horizontal rainscreen → Curtainwall

EXTERIOR MATERIALS PALETTE

See following page for the exterior materials palette.



EXTERIOR FINISHES

EXTERIOR WALL FINISHES

TYPICAL

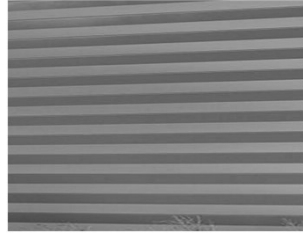
EIFS (EXTERIOR INSULATION AND FINISH SYSTEM)



B.O.D.: DRYVIT COLOR: "105 SUEDE", FINISH: FINESSE

ACCENT #1

VERTICAL METAL PANEL SYSTEM



B.O.D.: KINGSPAN CONCEALED FASTENER SERIES, W-12, COLOR: "ZINC GRAY"

ACCENT #2

WOOD-LOOK PHENOLIC HORIZONTAL PANEL SYSTEM



B.O.D.: TRESPA PURA, STAGGERED JOINT LAYOUT, CONCEALED FASTENERS, COLOR: "ROMANTIC WALNUT"

ACCENT #3

COLOR PHENOLIC PANEL SYSTEM



B.O.D.: TRESPA METEON, CONCEALED FASTENERS, COLORS (FROM LEFT TO RIGHT): "PACIFIC," "RUSTY RED," "VERDIGRIS," "TURF GREEN"

ACCENT #4

METAL COMPOSITE PANEL SYSTEM



LOCATED BETWEEN VERTICAL METAL PANEL (ACCENT #1) AND CURTAINWALL/WOOD-LOOK PHENOLIC PANEL SYSTEM (ACCENT #2); B.O.D.: NORTH CLAD, ACM COMPOSITE PANEL SERIES, COLOR: CUSTOM COLOR TO MATCH CURTAINWALL MULLION, "NIGHT HAWK GRAY"

GLAZING

MULLIONS



B.O.D. KAWNEER, COLOR: "NIGHT HAWK GRAY"

CURTAINWALL INSULATED INFILL METAL SSG



B.O.D.: MAPES INSULATED SSG WITH WRAPPED EDGES. COLOR: MATCH MULLION COLOR, "NIGHT HAWK GRAY"

SOFFITS/FASCIA

SOFFIT #1: PAVILION ROOFS



LINEAR PLANK METAL PANEL WITH DECORATED WOOD-LOOK FINISH; B.O.D.: CERTAINTED LINEAR PLANK METAL PANEL WITH DECORATED WOOD-LOOK POWDER COAT; COLOR: "8422 FONTHILL CHERRY"

SOFFIT #2: COVERED WALKWAYS



LINEAR PLANK METAL PANEL WITH POWDER COAT FINISH; MATCH ROOF FASCIA COLOR ALUCOBOND COLOR CHART, PVDF 2 "BONE WHITE"

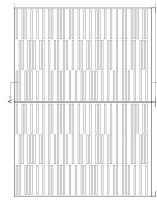
ROOF/COVERED WALKWAY FASCIA



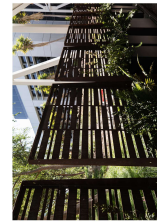
ACM WITH KYNAR FINISH, DRY-SEALED INSTALLATION. B.O.D.: NORTH CLAD, ACM COMPOSITE PANEL SERIES, COLOR: SELECTED FROM CLASSIC COLLECTION ALUCOBOND COLOR CHART, PVDF 2 "BONE WHITE"

FENCES/GATES

DECORATIVE METAL FENCE WITH GATES



3/16" ALUMINUM POWDER COAT PANELS; B.O.D.: BOK MODERN "B21" MODULAR FENCE SYSTEM, CUSTOM MODIFIED TO "50% PERCENT OPEN". FINISH COLOR: "SATIN/STATUARY BRONZE" #38/60080.



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SYSTEMS CRITERIA- STRUCTURAL

STRUCTURAL SYSTEM

For the design concept of the Gonzales Community Center Complex, two options have been developed and included in this Structural Criteria. The Base Option for the structure utilizes structural steel with steel braced frames. The Alternate Option utilizes timber construction with dimensioned lumber and long span trusses. The criteria includes the requirements for each option, that will be examined the General Contractor may examine and utilize for the final building designs.

Base Option

The Structural Steel Base Option has advantages that complement the architecture. Structural steel allows for the Building to efficiently incorporate large open spaces, multiple roof slopes and the use of exterior glazing around the building. To accommodate the “C” shaped configuration of the Community Center Complex each segment is designed with its own lateral system assuming flexible roof diaphragms. The project team did consider, an option to utilize steel moment-resisting frames, but this option was not developed further due to the expected cost premium.

The gravity load carrying system consists of structural steel columns supporting steel wide flange beams. The sloping roofs consist of bare 18 gage metal decking spanning to the support beams. At long span areas, such as the Community Hall, the roof requires supports consisting of deeper either W36x beams, long-span open web steel joists, or an engineered angle trusses supported on the steel perimeter beams and columns. Mechanical wells at building roofs require additional steel framing to form the well depression, and concrete over metal deck to facilitate location of housekeeping keeping pads for the roof top units support and anchorage. Supplemental steel is required at roll up doors, clerestory and ribbon windows, cladding and glazing, and at other large openings in exterior walls.

The lateral force resisting system uses a Brace Frame system that utilizes steel columns and tube steel braces. The Braces are located in areas integrated with the architectural design concept, with AESS finish (Architectural Exposed Structural Steel) where noted by the Architect. The AESS finish is per AISC requirements, to ensure they meet the visual criteria. The location of brace frames may move along a given line of resistance based on desired usage of space. See architectural drawings for restriction on brace frame locations. The tube steel braces will have two potential options, special concentric braced frame system(SCBF) or the Buckling Resistant Braced Frame (BRBF). The BRBF system provides higher seismic performance, but, may not be cost efficient for the expected seismic loads. The bare metal deck roof diaphragms are designed as flexible diaphragms that are advantageous for this layout, since it limits torsional response in the building. The irregular C-shaped plan combined with a stiff diaphragm, such as a concrete filled deck or slab, would result in torsion or twisting of the building. The standing seam deck specified on the architectural drawings will serve as the architectural roof finish over the structural metal deck. If the Contractor elects to use an alternative, stiff or rigid, diaphragm, the building will require additional analysis to verify the building configuration and location of lateral elements meet the code requirements for seismic resistance.

The design of the exterior wall system is expected to be design build with delegated structural engineer(s). The structural criteria includes the code required seismic and wind parameters to determine the design loading and design the exterior wall. The General Contractor is responsible for the exterior wall design and to determine what is needed support the Exterior. The exterior wall design engineer shall design any required secondary steel, metal studs and connectors.

The structure requires design to support a fall arrest system and PV panels at locations shown on the Architectural roof plans. For the fall arrest system, design each tie back anchor support, and supporting framing, for a 5000 lb horizontal load, in any direction, per person expect to be attached to the system, per OSHA Standard 1910 requirements. Attach the PV panel system to support stanchions or frames positively attached or anchored to the roof. Alternatively, the PV system may utilize a ballasted system to pin them to the building roof. Design the roof framing for the loads imposed to structure, based on the PV mounting option selected. If steel stanchions are used, they can be directly attached to the roof framing, or to the standing seam roof deck using appropriate attachment clips. If the PV system is attached to the standing seam roof, the Contractor is responsible for adjusting the design of

the connection of the standing seam deck to the structural deck to include the additional load from the PV system. If a ballasted system is selected, Contractor is responsible to adjust the building design for the added weight, including impacts to the gravity and lateral systems.

Alternate Option (S1: Hybrid Wood Structural System)

The Alternative Option utilizes timber construction. Use of timber framing is efficient for spans up to 25 feet, which are supported on load bearing walls or glulam girders supported by columns. In long span, open space areas like the Community Hall, Fitness Center and Library, engineered joists, such as from Weyerhaeuser™ and RedBuilt™, are required. The timber scheme also modifies the architectural façade options to utilize punched windows, which may be also utilized as the bearing walls for the building. Alternative exterior wall systems, such as curtain wall system, glazing, metal panel or studs would require secondary elements for support

The gravity load carrying system consists of sawn lumber or engineered joists supported on load bearing interior and exterior walls. At the Community Hall the long spans were supported by open web joists or steel trusses supported by steel posts braced by exterior wall.

The lateral force resisting system uses plywood sheathed shear walls with holdowns at the ends of the wall panels. Most of the walls were placed at building perimeter, but, in some areas like the Community Hall, intermediate walls were required to reduce the span of the plywood sheathed roof diaphragm. A steel frame moment resisting frame, such as the Simpson Strong-Wall or Strong-Frame, may be used at interior locations where a solid wall may cause programming challenges.

Similar to the base option, the structure shall be designed to support a fall arrest system and PV panels at locations shown on the Architectural roof plans. The tie back anchors and supporting framing should be designed for 5000 lb load in any direction per OSHA requirements. Roof framing should be designed for the PV panel loads that may be anchored on steel stanchions or utilize a ballasted system for anchorage. See base option for more details.

Foundations

A geotechnical report has been developed for this site by Kleinfelder, dated July 2012. The recommendations provided in this report require confirmation with an updated geotechnical investigation provided by the DBE. Based on the report provided by Kleinfelder, the site is underlain with alluvial silty and clayey sands with some lean clay. Ground water was not encountered in borings extending up to 50 ft below grade hence, liquefaction potential in the top 50 ft of subgrade is low. The near surface soils are moderately expansive.

Per the geotechnical report, a shallow spread footing system is recommended for this building tied together with a concrete slab on grade. The foundations can rest on native undisturbed soil or engineered fill and should be deepened to minimum 18” to avoid the moderately expansive surface layer. Lateral resistance against sliding is provided by friction at the bottom of footings and passive soil pressure on the face of footings.

Based on this, for the base (steel) option, steel columns will be supported by spread footings. The steel frames will be supported by spread footings at columns with grade beams extending between the columns at each end. All spread footings will be connected with a concrete slab on grade,

For the alternate (wood) option, timber shear walls and bearing walls will be supported by continuous wall footings, connected with a concrete slab on grade.

Trash Enclosure

The trash enclosure will be framed with concrete masonry walls on all sides with steel support framing and bare metal deck forming the roof of the enclosure. Steel jambs is required for supporting door framing at the enclosure gate and any ribbon windows required between the top of walls and metal deck roof. The foundations will be continuous wall footings under a concrete slab-on-grade.

Add Alternate: Pre-Engineered Gymnasium Building

The Gym Building has been proposed to be a pre-engineered steel butler frame building. The lateral system of the building should be designed to resist seismic and wind forces calculated per the parameters provided in the loading criteria section of this report. The super structure will be design-build by the manufacturer who would provide a stamped set of calculations for review by the City of Gonzales. The DBE's Structural-Engineer-Of-Record (SEOR) will be responsible for foundation design and anchorage of steel frames to the foundations. The foundations are anticipated to be shallow spread footings connected with grade beams under a concrete slab-on-grade per the geotechnical report by Kleinfelder.

I. Loading Criteria

- A. All construction shall comply with the following codes:
 - Title 24, Part 2, 2019 California Building Code, based on 2018 International Building Code.
 - ASCE 7-16, Minimum Design Loads for Buildings and Other Structures
 - ACI 318-14, Building Code Requirements for Structural Concrete
 - AISC 360-16, Specifications for Structural Steel Buildings
 - AISC 341-16, Seismic Provisions for Structural Steel Buildings
 - AWS D1.1-15, Structural Welding Code
 - AWS D1.8-16, Structural Welding Code, Seismic Supplement
 - AISI S100-16/S1-18, Design of Cold-Formed Steel Structural Members
 - AWC NDS 2018, National Design Specifications for Wood Construction

II. Design Load Combination

- A. Load Combinations for use with Allowable Stress Design is per CBC 2019, Section 1605.3. Load Combinations using Strength Design or Load and Resistance Factor Design are per CBC 2019, Section 1605.2.

III. Wind Loads

- A. Per the 2019 CBC, Section 1609 and 1609.6 Alternate All-Heights Method.
 - Design Factors:
 - Basic Wind Speed: 91 MPH
 - Exposure Type: C
 - Risk Category: II
 - Importance Factor, I_w : 1.00

VI. Seismic Loads

- A. Seismic loads are per the 2019 CBC Section 1613 and ASCE 7-16 Chapters 12, 20 and 22 using code mapped spectra. The Geotechnical report provided is based on CBC 2010, which is superseded by CBC 2019. An updated report is required to confirm the seismic design parameters. For the design criteria documents, the seismic coefficients below, are per USGS values for ASCE 7-16.

Design Factors:

$S_S = 1.59g$
 $S_1 = 0.573g$
 $S_{DS} = 1.272g$
 $S_{D1} = \text{Per Calcs}$
Site Class: D-Default (Confirm with future Geotechnical Report)

Seismic Parameters – Base Option

Proposed Seismic Force Resisting System: B2 – Steel Special Concentric Brace Frame
Response Modification Factor, R: 6
Displacement Amplification Factor, C_d : 5
Overstrength Factor, Ω_o : 2
Structural System Limitations: 160 ft.
Seismic Response Coefficient, C_S : 0.212
Seismic Design Category: D
Risk Category: II
Importance Factor, $I_e = 1.00$
Location of Base for Seismic: Level 1

Seismic Parameters – Alternate Option

Proposed Seismic Force Resisting System: A16 – Light-frame (wood) walls sheathed with wood structural panels rated for shear resistance
Response Modification Factor, R: 6.5
Displacement Amplification Factor, C_d : 4
Overstrength Factor, Ω_o : 3
Structural System Limitations: 65 ft.
Seismic Response Coefficient, C_S : 0.196
Seismic Design Category: D
Risk Category: II
Importance Factor, $I_e = 1.00$
Location of Base for Seismic: Level 1

VII. Gravity Loads

- A. Gravity dead loads will consist of the computed actual weights of materials of construction and fixed equipment/furniture. Assume 20 PSF Sustained DL for areas with Photo Voltaic (PV) Panels based on assumed frame support system. Frame support system will apply seismic overturning loads to the roof. The lateral load applied to the top of these PV support frames will be on the order of 30 PSF. Coordinate with the future PV supplier for required seismic loads. An alternative, ballasted system is acceptable with adjustment of roof loads.
- B. Live Loads*:
- | | |
|------------------------------|---------------------------------------|
| Office & Classroom: | 50 PSF + 20 PSF partitions |
| Corridors & Exit ways: | 80 PSF + 20 PSF partitions |
| Mechanical/Electrical Rooms: | 125 PSF (or actual weight if heavier) |
| Light Storage: | 125 PSF |
| Roofs: | 20 PSF |
| Concentrated Load: | 2,000 pounds |

*Live loads may be reduced where permissible by ASCE 7-16 and CBC 2019.

VIII. Deflection Control

- A. Structural framing members are designed to limit deflections per ASCE 7-16 and CBC 2019 with the following minimum criteria:

Roof LL (Plaster and Stucco ceiling):	L/360
Roof LL (Non-plaster ceiling):	L/240
Roof LL (No ceiling):	L/240

IX. Proposed Minimum Material Properties (More information contained in included specification sections).

A. Concrete

All structural concrete to have a minimum compressive strength at 28 days as follows:

Foundations (footing elements & grade beams)	4,000 PSI (Hardrock)
Slab-on-grade	4,000 PSI (Hardrock)
Miscellaneous (pads, curbs, etc.)	4,000 PSI (Hardrock)

B. Reinforcement

Typical Reinforcement:	ASTM A615, Grade 60 (fy = 60 KSI)
Welded Rebar:	ASTM A706, Grade 60 (fy = 60 KSI)
Welded Wire Fabric:	ASTM A185 (fy = 65 KSI)

C. Structural Steel

All Structural steel to conform to the following specifications (unless noted otherwise):

Wide-flange Sections (Column and Beams):	ASTM A992, Grade 50 (fy = 50 KSI)
Channels, Plates, and Angles:	ASTM A572 Grade 50 (fy = 50 KSI)
Miscellaneous Shapes:	ASTM A36 (fy = 36 KSI)
Hollow Structural Shapes (HSS):	ASTM A500, Grade C (fy = 50 KSI)
Pipes:	ASTM A53, Grade B (fy = 35 KSI)

Structural Bolts: Bolted connections to be A325X bolts unless noted otherwise.

Gravity Column Anchor Bolts:	ASTM F1554-Grade 55 (fy = 55 KSI)
Seismic Column Anchor Bolts:	ASTM F1554- Grade 105 (fy = 105 KSI)
Threaded Rod:	ASTM A36 (fy = 36 KSI)
Shear Studs:	ASTM A29-12 (Fu = 65 KSI)

Welding: In Conformance with AWS D1.1, D1.4 and D1.8.

Electrode Strength:	E80XX (Reinforcing Steel) E70XX (Structural Steel)
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D. Steel Deck:

ASTM A446, Grade A
 Galvanized G60 or G90 (ASTM A525)

E. Wood:

WCLIB or WWPA marked Douglas Fir (DF)
 Joists and rafters, 4x beams: 2"-4" thick, DF#2
 Beams, headers larger than 4x DF#1
 Posts DF#1
 Wall Studs and Plates 4" wide, DF Std.
 6" wide, DF#1
 Blocking DF Stud Grade

F. Plywood

APA rated DOC PS 1

G. Wood Connectors

Simpson Strong Tie or approved equal

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SYSTEMS CRITERIA – MECHANICAL, PLUMBING & FIRE PROTECTION

PROJECT SUMMARY

This systems criteria document has been prepared for the new Gonzales Community Center Complex, located on 5th Street, Gonzales, CA. This project contains approximately 23,000 GSF of programming including but not limited to approximately a 6,000 GSF Library, a 4,000 GSF Teen Center, a 3,500 GSF Community Center and over 13,000 GSF of programming support spaces.

This document describes the proposed HVAC, Plumbing and Fire Protection systems for this project, but in no way represents final selections for system types, locations or sizing. The HVAC system descriptions in particular has been prepared based on limited building details at the time of its preparation. The Design Build Entity (DBE) shall be responsible for completing their own analysis and conclusions of code, loads and space fit requirements.

While the parameters within this document have been prepared including many previously coordinated owner requests and comments, the DBE is encouraged to suggest changes & improvements to systems or approaches where the DBE feels that they can provide an improvement that provides “added value” to the owner.

Unless specifically noted in writing within the DBE bid documents, the DBE is expected to provide fully functioning HVAC, Plumbing and Fire Protection systems for this project. No part of these systems shall be “excluded” or “by others” unless approved in writing before bids by the owner. Refer to Divisions 0 & 1 for specific bid structure requirements and other project contractual requirements.

CHANGING CALIFORNIA

This project incorporates several design features that are intended to help the owners deal with the challenges of providing safe and reliable public services in an ever-changing California environment. The focus of these features fall into three broad categories described below. The DBE is encouraged to consider these challenges and how they will affect “typical” design practices that have been in use by most designers, including the authors of this document, as recently as 5 years ago.

INDOOR AIR QUALITY (IAQ)

Most experts on this subject agree that the recent increases in wildfires and days where the region experiences excessive air pollution due to effluent from wildfires are the new normal for California. Furthermore, most expect these occurrences to only increase in the future. To help the owners mitigate this challenge, the HVAC systems shall be designed with strategies that help provide a safe interior environment for the occupants, even when the outdoor air particulates present an “unhealthy” outdoor air quality environment.

HVAC air systems that are under 2,000 CFM shall include minimum 4” deep MERV 14 filters designed for low pressure drop. Low pressure drops may be achieved by placing filters in oversized filter racks upstream of the units instead of the standard factory filter racks that are typically sized for higher face velocities, and which create excessive pressure drops at the target MERV value.

HVAC air systems 2,000CFM+ shall include minimum 4” deep MERV 11 pre-filters and 12-16” MERV 15 deep final-filters designed for low pressure drop. All air systems in this category shall be designed with enough reserve static pressure capabilities to run with MERV-16 final filters to allow more flexibility and filtration options in the future.

AREA OF REFUGE FOR COOLING

This project is expected to serve as an “area of refuge” for the public on days of excessive heat. An analysis of the Actual weather over the past decade will show that the last decade has been noticeably warmer on average and warmer than the code mandated design conditions shown in the “Outdoor Design Conditions” section below. Note that some of this data is 40+ years old and there is currently an effort by ASHRAE to update all of the weather data figures for a future T-24 Part 6 Joint Appendices. If this update is available at the time, the team shall use the updated weather data that is, at the time of this writing, being developed by a group within ASHRAE. The publish date is unknown at this time.

This special use of the project is important and relevant to the HVAC systems design because the DBE will be expected to provide HVAC systems that can provide sufficient cooling for several of the public refuge spaces to maintain their indoor design conditions when experiencing coinciding maximum occupancy and peak outside air temperatures.

COVID-19 & FUTURE PANDEMICS

It is unclear what risk COVID-19 will represent by the time that this project opens, but the owners wish to as much as possible, futureproof the design of this project to address either a continued COVID-19 risk or a pandemic risk from some future unknown pathogen(s). ASHRAE has conducted 100's of research projects since the COVID-19 outbreak on various design strategies, and while this research continues at the time of this writing, initial research shows that all of the following can help mitigate the spread of COVID-19 when implemented correctly. As such, the DBE shall incorporate into the final design of this project where indicated within the design criteria, drawings or specifications.

- 🌀 Increased Outside Air
- 🌀 Increased Filtration of return/room air
- 🌀 Ultraviolet Irradiation of return/room air

CODES & STANDARDS

Codes

- 🌀 2019 T-24 Part 2 California Building Code
- 🌀 2019 T-24 Part 3 California Electrical Code
- 🌀 2019 T-24 Part 4 California Mechanical Code
- 🌀 2019 T-24 Part 5 California Plumbing Code
- 🌀 2019 T-24 Part 6 California Energy Code
- 🌀 2019 T-24 Part 9 California Fire Code
- 🌀 2019 T-24 Part 11 California Green Building Standards Code (CALGreen)
- 🌀 California Retail Food Code
- 🌀 County & City amendments to state codes above

Standards

- 🌀 AHRI 310/380 - Packaged Terminal Air-Conditioners and Heat Pumps; 2014
- 🌀 AHRI 340/360 - Performance Rating of Commercial and Industrial Unitary Air-Conditioning and Heat Pump Equipment; 2011
- 🌀 AHRI 550/590 (I-P) - Performance Rating of Water-Chilling and Heat Pump Water-Heating Packages Using the Vapor Compression Cycle; 2015
- 🌀 ASHRAE (HVACA) - ASHRAE Handbook - HVAC Applications; 2015
- 🌀 ASHRAE Std 55 - Thermal Environmental Conditions for Human Occupancy; 2017
- 🌀 ASHRAE Std 62.1 - Ventilation for Acceptable Indoor Air Quality; 2019
- 🌀 SMACNA (DCS) - HVAC Duct Construction Standards Metal and Flexible; 2005 (Rev. 2009)
- 🌀 NFPA 13 – Standard for the Installation of Sprinkler Systems; 2019

HVAC

LOAD CALCULATIONS

OUTDOOR DESIGN CONDITIONS

The project will use the highest summer and lowest temperatures allowed by the energy code, which are:

City	Latitude	Elevation (ft)	Longitude	Cooling								Heating						
				0.10%		0.50%		1.00%		2.00%		Design Wetbulb 0.1%	Design Wetbulb 0.5%	Outdoor Daily Range	Winter Median of Extremes	Design Drybulb (0.2%)	Design Drybulb (0.6%)	HDD*
				DB	MCWB	DB	MCWB	DB	MCWB	DB	MCWB							
Soledad	36.4	200	121.3	90	67	87	65	86	65	82	64	70	67	23	24	29	32	1020

Figure 1 – Soledad Weather Data Based on ASHRAE Weather Data

The above design conditions will be used to select both heating and cooling HVAC equipment, but these figures do not give an indication on temperatures seasonally throughout the year. Figure 2 below gives a better sense of how the daytime highs and lows vary throughout the season, presented on a month-month basis.

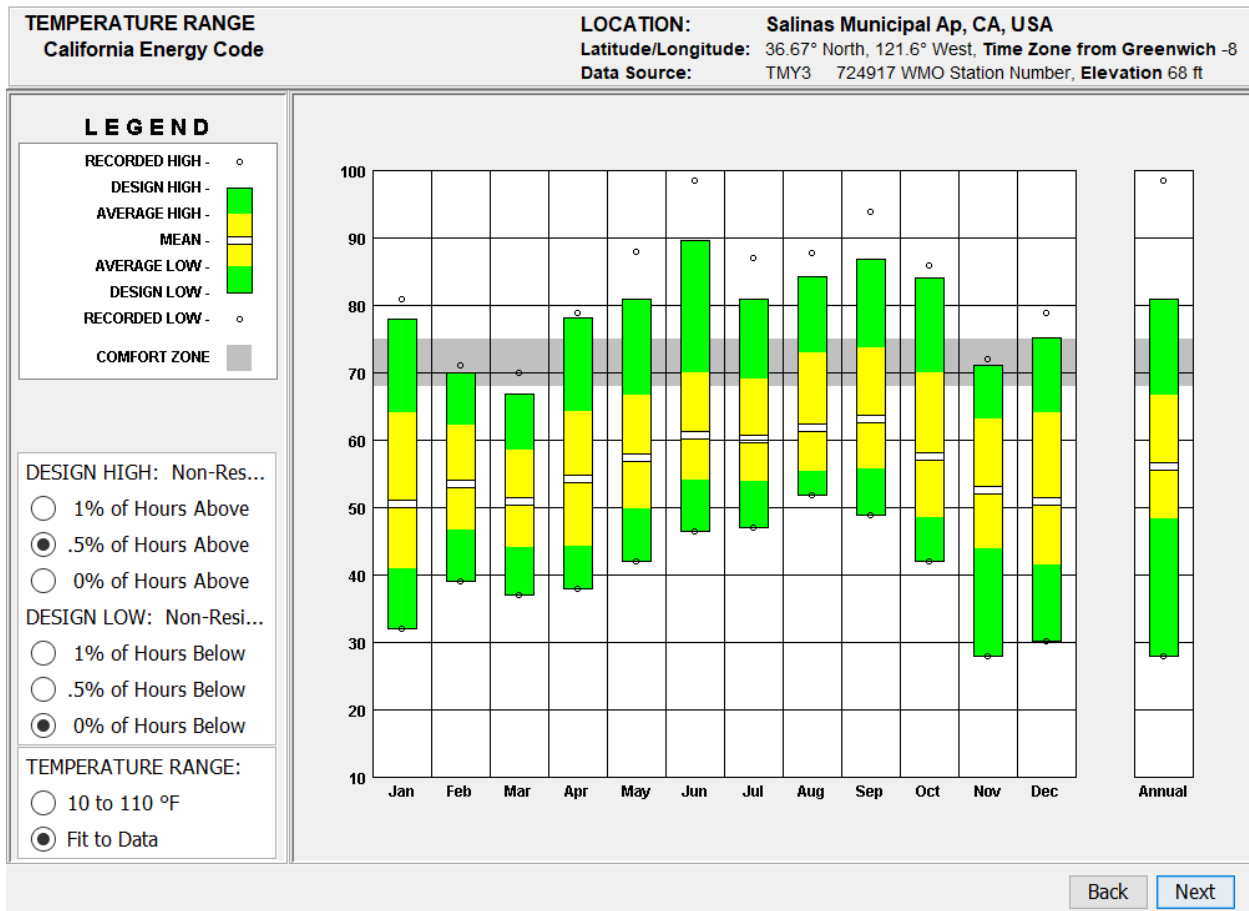


Figure 2 - Outside Air Temperature Historical Range by Month (Oakland Airport)

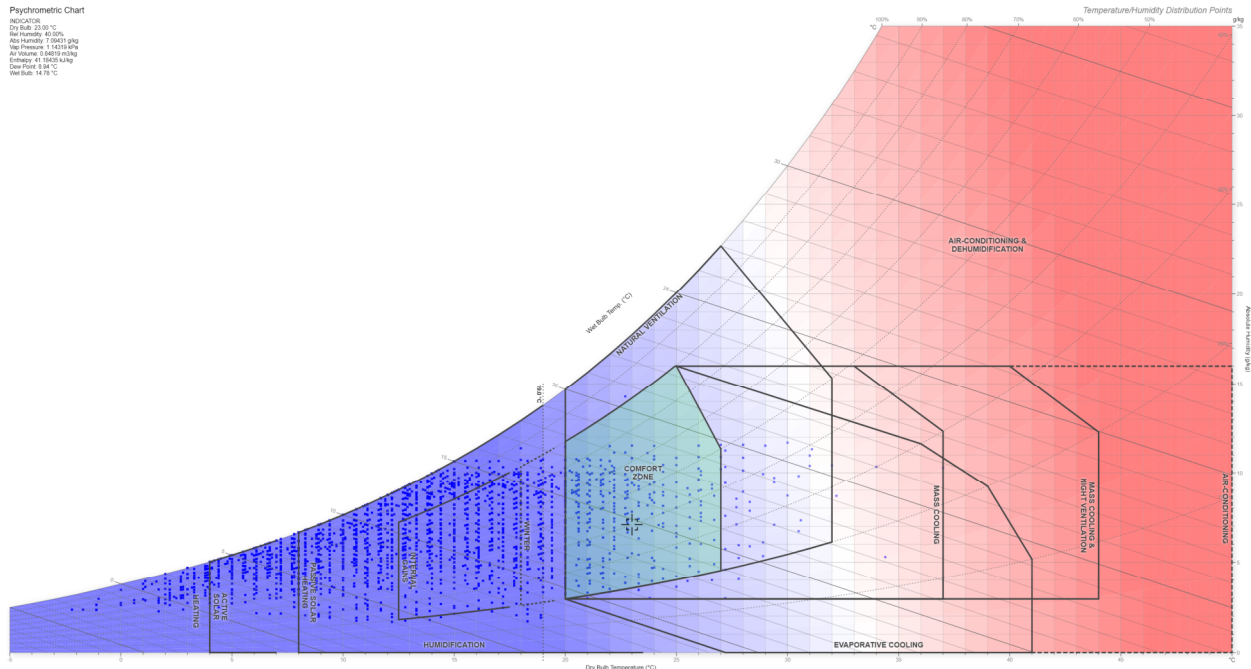


Figure 3 - Outside Air Temperature Psychrometric Plot (Solinas AP)

INDOOR DESIGN CONDITIONS

The equipment design and selections assume the following interior design conditions:

Space	System Type	Ceiling Fans? *	Summer (°F)	Winter (°F)	Humidity %
Z1 - Library	Mixed air – sidewall & exposed ductwork, indoor AHU	No	72	70	N/A
Z2 – Group Study	Mixed air – overhead fancoil	No	72	70	N/A
Z3 – Breakroom & Offices	Mixed air – overhead fancoil	No	72	70	N/A
Z4 – Telecom A112	Mixed air – ductless fancoil	No	65-80	65-80	N/A
Z5 – Teen Innovation Lab	Mixed air – exposed ducts, rooftop AHU	No	72	70	N/A
Z6 – Teen Lounge/Game Room	Mixed air – exposed ducts, indoor AHU	No	75	70	N/A
Z7 – Classroom A121	Mixed air – overhead concealed fancoil	No	75	70	N/A
Z8 – Conference Rooms	Mixed air – overhead concealed fancoil	No	75	70	N/A
Z9 – CC Office B101 & Rooms	Mixed air – overhead concealed fancoil	No	75	70	N/A
Z10 – Fitness Room B106	Mixed air – exposed ducts, indoor AHU	No	70	70	N/A
Z11 – Commercial Kitchen	Mixed air – exposed	No	75	68	N/A
Z12 – Community Center North	Mixed air – exposed cassette fancoils	Yes	75	70	N/A
Z13 – Community Center South	Mixed air – exposed cassette fancoils	Yes	75	70	N/A
Z14 - Restrooms	Mixed air – overhead concealed fancoil	No	75	68	N/A
Z15 – Telecom B116	Mixed air – ductless fancoil	No	65-80	65-80	N/A
Z16 – Telecom A129	Mixed air – ductless fancoil	No	65-80	65-80	N/A
Gymnasium (Alternate)	Turnkey MEP systems	Yes	75	70	N/A

Janitor	Exhaust only	No	N/A	N/A	N/A
Mechanical Room	Exhaust only	No	N/A	N/A	N/A
Electrical Room	Exhaust only	No	85	N/A	N/A

*where ceiling fans are not provided, Summer cooling setpoint should be reduced by 3°F
N/A = Not controlled or monitored

Interior Load ASSUMPTIONS

- ⌚ People – 250 BTU/h Sensible + 200 BTU/hr Latent for all spaces
- ⌚ Ventilation rates per 2019 CMC Table 422.1 and/or ASHRAE 62.1-2019
- ⌚ Infiltration for Summer & Winter at 0.06 CFM/ft²
- ⌚ Lighting loads in accordance with ASHRAE Handbook-Fundamentals, Ch-18 Nonresidential Cooling & Heating Load Calculations, Table 2
- ⌚ Noise Criteria in accordance with ASHRAE Handbook-Fundamentals, Ch-49 Noise & Vibration Control, Table 1
- ⌚ Plug loads – 0.5 W/ft²

The following table will be completed with additional information in the next systems criteria deliverables

Ventilation rates & Occupancy density values consider as per ASHRAE 62.1-2019 -Table 6-1

Space	Occupants	Ventilation (CFM/per)	Ventilation (CFM/ft ²) Exhaust [CFM]	People Sensible/Latent (BTU/ft ²)	Lighting (W/ft ²)	Equip/Plug (W/ft ²)	Room Noise Criteria (NC)
<u>Building A</u>							
LIBRARY FLOOR (A101) (A110) (A111) (A117) (A115) (A117)	42	5	0.12	250/200	1.06	0.5	30
BOOK DROP CLOSET (A102)	0	5	0.06	250/200	1.11	0	30
OFFICE (A103)	1	5	0.06	250/200	1.11	1	30
STAFF (A104)	3	5	0.06	250/200	1.11	1	30
BREAK AREA (A105)	1	5	0.12	250/200	0.73	1	40
STAFF RR (A106)	-	-	[75]	245/155	0.98	-	-
FAMILY RR (A107)	-	-	[75]	245/155	0.98	-	-
MEN'S RR (A108)	-	-	[225]	245/155	0.98	-	-
WOMEN'S RR (A109)	-	-	[225]	245/155	0.98	-	-
TELECOM (A112)	-	-	[300]	-	0.42	-	-
STOR. (A113)	-	-	[75]	-	0.63	-	-
JANITOR'S CLOSET (A114)	-	-	[100]	-	0.42	-	-
GROUP STUDY (A116)	4	5	0.12	250/200	1.06	1	30
STOR. (A118)	-	-	[75]	-	0.63	-	-
TEENS INNOVATION LAB (A119)	28	10	0.18	275/475	1.43	1.5	30
TEEN LOUNGE/GAME ROOM (A120)	30	7.5	0.18	250/200	0.73	1.5	40
STOR. (A121)	-	-	[75]	-	0.63	-	-
ELEC (A122)	-	-	[200]	-	0.42	-	-
CLASSROOM (A123)	36	5	0.12	250/200	1.24	1	30
STOR. (A124)	-	-	[75]	-	0.63	-	-
MECH. (A125)	-	-	[200]	-	0.42	-	-

CONF. (A126)	4	5	0.06	250/200	1.23	1	30
FIRE RISER (A127)	-	-	-	-	-	-	-
CONF. (A128)	4	5	0.06	250/200	1.23	1	30
TELECOM (A129)	-	-	[300]	-	0.42	-	-
CONF. (A130)	8	5	0.06	250/200	1.23	1	30

Space	Occupants	Ventilation (CFM/per)	Ventilation (CFM/ft ²) [Exhaust CFM]	People Sensible/Latent (BTU/ft ²)	Lighting (W/ft ²)	Equip/Plug (W/ft ²)	Room Noise Criteria (NC)
Building B							
CC OFFICE (B101)	6	5	0.06	250/200	1.11	1	30
BREAK ROOM (B102)	1	5	0.12	250/200	0.73	1	40
STOR. (B103)	0	-	-	-	-	-	-
STAFF RR (B104)	-	-	[75]	245/155	0.98	-	-
CONF. (B105)	4	5	0.06	250/200	1.23	0.5	30
FITNESS ROOM (B106)	32	10	0.06	500/750	0.72	1	45
STOR. (B107)	0	-	[50]	-	0.63	-	-
FOOD SRV. ALCOVE (B108)	0	-	0.06	-	0.63	-	-
COMMER. KITCHEN (B109)	7	-	[2,000]	275/275	1.21	1	-
STOR. (B110)	-	-	[50]	-	0.63	-	-
STOR. (B111)	-	-	[50]	-	0.63	-	-
COMMUNITY HALL NORTH (B112)	175	5	0.06	245/155	1.23	0.5	30
COMMUNITY HALL SOUTH (B112)	160	5	0.06	245/155	1.23	0.5	30
PARTITION CLOSET (B113)	-	-	-	-	-	-	-
PLATFORM (B114)	10	5	0.06	250/250	1.23	1	30
STOR. (B115)	-	-	[50]	-	0.63	-	-
TELECOM (B116)	-	-	[300]	-	0.42	-	-
FIRE RISER (B117)	-	-	-	-	-	-	-
MECH (B118)	-	-	[200]	-	0.42	-	-
DRESSING ROOM & STOR (B119)	5	5	0.06	250/250	1.23	1	30
VENDING ALCOVE (B120)	-	-	[50]	-	0.63	-	-
ELEC. (B121)	-	-	[300]	-	0.42	-	-
JANITOR'S CLOSET (B122)	-	-	[100]	-	0.42	-	-
MEN'S RR (B123)	-	-	[375]	245/155	0.98	-	-
WOMEN'S RR (B124)	-	-	[375]	245/155	0.98	-	-
FAMILY RR (B125)	-	-	[75]	245/155	0.98	-	-

LOAD CALCULATION METHODOLOGY

This project should utilize industry-recognized load calculation tools that utilize the ASHRAE RTS method, such as Trane Trace 700, Elite CHVAC or other industry-recognized load calculation computer software to calculate both the heating and cooling peaks for use in sizing the respective heating and cooling equipment described in this narrative.

SAFETY FACTORS

While the California Energy Code allows designers to provide up to 32% increased cooling capacity, and 43% increased cooling capacity in the form of safety factors and pull-down/warm-up capacities; the owner has requested safety factors of 30% be used by the DBE team on both cooling and heating system sizing calculations.

EQUIPMENT & SYSTEMS

HEATING

All the classroom areas will be heated through concealed and ducted VRV heat pump unit, while the support areas will be heated through the Hi-Wall Units (Ductless unit). The heat-pump units are air-cooled, high-efficiency VRV Units.

COOLING

All the classroom areas will be cooled through concealed ducted VRV heat pump units, while the support areas will be cooled through the Hi-Wall Units (Ductless Units). The heat-pump units are air-cooled, high-efficiency VRV Units.

VENTILATION

Ventilation will be provided from either the Make-up air fan or VRV ducted fan coils as a fixed air ratio from a single designated wall louver marked on floor plans.

Outside air intakes would be taken through the backside of the building wall, 10 ft away from any exhaust outlets.

CEILING FANS

The addition of ceiling fans strategically throughout the project has the potential to save energy and first costs by extending the comfort range during the building's summer natural ventilation mode and saving annual energy usage. The ceiling fan cooling effect varies from project to project, but in general, ceiling fans will typically provide 3-5°F of "apparent cooling" on a project in high-speed mode.

ACOUSTICS

The DBE is responsible for delivering space designs that meet the Room Criteria values listed above for each space. The overall acoustical performance of each area is, of course, dependent on many factors beyond the HVAC systems design. The following design criteria should be considered the minimum allowable design features to help the DBE avoid most objectional HVAC noise levels. This criterion does not guarantee that the specified room noise criteria (NC) requirements have been satisfied; it is still the responsibility of the DBE to evaluate every space and provide design features that achieve the overall room NC values. Solutions to achieve this might include, but are not limited to, duct silencers, increased acoustical duct lining, oversized duct design, additional turns, relocation of HVAC equipment, reselection of equipment to operate quieter, vibration isolators, etc..

- ④ Fancoil return/supply ducts should be lined with 1" acoustical lining for the first 10' on each side of the fancoil, except where the DBE can demonstrate in writing to the owner's rep, that the lining is not needed to achieve the room NC value or to avoid objectional HVAC noise levels.
- ④ All vibration-producing equipment shall be isolated from the structure with resilient or spring vibration-isolating supports. The DBE shall provide additional measures that are required (i.e. inertia pads), where needed, to achieve the project NC values, based on their evaluation of the actual structure and HVAC systems in their design.
- ④ All diffusers/grilles shall be selected for no more than 25NC at the peak design airflows, except restroom diffuser/grilles.
- ④ Any transfer duct shall be lined with 1" acoustical lining for their entire length to minimize "cross-talk" and noise transfer between spaces. Transfer ducts should have sufficiently long ducts with at least two elbows to help attenuate noise transfer between two distinct rooms or spaces.
- ④ Duct sizing limits based on location:
 - Shafts: 1500 FPM Maximum
 - Main Trunks: 1000 FMP Maximum
 - Final branches to grille/diffuser: 800 FPM Maximum

The DBE shall use lower pressure fittings and takeoffs throughout this project, as illustrated in the image below from the 2021 ASHRAE Handbook Fundamentals, Chapter 21 Duct Design. Screw-in can fittings are prohibited.

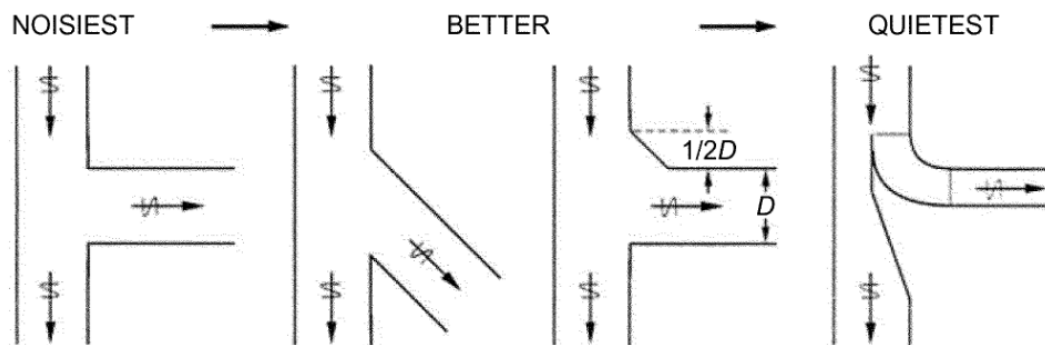


Fig. 22 Guidelines For Minimizing Regenerated Noise in Takeoff
(Schaffer 2005)

Figure 4 – Guidelines for Minimizing Regenerated Noise in Takeoff

DUCT DESIGN

Duct design practices should follow the 4th edition of the SMACNA Duct Constructions Standards manual and ASHRAE’s Duct Design Chapter 21 in the 2021 ASHRAE Handbook - Fundamentals. Duct sizing for most duct runs is performed using the constant friction method in the range of 0.05 – 0.075 IWG per 100’ of friction loss. In addition, the following are upper-velocity limits for ducts based on location and purpose.

- ② Intake wall louvers should be sized for no more than 400 FPM through the louver’s free area.
- ② Exhaust wall louvers should be sized for no more than 500 FPM through the louver’s free area.
- ② Diffuser/Grilles no more than 800 FPM for neck velocity, except where the manufacturer’s performance data demonstrates that higher velocities will still result in 25NC or less sound levels at the actual conditions.

Incorporate the following “best practices” throughout the project:

- ② Route ducts as straight as possible to reduce pressure loss, noise, and first costs.
- ② Use round spiral ducts whenever round ducts can fit within space constraints.
- ② Avoid consecutive fittings and close-coupled fittings because they can significantly increase pressure losses.
- ② Design air distribution systems to minimize flow resistance and turbulence. High flow resistance increases fan pressure, which results in higher noise being generated by the fan, especially at low frequencies. Turbulence also increases flow noise generated by duct fittings and dampers, especially at low frequencies.
- ② Efficient fittings create the least turbulence and noise. The figure above provides generalized guidelines for minimizing regenerated noise from takeoffs. Tables 10 and 11 (courtesy of ASHRAE) below provide specific guidance for tees and wyes.
- ② Duct transitions should not exceed an included angle of 15°.
- ② Fans should discharge into duct sections that remain straight for as long as possible, up to 10 duct diameters from the fan discharge, to avoid fan “system effects.”
- ② Design duct connections at the fan inlet for uniform and straight airflow. Both turbulence and flow separation at the fan blades can significantly increase fan-generated noise. To account for fan inlet system effects, use the ASHRAE Duct Fitting Database (ASHRAE 2016) (ED7 and ER7 series).

Table 10 Options for Selecting 90° Takeoff

Code	Description	Efficiency	Loss Coefficient	
			Main ^a	Branch ^b
SD5-12	Tee, 45° entry branch	Highest	0.15	0.64
SD5-4	Wye, 45°, Straight body branch with 45° elbow, 90° to main	—	0.15	0.74
SD5-11	Tee, Conical branch	—	0.15	0.87
SD5-10	Tee, Conical branch tapered into body	—	0.15	1.10
SD5-9	Tee	Lowest	0.15	1.80

^a $Q_s/Q_c = 0.8; A_s/A_c = 0.69$
^b $Q_b/Q_c = 0.2; A_b/A_c = 0.25$

Figure 5 – Options for 90° Takeoff

Table 11 Options for Selecting 45° Takeoff (Wye)

Code	Description	Efficiency	Loss Coefficient	
			Main, C_s^a	Branch, C_b^b
SD5-2	Wye, 45°, Conical branch tapered into body	Highest	0.15	0.45
SD5-3	Wye, 45°, Straight body branch with reduction transition	—	0.15	0.50
SD5-1	Wye, 45°	Lowest	0.15	0.70

^a $Q_s/Q_c = 0.8; A_s/A_c = 0.69$
^b $Q_b/Q_c = 0.2; A_b/A_c = 0.25$

Figure 6 – Options for 45° Takeoff

HVAC EQUIPMENT SCHEDULES (BASE)

Refer to the drawing sheet M6.01 HVAC SCHEDULES for a listing of the base system equipment. The base HVAC system features three Daikin VRV condensers, both heat recovery and heat pump models to provide heating and cooling to Buildings A & B. Refer to the provided mechanical plans for equipment placement, sizing, and other base design features.

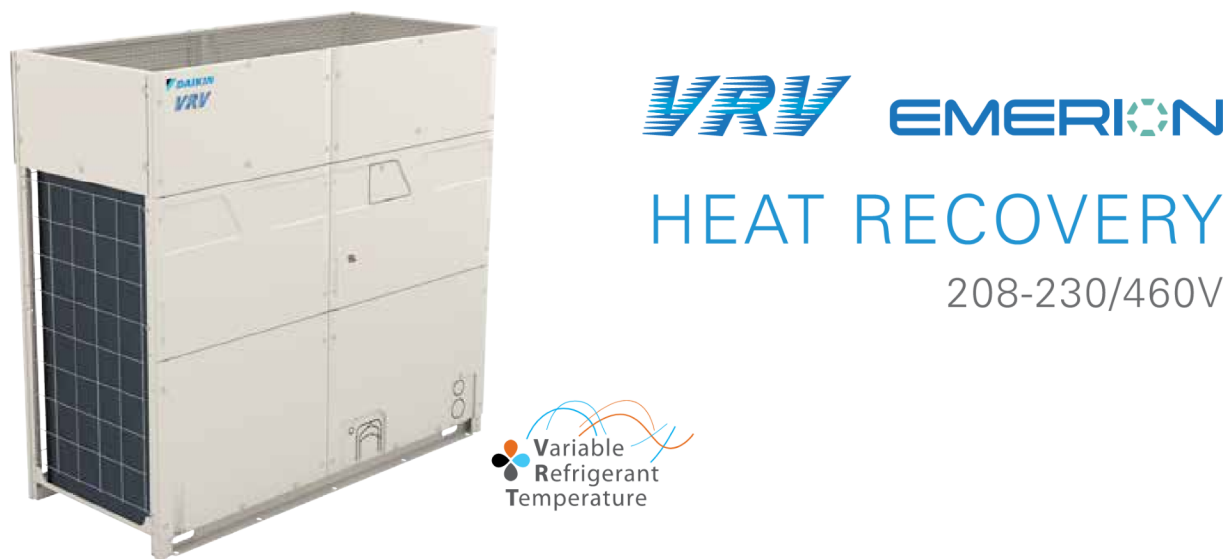


Figure 7 – Daikin VRV REYQ*AATJA outdoor heat pump

CONTROLS

This project will be provided with a new DDC Building Management System (BMS) residing onsite in the administration office. The system shall include web-based controls where the Graphical User Interface (GUI) is accessed remotely via the internet. Given the difficulties of mixing the native Daikin controls and DDC controls on the zone level, the DBE shall utilize the Daikin Navigation Remote Controller BRC1E73 for its thermostat instead of a 3rd party DDC thermostat/controller at the zone level. The project shall include an onsite data storage server of at least 1TB to retain trend log data. The project shall include one Daikin intelligent Touch Manager LCD screen control panel in the admin office.

The owners may consider the upcoming Daikin HERO Ecosystem later in the year if it can provide a project cost credit as a deductive alternative to a complete onsite DDC system. The site would need to be demonstrated to the owners and approved in writing before becoming the alternative controls system for the project.

There are a few unique control features or strategies that warrant highlighting here, though they are mentioned elsewhere in this document or in the project specifications and drawings.

- ② Provide a single setpoint variable in the BMS GUI that locks out airside economizer functions and fixes the OA dampers to their code minimum values. This setpoint is intended to be used on “Bad Air Days” where wildfire smoke or other outdoor contaminants make the outside air more hazardous than the indoor air.
- ② Provide a single setpoint variable in the BMS GUI that increases the OA minimums by 30%. This control feature shall be implemented regardless of whether any of the fancoils are increased in capacity or not, and this feature is independent of any alternatives. This setpoint is intended to be used during the next COVID or future outbreak, where increased ventilation can be used to assist with the dilution of indoor contagions.
- ② In the community hall, provide a user override interface on the wall on both sides of the community halls to allow the users to tell the controls system whether to control zones 12 & 13 as a single zone or two separate zones. This feature may be automated with an appropriate door sensor that can accurately sense when the room partition is in place, or it can be a wall override interface with signage clearly stating what user input is needed for each room divider condition.

- For spaces like the Library where there are multiple fancoils serving the same space, provide a controls strategy, such as most demanding, to prevent or minimize simultaneous heating and cooling within the same space or short cycling the heating and cooling demands throughout the day.

HVAC EQUIPMENT SCHEDULES (M-1 ALTERNATIVE)

This list of equipment represents the components needed for a four (4) pipe CHW/HHW plant and air systems with hydronic coils instead of DX coils. Also, assume air systems with changeover valves instead of dual coil air systems with separate coil connections. While the CFMs are often higher for hydronic systems, assume the same air system sizes for this alternate. BFE is investigating whether a similar CFM and water DT is viable, as well as alternate terminal systems, such as radiant floors. CHW & HHW piping may be copper, steel, PEX or Aquatherm, buried where needed, sized at 2’/100’ pressure drop.

Assuming that the structural costs credit will be included in the estimates, assume that the ASHP-1 is located along the Southeast wall of the Community Hall Dressing room, between gridlines 12 & 14. If needed, the cost model may assume that the plant is located in the exiting mechanical well near Fitness, albeit twice the physical footprint. The main supply & return pipes to/from the plant will be 3”pipes.

While not inclusive of all HVAC equipment for this alternative, this list summarizes in greater detail the major HVAC equipment for the alternative.

ITEM	QTY	Size	Notes
ASHP-1 (All base buildings)	1	65 Tons	Aermec NRP 1250
HHWP-1&2 (Fitness/Kitchen)	2	2.5 HP (each)	Heating Hot Water Primary Pumps (50% redundancy)
CHWP-1&2	2	3 HP (each)	Chilled Hot Water Primary Pumps (50% redundancy)
HHWT-1	1	800 Gal	Heating Hot Water Buffer Tank (insulated)
CHWT-1	1	800 Gal	Chilled Water Buffer Tank (insulated)
Z1A – Library & Circulation	1	3,400 CFM	Indoor AHU & similar duct distribution (see plans)
Z1B – Library NW Corner	1	700 CFM	Similar system & layout as base system (see plans)
Z2 – Group Study	1	300 CFM	Similar system & layout as base system (see plans)
Z3 – Breakroom & Offices	1	600 CFM	Similar system & layout as base system (see plans)
Z4 – Telecom A112	1	300 CFM	Mixed air – overhead fancoil
Z5 – Innovation Lab	1	1,700 CFM	Similar system & layout as base system (see plans)
Z6 – Teen Lounge/Game Room	1	2,500 CFM	Similar system & layout as base system (see plans)
Z7 – Classroom	1	1,500 CFM	Similar system & layout as base system (see plans)
Z8 – Conference Rooms	1	1,100 CFM	Similar system & layout as base system (see plans)
Z9 – CC Office & Breakroom	1	700 CFM	Mixed air – overhead concealed fancoil
Z10 – Fitness Room	1	4,200 CFM	Indoor AHU & similar duct distribution (see plans)
Z11 – Commercial Kitchen	1	2,000 FCM	Rooftop MAU (heat/cool) + Grease Exhaust
Z12 – Community Center North	1	4,200 CFM	Indoor AHU & similar duct distribution (see plans)
Z13A – Community Center South	1	3,400 CFM	Mixed air – exposed cassette fancoils
Z13B – Community Center South Stage	1	700 CFM	Similar system & layout as base system (see plans)
Z14 – Restrooms	1	700 CFM	Mixed air – Concealed cassette fancoils
Z14 – Restr. 121/123	1	600 CFM	Similar system & layout as base system (see plans)
Janitor	1	70 CFM	Cabinet Exhaust Fan
Mechanical Rooms	2	100 CFM	Cabinet Exhaust Fan
Electrical Rooms	2	100 CFM	Cabinet Exhaust Fan + line voltage thermostat
Kitchen Grease Exhaust	1	2,000 CFM	Rooftop Grease Exhaust fan
All exhaust systems should be identical for base and this Alternative			

NRP 0800-1800

Air-water multipurpose

Cooling capacity 51.7 ÷ 120.3 ton
Heating capacity 738,278 ÷ 1,689,276 BTU/h

- High efficiency also at partial loads
- Units designed for 2 or 4-pipe systems
- Simultaneous and independent production of hot and chilled water



Figure 8 –Aermec NRP outdoor 4-pipe air-water heat pump (Alternate HVAC System)

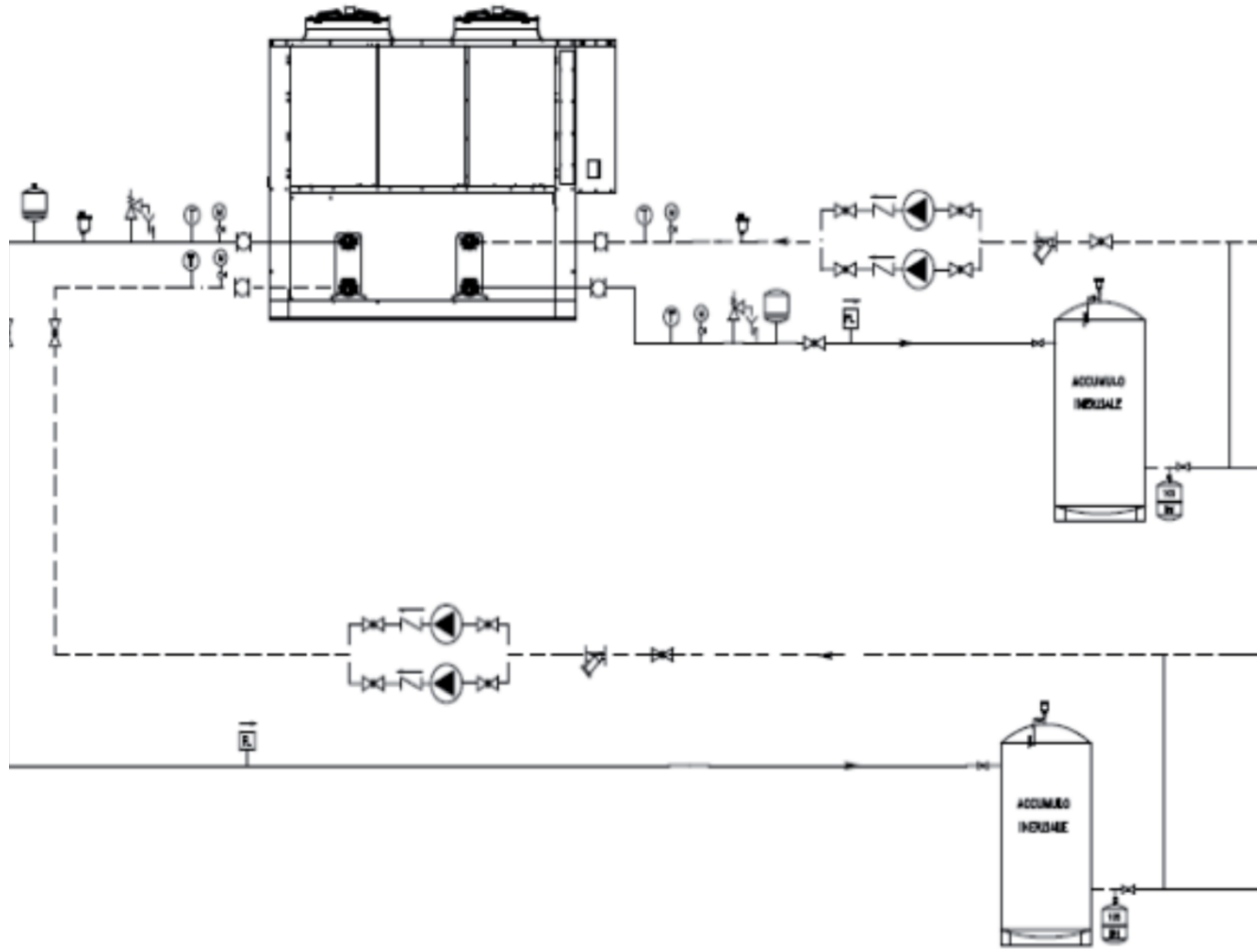


Figure 9 –Aermec NRP 4-pipe piping diagram (Alternate HVAC System)

INCREASED VENTILATION (M-2 ALTERNATIVE)

To address some of the concerns in the previously mentioned “Changing California” section, provide an additive alternate price for increasing the Outside Air (OA) volume by 30% for the following zones.

ZONE	BASE OA	ALT OA	Notes
Z1A – Library & Circulation	710	920	Assume no fancoil capacity is required
Z2 – Group Study	45	60	Assume no fancoil capacity is required
Z3 – Breakroom & Offices	70	90	Assume no fancoil capacity is required
Z5 – Innovation Lab	500	650	Assume no fancoil capacity is required
Z6 – Teen Lounge/Game Room	510	660	Assume no fancoil capacity is required
Z7 – Classroom	290	380	Assume no fancoil capacity is required
Z8 – Conference Rooms	120	160	Assume no fancoil capacity is required
Z9 – CC Office & Breakroom	120	160	Assume no fancoil capacity is required
Z10 – Fitness Room	1080	1400	Assume 1Ton additional fancoil capacity is required
Z12 – Community Center North	1025	1330	Assume 1Ton additional fancoil capacity is required
Z13A – Community Center South	1040	1350	Assume 1Ton additional fancoil capacity is required
Z13B – Community Center South Stage			Assume no fancoil capacity is required

INCREASED HVAC FILTRATION (M-3 ALTERNATIVE)

To address some of the concerns in the previously mentioned “Changing California” section, provide an additive alternate price for increasing the MERV 13 filtration to MERV 14 filtration for the following spaces. This alternative shall include any modifications needed to the unit’s filter rack, model or capacity to account for the additional external pressure drop, where needed. Modifying the design to provide a lower face velocity and equivalent pressure drop to the MERV 13 filters is preferred to an increase in the fancoil capacity.

ZONE

Z1A – Library & Circulation

Z3 – Breakroom & Offices

Z5 – Innovation Lab

Z6 – Teen Lounge/Game Room

Z7 – Classroom

Z9 – CC Office & Breakroom

Z10 – Fitness Room

Z12 – Community Center North

Z13A – Community Center South

ULTRA VIOLET DISINFECTION (M-4 ALTERNATIVE)

Provide UV lamp disinfection in the return ducts of the fancoils of the Community Halls North and South, zones 12 & 13A. Use a combined unit return duct to disinfect intakes for both fancoils in a single location where possible.

PRE-ENGINEERED GYMNASIUM (A-1 ALTERNATIVE)

Provide the following HVAC systems for the Gymnasium

ITEM	QTY	Size	Notes
Gymnasium (Building Alternate)	1	10,000 CFM	Packaged Rooftop Heatpump unit with dry-bulb economizer, DCV controls & low “heavy-duty” bar return air grilles
Gymnasium Restrooms	1	70 CFM per	General exhaust, transferring make-up air from the Gymnasium via acoustically lined overhead transfer duct & grilles

END OF HVAC SECTION

PLUMBING

Fixture water efficiency

Lavatories: 0.5 GPM

Water closets: 1.28 GPF Flushometer

Urinals: 0.125 GPF

Bar sinks: 1.5 GPM

Kitchen sinks: 1.8 GPM

DOMESTIC COLD WATER

Provide city water main & main branches as indicated on the provided plumbing drawings from the municipal water mains to service each of the two building clusters in the base building and a 1" water main to serve the Gymnasium Alternate. Provide an underground accessible building disconnect valve for each building site water feed line. The domestic water lines underground from BFP to the building shall be routed under the building through sleeved openings in the grade beams to enter the building in one of the walls of the restroom core. All above grade indoor water piping shall be type L copper or PEX, and below grade, piping shall be type K with PE sleeves or a double wrap of PE take for corrosion protection. If a connection for irrigation is required from the building water main, the connection shall be protected with its own dedicated irrigation line BFP device.

DOMESTIC HOT WATER

Provide tankless Hubbell hot water heater mounted below the project sinks where shown on the drawings. The water heater shall service lavatories, Mop Sinks, Hand Sinks, and any other fixtures identified as needing hot water. All piping downstream of the water heater shall be insulated to a minimum 1.5" insulation thickness, and any piping exposed to the outdoors shall be shielded with an aluminum insulation shield with removable boots over valves or other serviceable accessories.



Provide an air-source heat pump storage style water heater with 80 gallons minimum storage tank for the commercial kitchen.

CONDENSATE

Provide condensate piping from the following fixtures to a CPC approved indirect waste connection with an airgap to the building sanitary sewer line. Refer to mechanical drawings for locations of HVAC equipment requiring condensate drainage; coordinate final locations and layouts with the HVAC sub.

- ② 1" cooling coil condensate connection from the indoor air handler units
- ② 3/4" cooling condensate from each of the fan coils in the ceiling of the classrooms and other spaces.
- ② 3/4" condensate drain pan for ASHP water heater(s)

STORM

Provide American-made cast-iron storm drain connection to roof drains and overflow connections shown on roof plans. With the current roof configurations, the project is expected to use a combination of rainwater collection via roof gutters, and external rainwater leaders for the metal roofs and internal roof drains with internal pipe routing to grade and overflows connected to exterior walls for all flat roof areas.

SANITARY SEWER & VENTING

Provide American-made cast iron sewer and vent piping throughout the building in compliance with the 2016 CPC for all devices requiring sanitary sewer connections. All lines shall gravity drain to the municipal sewer main at the street at 1/4" per 1' slope unless noted otherwise on drawings.

NATURAL GAS & Propane

Currently, the assumption is that all heating for buildings and hot water production will be accomplished without the use of fossil fuels.

END OF PLUMBING SECTION

FIRE PROTECTION

WET PIPE SPRINKLERS

Buildings A, B and the Alternative A-1 Gymnasium shall be fully sprinkled. The DBE shall provide a new complete water based fire protection system designed by the DBE in accordance with NFPA 13 Standard for the Installation of Sprinkler Systems. The NFPA Occupancy Hazard Classification for each building shall be primarily Light Hazard, for the purposes of establishing water supply design and allowable square footage per sprinkler head. Mechanical rooms, electrical rooms and storage rooms shall be classified as Ordinary Hazard Group 1 for preliminary purposes.

All calculations and design features shall be in accordance with the local Authority Having Jurisdiction (AHJ) and subject to their approval. The DBE shall be responsible for preparing calculations, drawings and an application package to obtain approval from the AHJ prior to commencing of work.

Our initial assumption is that each building will require its own sprinkler riser and dedicated closet, which are shown on the drawings. The DBE may utilize a single riser and point of entry only when the AHJ has approved this approach.

The owners have obtained the following flow test results and we feel the site has adequate pressure to serve the buildings with a fire pump.

Hydrant Test Report

Date:

Location:	Static	Residual	Pitot	Outlet Dia.	Coef.	GPM	GPM @ 20 Psi
560 5th St	89	76	55	2.5		1244	3065

Hydrant test conducted according to NFPA 291.

Method: Hydrant flushed, Static Pressure measured, Residual Pressure measured,
Pitot Reading taken from down stream hydrant.

Equation: $QF=(29.83)(C)(D)(P)$

$QR= QF \times (HR/HF).54$

C= outlet Coefecient

D= Diameter or the outlet Squared

P= Square root of the Pitot Pressure reading

QF= Total GPM

QR= GPM at 20 PSI

HR= Pressure drop to desired residual Pressure

HF= Pressure drop during test

END OF FIRE PROTECTION SECTION

SYSTEMS CRITERIA – ELECTRICAL, LIGHTING, LOW VOLTAGE

PROJECT OVERVIEW

Project Description

Item	Description
Building Type	Community Center, consisting of a Library building and Community Hall building Add Alternate A1: Additional Gym building
Floors	One
Floor Area	Approx. 38,000 SF
Construction Type	New Construction
Location	Gonzales, CA

Base Scope and Add Alternates

Base scope is described in this document in black text and shall be included in the base cost estimate.

Add Alternate scope is described in this document in blue text and shall be included as separate line items in the cost estimate. All items associated with the Gymnasium building shall be included as an Add Alternate.

Project Goals

Safety: A safe electrical system shall be the highest priority in the building. All systems installed shall meet or exceed all code requirements to ensure a safe working environment for all building occupants. All systems shall be properly installed, grounded/bonded, and tested to the strictest standards.

Flexibility: The electrical system shall also be flexible and shall allow for the building occupants to utilize their space effectively without the use of make-shift workarounds, excessive use of plug strips or extension cords, or sub-optimal furniture arrangements that may result from inconvenient or hard to reach electrical outlets. The system shall be flexible enough to accommodate current and future needs without major changes to the electrical system.

Efficiency: The building shall utilize electricity throughout the Mechanical, Lighting, Plumbing, Architectural, and Owner provided systems. As such, maximizing the efficiency of the electrical system will be critical to achieving maximum energy savings within the building.

Sustainability: The electrical and lighting systems shall be designed using sustainable design principles with the goal of providing an enhanced environment for its users, minimizing energy consumption, minimizing the emission of global warming causing greenhouse gasses, being resource efficient, and minimizing the introduction of toxic materials into the environment.

All-Electric: To reduce the overall carbon footprint of the building, all systems shall be run off electricity, and no natural gas appliances shall be utilized. A larger electrical service may result, however the elimination of a gas distribution system is expected to offset this cost.

Energy Production and Storage: As part of the base scope, conduits for a solar photovoltaic (PV) system shall be provided. *As part of add-alternates, a PV system (Add Alt E1) and battery system (Add Alt E2) shall be installed to offset as much energy as possible based on the roof area available and to provide battery backup for a minimum of 24 hours.*

Scope Summary

The following items shall be included as part of the scope of this project. Refer to individual sections for more detailed information and system requirements.

Building System	Description
Power Distribution	3,000A, 208Y/120V, 3-phase, 4-wire electrical service. Distribution panels, branch panels, circuit breakers, feeders, and branch circuitry.
Backup Power	Camlocks for connection of a portable diesel generator. Light Fixtures with integral battery packs and/or emergency lighting inverters. <i>Add Alt E2: Batteries to provide optional standby power to Library and Community Hall areas.</i>
Energy Monitoring	Main service metering at each building per Code requirements. Connect system to building data system and Building Management System (BMS).
Receptacle Controls	Controlled receptacles connected to room lighting controls in office and office support spaces as required by code and other locations indicated.
Electric Vehicle (EV) Charging	(2) Dual-headed Level 2 EV Charger (1) Dual-headed Level 3 EV Charger Provide Capacity and Infrastructure for (10) Dual-headed Level 2 EV Chargers <i>Add Alt E3: Provide Capacity and Infrastructure for (13) EV ready spaces. Provide (1) dual-headed Level 3 charger, (2) dual-headed Level 2 chargers, and (1) single-head Level 2 charger.</i>
Lighting	High-efficiency LED lighting throughout
Lighting Controls	Interior: Networked controls, including dimming switches, photocells, occupancy sensors, and time clocks. Demand-response capable controls. Exterior: Networked controls, including astronomic time clocks, occupancy sensors, and photocells. Demand-response capable controls.
Tele/Data	Telephone and Data inactive equipment and distribution system.
Audio/Visual (A/V)	A/V system for conference rooms, community room, gym, library, and exterior amphitheater, including flat panel displays, projectors, controls, sound system, video and audio inputs/outputs, and integration with other systems.
Television (TV)	Cable TV distribution system.

Building System	Description
Security	Intrusion detection, card access, and camera system. Library system shall be independent of the rest of the campus.
Fire Alarm (FA)	Fully automatic, addressable fire alarm system with bi-lingual (Spanish and English) voice evacuation capabilities. Library system shall be independent of the rest of the campus.
Renewable Energy Systems	Base: Infrastructure for PV and Battery systems. Add Alternate E1: Rooftop photovoltaic system. Add Alternate E2: Battery backup system.

DESIGN CRITERIA

Codes and Standards

This project shall comply with the most current version of all state and local codes, including, but not limited to, those noted below. This project shall not be considered a code-minimum job and shall exceed the requirements of the code where required as part of this document.

This document and the drawings are based on the 2019 version of the California Building Code and other codes noted below. It is anticipated that at the time of design, the 2022 version of the Code will be in effect. The Contractor shall be responsible for confirming that the design conforms to all aspects of the most current version of the code at the time of design.

Codes:

- California Building Code (CBC)
- California Electrical Code (CEC)
- California Mechanical Code (CMC)
- California Plumbing Code (CPC)
- California Energy Code (CEnC)
- California Fire Code (CFC)
- California Green Code (CGC)
- California Referenced Standards Code
- NFPA 72 National Fire Alarm Code
- NFPA 110 Standards for Emergency and Standby Power Systems
- ADA Standards for Accessible Design - Code of Regulations (Including Amendments)
- State of California Public Utilities Commission (CPUC)
- Occupational Safety and Health Administration (OSHA)

Standards:

- American National Standards Institute (ANSI)
- American Society for Testing and Materials (ASTM)
- Association of Edison Illuminating Companies (AEIC)
- Certified Ballast Manufacturers (CBM)

- Electrical Testing Laboratories (ETL)
- Electronic Industries Association (EIA)
- Illuminating Engineering Society of North America (IESNA)
- Institute of Electrical and Electronics Engineers (IEEE)
- Insulated Power Cable Engineers Association (IPCEA)
- National Electrical Manufacturers Association (NEMA)
- International Electrical Testing Association (NETA)
- National Fire Protection Association (NFPA)
- Underwriters' Laboratories (UL)

Load Calculations and Assumptions

Loads shall be calculated based on the requirements outlined in CEC Article 220. All relevant demand factors and spare capacity shall be included in the service sizing. In addition to code required loads, the following information shall be used for owner equipment and requirements. Equipment or spaces not noted below shall have a minimum load agreed upon by Owner and Engineer prior to finalizing service sizing.

Equipment or Space Type	Load and Requirements
MDF Rooms	8,000 VA / Rack
IDF Rooms	4,000 VA / Rack
EV Chargers	Level 2: 7,200 VA / Charger Level 3: 50,000 VA / Charger
Kitchen Equipment	Per Food Service Consultant
Mechanical Equipment	Per Mechanical Consultant
Plumbing Equipment	Per Plumbing Consultant
Spare Ampacity	20% Additional future capacity at each panelboard and main service
Spare Circuits	20% Space for future breakers at each panelboard

Light Levels

Light levels in all interior and exterior spaces shall be as recommended by the IESNA, unless otherwise noted. Where light levels proposed are less than those recommended by the IESNA, written approval shall be obtained from the Owner and Engineer prior to finalization of lighting layout.

Space Type	Light Levels (Foot Candles)
Office	30
Classrooms	30
Conf/Study Rooms	30
Library	40

Space Type	Light Levels (Foot Candles)
Innovation/Tech Area	50
Break Rooms	20
Teen / Game Area	15 (general) / 30 (task-specific areas like pool/ping pong table)
Hallway & Circulation	10
IT Rooms	10 (floor) / 30 (vertical)
Restrooms	15
Back of House	20
Gym	50
Community Hall	30
Kitchen	50
Fitness	50
Parking Lot	0.5
Walkways	5
Courtyard	10

ELECTRICAL SYSTEMS

Site Infrastructure

Provide (5) 5” primary conduit per utility company requirements from utility point of connection at the street to new transformer location adjacent to the building. Provide a new transformer pad per utility company requirements in a location agreed upon by the Architect and Utility. Provide bus duct from utility transformer to new main switchboard location adjacent to transformer.

Utility Service

The utility service provider shall be PG&E, and all equipment shall be installed per PG&E Greenbook requirements. A new 208Y/120V, 3-phase, 4-wire utility service shall be provided.

All primary wiring shall be provided by the utility. All primary conduit and secondary bus duct shall be provided by the Contractor.

Power Distribution

Provide a new main switchboard at the exterior of the Library building. A new bus duct termination section, meter/main circuit breaker sections, and distribution section(s) (quantity as required) shall be provided. Provide meter sockets per utility requirements. If required by utility, provide (1) 2” conduit from switchboard to MPOE as required for remote meter reading per utility company requirements. Refer to attached single line diagram for switchboard size and ratings.

[Add Alt A1: Provide the following panelboards at the Gym:](#)

- (1) 600A, 208Y/120V distribution panel at Gym to feed mechanical units and sub-panels
- (1) 225A, 208Y/120V panelboard for receptacles
- (1) 100A, 208Y/120V panelboard for lighting

Provide electrical rooms throughout the buildings as noted below:

Electrical Room Location	Requirements
Community Hall Bldg	Main Electrical Room, single exit door, door swings out and has panic hardware
Library Bldg	Main Electrical Room, single exit door, door swings out and has panic hardware Satellite Electrical Room (at Library proper), single exit door, door may swing into or out of room, no panic hardware required. Library space shall be separately metered by the utility, refer to single line diagram.
Add Alt A1: Gym Bldg	Satellite Electrical Room, single exit door, door swings out and has panic hardware

Provide quantity of circuits, distribution panels, and panelboards as required to feed all lighting, receptacles, architectural equipment, mechanical equipment, plumbing equipment, and other miscellaneous devices required for the functioning of the building. Refer to attached single line diagram for sizes and quantities of panels required. Loads shall be separated by category onto separate panels based on the following categories. Dedicated panels may contain loads of a different type, provided they do not exceed 10% of the total load on the panel. Panels may also have combined load, provided the enclosures are large enough to add circuit-by-circuit monitoring in the future.

Load Type	Requirements
Lighting	All interior and exterior lighting loads and lighting controls
HVAC Systems	All HVAC equipment
Receptacles and Appliances ≤ 25 kVA	All general purpose and miscellaneous receptacle loads, separated by area (5,000sf maximum) or floor
Renewable Power Generation	Each group of renewable power generation systems (e.g. PV, wind, etc)
Charging Stations	All EV charging stations, including ancillary equipment
Kitchens	All cooking, warming, refrigeration, and coffee making equipment
IT Equipment	All IDF and MDF room receptacles
Loads ≥ 25 kVA	Each load shall be capable of being monitored individually

Provide Ground Fault Circuit Interrupter (GFCI) protection for all receptacles provided for bathrooms, exterior locations, kitchens, garages, dishwashers, indoor wet locations, locker rooms, or where installed within 6'-0" of sinks or showers.

Where devices are duplex or quad outlets, all GFCI receptacles shall be provided with integral test/reset buttons. Where devices are special NEMA type, provide GFCI circuit breaker and provide label at receptacle indicating that the device is protected by a GFCI circuit breaker. Feed-thru devices shall not be used.

Provide receptacle devices and power connections for all equipment required by the owner and design consultants. Refer to preliminary floor plans provided for preliminary device and connection locations and quantities.

Backup Power

The main panel powering the Library shall be provided with a sub-feed breaker that has a kirk-key interlock with the main breaker. The sub-feed breaker shall feed a camlock at the exterior of the building to allow for a portable generator to be connected and back-feed the library areas.

[Add Alt E2: A battery backup system shall be provided for the library, community hall, and kitchen areas. Refer to "Renewable Energy Systems" section below for additional information.](#)

Rack mounted Uninterruptible Power Supply (UPS) units shall be furnished and installed by the contractor to provide additional power for IDF/MDF loads. UPS units shall be located in each rack, unless otherwise noted. Provide UPS units sized per owner's equipment requirements.

To provide emergency power for egress lighting, the Contractor shall provide UL listed emergency battery packs for select light fixtures to provide emergency egress lighting throughout the space. Each control zone shall be provided with a UL924 listed power transfer device to allow for egress lighting to be controlled with room lighting. Contractor shall assume that approximately 1 in 4 fixtures is to be provided with emergency battery pack. For fixtures that do not have an option for an integral battery pack, a UL listed lighting inverter, sized as required, shall be provided to feed those fixtures.

Energy Monitoring

An energy monitoring system shall be provided for the building to meet Code requirements. The energy monitors shall track energy usage, including historic data and trend data. The metering system shall store historical data on a cloud-based or local, owner-furnished server and shall display data via web-based dashboard interface. If a cloud-based solution is selected, contractor shall include in their costs a minimum of one-year data storage. The energy monitoring system shall store, at a minimum, the following information:

- Building information, including:
 - Name
 - Location
 - Square footage
 - Unique sustainability features
- Energy information, including:
 - Overall building energy use
 - Overall building energy production
 - Energy usage for each meter in the building, including description for what system or device that meter is measuring

- Energy generation for each meter in the building, including description for what system or device that meter is measuring
- Metering data for other systems (see other disciplines’ narratives for more information), including:
 - Water usage
 - Gas usage

Revenue-grade electronic submeters will be provided to separately monitor the overall power usage for each building.

Each meter shall be configured with a unique identifier and shall be labeled in the field, as well as in the server’s database. Data shall be collected from each meter at 15 second intervals and shall be stored in the server. At a minimum, the metering system shall collect and store the following information:

Value to be Logged	Units/Format
Real Power Usage	KiloWatts (KW)
Apparent Power Usage	Kilo-Volt-Amps (KVA)
Ratio of Apparent to Real Power	Power Factor (KW/KVA)
System Voltage	Volts (V)
Amperage per Phase	Amps (I)
Energy Usage	KiloWatt-Hours (KWh)
Date	MM/DD/YYYY
Time	HH:MM:SS

Plug Load Controls

Controlled receptacles shall be provided for all office workstations, private offices, conference rooms, break rooms, kitchenettes, and other office support spaces as required by Title 24. In those areas, duplex receptacles shall be provided as half-switched type receptacles, with the top half being unswitched and the bottom half being controlled with the room lighting such that when the local occupancy sensor detects no motion the receptacle turns off. All controlled receptacles shall be properly labeled in a permanent manner by the receptacle manufacturer and shall clearly indicate which receptacle turns off with the room lighting.

Receptacles in furniture systems shall be coordinated with the furniture vendor to ensure that each workstation is provided with both controlled and uncontrolled sets of receptacles.

Electric Vehicle (EV) Charging Stations

A minimum of (2) parking stalls shall be provided with a shared Level-3, dual headed charging station (1 total station). A minimum of (4) parking stalls shall be provided with shared Level-2, dual headed charging stations (2 total stations). A minimum of (1) station shall be provided at (1) ADA accessible parking stall. Exact locations of stations shall be coordinated with Owner and Architect.

Additional capacity shall be reserved on the switchboard to add (10) additional future Level-2, dual headed charging stations.

Add Alt E3: Provide Capacity and Infrastructure for (13) EV ready spaces. Provide (1) dual-headed Level 3 charger, (2) dual-headed Level 2 chargers, and (1) single-head Level 2 charger.

Switchgear

All switchboard sections shall be free-standing, front-accessible, sectional type. Sections shall be mounted on a 6” high concrete housekeeping pad that shall extend a minimum of 6” beyond the sides and back of the switchgear, and a minimum of 4’-0” in front of the switchgear. Where switchboards include utility metering, coordinate with utility representative to ensure that the housekeeping pad shall not violate their requirements.

Main circuit breakers shall be electronic, adjustable trip type. Branch breakers shall be molded case type. Each section shall have full-height, tin-plated copper bussing to allow for addition of future breakers in unused spaces. Refer to single line diagram for quantity of breakers and prepared spaces to be provided.

Service entrance equipment shall meet all requirements of the local utility, including, but not limited to, all requirements for low voltage telecom connections, metering, and termination of service conductors.

A Surge Protective Device (SPD) shall be provided on the main switchboard.

Panelboards and Distribution Panels

All distribution panels and panelboards shall have full-height, tin-plated copper bussing and shall be door-in-door type to allow servicing of equipment without needing to remove entire panelboard cover. Doors shall have full-height piano hinge and shall be lockable. All panels shall be provided with a Main Circuit Breaker (MCB). Main Lug Only (MLO) panels shall not be permitted except when wiring between sections of multi-section panels.

Surge Protective Devices (SPDs) shall be provided on each panelboard that serves computer loads.

Branch circuit panelboards shall have a maximum of 42 circuits, unless otherwise noted. MCB shall be located at either the top or bottom of the panel, based on conduit routing requirements and Contractor’s convenience for installation. All breakers shall be thermal/magnetic, molded case type, unless otherwise noted. Where higher circuit counts are indicated, the contractor may opt to either provide separate sections for the panelboard, or, if permitted by the manufacturer and code, may have a taller panel to accommodate the additional circuits.

Equipment Connections

Provide connections to all mechanical, electrical, plumbing, architectural, and owner equipment as required for a fully functioning system. Refer to other disciplines’ documents for additional information and loads to determine the required connection sizes and quantities. General equipment connections shall be as follows, refer to specific equipment requirements for deviations from this list.

Equipment Type	Requirements
Lighting	208Y/120V, 3 phase, 4 wire, 60 hertz Maximum of 1,600 VA per 20A/1P circuit
HVAC Systems	3/4HP and Larger: 208Y/120, 3 phase, 4 wire, 60 hertz 1/2 HP and Smaller: 120V, 1 phase, 2 wire, 60 hertz
Domestic Water	3/4HP and Larger: 208Y/120, 3 phase, 4 wire, 60 hertz 1/2 HP and Smaller: 120V, 1 phase, 2 wire, 60 hertz
Receptacles and Appliances ≤ 25 kVA	208Y/120V, 3 phase, 4 wire, 60 hertz Maximum of (6) duplex receptacles per 20A/1P circuit

Equipment Type	Requirements
	Maximum of 1,600 VA per 20A/1P circuit
Renewable Power Generation	208Y/120V, 3 phase, 4 wire, 60 hertz
Renewable Power Controls	208Y/120V, 3 phase, 4 wire, 60 hertz
Charging Stations	208/120V, 1 phase, 3 wire, 60 hertz
Kitchens	208Y/120V, 3 phase, 4 wire, 60 hertz
IT Equipment	208Y/120V, 3 phase, 4 wire, 60 hertz
Loads \geq 25 kVA	208Y/120V, 3 phase, 4 wire, 60 hertz

Add Alt A1: Provide connections to all lighting, power, and HVAC equipment within the Gym building. Provide receptacles throughout the gymnasium at 20'-0" on center, and in the lobby at 10'-0" on center, for general use. Provide a minimum of (1) convenience receptacles in each restrooms, electrical room, storage room, and mechanical room. Provide quad receptacles on each wall of the tele/data room, and at the top of the IT rack. Provide additional 30A/2P twist lock receptacle at the top of the IT rack.

Raceways

Galvanized Rigid Conduit (GRC) shall be used in utility spaces when exposed. Vinyl-wrapped GRC shall be used for elbows below grade.

Electrical Metallic Tubing (EMT) shall be used for interior concealed work or interior exposed work. Where exposed in finished areas, conduits shall be painted per architectural direction.

Flexible Metallic Conduit (FMC) shall be used for connections to motor loads, or for final connections to light fixtures in lengths less than 6'-0"

Liquid-tight Flexible Metallic Conduit (LFMC) shall be used for connections to pumps or motor loads located in exterior locations or locations subject to incidental contact with water.

Metal-Clad (MC) Cable may be used for branch circuitry in concealed areas.

High-Density Polyethylene (HDPE) or Polyvinyl Chloride (PVC) conduit shall be used below grade.

Devices

Color: Shall be as directed by architect in finished spaces and shall be galvanized steel with beveled edges in unfinished spaces.

Form Factor: All devices shall be Decora-style.

Receptacles: Duplex receptacles shall be rated for 20A and shall be Commercial grade. Special receptacles with NEMA designations matching their power requirements shall be provided for connection to equipment where required.

Half-switched Receptacles: Provide receptacles with permanent markings indicating which half of the receptacle is controlled.

USB Receptacles: Provide duplex receptacle with (2) integral USB charging ports.

GFCI receptacles: Provide duplex receptacle with integral GFCI protection device and test/reset switches.



Figure 1 - Half-switched receptacle (left), USB receptacle (right)

Wiring

Wire shall be installed in conduit throughout, unless otherwise noted. THHN/THWN insulation shall be provided on wiring #8 AWG and smaller. XHHW insulation shall be provided on wiring #6 AWG and larger. All wiring shall be copper.

Romex and BX cabling shall not be used.

LIGHTING SYSTEMS

Light Fixtures

All lighting shall be high-efficiency LED with 3500K color temperature. See equipment cutsheets for fixture types. See plans for preliminary locations and quantities.

Add Alt A1: Provide high bay LED fixtures throughout the Gym. Provide surface mounted 4' long LED fixtures in storage, electrical, mechanical, tele/data, and janitor's closet rooms. Provide recessed LED downlights within the restrooms and lobby. Provide decorative LED pendants within the lobby. Provide wall mounted LED wallpacks around the perimeter.

Lighting Controls

The lighting controls shall be fully networked together, and the head-end equipment shall be tied into the building data network. The controls shall be capable of accepting a Demand Response (DR) signal from the utility to automatically dim the lights to a pre-determined level.

Dimming controls shall typically be provided throughout, except in electrical rooms, restrooms, or other locations where permitted by Code.

Ceiling mounted occupancy sensors shall be provided throughout all offices, restrooms, break rooms, and other areas where required by code. Sensors switches may be used for single occupant restrooms.

Daylight sensors shall be provided for all areas with sidelight windows as well as skylights. Lighting in the daylight zones shall dim automatically when there is sufficient daylight available to provide proper light levels within the space.

All exterior lighting shall be controlled via a Lighting Control Panel (LCP) with an integral astronomic time clock. Additionally, where required fixtures shall be provided with occupancy sensors and multi-level dimming to dim lights down when no one is present.

The main Library area shall also be controlled via LCP. The lights shall be manually turned on by the staff in the morning and shall sweep off at a pre-determined time each day. Dataline switches shall be provided in the space to allow for timed overrides after-hours to allow staff to temporarily turn on the lights for a pre-determined amount of time outside of normal operating hours before they sweep off again.

In addition to the general lighting controls, the Community Hall shall also have theatrical dimming controls for selected pipe-grid mounted theatrical fixtures. Controls shall be wall mounted and shall have individual dimmers for each fixture, as well as buttons that shall be programmed with pre-defined scenes. Scenes shall be determined with the City and programmed at the completion of construction.

Add Alt A1: Provide daylight dimming controls within the Gym and lobby. Provide dimming controls within the storage room if required. Provide on/off controls with occupancy sensors in the restrooms, janitor's closet, tele/data room, and mechanical room. Provide on/off controls in electrical room. Provide lighting control panel with astronomic time clock for control of exterior lighting, lobby, and gym to sweep lights off at a pre-determined time.

Emergency Lighting

Refer to "Backup Power" section above for requirements.

LOW VOLTAGE SYSTEMS

Site Infrastructure

Provide (2) 4" conduits from each utility provider location at the street and stub them up in the main electrical room at the MPOE location. Contractor shall assume (3) utility providers: 1) city fiber network, 2) AT&T, 3) Comcast. Exact providers and quantities shall be confirmed with City. Provide site pull boxes per utility provider's requirements.

Provide (3) 4" conduits from MPOE at Community Hall building to telecom room at Library building and to a point on site stubbed out near the telecom room at Gym building.

Add Alt A1: Stub conduits from exterior of building into telecom room at the Gym building.

Telecom Rooms

Provide 8' x 4' x 3/4" sheets of fire treated plywood around the perimeter of each Tele/Data room for mounting of utility and other low voltage equipment. Provide grounding busbar in each Tele/Data room for bonding of all telecommunications device equipment and bond per utility company and manufacturer requirements.

Provide floor mounted, full height, 4-post racks in each telecom room as required to house all patch panels, switches, and owner equipment. Vertical cable management shall be provided between each rack and at the ends of racks, and horizontal cable management shall be provided between each switch and each patch panel.

Provide ladder rack spanning between walls above telecom racks to allow for routing and management of wiring. Bond all components of the racks and ladder rack per manufacturer's requirements.

Add Alt A1: Provide the above items at the telecom room at the Gym building.

Tele/Data

Provide telephone and data jacks throughout the building. All cabling and jacks shall be rated at Cat6A. All telephone and data wiring shall terminate at patch panels. Wireless Access Point (WAP) and Security

Camera wiring shall terminate at Power Over Ethernet (POE) patch panels. All wiring and jacks shall be labeled per City requirements and shall be color-coded as noted below:

- Data: Blue
- Telephone: White
- WAPs: Purple
- Security Cameras: Orange

Provide devices in locations shown on preliminary drawings. All wiring within each building shall terminate at the telecom room within that building.

The library space and all tele/data devices connected to it shall be installed per the library’s IT standards for cabling and products, and shall be installed by one of the two following approved vendors. The remaining areas may utilize a cabling installer/vendor of the Design/Build entity’s choice, however all library devices must be installed, terminated, and tested by an approved vendor. Refer also to the Division 01 specifications for requirements.

- Johnson Electronics (Genetec & Low voltage)
 - a. Bryan Johnson bryan@johnson-electronics.com 831-424-6459
 - b. <https://www.johnson-electronics.com/>
- AMS.Net (Low voltage)
 - a. Greg Jaramishian gjaramishian@ams.net 559-213-9278
 - b. <https://ams.net/>

All other areas of the project may either utilize the same vendor as the library, or may utilize a sub-contractor of the General Contractor’s choosing who meets the requirements of the specifications and preliminary design documents. Refer also to the Division 01 specifications for requirements.

Add Alt A1: Provide wireless access points throughout the interior of the Gym building and at select locations at the exterior. Provide hard wired data for general use at a minimum of (4) locations throughout the gym. Provide additional data connections to all shot clocks, scoreboards, and other miscellaneous Gym equipment as required.

Local Audio/Visual (AV) Systems

Selected spaces shall be provided with complete local audio/visual systems, including, but not limited to, all devices and capabilities noted in the “Requirements” column. The systems in these spaces shall be dedicated to that space and shall not be interconnected with any other spaces.

Refer to low voltage diagrams for preliminary equipment, interconnections, inputs, outputs, and other miscellaneous requirements. Exact requirements for each area shall be confirmed with the City and Library.

Area	Requirements
Main Library and Homework Center	Provide speaker wiring and speakers for general overhead sound and for white noise Provide Local wallplates for HDMI input to wall mounted TVs Provide HDMI input back to AV rack in AV equipment room to wall mounted TVs Provide Local wallplate for AV controls

Area	Requirements
	<p>Provide AV Receiver for collection of inputs and outputs to TV and speakers</p> <p>Provide controller for digital signage</p>
Group Study 2	<p>Provide “Zoom Room” with microphone, camera, speakers, inputs for flat panel display, room scheduling device, and tabletop or wall mounted touch screen controls.</p>
Innovation Lab	<p>Provide speaker wiring and speakers for general overhead sound</p> <p>Provide Local wallplates for HDMI input to overhead projectors</p> <p>Provide HDMI input back to AV rack in AV equipment room to projector</p> <p>Provide Local wallplate for AV controls</p> <p>Provide AV Receiver for collection of inputs and outputs to projectors and speakers</p> <p>Provide HDMI output for overhead projectors</p> <p>Provide inputs for wireless microphones and ALS system</p>
Teen Room	<p>Provide speaker wiring and speakers for general overhead sound</p> <p>Provide Local wallplates for HDMI input to wall mounted TVs</p> <p>Provide HDMI input back to AV rack in AV equipment room to wall mounted TVs</p> <p>Provide Local wallplate for AV controls</p> <p>Provide AV Receiver for collection of inputs and outputs to projector and speakers</p> <p>Provide HDMI output for wall mounted TVs</p> <p>Provide inputs for wireless microphones and ALS system</p>
Classroom	<p>Provide speaker wiring and speakers for general overhead sound</p> <p>Provide Local wallplates for HDMI input to overhead projector</p> <p>Provide HDMI input back to AV rack in AV equipment room to projector</p> <p>Provide Local wallplate for AV controls</p> <p>Provide AV Receiver for collection of inputs and outputs to projector and speakers</p> <p>Provide HDMI output for overhead projector</p> <p>Provide inputs for wireless microphones and ALS system</p>
Fitness Area	<p>Provide speaker wiring and speakers for general overhead sound</p>

Area	Requirements
	<p>Provide sub-woofer</p> <p>Provide Local wallplates for HDMI input to wall mounted TVs</p> <p>Provide HDMI input back to AV rack in AV equipment room to wall mounted TVs</p> <p>Provide Local wallplate for AV controls</p> <p>Provide AV Receiver for collection of inputs and outputs to projector and speakers</p> <p>Provide HDMI output for wall mounted TVs</p> <p>Provide inputs for wireless microphones and ALS system</p>
Community Hall	<p>Provide speaker wiring and speakers for general overhead sound</p> <p>Provide Local wallplates for HDMI input to overhead projectors</p> <p>Provide HDMI input back to AV rack in AV equipment room to projector</p> <p>Provide Local wallplate for AV controls</p> <p>Provide AV Receiver for collection of inputs and outputs to projectors and speakers</p> <p>Provide HDMI output for overhead projectors</p> <p>Provide inputs for wireless microphones and ALS system</p> <p>Provide inputs for hard wired microphones</p>
Exterior Amphitheater	<p>Provide speaker wiring and exterior speakers for general surround sound</p> <p>Provide exterior sub-woofer</p> <p>Provide hardwired microphone inputs</p> <p>Provide in-grade, weatherproof floor boxes for power, audio, and video to allow for plugging in portable projector to sound system and remote AV equipment</p>
Exterior Signage	<p>Provide controller for digital signage</p>
Add Alt A1: Gym	<p>Provide speaker wiring and speakers for general overhead sound</p> <p>Provide Local wallplates for HDMI input to overhead projectors</p> <p>Provide HDMI input back to AV rack in AV equipment room to projector</p> <p>Provide Local wallplate for AV controls</p> <p>Provide AV Receiver for collection of inputs and outputs to projectors and speakers</p> <p>Provide HDMI output for overhead projectors</p>

Area	Requirements
	<p data-bbox="735 262 1349 294">Provide inputs for wireless microphones and ALS system</p> <p data-bbox="735 310 1192 342">Provide inputs for hard wired microphones</p>

Intrusion Detection

A zoned intrusion detection system shall be provided throughout. The library space shall be provided with a separate system from the rest of the Library building and from the Community Hall building. DBE shall coordinate with Library for intrusion and monitoring system and protocols.

Motion detectors shall be provided throughout all areas with exterior doors and windows.

Door contacts shall be provided at all exterior doors, roof hatches, and operable windows.

Library areas shall be installed by one of the approved vendors. Refer to “Tele/Data” section above, as well as Division 01 specifications, for additional information.

[Add Alt A1: Provide the above items at the Gym building.](#)

Card Access

A zoned card access system shall be provided throughout. The library space shall be provided with a separate system from the rest of the Library building and from the Community Hall building. DBE shall coordinate with Library for card access and monitoring system and protocols.

Card readers shall be provided at all exterior doors, as well as is required to separate interior areas, such as the Teen Lounge and the Innovation Lab.

Card Access system shall be capable of locking/unlocking doors on a timed schedule, as well as allowing access to authorized personnel after hours. Areas shall be zoned, and card readers shall allow for multiple tiers of access, allowing some card holders to access certain areas but not others.

Library areas shall be installed by one of the approved vendors. Refer to “Tele/Data” section above, as well as Division 01 specifications, for additional information.

[Add Alt A1: Provide the above items at the Gym building.](#)

Security Cameras

Provide an IP based security camera system at the perimeter of the building. The camera system shall be remotely accessible by the Police Department and by Library staff.

High definition, fixed IP cameras shall be located on the building around the entire perimeter to cover all doors and windows along the façade.

A high definition, Pan/Tilt/Zoom IP camera shall be provided to cover the entry drive aisle to allow for license plate reading.

A local Network Video Recorder (NVR) shall be provided at the MDF and/or IDFs to store a minimum of 1 month of video from all cameras. The NVR software shall allow for local or remote access to the videos, and shall allow for exporting segments of video from specific timestamps as required.

Library areas shall be installed by one of the approved vendors. Refer to “Tele/Data” section above, as well as Division 01 specifications, for additional information.

[Add Alt A1: Provide the above items at the Gym building.](#)

Fire Alarm

Provide an automatic, addressable fire alarm system throughout each building. The system shall be capable of voice evacuation and shall have pre-programmed voice instructions as well as the ability to manually alert occupants via a microphone station. The Fire Alarm Control Panel (FACP) shall be located in the Library building telecom room. The library proper shall be provided with its own fire alarm system and the FACP for that area shall be located within the library. The systems shall be cross-connected to allow for monitoring of the system in the adjacent spaces, and to allow for the alarms in one area to be displayed in the other. A Remote Annunciator (RA) and microphone station shall be provided in the Main Library and Community Hall office.

Smoke detectors shall be provided below ceiling in all spaces, and heat detectors shall be provided above ceiling throughout if required. A manual pull station shall be provided within 5'-0" of the main FACP.

In all regularly occupied spaces, speaker strobes shall be provided to provide both visual and audible alarms to occupants. Exterior spaces shall be provided with weatherproof speakers.

All fire smoke dampers, water flow switches, tamper switches, magnetic door holders in fire walls, and other miscellaneous devices shall be connected to the fire alarm system by either an addressable monitor module or relay module as required.

The fire alarm panel shall be provided with a hard-wired phone line and shall be capable of dialing out to a remote monitoring service. Exact service provider to be selected by the owner.

The voice-evacuation functionality of the fire alarm system shall be capable of transmitting pre-recorded as well as live messages, and a remote microphone station shall be located within the Main Library and Community Hall office areas. The pre-recorded messages shall include both English and Spanish recordings.

[Add Alt A1: Provide full fire alarm detection and notification coverage at the Gym building. Provide local remote annunciator and microphone station at lobby. Provide notification power supply and amplifier.](#)

Emergency Responder Radio Coverage System (ERRCS)

Provide raceways, boxes, and space for equipment for a future ERRCS system. At the completion of the project, provide a radio coverage survey of the building. If the building is found to have dead spots, or areas with limited coverage, provide an ERRCS system utilizing the pathways and space provided.

RENEWABLE ENERGY SYSTEMS

Photovoltaics

Infrastructure shall be provided to support a future rooftop PV system. At each building, provide (2) 2" conduits stubbed up to the roof from the main electrical panel for future wiring. Provide weatherproof cap at roof for each conduit.

[Add Alt E1: Provide an add-alternate to provide each building with a rooftop PV system. Provide all panels, wiring, conduit, inverters, and mounting hardware required for a complete system. The Library building shall be provided with a 130KW PV system and the Community Hall building shall be provided with a 120KW PV system. System size is based on an assumed EUI for the buildings of 51 kBtu per square-foot per year with the goal of offsetting 100% of the energy used within the buildings on an annual basis \(roughly 170,000 kWh per year for the Library building and 160,000 kWh per year for the Community Hall building\). Exact sizing shall be confirmed based on actual available roof area, as well as the overall modeled energy usage of the buildings. Panels shall be rack mounted on the top of each building. Both systems shall utilize string inverters. Inverters shall be located in the main electrical rooms,](#)

and utility disconnects shall be provided adjacent to the main switchboard, or within the electrical room of each building if allowed by the utility.

Add Alt A1: Provide all panels, wiring, conduit, inverters, and mounting hardware required for a complete system. The Gym building shall be provided with a 150KW PV system. System size is based on an assumed EUI for the buildings of 51 kBtu per square-foot per year with the goal of offsetting 100% of the energy used within the building on an annual basis (roughly 210,000 kWh per year). Exact sizing shall be confirmed based on actual available roof area, as well as the overall modeled energy usage of the buildings. Panels shall be rack mounted on the top of each building. The system shall utilize string inverters. Inverters shall be located in the main electrical room, and utility disconnect shall be provided adjacent to the main switchboard, or within the electrical room of the Gym building if allowed by the utility.

Batteries

Infrastructure shall be provided to support a future battery system. At each building, provide (2) 3” conduits stubbed from the main electrical room at the Community Hall building and the Library satellite electrical room out to the parking lot for connection to a future battery system.

Add Alt E2: Provide an exterior battery system at the parking lot to backfeed the Community Hall, Kitchen, Restrooms, and Library. Provide wiring from the batteries to automatic transfer switches as required to backfeed all required panels and locate transfer switches within the main electrical rooms of each building. Batteries shall be sized to provide 24hrs of backup to each of the areas listed above without any recharging. Preliminary sizing shall be 12,000 Amp-Hours. If the PV Add Alt E2 is selected, the batteries shall be connected to the electrical system in such a way that the batteries can be recharged from the PV system.

EQUIPMENT LISTS

Power Equipment

Equipment Type	Manufacturer
Switchboard	SquareD QED series or approved equal
Distribution Panels	SquareD I-Line or approved equal
Panelboards	SquareD I-Line or approved equal
EV Chargers	Level 2: BTC Power Dual Head Level 2 L2P-30-240-15-001 Level 3: BTC Power Dual Head Level 3 L3S-50-208-01-003 with dual SAE J1772 connectors
Add Alternate E2: Batteries	Tesla Powerpack or approved equal
Add Alternate E1: Photovoltaics	Panels: SunPower X-series Inverters: SolarEdge 208V, 3-phase string inverters or approved equal

Lighting Equipment

Refer to preliminary plans for types of fixtures to be used in each space.

Equipment Type	Manufacturer
Light Fixtures	See attached cutsheets

Refer to preliminary plans for lighting controls in each space.

Equipment Type	Manufacturer
Controls	Wattstopper DLM or approved equal
Dimming Switches	Wattstopper LMDM-101 or approved equal
Occupancy/Vacancy Sensors	Wattstopper LMDC-100 Dual Technology Occupancy Sensor or approved equal
Lighting Control Panel	Wattstopper LMCP8 or approved equal
Dimming Controller	Wattstopper LMRC-220 or approved equal
Switched Receptacle Controller	Wattstopper LMPL-101 or approved equal
Photocell	Wattstopper LMLS-500 or approved equal
Segment Manager	Wattstopper LMSM or approved equal

Low Voltage Equipment

Provide equipment in quantities and types as noted above and as required by plans (e.g. provide door sensor for each exterior door shown on the plans).

Equipment Type	Manufacturer
Library Areas	All products per Library standards. Refer to “Monterey County Telecommunications Cabling and Pathway Systems 2022” specification for all products and installation requirements.
Tele/Data	Fiber Wiring: Berk-Tek Leviton Single Mode and/or Multi Mode cable as required Copper Wiring: Berk-Tek Leviton Category 6A cable or approved equal Jacks: Leviton eXtreme Category 6A or approved equal Patch Panels: Leviton QuickPort Category 6A patch panels or approved equal UPS: APC Smart-UPS series or approved equal Four-Post Racks: Chatsworth 15216-703 with vertical wire management
Local AV System	Extron or approved equal

Fire Alarm

Detection/Control: Notifier NFS2-3030 with digital amplifier and voice evacuation capabilities or approved equal, with compatible detection and control devices

Notification: Wheelock PS series power supplies with compatible visual appliances, and Notifier DAA2 series amplifier with compatible Wheelock voice evacuation appliances

Card Access

Controller: Genetec LP1501 (Library standard, no substitutions)

Reader: Genetec 920PTNTEK00000 (Library standard, no substitutions)

Gateway: Genetec Synergis Cloud Link (Library standard, no substitutions)

Intrusion Detection

Intrusion Panel: Bosch D9412Gv4

Alphanumeric Command Center: Bosch D1255

PIR Motion Detector: Takex PA-7100E (with BU-7000 flush mount kit)

Security Cameras

Cameras: Genetec Fixed or PTZ HD IP cameras (Library standard, no substitutions)

Recorder: Genetec Network Video Recorder (Library standard, no substitutions)

Software: Genetec Omnicast Security Center Enterprise Edition (Library standard, no substitutions)