Request for Proposals

San Juan County Bond Counsel Services

San Juan County
117 South Main
PO Box #9
Monticello, Utah 84535

Date of Issue:
December 29, 2023

I. INTRODUCTION

II. SCOPE OF WORK

San Juan County is seeking an individual, team, or company that will satisfy all of the following:

It is anticipated that a full complement of professional services shall be provided by the architect selected for this project. These services shall include, but not necessarily be limited to, those outlined as follows:

A. Evaluation of San Juan County requirements for programs and services.
B. Evaluation of Federal, State and local requirements and standards, including Monticello City Code, Zoning and other requirements.
C. Schematic Design Phase Services:
    1. Hold programming meeting to collect complete information derived from the Feasibility Study and any changes regarding desired size, technology focus, function, and aesthetics of spaces.
    2. With the assistance of the County Design Team, assist in the development of a construction program and project scope, establishing cost estimates of each desired improvement and be qualified in accordance with Utah Code Title 58 Chapter 3A.
    3. Determine the estimated costs of the desired improvements and in sizing the Project.
    4. Present Schematic Design to Monticello City for the remodel and possible expansion spaces.
    5. Provide meeting minutes of discussions and direction.
D. Design Development Phase Services:
    1. Refine and revise design according to feedback provided from Schematic Design phase. Preliminary Design includes, but not limited to, space planning, and design development.
    2. Hold review meeting to review changes with County Design Team to reach consensus on final plans.
    3. Provide meeting minutes of discussions and direction.
    4. Prepare a construction schedule and prepare appropriate bidding categories and phases.
    5. Prepare a new occupancy schedule to be implemented upon completion of construction.
    6. Review commissioning options with County Design Team and incorporate appropriate commissioning duties into the plans and specifications.
E. Preliminary cost estimates:
    1. Prepare projected cash flow schedules for all aspects of the Project.
    2. Provide necessary cost estimates to: 1) satisfy purchasing requirements, 2) permit the Architect to perform basic services, and 3) ensure the Project does not exceed the fixed budget.
F. Final Design services:
    1. Complete Final Design including, but not limited to, working drawings, specifications, cost estimates, prospective bidders list, approvals (State and Local Authorities), Technical Addenda, clarifications for all elements of each particular project, which may include:
        i. Landscape/Site Design
        ii. Structural Design
        iii. Architectural Design
        iv. Mechanical Design
        v. Electrical Design
        vi. Lighting Design
        vii. Acoustical Design
        viii. Technology Design
        ix. Energy Efficiency Design

2. Additional drawings such as Zoning and code information for permitting, demolition plans, sections, interior and exterior elevations, door and window details, jail controls systems, materials and fixtures lists, construction details and general notes need to also be included.

G. Preparation of plans and specifications for construction bidding.
H. Obtain final approval from Monticello City.
I. Final cost estimate.
J. Assistance with bidding:
    1. Complete bid package of all required construction documents and specifications, including reproduction of the same.
    2. Assist in developing the necessary advertising for bid documentation and distribution.
    3. Assist with creating a list of all possible contractors interested in bidding and performing this work.
    4. Prepare and distribute construction documents to bidders.
    5. Participate in pre-bid conference with all bidders for each division of work.
    6. Assist in evaluating bids in each work category.
    7. Participate in post-bid interviews with apparent low bidders.
    8. Develop award recommendations.
K. Construction Phase Services:
    1. Architect acts as the County's advocate during construction by answering contractor or sub-contractor's questions, interpreting construction documents, and assisting with the final product, material, and color selections.
    2. Assist contractor in obtaining building permit.
    3. Provide on-site observation and supervision of construction including supervision and site visits as necessary during the entire construction period, and to ensure work is being performed in accordance with the Contract Documents.
    4. Continually monitor and update construction, construction draw requests, and occupancy schedules.
    5. Prepare change order requests and receive County approvals.
    6. Review shop drawings and submittals and expedite the review process.
    7. Review payment and cost control procedures, including the following:
        i. Contractor's Schedule of Values
        ii. Contractor's Payment Application and Certification
        iii. Contractor's Sworn Statements and Waivers of Lien, if applicable
        iv. Purchase Orders and disbursement summaries
        v. Change Order listings
        vi. Budget Costs Summary Reports
    8. Participate in progress meetings and provide progress reports.
        i. As needed, meet with the County Building Inspector to discuss any activities which may affect operations.
        ii. Weekly meeting with County and trade contractors either in person or virtual.
        iii. Monthly meetings for planning, coordination, and payments with County which will include status reports on the Project, budget, change orders, and allowances for reimbursable expenses.
    9. Prepare as-built drawings and record and review operating and maintenance manuals, warranties, guarantees, and Project directories.
    10. Ensure that all construction is completed as specified by the construction documents and meets all codes and regulations of agencies having jurisdiction.
    11. Provide review and coordinate Project commissioning, including but not limited to mechanical, electrical, and building envelope of expanded spaces.

12. Provide corrective or completion punch lists, coordinate final inspections, and recommend acceptance and occupancy.

L. Assist County with selection and procurement of furniture, fixtures, and equipment.

M. Post-construction Phase Services:
   1. Assist in facilitating/requiring training sessions for appropriate employees regarding the operation and maintenance of technical equipment.
   2. Provide follow-up and call-back services for the duration of the longest warranty period covered by a contractor on the Project.
   3. Conduct a post-occupancy walk-through appropriately at times to address Project issues prior to expiration of applicable warranties.
   4. Ensure that a digital and hard copy of As-Built drawings are delivered to the owner within 60 days of project completion.
   5. Provide Digital Copy of digital files and all construction documentation including submittals, meeting minutes, warranties, and operation and maintenance manuals.

III. COSTS/FEES

The maximum fee for the services sought through this RFP will be the selected Vendor's[1] proposal price. Vendors shall submit a fee proposal similar to the Form Fee Proposal below. Vendors shall also submit a rate schedule (similar to the Form Rate Schedule below) for all individuals that the Vendor anticipates will provide services in connection with this RFP. Fees should be based on the anticipated 42,633 square foot feasibility study suggestions. This square footage total may increase or be reduced based on recommendations determined during the Schematic, Development Design and Final Design phases in order to maintain final fixed costs of the project.

Form Fee Proposal	
	Total Cost
Schematic Design Phase Services	
Design Development Phase Services	
Final Design Phase Services	
Bidding and Award	
Construction Administration	
Grand Totals:	

Form Rate Schedule	
	Hourly Rate
Name of Employee #1	
Name of Employee #2	
Name of Employee #3	
Name of Employee #4	
Name of Employee #5	

[1] The term "Vendor," as used in this RFP, means an individual or entity who is seeking to enter into a contract with San Juan County to provide San Juan County with services, including but not limited to, an individual or entity who submits a proposal in response to this RFP.

Continue naming all employees that Vendor anticipates will provide services regarding this RFP	

Failure by a Vendor to comply with any requirement of this Section may result in rejection of the Vendor's proposal.

The price proposal for this Project shall be submitted on the "Attachment B" provided in this RFP. This price shall include all fees and costs as a maximum fee for the provisions indicated in the Project Scope of Work as described above, including preliminary design services, preliminary cost estimates necessary to determine construction estimates and budgets, final design services, preparation of plans and specifications to be used in construction bidding, preparation of final cost estimates, assistance with bidding, construction management and post-construction services.

Please submit an hourly rate schedule using the form above which will be utilized for changes in the scope of services approved by San Juan County.

IV. PROPOSAL SUBMISSION REQUIREMENTS

All proposals submitted for evaluation should include, but are not limited to, the following:

A. San Juan County RFP Form: The County's Request for Proposal form completed and included as page 1 in the bid packet. (Attachment B)
B. Introduction: This section consisting of a cover letter, an executive summary (two pages maximum) and an organizational chart showing the team involved including individual members, all organizations, relationships and a breakdown of responsibilities including a biography and resume of key members who will be involved in the project. Resumes of Principals shall be included. Provide a minimum of three references, including name, address and telephone number of persons who can attest to the performance, qualifications, and experience on like projects specifically a CM/GC construction process.
C. A list and explanation of each Jail or Prison remodel and expansion project performed by Vendor that is similar to the services sought through this RFP.
D. Vendor Qualifications and Experience: A narrative that specifically addresses the firm's or individual's experience in designing County government public building remodels preferably County or State Jails with the capability to successfully perform the required services requested in the RFP's scope of work, a description demonstrating involvement on similar projects and the specific project described. Project information such as photographs and 11x17 floor plans for the identified projects should be briefly included. A demonstrated experience performing architectural services in remote rural Counties, specifically San Juan County, is preferred.
E. Proposal: This section should cover such things as the approach to the RFP's scope of work; the proposed schedule of the work to include a project timeline with availability; project strategy; methodology used to control costs, maximize construction economy, and ensure operational effectiveness; identify outputs to be delivered; and identify advantages of the proposal to San Juan County.
F. Fee Schedule: A detailed fee schedule proposed to be charged for the services to be performed.

Proposals in non-standard formats cannot be evaluated without considerable analysis. Failure to follow the prescribed format may result in rejection of the proposal.

V. SAN JUAN COUNTY'S REQUEST FOR PROPOSALS POLICY

Each Vendor who submits a proposal in response to this RFP agrees to comply with and be bound by San Juan County's Request for Proposals policy that is in place at the time that this RFP was issued. Each Vendor may request and receive a copy of San Juan County's Request for Proposals policy by sending an email to Purchasing Manager Mack McDonald at mmcdonald@sanjuancounty.org and requesting a copy of San Juan County's Request for proposals policy found within the Purchasing Policy. This can also be found online at sanjuancounty.org.

VI. EVALUATION CRITERIA

Submitted Proposals will be evaluated and scored by the selection committee based on the following criteria:

Evaluation Criteria			
Primary Criteria		Primary Criteria % of Overall Evaluation Score	
Qualification and Experience	*Sub-Criteria*	**30%**	*Sub-Criteria % of Primary Criteria Evaluation Score*
	• Experience level of key Architectural personnel relating to County public buildings remodels preferably County or State Jails design and construction management with a CM/GC process. • Quality of response to RFP connecting directly to related experience in firm's or individual's experience in designing County government public buildings preferably County or State Jails or Prisons with the capability to successfully perform the required services. • Expertise and experience as an architectural firm performing architectural services with a demonstrated experience working in remote rural Counties specifically San Juan County is preferred.		10% 10% 10%
Technical Approach	*Sub-Criteria*	**30%**	*Sub-Criteria % of Primary Criteria Evaluation Score*
	• Scope of Work • Detail of submitted work plan, schedule and proposed project approach		15% 15%

Fee Schedule	*Sub-Criteria*	**30%**	*Sub-Criteria % of Primary Criteria Evaluation Score*
	• Grand Total • Rate Schedule		15% 15%
Introduction		**10%**	
	Sub-Criteria		*Sub-Criteria % of Primary Criteria Evaluation Score*
	• Firm's organization • Professionalism and strength of team including references		5% 5%

VII. PROJECTED SCHEDULE FOR THE RFP PROCESS

The County reserves the right to modify this schedule at its sole discretion.

Activity	Date
Request for Proposal Issued	December 28, 2023
Initial Question and Answer Meeting	January 4, 2024
Last day to submit questions via e-mail	January 10, 2024
Proposal Due Date	January 11, 2024
Notice of Award	February 6, 2024

Final selection may require a final in-person presentation and interview, if necessary, depending on the evaluation team's recommendation.

VIII. QUESTION AND ANSWER MEETING

Interested firms wishing to submit a proposal are encouraged to attend a question, answer, and introduction virtual meeting on January 4, 2024 at 3:00 pm, MST accessed by the following Google Meet video call link: https://meet.google.com/suz-ixvv-jtn Or dial: (US) +1 802-560-5898 PIN: 540 400 889#. It is critical that interested parties are on time for the meeting. **This is the only date and time for a virtual face to face with County employees for the proposal.**

IX. WRITTEN CONTRACT REQUIRED

The selected party must be willing to enter into a written contract with San Juan County. A binding agreement between San Juan County and the selected party is dependent upon the negotiation, preparation, and execution of a formal contract. At any time prior to the execution of a binding agreement executed by both parties, San Juan County may, in its sole discretion, stop the selection process and decline to enter into an agreement for the subject matter herein.

X. INQUIRIES

All inquiries relating to the specifications or proposal procedure should be directed in writing through e-mail to the Purchasing Agent, Mack McDonald at mmcdonald@sanjuancounty.org. The last day and time to submit

questions will be 4:30 p.m. on January 10, 2024. **Please do not contact the agency, division, department, or other County officers or employees.**

XI. REQUEST FOR FINAL AND BEST OFFERS

Among other options at San Juan County's disposal, San Juan County may request a final and best offer at any time during the RFP process. If San Juan County exercises this option, the interested party shall respond prior to the deadline established by San Juan County when the option is exercised. If the interested party fails to timely provide a final and best offer, the best offer made by the interested party prior to the exercise of this option will be considered by San Juan County as the final offer of the interested party.

XII. PROTESTS

As further described in San Juan County's Request for Proposals policy, which is incorporated herein by this reference, any proposer who submitted a timely filed proposal that was not rejected by either the evaluation committee or the Purchasing Agent may file a protest. In order to be timely, a protest must be submitted, in writing, to the San Juan County Board of County Commissioners no later than six calendar days after the date that the *Notice of Intent to Engage in Contract Negotiations* was sent by the Purchasing Agent to the applicable Vendor. Protests that are not submitted in a timely manner to the San Juan County Board of County Commissioners shall be rejected by San Juan County.

XIII. SAN JUAN COUNTY MAY TERMINATE THE RFP PROCESS OR DECIDE NOT TO ENTER INTO A CONTRACT

As further described in San Juan County's Request for Proposals policy, which is incorporated herein by this reference, San Juan County may terminate the RFP process regarding this RFP for any reason and at any time prior to the execution of a contract by a proposer and San Juan County regarding the services sought through this RFP. Moreover, San Juan County may decide not to enter into a contract with any proposer to provide the services sought through this RFP.

XIV. CONTRACT AND PROPOSAL INFORMATION

All proposers who submit a proposal in response to this RFP acknowledge that they have each read and understand this RFP and agree to be bound by the terms and provisions of this RFP, including, but not limited to, the following:

A. Firm Pricing: All prices, quotes, or proposals shall remain firm for the duration of the RFP process regarding this RFP and until a contract regarding this RFP is executed by San Juan County and a Vendor or San Juan County decides not to enter into a contract with any Vendor to provide the services sought through this RFP. A Vendor's failure to comply with this provisions may result in the rejection of the Vendor's proposal.

B. Governing Law and Exclusive Jurisdiction and Venue: Any contract between San Juan County and a Vendor regarding this RFP will be interpreted, construed, and given effect according to the laws of the state of Utah and the ordinances of San Juan County, and the courts within San Juan County, Utah shall have the sole and exclusive jurisdiction and venue regarding any such contract. No contract will be assigned, in whole or in part, without the written consent of San Juan County.

C. Licensing: The selected Vendor shall obtain all applicable federal, state, and local licenses before any contract between San Juan County and the Vendor regarding this RFP is executed. The selected Vendor

must maintain for the duration of the contract between San Juan County and the Vendor regarding this RFP.

D. Registration: All Vendors shall be registered with the Utah State Division of Corporations and Commercial Code to perform business in the state of Utah. NOTE: Forms and information on registration may be obtained by calling (801) 530-4849, or toll free at 877-526-3994 or by accessing: www.commerce.utah.gov.

E. Public Domain: Interested Parties are advised that Utah law and San Juan County ordinances provide that, upon the full execution of a contract subsequent to an RFP, the contents of a selected proposal relating to this RFP may be placed in the public domain and become public records subject to examination by any interested parties in accordance to the Government Records Access Management Act (GRAMA), Utah Code Ann. 63G-2-101 et seq. and County ordinance. Please refer to Section XVI below for specific details regarding the protection of certain information.

F. Modifying or Withdrawing Proposals: Interested parties may modify or withdraw their proposals at any time prior to the proposal due date. Interested parties may withdraw their proposals if San Juan County and the selected interested party cannot agree on contract terms.

G. Independent Contractors: Interested party agrees that if he/she/it enters into a contract with San Juan County, he/she/it will be an independent contractor and have no authority, express or implied, to bind San Juan County to any agreements, settlements, liability, or understanding whatsoever with any third party and will have no interest in any benefits provided by San Juan County to its employees.

H. Free and Competitive Bidding: Any agreement or collusion among prospective interested parties to fix a price or limit competition shall render the proposal void and such conduct shall be unlawful and subject to criminal sanction.

I. Insurance: If awarded the contract, an interested party will, at its sole cost and expense, secure and maintain both prior to the commencement of the term of the contract and for the duration of the contract, insurance coverage as follows:

(1) General Liability Insurance as follows: Occurrence form commercial general liability insurance with the following minimum limits:
   (a) Each Occurrence - $1,000,000.00;
   (b) Damage to Rented Premises – $50,000.00;
   (c) Med. Exp. (Any one person) – $5,000.00;
   (d) Personal & Adv. Injury – 2,000,000.00;
   (e) General Aggregate - $2,000,000.00;
   (f) Products – Comp/Op Agg. - $2,000,000.00; and
   (g) Other – N/A;

(2) Automobile Liability Insurance: With minimums to satisfy the state of Utah's requirements;

(3) Workers Compensation and Employers' Liability: With minimums to satisfy the state of Utah's requirements or a valid waiver issued by the appropriate department of the state of Utah; and

J. Indemnification: If awarded a contract and consistent with the terms and provisions of the written contract between San Juan County and the selected party, the selected party, for itself, and on behalf of its representatives, among others, shall agree and promise to indemnify, defend, save and hold harmless San Juan County, and San Juan County's representatives, among others, from any and all claims, among other things.

K. Infringement: An interested party shall not infringe on patents, copyrights, trademarks, or intellectual property rights. The consequences from violation, including costs of defending a claim and indemnification from an action of claim by a third party, shall be borne by the selected party.

L. Warranties. If products, goods, or otherwise will be supplied or provided by the selected party, the selected party shall agree to the specific warranty provisions that will be set forth in the written contract entered into between San Juan County and the selected party.

M. Conflicting Terms of Provisions: If any portion of this RFP conflicts in whole or in part with a written agreement entered into between the selected party and San Juan County subsequent to the issuance of this RFP, the subsequent written agreement between the selected party and San Juan County shall control.

XV. RFP SUBMISSION REQUIREMENTS AND NOTICE TO INTERESTED PARTIES ON HOW TO POTENTIALLY PROTECT CERTAIN PORTIONS OF THEIR PROPOSALS

All interested parties shall submit **five (5)** copies of their proposal to San Juan County along with the completed form attached as "Attachment A" hereto. Four copies of the interested party's proposal shall be a full and complete copies and shall be submitted in hard copy form by either mailing or hand delivering such copy as follows:

If Provided by Mail:

San Juan County
Attn: Purchasing Agent
117 South Main Street
PO Box 9
Monticello, Utah 84535

If Provided by Hand Delivery:

San Juan County
Attn: Purchasing Agent

117 South Main Street, Room #202
Monticello, Utah 84535

The fifth copy shall be submitted in "PDF" form. This copy may be submitted on a CD, flash drive, or other electronic storage medium and provided, along with the first copy, either in the mail or by hand delivery.

If the interested party's proposal either does not contain information that may be protected under Section 63G-2-305(1) or (2) of the Utah Code or the interested party does not want to protect information that could be protected under Section 63G-2-305(1) or (2) of the Utah Code, then the interested party's second copy of its proposal, provided in "PDF" form, shall be a full and complete copy of the interested party's proposal.

If, however, the interested party's proposal does contain information that may be protected under Section 63G-2-305(1) and/or (2) of the Utah Code, and the interested party would like to protect such information in its proposal, then the interested party shall comply with Section 63G-2-309 of the Utah Code.

If the interested party does not strictly comply with all of the foregoing provisions of this section, San Juan County, upon receiving a GRAMA request for the interested party's proposal, will release a full and complete copy of the interested party's proposal.

All costs associated with the preparation of the proposal, as well as any other related materials, will be the sole responsibility of the interested party. All proposals become the property of San Juan County upon submission. San Juan County reserves the right, but is not obligated, to reject any or all proposals submitted.

All project specifications, manuals, preliminary drawings, and construction drawings, whether digital or hard copies will all be tied directly to this project and shall be provided to and owned by San Juan County.

Further submission requirements are set forth in the Attachment B sections below:

Attachment A

Feasibility Study

San Juan County Public Safety Building Feasibility Study

January 11, 2021

ajc architects

content

part one
introduction

pictured: monticello city

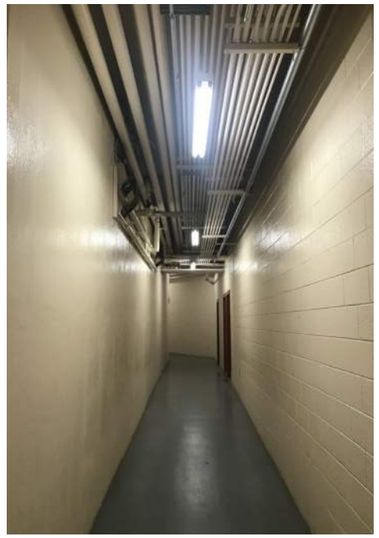
executive summary

The purpose of this study is two-fold. The first effort is to identify current and future program needs for the existing facility and to study the necessary code updates since the previous design had been completed in 2009. The second purpose is to identify how to adapt the facility to a post Covid-19 reality, which includes increased needs for quarantining and population separation.

The study provides a summary of new program needs, mechanical and electrical building system updates, and operational requirements impacting the total capacity and reuse of existing building spaces. The study also considers site improvements needed to accommodate new programmatic spaces such as a new outdoor recreation yard and additional parking.

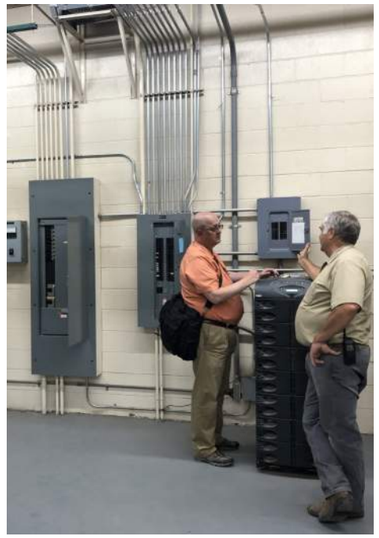
The architectural scope of this study is primarily focused on the interior remodel and accompanying addition to the existing building. The feasibility design proposes two primary additions to the building; one for the courts system on the west side of the building and one for corrections on the east side of the building. The study also includes limited modifications to the site and existing grades as dictated by new entry and operational needs.

Also provided is a detailed summary of the desired program and individual space needs. A detailed program of individual spaces and uses has been included for reference. The program is broken into the following overall categories: inmate housing, inmate medical, corrections intake, corrections support, corrections administration, corrections programming, courts, police-courts, building support. The proposed concept was configured with the anticipation of a potential future phase that could add a significant number of beds to the facility. Critical operational and service spaces were located in areas that would allow future service to a large addition to the east side of the building.



pictured: photos of the existing public safety building and surrounding area

pictured: photos of the existing public safety building



pictured: photos of the existing public safety building and surrounding area

study participants

01. **Mack McDonald** | mmcdonald@sanjuancounty.org
    Chief Administrative Officer | San Juan County
02. **John Young** | jyoung@sanjuancounty.org
    Jail Commander | San Juan County
03. **Jill Jones**, AIA, NCARB, LEED AP BD+C | jjones@ajcarchitects.com
    Principal in Charge | ajc architects
04. **Heber Slabbert**, AIA, NCARB | hslabbert@ajcarchitects.com
    Principal Partner | ajc architects
05. **Aaron Rask Codden**, AIA, NCARB, WELL AP, LEED Green Associate | acodden@ajcarchitects.com
    Project Support | ajc architects

location

San Juan Public Safety Building
297 South Main Street
Monticello, Utah 84535

project description

The San Juan County Public Safety Building is an existing facility operating as a public courts, sheriff's office and correctional facility. The existing facility requires updates to meet current code and health safety requirements as well an expansion of the total number of beds.

project justification

This new facility study is justified for the following reasons:

01. The current facility is not equipped to accommodate the health and safety requirements necessary to effectively manage the spread of Covid-19.
02. The previous study was completed under an out-dated version of the code and as such requires updates to meet current code requirements.
03. The demands and operational needs of the current facility have changed since the 2009 plans were completed.
04. Facility requires an expanded number of correctional beds to increase total facility capacity.

part two
program

San Juan County Public Safety
space area summary

space	space name	preferred level	occupancy	sf per occupancy	program sf	number of spaces	total net square feet	notes

NOTE Only remodeled/addition spaces are listed in this document per the 2009 preliminary study by Archiplex.

A.	**Corrections Inmate Housing**							
A.1	Men's Dormitory (Small)	1	10	55	550	1	550	Double bunk bed, dining, restrooms. Replaces existing multi-purpose .
A.2	Men's Dormitory (Medium)	1	16	55	880	1	880	Double bunk bed, dining, restrooms. Replaces existing kitchen .
A.3	Men's Dormitory (Large)	1	32	55	1,760	1	1,760	Double bunk bed, dining, restrooms. Replaces existing outside rec yard and booking office.
A.4	Men's Remodeled Trustee Dormitory	1	16	65	1,040	1	1,040	Existing space that will be modified smaller to accommodate hallway if needed.
A.5	Men's Work Release Dormitory	1	10	65	650	1	650	Existing space that will be modified smaller to accommodate hallway if needed.
A.6	Women's Dormitory	1	16	55	880	1	880	Includes mezzanine. Separate and secure circulation from men's circulation.
							5,760 TOTAL NSF Corrections Inmate Housing	
B.	**Corrections Inmate Medical**							
B.1	Medical Office	1				1		Room for 2 medical stations, with line of sight view of detox and holding cells. Remains in current location.
B.2	Detox Cells	1				2		Existing
B.3	Holding Cells	1				2		Existing
B.5	Medical storage room	1			120	1	120	Secure access storage room for medications
							120 TOTAL NSF Corrections Inmate Medical	
C.	**Corrections Intake**							
C.1	Booking	B	2	100	200	1	200	Typically supports 8-10 people at a time arriving from state facilities - inmates are processed quickly, space will not require cuff bars, typically only need open common
C.2	Detox	B			100	3	300	Hardened cells - anti-ligature..
C.3	Property Storage	B			500	1	500	Compact storage system still being considered (potential sf savings).
C.4	Sallyport Garage	B			2,200	1	2,200	Room for two overhead doors that can fit UDC transit vehicles (vans).
C.5	Shower	B			90	1	90	Hardened/durable - anti-ligature.
C.6	Intake	B	10	15	150	1	150	8-10 inmates - standing room only, waiting for quick processing to next space.

space	space name	preferred level	occupancy	sf per occupancy	program sf	number of spaces	total net square feet	notes
NOTE Only remodeled/addition spaces are listed in this document per the 2009 preliminary study by Archiplex.								
C.7	Offices	B	1	120	120	3	360	Booking staff offices.
C.8	Open Office	B	3	80	240	1	240	
C.9	Janitor	B			60	1	60	
C.10	Office Storage	B			120	1	120	
							4,220 TOTAL NSF Corrections Intake	
D.	**Corrections Support**							
D.1	Kitchen	1			1,500	1	1,500	All food prep on site with bulk delivery, anticipate delivery up to twice a week.
D.2	Kitchen Break Room	1			100	1	100	Open to the kitchen.
D.3	Kitchen Cooler	1			165	1	165	Connected to kitchen.
D.4	Kitchen Dry Storage	1			325	1	325	Connected to kitchen.
D.5	Kitchen Freezer	1			165	1	165	Connected to kitchen.
D.6	Kitchen Gender Inclusive Restroom	1			70	2	140	One is connected to the kitchen office.
D.7	Kitchen Office	1			100	1	100	Connected to kitchen.
D.8	Laundry	1			720	1	720	Floor sink, hand wash sink, counters, island cabinets and carts for folding/sorting, large commercial washers & dryers (need count)
D.9	General Storage	1			900	1	900	Near classrooms and new rec yard.
							4,115 TOTAL NSF Corrections Support	
E.	**Corrections Admin**							
E.1	Exercise Room	B			620	1	620	Two water coolers, one ADA compliant. 25-30 lockers for patrol and corrections staff.
E.2	Shower Room	B			120	1	120	One toilet, one shower, intended for one user.
E.3	Control Room Mezzanine Tower (Main Level)	1			275	1	275	Rec Yard overlook, with controls equipment and "U" shaped control desk.
E.4	Control Room Support (Lower Level)	B			275	1	275	
E.5	Private Office	1			120	5	600	
E.6	Manager Office	1			220	1	220	
E.7	Gender Inclusive Restroom	1			70	1	70	
E.8	Copy Room	1			80	1	80	Upper and lower cabinets, with space for copier.
E.9	Admin Lobby	1			220	1	220	Basic seating space.
E.10	Secure Storage	1			55	1	55	
E.11	Conference Room	1	14	20	280	1	280	
							2,815 TOTAL NSF Corrections Admin	

space	space name	preferred level	occupancy	sf per occupancy	program sf	number of spaces	total net square feet	notes

NOTE Only remodeled/addition spaces are listed in this document per the 2009 preliminary study by Archiplex.

F.	**Corrections Programming**							
F.1	Sgt. Office/Booking Office	1			100	1	100	For program administrators/staff. Simple desk layout.
F.2	Chapel/Family History	1	25	30	750	1	750	
F.3	Future Program Space	B			2,200	1	2,200	Allow for future program expansion, based on building layout, needs to be adjacent to classrooms.
F.4	USU Classroom	B	15	25	375	1	375	Part of Distance Learning Network, on-site servers already in place in secure location.
F.5	USU Office	B			100	2	200	For program administrators/staff. Simple desk layout.
F.6	High School Office	B			100	1	100	For program administrators/staff. Simple desk layout.
F.7	Video Visiting	1	6	30	180	1	180	Room for 6 visitors sitting at monitor workstations.
F.8	Therapeutic Rehab	B	16	15	240	3	720	Up to 16 inmates per session.
F.9	Therapeutic Rehab Office - Intoxilizer	B		100	180	1	180	Adjacent to therapeutic rehab- room to meet with inmates.
F.10	Women's Restroom	B			70	1	70	Single user, available to therapy and classroom users.
F.11	Men's Restroom	B			70	1	70	Single user, available to therapy and classroom users.
						4,945 TOTAL NSF		Corrections Programming

G.	**Courts**							
G.1	Break Room				180	1	180	Away from public circulation (seating for 4-6 people).
G.2	Clerks				540	1	540	5 Open Office Desks, Secure Filing Cabinets. 2 Exits. 2 pass thru window stations
G.3	Conference	4		35	140	1	140	Access only through county attorney office suite. CA Suite.
G.4	Copy				85	1	85	Upper/lower cabinets with copier. Access only through county attorney office suite. CA Suite.
G.5	County Attorney				210	1	210	Desk, with seating for 2 guests, secure filing cabinets. Access only through county attorney office suite. CA Suite.
G.6	County Attorney Assistant	1		120	120	1	120	Desk, secure filing cabinets. Access only through county attorney office suite. CA Suite.
G.7	New Courtroom				1,580	1	1,580	Jury bench for 8, bailiff, witness stand, clerk stand, judge stand, seating for 5 for prosecution/defense, 2 rows of public bench seating.
G.8	District Court Judge's Chambers				0	1	0	Existing.
G.9	District Court Judge's Chambers Restroom				0	1	0	Existing.
G.10	Gender Inclusive Restroom				70	4	280	
G.11	Holding				95	2	190	Hardened holding cells with bench, and restrooms.

space	space name	preferred level	occupancy	sf per occupancy	program sf	number of spaces	total net square feet	notes
NOTE	Only remodeled/addition spaces are listed in this document per the 2009 preliminary study by Archiplex.							
G.12	Interview		4	35	140	2	280	Adjacent to new courtroom.
G.13	JC Judge's Assistants		2	120	240	1	240	2 Open office stations with secure file storage.
G.14	JC Judge's Chambers				260	1	260	Desk, with seating for 2 guests, secure filing cabinets. Door to JC Judge's Assistants office.
G.15	JC Judge's Chambers Restroom				70	1	70	Unisex stall with access only through JC Judge's chambers.
G.16	Jury & Law Library		10	40	400	1	400	Conference table, millwork with hand wash sink, and mini refrigerator, bookshelves. Has a unisex toiler inside the room.
G.17	District Court Judge's Chambers				200	1	200	Desk, with seating for 2 guests, secure filing cabinets. Door to JC Judge's Assistants office.
G.18	District Court Judge's Chambers Restroom				50	1	50	
G.19	JV Judge's Chambers				200	1	200	Desk, with seating for 2 guests, secure filing cabinets. Door to JC Judge's Assistants office.
G.20	JV Judge's Chambers Restroom				50	1	50	
G.21	Main Courtroom							Existing.
G.22	Public Computer		3	35	105	1	105	3 Public computer stations, with window/storefront for visibility.
							5,180 TOTAL NSF Courts	
H.	**Police - Courts**							
H.1	Probation				140	2	280	
H.2	Probation Restroom (unisex)				70	1	70	
							350 TOTAL NSF Police	

space	space name	preferred level	occupancy	sf per occupancy	program sf	number of spaces	total net square feet	notes

NOTE Only remodeled/addition spaces are listed in this document per the 2009 preliminary study by Archiplex.

I.	**Building Support**							
I.1	Telecommunications				350	1	350	
I.2	Mechanical/Electrical				2,700	1	2,700	
I.3	Security Checkpoint				180	1	180	Secure control point controlling access to courts and clerks offices section of the building.
I.4	Chemical Storage				50	1	50	Connected to laundry facility.
I.5	Trash				120	1	120	Connected to kitchen.
I.6	Staging				300	1	300	Connected to trash and loading dock.
I.7	Loading Dock				550	1	550	
I.8	Restroom Bank				220	1	220	Men's: urinal, WC, lav | Women: 2 WV, lav, accessible by public
							4,470 TOTAL NSF Building Support	

31,975 TOTAL NSF Indoor Program Spaces

75% efficiency factor **42,633 TOTAL GSF** Indoor Program Spaces

J.	**Outdoor Program Elements**	
J.1	Outdoor Rec Yard	2,500
	Community Garden	
	Community Garden Tool Shed	

part three
architectural

architectural

01 site accessibility

Wherever possible, all site paths shall meet or exceed ADA criteria for slope (including cross slopes) and landings. All usable outdoor spaces shall be fully accessible.

02 emergency and non-routine service access

Pathways for emergency vehicles should be provided on two sides of the building. The site currently provides access on multiple sides of the building from several directions. Emergency/service pathways may be integrated into the pedestrian pathways with careful design. However, proper emergency/service vehicle dimensions and weights should be utilized for load calculations in such design situations. The location of the fire department connection, and other related equipment, should be coordinated with the Fire Marshal.

03 fire sprinklers

The building has an existing fire sprinkler system installed. This system will need to be evaluated by a fire sprinkler subcontractor prior to remodel to confirm it meets the NFPA 13 requirements at the time of permitting and construction for the proposed use. The current study and code analysis assumes an expansion of the existing fire sprinkler system for the new additions.

04. general

The existing envelope is primarily a brick veneer facade. The existing roof is a single-ply roofing membrane. The exterior glazing on the existing building consists of a combination of punched openings with storefront frames and entrances with floor to ceiling storefront systems. The inmate program areas have small slit punched windows, operable roof skylights and secure interior storefront systems.

The existing interiors were originally designed in the late 1980's with exposed brick and masonry walls, concrete structure/finishes, carpeted flooring, and gypsum hard lid ceilings. There are several public areas that have acoustic ceiling tile and gypsum board finish. The correctional areas have painted exposed structure, concrete floors, and painted masonry walls.

The new interiors will be pragmatic in finish and function to meet the strict durability and security requirements of correctional facilities. The dorm room ceilings will be painted exposed structure with sealed concrete floors for ease of maintenance. The classrooms and offices will require painted gypsum ceilings to prevent concealed hiding spaces and carpet to improve acoustic performance. Carpet should be selected in darker colors to accommodate the build-up of oil and dirt from inmate traffic and use. The interior walls will need to be painted CMU to maximize durability on the lower two levels of the east addition.

The west addition will have painted gypsum walls and ceilings in the court related spaces except where inmate traffic occurs. These areas will require masonry and exposed concrete structure for durability and security. The new proposed third level for correctional administration is being proposed as a metal stud framed construction type with gypsum finishes and acoustic ceiling tile with carpet finishes typical to office spaces. This space will require less durable finishes which will help reduce construction costs and complexity.

The project also requires a commercial kitchen with dry and cold storage for extended food supplies. A new expanded commercial laundry facility will be included with storage space for large laundry carts.

The program also calls for educational classrooms and learning spaces with secure circulation to allow for male and female inmate populations to access the spaces while remaining completely separated.

New dorms are configured in a range of sizes from small to large to allow for the flexibility of effectively quarantining new arriving inmates in staggered groups to minimize introducing infectious spread, or to quarantine current inmates as needed. This effort to minimize the introduction of outside contaminants is further supported by a new intake area with improved separation from the rest of the existing inmate population.

The administration level includes workout and locker rooms, conference and office space and storage for correctional officers.

Finally, the judicial wing provides additional courtroom spaces and supporting inmate circulation and interview rooms. The new layout allows for a safer configuration for judge and clerks quarters, locating them further from the public gathering spaces and inmate circulation.

05. building access

The renovation will add a more functional service dock area with redundant levels of security/access control. The primary public entrance on the southwest side of the building, on the main level, has an existing storefront vestibule and will remain unchanged.

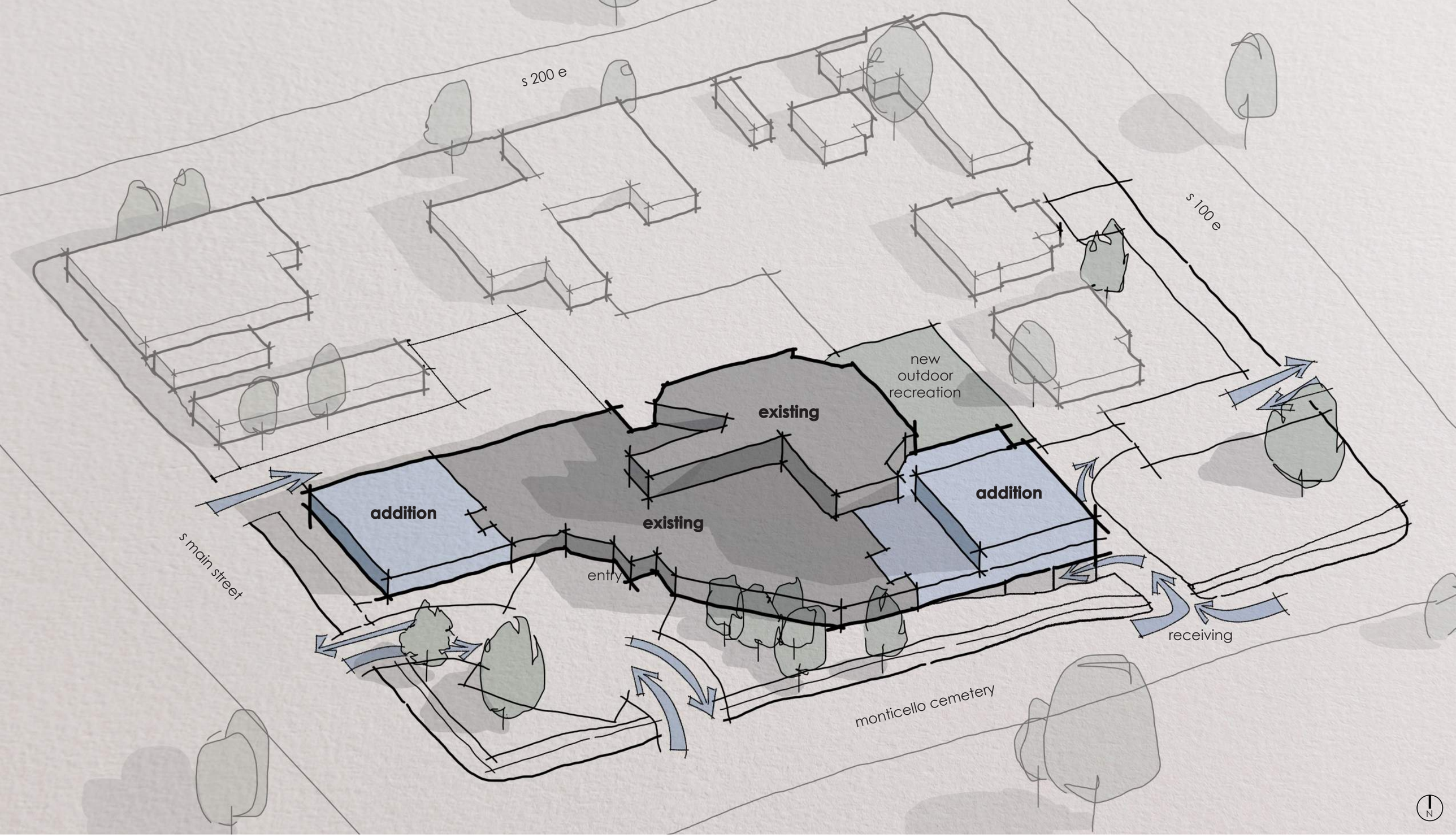
An exterior secure recreation yard is being proposed on the northeast corner of the building, with perimeter walls and an overlooking watch tower. The community gardens will likely be relocated within this area along with a locked storage room for gardening supplies.

06. energy performance

This project will be required to maximize energy efficiency and minimize long term operation costs. It will not however be required to meet LEED standards but will recommend following the State of Utah High Performance Building Standards.

pictured: photo of existing secured skylights above dorm rooms

part four
concept



perspective sketch of additions

concept

san juan county public safety building

SAN JUAN COUNTY SHERIFF'S OFFICE

ajc architects

site plan

concept

san juan county public safety building

scale: 1" = 50'

0' 25' 50' 100' 150'

SAN JUAN COUNTY SHERIFF'S OFFICE

ajc architects

existing conditions shown in grey

lower level floor plan

concept

san juan county public safety building

scale: 1/16" = 1' 0"

0' 8' 16' 32' 48'

SAN JUAN COUNTY SHERIFF'S OFFICE

ajc architects

first level floor plan, west side

concept

san juan county public safety building

scale: 1/16" = 1' 0"

0' 8' 16' 32' 48'

SAN JUAN COUNTY SHERIFF'S OFFICE

ajc architects

police
chief's office
sheriff
under sheriff
men's large dormitory
medical office
medical storage
suicide watch
suicide watch
holding
holding
men's medium dorm #1
men's medium dorm #2
men's medium dorm #3
elevator mech. room
work release
trustee
light well for level below
janitor
indoor recreation
restroom
equipment storage
office
break
freezer
cooler
laundry
kitchen
elev.
rec. yard tower
women's dormitory
general and dry goods storage

existing conditions shown in grey

first level floor plan, east side

concept

san juan county public safety building

scale: 1/16" = 1' 0"

0' 8' 16' 32' 48'

SAN JUAN COUNTY SHERIFF'S OFFICE

ajc architects

existing conditions shown in grey

upper level

concept

san juan county public safety building

scale: 1/16" = 1' 0"

0' 8' 16' 32' 48'

SAN JUAN COUNTY SHERIFF'S OFFICE

ajc architects

part five
civil

civil

The San Juan County Public Safety Building will require site upgrades to accommodate additional users and utility demands. These proposed site upgrades include the following.

01. parking

There are currently 46 existing parking spaces on the San Juan County Public Safety site. Local building authorities will dictate the number of parking stalls required to accommodate additional use of the expanded facilities. The landscaped area on the southeast corner of the property can potentially accommodate 41 additional parking spaces which should be sufficient. Additional hard surfacing in this new area will create a small amount of additional runoff which will be evaluated and mitigated as required.

02. utilities

The expansion of the Public Safety Building will likely require the resizing of existing water mains, fire supply main, and new or additional sewer connections. During the design phase natural gas and power connections will be evaluated and sized based on demands derived from the mechanical design. New communications and data lines will be incorporated into the new design.

03. outdoor recreation area

The area directly east of the building currently being used as access to trailer storage and a garden plot will be used for an outdoor recreation area. This area will be accessed directly from the inmate stairwells. Secure fencing will be required around the perimeter of this area. New concrete will also be needed to convert the garden area to recreation space.

04. access to storage yard

The new outdoor recreation area will eliminate the current access to the County Trailer storage area. A new access connecting to the north parking lot will need to be created to provide access to this area if the county desires to continue storing trailers here.

pictured: photo of existing site, east gate

pictured: site aerial image

part six
structural

structural

01. foundation system

A geotechnical report for the project has not been received at this time. A geotechnical investigation and report will need to be completed prior to proceeding with the design phase of the project.

The foundation system of the existing building consists of reinforced concrete spread footings. It is anticipated that the structural systems and foundation loads for the new addition will be similar to the existing building. The structure of the new addition can most likely be supported by reinforced concrete spread footings in similar fashion to the existing building.

02. floor structure

It is anticipated that the structural systems for the new addition will be similar to the existing building.

At ground level floors a concrete slab on grade will be placed over a granular layer that will function as a capillary break. A vapor retarder membrane will be placed in areas where moisture sensitive flooring is installed on the slab on grade.

At secure areas of the addition the anticipated floor structure will probably consist of reinforced concrete pan joists or flat slabs as determined by the span of the floor structure. Pan joists and flat slabs will be supported by reinforced concrete girder beams which will in turn be supported by reinforced concrete columns. Some parts of the pan joists and flat slabs will be supported by concrete foundation walls or masonry bearing walls.

The structural system at the suspended floors at non-secure areas can be either reinforced concrete similar to the secure areas, or a steel framed system. It is anticipated that a steel framed system would consist of composite steel beams and girders with a concrete floor slab on steel floor deck. Open web steel joists may also be considered for the floor system. The floor system at non-secure areas should be selected by the design team based on the relative cost of the two systems considering the potential benefit of a single system for the entire floor area. It also seems possible that the concrete floor slab on steel deck may be sufficiently durable at secure areas.

03. roof structure

Areas of the roof structure that are above secure areas will probably be of the same construction as the floors described above.

It is anticipated that the framing system above non-secure areas may consist of 1 ½" deep galvanized steel deck supported by open web steel joists or steel wide flange beams and girders. The steel wide flange beams and girders will reduce the depth of the roof structure compared to steel open web joists and girders. Additional wide flange beams may also be used selectively at roof areas that support mechanical equipment or are otherwise irregular in shape.

The roof structure may either be constructed as a basically flat structure but sloped to drain, or as a completely flat structure with tapered insulation on the deck to provide slope toward the roof drains. At irregularly shaped areas of the roof it may be preferable to construct the roof as a flat structure and tapered insulation to provide proper drainage.

04. walls

Below grade foundation walls will consist of cast-in-place reinforced concrete. Above grade structural walls will for the most part be reinforced masonry. Some above grade walls may be reinforced concrete for security or other purposes. Many of the reinforced masonry and concrete walls will function as bearing walls to support floor and roof structures.

05. lateral force resisting system

A reinforced masonry/concrete shear wall system is anticipated for the lateral force resisting system of the new addition. The reinforced masonry/concrete shear wall system will experience a low magnitude of horizontal drift under earthquake and higher velocity wind loads. Calculated lateral drifts in the building shall not exceed the story drift limits specified in the code for a Risk Category III building. Due to the relatively low earthquake ground motions at the site it is expected that there will be little challenge to meet the code drift requirements.

It is anticipated that overturning and sliding forces in the shear walls will be resisted by reinforced concrete spread footings. The footings will be of sufficient size to keep toe bearing pressures within the geotechnical design limits of the final soils report.

06. remodeling of existing structure

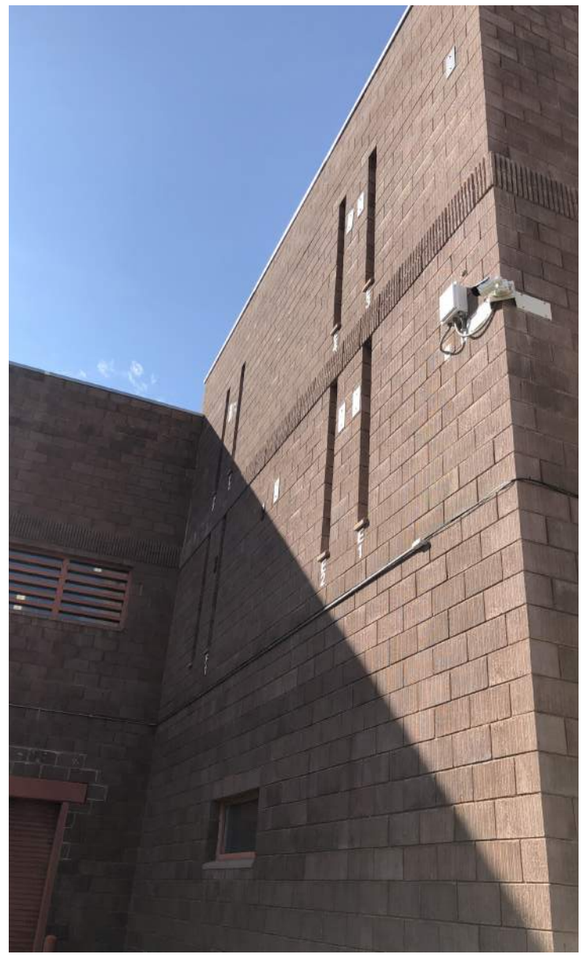
The existing structure may need to be altered where it interfaces with the new addition or at modifications within the existing floor plan. All alterations and/or additions to the existing structure shall comply with the requirements of the 2018 International Existing Building Code (IEBC) or the edition in force at the time of the design work.

07. future expansion

Future expansion of the new addition is not anticipated at this time, but if future additions are constructed the assumption is that they will be adjacent to the existing building and structurally separated. At this time there are no plans to design the new structure to support the load from future vertical expansion.

08. structural design criteria and material strengths

The structural design criteria and material strengths listed below are according to our best estimate at this time based on the information above. The criteria and strengths shall be evaluated by the design team as the design progresses and revised as needed. The structural design will be according to the 2018 International Building Code and ASCE 7-16 Minimum Design Loads for Buildings and Other Structures, or the code in force at the time the addition is designed. Preliminary design criteria are as follows:



pictured: photo of existing masonry exterior and dorm room openings

a. Governing Building Code 2018 International Building Code (IBC) with Utah Building Code Amendments

b. Risk Category III

c. Design Uniform Roof Snow Load 52 psf (snow drift per IBC)
Ground Snow Load 67 psf
Snow Importance Factor IS = 1.1

d. Suspended Floor Live Loads

Offices	50 psf live load plus 15 psf partition load
Assembly areas	100 psf live load
Stairs, Corridors and Exit ways	100 psf live load
Cell Blocks	40 psf live load
Mechanical rooms	125 psf or as required by mechanical equip.

e. Lateral Loads

1. Seismic Loads:

Short Period Spectral Acceleration	SS = 0.179
One Second Spectral Acceleration	S1 = 0.057
Importance Factor	Ie = 1.25
Seismic Design Category	B
Site Class	D assumed
Response Modification Factor	Determined by design team

2. Wind Loads:

Basic Wind Speed	110 M.P.H.
Exposure Type	C

Preliminary Working Stresses for Materials are as follows:

a. Concrete (28-day strengths):

Concrete Footings	f 'c = 3000 psi
Interior Slab on Grade	f 'c = 3000 psi
Concrete on Steel Floor Deck	f 'c = 3000 psi
Reinforced Concrete Floors	f 'c = 4000 psi
Reinforced Concrete Columns	f 'c = 4000 psi
Exterior Slab on Grade	f 'c = 4500 psi
Concrete Foundation Walls	f 'c = 4500 psi

b. Reinforcing Steel ASTM 615 Grade 60 fy = 60 ksi

c. Structural Steel:

Steel Wide Flange Beams and Columns	ASTM A992 fy = 50 ksi
Misc. Steel	ASTM A-36 fy = 36 ksi
Steel Tube Sections	ASTM A50 Grade B fy = 46 ksi
Steel to Steel Bolts	ASTM A325 or A490
Anchor Rods	ASTM 307 or ASTM F1554

part seven
mechanical

mechanical

01. executive summary

The San Juan County Justice Courts and County Building is proposing a 25,000 to 30,000 square foot addition to the existing county building. The existing building serves a variety of County departments including police and sheriff departments, corrections, courts, DMV, administration and dispatch.

The proposed space would generally serve inmates, sheriff staff, and corrections staff. The space will include an expanded kitchen facility capable of serving up to 300 people. Other space uses include; new laundry facilities, therapy, detox, medical and rehabilitation areas as well as housing and classrooms. In total the facility will be adding 35 dorm style cells and up to 60 beds and inmates along with auxiliary services to serve these inmates.

02. existing system and conditions

The existing building is served by a central boiler plant on the ground level. The heating system consists of two 627 MBH boilers, air separator, and compression tank and inline circulation pumps. One boiler has been replaced in recent years, the other is aging.

The various wings of the building are served by interior AHU's above the jail control center. There are three Air Handling Units currently serving the building. Duct mounted heating coils are located in the Air Handler room to serve the inmate areas, court room, and office spaces. There is currently no preheat coil in the AHUs.

Cooling is provided by evaporative cooling. This includes a direct evaporative cooling section in each interior AHU, and indirect cooling coils tied to a roof mounted cooling tower. The facility has had problems with the evaporative cooling system. The air handling units are Temptrol DF-12MEVC units which provide supply air to the zones.

Domestic water is provided by a domestic water boiler and storage tank. There have been concerns with the lack of mixing valves and supply of hot water at high demand times. The 200 gallon storage tank was manufactured in 1988.

In addition to the existing heating systems there is a snow melt system which serves the recreation yard and sidewalks.

The existing building automation control system is an outdated pneumatic controls system and needs to be upgraded.

03. existing building recommendation summary

The controls system shall be updated to a modern direct digital control (DDC) system with remote access and alarms for diagnostics. The fire detection and alarm shall also be updated to current code. All existing heating coils shall be provided with new controls. Provide a test and balance of all existing systems.

The existing boiler plant shall be upgraded to provide the additional heating and pumping capacity needed to serve both the existing building and the new addition.

top: rooftop mechanical equipment directly above police quarters
bottom: view of upper level mechanical room

top: mechanical room view 1
bottom: mechanical room view 2

04. new addition recommendation summary

The new space will be a 25-30,000 square foot addition consisting of two levels. The space temperature requirements for correctional facility inmates are 65-85 degrees. The state of Utah High Performance Building Standard recommendations are to heat to 68 degrees and cool to 75. Although this is not a state owned facility, we have been asked to use the state of the Utah HPBS recommendations for this evaluation. There is a high density of people per square foot. The facility has concerns about the existing air flow and stagnant air. In the winter there is condensation on the walls and windows due to the latent load of people. These concerns will be addressed in the addition with greater ventilation requirements by a proposed 100% outside air system.

Air Handler with VAV: This unit shall be provided with a pre heating coil to serve the Variable Air Volume with reheat (VAV) system below. This will require upsizing the existing boilers. Cooling will be achieved through DX cooling. The AHU will be provided with an energy recovery section and an economizer capable of 100% outdoor air to the cell areas. Condenser coils shall be provided with hail guards. AHU Smoke detection shall include a remote test panel. The AHU shall be located on the roof and primary ductwork shall be located within the ceiling space of the addition. The AHU and exhaust system shall be integrated into a new smoke control system for the new addition as well.

There will be new laundry equipment required for the additional housing. There will be one additional industrial washer and dryer. The dryer shall be gas fired requiring both gas piping and exhaust ductwork. The exhaust shall be located in a sidewall to prevent excess lint from clogging coils in mechanical equipment on the roof. Booster fans may be required depending on length of vent.

Through the addition the existing kitchen shall be relocated to an expanded full service kitchen. New kitchen exhaust hoods and make up air unit shall be provided in the expansion. All new hoods shall be provided with fire detection and suppression. New gas piping with automatic gas shut off valve shall serve all gas fired kitchen equipment. The MAU shall include gas heat and evaporative cooling.

The plumbing fixture count will be evaluated and additional domestic piping will be provided to the new units through the existing distribution system. This includes providing piping to all new housing units, kitchen, janitorial and showers.

Domestic cold water, new piping shall be routed to the addition and new plumbing fixtures. Shut off valves shall be provided at each unit and main branch takeoff for ease of service. Provide a new larger PRV station at existing building to accommodate additional domestic water load.

Domestic hot water new piping shall be routed to the addition and new plumbing fixtures. Shut off valves shall be provided at each unit and main branch takeoff for ease of service. The existing domestic water heater and storage tank shall be evaluated for capacity and should be upgraded. A recirculation pump on the domestic hot water distribution will be used to meet energy code and provide quick response in the hot water system. The existing storage tank shall be removed and replaced to match the increased demand in the hot water system. A new master mixing valve shall be provided as well as point

04. new addition recommendation summary (cont'd)

of use mixing valves at the fixtures. The facility has requested control of the showers. Showers shall be provided with timers and accessible shutoff valves.

Plumbing fixtures: In general there will be steel penal fixtures in place in the inmate living quarters. Specialty units where ligature fixtures are required shall be provided. These are in the medical, suicide watch and detox rooms. In public and staff areas plumbing fixtures shall be standard porcelain with standard hardware.

The drainage shall be served by new sanitary sewer. Existing sanitary sewer piping is routed to a sewage grinder. New piping shall tie into existing piping prior to the grinder. The existing sewage grinder shall be evaluated by civil site utility engineer for sizing and the new service requirements.

Kitchen: Addition requires additional gas piping to serve cooking equipment. Current meter and pipe sizing shall be increased for additional capacity. New domestic water as well as sanitary sewer and vent piping shall serve the new space. The size of the existing grease interceptor will also need to verified and possibly replaced due to the increased capacity of the kitchen services.

Fire Protection: The new addition shall be sprinkled and alarmed per NFPA standards. The HVAC system shall include smoke control per code requirements for a correctional facility.

05. design conditions

The mechanical system shall be designed to maintain comfort condition in accordance with the Utah State Energy Code, DFCM A/E Design Guide, and ASHRAE 90.1 2016.

- Elevation: 7,070 Ft.
- Ambient: (ASHRAE 2-1/2%, 97.5%)
  - Summer 95°F DB 65°F WB
  - Winter 5°F DB

- Indoor Conditions:
  - Summer 75°F
  - Winter 68°F

- Envelope:
  Envelope insulation, U-values, and infiltration rates shall be coordinated with the owner, architect, mechanical engineer, envelope commissioning agent, and energy model.

- Ventilation Rates: ASHRAE 62-1

- Internal Heat Gain:
  People: ASHRAE Estimates for Level Activity or program estimated counts for areas such as classrooms with average design occupancies.
  Equipment: ASHRAE Estimates for the Following
  - Computers/Servers
  - Copy Machines
  - TV Monitors, equipment, and electronics
  - Special Lighting
  - Any other heat producing equipment

  Lights: Coordinate with electrical engineer and energy consultant.

06. applicable codes

The mechanical system for the building shall be designed and installed in accordance with the most recently adopted codes and standards:

- International Building Code (IBC) including all appendices
- International Mechanical Code (IMC)
- International Plumbing Code (IPC)
- International Energy Conservation Code (IECC)
- National Electrical Code (NEC)
- National Fire Protection Association (NFPA)
- ASHRAE 90.1
- ASHRAE Standard for Ventilation 62-1
- ASHRAE Guides and Standards (ASHRAE)
- State of Utah Boiler and Pressure Vessel Rules and Regulations
- American Society of Mechanical Engineers (ASME)
- American Standards Association (ASA)
- American Society of Testing Materials (ASTM)
- Sheet Metal and Air conditioning Contractors National Association (SMACNA)
- Occupational Safety and Health Administration (OSHA)
- DFCM Indoor Air Quality Criteria
- International Fuel Gas Code (IFGC) and Questar Regulations
- Utah State High Performance Building Standard.
- Department of Corrections (DOC) guidelines
- National institute of Jail Operators (NIJO)

07. heating, ventilating, and air conditioning

The new building shall be heated, cooled, and ventilated with systems that will balance performance, efficiency, and maintainability. Mechanical systems shall be suitable for the building function and occupancy in accordance with ASHRAE and IMC standards. HVAC systems shall be designed for administration offices, work rooms, intake rooms, inmate rooms, common areas, intake areas etc. as described in the architectural program and space summaries.

For planning purposes, based on the anticipated mechanical space and the adjacent building systems, preliminary systems shall be a VAV rooftop unit with a boiler and VAV reheat system. Other systems may be evaluated by the design team using information from the mechanical engineer, building energy consultant, San Juan county facilities staff, and owner experience and preferences.

08. heating system

Assuming a VAV reheat system, the heating source for both the existing building and new addition shall be high efficiency boiler(s) for the reheat coils and hot water pre-heat. Heating water shall be distributed through both the existing and new buildings using parallel variable flow heating water pumps. It shall include reheat coils located at the VAV boxes, and may or may not include pre-heating coils at the AHU level. The heating hot water pumps shall be designed with 100% redundancy. The heating hot water system shall consist of hot water distribution pumps, standby pumps, variable frequency drives, pre-heat coil inline circulating pumps, air eliminator, and expansion tank complete with automatic make-up water system. The entire hot water system shall be controlled by DDC controls and completely integrated into a central head end. Hot water piping shall be sized

08. heating system (cont'd)

for no more than 6 fps velocity and 4 HD/100' Loss. Piping shall be carbon steel schedule 40, threaded and welded joints throughout the building, and potentially grooved joints in mechanical rooms only. The heating water source shall be high efficiency condensing boilers. System shall be designed for central heating equipment redundancy (such as multiple boilers and pumps).

09. cooling system

Cooling source for the new building shall be included as part of a packaged DX VAV rooftop unit(s). Building cooling system shall be integrated into DDC controls system. Cooling system shall have provisions for demand limiting strategies through the building automation system. System shall include provisions for individual temperature control, low load modulation, and high efficiency operation.

10. air systems

Air system for the new building shall be provided to meet ventilation requirements for ASHRAE 62, and shall be controlled as necessary to meet the HPB standards. Design shall include 100% outside air to the cell areas with an energy recovery (ERV) section to improve indoor air quality. Air shall be supplied from a variable volume roof mounted air handling unit, with VAV boxes for individual spaces or zones. Air may be distributed by overhead diffusers. Diffusers shall be security rated and anti-ligature fixtures in coordination with the architectural requirements for each space. The number of air handling units and their locations shall be determined by space availability, location, usage, requirements and economics. The use of return/relief fans shall be determined during design. Return fans are encouraged where there are large pressure drops or long runs through return air systems, or if additional control of building static pressure is required.

Roof and ceiling mounted exhaust fans, depending on usage, shall be provided for the copy rooms, toilet rooms, elevator machine rooms, custodial closets, smoke evacuation, and any other areas where odors or particulates may be present. The exact number and location of the fans shall be determined during design.

Outside air ventilation shall comply with ASHRAE Standard 62-1. Outside air system may include demand control ventilation carbon dioxide sensors at the administrative areas in order to provide adequate ventilation and improved energy efficiency. The number and location of fresh air inlets, and relief air outlets shall be determined during design. Fresh air inlets shall not be located in any location where contamination of the air can take place, i.e. carbon monoxide, lawn fertilizer, plumbing vents, etc.

The air handling system shall be controlled by a DDC control system that is 100% integrated into the central control system. Additional specifics of the control system shall be coordinated with San Juan County during design, depending on the system that is selected.

All ductwork shall be insulated metal duct with volume dampers for each branch diffuser or register. Air distribution systems for distance offices, classrooms and conference rooms shall be designed to provide a quiet, comfortable learning and working environment.

above: mechanical room view 3

Provide secure access to the equipment, such as VAV boxes, located above ceilings.

11. acoustics

All systems shall be designed to minimize HVAC noise. Low pressure ductwork in the sound sensitive areas shall be designed for a maximum pressure drop of 0.08"/100'. Individual components, including diffusers, grilles, VAV boxes, etc. located in these areas shall be designed for a maximum NC=25. Piping in these areas shall be designed for a maximum velocity of 4 fps or 4 HD/100'. Mechanical equipment located near these areas shall be designed with vibration isolation, including inertia bases at pumps, internal spring isolators at fans, flex connectors at piping and ducts, sound attenuators, etc. All ductwork shall be properly sealed and insulated.

Restroom exhaust at individual cells and shower rooms shall be designed to locate the fan remotely in order to minimize noise and disturbance at adjacent spaces.

12. plumbing systems

Plumbing systems shall be designed to meet the International Plumbing Code as adopted by the State of Utah.

The existing building is equipped with standard efficiency domestic hot water gas fired water heaters and storage tank. A secondary water heater is currently used to support the kitchen. New water heaters, storage tank and master mixing valves are required to support the new addition and kitchen facility. This may include high efficiency storage type, instantaneous, or a boiler or heat exchanger and storage tank combination. Provide recirculating pumps, mixing valves at point of use, etc.

Plumbing fixture manufacturers shall use consistent manufacturers throughout the building. Provide ADA compliant fixtures as required by code as well as penal ware and ligature resistant fixtures.

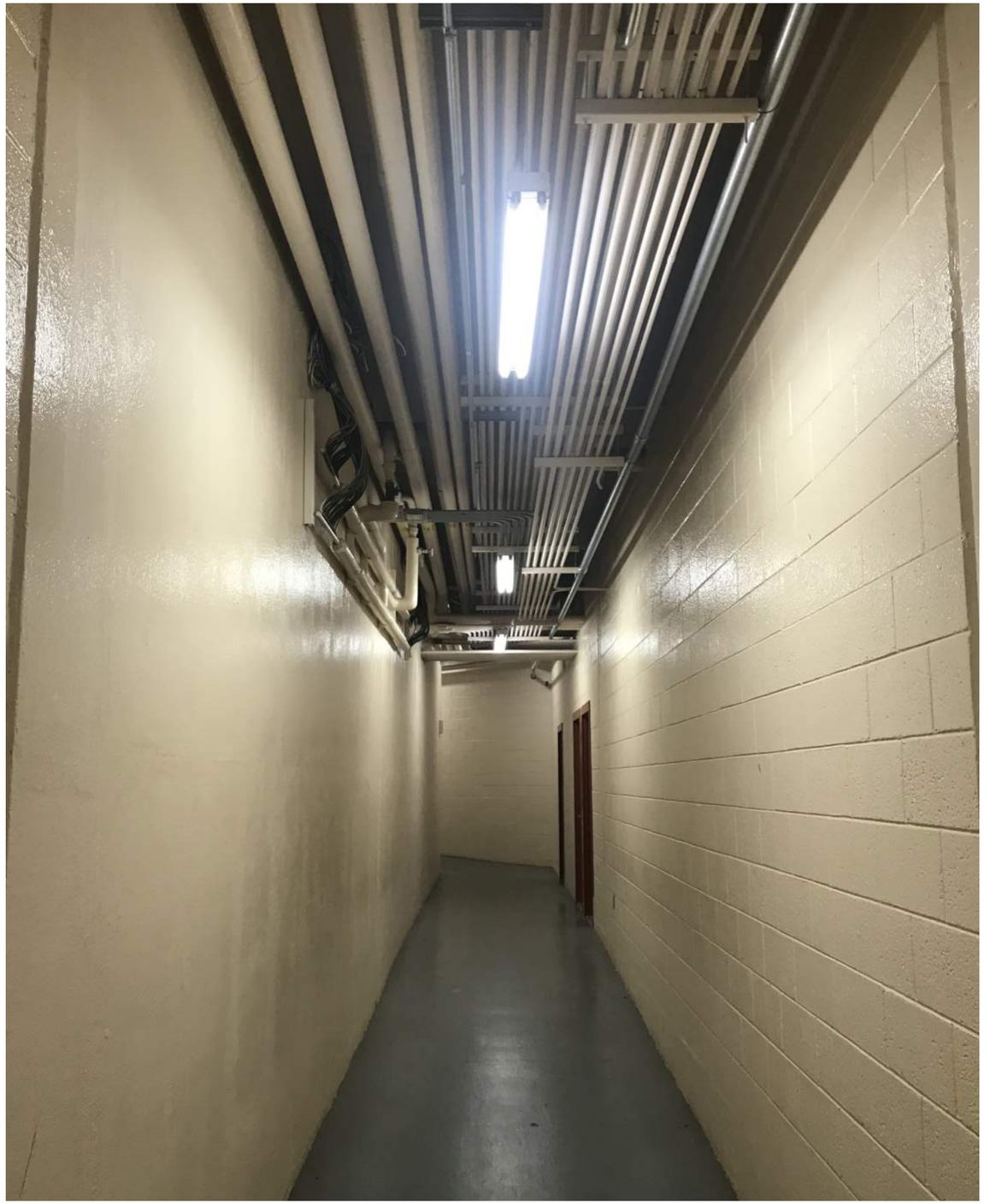
Provide mixing valves to meet ADA tempering requirements under each lavatory using auto faucets and shower locations.

Lavatories shall be wall mounted, or unitary, stainless steel with push button activation. Lavatory faucets shall be low flow to meet State of Utah HPB requirements.

Water closets for cell areas shall be high efficiency flush valve style, and ADA approved with elongated bowl and open front seat. Bowl shall be stainless steel. Water closets and lavatories may be combination security type fixtures as coordinated with architectural plans.

Project shall include a full service kitchen. Kitchen equipment and systems shall be provided by food service designer and contractor. Where 3 compartment sinks are used, provide indirect waste to a floor sink. Provide a separate grease waste line to a grease interceptor by the civil site utility contractor. Provide 140 degree water to fixtures where required by health code.

Floor drains shall be provided in all bathrooms, custodial closets, detox rooms, medical watch rooms,



above: passage way currently used for a wide array of mechanical, plumbing, and electrical systems, located on lower level

12. plumbing systems (cont'd)

mechanical equipment rooms, close to water heaters, and any other location where drains are needed or required. Floor sinks and trench drains shall be used in mechanical areas where more water is expected.

Water treatment shall be provided for flushing and cleaning all pipe systems, and as necessary to treat all hydronic systems.

Exterior hydrants shall be provided for landscape and hose connections. Hydrants shall be wall mounted, box cover, key operator, and freeze proof with 3/4" ball valve on water supply line to hydrant.

Roof drainage shall consist of a primary and secondary drainage system.

Provide access to all valves, etc. that require maintenance.

Hot water will be provided to all lavatories, service sinks, cabinet mounted sinks and any fixture requiring hot water. Provide water softener for all domestic hot water systems.

13. fire protection system

Fire sprinkler protection system shall be provided suitable for the building type and occupancy. This will be determined at the start of design. The entire building shall be sprinkled. System shall comply with NFPA, San Juan County Fire Marshal and State of Utah Fire Marshal requirements.

A wet pipe fire sprinkling system, shall be provided complete with fire riser, alarms, panel, piping, sprinkler heads, etc.

The fire sprinkler inspector's test shall be piped into a drain or sewer to prevent water damage.

The fire sprinkler inspector test shall be of the simulated sprinkler head type, and not the glass bulb type.

The contractor shall provide documentation of the acceptability of all fire-safety materials used.

All piping used for fire protection shall be per NFPA and campus standards. Thin wall piping for fire protection is not allowed.

Smoke evacuation shall be provided for the cell areas per code.

14. utilities

Water: Provide a new domestic water line from the existing system to the building addition. Design team shall work with owner and architect for best routing and isolation locations.

All interior above grade water piping shall be type L copper. All culinary hot and cold water piping shall be insulated. Other piping materials such as PP-R may be evaluated with the owner and design team during design.

Existing water PRV station shall be upgraded for increased capacity. PRV shall be set to maintain water pressure to 60 PSIG down stream pressure.

Provide a new fire line to new fire riser(s) within the building. Coordinate with city, civil, and fire marshal.

Sewer: Provide a new Building sewer line from new building to the existing sewage grinder and to the city main, coordinate with city and civil. Design team shall determine the best location for new tie-in, tentatively plan on east side of building. Provide a separate grease waste line to grease interceptor by civil to serve kitchen expansion. Sewer piping shall be cast iron above grade and PVC or ABS below grade. Provide cleanouts as required by code.

Storm Drainage: Provide a new building storm drain line from new building expansion to the city main, coordinate with city and civil. Design team shall determine the best location for new tie-in. Storm drain piping shall be cast iron above grade and PVC below grade. Provide cleanouts as required by code. Roof drain piping inside the building shall be insulated. Primary and secondary roof drain system shall be provided.

Natural Gas: Natural gas shall be supplied from the existing lines serving the site, capacities shall be verified to increase the size of the boilers. Gas supply piping shall be carbon steel piping above ground and in the buildings and polyethylene piping below grade to meet Dominion gas requirements. Existing gas meter shall be upgraded for increased capacity.

part eight
electrical

01. codes

The electrical work will comply with the laws, ordinances, and rules of the State of Utah, and local government. In addition, the following codes are applicable:

- NEC (National Electrical Code) 2017
- IFC (International Fire Code) 2018
- IBC (International Building Code) 2018
- IECC (International Energy Conservation Code) 2018

02. standards

The Applicable standards are as follows:

- UL (Underwriters Laboratories)
- ASTM (American Society for Testing and Materials)
- ANSI (American National Standards Institute)
- NEMA (National Electrical Manufacturer's Association)
- IEEE (Institute of Electrical and Electronics Engineers)
- EIA/TIA (Electronic Industries Association/ Telecommunications Industries Association)
- IESNA (Illuminating Engineering Society of North America)
- LEED (Leadership Energy Efficient Design)

03. raceways

Existing raceways may be reused where they comply with project specifications; EMT conduit (Electrical Metallic Tubing) may be used throughout for branch circuits and feeders. PVC Conduit shall be used under slab and below grade with rigid elbows. MC cable will be allowed in stud walls only. Final conduit connections to lighting fixtures shall be by means of a flexible conduit whip, not exceeding 6 feet in length. Conduit connections to vibrating equipment shall be by means of flexible seal-tite conduit. Conduit fittings shall be malleable steel. Aluminum conduit and conduit fittings will not be allowed. Minimum raceway size shall be 1/2 inch.

04. cable tray

Cable tray or basket tray may be provided in communication rooms, main corridors and large open office areas for telecommunication cabling as requested by owner's telecommunication contractor. Cable tray will be UL-listed, hot-dipped (after fabrication) galvanized corrosion resistant finish systems of sizes, types and capacities indicated, and meeting all requirements of NEMA VE-1. Grind all rough edges, drip concentrations, etc, to smooth finish. Apply cold zinc spray to all field cut surfaces.

05. conductors

Conductors shall be copper. Solid conductor for sizes #14 AWG and smaller; stranded conductor for sizes #12 AWG and larger. Insulation shall be THHN/THWN, rated for 600 volts. Aluminum conductors shall not be acceptable. Minimum conductor size for branch circuits shall be #12 AWG. All conductors will be color coded according to the NEC.

06. voltage drop

The voltage drop for feeders shall be limited to 2 percent. The voltage drop for branch circuits shall be limited to 3 percent.

07. site utilities

The existing electrical service is run under ground to the building from a pad mounted transformer. The existing service in not sufficiently sized to serve the building expansion. A new underground electrical service will be provided. An underground feed will be

above: fluorescent lighting in the lobby (two views above), electrical engineer proposes LEDs throughout the facility only where renovation is taking place, see bullet "10"

run to a new EUSERC metering cabinet. The existing electrical service will be fed from this new service.

08. power distribution

The existing electrical distribution of to the building is 400-amp 277/480-volts, 3 phase, 4 wire. The existing service equipment will remain and will be refed from a new utility service entrance. Surge Protection will be provided for the main electrical service entrance equipment.

09. wiring devices

Wiring devices shall comply with NEMA standards Pub. No. WD 1. Switches and receptacles shall be specification grade, and rated at 20 amps and 120 volts AC. Receptacles shall be 3-wire grounding type. GFI (Ground fault circuit interrupter) type receptacles shall be rated 20 amps, 120 volts AC, with solid-state ground fault sensing and 5 milliamp trip level. Receptacles in toilet rooms, wet areas, or within 6 feet of any sink shall be GFI type. Receptacles on the building exterior shall be GFI type. All coverplates shall be stainless steel or vandal resistant where appropriate. Receptacles on emergency power shall be red.

10. lighting

All existing interior lighting in areas not being remodeled will be remain. In all other areas new lighting will be LED type light fixtures. Fixtures will be provided with 3500 K LEDs or a temperature as requested by the owner.
Lighting Illumination Levels shall be provided per IESNA recommendations. Provide LED luminaires which are tested in accordance with IES LM-79, diodes tested in accordance with IES LM-80, and provide a minimum R9 rating of ≥ 50 (unless specified differently), a CRI rating of ≥ than 80 and L70 (6K) = 50,000 hours (IES TM-21). Provide with 0-10V dimming drivers as standard. In detention areas such as sleeping spaces, dormitories, holding cells, etc. Lighting will be detention grade. All lighting provided will be anti-ligature.

11. exterior lighting

Existing pole mounted area lights will be reused in place. The owner should consider the option of upgrading exterior lighting to LED. Emergency egress lighting will be provided at all building exits.

12. lighting control

Control of existing and new exterior lighting will be by relay panel with astronomical clock. Lighting in the common spaces will be is controlled by programmable relay panel. Lighting in office spaces will be controlled with a combination of toggle switch in combination with automatic occupancy sensors. Lighting in toilet rooms will be controlled solely by occupancy sensors. Rooms and areas with daylight will have occupancy daylight sensors to provide dimming. In secured areas lighting controls will be located and arranged to limit control to authorized staff.

13. emergency power

The facility has an existing 70-KW 277/480V diesel generator. The generator is not large enough to support the building expansion. The existing emergency distribution system serves both life safety and optional loads, which are not allowed under the current NECA new emergency diesel generator will be provided to support the facilities life safety and optional loads. These loads shall include but not limited to the following:

a. Life Safety Loads, including telecommunications, intercoms, door locks, vehicle gates and video

above: the majority of the electrical equipment and controls are located in the mechanical room on the lower level

surveillance system.

b. Optional loads including overhead doors, elevator, dispatch loads, kitchen

equipment, office equipment and the court room.

The new diesel emergency generator will be located outside of the building. The generator fuel tank shall provide 48 hours of capacity at full load. The generator will have a NEMA 3R enclosure. The generator will be capable of starting and assuming the emergency load within 10 seconds of a power outage. Automatic transfer switches will be provided in the existing main electrical room and will be wired to automatically start the generator upon loss of utility power.

14. grounding

Grounding shall be provided for the entire raceway, service entrance, enclosures and equipment system. Grounding shall be provided in accordance with the NEC. A separate grounding conductor shall be provided for all feeders, equipment circuits and branch circuit runs. Grounding conductors shall be sized in accordance with the NEC.

15. surge protective device (spd)

An SPD will be provided on the new service entrance equipment and on all emergency branch panels as required by the NEC. An SPD will also be provided on panels serving electronic equipment.

16. emergency distributed antenna system (das)

A distributed antenna system / emergency communication system will be provided for emergency responders using radio equipment using 800MHz and 450-460MHz UHF bands. The system is required by code if fire departments radio equipment can not operate in the building. A donor antenna will be installed on the roof with a bi-directional amplifier in the basement Equipment Room (ER). Throughout the building omnidirectional antennae, radiating panels, and radiating 1/2" hardline cable will be utilized to ensure sufficient signal strength is achieved. The owner may choose to test the building after construction is complete and add this system if required based on radio transmission test results.

17. two way emergency communication system

The International Building Code (IBC) Section 1007 requires a two-way communication system on all new construction projects for all areas of refuge, regardless of whether the building has a sprinkler system. A call switch will be located at every elevator landing on each accessible floor that is one or more stories above/below the story of exit discharge. The system will also have a timed automatic telephone dial-out to an off-site location.

18. fire alarm

The fire alarm system shall incorporate State Fire Marshals Rules section R710-004 and the design shall be in accordance with the latest version of NFPA 72 Style D initiating circuits, Style Z notification circuits and Style 6 or 7 signaling line circuits (State Fire Marshal Requirement 3.3.3.3.1). Horn/strobe devices shall be 95 dB and a minimum of 15 candela and white or red in color. Smoke detector devices shall be photoelectric type. Manual pull station devices shall be single-action type with key reset. Duct detectors shall be provided in return air ducts for air handling units, which have a capacity in excess of 2000 cubic feet/minute. Control modules for fan shutdown. Monitor modules for fire sprinkler flow and tamper switches. Smoke detectors will be provided in all sleeping areas. In smaller isolated resident rooms, smoke detection will be accomplished with a duct detector to prevent damage by the resident. Protective covers will be provided on all smoke detectors that residents have access to, to prevent damage to units. Smoke detectors will be provided in all hallways and corridors. Smoke detector will be provided at each elevator landing to initiate elevator recall. The fire alarm system interface with the smoke management system will be modified to provide inputs for new or modified smoke zones. All modifications to the smoke management system shall be done by division 23. Vandal resistant covers will be provided where units are accessible by the residents unless the owner indicates that the locations are not at risk of being damages. No notification devices will be located within the resident sleeping areas, where the residents are in a lock down condition. In this case, the facility staff will be trained and responsible to provide notification and instructions to residents on how and where they are to evacuate the facility in the event of an alarm. All fire alarm wiring shall be installed in 3/4-inch conduit.

19. television system

The facility has an existing televisions distribution system. The system shall be expanded to allow TV monitors to be added in new dayrooms, conference rooms and classrooms.

20. telecommunications

The facility has an existing Entrance Facility (EF) which will remain. Power outlets located in communications rooms shall be connected to the emergency generator. At each telephone/data outlet a 4-11/16" x 2-1/8" junction box will be provided with a single gang plaster or tile ring. From each outlet box a 1" conduit will be run to the nearest ER or cable tray. All telecommunication cabling, jacks, racks, etc. will be provided and tested by the Owner's telecommunications contractor.

21. audio/visual

Conference audio/visual systems will comprise of digital and analog (HDMI and VGA) inputs at the conference room table. A table cubby will be included as an integral part of the furniture or provided as a component of AV system. The table cubby will house all of the AV, power and data connections. A flat panel display will be mounted at the end of the room, which will display the output of the user's equipment connected at the table. Wireless video can be added to the system to allow a user the option of mirroring off of a user tablet to the room display. Classrooms / Learning studios will include digital and analog input wall plates for teacher's computer and/or auxiliary devices. Wall plates will connect to a video switcher that will output to a large flat panel display that has interactive capabilities. Depending on the room finishes, and size, either a radio frequency (RF) or infrared (IR) microphone will be used for teacher voice amplification. Loudspeakers will be spaced throughout the room for content audio and voice amplification. System will include distance learning capabilities including video cameras and video codec.

22. energy utilization

The standard that governs the requirements for energy utilization is the High Performance Building Standard and the International Energy Conservation Code (IECC). These standards outline the power density requirements for electrical lighting systems as well as energy related to mechanical cooling and

heating. Advanced metering will not be provided on existing and new electrical distribution equipment.

23. access control system

The access control system shall provide local door control in staff spaces typically outside of the resident accessible spaces. The system shall consist of proximity type card readers, door position contacts and request to exit sensors. Card readers will be proximity type. The system will have a client software interface that can be monitored at central control or any other staff computer that users deem appropriate. The system shall track system usage and monitor doors to ensure that they are kept in a secured state.

24. locking control system

The existing locking control system shall be modified by the HUBL Group. The security workstation shall control all detention movement doors, exterior non-public doors and vehicle gates. Doors shall be interlocked in any space containing more than one controlled door. All security doors shall be controlled from each control room. The existing control system utilizes Indusoft to program the generate the graphical user interface and interface with the locking control system.

25. intercom and paging system

The existing intercom and paging system shall be modified by the HUBL Group. Detention grade intercom stations will be provided throughout the facility at all inmate movement doors, exterior overhead doors and site gates. The intercom system will be integrated into the control stations located at the control rooms. The existing control system utilizes Indusoft to program the generate the graphical user interface and interface with the locking control system.

26. video surveillance system

The existing video surveillance system shall be modified by the HUBL Group to allow the expansion of the system for new surveillance cameras added to the expansion. The system shall allow central control the ability to observe all interior spaces where residents have access and where a security threat may exist. video surveillance cameras will be located so that the entire building perimeter, exercise yards and parking lots can be observed. The primary interior video surveillance camera will be ceiling mounted integrated dome, with a polycarbonate lens. The camera resolutions will vary from HD to 3-megapixel depending upon the required field of view. Exterior video surveillance cameras will be building mounted. Exterior cameras will be an integrated dome style camera with a resolution of HD through 5-megapixel. The primary use of HD resolution cameras will be at entry points where there is a small field of view. The use pan-tilt-zoom cameras will be limited, to avoid the potential of gaps in the recording system. With the use of high-resolution cameras will allow the staff the ability to pan and zoom in a CCTV image. The existing Video Management System (VMS) is produced by Avigalon. As second server will be added for new cameras. The VMS will have its own network distribution so that the VMS bandwidth needs will not impact other facility network needs. The VMS will provide 90-days of video retention. The VMS will allow remote client access, with the ability to restrict user access to only areas of the system that the system administrator feels is appropriate.

part nine

code analysis

DATE: 12/22/20
NAME OF PROJECT: SAN JUAN COUNTY JUSTICE
PROJECT #: 2020-54

CODE ANALYSIS

BUILDING CODES

INTERNATIONAL BUILDING CODE (IBC)	2018
INTERNATIONAL FIRE CODE (IFC)	2018
INTERNATIONAL MECHANICAL CODE (IMC)	2018
INTERNATIONAL PLUMBING CODE (IPC)	2018
NATIONAL ELECTRICAL CODE (NEC)	2017
INTERNATIONAL FUEL GAS CODE	2018
INTERNATIONAL ENERGY CONSERVATION CODE	2018
INTERNATIONAL EXISTING BUILDING CODE	2018
ICC ANSI A117.1	2009
UTAH AMENDMENTS, TITLE 15A	2018

OCCUPANCY CLASSIFICATION – IBC CHAPTER 3

'I' - INSTITUTIONAL GROUP I-3
'B' - BUSINESS

TYPE OF CONSTRUCTION – IBC CHAPTER 6

TYPE II - A	SPRINKLED
TYPE II - B	SPRINKLED

AUTOMATIC SPRINKLER SYSTEM – IBC SECTION 903.2.6
NFPA 13

ALLOWABLE BUILDING HEIGHT – IBC CHAPTER 5, TABLE 504.3
EXISTING: NO CHANGE
ALLOWED: 75 FEET
ACTUAL: 38 FEET

ALLOWABLE STORIES ABOVE GRADE PLANE – IBC CHAPTER 5, TABLE 504.4
EXISTING: NO CHANGE
I-3 (TYPE II-A)
ALLOWED: 3 STORIES
ACTUAL: 3 STORIES

B (TYPE II-B)
ALLOWED: 2 STORIES
ACTUAL: 1 STORIES

ALLOWABLE BUILDING AREA – IBC CHAPTER 5, TABLE 506.2
EXISTING: NO CHANGE
I-3 (TYPE II-A)
ALLOWED: 45,000 S.F.

ACTUAL: 20,453 S.F. LOWER LEVEL
25,550 S.F. MAIN LEVEL
3,962 S.F. UPPER LEVEL

B (TYPE II-B)
ALLOWED: 69,000 S.F.
ACTUAL: 13,077 S.F. MAIN LEVEL

FIRE RESISTIVE REQUIREMENTS – IBC CHAPTER 6, TABLE 601

	TYPE II - A	
STRUCTURAL FRAME	1.0	HOUR RATING
EXTERIOR	1.0	HOUR RATING
INTERIOR	1.0	HOUR RATING
EXTERIOR NONBEARING WALLS	0.0	HOUR RATING
INTERIOR NONBEARING WALLS	0.0	HOUR RATING
FLOOR	1.0	HOUR RATING
(INCLUDING SUPPORTING BEAM AND JOISTS)		
ROOF	1.0	HOUR RATING
(INCLUDING SUPPORTING BEAM AND JOISTS)		

	TYPE II - B	
STRUCTURAL FRAME	0.0	HOUR RATING
EXTERIOR	0.0	HOUR RATING
INTERIOR	0.0	HOUR RATING
EXTERIOR NONBEARING WALLS	0.0	HOUR RATING
INTERIOR NONBEARING WALLS	0.0	HOUR RATING
FLOOR	0.0	HOUR RATING
(INCLUDING SUPPORTING BEAM AND JOISTS)		
ROOF	0.0	HOUR RATING
(INCLUDING SUPPORTING BEAM AND JOISTS)		

ACCESSORY OCCUPANCY – IBC SECTION 508.2
'S' - STORAGE

OCCUPANCY SEPARATIONS – IBC TABLE 508.4
'B' TO 'I-3' 1 HR

INCIDENTAL USES – IBC TABLE 509
LAUNDRY ROOM .100 S.F. NON SEPARATED DUE TO SPRINKLERS

CORRIDORS – IBC TABLE 1020.1;

	SPRINKLED
'I' - INSTITUTIONAL GROUP I-3	0 HRS
'B' BUSINESS	0 HRS

TRAVEL DISTANCE – IBC SECTION 1017.2

SPRINKLED

'I' - INSTITUTIONAL GROUP I-3	200	FEET
'B' - BUSINESS	300	FEET

EXIT SEPARATION – IBC SECTION 1007.1.1

SEPARATION OF EXITS SHALL BE 1/2 THE LENGTH OF THE MAXIMUM DIAGONAL DIMENSION.

EXCEPTION 2: SEPARATION OF EXITS SHALL BE 1/3 THE LENGTH OF THE MAXIMUM DIAGONAL DIMENSION.

COMMON PATH OF EGRESS TRAVEL (Space) – IBC Table 1006.2.1

	SPRINKLED	
'I' - INSTITUTIONAL GROUP I-3	100	FEET
'B' - BUSINESS	100	FEET

OCCUPANCY LOADS – IBC TABLE 1004.5

STORAGE, UTILITY SPACES, ETC.	300 GROSS	
OFFICES	150 GROSS	
CONFERENCE ROOM, ASSEMBLY ROOM	15 NET	
DAYCARE	35 NET	
CLASSROOMS	20 NET	
TOTAL OCCUPANTS	309	I-3
	98	I-3 STAFF
	100	B

NUMBER OF REQUIRED EXITS – IBC TABLE 1006.2.1

	REQUIRED	PROVIDED
· EXITS REQUIRED PER STORY		

EGRESS WIDTH per PERSON SERVED - IBC 1005.3

'I' - INSTITUTIONAL GROUP I-3

	REQUIRED	PROVIDED	
· STAIRWAY	0.3 IN/OC 122.1	252	INCHES
· OTHER	0.2 IN/OC 81.4	108	INCHES

'B' - BUSINESS

	REQUIRED	PROVIDED	
· STAIRWAY	0.3 IN/OC 30	44	INCHES
· OTHER	0.2 IN/OC 20	144	INCHES

MINIMUM CORRIDOR WIDTHS – IBC TABLE 1020.2

	REQUIRED	PROVIDED
· STANDARD WIDTH	44"	60"
· OCCUPANT LOAD <50	36"	36"
· 'I' - INSTITUTIONAL GROUP I-2	96"	96"

DEAD END CORRIDORS – IBC SECTION 1020.4

50 FEET - SPRINKLED

INTERIOR WALL AND CEILING FINISH – IBC TABLE 803.13

	'I-3'	'B'
INTERIOR EXIT STAIRWAYS, ETC.	CLASS 'A'	CLASS 'B'
CORRIDORS / ENCLOSURE EXIT ACCESS STAIRWAYS	CLASS 'A'	CLASS 'C'
ROOMS AND ENCLOSED SPACES	CLASS 'C'	CLASS 'C'

STAIRS / RAMPS –IBC CHAPTER 10

SECTION 1009.3.2; EXCEPTION 1 – CLEAR WIDTH OF 48 INCHES MINIMUM BETWEEN HANDRAIL IS NOT REQUIRED (SPRINKLER)

SECTION 1009.3.3 EXCEPTION 2 – AREA OF REFUGE IS NOT REQUIRED WHEN BUILDING IS EQUIPED THROUGHOUT WITH AN AUTOMATIC FIRE SPRINKLER SYSTEM.

SECTION 1005.3.1 – THE WIDTH SHALL NOT BE LESS THAN 44 INCHES (To determine the egress width, multiply the occupancy times .30 to equal the number of width inches required).

SECTION 1005.3.1 EXCEPTION 1 – THE WIDTH SHALL NOT BE LESS THAN 44 INCHES (To determine the egress width, multiply the occupancy times .20 to equal the number of width inches required in sprinkled buildings).

SECTION 1011.5.2 – STAIR RISER HEIGHT SHALL BE 7 INCHES MAXIMUM AND 4 INCHES MINIMUM. THE STAIR TREAD SHALL BE 11 INCHES MINIMUM.

SECCTION 1011.8 – THE MAXIMUM DISTANCE A STAIR MAY RISE WITHOUT A LANDING IS 12 FEET.

SECTION 1011.11 – HANDRAIL IS REQUIRED ON EACH SIDE.

SECTION 1014.2 – HANDRAIL HEIGHT, FROM NOSING, SHALL NOT BE LESS THAN 34 INCHES AND NOT GREATER THAN 38 INCHES.

SECTION 1014.6 – HANDRAIL MUST RETURN TO WALL, GUARD, WALKING SURFACE, THE HANDRAIL NEEDS TO BE CONTINUOUS TO THE NEXT RUN OF STAIRS; (IF NOT) THEN, THE HANDRAIL MUST EXTEND 12 INCHES BEYOND THE RISER AND SLOPE A DISTANCE OF ONE TREAD BEYOND THE BOTTOM OF THE RISER.

SECTION 1011.12 - STAIRS TO THE ROOF IN BUILDINGS WITH FOUR OR MORE STORIES; OTHER MEANS TO THE ROOF MAY BE BY ALTERNATING TREAD DEVICE, SHIPS LADDER OR A PERMANENT LADDER.

ICC A117.1 504.9 – STAIR SIGNAGE IS REQUIRED ON EACH STORY LANDING. TO HAVE RAISED CHARACTERS AND BRAILLE.

SECTION 1017.3 - TRAVEL DISTANCE REQUIRED IN TABLE 1017.2 MAY BE TO A RATED STAIR ENCLOSURE.

EXISTING: NO CHANGES TO CURRENT SPACE OR USE

GUARDS - IBC SECTION 1015

SECTION 1015.2 – GUARDS SHALL BE LOCATED ALONG OPEN-SIDED WALKING SURFACES THAT ARE MORE THAN 30 INCHES TO FLOOR OR GRADE BELOW.

SECTION 1015.3 – HEIGHT SHALL BE NOT LESS THAN 42 INCHES.

SECTION 1015.4 – OPENING LIMITATION SHALL NOT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER.

EXISTING: NO CHANGES TO CURRENT SPACE OR USE

ELEVATORS – IBC SECTIONS 1009.4 AND 3006

SECTION 1009.4 – ELEVATORS MAY BE USED AS AN ACCESSIBLE MEANS OF EGRESS.

SECTION 1009.4.1 – STANDBY POWER SHALL BE PROVIDED.

SECTION 1009.4.2 EXCEPTION 2 – AREA OF REFUGE IS NOT REQUIRED (SPRINKLED).

SECTION 1009.8 – TWO WAY COMMUNICATION IS REQUIRED AT THE LANDING.

SECTION 1009.9.9 – SIGNAGE IS REQUIRED.

SECTION 3006.2 – ELEVATOR HOIST-WAY OPENING PROTECTION IS NOT REQUIRED WHERE THE ELEVATOR ONLY CONNECTS 3 STORIES.

SECTION 3006.3 – HOIST-WAY OPENING PROTECTION FOR ELEVATOR THAT CONNECTS MORE THAN 3 STORIES REQUIRED AN ADDITIONAL DOOR FOR SMOKE AND DRAFT CONTROL OR HOIST-WAY PRESSURIZED.

PORTABLE FIRE EXTINGUISHERS: SECTION 906

MAXIMUM DISTANCE OF TRAVEL TO EXTINGUISHER 75 FEET

ACCESSIBLE – IBC CHAPTER 11

ACCESSIBLE ROUTE 1104.1: AT LEAST ONE ACCESSIBLE ROUTE WITHIN THE SITE PROVIDED FROM ACCESSIBLE PARKING, ACCESSIBLE PASSANGER LOADING ZONE OR SIDEWALK TO THE ACCESSIBLE BUILDING ENTRANCE.

ACCESSIBLE PARKING: TABLE 1106.1 (1 PER 25) PARKING STALLS; (2 PER 26 TO 50) PARKING STALLS.

VAN SPACES 1106.5: FOR EVERY 6 OR FRACTION OF 6 ACCESSIBLE PARKING SPACES, AT LEAST 1 SHALL BE A VAN-ACCESSIBLE SPACE. PARKING STALL WIDTH = 11 FT. WITH AISLE OF 5 FEET. THE ACCESSIBLE STALL AND AISLE CAN NOT SLOPE MORE THAN 2% (1:48).

ACCESSIBLE ENTRANCES 1105.1: AT LEAST 60 % OF ALL PUBLIC ENTRANCES SHALL BE ACCESSIBLE.

IBC SECTION 1109.2 – EACH TOILET ROOM AND BATHING ROOM SHALL BE ACCESSIBLE.

IBC SECTION 1109.2.2 – EACH RESTROOM WILL NEED TO HAVE 5% (AT LEAST ONE) ACCESSIBLE WATER CLOSET.

IBC SECTION 1109.3 – EACH RESTROOM WILL NEED TO HAVE 5% (AT LEAST ONE) ACCESSIBLE SINK.

IBC SECTION 1111.1 – REQUIRED ACCESSIBLE ELEMENTS SHALL BE IDENTIFIED USING THE INTERNATIONAL SYMBOLS OF ACCESSIBILITY.

ROOF - IBC CHAPTER 15

MINIMUM ROOF COVERING CLASSIFICATION - TABLE 1505.1

TYPE I - B CLASS B

BUILDING ENVELOPE REQUIREMENTS - IECC TABLE C402.1.3

CLIMATE ZONE 5

OPAQUE ELEMENTS

	INSULATION MIN. R-VALUE
ROOFS	
WALLS	
ABOVE GRADE	
BELOW GRADE	
FLOORS	
SLABS ON GRADE	
DOORS	

PLUMBING FIXTURE REQUIREMENTS – IBC CHAPTER 29

		MEN	WOMEN
OCC. 'B' TOTAL OCCUPANTS:	100	50	50

REQUIRED FOR THIS TENANT SPACE ONLY:

WATER CLOSET		LAVATORIES		TUBS / SHOWERS	D.F.	OTHER
1/25 FOR FIRST 50		1/40 FOR FIRST 80		NONE	1/100	1 SERVICE SINK
MEN	WOMEN	MEN	WOMEN			
2	2	1.25	1.25	0	1	1

1/50 ABOVE 50		1/80 ABOVE 80	
MEN	WOMEN	MEN	WOMEN
0	0	0	0

		MEN	WOMEN
OCC. 'I-3' TOTAL OCCUPANTS:	49	45	4

REQUIRED FOR INMATES:

WATER CLOSET		LAVATORIES		TUBS / SHOWERS		D.F.	OTHER
1 PER CELL		1 PER CELL		1 PER 15		1/100	1 SERVICE SINK
MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		
45	4	45	4	3.00	0.27	0.49	1

		MEN	WOMEN
OCC. 'I-3' TOTAL OCCUPANTS:	98	49	49

REQUIRED FOR STAFF:

WATER CLOSET		LAVATORIES		TUBS / SHOWERS	D.F.	OTHER
1 PER 25		1 PER 35		NONE	1/100	1 SERVICE SINK
MEN	WOMEN	MEN	WOMEN			
0.98	0.98	0.98	0.98	0	0.98	1

REQUIRED:

I-3

WATER CLOSET		LAVATORIES		TUBS / SHOWERS		D.F.	OTHER
MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		1 SERVICE SINK
47	6	47	6	3	1	2	1

B

WATER CLOSET		LAVATORIES		TUBS / SHOWERS		D.F.	OTHER
MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		1 SERVICE SINK
2	2	2	2	0	0	1	1

PROVIDED:

INMATES

WATER CLOSET		LAVATORIES		TUBS / SHOWERS		D.F.	OTHER
MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		1 SERVICE SINK
45	4	45	4	15	2	2	1

STAFF

WATER CLOSET		LAVATORIES		TUBS / SHOWERS		D.F.	OTHER
MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		1 SERVICE SINK
1	1	1	1	1	1	2	1

PLUS 3 UNISEX

BUSINESS

WATER CLOSET		LAVATORIES		TUBS / SHOWERS		D.F.	OTHER
MEN	WOMEN	MEN	WOMEN	MEN	WOMEN		1 SERVICE SINK
4	3	3	4	0	0	2	1

PLUS 5 PRIVATE UNISEX

part ten
cost estimate

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……...AJC
STAGE OF DESIGN……..FEASIBILITY

42,633 TOTAL SF

CSI #	DESCRIPTION		ADDITIONS	REMODEL	TOTAL
	BUILDING COST SUMMARY				
02	EXISTING CONDITIONS		$ 52,418	$ 48,409	$ 100,828
03	CONCRETE		$ 367,951	$ 22,182	$ 390,133
04	MASONRY		$ 1,272,349	$ 261,411	$ 1,533,759
05	METALS		$ 991,225	$ 38,728	$ 1,029,953
06	WOODS & PLASTICS		$ 240,490	$ 153,560	$ 394,049
07	THERMAL & MOISTURE PROTECTION		$ 519,593	$ 43,133	$ 562,725
08	DOORS & WINDOWS		$ 935,953	$ 343,707	$ 1,279,660
09	FINISHES		$ 996,885	$ 596,418	$ 1,593,303
10	SPECIALTIES		$ 101,783	$ 58,091	$ 159,874
11	EQUIPMENT		$ 564,719	$ -	$ 564,719
12	FURNISHINGS		$ 36,354	$ 12,500	$ 48,854
13	SPECIAL CONSTRUCTION		$ -	$ -	$ -
14	CONVEYING SYSTEMS		$ 118,750	$ 93,750	$ 212,500
21	FIRE SUPPRESSION		$ 118,746	$ 67,773	$ 186,519
22	PLUMBING		$ 305,348	$ 203,319	$ 508,667
23	HVAC		$ 1,526,738	$ 900,414	$ 2,427,152
26	ELECTRICAL		$ 882,115	$ 503,458	$ 1,385,573
27	COMMUNICATION		$ 271,420	$ 154,910	$ 426,330
28	ELECTRONIC SAFETY & SECURITY		$ 407,130	$ 232,365	$ 639,495
31	EARTHWORK		$ 120,777	$ -	$ 120,777
32	EXTERIOR IMPROVEMENTS		$ 185,816	$ -	$ 185,816
33	UTILITIES		$ 130,000	$ -	$ 130,000
	SUBTOTAL		$ 10,146,558	$ 3,734,127	$ 13,880,685
	GENERAL CONDITIONS	8%	$ 811,725	$ 298,730	$ 1,110,455
	BONDS & INSURANCE	2%	$ 219,166	$ 80,657	$ 299,823
	OVERHEAD & PROFIT	4%	$ 447,098	$ 164,541	$ 611,639
	DESIGN CONTINGENCY	15%	$ 1,521,984	$ 560,119	$ 2,082,103
	TOTAL CONSTRUCTION COST		$ 13,146,529	$ 4,838,174	$ 17,984,704

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……...AJC
STAGE OF DESIGN……..FEASIBILITY

ADDITIONS
27,142 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	BUILDING COST SUMMARY				
02	EXISTING CONDITIONS			$ 1.93	$ 52,418
03	CONCRETE			$ 13.56	$ 367,951
04	MASONRY			$ 46.88	$ 1,272,349
05	METALS			$ 36.52	$ 991,225
06	WOODS & PLASTICS			$ 8.86	$ 240,490
07	THERMAL & MOISTURE PROTECTION			$ 19.14	$ 519,593
08	DOORS & WINDOWS			$ 34.48	$ 935,953
09	FINISHES			$ 36.73	$ 996,885
10	SPECIALTIES			$ 3.75	$ 101,783
11	EQUIPMENT			$ 20.81	$ 564,719
12	FURNISHINGS			$ 1.34	$ 36,354
13	SPECIAL CONSTRUCTION			$ -	$ -
14	CONVEYING SYSTEMS			$ 4.38	$ 118,750
21	FIRE SUPPRESSION			$ 4.38	$ 118,746
22	PLUMBING			$ 11.25	$ 305,348
23	HVAC			$ 56.25	$ 1,526,738
26	ELECTRICAL			$ 32.50	$ 882,115
27	COMMUNICATION			$ 10.00	$ 271,420
28	ELECTRONIC SAFETY & SECURITY			$ 15.00	$ 407,130
31	EARTHWORK			$ 4.45	$ 120,777
32	EXTERIOR IMPROVEMENTS			$ 6.85	$ 185,816
33	UTILITIES			$ 4.79	$ 130,000
	SUBTOTAL			$ 373.83	$ 10,146,558
	GENERAL CONDITIONS	8%		$ 29.91	$ 811,725
	BONDS & INSURANCE	2%		$ 8.07	$ 219,166
	OVERHEAD & PROFIT	4%		$ 16.47	$ 447,098
	DESIGN CONTINGENCY	15%		$ 56.07	$ 1,521,984
	TOTAL CONSTRUCTION COST			$ 484.36	$ 13,146,529

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL **ADDITIONS**
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……AJC 27,142 SF
STAGE OF DESIGN……..FEASIBILITY

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**				
	Site Demolition & Clearing	20,000	SF	$ 1.25	$ 25,000
	Demolition at Existing Exterior Wall	6,267	SF	$ 4.38	$ 27,418
	TOTAL EXISTING CONDITIONS				**$ 52,418**
03	**CONCRETE**				
	Continuous Footing	115	CY	$ 468.75	$ 53,906
	Spot Footing	100	CY	$ 493.75	$ 49,375
	Foundation Wall	3,102	SF	$ 43.75	$ 135,721
	Slab On Grade	13,379	SF	$ 4.69	$ 62,714
	Topping Slab	13,763	SF	$ 4.81	$ 66,234
	TOTAL CONCRETE				**$ 367,951**
04	**MASONRY**				
	Exterior CMU Walls	15,511	SF	$ 22.50	$ 348,998
	Interior CMU Walls	20,357	SF	$ 22.50	$ 458,021
	Exterior Brick Veneer	15,511	SF	$ 30.00	$ 465,330
	TOTAL MASONRY				**$ 1,272,349**
05	**METALS**				
	Floor Structural Steel (12 LB/SF)	165,156	LB	$ 2.88	$ 474,824
	Roof Structural (9 LBS/SF)	123,867	LB	$ 2.88	$ 356,118
	Metal Floor Deck	13,763	SF	$ 3.94	$ 54,192
	Metal Roof Deck	13,379	SF	$ 3.81	$ 51,007
	Metal Pan Stairs	526	SF	$ 66.25	$ 34,848
	Freestanding Railing	42	LF	$ 368.75	$ 15,488
	Wall Railing	40	LF	$ 118.75	$ 4,750
	TOTAL METALS				**$ 991,225**
06	**WOOD & PLASTICS**				
	Carpentry				
	Wood Plates & Blocking	27,142	SF	$ 0.44	$ 11,875
	Subtotal Carpentry				**$ 11,875**
	Millwork				
	Building Millwork	23,802	SF	$ 7.50	$ 178,515
	Courts Millwork	3,340	SF	$ 15.00	$ 50,100
	Subtotal Millwork				**$ 228,615**
	TOTAL WOOD & PLASTICS				**$ 240,490**
07	**THERMAL & MOISTURE PROTECTION**				
	Roof Membrane	13,379	SF	$ 4.31	$ 57,697
	Rigid Roof Insulation	13,379	SF	$ 4.56	$ 61,042
	Roof Weather Barrier	13,379	SF	$ 4.06	$ 54,352
	Roof Protection Board	13,379	SF	$ 2.19	$ 29,267
	Rigid Wall Insulation	15,511	SF	$ 2.81	$ 43,625
	Weather Barrier	15,511	SF	$ 4.06	$ 63,013
	Wall Batt Insulation	15,511	SF	$ 1.19	$ 18,419
	Sound Batt	20,357	SF	$ 1.06	$ 21,629
	Soffit	1,450	SF	$ 37.50	$ 54,375
	Metal Roof Cap	873	LF	$ 16.19	$ 14,124
	Flashing & Sheet Metal	1,745	SF	$ 8.13	$ 14,178
	Fireproofing	27,142	SF	$ 2.49	$ 67,516
	Fire Stopping & Sealing	27,142	SF	$ 0.31	$ 8,482
	Caulking & Sealing	27,142	SF	$ 0.44	$ 11,875

PROJECT ESTIMATE CONSTRUCTION CONTROL CORPORATION 1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL **ADDITIONS**
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……AJC 27,142 SF
STAGE OF DESIGN……..FEASIBILITY

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	TOTAL THERMAL & MOISTURE PROTECTION				**$ 519,593**
08	**DOORS & WINDOWS**				
	Interior & Exterior Doors	27,142	SF	$ 10.00	$ 271,420
	Exterior Glazing (30% of Exterior Wall SF)	4,653	SF	$ 56.25	$ 261,748
	Interior Glazing (5% of Interior Wall SF)	2,036	SF	$ 50.00	$ 101,783
	Ballistic, Security Glazing Add (20% of Glazing)	1,338	SF	$ 225.00	$ 301,003
	TOTAL DOORS & WINDOWS				**$ 935,953**
09	**FINISHES**				
	Interior Partition Framing	20,357	SF	$ 3.56	$ 72,520
	Gyp. Wallboard	40,713	SF	$ 2.30	$ 93,640
	Abuse Resist. Gyp Wallboard Add	10,178	SF	$ 0.31	$ 3,181
	Corrections Inmate Housing Ceiling	4,380	SF	$ 37.50	$ 164,250
	Corrections Support/Kitchen Ceiling	4,115	SF	$ 6.25	$ 25,719
	Admin Space Ceiling	2,815	SF	$ 6.25	$ 17,594
	Corrections Programming Ceiling	4,945	SF	$ 15.63	$ 77,266
	Courts Ceiling	3,340	SF	$ 25.00	$ 83,500
	Corrections Inmate Housing Flooring	4,380	SF	$ 3.75	$ 16,425
	Corrections Support/Kitchen Flooring	4,115	SF	$ 15.63	$ 64,297
	Admin Space Flooring	2,815	SF	$ 6.25	$ 17,594
	Corrections Programming Flooring	4,945	SF	$ 8.75	$ 43,269
	Courts Flooring	3,340	SF	$ 8.75	$ 29,225
	Raised Access Flooring at Courtroom	790	SF	$ 24.94	$ 19,701
	Base	4,071	LF	$ 4.38	$ 17,812
	Paint Gyp. Wallboard	40,713	SF	$ 1.05	
	Paint Interior Masonry	20,357	SF	$ 1.08	$ 21,883
	Wall Finishes	61,070	SF	$ 3.75	$ 229,011
	TOTAL FINISHES				**$ 996,885**
10	**SPECIALTIES**				
	Building Specialties	27,142	SF	$ 3.75	$ 101,783
	TOTAL SPECIALTIES				**$ 101,783**
11	**EQUIPMENT**				
	Kitchen Equipment	2,155	SF	$ 256.25	$ 552,219
	Laundry Equipment	1	Allow	$ 12,500.00	$ 12,500
	TOTAL EQUIPMENT				**$ 564,719**
12	**FURNISHINGS**				
	Window Coverings	2,327	SF	$ 15.63	$ 36,354
	TOTAL FURNISHINGS				**$ 36,354**
13	**SPECIAL CONSTRUCTION**				
	TOTAL SPECIAL CONSTRUCTION				**$ -**
14	**CONVEYING SYSTEMS**				
	Passenger Elevator - 3 Stop	1	EA	$ 118,750.00	$ 118,750
	TOTAL CONVEYING SYSTEMS				**$ 118,750**
21	**FIRE SUPPRESSION**				
	Fire Suppression System	27,142	SF	$ 4.38	$ 118,746

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME…….....SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL
LOCATION……..……MONTICELLO, UT
ARCHITECT…….....AJC
STAGE OF DESIGN……..FEASIBILITY

ADDITIONS
27,142 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	TOTAL FIRE SUPPRESSION				**$ 118,746**
22	**PLUMBING**				
	Building Plumbing	27,142	SF	$ 11.25	$ 305,348
	TOTAL PLUMBING				**$ 305,348**
23	**HVAC**				
	HVAC - AHU, VAV	27,142	SF	$ 56.25	$ 1,526,738
	TOTAL HVAC				**$ 1,526,738**
26	**ELECTRICAL**				
	Service & Distribution	27,142	SF	$ 8.75	**$ 237,493**
	Power	27,142	SF	$ 7.50	**$ 203,565**
	Lighting	27,142	SF	$ 16.25	**$ 441,058**
	TOTAL ELECTRICAL				**$ 882,115**
27	**COMMUNICATIONS**	27,142	SF	$ 10.00	**$ 271,420**
28	**ELECTRONIC SAFETY & SECURITY**				
	Fire Alarm System	27,142	SF	$ 3.75	**$ 101,783**
	Security, Surveillance	27,142	SF	$ 11.25	**$ 305,348**
	TOTAL ELECTRONIC SAFETY & SECURITY				**$ 407,130**
31	**EARTHWORK**				
	Site Excavation	20,000	SF	$ 2.50	$ 50,000
	Building Excavation	1,982	CY	$ 8.75	$ 17,343
	Backfill & Compaction	198	CY	$ 36.25	$ 7,185
	Haul Off Excess	1,982	CY	$ 8.75	$ 17,343
	Site Grading	6,621	SF	$ 0.99	$ 6,538
	Building Grading	13,379	SF	$ 0.74	$ 9,867
	SWPPP	1	LS	$ 12,500.00	$ 12,500
	TOTAL EARTHWORK				**$ 120,777**
32	**EXTERIOR IMPROVEMENTS**				
	Outdoor Rec Yard	2,500	SF	$ 18.75	$ 46,875
	Misc. Site Improvements, Patching	15,879	SF	$ 8.75	$ 138,941
	TOTAL EXTERIOR IMPROVEMENTS				**$ 185,816**
33	**SITE UTILITIES**				
	Water Line - Connect to Existing	1	LS	$ 12,500.00	$ 12,500
	Fire Line	1	LS	$ 37,500.00	$ 37,500
	Sewer Line	1	LS	$ 37,500.00	$ 37,500
	Storm Drainage	20,000	SF	$ 0.94	$ 18,750
	Gas Line - Connect to Existing	1	LS	$ 11,875.00	$ 11,875
	Communications - Connect to Existing	1	LS	$ 11,875.00	$ 11,875
	TOTAL SITE UTILITIES				**$ 130,000**

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME…….....SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL
LOCATION……..……MONTICELLO, UT
ARCHITECT…….....AJC
STAGE OF DESIGN……..FEASIBILITY

REMODEL AREAS
15,491 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	BUILDING COST SUMMARY				
02	**EXISTING CONDITIONS**			$ 3.13	$ 48,409
03	**CONCRETE**			$ 1.43	$ 22,182
04	**MASONRY**			$ 16.88	$ 261,411
05	**METALS**			$ 2.50	$ 38,728
06	**WOODS & PLASTICS**			$ 9.91	$ 153,560
07	**THERMAL & MOISTURE PROTECTION**			$ 2.78	$ 43,133
08	**DOORS & WINDOWS**			$ 22.19	$ 343,707
09	**FINISHES**			$ 38.50	$ 596,418
10	**SPECIALTIES**			$ 3.75	$ 58,091
11	**EQUIPMENT**			$ -	$ -
12	**FURNISHINGS**			$ 0.81	$ 12,500
13	**SPECIAL CONSTRUCTION**			$ -	$ -
14	**CONVEYING SYSTEMS**			$ 6.05	$ 93,750
21	**FIRE SUPPRESSION**			$ 4.38	$ 67,773
22	**PLUMBING**			$ 13.13	$ 203,319
23	**HVAC**			$ 58.13	$ 900,414
26	**ELECTRICAL**			$ 32.50	$ 503,458
27	**COMMUNICATION**			$ 10.00	$ 154,910
28	**ELECTRONIC SAFETY & SECURITY**			$ 15.00	$ 232,365
31	**EARTHWORK**			$ -	$ -
32	**EXTERIOR IMPROVEMENTS**			$ -	$ -
33	**UTILITIES**			$ -	$ -
	SUBTOTAL			$ 241.05	$ 3,734,127
	GENERAL CONDITIONS	8%		$ 19.28	$ 298,730
	BONDS & INSURANCE	2%		$ 5.21	$ 80,657
	OVERHEAD & PROFIT	4%		$ 10.62	$ 164,541
	DESIGN CONTINGENCY	15%		$ 36.16	$ 560,119
	TOTAL CONSTRUCTION COST			$ 312.32	$ 4,838,174

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL **REMODEL AREAS**
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……..AJC 15,491 SF
STAGE OF DESIGN……..FEASIBILITY

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
02	**EXISTING CONDITIONS**				
	Interior Demolition	15,491	SF	$ 3.13	$ 48,409
	TOTAL EXISTING CONDITIONS				**$ 48,409**
03	**CONCRETE**				
	Concrete Slab Patching at Plumbing	1	Allow	$ 12,500.00	$ 12,500
	Slab Patching, Level	15,491	SF	$ 0.63	$ 9,682
	TOTAL CONCRETE				**$ 22,182**
04	**MASONRY**				
	Interior Masonry Walls	11,618	SF	$ 22.50	$ 261,411
	TOTAL MASONRY				**$ 261,411**
05	**METALS**				
	Misc. Metals, Structural Modification	15,491	SF	$ 2.50	$ 38,728
	TOTAL METALS				**$ 38,728**
06	**WOOD & PLASTICS**				
	Carpentry				
	Wood Plates & Blocking	15,491	SF	$ 0.44	$ 6,777
	Subtotal Carpentry				**$ 6,777**
	Millwork				
	Building Millwork	15,491	SF	$ 7.50	$ 116,183
	Courts Millwork	2,040	SF	$ 15.00	$ 30,600
	Subtotal Millwork				**$ 146,783**
	TOTAL WOOD & PLASTICS				**$ 153,560**
07	**THERMAL & MOISTURE PROTECTION**				
	Sound Batt	11,618	SF	$ 1.06	$ 12,344
	Fireproofing Repair	15,491	SF	$ 1.24	$ 19,170
	Fire Stopping & Sealing	15,491	SF	$ 0.31	$ 4,841
	Caulking & Sealing	15,491	SF	$ 0.44	$ 6,777
	TOTAL THERMAL & MOISTURE PROTECTION				**$ 43,133**
08	**DOORS & WINDOWS**				
	Doors - Interior & Exterior	15,491	SF	$ 10.00	$ 154,910
	Interior Glazing (5% of Interior Wall SF)	1,162	SF	$ 50.00	$ 58,091
	Ballistic, Security Glazing Add (50% of Glazing)	581	SF	$ 225.00	$ 130,705
	TOTAL DOORS & WINDOWS				**$ 343,707**
09	**FINISHES**				
	Interior Partition Framing	11,618	SF	$ 3.56	$ 41,390
	Gyp. Wallboard	23,237	SF	$ 2.30	$ 53,444
	Abuse Resistant Gyp. Wallboard Add	11,618	SF	$ 0.31	$ 3,631
	Corrections Inmate Housing Ceiling	935	SF	$ 37.50	$ 35,063
	Inmate Medical Ceiling	400	SF	$ 37.50	$ 15,000
	Corrections Intake Ceiling	4,220	SF	$ 37.50	$ 158,250
	Courts Ceiling	2,040	SF	$ 25.00	$ 51,000
	Corrections Inmate Housing Flooring	935	SF	$ 3.75	$ 3,506
	Inmate Medical Flooring	400	SF	$ 10.00	$ 4,000
	Corrections Intake Floring	4,220	SF	$ 3.75	$ 15,825
	Courts Flooring	2,040	SF	$ 8.75	$ 17,850

PROJECT ESTIMATE CONSTRUCTION CONTROL CORPORATION 1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL **REMODEL AREAS**
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……..AJC 15,491 SF
STAGE OF DESIGN……..FEASIBILITY

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	Raised Access Flooring at Courtroom	790	SF	$ 24.94	$ 19,701
	Base	2,324	LF	$ 4.38	$ 10,166
	Paint Gyp. Wallboard	23,237	SF	$ 1.05	$ 24,398
	Paint Masonry Walls	11,618	SF	$ 1.08	$ 12,490
	Wall Finishes	34,855	SF	$ 3.75	$ 130,705
	TOTAL FINISHES				**$ 596,418**
10	**SPECIALTIES**				
	Building Specialties	15,491	SF	$ 3.75	$ 58,091
	TOTAL SPECIALTIES				**$ 58,091**
11	**EQUIPMENT**				
	TOTAL EQUIPMENT				**$ -**
12	**FURNISHINGS**				
	Window Coverings	1	Allow	$ 12,500.00	$ 12,500
	TOTAL FURNISHINGS				**$ 12,500**
13	**SPECIAL CONSTRUCTION**				
	TOTAL SPECIAL CONSTRUCTION				**$ -**
14	**CONVEYING SYSTEMS**				
	Passenger Elevator - 2 Stop	1	EA	$ 93,750.00	$ 93,750
	TOTAL CONVEYING SYSTEMS				**$ 93,750**
21	**FIRE SUPPRESSION**				
	Fire Suppression System	15,491	SF	$ 4.38	$ 67,773
	TOTAL FIRE SUPPRESSION				**$ 67,773**
22	**PLUMBING**				
	Existing Plumbing Demolition	15,491	SF	$ 1.88	$ 29,046
	Building Plumbing	15,491	SF	$ 11.25	$ 174,274
	TOTAL PLUMBING				**$ 203,319**
23	**HVAC**				
	Existing HVAC Demolition	15,491	SF	$ 1.88	$ 29,046
	HVAC - AHU, VAV	15,491	SF	$ 56.25	$ 871,369
	TOTAL HVAC				**$ 900,414**
26	**ELECTRICAL**				
	Electrical Demolition	15,491	SF	$ 1.25	**$ 19,364**
	Service & Distribution	15,491	SF	$ 7.50	**$ 116,183**
	Power	15,491	SF	$ 7.50	**$ 116,183**
	Lighting	15,491	SF	$ 16.25	**$ 251,729**
	TOTAL ELECTRICAL				**$ 503,458**
27	**COMMUNICATIONS**	15,491	SF	$ 10.00	**$ 154,910**
28	**ELECTRONIC SAFETY & SECURITY**				

PROJECT ESTIMATE	CONSTRUCTION CONTROL CORPORATION	1/7/2021

PROJECT NAME……..…..SAN JUAN COUNTY PUBLIC SAFETY ADDITION/REMODEL
LOCATION……..……MONTICELLO, UT
ARCHITECT……..……AJC
STAGE OF DESIGN……..FEASIBILITY

REMODEL AREAS

15,491 SF

CSI #	DESCRIPTION	QTY	UNIT	UNIT COST	TOTAL
	Fire Alarm System	15,491	SF	$ 3.75	**$ 58,091**
	Security, Surveillance	15,491	SF	$ 11.25	**$ 174,274**
	TOTAL ELECTRONIC SAFETY & SECURITY				**$ 232,365**
31	**EARTHWORK**				
	TOTAL EARTHWORK				**$ - **
32	**EXTERIOR IMPROVEMENTS**				
	TOTAL EXTERIOR IMPROVEMENTS				**$ - **
33	**SITE UTILITIES**				
	TOTAL SITE UTILITIES				**$ - **

Attachment B

San Juan County RFP Form

Respondent Information: Provide the following information about yourself and your company.

Respondent Name: _____
(Note: give exact legal name as it will appear on the contract, if awarded)

Address: _____

City: _____ State: _____ Zip: _____

Business Structure:
_____ Individual or Sole Proprietorship
_____ Partnership
_____ Corporation
_____ Limited Liability Company
_____ Other, list business structure _____

Insurance Certificate: _____ Copy of insurance certificate, or _____You are willing to get the proper insurance requirements if awarded the contract during contract negotiation.

Contact Information: List the one person who San Juan County or their representative may contact concerning your proposal.

Name: _____
Telephone Number: _____
E-Mail: _____

Final Bid/Pricing Structure:
_____
_____

By submitting this proposal, _____ hereby certifies our willingness to enter into a contract with San Juan County, if selected.

Signature _____ Date _____