SPECIAL WORK SESSION AGENDA

Casper City Council
City Hall, Council Meeting Room
Tuesday, October 29, 2019, 5:30 p.m.

Special Work Session Meeting Agenda		Recommendation	Allotted Time	Beginning Time
Recommendations = Information Only, Move Forward for Approval, Direction Requested				
1.	Tree & Shrub Ordinance	Direction Requested	20 min	5:30
2.	Results of Police Station Assessment	Direction Requested	45 min	5:50
3.	Fire Admin/Headquarters Station #1	Direction Requested	45 min	6:35
			Approximate End Time:	7:20

October 23, 2019

MEMO TO: J. Carter Napier, City Manager

FROM: Tim Cortez, Director of Parks and Recreation
John Henley, City Attorney

SUBJECT: Trees and shrubs

Meeting Type & Date:
Special Work Session
October 29, 2019

Action Type
3rd Reading of Ordinance

Recommendation
That Council adopt an Ordinance amending Chapter 12.32 of the Casper Municipal Code regarding Trees and Shrubs.

Summary
As the result of a man's (consumer's) death, resulting from the felling of a tree by an uncertified individual providing arborist service, the City was asked to review its licensing ordinance for arborists. In the process of that review, which included discussions with and a meeting with the daughters of the man who was killed in the tree felling incident, and meetings with local tree services, a review of the City Code Chapter addressing "Trees and Shrubs" was undertaken; the result of that review are the proposed modifications showing in red and blue on the attached Chapter 12.32 "mark-up." The vast majority of the tree companies asked for increased training requirements, certification by the International Society of Arboriculture and maintain significantly higher liability insurance and Workers' Compensation insurance (See 12.32.075). Another request by the vast majority of arborists was a request that for "aerial operations" a certified arborist must be on location for the performance of the aerial operation. (12.32.020 and 12.32.090 B1).

In preparation for 3rd reading, staff and the working group behind the ordinance is looking for one friendly amendment to reduce red tape in the pruning and trimming of boulevard trees. As the ordinance is written now, boulevard trees needing trimmed or pruned would require a permit unless it is done by the homeowner or a relative thereof. The working group would like to expand this to include licensed arborist hired by the homeowner. Sample language of the proposed amendment is attached.

In addition, staff is looking to clarify one exemption as well. This exemption would be inserted into the definition of commercial arborists whereas arborists for power companies would not be considered commercial arborists doing work for the general public. For instance, Rocky Mountain

Power contracts with arborists to work around their power lines. These contracted arborists meet or exceed the standards proposed in this ordinance.

Council has also expressed a desire to see further amendments, which will be crafted over the next week and delivered prior to third reading.

Financial Considerations
None anticipated

Oversight/Project Responsibility
Tim Cortez, Parks and Recreation Director
John Henley, City Attorney

Attachment
Proposed Amendment Regarding Boulevard Trees
Proposed Amendment Regarding Exemption for Power Company Contractors
Proposed Amended Chapter 12.32 – Trees and Shrubs

Proposed Amendment Regarding Boulevard Trees

12.32.110 - Permit—Not required for work by property owner.

A property owner or a member of the property owner's immediate family "OR A LICENSED TREE CONTRACTOR IN THE PROPERTY OWNER'S EMPLOY" who trims or prunes any tree or shrub within the "BOULEVARD AREA OF THE" public street which abuts the property owner's property shall not be required to obtain a permit as set forth in Section 12.32.080 of this Chapter.

Proposed Amendment Regarding Exemption for Power Company Contractors

Add to Definition C "Commercial arborist":

However, an employee or subcontractor of Rocky Mountain Power Corporation who (which) is retained and engaged in overhead line work, and has (have) agreed to comply with ANSI Z133 Standards, are not included in the definition of Commercial Arborist, for purposes of this Chapter (12.32).

ORDINANCE NO. _____

AN ORDINANCE AMENDING CHAPTER 12.32
OF THE CASPER MUNICIPAL CODE

WHEREAS, the Casper Municipal Code provisions addressing trees and shrubs promotes the public's health and safety, the tree and landscaping companies' employees' health and safety as well as consumers' community's health and safety; and

WHEREAS, authority is granted to cities and towns by W.S. 15-1-103(a) (iv), (xiii) and (xli) to adopt ordinances and regulations for the health, welfare and safety of the city and to license and regulate business activities within the City for the health, safety and welfare of its citizens.

NOW, THEREFORE, BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF CASPER, WYOMING: That Chapter 12.32 of the Casper Municipal Code, and the Code Sections therein are hereby amended:

Chapter 12.32 - TREES AND SHRUBS

Sections:

12.32.010 - Purpose – Authority.

A. This Chapter addresses the care of trees and shrubs. The City recognizes the substantial economic, environmental, aesthetic and public health benefits of healthy trees and shrubs within the community. It is the policy of the City to protect and enhance the community's trees and shrubs. The purpose of this Chapter is to promote and protect the public safety and general welfare by providing regulation, and to establish policies regarding the planting, maintaining and removal of trees through recommended and accepted horticultural and arboricultural practices, and to establish and enforce professional standards for commercial arborists, pertaining to operating a tree maintenance business and/or a landscaping business with a tree maintenance component.

B. Authority is granted to cities and towns by Wyo. Stat. Section 15-1-103(a) (iv), (xiii) and (xli) to adopt ordinances and regulations for the health, welfare and safety of the city and to license and regulate business activities within the City for the health, safety and welfare of its citizens.

C. The requirements of this Chapter will not be deemed to impose any liability for damages or duty of care and maintenance upon the City or any of its officers, agents or employees.

(Ord. 29-83 (part), 1983: prior code § 38-1)

12.32.020 - Definitions.

The following definitions shall apply in the interpretation and enforcement of this Chapter:

As used in this Chapter:

A. “Aerial Operation” shall mean any tree trimming or pruning operation which is being performed on tree branches 12 feet above the ground or greater, measured from the ground where it intersects with the tree trunk, to the branch where it intersects with the tree trunk, and all tree felling operations.

B. "City property" shall mean and include all real property owned by and leased to the City of Casper, not including dedicated right-of-way, dedicated parks and developed parks and public spaces.

C. "Commercial arborist" means any person, firm or corporation engaged in the business of cutting, trimming, pruning, spraying, injecting chemicals, or removing trees or shrubs for compensation.

D. "Maintenance" shall mean any and all work performed on trees including, but not limited to, planting, watering, pruning, removing, stump grinding, treating for insects or diseases, protecting and enhancing soils, and preserving and protecting trees during construction.

E. "Noxious tree" means a tree that is designated a "designated noxious weed" by the Wyoming Weed and Pest Control Act, Wyoming Statute § 11-5-101, et seq.

F. "Private property" means all land and improvements, including fixtures and a appurtenances, located within the property lines of a property.

G. “Property owners” shall mean any person or entity having a legal interest in real property and its fixtures and appurtenances.

H. "Responsible party" shall mean the property owner or an entity or person who, acting as an agent for or in any other legal capacity on behalf of the owner, has authority over property subject to this chapter or who is responsible for the maintenance or management of said property.

I. "Tree" or "trees" shall mean any perennial woody plant, usually, but not necessarily, single stem and long-lived with a height greater than overall spread.

(Ord. 11-97 § 1 (part), 1997: Ord. 29-83 (part), 1983: prior code § 38-2)

12.32.030 – Guidelines and Authority.

For the purpose of this chapter, the Parks Division of the Parks and Recreation Department is charged with the duties and responsibilities of implementing the annual City tree plan.

(Ord. 29-83 (part), 1983: prior code § 38-3)

(Ord. No. 31-10, § 1, 12-21-2010)

12.32.040 - Powers and duties—City tree plan.

It shall be the responsibility of the Director of the Parks and Recreation Department, or the Director's authorized agent, to develop, write and implement an annual, community tree and shrub work plan.

(Ord. 29-83 (part), 1983: prior code § 38-4)

(Ord. No. 31-10, § 2, 12-21-2010)

12.32.050 - Enforcement—City Manager authority.

The City Manager or the Manager's duly authorized agent shall have full power, authority, jurisdiction and control of planting, locating and replacing all trees on public streets and other areas of public property, and shall likewise have supervision, direction and control of the care, trimming and removal thereof, as well as the enforcement duties with respect to the obligations imposed by this chapter.

(Ord. 29-83 (part), 1983: prior code § 38-5)

12.32.060 - Care of public trees—City authority.

The City shall have the right to plant, trim, spray, preserve and remove trees, plants and shrubs within the lines of all streets, alleys, avenues, lanes, squares and public grounds, as may be necessary to insure safety when servicing City utilities, or to preserve the symmetry and beauty of such public grounds. The City may remove, or cause to be removed, any tree or part thereof which is in an unsafe condition, or which, by reason of its nature, is injurious to sewers, electric power lines, gas lines, water lines or other public improvements, or is affected with any injurious fungus, insect or other pest.

(Ord. 29-83 (part), 1983: prior code § 38-8)

12.32.070 - Planting—Location and spacing.

A. Trees shall not be planted closer than two (2) feet to any curb or sidewalk.

B. No tree or shrub shall be planted closer than ten feet to any fireplug or utility pole.

C. Trees and shrubs planted near intersections shall be no closer to that intersection than as provided in Sections 12.24.040 and 12.24.050 of this code.

D. No trees shall be planted under or within ten lateral feet of any overhead utility wire or within five lateral feet of any underground water line, sewer line, transmission line, or other utility.

E. No trees of the genus populus shall be planted within fifty feet of any underground water line or sewer line.

F. Variances to location and spacing and species restrictions may be granted under special circumstances, such as public beautification projects, wherein special consideration can be made to accommodate the desired beautification and appearance. Such variances shall be granted by the city manager or his/her designee upon review of submitted plans and specifications. Existing trees and shrubs are specifically "grandfathered."

(Ord. 7-99 § 1, 1999; Ord. 29-83 (part), 1983: prior code § 38-7)

12.32.075 - Commercial arborist—License and insurance requirements—Suspension and revocation—Appeal procedures.

A. All commercial arborists shall be licensed and insured. Any appropriate fees that may be assessed for licensing shall be established by resolution.

B. Before a commercial arborist license will be granted, the applicant shall:

1. Successfully complete yearly, with a satisfactory score, a competency test administered by the Wyoming Extension Office. Within three years of obtaining a commercial arborist license from the City, each commercial arborist shall secure certification from the International Society of Arboriculture as an ISA Certified Arborist. Proof of such certification shall be filed with the City Clerk's Office. Securing certification from the International Society of Arboriculture as an ISA Certified Arborist, replaces the requirement for a yearly competency test administered by the Wyoming Extension Office.

2. Prior to an arborist license being issued, applicants must file with the office of the City Clerk proof of commercial general liability insurance coverage for the business of the employer of the arborist or the business of the arborist, from a carrier authorized to do business within the State of Wyoming in the following amounts: Commercial general liability insurance coverage must be in the minimum amount of One Million Dollars ($1,000,000.00) per occurrence with a minimum general aggregate amount of Two Million Dollars ($2,000,000.00). The coverage document must list the City of Casper, office of the City Clerk, as a certificate holder and contain a statement indicating that any notice of cancellation issued to the applicant must also be provided in writing to the City Clerk within thirty (30) days of effectiveness and Workers' Compensation coverage as mandated by the Statutes of the State of Wyoming.

C. Failure of a commercial arborist to comply with the conditions set forth in this section shall result in the City Clerk's revocation of such license. In the event of such revocation, except and unless such license has been caused to be revoked by termination of insurance, the City Council shall have the authority to overrule or otherwise modify the revocation of the City Clerk with regard to license revocation. If an appeal of the City Clerk's decision is desired, the appeal shall be filed with the Clerk with a copy to the City Attorney within ten (10) calendar days from the date of the City Clerk's revocation of the arborist license. A hearing by the City Council on an appeal shall be held within fifteen (15) days from the date the appeal is filed with the City Clerk.

(Ord. 11-97 § 1 (part), 1997)

12.32.080 - Permit—Required when—Application.

A. Except as provided in § 12.32.110, abutting property owners, it is unlawful for any person, firm, partnership or corporation to prune, trim, plant, remove or replace any tree or shrub on public property, or within the public right-of-way, without first having obtained a permit for such activity from the City Director of the City Parks and Recreation or the Director's designee.

B. Such permits shall be requested by written application, which shall specifically describe the work to be done and the location thereof. Any permit issued pursuant to an application previously submitted shall expire within sixty (60) days from the date of its issuance, or within such shorter time as may be set forth within the permit. No charge shall be made for any permit, or for the processing of any application requesting a permit pursuant to the terms of this Chapter. Any work done without a permit required by this Section may result in a criminal misdemeanor charge and may be punishable by a fine of up to $750.00.

C. Such permit may direct the specific manner in which the trimming and cutting is to be done. It shall be the responsibility of the Director or designee to establish reasonable standards for these permits.

D. In the event a permit is denied, the basis for denial shall be given to the applicant, who shall have the right to appeal the denial to the City Council. A written notice of appeal must be filed with the City Clerk with a copy to the City Attorney within five (5) days of the denial. Upon the receipt of a notice of appeal, the City Council shall hear and decide the appeal at the next regular scheduled meeting occurring no less than three (3) days from when the notice of appeal is filed with the Clerk.

E. No trees or shrubs shall be planted in or removed from any public street, public parking strip or other public property within the City without the prior acquisition of a written permit therefor from the Director of the Parks and Recreation Department. A violation of this subparagraph may result in a criminal misdemeanor charge and may be punishable by a fine of up to $750.00.

(Ord. 2-85 § 1 (part), 1985: Ord. 29-83 (part), 1983: prior code § 38-10 (A) (part), (1))

(Ord. No. 31-10, § 3, 12-21-2010)

12.32.090 – Licensed Arborist responsibility

A. Arborist will be responsible for work activities performed by them or supervised by them in conformance with all applicable city code provisions, and applicable Wyoming law.

B. The following provisions apply to licensee operations:

1. An ISA Certified Arborist must be on location at the job site at all times during an aerial operation.

2. Safety measures and equipment must be utilized at all times to protect workers and the public;

3. Adherence to notices or orders issued from the Director of the Parks and Recreation Department or the Director's designee pertaining to work activities and operations; and the

4. Maintenance of current physical and mailing and emailing address information, as well as text information at the Office of the City Clerk for use in providing any written or personal notification necessary from the Director.

5. A violation of Paragraphs 1-3 of this Section shall be punishable by a criminal misdemeanor fine of up to $750.00.

12.32.100 - Permit—Traffic control measures.

It shall be a condition of the permit required in Section 12.32.080 of this Chapter that the permittee take appropriate measures to assure that, during the performance of the work, traffic conditions shall be maintained as nearly normal as practicable, at all times. The permittee shall route and control traffic, including the permittee's own vehicles, as required by the City Manual of Specifications and Procedures for the use of traffic-control devices in construction and maintenance areas, and other applicable City Ordinances.

(Ord. 2-85 § 1 (part), 1985: Ord. 29-83 (part), 1983: prior code § 38-10 (C))

12.32.110 - Permit—Not required for work by property owner.

A property owner or a member of the property owner's immediate family who trims or prunes any tree or shrub within the public street which abuts the property owner's property shall not be required to obtain a permit as set forth in Section 12.32.080 of this Chapter.

(Ord. 2-85 § 1 (part), 1985: Ord. 29-83 (part), 1983: prior code § 38-10 (B))

12.32.120 - Protection of trees during excavations.

In making excavations in street or other City property, care shall be taken to avoid injury to the roots of any tree or shrub, wherever possible.

(Ord. 29-83 (part), 1983: prior code § 38-14)

12.32.130 - Attaching signs or notices prohibited.

It is unlawful to attach any sign, advertisement or notice to any tree or shrub on City property or parkway.

(Ord. 29-83 (part), 1983: prior code § 38-12)

12.32.140 - Attaching wires or ropes prohibited.

A. It is unlawful to attach any wire or rope to any tree or shrub in any public street, parkway or other City property without the permission of the City Manager or the City Manager's duly authorized representative.

B. Any person or company which maintains poles and wires in the streets, alleys or other City property shall, in the absence of provision in the franchise concerning the subject, keep such wires and poles free from and away from any trees and shrubs in such places as far as may be possible, and keep all such trees and shrubs near wires and poles properly trimmed, subject to the supervision of the City Manager or the City Manager's duly authorized representative, so that no injury shall be done either to the poles or wires or to the shrubs and trees by their contact.

(Ord. 29-83 (part), 1983: prior code § 38-13)

12.32.150 - Injuring trees or shrubs prohibited.

It is unlawful to purposely injure any tree or shrub planted or growing on City property or parkway.

(Ord. 29-83 (part), 1983: prior code § 38-11)

12.32.160 - Prohibited species of trees and shrubs.

It is unlawful to plant or cause to be planted on public places, any of the following:

A. Any cotton-bearing cottonwood trees; except within forty (40) feet of the North Platte River bank.

B. Any female box elder tree (acer negundo);

C. Any willows with a maximum height of ten (10) or more feet (genus salix), except within forty (40) fee of the North Platte River bank.

D. Any State of Wyoming designated weeds (Wyoming Statute 11-5-102) which include Russian olives and tamarisk.

(Ord. 7-99 § 2, 1999; Ord. 29-83 (part), 1983: prior code § 38-6)

12.32.170 - Dangerous trees deemed nuisance when—Remedies.

A. Any tree growing over a public alley, street or highway, or so located as to extend its branches over a public alley, street or highway, shall be trimmed by the owner of the property on which the tree stands, or an authorized agent or employee of tree owner, so that there shall be a clear height of fifteen (15) feet above the surface of the street, alley or highway, and eight (8) feet above the surface of sidewalks unobstructed by the branches, or so that the tree does not obstruct the light from any streetlight or the view of any intersection. Additionally, such owner or agent shall remove all dead branches and stubs on any tree or trees which have become likely to fall on or across the public highways, streets or alleys of the City.

B. For purposes of maintaining visibility for traffic at intersections, existing hedges, shrubs or other plant material within ten (10) feet from the face of the curb on a corner lot shall be trimmed and maintained so as not to stand more than thirty-six (36) inches above the level of the sidewalk. On corners where existing embankments, retaining walls or other objects are placed, no plant material shall be planted unless a permit has previously been obtained from the City Manager.

C. If vegetation, on private property, in any way other than as stipulated in this section causes a hindrance to the general public, or in any way endangers the security and usefulness of any public street, highway, alley, sewer or sidewalk, as determined, following an inspection, the same is declared to be a public nuisance. The City Manager or the City Manager's authorized agent shall issue the property owner or the owner's agent a written notice requiring the owner or agent to correct or remove the nuisance within fifteen (15) days. If the owner or agent does not correct the nuisance within the time specified, the City Manager or the City Manager's authorized agent shall cause the same to be corrected or removed. In the event the city corrects or removes the tree, then all costs thereof, including, but not limited to: cost of any contractors and administration; costs and fees as established by the City Council; all collection fees, expenses, costs and reasonable attorney's fees incurred by the City, shall be due and owing from the property owner to the City. Such costs, expenses and fees may be collected in any manner prescribed by law.

(Ord. 27-05 § 3, 2005; Ord. 18-99 § 1, 1999; Ord. 29-83 (part), 1983: prior code § 38-9)

12.32.180 - Interfering with city activities—Public hearings.

No person shall prevent, delay or interfere with the director of the public services department, or any of his duly authorized agents or assistants in the execution or enforcement of this chapter; provided, however, nothing contained in this chapter shall be construed as an attempt to prohibit a public hearing, or to prohibit any legal or equitable remedy in any court of competent jurisdiction for the protection of property rights by the owner of property within the city.

(Ord. 29-83 (part), 1983: prior code § 38-15)

(Ord. No. 31-10, § 3, 12-21-2010)

12.32.190 - Violation—Penalty.

Any person violating any provision of this Chapter shall be guilty of a misdemeanor, the penalty for which shall be that set forth in Chapter 1.28 of this code.

(Ord. 29-83 (part), 1983: prior code § 38-16)

This Ordinance shall be effective twenty-one days, 2019.

PASSED on 1st reading the ____ day of _____, 2019

PASSED on 2nd reading the ____ day of _____, 2019

PASSED, APPROVED, AND ADOPTED on third and final reading the _____ day of _____, 2019.

APPROVED AS TO FORM:

_____

ATTEST:

CITY OF CASPER, WYOMING
A Municipal Corporation

_____
Fleur D. Tremel
City Clerk

_____
Charles Powell
Mayor

October 21, 2019

MEMO TO: J. Carter Napier, City Manager

FROM: Keith McPheeters, Chief of Police
Shane Chaney, Police Captain

SUBJECT: Casper Police Department Needs Assessment

Meeting Type & Date
Special Work Session
October 29, 2019

Action type
Direction Requested

Recommendation
That Council, review the information provided and presented regarding the feasibility and needs assessment completed for the Casper Police Department, Municipal Court and Public Safety Communications, and provide direction to the staff.

Summary
In October 2018, the Casper Police Department issued an RFP for a feasibility study and space needs assessment for the current Police Department. James Estes with Police Facility Design Group, PA was the consultant selected to complete the assessment for the Police Department. Mr. Estes specializes in Police Department facility design. Mr. Estes was tasked with assessing the physical conditions of our facility, assessing the operational effectiveness and efficiency of the facility, and evaluate the feasibility of the current facilities for future use and operations. Additionally, the consultants were tasked with projecting the future space and operational needs for the Police Department, Municipal Court, and Public Safety Communications. From this research, the consultants were asked to evaluate the feasibility of providing additions/remodels to current facilities and the feasibility of relocating the operations to new sites within the area that maintain operational effectiveness and efficiency.

Mr. Estes will be in attendance to present the final space needs assessment and feasibility study. Mr. Estes will be available to discuss the research process and answer any questions Council may have.

Financial Considerations
Project cost will be included in the presentation for Council's consideration.

Oversight/Project Responsibility
Shane Chaney, Police Captain

Attachments
Police Feasibility Studies and Space Needs Assessment

Police Facility Design Group
500 Grand Boulevard Suite 201A
KANSAS CITY, MISSOURI 64106
(816) 298-6700

exclusively dedicated to public safety facility planning since 1978

Williams Spurgeon Kuhl & Freshnock Architects, Inc.

110 Armour Road
North Kansas City, MO 64116
(816) 300-4101

Police Headquarters and Fire-EMS Administration

Casper, Wyoming

September 11, 2019

Phase 1 Feasiblility Studies and Space Needs Assessment
Volume 1 - Police & Courts

INTRODUCTION

The scope of service as stated in the RFP issued on October 10, 2018 is as follows:

The Scope of Services required includes evaluating the current conditions and anticipated needs of both the Police Department and the Fire-EMS Administration and Station No. 1. Consultants are to ultimately provide the assessment and practicality for potential options for both departments. The options to be studied and presented for each department are: 1) remain in the municipal campus setting and provide additions/remodels to current locations; 2) relocate the departments to new sites within proximities appropriate for the utmost functionality; and 3) a combination of one department or the other remaining within the municipal campus while relocating one department or the other to a new location.

The study report document is provided in two volumes 1 - contained herein – covers the entirety of the work scope involving the Police Department and Courts. Volume 2 covers the entirety of the work scope pertains to the Fire Department and EMS.

Primary activities and objectives of the Needs Study are as follows:

- Define current personnel, activities, and support functions.
- Document projected staffing increases.
- Determine current and future facility space requirements.
- Determine operational relationships of the personnel, activity, and support spaces.
- Develop site requirements.
- Determine the minimum site requirements necessary to develop a new facility
- Analyze sites that have been identified for possible project development.
- Perform an evaluation of the existing facility's capacity to meet current and future needs of the Police and Courts.
- Perform an evaluation of other properties with existing building structures for development to meet the needs of the Police and Courts.
- Estimate building and site development construction costs for identified development scenarios and compare and contrast both, strengths and weaknesses of each development scenario and project costs.

STUDY PROCESS

The study process began with on-site meetings on April 9th – 11th, 2019 with James Estes and JoLaina Greenhagen of Police Facility Design Group, and managers and personnel of the Casper Police Department and Courts. Information-gathering meetings provided an understanding of present and future department functions. Discussions with department representatives focused on how they currently operate, and how they could operate more efficiently without consideration for the way they currently operate under the constraints imposed by their existing building. To assist the architects in developing a facility program, one aspect of the meetings catalogued current budgeted personnel, and looked at the accessory support space they need to conduct routine operations. A tour of the existing facilities was conducted to support documentation of deficient conditions and typical usage of current space.

The following outlines the details of the process, which resulted in the final outcome documented in this report:

- Meetings were conducted in group interview format. This provided the insight into what makes these specific departments unique, and how the law enforcement in the region is evolving. This is followed by a similar discussion

pertaining to each department and how the issues they face are impacted by their facility. Department personnel are asked to think beyond the envelope of how they currently operate, focusing on how they should operate if not for the constraints of deficient space. Understanding these factors, blended with the understanding of traditional law enforcement space needs, allows the development of a building program specifically tailored to the needs of Casper Police Department and Court personnel.

- Development of a list of optimal functional elements for current needs, through meetings and/or surveys with department administrators, provided a breakdown of the proposed building into each distinct element. (Functional elements are comprised of personnel, activities, and accessory support space. The list includes each distinct function, which in the design phase will become a room or space). Utilizing department personnel input, these elements are increased where necessary to meet the anticipated future needs.

- Utilizing PFDG's database developed from nearly 300 similar facilities around the country, space is established for each functional element based upon space standards necessary to accommodate specific operations. This method brings credibility to the establishment of the building size (which directly affects construction costs), and provides the highest level of assurance that the facilities will be useful at building occupancy, and for an acceptable time period in the future.

- Optimal internal adjacencies, or spatial relationships, between personnel, activities, and corresponding support functions are developed with the assistance of department personnel and reflected in the preliminary plan layout. Input to the architects through this process allows Casper personnel the opportunity to influence how the building will ultimately be designed to meet their department's specific operational needs.

- Develop alternative building configurations to establish probable building footprints. Establish parking and other site use elements. Develop site density usage to determine the minimum and maximum site area requirement for building development.

- Identify the various scenarios for developing facilities that will support the programmatic requirements. These include; new facility construction, modification and reuse of the existing facilities, and potential use of existing buildings on identified properties.

- Estimate construction costs to develop facilities for each scenario. Estimates are derived by applying current square footage and unit costs for police and court facilities built around the country, adjusted to the Casper region. PFDG maintains a cost database compiled from new facilities planned by PFDG and buildings planned by others. Utilizing typical square footage costs ensures that the building construction budget is sufficient without being overly ambitious.

Personnel Growth Accommodation

While well designed public safety buildings can be renovated to support future growth of the occupying department, the fortified nature of the building's construction, along with the distributed placement of future staff throughout the building, makes renovation and expansion of the building to accommodate personnel growth in a department extremely costly. Like public safety departments all over the country, Casper elected to plan for a building that will support 20-years of staff growth. This 20-year planning period reflects the point at which the building would – theoretically – be a perfect fit for the Casper Police Department, though the building may effectively support the department's space needs for many years after that period without significant expansion, based on how the City of Casper and the Department actually grow.

Given that the number of personnel in the department is the primary determinant of the space requirement, a properly sized building requires projecting the appropriate number of personnel who will occupy the building. Architects worked with public safety managers in ascertaining likely personnel growth in the department over the next 20-years. These discussions were informed by current City of Casper population estimates, US census information and historical population increase rates over the last several decades. Current personnel counts were adjusted to reflect understood increases in staffing that should occur in the short term. The department personnel increase forecasted to the future reflects an understanding that the level of service to the citizens of Casper should be maintained.

DEPARTMENT DIVISION	2019 PERSONNEL	2039 PERSONNEL
Administration	6	9
Support Services	13	22
Evidence & Property	3	4
Communications	21	27
Investigations	17	25
Patrol	91	118
POLICE PERSONNEL TOTALS	**151**	**205**
Court	10	18

National Space Standards

Once all personnel, activities, and support functions were identified through group meetings, square footage was assigned to each element. A determination of space for each element can be very subjective. Therefore, accurately assigning the appropriate amount of space is based upon area derived from a database of previously designed facilities and tailored to fit the way the Casper Police Department and Court needs to operate. One component factored into the determination of space assigned to a specific Functional Element is the use of planning standards for public safety facilities. This can come in many forms but is primarily related to the size of a workstation, seating, or table requirement to perform a task, or multiple tasks within the functional element. It can also be a standard for a room size based on the area required to perform a known set of tasks. Application of space standards protects against overbuilding or premature obsolescence from providing a space of insufficient size.

SPACE NEEDS PROGRAMMING

A summary of the space needs requirements for the Casper Police Department and Court is listed in the table below.

DIVISION	2019 SPACE	2039 SPACE
Administration	1,790	2,340
Support Services	6,395	7,540
Evidence & Property	3,405	3,860
Communications	2,850	3,855
Investigations Division	4,890	5,740
Patrol Division	4,070	4,740
Detainee Intv./ Interrog.	2,270	2,270
General Building Support	10,880	12,881
Subtotal (Net Area)	**36,550**	**43,226**
Accessory Space	1,097	1,297
Circulation Space	10,165	12,021
Walls & Unusable Space	4,303	5,089
Police Building Total	**52,114**	**61,633**
Court	6,015	7,365
Accessory Space	180	221
Circulation Space	1,549	1,896
Walls & Unusable Space	697	853
Court Building Total	**8,441**	**10,336**
Fleet Garage	6,050	6,050
Range/ Training	6,345	6,345
Walls & Unusable Space	1,116	1,116
Fleet Garage & Training	**13,511**	**13,511**
TOTAL	**74,066**	**85,479**

SITE DEVELOPMENT SCENARIOS

With the establishment of the space need program above, the focus of the report turns to identifying and evaluating development scenarios that provide the best outcome for designing and constructing facilities that meet the programmed space and provide the best long-term value.

Four development scenarios were identified. They include, 1) Reuse of the existing Hall of Justice by renovating existing space and expanding the floor space by constructing a new addition, attached to, and/or immediately adjacent the current structure; 2) a building of new construction on a clean site to be identified; 3) renovate and expand the former Sears space in the East Ridge Mall; and, 4) renovate and expand the former Star-Tribune building.

The cost estimates associated with each development scenario reflect building and site construction cost today for comparison. Other project costs for design and engineering, FF&E, and future escalation require consideration.

Option 1, Hall of Justice. Evaluating the Hall of Justice also included consideration of Police use space in other structures in close proximity to the Hall of Justice. These "other" buildings are the City Center Building and the Market Street Garage and Storage Building. Public safety departments the size of Casper recognize that dispersing staff across multiple buildings is operationally inefficient. The remedy for addressing this deficiency is, typically, to construct buildings that house all staff under a single roof. This is especially true for the Administrative, Support Services, and Investigations Divisions, including all storage needs these divisions require. For this reason, a long-term solution that includes the continuing use of the Hall of Justice necessitates the abandonment of the City Center and Market Street buildings, and

moving their functions into the renovated Hall of Justice.
Any renovation and expansion to the Hall of Justice assumes that the County would agree to the plan. Casper Police currently occupy about 22,000 square feet of space that could reliably be considered for their continued use. Given this relatively small percentage of the area requirement of the programmed space need, a new construction addition would make up a significant portion of the overall project.

Construction of any attached structure to an existing structure carries additional risk with regard to construction conditions that are difficult to predict prior to the occurrence of actual construction. This means costs can be harder to estimate early and the risk of Change Orders increases. Minimizing the impact on ongoing operations in the existing building while construction occurs immediately adjacent is also challenging to both operations and construction. How contractors react in their pricing to this added complexity is also difficult to predict in preliminary estimates.

Opting to advance the Hall of Justice development scenario carries with it many hurdles to bringing the existing space up to meet the requirements of current codes and ADA requirements. Yet the greatest challenge with Option 1 involves the identification of sufficient site area immediately adjacent that will support the required footprint addition. After considering the potential for street closures to accommodate the added footprint and determining the undesirable nature of this, combined with extensive costs associated with utility relocation, our evaluation determined that if an expansion to the Hall of Justice was the preferred development scenario to advance, the most reasonable option to put forth would be the placement of it on the current County parking lot to the immediate south of the Hall of Justice.

The proposal developed under this option would be the development of a basement level parking garage with two floors built over it. This garage would replace County parking lost to the building footprint built upon it. The two floors of Police and Courts space built above the basement garage would meet the programmed space need.
The only probable solution to this option, when paired with the basement garage parking to replace the existing County parking results in new construction of square footage nearly identical to that of an new building on an unidentified site, in addition to the renovated space in the existing Hall of Justice.

Even with the County parking lot, the site area is less than two acres and relies on the current parking lot across the street for police vehicles. Even with a new building addition, the current parking situation is not addressed and remains inadequate.

Hall of Justice Cost:	
Renovated Space	$ 5,387,520
New Addition	$28,806,163
Site Development	$ 962,000
Total Construction Cost	**$35,155,683**
Acquisition Cost	$ 0

Option 2, new construction on an unidentified site. New facilities are the most predictable with regard to meeting an expected outcome while maintaining an established budget. Starting with a clean slate is the best way to ensure that all planning objectives can be met as there are few if any existing impediments to impact the goals. Our planning for new facilities is based on planning standards for police facilities built around the Country, tailored to Casper's specific needs. This ensures credible planning solutions with regard to space, quality, and cost.

While our planning proposal for new construction is based on an

actual site centrally located in Casper, this option could be developed on most any desired property of approximately eight acres in Casper. Our planning for new construction on eight acres affords design flexibility of the building structure, sufficient parking with designated and secure parking for Police fleet vehicles, and room for expansion beyond the needs of the 20-year planning period. New construction on a sufficient site will serve not only the Casper Community today, but for the next generation to come.

New Construction:

Renovated Space	$ 0
New Space	$33,007,175
Site Development	$ 2,478,920
Total Construction Cost	**$35,486,095**

Acquisition Cost (Undetermined)

Option 3, former Sears space, East Ridge Mall. The former Sears space consists of approximately 70,000 square feet of enclosed space on one level. The interior is relatively open and unobstructed which would minimize demolition cost prior to renovating the interior. The requirement for new expanded space is relatively small at about 15,000 square feet. The site area the shopping center will commit to dedicating to the City project is relatively undetermined, but the potential for space is more than sufficient to meet the programmed requirement. Most of this site area is currently constructed as parking and most of it would be used for parking in the public safety project.

While our evaluation has determined that there is an opportunity for construction cost savings versus new construction there are serious concerns. Chief among these concerns is the party wall the Police Department would share with an unknown neighbor in the adjacent mall space. Additionally, the mall is designed as retail space and is intended to move large numbers of both pedestrians and vehicles through it and around it. Sound security planning for public safety facilities intends to control and minimize traffic around the building and is in opposition to this style of planning use.

The design of this space to serve a large retail tenant results in a high floor to deck ratio when compared to most public safety buildings. At approximately 22 feet for the former Sears space, this compares to a height of about 14 feet for most police buildings. The taller space results in a much greater volume of space within the building insulation envelop and would result in substantially higher energy costs year after year.

As stated prior, our evaluation concludes that there is an opportunity to see construction cost savings in renovating and expanding this space. But this savings may be decreased or even eliminated depending on a final agreed upon sales price.

East Ridge Mall:

Renovated Space	$19,663,920
New Addition	$ 5,047,830
Site Development	$ 2,642,000
Total Construction Cost	**$27,353,750**

Acquisition Cost (TBD, Est. 3-8 million)

Option 4, Star-Tribune Building. The existing building structure consists of approximately 47,000 square feet and will require a new building addition of 38,000 square feet to meet the programmed need. The building itself is complex and cut up in its massing and may create difficulties in efficiently using space. The new addition to the existing building would be required to be a two-story space and, again, does not lend itself to working well with the odd shaping of the existing structure.

The current star-Tribune site area is just over 4 acres. The existing programmed space requirement including building and parking fit on the existing site but are extremely tight. The railroad tracks and potential for a hazardous chemical spill merely feet behind the building represent a threat to a 24/7 critical use building operation such as that of a police building. Additionally, the building sits at an undesirable location for a public safety building being at the end of a dead-end road.

When the acquisition cost of the property is factored in along with the prudent long-term need to acquire some additional acreage for future needs, the final project costs are similar to that of new construction.

Star-Tribune Building:	
Renovated Space	$15,261,439
New Addition	$15,017,220
Site Development	$ 1,642,000
Total Construction Cost	**$31,920,659**
Acquisition Cost	(TBD, Est. 2.8 million)*

*Does not include additional adjacent properties desired

SUMMARY CONCLUSION

Deficiencies in the current facilities are readily apparent with the most obvious being a severe shortage of space to conduct routine public safety operations. The Department currently occupies approximately 40,000 square feet of space in three different buildings, plus space on a long-term lease for Communications. This is just over one-half of the space the Department needs today, and less than half the space (46%) they will need in 20-years. Given the space is not in one single building makes the space shortage and operational efficiencies even worse.

Further issues relate to the age and condition of the existing facilities, ADA and code deficiencies, and security weaknesses. The existing facility and site do not appear to be a viable candidate for long-term police department and court usage as it cannot support parking needs and long-term future growth. The expense, as well as the impact to ongoing law enforcement operations, to correct deferred maintenance issues and to marginally address space issues does not appear to be a prudent investment of public funds. These issues are further complicated due to a lack of total control over the building environment given County ownership of the building.

Making a determination as to the feasibility for renovating any building assumes the building to be renovated can be made to perform functionally on par with that of a new building, and how the cost to do so compares to that of new construction. Each of the three identified renovation scenarios can be compared to the scenario involving new construction for comparison.

Without designing final plan layouts for each renovation scenario, we did develop detailed cost estimates for each based on our extensive experience with this building type. Given our attention to ensuring that we adequately covered all costs we would anticipate, it must be acknowledged that renovation projects are, and will, always be riskier to predict what construction costs will actually be when contractors bid the work. This is because they have to assess the cost risks they face when performing work on and around ongoing business operations of the police department, delays associated with phased projects, and uncovering unforeseen conditions once they "tear" into the project.

Given the greater uncertainty of predicting costs associated with

renovation projects, the lower predictability with regard to maximizing the functional outcome of same due to the impact of existing facility constraints on the design, we believe new facility construction is likely to result in the best long-term value and would recommend it as the best investment if constructed on a site of eight or more acres.

Of the renovation/ expansion scenarios, the East Ridge Mall represents the best opportunity for success of these. It presents a building envelop configuration that would appear to readily support the placement of the programmed space in an efficient manner. We can predict with a good degree of accuracy what systems will need to be replaced and their cost. And our best detailed estimates reflect a significant enough savings that even if we encounter construction conditions that require unforeseen expenditures, the overall project will still result in cost savings. But this savings does come with a security compromise given the party wall, surrounding traffic, and open access all around the building exterior.

We believe the Star-Tribune Building is not a good candidate for consideration. While we like its overall location in the community, the railroad tracks and dead-end street give us cause for concern. Making a substantial investment in such a small site that will not support future expansions, requires the acquisition of neighboring properties to be viable for long-term value. And we think the existing building configuration and structure lends difficulty towards achieving a successful design outcome.

We do not believe the existing Hall of Justice is worthy of further consideration for continuing use for police operations. The existing space is poor and would be expensive to bring up to standard. The separate buildings concept should be abandoned. The resulting development of this option would be the equivalent of building a totally new building in an area where the land to support it is not available, and the location is difficult to construct upon.

EXISTING FACILITIES ANALYSIS

The need for new or renovated facilities is driven by the condition of the existing facilities. In the discussion that follows, we identify the primary deficiencies that constrain the capability of the Casper Police Department and Courts to conduct day-to-day operations in an efficient manner. This evaluation was made by touring the facility and site and reviewing the drawings of the existing facilities. The original drawings were provided by the City. The design team took field measurements of the building structures and revised the existing building plans to reflect actual built conditions. This evaluation was not exhaustive and was made for the purpose of determining general feasibility.

The Casper Police Department is currently located in four separate structures. Primary operations are conducted from the County owned Hall of Justice. The City Center Building houses many of the Support Services functions, primarily related to Career Services; Personnel and Training. The Marathon Building on Market Street is primarily a storage space. Communications/ Dispatching is located in leased space in the NERD Building.

It would be expected that all of these functions would operate out of one single structure. Management of personnel and property, monitoring activity, and interacting with the public and outside agencies is more efficient from a single location. Police Departments across the country typically do not disperse their operations in communities of less than 150,000 – 200,000 resident population, or when geographical impediments inhibit the ease of movement between the policing area and the police station. The current distribution of personnel in the Casper Police Department is the result of a lack of space that has increased through the years as the Community and Department have grown.

Identification of Current Facility Deficiencies and Operational Issues

The primary facility used by the Department is a County building and creates limitations to the control the City and Department have for addressing current needs and growth needs into the future. Substantial investment to renovate and expand a building– even when determined to be feasible -deserves very careful consideration when the property is owned by another entity. Construction methods and design appear to be outdated, or altogether not intended for law enforcement purposes at the period of original design and do not appear to be truly suitable for use by the Casper Police Department and Court.

There are numerous areas of the building that are suffering from deferred maintenance and routine wear-and-tear. There are several areas in the facility that do not conform to accessibility guidelines. Overall security in each building is extremely vulnerable. (We will not go into details in this report so as not to increase the risk by pointing out weakness).

The inadequacies of the existing facilities compromise confidentiality, safety, security, and personnel productivity. In addition to inadequate space, the relationship and placement of existing rooms within the overall building are deficient. The current facility lends itself to a chaotic placement of personnel, inhibiting proper interaction, and adding to the inefficient use of the staff's time. A new facility, properly designed, will enhance the required operational interactions. The new building should be designed to facilitate current operations efficiently and accept expected future staffing increases without impacting proper operations.

Space/ Square Footage Deficiencies

In looking at the net area of space available in the existing facility as compared to the corresponding space requirement, we can draw the following conclusions:

1. Police Administration requires 1,790 square feet currently, and 2,340 square feet in 20 years. The existing Administration area contains 1,787 square feet of area dedicated to the specific need. This area is appropriate for today's requirement but only 76 percent of the need in 20 years.

The location of the Police Administration within the facility could be improved. The new facility should remove the Administrative suite of space from the main flow of traffic through the building, placing it in a location out of a main traffic corridor.

The development of a self-contained administrative suite with an access control/reception point would maximize the work environment. The relationship with the Lobby needs careful consideration. This relationship should promote controlled, yet convenient access between the Lobby and Administrative Suite for authorized visitors, while maintaining a visual separation from the Lobby, and a physical location within the secure portion of the building.

2. The Support Services Division is comprised of several policing and support functions, whose primary area needs – beyond Communications – involve records, personnel, and training. For these functions, the current space needed is 6,395 square feet, and 7,540 square feet in 20 years. To meet these needs, 5,533 square feet is available in the Hall of Justice and City Center. For current needs, the existing facility provides 87 percent of the required square footage and only 73 percent of the needed space at the planning horizon in the year 2039.

While the space is insufficient to support the required operations in this division, the deficiency is exacerbated by the space being in two separate buildings.

3. Space in the existing building dedicated to the handling and storage of evidence is 1,187 square feet. This is 35 percent of the required area of 3,405 square feet needed today, and 31 percent of the future need for 3,860 square feet.

There is a significant space in the Marathon building used for the storage of large evidence and found property, including space for processing a vehicle held as evidence. However, this space is so inappropriate that it cannot really be considered as relevant space to serve its intended purpose. It is - more or less - an overflow space for items that have no proper place to store them.

4. There is currently a lack of facility space to house personnel within the Criminal Investigations Division. The Investigations Division currently occupies only 2,853 square feet in the existing building. For current needs, the existing building provides only 58 percent of the required space, and 50 percent of the need in twenty-years. In addition to the space deficiency, there is a lack of space for confidential discussions with witnesses, suspects, and between investigators, as well as secured storage for equipment.

Investigation facilities should be developed which house all investigators in the new facility. The workroom should utilize a flexible bullpen configuration, with supervisory personnel immediately adjacent the workroom in private offices.

5. The Patrol Division requires 4,070 square feet currently, and 4,740 square feet in 20 years. The existing Patrol functions are supported by area totaling 2,851 square feet in the existing

building. For current needs, the existing facility provides 70 percent of the required space, and 60 percent of the required space needed in twenty-years.

The development of a new facility should keep all patrol functions in the main building with all other police operations. The building layout should be developed to facilitate the efficient movement of officers in and out of the building, to and from lockers, report writing rooms, and briefing space. Supervisory personnel should have shared office space correlating to shifts. Rooms specifically for the purpose of briefing, and report writing should be developed. Locker quantities should be sufficient to handle the unknown ratio of male to female personnel. Modern day police officers are expected to be physically fit. Fitness training facilities should be developed to meet this goal.

6. There is no space in the building for Communications. Dur to this it is currently housed in leased space in the NERD Building. Communications has a current space requirement of 2,850 square feet, with a need for 3,855 square feet in twenty-years.

Placing Communications back in the police facility environment can support the Department in monitoring activity within the facility. This can be especially helpful during the overnight hours when the building is, effectively, inoperative.

7. The current space to interview and control potentially hostile detainees is inadequate. The Department currently shares a contained Sally Port with the County in the Hall of Justice. The security issue of importance here is that once the detainee is brought into this space, the Department does not have proper space nearby to maintain security and control over the detainee, in, or as they move to an interrogation area/room. Facilities should be developed that provide a secure means of transporting a detainee from a car to the interview area, via a designated prisoner intake access point.

8. A modern police facility requires a variety of support spaces that allow the proper interaction between staff, and staff and public; locker rooms, training space, etc. among these. The existing facilities are lacking much of this space altogether, or the placement and quality of space is so poor that it renders the space virtually useless for its intended purpose. A Multi-use room should be carefully designed to provide space to conduct in-service training, and provide the flexibility to potentially serve as a community meeting room. In addition to sufficient assembly space, area should be provided for required storage. The lobby should be developed as a control point, capable of handling small crowds for assembly, which allows the public into areas of the facility intended for community function, while restricting access to the staff areas.

9. Other needs that are inadequate are those pertaining to storage space, closets, sufficient restrooms, and proper hallway circulation. Development of these areas in a new building will be guided by the appropriate building codes, ADA requirements, and standards for design.

10. Though less than efficient parking configurations are frequently an accepted inadequacy, parking that promotes a smooth flow in and out of the current site is highly desirable. Parking should be designed in such a way that it provides separation between public and staff parking areas, and provide convenient access to the building for fleet vehicles. From the public parking area, access points into the building should be readily identifiable.

Parking with access to the main police entry point at the Hall of

Justice is extremely limited as a matter of convenience. Although there is police vehicle parking in the basement of the Hall of Justice, it is extremely limited to even meet the needs of a few fleet patrol vehicles. Most staff parking is located across the street on an open lot. It is inadequate regarding personnel convenience and security of the Departments property.

Law enforcement facilities have a high demand for first floor use. Public contact points, uniformed patrol, detention and evidence functions are typically placed at ground level. It was noted that uniformed patrol was operating primarily from a basement location which is inefficient and cumbersome to routine police operations. Administration is located at the first floor area which would be better suited for one of the aforementioned divisions which should have priority for ground floor access.

Large evidence storage is located in a basement storage room at some distance from the primary evidence processing and storage area. Disposition of evidence or property comes from multiple locations, making release at one single contact point difficult. Convenient disposition to property owners and officials should be considered in a new facility with the evidence division in relatively close proximity to public contact points as well as the secure "back of the building" where evidence is brought in initially.

Report writing and evidence bag-and-tag is separate from the evidence lockers. Officers are less efficient in their day-to-day duties with regards to preparing evidence and property in conjunction with associated report writing and subsequent temporary storage in evidence drop lockers. It would be more efficient for report writing and bag-and-tag functions to occur at a unified space with secure pass-through evidence drop lockers connected to the evidence processing and storage area.

The aforementioned issues build inefficiency into the day-to-day duties of evidence division and patrol and investigative personnel as they must constantly move between different areas of the building to complete their duties. Evidence division spaces in typical modern law enforcement facilities will be unified and self-contained allowing staff to operate efficiently and to reinforce proper chain-of-custody procedures by design.

The investigations division currently struggles with the competing needs of privacy to conduct focused work and conduct telephone interviews versus the benefits of a collaborative work environment to resolving cases. A future facility should either consider private or semi-private offices with a collaborative group meeting area or an open office concept with private rooms available for focused work or confidential phone calls.

The court area does not provide quality security for the judge and court personnel. Ballistics resistant construction should be considered for the dais screen wall. A temporary holding room(s) outside of the court room would be beneficial to improved security.

The physical fitness space is sufficient in size, but of poor quality to motivate all but the more hardcore fitness buffs from using it on a regular basis

Existing Facility Structure and Service Areas

The impact of the existing structural system and location of service areas on a renovation project is an important consideration. Column locations can impact design flexibility. Service areas include stairs, elevators, mechanical/electrical equipment, restrooms, etc. Structural elements and service areas are difficult and costly to modify and should be maintained in place if possible. In reviewing the existing drawings, it is apparent that the structural column system in the existing Hall of Justice is dense.

The placement of columns will impact how effective a renovation will be and may create issues with final design and the ultimate efficiency of how spaces are laid out and interact with each other. Service areas are also spread throughout each floor plate of the existing facility. To a certain degree, this is to be expected. However, where the greatest issues lie is in maintaining the path of egress to stairs and exits. In several cases, paths to exits will need to be maintained but security issues could result where it becomes necessary to take exiting persons through potentially secure portions of the building to reach those exits.

A more detailed evaluation of the condition of the structural system and its capacity to meet the design requirements for a critical use facility would be necessary should the City decide that renovating the Hall of Justice is the best direction for advancing the project. A new facility would be designed to meet stringent structural design criteria for critical use facilities. The existing facility likely does not currently meet this design criteria.

Existing Facility Mechanical and Electrical Systems

A detailed evaluation of the condition of the mechanical and electrical systems at the existing facility will be required during any subsequent investigations of the existing facility.

It has also been noted that there is not adequate power and technology capacity at numerous areas of the facility to accommodate routine and typical law enforcement operations. The equipment utilized by public safety agencies becomes greater each year and having adequate power and technology infrastructure place is a critical part of long-term planning.

There are separate camera systems for general surveillance and interview rooms and the quantity of general surveillance cameras appeared to be less than a typical modern law enforcement facility. A unified system should be considered for a new facility that, at a minimum, covers general site surveillance, key site and building entry points, public areas, interview rooms, detention areas and critical or sensitive areas such as evidence bag-and-tag and storage. A modern system should also include redundancy in storage and operation so that critical events are not lost in case of equipment failure.

There are several different security access control systems in operation – a combination of pin-pad locks, stand-alone proximity card locks and a centralized card access system. This creates inefficiency in programming and maintaining the disparate systems in operation. A unified system should be considered for a new facility that will secure, at a minimum, building perimeter, public-to-staff area doors, any critical areas such as detention and evidence and any frequent-use doors such as gun cleaning and patrol equipment rooms. With communications as part of the facility, redundancy for access control systems should be considered to ensure that the ability to operate and control the system from dispatch is maintained in the event of equipment failure.

It has been noted that there are ventilation and airflow issues at several key areas of the police department, notably evidence areas. Some modifications would likely be necessary as part of any renovations conducted.

Energy efficiency of the existing systems is also a concern. A new facility would provide necessary mechanical, electrical and technology systems for public safety operations and be energy efficient. The existing systems in place at the Hall of Justice are less efficient and would require significant modifications, and potentially replacement, to adequately address the needs of the Police Department and Court. Compounding this issue is the cost

for upgrading systems owned and maintained by the County to meet the Casper Police Department needs.

Existing Facility Site Issues

The existing site is currently fully developed. There is no room for expansion, either to address identified space needs or for future expansion beyond the 25-year planning horizon.

Parking for public and staff is undersized and there is no distinct separation between public and staff parking areas which is a significant security concern. Public parking is especially deficient.

Difficulties of Renovating for Public Safety Departments

Our experience in considering renovations of existing structures for public safety agencies shows that it is very difficult to address all the functional and space needs that a new facility would include without compromise. Often, in comparison to basic commercial project renovations, more significant renovations are necessary to achieve even a compromised version of the needs a new facility would address.

Further, complications arise when renovating or expanding a facility that must stay in operation during construction activities. Often, construction must be phased and various divisions moved to temporary or renovated locations and then the next phase of work commencing. This lengthens the overall duration of construction and therefore increases the cost of construction. Operating out of a facility under construction also impacts the productivity and effectiveness of personnel.

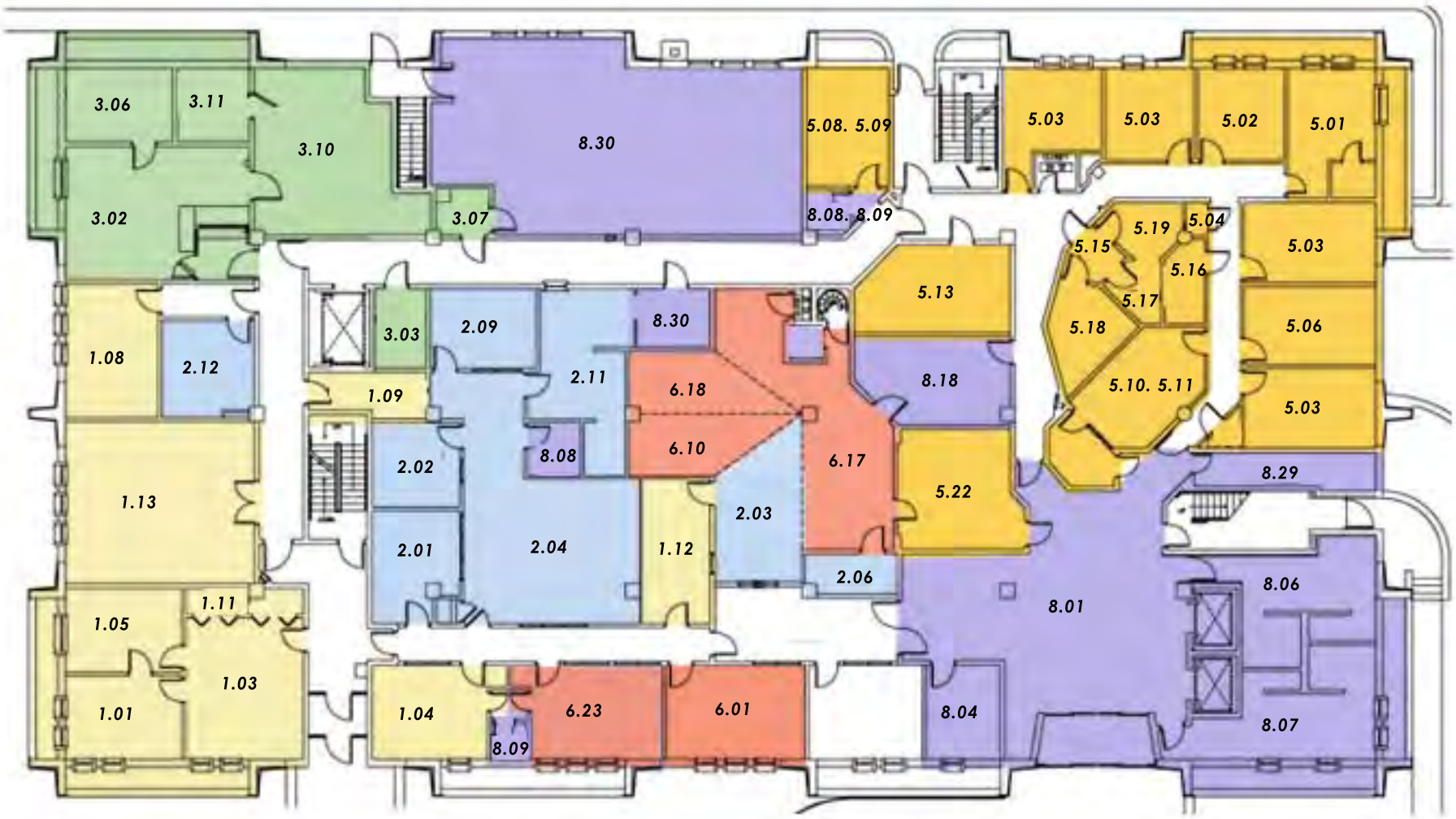
Given the costs of demolition, the increased costs of renovation construction compared to more typical commercial renovations, and the frequent need to phase construction activity, the ultimate costs in many cases approach that of new construction. Due to the nature of renovation projects, unknown conditions will be encountered during the course of construction and be required to be addressed. Therefore, the construction phase contingency allowance for a renovation project should be greater than that for a new construction project.

Consideration must therefore be given to not only costs, but also the compromises that may be inherent in a renovation project and the effect on personnel of operating out of a facility under construction.

It was apparent that the current site and facility are not meeting the current and future needs of the Casper Police Department. Considering that department growth within the current facility will be impossible and that current staff efficiency is likely being impacted in a significant way, in order to consider the existing facility as a viable alternative to new construction, any renovation conducted would have to achieve the following:

- Address all identified space and parking needs.
- Eliminate all of the functional and operational compromises that are currently being experienced by Police and Court personnel, just as a new facility would provide.
- Be considered structurally sound and responsive to design criteria for critical use facilities.
- Provide adequate mechanical, electrical and technology systems and infrastructure to support public safety operations.
- Be considered more cost effective than new construction and a prudent use of public funds.

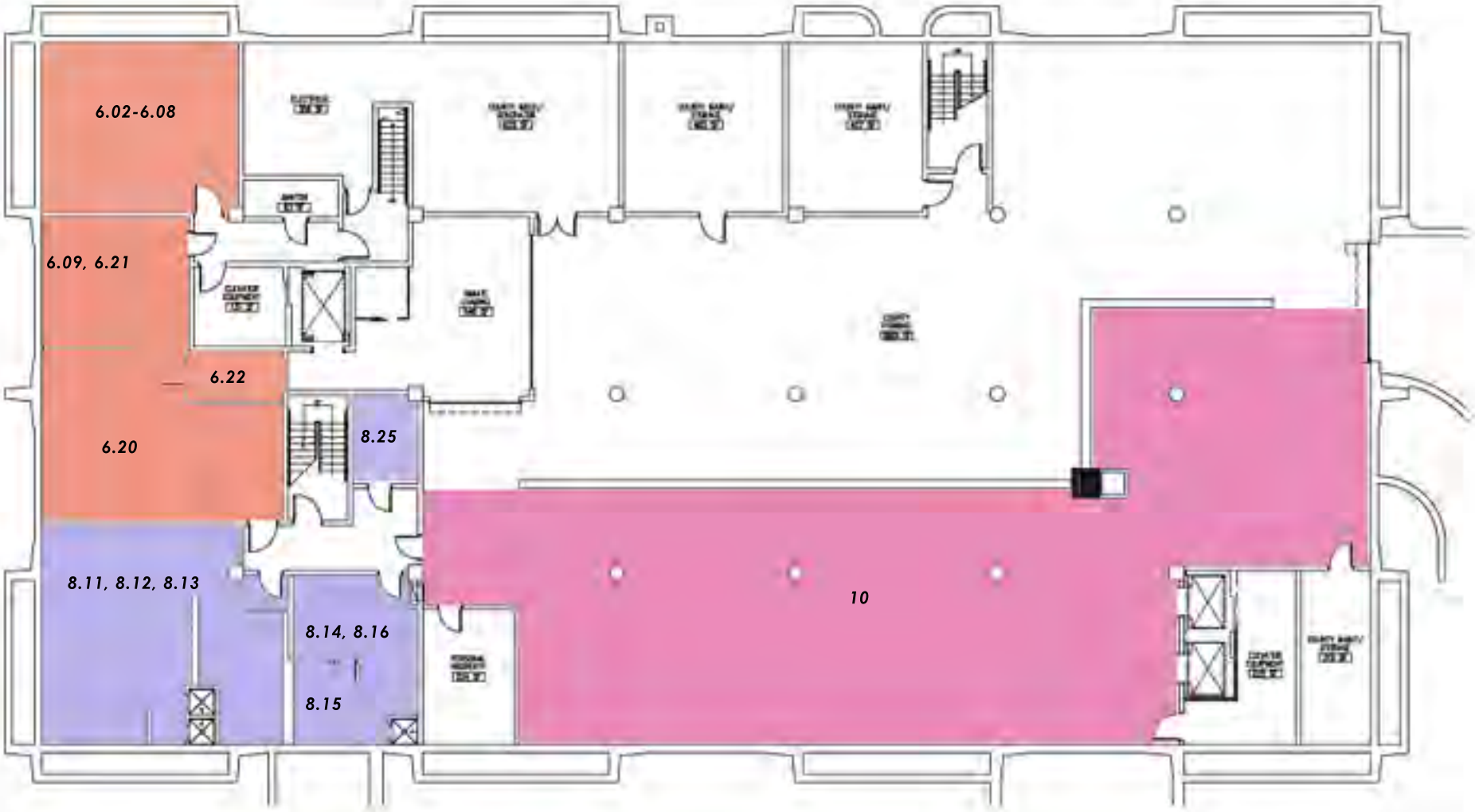
The following pages diagram and color code the existing space occupied by the Casper Police Department.



LEGEND

1. Administration
2. Support Services
3. Evidence & Property
4. Dispatch
5. Investigations
6. Patrol
7. Detainee Interview/ Interrogation
8. Building Support
9. Courts
10. Garage / Outbuilding
11. Firing Range

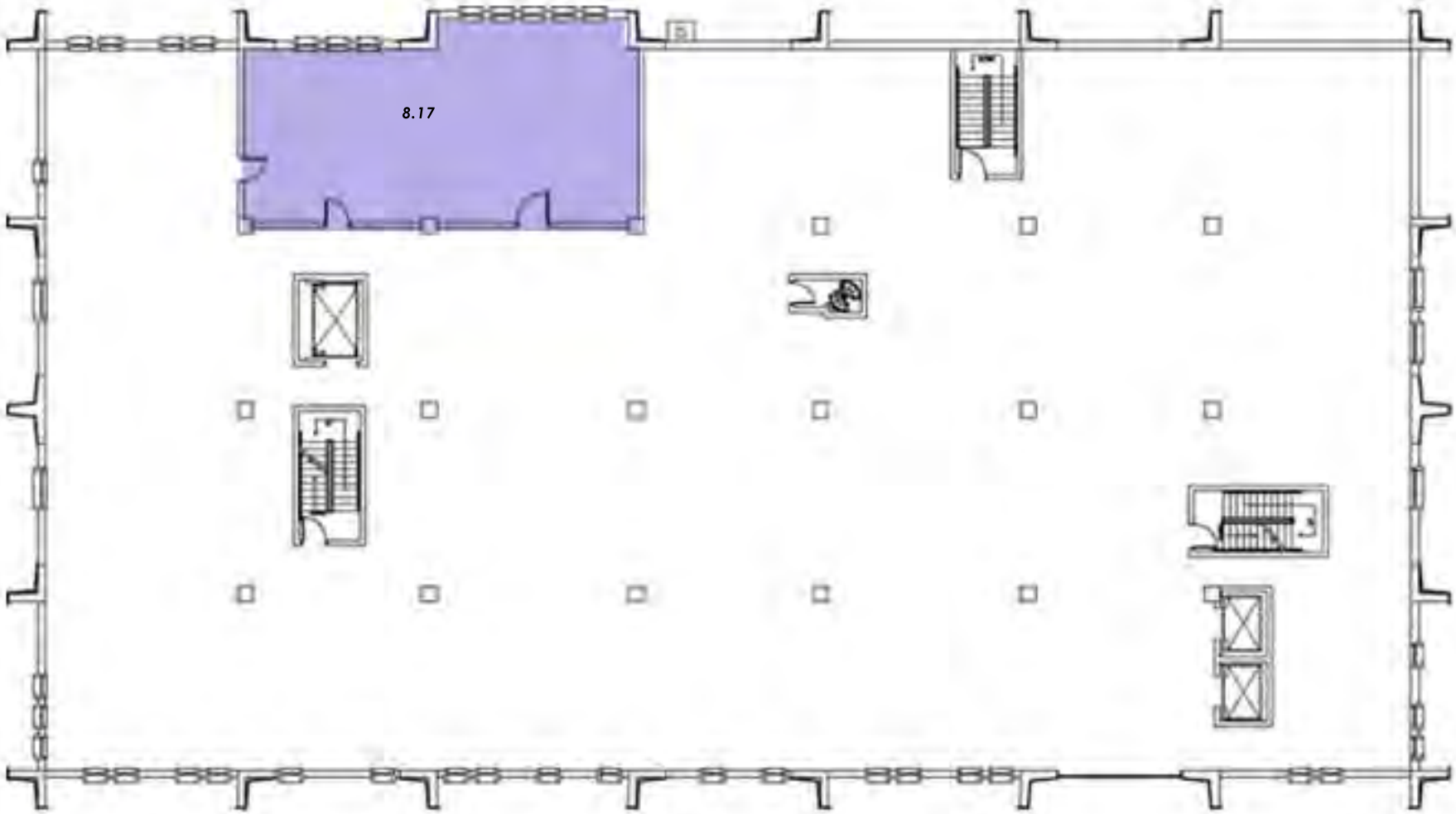
First Floor Plan



Basement Floor Plan

LEGEND

1. *Administration*
2. *Support Services*
3. *Evidence & Property*
4. *Dispatch*
5. *Investigations*
6. *Patrol*
7. *Detainee Interview/ Interrogation*
8. *Building Support*
9. *Courts*
10. *Garage / Outbuilding*
11. *Firing Range*



LEGEND

1. Administration
2. Support Services
3. Evidence & Property
4. Dispatch
5. Investigations
6. Patrol
7. Detainee Interview/ Interrogation
8. Building Support
9. Courts
10. Garage / Outbuilding
11. Firing Range

Second Floor Plan

City Center Basement

City Center Level 1

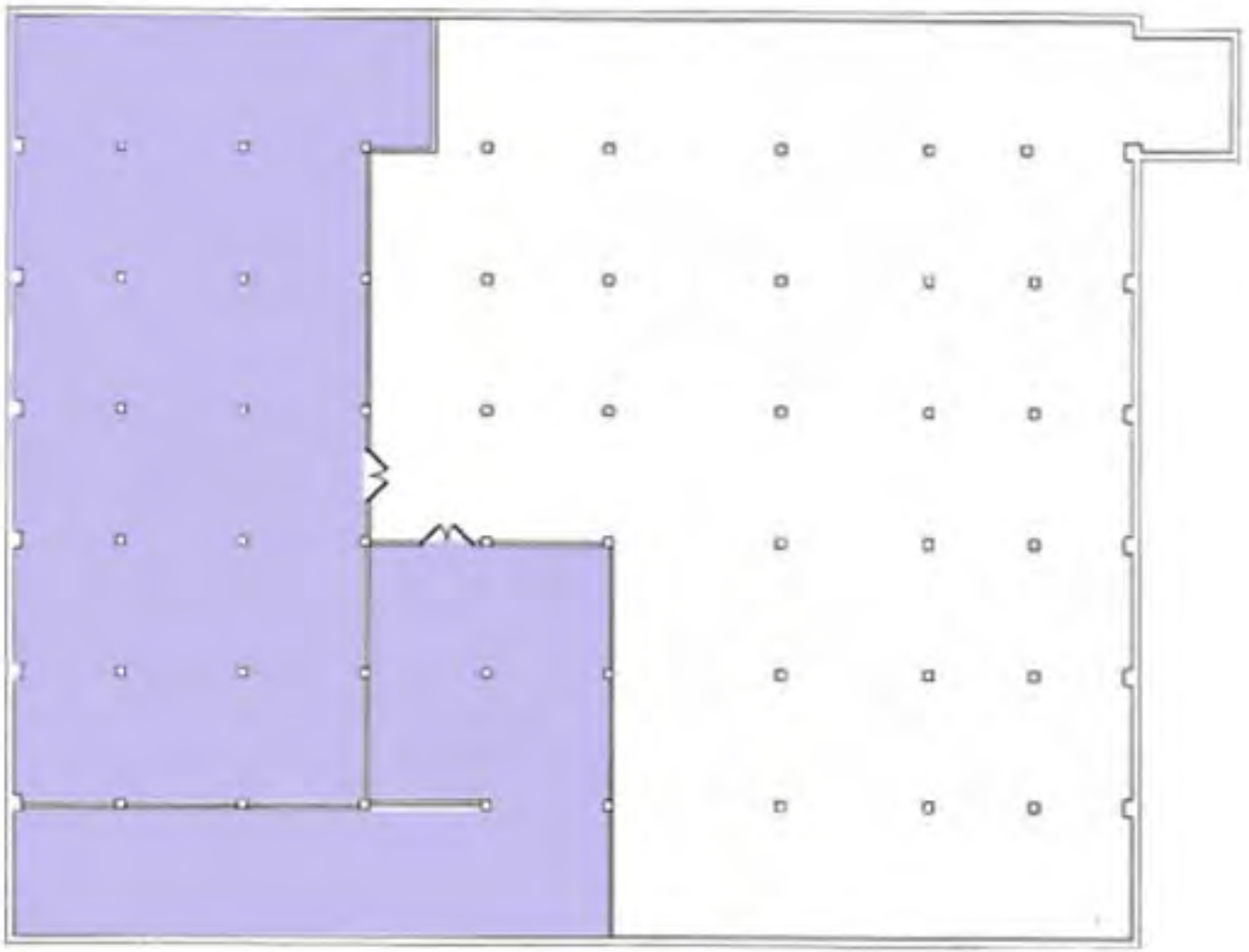
LEGEND

1. *Administration*
2. *Support Services*
3. *Evidence & Property*
4. *Dispatch*
5. *Investigations*
6. *Patrol*
7. *Detainee Interview/ Interrogation*
8. *Building Support*
9. *Courts*
10. *Garage / Outbuilding*
11. *Firing Range*

Marathon First Floor

LEGEND

1. *Administration*
2. *Support Services*
3. *Evidence & Property*
4. *Dispatch*
5. *Investigations*
6. *Patrol*
7. *Detainee Interview/ Interrogation*
8. *Building Support*
9. *Courts*
10. *Garage / Outbuilding*
11. *Firing Range*



LEGEND

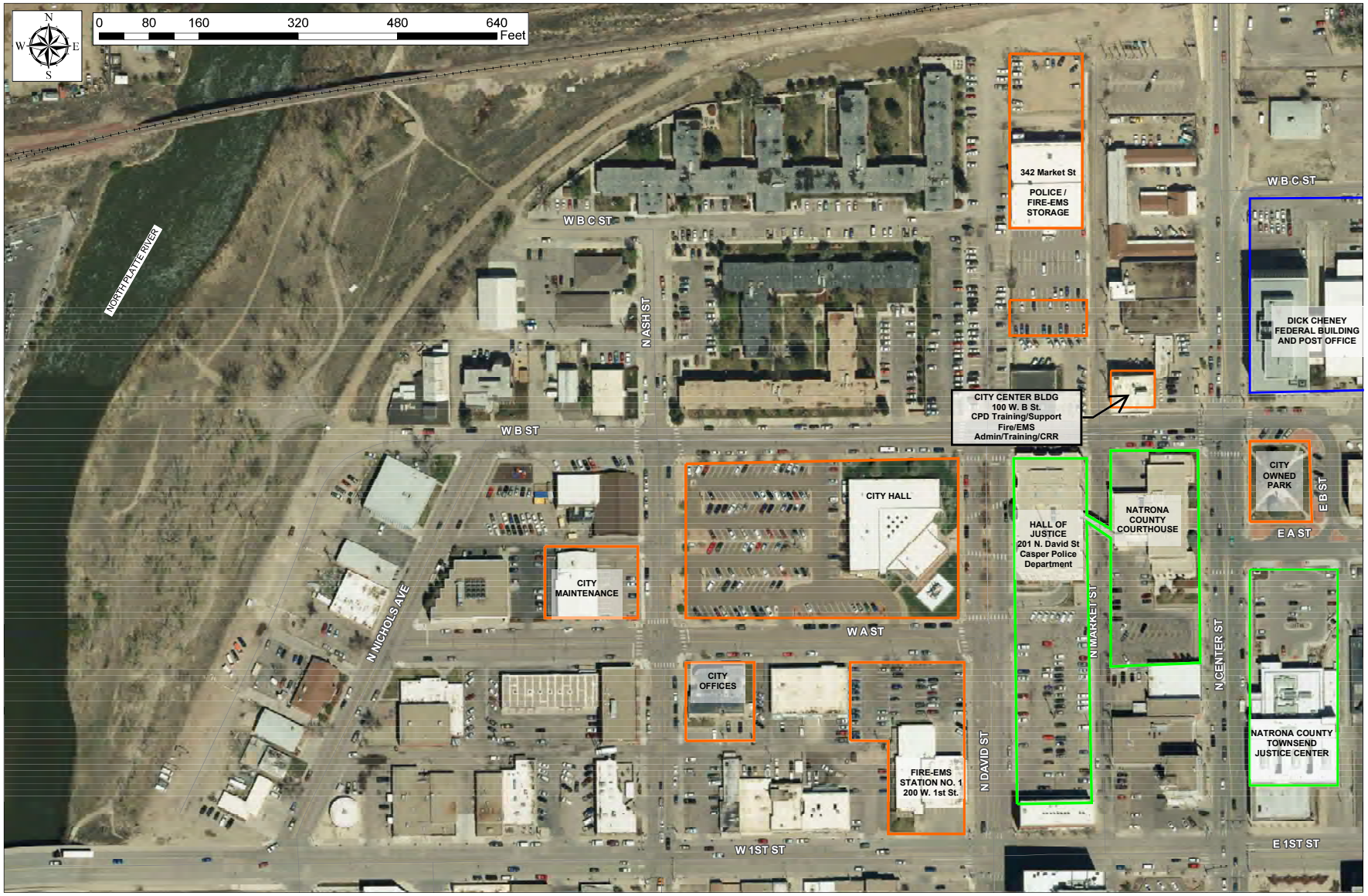
1. *Administration*
2. *Support Services*
3. *Evidence & Property*
4. *Dispatch*
5. *Investigations*
6. *Patrol*
7. *Detainee Interview/ Interrogation*
8. *Building Support*
9. *Courts*
10. *Garage / Outbuilding*
11. *Firing Range*

Marathon Basement

Marathon Second Floor

LEGEND

1. *Administration*
2. *Support Services*
3. *Evidence & Property*
4. *Dispatch*
5. *Investigations*
6. *Patrol*
7. *Detainee Interview/ Interrogation*
8. *Building Support*
9. *Courts*
10. *Garage / Outbuilding*
11. *Firing Range*



CITY OWNED PROPERTY

NATRONA COUNTY OWNED PROPERTY

FEDERAL OWNED PROPERTY

CITY OF CASPER MUNICIPAL CAMPUS

PLANNING FOR GROWTH

The primary factor influencing the cost of a new facility is gross square footage (the total area of the building's floor plans measured to the outside face of the exterior walls). Total area is directly related to the number of personnel and the functions they perform in a given space. Therefore, planning new buildings requires the projection of future personnel in order to avoid premature inadequacy. Selecting the point in the future (planning horizon) that will provide the best planning results is a judgment decision based upon experience.

Planning Horizon

The average useful life expectancy of a public building constructed today exceeds 70 years (frequently housing various tenants during this time). Anticipating the number of personnel who will occupy the building and how evolving technologies will influence facility operations 70 years from now is difficult, if not impossible.

Even if reasonable estimates for personnel and facility operations were possible to project that far into the future, a building sized for even 40 years of growth may well be three-quarters empty when first occupied. Considering that life cycle costs (heating, cooling, maintenance and repair) can far exceed initial construction costs, the economic sense of building at today's prices would be outweighed by the cost of maintaining unused space.

On the other hand, personnel growth patterns in a facility planned only to meet today's needs will lead to a condition of overcrowding that starts at initial occupation. In fact, with the typical occupancy of a new facility occurring more than two years after the actual building planning has taken place, a space deficiency can result from the outset with a growing law enforcement agency. The best planning allows the user to grow "into" the space, not "out of" the space.

This space needs program looks at space required to meet current needs, and the space needs in 20 years. Planning beyond 25 years is not recommended. A planning horizon of about 20 years provides a reasonable degree of longevity, funding practicality, and predictability of operational methods and requirements. In planning to a 20-year time frame, the increase in required floor area will allow for expected growth and change without unreasonably large areas of initially unused space.

Long-Term Growth

With the 20-year planning horizon, what happens after the year 2039? At that time the building structure should still have many years of useful life remaining. At the year 2039, the space in the facility should provide a "perfect fit" for the building's personnel and their functional requirements (in planning theory). Due to limitations in the service population, personnel increases beyond those identified in the Space Need Tables are not anticipated. However, future changes in the demand for police services could unexpectedly demand more personnel.

Some unanticipated personnel could be added with little negative impact to the building space. Minor modifications to some portions of the interior space may be required at some future point. It is unlikely that the expanded building will ever see a large enough personnel increase that would create a space deficiency comparable to the existing situation.

PERSONNEL PROJECTIONS

The primary determinant of the size of a building is the number of occupants (personnel assigned and visitors) that use a space, activities that occur within the space and equipment that supports the personnel and activities. Therefore, a properly sized building requires projecting the appropriate number of personnel who will occupy the building. While our goal is to be as accurate as possible, minor inaccuracies in the projected personnel requirements will not result in a decreased level of operational efficiency. It will, however, mean that the 'perfect fit' projected to occur in the adequacy year will occur earlier, or perhaps later, than projected depending upon when the total number of personnel projected for a planning period is reached.

The intent of this space need program is not to conduct a management/staffing analysis and any discussion of personnel projections is not to be taken as a recommendation for hiring additional personnel. However, prudent planning dictates making an allowance for probable staff growth. Architects worked with department managers in ascertaining likely personnel growth in the department in both the near term as well as over the next 20 years.

Year	Total Personnel	Population
2019	**151**	**59,000**
2039	**205**	**75-80,000**

FUNCTIONAL ELEMENTS

A public service building is a tool to aid in conducting those operations necessary for delivering efficient services to the public. Developing an adequate tool for this task requires understanding and identifying those personnel and the activities the building will support. These are referred to as Functional Elements. Therefore, defining an adequate facility, or a tool that works, requires the identification of each Functional Element. In developing these elements, the Architects asked department personnel to imagine activities as they should be, without the constraints of the present building. They were encouraged to take advantage of a rare opportunity to rethink every aspect of routine functions as they are currently conducted. The product of this exercise is a unique list of functional elements specific to the operations of these law enforcement departments.

In listing functional elements, we group them by identifying their common characteristics. In the case of law enforcement facilities, this breakdown of the total building begins with the department divisions such as Administration, Investigations, and Patrol. In the Space Needs Tables, headings such as these precede each listing of functional elements.

Although the functional elements ultimately define rooms, the best results come from maintaining the functional orientation during the study phase. Therefore, in the information gathering process, spaces such as hallways, closets, and stairs are purposely ignored in conversations with department personnel. The goal is to keep department personnel focused on how they operate, and not on the specific rooms and space they operate in. This is the essence of effective operational space development. For this reason, accessory support spaces (spaces that do not accommodate personnel or a primary activity) are not listed. Nonetheless, the floor area required for this support function is accounted for in the conversion of the net area total to the gross area total, explained in space needs development below.

Accessory support spaces include:

- coat closets
- non-specific storage
- corridors, stairways
- elevator shafts
- structural space and wall thickness
- mechanical chase space
- miscellaneous building equipment

It should be pointed out that architects and space planners, much like accountants, have various ways of reaching the same bottom line. For this reason, the net-to-gross conversion factor is neither constant nor standard in the industry. The more accessory use spaces are specifically programmed, the lower the value of the conversion factor. It is our belief that including the specific development of accessory use space takes away from focusing on the operations of the department that form the core of the facility development. The conversion factor here is based upon the average for over 100 law enforcement facilities that have been built.

SPACE NEEDS TABLES

In the Space Needs Tables that follow, current year (2019) personnel were allotted to the list of functional elements in the third column, labeled P1. The fourth column, labeled WS1, indicates the number of workstations required to support the assigned personnel and the fifth column labeled WST1, indicates the workstation type referenced to the planning standards diagrams included as part of this section. Based on the specific activity occurring in the space, the frequent peak occupancy (the highest number of occupants commonly found in the room, including visitors and the person or persons assigned to the space) is predicted in the sixth column, labeled O1.

Many functional elements do not have personnel assigned to the space, and size is determined by the activity that occurs in the space, such as with meeting or lobby space. The O1 column is a useful indicator of space needs, primarily when no personnel are assigned to the element.

From the personnel, workstation, and occupancy figures, and from an understanding of activities and equipment requirements, the 2019 space requirement was estimated for each element in the seventh column, labeled S1. This is the space requirement necessary for the department as it would be ideally staffed today if it were to be housed in what would be considered a current-day, typical law enforcement facility. The many accessory support spaces (closets, corridors, etc.) were not listed in order to retain the important orientation of primary functions.

The information in the 2019 columns were developed to enhance the accuracy of the 2039 projection, and to use as a measure for establishing the degree of deficiency in the current facility.

Based on the personnel projection, five similar columns were developed for the adequacy year, 2039. (See columns P2, WS2, WST2, O2, and S2.) The S2 column represents the need for which a building would be designed.

The sum of column S2 is the net area for a given grouping of functional elements. Using a multiplier, a percentage of the listed net area for each functional space is added for support space (gross area). This area is listed in the final row of the Summary of the Space Needs Tables.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									
Planning Horizon Frequent Peak Occupants-O2									⇩
Workstation Type-WST2								⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

1.00 ADMINISTRATION		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
1.01	Police Chief	1	1	PS-1	6	295	1	1	PS-1	6	295
1.02	Deputy Chief	0	0	-	0	0	1	1	PS-2	4	200
1.03	Administrative Assistant	1	1	PS-5	2	125	1	1	PS-5	2	125
1.04	Operations Captain	1	1	PS-2	4	200	1	1	PS-2	4	200
1.05	Support Services Captain	1	1	PS-2	4	200	1	1	PS-2	4	200
1.06	Administration Toilet	0	0	PS-14	1	65	0	0	PS-14	1	65
1.07	Professional Standards Captain	0	0	-	0	0	1	1	PS-2	4	200
1.08	Financial Services	1	1	PS-4	3	150	1	1	PS-4	3	150
1.09	Public Information Officer	1	1	PS-4	3	150	1	1	PS-4	3	150
1.10	Grant Coordinator	0	0	-	0	0	1	1	PS-4	3	150
1.11	Administration Files	0	0	-	1	65	0	0	-	1	65
1.12	Copy/ Supplies/ Workroom	0	0	-	2	80	0	0	-	2	80
1.13	Administration Conference Room	0	0	PS-13	18	460	0	0	PS-13	18	460
Totals (Areas= Net Square Feet)		**6**				**1,790**	**9**				**2,340**

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									⇩
Planning Horizon Frequent Peak Occupants-O2								⇩	⇩
Workstation Type-WST2							⇩	⇩	⇩
Planning Horizon Workstations-WS2						⇩	⇩	⇩	⇩
Planning Horizon Personnel-P1					⇩	⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

2.00 SUPPORT SERVICES		2019					2039				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
2.01	Technologies Manager	1	1	PS-3	4	175	1	1	PS-3	4	175
2.02	Records Supervisor	1	1	PS-3	4	175	1	1	PS-3	4	175
2.03	Front Desk	1	2	-	2	80	1	3	-	3	120
2.04	Records Clerks/ Copier	5	6	PS-7	6	830	7	9	PS-7	9	1,145
2.05	Mail/ Receiving Room	0	0	-	2	160	0	0	-	2	160
2.06	Office Supplies/ Forms Storage	0	0	-	1	80	0	0	-	1	80
2.07	Coffee Counter	0	0	-	1	20	0	0	-	1	20
2.08	System Technologies Advisor	0	0	PS-4	2	150	1	1	PS-4	2	150
2.09	File Servers	0	0	-	1	210	0	0	-	1	265
2.10	Information Technologies (IT) Workroom [.1]	0	0	-	1	130	0	0	-	1	130
2.11	IT Computer/ Parts storage	0	0	-	1	60	0	0	-	1	60
2.12	Fleet Coordinator	1	1	PS-5	2	125	1	1	PS-5	2	125
2.13	Fleet Storage	0	0	-	1	230	0		-	1	230
2.14	Internal Affairs Lieutenant	0	0	-	0	0	1	1	PS-3	4	175

Continued On Next Page

Functional Elements and Space Needs											
CASPER POLICE AND COURTS											
2.00 SUPPORT SERVICES, Continued		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
2.15	Internal Affairs Sergeant	1	1	PS-5	2	125	2	2	PS-4	3	150
2.16	Internal Affairs Interview	0	0	PS-17	3	75	0	0	PS-17	3	75
2.17	Career Services Sergeant	1	1	PS-5	2	125	1	1	PS-5	2	125
2.18	Career Services Coordinator	1	1	PS-5	2	125	1	1	PS-5	2	125
2.19	Background Investigator	1	1	PS-5	2	125	1	1	PS-5	2	125
2.20	Career Services:										365
	Advanced Training Coordinator	0	0	-	0	0	1	1	PS-7	2	-
	Training Officer	0	0	-	0	0	1	1	PS-7	2	-
	Career Services Administrative Assistant	0	0	-	0	0	1	1	PS-7	2	-
2.21	Career Service / Training Files	0	0	-	1	110	0	0	-	1	145
2.22	Quartermaster	0	0	-	0	355	1	1	PS-8	1	490
2.23	Training Observation/ Waiting [2.]	0	0	-	0	160	0	0	PS-8	6	160
2.24	Driving Simulator	0	0	-	0	170	0	0	PS-8	2	170
2.25	Judgement Training Simulator (Virtra)	0	0	-	0	900	0	1	PS-8	3	900
2.26	Defensive Tactics Room	0	0	-	20	1,600	0	0	PS-8	28	1,600
2.27	Defensive Tactics Storage	0	0	-	0	100	0	0	PS-8	1	100
2.28	Scenario Training Room	0	0	-	0	0	0	0	PS-8	1	0
Totals (Areas= Net Square Feet)		**13**				**6,395**	**22**				**7,540**

1. Continous wall counter work station, and one sit down computer work station.

2. Central with viewing into all training areas. Sound separation.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									
Planning Horizon Frequent Peak Occupants-O2									⇩
Workstation Type-WST2								⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

3.00 EVIDENCE & PROPERTY		2019					2039				
No.	Name:	P1	WS1	WST1	O1	S1	P2	WS2	WST2	O2	S2
3.01	Evidence Custodian Office	1	1	PS-5	1	125	1	1	PS-5	2	125
3.02	Property and Evidence Technicians Office	2	2	PS-9	2	170	3	3	PS-9	3	230
3.03	Evidence Packaging (Bag/Tag)	0	0	-	2	130	0	0	-	2	130
3.04	Secure Evidence Processing	0	0	-	1	145	0	0	-	1	145
3.05	Dirty Evidence Sorting Room	0	0	-	1	120	0	0	-	1	120
3.06	Latent Evidence Processing	0	0	-	1	220	0	0	-	1	220
3.07	Blood Drying	0	0	-	1	100	0	0	-	1	100
3.08	Drug Take Back [1.]	0	0	-	1	80	0	0	-	1	80
3.09	Evidence Review and Disposition	0	0	-	2	75	0	0	-	2	75
3.10	Property/Evidence Storage	0	0	-	1	1,075	0	0	-	1	1,260
3.11	Drug Evidence Room/ Cash/Precious Mtls Safe	0	0	-	1	160	0	0	-	1	225
3.12	Firearms Storage	0	0	-	1	130	0	0	-	1	160
3.13	Large Evidence Storage	0	0	-	1	350	0	0	-	1	465
3.14	Large Evidence Drops	0	0	-	1	100	0	0	-	1	100
3.15	Vehicle Processing	0	0	-	1	425	0	0	-	1	425
3.16	Vehicle As Evidence Storage Unit	0	0	-	1		0	0	-	1	
Totals	(Areas= Net Square Feet)	**3**				**3,405**	**4**				**3,860**

1. Secure Dropbox (Postal style) in secure room with drop access to public lobby. Sorting table and temporary storage in room.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

										Planning Horizon Space Needs-S2
										Planning Horizon Frequent Peak Occupants-O2 ⇩
									Workstation Type-WST2 ⇩	⇩
								Planning Horizon Workstations-WS2 ⇩	⇩	⇩
							Planning Horizon Personnel-P1 ⇩	⇩	⇩	⇩
						Current Space Needs-S1 ⇩	⇩	⇩	⇩	⇩
					Current Frequent Peak Occupants-O1 ⇩	⇩	⇩	⇩	⇩	⇩
				Workstation Type-WST1 ⇩		⇩	⇩	⇩	⇩	⇩
			Current Workstations-WS1 ⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
		Current Personnel-P1 ⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

4.00 DISPATCH		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
4.01	Communications Manager	1	1	PS-3	3	175	1	1	PS-3	3	175
4.02	Shift Suprevisor Office	0	2	PS-4	2	150	0	2	PS-4	2	150
4.03	Telecommunicators	20	7 [1.]	PS-10	4	1,260	26	12 [1.]	PS-10	5	2,160
4.04	Conference/ Training Room	0	0	PS-13	8	295	0	0	PS-13	10	335
4.05	Breakroom	0	0	-	3	135	0	0	-	3	135
4.06	Quiet Room	0	0	-	1	75	0	0	-	1	75
4.07	Mens's Locker Room	0	0	PS-18	10 [2.]	90	0	0	PS-18	13 [2.]	120
4.08	Women's Locker Room	0	0	PS-18	12 [2.]	110	0	0	PS-18	16 [2.]	145
4.09	Toilet 1	0	0	-	1	65	0	0	-	1	65
4.10	Toilet 2	0	0	-	1	65	0	0	-	1	65
4.11	911/ Radio Equipment Room/ Computer Equip.	0	0	-	3	240	0	0	-	3	240
4.12	Communications Storage	0	0	-	3	80	0	0	-	3	80
4.13	Central Vac/ Custodial Supply/ Janitor Closet	0	0	-	3	110	0	0	-	3	110
Totals (Areas= Net Square Feet)		**21**				**2,850**	**27**				**3,855**

1. Number of Communications/Dispatch Consoles
2. Number of lockers, 18"w x 24"d x 72"h.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									⇩
Planning Horizon Frequent Peak Occupants-O2									⇩
Workstation Type-WST2								⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

5.00 INVESTIGATIONS		2019					2039				
No.	Name:	P1	WS1	WST1	O1	S1	P2	WS2	WST2	O2	S2
5.01	Detective Lieutenant	1	1	PS-3	4	175	1	1	PS-3	4	175
5.02	Detective Sergeants	1	1	PS-4	3	150	2	2	PS-3	4	175
5.03	Detectives	9	9	PS-8	12	1,105	13	13	PS-8	19	1,425
5.04	Investigations Equipment	0	0	-	1	60	0	0	-	1	90
5.05	Task Force Officers	2	0	-	0	0	2	0	-	0	0
5.06	Investigations Administrative Assistant	1	1	PS-8	4	180	2	2	PS-8	5	260
5.07	Crime Analyst	1	1	PS-5	2	125	1	1	PS-5	2	125
5.08	Digital Forensics Technician	0	0	-	0	0	1	1	PS-5	2	125
5.09	Digital Forensics Workroom [1.]	0	0	-	2	130	0	0	-	2	130
5.10	Victim Service Coordinator	1	1	PS-3	4	175	1	1	PS-3	4	175
5.11	Victim Service Tech/ Volunteers	1	2	PS-9	3	170	2	4	PS-9	5	290
5.11	Victim Service Conference/ Children's Room	0	0	PS-13	6	215	0	0	PS-13	6	215
5.12	Victim Service Storage	0	0	-	1	50	0	0	-	1	50
5.13	Investigations Conference Room	0	0	PS-13	20	500	0	0	PS-13	20	500

Continued On Next Page

Functional Elements and Space Needs											
CASPER POLICE AND COURTS											
5.00 INVESTIGATIONS, Continued		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
5.14	Major Case Room	0	0	PS-13	24	1,010	0	0	PS-13	24	1,010
5.15	Interview Waiting Room	0	0	PS-13	10	150	0	0	PS-13	10	150
5.16	Interview Room No. 1	0	0	PS-17	3	75	0	0	PS-17	3	75
5.17	Interview Room No. 2	0	0	PS-17	3	75	0	0	PS-17	3	75
5.18	Interview Room No. 3	0	0	PS-17	3	75	0	0	PS-17	3	75
5.19	Interview Room No. 4	0	0	-	0	0	0	0	PS-17	3	75
5.20	Interview Room No. 5	0	0	-	0	0	0	0	PS-17	3	75
5.21	Large Interview Room	0	0	PS-17	5	120	0	0	PS-17	5	120
5.22	Soft Interview Room	0	0	-	6	135	0	0	-	6	135
5.23	Polygraph Suite 2.	0	2	PS-13	2	150	0	2	PS-13	2	150
5.24	Interview Toilet	0	0	PS-14	1	65	0	0	PS-14	1	65
Totals (Areas= Net Square Feet)		**17**				**4,890**	**25**				**5,740**

1. Continous wall counter work station, and one sit down computer work station.
Polygraph Suite (Two Adjoining Rooms)

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2										⇩
Planning Horizon Frequent Peak Occupants-O2									⇩	⇩
Workstation Type-WST2								⇩	⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

6.00 PATROL		2019					2039				
No.	Name:	P1	WS1	WST1	O1	S1	P2	WS2	WST2	O2	S2
6.01	Patrol Lieutenants	3	2	PS-3	4	175	3	2	PS-3	4	175
6.02	Patrol Sergeant Office No. 1	1	1	PS-4	2	150	1	2	PS-4	3	150
6.03	Patrol Sergeant Office No. 2	1	1	PS-4	2	150	2	2	PS-4	3	150
6.04	Patrol Sergeant Office No. 3	1	1	PS-4	2	150	2	2	PS-4	3	150
6.05	Patrol Sergeant Office No. 4	1	1	PS-4	2	150	2	2	PS-4	3	150
6.06	Patrol Sergeant Office No. 5	1	1	PS-4	2	150	2	2	PS-4	3	150
6.07	Patrol Sergeant Office No. 6	2	2	PS-4	3	150	2	2	PS-4	3	150
6.08	Patrol Sergeant Office No. 7	2	2	PS-4	3	150	2	2	PS-4	3	150
6.09	Patrol Officers	50	0	-	0	0	64	0	-	0	0
6.10	Traffic Sergeant	1	1	PS-5	2	125	1	1	PS-5	2	125
6.11	Traffic Officers Workroom [1.]	3	3	PS-15	4	215	5	5	PS-15	4	215
6.12	PORT Sgt (Problem Oriented Response Team)	1	1	PS-5	2	125	1	1	PS-5	2	125
6.13	PORT Officers [2.]	4	4	PS-9	4	315	7	7	PS-9	7	465
6.14	PORT Equipment Storage	0	0	-	1	45	0	0	-	1	45
6.15	SRO Sergeant (School Resource Officer)	1	1	PS-5	2	125	1	1	PS-5	2	125

Continued On Next Page

Functional Elements and Space Needs											
CASPER POLICE AND COURTS											
6.00 PATROL, Continued		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
6.16	SRO's	8	2	PS-9	2	145	9	2	PS-9	2	145
6.17	CSO's (Community Service Officers)	4	4	PS-9	4	240	6	6	PS-9	6	360
6.18	Animal Control Supervisor	1	1	PS-5	2	125	1	1	PS-2	2	125
6.19	Animal Control Office	6	3	PS-9	3	205	6	3	PS-9	3	205
6.20	Briefing Room	0	0	PS-11	16	445	0	0	PS-11	22	610
6.21	Report Writing Room	0	0	PS-15	10	200	0	0	PS-15	14	280
6.22	Patrol Supply Storage	0	0	-	1	70	0	0	-	1	100
6.23	Conference Room [3.]	0	6	PS-15	6	265		6	PS-15	6	265
6.24	K-9 Coordinator Office	0	0	-	0	0	1	1	PS-5	2	125
6.25	K-9 Training/ Supplies	0	0	-	1	50	0	0	-	1	50
6.26	Indoor/ Ourdoor Run [4.]	0	0	-	5	150	0	0	-	5	150
6.27	SRT Turnout Room [5.]	0	0	-	12 [6.]		0	0	-	12 [6.]	
Totals (Areas= Net Square Feet)		**91**				**4,070**	**118**				**4,740**

1. Three "library carel" type work stations and four person central conference table in room.
2. PORT Canine may be in attendence with Officer at times.
3. Work stations are "library carels". Six person central conference table in room.
4. Each run is 5' x 16' with 10' linear feet of run exterior fencing. Exterior run is not calculated in progam square footage.
5. Turnout room consists of 3' x 3' lockers, conference table, and presentation wall.
6. Number of lockers.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

									Planning Horizon Space Needs-S2	
								Planning Horizon Frequent Peak Occupants-O2	⇩	
							Workstation Type-WST2	⇩	⇩	
						Planning Horizon Workstations-WS2	⇩	⇩	⇩	
					Planning Horizon Personnel-P1	⇩	⇩	⇩	⇩	
				Current Space Needs-S1	⇩	⇩	⇩	⇩	⇩	
			Current Frequent Peak Occupants-O1	⇩	⇩	⇩	⇩	⇩	⇩	
		Workstation Type-WST1	⇩		⇩	⇩	⇩	⇩	⇩	
	Current Workstations-WS1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	

7.00 DETAINEE INTERVIEW/ INTERROGATION		2019					2039				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
7.01	Sally Port	0	0	PS-20	4 [1.]	1,750	0	0	PS-20	4 [1.]	1,750
7.02	Entry Waiting/ Holding	0	0	-	3	160	0	0	-	3	160
7.03	Large Interrogation Room	0	0	-	2	120	0	0	-	2	120
7.04	Interrogation Room No. 1	0	0	-	2	80	0	0	-	2	80
7.05	Interrogation Room No. 2	0	1	-	2	80	0	1	-	2	80
7.06	Interrogation Room No. 3	0	0	-	2	80	0	0	-	2	80
Totals (Areas= Net Square Feet)		**0**				**2,270**	**0**				**2,270**

1. Two drive through bays with 2 vehicles in tanden each bay.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									
Planning Horizon Frequent Peak Occupants-O2									⇩
Workstation Type-WST2								⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

8.00 BUILDING SUPPORT		2019					2039				
No.	Name:	P1	WS1	WST1	O1	S1	P2	WS2	WST2	O2	S2
8.01	Lobby	0	0	-	10/60 [1.]	840	0	0	-	15/60 [1.]	900
8.02	Press/ Class/ Community Rm (Tiered Seating)	0	0	-	60	1,600	0	0	-	60	1,600
8.03	Kitchenette/ Galley	0	0	-	2	80	0	0	-	2	80
8.04	Interview/ Report Taking/ Fingerprint Room	0	0	-	3	90	0	0	-	3	90
8.05	Interview/ Report Taking	0	0	-	1	70	0	0	-	1	70
8.06	Men's Public Toilet (Shared With Courts)	0	0	PS-14	3/5 [2.]	285	0	0	PS-14	3/5 [2.]	285
8.07	Women's Staff Toilet (Shared With Courts)	0	0	PS-14	3/5 [2.]	285	0	0	PS-14	3/5 [2.]	285
8.08	Men's Staff Toilets	0	0	PS-14	2/4 [2.]	235	0	0	PS-14	2/4 [2.]	235
8.09	Women's Staff Toilets	0	0	PS-14	2/4 [2.]	235	0	0	PS-14	2/4 [2.]	235
8.10	Staff Entry/ Mudroom	0	0	-	2	120	0	0	-	2	120
8.11	Men's Locker Room	0	0	PS-18	95/10 [3.]	1,145	0	0	PS-18	143/15 [3.]	1,726
8.12	Men's Toilets	0	0	PS-14	2/3 [2.]	200	0	0	PS-14	2/4 [2.]	235
8.13	Men's Showers	0	0	PS-19	2	60	0	0	PS-19	3	90
8.14	Women's Locker Room	0	0	PS-18	17/18 [3.]	260	0	0	PS-18	23/22 [3.]	345
8.15	Women's Toilets	0	0	PS-14	2/2 [2.]	170	0	0	PS-14	2/2 [2.]	170
8.16	Women's Showers	0	0	PS-19	2	60	0	0	PS-19	2	60
8.17	Physical Fitness Room	0	0	-	12	950	0	0	-	16	1,200

Continued On Next Page

Functional Elements and Space Needs											
CASPER POLICE AND COURTS											
8.00 BUILDING SUPPORT, Continued		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
8.18	Kitchen/ Break Room	0	0	-	20	320	0	0	-	30	465
8.19	Laundry Room	0	0	-	2	120	0	0	-	2	120
8.20	Quiet Room	0	0	-	1	75	0	0	-	1	75
8.21	Multi_Use Room	0	0	-	40/80 [4.]	1,100	0	0	-	40/80 [4.]	1,100
8.22	M.U General Storage (Tables/ Chairs)	0	0	-	2	140	0	0	-	2	140
8.23	M.U. Training Storage (Restricted Access)	0	0	-	1	110	0	0	-	1	110
8.24	Gun Cleaning Room [3.]	0	0	-	3	120	0	0	-	3	120
8.25	Armory	0	0	-	2	165	0	0	-	2	210
8.26	Ammunition	0	0	-	1	120	0	0	-	1	160
8.27	Custodial Supply	0	0	-	1	140	0	0	-	1	180
8.28	Receiving/ Central Supplies	0	0	-	1	125	0	0	-	1	145
8.29	Janitor Closet	0	0	-	1	70	0	0	-	1	70
8.30	Mechanical/Elec/Data/Security Equip.[5.]	0	0	-	1	1,590	0	0	-	1	2,260
Totals (Areas= Net Square Feet)		**0**				**10,880**	**0**				**12,881**

1. Occupants based on routine visitors/ assembly occupants, resectively.
2. Figure indicates toilet lavatories and water closets, respectively.
3. Lockers counts for 24' x 24" x 72" wardrobe lockers, and double tier 12" x 18" x 72" unassigned lockers, respectively.
4. Figure indicate classsroom and high density configuration, respectively.
5. Mechanical Equipment room may be significantly smaller if final design utilizes rooftop mechanical equipment.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2										
Planning Horizon Frequent Peak Occupants-O2										⇩
Workstation Type-WST2								⇩	⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

9.00 COURTS		2019					2039				
No.	Name:	P1	WS1	WST1	O1	S1	P2	WS2	WST2	O2	S2
9.01	Court Clerk (Administrator)	1	1	PS-3	4	175	1	1	PS-3	4	175
9.02	Clerks (5 Position Public Counter)	3	3	PS-8	3	290	7	7	PS-8	7	610
9.03	Conference Room	0	0	PS-13	6	215	0	0	PS-13	6	215
9.04	Judge Chamber No. 1	1	1	PS-3	4	175	1	1	PS-3	4	175
9.05	Judge Chamber No. 2	0	0	-	0	0	1	1	PS-3	4	175
9.06	Financial Analyst	1	1	PS-5	2	125	2	2	PS-4	2	150
9.07	Probation Office	1	1	PS-5	2	125	1	1	PS-5	2	125
9.08	Community Services Coordinator	1	1	PS-5	2	125	1	1	PS-5	2	125
9.09	Future Office	0	0	-	0	0	1	1	PS-5	2	125
9.10	City Attorney	0	1	PS-4	2	150	0	1	PS-4	2	150
9.11	Bailiff	0	0	-	0	0	1	1	PS-5	2	125
9.12	Drug Court	1	1	PS-5	2	125	1	1	PS-5	2	125
9.13	Youth Diversion	1	1	PS-5	2	125	1	1	PS-5	2	125
9.14	Courtroom:										
9.15	Well of Court - Bench, Jury, Podium, Attorneys	0	4	-	-	800	0	4	-	-	800
9.15	Gallery	0	0	-	150	1,260	0	0	-	190	1,600
9.16	Hearing Room	0	0	-	10	600	0	0	-	10	600

Continued On Next Page

Functional Elements and Space Needs											
CASPER POLICE AND COURTS											
9.00 COURTS, Continued		**2019**					**2039**				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
9.17	Jury Room	0	0	PS-13	12	335	0	0	PS-13	12	335
9.18	Men's Jury Restroom	0	0	PS-14	1	65	0	0	PS-14	1	65
9.19	Women's Jury Restroom	0	0	PS-14	1	65	0	0	PS-14	1	65
9.20	Men's Staff Restroom	0	0	PS-14	1	65	0	0	PS-14	1	65
9.21	Women's Staff Restroom	0	0	PS-14	1	65	0	0	PS-14	1	65
9.22	Attorney/ Client Meeting Room No. 1	0	0	PS-17	3	75	0	0	PS-17	3	75
9.23	Attorney/ Client Meeting Room No. 2	0	0	PS-17	3	75	0	0	PS-17	3	75
9.24	Men's Public Toilet	Shared with Police Lobby				0	Shared with Police Lobby				0
9.25	Women's Public Toilet	Shared with Police Lobby				0	Shared with Police Lobby				0
9.26	Court Lobby	0	0	-	150	900	0		-	190	1,140
9.27	Courtroom Sound Vestibule	0	0	-	2	80	0	0	-	2	80
Totals (Areas= Net Square Feet)		**10**				**6,015**	**18**				**7,365**

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									
Planning Horizon Frequent Peak Occupants-O2									⇩
Workstation Type-WST2								⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩		⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

10.00 GARAGE/ OUTBUILDING		2019					2039				
No.	**Name:**	**P1**	**WS1**	**WST1**	**O1**	**S1**	**P2**	**WS2**	**WST2**	**O2**	**S2**
10.01	Fleet Vehicles	0	0	PS-20	10[1.]	3,350	0	0	PS-20	10[1.]	3,350
10.02	Bikes	0	0	PS-20	1[2.]	675	0	0	PS-20	1[2.]	675
10.03	K-9 Training Equipment	0	0	PS-20	1[2.]	675	0	0	PS-20	1[2.]	675
10.04	Vehicle As Evidence	0	0	PS-20	1[2.]	675	0	0	PS-20	1[2.]	675
10.05	Miscellaneous Storage	0	0	PS-20	1[2.]	675	0	0	PS-20	1[2.]	675
Totals (Areas= Net Square Feet)		**0**				**6,050**	**0**				**6,050**

1. Number of fleet vehicles. If housed in standardized outbuilding, two vehicles per bay.
2. Number of drive through bays, 14'w x 48' deep to allow parking of two vehicles in tandem.

Functional Elements and Space Needs

CASPER POLICE AND COURTS

Planning Horizon Space Needs-S2									
Planning Horizon Frequent Peak Occupants-O2									⇩
Workstation Type-WST2								⇩	⇩
Planning Horizon Workstations-WS2							⇩	⇩	⇩
Planning Horizon Personnel-P1						⇩	⇩	⇩	⇩
Current Space Needs-S1					⇩	⇩	⇩	⇩	⇩
Current Frequent Peak Occupants-O1				⇩	⇩	⇩	⇩	⇩	⇩
Workstation Type-WST1			⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Workstations-WS1		⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩
Current Personnel-P1	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩	⇩

11.00 FIRING RANGE		2019					2039				
No.	Name:	P1	WS1	WST1	O1	S1	P2	WS2	WST2	O2	S2
11.01	Firing Range	0	0	-	10 [1.]	6,000	0	0	-	10 [1.]	6,000
11.02	Range Secure Entry Vestibule	0	0	-	1	45	0	0	-	1	45
11.03	Range Control Room / Office[1]	0	0	-	2	125	0	0	-	2	125
11.04	Range Storage	0	0	-	1	175	0	0	-	1	175
Totals (Areas= Net Square Feet)		**0**				**6,345**	**0**				**6,345**

1. Number of firing lanes; or equivilent in a tactical range design.

SPACE NEEDS SUMMARY

Information contained in the previous Space Needs Tables represents the net total square footage for the proposed building project. The sum of all divisions is the Net Area Subtotal, representing the total usable space in each room, and is indicated in the Summary Table on the following page.

Areas not programmed by function include circulation space such as halls, stairways, and elevators; and unusable space defined by and within walls. These are added to the total net area by the use of a multiplier that is established through historical precedence with reference to similar buildings constructed in the past. The result is the gross square footage of the building, which is the total floor area of all floor levels measured to the outside face of exterior walls.

In the table on the following page, the net space needs are combined and the aforementioned multiplier applied to determine the total area required for the project.

Functional Elements and Space Needs Summary Table					
CASPER POLICE AND COURTS					
		2019			
No.		**P1**	**S1**	**P2**	**S2**
	POLICE BUILDING:				
1	ADMINISTRATION	6	1,790	9	2,340
2	SUPPORT SERVICES	13	6,395	22	7,540
3	EVIDENCE and PROPERTY	3	3,405	4	3,860
4	COMMUNICATIONS	21	2,850	27	3,855
5	INVESTIGATIONS DIVISION	17	4,890	25	5,740
6	PATROL DIVISION	91	4,070	118	4,740
7	DETAINEE INTERVIEW/ INTERROGATION	0	2,270	0	2,270
8	GENERAL BUILDING SUPPORT	0	10,880	0	12,881
	SUBTOTAL (Net Area)	151	36,550	205	43,226
	ACCESSORY SUPPORT SPACE (+3%)		1,097		1,297
	CIRCULATION (+27%)		10,165		12,021
	WALLS AND UNUSABLE AREA (+9%)		4,303		5,089
	POLICE BUILDING SUBTOTAL		**52,114**		**61,633**
9	COURTS	10	6,015	18	7,365
	ACCESSORY SUPPORT SPACE (+3%)		180		221
	CIRCULATION (+25%)		1,549		1,896
	WALLS AND UNUSABLE AREA (+9%)		697		853
	COURTS BUILDING SUBTOTAL		**8,441**		**10,336**

Continued On Next Page

Functional Elements and Space Needs Summary Table					
CASPER POLICE AND COURTS					
		2019		**2039**	
No.		**P1**	**S1**	**P2**	**S2**
10	GARAGE, attached or detached		6,050		6,050
	WALLS AND UNUSABLE AREA (+9%)		545		545
	GARAGE BUILDING SUBTOTAL		**6,595**		**6,595**
11	FIRING RANGE, attached or detached		6,345		6,345
	WALLS AND UNUSABLE AREA (+9%)		571		571
	FIRING RANGE BUILDING SUBTOTAL		**6,916**		**6,916**
	BUILDING GRAND TOTAL		**74,066**		**85,479**

BUILDING CONFIGURATIONS AND FOOTPRINT AREA

Section 3 establishes the required space needs for all of the affected operations, both at the building level, and at the site level through the establishment of the parking requirements. An important aspect for establishing how much site area is required to support a space needs program involves evaluating how the space is distributed by floor level. This distribution determines the ground level footprint size which drives the area the building requires on the site. In order to maintain the efficient flow of operations, the floor level distribution of the specific functions must maintain keeping in close proximity those spaces that require adjacency. Equally important is understanding how the configuration of the floor level (plates) impact construction cost efficiency. The more equal the area of the floor plates, the more cost efficient the building is to construct. The following tables put forth the most probable options for developing facilities that meet the needs identified in Section 3.

Four options were established from the standpoint of building configuration, placing the operational elements on one of four floor levels; basement, first, second, and third floors. This will provide alternate building configurations, giving the flexibility to choose the best configuration to meet the design needs of any of the sites identified for development.

The desired placement of any given element on a specific floor level is influenced by two elements; internal, placement based on the specific design needs of the given functional element; and external, which relates to the impact the given conditions of the site to be developed have on the design of the building. Without consideration for the external forces, typical police buildings could most often work quite well with all functional elements on the ground level. Given that this is seldom the most efficient or cost effective way to construct buildings, consideration has to be given to the functions that have the greatest need to be on the first floor. In a police building, these spaces are usually those that require frequent contact with the public, like records; those spaces that get a high flow of traffic, such as uniform patrol; detention, where it is undesirable to move detainees up and down multiple levels; and areas like evidence and property, where bulk items are moved to and from at frequent intervals. Frequently, in police facility design, Administration and Investigations represent the most efficient compromise - along with some meeting rooms – on the above grade levels.

Building Configuration Tables

Referring to the Building Configuration Tables for four development options, on the following pages, the second column lists the subtotal of the space elements defined in the Space Need Tables in Section 3. All columns to the right state the square footages – both net and gross - for each space needs element assigned to the indicated floor level. The subtotal of the net areas are increased using specific multipliers to account for support space, circulation, and unusable building areas. The result shows the gross area required for each floor level. The first floor level establishes the footprint used as one factor in determining minimum site area.

Building Configuration: Option 1, Two-Story

CASPER POLICE AND COURTS

	FLOOR PLATE	Basement		First		Second		Third		Total
		Net SF	Gross	Net SF	Gross SF	Net SF	Gross SF	Net SF	Gross SF	
1.00	POLICE ADMINISTRATION (Office of the Chief)					2,340	3,336			
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21					2,065	2,944			
3.00	EVIDENCE & PROPERTY			3,860	5,504					
	3.01-3.12									
	3.13-3.15									
4.00	COMMUNICATIONS					3,855	5,497			
5.00	INVESTIGATIONS DIVISION					5,740	8,184			
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.02-8.07, 8.10-8.17, 8.19, 8.24-8.30			10,121	14,431					
	8.01(400sf), 8.08, 8.09, 8.18, 8.20-8.23					2,760	3,935			
	POLICE SPACE SUBTOTAL			**26,466**		**16,760**				
	Accessory Support Space (+3%)			**794**		**503**				
	Circulation (+27%)			**7,360**		**4,661**				
	Walls and Unusable Area (+9%)			**3,116**		**1,973**				
	1.00 - 8.00 Gross Subtotals			**37,736**		**23,897**				**61,633**

Continued On Next Page

Building Configuration: Option 1, Two-Story										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS			7,365	10,336					
	9.01, 9.0									
	9.03, 9.0									
	COURTS SPACE SUBTOTAL			**7,365**						
	Accessory Support Space (+3%)			**221**						
	Circulation (+25%)			**1,896**						
	Walls and Unusable Area (+9%)			**853**						
	9.00 Gross Subtotals			**10,336**						**10,336**
10.00	GARAGE			6,050	6,595					
11.00	FIRING RANGE			6,345	6,916					
	GARAGE/RANGE SUBTOTAL			**12,395**						
	Walls and Unusable Area (+9%)			**1,116**						
	10.00 / 11.00 Gross Subtotals			**13,511**						**13,511**

	BUILDING TOTALS 1.00 - 11.00 GSF			**61,582**		**23,897**				**85,479**

Building Configuration: Option 2, Two Story

CASPER POLICE AND COURTS

	FLOOR PLATE	Basement		First		Second		Third		Total
		Net SF	Gross	Net SF	Gross SF	Net SF	Gross SF	Net SF	Gross SF	
1.00	POLICE ADMINISTRATION (Office of the Chief)					2,340	3,336			
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21					2,065	2,944			
3.00	EVIDENCE & PROPERTY			3,860	5,504					
	3.01-3.12									
	3.13-3.15									
4.00	COMMUNICATIONS					3,855	5,497			
5.00	INVESTIGATIONS DIVISION					5,740	8,184			
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.05-8.07, 8.10, 8.24-8.30			4,405	6,281					
	8.01(400sf), 8.02-8.04, 8.08, 8.09, 8.11-8.23					8,476	12,085			
	POLICE SPACE SUBTOTAL			**20,750**		**22,476**				
	Accessory Support Space (+3%)			**623**		**674**				
	Circulation (+27%)			**5,771**		**6,251**				
	Walls and Unusable Area (+9%)			**2,443**		**2,646**				
	1.00 - 8.00 Gross Subtotals			**29,586**		**32,047**				**61,633**

Continued On Next Page

Building Configuration: Option 2, Two Story										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS			7,365	10,336					
	9.01, 9.0									
	9.03, 9.0									
	COURTS SPACE SUBTOTAL			**7,365**						
	Accessory Support Space (+3%)			**221**						
	Circulation (+25%)			**1,896**						
	Walls and Unusable Area (+9%)			**853**						
	9.00 Gross Subtotals			**10,336**						**10,336**
10.00	GARAGE			6,050	6,595					
11.00	FIRING RANGE			6,345	6,916					
	GARAGE/RANGE SUBTOTAL			**12,395**						
	Walls and Unusable Area (+9%)			**1,116**						
	10.00 / 11.00 Gross Subtotals			**13,511**						**13,511**

	BUILDING TOTALS 1.00 - 11.00 GSF			**53,432**		**32,047**				**85,479**

Building Configuration: Option 2, Two Story										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
1.00	POLICE ADMINISTRATION (Office of the Chief)					2,340	3,336			
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21					2,065	2,944			
3.00	EVIDENCE & PROPERTY			3,860	5,504					
	3.01-3.12									
	3.13-3.15									
4.00	COMMUNICATIONS					3,855	5,497			
5.00	INVESTIGATIONS DIVISION					5,740	8,184			
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.05-8.07, 8.10, 8.24-8.30			4,405	6,281					
	8.01(400sf), 8.02-8.04, 8.08, 8.09, 8.11-8.23					8,476	12,085			
	POLICE SPACE SUBTOTAL			**20,750**		**22,476**				
	Accessory Support Space (+3%)			**623**		**674**				
	Circulation (+27%)			**5,771**		**6,251**				
	Walls and Unusable Area (+9%)			**2,443**		**2,646**				
	1.00 - 8.00 Gross Subtotals			**29,586**		**32,047**				**61,633**

Continued On Next Page

Building Configuration: Option 2, Two Story										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS			7,365	10,336					
	9.01, 9.0									
	9.03, 9.0									
	COURTS SPACE SUBTOTAL			**7,365**						
	Accessory Support Space (+3%)			**221**						
	Circulation (+25%)			**1,896**						
	Walls and Unusable Area (+9%)			**853**						
	9.00 Gross Subtotals			**10,336**						**10,336**
10.00	GARAGE			6,050	6,595					
11.00	FIRING RANGE			6,345	6,916					
	GARAGE/RANGE SUBTOTAL			**12,395**						
	Walls and Unusable Area (+9%)			**1,116**						
	10.00 / 11.00 Gross Subtotals			**13,511**						**13,511**

	BUILDING TOTALS 1.00 - 11.00 GSF			**53,432**		**32,047**				**85,479**

Building Configuration: Option 3, Two-Story with Basement										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
1.00	POLICE ADMINISTRATION (Office of the Chief)					2,340	3,336			
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21					2,065	2,944			
3.00	EVIDENCE & PROPERTY									
	3.01-3.12			2,870	4,092					
	3.13-3.15			990	1,412					
4.00	COMMUNICATIONS					3,855	5,497			
5.00	INVESTIGATIONS DIVISION					5,740	8,184			
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.05, 8.10, 8.24-8.30			1,350	1,925					
	8.01(400sf), 8.02-8.04, 8.06-8.09, 8.11-8.23					4,560	6,502			
	8.11-8.17, 8.24-8.30	6,971	9,939							
	POLICE SPACE SUBTOTAL	**6,971**		**17,695**		**18,560**				
	Accessory Support Space (+3%)	**209**		**531**		**557**				
	Circulation (+27%)	**1,939**		**4,921**		**5,162**				
	Walls and Unusable Area (+9%)	**821**		**2,083**		**2,185**				
	1.00 - 8.00 Gross Subtotals	**9,939**		**25,230**		**26,463**				**61,633**

Continued On Next Page

Building Configuration: Option 3, Two-Story with Basement										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS			7,365	10,336					
	9.01, 9.0									
	9.03, 9.0									
	COURTS SPACE SUBTOTAL			**7,365**						
	Accessory Support Space (+3%)			**221**						
	Circulation (+25%)			**1,896**						
	Walls and Unusable Area (+9%)			**853**						
	9.00 Gross Subtotals			**10,336**						**10,336**
10.00	GARAGE	6,050	6,595							
11.00	FIRING RANGE	6,345	6,916							
	GARAGE/RANGE SUBTOTAL	**12,395**								
	Walls and Unusable Area (+9%)	**1,116**								
	10.00 / 11.00 Gross Subtotals	**13,511**								**0**

	BUILDING TOTALS 1.00 - 11.00 GSF	**23,450**		**35,566**		**26,463**				**85,479**

Building Configuration: Option 3, Two-Story with Basement										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
1.00	POLICE ADMINISTRATION (Office of the Chief)					2,340	3,336			
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21					2,065	2,944			
3.00	EVIDENCE & PROPERTY									
	3.01-3.12			2,870	4,092					
	3.13-3.15			990	1,412					
4.00	COMMUNICATIONS					3,855	5,497			
5.00	INVESTIGATIONS DIVISION					5,740	8,184			
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.05, 8.10, 8.24-8.30			1,350	1,925					
	8.01(400sf), 8.02-8.04, 8.06-8.09, 8.11-8.23					4,560	6,502			
	8.11-8.17, 8.24-8.30	6,971	9,939							
	POLICE SPACE SUBTOTAL	**6,971**		**17,695**		**18,560**				
	Accessory Support Space (+3%)	**209**		**531**		**557**				
	Circulation (+27%)	**1,939**		**4,921**		**5,162**				
	Walls and Unusable Area (+9%)	**821**		**2,083**		**2,185**				
	1.00 - 8.00 Gross Subtotals	**9,939**		**25,230**		**26,463**				**61,633**

Continued On Next Page

Building Configuration: Option 3, Two-Story with Basement										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS			7,365	10,336					
	9.01, 9.0									
	9.03, 9.0									
	COURTS SPACE SUBTOTAL			**7,365**						
	Accessory Support Space (+3%)			**221**						
	Circulation (+25%)			**1,896**						
	Walls and Unusable Area (+9%)			**853**						
	9.00 Gross Subtotals			**10,336**						**10,336**
10.00	GARAGE	6,050	6,595							
11.00	FIRING RANGE	6,345	6,916							
	GARAGE/RANGE SUBTOTAL	**12,395**								
	Walls and Unusable Area (+9%)	**1,116**								
	10.00 / 11.00 Gross Subtotals	**13,511**								**0**

	BUILDING TOTALS 1.00 - 11.00 GSF	**23,450**		**35,566**		**26,463**				**85,479**

Building Configuration: Option 4, Three-Story

CASPER POLICE AND COURTS

	FLOOR PLATE	Basement		First		Second		Third		Total
		Net SF	Gross	Net SF	Gross SF	Net SF	Gross SF	Net SF	Gross SF	
1.00	POLICE ADMINISTRATION (Office of the Chief)							2,340	3,336	
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21							2,065	2,944	
3.00	EVIDENCE & PROPERTY			3,860	5,504					
	3.01-3.12									
	3.13-3.15									
4.00	COMMUNICATIONS							3,855	5,497	
5.00	INVESTIGATIONS DIVISION							5,740	8,184	
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.05, 8.10, 8.24-8.30			5,835	8,320					
	8.01(400sf), 8.02-8.04, 8.06-8.09, 8.11-8.23					6,681	9,526			
								365	520	
	POLICE SPACE SUBTOTAL			**22,180**		**6,681**		**14,365**		
	Accessory Support Space (+3%)			**665**		**200**		**431**		
	Circulation (+27%)			**6,168**		**1,858**		**3,995**		
	Walls and Unusable Area (+9%)			**2,611**		**787**		**1,691**		
	1.00 - 8.00 Gross Subtotals			**31,625**		**9,526**		**20,482**		**61,633**

Continued On Next Page

Building Configuration: Option 4, Three-Story										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS					7,365	10,336			
	Accessory Support Space (+3%)					**221**				
	Circulation (+25%)					**1,896**				
	Walls and Unusable Area (+9%)					**853**				
	9.00 Gross Subtotals					**10,336**				**10,336**
10.00	GARAGE			6,050	6,595					
11.00	FIRING RANGE			6,345	6,916					
	GARAGE/RANGE SUBTOTAL			**12,395**						
	Walls and Unusable Area (+9%)			**1,116**						
	10.00 / 11.00 Gross Subtotals			**13,511**						**13,511**

	BUILDING TOTALS 1.00 - 11.00 GSF			**45,135**		**19,862**		**20,482**		**85,479**

Building Configuration: Option 4, Three-Story

CASPER POLICE AND COURTS

	FLOOR PLATE	Basement		First		Second		Third		Total
		Net SF	Gross	Net SF	Gross SF	Net SF	Gross SF	Net SF	Gross SF	
1.00	POLICE ADMINISTRATION (Office of the Chief)							2,340	3,336	
2.00	SUPPORT SERVICES									
	2.02-2.07, 2.12, 2.13, 2.22-2.27			5,475	7,806					
	2.01, 2.08-2.11, 2.14-2.21							2,065	2,944	
3.00	EVIDENCE & PROPERTY			3,860	5,504					
	3.01-3.12									
	3.13-3.15									
4.00	COMMUNICATIONS							3,855	5,497	
5.00	INVESTIGATIONS DIVISION							5,740	8,184	
6.00	PATROL			4,740	6,758					
7.00	DETAINEE INTERVIEW/ INTERROGATION			2,270	3,237					
8.00	BUILDING SUPPORT:									
	8.01(500sf), 8.05, 8.10, 8.24-8.30			5,835	8,320					
	8.01(400sf), 8.02-8.04, 8.06-8.09, 8.11-8.23					6,681	9,526			
								365	520	
	POLICE SPACE SUBTOTAL			**22,180**		**6,681**		**14,365**		
	Accessory Support Space (+3%)			**665**		**200**		**431**		
	Circulation (+27%)			**6,168**		**1,858**		**3,995**		
	Walls and Unusable Area (+9%)			**2,611**		**787**		**1,691**		
	1.00 - 8.00 Gross Subtotals			**31,625**		**9,526**		**20,482**		**61,633**

Continued On Next Page

Building Configuration: Option 4, Three-Story										
CASPER POLICE AND COURTS										
FLOOR PLATE		**Basement**		**First**		**Second**		**Third**		**Total**
		Net SF	**Gross**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	**Net SF**	**Gross SF**	
9.00	COURTS					7,365	10,336			
	Accessory Support Space (+3%)					**221**				
	Circulation (+25%)					**1,896**				
	Walls and Unusable Area (+9%)					**853**				
	9.00 Gross Subtotals					**10,336**				**10,336**
10.00	GARAGE			6,050	6,595					
11.00	FIRING RANGE			6,345	6,916					
	GARAGE/RANGE SUBTOTAL			**12,395**						
	Walls and Unusable Area (+9%)			**1,116**						
	10.00 / 11.00 Gross Subtotals			**13,511**						**13,511**

	BUILDING TOTALS 1.00 - 11.00 GSF			**45,135**		**19,862**		**20,482**		**85,479**

PARKING REQUIREMENT

To determine the extent to which a site will support parking needs, a determination must be made for the demand for both public and staff parking.

The development for each of these two parking categories is distinct to represent the separation requirement of the two types in actual site development. A determination of the peak parking space demand is calculated on the following page.

The peak use of public parking could occur at any given time. This is due to the fact that the greatest demand for public parking is in support of municipal court proceedings or an assembly event in the Training Room. The peak use for staff parking typically occurs during one of the daily shift changes on a weekday during normal operating hours. The exception to this - whereby a greater demand for parking may result – may occur infrequently for large assemblies of staff in the Training Room, or during a special operations event.

The establishment of the proper amount of parking is based on the total number of personal and fleet vehicles on the site at the same time. Personal vehicles are those vehicles driven to the site by the department personnel who own the vehicle. Fleet vehicles are all City owned vehicles provided to the personnel.

Should consideration be given to include covered or protected parking in the design of the project, other parking can be reduced by the amount of vehicles that will be parked in the garage area. This will result in less site area being required to support the project.

Currently parking at the Hall of Justice occurs off site, across the street in an unprotected lot. In discussions with the Department, it was determined that the design basis for parking was 170 staff parking spaces, including personal and fleet vehicles. The public parking was determined to have a need for 100 spaces, primarily driven by court.

PARKING REQUIREMENT

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SITE DENSITY REQUIREMENT

The final component to a space need program is a determination of the site area required. This is assessed without regard for knowledge of the sites; whether new construction on clean sites, or sites with a structure for renovation. We utilize the total space program, the optional footprint sizes, and parking requirement, along with some assumptions about area for expansion and open area for green space to get to a recommendation. From this, a focused search for the right size properties can begin.

On the following page, two tables indicate both a low density site area, and a recommended site area. The difference in area designated equates to the difference in the footprint size and the open area on the site. The footprint size for the larger site is derived from the largest first floor level from the Building Configuration Tables. The open area stated is an assumption based on green space frequently desired. Green space can provide benefit, such as cooling by shade of trees, to absorption of rain fall runoff, but green space comes at a cost. Typically at initial acquisition.

SITE AREA REQUIREMENTS

CASPER POLICE AND COURT FACILITY			
LOW DENSITY DEVELOPMENT OPTION			
Total Project Space Need			85,479 SF
Footprint, Police & Courts (Two story)			61,582 SF
Staff Parking:	170	450	76,500 SF
Public Parking:	100	450	45,000 SF
Mechanical/Electrical Yard			3,000 SF
Miscellaneous Paved Area			4,000 SF
Total Developed Area			**190,082 SF**
Long Range Bldg Expansion Space (30%GSF)			57,025 SF
Subtotal Developed Space (NIC, Longe Range Prkg)			247,107 SF
Open Area		50%	247,107 SF
	TOTAL SITE REQUIREMENT		**494,213 SF**
			11.34 acres

CASPER POLICE AND COURT FACILITY			
RECOMMENDED DENSITY DEVELOPMENT OPTION			
Total Project Space Need			85,479 SF
Footprint, Police & Courts (Three story)			35,566 SF
Staff Parking:	170	400	68,000 SF
Public Parking:	100	400	40,000 SF
Mechanical/Electrical Yard			3,000 SF
Miscellaneous Paved Area			4,000 SF
Total Developed Area			**150,566 SF**
Long Range Bldg Expansion Space (30%GSF)			45,170 SF
Subtotal Developed Space (NIC, Longe Range Prkg)			195,736 SF
Open Area		40%	130,491 SF
	TOTAL SITE REQUIREMENT		**326,226 SF**
			7.49 acres

SITE SELECTION

With the establishment of the space need program in Section 3, the focus of the report turns to identifying and evaluating development scenarios that provide the best outcome for designing and constructing facilities that meet the programmed space and provide the best long-term value.

Four development scenarios were identified. They include, 1) Reuse of the existing Hall of Justice by renovating existing space and expanding the floor space by constructing a new addition, attached to, and/or immediately adjacent the current structure; 2) a building of new construction on a clean site to be identified; 3) renovate and expand the former Sears space in the East Ridge Mall; and, 4) renovate and expand the former Star-Tribune building.

Determining the best location for the development of a public safety facility starts with identifying sites that provide requirements that cannot be compromised. This typically corresponds to site acreage for development. That is, the property size less any easements or conditions that cannot be built upon or developed. Beyond this minimum site area requirement, we look at the difficulty for developing the site. Given enough site acreage almost any difficulty associated with developing a site for a specific purpose can be achieved given sufficient funds dedicated to the problem. Hypothetically, if required, eliminating large wooded areas or leveling extensive elevation changes can be accomplished at additional expense. This has to be considered when valuing and comparing different sites.

Beyond meeting minimum site area and the cost to develop that site, assessing the best location relates to the capability for any given site to meet public safety operating goals. In the discussion that follows we identify the most common criteria for consideration.

Operational Goals

Visibility:

Visibility is important in two ways. The first way it is important is for prospective users of services who have no idea where the building is located. The second way visibility plays a role is that it is a constant reminder to the residents of the City that public safety is important to the community. In other words, the location is such that many drivers routinely see the building while making their way around the City. While the role law enforcement plays in a community is subject to varying personal perceptions, usually the presence is viewed as a positive. Enhanced visibility, along with accessibility, results in more convenient reporting of incidents by citizens. Higher visibility augments community policing.

Vehicular Access to Site:

While considered similar to visibility, accessibility is somewhat different. Sites can be imagined that are visible but not easily accessible. Playing a typical role in accessibility are factors such as one-way streets, zero-lot line impaired visibility, and location within routine traffic patterns.

Vehicular Access to Community:

While access to major thoroughfares is important (as discussed in item 2 previously) and the surrounding roads and arterials aid this access, this particular criteria specifically addresses how the roads immediately surrounding the site control and direct the flow of traffic. The ideal site will allow public safety vehicles leaving the site to mix into the traffic. Additionally, of importance to the citizens is the average time from the "call for service" to the arrival time of the responder. Few responses originate from the building, as there are sufficient vehicles on patrol at most times. More important might be the consideration given to the time it takes an officer in the field to return to the station, or drive to a patrol sector. Officers responsible for a certain geographic area, or beat, often have to go to the station to accomplish a work-related function. Therefore, sites that have good access to major arteries that traverse the community are desirable. It is not necessarily limited to selecting the most geographically centered site. There are other things to take into consideration: the impact of one-way streets, stoplights, stop signs, traffic, speed limits, school zones, and railroad tracks, etc., which can reduce or add to the travel time.

Pedestrian/Public Access:

Police facilities play a highly interactive role in the community. Beyond the typical contact point for obtaining accident and other reports, making a complaint, or seeking public safety assistance, the building serves the community in other ways. Community policing - or proactive – models, engage the citizens of a community. Often this is done through neighborhood safety meetings at the facility, citizen police academies, and just exposing the community to the department by providing public meeting space within the police building. The building must be accessible to users of the building in both emergency and non-emergency situations.

In a highly urban community, precinct facilities often become focal points of the neighborhood and may even be considered a point of refuge. In this type of scenario, pedestrian access from the surrounding area can play an important role. However, in most suburban communities, it is the norm to access most destinations by automobile. Therefore, this criteria will typically be of lower importance to most suburban communities.

Location:

This criterion acknowledges the importance of maintaining a central location in order to, among other reasons; maintain potential expectations of the citizens of a community. In some communities, a fringe location in a specific area can be perceived as giving preferential treatment to that area. The central location can minimize this perception in communities where it is prevalent. Overall, it should be kept in mind that the significance of a central location, on its own merit, has little significance on police operations. Only a very small percentage of the total number of responses originates out of the law enforcement center.

Compatible Neighboring Land Uses:

The new building will be a symbol of the legal system, public safety, and of city government. The structure should be designed with proper dignity. Sites that will support or enhance that appearance

will receive higher scores. A well planned, and adequately funded project will provide an excellent opportunity to change or add to the value of the chosen neighborhood.

Various neighborhoods can be predicted to be a good fit, or a bad fit. As an example, positive neighboring land uses could be campus government facilities, mixed-use offices, commercial locations, and other institutional uses. Negative neighboring land use examples are noisy sites, and industrial areas with smoke or odor.

Interagency Convenience:

Sites that allow more convenience in support of interaction with City Hall elements and the County Jail can be more desirable. This is typically more important in cities where a considerable amount of time may be expended on moving prisoners between courts or jails.

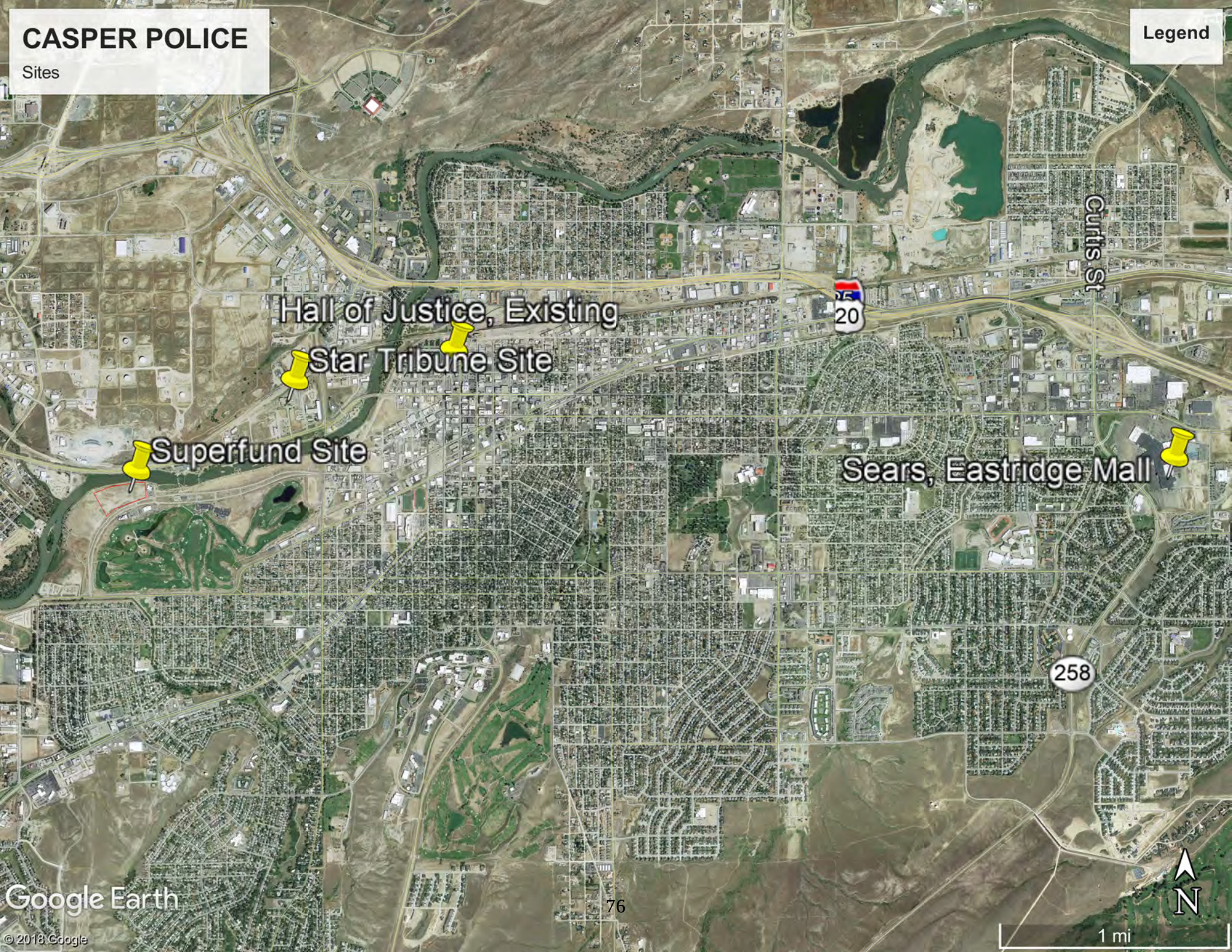
Employee Amenities:

This criterion deals with the advantages available to the workers within the building; the ability to run errands easily and have dining options that are in close proximity to their work environment. Locations near areas anticipated to be visited during break time away from the station score high in this criterion. Examples of first visited entities are banks, restaurants, shopping areas, vehicle refueling locations, etc. Amenities also aid in the recruiting, retention, and morale of employees.

Safety:

Consideration for the safety of the department staff is paramount, though in most communities, few locations result in a high degree of inherent risk to persons working in or visiting the building. More likely, safety refers to the protection of City property, especially fleet vehicles. In the survey, low values assigned to the weighted value do not necessarily reflect that safety is not of importance, but that it may not be much of an issue in this particular community.

The map on the following page shows the location for each of the sites considered and evaluated in this study.


CASPER POLICE
Sites
Legend
Hall of Justice, Existing
Star Tribune Site
Superfund Site
Sears, Eastridge Mall
Curtis St
20
258
N
1 mi
Google Earth
© 2018 Google

OPTION 1: HALL OF JUSTICE

Evaluating the Hall of Justice also included consideration of Police use space in other structures in close proximity to the Hall of Justice. These "other" buildings are the City Center Building and the Market Street Garage and Storage Building. Public safety departments the size of Casper recognize that dispersing staff across multiple buildings is operationally inefficient. The remedy for addressing this deficiency is, typically, to construct buildings that house all staff under a single roof. This is especially true for the Administrative, Support Services, and Investigations Divisions, including all storage needs these divisions require. For this reason, a long-term solution that includes the continuing use of the Hall of Justice necessitates the abandonment of the City Center and Market Street buildings, and moving their functions into the renovated Hall of Justice.

Any renovation and expansion to the Hall of Justice assumes that the County would agree to the plan. Casper Police currently occupy about 22,000 square feet of space that could reliably be considered for their continued use. Given this relatively small percentage of the area requirement of the programmed space need, a new construction addition would make up a significant portion of the overall project.

Construction of any attached structure to an existing structure carries additional risk with regard to construction conditions that are difficult to predict prior to the occurrence of actual construction. This means costs can be harder to estimate early and the risk of Change Orders increases. Minimizing the impact on ongoing operations in the existing building while construction occurs immediately adjacent is also challenging to both operations and construction. How contractors react in their pricing to this added complexity is also difficult to predict in preliminary estimates.

Opting to advance the Hall of Justice development scenario carries with it many hurdles to bringing the existing space up to meet the requirements of current codes and ADA requirements. Yet the greatest challenge with Option 1 involves the identification of sufficient site area immediately adjacent that will support the required footprint addition. After considering the potential for street closures to accommodate the added footprint and determining the undesirable nature of this, combined with extensive costs associated with utility relocation, our evaluation determined that if an expansion to the Hall of Justice was the preferred development scenario to advance, the most reasonable option to put forth would be the placement of it on the current County parking lot to the immediate south of the Hall of Justice.

The proposal developed under this option would be the development of a basement level parking garage with two floors built over it. This garage would replace County parking lost to the building footprint built upon it. The two floors of Police and Courts space built above the basement garage would meet the programmed space need.

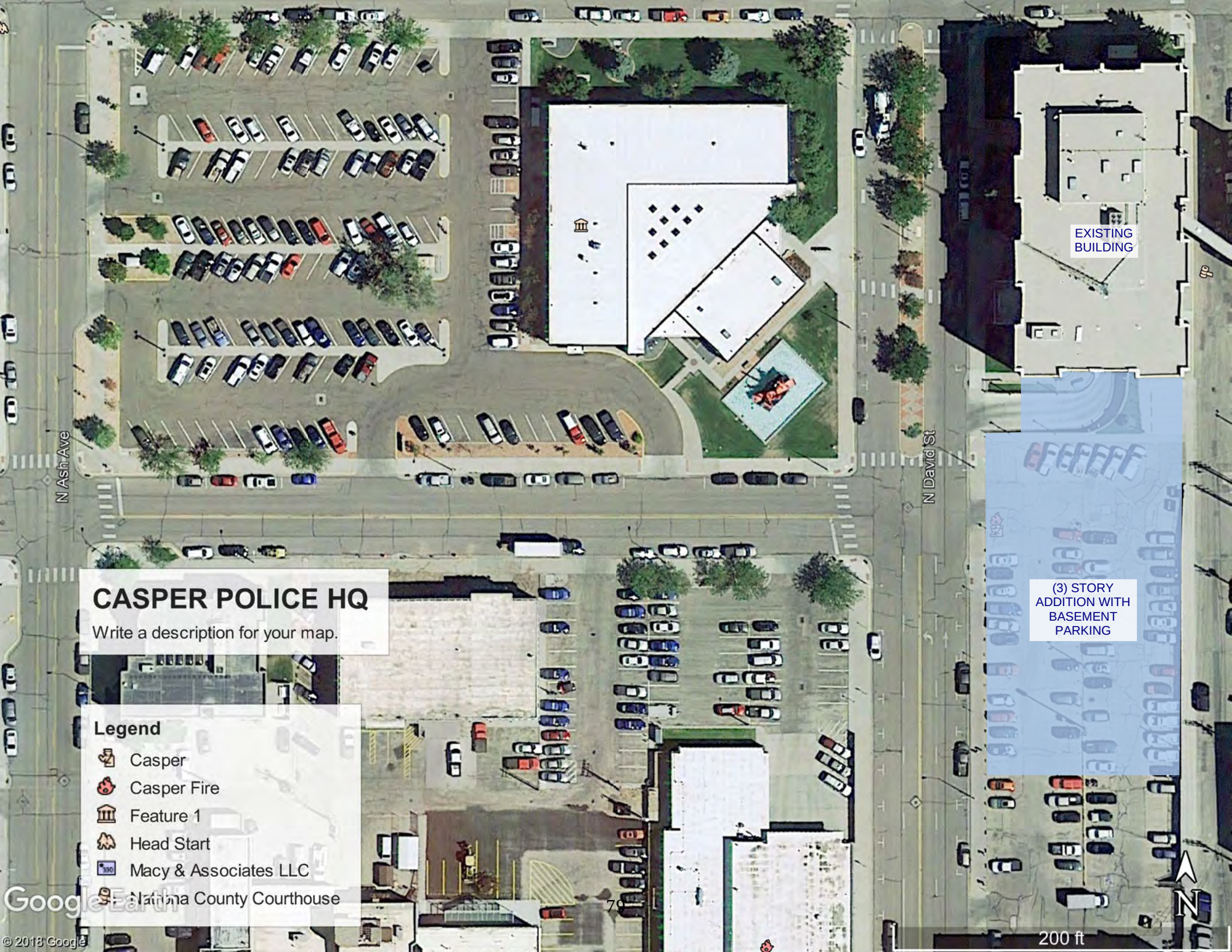
The only probable solution to this option, when paired with the basement garage parking to replace the existing County parking results in new construction of square footage nearly identical to that of an new building on an unidentified site, in addition to the renovated space in the existing Hall of Justice.

Even with the County parking lot, the site area is less than two acres and relies on the current parking lot across the street for police vehicles. Even with a new building addition, the current parking situation is not addressed and remains inadequate.

Of all of the options being considered, the Hall of Justice carries with it more variables that could have an impact on the final cost for the project. It requires a phasing plan for sequencing the work

in a manner that places the lowest impact on the ongoing Casper police operations. This phasing could have a dramatic consequence to scheduling and thus the time on the project by the contractor and their costs.

In the detailed estimates, we have attempted to cover these cost factors, but the perception of difficulty and risk is an intangible and each contractor will perceive it differently and adjust their cost accordingly.


CASPER POLICE HQ
Write a description for your map.
Legend
Casper
Casper Fire
Feature 1
Head Start
Macy & Associates LLC
Natrona County Courthouse
EXISTING BUILDING
(3) STORY ADDITION WITH BASEMENT PARKING
N Ash Ave
N David St
N
200 ft
Google Earth
© 2018 Google

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION

Hall of Justice Building Renovation and Expansion

	BUILDING	Renovated Space		New Construction	
		Construction Cost	%	Construction Cost	%
1	Demolition Selective removal of all materials and systems to be replaced	$242,000			
2	Substructure Excavation, Backfill, Footings/Foundations, etc.	$0	0.0%	$1,633,000	7.1%
3	Superstructure Concrete slabs, structural steel floor/ roof framing and columns, etc.	$0	0.0%	$2,415,000	10.5%
4	Exterior Closure Wall finish & backup, trim & soffits, exterior doors, windows, etc.	$0	0.0%	$3,312,000	14.4%
5	Roofing Roofing metal, covering, gutters & downspouts, hatches, etc.	$0	0.0%	$690,000	3.0%
6	Interior Construction CMU & drywall partitions, interior doors & glazing, etc.	$1,291,389	28.2%	$2,392,000	10.4%
7	Stairs Pan filled concrete & steel, ladders, etc.	$0	0.0%	$276,000	1.2%
8	Interior Finishes Floor, walls, & ceilings; tile, carpet, paint, resins, epoxys, vinyl base	$698,382	15.3%	$1,610,000	7.0%
9	Conveying Systems Elevators	$0	0.0%	$511,060	2.2%
10	Plumbing Heaters, valves, sumps, drains, fixtures, connections, piping, etc.	$274,764	6.0%	$1,610,000	7.0%
11	HVAC Equipment: boilers, air handlers, VAV boxes, etc; ductwork, etc.	$565,472	12.3%	$3,082,000	13.4%
12	Fire Protection Sprinkler system, backflow preventer	$45,794	1.0%	$253,000	1.1%
13	Electrical Transformer, generator, panels, wiring, recetacles, switches, lights, etc.	$443,743	9.7%	$2,438,000	10.6%
14	Technology Voice/data, cabling, PA/intercomm, security & access control, CCTV, etc.	$438,983	9.6%	$1,012,000	4.4%

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION
Hall of Justice Building Renovation and Expansion

15	Specialties Signage, toilet partitions, bath specialties, lockers, display boards, etc.	$183,176	4.0%	$644,000	2.8%
16	Equipment Detention products & fixtures, range equipment	$0	0.0%	$1,444,000	5.8%
17	Furnishings Window treatments, casework, vanity & counter tops, display cases, etc.	$289,330	6.3%	$667,000	2.9%
18	Special Construction Bullet resistant panels & glazing, etc.	$105,326	2.3%	$253,000	1.1%
	Building Subtotal	$4,578,358		$24,242,060	
	General Conditions, Overhead, and Profit	$809,162		$4,564,103	
	BUILDING TOTAL	**$5,387,520**		**$28,806,163**	
	SITE				
	Demolition	$27,000			
	Site Preparation Excavation, grading, structural fill, dewatering, etc.	$31,628	4.0%		
	Exterior Improvements Curbs, pavement, retaining walls, enclosures, fencing, landscape, signs, etc.	$622,281	78.7%		
	Site Utilities Bullet resistant panels & glazing	$73,535	9.3%		
	Electrical	$63,256	8.0%		
	Site Subtotal	$817,700			
	General Conditions, Overhead, and Profit	$144,300			
	SITE TOTAL	**$962,000**			
	BUILDING & SITE TOTAL	**$35,155,683**			

OPTION 2: NEW CONSTRUCTION

New facilities are the most predictable with regard to meeting an expected outcome while maintaining an established budget. Starting with a clean slate is the best way to ensure that all planning objectives can be met as there are few if any existing impediments to impact the goals. Our planning for new facilities is based on planning standards for police facilities built around the Country, tailored to Casper's specific needs. This ensures credible planning solutions with regard to space, quality, and cost.

While our planning proposal for new construction is based on an actual site centrally located in Casper, this option could be developed on most any desired property of approximately eight acres in Casper. Our planning for new construction on eight acres affords design flexibility of the building structure, sufficient parking with designated and secure parking for Police fleet vehicles, and room for expansion beyond the needs of the 20-year planning period. New construction on a sufficient site will serve not only the Casper Community today, but for the next generation to come.

New construction allows for more design flexibility as there are not the impediments encountered when working around the elements of an existing structure. New construction does not bring with it the baggage associated with existing buildings. And in new construction you pay for only what you get. In existing building resuse, In buying existing buildings, Owners frequently pay for a building structure, systems, products, and materials only to have to replace or substantially modify them.

Frequently, for this reason, renovating an existing building can meet, or even exceed, the cost of building new. Current building construction and energy codes can virtually demand the replacement of elements as basic as the walls and roof of an existing building. Adding doors and windows can ripple through, and require modification of structural components. And on top of this, there is the cost to remove or demolish building components that are not planned for reuse. These traits are not associated with new construction.

The site diagrams on the following pages reflect three of the four building configurations established in Section 3 with a detailed cost estimate breakdown on page 4.15.

CASPER, WYOMING - OPTION 2

FUTURE

170 STAFF PARKING SPOTS

1 STORY GARAGE/ RANGE

2 STORY POLICE

1 STORY COURTS

GATE

100 PUBLIC PARKING SPOTS

FUTURE

FUTURE

FUTURE ADDITION 22,000SF

FUTURE

FUTURE

FUTURE

GATE

CASPER, WYOMING - OPTION 3

FUTURE

170 STAFF PARKING SPOTS

FUTURE

FUTURE

GATE

2 STORY POLICE WITH BASEMENT GARAGE/RANGE

1 STORY COURTS

FUTURE ADDITION 30,000SF

100 PUBLIC PARKING SPOTS

FUTURE

FUTURE

FUTURE

FUTURE

GATE

CASPER, WYOMING - OPTION 4

FUTURE

170 STAFF PARKING SPOTS

1 STORY POLICE APPROX. 31,000SF

3rd FLOOR POLICE APPROX. 20,000SF

GATE

1 STORY GARAGE/ RANGE APPROX. 13,0000SF

2nd STORY SUPPORT APPROX. 10,000SF

2nd STORY COURTS APPROX. 10,000SF

100 PUBLIC PARKING SPOTS

FUTURE

FUTURE 1 STORY APPROX. 15,000SF

FUTURE 2 STORY UP TO 9,000SF EACH FLOOR

FUTURE

FUTURE

FUTURE

FUTURE

GATE

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION

New Construction

	BUILDING	Renovated Space Construction Cost	Renovated Space %	New Construction Construction Cost	New Construction %
1	Demolition Selective removal of all materials and systems to be replaced				
2	Substructure Excavation, Backfill, Footings/Foundations, etc.		0.0%	$1,711,422	6.1%
3	Superstructure Concrete slabs, structural steel floor/ roof framing and columns, etc.		0.0%	$2,665,329	9.5%
4	Exterior Closure Wall finish & backup, trim & soffits, exterior doors, windows, etc.		0.0%	$3,675,349	13.1%
5	Roofing Roofing metal, covering, gutters & downspouts, hatches, etc.		0.0%	$841,683	3.0%
6	Interior Construction CMU & drywall partitions, interior doors & glazing, etc.		0.0%	$2,637,273	9.4%
7	Stairs Pan filled concrete & steel, ladders, etc.		0.0%	$336,673	1.2%
8	Interior Finishes Floor, walls, & ceilings; tile, carpet, paint, resins, epoxys, vinyl base		0.0%	$1,963,927	7.0%
9	Conveying Systems Elevators		0.0%	$623,407	2.2%
10	Plumbing Heaters, valves, sumps, drains, fixtures, connections, piping, etc.		0.0%	$1,963,927	7.0%
11	HVAC Equipment: boilers, air handlers, VAV boxes, etc; ductwork, etc.		0.0%	$3,759,517	13.4%
12	Fire Protection Sprinkler system, backflow preventer		0.0%	$308,617	1.1%
13	Electrical Transformer, generator, panels, wiring, recetacles, switches, lights, etc.		0.0%	$2,861,722	10.2%
14	Technology Voice/data, cabling, PA/intercomm, security & access control, CCTV, etc.		0.0%	$1,234,468	4.4%

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION

New Construction

15	Specialties Signage, toilet partitions, bath specialties, lockers, display boards, etc.		0.0%	$729,459	2.6%
16	Equipment Detention products & fixtures, range equipment		0.0%	$1,627,254	5.8%
17	Furnishings Window treatments, casework, vanity & counter tops, display cases, etc.		0.0%	$813,627	2.9%
18	Special Construction Bullet resistant panels & glazing, etc.		0.0%	$308,617	1.1%
	Building Subtotal	$0		$28,056,099	
	General Conditions, Overhead, and Profit	$0		$4,951,076	
	BUILDING TOTAL	**$0**		**$33,007,175**	
	SITE				
	Demolition	$0			
	Site Preparation Excavation, grading, structural fill, dewatering, etc.	$84,283	4.0%		
	Exterior Improvements Curbs, pavement, retaining walls, enclosures, fencing, landscape, signs, etc.	$1,658,274	78.7%		
	Site Utilities Bullet resistant panels & glazing	$195,959	9.3%		
	Electrical	$168,567	8.0%		
	Site Subtotal	$2,107,082			
	General Conditions, Overhead, and Profit	$371,838			
	SITE TOTAL	**$2,478,920**			
	BUILDING & SITE TOTAL	**$35,486,095**			

OPTION 3: EAST RIDGE MALL

The former Sears space consists of approximately 70,000 square feet of enclosed space on one level. The interior is relatively open and unobstructed which would minimize demolition cost prior to renovating the interior. The requirement of a new addition to meet the total programmed space is relatively small at about 15,000 square feet. The site area the shopping center will commit to dedicating to the City project is relatively undetermined, but the potential for space is more than sufficient to meet the programmed requirement. Most of this site area is currently constructed as parking and most of it would be used for parking in the public safety project.

General access and egress at the site is good as would be expected at a large mall site; however, the site is further to the eastern side of the City than preferred by the Police Department. The building and systems are in good condition based on a cursory observation, but it is highly likely that they would not perform in a manner to meet the needs of a 24/7 critical use facility.

While the condition of the structure would serve a variety of retail tenants well, there are serious weaknesses in its planning and design with regard to considering conversion to a police use. Chief among these concerns is the party wall the Police Department would share with an unknown neighbor in the adjacent mall space. Being able to control the immediate surroundings at a public safety facility is paramount to security. Additionally, the mall is designed as retail space and is intended to move large numbers of both pedestrians and vehicles through it and around it. Sound security planning for public safety facilities intends to control and minimize traffic around the building and is in opposition to the retail planning style typical of a large regional shopping center.

There is minimal natural light into the building and detrimental to the good health of the individuals that will office out of the facility. Windows can be cut into existing exterior walls, but at significant expense. Plumbing is not sufficient to meet codes for the building type, requiring extensive cutting of the existing concrete for installation.

Given the good condition of all of the buildings mechanical and electrical systems, the current Owner would likely desire to receive full market value for them in the sales price. But for police use, they are not robust enough for the job and would very likely require immediate replacement.

Excess energy usage would result in increased operational costs over the life of the building. The design of this space to serve a large retail tenant results in a high floor to deck ratio when compared to most public safety buildings. At approximately 22 feet for the former Sears space, this compares to a height of about 14 feet for most police buildings. This is the height at which the insulation forms the top of the conditioned building envelop. The taller space results in a much greater volume of space within the building envelop and would result in substantially higher energy costs year after year.

As stated prior, our evaluation concludes that there is an opportunity to see construction cost savings in renovating and expanding this space. But this savings may be decreased or even eliminated depending on a final agreed upon sales price.

The diagram on the following page indicates the probable usage of the site. A detailed cost estimate breakdown is on page 4.18.


CASPER POLICE HQ
Eastridge Mall Site, Former Sears Location
Legend
PUBLIC PARKING
ADDITION
15,000sf
GATE
GATE
PUBLIC PARKING
SECURE STAFF PARKING
Carriage Ln
258
N
300 ft
© 2018 Google
Google Earth

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION

East Ridge Mall Building Renovation and Expansion

	BUILDING	Renovated Space		New Construction	
		Construction Cost	%	Construction Cost	%
1	Demolition Selective removal of all materials and systems to be replaced	$137,000			
2	Substructure Excavation, Backfill, Footings/Foundations, etc.	$66,857	0.4%	$377,578	8.8%
3	Superstructure Concrete slabs, structural steel floor/ roof framing and columns, etc.	$267,429	1.6%	$549,204	12.8%
4	Exterior Closure Wall finish & backup, trim & soffits, exterior doors, windows, etc.	$434,573	2.6%	$497,716	11.6%
5	Roofing Roofing metal, covering, gutters & downspouts, hatches, etc.	$133,715	0.8%	$124,429	2.9%
6	Interior Construction CMU & drywall partitions, interior doors & glazing, etc.	$4,596,441	27.5%	$270,311	6.3%
7	Stairs Pan filled concrete & steel, ladders, etc.	$0	0.0%	$0	0.0%
8	Interior Finishes Floor, walls, & ceilings; tile, carpet, paint, resins, epoxys, vinyl base	$2,574,007	15.4%	$124,429	2.9%
9	Conveying Systems Elevators	$0	0.0%	$0	0.0%
10	Plumbing Heaters, valves, sumps, drains, fixtures, connections, piping, etc.	$1,504,290	9.0%	$150,173	3.5%
11	HVAC Equipment: boilers, air handlers, VAV boxes, etc; ductwork, etc.	$2,624,150	15.7%	$227,405	5.3%
12	Fire Protection Sprinkler system, backflow preventer	$167,143	1.0%	$25,744	0.6%
13	Electrical Transformer, generator, panels, wiring, recetacles, switches, lights, etc.	$2,005,720	12.0%	$235,986	5.5%
14	Technology Voice/data, cabling, PA/intercomm, security & access control, CCTV, etc.	$835,717	5.0%	$128,720	3.0%

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION
East Ridge Mall Building Renovation and Expansion

15	Specialties Signage, toilet partitions, bath specialties, lockers, display boards, etc.	$484,716	2.9%	$42,907	1.0%
16	Equipment Detention products & fixtures, range equipment	$0	0.0%	$1,444,000	5.5%
17	Furnishings Window treatments, casework, vanity & counter tops, display cases, etc.	$501,430	3.0%	$60,069	1.4%
18	Special Construction Bullet resistant panels & glazing, etc.	$384,430	2.3%	$30,035	0.7%
	Building Subtotal	$16,717,617		$4,288,704	
	General Conditions, Overhead, and Profit	$2,946,303		$759,126	
	BUILDING TOTAL	**$19,663,920**		**$5,047,830**	

SITE			
Demolition	$87,000		
Site Preparation Excavation, grading, structural fill, dewatering, etc.	$123,046	5.7%	
Exterior Improvements Curbs, pavement, retaining walls, enclosures, fencing, landscape, signs, etc.	$1,711,849	79.3%	
Site Utilities Bullet resistant panels & glazing	$151,109	7.0%	
Electrical	$172,696	8.0%	
Site Subtotal	$2,245,700		
General Conditions, Overhead, and Profit	$396,300		
SITE TOTAL	**$2,642,000**		
BUILDING ACQUISITION COST (To Be Determined)	**(TBD)**		
BUILDING & SITE TOTAL	**$27,353,750**		

OPTION 4: STAR-TRIBUNE BUILDING

The existing building structure consists of approximately 47,000 square feet and will require a new building addition of 38,000 square feet to meet the programmed need. The building itself is complex and cut up in its massing and may create difficulties in efficiently using space. The new addition to the existing building would be required to be a two-story space and, again, does not lend itself to working well with the odd shaping of the existing structure.

The current star-Tribune site area is just over 4 acres. The existing programmed space requirement including building and parking fit on the existing site but are extremely tight. The railroad tracks and potential for a hazardous chemical spill merely feet behind the building represent a threat to a 24/7 critical use building operation such as that of a police building. Additionally, the building sits at an undesirable location for a public safety building being at the end of a dead-end road.

When the acquisition cost of the property is factored in along with the prudent long-term need to acquire some additional acreage for future needs, the final project costs are similar to that of new construction.

The diagram on the following page indicates the probable usage of the site. A detailed cost estimate breakdown is on page 4.22.


44
8
12
21
24
170 STAFF PARKING SPOTS
33
170 Star Ln
2 STORY ADDITION
(APPROX 19,000)
SQ/FT/FLR
9
7
12
GATE
GATE
100 PUBLIC PARKING SPOTS

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION

Star Tribune Building Renovation and Expansion

	BUILDING	Renovated Space Construction Cost	%	New Construction Construction Cost	%
1	Demolition Selective removal of all materials and systems to be replaced	$620,000			
2	Substructure Excavation, Backfill, Footings/Foundations, etc.	$168,639	1.3%	$791,407	6.2%
3	Superstructure Concrete slabs, structural steel floor/ roof framing and columns, etc.	$389,167	3.0%	$1,161,582	9.1%
4	Exterior Closure Wall finish & backup, trim & soffits, exterior doors, windows, etc.	$278,903	2.2%	$1,659,403	13.0%
5	Roofing Roofing metal, covering, gutters & downspouts, hatches, etc.	$103,778	0.8%	$382,939	3.0%
6	Interior Construction CMU & drywall partitions, interior doors & glazing, etc.	$2,939,240	22.7%	$1,327,522	10.4%
7	Stairs Pan filled concrete & steel, ladders, etc.	$64,861	0.5%	$153,176	1.2%
8	Interior Finishes Floor, walls, & ceilings; tile, carpet, paint, resins, epoxys, vinyl base	$1,695,715	13.1%	$765,878	6.0%
9	Conveying Systems Elevators	$129,722	1.0%	$283,630	2.2%
10	Plumbing Heaters, valves, sumps, drains, fixtures, connections, piping, etc.	$778,333	6.0%	$753,114	5.9%
11	HVAC Equipment: boilers, air handlers, VAV boxes, etc; ductwork, etc.	$1,472,114	11.3%	$1,621,109	12.7%
12	Fire Protection Sprinkler system, backflow preventer	$129,722	1.0%	$114,882	0.9%
13	Electrical Transformer, generator, panels, wiring, recetacles, switches, lights, etc.	$1,037,778	8.0%	$1,289,228	10.1%
14	Technology Voice/data, cabling, PA/intercomm, security & access control, CCTV, etc.	$847,858	6.5%	$382,939	3.0%

PRELIMINARY CONSTRUCTION COST ESTIMATE BY DIVISION

Star Tribune Building Renovation and Expansion

15	Specialties Signage, toilet partitions, bath specialties, lockers, display boards, etc.	$518,889	4.0%	$268,057	2.1%
16	Equipment Detention products & fixtures, range equipment	$0	0.0%	$1,444,000	5.8%
17	Furnishings Window treatments, casework, vanity & counter tops, display cases, etc.	$593,500	4.6%	$268,057	2.1%
18	Special Construction Bullet resistant panels & glazing, etc.	$298,361	2.3%	$102,117	0.8%
	Building Subtotal	$12,066,580		$12,769,041	
	General Conditions, Overhead, and Profit	$2,290,477		$2,248,179	
	BUILDING TOTAL	**$15,261,439**		**$15,017,220**	
	SITE				
	Demolition	$48,000			
	Site Preparation Excavation, grading, structural fill, dewatering, etc.	$107,816	8.0%		
	Exterior Improvements Curbs, pavement, retaining walls, enclosures, fencing, landscape, signs, etc.	$979,778	72.7%		
	Site Utilities Bullet resistant panels & glazing	$152,290	11.3%		
	Electrical	$107,816	8.0%		
	Site Subtotal	$1,395,700			
	General Conditions, Overhead, and Profit	$246,300			
	SITE TOTAL	**$1,642,000**			
	BUILDING & SITE TOTAL	**$31,920,659**			

STATEMENT OF PROBABLE CONSTRUCTION COST

Preliminary new construction cost can be estimated by utilizing average new facility square footage construction costs for typical public safety facilities built around the country. By adjusting these numbers to the local construction market and factoring in inflation, the total probable cost can be developed for the Casper Public Safety Facility to a predetermined point in time.

The process begins with a review of the cost of a typical new public safety facility. Cost information and other survey data have been collected from over 300 new facilities. The facilities have been constructed in many locations and bidding climates over many years. Therefore, the cost figures from the database have been adjusted for inflation and regional cost differences to develop the average.

In addition, we check square footage figures against recent detailed bid costs from similar projects. These are actual contractor bid figures by construction specification. We can add or subtract segments of the total cost based on the specific cost categories we anticipate as relevant to each development scenario we evaluate.

At the projected time of bidding we assess market supply and demand. Construction activity at the time of bidding can have a dramatic affect on costs. Low activity means more competitive bids. Increased activity results in fewer bidders and higher project cost. If we can time the market to avoid bidding our project at the same time other large projects are bidding, we recommend this.

Site development typically comprises approximately 8 - 10% of the total square footage cost, and this is reflected in the detailed costs associated with each development scenario.

Other project costs have been identified under the category of "Soft Costs". These include, but are not limited to, professional fees, geotechnical exploration, site surveys, construction phase testing, and furnishings, and design and construction contingencies.

The design contingency reflects a cost margin due to insufficient details at the preliminary stages of a project to ensure bidding accuracy. It is generally 5 – 10 % of the estimated cost and reduced as the project becomes better defined. A construction contingency should be maintained after the initial bid to accommodate Owner desired changes to the project. While it is possible that the contingency is never utilized, it should be considered as though it will.

Total project cost is a combination of the hard costs required to physically construct a building as well as the soft costs needed to support project development and to ready a completed facility for occupancy. The total project cost is established around the current construction market for a building bid in 2019 with likely annual escalation costs shown separately.

On the following page, we have itemized the various primary components of the public safety facility.

EARLY PRELIMINARY STATEMENT OF COST

CASPER POLICE AND COURTS FACILITY

	2039 SQ FT		2019 SF COST		CONSTRUCTION COST		SOFT COST %		PROJECT TOTAL
Police Building:	61,633	x	$425	=	$26,194,025	x	1.20	=	$31,432,830
Courts Component:	10,336	x	$425	=	$4,392,800	x	1.20	=	$5,271,360
Garage/ Outbuilding:	6,595	x	$250	=	$1,648,750	x	1.20	=	$1,978,500
Firing Range, (Incl. Equip):	6,916	x	$470	=	$3,250,520	x	1.20	=	$3,900,624
					$35,486,095				**$42,583,314**
Escalation 2020 (5%)					$37,260,400				$44,712,480
Escalation 2021 (5%)					$39,123,420				$46,948,104

PRELIMINARY CONSTRUCTION COST SUMMARY

Option 1: Hall of Justice Building

BUILDING

Existing Structure Renovation:						
Core Police Functions	22,080	SF	x	$244	=	$5,387,520
Garage (Swap with County)	0	SF	x	$0	=	$0
Total Renovated Area	**22,080**	**##**				**$5,387,520**
New Addition (2 Floors + Basement):						
Core Police Functions	39,553	SF	x	$387	=	$15,307,011
Courts	10,336	SF	x	$387	=	$4,000,032
Garage (Basement Location)	6,595		x	$225		$1,483,875
Firing Range (Basement Location)	6,916	SF	x	$445	=	$3,077,620
Basement Parking (Displaced Co. Prkg.)	21,945	SF	x	$225	=	$4,937,625
Total New Addition (Bsmt Parking, NIC)	**63,400**	**SF**				**$28,806,163**
SITE						**$962,000**
TOTAL CONSTRUCTION COST						**$35,155,683**
Project Soft Cost: 25%						**$8,788,921**
TOTAL PROJECT COST						**$43,944,604**

Option 2: New Construction on Unidentified Site

BUILDING

New Construction Only:						
Core Police Functions	61,633	SF	x	$396	=	$24,406,668
Courts	10,336	SF	x	$396	=	$4,093,056
Garage	6,595	SF	x	$221	=	$1,457,495
Firing Range	6,916	SF	x	$441	=	$3,049,956
Total	**85,480**	**SF**				**$33,007,175**
SITE						**$2,478,920**
TOTAL CONSTRUCTION COST						**$35,486,095**
Project Soft Cost: 20%						**$7,097,219**
TOTAL PROJECT COST						**$42,583,314**
BUILDING/ PROPERTY ACQUISITION						**(Unknown)**

PRELIMINARY CONSTRUCTION COST SUMMARY, Continued

Option 3: East Ridge Mall, Former Sears Location

BUILDING

Existing Structure Renovation:						
Core Police Functions	60,144	SF	x	$279	=	$16,780,176
Courts	10,336	SF	x	$279	=	$2,883,744
Total Renovated Area	**70,480**	**SF**				**$19,663,920**
New Addition:						
Core Police Functions	1,489	SF	x	$387	=	$576,243
Garage	6,595	SF	x	$225	=	$1,483,875
Firing Range	6,916	SF	x	$432	=	$2,987,712
Total New Addition	**15,000**	**SF**				**$5,047,830**
SITE						**$2,642,000**
TOTAL CONSTRUCTION COST						**$27,353,750**
Project Soft Cost: 25%						**$6,838,438**
TOTAL PROJECT COST						**$34,192,188**
BUILDING/ PROPERTY ACQUISITION (Estimated at $3 - $8 million)						**(TBD)**

Option 4: Star Tribune Building Renovation and Expansion

BUILDING

Existing Structure Renovation:						
Core Police Functions	30,105	SF	x	$349	=	$10,506,645
Courts	10,336	SF	x	$349	=	$3,607,264
Garage	6,595	SF	x	$174	=	$1,147,530
Total Renovated Area	**47,036**	**SF**				**$15,261,439**
New Addition:						
Core Police Functions	20,748	SF	x	$387	=	$8,029,476
Courts	10,336	SF	x	$387	=	$4,000,032
Firing Range	6,916	SF	x	$432	=	$2,987,712
Total New Addition	**38,000**	**SF**				**$15,017,220**
SITE						**$1,642,000**
TOTAL CONSTRUCTION COST						**$31,920,659**
Project Soft Cost: 25%						**$7,980,165**
TOTAL PROJECT COST						**$39,900,824**
BUILDING/ PROPERTY ACQUISITION (Listing Price, does not include adjacent prop.)						**$2,800,000**

CONCLUSIONS

1. The current facilities are inadequate to conduct routine public service functions. The growth in the service population, and the evolution of policing and the delivery of those services in the community of Casper have placed a demand on the existing facilities that has exceeded the capacity of those facilities to efficiently support law enforcement operations. The buildings as they currently exist will become increasingly deficient in the future when additional staff are required. Improved facilities will address the needs of an important public service that can have a significant impact on the community and region for many years to come.

2. The inadequacies of the existing facilities compromise confidentiality, security, and personnel productivity. The most obvious example is the disbursement of various department divisions into multiple buildings. The new facilities should be designed to facilitate current operations efficiently and accept expected future staffing increases without impacting proper operations.

3. In addition to adequate space, facility adequacy requires the proper placement of each space. The current facility lends itself to a chaotic placement of personnel, inhibiting proper interaction, and adding to the inefficient use of the staff's time. New facilities will be required to remedy these inefficient relationships.

Space Needs

1. Space needs development should be in accordance with industry standards. Current facilities provide 46,260 square feet of space. Nearly one-half of this existing space is a nondescript storage facility or less than desirable use quality, or leased space. While the remaining existing space is serviceable, only about 20 percent of all the space occupied is of adequate quality to support efficient operations. The required space need for the present staff size is 52,114 and the projected need in 20-years is 61,633.

2. The size of the proposed Police Facility can be compared to typical law enforcement facilities around the country. In assessing the appropriateness of the space planning for the space related to the police facility, a comparison can be made to law enforcement facilities for similar sized communities. Year 2039 ratios for square footage to personnel (total gross building sq. ft. divided by the total personnel) in the Casper study yields 300 square feet. This compares to an average square footage of 287 square feet per person for new facilities of similar personnel size, from the database of national averages. At four percent above the average mean, this is well within the variance for proper planning.

3. Police Administration requires 1,790 square feet currently and 2,340 square feet in 20-years. The existing Administration area contains 1,787 square feet of area dedicated to the specific need. This area is appropriate for todays need and 76 percent of that in 20-years.

The location of the Police Administration within a new facility could be improved by creating an access point with a direct, or indirect link between the Lobby and an administrative contact point. The Police Chief and Executive staff should be visually and acoustically screened from this position. The Administrative suite should be self-contained with secured access to all staff areas of the building to maximize the work environment. The relationship with the lobby requires careful consideration to provide for

convenient access, while maintaining a secure, visual separation from the lobby.

4. The space in the current facility specifically designated for Support Services (not including Communications and Evidence and Property) functions contains 5,533 square feet. The programmed space need is for 6,395 square feet currently, and 7,540 square feet in 20-years. This is 87 percent of the current need, and 73 percent of the required space needed in 20-years.

New facilities are needed to increase the size of space that support personnel and training in one main building, with an emphasis on securely and conveniently interacting with the entire department.

5. There is currently a lack of facility space to house personnel within Police Investigations. The Investigations Division currently occupies around 2,853 square feet in the building. This is 58 percent of the current space requirement of 4,890 square feet, and only 50 percent of the need for 5,740 square feet in 20-years.

Investigation facilities should be developed which house all investigations functions in a self-contained suite. The Investigators workroom could utilize a flexible bullpen configuration or individual, private offices, with supervisory personnel immediately adjacent the investigators in private offices.

6. The Patrol Division requires 4,070 square feet currently, and 4,740 in 20-years. Existing patrol functions are supported by area totaling 2,852 square feet, which is 70 percent of today's requirement and 60 percent of the need in 20-years.

The development of a new facility should keep all patrol functions in the main building with all other police operations. The building layout should be developed to facilitate the efficient movement of officers in and out of the building, to and from evidence drop areas, report writing rooms, and briefing space. Supervisory personnel should have independent workstations. Briefing, and report writing space should be developed for the specific use of those functions. Locker quantities should be sufficient to handle the unknown ratio of male to female personnel.

7. Evidence space requires 3,405 square feet currently, and 3,860 square feet in 20-years. There is currently 1,187 square feet available for secure and proper handling and storage of evidence. The current space is 35 percent of the current need, and 31 percent of the need in 20-years.

An evidence area should be developed which provides a convenient location adjacent to the secured area for field personnel to bag and label evidence before securing it. The location of this bag and tag function would be highly desirable in the new report writing room. The processing area should be immediately adjacent to this location, secured, with direct access to bagged evidence. Storage areas for evidence should be developed to handle specific types of evidence, such as general evidence, found property, large evidence, drugs, and firearms without ever leaving the secured processing area.

8. Communications is not located in the building, but is in leased space in the NERD Building. While the space they are occupying is more than adequate, it would be beneficial for Communications to be within the same building as the other divisions. This would promote positive interaction with police officers and allow

Communications to monitor the police building, especially in the overnight hours.

10. Miscellaneous areas currently lacking are those pertaining to storage space, closets, sufficient restrooms, proper hallway circulation, and mechanical equipment rooms to support new, highly efficient HVAC systems. Development of these areas should be guided by the appropriate building codes, ADA requirements, and standards for design. As stated prior, there is current space for various storage requirements in one of the secondary buildings, but it is of low quality based on ease of access and security.

Development Options

Four development scenarios were investigated in detail. Three of these looked at renovating existing buildings. In considering a building to be renovated, the goal is to advance the project in a manner that allow the renovated/ expanded space to perform on a level of functional efficiency comparable to a new building. Given this, renovations frequently require some compromise. This is just the nature of developing space around the impediments of existing building parts.

With the stringent requirements of current building and energy codes and regulations related to critical use buildings such as this project entails, few elements of an existing building is left untouched. Wall and roofs must be extensively upgraded to meet energy modeling. Mechanical, electrical, and IT (technology) generally requires a total update to meet the high demand performance level required. Vertical circulation from stairs and elevators, when requiring modification, is costly work in the confines of an existing building.

When considering any renovation, if we believe the plan being put forth can perform with an equivalency to that of new construction, we consider the cost. Can it be built at a savings versus new construction? Generally, we are looking for a significant savings as we recognize there is a greater risk of encountering unexpected conditions during construction that may drive construction costs higher. And the expected outcome may not be as certain as with new construction.

Renovating the existing police space within the Hall of Justice is the least likely to result in a good long-term outcome. The police operations occurring in the Hall of Justice and other downtown buildings must be brought under one roof to be of long-term value. Casper Police and Courts occupy such a small amount of space in the Hall of Justice that a new adjacent addition would be a substantial part of the entire project. Given the limited area to place an expansion at the site, the only realistic possibility would be on the County parking immediately south of the current building. To address the displacement of this parking, the project would need to include a basement parking Garage dedicated to County use. This drives the total project construction cost beyond the estimates for a new project on an arbitrary site.

While costs for renovating the Hall of Justice exceed the cost of new construction, the parking is not addressed. The already deficient parking situation is further exacerbated and could be expected to worsen over time.

Renovating and adding on to the Star-tribune building is only slightly better. The project cost represent a very small savings over that of new construction. The building's structure, odd sized floor levels and general configuration are not conducive to

design flexibility and reduce the outlook for the best functional outcome. The site barely accommodates the building and parking needs, with zero opportunity for future expansion unless additional adjacent properties are acquired. This would likely push the total project costs beyond that of new construction.

Given this limited site area along with the close proximity to railroad tracks, and the semi-dead-end street the building is situated on, it is our professional opinion that the Star-Tribune is inadequate for conversion to a police facility use.

Of the renovation options, we believe the best opportunity for success comes with the East Ridge Mall location. It is a relatively clean structure in good condition. The building configuration is simple, and a new addition would represent only a small part of the total space required. This would minimize the uncertainty associated with unforeseen conditions.

The construction cost estimate indicates the best opportunity to save a significant amount versus new construction. The caveat is the acquisition figures. Some initial indications of the Mall Owner's sales price push the total project cost to nearly the cost of a new facility, if not higher.

We previously highlighted our concerns with this option and question whether the potential cost savings overcome the concerns when spread over the life of the building.

Given the length of time a single City entity could occupy this building (70-100 years if appropriately planned), a project considered for renovation must possess special characteristics, and generally be able to be acquired for below market price. Even if new construction is substantially higher than renovating an existing building, the added cost is spread over many years, minimizing the impact. But if the renovation reflects any functional compromise or lower efficiency, that effect is cumulative, and this magnified over those many years of the life of the building.

It is our professional opinion that the buildings considered for renovation do not possess all of, of enough of, the desirable aspects we look for as indicators that their renovation will be equivalent to new construction. And we have identified weaknesses in each existing building that will result in a lifetime of compromise.

Benefits of a New Police Facility Project

Given the establishment of the need for new facilities for the Casper Police and Courts, what is the benefit in doing so. We believe the following highlight some of the reasons this project should be undertaken:

Maximize the operational efficiency for all staff during time spent in the building by minimizing down time waiting for space to become available to conduct certain tasks and improving personnel interaction by placing individuals in close proximity where desirable. In addition, creating space within the building for storage lessens time spent traveling to remote locations to retrieve items.

Proper facilities can promote an increased level of in-service training maximizing the skills of department personnel and minimizing liability to the City based on the interaction occurring between staff and citizens.

Lessen the manpower demand over time by utilizing technological infrastructure to monitor events occurring within the building.

Support the safety and security of both staff and the public by utilizing the design of the facility to achieve a safe physical environment.

Provide for the occurrence of discreet conversations and the exchange of information between officers and victims and/or witnesses, so as not to discourage the public from engaging with the Police.

Modernizing facilities typically results in increased department morale, promoting improved job performance, hiring edge, and employee retention.

Properly designed space promotes interaction between the public and Police Department. Emphasizing this alliance has been shown to have a positive impact on the reduction in crime.

Reduce potential liability, especially associated with the high risk involved with detaining prisoners.

Maintain the "Chain of Evidence" through proper facility design in order to maximize conviction rates.

Minimize energy costs by employing the design of modern systems to supply and control the internal building environment.

PLANNING STANDARDS

It has been determined that the elements that dictate the need for space in a building are assigned personnel, temporary occupants, activities, and the equipment and furnishings necessary to conduct the required activity. A determination of the appropriate amount of space for each of these is very subjective, and is based upon a database of properly designed law enforcement facilities tailored to fit the way a specific department needs to operate.

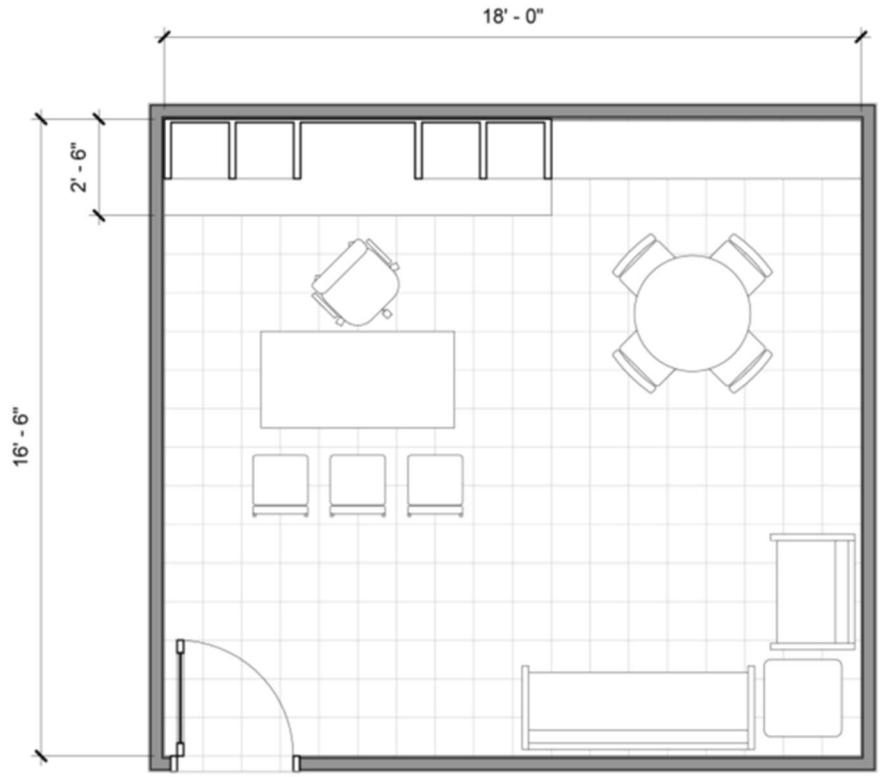
The area required for certain functional elements can be determined in part by applying specific planning standards. Planning standards (PS) are simply an established quantity of floor space required to conduct a known activity, tested by past history. This can come in many forms, but they are primarily related to the size of a workstation, seating, or table requirement to perform a task, or multiple tasks within the Functional Element. It can also be a typical room size based on the area required to perform a known set of tasks.

For the Functional Elements listed in the Space Needs Tables, the square footages assigned in the Space Needs Tables are based on Planning Standards. The diagrams on the following pages correspond to the designation in the first column of the table to the right. The area of a Planning Standard can be increased or decreased, in order to affect the overall square footage. However, the area shown herein is recommended for the given task.

Referring to the Space Need Tables, columns WS1 and WS2 indicate the number of workstations when they are used. Columns WS1T and WS2T designate the type of workstation, cross-referenced at right.

Please note that these diagrams are general and typical of public safety facilities across the nation. These would be refined on a space-by-space basis as needed during the design phase as the project is developed.

TYPE	TYPICAL USE
PS-1	Private Office
PS-2	Private Office
PS-3	Private Office
PS-4	Private Office
PS-5	Private Office
PS-6	Private Office
PS-7	Open Office
PS-8	Open Office
PS-9	Open Office
PS-10	Communications / Dispatch
PS-11	Briefing Room
PS-12	Training / Multi-Use Rooms
PS-13	Conference Rooms
PS-14	Toilet Rooms
PS-15	Report Writing
PS-16	Evidence Intake/Processing
PS-17	Interview Rooms
PS-18	Locker Rooms
PS-19	Shower Stalls
PS-20	Sally Port



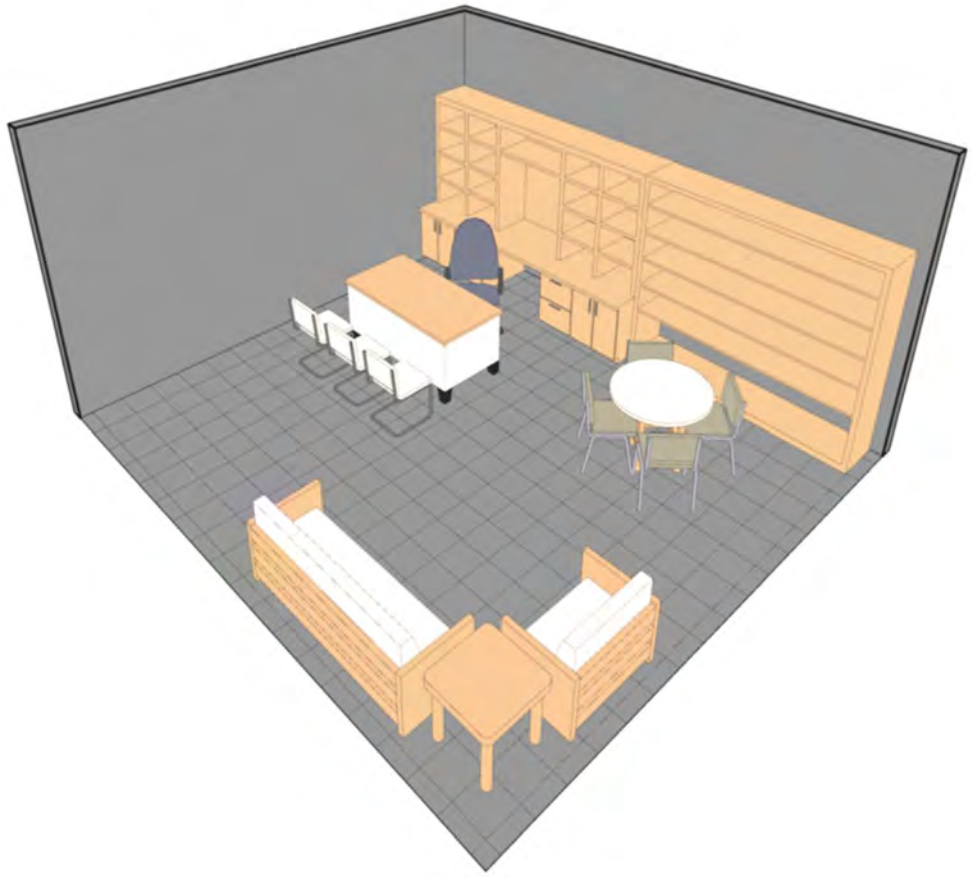
DESIGN CONSIDERATIONS

- ✓ 295 SQUARE FOOT FLOOR AREA
- ✓ BUILT-IN CASEWORK AND FILE SPACE
- ✓ WORKSTATION AREA AT DESK
- ✓ CASUAL MEETING AREA (SOFA SEATING)
- ✓ SMALL CONFERENCE TABLE
- ✓ WALLS TO DECK WITH SOUND INSULATION
- ✓ POWER / DATA AT WORKSTATION, MEETING AREA AND CONFERENCE TABLE

PLANNING STANDARD PS-1

PLAN VIEW

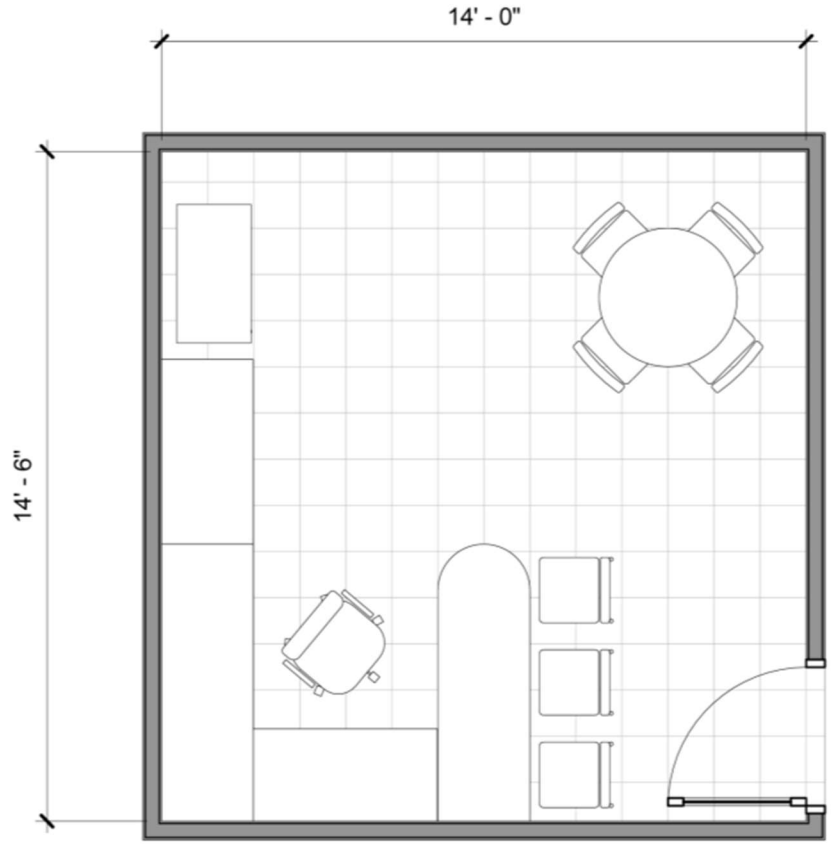
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-1

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



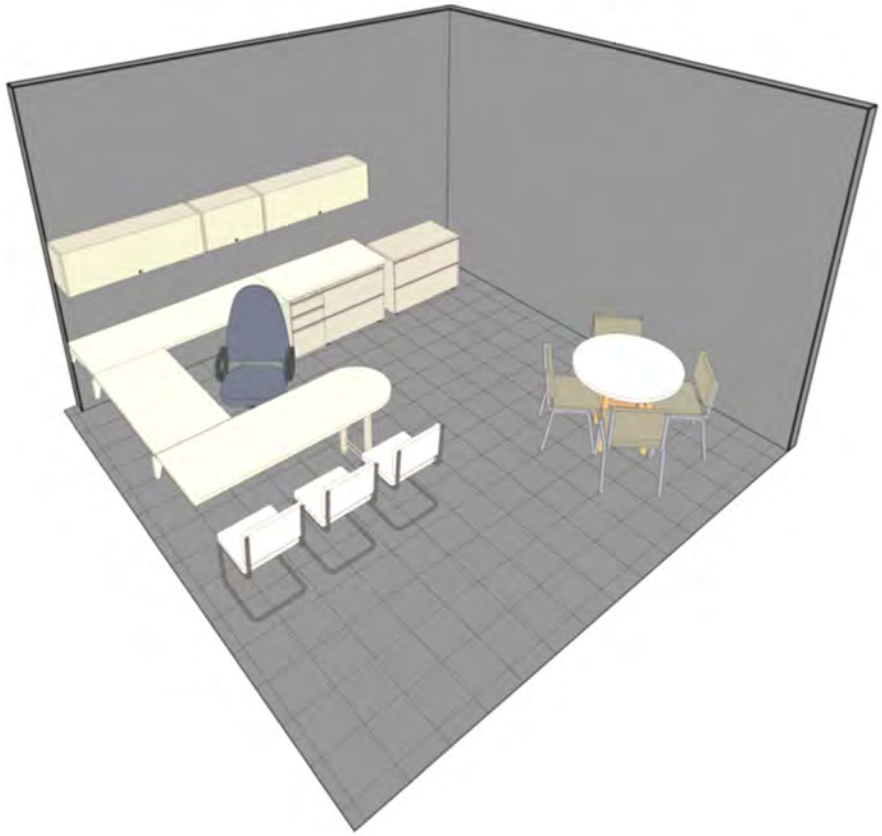
DESIGN CONSIDERATIONS

- ✓ 200 SQUARE FOOT FLOOR AREA
- ✓ 8 x 10 WORKSTATION AREA
- ✓ LATERAL OR LETTER FILE CABINET
- ✓ SMALL CONFERENCE TABLE
- ✓ POWER / DATA AT WORKSTATION, AND CONFERENCE TABLE
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-2

PLAN VIEW

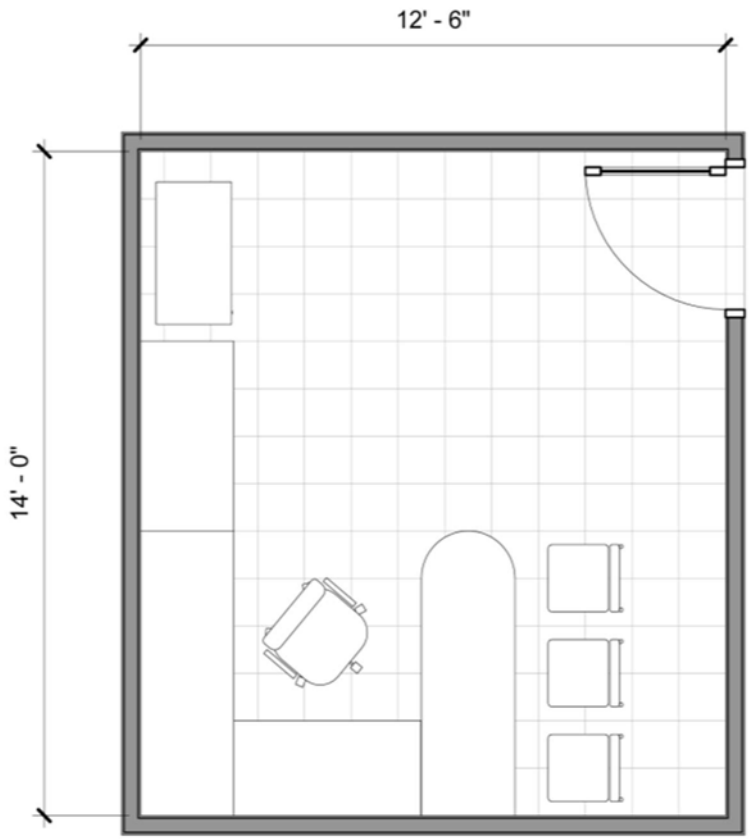
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-2

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



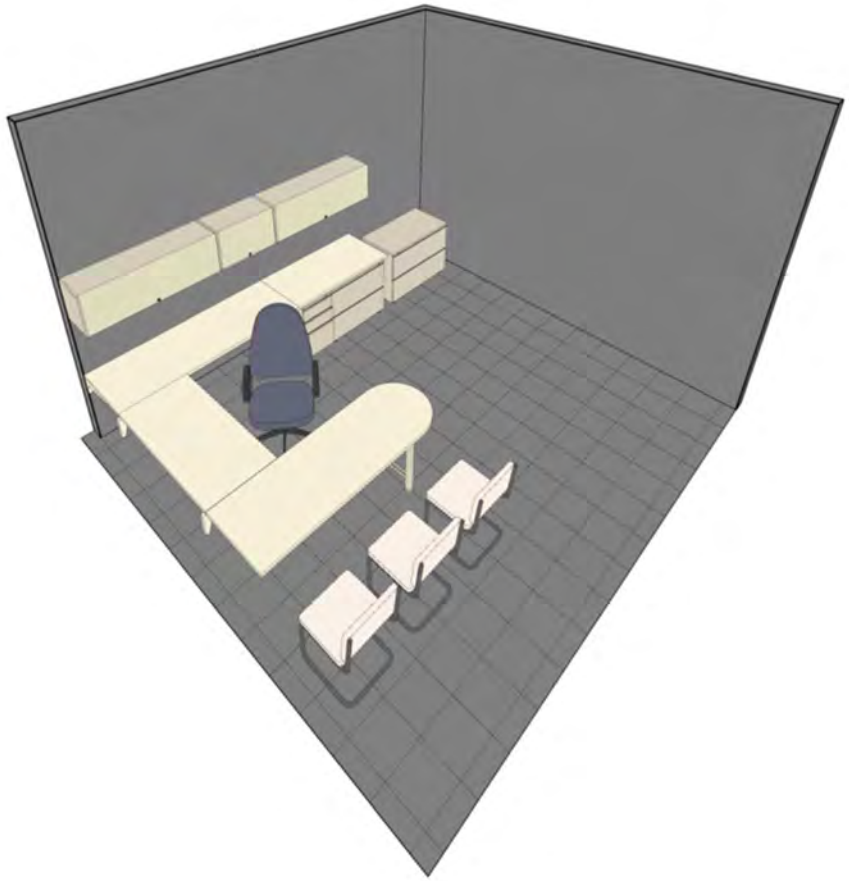
DESIGN CONSIDERATIONS

- ✓ 175 SQUARE FOOT FLOOR AREA
- ✓ 8 x 10 WORKSTATION AREA
- ✓ LATERAL OR LETTER FILE CABINET
- ✓ POWER / DATA AT WORKSTATION
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-3

PLAN VIEW

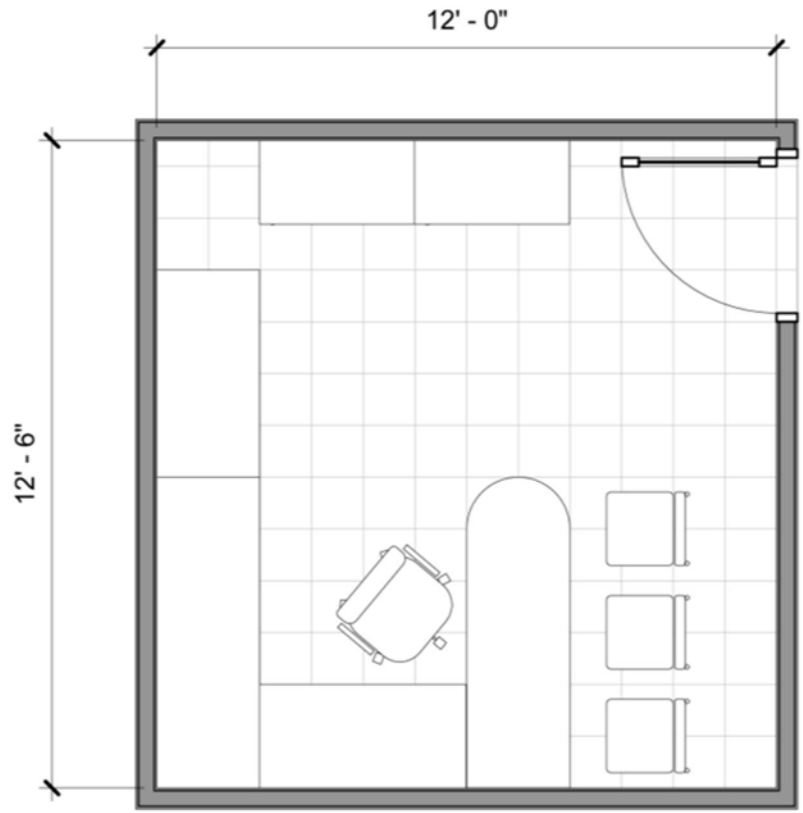
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-3

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



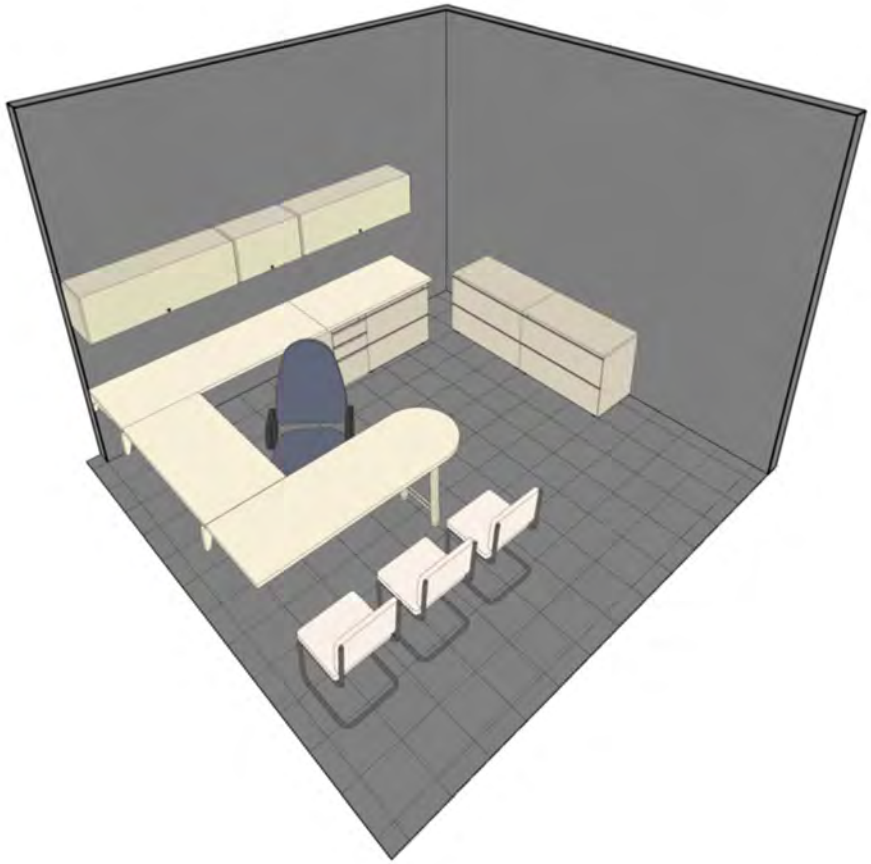
DESIGN CONSIDERATIONS

- ✓ 150 SQUARE FOOT FLOOR AREA
- ✓ 8 x 10 WORKSTATION AREA
- ✓ LATERAL OR LETTER FILE CABINET
- ✓ POWER / DATA AT WORKSTATION
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-4

PLAN VIEW

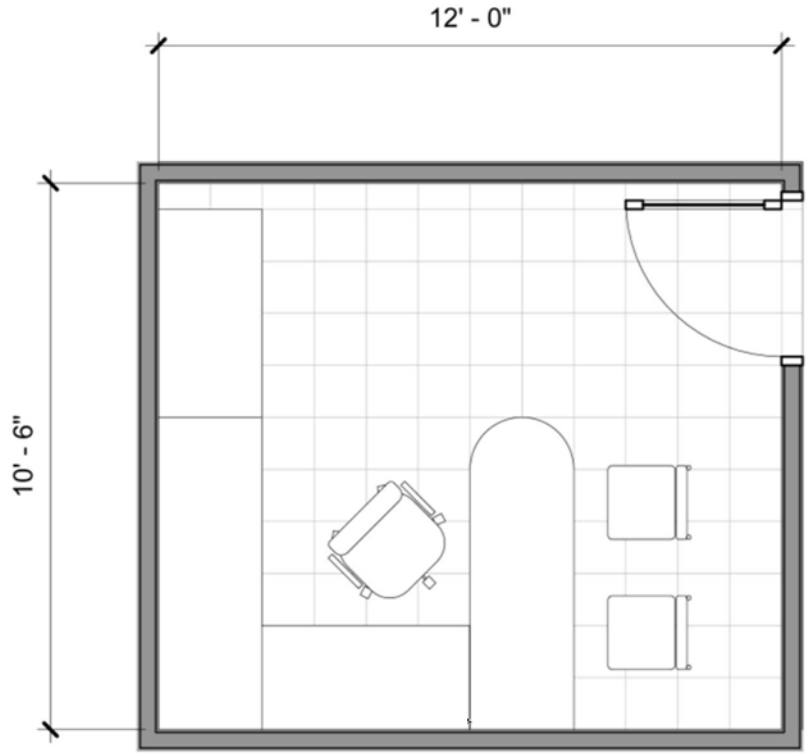
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-4

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



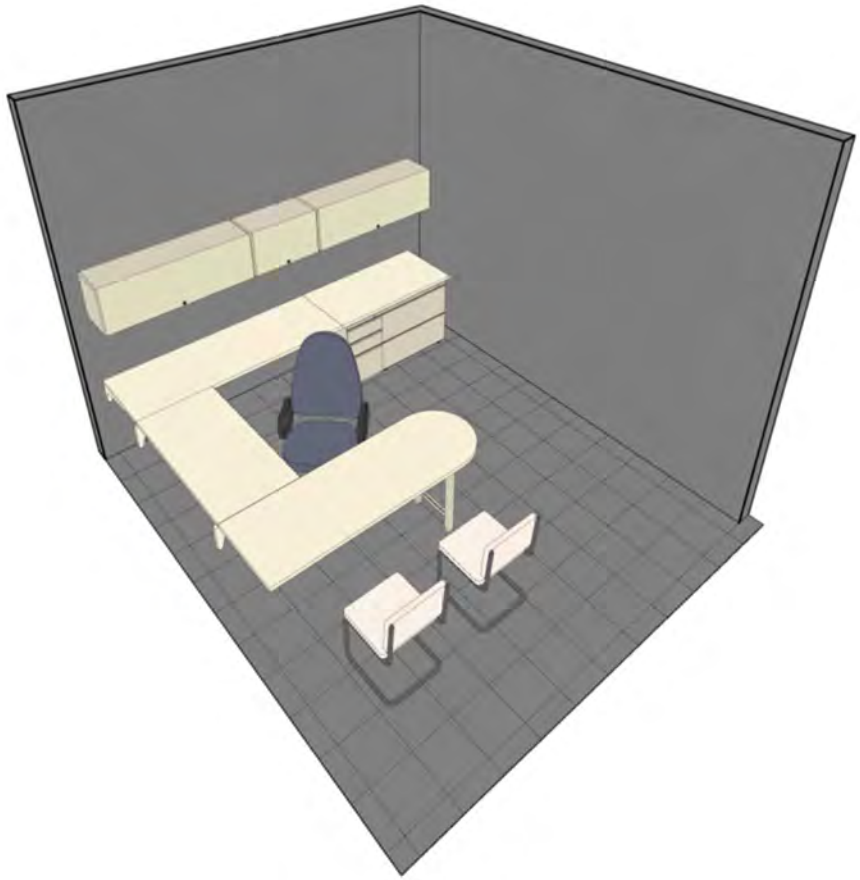
DESIGN CONSIDERATIONS

- ✓ 125 SQUARE FOOT FLOOR AREA
- ✓ 8 x 10 WORKSTATION AREA WITH BUILT-IN FILES
- ✓ POWER / DATA AT WORKSTATION
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-5

PLAN VIEW

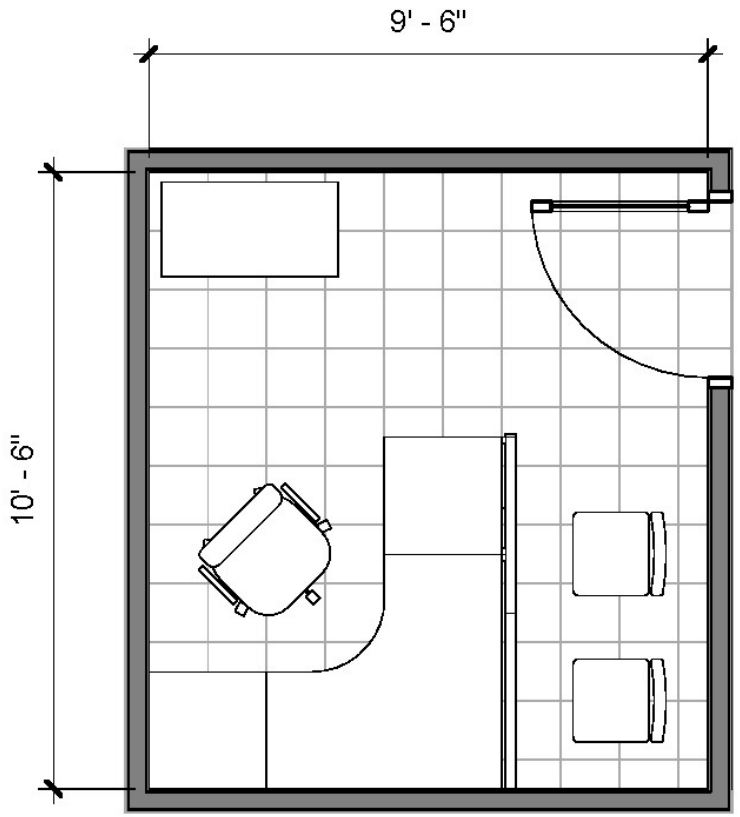
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-5

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



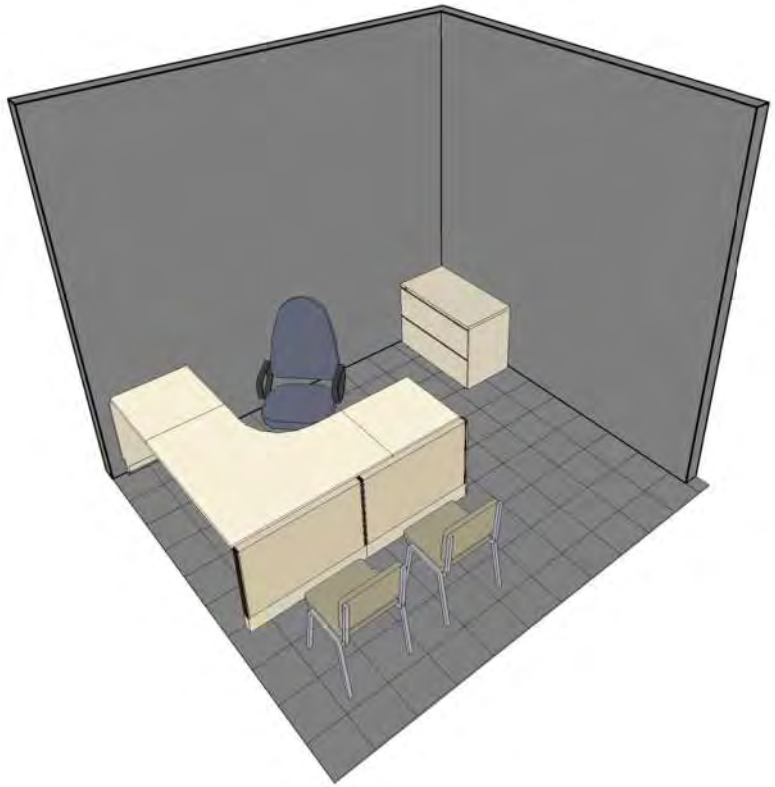
DESIGN CONSIDERATIONS

- ✓ 100 SQUARE FOOT FLOOR AREA
- ✓ 6 x 6 WORKSTATION AREA WITH BUILT-IN FILES
- ✓ POWER / DATA AT WORKSTATION
- ✓ LATERAL OR LETTER FILE CABINET
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-6

PLAN VIEW

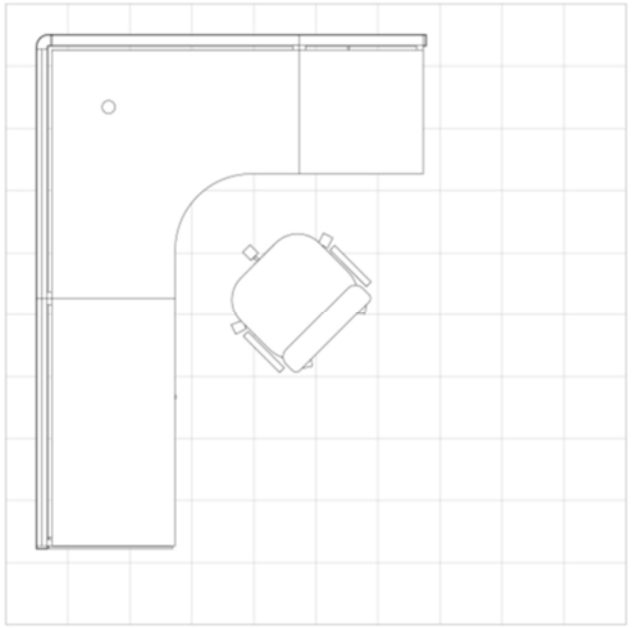
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-6

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING

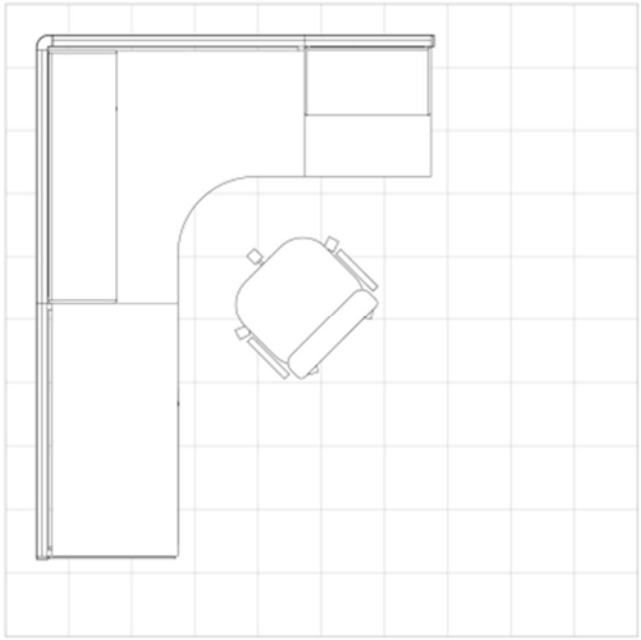


DESIGN CONSIDERATIONS

- ✓ 8 x 6 WORKSTATION AREA
- ✓ BUILT-IN FILE STORAGE
- ✓ UPPER CLOSED STORAGE AREA

PLANNING STANDARD PS-8a

CASPER POLICE AND COURTS
CASPER, WYOMING

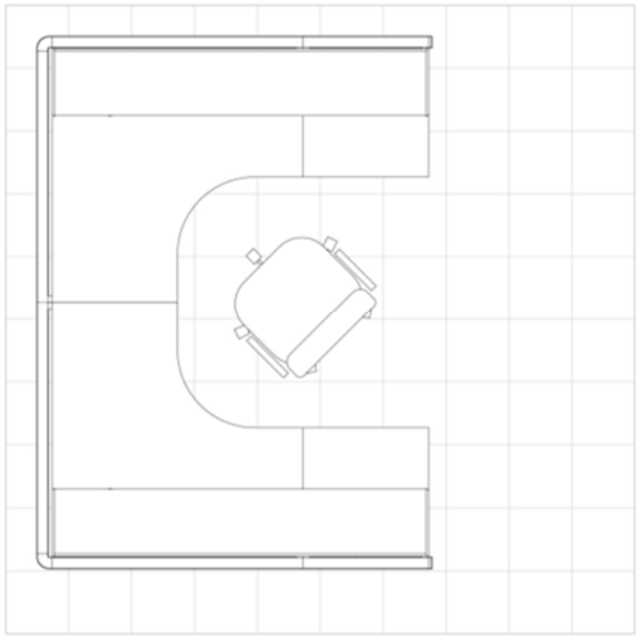


DESIGN CONSIDERATIONS

- ✓ 8 x 6 WORKSTATION AREA
- ✓ BUILT-IN FILE STORAGE
- ✓ UPPER CLOSED STORAGE AREA

PLANNING STANDARD PS-8b

CASPER POLICE AND COURTS
CASPER, WYOMING

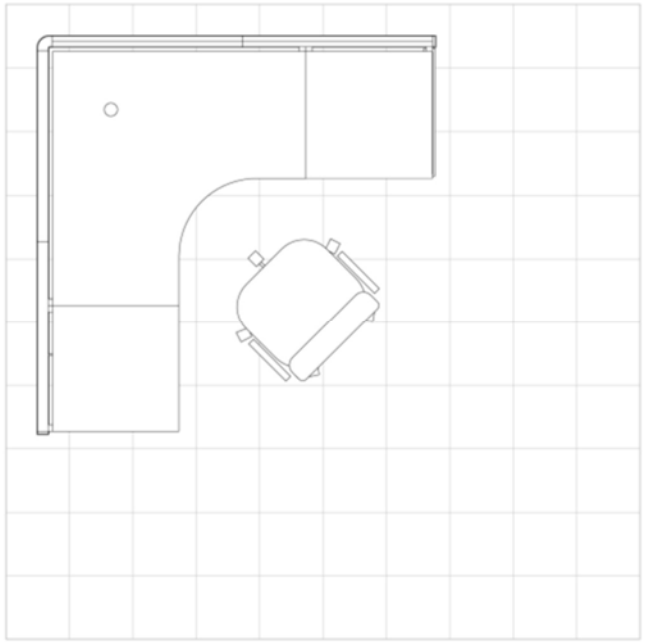


DESIGN CONSIDERATIONS

- ✓ 8 x 6 WORKSTATION AREA
- ✓ BUILT-IN FILE STORAGE

PLANNING STANDARD PS-8c

CASPER POLICE AND COURTS
CASPER, WYOMING

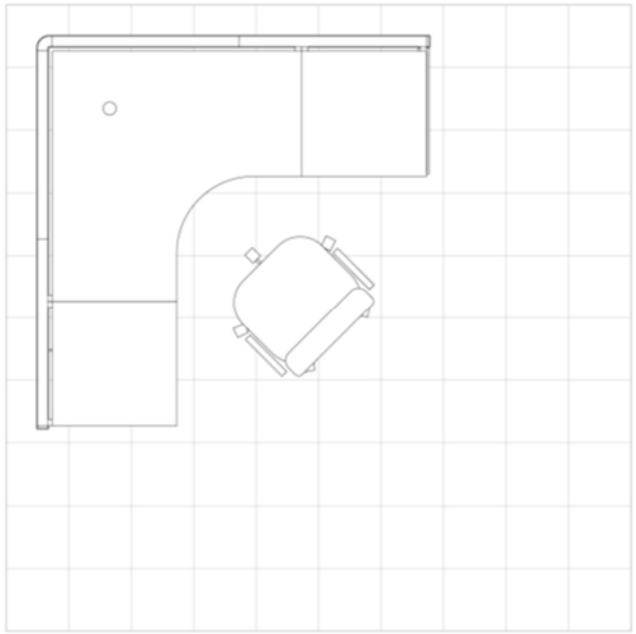


DESIGN CONSIDERATIONS

- ✓ 6 x 6 WORKSTATION AREA
- ✓ BUILT-IN FILE STORAGE
- ✓ UPPER CLOSED STORAGE AREA

PLANNING STANDARD PS-9a

CASPER POLICE AND COURTS
CASPER, WYOMING

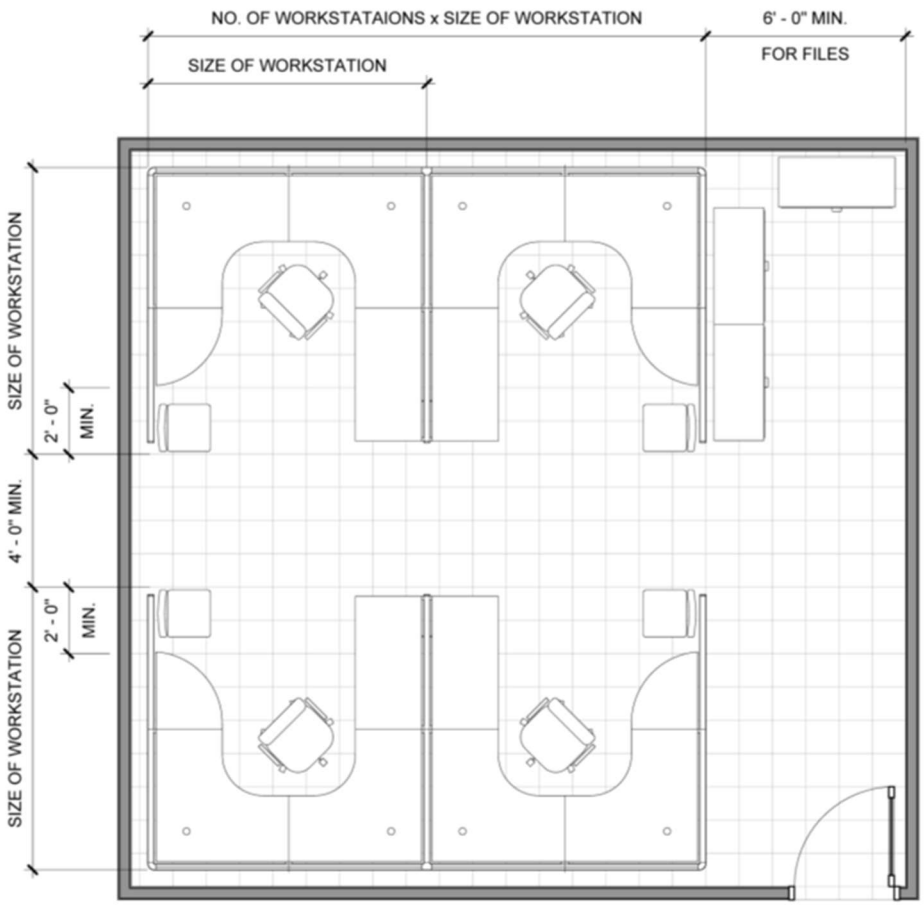


DESIGN CONSIDERATIONS

- ✓ 6 x 6 WORKSTATION AREA
- ✓ BUILT-IN FILE STORAGE

PLANNING STANDARD PS-9b

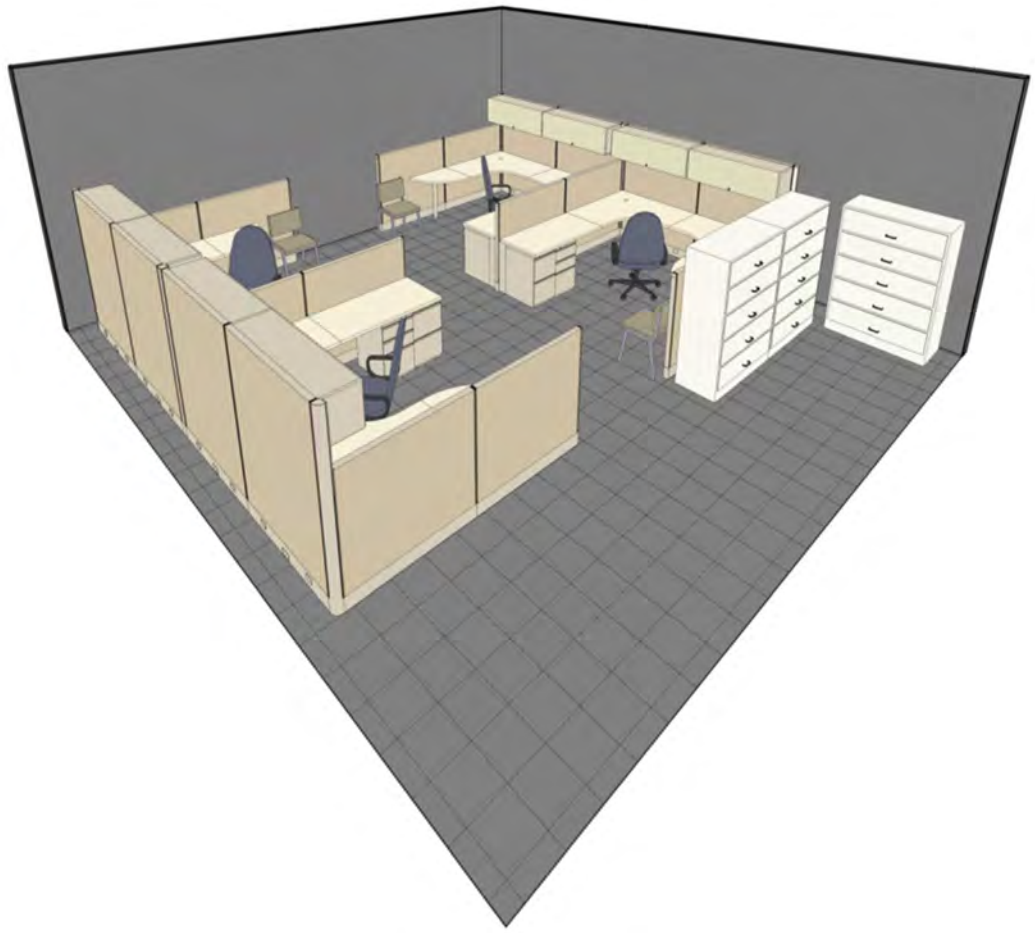
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARDS PS-7, PS-8 AND PS-9

EXAMPLE LAYOUT

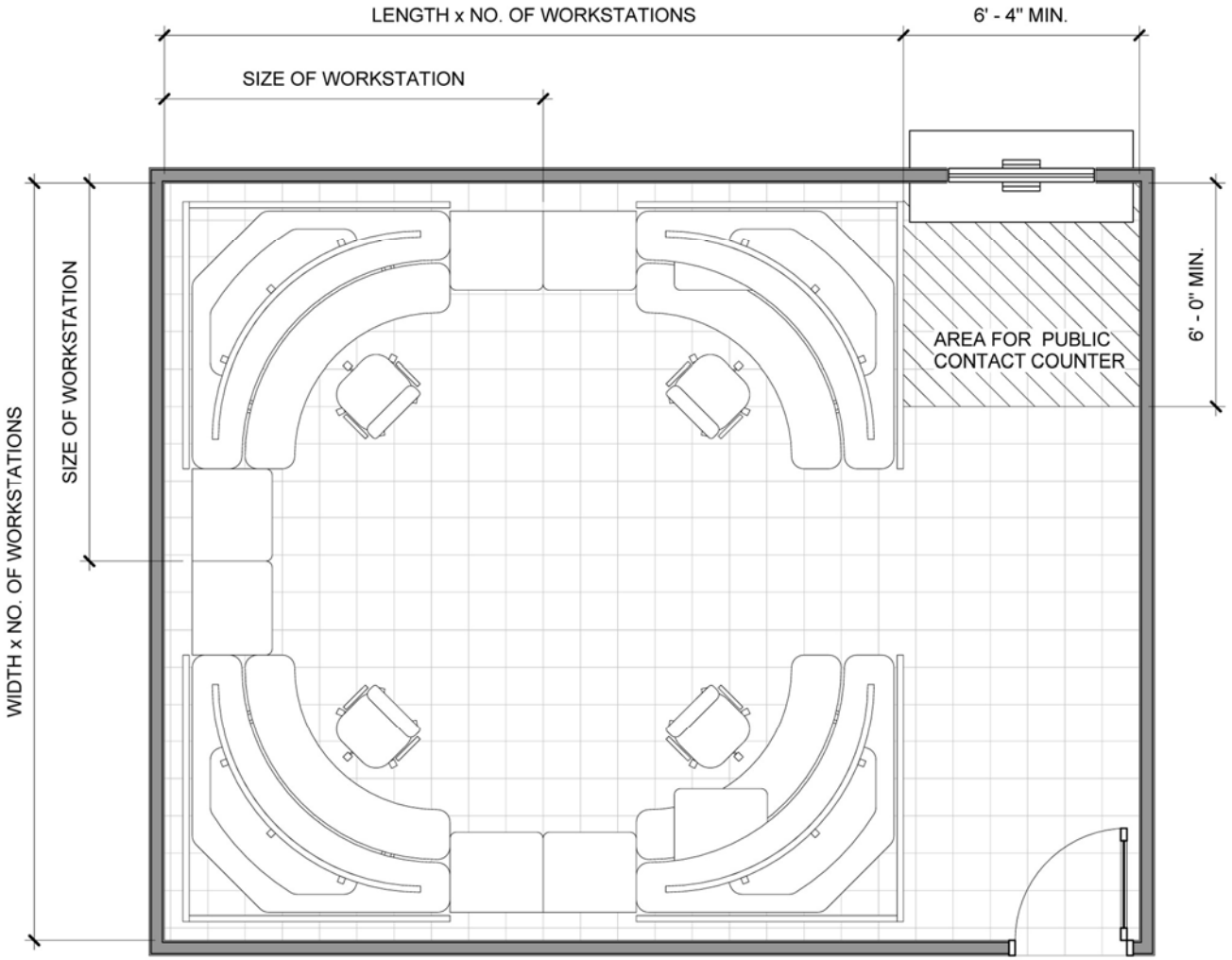
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARDS PS-7, PS-8 AND PS-9

3D VIEW

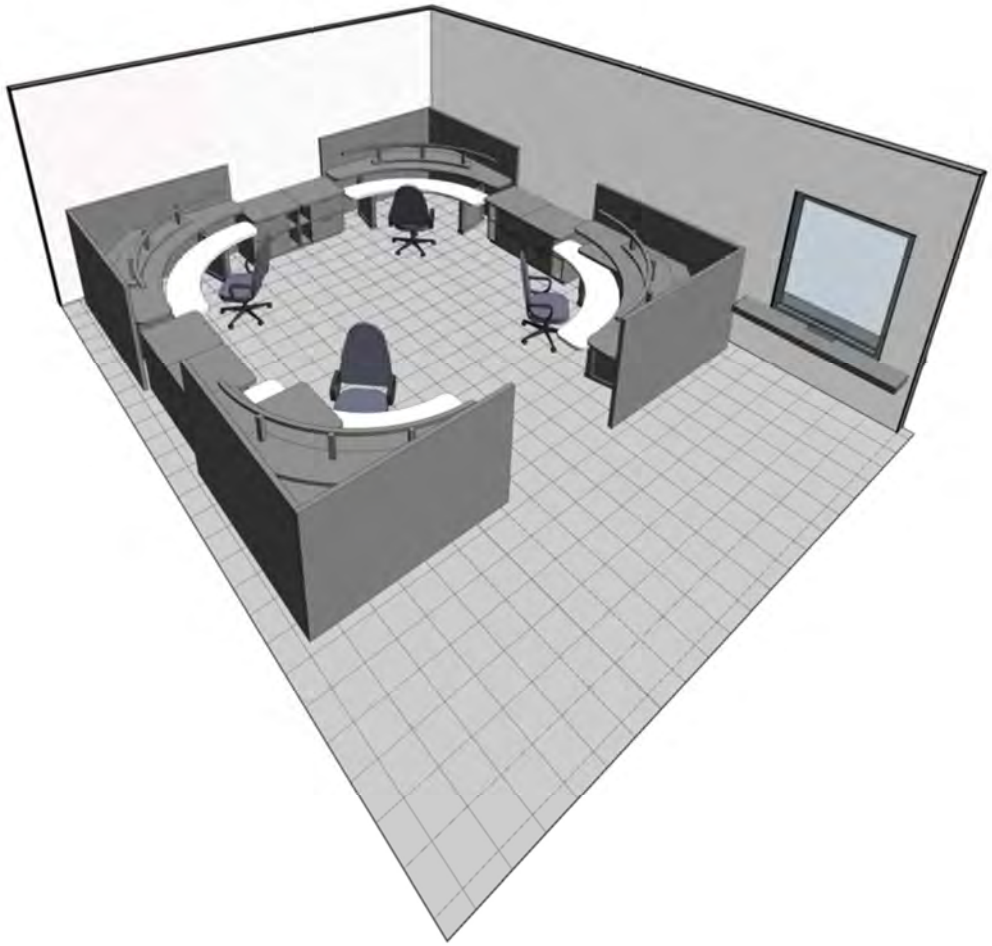
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARDS PS-10

EXAMPLE LAYOUT

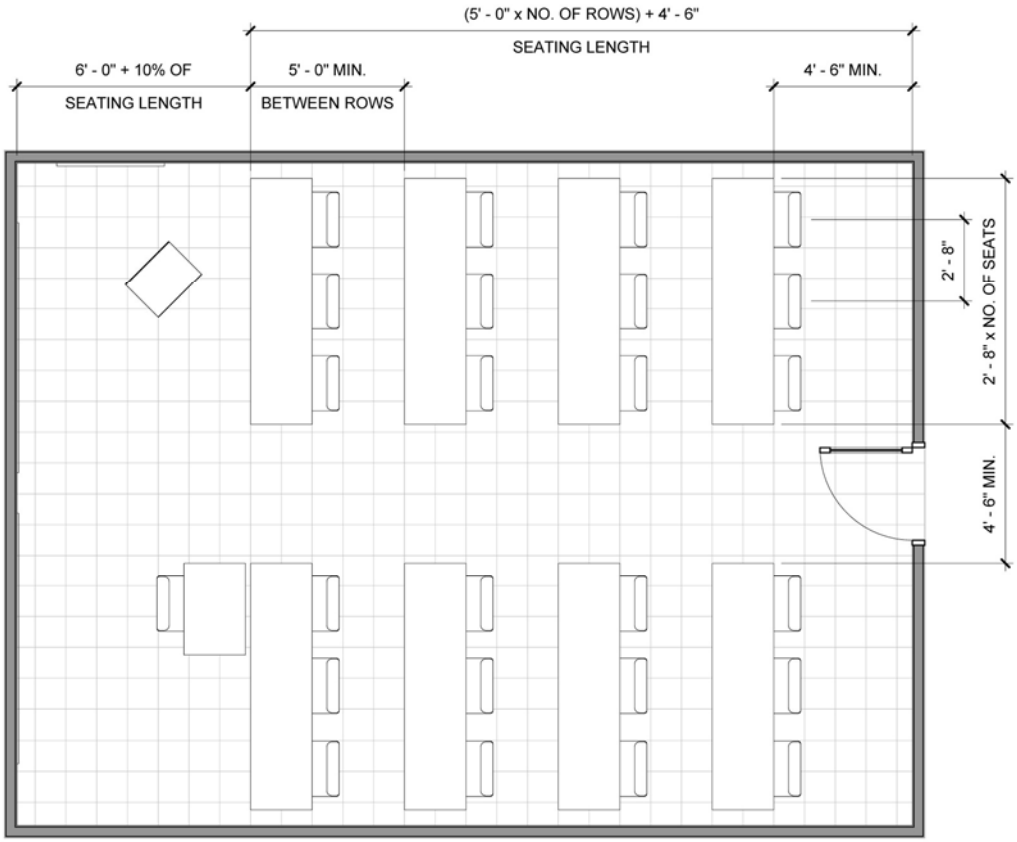
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARDS PS-10

3-D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING

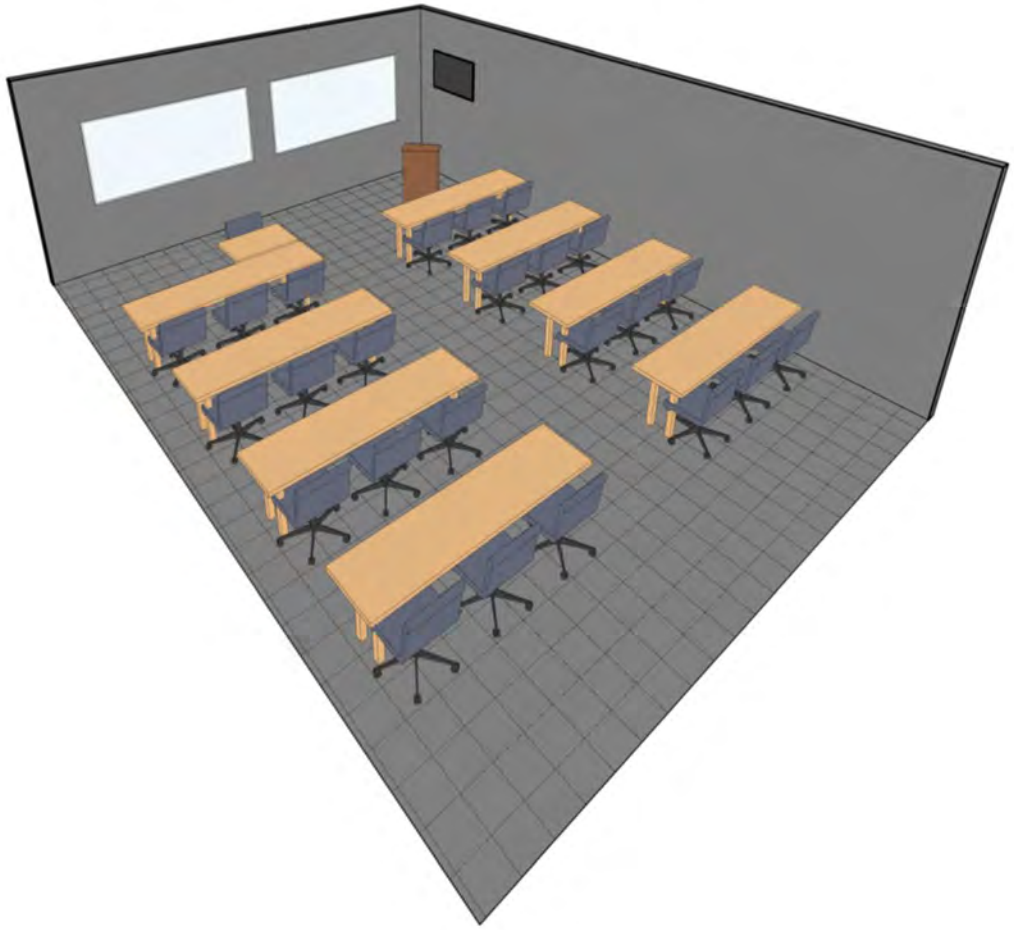


DESIGN CONSIDERATIONS

- ✓ OPTIONAL BUILT-IN CASEWORK FOR AUDIO / VISUAL EQUIPMENT
- ✓ POWER / CATV / DATA AT AUDIO / VISUAL EQUIPMENT
- ✓ POWER / DATA AT EACH ROW
- ✓ CONCEALED PROJECTION SCREEN
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-11
PLAN VIEW

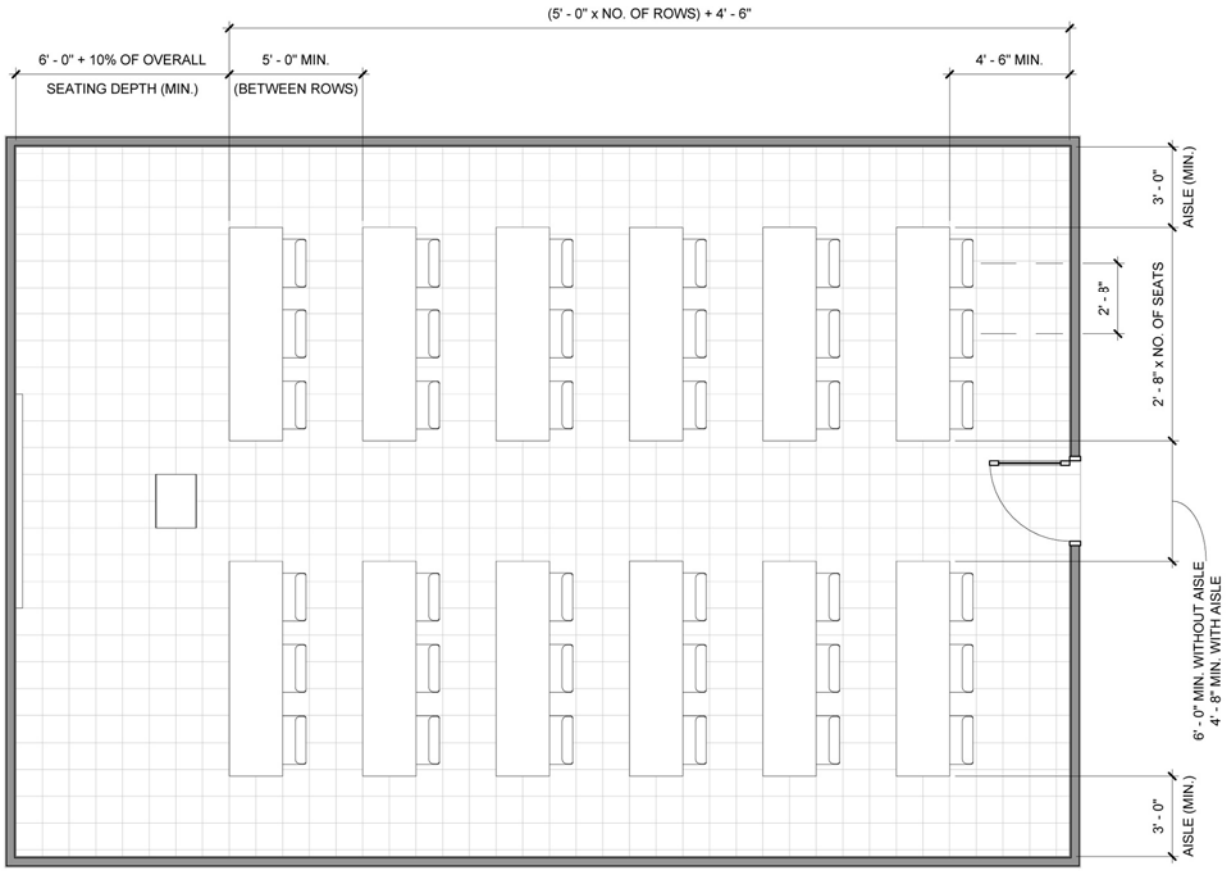
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-11

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



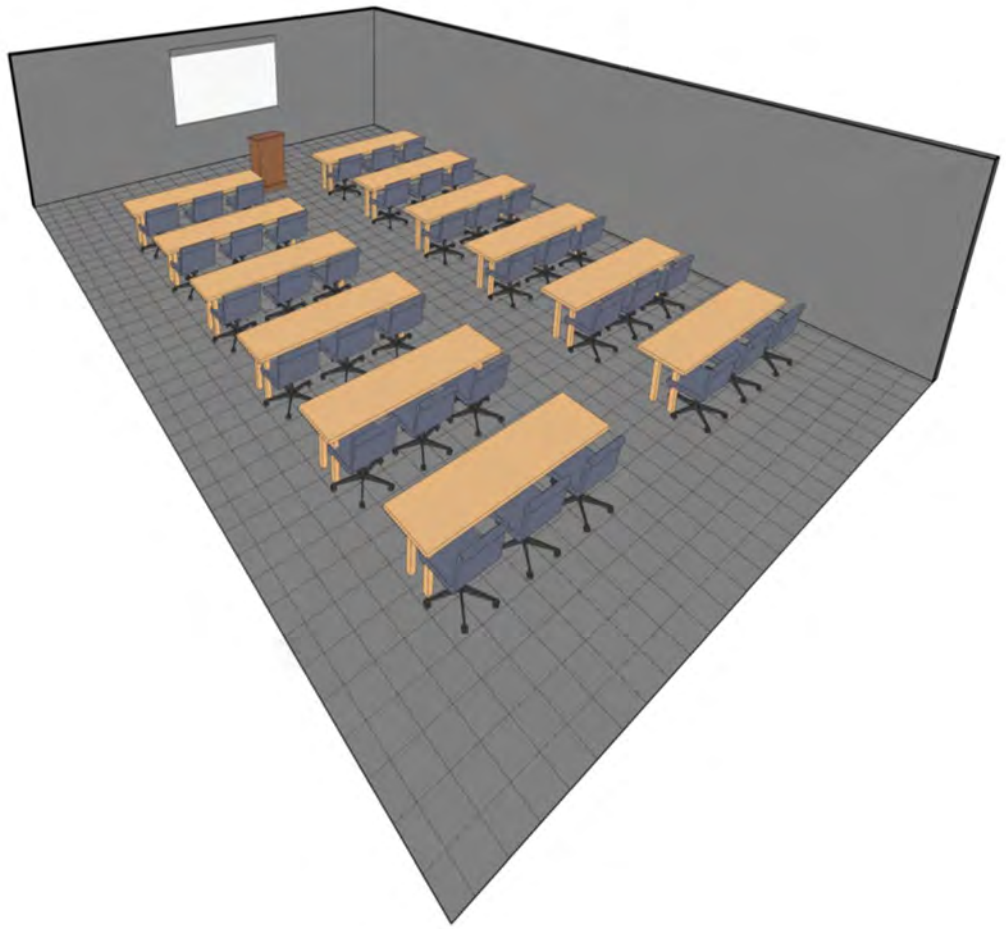
DESIGN CONSIDERATIONS

- ✓ CONCEALED PROJECTION SCREEN
- ✓ IN CEILING PROJECTOR MOUNT
- ✓ OPERABLE PARTITION(S)
- ✓ POWER / DATA / MICROPHONE NEAR THE PODIUM
- ✓ EXTRA POWER / DATA IN WALLS FOR POSSIBLE E.O.C. USE
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-12a

PLAN VIEW

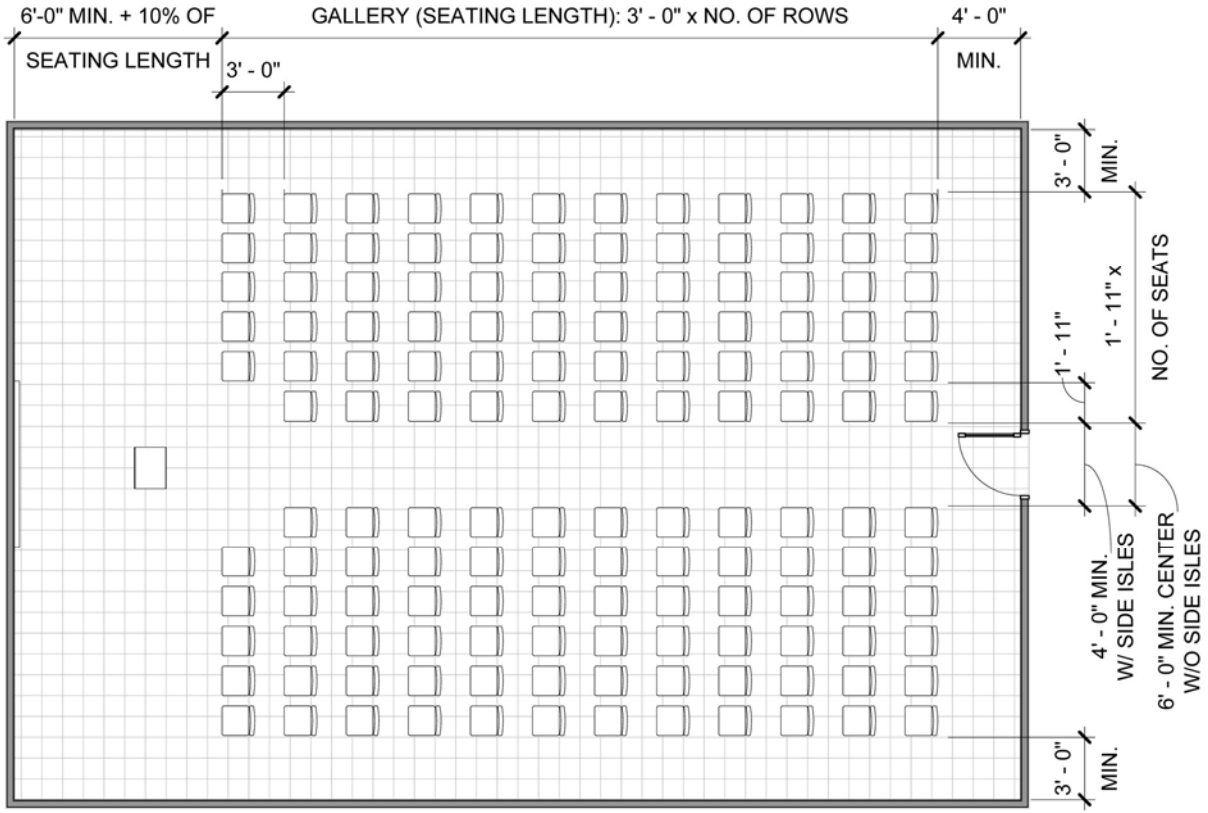
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-12a

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



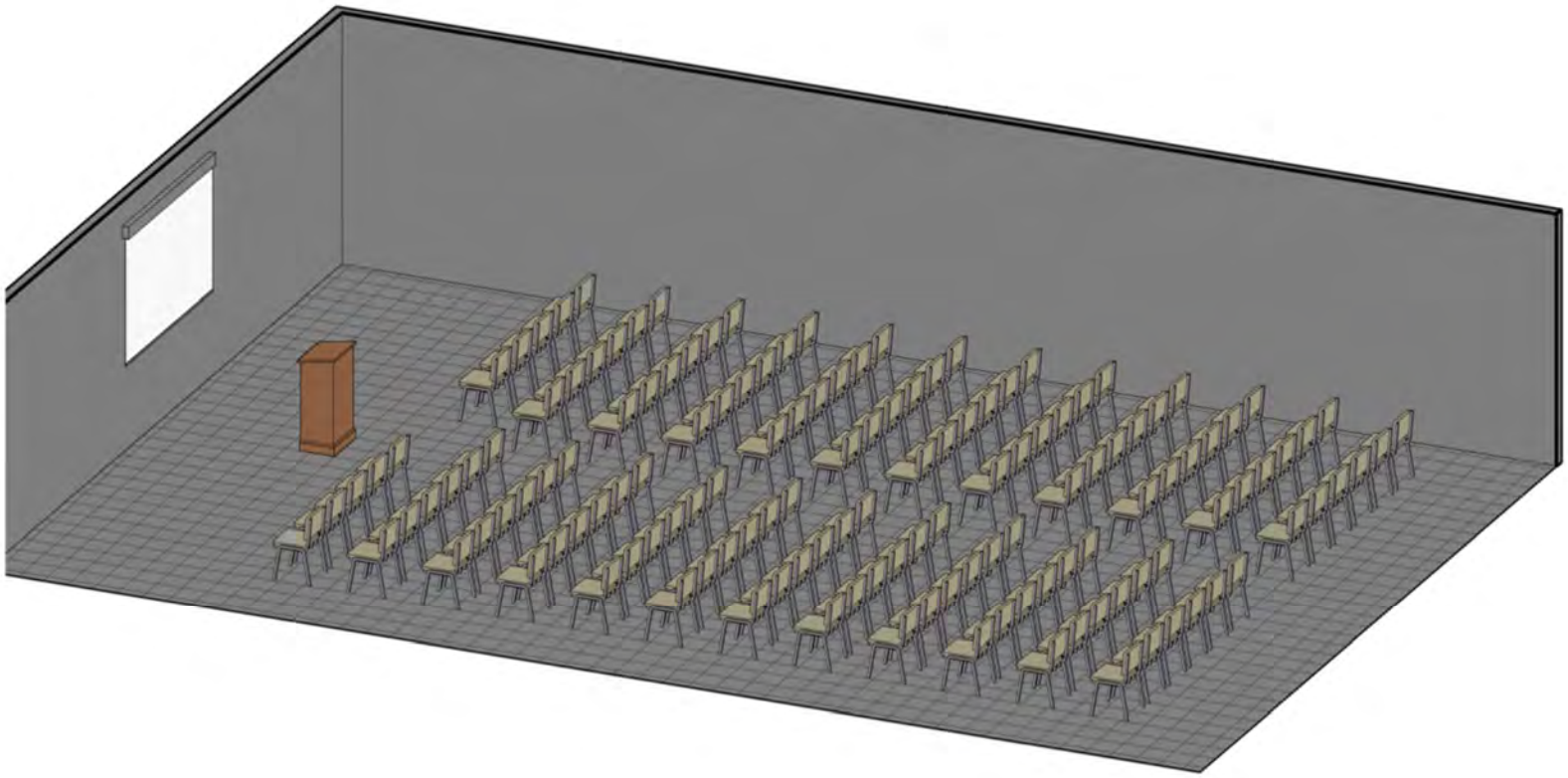
DESIGN CONSIDERATIONS

- ✓ CONCEALED PROJECTION SCREEN
- ✓ IN CEILING PROJECTOR MOUNT
- ✓ OPERABLE PARTITION(S)
- ✓ POWER / DATA / MICROPHONE NEAR THE PODIUM
- ✓ EXTRA POWER / DATA IN WALLS FOR POSSIBLE E.O.C. USE
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-12b

PLAN VIEW

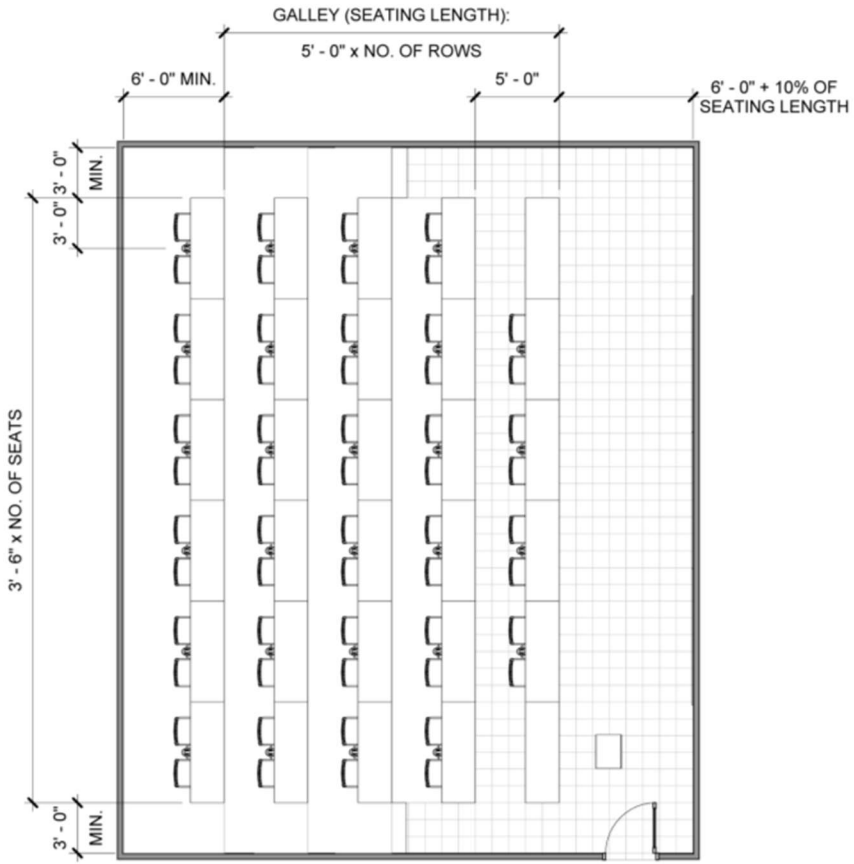
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-12b

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



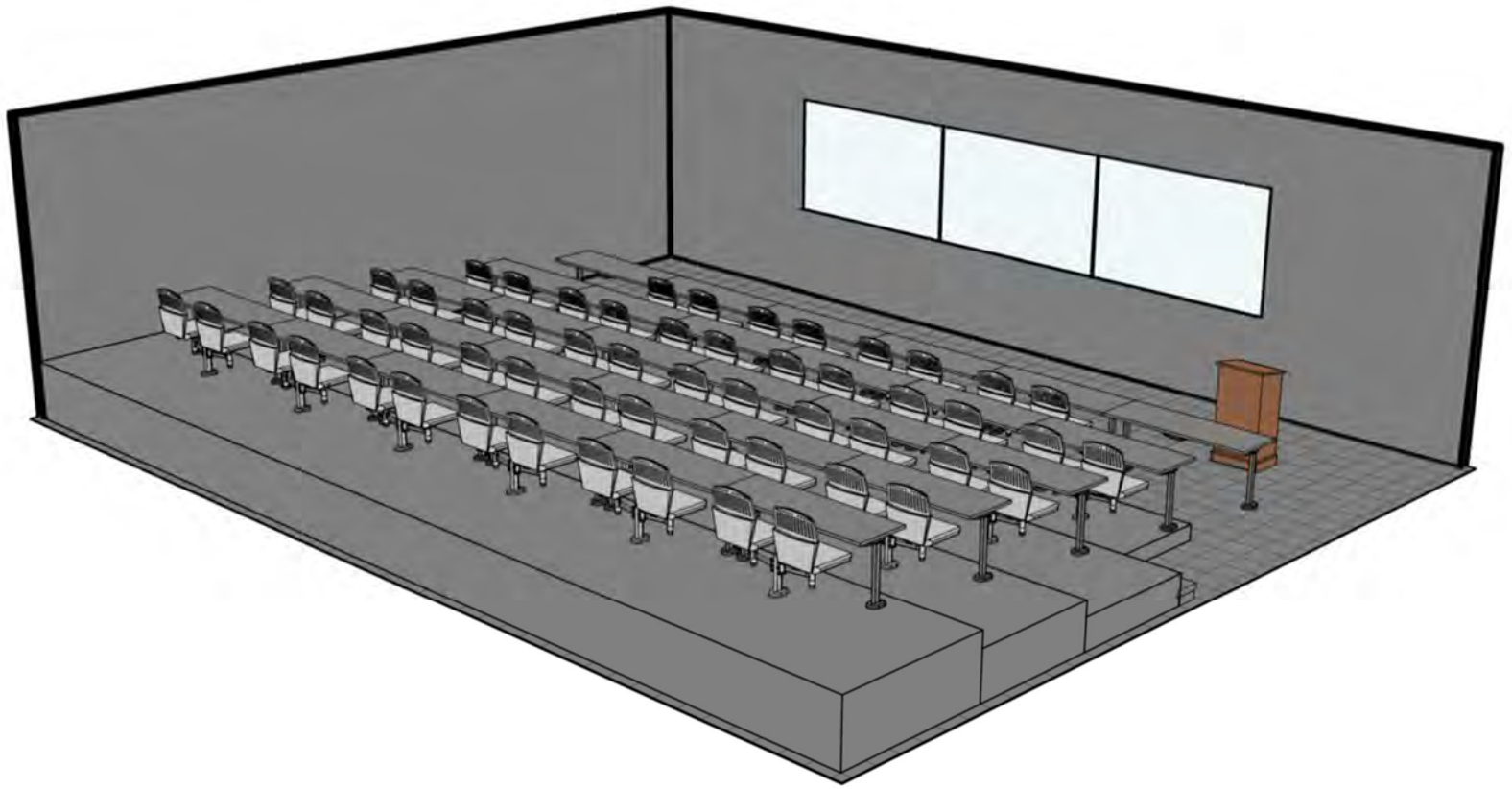
DESIGN CONSIDERATIONS

- ✓ TIERED AUDITORIUM SEATING
- ✓ CONCEALED PROJECTION SCREEN(S)
- ✓ IN CEILING PROJECTOR MOUNT(S)
- ✓ POWER / DATA / MICROPHONE NEAR THE PODIUM
- ✓ POWER / DATA AT EACH SEAT LOCATION
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-12d

PLAN VIEW

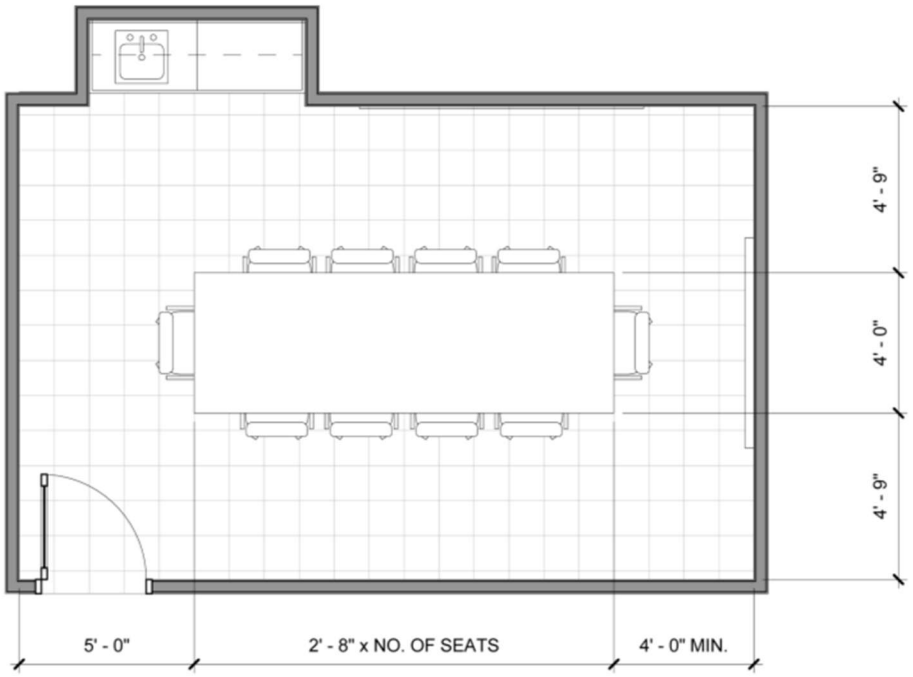
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-12d

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



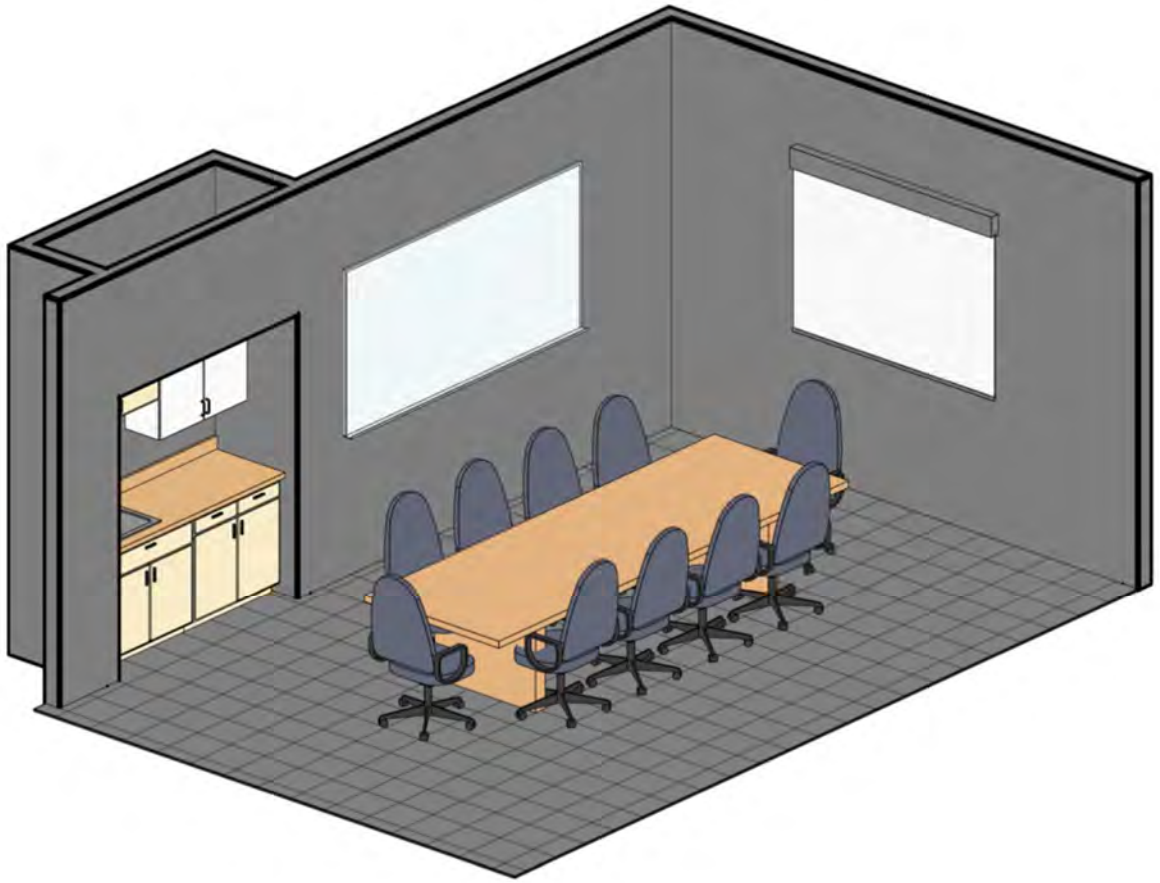
DESIGN CONSIDERATIONS

- ✓ POWER / PHONE / DATA IN FLOOR AT CONFERENCE TABLE
- ✓ CONCEALED PROJECTION SCREEN
- ✓ IN-CEILING PROJECTOR MOUNT -OR- ROUGH-IN FOR FLAT PANEL TV WITH POWER AND CATV / VIDEO / DATA HOOK-UP
- ✓ WALLS TO DECK WITH SOUND INSULATION

PLANNING STANDARD PS-13

PLAN VIEW

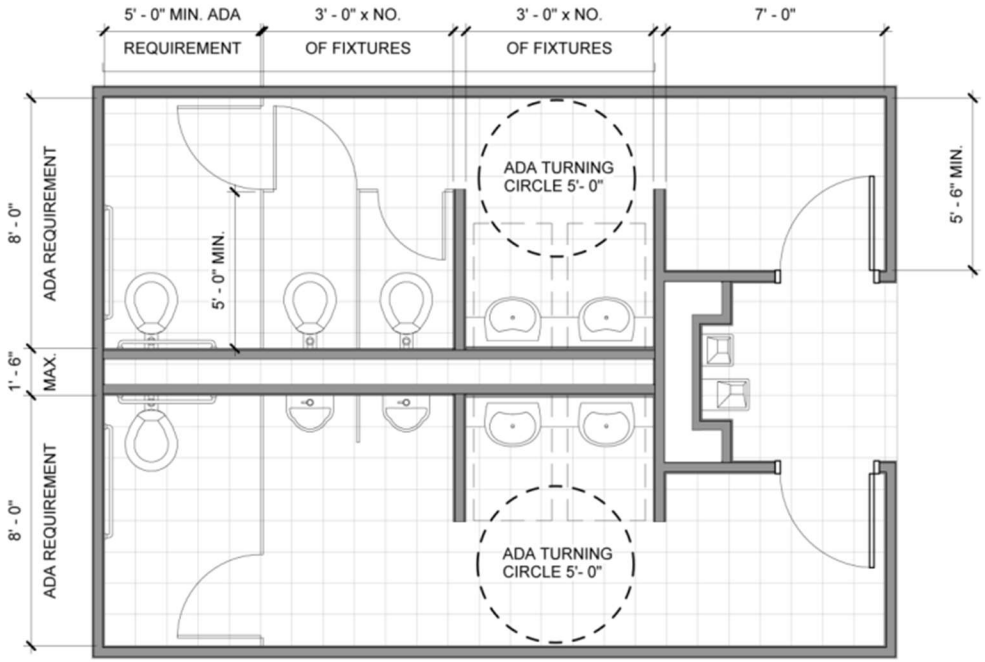
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-13

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



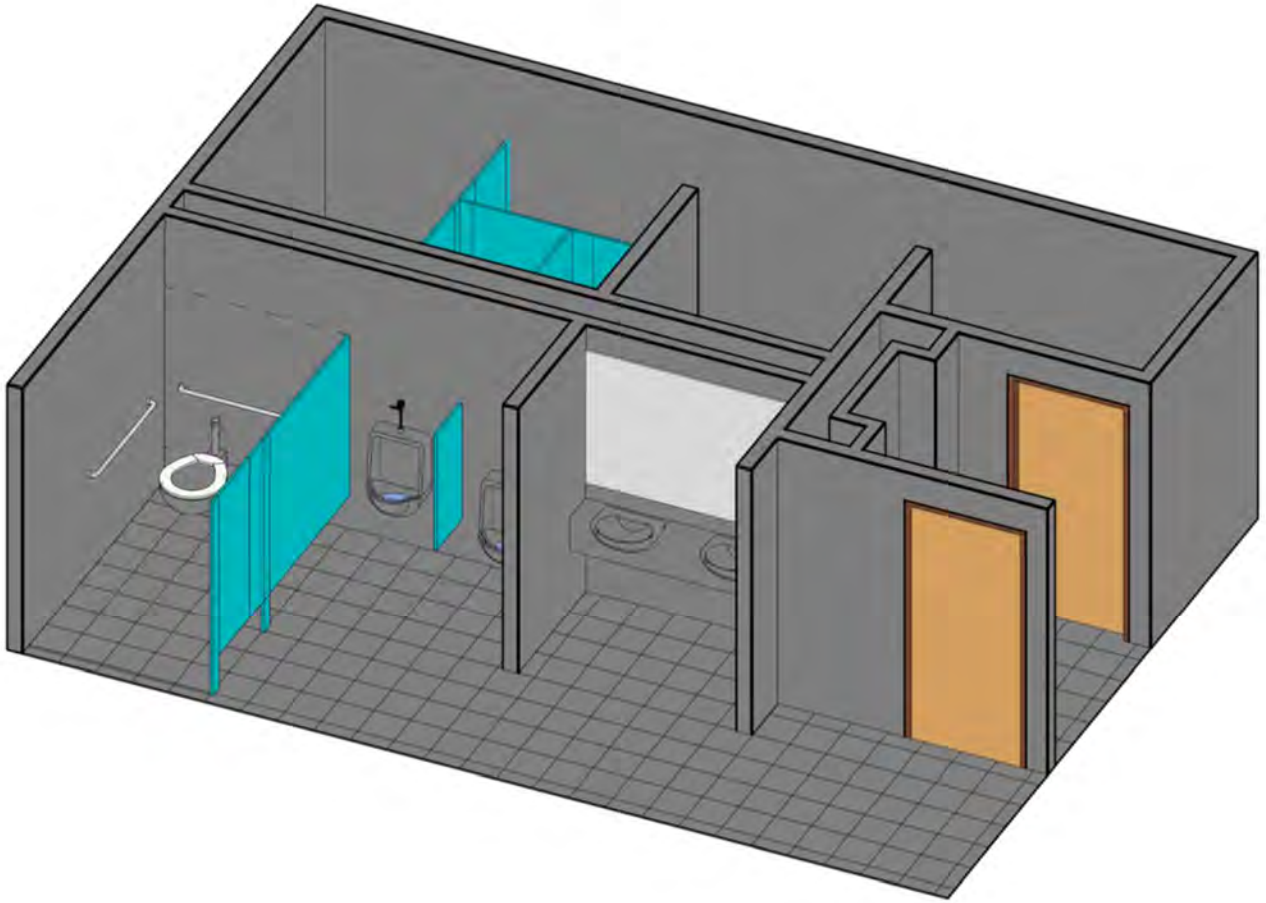
DESIGN CONSIDERATIONS

- ✓ STAINLESS STEEL TOILET PARTITIONS
- ✓ WIDE MOUTH OR FLOOR STYLE URINALS
- ✓ CONTINUOSLY MOUNTED URINAL SCREEN

PLANNING STANDARD PS-14a

PLAN VIEW

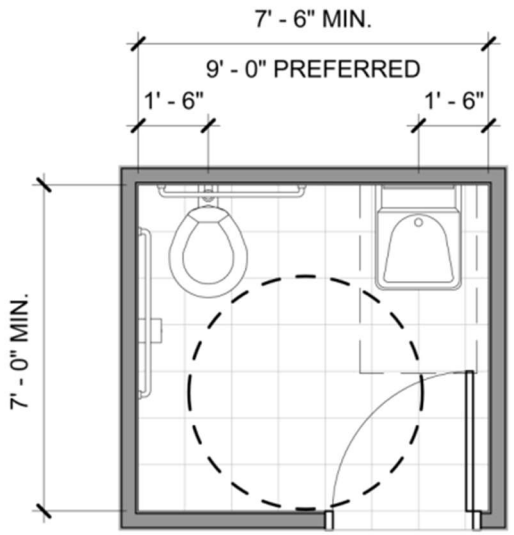
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-14a

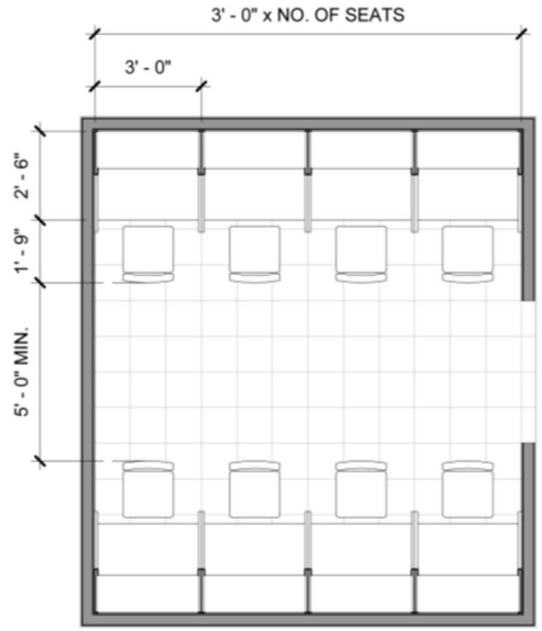
3D VIEW

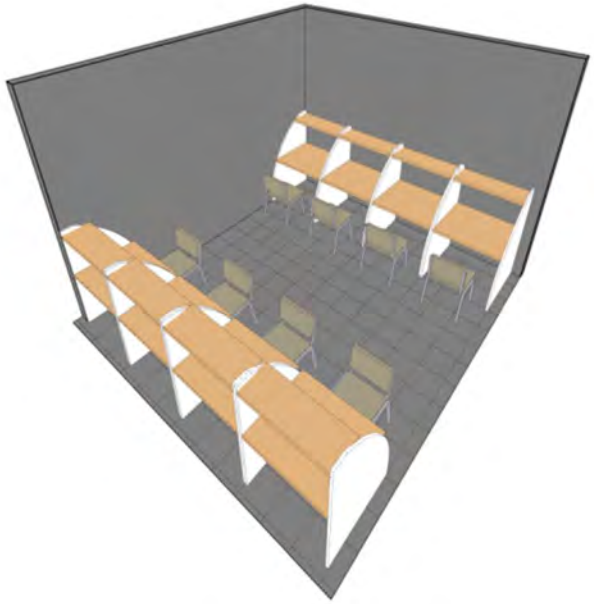
CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-14b

CASPER POLICE AND COURTS
CASPER, WYOMING





ASSIGNED TO

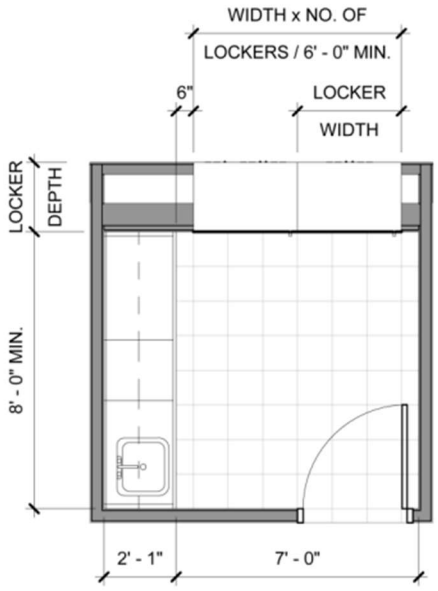
4.18 Report Writing

DESIGN CONSIDERATIONS

- ✓ BUILT-IN WORKSTATIONS
- ✓ POWER / DATA AT EACH WORKSTATION

PLANNING STANDARD PS-15b

CASPER POLICE AND COURTS
CASPER, WYOMING

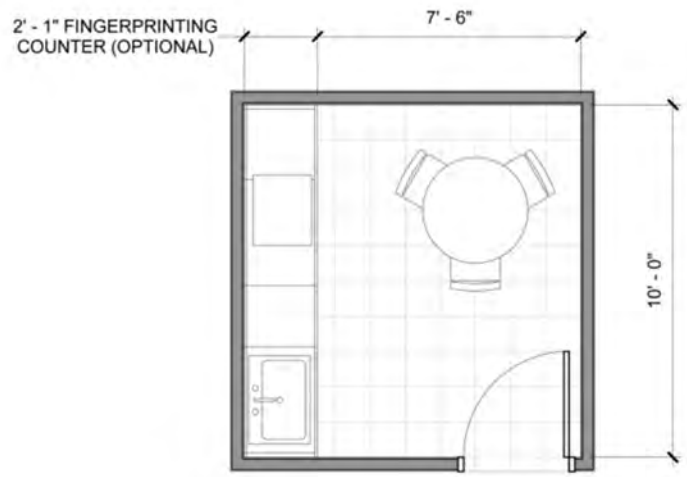


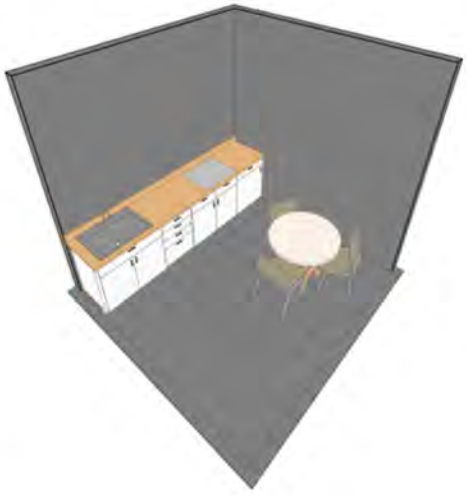
DESIGN CONSIDERATIONS

- ✓ EPOXY COUNTERTOP AT STAND-UP COUNTER WITH SINK
- ✓ STORAGE FOR EVIDENCE SUPPLIES
- ✓ POWER AT COUNTER
- ✓ PASS THROUGH, SLAM LOCK EVIDENCE LOCKERS
- ✓ REFRIGERATION PART OF PART OF EVIDENCE LOCKERS

PLANNING STANDARD PS-16

CASPER POLICE AND COURTS
CASPER, WYOMING



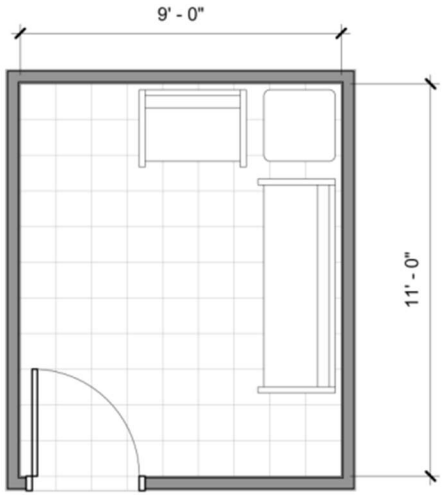


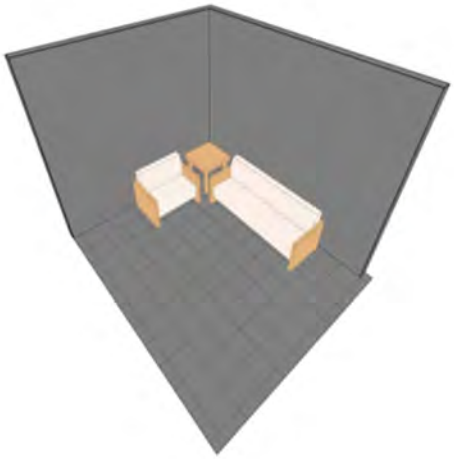
DESIGN CONSIDERATIONS

- ✓ OPTIONAL STAND-UP COUNTER WITH FOR FINGER PRINTING AND SINK FOR CLEAN UP
- ✓ ACCESS CONTROLLED ENTRY
- ✓ SMALL CONFERENCE TABLE
- ✓ AUDIO / VIDEO SURVEILLANCE
- ✓ WALLS TO DECK WITH SOUND INSULATION AND ACCOUSTICAL WALL TREATMENT
- ✓ SOUND RATED DOOR AND HARDWARE

PLANNING STANDARD PS-17a

CASPER POLICE AND COURTS
CASPER, WYOMING



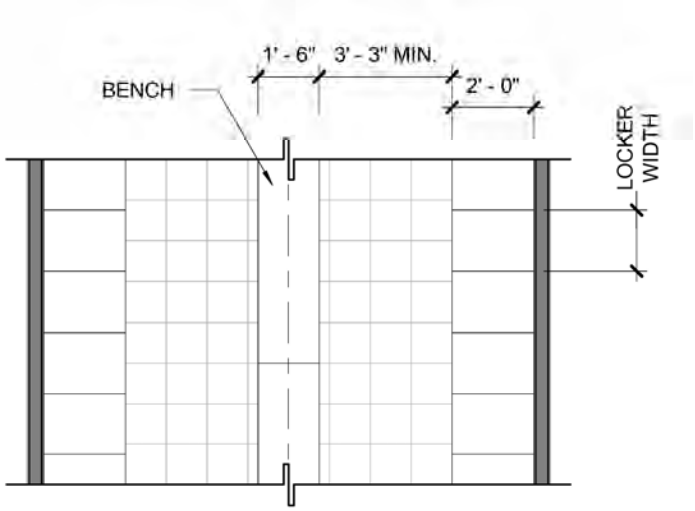


DESIGN CONSIDERATIONS

- ✓ CASUAL SEATING AREA (SOFA SEATING)
- ✓ CHILD FRIENDLY ENVIROMENT WITH STORAGE FOR TOYS
- ✓ ACCESS CONTROLLED ENTRY
- ✓ SMALL CONFERENCE TABLE
- ✓ AUDIO / VIDEO SURVEILLANCE
- ✓ WALLS TO DECK WITH SOUND INSULATION AND ACCOUSTICAL WALL TREATMENT
- ✓ SOUND RATED DOOR AND HARDWARE

PLANNING STANDARD PS-17b

CASPER POLICE AND COURTS
CASPER, WYOMING



DESIGN CONSIDERATIONS

- ✓ LOCKERS – CIVILIAN PERSONNEL
  - o TWO-TIER
- ✓ LOCKERS – PRISONER PROPERTY
  - o FOUR-TIER
  - o HEAVY DUTY

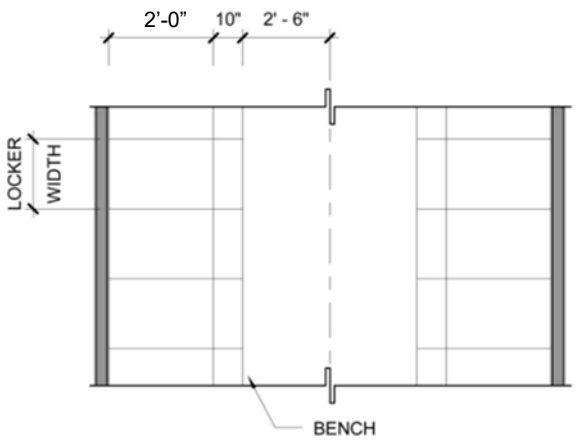
W = 12" = 5.25 SQUARE FEET

W = 24" = 10.5 SQUARE FEET

W = 30" = 13.13 SQUARE FEET

PLANNING STANDARD PS-18a

CASPER POLICE AND COURTS
CASPER, WYOMING



DESIGN CONSIDERATIONS

- ✓ LOCKERS – SWORN PERSONNEL
  - o WARDROBE WITH INTERGRAL BENCH
  - o LOCKABLE INSIDE COMPARTMENT FOR SIDE ARM STORAGE
  - o PULL OUT DRAWER AT BASE FOR PERSONNEL EQUIPMENT
  - o POWER AND VENTILATION AT EACH SWORN PERSONNEL LOCKER
- ✓ LOCKERS – CIVILIAN PERSONNEL
  - o TWO-TIER WITH OR WITHOUT INTERGRAL BENCH

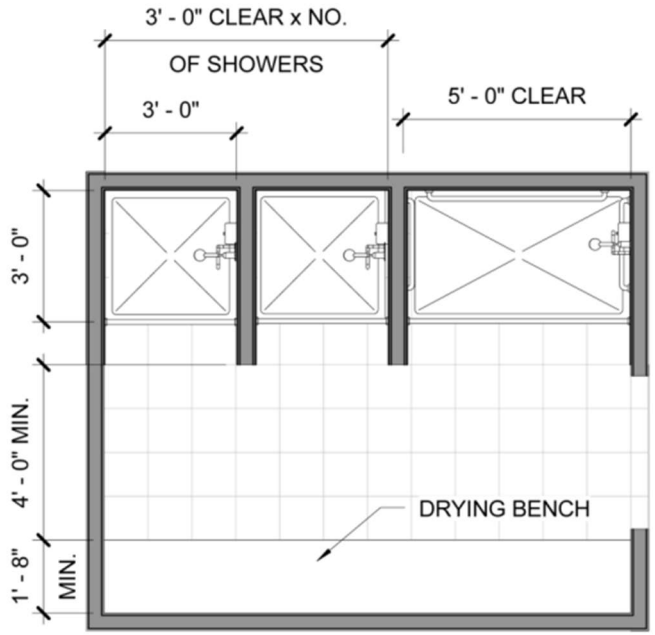
W = 12" = 5.25 SQUARE FEET

W = 24" = 10.5 SQUARE FEET

W = 30" = 13.13 SQUARE FEET

PLANNING STANDARD PS-18b

CASPER POLICE AND COURTS
CASPER, WYOMING

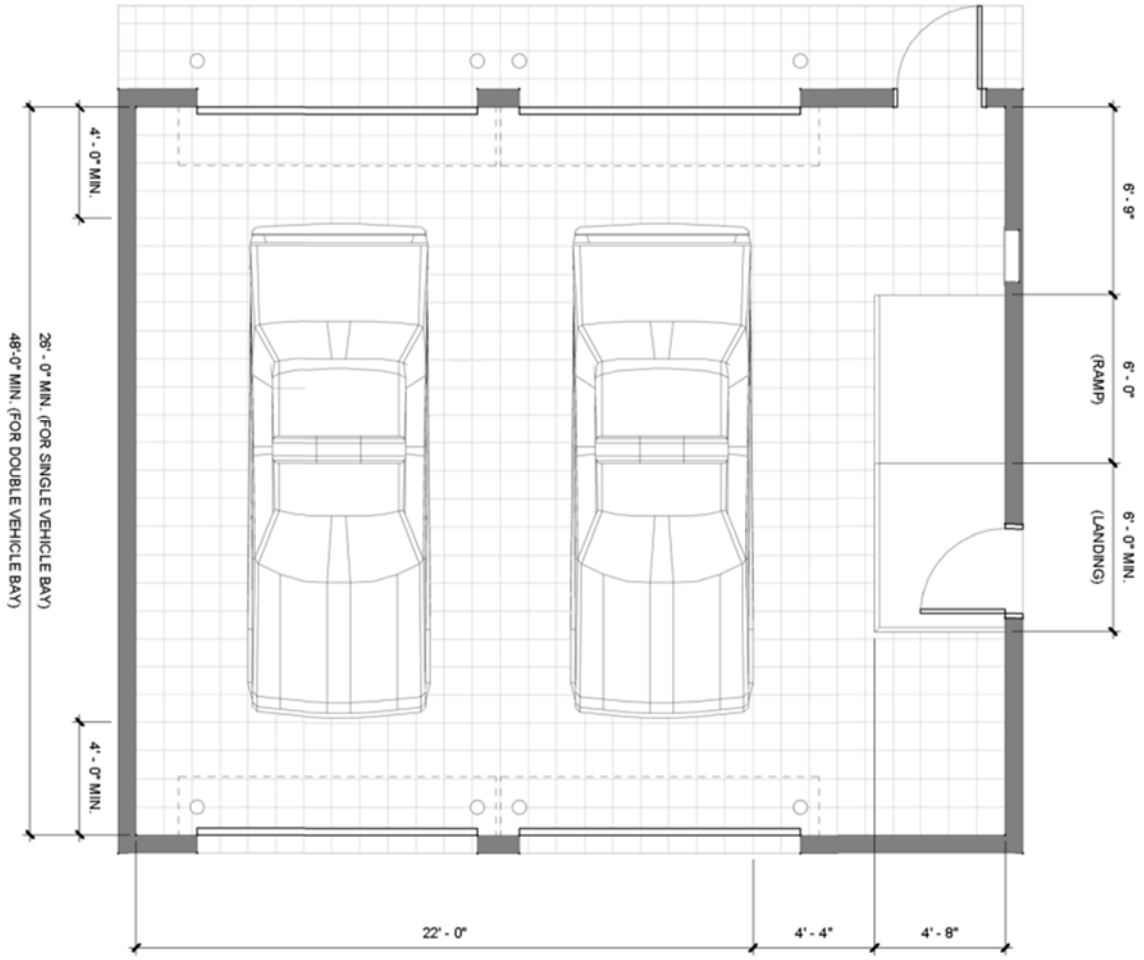


DESIGN CONSIDERATIONS

- ✓ DRY OFF BENCH
- ✓ CLOTHES HOOKS

PLANNING STANDARD PS-19

CASPER POLICE AND COURTS
CASPER, WYOMING



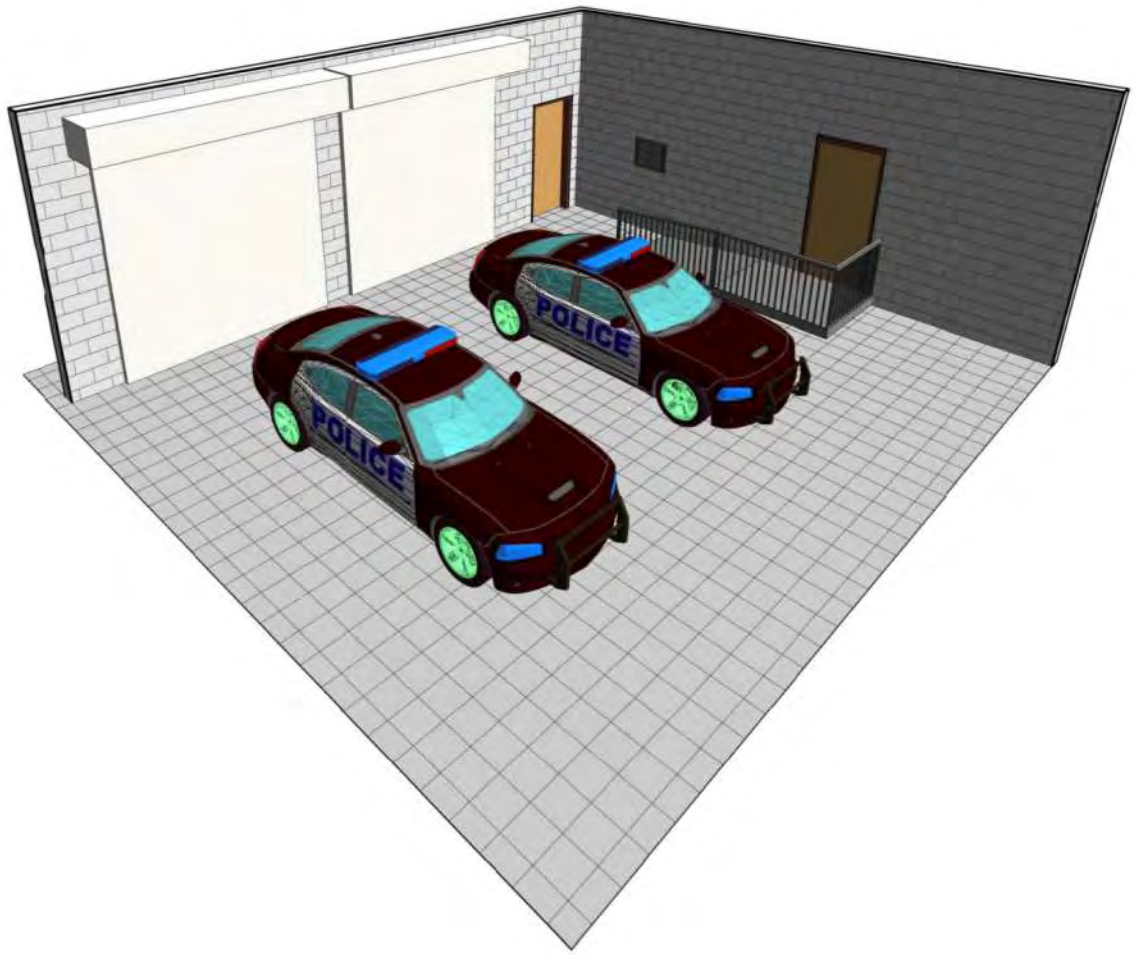
DESIGN CONSIDERATIONS

- ✓ VEHICLE ACCESS CONTROLLED OVERHEAD DOOR FOR ENTRY INTO SALLY PORT
- ✓ VIDEO SURVEILLANCE INSIDE AND *OUTSIDE*
- ✓ RECESSED GUN LOCKER
- ✓ ACCESS CONTROLLED OVERHEAD DOOR SWITCHES
- ✓ ACCESS CONTROLLED EXTERIOR DOOR IN AND OUT OF SALLY PORT
- ✓ INTERLOCKING "MAN TRAP" CAPABILITY
- ✓ LOCKDOWN OF ENTRY FROM EXTERIOR DURING MOVEMENT OF DETAINEE FROM VEHICLE
- ✓ TRENCH DRAIN
- ✓ EYE WASH STATION WITH DECONTAMINATION SHOWER
- ✓ PHOTO-EYE DETECTION SYSTEM TO SHUT OVERHEAD DOORS

PLANNING STANDARD PS-20a

PLAN VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING



PLANNING STANDARD PS-20a

3D VIEW

CASPER POLICE AND COURTS
CASPER, WYOMING

October 16, 2019

MEMO TO: J. Carter Napier, City Manager JCN

FROM: Thomas E. Solberg, Fire Chief TES
Daniel S. Griswold, Deputy Chief DSG

SUBJECT: Fire Administration/Headquarters Station #1

Meeting Type & Date:
Special Work Session
October 29, 2019

Action type:
Direction Requested

Recommendation:
That Council, review the information provided and presented regarding the feasibility and needs assessment completed for current Fire Station #1 and Fire Administration, and provide direction to staff.

Summary:
In October 2018, the Fire-EMS Department, in coordination with the Casper Police Department, issued a RFP for a feasibility study and space needs assessment for the current Fire Station #1 and the current space for Fire Administration located in the City Center Building. Rick Kuhl with Williams, Spurgeon, Kuhl & Freshnock Architects, was the consultant selected to complete the Fire Department portion of this project. Mr. Kuhl specializes in fire department facility design. Mr. Kuhl was tasked with assessing the physical conditions of each facility, assessing the operational effectiveness and efficiency of each facility, and evaluating the feasibility of the current facilities for future use and operations. Additionally, the consultants were tasked with projecting the future space and operational needs for both Fire Administration and Fire Station One. From this research, the consultants were asked to evaluate the feasibility of providing additions/remodels to current facilities and the feasibility of relocating the operations to new sites within area that maintain operational effectiveness and efficiency.

Mr. Kuhl will be in attendance to present the final space needs assessment and feasibility study. Mr. Kuhl will be available to discuss the research process and answer any questions Council may have.

Financial Considerations
Project cost will be included in the presentation for Council's consideration.

Oversight/Project Responsibility
Daniel Griswold, Deputy Chief

Attachments
Casper Fire-EMS Fire Administration/Headquarters Station #1 Final Study

Police Facility Design Group
500 Grand Boulevard Suite 201A
KANSAS CITY, MISSOURI 64106
(816) 298-6700

exclusively dedicated to public safety facility planning since 1978

Williams Spurgeon Kuhl & Freshnock Architects, Inc.

110 Armour Road
North Kansas City, MO 64116
(816) 300-4101

Police Headquarters and Fire-EMS Administration

Casper, Wyoming

September 11, 2019

Phase 1 Feasibility Studies and Space Needs Assessment
Volume 2 - Fire-EMS

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INTRODUCTION

A Request for Proposals (RFP) was issued October 10, 2018 by the City of Casper. The RFP outlined the objectives of the Study as well as the general parameters of the Study including the envisioned timeline for undertaking and completing the Study. The work of this Study is considered Phase I of what is envisioned as a multi-phase scope of work to Study, Recommend and Act on recommendations. Upon completion of Phase I scope of services and depending on the availability and timing of funds and schedule, it is intended to proceed with the subsequent phases which will include pre-design, design construction documents and construction administration of the solution agreed upon under Phase I for either or one department.

Police Facilities Design Group (PFDG), in partnership with Williams Spurgeon Kuhl & Freshnock Architects, Inc. (WSKF), was retained by the City of Casper to complete a study. The Study encompassed both the existing Police Department Facilities as well as the existing Fire-EMS Department Headquarters and Fire-EMS Station 1. PFDG is to complete the assessment of the Police Department and WSKF is to complete the assessment of the Fire-EMS Department. The objective of the Study was to determine; 1) Physical Conditions of each facility, 2) Assess the operational effectiveness and efficiency of each facility and 3) Feasibility of the current facilities for future use and operations. The Study of both Departments is considered a joint and collaborative assessment of the respective Departments by the respective firms.

Generally, the considerations for each Department was; 1) remain in the municipal campus setting and provide additions/remodels to current locations and 2) relocate the departments to new sites within proximities appropriate for the utmost functionality. Additionally, the study and assessment are to include security related features and needs specific to provide effective Law Enforcement and Fire-EMS operations with adaptability for the future.

The Casper Fire-EMS Department is organized into two primary divisions: 1) Operations/Training and 2) Community Risk Reduction. Currently, operations are conducted out five Fire Stations spread throughout the City with a minimum staffing of 18 personnel on duty each day. Five Engine companies, one Truck, one Rescue and one Command Vehicle are in service all day, every day to the citizens and visitors of the City of Casper. In addition to the structure fire responses, Casper Fire-EMS fire engines respond to medical emergencies and non-emergencies, various rescue incidents as well as hazardous material incidents. The Operations Division firefighters are also involved with teaching fire safety in Casper's schools, inspections of numerous Casper area businesses, as well as many other calls for public service.

The training and personnel division provides for the education and wellness of all firefighters within the organization. This division is responsible for hiring, promotional testing, and disciplinary action. Training responsibilities are coordinated through a training captain.

The Community Risk Reduction division is responsible for fire and life safety inspections as well as public education efforts. Currently, there are three community risk reduction officers working in this division.

The Fire-EMS Department current operations occupies approximately 59,830 SF within seven (7) separate buildings as follows:

Administration/Training/Community Risk Reduction	3,600 SF
Station 1	10,605 SF
Station 2	8,890 SF
Station 3	12,200 SF
Station 5	9,086 SF
Station 6	12,250 SF
Storage	3,200 SF

The study Tasks included: 1) Operational & Physical Evaluation of Current Conditions and Space Needs Assessment (for HQ and Station 1), 2) Feasibility Study (to remain at the current locations or to relocate to another location), 3) Opinion of Probable Costs – Anticipated Budgets, 4) Anticipated Schedule and Phasing, and 5) Formal Presentation.

The following contents of the study provide the information relative to each of the Tasks outlined above.

EXECUTIVE SUMMARY

The existing Fire Administration Facility contains approximately 7,000 SF of which the Fire Department occupies approximately 3,600 SF on the 2nd floor, shares approximately 3,400 SF on the 1st floor and 3rd floor with the Police Department. The space needs assessment recommends approximately 14,000 SF of space for the current and future space needs. The spaces that are particularly lacking include: 1) Training Space, 2) Community Risk Space, 3) Meeting Spaces, 4) Storage Space and 5) Locker Space. Additionally, the Training Space would need to be supported by adequate indoor apparatus parking space (space for on-duty personnel to park apparatus during training classes).

The existing Station 1 provides approximately 11,300 SF of space for the 6 to 10 personnel who operate from this location daily. The space needs assessment recommends approximately 24,200 SF of space for the current and future space needs for up to 16 daily operations personnel. The spaces that are particularly lacking include: 1) Gender Neutral Bunk Rooms for minimum of 16, 2) Single-Occupant Use Shower/Toilets (min. ratio of 1 per 3 personnel), 3) Effective Travel/Access Between Bunk Rooms and Apparatus Bays, 4) Adequate Fitness Space for 12 Personnel, 5) Adequate Living Quarter Space for 16 Personnel, 6) Appropriate Decon-Protocol Space for Event Decontamination, 7) Adequate Building/Space Security Systems and 8) Adequate Space for Daily Equipment Checks & Servicing.

The combined space needs of the Fire HQ and Station 1 are approximately 38,000 SF. The site area requirement associated with this space is approximately 3.25A. The site space requirements include: 1) Parking for HQ, 2) Parking for Station 1, 3) Adequate Drive/Circulation for Apparatus, 4) Adequate Aprons for Apparatus, 5) Adequate Private Outdoor Space for Station 1, and 6) Adequate & Accessible Public Parking for HQ & Station 1.

The anticipated cost for replacement of HQ and Station 1 are:

Fire HQ	$ 5,829,100 (low)	$ 6,183,575 (high)
Station 1	$ 7,664,260 (low)	$ 8,129,055 (high)
Total	**$13,493,360 (low)**	**$14,312.630 (high)**
Contingency (20%)	$ 2,700,000 (low)	$ 2,875,000 (high)
Total w/Contingency	**$16,200,000 (low)**	**$17,200,000 (high)**

The above cost summary represents the “hard cost” (construction cost) for the proposed facilities. There will be “soft cost” associated with the proposed facilities as well. The anticipated soft costs include:

Land Purchase	TBD
Geotechnical Investigation	$ 10,000
Construction Testing/Inspections	$ 20,000
Furniture/Fixtures/Equipment-HQ	$150,000
Furniture/Fixtures/Equipment- Station 1	$125,000
Building Permit	$ 50,000
Design Fees	$1,620,000 to $1,720,000
Total Soft Cost	**$1,975,000 to $2,075,000***

**Excludes Land Purchase Cost*

Total Hard+Soft Cost	**$18,175,000 (low)**	**$19,275,000 (high)**

The anticipated schedule for these facilities is highly dependent on the desired approach to the development. If the approach is to development both facilities simultaneously on a single site, the design and construction can likely be completed in 2 to 3 years. If the approach is to phase the design and construction of both facilities, design and construction can likely be completed in 3 to 5 years (assuming design for each facility is not completed simultaneously and both facilities are located on new sites). If the approach is to phase the design and construction of both facilities with the existing Station 1 site repurposed for Fire HQ, the timeline would likely be from 3 to 6 years (again, assuming design for each facility is not completed simultaneously and the Station is located on a new site and HQ is located on Station 1’s current site).

STUDY PROCESS

The study was completed over a 4-month time period. The study "kickoff" began in April 2019 and the final design review meeting was completed in August 2019. During this time period, the FD and WSKF held four planning and design meetings. The meetings were completed separately with Fire Administration and Firefighters of Station 1. The meetings with firefighters involved the crew on duty on the day of the meeting resulting in the opportunity for different crews to have input on the planning and assessment of Station 1.

Additionally, WSKF completed one meeting with the City Manager in order to provide a status report as well as an opportunity to discuss the anticipated outcomes and the anticipated study report. Feedback from the City Manager has been incorporated into the overall study. In particular, the City Manager wanted to assure that the study incorporated an assessment of the conditions of Station 1 as well as the incorporation of a budget contingency. Both requests have been incorporated into the study.

The study process began with discussions with both Administration and Station 1 crews regarding space needs for each respective facility. As a result of these focused discussions, WSKF was able to prepare the Space Needs Assessment spreadsheets that can be found elsewhere in this study. Only the final spreadsheets are presented in this study for the collective use of the Fire Administration as well as Station 1 Firefighters.

In order to develop some sense of the required site area for a combined Fire Administration and Station 1, the combined space needs program was used to assess possible site locations. As the locations are hypothetical, the particular site assessments are not presented herein. However, it was confirmed that the minimum site area for a combined location for Administration and Station 1 is in the order of 3.25A. Understanding that this is the minimum area, possible sites with more area would be a recommendation, but not a requirement. There are many criteria that are to be used when assessing possible sites for the combined location. Most critical to this assessment is the need for Station 1 to remain within a defined geographical service area for Station 1 service area. The current location would be a possible location if adequate site area could be obtained. However, there are other sites with the geographical limitations that would also fulfill the site requirements for Station 1. Other assessment criteria would include: 1) Site access that provides for drive-thru apparatus bays, 2) Site area that provides for adequate apparatus turning and maneuvering space, 3) Site geometry that provides a minimum of 50 to 60 foot front and rear apparatus aprons, 4) Site area and geometry that provides for distinct parking for Administration and Station personnel as well as distinct parking for Staff and Public, 5) Sites with adequate utility infrastructure to service the needs of a Fire Station; namely water, and 6) Site access to streets that provide for response times within the limitations established by the Fire Department response parameters.

In order to confirm the site area requirement, preliminary (box diagram) design was completed for both Fire Administration and Station 1. Not only was this effort valuable to confirm site parameters but this also provides some preliminary insights into possible functional relationships between the two facilities but also the functional requirements and relationships within each facility. At least two rounds of design assessment were completed for Fire Administration and Station 1 which proved to both confirm design assumptions and challenge envisioned design configurations. The final preliminary design for Fire Administration and Station 1 can be found elsewhere in this study. While these designs have been refined from the original concept they are, nonetheless, still in need for further refinement and development. Readers are cautioned to be aware of the preliminary nature of the design as they appear more developed than such is in reality.

SPACE NEEDS ASSESSMENT

The space needs assessment of the Fire Administration and Fire Station 1 was completed independent of each facility. This section of the study will present the final space needs as determined for each facility. To the extent it is possible, any shared spaces between the two facilities have been incorporated into one or the other facility to assure economies of space needs. The following is narrative and incorporated spreadsheets present the current planning for the respective facilities.

Fire Administration

The space needs for Fire Administration are provided for the following five areas: 1) Lobby, Administration & Support Services, 2) Community Risk Reduction, 3) Training, 4) Support Spaces and 5) Site. For each of the five areas, a subtotal for the area with grossing factor and wall factor is presented with the final gross square footage. The square footage listed for the line items within each of the five areas are to be considered net square footage. Please note the following terms/definitions:

Grossing Factor – a percentage added to the net square footage to account for minor space needs (i.e. janitor closets, corridors, etc.) excluded from the listed spaces

Wall Factor – a percentage added to the net square footage and Grossing Factor to account for interior and exterior wall areas (i.e. stud wall area, exterior masonry wall area, etc.) excluded from the listed spaces

Net Square Footage – this is the area contained within the interior finish surface of a room or area (i.e. length and width of room enclosed with walls or implied walls) excluded from the listed spaces

Gross Square Footage – this is the area contained within the outside face of the exterior walls of the building such that if you were to draw a line around the exterior of the building all area within this line would be considered the gross area of the building

Refer to the following pages for a review of the Space Needs for Fire Administration;

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
A-1	Vestibule	call station for after hours use, map w/ map lights, auto dialer w/ video to dispatch (exterior), station doorbell	8	18	144	airlock for energy efficiency & to reduce drafts; visible from reception; capable of being secured to prevent entry into lobby; provide phone/intercom
A-2	Lobby	waiting for 4 people; display space for pictorial history and memorabilia	18	35	630	adjacent to Admin. Assist. 1
		SPACES BELOW THIS LINE ARE SECURED w/ ACCESS CONTROL				
A-3	Restroom	single occupancy restroom	7.5	8	60	staff use, ADA compliant
A-4	Restroom	single occupancy restroom	7.5	8	60	staff use, ADA compliant
A-5	Fire Truck Showroom	overhead door w/ exterior access, display cases for other items	18	38	684	
A-6	Administrative Assistant 1	service security window/counter for transactions with a pass-thru tray	9	10	90	adjacent to lobby space, can be an open office space
A-7	Administrative Assistant 2	community risk reduction	9	10	90	near Admin. Assistant 1, can be an open office space
A-8	Fire Administrative Assistant		10	12	120	adjacent to Fire Chief & Deputies
A-9	Fire Chief Waiting Area		5	10	50	adjacent to Fire Admin. Assist.
A-10	Office Manager (future)		10.5	17	179	coat closet/cabinet
A-11	Workroom	copier, printer, paper storage, knox box safe	8	12	96	
A-12	Public Educ. Supplies Storage	steel shelving	10	20	200	
A-13	Fire Chief	meeting space for 4	16	17	272	coat closet/cabinet
A-14	Deputy Chief 1		14	16	224	coat closet/cabinet
A-15	Deputy Chief 2		14	16	224	coat closet/cabinet
A-16	Deputy Chief 3		14	16	224	coat closet/cabinet
A-17	Large Conference Room	accessible to all, conference table for 15 + 5, video conferencing capability	16	31	496	
A-18	Small Conference Room	accessible to all, conference table for 8-10, video conferencing capability	16	23	368	
A-19	Training Officer/Captain	produce videos in office, green wall, design for sound control	12	15	180	small training events
A-20	Battalion Chief		12	15	180	adjacent to CRR, coat closet/cabinet
A-21	EMS Manager	2 visitor chairs	12	15	180	
A-22	EMS Accounting/Reports	3 workstations	12	15	180	
A-23	Women's Locker Room	8 lockers	15.5	17	264	
A-24	Women's Locker Room Vestibule	private entry into locker room	6	7	42	
A-25	Women's Locker Restroom	2 individual toilets/shower units	12	15	180	

A-26	Men's Locker Room	14 lockers	15.5	23	357
A-27	Men's Locker Room Vestibule	private entry into locker room	6	7	42
A-28	Men's Locker Restroom	1 toilet, 1 urinal, 2 showers	14.5	15	218
				Vestibule, Admin., & Support Subtotal	6,032
				Grossing Factor (25%)	1,508
				Wall Factor (3%)	226
				Vestibule, Admin, Support Spaces Total	**7,766**

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
B-1	Community Risk Reduction 1		12	15	180	coat closet/cabinet
B-2	Community Risk Reduction 2		12	15	180	coat closet/cabinet
B-3	Community Risk Reduction 3		12	15	180	coat closet/cabinet
B-4	Community Risk Reduction 4		12	15	180	coat closet/cabinet
B-5	Community Risk Reduction 5		12	15	180	coat closet/cabinet
B-6	Plans Review Room	complete reviews of plans, large format plotter, layout tables/counters	11	18	198	
B-7	Plans Storage	double the amount of current storage, flat file storage design	12	18	216	
B-8	Digital Plans Meeting Room	hold up to 10 people, wall-mounted monitor, min. 72"	12	20	240	
				Vestibule, Admin., & Support Subtotal	1,554	
				Grossing Factor (25%)	389	
				Wall Factor (3%)	58	
				Community Risk Reduction Total	**2,001**	

C. TRAINING

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
C-1	Training Room	Seating for 50 w/ tables and chairs, floor boxes - power and data, monitors and walltalkers, storm shelter?	38	39	1482	adjacent to the lobby/public restrooms; ceiling mount projection screen; projection white board, wall mount TV monitors; tall storage cabinets
C-2	Training Room Storage		8	10	80	Additional chair & table storage
C-3	Storm Shelter Restroom	as req'd by ICC 500	7.5	8	60	
C-4	Storm Shelter Mechanical	as req'd by ICC 500	8.5	10.5	89	
C-5	Kitchenette	Sink, dishwasher, microwave, refrigerator, service counter into training room	10	18	180	
				Training & Support Subtotal	1,891	
				Grossing Factor (25%)	473	
				Wall Factor (3%)	71	
				Training Total	**2,435**	

D. SUPPORT SPACES

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
D-1	Public Restrooms	3 toilets in Women's/2 urinals & 1 toilet in Men's, 2 sinks in each restroom	18	23	414	
D-2	Archive Storage	400-500 sf	16	23.5	376	
D-3	Breakroom	full size refrigerator w/ ice maker, microwave, sink, coffee maker, oven, table for 6 people	13	18	234	
D-4	Electrical		8	8	64	electrical service panels
D-5	Technology		8.5	9.5	81	space for bldg. technology services as well as telephone service, IT server, VoIP phones, individual heating/cooling, single rack, dispatch entry, access control hub, meet w/ City IT to determine needs (city scope vs. contractor scope), 2 racks - computer server and radio/PA equipment
D-6	Mechanical		8	8	64	
D-7	Water/Sprinkler Service		8	8	64	domestic hot water/recirculating pump, fire protection service entry, backflow preventer, etc.
D-8	Janitor/Storage		6	7	42	floor sink & storage space for vacuum, mop bucket, mop, broom, & cleaning supplies
				Training & Support Subtotal	1,339	
				Grossing Factor (25%)	335	
				Wall Factor (3%)	50	
				Support Spaces Total	**1,724**	

E. SITE

RM. NO.	AREA NAME	DESIGN REQUIREMENTS	AREA SIZE	NOTES
E-1	Public Parking	25-30 parking spaces	12,800	
E-2	Apparatus/Bus Parking	3 parking spaces	1,800	15 x 40
E-3	Staff Parking	20 parking spaces	6,600	10' w. min.
E-4	Firefighter Memorial		400	
E-5	Emergency Generator		500	
E-6	Site Drives/Paving		0	zoning/landscaping requirements
		Site Subtota	22,186	
		Grossing Factor (200%	44,371	
		Site Total	**66,557**	

WSKF ARCHITECTS, INC.
110 ARMOUR ROAD
NORTH KANSAS CITY, MO 64116

CASPER FIRE-EMS ADMINISTRATION + HEADQUARTERS STATION NO. 1

PHASE 1 FEASIBILLITY STUDIES + SPACE NEEDS ASSESSMENT

June 18, 2019
August 6, 2019

DESIGN / SPACE NEEDS SUMMARY	
A. Lobby, Administration & Support Services	7,766
B. Community Risk Reduction	2,001
C. Training	2,435
D. Support Spaces	1,724
BUILDING TOTAL	**13,926**

ACTUAL FLOOR PLAN AREAS	
ACTUAL ROOM TOTAL	
ACTUAL GROSSING AND WALL AREA	
ACTUAL BUILDING TOTAL	**14,179**

CASPER, WY BUILDING CODES	as of 6/5/19
2018 International Building Code with Amendments	
2018 International Plumbing Code with Amendments	
2018 International Mechanical Code with Amendments	
2018 International Fuel Gas Code with Amendments	
2018 International Energy Conservation with Amendments (as reference only)	
2018 International Fire Code with Amendments	
2017 National Electrical Code with Amendments	
2017 ANSI ICC A117.1 Accessibility Standard	

Fire Station 1

The space needs for Fire Station 1 are provided for the following four areas: 1) Entry & Support Spaces, 2) Apparatus Bays, 3) Living Quarters, and 4) Site. For each of the four areas, a subtotal for the area with grossing factor and wall factor is presented with the final gross square footage. The square footage listed for the line items within each of the four areas are to be considered net square footage. Please refer to Fire Administration for definitions of terms used.

Refer to the following pages for a review of the Space Needs for Fire Station 1;

A. ENTRY & SUPPORT SPACES

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
A-1	Vestibule	locked interior and exterior door, push button to lock ext. door from the inside, push to talk (no phone)	8	8	64	map w/ map lights, airlock for energy efficiency & to reduce drafts **BUILDING ACCESS CONTROL:** Gallagher Access Controls for exterior door access (key pads where each employee can be assigned individual codes)
		SPACES BELOW THIS LINE ARE SECURED w/ ACCESS CONTROL				
A-2	Public Restroom	single occupancy use	7.5	8	60	ADA compliant
A-3	Mechanical Room		8	8	64	
A-4	Electrical Room	three phase power	8	8	64	exterior access preferred
A-5	Janitor Closet	30" shelving for dry goods, housekeeping supplies, floor sink	6	7	42	space for mop bucket, mop, broom, and cleaning supplies
A-6	IT Closet	server rack, telephone, etc.	8	8	64	exterior access for IT staff
A-7	Water/Sprinkler Service	fire protection - fully sprinkled, water conditioning, lawn irrigation	8	8	64	domestic hot water/recirculating pump, fire protection service entry, backflow preventer, etc.
		Vestibule, Admin., & Support Subtotal			422	
		Grossing Factor (25%)			106	
		Wall Factor (3%)			16	
		Vestibule, Admin, Support Spaces Total			**543**	

B. APPARATUS BAYS

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
B-1	Apparatus Bays	6 - 18' x 90' bays w/ 14'x14' overhead doors, 22' high ceiling, double deep drive-thru bays, exhaust system: direct capture, radiant flooring + 15' apron, water fill - 2" line at ceiling overhead line w/ drops to each truck, 2- 3' walkways	114	90	10,260	ability to tip the cab on aerial, bollard protection at front & rear of bays; floor sloped to continuous trench drains; electrical and compressed air supply for vehicles, provide a hydrant at the station
B-2	Apparatus Bay Vestibule 1	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and the living quarters/office area
B-3	Apparatus Bay Vestibule 2	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and the living quarters/office area

B-4	Apparatus Bay Vestibule 3	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and the living quarters/office area
B-5	Apparatus Bay Vestibule 4	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and administration
B-6	Apparatus Bay Vestibule 5	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and administration
B-7	Hose/Rack Storage	2 or 3 - 2'x6' hose racks on rollers, floor drain	7	11	77	clean hose manually, first cleaning on scene, 50' & 100' hose, synthetic hose
B-8	Hose Drying/Training Tower		12	12	144	locate adj. to wash bay; min. tower height 32', 50' hose length
B-9	Work Shop	no welding	8	12	96	general maintenance
B-10	Staff Restroom	sink, toilet, urinal	7.5	8	60	
B-11	Decon		4.75	7	33	Post-Event Shower/Eye-Wash
B-12	Gear Wash Room	extractor (3'wx3'lx68"h), washer, and electric dryer, dry w/ 2 forced air racks (3'Wx8'L) + 1 future, truck wash system, utility sink, exhaust fan	13	21	273	two sets of gear per person
B-13	Gear Storage	48 lockers (3 shifts of 15 ea. + 3 extra) dedicated exhaust and fresh air make-up	22	24	528	
B-14	Janitor Closet		6	6	36	
B-15	SCBA Unit / Air Compressor	tire fill, cuffs for exhaust system, 150 psi	10	10	100	
B-16	SCBA Fill Station		10	10	100	adjacent to SCBA/Air Compressor room; SCBA breathing air filling machine; no oxygen fill, workbench for cleaning/repairing SCBA tanks; base/upper cabinet storage; explosion-proof environment; no bottle storage (all on trucks)
B-17	EMS Storage	sink, drug storage - vending machine,	10	20	200	accessible off of the bay or common hallway between bay & living quarters, climate controlled
B-18	Oxygen Tank Rack		8	8	64	
B-19	Watch/Report Office	6 workstations	10	20	200	locate for visibility to bays; wall/tack board space for maps/hanging clipboards; counter space for "control head" radio consoles; dedicated fax machine; base cabinets for paper/report forms; OH door controls
B-20	Mezzanine Space		12	80	960	ability for training, space above apparatus bay support spaces

Apparatus Bays & Support Subtotal	13,446
Grossing Factor (15%)	2,017
Wall Factor (3%)	464
Apparatus Bay Total	**15,927**

EQUIPMENT LIST

NO.	APPARATUS	Connections: Air & Power	L	W	H	RADIUS: curb-to-curb/wall-to-wall
E1	Bay 1: Engine (48,500 lbs.)	power: one to ea. apparatus, driver's side, 10' back from overhead door	31'-7"	10'-4"	9'-9"	C2C: 61' circle = 30'.5"radius bumper extends 6.5' past the front wheel
E2	Bay 2: Ambulance (future)		-	-	-	
E3	Bay 3: Rescue (27,180 lbs.)	bumper to plug-in distance is 10'-8"	31'-7"	9'-5"	10'-1"	C2C: 63' circle = 31'.5" radius bumper extends ___' past the front wheel
E4	Bay 4: Aerial (68,340 lbs.)	bucket to plug-in distance is 12'-0"	47'-7"	10'-4"	12'-4"	W2W: RH Turn = 42.71' / LH Turn = 40.58' C2C: RH Turn = 38.68' / LH Turn = 36.40'
E5	Bay 5: BC Vehicle		19'-0"	8'-0"	-	
E6	Bay 6: Open		-	-	-	
E7	Fire Truck Showroom (Antique Engine)		20'-0"	6'-2"	6'-2"	

C. LIVING QUARTERS

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
C-1	Kitchen	commercial reach-in refrigerator, 2 microwaves, coffee maker, ice-maker (60-80 lb unit), 3 lockable tall cabinets/pantries (1/shift), 2 commercial range/ovens, 2 dishwashers, garbage disposal, instant hot water at sink, single basin deep sink	17	25	425	near Dining & Day Room
C-2	Dining	sized to fit 16 people	12	25	300	open to kitchen area (no walls between kitchen and dining), able to see TV in Day Room from room
C-3	Day Room	12 loungers	21	29	609	living room type area; low lighting, no room separation necessary from kitchen/dining, in-floor power between loungers, USB plug-in an option
C-4	14 Bunk Rooms	long twin bunk, 4-24x24 lockers w/ bench & deep drawer, wall light, desk w/ light	10	12.5	1,750	
C-5	5 Shower/Toilet	vanity with base cabinet, toilet, & shower	8	12.5	500	
C-6	BC Office	3-24x24 lockers	14	16	224	
C-7	Battalion Chief Bunk	long twin bunk, 3-24x24 lockers w/ bench & deep drawer, wall light, desk w/ light	11	12.5	138	
C-8	Captain's Bunk		11	12.5	138	
C-9	BC-Captain Shower/Toilet	vanity with base cabinet, toilet, & shower	8	12.5	100	jack/jill style shared restroom
C-10	Captain's Office	3-24x24 lockers	12	16	192	
C-11	Sauna	6 people	6	7	42	
C-12	Personnel Detox Laundry	2 washers/dryers, folding counter, hang space, cabinets, cubbies for clean clothes	9	15	135	near Gear Wash
C-13	2 Detox Shower/Toilet	vanity with base cabinet, toilet, & shower	8	12.5	200	
C-14	Fitness	CrossFit and the following equipment: (2) Evolution Corner Multifunctional Trainer CXT-200, (2) NordicTrack X11i Incline Trainers (Treadmills), (2) Kettlebell sets (25/35/45/55), (2) Vulcan Strength Training Systems 385# bumper plates and Olympic bar set, (2) Rogue Fitness Rogue RE-3 Power rack with (2) Rogue adjustable 2.0 benches, (3) Concept 2 Rowers dumbbells	30	30	900	access to apparatus bays & outdoor area, provide acoustical separation from other living area spaces; shelving, wall-mounted TV, wall-mounted fan, size will be determined by the amount of and size of equipment, number of occupants in the room at one time: 12
C-15	Battery Charging Counter		3	6	18	
C-16	Personnel Bunk Laundry	2 washers/dryers, folding counter, hang space, cabinets, cubbies for clean clothes	9	15	135	

C-17	Janitor Closet	30" shelving for dry goods, housekeeping supplies, floor sink	6	7	42	space for vacuum, mop bucket, mop, broom, and cleaning supplies
C-18	Uniform Storage	25 uniforms class a uniforms (9') & department wide uniform storage (9')	10	10	100	
C-19	Storage		8	8	64	general storage

Living Quarters & Support Subtotal	6,011
Grossing Factor (25%)	1,503
Wall Factor (3%)	225
Living Quarters Total	**7,739**

D. SITE

AREA	AREA NAME	DESIGN REQUIREMENTS	PROPOSED AREA	NOTES
D-1	Public Parking	10 parking spaces	0	school bus tours (3 spaces planned for administration portion of the building
D-2	Staff Parking	32 parking spaces, 10x20 w/ plug-ins	13,200	min. 10' x 20' spaces
D-3	Apparatus Bay Aprons	45-50' apron on front and back	10,800	
D-4	Outdoor Patio	covered patio	500	adjacent to kitchen/dining, gas grill and smoker
D-5	Emergency Generator	power full station, diesel and propane 2 1000 gallons	500	shelter space needed within the building
D-6	Site Drives/Paving		-	
D-7	Exterior Storage/Trash	small utility building to store lawn mower, gas, etc., potentially two dumpsters	225	
D-8	Hydrant Fill	rear apron, not metered	-	
D-9	Lawn/Green Space		-	
D-10	Monument Sign	scrolling message signage	-	
D-11	Flagpole	two flags, one pole	-	height will be sized to building/site
D-12	Stormwater Design	roof drainage underground	-	
		Site Subtotal	25,225	
		Grossing Factor (200%)	50,450	
		Site Total	**75,675**	

WSKF ARCHITECTS, INC.
110 ARMOUR ROAD
NORTH KANSAS CITY, MO 64116

CASPER FIRE-EMS ADMINISTRATION + HEADQUARTERS STATION NO. 1
PHASE 1 FEASIBILLITY STUDIES + SPACE NEEDS ASSESSMENT

June 18, 2019
August 6, 2019

DESIGN / SPACE NEEDS SUMMARY	
A. LOBBY, ADMINISTRATION & SUPPORT SERVICES	543
B. APPARATUS BAYS	15,927
C. LIVING QUARTERS	7,739
BUILDING TOTAL	**24,210**

ACTUAL ROOM TOTAL		
ACTUAL GROSSING AND WALL AREA	1-story	2-story
ACTUAL BUILDING TOTAL	**24,307**	**23,853**

Combined Fire Administration & Fire Station 1

The combined space needs for Fire Administration and Fire Station 1 are provided below.

WSKF ARCHITECTS, INC.
110 ARMOUR ROAD
NORTH KANSAS CITY, MO 64116

CASPER FIRE-EMS ADMINISTRATION + HEADQUARTERS
STATION NO. 1
PHASE 1 FEASIBILITY STUDIES + SPACE
NEEDS ASSESSMENT

Aug. 5, 2019

A. TOTAL BUILDING

	PROPOSED AREA	ACTUAL	EXISTING BUILDING
STATION TOTAL	24,210	24,307	13,137
HEADQUARTERS TOTAL	13,926	14,179	6,883
TOTAL	38,135	38,486	20,020
difference		*(351)*	

A. TOTAL SITE

	PROPOSED AREA	ACTUAL
STATION TOTAL	75,675	0
HEADQUARTERS TOTAL	66,557	0
TOTAL	142,232	0
(in acres)	*3.26*	

PRELIMINARY FACILITY DESIGN

In order to affirm the design requirements for potential sites and to affirm the functional relationships between Fire Administration and Fire Station 1, preliminary (box diagram) design encompassing both facilities. This preliminary design is conceptual in nature and does not fully present design requirements as would be expected for the initial design requirements.

Fire Administration & Fire Station 1

There are two options presented on the following pages for individual and comparative assessment. Each of the options has respective qualities and attributes that provide insights into their respective design requirements. For a discussion of each design option and the relative merits of each option, please see the following:

Option 1

This is a single-story design scheme with all spaces located at grade with independent access to each facility; Fire Administration and Station 1. The Fire Administration Facility is located to the left of the apparatus bays and Station 1 is located to the right of the apparatus bays. While the apparatus bays are used for reference of the respective facilities, in reality, the apparatus bays are functionally part of the Station 1 space requirements. However, the apparatus bay immediately adjacent to the Fire Administration Facility would be used by crews from other stations to park their apparatus while completing training in the Training Room contained with the Fire Administration Facility. Additionally, the Fitness Room located on the left side of the apparatus bays is also a Station 1 space programmed requirement. However, for the preliminary design purposes, this space is located separate from the Station 1 proper in order to achieve some of the functional requests for this space (providing quick access to the apparatus bays while also providing access to the exterior without having to traverse through other spaces within the facility). For Fire Administration, there would be separate entrances for staff from the public entrance at the front (bottom side of the plan). Additionally, the public entrance would be afforded a secure point of access to the Lobby without compromising access to the other areas of the facility thus achieving of the shortcomings of the existing facility; lack of security and control of public access. There are several meeting spaces within the Fire Administration that provide for both ease of servicing the public as well as for internal use. As the requirement for meeting space needs to offer space for different number of attendees, there are a variety of sizes of meeting/conference rooms with Fire Administration. Lastly, the Community Risk Division within Fire Administration needs to be afforded convenient and accessible meeting space with Fire Administration. This portion of Fire Administration is located immediately adjacent to the Lobby near the front of the facility to accommodate this functional need. The current facility does not offer enough meeting space nor appropriate security means. The lack of space compromises both service to the public and places staff at risk.

Station 1 space (to the right of the apparatus bays) includes the needed space for up to 16 personnel (meeting current and future space needs at Station 1). Additionally, there is both staff and public entrances to the Station providing the necessary and needed security for the Station. With the apparatus bays sandwiched between the Fire Administration and Station 1 living quarters, immediate and quick access to the apparatus bays from the Station is inherently provided. The bunk room location at the center of the design, in particular, provides quick access from the bunk rooms to the apparatus bays to accommodate the desired short distance for quick response or “turnout” time for crews on duty. The living quarters are placed at the rear of the facility (top of the layout) to facility both privacy for crews as well as immediate access to staff parking envisioned to be located at the rear of the facility. Refer to the following page for Option 1:

Option 1 Preliminary Design, Fire-EMS Administration & Station 1

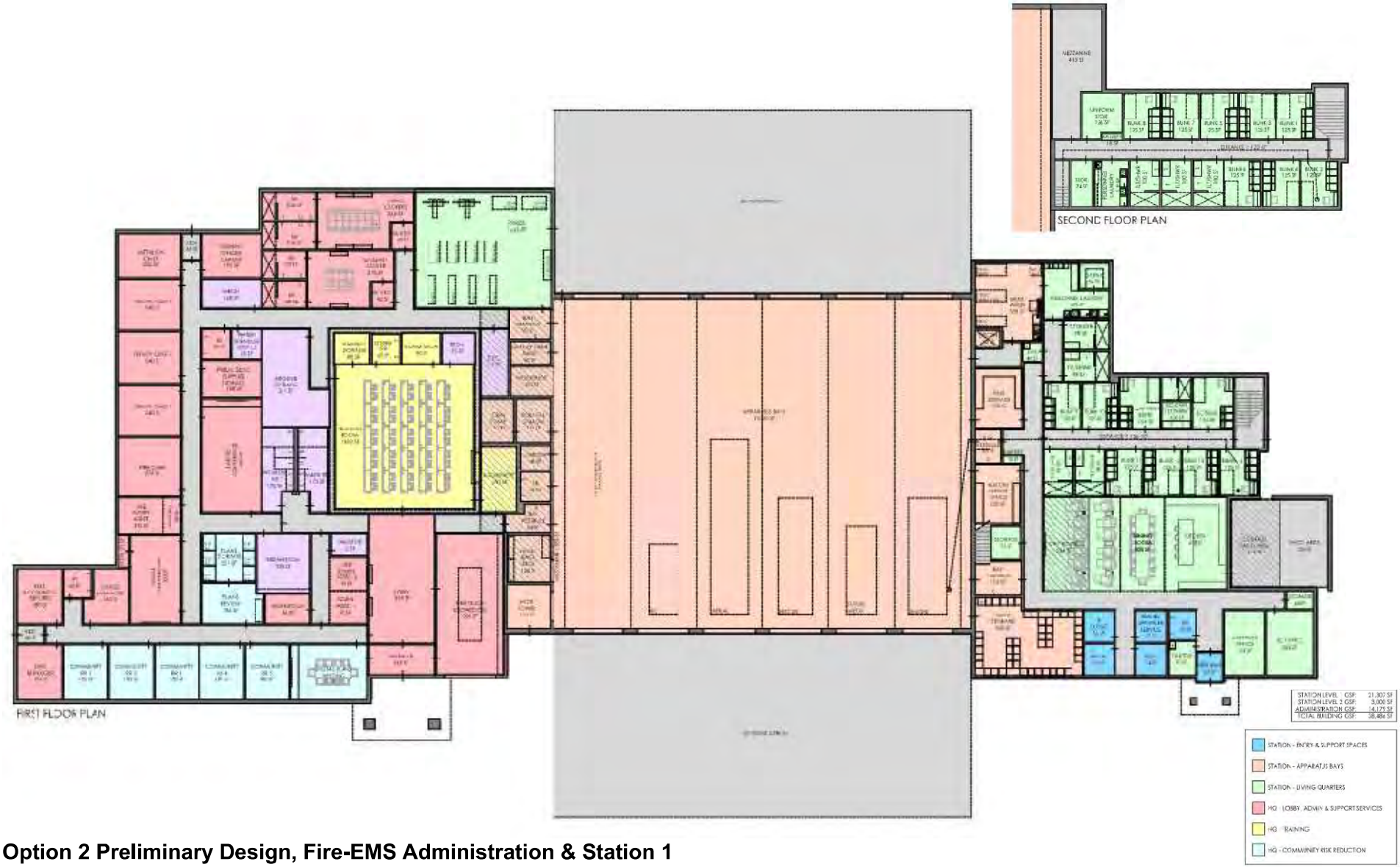
Option 1 – Fire-EMS Administration

Option 1 – Fire-EMS Station 1

Option 2

This is a two-story design scheme with most spaces located at grade except for a portion of the bunk rooms located on the second floor. As with Option 1, independent access to each facility; Fire Administration and Fire-EMS Station 1 is provided. Again, the Fire Administration Facility is located to the left of the apparatus bays and Fire-EMS Station 1 is located to the right of the apparatus bays. The Fire Administration and apparatus bay design are the same for Option 1 and Option 2.

Fire-EMS Station 1 space (to the right of the apparatus bays) provides similar spaces as Option 1 with the exception of bunk rooms located on the 1st and 2nd floors. The reason for locating bunkrooms on the two floors is to reduce travel distance from the bunk rooms to the apparatus bays. Refer to the following page for Option 2:



Option 2 Preliminary Design, Fire-EMS Administration & Station 1

DESIGN REVIEW; OPTION 1 & 2

In review discussions with the Fire Department, there is a preference for design Option 1. The comments in favor of Option 1 include: 1) All personnel are located on one floor, 2) Firefighter injury concern with personnel using stairways (middle of the night use during response to an emergency call), 3) Location of Living Quarters near the front of the building resulting in compromise of personal space and potential security, and 4) Overall sense of lack of community with a 2-story design. It should be noted that the two-design approach was included for general understanding of how the two designs might compare and not to promote the two-story design over the single-story design.

DESIGN FOCUS; DECON PROTOCOL

One of the key design objectives with current fire station design is the goal of "risk reduction" to firefighter health and wellness. Most any fire industry publication, today, contains current efforts to reduce the risk firefighters encounter as a result of performing their job functions and daily business operations. Efforts range from how to properly clean fire gear to personal hygiene after returning from a fire, EMS or hazardous waste event. Many of the events firefighters' experience result in incremental exposure to contaminants that are, long-term, hazardous to their health and wellness.

To this end, the proposed design includes decontamination protocol that attempts to mitigate these daily or regular exposures. The final design needs to work in partnership with other firefighter decontamination processes and protocols that begin at the scene of the event. This sort of effort is becoming commonplace for departments throughout the country.

The "Risk Plan" depicted on the adjacent column, is a floor plan enlargement that was included in Option 1 and 2. While this plan is viewed as a positive step towards creating a fire station atmosphere addressing firefighter risk reduction, this is a preliminary design that would be expected to further evolve over the next generations of design.

In review of this plan, there are numbers that denote the decontamination protocol process through the space. Generally, the protocol is to transition from hot, to cold decontamination. Each of these "zones" of decontamination provide for progressive reduction of contaminates and "risk reduction". The zones are often referred to as red to yellow to green to reflect the corresponding stage of cleaning contaminates from everything from gear to the person themselves.

You will note, that the area of the plan below replicates the color corresponding with the decontamination. Each of the 1 through 4 numbered spaces contains equipment and supporting methodology cleaning steps. You will also note that the presented design is intended to have a flow and direction that does not involve the need to backtrack or duplicate cleaning processes. The design focus on decontamination extends to other spaces throughout the station as well.

RISK PLAN

EXISTING STATION 1 ASSESSMENT

As the study recommendation is for the replacement of Station 1 with a new Station 1, it is important to understand the assessment and general conclusions as to "why" the existing station is not a candidate for renovation. This section of the study will focus on the assessment of Station 1.

As has been presented in the study, the space needs of Station 1 would require an addition of approximately 11,000 SF. The significant categories of space needs include:

1) Apparatus Bays (current station provides 4 bays with 3 being drive-thru while the recommendation is for 6, drive-thru bays)
2) Gender-Neutral Bunk Rooms (current design is dormitory style while proposed design is for single-occupant bunks thus allowing for gender-neutral design)
3) Living Quarters for a minimum of 10 – 12 personnel with space for future 16 personnel (current dining room/living room provides comfortable space 8 to 10 while proposed design provides ample living space for 16)
4) Health-Wellness environment throughout the station (current design provides for decontamination through use of the existing sauna while the proposed station includes event decon protocol space as well as containment of apparatus bay decontaminates from entering the living space as well as transition zones between apparatus bays and living quarters
5) Fitness space for minimum of 10 – 12 personnel (current design provides approximately 400 SF while the proposed design provides approximately 1,200 SF or fitness space for 10 to 12 personnel)
6) Adequate and appropriate design for operational support space (current design exposes fire gear to contaminants of the apparatus bays and locates the SCBA (self-contained breathing apparatus) equipment inside the apparatus bays while the proposed design provides for separate and distinct self-contained space for fire gear and isolates the SCBA from all apparatus bay contaminates)

These are a few of the assessed shortcomings or inadequacies of the existing Station 1. While it may be possible to accommodate some of the recommended design changes within the existing station, there will be a "tipping point" in the incremental improvement/investment of the existing station that will become a question as to when such investment does not make financial sense for the long-term use of the facility.

CO-LOCATION; FIRE ADMINSTRATION – STATION 1

There has been discussion of whether there is a need or rationale for the co-location of Fire Administration and Station 1? It is important to present some of the discussion and considerations for either co-locating or separate locations. Some of the considerations are presented here:

1) Shared Uses – The recommended design includes "Training" space for fire-EMS personnel. The uses of this space include an array of training opportunities from classroom to tactical training uses
2) Training Room Support – In that training for personnel is normally scheduled for on-duty crews, there is a requirement for crews to temporarily "garage" apparatus during training classes as apparatus cannot be parked outside during freezing conditions
3) Operational Efficiency – As with most calls for service, there is a coordinated response that involves both

station and administration that a co-location would operational benefit such response

4) Utility Efficiency – As both Administration and Station facilities should be afforded emergency operational power, co-location would allow for a single source of power (one standby generator) for both uses

5) Site Efficiency – Administration and Station facilities require designated and secure/separated parking for both Department vehicles as well as personal vehicles. There is the potential for economy of space and parking use with co-location

6) Emergency Operations – During emergency events, both Administration and Station personnel are required to coordinate and operate as one unit. Co-location will facilitate this coordination and present more effective communication and response to such events

These are a few of the considerations for co-location of Fire Administration and Fire-EMS Station 1. While there will also be challenges to such co-location (i.e. adequate site area), the recommendation for co-location, it is believed, out-weigh the challenges for such.

APPENDIX

SPACE NEEDS – FIRE-EMS ADMINISTRATION

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
A-1	Vestibule	call station for after hours use, map w/ map lights, auto dialer w/ video to dispatch (exterior), station doorbell	8	18	144	airlock for energy efficiency & to reduce drafts; visible from reception; capable of being secured to prevent entry into lobby; provide phone/intercom
A-2	Lobby	waiting for 4 people; display space for pictorial history and memorabilia	18	35	630	adjacent to Admin. Assist. 1
		SPACES BELOW THIS LINE ARE SECURED w/ ACCESS CONTROL				
A-3	Restroom	single occupancy restroom	7.5	8	60	staff use, ADA compliant
A-4	Restroom	single occupancy restroom	7.5	8	60	staff use, ADA compliant
A-5	Fire Truck Showroom	overhead door w/ exterior access, display cases for other items	18	38	684	
A-6	Administrative Assistant 1	service security window/counter for transactions with a pass-thru tray	9	10	90	adjacent to lobby space, can be an open office space
A-7	Administrative Assistant 2	community risk reduction	9	10	90	near Admin. Assistant 1, can be an open office space
A-8	Fire Administrative Assistant		10	12	120	adjacent to Fire Chief & Deputies
A-9	Fire Chief Waiting Area		5	10	50	adjacent to Fire Admin. Assist.
A-10	Office Manager (future)		10.5	17	179	coat closet/cabinet
A-11	Workroom	copier, printer, paper storage, knox box safe	8	12	96	
A-12	Public Educ. Supplies Storage	steel shelving	10	20	200	
A-13	Fire Chief	meeting space for 4	16	17	272	coat closet/cabinet
A-14	Deputy Chief 1		14	16	224	coat closet/cabinet
A-15	Deputy Chief 2		14	16	224	coat closet/cabinet
A-16	Deputy Chief 3		14	16	224	coat closet/cabinet
A-17	Large Conference Room	accessible to all, conference table for 15 + 5, video conferencing capability	16	31	496	
A-18	Small Conference Room	accessible to all, conference table for 8-10, video conferencing capability	16	23	368	
A-19	Training Officer/Captain	produce videos in office, green wall, design for sound control	12	15	180	small training events
A-20	Battalion Chief		12	15	180	adjacent to CRR, coat closet/cabinet
A-21	EMS Manager	2 visitor chairs	12	15	180	
A-22	EMS Accounting/Reports	3 workstations	12	15	180	
A-23	Women's Locker Room	8 lockers	15.5	17	264	
A-24	Women's Locker Room Vestibule	private entry into locker room	6	7	42	
A-25	Women's Locker Restroom	2 individual toilets/shower units	12	15	180	

A-26	Men's Locker Room	14 lockers	15.5	23	357	
A-27	Men's Locker Room Vestibule	private entry into locker room	6	7	42	
A-28	Men's Locker Restroom	1 toilet, 1 urinal, 2 showers	14.5	15	218	
				Vestibule, Admin., & Support Subtotal	6,032	
				Grossing Factor (25%)	1,508	
				Wall Factor (3%)	226	
				Vestibule, Admin, Support Spaces Total	**7,766**	

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
B-1	Community Risk Reduction 1		12	15	180	coat closet/cabinet
B-2	Community Risk Reduction 2		12	15	180	coat closet/cabinet
B-3	Community Risk Reduction 3		12	15	180	coat closet/cabinet
B-4	Community Risk Reduction 4		12	15	180	coat closet/cabinet
B-5	Community Risk Reduction 5		12	15	180	coat closet/cabinet
B-6	Plans Review Room	complete reviews of plans, large format plotter, layout tables/counters	11	18	198	
B-7	Plans Storage	double the amount of current storage, flat file storage design	12	18	216	
B-8	Digital Plans Meeting Room	hold up to 10 people, wall-mounted monitor, min. 72"	12	20	240	
				Vestibule, Admin., & Support Subtotal	1,554	
				Grossing Factor (25%)	389	
				Wall Factor (3%)	58	
				Community Risk Reduction Total	**2,001**	

C. TRAINING

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
C-1	Training Room	Seating for 50 w/ tables and chairs, floor boxes - power and data, monitors and walltalkers, storm shelter?	38	39	1482	adjacent to the lobby/public restrooms; ceiling mount projection screen; projection white board, wall mount TV monitors; tall storage cabinets
C-2	Training Room Storage		8	10	80	Additional chair & table storage
C-3	Storm Shelter Restroom	as req'd by ICC 500	7.5	8	60	
C-4	Storm Shelter Mechanical	as req'd by ICC 500	8.5	10.5	89	
C-5	Kitchenette	Sink, dishwasher, microwave, refrigerator, service counter into training room	10	18	180	
				Training & Support Subtotal	1,891	
				Grossing Factor (25%)	473	
				Wall Factor (3%)	71	
				Training Total	**2,435**	

D. SUPPORT SPACES

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
D-1	Public Restrooms	3 toilets in Women's/2 urinals & 1 toilet in Men's, 2 sinks in each restroom	18	23	414	
D-2	Archive Storage	400-500 sf	16	23.5	376	
D-3	Breakroom	full size refrigerator w/ ice maker, microwave, sink, coffee maker, oven, table for 6 people	13	18	234	
D-4	Electrical		8	8	64	electrical service panels
D-5	Technology		8.5	9.5	81	space for bldg. technology services as well as telephone service, IT server, VoIP phones, individual heating/cooling, single rack, dispatch entry, access control hub, meet w/ City IT to determine needs (city scope vs. contractor scope), 2 racks - computer server and radio/PA equipment
D-6	Mechanical		8	8	64	
D-7	Water/Sprinkler Service		8	8	64	domestic hot water/recirculating pump, fire protection service entry, backflow preventer, etc.
D-8	Janitor/Storage		6	7	42	floor sink & storage space for vacuum, mop bucket, mop, broom, & cleaning supplies
				Training & Support Subtotal	1,339	
				Grossing Factor (25%)	335	
				Wall Factor (3%)	50	
				Support Spaces Total	**1,724**	

E. SITE

RM. NO.	AREA NAME	DESIGN REQUIREMENTS	AREA SIZE	NOTES
E-1	Public Parking	25-30 parking spaces	12,800	
E-2	Apparatus/Bus Parking	3 parking spaces	1,800	15 x 40
E-3	Staff Parking	20 parking spaces	6,600	10' w. min.
E-4	Firefighter Memorial		400	
E-5	Emergency Generator		500	
E-6	Site Drives/Paving		0	zoning/landscaping requirements
		Site Subtotal	22,186	
		Grossing Factor (200%)	44,371	
		Site Total	**66,557**	

DESIGN / SPACE NEEDS SUMMARY	
A. Lobby, Administration & Support Services	7,766
B. Community Risk Reduction	2,001
C. Training	2,435
D. Support Spaces	1,724
BUILDING TOTAL	**13,926**

ACTUAL FLOOR PLAN AREAS	
ACTUAL ROOM TOTAL	
ACTUAL GROSSING AND WALL AREA	
ACTUAL BUILDING TOTAL	**14,179**

CASPER, WY BUILDING CODES	as of 6/5/19
2018 International Building Code with Amendments	
2018 International Plumbing Code with Amendments	
2018 International Mechanical Code with Amendments	
2018 International Fuel Gas Code with Amendments	
2018 International Energy Conservation with Amendments (as reference only)	
2018 International Fire Code with Amendments	
2017 National Electrical Code with Amendments	
2017 ANSI ICC A117.1 Accessibility Standard	

SPACE NEEDS – FIRE-EMS STATION 1

A. ENTRY & SUPPORT SPACES

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
A-1	Vestibule	locked interior and exterior door, push button to lock ext. door from the inside, push to talk (no phone)	8	8	64	map w/ map lights, airlock for energy efficiency & to reduce drafts **BUILDING ACCESS CONTROL:** Gallagher Access Controls for exterior door access (key pads where each employee can be assigned individual codes)
		SPACES BELOW THIS LINE ARE SECURED w/ ACCESS CONTROL				
A-2	Public Restroom	single occupancy use	7.5	8	60	ADA compliant
A-3	Mechanical Room		8	8	64	
A-4	Electrical Room	three phase power	8	8	64	exterior access preferred
A-5	Janitor Closet	30" shelving for dry goods, housekeeping supplies, floor sink	6	7	42	space for mop bucket, mop, broom, and cleaning supplies
A-6	IT Closet	server rack, telephone, etc.	8	8	64	exterior access for IT staff
A-7	Water/Sprinkler Service	fire protection - fully sprinkled, water conditioning, lawn irrigation	8	8	64	domestic hot water/recirculating pump, fire protection service entry, backflow preventer, etc.

Vestibule, Admin., & Support Subtotal	422
Grossing Factor (25%)	106
Wall Factor (3%)	16
Vestibule, Admin, Support Spaces Total	**543**

B. APPARATUS BAYS

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
B-1	Apparatus Bays	6 - 18' x 90' bays w/ 14'x14' overhead doors, 22' high ceiling, double deep drive-thru bays, exhaust system: direct capture, radiant flooring + 15' apron, water fill - 2" line at ceiling overhead line w/ drops to each truck, 2- 3' walkways	114	90	10,260	ability to tip the cab on aerial, bollard protection at front & rear of bays; floor sloped to continuous trench drains; electrical and compressed air supply for vehicles, provide a hydrant at the station
B-2	Apparatus Bay Vestibule 1	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and the living quarters/office area
B-3	Apparatus Bay Vestibule 2	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and the living quarters/office area

B-4	Apparatus Bay Vestibule 3	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and the living quarters/office area
B-5	Apparatus Bay Vestibule 4	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and administration
B-6	Apparatus Bay Vestibule 5	handwash sink & walk off carpet tile	7	9	63	space for air/containment control between the apparatus bays and administration
B-7	Hose/Rack Storage	2 or 3 - 2'x6' hose racks on rollers, floor drain	7	11	77	clean hose manually, first cleaning on scene, 50' & 100' hose, synthetic hose
B-8	Hose Drying/Training Tower		12	12	144	locate adj. to wash bay; min. tower height 32', 50' hose length
B-9	Work Shop	no welding	8	12	96	general maintenance
B-10	Staff Restroom	sink, toilet, urinal	7.5	8	60	
B-11	Decon		4.75	7	33	Post-Event Shower/Eye-Wash
B-12	Gear Wash Room	extractor (3'wx3'lx68"h), washer, and electric dryer, dry w/ 2 forced air racks (3'Wx8'L) + 1 future, truck wash system, utility sink, exhaust fan	13	21	273	two sets of gear per person
B-13	Gear Storage	48 lockers (3 shifts of 15 ea. + 3 extra) dedicated exhaust and fresh air make-up	22	24	528	
B-14	Janitor Closet		6	6	36	
B-15	SCBA Unit / Air Compressor	tire fill, cuffs for exhaust system, 150 psi	10	10	100	
B-16	SCBA Fill Station		10	10	100	adjacent to SCBA/Air Compressor room; SCBA breathing air filling machine; no oxygen fill, workbench for cleaning/repairing SCBA tanks; base/upper cabinet storage; explosion-proof environment; no bottle storage (all on trucks)
B-17	EMS Storage	sink, drug storage - vending machine,	10	20	200	accessible off of the bay or common hallway between bay & living quarters, climate controlled
B-18	Oxygen Tank Rack		8	8	64	
B-19	Watch/Report Office	6 workstations	10	20	200	locate for visibility to bays; wall/tack board space for maps/hanging clipboards; counter space for "control head" radio consoles; dedicated fax machine; base cabinets for paper/report forms; OH door controls
B-20	Mezzanine Space		12	80	960	ability for training, space above apparatus bay support spaces

Apparatus Bays & Support Subtotal	13,446
Grossing Factor (15%)	2,017
Wall Factor (3%)	464
Apparatus Bay Total	**15,927**

EQUIPMENT LIST

NO.	APPARATUS	Connections: Air & Power	L	W	H	RADIUS: curb-to-curb/wall-to-wall
E1	Bay 1: Engine (48,500 lbs.)	power: one to ea. apparatus, driver's side, 10' back from overhead door	31'-7"	10'-4"	9'-9"	C2C: 61’ circle = 30’.5”radius bumper extends 6.5' past the front wheel
E2	Bay 2: Ambulance (future)		-	-	-	
E3	Bay 3: Rescue (27,180 lbs.)	bumper to plug-in distance is 10'-8"	31'-7"	9'-5"	10'-1"	C2C: 63’ circle = 31’.5” radius bumper extends ___' past the front wheel
E4	Bay 4: Aerial (68,340 lbs.)	bucket to plug-in distance is 12'-0"	47'-7"	10'-4"	12'-4"	W2W: RH Turn = 42.71' / LH Turn = 40.58' C2C: RH Turn = 38.68' / LH Turn = 36.40'
E5	Bay 5: BC Vehicle		19'-0"	8'-0"	-	
E6	Bay 6: Open		-	-	-	
E7	Fire Truck Showroom (Antique Engine)		20'-0"	6'-2"	6'-2"	

C. LIVING QUARTERS

RM. NO.	ROOM NAME	DESIGN REQUIREMENTS	RM. WIDTH	RM. LENGTH	PROPOSED AREA	NOTES
C-1	Kitchen	commercial reach-in refrigerator, 2 microwaves, coffee maker, ice-maker (60-80 lb unit), 3 lockable tall cabinets/pantries (1/shift), 2 commercial range/ovens, 2 dishwashers, garbage disposal, instant hot water at sink, single basin deep sink	17	25	425	near Dining & Day Room
C-2	Dining	sized to fit 16 people	12	25	300	open to kitchen area (no walls between kitchen and dining), able to see TV in Day Room from room
C-3	Day Room	12 loungers	21	29	609	living room type area; low lighting, no room separation necessary from kitchen/dining, in-floor power between loungers, USB plug-in an option
C-4	14 Bunk Rooms	long twin bunk, 4-24x24 lockers w/ bench & deep drawer, wall light, desk w/ light	10	12.5	1,750	
C-5	5 Shower/Toilet	vanity with base cabinet, toilet, & shower	8	12.5	500	
C-6	BC Office	3-24x24 lockers	14	16	224	
C-7	Battalion Chief Bunk	long twin bunk, 3-24x24 lockers w/ bench & deep drawer, wall light, desk w/ light	11	12.5	138	
C-8	Captain's Bunk		11	12.5	138	
C-9	BC-Captain Shower/Toilet	vanity with base cabinet, toilet, & shower	8	12.5	100	jack/jill style shared restroom
C-10	Captain's Office	3-24x24 lockers	12	16	192	
C-11	Sauna	6 people	6	7	42	
C-12	Personnel Detox Laundry	2 washers/dryers, folding counter, hang space, cabinets, cubbies for clean clothes	9	15	135	near Gear Wash
C-13	2 Detox Shower/Toilet	vanity with base cabinet, toilet, & shower	8	12.5	200	
C-14	Fitness	CrossFit and the following equipment: (2) Evolution Corner Multifunctional Trainer CXT-200, (2) NordicTrack X11i Incline Trainers (Treadmills), (2) Kettlebell sets (25/35/45/55), (2) Vulcan Strength Training Systems 385# bumper plates and Olympic bar set, (2) Rogue Fitness Rogue RE-3 Power rack with (2) Rogue adjustable 2.0 benches, (3) Concept 2 Rowers dumbbells	30	30	900	access to apparatus bays & outdoor area, provide acoustical separation from other living area spaces; shelving, wall-mounted TV, wall-mounted fan, size will be determined by the amount of and size of equipment, number of occupants in the room at one time: 12
C-15	Battery Charging Counter		3	6	18	
C-16	Personnel Bunk Laundry	2 washers/dryers, folding counter, hang space, cabinets, cubbies for clean clothes	9	15	135	

C-17	Janitor Closet	30" shelving for dry goods, housekeeping supplies, floor sink	6	7	42	space for vacuum, mop bucket, mop, broom, and cleaning supplies
C-18	Uniform Storage	25 uniforms class a uniforms (9') & department wide uniform storage (9')	10	10	100	
C-19	Storage		8	8	64	general storage

Living Quarters & Support Subtotal	6,011
Grossing Factor (25%)	1,503
Wall Factor (3%)	225
Living Quarters Total	**7,739**

D. SITE

AREA	AREA NAME	DESIGN REQUIREMENTS	PROPOSED AREA	NOTES
D-1	Public Parking	10 parking spaces	0	school bus tours (3 spaces planned for administration portion of the building
D-2	Staff Parking	32 parking spaces, 10x20 w/ plug-ins	13,200	min. 10' x 20' spaces
D-3	Apparatus Bay Aprons	45-50' apron on front and back	10,800	
D-4	Outdoor Patio	covered patio	500	adjacent to kitchen/dining, gas grill and smoker
D-5	Emergency Generator	power full station, diesel and propane 2 1000 gallons	500	shelter space needed within the building
D-6	Site Drives/Paving		-	
D-7	Exterior Storage/Trash	small utility building to store lawn mower, gas, etc., potentially two dumpsters	225	
D-8	Hydrant Fill	rear apron, not metered	-	
D-9	Lawn/Green Space		-	
D-10	Monument Sign	scrolling message signage	-	
D-11	Flagpole	two flags, one pole	-	height will be sized to building/site
D-12	Stormwater Design	roof drainage underground	-	
		Site Subtotal	25,225	
		Grossing Factor (200%)	50,450	
		Site Total	**75,675**	

WSKF ARCHITECTS, INC.
110 ARMOUR ROAD
NORTH KANSAS CITY, MO 64116

DESIGN / SPACE NEEDS SUMMARY	
A. LOBBY, ADMINISTRATION & SUPPORT SERVICES	543
B. APPARATUS BAYS	15,927
C. LIVING QUARTERS	7,739
BUILDING TOTAL	**24,210**

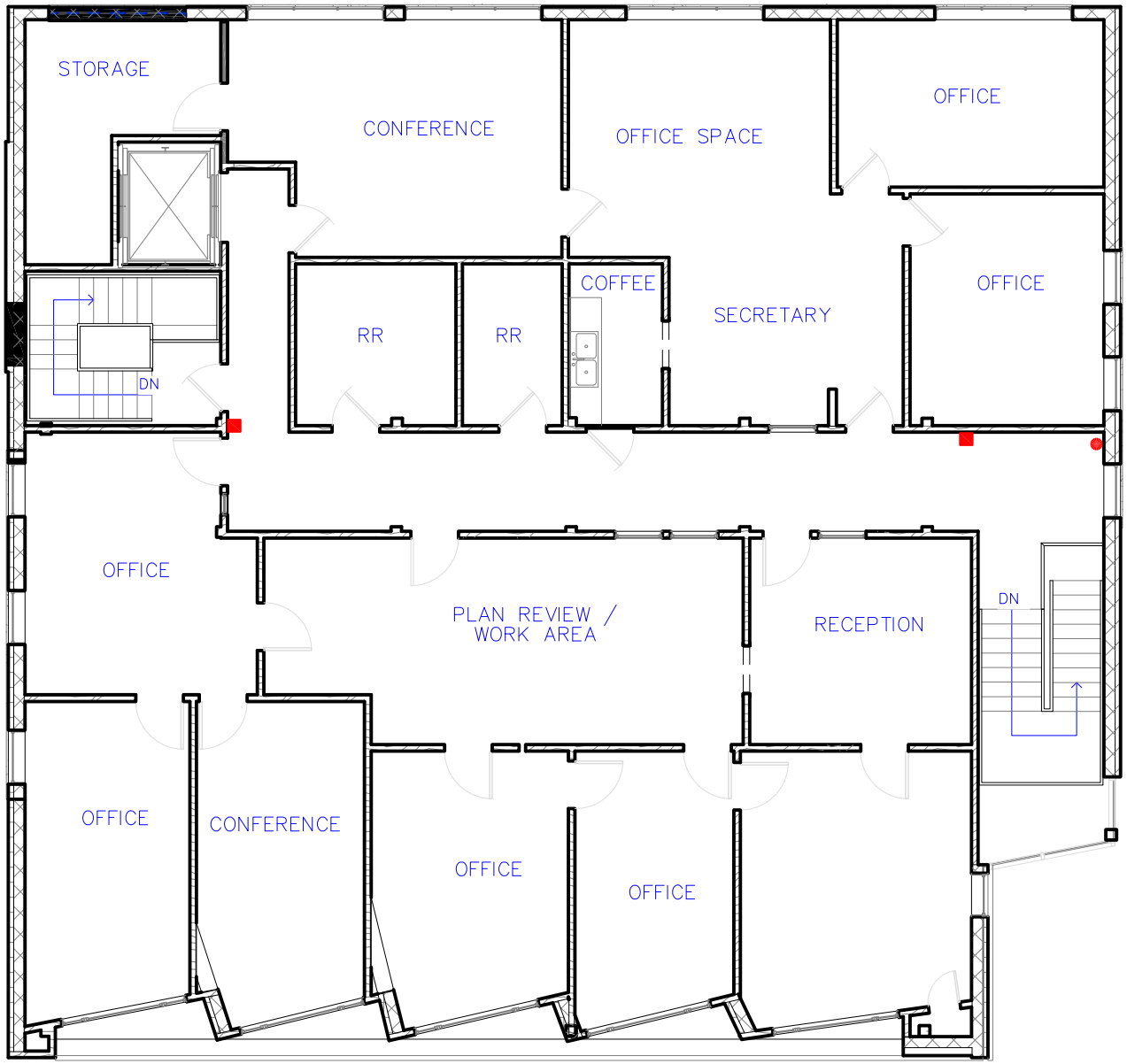
ACTUAL ROOM TOTAL			
ACTUAL GROSSING AND WALL AREA		1-story	2-story
ACTUAL BUILDING TOTAL		**24,307**	**23,853**

FLOOR PLANS – FIRE-EMS ADMINISTRATION

- ***FIRE EXTINGUISHERS***
- ***FIRE ALARM PULL STATION***

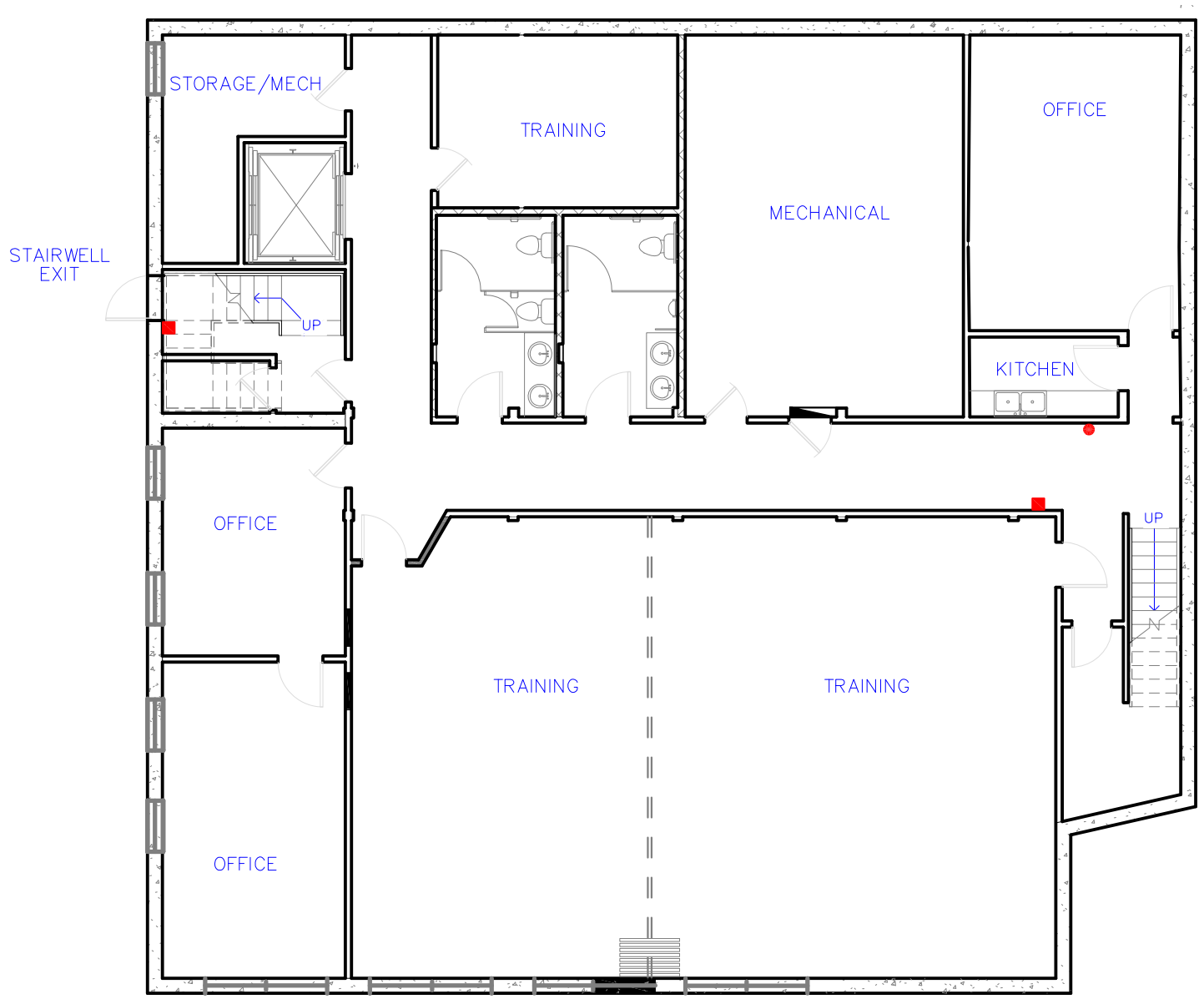
CITY CENTER - MAIN FLOOR

- ***FIRE EXTINGUISHERS***
- ***FIRE ALARM PULL STATION***



CITY CENTER - 2ND FLOOR

- ***FIRE EXTINGUISHERS***
- ***FIRE ALARM PULL STATION***

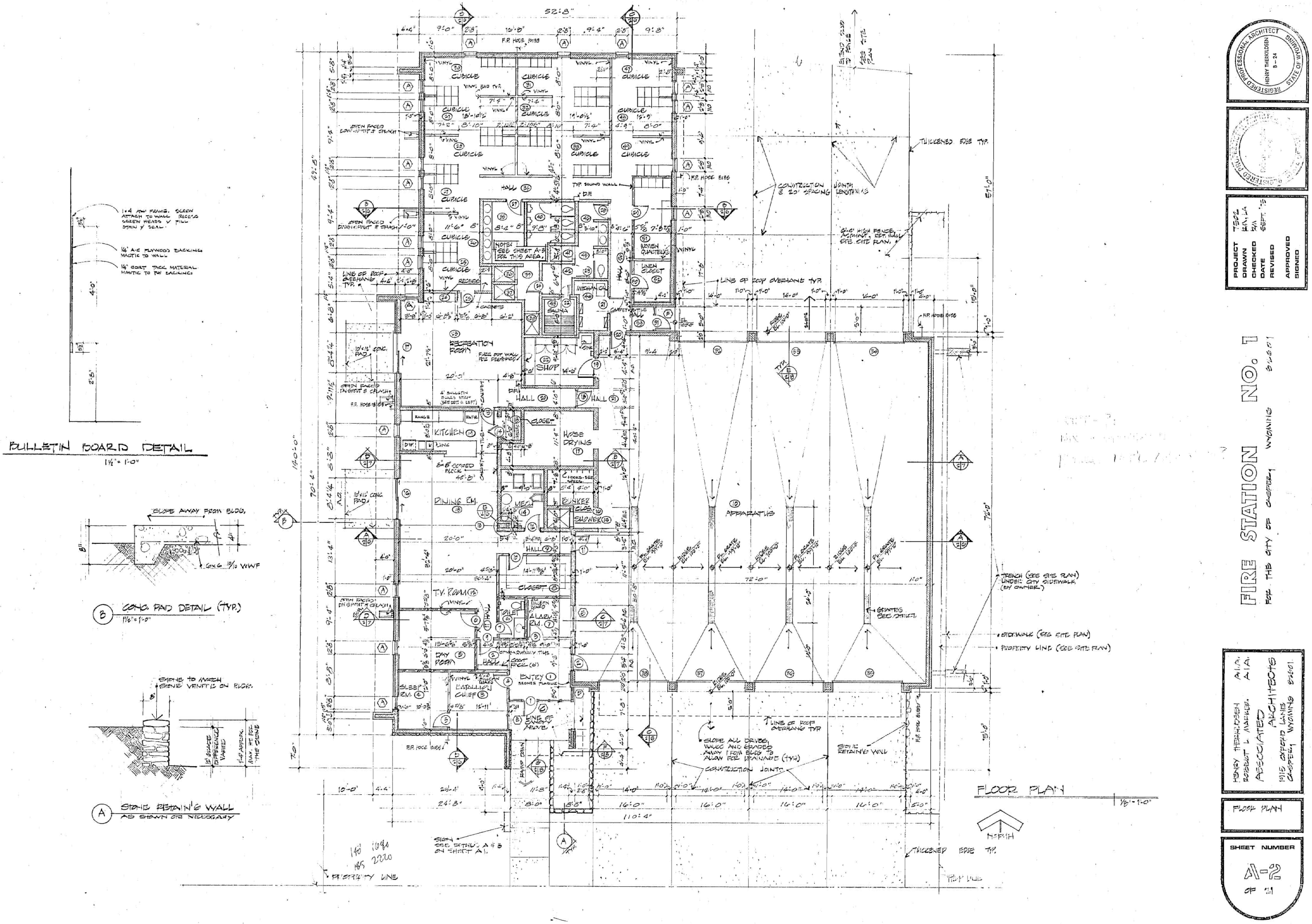


NORTH

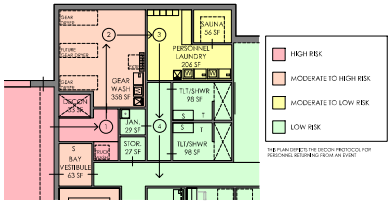
NOT TO SCALE

CITY CENTER – BASEMENT

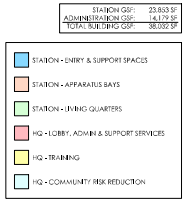
EXISTING FLOOR PLAN – FIRE-EMS STATION 1

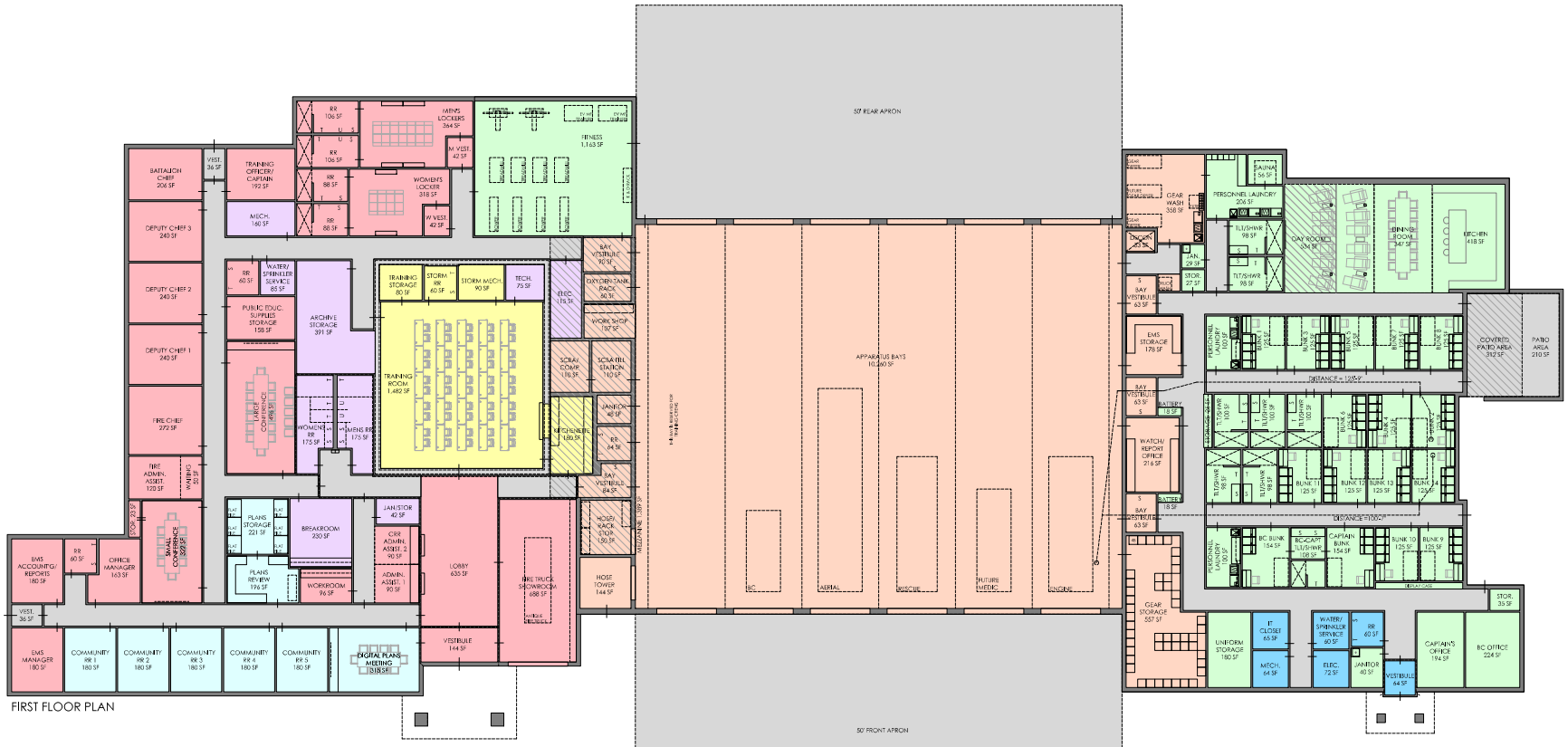

BULLETIN BOARD DETAIL
CONC. PAD DETAIL (TYP.)
STONE RETAIN'G WALL
FLOOR PLAN
RECREATION ROOM
KITCHEN
DINING RM.
T.V. ROOM
APPARATUS
HOSE DRYING
FIRE STATION NO. 1
FOR THE CITY OF CASPER, WYOMING
ASSOCIATED ARCHITECTS
SHEET NUMBER
A-2

DESIGN – OPTION 1



RISK PLAN





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CASPER FIRE-EMS ADMINISTRATION + HEADQUARTERS STATION NO. 1 - PHASE 1 FEASIBILITY STUDY + SPACES NEEDS ASSESSEMENT

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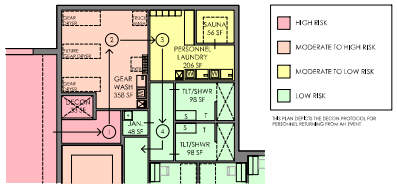
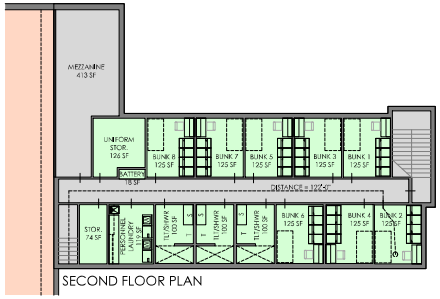
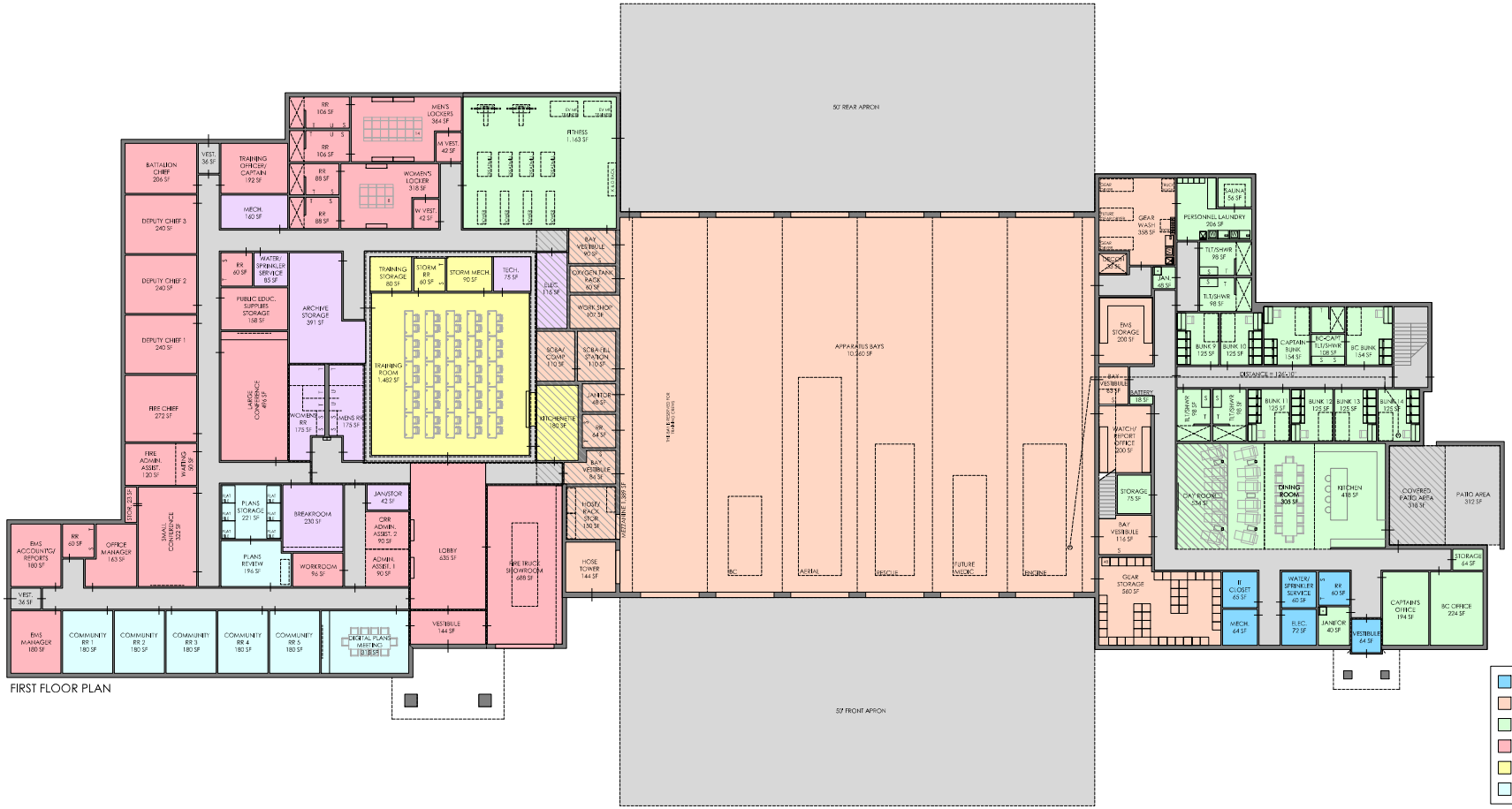
DESIGN – OPTION 2



RISK PLAN



SECOND FLOOR PLAN



FIRST FLOOR PLAN

Williams Spurgeon Kuhl & Freshnock Architects, Inc

CASPER FIRE-EMS ADMINISTRATION + HEADQUARTERS STATION NO. 1 - PHASE 1 FEASIBILITY STUDY + SPACES NEEDS ASSESSEMENT

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