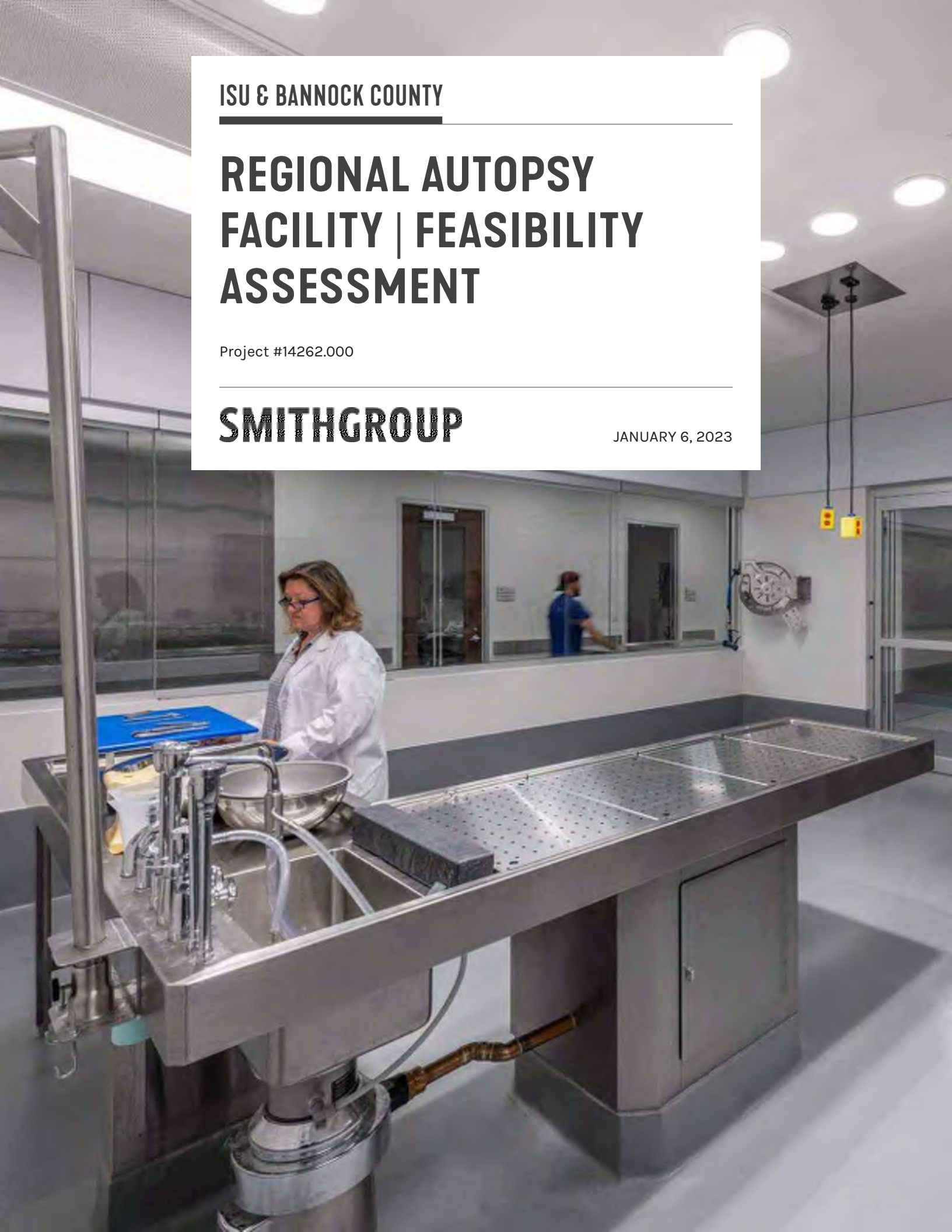
ISU & BANNOCK COUNTY

REGIONAL AUTOPSY FACILITY | FEASIBILITY ASSESSMENT

Project #14262.000

SMITHGROUP

JANUARY 6, 2023



JOHNSON COUNTY MEDICAL EXAMINER'S FACILITY

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EXECUTIVE SUMMARY

The state of Idaho is a geographically diverse and large state which boarders on six states and Canada. This diversity and rich natural resources has helped the state to regularly be listed as one of the fastest growing populations in the country. With this growth in population comes great economic opportunities, however, it also impacts the public health and criminal justice systems.

Population change has a direct impact on the number of autopsies required to better understand the cause and manner of death for those who died under extenuating circumstances. As the population increases, the quantity of autopsies needed will typically increase. Due to the growth projected in eastern Idaho, historical trends show that there should be an increased demand on the facilities currently serving the region.

By Idaho State Statute, it falls upon elected Coroners to certify the cause and manner of death due to the result of violence, suspicious or unknown circumstances, or the death of a child. However, Coroners also have the duty of fiscal responsibility as it relates to ongoing cost related to upholding their duties. Part of these costs include the transport of decedents to and from an autopsy facility which are impacted by the travel distance and time associated.

Beyond transportation, time is also a factor that impacts families of the departed. Many counties are unable to support their own autopsy facility due to cost and low decedent load. Transportation, autopsy, and investigation all impact the final death certification and this time imparts an emotional toll on families at a challenging time.

To address the need for better access to autopsy services, Bannock County and Idaho State University (ISU) are interested in partnering to develop an eastern Idaho autopsy facility. This partnership will improve access to training opportunities with autopsies being conducted within an ISU building. Counties in the region, including Bannock County would benefit from the reduced cost in transporting decedents long distances. This assessment helps the County and University partners to better understand the demand on the facility, minimum staff necessary to maintain operations, and space necessary for conducting autopsies.

Before the County can understand how much space will be needed or the quantity of staff, an evaluation of population change and historical autopsy needs was conducted. According to the Idaho Department of Labor, population in the region will expand from approximately 556,000 to 578,000 in the next 5-years. Although that growth is modest, if this percentage growth becomes a trend, population could expand to over 700,000 in the next 30-years.

Across the previous 5-year period, both Bannock County and the potential partners in the region have conducted a relatively low quantity of around 0.15 autopsies per 1,000 people in the catchment area. This low rate is expected to increase once better access is available, and although the National Association of Medical Examiners (NAME) Scientific Working Group for Medicolegal Death Investigation (SWGMDI) suggest that programs endeavor to reach 1 autopsy per 1,000, it is likely unrealistic due to current budget limitations for Coroners.

To maintain a financially efficient autopsy program, there is a minimum number of autopsies needed per forensic pathologist. NAME accreditation guidelines identifies that a single forensic pathologist shall not conduct more than 250 autopsies per calendar year. This number can be extended to 325 autopsies if partial or external examinations are conducted if deemed appropriate by the forensic pathologist. To receive the greatest benefit from the expenses of operating an autopsy facility, this program should attempt to reach the NAME maximum number of autopsies each year. To support this single forensic pathologist, two autopsy assistants are required. They will share duties within the morgue and administrative tasks so there is reliable coverage.

To increase the number of autopsies means that the rate at which decedents are sent to autopsy needs to increase as well. The aforementioned 0.15 autopsies per 1,000 in the region would need a considerable increase to approach the 325 autopsies per year. Bannock County and their partners should continue conversations on expectations autopsies that Coroners in the region will be calling for to ensure that maximum benefit is achieved. Nationally, other programs which construct new facilities have seen an increase in the number of autopsies that outside Counties contribute to the system and it sounds like this is a distinct possibility in this case as well.

Knowing that a minimum of three staff will be required to operate the program and the quantity of decedents that will be received each year, a space list was developed. The Net Assignable Square Footage of approximately 4,000 NASF grows to approximately 6,600 Gross Square Feet (GSF) when adding supporting spaces like utility rooms and circulation. It is appropriate for ISU and Bannock County to identify a space that accommodates this square footage and four options were tested by the design team.

Three locations within the Roy F. Christensen (RFC) Complex and one location at the Business Technology Center were identified for consideration by the University. Upon testing the spaces, three themes emerged. First, that the RFC would create an on-campus visibility that may not be viewed positively by students, staff, and visitors. Second, that the layouts within the RFC were not as operationally ideal when compared to the layout offered at the Business Technology Center. Finally, that costs for renovating the two different buildings are in general alignment.

Due to these factors, it is recommended that ISU and Bannock County continue to discuss how to renovate and occupy the south wing of the Business Technology Center for this new autopsy program. As the County's goal to occupy the facility by the end of 2025, these discussions should continue at a regular frequency so that selection of design and construction teams can be underway soon.

Ensuring that the medicolegal autopsy needs are appropriately accommodated for eastern Idaho is of utmost importance for both Bannock County and ISU. Although this regional operation will not provide investigative services, the community would greatly benefit from better access to autopsies. The emotional needs of the families and health of the community are at stake, and this report outlines an approach to addressing those needs.

KEY FINDINGS

- The region is expected to see continued growth over the next three decades.
- Autopsy demand from Bannock and 15 partner counties in the region needs to increase to justify a full load for a Forensic Pathologist.
- Renovation of vacant space on the ISU campus is a valid option for development.
- Overall project cost is approximately $9 million for renovating an existing building, but additional dollars would be needed to build a new structure and site.

PLACER COUNTY SHERIFF CORONER'S FACILITY

SECTION 01

BACKGROUND INFORMATION

ISU & BANNOCK COUNTY VISION & GOALS

- Enhancing accessfor Citizens of Southeast Idaho
- Support ISU academic and research efforts related to forensic science
- Collaboration within ISU and establish new education programs
- Identify research and academic connections between the County and University
- Space for state-of the- art lab facility and partnering for success
- Provide a needed service to the region
- Collaborative partnership
- Project support from Governor Timely resolution of cases Example for other areas of Idaho

IMPORTANT ISSUES TO OVERCOME

- Ensuring **sufficient resources** to design and operate the facility
- Consistent leadership from the beginning to a "**self-sustaining**" end
- Identifying the best location
- Finding the right space on campus meeting the County's needs
- Appropriate **funding**
- Location that is not disruptive to faculty and students
- **Funding** for the project
- County goal for sel-fsustaining program

HOW WILL THIS PROJECT SUPPORT YOUR MISSION?

- Allow collaboration with Health Science Programs and influence recruiting / retention
- Provides a research resource for faculty and students
- Collaboration aligns with health science mission in medical anthro, criminology, and College of Tech
- Opportunity to build a relationship with the County and surrounding communitiesEducational opportunity for the University
- Medial Lab Sciences program synergy as a learning and training environment
- Expand public awareness of Health Professions complexity and programs in MDI
- Educational Opportunities

WHAT SHOULD THIS FACILITY COMMUNICATE?

TO THE COMMUNITY

- Resource for SE Idaho
- Partnership with the University and SE Idaho community at large
- Collaboration between local law enforcement with ISU extends a community service mission
- A joint communication plan between the County and ISU is needed
- Enhance the state's mission to provide safety and support
- That the facility is not operated by ISU
- Showcases the latest technology
- County intent to work with ISU communications team

WHAT SHOULD THIS FACILITY COMMUNICATE?

TO THE UNIVERSITY

- **Partner in Research, innovation, and learning**
- ISU provides a service that **supports teaching and research purposes**
- Opportunity for **education and research** with an important community partnership
- A joint communication plan between the County and ISU is needed
- Partnership, stewardship within facilities, and collaboration
- Provides a muchneeded community service and enhancement of ISU's educational mission
- Showcases the latest technology

WHAT SHOULD THIS FACILITY COMMUNICATE?

TO STAFF

- **Partner in Research, innovation, and learning**
- Town/Gown relationships are important to develop and maintain; mutually-beneficial
- "SAA"
- A joint communication plan between the County and ISU is needed
- Facility is appropriate for County to accomplish their work and well-funded
- That the facility is not operated by ISU
- Showcases the latest technology

JOHNSON COUNTY MEDICAL EXAMINER'S FACILITY

HAMILTON COUNTY CORONER'S OFFICE

SECTION 02

ANALYSIS

To ensure public health and safety, the autopsy facility must have capacity to respond to current, as well as future demands. To project the need, this analysis looked at several different categories of information including current conditions, projected regionwide population growth, and historical national trends.

INDUSTRY STANDARDS

Facility benchmarks and standards were reviewed in relation to the National Association of Medical Examiners (NAME) accreditation standards. Based primarily on population growth projections and historical data for caseload, and staffing costs, the study evaluated the potential 30-year growth projection for administrative, morgue, autopsy, and building support functions to the year 2052. Recommendations from the Scientific Working Group for Medicolegal Death Investigation (SWGMDI), supported by the National Institute of Justice (NIJ), were evaluated for this Needs Assessment in benchmarking a regional forensic center.

HAMILTON COUNTY CORONER'S OFFICE

SERVICE AREA

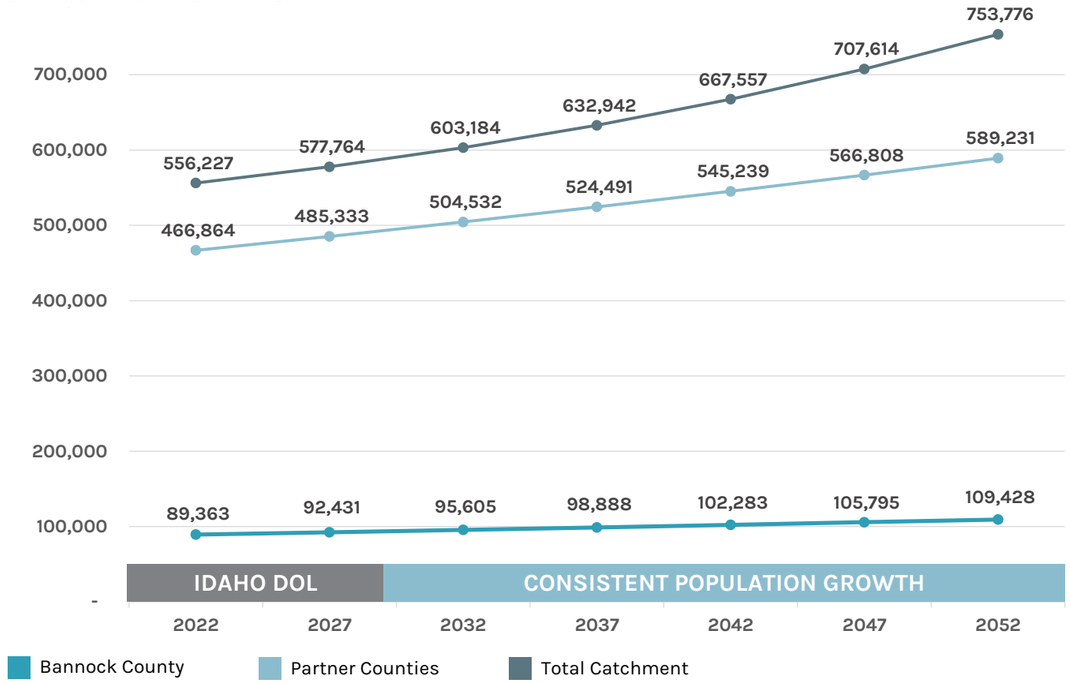
When considering the potential decedent demand, it is important to consider how far decedents will be transported to reach the autopsy facility. The National Association of Medical Examiners (NAME) suggests that the distance be limited to 100-miles to prevent excessive transport costs. Due to the location of current autopsy providers in the state, the eastern portion of Idaho is challenged to stay within this distance limit. Although not all counties expected to send decedents to the facility are within the 100-mile distance surrounding Bannock County, this new facility will greatly reduce transport costs for the counties sending decedents for autopsy.

Counties in the surrounding region that will send decedents to this facility are part of a group that are sometimes referred to as the "catchment" area. In addition to Bannock County, fifteen other counties are expected to send decedents to the facility for autopsy and are as indicated in the graphic below.

COUNTY SERVICE AREA

POPULATION GROWTH

BANNOCK COUNTY & PARTNERS



HISTORICAL DEMAND ANALYSIS

Recent autopsy rates for Bannock County and the regional partners have been quite low when compared to NAME guidelines for autopsies per 1,000 people in the population. This study suggests planning around an increased rate of autopsies based on input that counties in the catchment would be interested in sending a greater number of decedents for autopsy.

DECENT LOAD

To maintain NAME accreditation, forensic pathologists should not exceed 250 full autopsies per year, extending that quantity to 325 under some circumstances. It is important that the facility plan to utilize the one planned forensic pathologist to the greatest extent possible and that would elevate the calculated autopsy rate to between 0.5 to 0.75:1,000 for Bannock County and 0.25 to 0.5:1,000 for the remaining counties.

Historical 5-Year Average Autopsy Rate : 1,000 in the Population							
Bannock County Rate	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total Autopsies	14	14	15	15	16	17	17
Partner Counties Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	69	72	75	78	81	84	88
Combined Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	83	87	90	94	97	101	105

Calculated Rate	2022	2027	2032	2037	2042	2047	2052
0.5 Bannock + 0.25 Partners	161	168	174	181	187	195	202
0.75 Bannock + 0.5 Partners	300	312	324	336	349	363	377

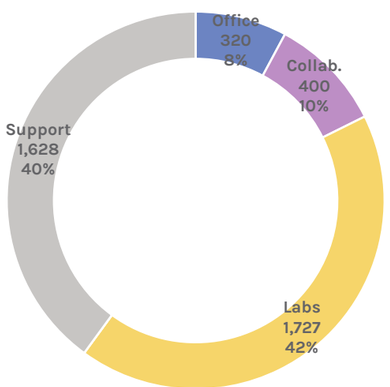
PRELIMINARY SPACE PROGRAM

Commonly, facilities that conduct autopsies would be compared to peer operations by demand and services provided. Typically, this would include planning space for staff members that would conduct investigations, provide exclusively administrative support, or have an area of focus in anthropology. This regional autopsy facility is envisioned to only provide autopsy services, with the Coroner from the submitting county handling communication with families and the legal system. As such, a direct area comparison to peer facilities is unlikely to yield adequate space to conduct the necessary tasks and an initial space list has been developed.

The summary included below identifies a collection of spaces that equate to approximately 4,000 Net Assignable Square Feet (NASF). This area is exclusive of the spaces which directly support the program. To understand the overall, Gross Square Footage (GSF) required to properly make the building function, an efficiency of 62% is applied to the NASF. Based on this efficiency, the autopsy program would require between 6,000 and 7,000 GSF.

Southeast Idaho Regional Autopsy Facility at ISU

Facility Summary	Staff	Grossing	Total NASF	Original NASF	Original GSF	Total GSF
Regional Autopsy Program Spaces	3	62%	4,075	0		6,572
Facility TOTAL	**3**	62%	**4,075**	0	0	**6,572**



	Office	Collab.	Labs	Edu	Support
	320	400	1,727	0	1,628
Regional Autopsy Facility	320	400	1,727	0	1,628

100%	Autopsy Facility	4,075	
		4,075	

Southeast Idaho Regional Autopsy Facility at ISU

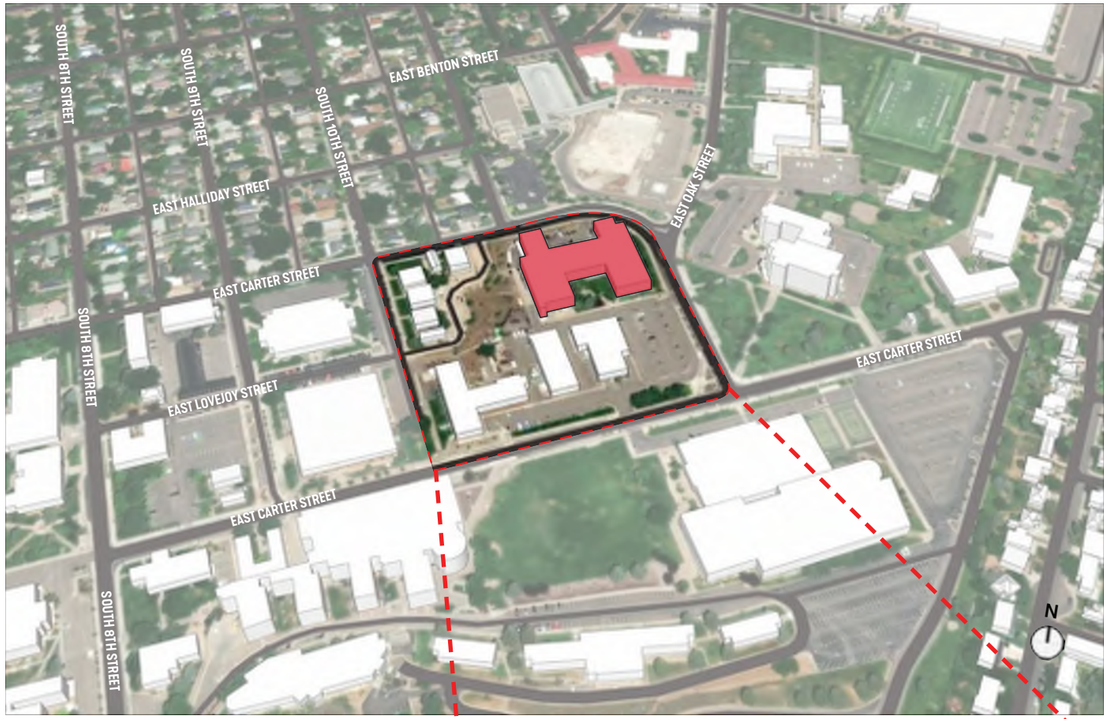
Regional Autopsy Facility

Space Name	Staff	NSF	Qty.	Total NSF	NASF	Total	Comments
Office							
Chief Medical Examiner	1	150	1	150	1.3 195		Includes area for microscope
Autopsy Assistant / Admin	2	48	2	96	1.3 125		
Sub-Total	3			246		320	
Collaboration							
Lobby		120	1	120	1.0 120		
Family Bereavement Room		120	1	120	1.0 120		Video Conference Capability
Break Room		100	1	100	1.0 100		
Autopsy Viewing		60	1	60	1.0 60		Viewing at grade / no elevated platform
Sub-Total	0			400		400	
Laboratory							
Receiving / Release Room		242	1	242	1.0 242		
X-Ray Room		363	1	363	1.0 363		
Decedent Cooler		396	1	396	1.0 396		Storage for 12 on carriers
General Autopsy		272	1	272	1.0 272		
General Autopsy Support		91	1	91	1.0 91		
Isolation Autopsy		272	1	272	1.0 272		
Isolation Autopsy Support		91	1	91	1.0 91		Small space for anthro
Sub-Total	0			1,727		1,727	
Support							
Sally Port		484	1	484	1.0 484		
Cart Wash Alcove		121	1	121	1.0 121		
Evidence and Evidence Drying		121	1	121	1.0 121		
Tissue / Slide and Block Storage		121	1	121	1.0 121		
Records Storage		121	1	121	1.0 121		
Autopsy Supply Storage		121	1	121	1.0 121		
Biological Waste Storage		60	1	60	1.0 60		
PPE On/Off		121	1	121	1.0 121		Includes laundry
Locker Area		100	1	100	1.0 100		Non-Gender Assigned
Changing Room		40	1	40	1.0 40		Non-Gender Assigned
Shower Room		100	1	100	1.0 100		Non-Gender Assigned
Office Supply Storage		18	1	18	1.0 18		Closet
Maintenance Storage		100	1	100	1.0 100		
Sub-Total	0			1,628		1,628	
TOTAL	3			4,001		4,075	

SECTION 03

BUILDING UNDER CONSIDERATION

ROY F. CHRISTENSEN COMPLEX



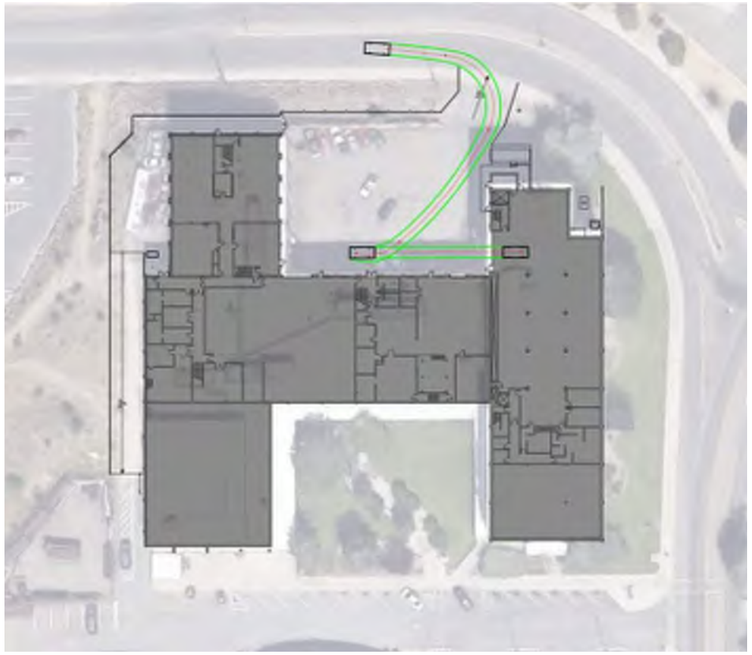
Located on the main ISU campus, the Roy F. Christensen Complex is a multi-level educational building bounded by East Carter and East Oak streets on the north. Due to the site's topography, the building has two floors that are partially exposed to the northwest, but considered basements. Three areas on the lowest level, basement level 2, are being considered for use within this feasibility assessment.

LOCATION OPTION 1

ROY F. CHRISTENSEN COMPLEX - BASEMENT LEVEL 2

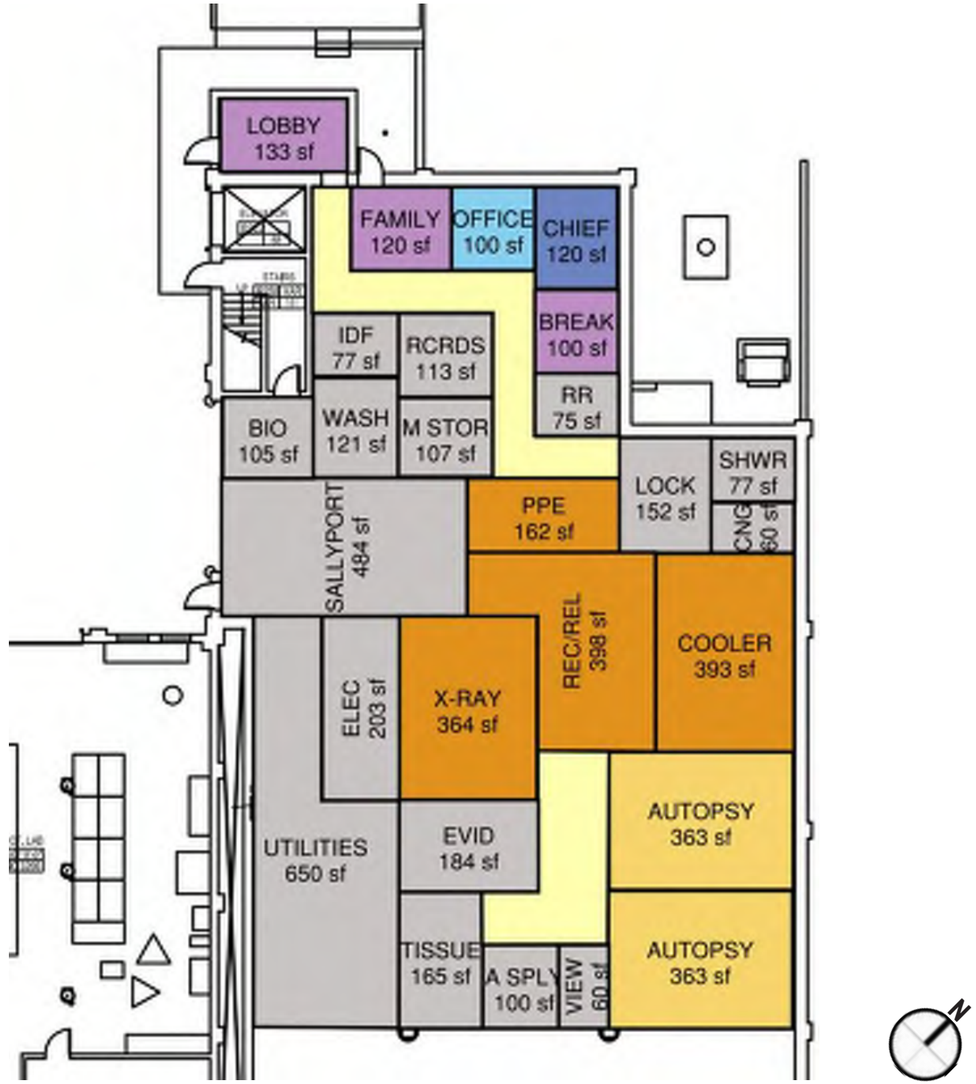
AREA IDENTIFIED:

10,800 SF



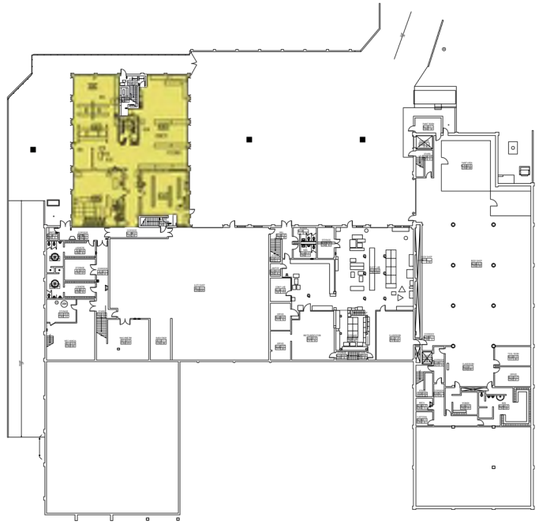
BLOCK PLAN LAYOUT

The 10,800 SF available for the initial option within the Roy F. Christensen (RFC) Complex is more than adequate to support the overall space need. Locating the autopsy facility closer to the north vehicular access area is important due to the need for receiving and releasing decedents from transport vehicles. This location is also slightly irregular in shape which impacts the organization of the spaces and their dimensions leading to a less than ideal plan. Additionally, the lobby entrance is disconnected from the existing parking area and may lead to some confusion for new visitors to the facility.



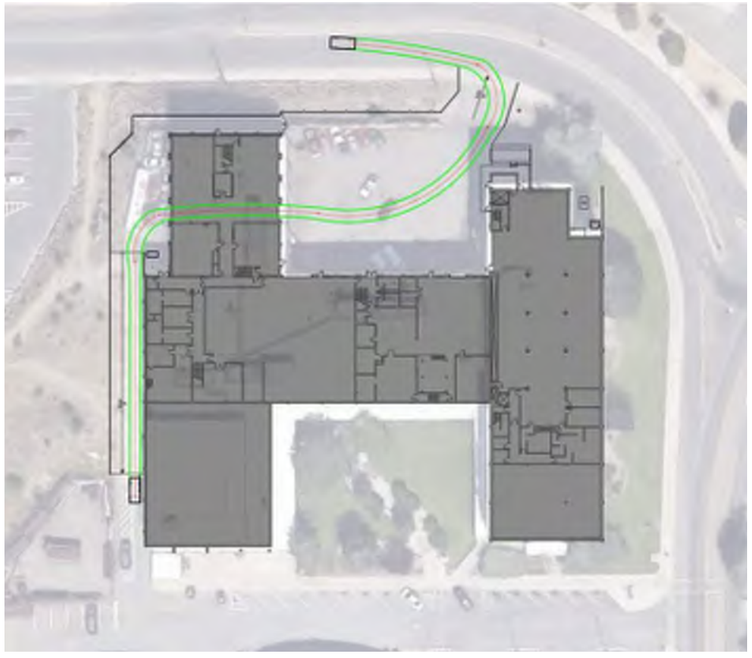
LOCATION OPTION 2

ROY F. CHRISTENSEN COMPLEX - BASEMENT LEVEL 2



AREA IDENTIFIED:

5,600 SF



SITE CIRCULATION

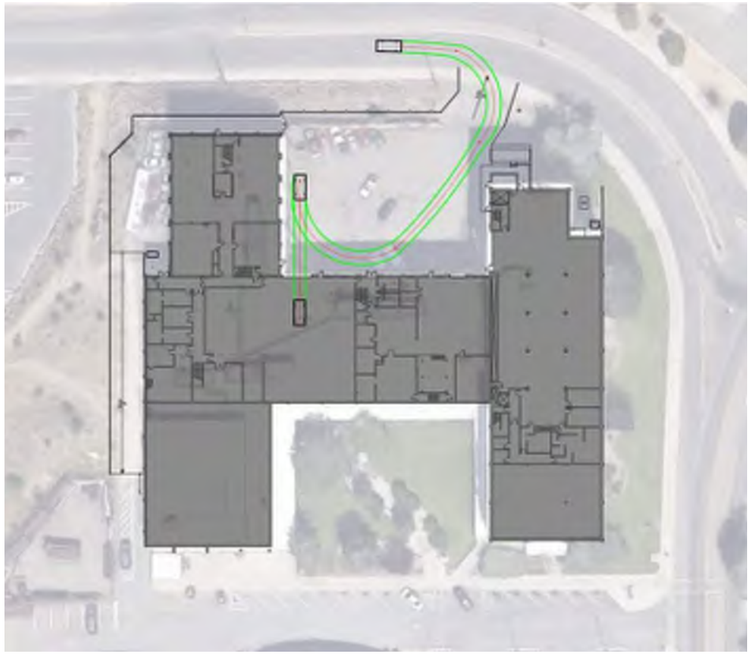
The second option within the RFC affords approximately 5,600 SF, slightly less than what is required by program. This forces the space to grow into the main body of the building and creating necessary modifications to existing egress corridors. Although this layout allows for a through drive for the sallyport, the building width causes it to be oversized. Also, this traffic pattern for transport vehicles sends them into the south parking area and therefore are much more visible for students, staff, and other visitors to campus.

LOCATION OPTION 3

ROY F. CHRISTENSEN COMPLEX - BASEMENT LEVEL 2

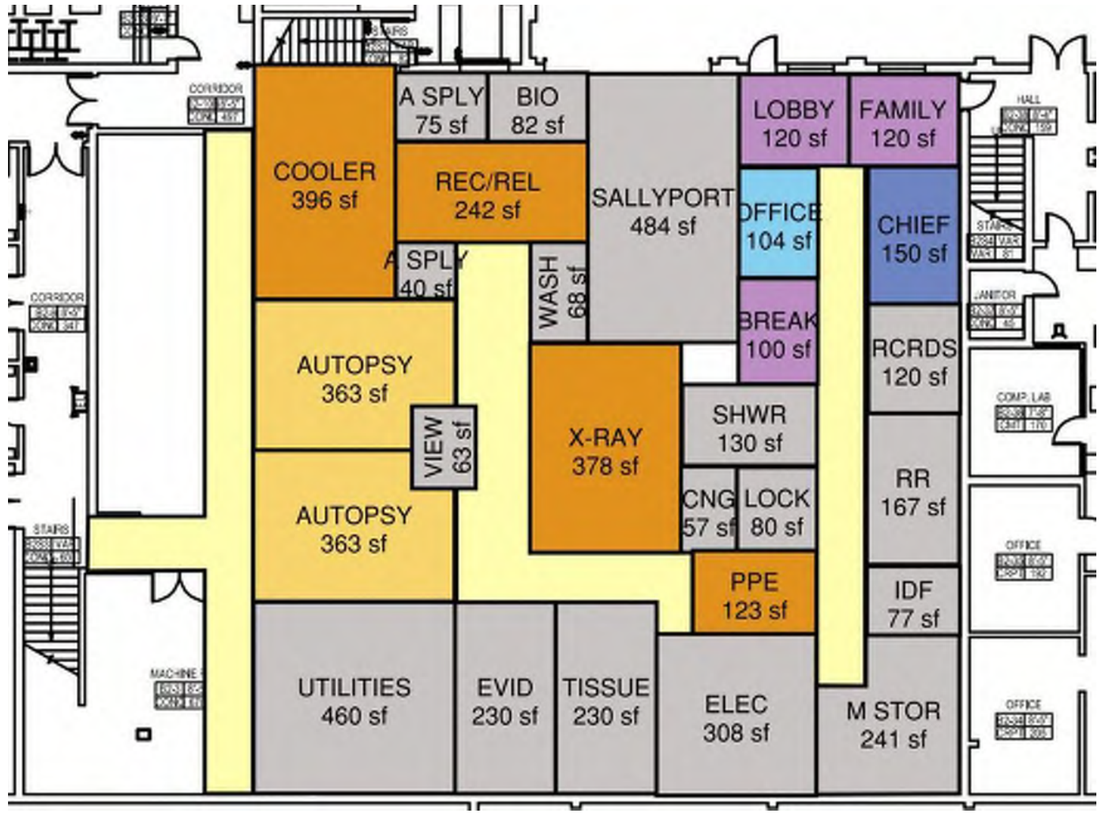
AREA IDENTIFIED:

10,600 SF



SITE CIRCULATION

The third and final option within the RFC provides a much more rectilinear area for use and the 6,200 SF is very close to what was identified in the space list. This improves the space adjacencies, but like all other options for this building, affords little options for natural daylight. Offloading decedents causes a less than ideal path to the decedent cooler and autopsy viewing requires law enforcement to be escorted through the morgue.



PLACER COUNTY SHEIFF CORNER'S FACILITY

BUSINESS TECH CENTER

Also evaluated for the autopsy facility was an off-campus facility, the Business Technology Center. This single level building is located along Alvin Ricken Drive to the east of the ISU campus.

The building is organized into two wings, connected by a link for primary building entry. Space available for this evaluation is available in the south wing, with good proximity to the existing loading and receiving area.

LOCATION OPTION 4

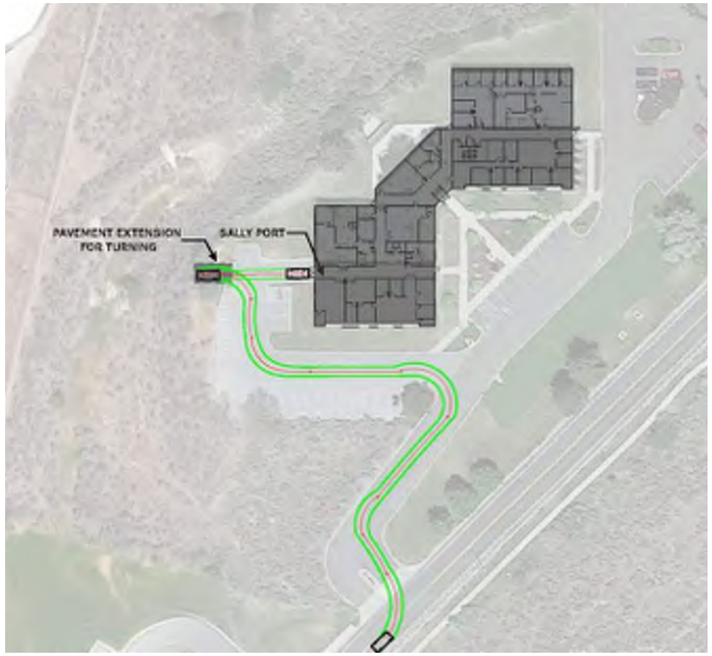
BUSINESS TECHNOLOGY CENTER - LEVEL 1

UNUSED AREA:

1,000 SF

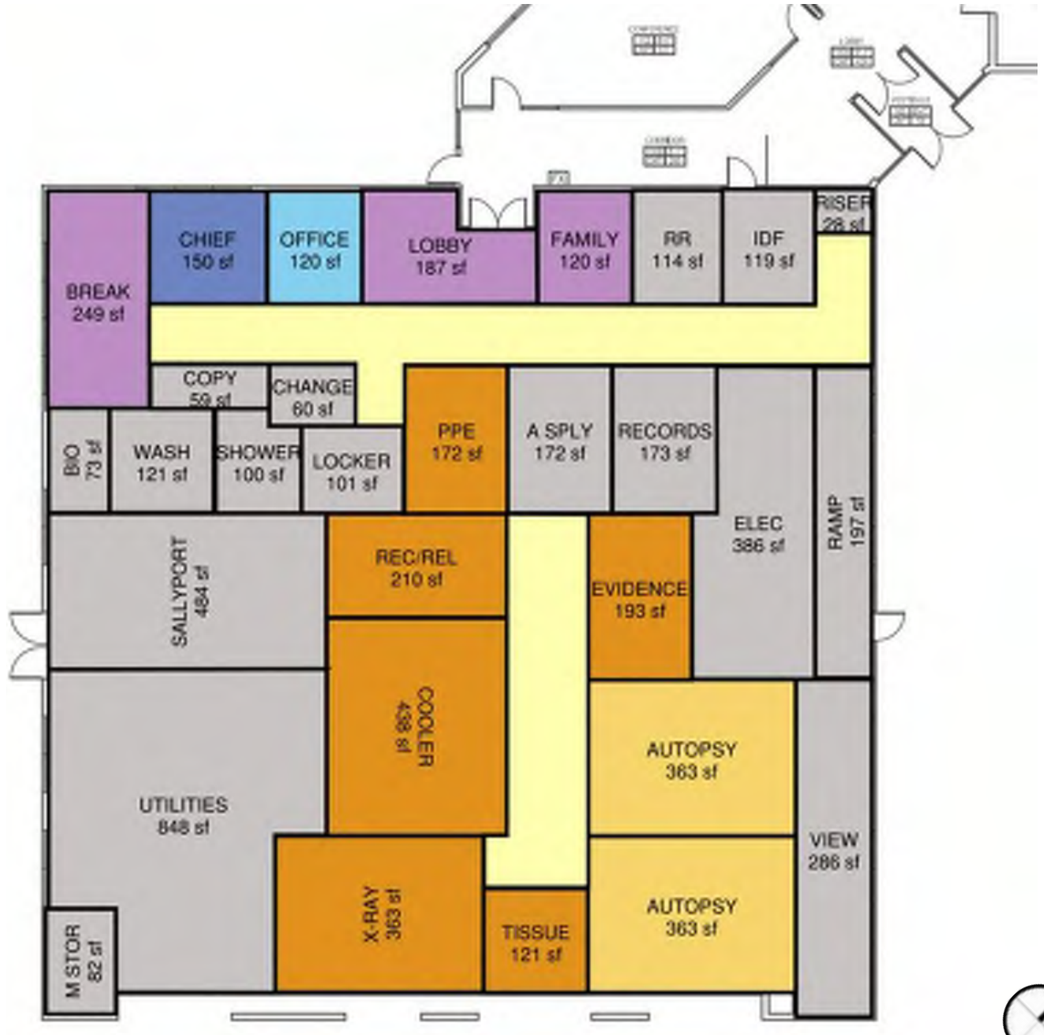
AREA IDENTIFIED:

7,500 SF



SITE CIRCULATION

This off-campus location at the Business Technology Center has a number of positive aspects. The overall shape of the space and existing dimensions allow for an efficient layout along with ample size at 7,500 SF. The access to daylight along all exterior elevations will be seen positively by staff and a prominent building entry will aid in wayfinding for visitors. Receiving and release of decedents is organized in a streamlined manner. One additional benefit that the options at the RFC couldn't achieve is that observation by law enforcement can occur outside the morgue from an elevated viewing platform.



SECTION 04

SYSTEM ASSUMPTIONS

Mechanical & Plumbing Systems

Existing Systems Overview

The design team completed an assessment of two sites to determine if a medical death investigation facility can function in the spaces available. Note that the current mechanical and plumbing systems support education, vocational, and office-related functions. Given that none of these spaces were designed for medical death investigation or laboratories, none of the existing mechanical systems are viable to support this program.

Aspects of medical death investigation function like laboratories, requiring large amounts of single pass outside air to ventilate the spaces along with a requirement by code to employ energy recovery to reduce operating costs. The demand for hot water is significantly higher for medical death investigation programs than for other facilities. This necessitates the need for a larger, preferably instantaneous hot water system to keep up with the increased demand.

At the same time, the existing facilities have limitations on the electrical power available. To minimize the impact on the electrical systems, and given this is a predominantly heating environment, the heating of outside air, sally port heating, and domestic hot water heating will be provided by natural gas that is available at both sites. While the size of the gas meter will likely need to be increased, we do not foresee an issue in supporting the program given the limited size of the building program. Local zone heating beyond the sally port will be electric to reduce first cost and simplify building operations.

A dedicated outside air system will allow for code-required energy recovery while improving the overall energy efficiency of the building. This same system can also provide for minimum ventilation to office and support programs, further improving building performance while adding another layer of protection against freezing outdoor conditions. The recommended approach utilizes fixed aluminum plates to provide for sensible energy recovery with no moving parts to reduce maintenance and limit air leakage. Negative pressurization for odorous exhaust systems will further ensure that the minimal air leakage through the recovery unit will always be from clean to dirty.

None of the existing sites have stand-by power. While work in the autopsy and support spaces can be suspended with a loss of power, stand-by power is needed for decedent walk-in coolers and critical data and monitoring systems. To minimize the requirements for stand-by power, dedicated systems will be provided for the walk-in cooler, data, and core electrical spaces. Given both the dry climate of Pocatello together with the use of an enclosed sally port, we do not anticipate the need for a dehumidifier within the decedent cooler.

While a more detailed investigation is needed for the domestic water and sanitary waste systems, we do not foresee an issue with this system being able to support the medical death investigation program, though significant changes will be required to support the autopsy stations, flushable floor drains, lockers, and showers needed for this facility. Accessible isolation valves for the domestic water system will be provided for key program areas to limit disruption to operations with equipment service and for ready isolation in the event of a system failure.

Mechanical and plumbing systems will be selected to configured to ease maintenance. Core mechanical and plumbing rooms will ideally be accessible from outside the medical death investigation suite, limiting the need for maintenance staff to enter and disrupt building operation.

Proposed Mechanical System Components

Note that any sizing listed below for equipment is preliminary and will be evaluated over the course of design to ensure that systems are right-sized needs and account for any planned growth in the future.

- (1) 10,000 CFM sensible-only recovery unit (Aldes Model CW10000e) with outdoor construction, fixed aluminum plates, intake hood, pre-filters, but without dedicated supply or exhaust fans.
- (2) 5,000 CFM packaged dedicated outside air units (Greenheck Model RV) with variable speed supply fans, 12.5-ton packaged DX cooling, and indirect gas-fired heater. Provide unit with an airflow measuring stations. Note conditioned outside air is ducted on the roof from recovery unit to inlet of dedicated outside air unit.
- (2) 4,500 CFM 7.5 HP utility set exhaust fans with remote variable-speed drives and exhaust stacks. Exhaust stacks to be a minimum of 10 FT above the roof with a discharge nozzle sized for 4,500

FPM with a dilution windbands to allow for variable system flow without supplemental bypass air. Exhaust duct is routed from the building to the recovery unit, then from the recovery unit to the inlet of the fans. Provide fans with airflow measuring stations. Note intent for exhaust fans is to also provide for Sally Port and locker area exhaust ventilation.

- Outdoor ductwork to be double wall insulated with a sloped top to shed water and reinforced to support the anticipated snow load. Ductwork support to utilize non-penetrating pad type supports with Unistrut framing and straps to ensure ductwork maintains its shape and is not impacted by wind loads.
- (1) 3-ton DX split system fan coil unit with indirect gas-fired heating for Sally Port. Primary ventilation is provided from dedicated outside air systems via a cooling only VAV unit. Provide low point exhaust and carbon monoxide sensor to ramp up ventilation as required. Provide fans with solid state motors and local speed controller for optimized system balancing. Provide 2-stage filtration, MERV 8/14.
- (3) 2-ton DX split system fan coil unit with indirect gas-fired heating for non-lab spaces. Primary air for this system is provided via the dedicated outside air system via a cooling only VAV unit. Provide fans with solid state motors and local speed controller for optimized system balancing. Provide 2-stage filtration, MERV 8/14.
- (4) sets of standard-speed laboratory supply + exhaust venturi valves with electric reheat coils with SCR controller, dedicated laboratory controllers, and LED display with pressure monitoring and airflow adjustment. Valves controlled to maintain fixed airflow offset.
- (1) set of high-speed laboratory supply + exhaust venturi valves with electric reheat coils with SCR controller, dedicated laboratory controllers, and LED display with pressure monitoring and airflow adjustment. Valves have dynamic pressure control to ensure morgue and autopsy spaces always remains negative.
- Electric cabinet unit heaters at entry vestibules and lobby spaces.
- Radiant gas-fired heaters at sally port roll-up doors to decrease the response time and protect against freezing when the doors are opened. Provide end switches for garage doors.
- Local building controller to monitor building systems and provide alarms. Provide visual and audible alarms with carbon monoxide detection in the Sally Port. System to also provide for trending, energy monitoring, and scheduling for maintenance, filter replacement, etc.

Proposed Plumbing System Components

Note that any sizing listed below for equipment is preliminary and will be evaluated over the course of design to ensure that systems are right-sized needs and account for any planned growth in the future.

- Provide accessible shut-off valves without ladders for domestic hot and cold water serving the different program areas (locker/shower/restroom and medical death investigation suite). Provide a dedicated water meter for this suite to document water use.
- Provide hose bibs in the sally port, autopsy, and cart washing area (with hot water available in the autopsy and cart washing areas).
- Modify the existing sanitary waste system to support the building program.
- Provide flushable floor drains within the autopsy space and isolation zones to ensure the floor drains are clean at the end of each day.
- Replace the existing natural gas meter (and natural gas line from street if needed) with a new natural gas meter supporting both the existing building and new program. Provide a dedicated gas line and flow meter for this program so that natural gas usage may be documented. Natural gas to then be extended to mechanical and plumbing systems serving this program.
- Provide a recirculating, gas-fired instantaneous water heater system designed for a minimum of 6 GPM. During the autopsy procedure, it is common for hot water to be running continuously at the station, potentially depleting the capacity of a storage-type water heater.
- Emergency fixtures shall be incorporated in spaces where staff could encounter body fluids or chemicals. Combination emergency shower eye wash units shall be incorporated in autopsy spaces, with eye wash units incorporated where decedent movement may inadvertently cause substances from splashing.

Fire Protection Systems

Existing Systems Overview

The existing buildings are protected by a automatic fire protection sprinkler system. The existing sprinkler systems will require modification to match the proposed program requirements and new occupancy hazards. Sprinklers, piping, hangers, control valves, and appurtenances shall be modified to provide a complete hydraulically calculated automatic sprinkler system in accordance with NFPA 13 and Idaho State University Design Standards as required. Degraded equipment and appurtenances will need to be replaced as necessary to support the modification and restoration of the existing sprinkler system.

Existing waterflow indication, and tamper switch position supervisory signals will be monitored by the existing fire alarm control panels. Electrical connections between these devices and these buildings fire alarm systems shall be maintained, unless modified, and restored during system commissioning.

The Roy F. Christensen (RFC) building will need to be provided with a new dry-pipe sprinkler system for protection of the sally port and outdoor canopies as required by NFPA 13 to protect against freezing of the sprinkler system.

All light and/or ordinary hazard areas will be provided with quick response sprinklers in both buildings.

The following pipe schedule shall be followed:

- Wet sprinkler pipe with a diameter of less than 2.5” shall be schedule 40 black steel. Wet sprinkler pipe with a diameter of 2.5” and larger may be schedule 10 or schedule 40 pipe. Roll grooves are permitted for all pipe both Schedule 10 and 40. Threaded pipe is only permitted for Schedule 40 pipe. Cut grooves are permitted for Schedule 40 pipe size 4” and larger only.

Electrical Systems

Existing System Overview

The design team completed an engineering assessment of the existing buildings to verify that an autopsy facility can function in the spaces available on the ISU campus and understand the condition of existing equipment. Following the assessment, recommendations include new and updated infrastructure from within the existing infrastructure for the new facility.

The observation included a site walk on November 8th, 2022, with a general survey of existing equipment in the proposed spaces. The building was mostly unoccupied during observation. It is not known what version of the National Electrical Code or International Building Code the original facility was designed under. This assessment is based on the most recent version of the Idaho State adopted codes: IECC 2018, IBC 2018, NEC 2017, as well as current industry standards.

Site Utilities

Figure 1 RFC Electrical Utility Vault

Figure 2 RFC Pad Mounted 500 kVA MV Transformer

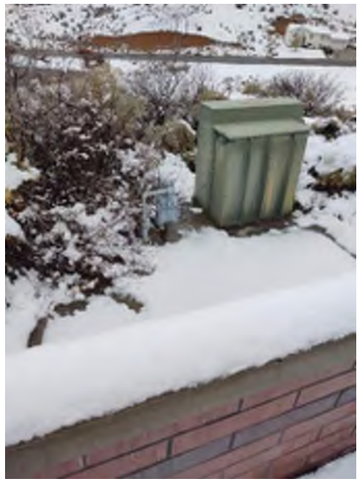


Figure 3 Business Technology Center Pad Mounted 150kVA MV Transformer

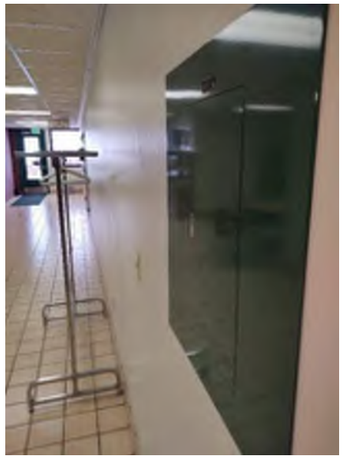
Both sites are served by Idaho Power. The Roy F. Christensen (RFC) building is serviced by multiple MV transformers, one transformer is pad mounted above grade located north of the building and the other transformers are in a vault in the courtyard south of the building, inaccessible at the time of the visit. The Business Technology building has a 150kVA MV transformer located west, slightly downhill from the building. Also located at this location is the electrical service for this building. Each wing of the building as a spare 2" conduit from the service to the inside of the building in the west wing, stubbed into the janitor's closet.

Prior to continual use of the utility transformer the equipment should be tested and reviewed by Idaho Power. Transformers in the vault at the RFC are planned to be replaced as part of a maintenance program for the building. The vault equipment at the RFC should also be tested and replaced as needed, including sump pump and monitoring equipment.

Site Criteria

The coroner's facility estimated load is between 100KVA to 200KVA, the service to the building needs to support this load. This estimate range is dependent on the equipment to be installed. Some X-ray equipment have a very high load while others do not, and the size and operation of the decedent cooler changes the overall demand. If the load is within 200KVA, capacity appears to exist at the RFC. The electrical service to the Business Technology building would require updating to account for this new, increased load.

Power Distribution



igure 4 Business Technology Center Recessed Panel CI, typical of panels in this building.

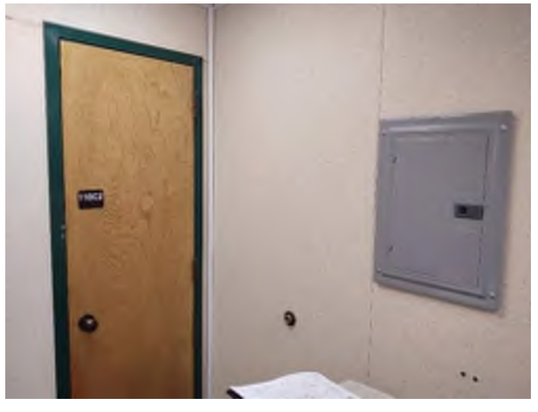


Figure 5 Business Technology Center Recessed Panel F, located in demountable wall.

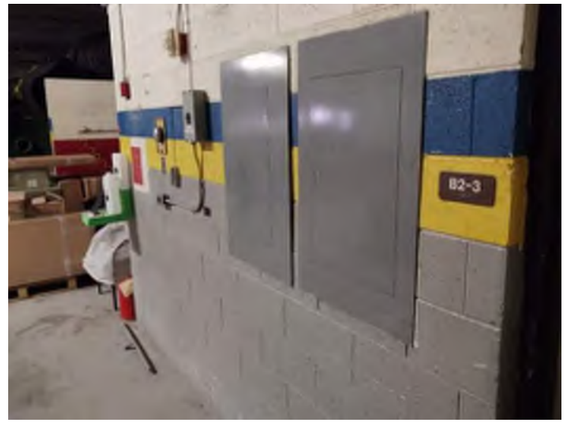


Figure 6 RFC South Recessed Panels, typical of panels in RFC.

Both the RFC and the Business Technology buildings have panels recessed into walls. In the west wing of the RFC, the panels are rated at 225A and in the east wing the panels are rated at 140A since the branch busbars feeding them are only rated for 140A. In the Business Technology building the panels are rated between 125A and 60A.

The equipment seemed to be in good order and well maintained. It is recommended that equipment beyond the recommended lifespan be replaced to provide optimal safety performance and efficiency for any renovation.

In addition to existing conditions, it is recommended that systems be validated and brought up to code in the area to be used for the autopsy facility. This includes but is not limited to a full coordination study with Arc-Flash labeling, Energy Reduction devices, infrared scanning, and others as appropriate. Since there are no consolidated one-line diagrams available, it is recommended that a contractor be hired to as-built existing systems to remain and devices in detail within existing sections of the buildings to be repurposed.

The RFC building spaces are aged with panels located within the space serving equipment and receptacles. Most receptacles and conduits are surface mounted. The columns in the northwest section the building have power run within the columns. The spaces at RFC are open and have standard utility lighting and power.

The Business Technology building has equipment and devices original to the building which was constructed

in the 1980's. A few additional panels were installed at a later date. There are modular walls with receptacles and data ports which appear to be in good condition. Panel F is located in one of the modular walls. Some surface mounted receptacles and conduits are located around the exterior walls, and power poles are also utilized in some rooms. Although poles are effective for distributing power, they can allow the movement of insects due to challenging sealing details, an important consideration in an autopsy facility. There are outlets within 6' of a sink that do not indicate GFCI protection.

Backup Emergency Power

Neither the RFC nor the Business Technology building have emergency backup power. This redundancy should be added to provide backup power for the new facility.

Uninterruptible Power Supply (UPS)

Neither the RFC nor the Business Technology building have UPS units that will maintain continuous operation of the AV/IT equipment or other important equipment needed for the new facility.

Metering

The metering of the equipment was not observed during the site assessment and load information was not available before the observation. The 12-month and 30-day Peak Demand can be requested by an Authorized Owner Representative from the Idaho Power key account manager. This information will verify if a service will need to be updated based on current loads.

Grounding

The grounding and bonding system was not clearly observed. Grounding buss bars are not provided in all electrical equipment locations and rooms.

It is recommended that the grounding system be included in any future as-built documentation report.

Lightning Protection

There is not a lightning protection system installed in these buildings.

Based on the approximate dimensions of the existing building, value of the components of the building, and location VAISALA National Lightning Protection Network analysis for Pocatello, the recommendation is that a lightning protection system should be installed. ISU and Bannock county should evaluate the need as part of a risk assessment. From general observations, it did not appear many buildings in the surrounding area include lightning protection other than the Portnuef Medical Center.

Lighting

The following describes the existing lighting and lighting control system condition.

Exterior Illumination

Figure 7 RFC Parking Lot Lighting Mounted on Roof

Figure 8 Business Technology Site lighting, Pole Light and Wall Pack

Although no nighttime observation was conducted, exterior lighting is provided by pole lights and building mounted lights. The RFC building may require additional lighting mounted on the building to provide sufficient visibility around the planned sallyport and the ramp on the west side of the building. The Business Technology Center may need supplemental lighting in the parking lot and around the planned sallyport.

There is potential energy and maintenance efficiencies with providing a full LED system that should be considered for any future exterior or parking lot lighting updates.

Interior Illumination

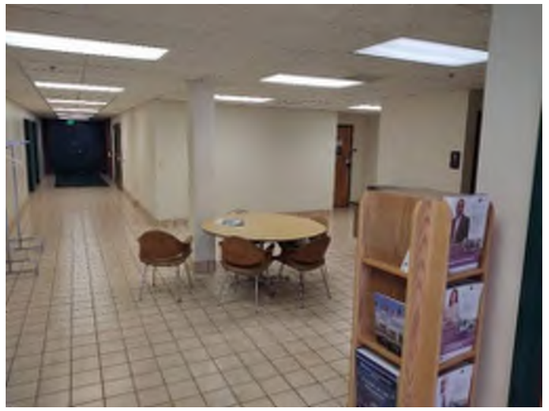


Figure 9 Business Technology Center South Wing Corridor and Break Area Lighting

Figure 10 Business Technology Center Main Entrance Lighting

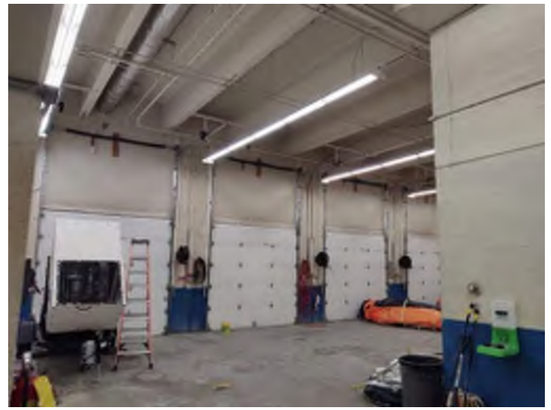


Figure 11 RFC Low Bay Lighting in the West side of RFC

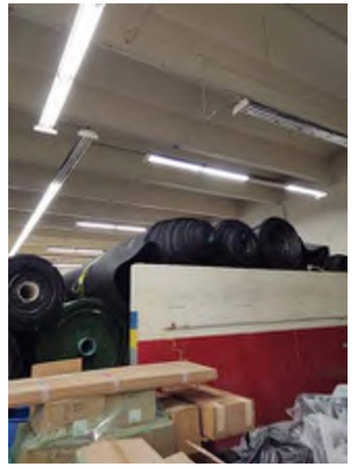


Figure 12 RFC Low Bay Lighting in the Southwest Side of RFC

Figure 13 RFC Low Bay Metal Halide Light fixtures in the East area of RFC

The west area of RFC has low bay linear lights to illuminate the area. The east area of RFC has older metal halide lights mounted from the bottom of a drop ceiling. The current lighting will not be appropriate or adequate for the new autopsy facility. These lights should be replaced with a new LED lighting layout to comply with current energy code and illuminate individual areas based on the specific activities within the areas.

Lighting in the Business Technology building has mostly 2x4 recessed light fixtures, but a few areas, such as the bathrooms, a lab, and an office, that have service mounted wrap around light fixtures. The main entrance to the Business Technology building includes downlights. As with the existing RFC lighting, most of these fixtures should be replaced with a new LED lighting layout to comply with current energy code and illuminate individual areas based on the specific activities within the areas.

Controls

The lighting controls were installed at various times before the 1980's in the RFC building, and the lighting controls at the Business Technology building were installed in the 1980's. Lighting controls within these spaces are toggle switches which should be updated to comply with code for the future facility. This will include daylighting, dimming controls, occupancy sensors, and timeclocks.

Egress

It is assumed that egress lighting is provided by battery packs and bug eye emergency lights since the buildings do not have backup generators or centralized inverter systems. The exit signs look to be in working order, but the egress lighting system was not tested. Egress lighting will be replaced due to adjustments to the layout and surrounding finish surfaces.

Fire Alarm System

The RFC and Business Technology buildings have existing fire alarm systems that are connected to the University's central monitoring station (Bosch D6600 System) that provides monitoring for these buildings. The fire alarm systems in these buildings seems to be in working order but was not verified during the site visit with no issues reported during the observation by ISU staff.

These fire alarm systems will be modified to support the program requirements and renovation in the areas of work in accordance with NFPA 72 and Idaho State University Design Standards as required. Audible/visual notification appliances and manual pull stations will be demolished and replaced to meet the new program layout. Existing smoke detectors shall remain or be replaced in all existing locations where provided as required by NFPA 72.

All sprinkler system water flow and tamper switches shall be monitored by the fire alarm system, including those in zone control assemblies, backflow preventer assemblies, and system isolation valves.

A full replacement of the fire alarm systems may be warranted with further evaluation of these systems. If replacement is pursued, all new fire control panels shall be Radionics/Bosch to ensure compatibility with the central monitoring station in accordance with Idaho State University Design Standards.

Electrical Summary

It is recommended that the new coroner's facility have an updated electrical distribution that complies with the current electrical code. This updated electrical distribution would consist of replacing the existing electrical panels and connecting them into the existing main electrical panels for the building and location chosen for the final facility. For RFC, the electrical distribution will originate at the existing main electrical panel within the building. This panel will depend on what area is to be utilized for the autopsy facility since there are multiple main electrical panels for the building. For the Business Technology building the electrical distribution will originate at the existing main electrical panel located adjacent to the MV transformer west of the building. There is an opportunity to utilize the existing spare conduit into the building to feed the new electrical requirements that exceed what the current panels can supply.

The buildings do not have generators and a generator will need to be added to serve the facility.

When the building is modified, energy efficiency updates would be required to comply with current codes, including updating to LED lighting and renovating the lighting control system.

SECTION 05

PROJECT SCHEDULE

PLACER COUNTY SHERIFF CORONER'S FACILITY

Because construction cost is so greatly impacted by project schedule and escalation, it is important to establish realistic durations for the primary steps in the overall project. This project schedule can be explained in three primary periods of procurement, design, and construction.

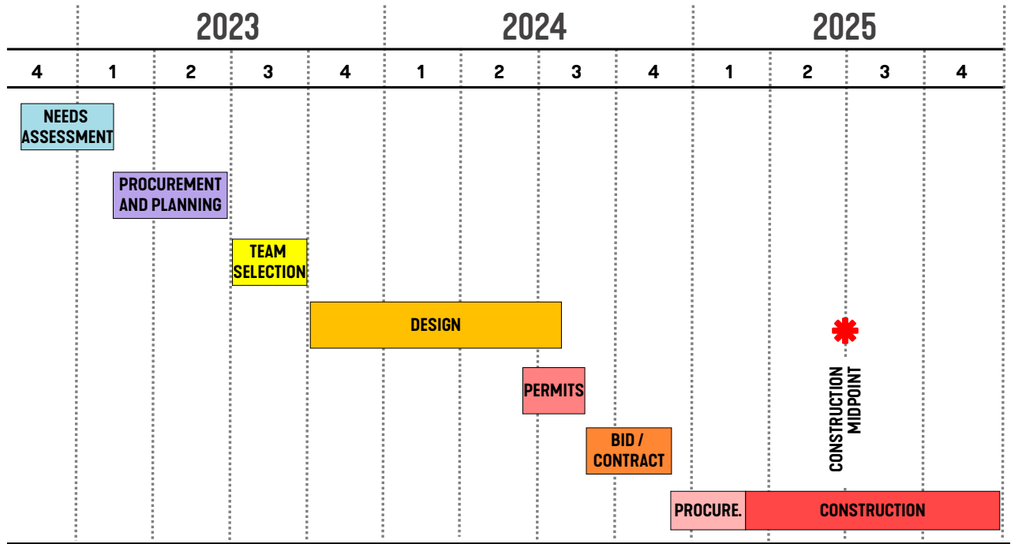
PROCUREMENT

Following the completion of this needs assessment, Bannock County leadership will undoubtedly require time to discuss the process for securing project funding, approve a contractual approach, and establish the mutually agreeable framework for operating with the surrounding Counties. Due to the ultimate goal of construction completion by the end of 2025, this procurement phase will need to be rapid and require considerable focus.

DESIGN

Following the procurement and planning phase, a design team will need to be selected as a partner of the County and University. As identified in the earlier system narratives, as-built information along with site and systems surveys will be critical for moving the project forward efficiently. The 10-month design phase includes some overlap in final Construction Document completion and the permit phase in hopes of abbreviating the overall project schedule.

ESTIMATED PROJECT SCHEDULE



CONSTRUCTION

The current construction trade availability and procurement challenges will impact small projects just as with larger projects. However, small projects will not have adequate float to adapt to long lead procurement items. Therefore, it is suggested that a period for construction startup and material procurement be incorporated before formal construction begin.

Multiple factors will impact each of the major durations and can be adjusted as the project progresses. This needs assessment attempts to provide aggressive estimates of durations due to multiple unknowns that will be realized throughout the process. Bannock County and ISU should discuss if durations for project planning and contracting will impact this schedule.

HAMILTON COUNTY CORONER'S OFFICE

SECTION 05

PROJECT COSTS

The breakdown shown on the next page indicates the projected cost of construction and total project costs for the multiple scenarios of construction. The scenarios assume construction on within two different buildings and are based on an estimated middle of 2025 construction midpoint timeline. This estimation does not include estimated costs for site procurement and assumes construction is 70% of total project costs.

SIZE

The anticipated facility size is based on a preliminary program of area and how the spaces fit within the different project sites. There are limits to how small a facility can be to adequately function and meet the needs of the region into the future, and the program identifies this minimum at 6,000 to 7,000 gross square feet. Gross Square Feet (GSF) refers to the area, measured to the outside face of the exterior walls, within a building including supporting spaces like toilet rooms and utility rooms.

CONSTRUCTION COST / PER SF

The estimated construction cost per square foot is based on construction costs for other medicolegal autopsy facilities and adjusted for conditions in the Idaho region surrounding Bannock County. Escalation within the construction marketplace has been considered in the development of the estimated construction cost.

To establish the full construction cost, the preliminary cost models were created for the four different planning options as follows:

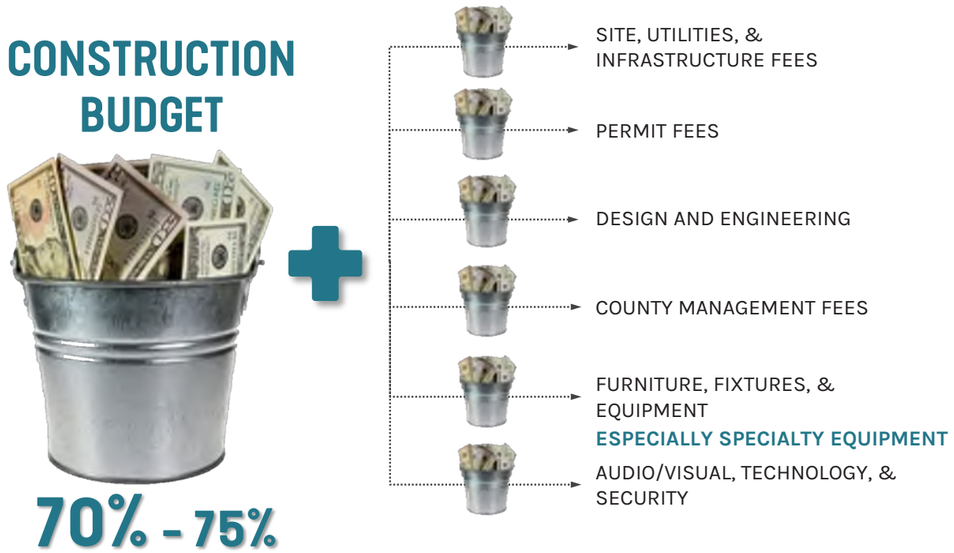
- RFC Basement Option 1
- RFC Basement Option 2
- RFC Basement Option 3
- Business Technology Center Option

PLACER COUNTY SHERIFF CORONER'S FACILITY

PROJECT COST

The estimated Construction Cost is generally between 70% and 75% of the overall cost to develop a project. The approximate 30% markup is expected to cover those items not captured in the Construction Cost including:

PROJECT COST BUCKETS



PROJECT COST SCENARIOS

The four, previously identified options have a similar cost, with the Business Technology Center being the least expensive option studied. All options are between $8.9 and $9.2 million for the interior space demolition and renovation, with limited site improvements.

For further consideration, if a new structure and shell were to be constructed, an added $1.76 million would be required. That cost would be added to the interior renovation costs and has been included for evaluation if the County chose not to construct the facility within an existing building in the ISU portfolio. Additionally, it does not include dollars for site improvements or infrastructure as those would vary greatly depending on the actual location chosen.

Options	RFC Option 1	RFC Option 2	RFC Option 3	Business Tech
Construction Cost	$5,450,000	$5,390,000	$5,430,000	$5,330,000
Escalation to Mid-2025	$980,000	$970,000	$980,000	$960,000
Soft Costs	$2,760,000	$2,730,000	$2,750,000	$2,700,000
Project Cost	**$9,190,000**	**$9,090,000**	**$9,160,000**	**$8,990,000**

New Building Construction Cost	$1,040,000
Escalation to Mid-2025	$190,000
Soft Costs	$530,000
Project Cost	**$1,760,000**

APPENDIX

01

WORKSHOP 1 PRESENTATION NOTES
10.24.2022

02

WORKSHOP 2 PRESENTATION NOTES
11.28.2022

03

WORKSHOP 3 PRESENTATION NOTES
12.20.2022

04

REGIONAL AUTOPSY FACILITY OPTIONS COST MODEL

IDAHO STATE UNIVERSITY & BANNOCK COUNTY FORENSIC LAB

WORKSHOP 01

10.24.2022

SMITHGROUP

AGENDA

1. INTRODUCTIONS
2. PROJECT VISION AND GOALS
3. STATE COVERAGE AND PROPOSED LOCATIONS
4. VIRTUAL FACILITY TOUR AND NEEDS
5. INITIAL CONSTRUCTION COST PERSPECTIVE
6. NEXT STEPS

TEAM OVERVIEW

CHRIS KNORR, AIA, LEED AP
Forensic Lead | Lab Planner

WILL McCRORY, AIA, LEED AP
Design Principal

HOLLY DEZINSKI, NCIDQ, LEED AP
Interior Designer

CHRIS FRY, PE
Electrical Engineer

ROB THOMPSON, PE
Mechanical Engineer

WHO IS SMITHGROUP?

FAST FACTS

1853
Longest Continually Operating Design Firm in the Nation

10
Lab of the Year Honors, *R&D Magazine*

#2
Science and Tech Firm *BD+C*, 2020

40 MIL
SF of S&T Facilities Designed and Built in the Last 15 Years

MARKETS

CROSS-MARKET EXPERTISE DRIVES INNOVATION

CULTURAL

HEALTHCARE

HIGHER EDUCATION

GOVERNMENT

MIXED USE

PARKS & OPEN SPACES

SCIENCE & TECHNOLOGY

URBAN ENVIRONMENTS

WATERFRONT

WORKPLACE

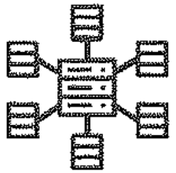
WHAT WE DO

SCIENCE AND TECHNOLOGY MARKET TYPOLOGIES

ACADEMIC RESEARCH

GOVERNMENT RESEARCH

CORPORATE RESEARCH
& DEVELOPMENT



MISSION CRITICAL

FORENSIC

RESEARCH PARKS &
INNOVATION DISTRICTS

WHAT WE DO

6
NATIONAL JUSTICE FACILITY AWARDS IN 6 YEARS

6
FORENSIC ROUNDTABLES IN THE LAST 6 YEARS

7M
SF OF FORENSIC PROJECT EXPERIENCE

100+
FORENSIC FACILITIES DESIGNED IN THE LAST 10 YEARS

VISIONING

SMITHGROUP

WHAT ARE THE GOALS FOR WORKING TOGETHER

SMITHGROUP

GOALS FOR WORKING TOGETHER

Enhancing access for Citizens of Southeast Idaho

Support ISU academic and research efforts related to forensic science

Collaboration within ISU and establish new education programs

Identify research and academic connections between the County and University

Space for state-of-the-art lab facility and partnering for success

Provide a needed service to the region

Collaborative partnership

Project support from Governor
Timely resolution of cases
Example for other areas of Idaho

WHAT WILL BE THE MOST IMPORTANT ISSUE TO OVERCOME FOR A SUCCESSFUL PROJECT?

SMITHGROUP

WHAT IS THE MOST IMPORTANT ISSUE TO OVERCOME

FUNDING IS A CRITICAL ISSUE

Ensuring **sufficient resources** to design and operate the facility

Consistent leadership from the beginning to a **"self-sustaining"** end

Identifying the best location

Finding the right space on campus meeting the County's needs

Appropriate **funding**

Location that is not disruptive to faculty and students

Funding for the project

County goal for self-sustaining program


HOW WILL THIS PROJECT BE A CATALYST TO SUPPORT YOUR MISSION?
SMITHGROUP

THE PROJECT AS A CATALYST

Allow collaboration with Health Science Programs and influence recruiting / retention

Provides a research resource for faculty and students

Collaboration aligns with health science mission in medical anthro, criminology, and College of Tech

Opportunity to build a relationship with the County and surrounding communities

Medial Lab Sciences program synergy as a learning and training environment

Expand public awareness of Health Professions complexity and programs in MDI

Educational Opportunities

WHAT SHOULD THIS FACILITY COMMUNICATE…

To the community?
To the University?
To present and future staff?

SMITHGROUP

THIS FACILITY COMMUNICATE TO THE COMMUNITY…

- Resource for SE Idaho
- Partnership with the University and SE Idaho community at large
- Collaboration between local law enforcement with ISU extends a community service mission
- A joint communication plan between the County and ISU is needed
- Enhance the state's mission to provide safety and support
- That the facility is not operated by ISU
- Showcases the latest technology
- County intent to work with ISU communications team

THIS FACILITY COMMUNICATE TO THE UNIVERSITY…

Partner in Research, innovation, and learning

ISU provides a service that supports teaching and research purposes

Opportunity for education and research with an important community partnership

A joint communication plan between the County and ISU is needed

Partnership, stewardship within facilities, and collaboration

Provides a much-needed community service and enhancement of ISU's educational mission

Showcases the latest technology

THIS FACILITY COMMUNICATE TO STAFF…

Partner in Research, innovation, and learning

Town/Gown relationships are important to develop and maintain; mutually-beneficial

“SAA”

A joint communication plan between the County and ISU is needed

Facility is appropriate for County to accomplish their work and well-funded

This facility is not operated by ISU

Showcases the latest technology


HOW WILL
UNIVERSITY SUPPORT
MDI NEEDS
SMITHGROUP

HOW WILL UNIVERSITY STAFF SUPPORT THE PROGRAM?

Operated by County, but University will provide a non-administrative support role

ISU provides space and building maintenance, but administration is County's responsibility

No true operational responsibility

Facility ran by the County

No staff outside of collaboration with training

This is not clear

Unsure

WHAT FACTORS WILL IMPACT THE PARTNERSHIP?

SMITHGROUP

FACTORS IMPACTING THE PARTNERSHIP

Concern for funding constraints and a location for smooth operation without impacting ISU

Numerous potential perceptions to overcome with operations funded outside ISU

Space is key with collaborative commitment between ISU and County

Both parties are committed to success

Visibility is limited / privacy for the lab

(new focus, dedicated staff, funding constraints, space availability, visibility to general student population)… and other factors

Funding constraints and space availability

Don’t want facility taking resources away from the ISU core mission


ANY CONCERNS BEING ON UNIVERSITY PROPERTY?
SMITHGROUP

CONCERNS BEING ON UNIVERSITY PROPERTY

Concern for locating a site allowing smooth operation for both ISU and Coroner

Handled quietly + marketed as a “cool” resource = viewed as valuable

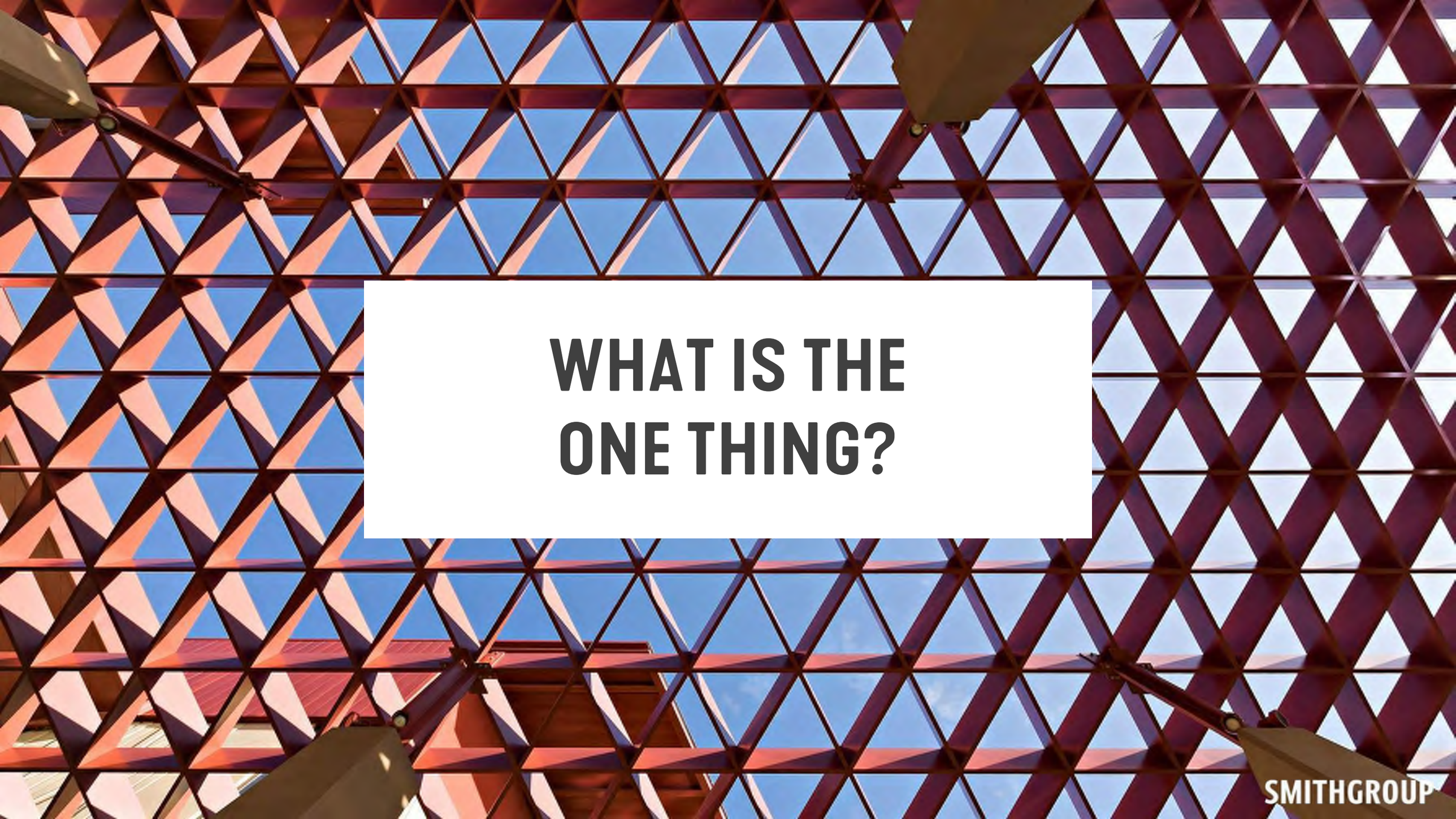
Must find a discreet, sensitive location

Security measures are appropriate and avoid circulation impacting the academic mission

Design a private, appropriate design for systems and circulation to be successful

(decedent transport and delivery, optics)… and other factors

None



WHAT IS THE ONE THING?

SMITHGROUP

WHAT IS THE ONE THING?

1. Marketing and message are an ongoing uphill battle
2. Ongoing funding

Partnership is important to the ISU relationship with the community and enhances programs and research

Supporting the legal process

ISU participates in this need assessment and construction, with County developing the program

ISU is committed to the success of this project

Biosafety level needs to be discussed

Professionalism for the program will ensure a positive view from the community

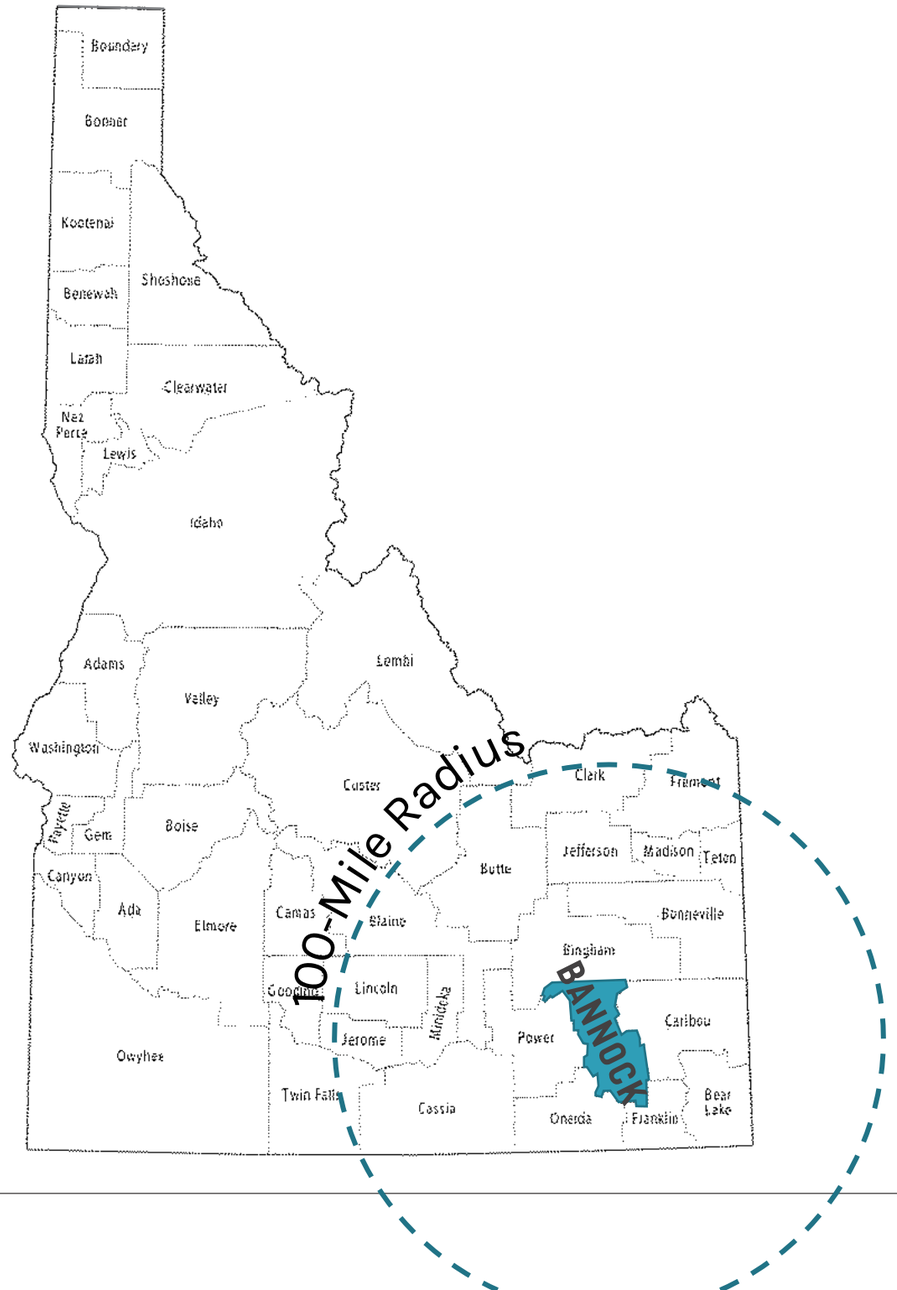
FACILITY COVERAGE

SERVICE AREA

“CATCHMENT”

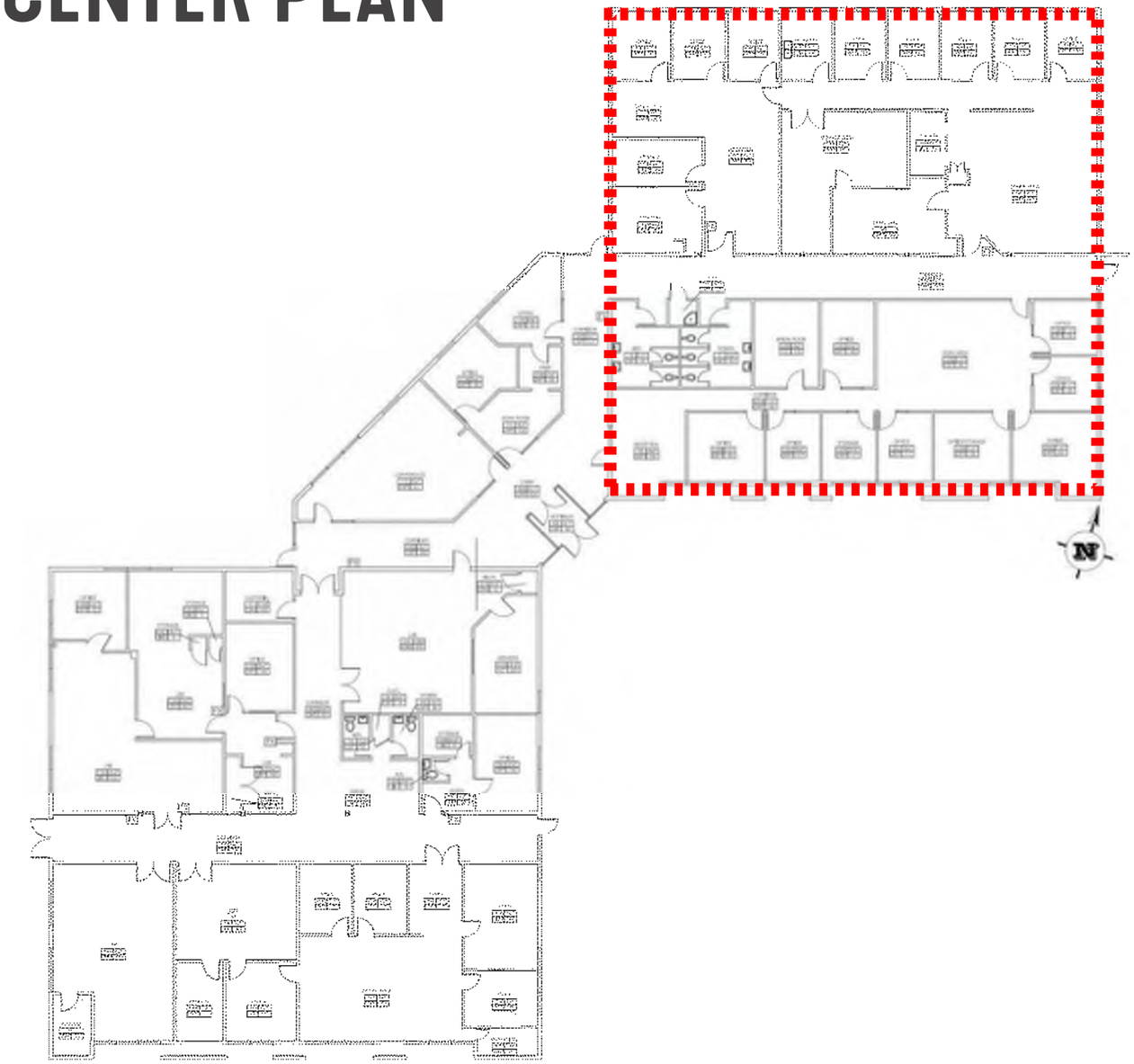
- Reservations Served?
- Partner Counties (12?)
- Bannock County

From Twin falls to
the Border (~300k)



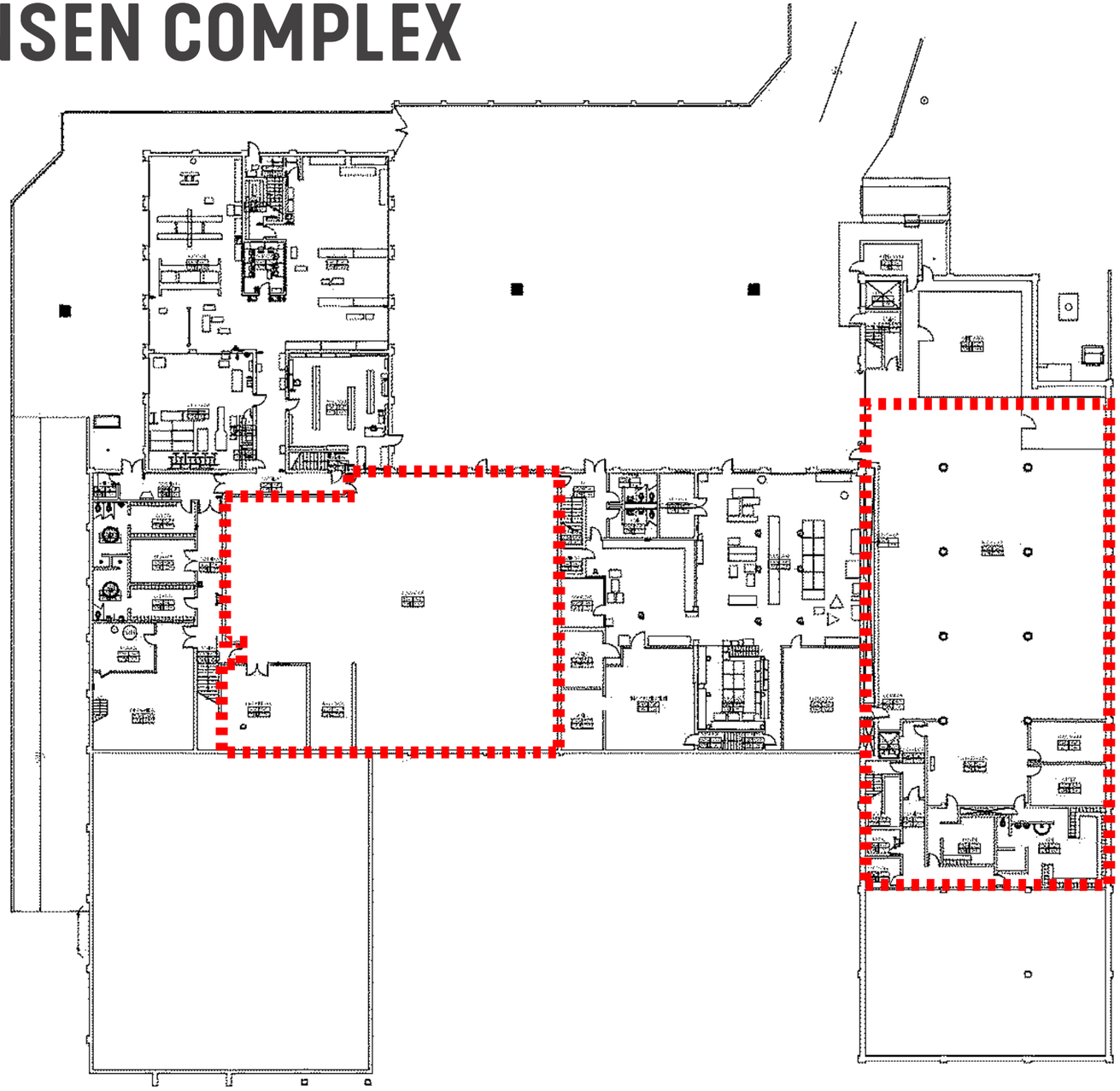
PROPOSED CAMPUS LOCATIONS

BUSINESS TECH CENTER PLAN



ROY F. CHRISTENSEN COMPLEX

BASEMENT LEVEL 2



VIRTUAL TOUR AND PROGRAM NEEDS

MEDICOLEGAL DEATH INVESTIGATION

OFFICIAL REVIEW TO IDENTIFY THE CAUSE AND MANNER OF DEATH

AUTOPSY

DAYLIGHTING PLEASE

AUTOPSY STATION TYPES

IMAGING TECHNOLOGIES

X-ray (Lodox)

CT

MRI

BIOCONTAINMENT

TRADITIONALLY, BSL2
SOMETIMES, BSL3

BSL-2 Support

BSL-3
Autopsy

BSL-3
Isolation
Autopsy

PERSONAL PROTECTIVE EQUIPMENT

FAMILY MEETING

RESTROOM & LOCKER ROOM APPROACH

GENDER ASSIGNED

UNASSIGNED WITH CHANGING ROOMS

OPEN AIR SCREENED OR ENCLOSED SALLYPORT

… MAYBE IN AUSTIN, TEXAS

ENCLOSED SALLYPORT

HAMILTON COUNTY CORONER


MUST HAVES?

KEY SITE CONSIDERATIONS

- Site Entry
  - Decedent, Staff, Visitor
- Parking
  - Staff
  - Fleet
    - Covered?
  - Visitor
  - Loading Dock
    - Depressed?
- Mass Casualty Staging?
- Shared Lobby / Public Entry?
- MEP Yard Requirements
  - Generator
    - Grade or on Roof
    - Shared or Dedicated
    - Enclosed?

MULTIPLE FRONT DOORS

WELCOMING PUBLIC AND STAFF ENTRANCES

SECURE VESTIBULE

LOBBY WITH DISPLAY

PUBLIC FORENSIC EDUCATION

TRAINING ROOM AS A SHARED RESOURCE?

PRIVATE OFFICE ACOUSTICS

BREAK

SECURE OUTDOOR COURTYARD

FLEXIBLE STORAGE

OBSERVATION

SEAMLESS CIRCULATION

VIRTUAL FACILITY TOURS

JOHNSON COUNTY

OLATHE, KS

SMITHGROUP

CAMPUS CONTEXT

PLAN


PUBLIC ENTRY
STAFF ENTRY
INVESTIGATIONS ENTRY
MASS CASUALTY
SALLYPORT

MAIN ENTRY

SECURE LOBBY

MULTIPURPOSE ROOM

STAFF ENTRY & BREAK AREA

OFFICES

BREAK ROOM

MORGUE CORRIDOR

AUTOPSY

OBSERVATION

TOXICOLOGY

PLACER COUNTY SHERIFF'S CORONER

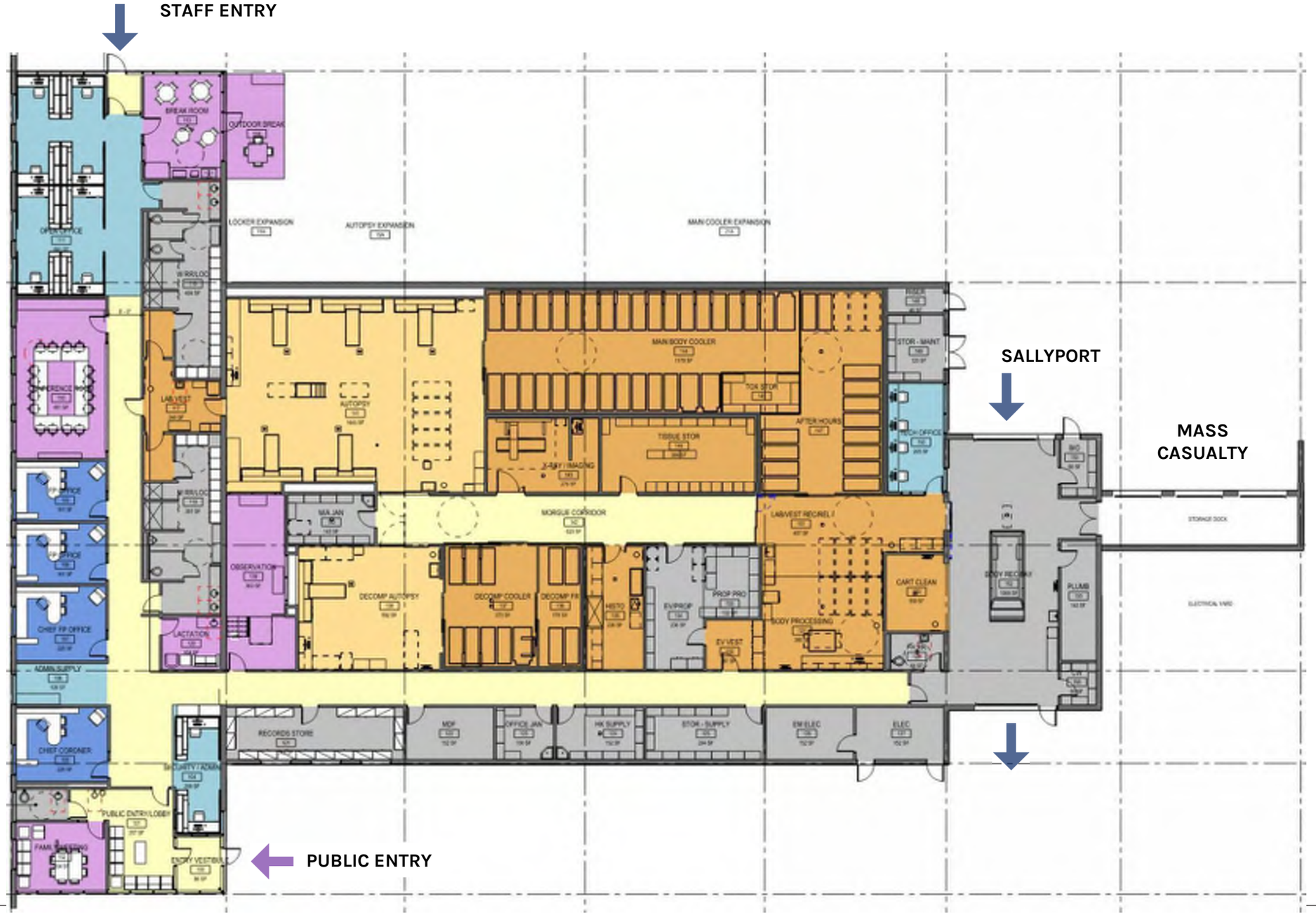
ROSEVILLE, CA

(SACRAMENTO AREA)

SMITHGROUP

SOUTH AERIAL

PLAN


STAFF ENTRY
BREAK ROOM
OUTDOOR BREAK
LOCKER EXPANSION
AUTOPSY EXPANSION
MAIN COOLER EXPANSION
CONFERENCE
LAB/VEST
AUTOPSY
MAIN BODY COOLER
TOX STOR
STOR - MAINT
X-RAY / IMAGING
TISSUE STOR
AFTER HOURS
TECH OFFICE
SALLYPORT
MASS CASUALTY
MA/JAN
MORGUE CORRIDOR
LAB/VEST RECREL
OBSERVATION
DECOMP AUTOPSY
DECOMP COOLER
DECOMP FR
HISTO
EVIP/SP
PROP PRO
EV VEST
BODY PROCESSING
CART CLEAN
BODY RECEIVE
PLUMB
STORAGE DOCK
ELECTRICAL YARD
CHIEF FP OFFICE
LACTATION
ADMIN SUPPLY
CHIEF CORONER
RECORDS STOR
MDF
OFFICE JAN
HK SUPPLY
STOR - SUPPLY
EM ELEC
ELEC
SECURITY / ADMIN
PUBLIC ENTRY LOBBY
ENTRY VESTIBULE
PUBLIC ENTRY

VISITOR ENTRY

LOBBY

FAMILY ROOM

STAFF ENTRY

INVESTIGATIONS TEAM AREA

BREAK SPACE

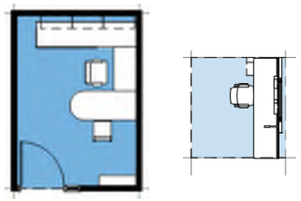
AUTOPSY

OBSERVATION

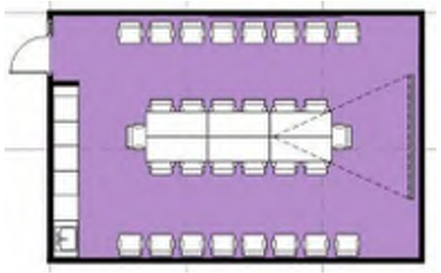
CONSTRUCTION BUDGET?

ALL SPACE IS NOT CREATED EQUAL

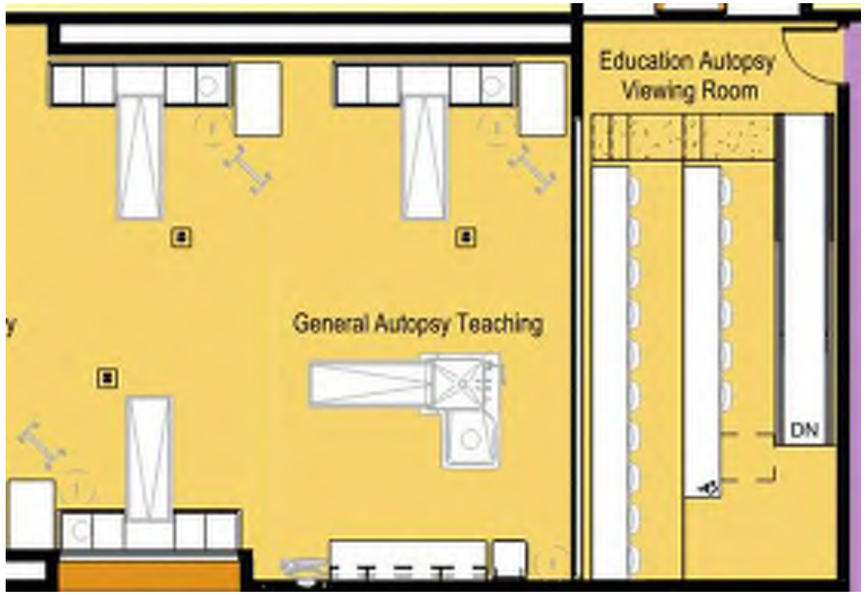
OFFICE



COLLABORATION



LAB & SUPPORT



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$$$-$$$$

BUDGET METHODOLOGY & COST CONTROL

UNDERSTANDING PROJECT BUDGET VS. CONSTRUCTION BUDGET

PROJECT BUDGET

MINUS → FURNITURE, FIXTURES & EQUIPMENT
ESPECIALLY FORENSIC EQUIPMENT

MINUS → UTILITIES + INFRASTRUCTURE
SITE PROCUREMENT?

MINUS → AUDIO VISUAL/IT

MINUS → DESIGN & PRECONSTRUCTION FEES

MINUS → CONTINGENCIES & ESCALATION/MISCELLANEOUS

~75%

Smaller projects generally have a higher percentage of soft costs than larger. It would be prudent to utilize a factor of 70% construction to project cost in this case.

BUDGET COMPARISONS

LOCATION, LOCATION, LOCATION…

PLACER COUNTY CORONER
ROSEVILLE, CALIFORNIA (SACRAMENTO AREA)
OPENED SPRING 2021

20,000 SF - $1100 / SF
$22,000,000 CONSTRUCTION
DESIGN/BUILD

ADA COUNTY CORONER
MERIDIAN, IDAHO
OPENING WINTER 2023

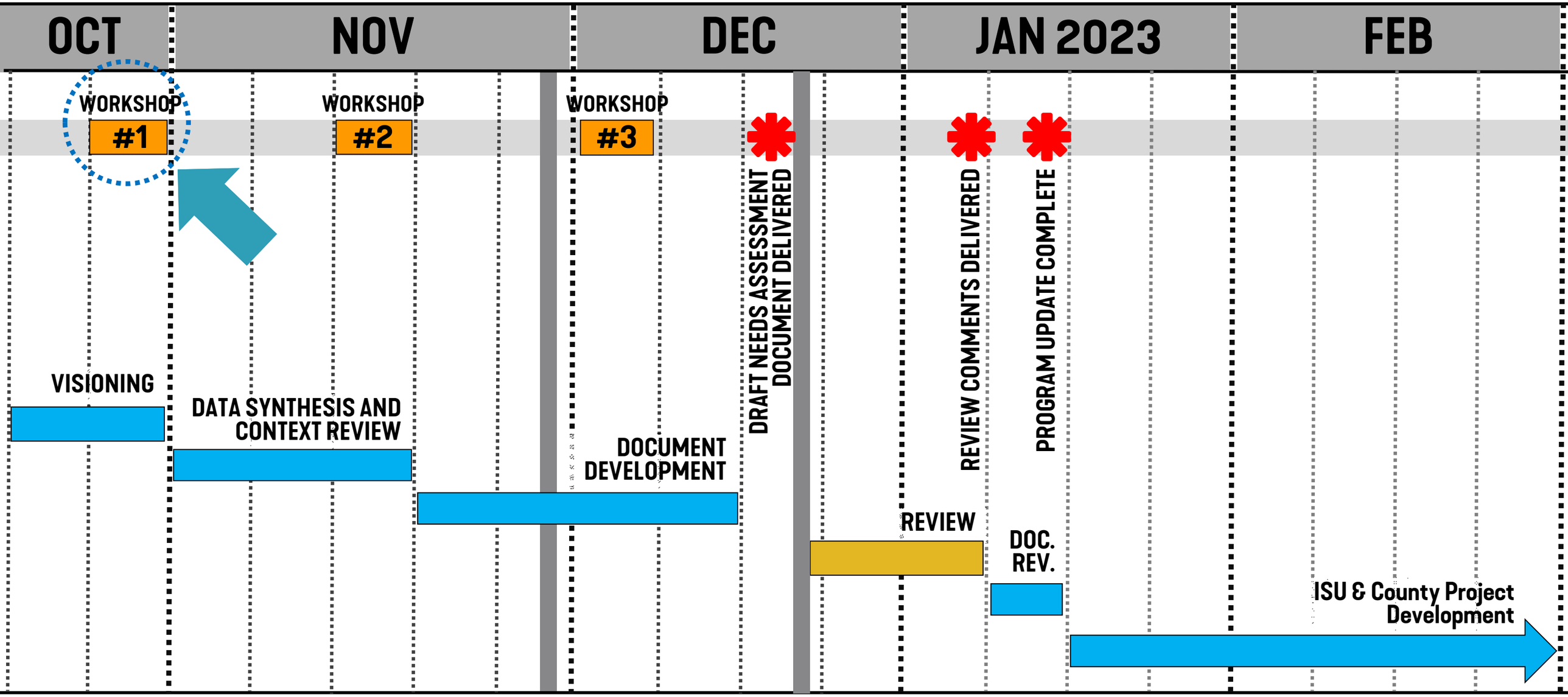
39,600 SF - $780 / SF
$31,000,000 CONSTRUCTION
DESIGN, BID, BUILD

PIMA COUNTY MEDICAL EXAMINER
TUCSON, ARIZONA
OPENING WINTER 2023

33,700 SF - $1,190 / SF
$40,000,000 CONSTRUCTION
DESIGN, BID, BUILD

NEXT STEPS

SCHEMATIC DESIGN SCHEDULE




THANK YOU!

SOUTHEAST IDAHO REGIONAL AUTOPSY FACILITY AS ISU

WORKSHOP 02

11.28.2022

SMITHGROUP

AGENDA

1. INTRODUCTIONS
2. STATE COVERAGE AND SIZING
3. BUILDINGS UNDER CONSIDERATION
4. GENERAL BUILDING SYSTEM NEEDS
5. NEXT STEPS

STATE COVERAGE AND SIZING

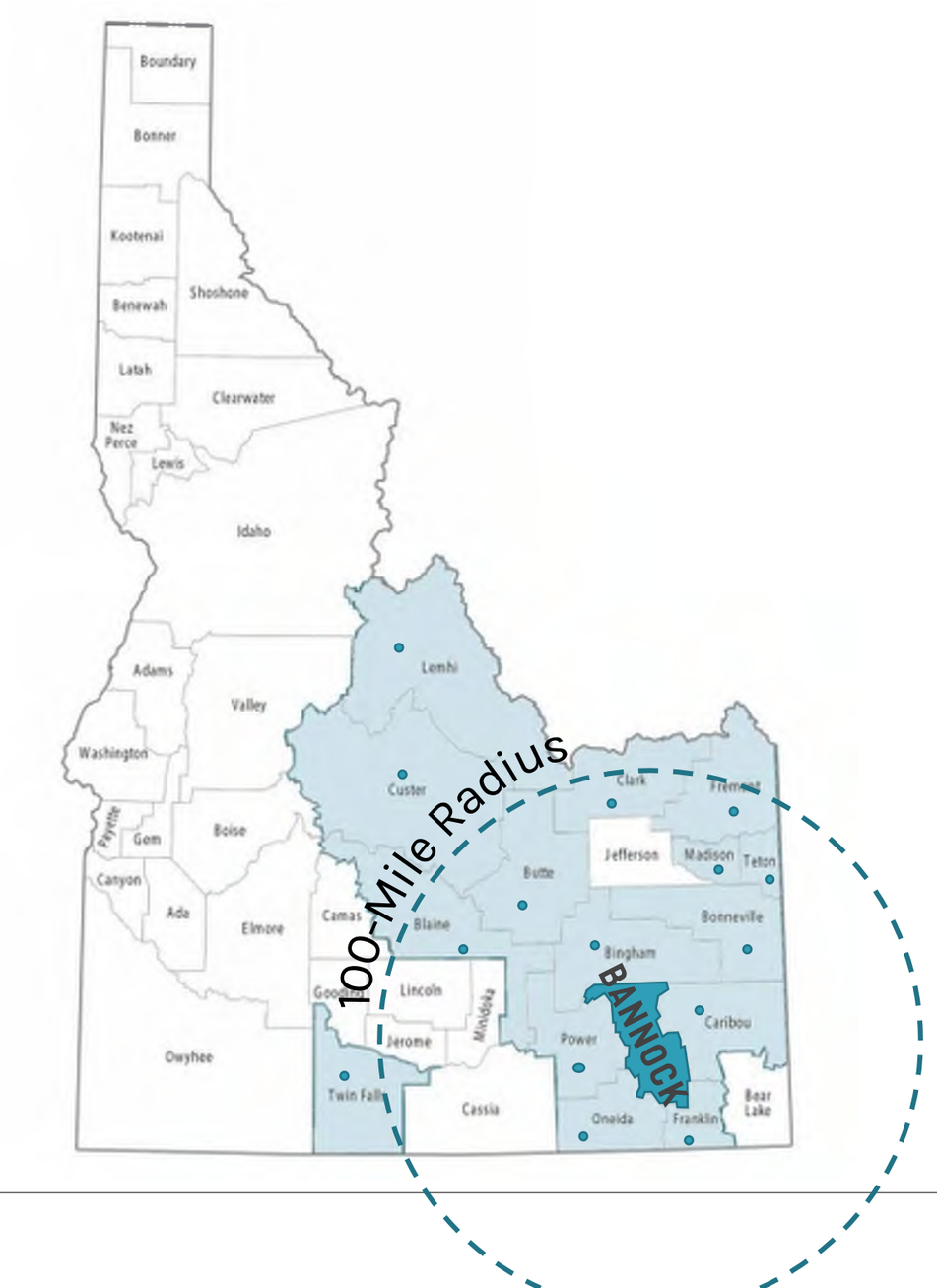
SERVICE AREA

“CATCHMENT”

Bannock County

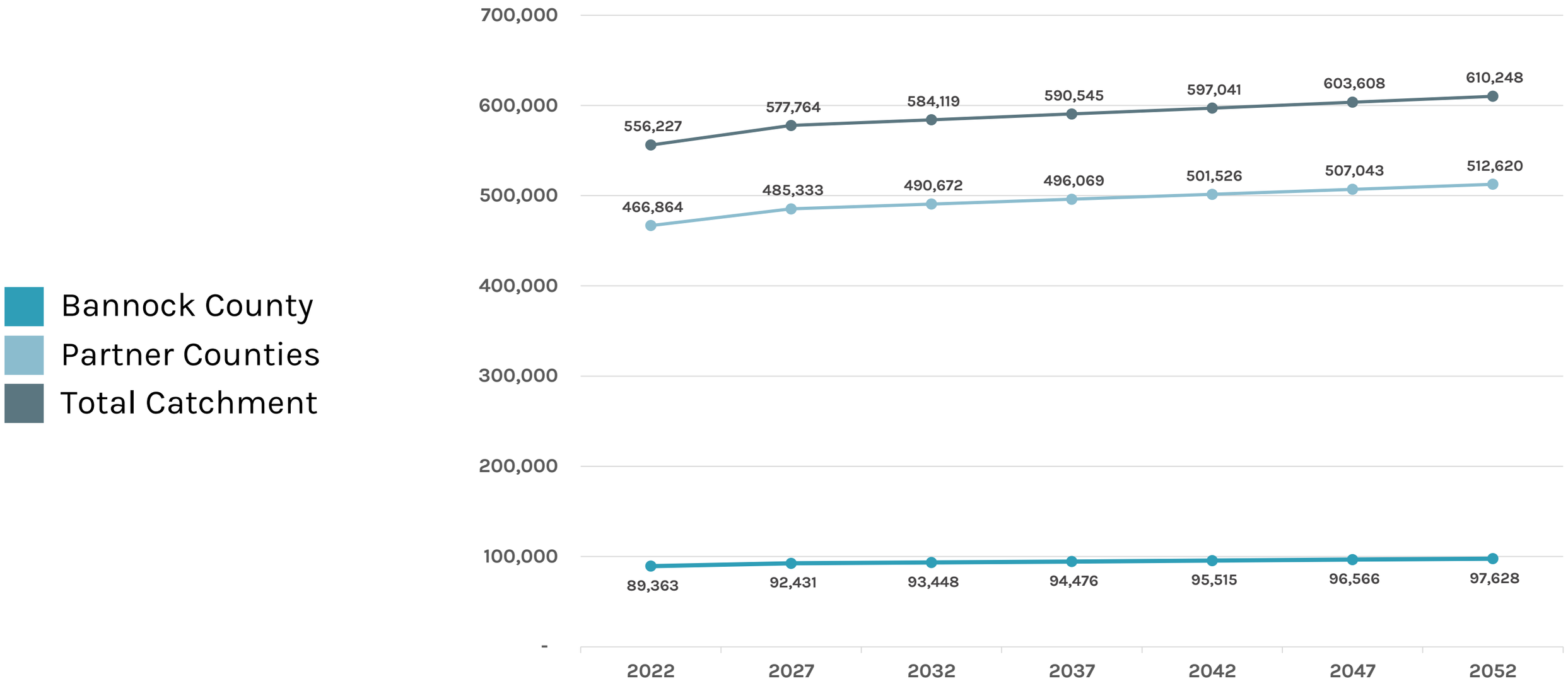
Partner Counties (15)

Not Served



POPULATION CHANGE

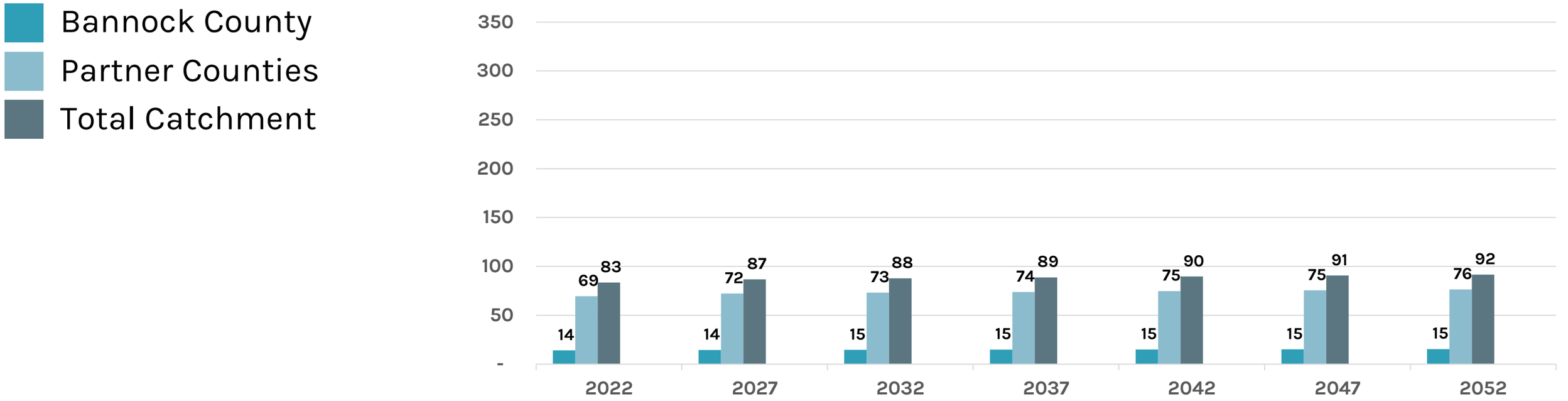
"CATCHMENT"



POPULATION CHANGE

"CATCHMENT"

5-Year Average Autopsy Rate : 1,000 in the Population							
Bannock County Rate	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total Autopsies	**14**	**14**	**15**	**15**	**15**	**15**	**15**
Partner Counties Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	**69**	**72**	**73**	**74**	**75**	**75**	**76**
Combined Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	**83**	**87**	**88**	**89**	**90**	**91**	**92**

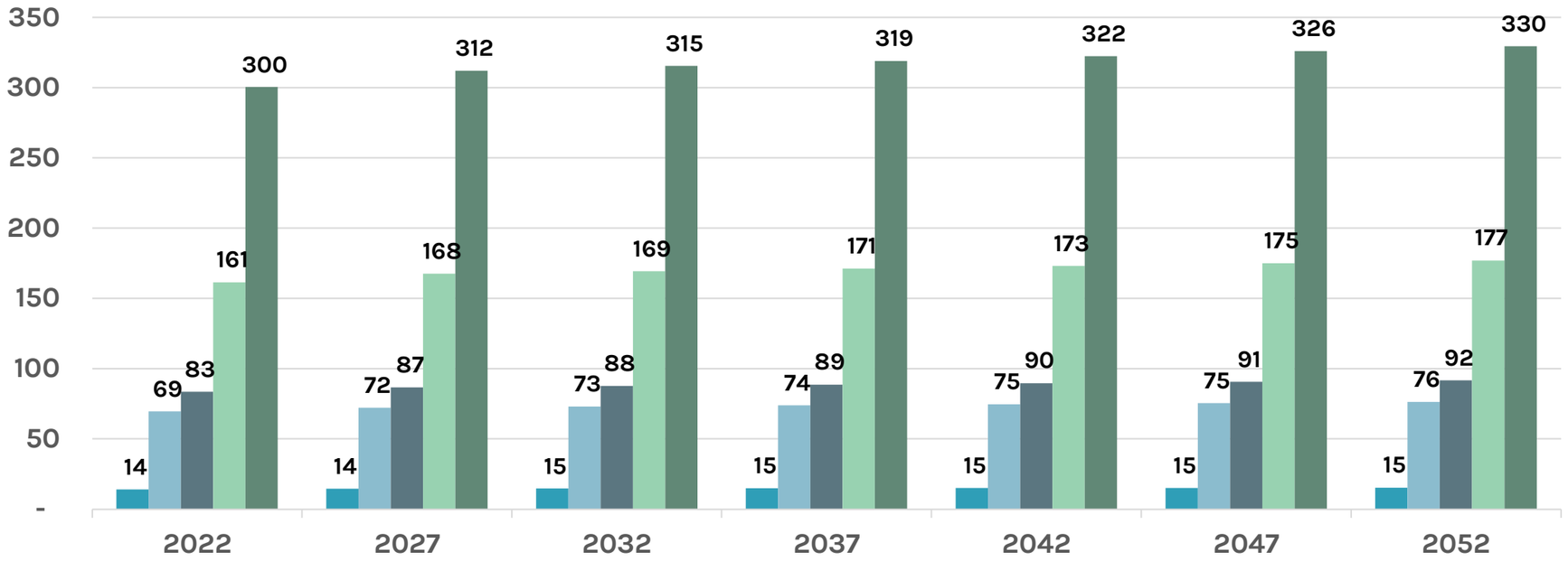


POPULATION CHANGE

"CATCHMENT"

5-Year Average Autopsy Rate : 1,000 in the Population							
Bannock County Rate	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total Autopsies	14	14	15	15	15	15	15
Partner Counties Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	69	72	73	74	75	75	76
Combined Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	83	87	88	89	90	91	92
Calculated Rate							
0.5 Bannock + 0.25 Partners	161	168	169	171	173	175	177
0.75 Bannock + 0.5 Partners	300	312	315	319	322	326	330

- Bannock County
- Partner Counties
- Total Catchment
- Increased Rate
- Further Increased Rate



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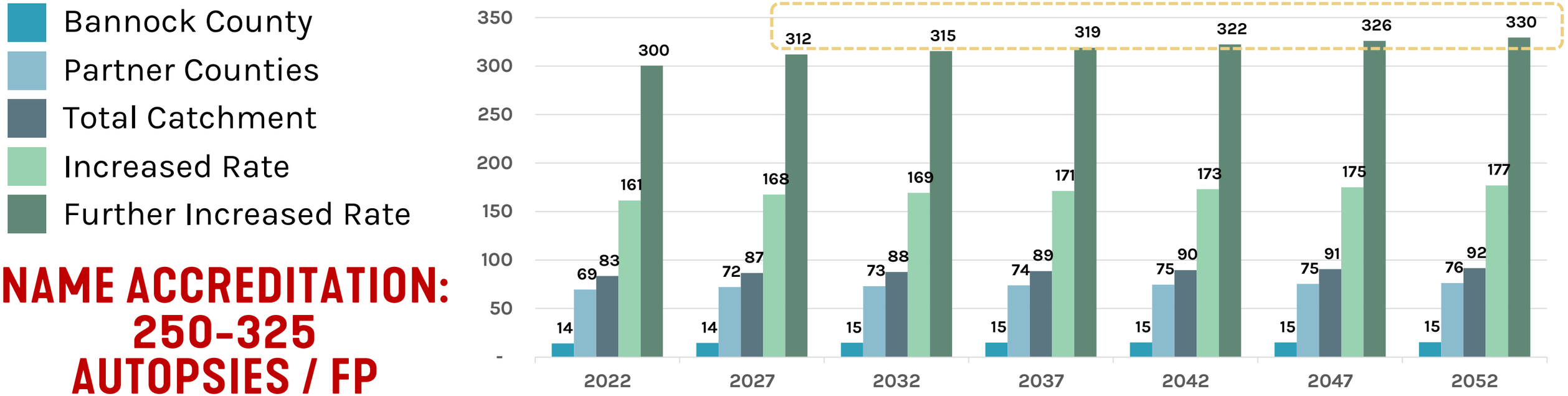

NAME ACCREDITATION: 250-325 AUTOPSIES / FP

STAFFING

OVERVIEW

- **What's Required?**
  - Forensic Pathologist
  - Autopsy Assistant / Administration

- **What's not Required?**
  - Investigators
  - Toxicology staff
  - Histology staff
  - Transcription staff

STAFFING

OVERVIEW

- **What's Required?**
  - (1) Forensic Pathologist
  - (2) Autopsy Assistant / Administration

3 TOTAL STAFF

- **What's not Required?**
  - Investigators
  - Toxicology staff
  - Histology staff
  - Transcription staff

FORENSIC PATHOLOGIST (MEDICAL EXAMINER)

STAFFING – COMMON DUTIES

- **Chief ME**
  - Postmortem examinations (100%)
  - Testimony
  - Teaching/education
  - Communication with stakeholders
  - Media/Public information Officer
  - Administrative Head

- **Locum ME**
  - Postmortem examinations over 325
  - When Chief is away
  - Testimony
  - Administrative Head
    - When CME not available

FORENSIC PATHOLOGIST (MEDICAL EXAMINER)

STAFFING – COMMON DUTIES

- **Chief ME**
  - Postmortem examinations (100%)
  - 250 Autopsies / Year
    - Maximum 325
  - Testimony
  - Teaching/education
  - Communication with stakeholders
  - Media/Public information Officer
  - Administrative Head

- **“Locum” ME**
  - Temporary Position
  - Postmortem examinations over 325
  - When Chief is away
  - Testimony
  - Administrative Head
    - When CME not available

- **One Forensic Pathologist needed**
- **Open with a chief ME, sending excess cases to Ada County or hiring Forensic Pathologists on an as needed (“Locum”) basis.**
- **One Forensic Pathologist needed**

AUTOPSY ASSISTANT

STAFFING – COMMON DUTIES

- **Autopsy Assistant Duties:**
  - Assist in postmortem examinations
    - Prosection of remains
    - Processing of specimens for toxicology, histology, DNA, culture, etc.
    - Radiographs
    - Photographs
    - Evidence collection
    - Data entry
  - Intake/release of remains from facility
  - Morgue remains and supplies management

- **Administrative Duties**
  - Triage of initial phone calls
  - Death certificate administration
  - Public records request administration
  - Invoicing/billing
  - Intra-office HR functions
  - Supply management
  - County & HR specific functions
    - Payroll, Employee paperwork, IT, Wellness, etc.

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STAFFING – COMMON DUTIES

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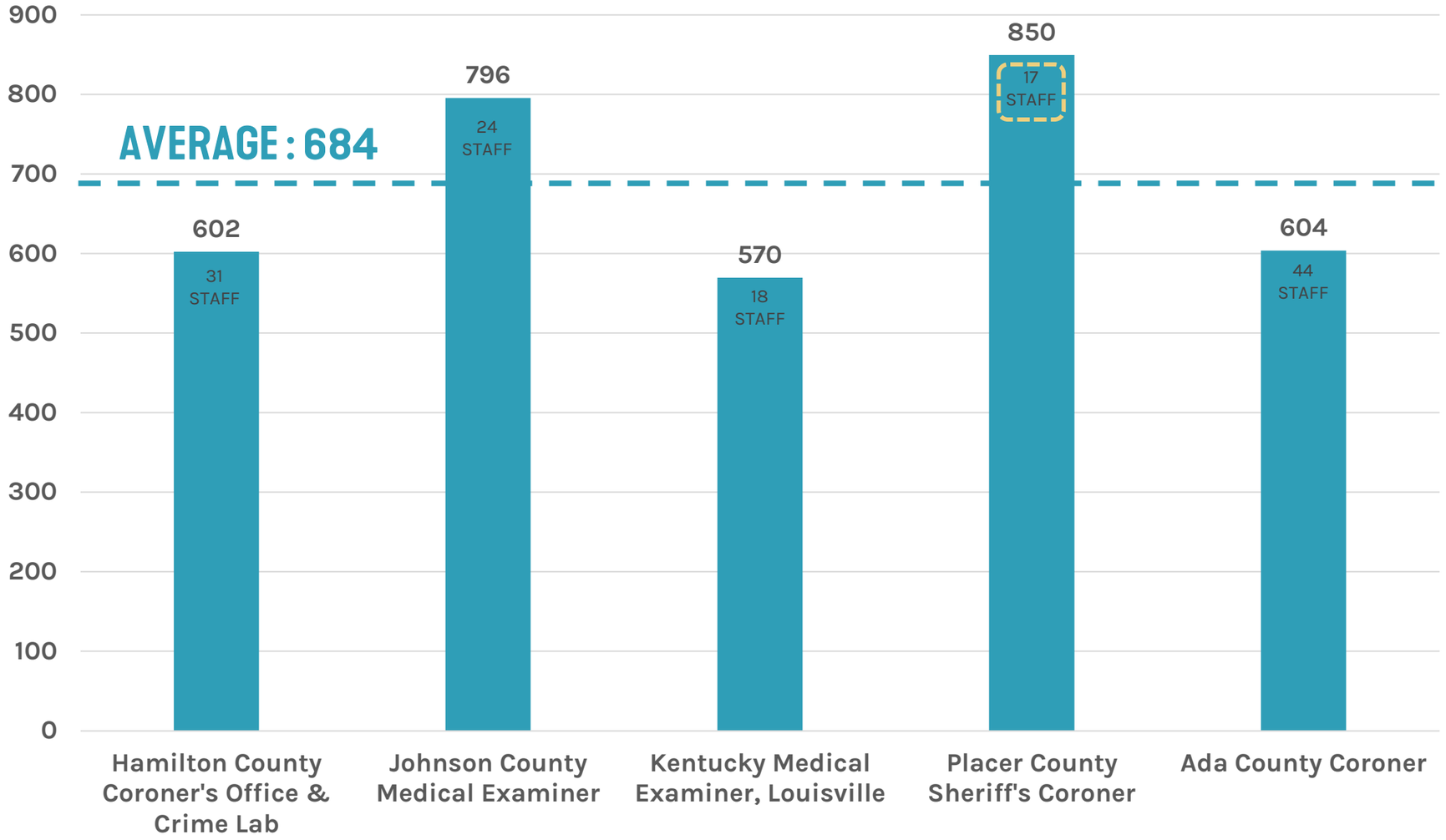
  - Invoicing/billing
  - Intra-office HR functions
  - Supply management
  - County & HR specific functions
    - Payroll, Employee paperwork, IT, Wellness, etc.

- **Open with (2) Autopsy Assistants that can support the administrative duties**

MEDICAL EXAMINER BENCHMARKING

PEER NASF / STAFF

- Placer County is closest comparison
- All have 2-3x autopsy load
- Smaller facilities are less efficient



MEDICAL EXAMINER BENCHMARKING

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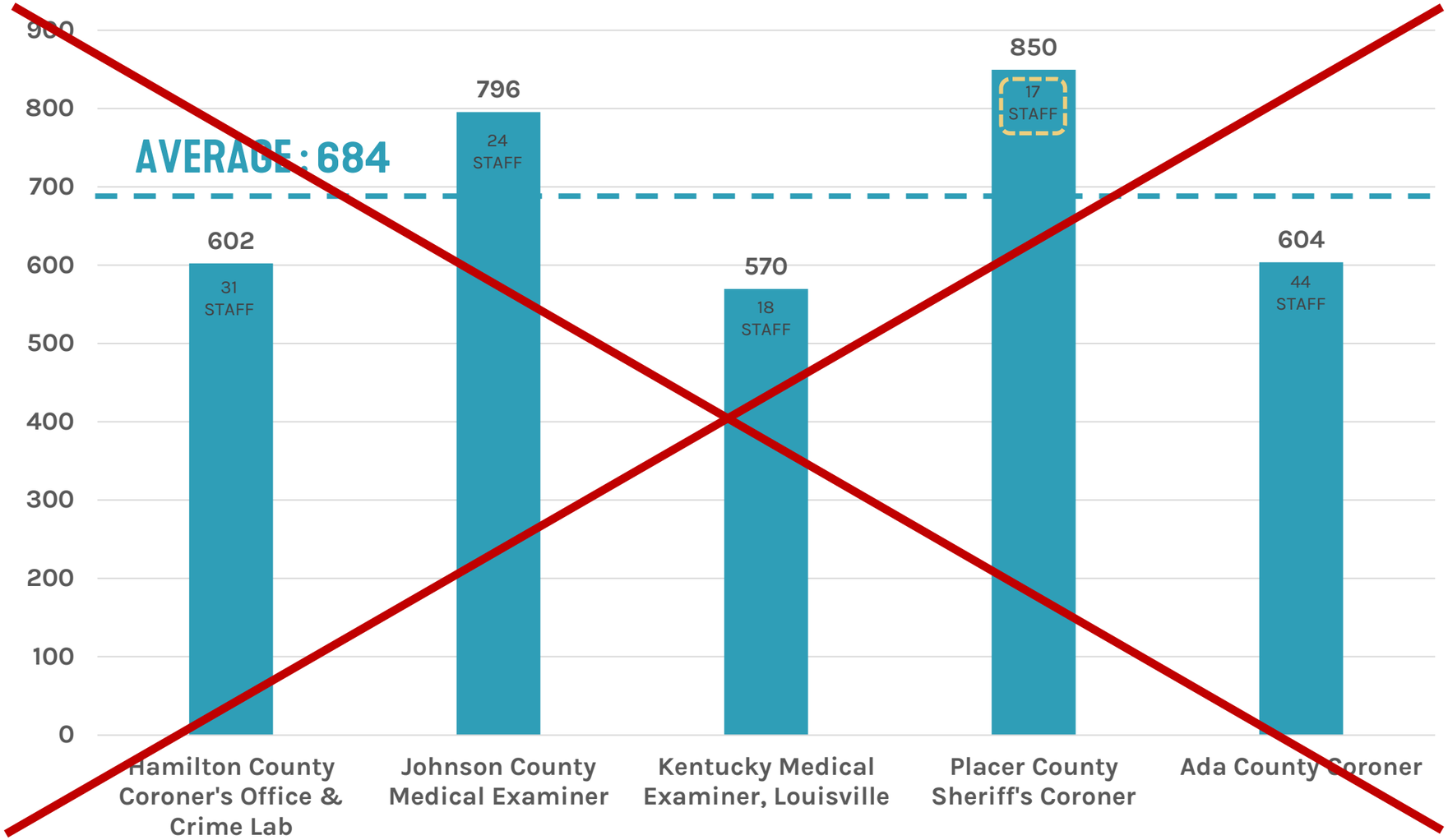
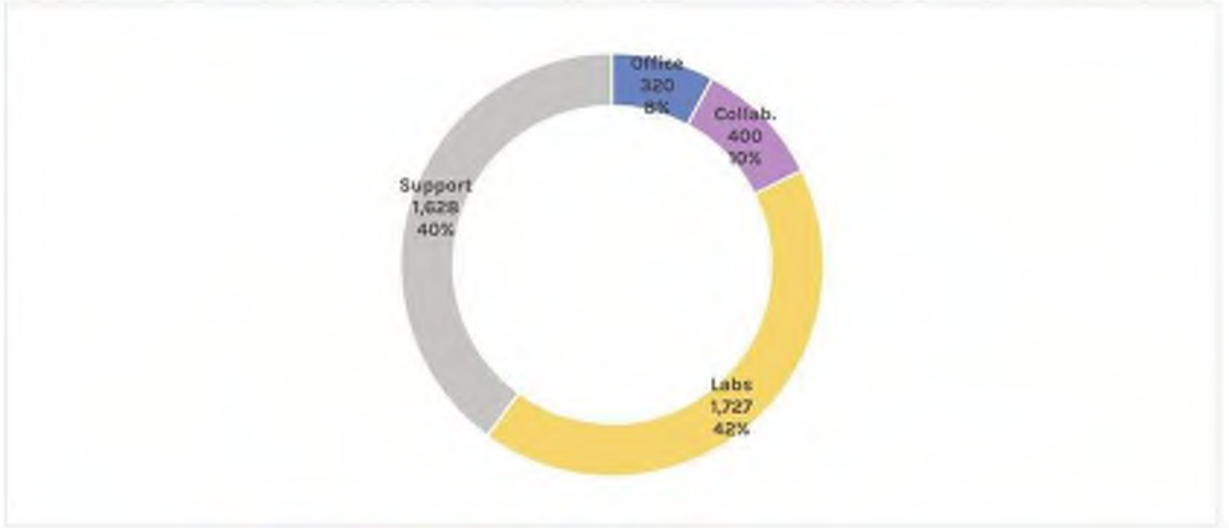
REMINDER:
3 TOTAL STAFF



CONCEPT SPACE PROGRAM

Southeast Idaho Regional Autopsy Facility at ISU

Facility Summary	Staff	Grossing	Total NASF	Original NASF	Original GSF	Total GSF
Regional Autopsy Program Spaces	3	62%	4,075			6,572
Facility TOTAL	**3**	62%	**4,075**	0	0	**6,572**



	Office	Collab.	Labs	Edu	Support
	320	400	1,727	0	1,628
Regional Autopsy Facility	320	400	1,727	0	1,628

100%	ional Autopsy Facility	4,075
		4,075

Southeast Idaho Regional Autopsy Facility at ISU

Regional Autopsy Facility

Space Name	Staff	NSF	Qty.	Total NSF	Mult.	NASF	Total NASF	Original SF	Comments
Office									
Chief Medical Examiner	1	150	1	150	1.3	195		0	Includes area for microscope
Autopsy Assistant / Admin	2	48	2	96	1.3	125		0	
Sub-Total	3			246			320	0	
Collaboration									
Lobby		120	1	120	1.0	120		0	
Family Bereavement Room		120	1	120	1.0	120		0	Video Conference Capability
Break Room		100	1	100	1.0	100		0	
Autopsy Viewing		60	1	60	1.0	60		0	Viewing at grade / no elevated platform
Sub-Total	0			400			400	0	
Laboratory									
Receiving / Release Room		242	1	242	1.0	242		0	
X-Ray Room		363	1	363	1.0	363		0	
Decedent Cooler		396	1	396	1.0	396		0	Storage for 12 on carriers
General Autopsy		272	1	272	1.0	272		0	
General Autopsy Support		91	1	91	1.0	91		0	
Isolation Autopsy		272	1	272	1.0	272		0	
Isolation Autopsy Support		91	1	91	1.0	91		0	Small space for anthro
Sub-Total	0			1,727			1,727	0	
Support									
Sally Port		484	1	484	1.0	484		0	
Cart Wash Alcove		121	1	121	1.0	121		0	
Evidence and Evidence Drying		121	1	121	1.0	121		0	
Tissue / Slide and Block Storage		121	1	121	1.0	121		0	
Records Storage		121	1	121	1.0	121		0	
Autopsy Supply Storage		121	1	121	1.0	121		0	
Biological Waste Storage		60	1	60	1.0	60		0	
PPE On/Off		121	1	121	1.0	121		0	Includes laundry
Locker Area		100	1	100	1.0	100		0	Non-Gender Assigned
Changing Room		40	1	40	1.0	40		0	Non-Gender Assigned
Shower Room		100	1	100	1.0	100		0	Non-Gender Assigned
Office Supply Storage		18	1	18	1.0	18		0	Closet
Maintenance Storage		100	1	100	1.0	100		0	
Sub-Total	0			1,628			1,628	0	
TOTAL	3			4,001			4,075	0	

CONCEPT SPACE PROGRAM

Southeast Idaho Regional Autopsy Facility at ISU

Facility Summary	Staff	Grossing	Total NASF	Original NASF	Original GSF	Total GSF
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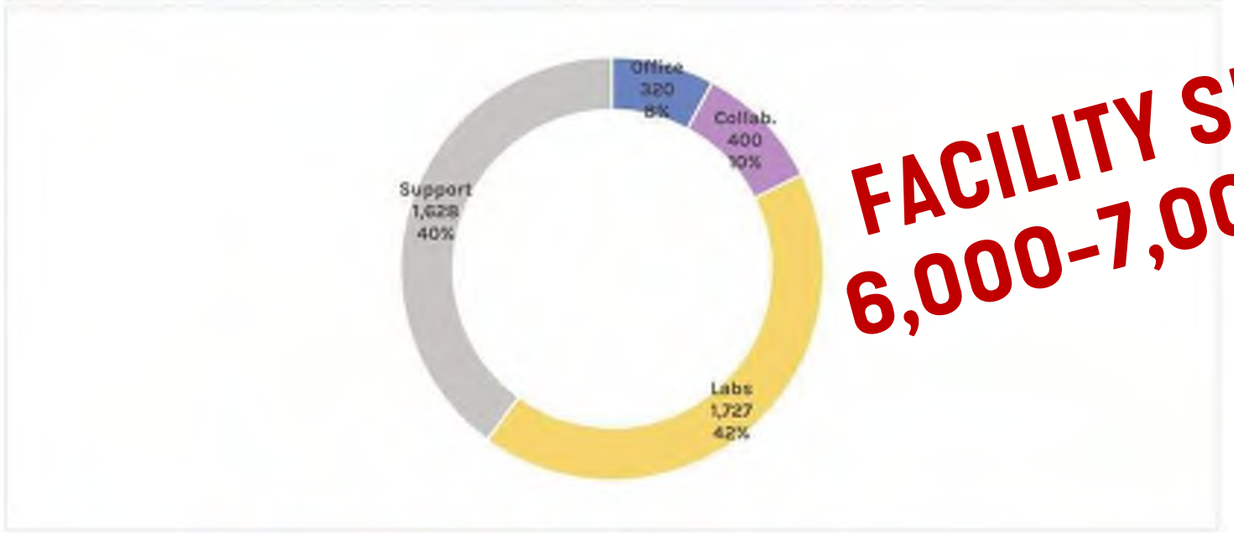

	Office	Collab.	Labs	Edu	Support
	320	400	1,727	0	1,628
Regional Autopsy Facility	320	400	1,727	0	1,628

100%	ional Autopsy Facility	4,075
		4,075

FACILITY SIZE: 6,000-7,000 SF

Southeast Idaho Regional Autopsy Facility at ISU

Regional Autopsy Facility

Space Name	Staff	NSF	Qty.	Total NSF	Mult.	NASF	Total NASF	Original SF	Comments
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Chief Medical Examiner	1	150	1	150	1.3	195		0	Includes area for microscope
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Laboratory									
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Support									
Sally Port		484	1	484	1.0	484		0	
Cart Wash Alcove		121	1	121	1.0	121		0	
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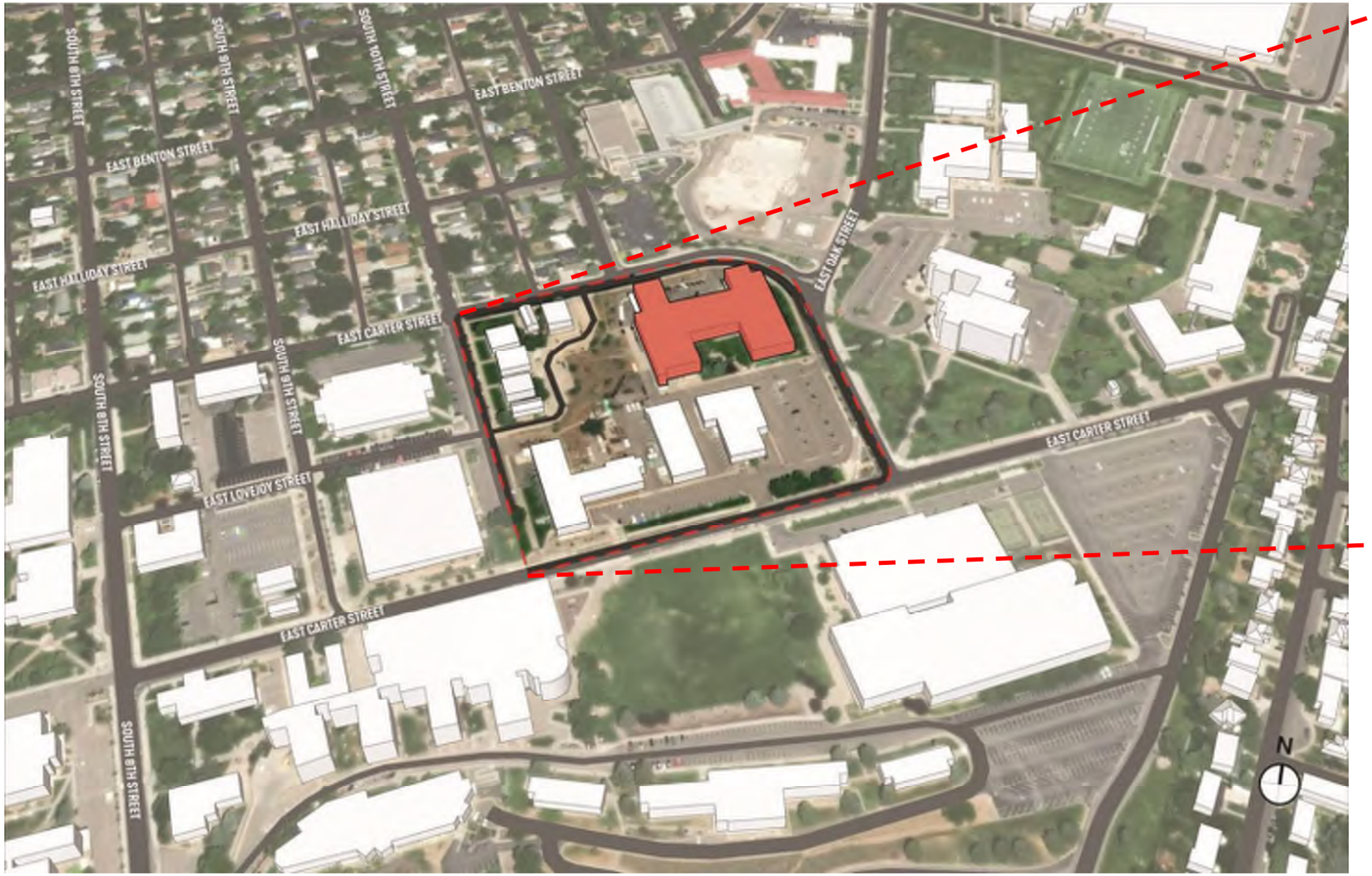
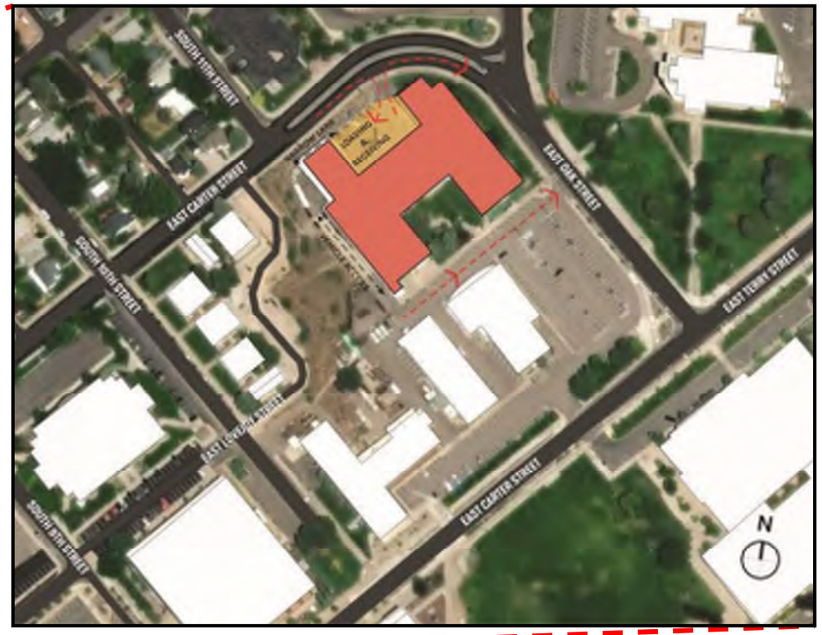
Tissue / Slide and Block Storage		121	1	121	1.0	121		0	
Records Storage		121	1	121	1.0	121		0	
Autopsy Supply Storage		121	1	121	1.0	121		0	
Biological Waste Storage		60	1	60	1.0	60		0	
PPE On/Off		121	1	121	1.0	121		0	Includes laundry
Locker Area		100	1	100	1.0	100		0	Non-Gender Assigned
Changing Room		40	1	40	1.0	40		0	Non-Gender Assigned
Shower Room		100	1	100	1.0	100		0	Non-Gender Assigned
Office Supply Storage		18	1	18	1.0	18		0	Closet
Maintenance Storage		100	1	100	1.0	100		0	
Sub-Total	0			1,628			1,628	0	
TOTAL	3			4,001			4,075	0	

FACILITIES UNDER CONSIDERATION

ROY F. CHRISTENSEN COMPLEX

BASEMENT LEVEL 2





ROY F. CHRISTENSEN COMPLEX

BASEMENT LEVEL 2

Positive Aspects:

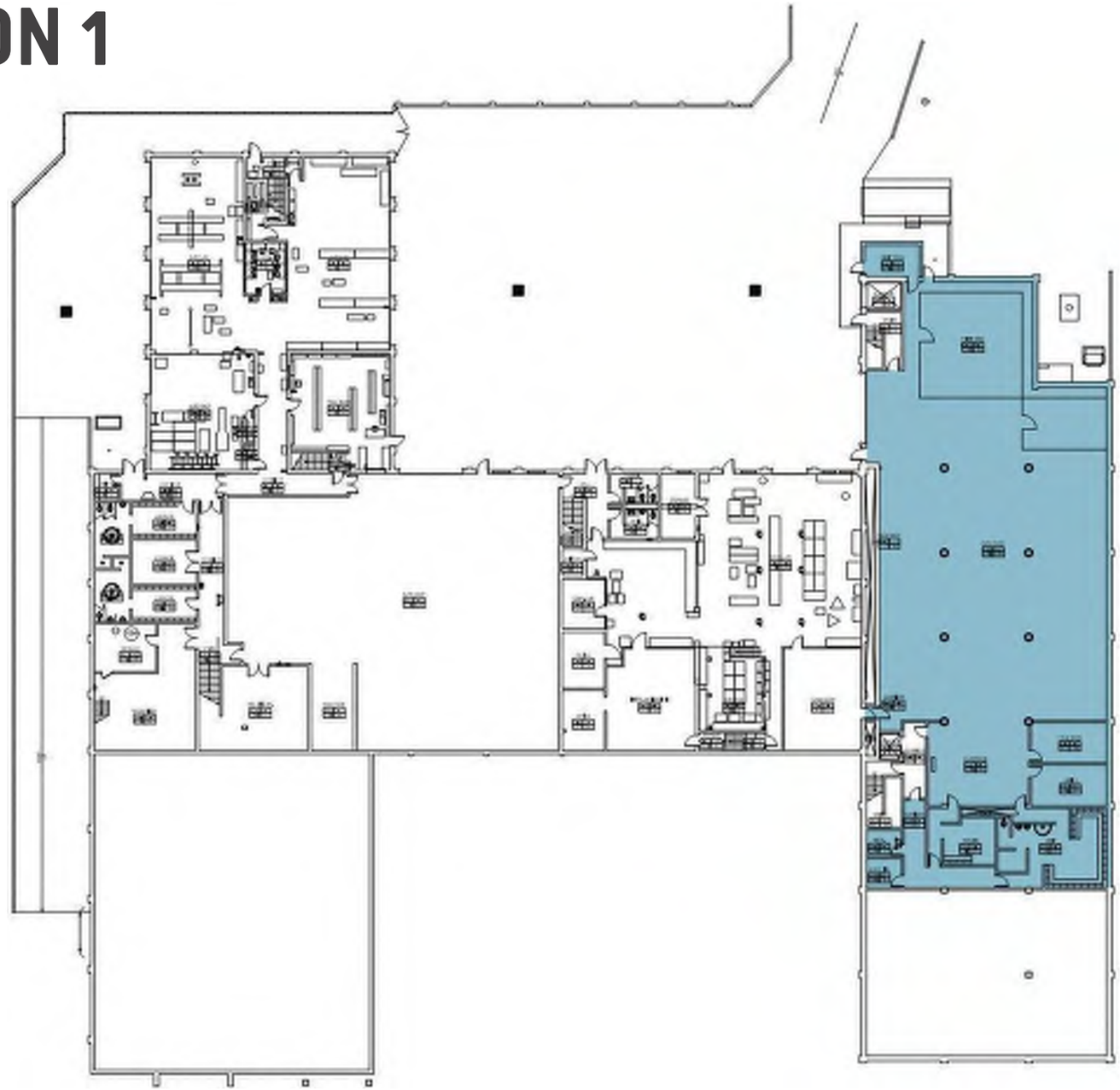
- 4-Minutes to I-15
- Edge of Campus
- Good access to loading
- High floor-to-floor

Negative Aspects:

- Poor family entry sequence
- Vehicle visibility to campus in Option 2
- Lack of existing windows

LOCATION OPTION 1

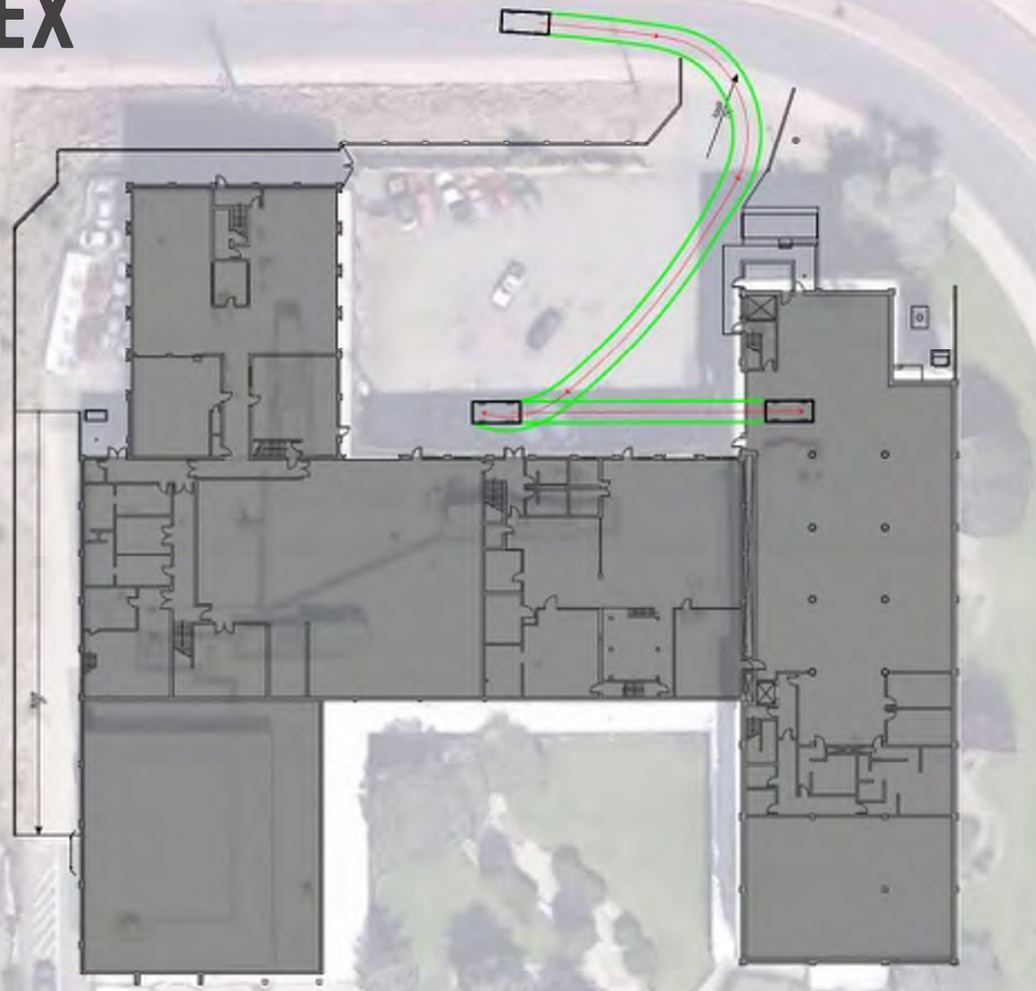
RFC BASEMENT LEVEL 2



AREA IDENTIFIED: 10,800 SF

ROY F. CHRISTENSEN COMPLEX

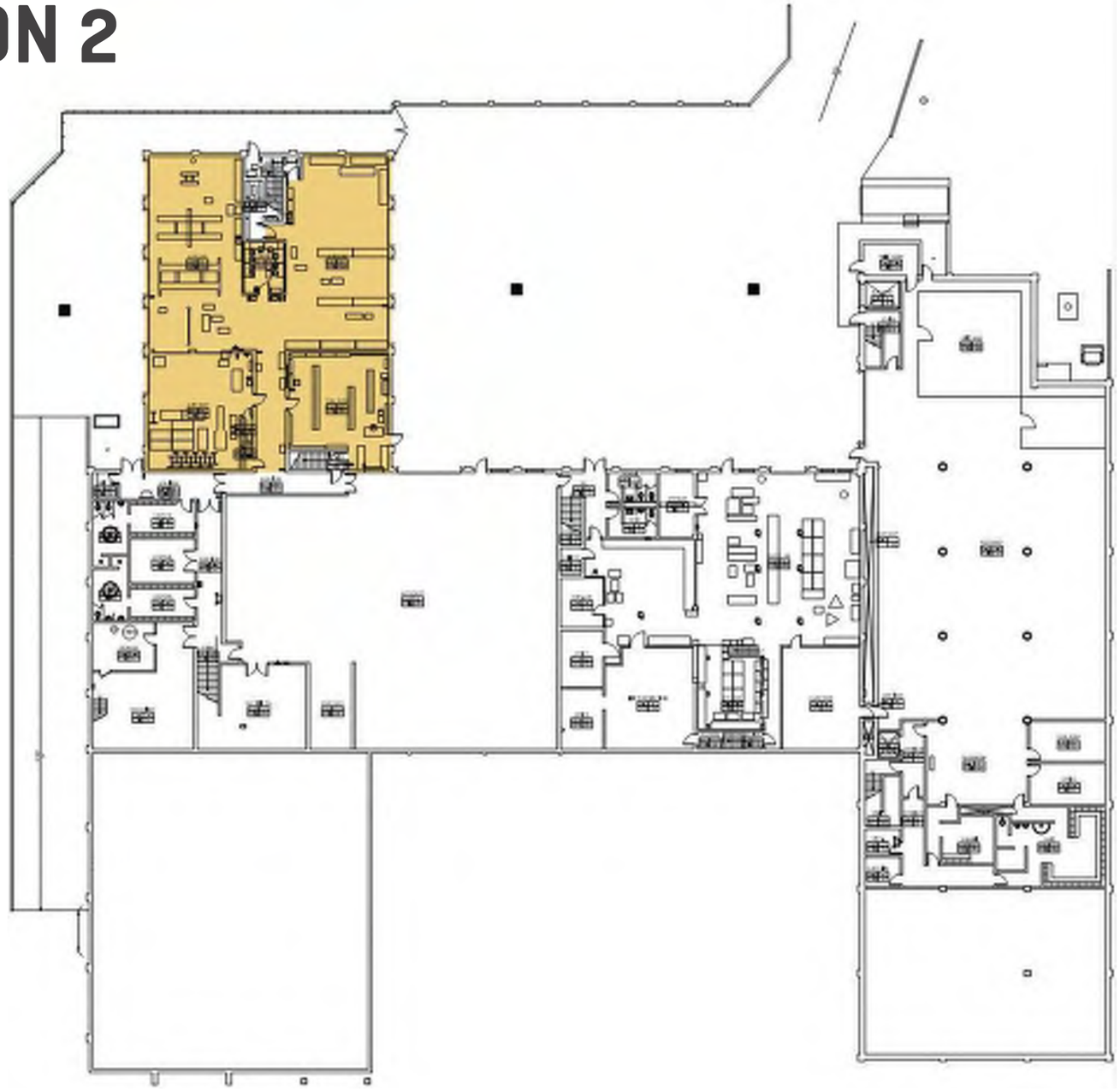
VEHICLE CIRCULATION – OPTION 1



LOCATION OPTION 2

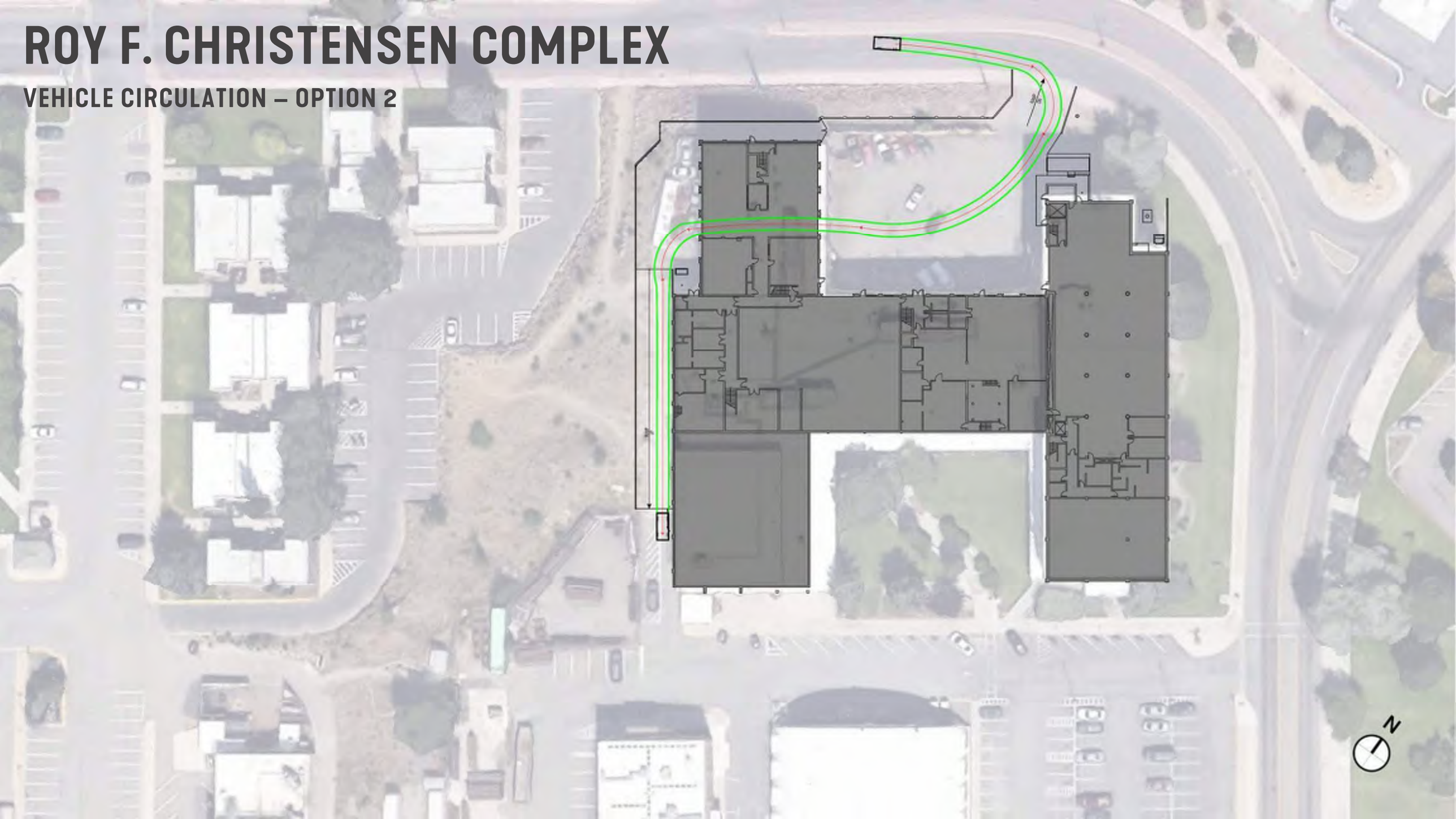
RFC BASEMENT LEVEL 2

AREA IDENTIFIED: 5,600 SF



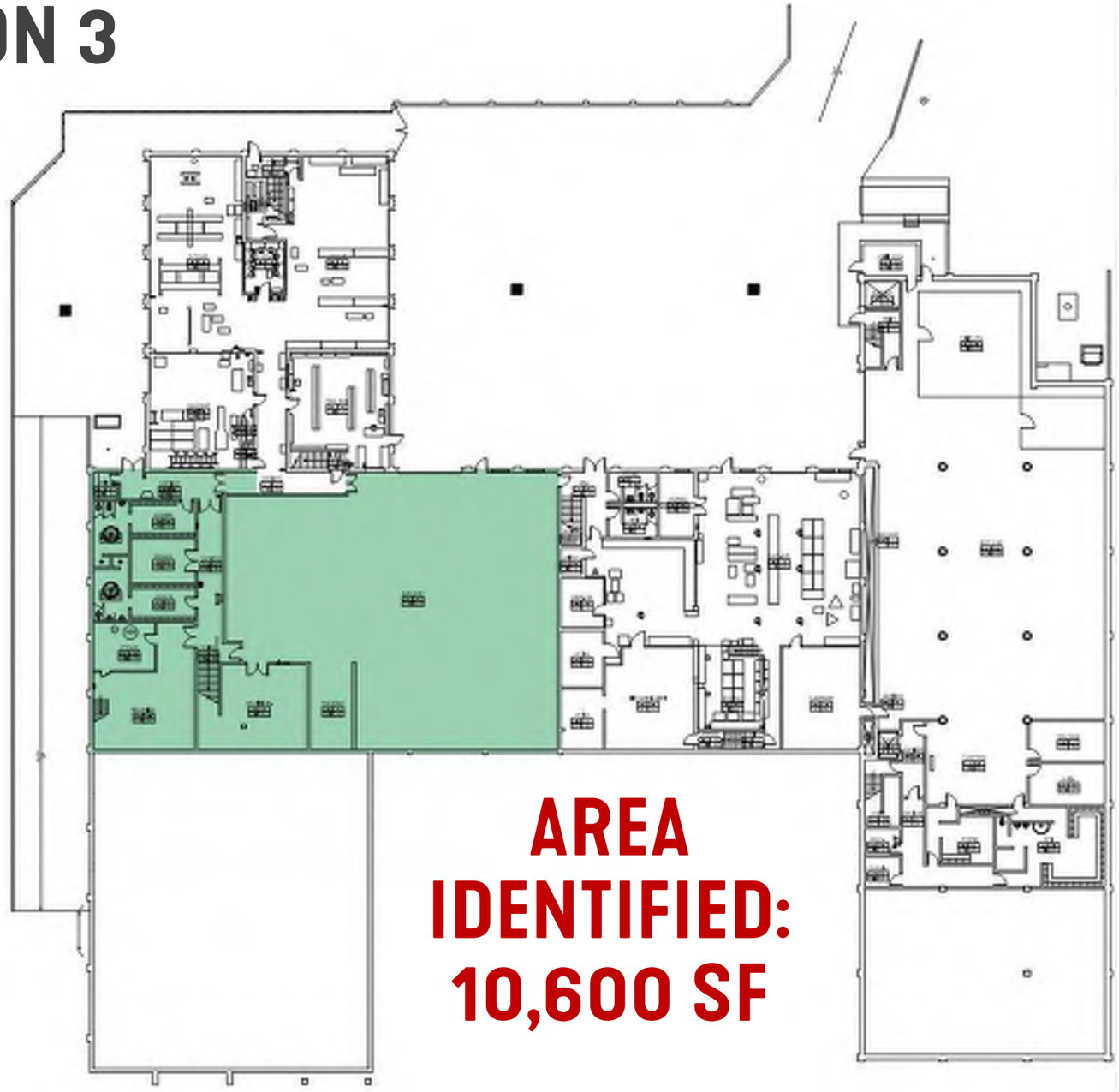
ROY F. CHRISTENSEN COMPLEX

VEHICLE CIRCULATION – OPTION 2



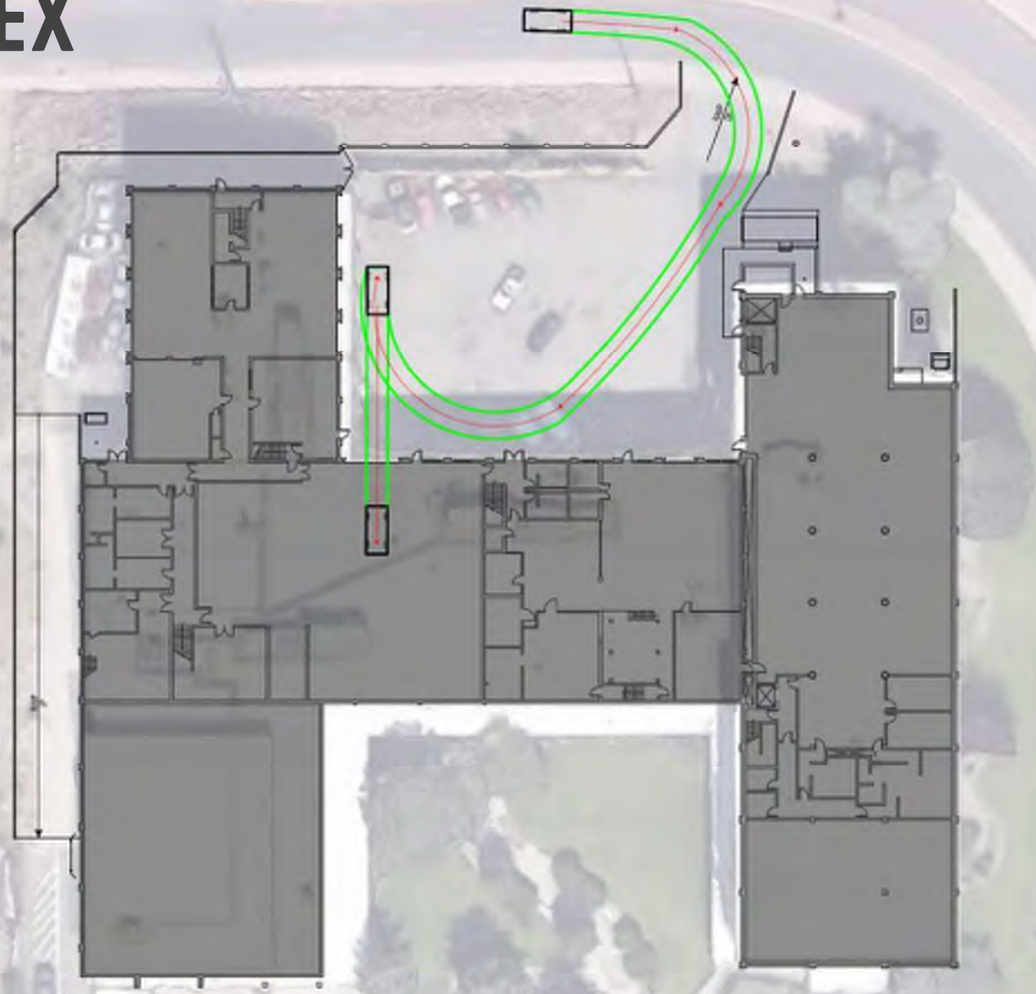
LOCATION OPTION 3

RFC BASEMENT LEVEL 2



ROY F. CHRISTENSEN COMPLEX

VEHICLE CIRCULATION – OPTION 3



BUSINESS TECH CENTER PLAN

BUSINESS TECH CENTER PLAN

Positive Aspects:

- 4-Minutes to I-15
- Distant from Campus
- Good family entry sequence
- Good access to loading
- Good existing windows

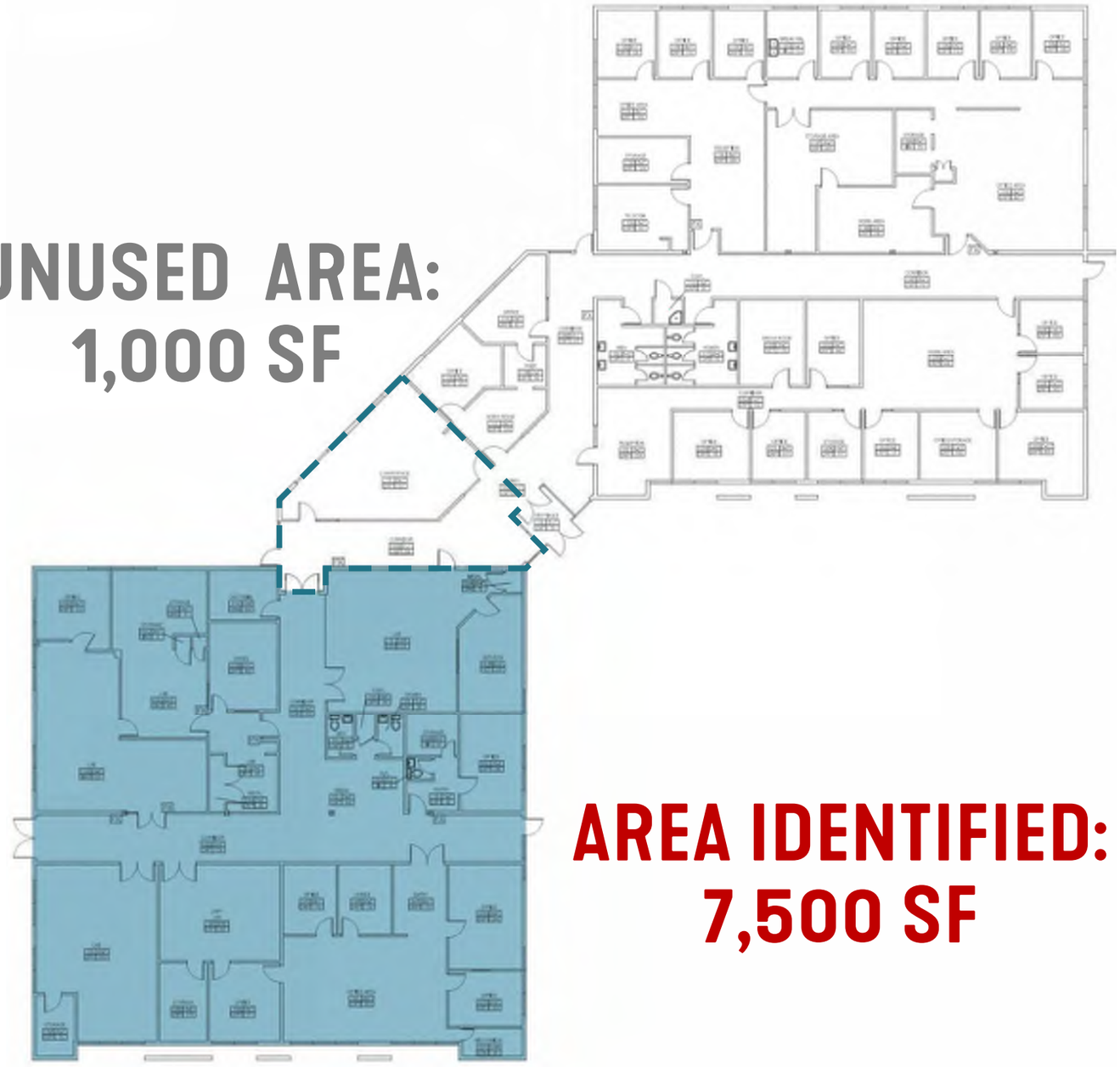
Negative Aspects:

- Low height to structure
- No vehicle bays

AVAILABLE AREA

BUSINESS TECHNOLOGY CENTER

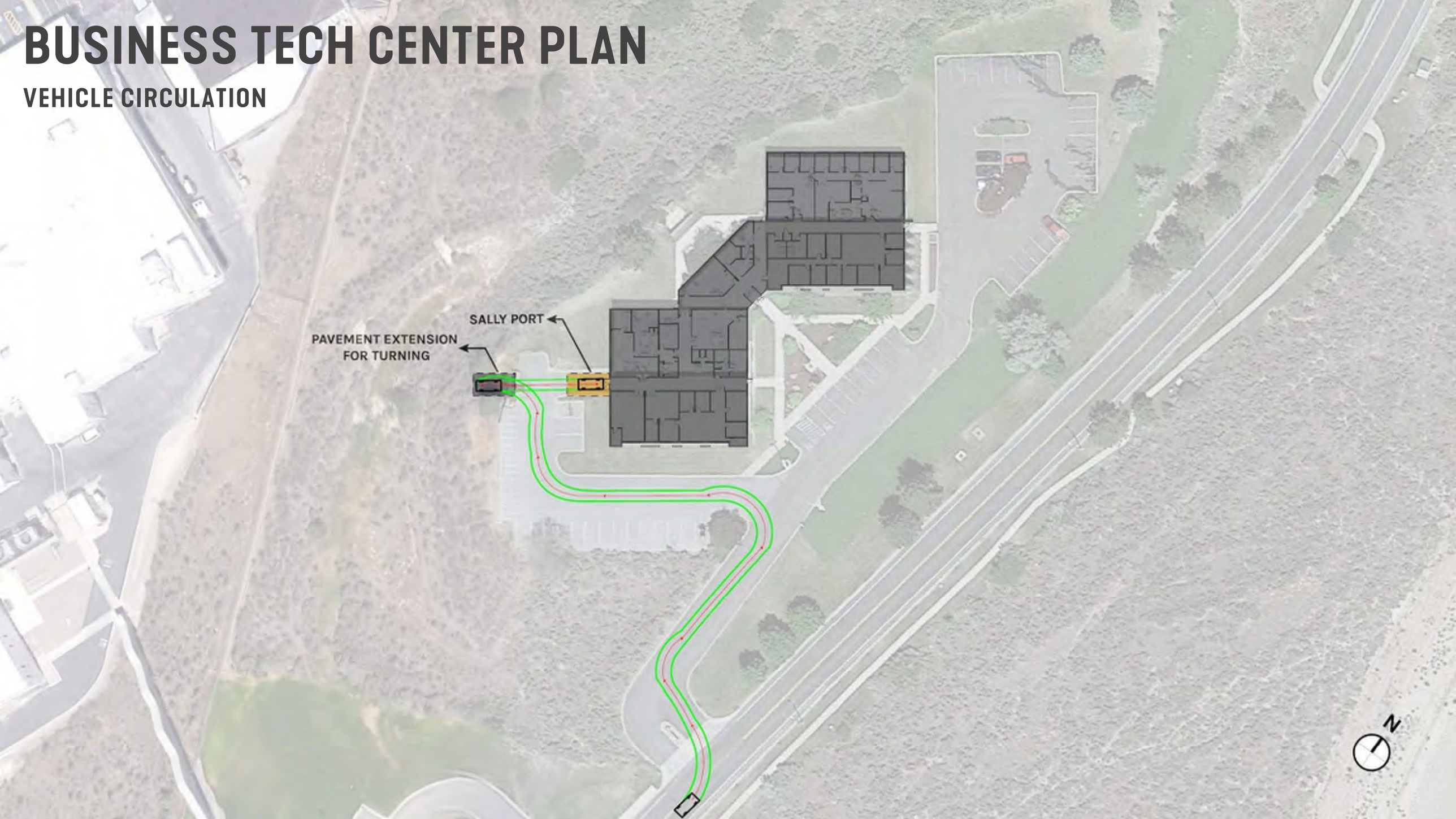
UNUSED AREA:
1,000 SF



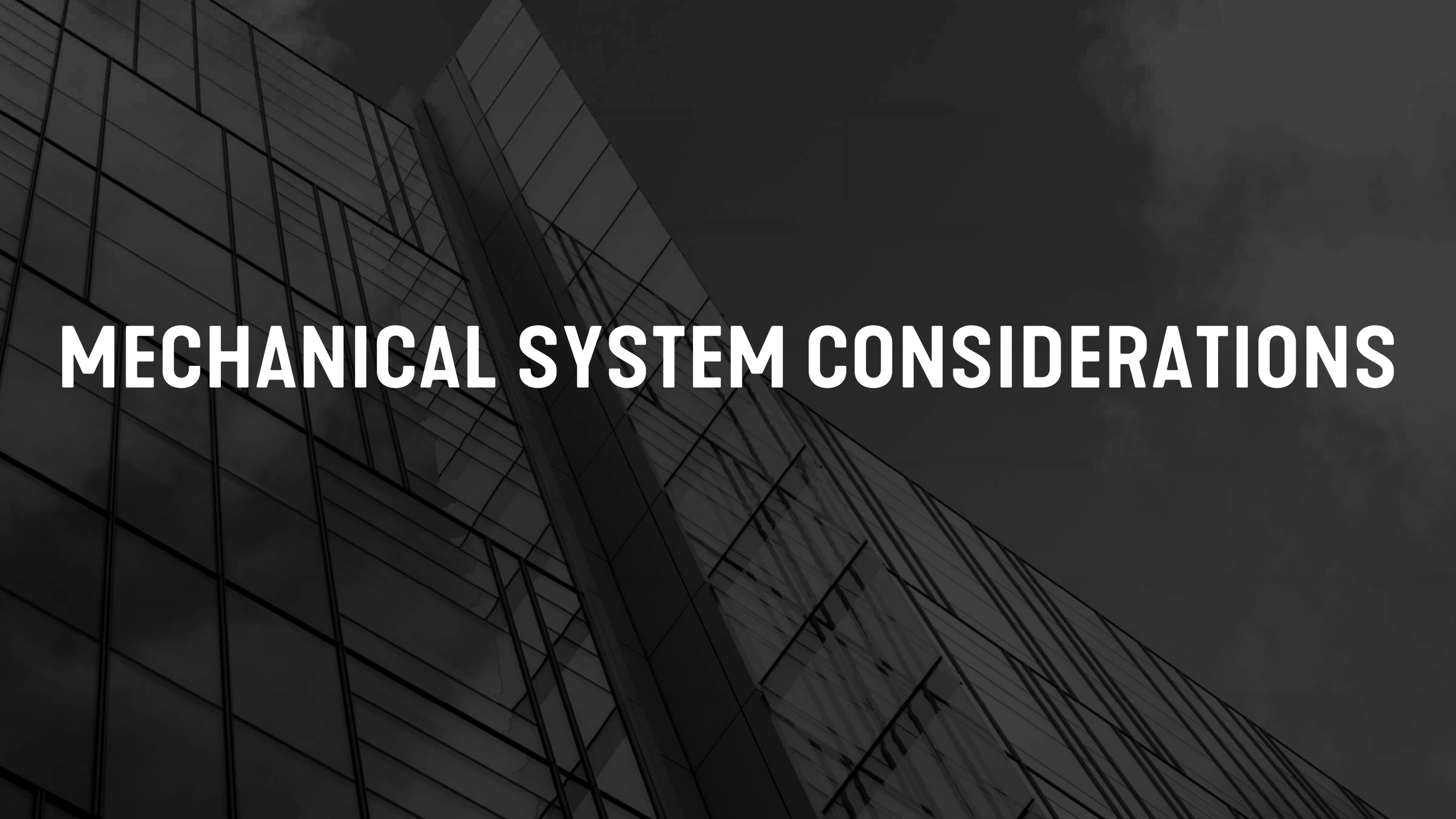
AREA IDENTIFIED:
7,500 SF

BUSINESS TECH CENTER PLAN

VEHICLE CIRCULATION



GENERAL BUILDING SYSTEMS NEEDS



MECHANICAL SYSTEM CONSIDERATIONS

MECHANICAL SYSTEMS DESIGN DRIVERS

MEDICAL DEATH + INVESTIGATION

1 – User Safety | Isolation

2 – Odor | Contamination Control

3 – Energy Efficiency | Resiliency

4 – Reliability | Redundancy

5 – Operations | Maintenance

MECHANICAL SYSTEMS DESIGN DRIVERS

MEDICAL EXAMINER

- Standard Temperature Range
- Stable Humidity Control
- Laminar Airflow Pattern
- Single Pass Elevated Ventilation for Autopsies (HEPA Filtration?)

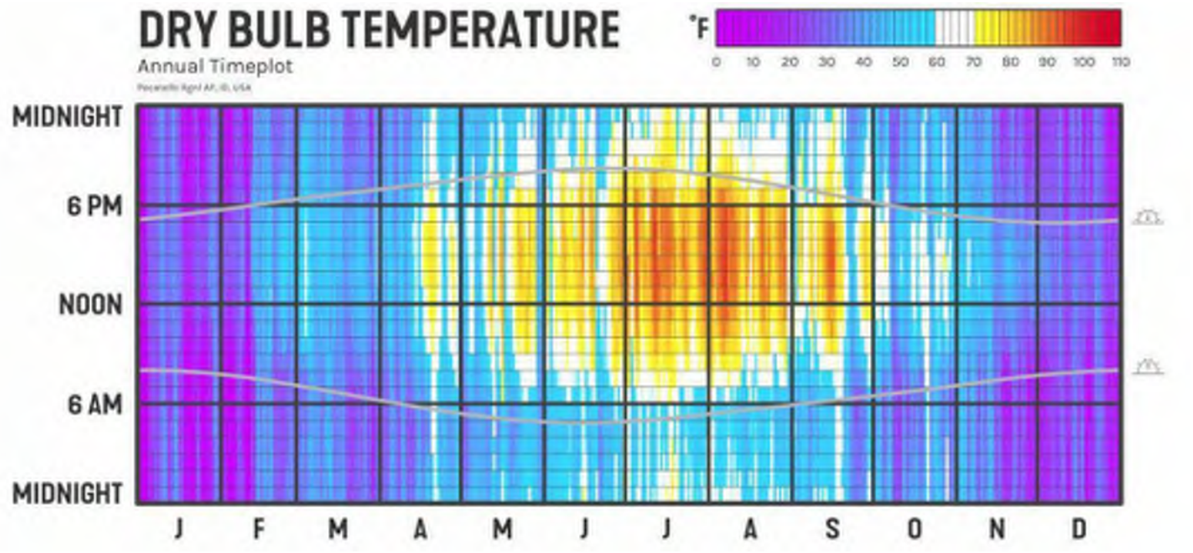
SALLY PORT + RECIVING

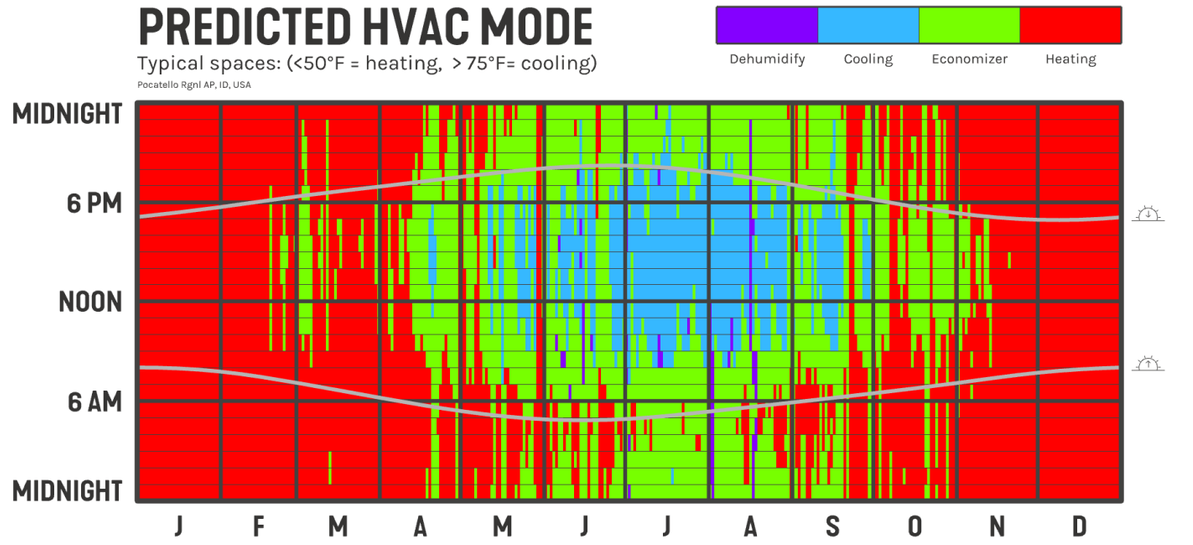
- Expanded Temperature Range
- No Humidity Control
- Radiant Heating at Rollup Doors
- Ability to Increase Exhaust with Detection of Carbon Monoxide

OFFICE AREAS

- Standard Temperature Range
- Stable Humidity Control
- Open / Closed Office Format to Support Privacy when Required
- Daylighting Preferred

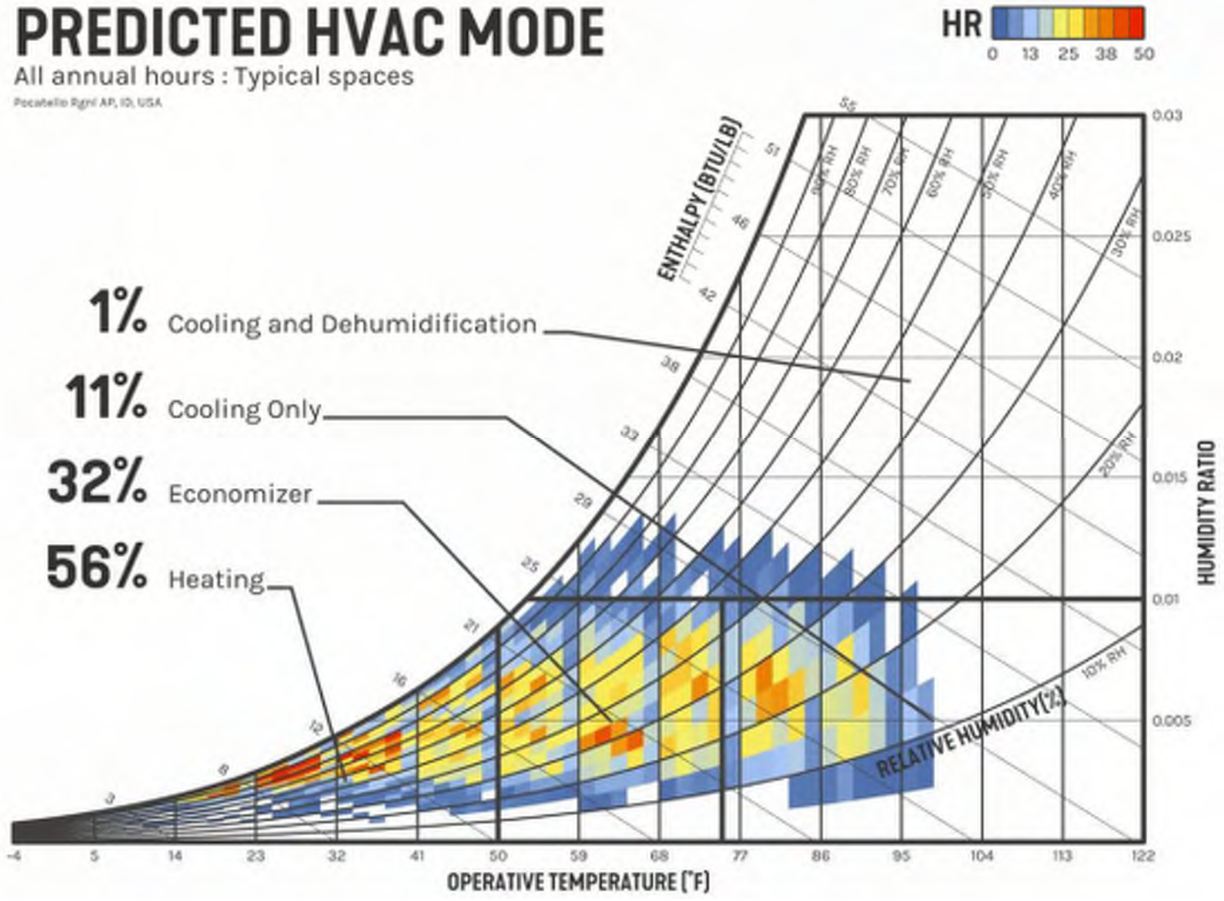
CLIMATE ANALYSIS INFORMS MECHANICAL SYSTEMS OPERATION





HVAC MODE CHARACTERISTICS

- Heating Loads 56% of Year
- Cooling Loads 12% of the Year
- Outside Air Economizer Operation Over 32% of Year



SALLY PORT + RECEIVING

WALK-IN COOLER

ISOLATION | DECOMP AUTOPSY

OFFICE AREAS

ELECTRICAL SYSTEM CONSIDERATIONS

UTILITY/SITE

Idaho Power

RFC:
Existing Transformers (500kVA each)

Business Tech Center:
Existing Transformer (150kVA)

Option: Pull-Up Cooler Connections

Option: Vehicle Charging Stations
- Free, Cost (Metered)…

Option: PV Canopies
- Purchase
- Lease Back

BUILDING DISTRIBUTION

Service Entrance

General Power

Autopsy

HVAC

Coolers

Imaging

Lighting

Lighting Controls

EMERGENCY CONNECTIONS

Generator (Diesel)
- Option: Indoor
- Option: Outdoor
  - Sound Attenuated
- Option: Redundancy (N+1, 2N, …)
- Option: Future Expansion
- Desired Back-up Time
  - Life Safety Min: 90min
  - Coolers: 2-Days?

Transfer Switch (Open Transition Req.)
- Option: By-pass Switch
- Life Safety
- Mechanical
  - Option: Full or Partial
- Stand-by
  - Critical Loads (Autopsy, Coolers,…)
  - Option: Non-Critical Loads

Option: Load Bank

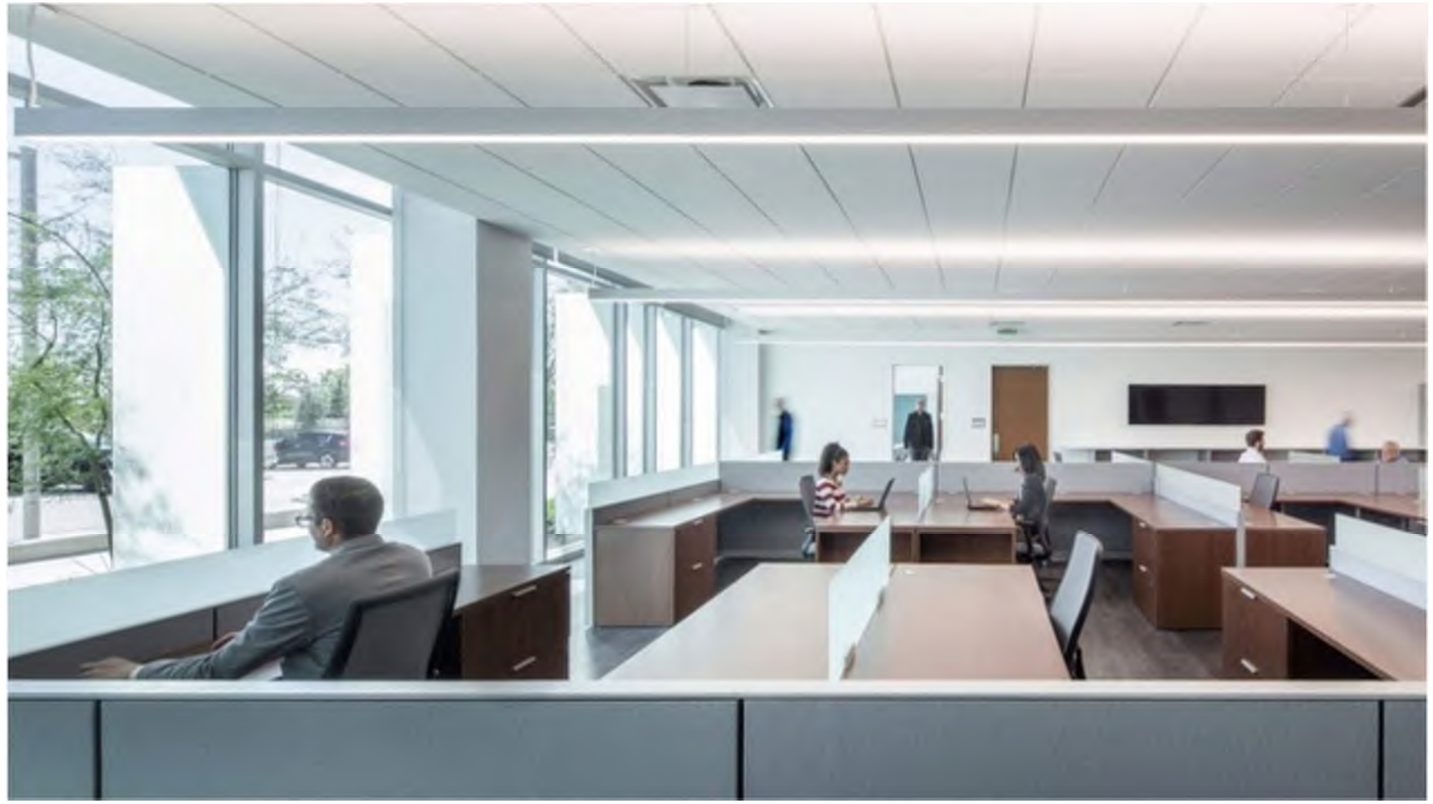
GENERAL POWER

No Generator Connections

Shared Spaces
- Lobby & Family Room
- Breakroom
- Likely No Conference Rooms
- …

Corridors

Office Areas
- 50% Switched Receptacles as Required
  - Option: Time of Day Or Occupancy Sensing



AUTOPSY

Mixed Power
- Normal
- Stand-By

Autopsy Station Connections

Ceiling Cord Reels

Table Exam
- High Powered Lighting
- Full Dimming Controls

HVAC/COOLER/IMAGING/MISC

HVAC Connections
- Option: Full/Partial Generator
- Option: VAV by Occupancy Sensing

Cooler
- Full Generator

Imaging
- Option: Full/No Generator
    - Depends on sensitivity of equipment

Any owner desired Stand-by
- Examples: Wellness Refrigerators, Break Refrigerators, …

LIGHTNING PROTECTION

Sensitive Equipment

Recommended Zone

LIGHTING

Interior LED
- Linear Pendants
- Recessed Downlights
- Cove Fixtures
- Decorative Pendants

Exterior LED
- Canopy
- Existing Parking Lot Poles
- Existing Pathway Lighting

Custom or Specific Lighting
- Tele-conference/Family Waiting/Specialty Spaces

Minimal Light Fixture Storage

LIGHTING CONTROLS

Code/Energy Requirements
- IECC/ASHRAE
- LEED

Interior Controls
- Full Dimming
- Vacancy/Occupancy Sensors
- Daylight Sensors
- Time Clock

Exterior
- Daylight Photocells
- Astronomical Time Clock
- BMS Tie-In

ADDITIONAL ENERGY STRATEGIES

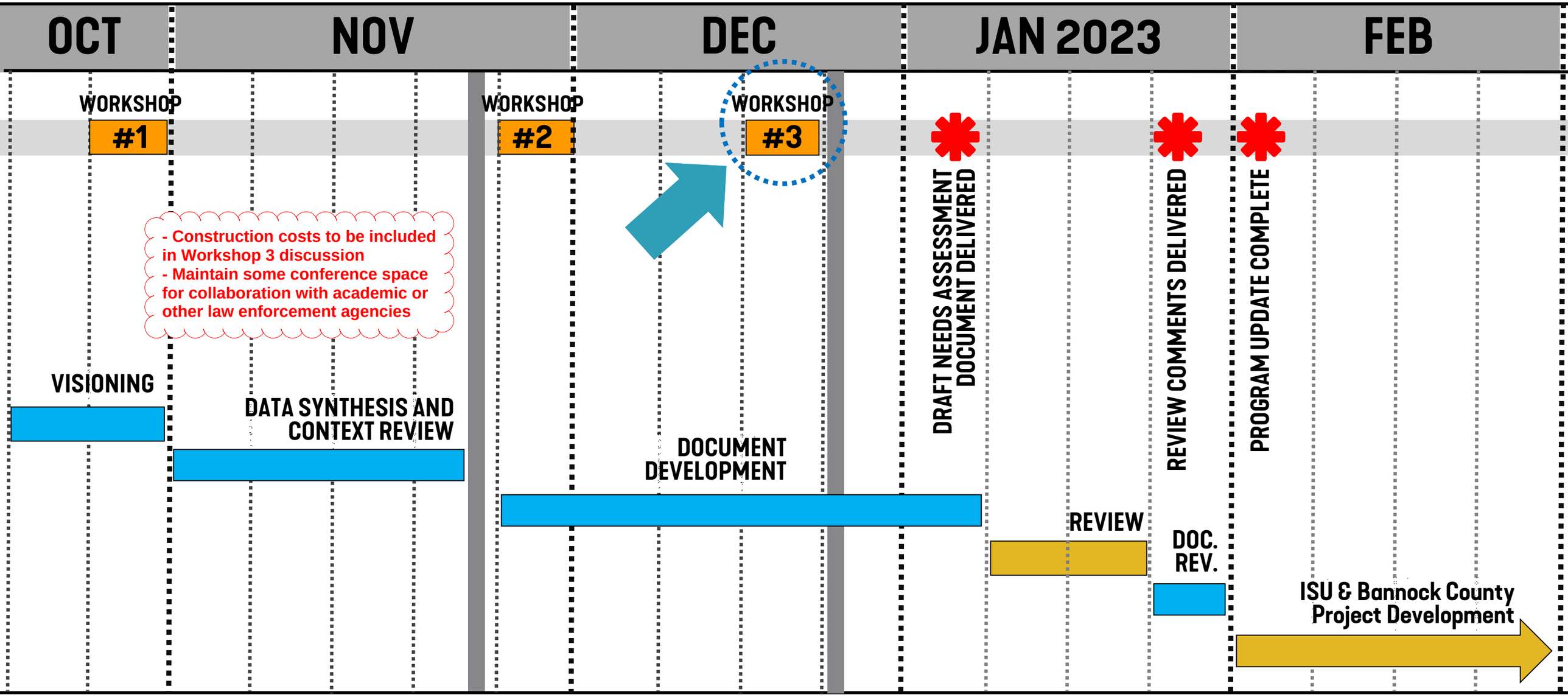
Advanced Metering

Solar Powered Light Poles

PV Provisions
- Future Canopies
- Future Use of the Roof
- Future Use of the Site…

NEXT STEPS

NEEDS ANALYSIS SCHEDULE




THANK YOU!

SOUTHEAST IDAHO REGIONAL AUTOPSY FACILITY AT ISU

WORKSHOP 03

12.20.2022

SMITHGROUP

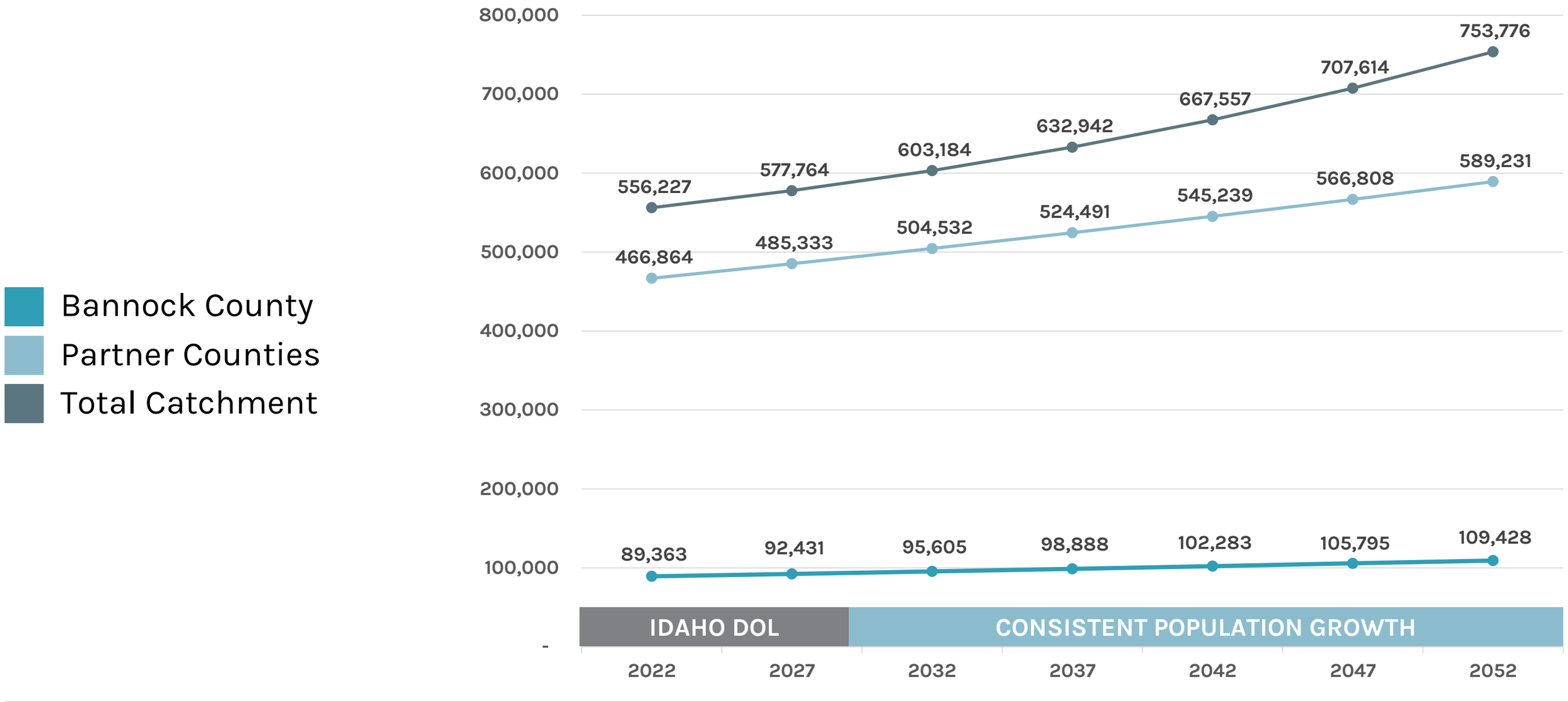
AGENDA

1. POPULATION AND LOAD UPDATE
2. BLOCK PLAN LAYOUTS
3. PROJECT COSTS
4. NEXT STEPS

POPULATION AND LOAD UPDATE

POPULATION CHANGE

"CATCHMENT"

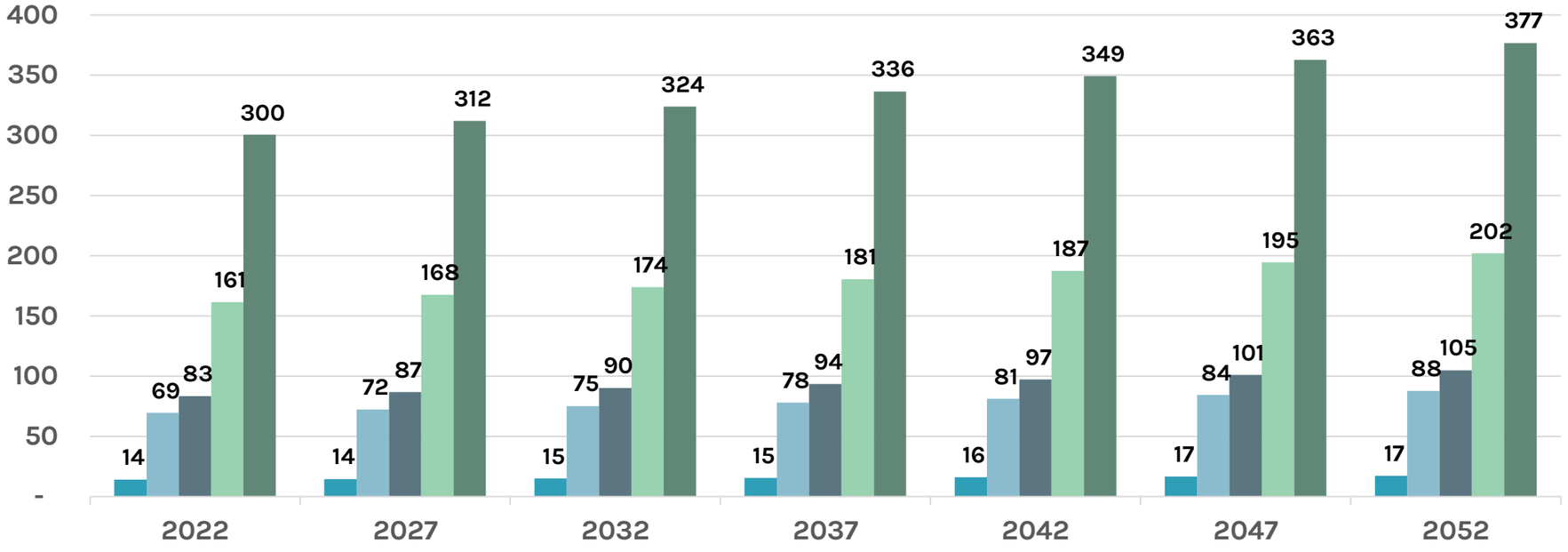


POPULATION CHANGE

"CATCHMENT"

5-Year Average Autopsy Rate : 1,000 in the Population							
Bannock County Rate	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total Autopsies	14	14	15	15	16	17	17
Partner Counties Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	69	72	75	78	81	84	88
Combined Rate	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Total Autopsies	83	87	90	94	97	101	105
Calculated Rate							
0.5 Bannock + 0.25 Partners	161	168	174	181	187	195	202
0.75 Bannock + 0.5 Partners	300	312	324	336	349	363	377

- Bannock County
- Partner Counties
- Total Catchment
- Increased Rate
- Further Increased Rate



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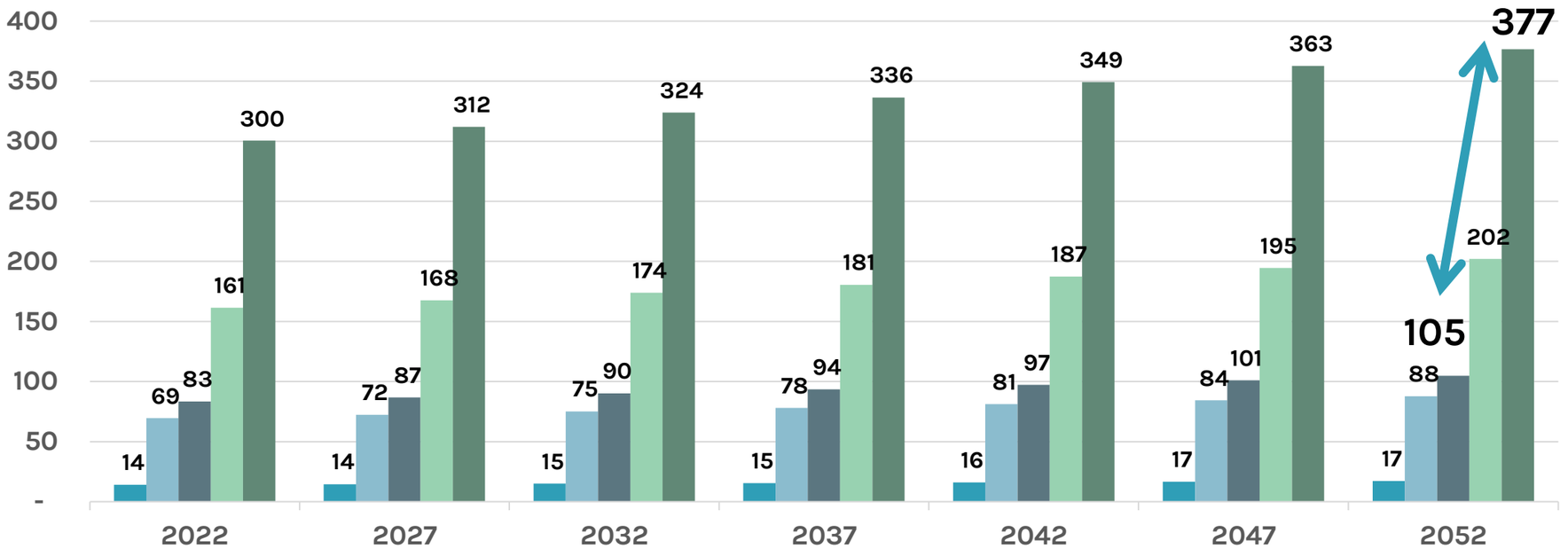

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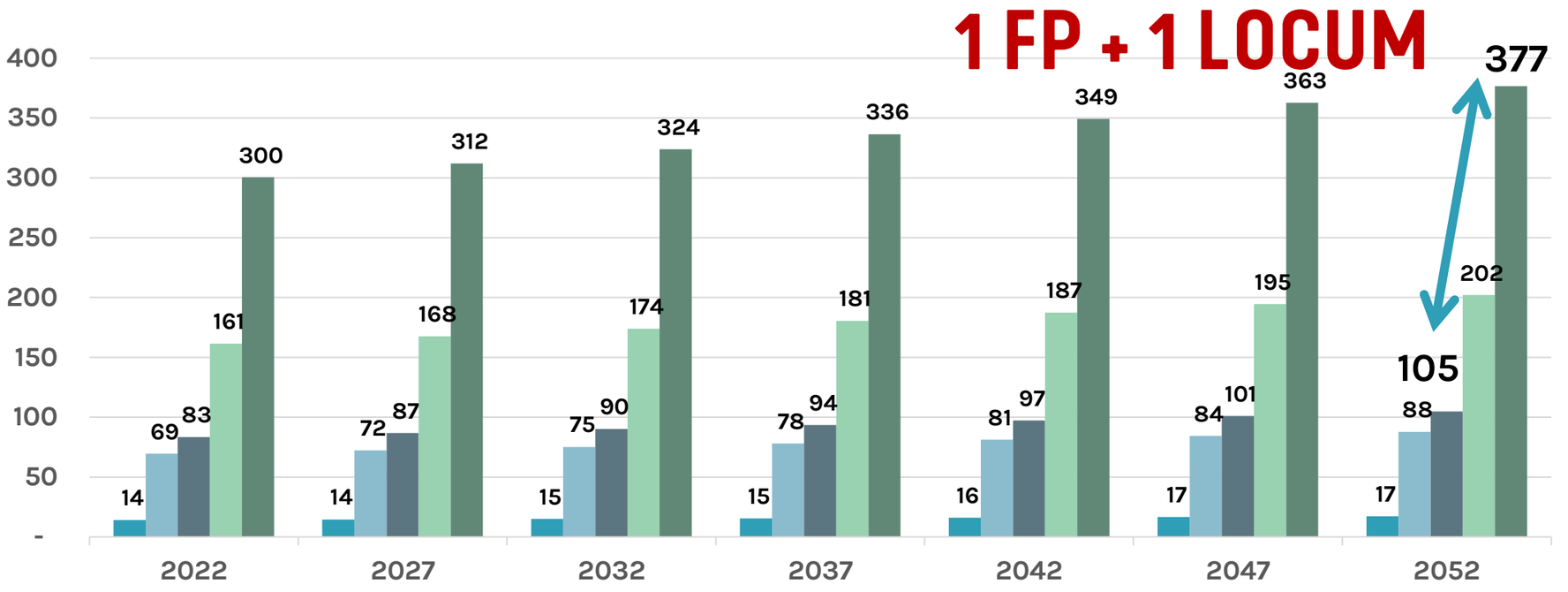
- Bannock County
- Partner Counties
- Total Catchment
- Increased Rate
- Further Increased Rate

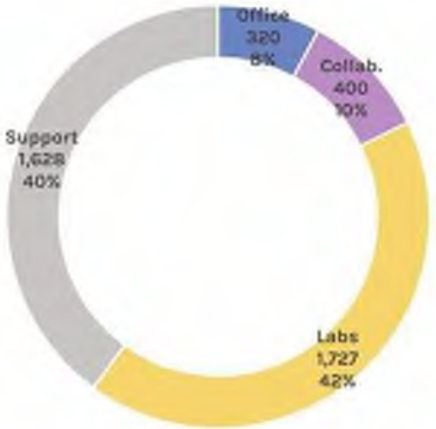
NAME ACCREDITATION: 250-325 AUTOPSIES / FP



CONCEPT SPACE PROGRAM REMINDER

Southeast Idaho Regional Autopsy Facility at ISU

Facility Summary	Staff	Grossing	Total NASF	Original NASF	Original GSF	Total GSF
Regional Autopsy Program Spaces	3	62%	4,075			6,572
Facility TOTAL	**3**	62%	**4,075**	0	0	**6,572**



	Office	Collab.	Labs	Edu	Support
	320	400	1,727	0	1,628
Regional Autopsy Facility	320	400	1,727	0	1,628

100%	gional Autopsy Facility	4,075
		4,075

FACILITY SIZE: 6,000-7,000 SF

Southeast Idaho Regional Autopsy Facility at ISU

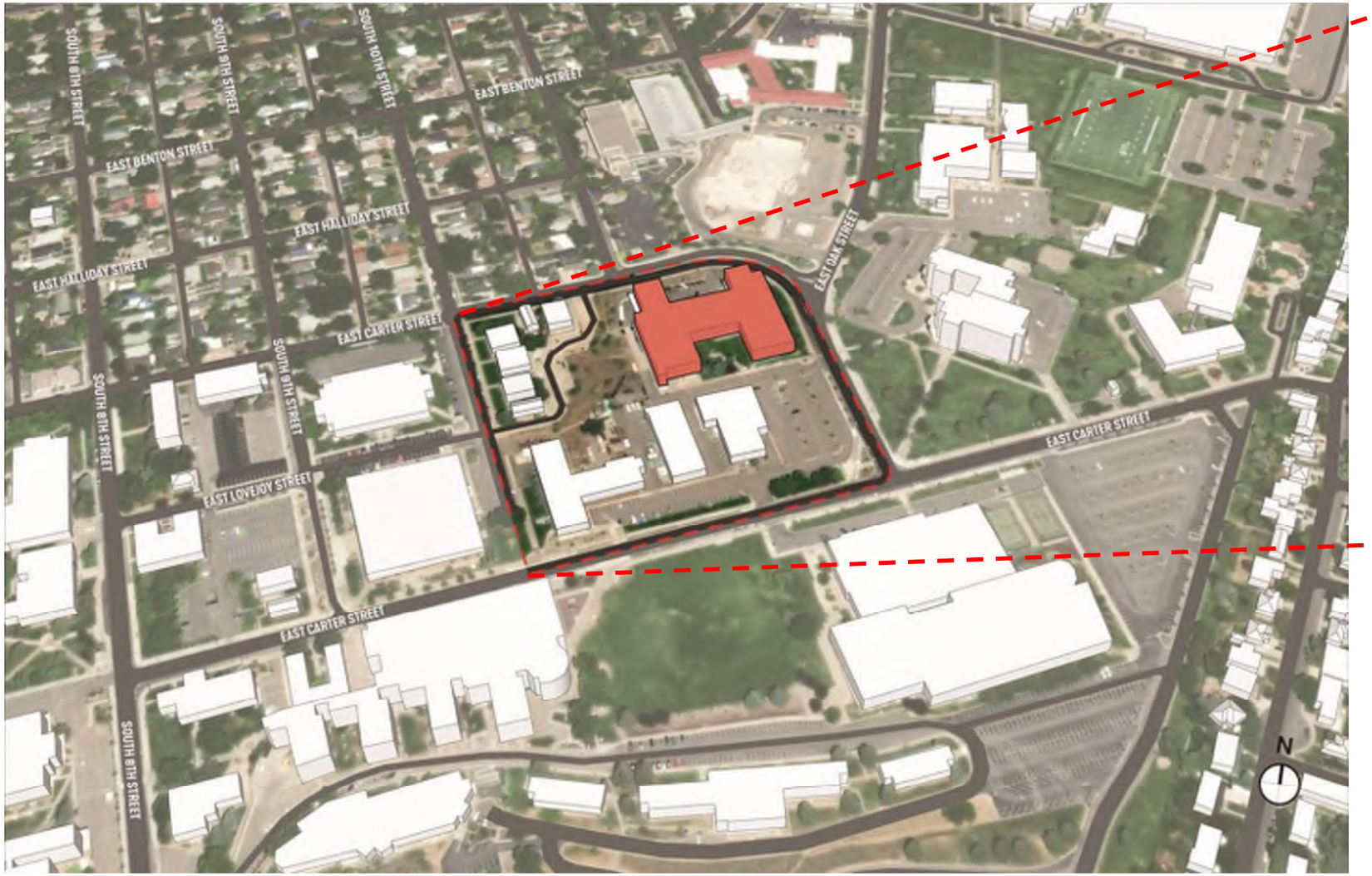
Regional Autopsy Facility

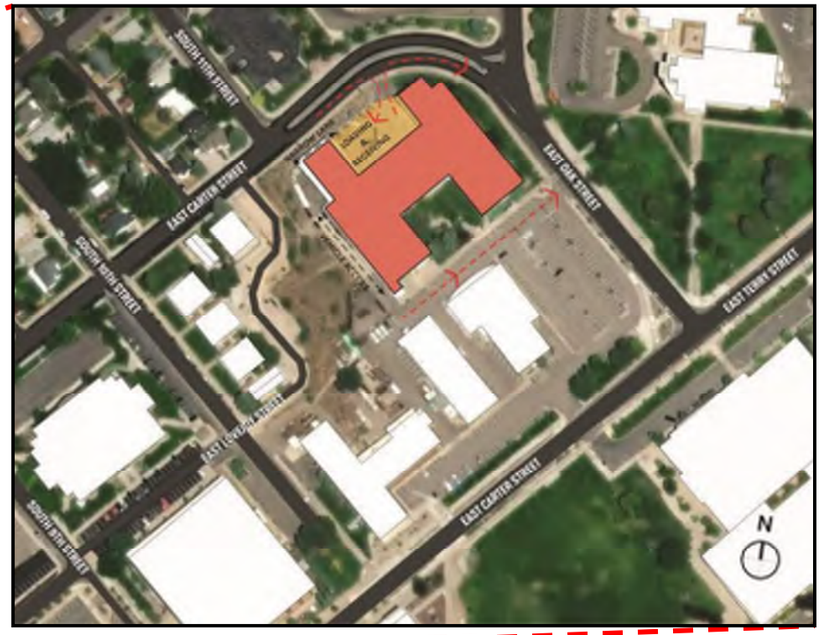
Space Name	Staff	NSF	Qty.	Total NSF	Mult.	NASF	Total NASF	Original SF	Comments
Office									
Chief Medical Examiner	1	150	1	150	1.3	195		0	Includes area for microscope
Autopsy Assistant / Admin	2	48	2	96	1.3	125		0	
Sub-Total	3			246			320	0	
Collaboration									
Lobby		120	1	120	1.0	120		0	
Family Bereavement Room		120	1	120	1.0	120		0	Video Conference Capability
Break Room		100	1	100	1.0	100		0	
Autopsy Viewing		60	1	60	1.0	60		0	Viewing at grade / no elevated platform
Sub-Total	0			400			400	0	
Laboratory									
Receiving / Release Room		242	1	242	1.0	242		0	
X-Ray Room		363	1	363	1.0	363		0	
Decedent Cooler		396	1	396	1.0	396		0	Storage for 12 on carriers
General Autopsy		272	1	272	1.0	272		0	
General Autopsy Support		91	1	91	1.0	91		0	
Isolation Autopsy		272	1	272	1.0	272		0	
Isolation Autopsy Support		91	1	91	1.0	91		0	Small space for anthro
Sub-Total	0			1,727			1,727	0	
Support									
Sally Port		484	1	484	1.0	484		0	
Cart Wash Alcove		121	1	121	1.0	121		0	
Evidence and Evidence Drying		121	1	121	1.0	121		0	
Tissue / Slide and Block Storage		121	1	121	1.0	121		0	
Records Storage		121	1	121	1.0	121		0	
Autopsy Supply Storage		121	1	121	1.0	121		0	
Biological Waste Storage		60	1	60	1.0	60		0	
PPE On/Off		121	1	121	1.0	121		0	Includes laundry
Locker Area		100	1	100	1.0	100		0	Non-Gender Assigned
Changing Room		40	1	40	1.0	40		0	Non-Gender Assigned
Shower Room		100	1	100	1.0	100		0	Non-Gender Assigned
Office Supply Storage		18	1	18	1.0	18		0	Closet
Maintenance Storage		100	1	100	1.0	100		0	
Sub-Total	0			1,628			1,628	0	
TOTAL	3			4,001			4,075	0	

FACILITIES UNDER CONSIDERATION

ROY F. CHRISTENSEN COMPLEX

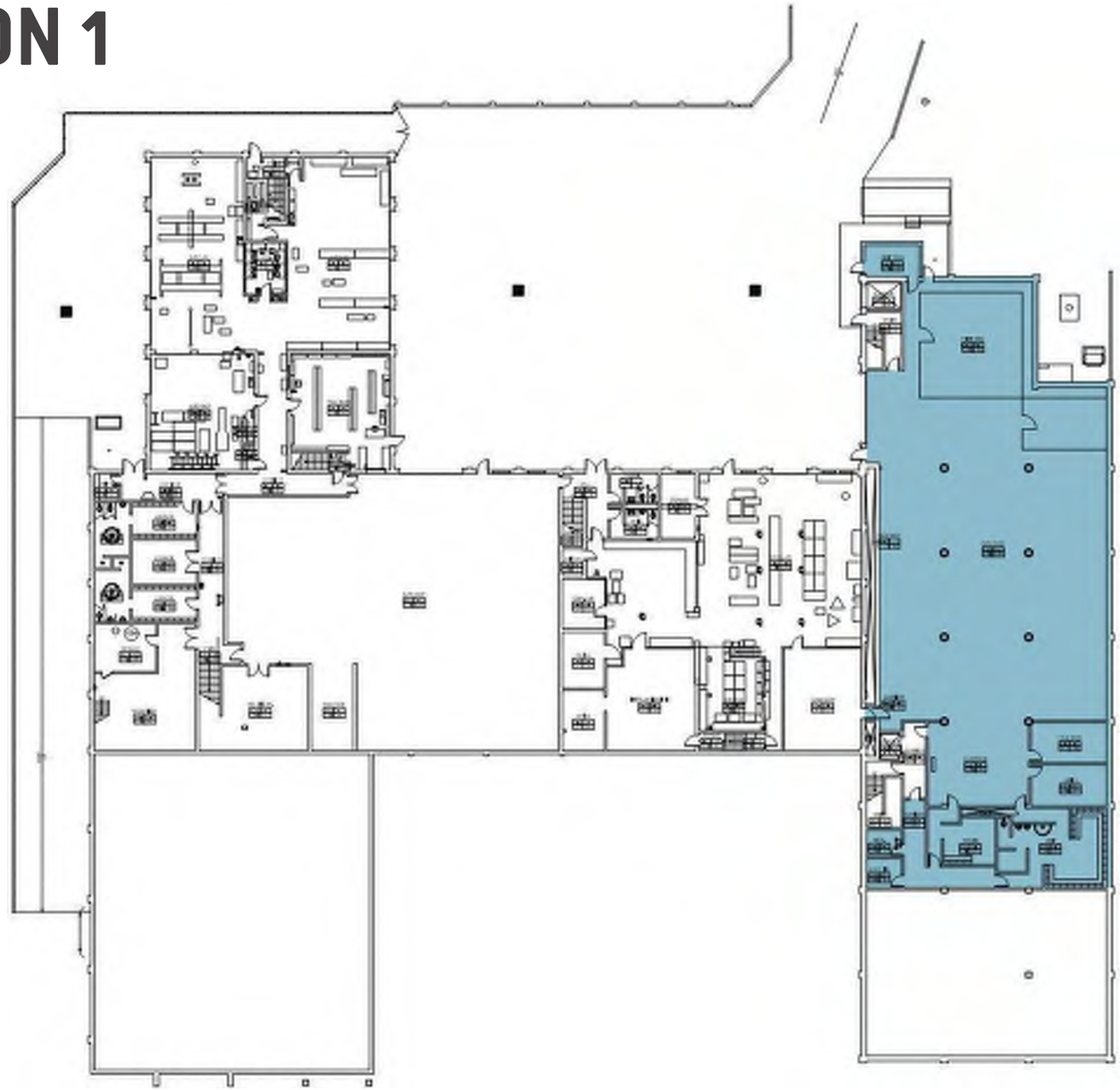
BASEMENT LEVEL 2





LOCATION OPTION 1

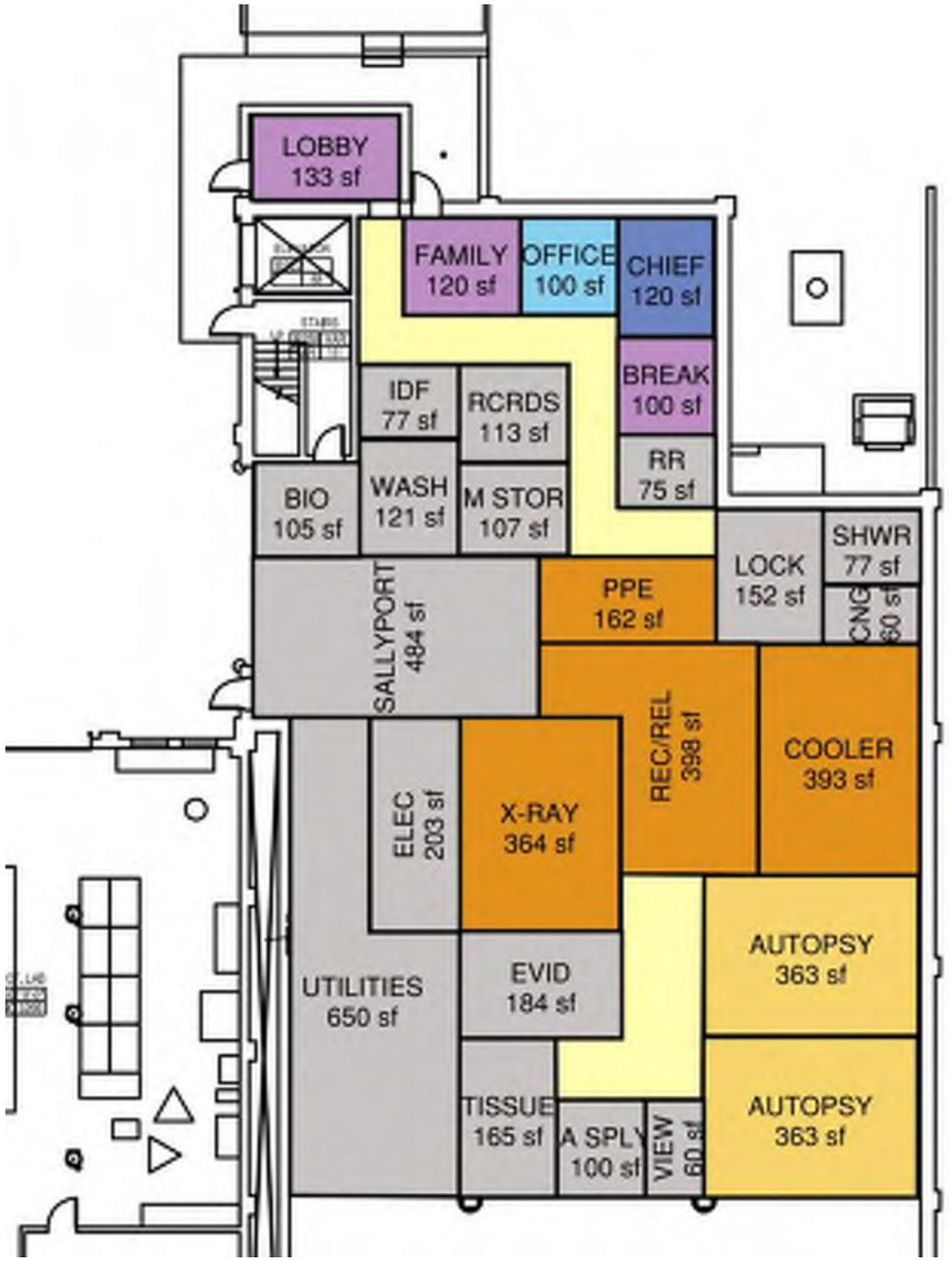
RFC BASEMENT LEVEL 2



AREA IDENTIFIED: 10,800 SF

LOCATION OPTION 1

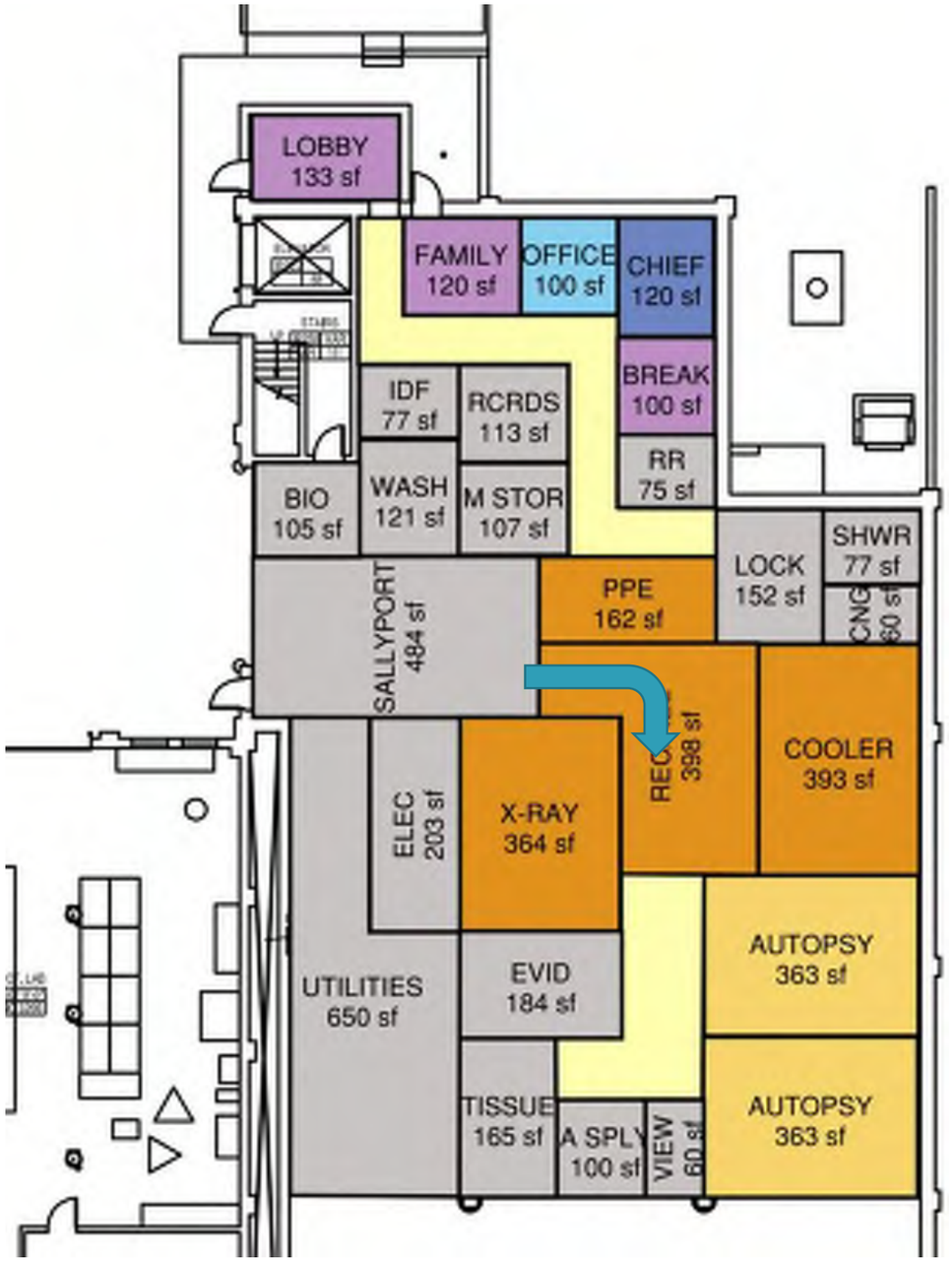
RFC BASEMENT LEVEL 2



BLOCK LAYOUT: 6,300 SF

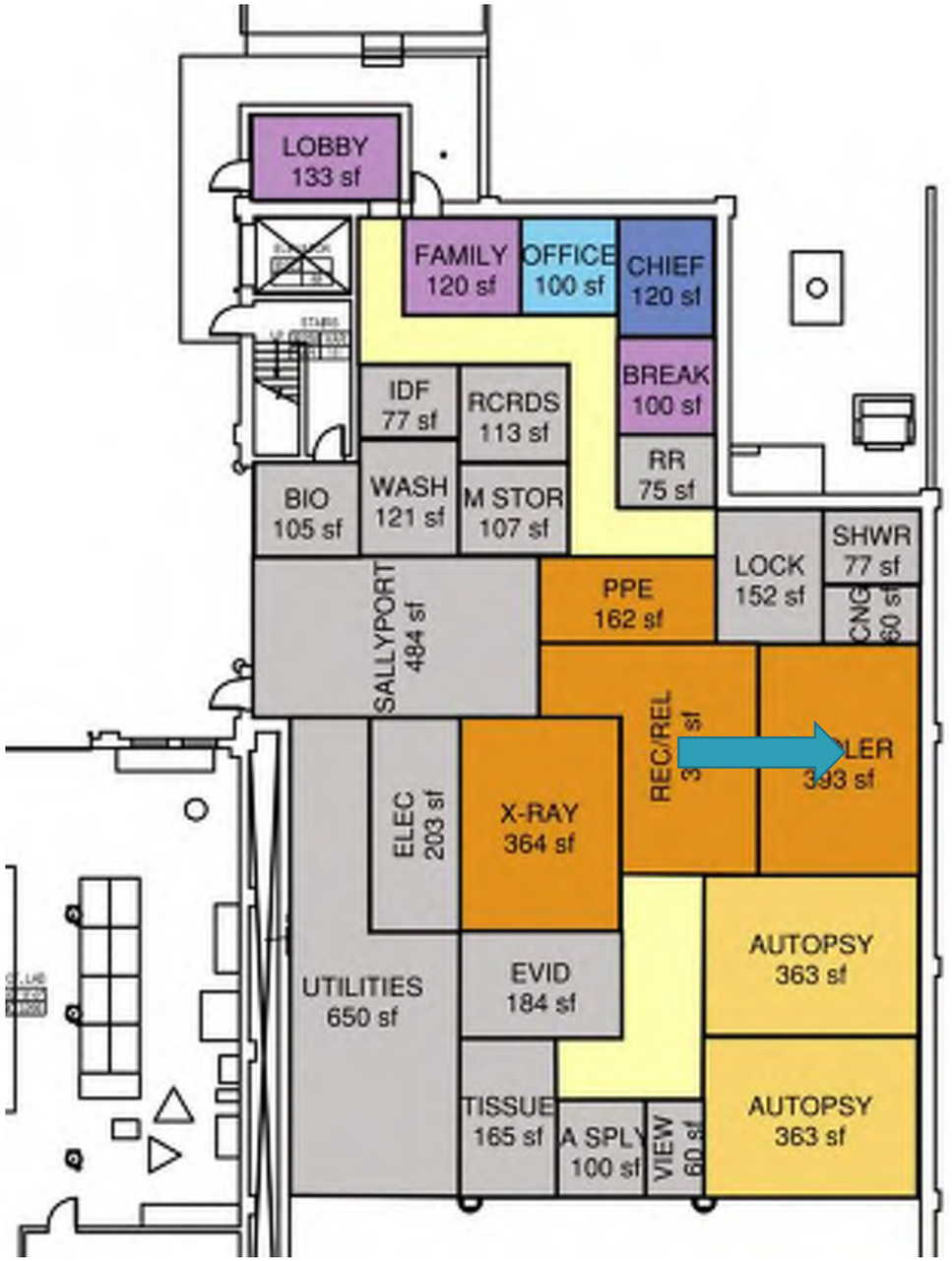
LOCATION OPTION 1

RFC BASEMENT LEVEL 2



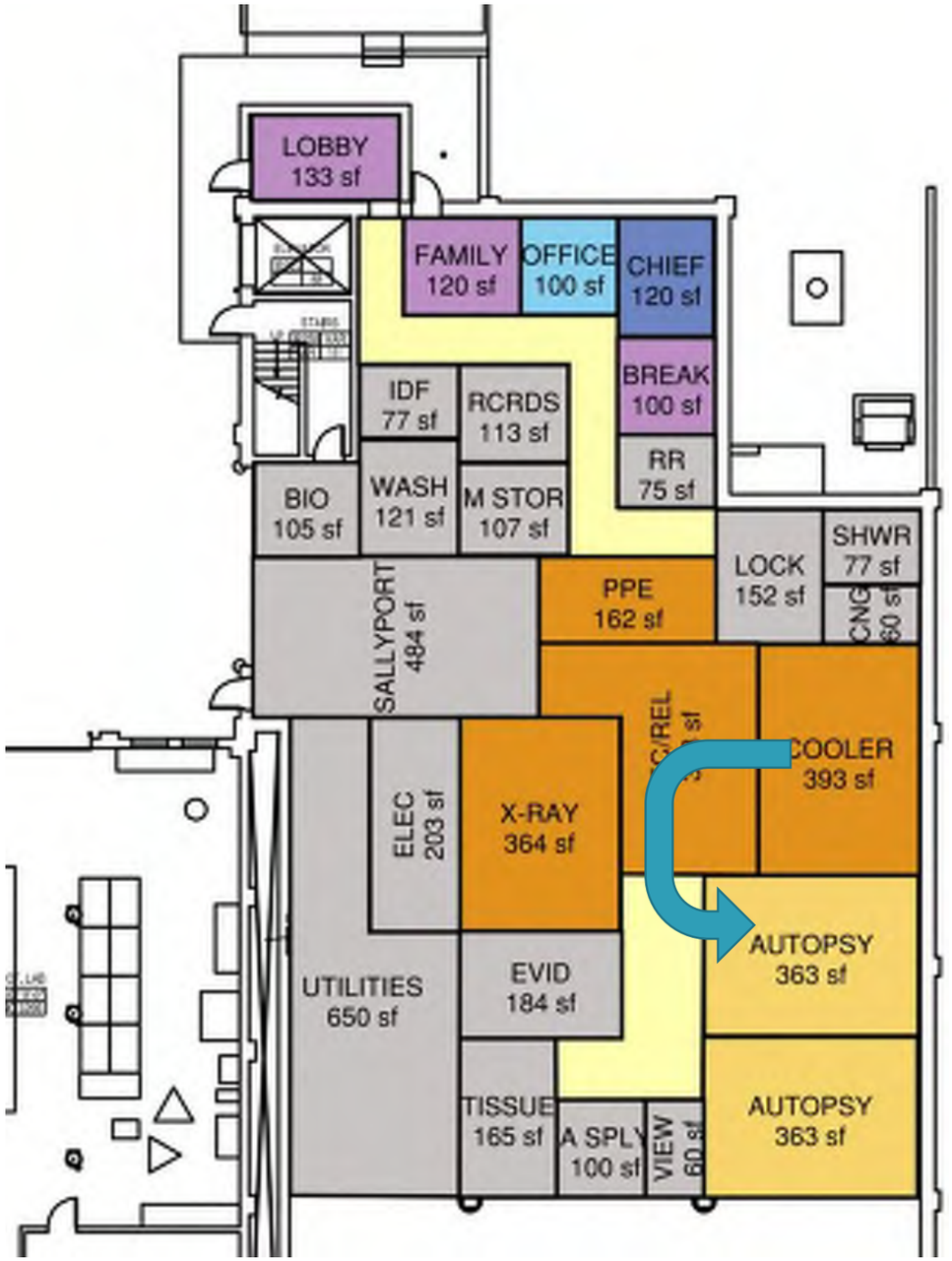
LOCATION OPTION 1

RFC BASEMENT LEVEL 2



LOCATION OPTION 1

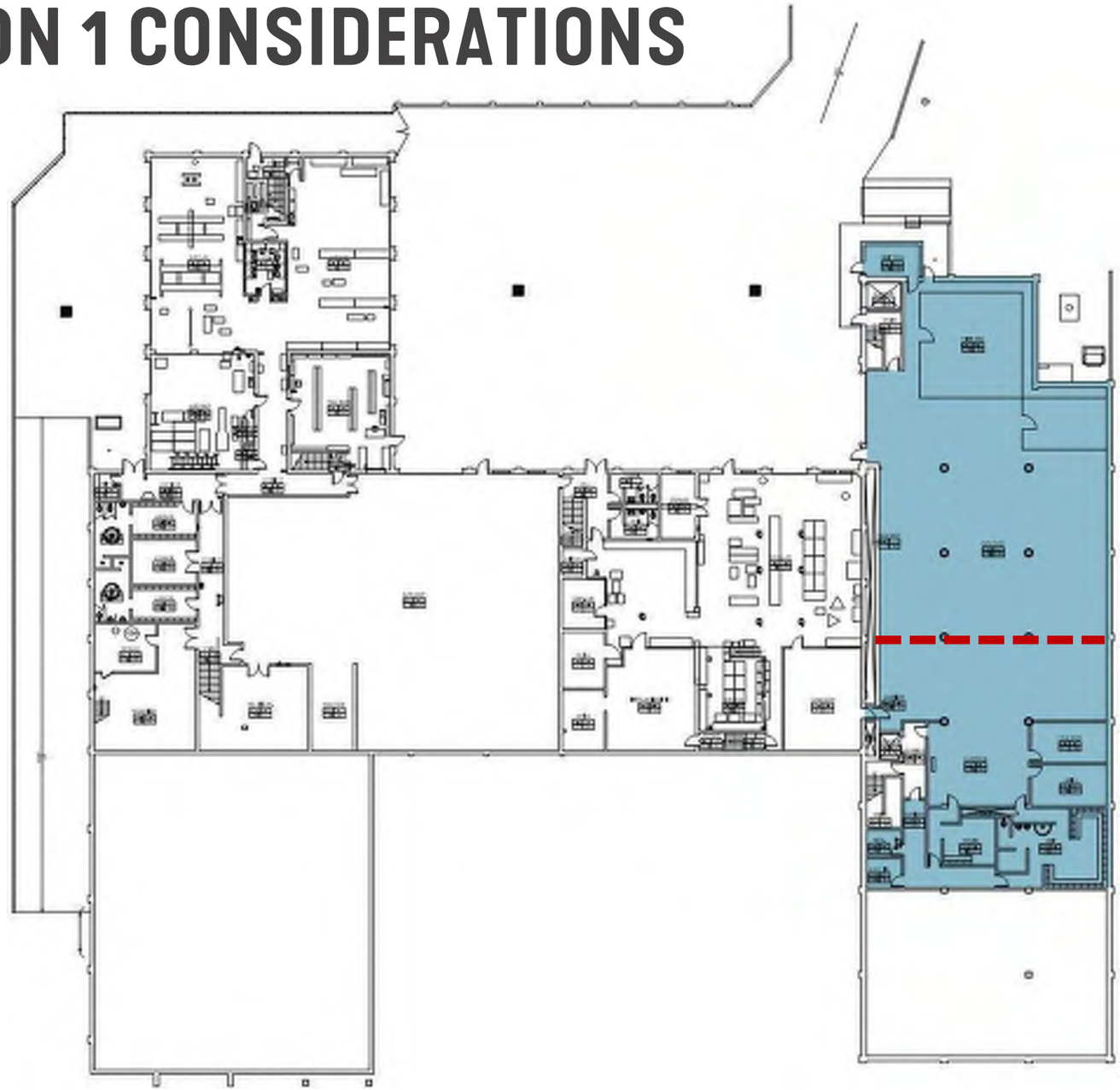
RFC BASEMENT LEVEL 2



LOCATION OPTION 1 CONSIDERATIONS

RFC BASEMENT LEVEL 2

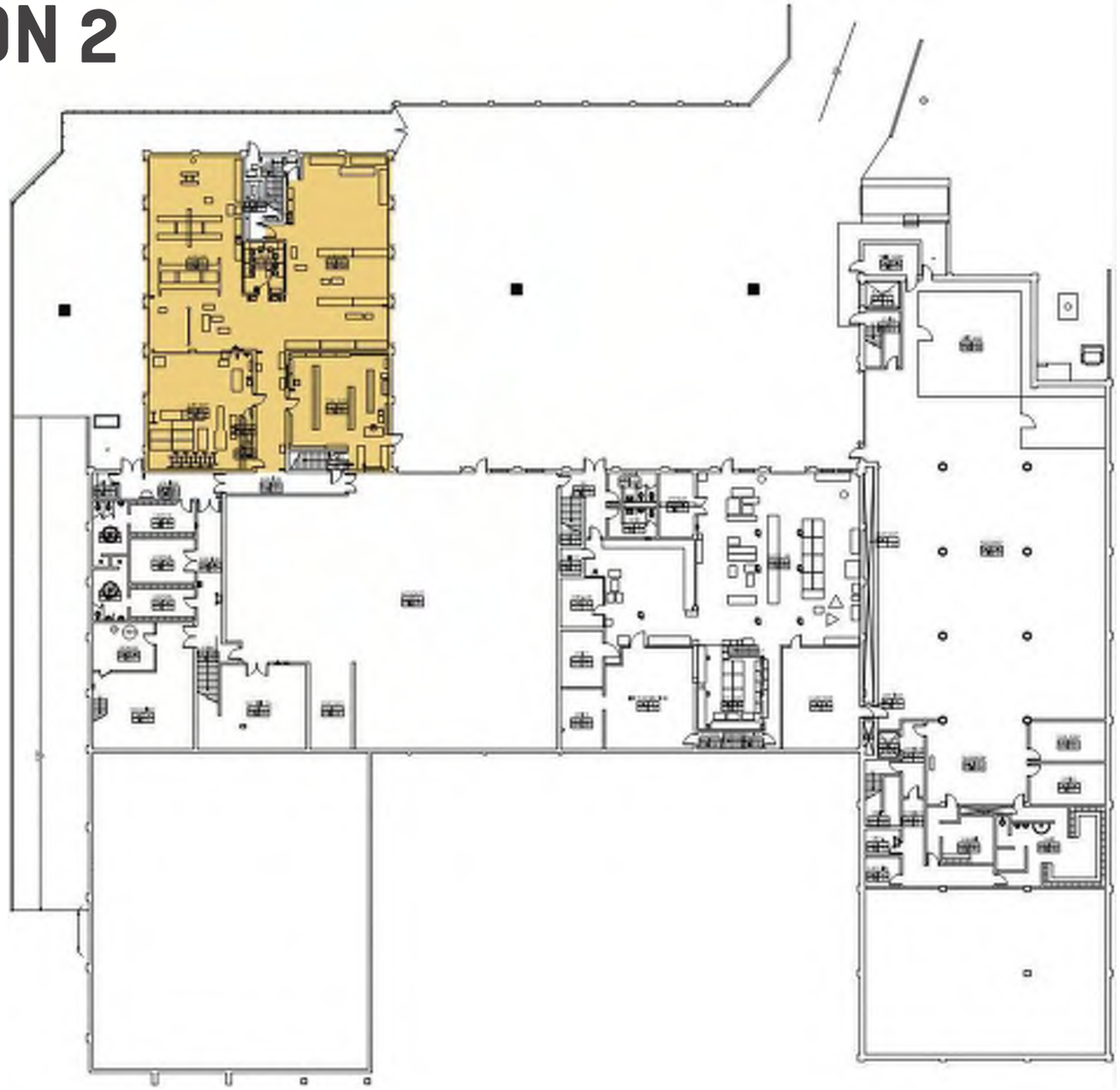
- Remaining area challenging to repurpose
- Family entry feels disconnected
- Minor reductions in net program areas



LOCATION OPTION 2

RFC BASEMENT LEVEL 2

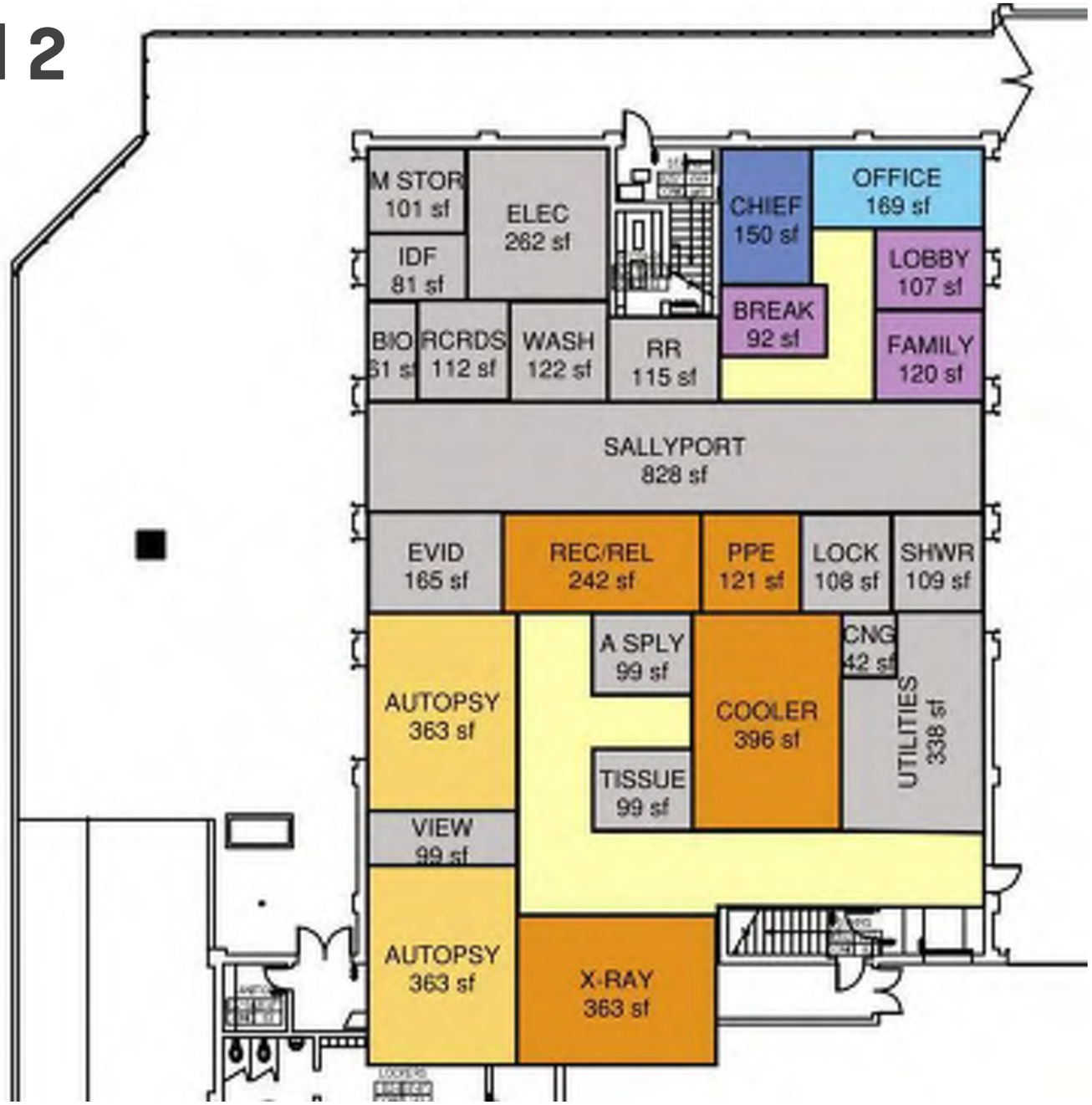
AREA IDENTIFIED: 5,600 SF



LOCATION OPTION 2

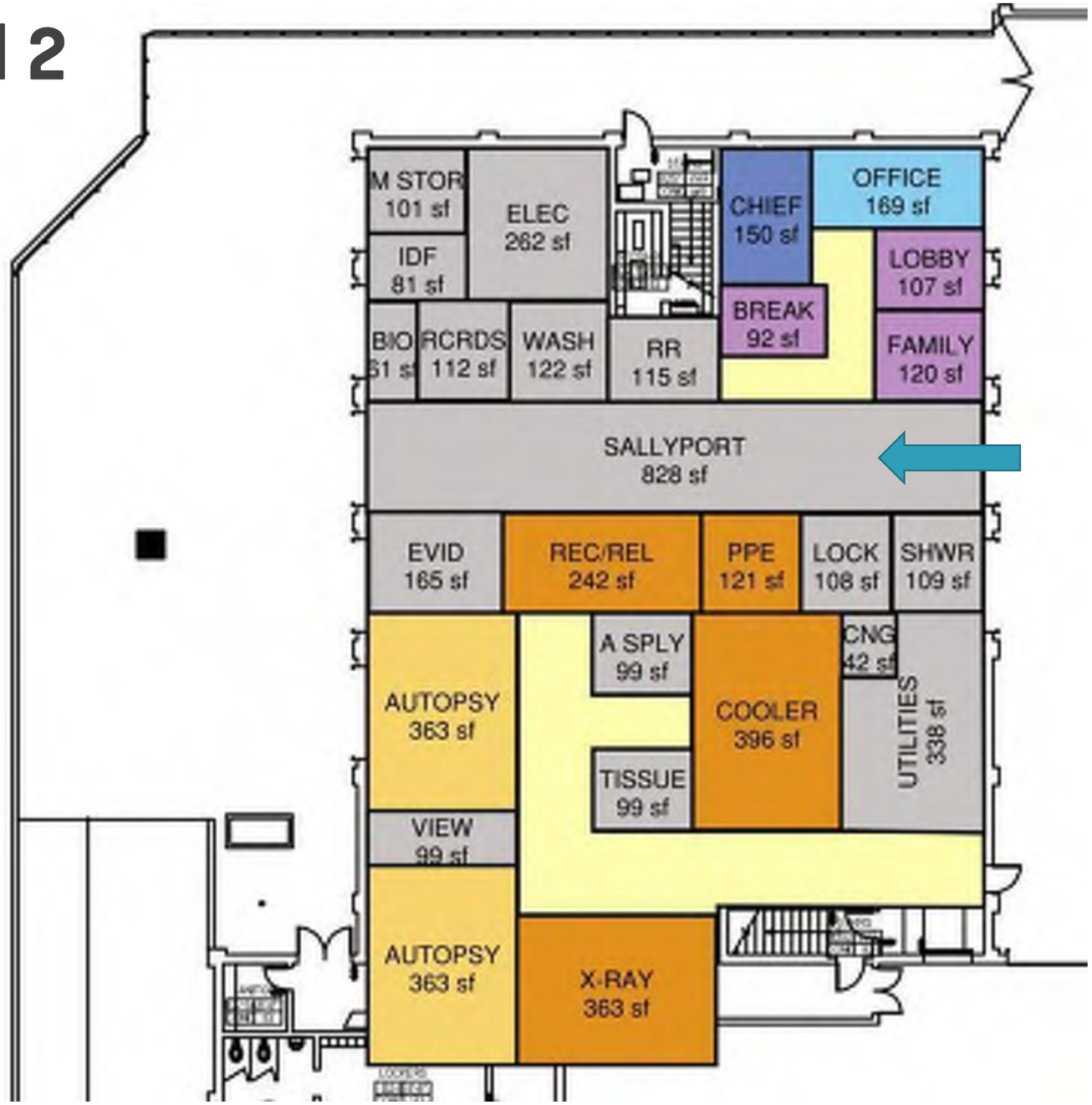
RFC BASEMENT LEVEL 2

BLOCK LAYOUT: 6,200 SF



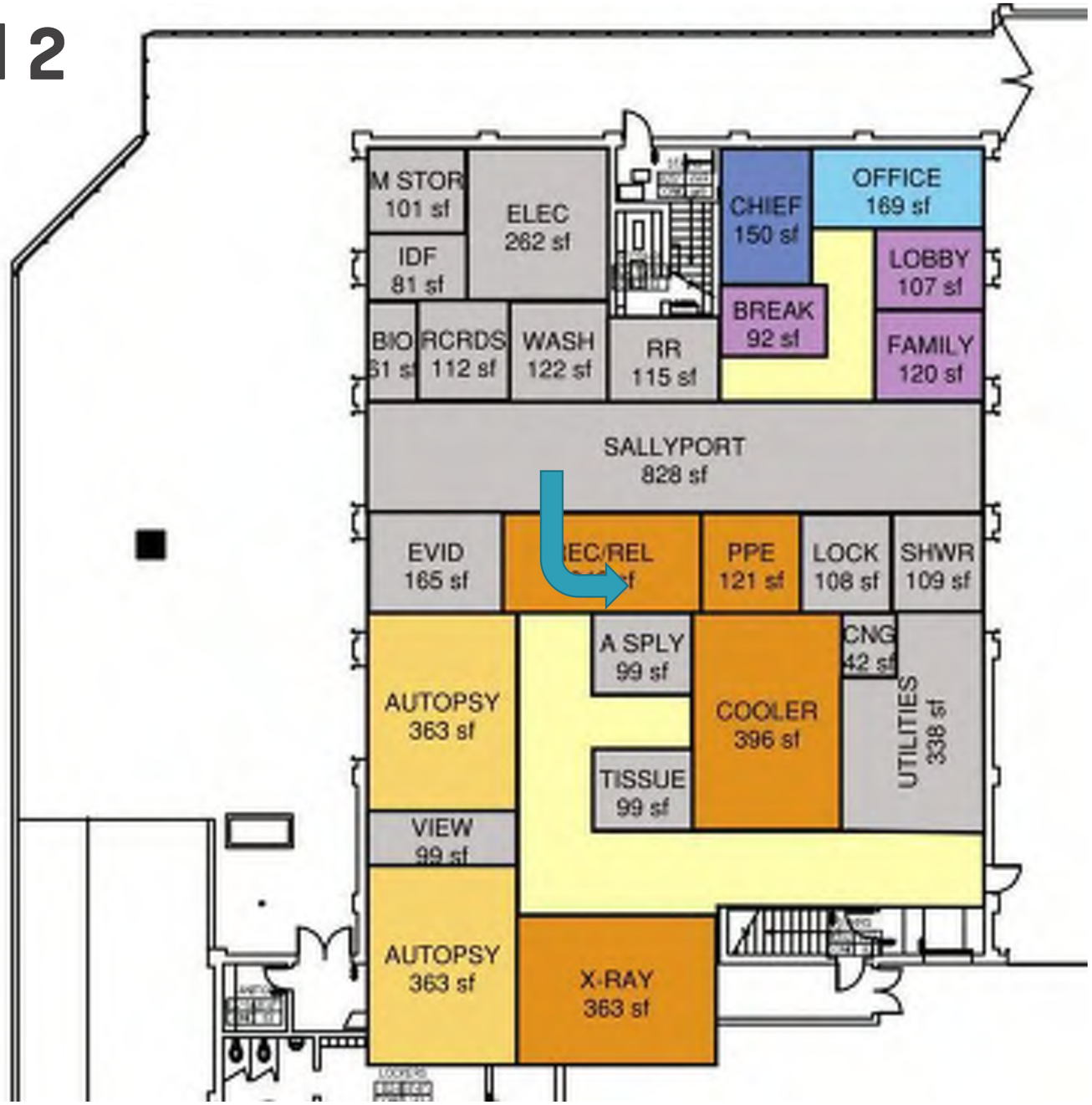
LOCATION OPTION 2

RFC BASEMENT LEVEL 2



LOCATION OPTION 2

RFC BASEMENT LEVEL 2

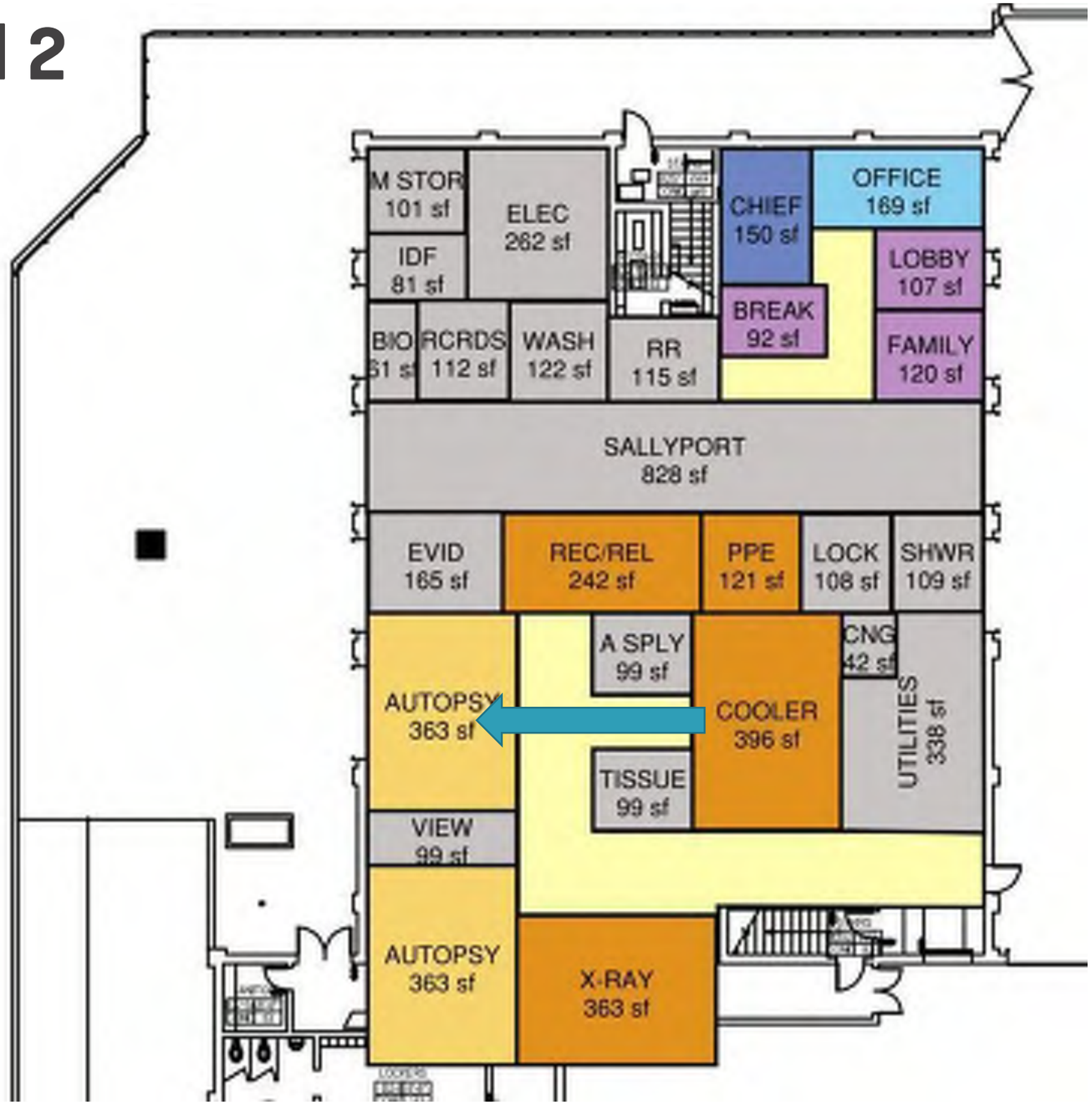


LOCATION OPTION 2

RFC BASEMENT LEVEL 2

LOCATION OPTION 2

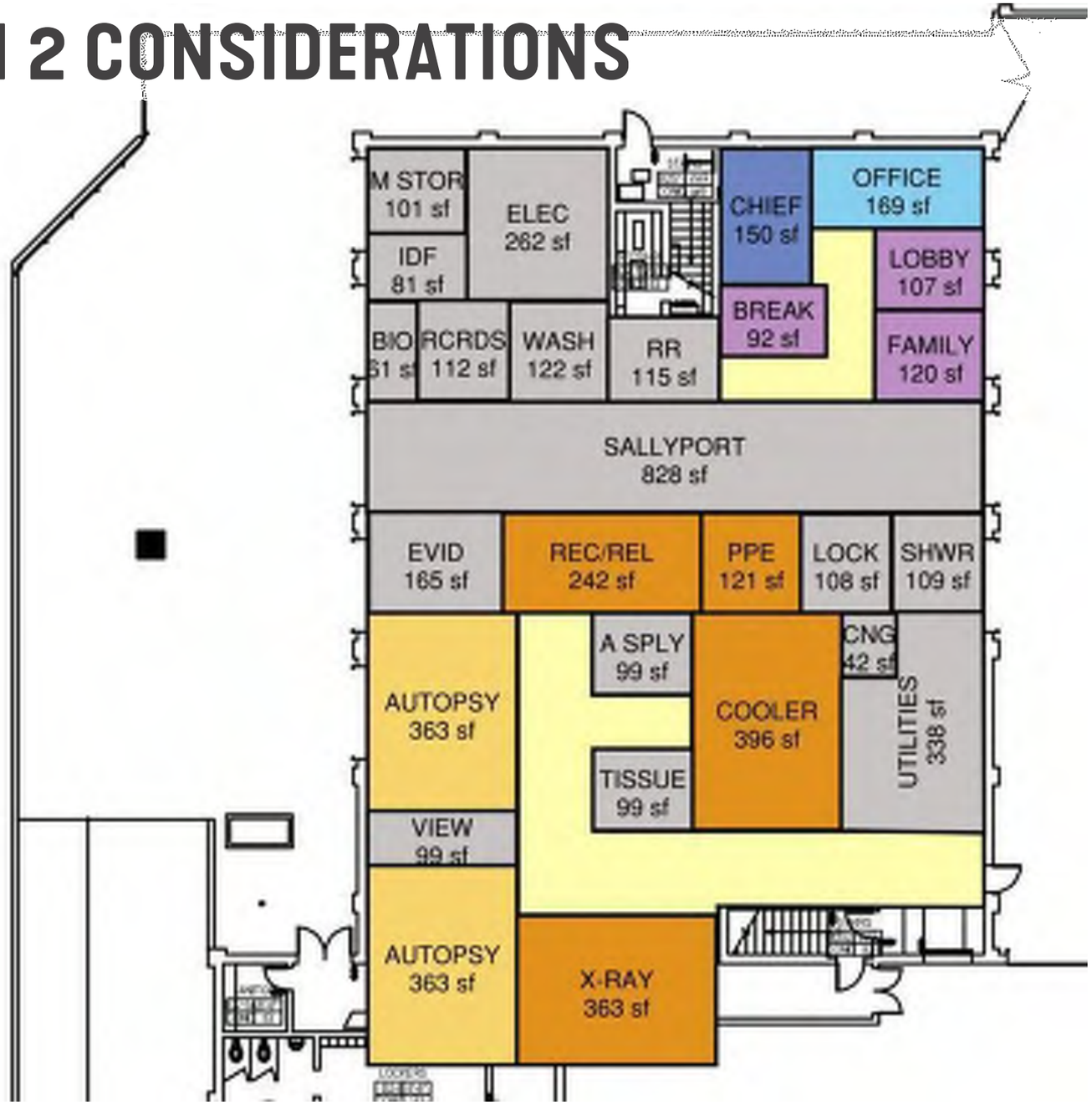
RFC BASEMENT LEVEL 2



LOCATION OPTION 2 CONSIDERATIONS

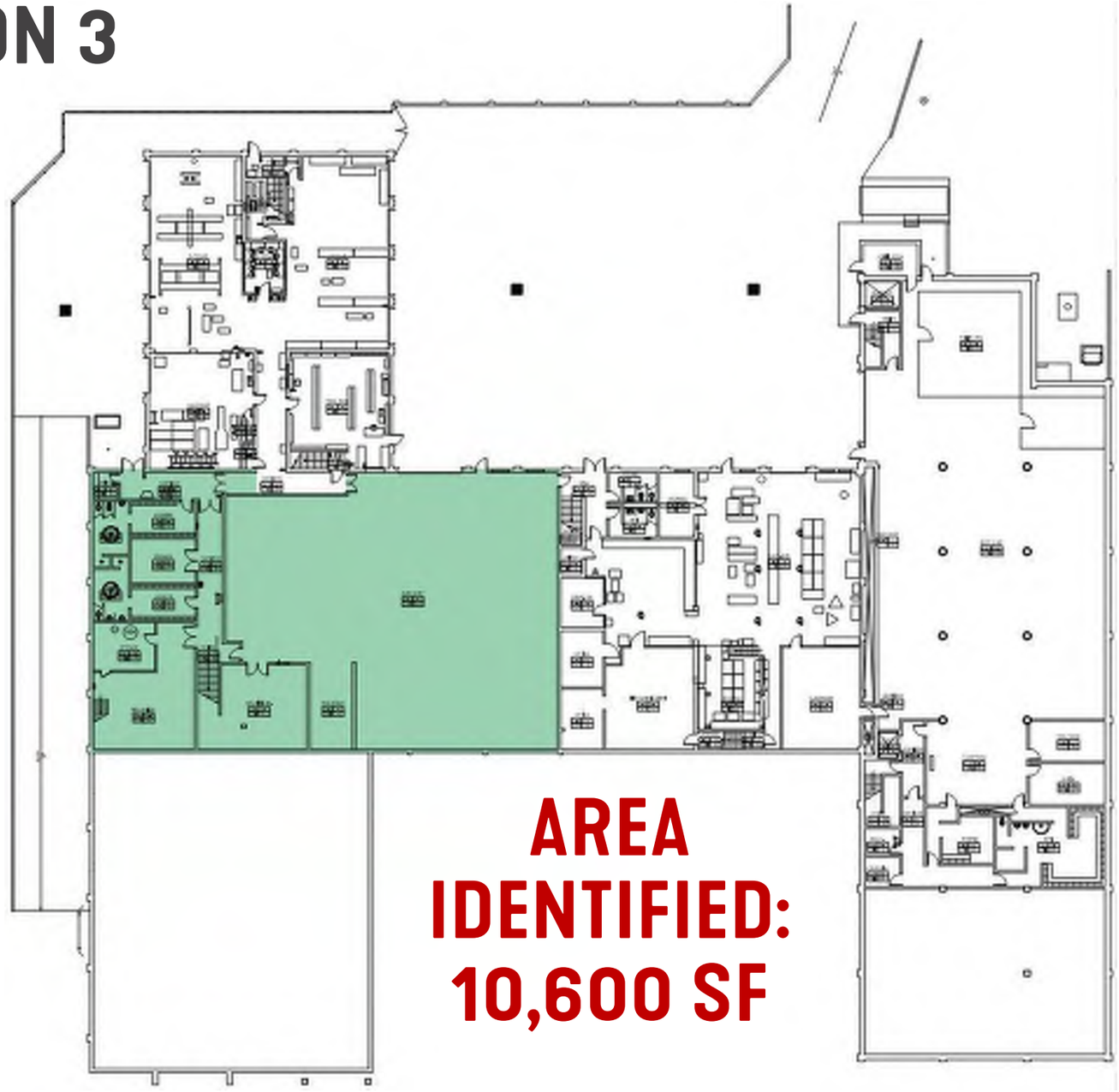
RFC BASEMENT LEVEL 2

- Layout efficiency reduction due to drive-thru
- Area required extends beyond west wing of RFC
- Office and morgue are separated by sallyport



LOCATION OPTION 3

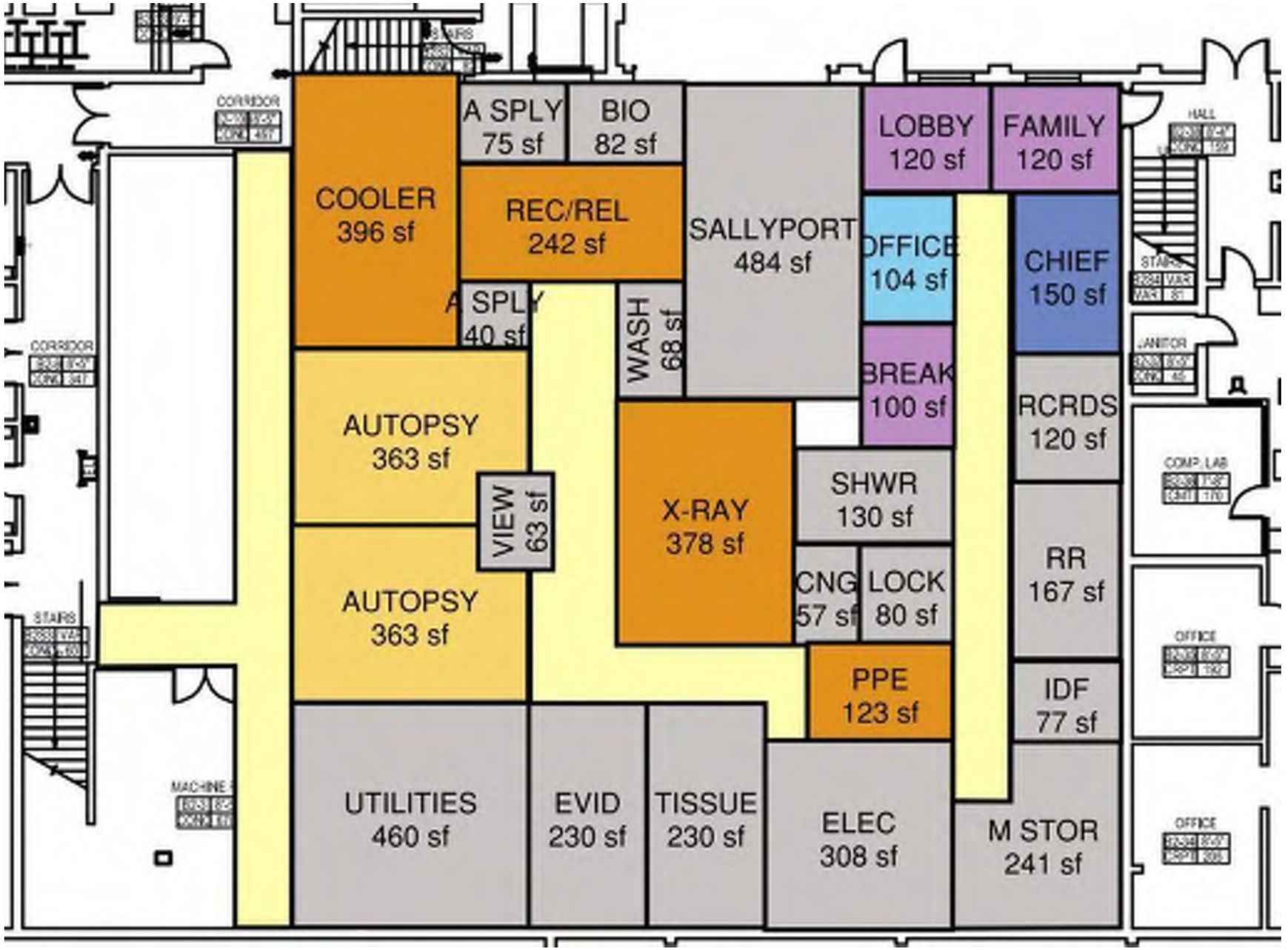
RFC BASEMENT LEVEL 2



LOCATION OPTION 3

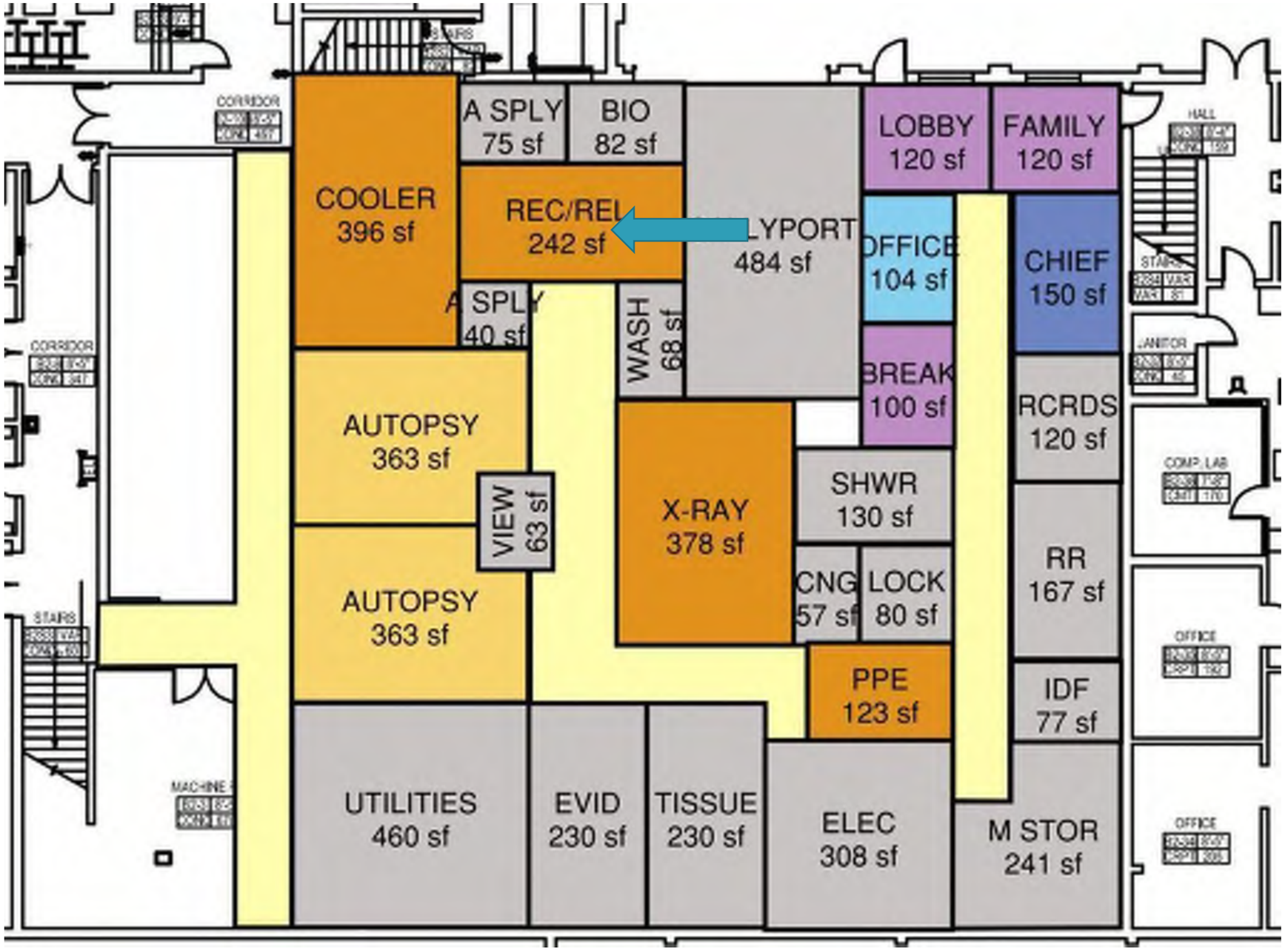
RFC BASEMENT LEVEL 2

BLOCK LAYOUT: 6,200 SF



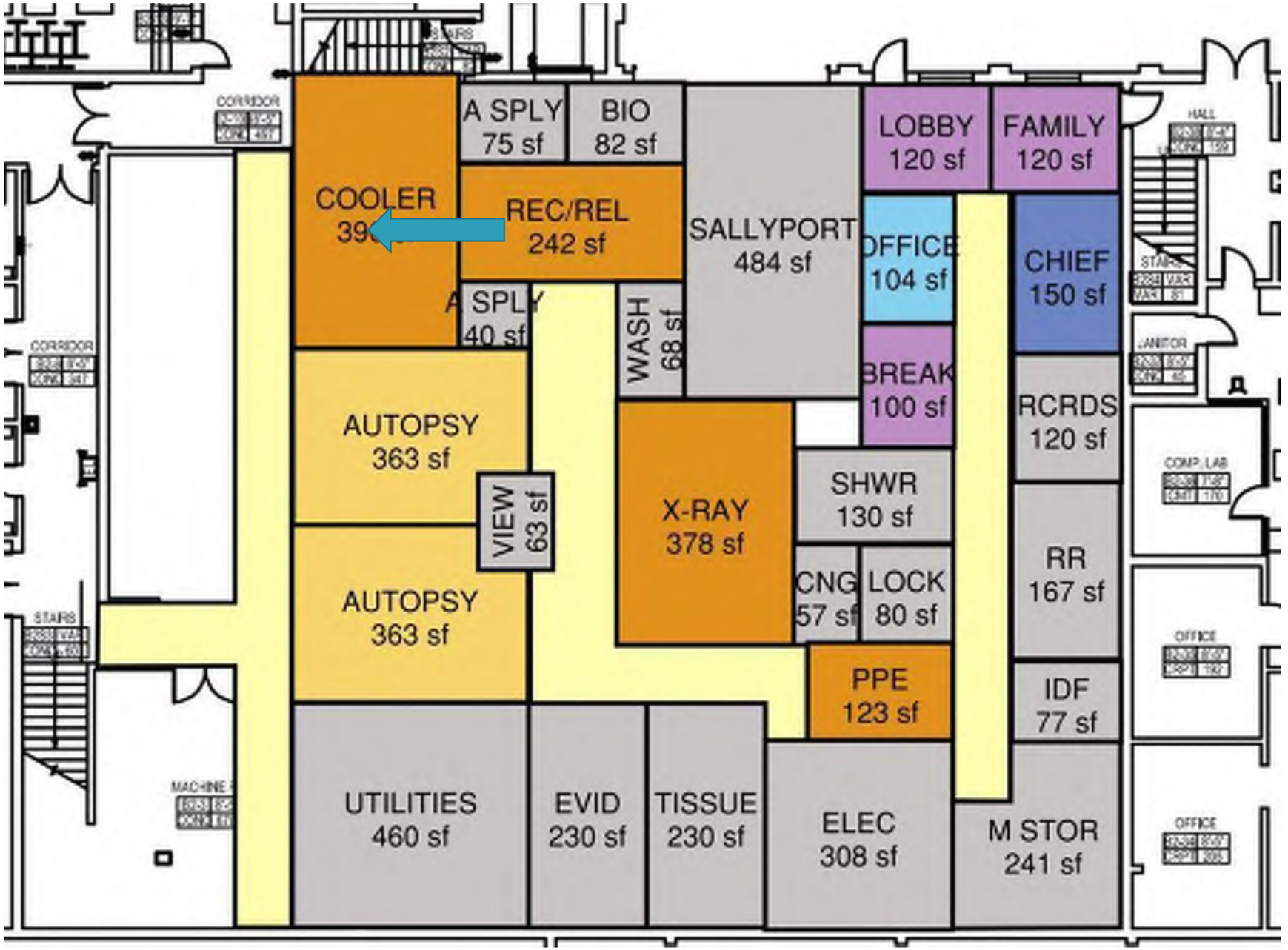
LOCATION OPTION 3

RFC BASEMENT LEVEL 2



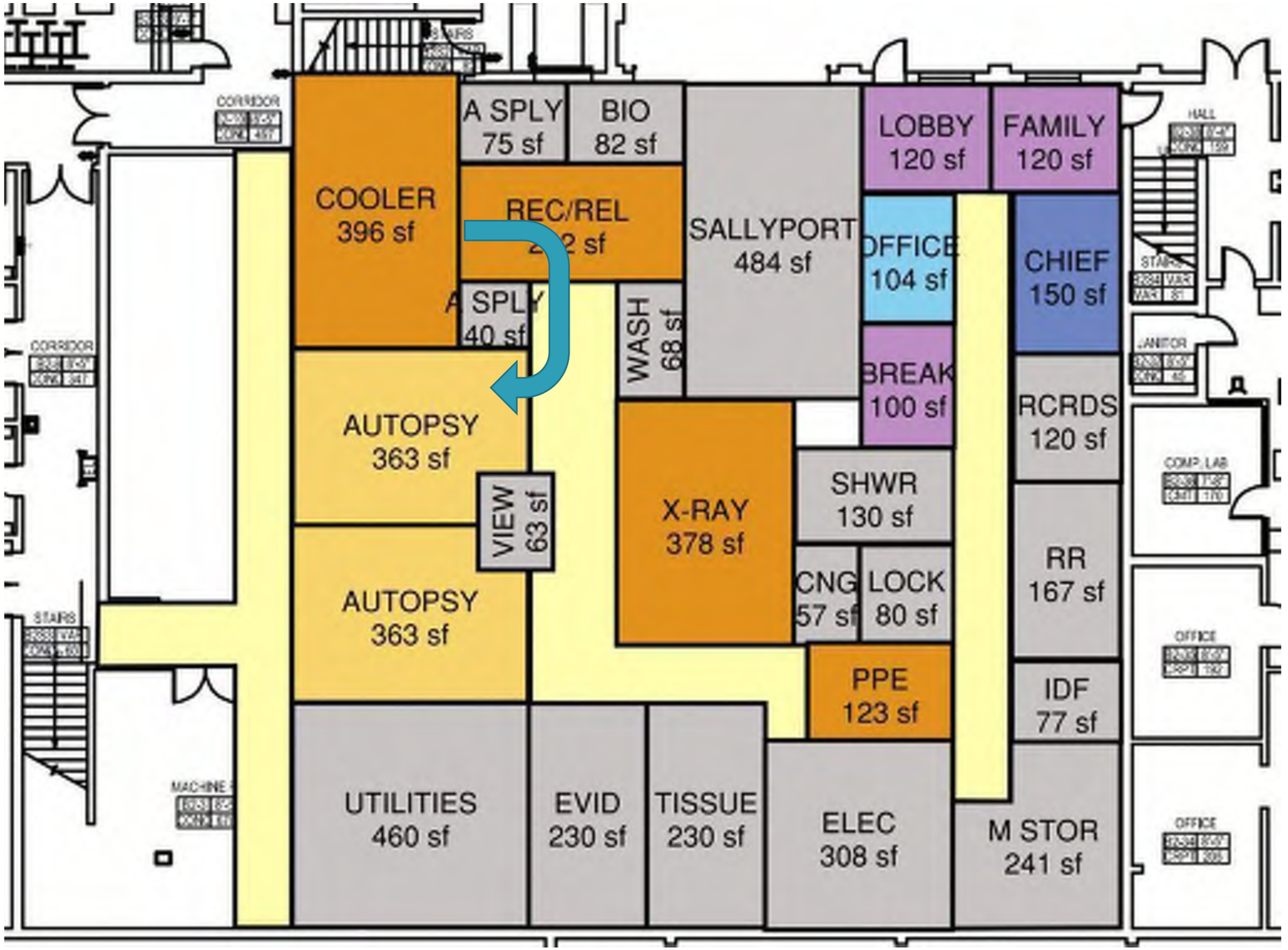
LOCATION OPTION 3

RFC BASEMENT LEVEL 2



LOCATION OPTION 3

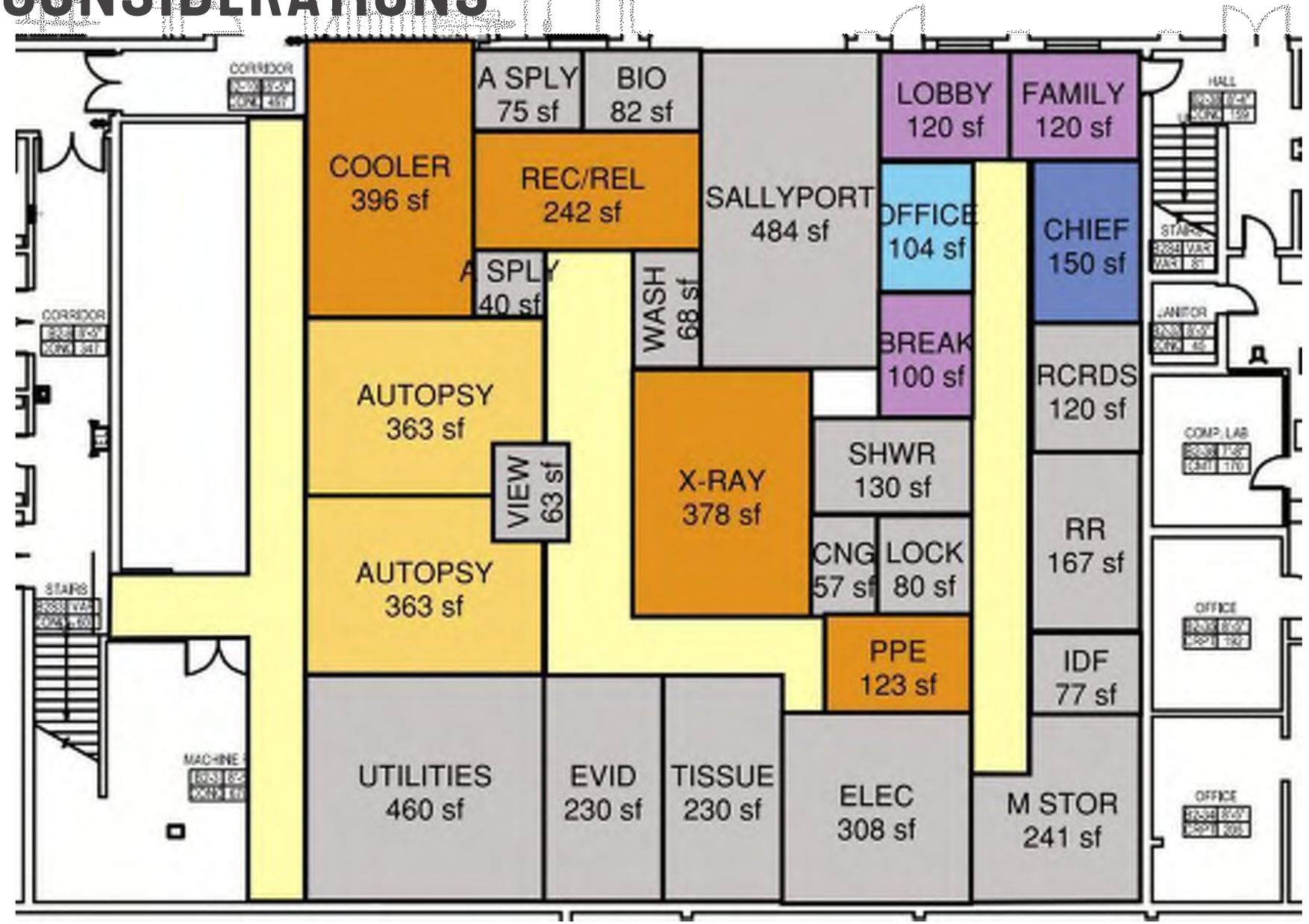
RFC BASEMENT LEVEL 2



LOCATION OPTION 3 CONSIDERATIONS

RFC BASEMENT LEVEL 2

- Sallyport circulation challenging
- Viewing of both autopsy stations accommodated
- Streamlined circulation improves program utilization
- Adjustment of building circulation required

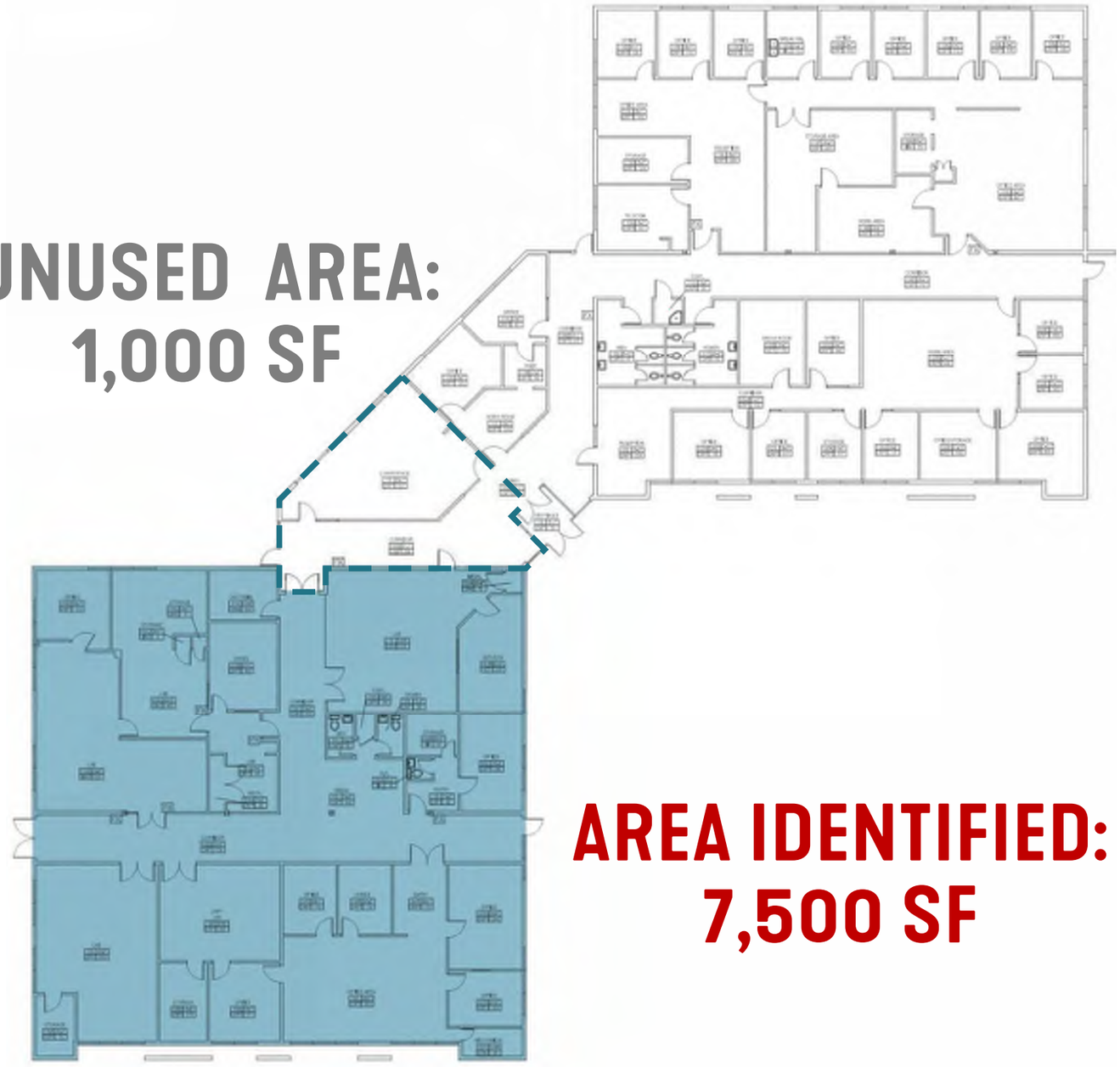


BUSINESS TECH CENTER PLAN

AVAILABLE AREA

BUSINESS TECHNOLOGY CENTER

UNUSED AREA:
1,000 SF



AREA IDENTIFIED:
7,500 SF

OPTION LAYOUT

BUSINESS TECHNOLOGY CENTER

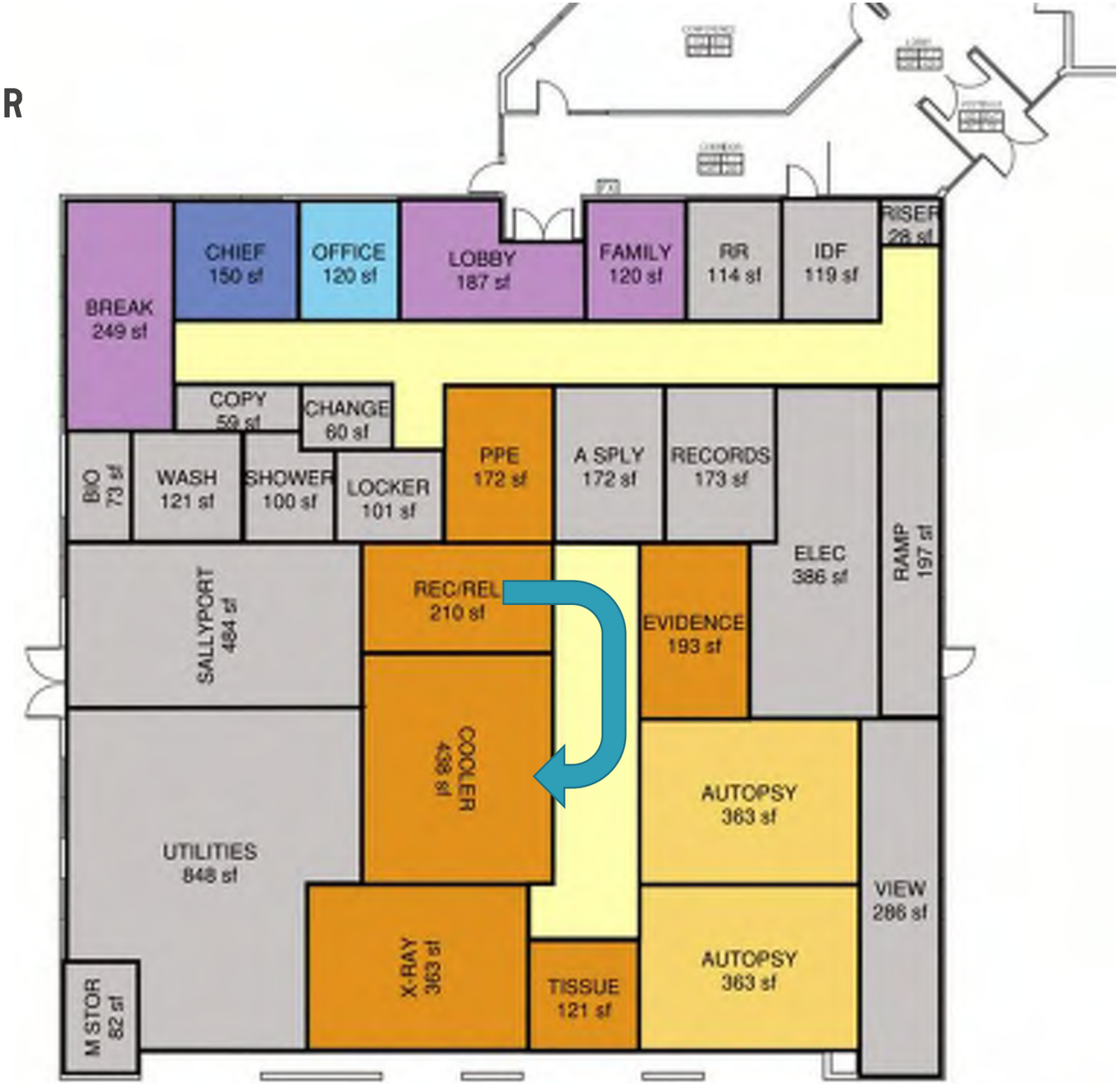
BLOCK LAYOUT: 7,500 SF

OPTION LAYOUT

BUSINESS TECHNOLOGY CENTER

OPTION LAYOUT

BUSINESS TECHNOLOGY CENTER



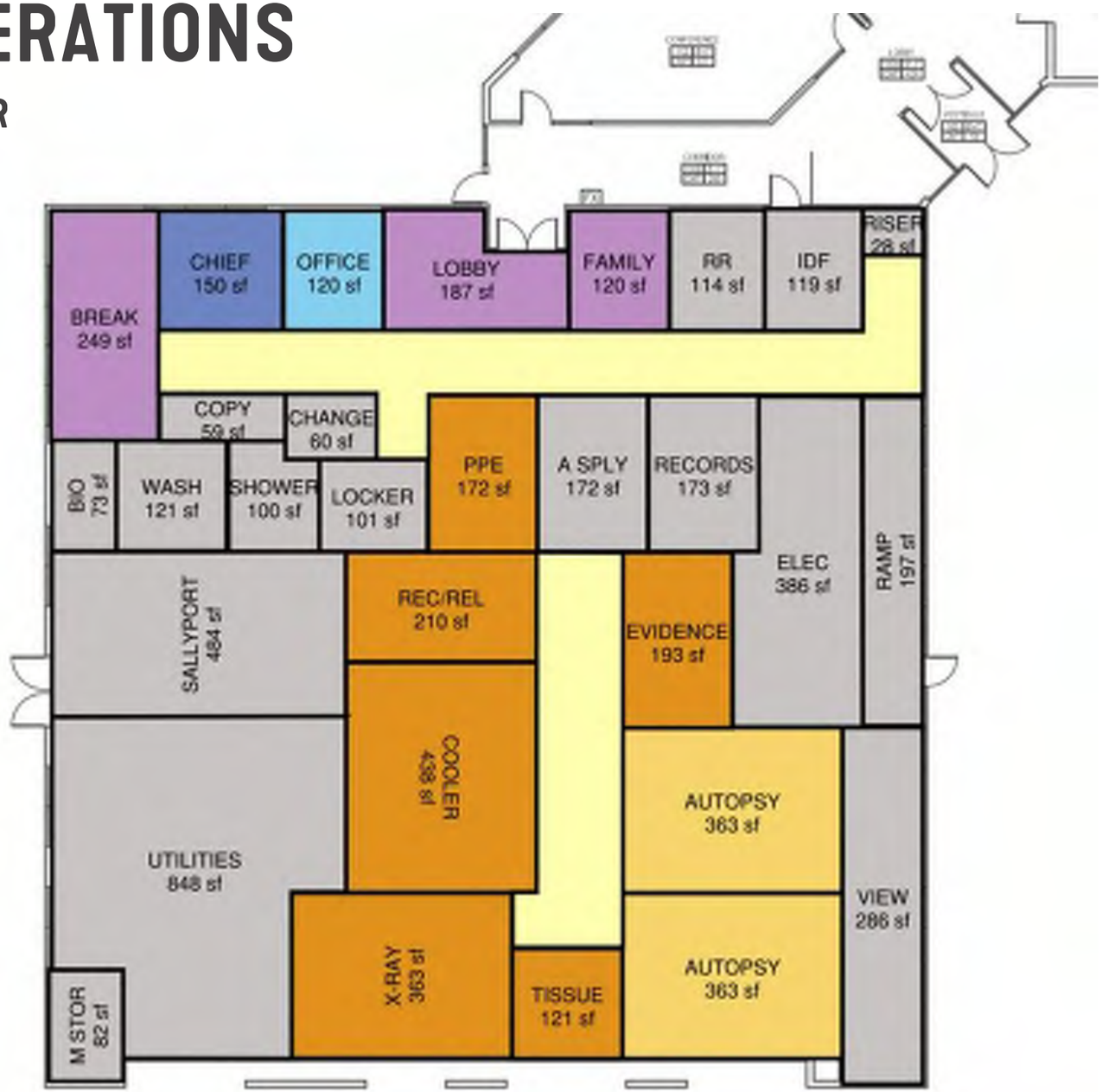
OPTION LAYOUT

BUSINESS TECHNOLOGY CENTER

LAYOUT CONSIDERATIONS

BUSINESS TECHNOLOGY CENTER

- Improved staff and decedent circulation
- Ample space for plan adjustments
- Ideal autopsy observation relationship



PROJECT COSTS

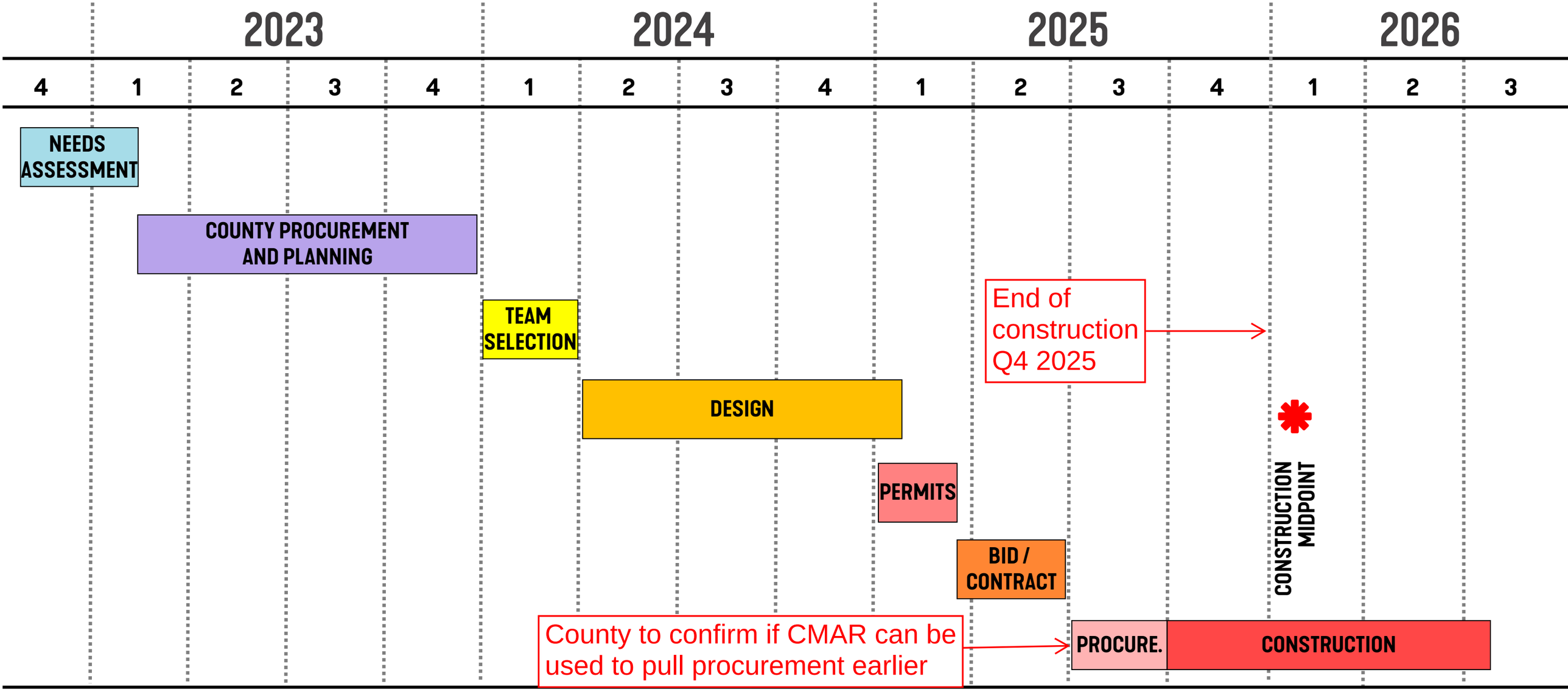
PROJECT COST BUCKETS

CONSTRUCTION BUDGET

70% - 75%

- SITE, UTILITIES, & INFRASTRUCTURE FEES
- PERMIT FEES
- DESIGN AND ENGINEERING
- COUNTY MANAGEMENT FEES
- FURNITURE, FIXTURES, & EQUIPMENT
  ESPECIALLY SPECIALTY EQUIPMENT
- AUDIO/VISUAL, TECHNOLOGY, & SECURITY

PROJECT SCHEDULE & ESCALATION



PROJECT COST BY OPTION

Note following the meeting:
These numbers included an error in the escalation percentage of only a single year. An increased rate is included in the final report.

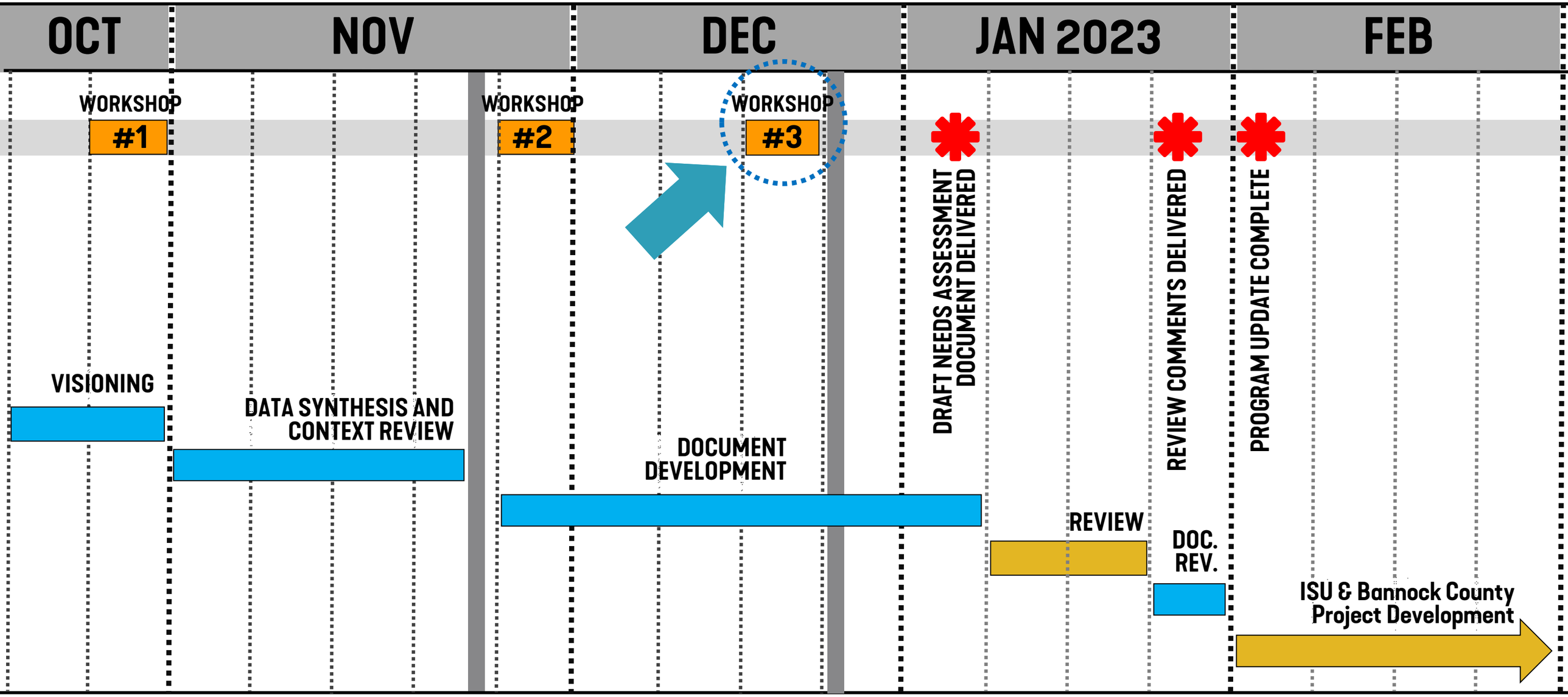
Options	RFC Option 1	RFC Option 2	RFC Option 3	Business Tech
Construction Cost	$5,460,000	$5,390,000	$5,440,000	$5,330,000
Escalation to Q1 2026	$385,000	$380,000	$380,000	$375,000
Soft Costs	$1,755,000	$1,730,000	$1,745,000	$1,710,000
Project Cost	**$7,600,000**	**$7,500,000**	**$7,565,000**	**$7,415,000**

The County needs to occupy the facility with construction finished by end of 2025. Escalation to midpoint of construction will be adjusted accordingly.

There is interest in the difference in project cost if a new building were to be constructed as opposed to renovating existing.

NEXT STEPS

NEEDS ANALYSIS SCHEDULE




THANK YOU!

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

SUMMARY

SCOPE	*SF =*	*10,800*	*6,572*	*10,600*	*7,500*
		RFC OPTION 1	RFC OPTION 2	RFC OPTION 3	BUSINESS TECH
Cost of Work					
Core and Shell		$ 1,851,069	$ 1,845,569	$ 1,837,925	$ 1,641,151
Buildout		$ 2,120,030	$ 2,077,750	$ 2,118,030	$ 2,216,950
Sitework		$ 20,000	$ 20,000	$ 20,000	$ 40,000
Subtotal COW		**$ 3,991,099**	**$ 3,943,319**	**$ 3,975,955**	**$ 3,898,101**
General Conditions	*12.00%*	$ 478,932	$ 473,198	$ 477,115	$ 467,772
Subtotal		**$ 4,470,030**	**$ 4,416,517**	**$ 4,453,069**	**$ 4,365,873**
Bonds and Insurance	*2.00%*	$ 89,401	$ 88,330	$ 89,061	$ 87,317
Subtotal		**$ 4,559,431**	**$ 4,504,847**	**$ 4,542,131**	**$ 4,453,190**
Contingency	*15.00%*	$ 683,915	$ 675,727	$ 681,320	$ 667,979
Subtotal		**$ 5,243,346**	**$ 5,180,574**	**$ 5,223,450**	**$ 5,121,169**
General Contractor's Fee	*4.00%*	$ 209,734	$ 207,223	$ 208,938	$ 204,847
SUBTOTALS		**$ 5,453,080**	**$ 5,387,797**	**$ 5,432,388**	**$ 5,326,015**
Escalation (mid-2025)	*18.00%*	$ 981,554	$ 969,803	$ 977,830	$ 958,683
TOTAL OPTIONS ESTIMATES		**$ 6,434,634**	**$ 6,357,601**	**$ 6,410,218**	**$ 6,284,698**

Add to Construct New Building for Business Tech Option *ADD* *$* *1,035,450*

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Basement	10,800	sf
TOTAL	**10,800**	**sf**

RFC OPTION 1

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
CORE AND SHELL						
Substructure / Superstructure						
Demolition						
Interior Demolition and Haul	6,572	sf	$ 5.00	$ 32,860		
Slabs and Foundations						
Slab Repairs and Leveling	6,572	sf	$ 2.00	$ 13,144		
Superstructure Steel						
Misc Steel at 0.5 psf (Kickers / Hangers / Embeds)	3	ton	$ 5,500.00	$ 16,500		
			Subtotal		**$ 62,504**	
			Total Sub/Superstructure			**$ 62,504**
Exterior Closure						
No Scope	-		$ -	$ -		
			Subtotal		**$ -**	
			Total Exterior Closure			**$ -**
Roofing / Insulation / Waterproofing						
Miscellaneous Caulking and Sealants / Fire Safing	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 9,858**	
			Total Roofing / Insulation / Waterproofing			**$ 9,858**
Conveying Systems						
No Scope	-		$ -	$ -		
			Subtotal		**$ -**	
			Total Conveying			**$ -**
Fire Protection						
Sprinkler System	6,572	sf	$ 5.75	$ 37,789		
			Subtotal		**$ 37,789**	
			Total Fire Protection			**$ 37,789**
Plumbing						
Fixtures						
Plumbing Fixture/Lab Sinks/Scrub Sinks/Connect Autopsy Including Rough-In/Carriers	6,572	sf	$ 12.00	$ 78,864		
Equipment						
Hot Water Heating NG Instantaneous w/ Pumps	6,572	sf	$ 7.00	$ 46,004		
Sanitary Waste Piping						
Sanitary Waste/Vent Piping	6,572	sf	$ 10.00	$ 65,720		

Basement	10,800	sf
TOTAL	**10,800**	**sf**

RFC OPTION 1

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Domestic Water System						
Domestic Water System w/Valves, Fittings, Insulation	6,572	sf	$ 10.00	$ 65,720		
Storm Drainage System						
Roof Drainage System	-	sf	$ 1.50	$ -		
Natural Gas System						
Natural Gas Pipe, Fittings, Connections	6,572	sf	$ 3.00	$ 19,716		
Miscellaneous Plumbing						
Cylinder Storage Manifold & Piping	6,572	sf	$ 1.00	$ 6,572		
Testing	6,572	sf	$ 0.75	$ 4,929		
Tag and Identification	6,572	sf	$ 0.25	$ 1,643		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
Miscellaneous Plumbing/Phasing	6,572	sf	$ 4.00	$ 26,288		
			Subtotal		**$ 325,456**	
			Total Plumbing			**$ 325,456**
HVAC						
Equipment						
Package Equipment						
Heat Recovery Unit - 10,000 cfm Roof Mtd	1	ea	incl	below		
Dedicated OA Unit Package 5,000 cfm Roof Mtd 12.5 ton	2	ea	incl	below		
Utility Set Exhaust Fans 4,500 cfm Roof Mtd	2	ea	incl	below		
DX Split System 3 ton w/ Gas Heating (lab space)	1	ea	incl	below		
DX Split System 2 ton w/ Gas Heating (non lab space)	3	ea	incl	below		
Equipment	1	allow	$ 250,000.00	$ 250,000		
Radiant Heating						
Elec Cabinet Unit Heaters	1	ls	$ 7,500.00	$ 7,500		
Distribution Systems						
Ductwork - Supply / Return / Exhaust / Roof	6,572	sf	$ 18.00	$ 118,296		
Grilles Registers Diffusers						
Grilles Registers Diffusers	6,572	sf	$ 2.00	$ 13,144		
Laminar Flow @ Autopsy	1	ls	$ 5,000.00	$ 5,000		
Air Terminals						
Venturi Valves - 4 sets Supply / Return Elec Re-Heat Std.	8	ea	$ 5,000.00	$ 40,000		
Venturi Valves - 1 set Supply / Return Elec Re-Heat Hi Speed	2	ea	$ 6,000.00	$ 12,000		
Piping						
Condensate Piping	6,572	sf	$ 0.60	$ 3,943		

Basement	10,800	sf
TOTAL	**10,800**	**sf**

RFC OPTION 1

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Controls						
Energy Management and Controls	6,572	sf	$ 15.00	$ 98,580		
Miscellaneous						
Acoustical Allowance	6,572	sf	$ 1.00	$ 6,572		
Testing & Startup	1	ls	$ 7,500.00	$ 7,500		
Miscellaneous - Hoist/Haul/Cleanup/Phasing	6,572	sf	$ 3.00	$ 19,716		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
Test and Balance Coordination	6,572	sf	$ 0.20	$ 1,314		
			Subtotal		**$ 593,566**	
			Total HVAC			**$ 593,566**
Electrical						
Electrical Equipment						
Main Switchboard						
Allow for Rework / New Switch	1	ls	$ 100,000.00	$ 100,000		
Distribution Panels						
Distribution Panels	1	ls	$ 14,000.00	$ 14,000		
Panelboards 277/480V + 120/208V						
Panelboards 120/208V	1	ls	$ 16,200.00	$ 16,200		
Panelboards 277/480V	1	ls	$ 18,000.00	$ 18,000		
Transformers						
Transformers	1	ls	$ 24,000.00	$ 24,000		
Emergency / Normal Distribution - Feeders						
Feeders	6,572	sf	$ 5.00	$ 32,860		
Emergency Power						
Generator						
Emergency Generator/Switchgear/Transfer Switch	6,572	sf	$ 10.00	$ 65,720		
Motor and Equipment Connections						
Motor and Equipment Connections	6,572	sf	$ 5.00	$ 32,860		
Lighting System						
Interior Lighting LED	6,572	sf	$ 12.00	$ 78,864		
Lighting Control						
Lighting Control	6,572	sf	$ 2.50	$ 16,430		
Power Distribution and Devices						
Devices						
Electrical Devices	6,572	sf	$ 5.00	$ 32,860		
Overhead Power Reel with Dedicated Circuit / Support	1	ls	$ 15,000.00	$ 15,000		
Conduit and Wire						
Lighting and Power Distribution	6,572	sf	$ 12.00	$ 78,864		

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Basement	10,800	sf
TOTAL	**10,800**	**sf**

RFC OPTION 1

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Motor & Power Feeders	6,572	sf	$ 6.00	$ 39,432		
Sealing/Rigid @ Autopsy Space	1	ls	$ 5,000.00	$ 5,000		
Ground and Lightening Protection						
Grounding	1	ls	$ 8,500.00	$ 8,500		
Lightning Protection	6,572	sf	$ 1.00	$ 6,572		
Phasing / Existing Building	6,572	sf	$ 3.00	$ 19,716		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
			Subtotal		**$ 614,878**	
			Total Electrical			**$ 614,878**
Communications						
Telephone and Data						
Telecommunications	6,572	sf	$ 6.50	$ 42,718		
Rough-In Conduit/Boxes for Telecom Devices	6,572	sf	$ 2.00	$ 13,144		
Audio/Visual						
Audio Visual Equipment	6,572	sf	$ 10.00	$ 65,720		
Rough-In Conduit/Boxes for AV Devices	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 131,440**	
			Total Communications			**$ 131,440**
Electronic Safety and Security						
Fire Alarm						
Fire Alarm System	6,572	sf	$ 4.50	$ 29,574		
Security						
Security - Cameras/Devices	6,572	sf	$ 6.00	$ 39,432		
Rough-In Conduit/Boxes for Security Devices	6,572	sf	$ 1.00	$ 6,572		
			Subtotal		**$ 75,578**	
			Total Electronic Safety			**$ 75,578**
			Subtotal Core & Shell - Cost of Work			**$ 1,851,069**
BUILD OUT						
Office						
Chief Medical Examiner	195	nsf	$ 100.00	$ 19,500		
Autopsy Assistant / Admin	125	nsf	$ 75.00	$ 9,375		
Collaboration						
Lobby	120	nsf	$ 265.00	$ 31,800		
Family Bereavement Room	120	nsf	$ 75.00	$ 9,000		
Break Room	100	nsf	$ 145.00	$ 14,500		
Autopsy Viewing	60	nsf	$ 165.00	$ 9,900		

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Basement	10,800	sf
TOTAL	**10,800**	**sf**

RFC OPTION 1

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Laboratory						
Receiving / Release Room	242	nsf	$ 160.00	$ 38,720		
X-Ray Room	363	nsf	$ 350.00	$ 127,050		
Decedent Cooler (cooler with equipment)	396	nsf	$ 45.00	$ 17,820		
General Autopsy	272	nsf	$ 800.00	$ 217,600		
General Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Isolation Autopsy	272	nsf	$ 810.00	$ 220,320		
Isolation Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Support						
Sally Port	484	nsf	$ 100.00	$ 48,400		
Cart Wash Alcove	121	nsf	$ 80.00	$ 9,680		
Evidence and Evidence Drying	121	nsf	$ 156.00	$ 18,876		
Tissue / Slide and Block Storage	121	nsf	$ 156.00	$ 18,876		
Records Storage	121	nsf	$ 84.00	$ 10,164		
Autopsy Supply Storage	121	nsf	$ 84.00	$ 10,164		
Biological Waste Storage	60	nsf	$ 94.00	$ 5,640		
PPE On/Off	121	nsf	$ 78.00	$ 9,438		
Locker Area	100	nsf	$ 125.00	$ 12,500		
Changing Room	40	nsf	$ 125.00	$ 5,000		
Shower Room	100	nsf	$ 200.00	$ 20,000		
Office Supply Storage	18	nsf	$ 84.00	$ 1,512		
Maintenance Storage	100	nsf	$ 84.00	$ 8,400		
Gross Up Space						
Gross Up Space	2,497	sf	$ 50.00	$ 124,850		
Unused Space						
MEP Connections for Unused Space	4,228	sf	$ 10.00	$ 42,280		
			Subtotal		**$ 1,106,865**	
			Total Interior Construction			**$ 1,106,865**
Casework and Equipment						
Casework						
Casework / Storage Shelving	3,355	sf	$ 35.00	$ 117,425		
			Subtotal		**$ 117,425**	
Equipment						
Equipment	6,572	sf	$ 45.00	$ 295,740		
Cooler	400	sf	$ 1,500.00	$ 600,000		
Carriers				*incl*		
Cartwash				*incl*		
Autopsy Sink / Equipment				*incl*		
Laundry				*incl*		
Evidence Storage				*incl*		
Freezers				*incl*		
Lab Specialties				*incl*		

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Basement	10,800	sf
TOTAL	**10,800**	**sf**

RFC OPTION 1

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Miscellaneous				*incl*		
			Subtotal Equipment		**$ 895,740**	
			Total Equipment/Casework			**$ 1,013,165**
			Subtotal Build-Out - Cost of Work			**$ 2,120,030**
SITEWORK						
Misc Sitework	1	ls	$ 20,000.00	$ 20,000		
			Subtotal		**$ 20,000**	
			Subtotal Sitework - Cost of Work			**$ 20,000**

SEE SUMMARY SHEET FOR MARKUPS

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Basement	6,572	sf
TOTAL	**6,572**	**sf**

RFC OPTION 2

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
CORE AND SHELL						
Substructure / Superstructure						
Demolition						
Interior Demolition and Haul	6,572	sf	$ 5.00	$ 32,860		
Slabs and Foundations						
Slab Repairs and Leveling	6,572	sf	$ 2.00	$ 13,144		
Superstructure Steel						
Misc Steel at 0.5 psf (Kickers / Hangers / Embeds)	2	ton	$ 5,500.00	$ 11,000		
			Subtotal		**$ 57,004**	
			Total Sub/Superstructure			**$ 57,004**
Exterior Closure						
No Scope	-		$ -	$ -		
Escal ##			**Subtotal**		**$ -**	
			Total Exterior Closure			**$ -**
Roofing / Insulation / Waterproofing						
Miscellaneous Caulking and Sealants / Fire Safing	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 9,858**	
			Total Roofing / Insulation / Waterproofing			**$ 9,858**
Conveying Systems						
No Scope	-		$ -	$ -		
			Subtotal		**$ -**	
			Total Conveying			**$ -**
Fire Protection						
Sprinkler System	6,572	sf	$ 5.75	$ 37,789		
			Subtotal		**$ 37,789**	
			Total Fire Protection			**$ 37,789**
Plumbing						
Fixtures						
Plumbing Fixture/Lab Sinks/Scrub Sinks/Connect Autopsy Including Rough-In/Carriers	6,572	sf	$ 12.00	$ 78,864		
Equipment						
Hot Water Heating NG Instantaneous w/ Pumps	6,572	sf	$ 7.00	$ 46,004		
Sanitary Waste Piping						
Sanitary Waste/Vent Piping	6,572	sf	$ 10.00	$ 65,720		

Basement	6,572	sf
TOTAL	**6,572**	**sf**

RFC OPTION 2

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Domestic Water System						
Domestic Water System w/Valves, Fittings, Insulation	6,572	sf	$ 10.00	$ 65,720		
Storm Drainage System						
Roof Drainage System	-	sf	$ 1.50	$ -		
Natural Gas System						
Natural Gas Pipe, Fittings, Connections	6,572	sf	$ 3.00	$ 19,716		
Miscellaneous Plumbing						
Cylinder Storage Manifold & Piping	6,572	sf	$ 1.00	$ 6,572		
Testing	6,572	sf	$ 0.75	$ 4,929		
Tag and Identification	6,572	sf	$ 0.25	$ 1,643		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
Miscellaneous Plumbing/Phasing	6,572	sf	$ 4.00	$ 26,288		
			Subtotal		**$ 325,456**	
			Total Plumbing			**$ 325,456**
HVAC						
Equipment						
Package Equipment						
Heat Recovery Unit - 10,000 cfm Roof Mtd	1	ea	incl	below		
Dedicated OA Unit Package 5,000 cfm Roof Mtd 12.5 ton	2	ea	incl	below		
Utility Set Exhaust Fans 4,500 cfm Roof Mtd	2	ea	incl	below		
DX Split System 3 ton w/ Gas Heating (lab space)	1	ea	incl	below		
DX Split System 2 ton w/ Gas Heating (non lab space)	3	ea	incl	below		
Equipment	1	allow	$ 250,000.00	$ 250,000		
Radiant Heating						
Elec Cabinet Unit Heaters	1	ls	$ 7,500.00	$ 7,500		
Distribution Systems						
Ductwork - Supply / Return / Exhaust / Roof	6,572	sf	$ 18.00	$ 118,296		
Grilles Registers Diffusers						
Grilles Registers Diffusers	6,572	sf	$ 2.00	$ 13,144		
Laminar Flow @ Autopsy	1	ls	$ 5,000.00	$ 5,000		
Air Terminals						
Venturi Valves - 4 sets Supply / Return Elec Re-Heat Std.	8	ea	$ 5,000.00	$ 40,000		
Venturi Valves - 1 set Supply / Return Elec Re-Heat Hi Speed	2	ea	$ 6,000.00	$ 12,000		
Piping						
Condensate Piping	6,572	sf	$ 0.60	$ 3,943		

Basement	6,572	sf
TOTAL	**6,572**	**sf**

RFC OPTION 2

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Controls						
Energy Management and Controls	6,572	sf	$ 15.00	$ 98,580		
Miscellaneous						
Acoustical Allowance	6,572	sf	$ 1.00	$ 6,572		
Testing & Startup	1	ls	$ 7,500.00	$ 7,500		
Miscellaneous - Hoist/Haul/Cleanup/Phasing	6,572	sf	$ 3.00	$ 19,716		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
Test and Balance Coordination	6,572	sf	$ 0.20	$ 1,314		
			Subtotal		**$ 593,566**	
			Total HVAC			**$ 593,566**
Electrical						
Electrical Equipment						
Main Switchboard						
Allow for Rework / New Switch	1	ls	$ 100,000.00	$ 100,000		
Distribution Panels						
Distribution Panels	1	ls	$ 14,000.00	$ 14,000		
Panelboards 277/480V + 120/208V						
Panelboards 120/208V	1	ls	$ 16,200.00	$ 16,200		
Panelboards 277/480V	1	ls	$ 18,000.00	$ 18,000		
Transformers						
Transformers	1	ls	$ 24,000.00	$ 24,000		
Emergency / Normal Distribution - Feeders						
Feeders	6,572	sf	$ 5.00	$ 32,860		
Emergency Power						
Generator						
Emergency Generator/Switchgear/Transfer Switch	6,572	sf	$ 10.00	$ 65,720		
Motor and Equipment Connections						
Motor and Equipment Connections	6,572	sf	$ 5.00	$ 32,860		
Lighting System						
Interior Lighting LED	6,572	sf	$ 12.00	$ 78,864		
Lighting Control						
Lighting Control	6,572	sf	$ 2.50	$ 16,430		
Power Distribution and Devices						
Devices						
Electrical Devices	6,572	sf	$ 5.00	$ 32,860		
Overhead Power Reel with Dedicated Circuit / Support	1	ls	$ 15,000.00	$ 15,000		
Conduit and Wire						
Lighting and Power Distribution	6,572	sf	$ 12.00	$ 78,864		

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Basement	6,572	sf
TOTAL	**6,572**	**sf**

RFC OPTION 2

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Motor & Power Feeders	6,572	sf	$ 6.00	$ 39,432		
Sealing/Rigid @ Autopsy Space	1	ls	$ 5,000.00	$ 5,000		
Ground and Lightening Protection						
Grounding	1	ls	$ 8,500.00	$ 8,500		
Lightning Protection	6,572	sf	$ 1.00	$ 6,572		
Phasing / Existing Building	6,572	sf	$ 3.00	$ 19,716		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
			Subtotal		**$ 614,878**	
			Total Electrical			**$ 614,878**
Communications						
Telephone and Data						
Telecommunications	6,572	sf	$ 6.50	$ 42,718		
Rough-In Conduit/Boxes for Telecom Devices	6,572	sf	$ 2.00	$ 13,144		
Audio/Visual						
Audio Visual Equipment	6,572	sf	$ 10.00	$ 65,720		
Rough-In Conduit/Boxes for AV Devices	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 131,440**	
			Total Communications			**$ 131,440**
Electronic Safety and Security						
Fire Alarm						
Fire Alarm System	6,572	sf	$ 4.50	$ 29,574		
Security						
Security - Cameras/Devices	6,572	sf	$ 6.00	$ 39,432		
Rough-In Conduit/Boxes for Security Devices	6,572	sf	$ 1.00	$ 6,572		
			Subtotal		**$ 75,578**	
			Total Electronic Safety			**$ 75,578**
			Subtotal Core & Shell - Cost of Work			**$ 1,845,569**
BUILD OUT						
Office						
Chief Medical Examiner	195	nsf	$ 100.00	$ 19,500		
Autopsy Assistant / Admin	125	nsf	$ 75.00	$ 9,375		
Collaboration						
Lobby	120	nsf	$ 265.00	$ 31,800		
Family Bereavement Room	120	nsf	$ 75.00	$ 9,000		
Break Room	100	nsf	$ 145.00	$ 14,500		
Autopsy Viewing	60	nsf	$ 165.00	$ 9,900		

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
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Basement	6,572	sf
TOTAL	**6,572**	**sf**

RFC OPTION 2

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Laboratory						
Receiving / Release Room	242	nsf	$ 160.00	$ 38,720		
X-Ray Room	363	nsf	$ 350.00	$ 127,050		
Decedent Cooler (cooler with equipment)	396	nsf	$ 45.00	$ 17,820		
General Autopsy	272	nsf	$ 800.00	$ 217,600		
General Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Isolation Autopsy	272	nsf	$ 810.00	$ 220,320		
Isolation Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Support						
Sally Port	484	nsf	$ 100.00	$ 48,400		
Cart Wash Alcove	121	nsf	$ 80.00	$ 9,680		
Evidence and Evidence Drying	121	nsf	$ 156.00	$ 18,876		
Tissue / Slide and Block Storage	121	nsf	$ 156.00	$ 18,876		
Records Storage	121	nsf	$ 84.00	$ 10,164		
Autopsy Supply Storage	121	nsf	$ 84.00	$ 10,164		
Biological Waste Storage	60	nsf	$ 94.00	$ 5,640		
PPE On/Off	121	nsf	$ 78.00	$ 9,438		
Locker Area	100	nsf	$ 125.00	$ 12,500		
Changing Room	40	nsf	$ 125.00	$ 5,000		
Shower Room	100	nsf	$ 200.00	$ 20,000		
Office Supply Storage	18	nsf	$ 84.00	$ 1,512		
Maintenance Storage	100	nsf	$ 84.00	$ 8,400		
Gross Up Space						
Gross Up Space	2,497	sf	$ 50.00	$ 124,850		
Unused Space						
MEP Connections for Unused Space	-	sf	$ 10.00	$ -		
			Subtotal		**$ 1,064,585**	
			Total Interior Construction			**$ 1,064,585**
Casework and Equipment						
Casework						
Casework / Storage Shelving	3,355	sf	$ 35.00	$ 117,425		
			Subtotal		**$ 117,425**	
Equipment						
Equipment	6,572	sf	$ 45.00	$ 295,740		
Cooler	400	sf	$ 1,500.00	$ 600,000		
Carriers				*incl*		
Cartwash				*incl*		
Autopsy Sink / Equipment				*incl*		
Laundry				*incl*		
Evidence Storage				*incl*		
Freezers				*incl*		
Lab Specialties				*incl*		

SE Idaho Regional Autopsy Facility at ISU
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Basement	6,572	sf
TOTAL	**6,572**	**sf**

RFC OPTION 2

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Miscellaneous				*incl*		
			Subtotal Equipment		**$ 895,740**	
			Total Equipment/Casework			**$ 1,013,165**
			Subtotal Build-Out - Cost of Work			**$ 2,077,750**
SITEWORK						
Misc Sitework	1	ls	$ 20,000.00	$ 20,000		
			Subtotal		**$ 20,000**	
			Subtotal Sitework - Cost of Work			**$ 20,000**

SEE SUMMARY SHEET FOR MARKUPS

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Basement	10,600	sf
TOTAL	**10,600**	**sf**

RFC OPTION 3

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
CORE AND SHELL						
Substructure / Superstructure						
Demolition						
Interior Demolition and Haul	6,572	sf	$ 5.00	$ 32,860		
Slabs and Foundations						
Slab Repairs and Leveling	6,572	sf	$ 2.00	$ 13,144		
Superstructure Steel						
Misc Steel at 0.5 psf (Kickers / Hangers / Embeds)	3	ton	$ 5,500.00	$ 16,500		
			Subtotal		**$ 62,504**	
			Total Sub/Superstructure			**$ 62,504**
Exterior Closure						
No Scope	-		$ -	$ -		
Escal ##			**Subtotal**		**$ -**	
			Total Exterior Closure			**$ -**
Roofing / Insulation / Waterproofing						
Miscellaneous Caulking and Sealants / Fire Safing	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 9,858**	
			Total Roofing / Insulation / Waterproofing			**$ 9,858**
Conveying Systems						
No Scope	-		$ -	$ -		
			Subtotal		**$ -**	
			Total Conveying			**$ -**
Fire Protection						
Sprinkler System	6,572	sf	$ 5.75	$ 37,789		
			Subtotal		**$ 37,789**	
			Total Fire Protection			**$ 37,789**
Plumbing						
Fixtures						
Plumbing Fixture/Lab Sinks/Scrub Sinks/Connect Autopsy Including Rough-In/Carriers	6,572	sf	$ 12.00	$ 78,864		
Equipment						
Hot Water Heating NG Instantaneous w/ Pumps	6,572	sf	$ 7.00	$ 46,004		
Sanitary Waste Piping						
Sanitary Waste/Vent Piping	6,572	sf	$ 10.00	$ 65,720		

Basement	10,600	sf	
TOTAL	**10,600**	**sf**	

RFC OPTION 3

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Domestic Water System						
Domestic Water System w/Valves, Fittings, Insulation	6,572	sf	$ 10.00	$ 65,720		
Storm Drainage System						
Roof Drainage System	-	sf	$ 1.50	$ -		
Natural Gas System						
Natural Gas Pipe, Fittings, Connections	6,572	sf	$ 3.00	$ 19,716		
Miscellaneous Plumbing						
Cylinder Storage Manifold & Piping	6,572	sf	$ 1.00	$ 6,572		
Testing	6,572	sf	$ 0.75	$ 4,929		
Tag and Identification	6,572	sf	$ 0.25	$ 1,643		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
Miscellaneous Plumbing	6,572	sf	$ 2.00	$ 13,144		
			Subtotal		**$ 312,312**	
			Total Plumbing			**$ 312,312**
HVAC						
Equipment						
Package Equipment						
Heat Recovery Unit - 10,000 cfm Roof Mtd	1	ea	incl	below		
Dedicated OA Unit Package 5,000 cfm Roof Mtd 12.5 ton	2	ea	incl	below		
Utility Set Exhaust Fans 4,500 cfm Roof Mtd	2	ea	incl	below		
DX Split System 3 ton w/ Gas Heating (lab space)	1	ea	incl	below		
DX Split System 2 ton w/ Gas Heating (non lab space)	3	ea	incl	below		
Equipment	1	allow	$ 250,000.00	$ 250,000		
Radiant Heating						
Elec Cabinet Unit Heaters	1	ls	$ 7,500.00	$ 7,500		
Distribution Systems						
Ductwork - Supply / Return / Exhaust / Roof	6,572	sf	$ 18.00	$ 118,296		
Grilles Registers Diffusers						
Grilles Registers Diffusers	6,572	sf	$ 2.00	$ 13,144		
Laminar Flow @ Autopsy	1	ls	$ 5,000.00	$ 5,000		
Air Terminals						
Venturi Valves - 4 sets Supply / Return Elec Re-Heat Std.	8	ea	$ 5,000.00	$ 40,000		
Venturi Valves - 1 set Supply / Return Elec Re-Heat Hi Speed	2	ea	$ 6,000.00	$ 12,000		
Piping						
Condensate Piping	6,572	sf	$ 0.60	$ 3,943		

Basement	10,600	sf
TOTAL	**10,600**	**sf**

RFC OPTION 3

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Controls						
Energy Management and Controls	6,572	sf	$ 15.00	$ 98,580		
Miscellaneous						
Acoustical Allowance	6,572	sf	$ 1.00	$ 6,572		
Testing & Startup	1	ls	$ 7,500.00	$ 7,500		
Miscellaneous - Hoist/Haul/Cleanup/Phasing	6,572	sf	$ 3.00	$ 19,716		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
Test and Balance Coordination	6,572	sf	$ 0.20	$ 1,314		
			Subtotal		**$ 593,566**	
			Total HVAC			**$ 593,566**
Electrical						
Electrical Equipment						
Main Switchboard						
Allow for Rework / New Switch	1	ls	$ 100,000.00	$ 100,000		
Distribution Panels						
Distribution Panels	1	ls	$ 14,000.00	$ 14,000		
Panelboards 277/480V + 120/208V						
Panelboards 120/208V	1	ls	$ 16,200.00	$ 16,200		
Panelboards 277/480V	1	ls	$ 18,000.00	$ 18,000		
Transformers						
Transformers	1	ls	$ 24,000.00	$ 24,000		
Emergency / Normal Distribution - Feeders						
Feeders	6,572	sf	$ 5.00	$ 32,860		
Emergency Power						
Generator						
Emergency Generator/Switchgear/Transfer Switch	6,572	sf	$ 10.00	$ 65,720		
Motor and Equipment Connections						
Motor and Equipment Connections	6,572	sf	$ 5.00	$ 32,860		
Lighting System						
Interior Lighting LED	6,572	sf	$ 12.00	$ 78,864		
Lighting Control						
Lighting Control	6,572	sf	$ 2.50	$ 16,430		
Power Distribution and Devices						
Devices						
Electrical Devices	6,572	sf	$ 5.00	$ 32,860		
Overhead Power Reel with Dedicated Circuit / Support	1	ls	$ 15,000.00	$ 15,000		
Conduit and Wire						
Lighting and Power Distribution	6,572	sf	$ 12.00	$ 78,864		

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Basement	10,600	sf
TOTAL	**10,600**	**sf**

RFC OPTION 3

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Motor & Power Feeders	6,572	sf	$ 6.00	$ 39,432		
Sealing/Rigid @ Autopsy Space	1	ls	$ 5,000.00	$ 5,000		
Ground and Lightening Protection						
Grounding	1	ls	$ 8,500.00	$ 8,500		
Lightning Protection	6,572	sf	$ 1.00	$ 6,572		
Phasing / Existing Building	6,572	sf	$ 3.00	$ 19,716		
Commissioning	1	allow	$ 10,000.00	$ 10,000		
			Subtotal		**$ 614,878**	
			Total Electrical			**$ 614,878**
Communications						
Telephone and Data						
Telecommunications	6,572	sf	$ 6.50	$ 42,718		
Rough-In Conduit/Boxes for Telecom Devices	6,572	sf	$ 2.00	$ 13,144		
Audio/Visual						
Audio Visual Equipment	6,572	sf	$ 10.00	$ 65,720		
Rough-In Conduit/Boxes for AV Devices	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 131,440**	
			Total Communications			**$ 131,440**
Electronic Safety and Security						
Fire Alarm						
Fire Alarm System	6,572	sf	$ 4.50	$ 29,574		
Security						
Security - Cameras/Devices	6,572	sf	$ 6.00	$ 39,432		
Rough-In Conduit/Boxes for Security Devices	6,572	sf	$ 1.00	$ 6,572		
			Subtotal		**$ 75,578**	
			Total Electronic Safety			**$ 75,578**
			Subtotal Core & Shell - Cost of Work			**$ 1,837,925**
BUILD OUT						
Office						
Chief Medical Examiner	195	nsf	$ 100.00	$ 19,500		
Autopsy Assistant / Admin	125	nsf	$ 75.00	$ 9,375		
Collaboration						
Lobby	120	nsf	$ 265.00	$ 31,800		
Family Bereavement Room	120	nsf	$ 75.00	$ 9,000		
Break Room	100	nsf	$ 145.00	$ 14,500		
Autopsy Viewing	60	nsf	$ 165.00	$ 9,900		

SE Idaho Regional Autopsy Facility at ISU
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Basement	10,600	sf
TOTAL	**10,600**	**sf**

RFC OPTION 3

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Laboratory						
Receiving / Release Room	242	nsf	$ 160.00	$ 38,720		
X-Ray Room	363	nsf	$ 350.00	$ 127,050		
Decedent Cooler (cooler with equipment)	396	nsf	$ 45.00	$ 17,820		
General Autopsy	272	nsf	$ 800.00	$ 217,600		
General Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Isolation Autopsy	272	nsf	$ 810.00	$ 220,320		
Isolation Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Support						
Sally Port	484	nsf	$ 100.00	$ 48,400		
Cart Wash Alcove	121	nsf	$ 80.00	$ 9,680		
Evidence and Evidence Drying	121	nsf	$ 156.00	$ 18,876		
Tissue / Slide and Block Storage	121	nsf	$ 156.00	$ 18,876		
Records Storage	121	nsf	$ 84.00	$ 10,164		
Autopsy Supply Storage	121	nsf	$ 84.00	$ 10,164		
Biological Waste Storage	60	nsf	$ 94.00	$ 5,640		
PPE On/Off	121	nsf	$ 78.00	$ 9,438		
Locker Area	100	nsf	$ 125.00	$ 12,500		
Changing Room	40	nsf	$ 125.00	$ 5,000		
Shower Room	100	nsf	$ 200.00	$ 20,000		
Office Supply Storage	18	nsf	$ 84.00	$ 1,512		
Maintenance Storage	100	nsf	$ 84.00	$ 8,400		
Gross Up Space						
Gross Up Space	2,497	sf	$ 50.00	$ 124,850		
Unused Space						
MEP Connections for Unused Space	4,028	sf	$ 10.00	$ 40,280		
			Subtotal		**$ 1,104,865**	
			Total Interior Construction			**$ 1,104,865**
Casework and Equipment						
Casework						
Casework / Storage Shelving	3,355	sf	$ 35.00	$ 117,425		
			Subtotal		**$ 117,425**	
Equipment						
Equipment	6,572	sf	$ 45.00	$ 295,740		
Cooler	400	sf	$ 1,500.00	$ 600,000		
Carriers				*incl*		
Cartwash				*incl*		
Autopsy Sink / Equipment				*incl*		
Laundry				*incl*		
Evidence Storage				*incl*		
Freezers				*incl*		
Lab Specialties				*incl*		

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Basement	10,600	sf
TOTAL	**10,600**	**sf**

RFC OPTION 3

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Miscellaneous				*incl*		
			Subtotal Equipment		**$ 895,740**	
			Total Equipment/Casework			**$ 1,013,165**
			Subtotal Build-Out - Cost of Work			**$ 2,118,030**
SITEWORK						
Misc Sitework	1	ls	$ 20,000.00	$ 20,000		
			Subtotal		**$ 20,000**	
			Subtotal Sitework - Cost of Work			**$ 20,000**

SEE SUMMARY SHEET FOR MARKUPS

SE Idaho Regional Autopsy Facility at ISU
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Level 1	7,500	sf
TOTAL	**7,500**	**sf**

BUSINESS TECH OPTION

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
CORE AND SHELL						
Substructure / Superstructure						
Demolition						
Interior Demolition and Haul	6,572	sf	$ 5.00	$ 32,860		
Slabs and Foundations						
Slab Repairs and Leveling	6,572	sf	$ 2.00	$ 13,144		
Superstructure Steel						
Misc Steel at 0.5 psf (Kickers / Hangers / Embeds)	2	ton	$ 5,500.00	$ 11,000		
			Subtotal		**$ 57,004**	
			Total Sub/Superstructure			**$ 57,004**
Exterior Closure						
No Scope	-		$ -	$ -		
Escal ##			**Subtotal**		**$ -**	
			Total Exterior Closure			**$ -**
Roofing / Insulation / Waterproofing						
Miscellaneous Caulking and Sealants / Fire Safing	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 9,858**	
			Total Roofing / Insulation / Waterproofing			**$ 9,858**
Conveying Systems						
No Scope	-		$ -	$ -		
			Subtotal		**$ -**	
			Total Conveying			**$ -**
Fire Protection						
Sprinkler System	6,572	sf	$ 5.75	$ 37,789		
			Subtotal		**$ 37,789**	
			Total Fire Protection			**$ 37,789**
Plumbing						
Fixtures						
Plumbing Fixture/Lab Sinks/Scrub Sinks/Connect Autopsy Including Rough-In/Carriers	6,572	sf	$ 12.00	$ 78,864		
Equipment						
Hot Water Heating NG Instantaneous w/ Pumps	6,572	sf	$ 7.00	$ 46,004		
Sanitary Waste Piping						
Sanitary Waste/Vent Piping	6,572	sf	$ 6.00	$ 39,432		

Level 1	7,500	sf
TOTAL	**7,500**	**sf**

BUSINESS TECH OPTION

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Domestic Water System						
Domestic Water System w/Valves, Fittings, Insulation	6,572	sf	$ 7.00	$ 46,004		
Storm Drainage System						
Roof Drainage System	6,572	sf	$ 1.50	$ 9,858		
Natural Gas System						
Natural Gas Pipe, Fittings, Connections	6,572	sf	$ 3.00	$ 19,716		
Miscellaneous Plumbing						
Cylinder Storage Manifold & Piping	6,572	sf	$ 1.00	$ 6,572		
Testing	6,572	sf	$ 0.75	$ 4,929		
Tag and Identification	6,572	sf	$ 0.25	$ 1,643		
Commissioning	1	allow	$ 5,000.00	$ 5,000		
Miscellaneous Plumbing	6,572	sf	$ 2.00	$ 13,144		
			Subtotal		**$ 271,166**	
			Total Plumbing			**$ 271,166**
HVAC						
Equipment						
Package Equipment						
Heat Recovery Unit - 10,000 cfm Roof Mtd	1	ea	incl	below		
Dedicated OA Unit Package 5,000 cfm Roof Mtd 12.5 ton	2	ea	incl	below		
Utility Set Exhaust Fans 4,500 cfm Roof Mtd	2	ea	incl	below		
DX Split System 3 ton w/ Gas Heating (lab space)	1	ea	incl	below		
DX Split System 2 ton w/ Gas Heating (non lab space)	3	ea	incl	below		
Equipment	1	allow	$ 228,000.00	$ 228,000		
Radiant Heating						
Elec Cabinet Unit Heaters	1	ls	$ 7,500.00	$ 7,500		
Distribution Systems						
Ductwork - Supply / Return / Exhaust / Roof	6,572	sf	$ 18.00	$ 118,296		
Grilles Registers Diffusers						
Grilles Registers Diffusers	6,572	sf	$ 2.00	$ 13,144		
Laminar Flow @ Autopsy	1	ls	$ 5,000.00	$ 5,000		
Air Terminals						
Venturi Valves - 4 sets Supply / Return Elec Re-Heat Std.	8	ea	$ 3,500.00	$ 28,000		
Venturi Valves - 1 set Supply / Return Elec Re-Heat Hi Speed	2	ea	$ 4,300.00	$ 8,600		
Piping						
Condensate Piping	6,572	sf	$ 0.60	$ 3,943		

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Level 1	7,500	sf
TOTAL	**7,500**	**sf**

BUSINESS TECH OPTION

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Controls						
Energy Management and Controls	6,572	sf	$ 10.00	$ 65,720		
Miscellaneous						
Acoustical Allowance	6,572	sf	$ 1.00	$ 6,572		
Testing & Startup	1	ls	$ 7,500.00	$ 7,500		
Miscellaneous - Hoist/Haul/Cleanup	6,572	sf	$ 1.00	$ 6,572		
Test and Balance Coordination	6,572	sf	$ 0.20	$ 1,314		
			Subtotal		**$ 500,162**	
			Total HVAC			**$ 500,162**
Electrical						
Electrical Equipment						
Primary Transformer						
Upgrade New Primary Transformer to 300kVA	1	ea	$ 125,000.00	$ 125,000		
Main Switchboard						
Update Main Switchboard	1	ls	$ 40,000.00	$ 40,000		
Distribution Panels						
Update Distribution Panels	1	ls	$ 14,000.00	$ 14,000		
Panelboards 277/480V + 120/208V						
Update Panelboards 120/208V	1	ls	$ 16,200.00	$ 16,200		
Update Panelboards 277/480V	1	ls	$ 18,000.00	$ 18,000		
Transformers						
Update Transformers	1	ls	$ 24,000.00	$ 24,000		
Emergency / Normal Distribution - Feeders						
Feeders	6,572	sf	$ 5.00	$ 32,860		
Emergency Power						
Generator						
Emergency Generator/Switchgear/Transfer Switch	6,572	sf	$ 9.00	$ 59,148		
Motor and Equipment Connections						
Motor and Equipment Connections	6,572	sf	$ 2.50	$ 16,430		
Lighting System						
Interior Lighting LED	6,572	sf	$ 9.00	$ 59,148		
Lighting Control						
Lighting Control	6,572	sf	$ 2.50	$ 16,430		
Power Distribution and Devices						
Devices						
Electrical Devices	6,572	sf	$ 3.50	$ 23,002		
Overhead Power Reel with Dedicated Circuit / Support	1	ls	$ 15,000.00	$ 15,000		
Conduit and Wire						

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Level 1	7,500	sf
TOTAL	**7,500**	**sf**

BUSINESS TECH OPTION

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Lighting and Power Distribution	6,572	sf	$ 10.00	$ 65,720		
Motor & Power Feeders	6,572	sf	$ 6.00	$ 39,432		
Sealing/Rigid @ Autopsy Space	1	ls	$ 5,000.00	$ 5,000		
Ground and Lightening Protection						
Grounding	1	ls	$ 8,500.00	$ 8,500		
Lightning Protection	6,572	sf	$ 1.00	$ 6,572		
			Subtotal		**$ 584,442**	
			Total Electrical			**$ 584,442**
Communications						
Telephone and Data						
Telecommunications	6,572	sf	$ 6.50	$ 42,718		
Rough-In Conduit/Boxes for Telecom Devices	6,572	sf	$ 2.00	$ 13,144		
Audio/Visual						
Audio Visual Equipment	6,572	sf	$ 6.00	$ 39,432		
Rough-In Conduit/Boxes for AV Devices	6,572	sf	$ 1.50	$ 9,858		
			Subtotal		**$ 105,152**	
			Total Communications			**$ 105,152**
Electronic Safety and Security						
Fire Alarm						
Fire Alarm System	6,572	sf	$ 4.50	$ 29,574		
Security						
Security - Cameras/Devices	6,572	sf	$ 6.00	$ 39,432		
Rough-In Conduit/Boxes for Security Devices	6,572	sf	$ 1.00	$ 6,572		
			Subtotal		**$ 75,578**	
			Total Electronic Safety			**$ 75,578**
			Subtotal Core & Shell - Cost of Work			**$ 1,641,151**
BUILD OUT						
Office						
Chief Medical Examiner	195	nsf	$ 100.00	$ 19,500		
Autopsy Assistant / Admin	125	nsf	$ 75.00	$ 9,375		
Collaboration						
Lobby	120	nsf	$ 265.00	$ 31,800		
Family Bereavement Room	120	nsf	$ 75.00	$ 9,000		
Break Room	100	nsf	$ 145.00	$ 14,500		
Autopsy Viewing	60	nsf	$ 165.00	$ 9,900		
Laboratory						

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Program Estimate
Smith Group
December 23, 2022

Level 1	7,500	sf
TOTAL	**7,500**	**sf**

BUSINESS TECH OPTION

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
Receiving / Release Room	242	nsf	$ 160.00	$ 38,720		
X-Ray Room	363	nsf	$ 350.00	$ 127,050		
Decedent Cooler (cooler with equipment)	396	nsf	$ 45.00	$ 17,820		
General Autopsy	272	nsf	$ 800.00	$ 217,600		
General Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Isolation Autopsy	272	nsf	$ 810.00	$ 220,320		
Isolation Autopsy Support	91	nsf	$ 250.00	$ 22,750		
Support						
Sally Port	484	nsf	$ 100.00	$ 48,400		
Cart Wash Alcove	121	nsf	$ 80.00	$ 9,680		
Evidence and Evidence Drying	121	nsf	$ 156.00	$ 18,876		
Tissue / Slide and Block Storage	121	nsf	$ 156.00	$ 18,876		
Records Storage	121	nsf	$ 84.00	$ 10,164		
Autopsy Supply Storage	121	nsf	$ 84.00	$ 10,164		
Biological Waste Storage	60	nsf	$ 94.00	$ 5,640		
PPE On/Off	121	nsf	$ 78.00	$ 9,438		
Locker Area	100	nsf	$ 125.00	$ 12,500		
Changing Room	40	nsf	$ 125.00	$ 5,000		
Shower Room	100	nsf	$ 200.00	$ 20,000		
Office Supply Storage	18	nsf	$ 84.00	$ 1,512		
Maintenance Storage	100	nsf	$ 84.00	$ 8,400		
Gross Up Space						
Gross Up Space	2,497	sf	$ 50.00	$ 124,850		
Remainder of Space						
Build out (Restrooms / Circulation / Misc)	928	sf	$ 150.00	$ 139,200		
			Subtotal		**$ 1,203,785**	
			Total Interior Construction			**$ 1,203,785**
Casework and Equipment						
Casework						
Casework / Storage Shelving	3,355	sf	$ 35.00	$ 117,425		
			Subtotal		**$ 117,425**	
Equipment						
Equipment	6,572	sf	$ 45.00	$ 295,740		
Cooler	400	sf	$ 1,500.00	$ 600,000		
Carriers				*incl*		
Cartwash				*incl*		
Autopsy Sink / Equipment				*incl*		
Laundry				*incl*		
Evidence Storage				*incl*		
Freezers				*incl*		
Lab Specialties				*incl*		
Miscellaneous				*incl*		
			Subtotal Equipment		**$ 895,740**	

SE Idaho Regional Autopsy Facility at ISU
Program Estimate
Smith Group
December 23, 2022

Level 1	7,500	sf
TOTAL	**7,500**	**sf**

BUSINESS TECH OPTION

DESCRIPTION	QTY	UNIT	UNIT COST	EXTENSION	SUBTOTAL	SUBTOTAL
			Total Equipment/Casework			**$ 1,013,165**
			Subtotal Build-Out - Cost of Work			**$ 2,216,950**
SITEWORK						
Pavement Extension	1	ls	$ 20,000.00	$ 20,000		
Misc Sitework	1	ls	$ 20,000.00	$ 20,000		
			Subtotal		**$ 40,000**	
			Subtotal Sitework - Cost of Work			**$ 40,000**

SEE SUMMARY SHEET FOR MARKUPS

Design a Better Future

SMITHGROUP

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