



**MONTANA
DEPARTMENT OF
ADMINISTRATION**

Architecture & Engineering Division

Greg Gianforte, Governor
Misty Ann Giles, Director

January 16, 2025

Bob Keenan, Chair
Director Charlie Brereton, Vice-Chair
Behavioral Health System for Future Generations Commission
c/o Department of Public Health & Human Services
PO Box 4210
Helena, MT 59620

RE: BHSFG Capital Expenditure Proposals

Thank you for the opportunity to participate in the cost estimate review and trust the additional input provided below is beneficial to the decision-making process. As requested, A&E has focused solely on Tracks 1 and 2.

We respectfully request the commission pay specific attention to each project's context identifiers and the assumptions upon which these estimates are based. When estimates are considered faulty, most often the prevalent cause is misalignment of expectations and scope definition, and not so much with the numbers themselves. Another factor affecting early estimates are unknown conditions or parameters that are discovered during further scope development; for which we've applied a marginal contingency factor.

Similarly for timelines, the schedules provided for existing facilities assume the department can accommodate patients, operations, and services in any affected locations or areas via other means without impact to contractor activities and within the estimated project timelines. In other words, no time or float contingencies are included for schedule conflicts. Department costs associated with schedule alignments and overlap with construction activities are not included.

For Track 1: Modernize and Upgrade MSH cost estimate confirmations and timelines, we have structured our review as individual projects in Attachment A should the decision be made to pursue some items and not others.

- There exists potential for optimization the more items are packaged into a single bundle for architectural/engineering services. Each of the items could still be bid as separate packages.
- We recommend the Electrical Primary Upgrades be implemented as a stand-alone effort.
- Contracting option to reduce construction durations:
 - A&E's procurement method of the general contractor for the MSH Compliance effort included, "the right to expand or reduce the GCCM's contract scope to include/exclude . . . additional projects at the Owner's sole discretion."
 - Upon the commission's selection of Track 1 items and concurrence that use of this option is agreeable, A&E will investigate the applicability, benefits, and potential time savings achievable.

For Track 2: Transition of IBC to a New Location cost estimate confirmation and timeline provided in Attachment B, we have noted that the site selection process is undefined and the most substantial increase above the table provided in the December 20th letter is the average cost per square foot of land in major municipal areas that have utilities already available. We estimate roughly a 2.5-acre site will be necessary to accommodate off-street parking, access drive, secure perimeter needs, storm water requirements, utility easements, and the footprint of a 13,000 square foot facility.

The confidence expressed in A&E in the December 20th letter is greatly appreciated and we stand ready to provide any additional assistance desired by the commission and department.

Very Respectfully,



Russ Katherman, Administrator

Enclosures:

Attachment A, Track 1: Modernize and Upgrade MSH
Attachment B, Track 2: Transition of IBC to a New Location

cc: Misty Ann Giles, Director, Department of Administration
Ryan Osmundson, Budget Director, Governor's Office of Budget and Program Planning
Senator John Esp, BHSFG Commissioner
Representative Jane Gillette, Chair, Appropriations Subcommittee Section B
Representative John Fitzpatrick, Chair, Appropriations Subcommittee Section F

ATTACHMENT A – Track 1: Modernize & Upgrade MSH

Electrical Primary (High Voltage) Upgrades		
General Description	Estimates	Estimation Assumptions and Notes
Replace Overhead Primary Electrical	\$2M	<ul style="list-style-type: none"> • Described by DPHHS as frequent power outages and pole replacements • Approximately 80 overhead primary power poles, lines, and transformers only. • Assumes poles, lines, and transformers are state-owned • <i>Does not include</i> relocating systems to be below-grade. • <i>Does not include</i> installation of back-up power systems to various campus buildings
Recommend Back-up Power Feasibility Study	\$100K	<ul style="list-style-type: none"> ○ ~26 campus buildings are reported to be without back-up power ○ A&E recommends a feasibility study to determine which buildings should be on back-up power and the most appropriate means to accomplish the task. ○ Rationale for Back-up Power Study – <ul style="list-style-type: none"> ▪ generators per building or a centralized system ▪ durations needed for back-up power and fuel sources ▪ generator sizing and essential electrical gear (e.g. transfer switches) needed per location
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure engineering services, contracting, investigation, analysis, and design	6 - 9	<ul style="list-style-type: none"> • Engineering services capacities have limited availability and high voltage systems are specialized • Feasibility study for back-up power could be by the same firm but not done concurrently unless capacity is available (study timeline is 6 months)
Bidding and construction award/contract	2	<ul style="list-style-type: none"> • Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	12 – 18	<ul style="list-style-type: none"> • high-voltage primary power work is specialized electrical work • transformers and switch gear are a supply chain issue and are long-lead time items

Electrical Generators, Main Hospital Building

General Description	Estimates	Estimation Assumptions and Notes
Replace Two (2) Existing Generators	\$800K	<ul style="list-style-type: none"> Existing generators are obsolete; repair/replacement parts are no longer available per DPHHS Assumes existing switchgear/transfer switches do not need to be upgraded
Recommend Hospital Power Capacity/Needs Evaluation	\$50K	<ul style="list-style-type: none"> Original system was constructed in the mid-'90s and is ~30-years old Patient rooms consist of a single back-up power outlet; overhead lighting is on back-up power Back-up systems are a combination of 120v (power) and 277v (lighting) It is unknown if the current system arrangement, wiring, and power outlets are sufficient to meet hospital care and equipment needs in the appropriate locations
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure engineering services, contracting, investigation, analysis, and design	6	<ul style="list-style-type: none"> Electrical engineering services capacities have limited availability at this time Needs evaluation for back-up power distribution inside the Hospital included
Bidding and construction award/contract	2	<ul style="list-style-type: none"> Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	15	<ul style="list-style-type: none"> electrical generators are a supply chain issue and are long-lead time items ~12+ months to manufacture and deliver 3 months to install, test, make operational

Group Home and Housing Roof Replacements

General Description	Estimates	Estimation Assumptions and Notes
Replace Roofs 10 Buildings Identified by DPHHS	\$3.3M	<ul style="list-style-type: none"> Assumes the buildings identified by DPHHS are the most critical needs. Assumes 6 sloped roofs at 22,200 square feet and 4 low-sloped roofs at 45,400 square feet. Assumes roofing underlayment and/or adhesives may contain asbestos
Recommend Facility Condition Assessments	Funded by A&E	<ul style="list-style-type: none"> A&E recommends facility condition assessments of all campus buildings. This assessment is limited solely to a review of deferred maintenance backlog of existing buildings. Assessment is not a campus planning tool or analysis of agency mission needs.
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure architectural services, contracting, hazardous materials investigation, analysis, and design	6	<ul style="list-style-type: none"> Assumes A&E is able to identify and select a design firm with the available capacity to meet our timeline
Bidding and construction award/contract	2	<ul style="list-style-type: none"> Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	Two roofing seasons, weather dependent	<ul style="list-style-type: none"> Assumes a winter bidding and contracting period to order materials and a spring start on the campus Due to Montana winters, roofers are typically at capacity over spring/summer months; hitting the winter bid point (or potentially the fall before) is crucial to completing multiple buildings in a timely manner.

Admission Unit & Infirmary

General Description	Estimates	Estimation Assumptions and Notes
Convert Existing Med Clinic Area into a Medical Infirmary and Admission Hold	\$1.75M	<ul style="list-style-type: none"> • Described by DPHHS as a ‘gut and remodel’ of existing space. • A&E is assuming this refers to the ~2,900 square feet of Admissions/Med space near the main Hospital entrance • A&E assumes a prelim program to be 5 beds (750 sf), admissions (200 sf), provider space (300 sf), secure med storage (150 sf), clean supply (150 sf), consult/exam (300 sf), nurse station (250 sf), laundry collection (100 sf), 2 toilet rooms (250 sf) plus 25% gross-to-net factor for a need of ~3,050 square feet. • Assumes the existing space is fully vacated for the renovation period and not phased (i.e. phasing will be more expensive). • Assumes existing mechanical and electrical systems are adequate and can be modified for these purposes. • <i>Does not include:</i> <ul style="list-style-type: none"> ○ Hospital equipment or furnishings ○ Costs for or identification of relocating current functions during construction. Assumes the agency will cover these expenses and needs. ○ Any building code or licensure implications for a change of use (i.e. a full-time infirmary vs. 48-72 hour admissions)
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure architectural services, contracting, investigation, analysis, and design	6 - 9	<ul style="list-style-type: none"> • Assumes A&E is able to identify and select a design firm with the available capacity to meet our timeline • Assumes rapid agency scope and programmatic decision-making and a single agency point of contact (i.e. no committees).
Bidding and construction award/contract	2	<ul style="list-style-type: none"> • Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	9 – 12	<ul style="list-style-type: none"> • 9-month window provided if the area is fully vacated and available to the contractor • 12-month window provide in the event the project has to be phased around other hospital operations

Ancillary Buildings

General Description	Estimates	Estimation Assumptions and Notes
Construct a New Maintenance Building for Trade Workers (does not include Educational Bldg for staff, students, and patients)	\$6.5M	<ul style="list-style-type: none"> • Square footage needed by DPHHS was not provided so A&E assumes a 1 to 1 replacement of existing facility space identified on a campus map for HVAC, plumbing, maintenance shop, electrical, and carpentry ---- approximately 13,000 square feet @ \$500/square foot • Assumes no welding or welding exhaust systems, no paint booth, and no substantial fabrication activities • Assumes utilities are readily available. • <i>Does not include:</i> <ul style="list-style-type: none"> ○ “and address other needs” that were not identified in the Dec 20th table ○ Cost for removal of hazardous materials, demo, or disposal of existing buildings ○ Costs for new equipment, i.e lifts, bench top, fixed, etc.
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure architectural services, contracting, programming and design	12	<ul style="list-style-type: none"> • Assumes rapid agency scope and programmatic decision-making and a single agency point of contact (i.e. no committees).
Bidding and construction award/contract	2	<ul style="list-style-type: none"> • Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	12	<ul style="list-style-type: none"> • Assumes a pre-engineered metal building with insulated exterior panels is acceptable.

Guard House, Front Entrance

General Description	Estimates	Estimation Assumptions and Notes
Construct a Guard House and Entry Gate	\$200K	<ul style="list-style-type: none"> Location desired and gate system are undefined which makes it difficult to estimate. If east of the railroads, an easement would be required from the railroad for power. Presently described by DPHHS as guard house for control point to enter grounds of MSH, would be staffed 24/7, and include a camera system A&E's assumptions: <ul style="list-style-type: none"> ~100 square foot pre-fabricated structure, environmentally controlled, no toilet, no ballistic protection, no fence line, no reconfiguration of existing driveways/roads No railroad easements are crossed or impacted Electrical power from a nearby building is available Single lane gate for entry only (i.e. no gate for departure) Gate is powered and controlled solely by guard on duty (i.e. no key pad or card access) <i>Does not include</i> cost of the camera system or cable/raceway routing back to central system as further investigation is needed.
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure engineering services, contracting, investigation, analysis, and specifications	6	<ul style="list-style-type: none"> Majority of this timeline is dedicated to determining the most appropriate location and presenting options for agency decision-making Assumes minimal effort expended to select a pre-fabricated structure and gate system
Bidding and construction award/contract	2	<ul style="list-style-type: none"> Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	4	<ul style="list-style-type: none"> 3 months to order and receive pre-fabricated structure and gate Construction work (power, site prep, etc.) can be done concurrently with ordering of materials; 1 month to finalize installation

Roads, Sidewalks, and Parking

General Description	Estimates	Estimation Assumptions and Notes
Fix potholes, pave dirt roads, build additional parking space, and address sidewalk hazards	\$2.8M	<ul style="list-style-type: none"> • Described as safety issues, large portion of campus roads are dirt, numerous potholes, sidewalks have major frost heaves and trip hazards, parking lots are inadequate in size • Interpreted to pave dirt roads and replace sidewalks. • DPHHS provided a sketch to identify extent of walks, drives and parking lot: <ul style="list-style-type: none"> ○ Sidewalk replacement, 3,860 lf x 5 feet wide or 19,300 sf @ \$12/sf const cost of removal and replacement of concrete sidewalks ○ Pave campus roads and drives, 11,160 lf x 20 feet wide or 220,000 sf of asphalt paving incl 25,000 sy @ \$40/sf const cost (demo, prep, 3" base, 3" section, seal coat) ○ Parking lot, size based on approx. number of existing spaces in adjacent lot, or 130 spaces @ \$6,000/space, including lighting, storm drainage structures or curbing, accessible routes
Process Steps and Timeline*	Months	Duration Assumptions** and Notes
* from point of decision & funding approval		** assumes statutory procurement processes apply and are included in timelines
Procure engineering services, contracting, investigation, surveying, analysis, and design	6	<ul style="list-style-type: none"> • Surveyor availability is limited; typically need to allow 1.5 – 2 months to get on their calendars
Bidding and construction award/contract	2	<ul style="list-style-type: none"> • Statutory bidding time frame & award/contract process for insurance and bonds (performance and payment bonds are statutorily required)
Construction	6	<ul style="list-style-type: none"> • Assumes only a storm water plan permit will be required

ATTACHMENT B – Track 2: Transition of IBC to a New Location

Capital Expenditure Estimate Only*		
Assumption	Estimate	Estimation Steps and Notes
Estimated Square Footage for a 12-Bed Facility	13,000 sq ft	The space requirement for one bed typically ranges from around 700 to 1,100 square feet.
Construction Cost per Square Foot	\$585	Inclusive of site development costs**
Estimated Construction Cost	\$7.6M	Estimated as construction cost per square foot multiplied by square feet.
Architect/Engineer Services***	\$1.5M	Estimated at approximately 20% of construction cost.
Furniture, Fixtures, and Equipment / Startup	\$2.3M	Estimated at approximately 30% of construction cost.
Land Acquisition Cost****	\$3.3M	Land costs vary by location and should be benchmarked against recent purchases in the area. Land cost estimate based on the average per square foot cost between Billings/Butte/Missoula/Bozeman - 2.5 acres at \$30 per square foot with utilities.
Escalation/inflation to Year Built Cost	\$1.1M	Estimated at approximately 10% of capital costs excluding land.
Total One Time Costs - Capital Development:	\$15.8M	
Contractor Support	\$1.0M	One-time expense to plan and design the service delivery model from BHSFG info.
Total Estimated One Time Costs:	\$16.8M	

* Does not include: a) staffing or care relocation costs, b) any specialty healthcare networking equipment systems

** Site development costs included and divided by the building square footage (earthwork, excavation, parking, secure perimeter, gated access, storm water, utilities from property line, etc.)

*** Includes Land Surveyor, Geotechnical, Civil/Structural/Mechanical/Electrical/Fire Protection Engineering, Architect, Systems Commissioning, etc.

**** Assumes all utilities (power, water, sewer, natural gas, broadband) are available at the property line of the chosen location and no utilities are stand-alone

Estimated Project Timeline – Site Selection Dependent (assumes all statutory procurement processes apply)

Project Component	Months	Time Estimation Steps and Notes
Site Selection	Unknown	<ul style="list-style-type: none"> • Locale and site identification process is presently undefined. • Can be competed (similar to SW MT Vets Home) • Direct search, negotiation, and purchase is feasible • Appraisal and a Teir 1 Environmental Assessment are required. • Assuming cost is within budget, a selected site purchase can be completed in ~2 months
<i>Some durations can overlap and run concurrently. Total timeline is dependent upon site selection and acquisition.</i>		
Procure Design Services per 18-8, Part 2 MCA	3	<ul style="list-style-type: none"> • Can be conducted concurrently with the site selection. • A&E advises running this concurrently and involving the design team in the site selection process for pros/cons of considered sites.
Design Process	12	<ul style="list-style-type: none"> • Duration is heavily dependent upon two factors: <ul style="list-style-type: none"> ○ Site identification/procurement ○ Speed of agency decision-making on scope and programmatic needs. • A&E recommends a single agency point of contact on all projects to increase speed of decision-making. • A&E recommends program needs and concepts be developed concurrently with site selection to reduce timeline.
Bidding & Award per 18-2, Parts 1-3 MCA	2	
Construction	14 to 16	<ul style="list-style-type: none"> • Assumes no delays in the plan review/building permit process; however, A&E is experiencing 3 to 5 months as typical permitting timeframe in some municipalities • 14 months assumes the project is bid February/March and does not lose a summer construction season for soils and foundation work • 16 months if bid in the fall and site work/foundations have to wait until spring • Assumes no delays in the licensure/certification process.
Agency Move-In / Set-up	2	<ul style="list-style-type: none"> • Assumes procurement of equipment, furnishings, etc. are run concurrently with construction and are ready upon issuance of a Certificate of Occupancy by the building code official.
<i>Design-Build Method Timeline Reduction Option: method is permitted in 18-2, Part 5.</i>		
<ul style="list-style-type: none"> • Via a Request for Proposals process, A&E could combine all parts (site, design, construction, equipment) into a single procurement step and single contract. • Pros: increased delivery speed; single source of responsibility • Cons: agency receives what's in the proposal, nothing more; less control over the site selection, design, and quality 		