Professional Consultation Report

Adirondack Park Agency Headquarters

Schematic Design Report
3 Main Street
Saranac Lake, NY

Project No. 46219

prepared for

Adirondack Park Agency

prepared by
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June 17, 2025

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1.0 PROJECT INTENT

The Adirondack Park Agency (APA) seeks to re-locate the Agency's headquarters from Ray Brook, NY to 1-3 Main St. in Saranac Lake, NY. The downtown site provides a unique opportunity to both the Agency and the greater Saranac Lake community. The move is consistent with Smart Growth principles, and the Agency's enabling legislation which seeks to channel commercial development into the Park's Hamlet centers. The downtown site will improve public access, increase transparency, and provide an opportunity for the Agency to be more integrated into one of the largest villages in Adirondack Park. Additionally, it will reduce miles of employee transportation to and from work leading to a reduction of carbon dioxide emitted into the atmosphere.

The economic benefit includes an increase in local business patronage by APA employees estimated at $376,000 per year. This will generate new development in target areas and broaden the community's employment base. Attracting professionals and families is key to the village efforts to create sustainable opportunities that enhance the quality of life, expand business opportunities, and support a resilient community. The APA project follows the goals of the Downtown Saranac Lake Revitalization Initiative. Re-using and rehabilitating the historic downtown buildings will enhance the qualities that make historic Saranac Lake distinctive - a walkable downtown, a vibrant arts and cultural community and diverse local businesses, shops, and restaurants.

Well-designed new construction that complements the historic architecture and is sensitive to the streetscape will continue the revitalization momentum already underway. To accommodate all the agency's space requirements, a new building will be sited into the hillside. This approach will allow the historic buildings to remain prominent along Main Street while reducing the visual impact of the new construction.

The Village of Saranac Lake and the Saranac Lake Historical Society have expressed support for the agency's move to their community.

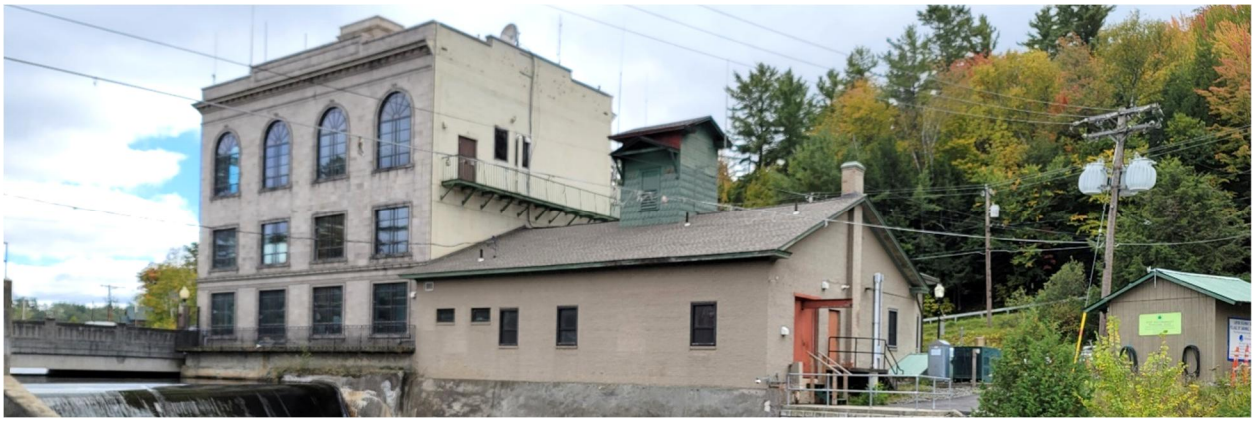

Photo – Above depicts the existing historic structures with the originally constructed Powerhouse pictured on the right with the Paul Smith Electric Light and Power building on the left.

Photos – Depict the overall proposed site for relocation and the surrounding context.

2.0 PROJECT SUMMARY

The draft report previously submitted on July 24, 2024, identified a total Project Budget—including both hard and soft costs—of $47,000,000. This exceeded both the current available maximum funding limit of $40,000,000 and the $30,000,000 original maximum budget.

The maximum allowable Construction Cost within the current $40,000,000 budget is currently estimated at $30,000,000. To stay within budget, the draft schematic design layouts for both the existing historic building and the proposed new construction were modified and other project scope reductions were identified to align the proposed project with the available funding.

Two significant historic buildings on Main Street would be rehabilitated. The Paul Smith Electric Light and Power building (Municipal Office Building) designed in 1927 is a three-story steel and masonry structure clad in glazed terra cotta. The main façade is enhanced with pale gray textured terra cotta to imitate granite, multi- colored tiles and blue and green pilasters. The angled main façade, parallel to Main Street creates a distinctive trapezoid footprint. At the rear is a one-story brick powerhouse completed in 1909. The battered foundation walls form part of the dam as well as the retaining wall for the riverbank. The original equipment was scrapped during World War II for the war effort. The combined available useable floor space of the Powerhouse (single story) and the Municipal Office building (three stories) is approximately 10,500 gross square feet (GSF). The remaining program square footage will be accommodated in a new detached building. To minimize the site disturbance, and to maximize the available site for parking, a three-story new structure is proposed to complement the historic three-story building.

Site conditions at the 1-3 Main property include an embankment along the southern, western and northwestern aspects and is bounded by the Saranac River on the east side. To maximize the distance away from the river and the 50 feet structure setback, the new building has been located on the Lake Street side and in proximity to the existing embankment. This location will require a retaining wall. The footprint of the building and the orientation of the building on the site are now designed to minimize cutting into the existing embankment. This does add some complexity to the design and costs but is the best location for the new building.

3.0 PROJECT PROGRAM

This section documents the program the schematic design was based upon. Any changes to the below will require assessment to determine the impact on the design and project budget.

3.1 Site Program

a) Parking: APA is requesting parking to accommodate sixty-two (62) staff parking for full time staffing considerations, fourteen (14) fleet parking spaces (Ford F-250's with plows on the front) include two future purchases, and five (5) additional spaces for the public or board members for a total of eighty-one (81) spaces.

   i. The previous site concept identified a maximum of approximately eighty-two (82) parking spaces. With the revised site design shown within this amended report there are currently a total of 70 parking spaces available. The decrease in spaces would still meet the APA's programmatic needs, especially given New York State's telework office place policy.

   ii. In addition, this proposed parking configuration exceeds what is presently available on site at 1-3 Main Street and would therefore be a parking enhancement for the village. Access to the parking lot would be allowed after hours and on weekends. Details on public parking would be identified in the lease agreement between the APA and the Village.

b) Residences Site Access: The Village confirmed canoe walk users travel from the upstream area (Main Street intersection) through the site parking lot to the northwest area, down the gravel path, and under the Highway to drop in their canoes. The Village would like to provide a walkway/clear direction for this pathing as part of site development.

c) Screening: Per Village code, landscaping is required at parking areas and screened from roadways and adjacent properties by a wall, fence, thick hedge or berm. Additionally, screening should not be less than 3ft but no more than 8ft. Further verification will be required given the site will be a redevelopment project and there is natural screening provided by the existing grading/slopes.

3.2 Facility Program

The program developed with the Feasibility Study was reviewed and updated as part of the initial Schematic Design Phase Report provided in 2024. During the re-scoping process to align the scope to the maximum construction costs, program reductions were reviewed with APA. Further plan development and refinement will be required in the next design phase of the project. The departments/groups within APA that will be accommodated at this site are as listed below.

ADMINISTRATION

The Administration division encompasses several groups including:

- Executive
- Maintenance
- Public Information / Communications

- Information Technology
- Legal Counsel

REGULATORY PROGRAMS

R.A.S.S. (RESOURCE ANALYSIS AND SCIENTIFIC SERVICES)

The RASS division encompasses two groups including:

- Wetlands / Natural Resource Analysis
- Engineering

PLANNING

The Planning division encompasses three groups including:

- State Land
- Local Government Services
- GIS

SHARED SPACE

Consists of common circulation areas, utility space, amenities within the following categories.

- Public Shared Space
- Division Shared Space
- Division Shared Utility Space

4.0 PROJECT CRITERIA

The review performed as part of this study included the code implications of the conceptual scope on the existing historic structures, based on review of the 2020 Building Code of New York State (BCNYS) and the 2020 Existing Building Code of New York State (EBCNYS). The requirement, for this State funded project, and any compliance with local regulations will require review during the next design phase. The following site requirements in Section 4.1 thru 4.3 are noted for reference, and for this State funded project would not be applicable with no local planning board approvals anticipated as being required for this project.

4.1 Zoning

a. The Village Dimensional Requirements for the site based on E2 zoning are noted below:

i. Min. Lot Area: None identified and typically determined during site plan review.

ii. Min. Height of Building: 24ft & 2 stories

iii. Max. Height of Building: None identified and typically determined during site plan review.

Greater than 40 feet in height beyond the 50-foot shoreline setback requires a permit through the Adirondack Park Agency.

iv. Max. Lot Coverage of Principal Building: None identified.

v. Max Lot Coverage of Impervious Surface: None identified.

vi. Principal Building Setbacks: Front, side, and rear = 0ft

vii. Accessory Structure Requirements

a. Accessory Structure Setbacks: Front = not permitted, Side and rear = 8ft

i. The minimum front setback for an accessory building may be 15ft if the primary entrance is facing the side or rear yard.

b. Max. accessory structure area: 15% of total lot area associated with the primary building

c. Max. height of accessory structure = 16ft

d. Max. height of the accessory structure exterior walls = 10ft

viii. Parking lot requirements:

a. Min. Parking Lot setback = 5ft

b. Parking Lot ratio: None identified. The Village confirmed there are no minimum requirements.

c. Parking stall width = 8.5ft

d. Parking Stall depth = 18ft

e. 2-way Drive aisle = 23ft

f. Parking lots of more than 50 spaces require segmentation with landscape islands, 10ft in width.

g. Parking Areas, shall be landscape and screened from roadways and adjacent properties by a wall, fence, thick hedge or berm.

h. Parking area light fixtures should be designed with a concealed or recessed light source that shields light downward to confine light spread and shall not exceed a max of 24ft in height. When within 50 ft of residential properties, fixtures shall not exceed 18ft in height.

ix. Retaining Walls over 100 square feet in area shall be located more than 50ft from the shoreline of a lake, river, or pond.

x. Vegetation clearing regulations:

a. Clear-cutting on any one lot shall not exceed 0.5 acres.

b. No clear-cutting shall be permitted on slopes greater than 15%

c. Selective removal of trees on slopes of over 15% is permitted when done in accordance with a cutting plan as prepared by a qualified forester.

d. Cutting on slopes greater than 25% shall be prohibited except for the construction of buildings with a building permit and in accordance with the clearing regulations.

4.2 **Shoreline Setback**

A 50-ft shoreline setback is required from the high-water mark as part of APA and Village code requirements. Portion of the existing paved parking lot and all the existing building are located within the 50-ft development setback.

a. From discussions with the Village's Jamie Konkoski, regarding the Village Code:

i. New impervious surface in the 50ft shoreline setback is acceptable, but a variance would be required. Variance approval will be more favorable if permeable surface is proposed in the 50ft setback instead of impervious.

ii. The existing structure type within the 50ft setback will need to be maintained in the proposed conditions to avoid a variance. In other words, a variance will be avoided if the proposed parking lot is placed over existing parking lot, but a variance would be required if the building footprint were to be proposed over existing pavement.

b) With the scope reductions an addition is no longer applicable, therefore, no new building construction is planned currently within the 50ft setback. If new building footprint is proposed in the 50ft setback, the Village will require justification from the Applicant demonstrating no other alternative placements were feasible.

a. APA code also describes:

i. Not more than 30% of the trees six inches or more in diameter at breast height within 35ft of the mean high water mark may be cut over any 10-year period

ii. No cutting of any vegetation may take place within 6ft of the mean high water mark, except that up to 30% of the shorefront may be cleared of vegetation on any individual lot.

iii. The shoreline building setback restrictions apply to all principal buildings and to all accessory structures exceeding 100 square feet in size.

4.3 **Principal and Accessory Buildings**

The design includes adding a new building to the project site. Jamie Konkoski with the Village provided the following guidance related to this item:

i. According to the Village Development Code, more than one principal building per lot is permitted if; a) the minimum required lot area (which is set during site plan review for district E), lot width and all yard requirements are met for each building; or b) the buildings are located within a district where mixed uses or multiple-use buildings are permissible. Multi-use buildings are permitted in district E.

ii. In summary, two principal buildings are allowed on that lot as long as the setbacks for principal buildings can be met. However, several dimensional requirements cannot be determined until the Site Plan Review Process. If the setbacks cannot be met, then a variance would be required.

4.4 **Stormwater**

a. Village of Saranac defers to NYSDEC stormwater requirements for land disturbing activities, the following items will need to be considered for stormwater management as part of site development:

b. Redevelopment rules will apply for development of the existing impervious areas; 25% of the water quality volume using standard stormwater treatment practice, 75% of the water quality volume using an alternative stormwater treatment practice, or 100% of the water quality peak flow using a flow through treatment system (i.e., hydrodynamic separator). Quantity controls and runoff reduction are not required for redevelopment activities.

c. New Development rules will apply for development of the existing vegetated areas (i.e., grass, wooded areas, non-paved areas). Pretreatment and treatment of the water quality volume, meeting runoff reduction volume requirements, and quantity controls (i.e., detention of the 1-, 10-, 100-year storm events to predevelopment rates).

d. Proposed disturbance will likely exceed 1-acre, requiring NYSDEC Notice of Intent & SPDES General Permit for Stormwater Discharges

e. Note that this project would be considered redevelopment (proposed impervious over existing impervious) and new development (proposed impervious over existing pervious) per NYSDEC.

4.5 **Building Code**

Alteration of Existing Historic Buildings

Existing Conditions

The property consists of two significant SHPO designated historic buildings to be altered/rehabilitated. The Paul Smith Electric Light and Power building (Municipal Office Building) designed in 1927 is a three-story steel and masonry structure.

At the rear is a one-story brick powerhouse completed in 1909. The combined available usable floor space of the Powerhouse (single story) and the Municipal Office building (three stories) is approximately 10,5000 GSF.

The existing 3-story structure means of egress and accessibility is by a non-compliant elevator and single interior exit stair located within the same enclosure. There is also an existing Fire Escape accessed from the 3rd story only. This fire escape needs to be evaluated for structural integrity and compliance with EBCNYS Section 805.3.1.2.1 to serve as the as a 2nd means of egress from the 3rd floor.

Proposed alterations of existing buildings shall comply with applicable provisions of 2020 NYS Existing's Building Codes as determined by the classification of work and level of alteration.

a. Classification of Work

The proposed alterations to the 1-story and 3-story historic buildings will have work areas of primarily of Change of Occupancy and Alteration-Level 2 respectively. These Classifications of Work shall require compliance to the applicable EBC provisions:

- Section 305 – Accessibility for existing Buildings
- Chapter 7: Alterations – Level 1
- Chapter 8: Alterations – Level 2
- Chapter 9: Alterations – Level 3
- Chapter 10: Change of occupancy
  a. Partial change of existing 1-story Powerhouse building with assembly use
- Chapter 12: Historic Buildings

b. Fire Protection Systems

Currently, the existing buildings are not equipped with an automatic sprinkler system throughout. With the planned classifications of work and travel distances there does not appear to be a code trigger to upgrade the building, and no sprinklers for the existing building are planned. This should be continually verified as the next design phase progresses.

c. Means of Egress

The 3-story building is a single exit building, and with the planned level of alterations can continue to be considered a single exit building where the applicable provisions of EBC

805.3.1.1 can be met. To comply with this section, the required travel distance of 50 ft per story per this section must be met within a non-sprinklered building. With the current program layout this should be feasible with the existing stair enclosure altered to be provided with a 1-hr fire-rated enclosure. During the next design phase, it should be evaluated if the stair enclosure needs to be increased to ensure compliance with the 50 ft travel distance requirement, and the scope required to provide the required fire-rated construction for the stair enclosure.

i. Accessible means of egress are not required in existing facilities per EBC 305.6 Exception 2. Therefore, the existing stair width will remain as-is.

d. <u>Handicap Accessibility</u>

The proposed alteration of the existing buildings includes reconfiguration of all floors and spaces to be made accessible including building entrances, toilet facilities and primary function areas. Such spaces shall comply entirely with Chapter 11 of NYS Building Code and ANSI 117.1.

Consideration for compliance to install an accessible route elevator have been analyzed based on the following code requirements and non-compliant conditions.

i. Existing Accessible Route: There is an existing elevator within the main vertical stair circulation of the 3-story structure. However, the current car configuration does not comply with the min. required clearances for existing elevators. A117.1 407.4.1 allows existing elevators as an accessible route provided the clear floor area is min. 36" W x 56" D. Currently, the existing elevator has clear car dimensions of roughly 36" wide by 39" deep, which is non-compliant with current code requirements. Providing an elevator as part of an accessible route is not included as outlined below.

ii. Alterations affecting primary function areas. The proposed scope is considered an alteration to primary function areas as defined in EBC 202. According to EBC 305.7, unless the cost of providing an accessible route exceeds 20% of the cost of alterations affecting area of primary function, an accessible route shall be provided per BCNYS Chapter 11. The primary function is office and meeting space with the estimated costs for the work of the primary functions for the existing building approximately $6,500,000. Therefore, the costs of providing the accessible route are not required to exceed approximately $1,3000,000. The project currently plans to alter the existing toilet rooms to make include handicap toilet rooms and drinking fountains on each floor to provide improved accessibility. The costs of an elevator and stair tower serving all floors was evaluated in the Schematic Design phase with an estimated value of $2,7000,000.

iii. Historic Buildings: EBC 305.9 requires designated historic structures that undergo alterations be made to comply with accessibility provisions, unless technically infeasible or determined by OGS (as the Authority Having Jurisdiction as the building code official) that providing an accessible route would destroy the historic significance of the facility.

iv. Technically Infeasible or Disproportionate: We cannot state that installing an accessible route as part of the alteration would be "technically infeasible", however, with the present design it is anticipated that providing a fully compliant accessible route would exceed 20% of the planned construction costs for renovating the existing building and could be

determined as destroying the historical significance of the building if an elevator were added. This historical impact would need determinations by SHPO.

e. Energy Conservation Construction

According to 2020 NYS ECC section C501.6, the provisions of the energy code related to construction for alterations of historic structures shall not be mandatory for historic buildings. All proposed energy efficiency measures under this scope shall be voluntary and not subject to compliance with any applicable ECC provisions.

New Building Construction

The proposed new 3 story office building as shown on the proposed floor plans shall comply with all applicable provisions for new construction in accordance with 2020 NYS Uniform Codes.

a. Construction Classification: IIB

Currently planned as a sprinklered building consisting of non-combustible construction consisting of a steel frame structure. The classification of the building shall be considered a IIB construction in accordance with BC 601. Alternative construction types, and a non-sprinklered building, could be evaluated, as further cost savings in the next design phase.

b. Occupancy Classification: Mixed-use – S-1, B

The proposed new 3-story building shall be considered a single use as a B-Business occupancy with incidental MER spaces as follows.

c. Fire Protection Systems

With construction classification IIB and given the existing area per floor as well as the number of stories it does not trigger the installation of an automatic sprinkler system in accordance with BC Section 503. However, until the full passive fire protection requirements could be fully understood the current scope assumes providing a sprinkler system for the new building.

According to BC 508.4, (1) hour separation is required between B-Business and S-1 Maintenance garage, if it were added back to the scope, for a non-sprinklered buildings.

d. Energy Conservation Construction

The proposed new building shall comply entirely with 2020 NYS Energy Conservation Code for new construction including Chapter 4, commercial energy efficiency.

e. Structural

Snow Loads

- Ground snow load, Pg: 91 psf
- Flat roof snow load, Pf: 77 psf
- Snow Importance factor, Is: 1.1
- Snow exposure factor, Ce: 1.0

- Thermal factor, Ct: 1.1
- Terrain Category: C (Exposed)
- Risk Category: III

Wind Loads

- Ultimate Design Wind Speed (Vult): 115 mph
- Nominal Design Wind Speed (Vasd): 89 mph
- Exposure: C
- Risk Category: III
- Internal pressure coefficient: +/-0.18

Seismic Loads

- Analysis Procedure: Equivalent Lateral Force
- Site Class: D (Default)
- Risk Category: III
- Seismic Design Category C
- Seismic Importance Factor, Ie: 1.25
- Mapped Spectral Response Acceleration, Short Periods: $S_s = 0.475$
- Mapped Spectral Response Acceleration, 1-Second: $S_1 = 0.1$
- Design Spectral Response Acceleration at Short Periods: $S_{DS} = 0.450$
- Design Spectral Response Acceleration at 1-Second: $S_{D1} = 0.16$

Existing Structural System Upgrades: According to the 2020 Existing Building Code of New York State (EBCNYS), if the project work scope includes more than 50-percent of the building area, which would be defined as an Alteration Level 3. With the scope reduction evaluated with the latest design iteration the work area will be kept under 50-percent in the multi-story building to avoid triggering structural upgrades. If this changes, the structural implications if an Alteration Level 3 were required are as follows:

i. Any existing gravity load-carrying element for which an alteration causes an increase in dead load, live or snow load, including snow drift effects, of more than 5-percent shall be replaced and altered as needed to carry the design loads.

The live loads will not be increasing in the existing office building, where the areas are to remain a typical office occupancy.

The live loads will be increasing in the existing single-story building, where the areas are currently proposed to convert from a business occupancy to public assembly occupancy. These live load increases exceed five percent of the original live loads. Per analysis, the existing floor framing does not have reserve capacity to support the anticipated design live loads. The existing flooring in this area was provided with an overbuild with prior renovation work. The overbuild floor will need removal and built back up with a new/lighter floor system. A developed design approach will require further verification in the next phase and additional field work with potential for recommended destructive removals to verify the existing conditions.

ii. Any existing lateral load-carrying element for which an alteration causes an increase in lateral (seismic or wind) loading by more than 10 percent will need to meet the wind and seismic design requirements per the 2020 BCNYS for new construction. Reduced seismic forces are permitted.

Substantial increases in dead load to the building can increase the effective seismic weight and ultimately the seismic load onto the existing lateral load-carrying elements. The weight of new finishes and mechanical/electrical/plumbing, including sprinkler piping if applicable, were reviewed and the anticipated dead loads will not increase the

design lateral load by more than 10 percent. There are no additional wall openings created from the proposed program, and therefore will not decrease the lateral load capacity of existing lateral force resisting elements.

iii. For any building assigned to Seismic Design Category C and higher with a structural system that includes unreinforced masonry bearing walls, the alteration work shall include the installation of wall anchors at the roof line unless an evaluation demonstrates compliance of existing wall anchorage.

Based on risk category, geographic and site parameters, the building is categorized as Seismic Design Category C. The existing powerhouse building consists of unreinforced masonry (brick) bearing walls. Previous renovation work included providing wall anchors for the existing timber trusses onto the south wall. Due to the scope of work herein, the remaining truss bearing points will need to be anchored to the existing brick walls along the roof line.

4.6 Recommended Work

4.6.1 Site

a. Grading: There are existing steep slopes along the southern, western, and northwestern areas of the project site. The proposed grading for the new building and parking lot will require retaining walls to connect back into existing grade. The height of the retaining wall varies between ±1 to ±15ft based on the conceptual grading. The grading will require excess cut and that excess material will need to be removed offsite.

Preliminary cut and fill quantities as noted below:

Cut: 2,100 cubic yards (assume 2,500 for estimating purposes)
Fill: 45 cubic yards (assumed 50 cubic yards for estimating purposes)

b. Stormwater: The proposed project activities include redevelopment (i.e., rebuilding over the existing development) and new development (i.e., building new improvements over the existing non-developed (or vegetated) areas). The NYSDEC has relaxed stormwater requirements for redeveloped areas and therefore a portion of the stormwater runoff will require stormwater quality controls to satisfy redevelopment requirements.

Redevelopment stormwater quality controls include a Hydrodynamic separator for treatment purposes prior to discharge into the nearby river. The new developed areas of the project site will require full NYSDEC water quality (i.e., treatment) and quantity controls (i.e, detention). The conceptual layout includes a subsurface infiltration practice which provides quality and quantity controls before discharging directly to the nearby river. A hydrodynamic separator is also required for pretreatment purposes.

c. Sanitary Sewer: The proposed new building layout is located over the existing sanitary sewer infrastructure and these existing utilities will need to be removed or abandoned in place. The sewer line will need to be rerouted around the new building and connect back into the downstream existing sewer line. The existing sewer line is ±13ft below grade. The sanitary sewer line from the proposed building will connect into the existing sewer infrastructure (assuming the existing sewer system has capacity to accept new flow – full analysis of the existing sewer capacity is required).

d. Water: The proposed new building layout is located over existing water infrastructure and these existing utilities will need to be removed or abandoned in place. The existing water line will need to be rerouted around the new building and connect back into the existing water line. The new water line will connect into the existing onsite system (assuming the

existing system has capacity to provide water service – full analysis of the existing water system is required).

e. Retaining Wall: Assume a slope and nail type retaining wall system to allow soil cut and removal to occur in increment heights. The length of the nails and spacing will require further analysis and possible additional soil boring into the hillside.

4.6.2 Site Electrical

a. Utility: There are multiple existing overhead utility lines that cross the site, including village-owned overhead lines feeding the hydropower facility, National Grid-owned overhead lines feeding buildings on the North side of the Saranac River, and overhead service conductors feeding the municipal building. The majority of the utility lines do not conflict with the proposed footprint of the new building and therefore shall remain as is. There is one site light pole that conflicts with the proposed new building and will need to be remove as part of this project.

An underground service would be installed to serve the new building, originating from a riser on one of the utility poles on Lake St. A 500kVA pad-mount utility transformer will need to be provided on site to serve the new building's electric.

b. Emergency Power: With costs in consideration and APA not indicating a definitive need for a back-up generator the following is the basis of the current electrical recommendation.

Battery Back-up: Remove the existing 150kW generator in the existing building and underground fuel storage tank. Life safety loads in the new and existing buildings will consist of only battery back-up.

c. Lighting: Remove the (1) existing site lighting pole that conflicts with the proposed building footprint. Provide ample LED site lighting (assumed 12 decorative pole lights with gooseneck fixtures at 20' pole height) in the new parking lot. Replace existing fluorescent wall packs on the exterior of the powerhouse and municipal buildings with LED type wall packs. Provide new LED wall pack fixtures on exterior façade of new building (assume 4 fixtures).

4.6.3 Existing Historic Buildings

a. Powerhouse

i. **Building Enclosure**: The current estimate is carrying an allowance for exterior restoration work for both structures. Further evaluation of the exact extent of exterior restoration work feasible within the allowance will be needed in the next design phase. The minimum intended scope would be to scrape and paint the existing siding.

ii. **Structural**

a) Infill Floor Framing: Original concrete slab had an overbuild installed, assumed with the prior tenant renovations tenant, with assumed 4.5" concrete slab over a 2.5" 20ga steel deck. There is not sufficient loading capacity in the floor system to accommodate the proposed assembly use. To accommodate the overbuild system would need removal and replaced with a lighter system. Assume removing the existing overbuild and replacing with a 5" thick light weight concrete slab reinforced with WWF 6x6 – W2.9 x W2.9 over a geofoam membrane/separator and 16" +/- of rigid cellular polystyrene geofoam (EPS15) conforming to ASTM D6817.

b) Exterior Unreinforced Masonry Walls: The unreinforced masonry walls supporting the powerhouse building will need to be mechanically connected to the existing roof trusses.

iii. **Interiors**: See Municipal Office Building next section for general interiors work that would also be applicable for the Powerhouse.

iv. **Mechanical**: See Municipal Office Building next section for mechanical work that would mostly also be applicable for the Powerhouse.

v. **Plumbing**: See Municipal Office Building next section for the plumbing work that would mostly also be applicable for the Powerhouse.

vi. **Electrical**

a) Service: We recommend retaining and reusing the existing 208/120V, 3-phase electric service at the powerhouse building.

b) Life Safety: All life safety loads, including emergency and egress lighting, exit signs, and the fire alarm system, to be battery backed-up in the powerhouse building. The existing fire alarm control panel in the municipal building electrical room will be re-used for the new fire alarm system. Provide new NAC panel in the powerhouse building electrical room.

c) Lighting: Fluorescent fixtures currently provide lighting throughout the powerhouse space. New LED fixtures will be provided throughout renovation areas. New lighting controls will be provided to comply with current energy codes.

d) Communications: A full telecommunications system will be provided throughout the building to support information technology and Wi-Fi needs in offices. Specific requirements of the server room and IT rack equipment needs to be further developed. The powerhouse will be served via the existing fiberoptic service in the municipal building IT room.

Telephone/data outlet boxes shall be provided throughout building office spaces and areas with computers. Power connections shall be provided as required for telecommunications system and AV equipment. Design of telephone/data equipment, devices, outlets, and wiring will be by IT vendor.

b. Municipal Office Building (Paul Smith Electric Light and Power)

i. **Building Enclosure**: The current estimate is carrying an allowance for exterior restoration work for both structures. The minimum intended scope would be to clean the façade with cleaning agents approved for historic façade cleaning ensuring that the existing façade is thoroughly cleaned without damage. The feasibility to include repair of existing cornice, dentils and other articulations within the project budget will need evaluated in the next design phase.

ii. **Interiors**

a. Partitions: Existing partitions in the existing building will maintained with partition work limited to areas shown as Reconfigured Space on the Appended Floor Plan drawings. All bearing walls will be retained. The surfaces to remain will be thoroughly cleaned and repaired as required and prepared to receive new partitions. The new interior partitions will be metal stud with gypsum drywall on both sides. Sound attenuation batts will be

provided in partitions that will need sound isolation such as common walls between offices and conference rooms.

b. Ceiling: All existing ceiling systems will be demolished. During the existing conditions filed survey no historic ceilings were discovered. If any existing ceiling with historic importance is discovered during demolition they will be retained, repaired and restored to as original state as possible. New acoustical ceiling tile (ACT) ceiling system will be installed in all the spaces except the restrooms. Restrooms will receive gypsum drywall hard ceiling.

c. Floor finish: Existing terrazzo flooring at the main entry lobby will be retained. It will be cleaned, repaired and restored to as original state as possible. The new floor finish will be selected to be compatible with the historic terrazzo floor. Portion of the Powerhouse Building will require floor infill to raise the elevation of the floor to align with the adjacent office building. Carpet tile flooring will be installed for all the office, conference and meeting rooms. Luxury vinyl tile floor will be installed for all the open spaces, break rooms and corridors on all the floors. Porcelain tile flooring will be installed for all the restrooms. The mechanical and electrical rooms will receive clear coat concrete sealer.

d. Wall finish: All gypsum drywall partitions will receive a coat of primer and two coats of paint.. All restrooms will receive 36” tall wainscot of ceramic tile with paint above. Some wall treatments will be considered for the entry lobbies in the building.

e. Lighting: Lighting has been described in more detail below in the Electrical section. General lighting will be LED light fixtures in compliance with current code while some signature lighting fixtures will be used in entry lobby. Task lighting will also be considered based on discussions during the next phase.

iii. **Mechanical**

Geothermal

a. Disconnect the HVAC system from the lake water. Remove the existing lake water system in its entirety, including all piping to the existing plate and frame heat exchanger, pump and water accessories. Provide a ground source heat pump system utilizing the well field and manifold provided by the Village of Saranac Lake. Provide piping (underground if necessary) from the building system to the well field manifold. Ground loop piping shall enter the building in the existing basement Mechanical Room. The ground loop pumps, air separator, expansion tank , and glycol feed unit shall be located in the existing basement Mechanical Room. Replace the existing plate and frame heat exchanger, building loop pumps air separator and expansion tank. Pump the ground loop piping to the new heat exchanger located in the new first floor mechanical room. The building loop air separator, expansion tank and pumps shall be located in the new first floor Mechanical Room. The well field shall have a capacity of 700 MBH heating and 25 tons cooling minimum. This includes the ventilation load noted below.

- The HVAC Contractor shall provide all piping, valve and accessories from the manifold to the building equipment, including all pumps and heat exchangers.

b. Remove the boiler and all associated flue and breeching to the masonry chimney. Seal the masonry chimney

c. Remove the building heat pump loop piping located throughout the building. Provide building loop piping to the heat pumps. Remove existing condensate drain piping and provide new from each heat pump. Run to nearest mop sink.

d. Remove the existing heat pumps. They are close enough at this time to their expected useful life that by the time this project is under way they will only have about 3 years left. Also they will not be sized properly for the new layout of the building. Provide ground source heat pumps to serve the new layout. The heat pumps shall supply ducted air with a plenum air return.

e. Remove the existing Renewaire energy recovery ventilators. Provide indoor energy recovery ventilators (ERVS) with supplemental electric heating coils to deliver outside air to the building, ducted to the return air for each space heat pump at a neutral temperature. The electric heating coils are required due to the very low outdoor winter air temperatures for this area. Heat pumps don't have the capacity to bring the air temperature up high enough without the supplemental heat. The return air to each ERV shall be ducted from the return air plenum to the ERV as will the bathroom exhaust air, with the bathroom exhaust fully ducted to the inlet of the ERV. The ERVs shall supply a total of 1500 CFM of air consisting of 1-600 CFM unit with a 10 KW electric coil and 3-300 CFM units for the rest of the building, each with a 5 KW electric coil. Upon a full load calculation for the building there may be a need for a heat pump at each ERV to reduce the humidity level of the air entering the space heat pumps. Outdoor air inlets and exhaust air outlets shall be through the building exterior walls.

f. Remove existing bathroom exhaust fans. Bathrooms shall be exhausted back to the ERV return.

g. The fuel-oil underground tank and piping to and from the building shall remain. Remove the piping serving the domestic water heater and boiler. The piping serving the emergency generator shall remain.

h. Controls sequences for all equipment will be modified so the existing DDC system shall be removed in its entirety. Provide a new system with full tracking, alarms and operator interface.

iv. **Plumbing**

a. Relocate the cold-water service to the new first floor mechanical room. This will make it more accessible. Provide a 2" service with water meter, pressure reducing valve, backflow preventer and all necessary shutoff and bypass valves. Remove all existing cold-water piping throughout the building. Provide new piping for distribution. Run this piping above the new ceilings.

b. Remove the fuel oil fired domestic water heater and associated circulating pump, flue, and controls. Provide a hybrid electric/heat pump domestic water heater. This will be a self-contained unit located in the basement mechanical equipment room. The unit will have a capacity of 112-gallon tank, 90GPH recovery at 100ºF; 12 KW at 240V. Connect this unit to cold water and hot water piping. Provide a new circulating pump and master mixing valve. Provide new domestic hot water and hot water circulating piping throughout the building to each fixture. Route piping through basement to rise in new Mechanical Room to run distribution piping above ceilings.

c. Remove all existing fixtures. Provide new fixtures throughout the building due to total floor plan changes and relocation of all bathrooms. The number of each type of fixture shall be: 4 water closets; 4 lavatories; 4 sinks; 3 mop sinks.
d. Existing roof drains shall remain. Horizontal piping shall be modified due to floor plan changes to get to new vertical risers. Run new vertical piping to drain piping in crawl space. Horizontal piping in crawl space shall remain and roof drain piping discharge shall remain.
e. Existing sanitary piping and discharge located in the basement shall remain. Provide new vertical piping horizontal piping from fixtures existing piping in basement. Remove existing vent piping. Provide new vent piping up through roof.

v. **Electrical**

a. Service: We recommend retaining and reusing the existing 400A, 208/120V, 3-phase electric service at the municipal building.

b. Life Safety: All life safety loads, including emergency and egress lighting, exit signs, and the fire alarm system, to be battery backed-up in the municipal building. Retain and reuse the existing fire alarm control panel in the municipal building electrical room for the new fire alarm system. This fire alarm control panel will serve both the powerhouse and municipal buildings. Add a Notification Appliance Circuit (NAC) panel in the municipal building electrical room for the fire alarm system.

c. Lighting: Fluorescent fixtures currently provide lighting throughout the municipal building space. New LED fixtures will be provided throughout renovation areas. New lighting controls will be provided to comply with current energy codes.

d. Communications: A full telecommunications system will be provided throughout the building to support information technology and Wi-Fi needs in offices. Specific requirements of the server room and IT rack equipment needs to be further developed. The municipal building will have a room for the Main Distribution Frame (MDF) and other communications equipment which will serve both the powerhouse and municipal buildings. The existing fiberoptic service and IT room will be utilized for the telecommunications service.

Telephone/data outlet boxes shall be provided throughout building office spaces and areas with computers.

Power connections shall be provided as required for telecommunications system and AV equipment. Design of telephone/data equipment, devices, outlets, and wiring will be by IT vendor.

c. New Office Building

i. **Building Enclosure**: All the exterior walls will be constructed out of cold formed metal studs with gypsum drywall on the interior. The outside of all exterior walls will receive continuous thermal insulation in compliance with the current energy code. Stone veneer will be considered for the exterior finish at the first floor with brick veneer for the second and third floor to create a new building which aligns with the historic aesthetic language of the existing building.

ii. **Structural**

1. Foundation: The new office building will be supported by conventional shallow spread footings. Interior footings with the most tributary load area will have a footing dize of approximately 13 feet by 13 feet with a maximum unreduced column load of 329 kips. Exterior spread footings are on average 8 feet by 8 feet. The perimeter walls will be supported by conventional wall footings.
2. Retaining wall: See Site-Civil Recommended Work Section.
3. Superstructure: The superstructure will consist of the following:
    a. Floors: 5-inch (total thickness) concrete slab on metal deck, supported by structural steel framing. Structural framing members (spandrels) are wide flanged W21 beams spaced at approximately 6 to 8 feet on center and spanning approximately 30 feet; W18's spaced at 6 to 8 feet on center and spanning approximately 25 feet. Structural steel girders will support the spandrels and will be 24-inch-deep wide flanged steel shapes.
    b. Roof: 1.5-inch metal deck, supported by structural steel framing. Structural framing members (spandrels) are wide flanged W16 beams spaced at approximately 6 to 8 feet on center and spanning approximately 30 feet; W14's spaced at 6 to 8 feet on center and spanning approximately 25 feet. Structural steel girders will support the spandrels and will be 21-inch-deep wide flanged steel shapes.
    c. Lateral System: Combination of steel concentrically braced frames not specifically detailed for seismic resistance, and intermediate reinforced masonry shear walls.
    d. Lateral System: Intermediate reinforced masonry shear walls.

iii. **Interiors**

a. Partitions: The new interior partitions will be metal stud with gypsum drywall on both sides. Sound attenuation batts will be provided in partitions that will need sound isolation such as common walls between offices and conference rooms.

b. Ceiling: New acoustical ceiling tile (ACT) ceiling system will be installed in all the spaces except the restrooms. Restrooms will receive gypsum drywall hard ceiling.

c. Floor finish: Carpet tile flooring will be installed for all the office, conference and meeting rooms. Luxury vinyl tile floor will be installed for all the open spaces, break rooms and corridors on all the floors. Porcelain tile flooring will be installed for all the restrooms. The mechanical and electrical rooms will receive clear coat concrete sealer.

d. Wall finish: All gypsum drywall partitions will receive a coat of primer and two coats of paint. All restrooms will receive 36" tall wainscot of ceramic tile with paint above. Some wall treatments will be considered for the entry lobbies in the building.

e. Lighting: Lighting has been described in more detail below in the Electrical section. General lighting will be LED light fixtures in compliance with current code while some signature lighting fixtures will be used in entry lobby. Task lighting will also be considered based on discussions during the next phase.

iv. **Mechanical**

Geothermal

a. Provide a ground source heat pump system utilizing the well field provided by the Village of Saranac Lake. Provide underground piping from the building to the well field manifold. Provide piping (underground if necessary) from the building system to the well field manifold. Ground loop piping shall enter the building in Mechanical Room. The ground loop pumps, air separator, expansion tank , and glycol feed unit shall be located in the Mechanical Room. Pump the ground loop piping to a plate and frame heat exchanger located in the mechanical room. The building loop air separator, expansion tank and pumps shall be located in the Mechanical Room. The well field shall have a capacity of 950 MBH heating and 43 tons cooling minimum.

- The HVAC Contractor shall provide all piping, valve and accessories from the manifold to the building equipment, including all pumps and heat exchangers.

b. Provide building loop piping to the heat pumps Provide condensate drain piping from each heat pump. Run to the nearest mop sink.

c. Provide ground source heat pumps to serve the building based on final layout. The heat pumps shall supply ducted air with a plenum air return.

d. Provide indoor energy recovery ventilators (ERVS) with supplemental electric heating coils to deliver outside air to the building, ducted to the return air for each space heat pump at a neutral temperature. The electric heating coils are required due to the very low outdoor winter air temperatures for this area. Heat pumps don't have the capacity to bring the air temperature up high enough without the supplemental heat. The return air to each ERV shall be ducted from the return air plenum to the ERV as will the bathroom exhaust air, with the bathroom exhaust fully ducted to the inlet of the ERV. The ERVs shall supply a total of 1500 CFM of air consisting of 1-600 CFM unit with a 10 KW electric coil and 3-300 CFM units for the rest of the building, each with a 5 KW electric coil. Upon a full load calculation for the building there may be a need for a heat pump at each ERV to reduce the humidity level of the air entering the space heat pumps. Outdoor air inlets and exhaust air outlets shall be through the building exterior walls.

e. Provide a DDC system with full tracking, alarms and operator interface.

v. **Plumbing**

a. Provide cold-water service in the first-floor mechanical room. Provide a 2" service with water meter, pressure reducing valve, backflow preventer and all necessary shutoff and bypass valves. No fire protection will be provided. Provide cold water distribution piping to all fixtures throughout the building. Run piping above ceilings.

b. Provide a hybrid electric/heat pump domestic water heater. This will be a self-contained unit located in the existing basement mechanical equipment room. The unit will have a capacity of 112-gallon tank, 90GPH recovery at 100ºF; 12 KW at 240V. Connect this unit to cold water and hot water piping. Provide a circulating pump and master mixing valve. Provide domestic hot water and hot water circulating piping throughout the building to each fixture. Run distribution piping above ceilings.

c. Provide new fixtures at Restrooms and Shower/Locker Room. The number of each type of fixture shall be as shown on the Schematic Drawings and include one emergency shower station in the Mechanical Room.

d. Provide a total of 6 roof drains – 4 on the office area roof. Each roof drain shall drain through a 3" vertical leader. The horizontal piping shall increase to 6" at the discharge from the building.

e. Provide sanitary piping (to underground) and venting (to roof) for all fixtures and floor drains, except at the emergency eyewash. Based on the preliminary floor plan the sanitary main drain leaving the building shall be 4".

vi. **Electrical**

a. Service: A new National Grid service will be provided for the new office building. We recommend providing a 600-amp, 100%-rated, 480/277 volt, 3-phase service to the new building. The service will come into the building underground via National Grid riser pole on Lake St and pad-mount transformer where the primary will be stepped down to 480 volts.

b. Life Safety: All life safety loads, including emergency and egress lighting, exit signs, and the fire alarm system, to be battery backed-up in the new office building. A new automatic addressable fire alarm system will be provided and will monitor the entire building. This will include a fire alarm control panel, Notification Appliance Circuit (NAC) panels, smoke detectors, pull stations, and horn/strobe devices.

c. Lighting: New LED fixtures will be provided throughout building. New lighting controls will be provided to comply with current energy codes.

d. Communications: A full telecommunications system will be provided throughout the building to support information technology and Wi-Fi needs in offices. Specific requirements of the server room and IT rack equipment needs to be further developed. The new office building will have a room for the Main Distribution Frame (MDF) and other communications equipment. Fiberoptic service will be provided. Local data and CATV shall enter the building near the main electrical room via local utility provider. Telephone/data outlet boxes shall be provided throughout building office spaces and areas with computers.

Power connections shall be provided as required for telecommunications system and AV equipment. Design of telephone/data equipment, devices, outlets, and wiring will be by IT vendor.

5.0 KEY CONSIDERATIONS

The following are some key items that are recommended for including with the next phase of the project. This information will be beneficial in providing additional information for the design team to continue development of the full scope of work required to relocate APA's headquarters to this location.

5.1 Existing Conditions Information

a. **Flood Plain**: Delineation of 100-year flood plain requires further verification; based on FEMA mapping. the 100-year flood elevation immediately upstream of spillway appears to be elevation ±1534 and immediately downstream the spillway at an elevation of ±1523. Per FIRM Community Panel Number 360273 0001 C, revised January 2, 1992, Lake Flower is part of a special Zone AE flood hazard region, with some of the region's boundary extending across the main street bridge. The existing buildings are exempt from this provision so long as they remain listed as a *historic* building in the *National Register of Historic Places* after the proposed work is completed. As currently designed, the new building should be

sufficiently located on the site to be beyond the flood plain but this warrants confirmation in the next design phase.

b. **Wetlands Delineation**: Wetlands Delineation: An engineer from the Army Corp of Engineers visited the site on November 8, 2023, and reviewed the delineated feature as well as the area between the delineated feature and the river. The engineer indicated that the wetland boundary will not need to change, and he took some soil samples to determine soil composition. The Army Corp of Engineers concluded that there are no onsite jurisdictional wetlands. (Letter dated October 3, 2024).

5.2 Design Considerations

a. **Retaining wall:** The site has several challenges for locating a new building with steep terrain along Lake Street on one side and the river on the other. The new building footprint and its orientation on the site have been designed and selected to minimize the cutting into the steep terrain along Lake Street but a retaining wall be required to support the newly created cut. Geotechnical analysis has been performed but the design of the retaining will need to be undertaken in the next phase.

b. **Variances and Approvals**: Section 4.2 describes all the regulations governing the project and all the variances that will be required in the next phase.

c. **SHPO**: During the Feasibility Study, an initial meeting took place, and the schematic design was subsequently developed with a focus on the discussions regarding the stair/tower addition and the alignment of the new building. The goal was to ensure it appeared as a simpler "sister" building to the existing one. Moving forward, it is advisable to conduct future meetings with the State Historic Preservation Office (SHPO) and to submit an application on CRIS early in the next design phase to gather their feedback.

6.0 COSTS

The projected costs outlined below reflect the latest estimates, taking into account a more comprehensive understanding of project scope and detailed cost analysis. These estimates have been refined beyond the initial rough-order-of-magnitude figures utilized during the feasibility phase that were based on a per-square-foot cost technique, and costs have now been established based on a more detailed estimating technique of the various anticipated scope items.

The draft report, dated July 24, 2024, identified a total Project Budget—including both hard and soft costs—of $47,000,000. This exceeded both the current available maximum funding limit of $40,000,000 and the $30,000,000 original maximum budget. The maximum allowable Construction Cost within the current $40,000,000 budget is currently estimated at $30,000,000. To stay within budget, the draft schematic design layouts for both the existing historic building and the proposed new construction were modified and other project scope reductions were identified to align the proposed project with the available funding.

This amended report updates the earlier schematic design layouts for both the existing historic building and the proposed new construction and identified other scope reductions aimed at aligning the project within the available funding.

Items	**Schematic** 2025 Scope Reductions	**Comments**
Construction Costs		
Site Development	$4,000,000	Includes a revised slope and nail retaining wall, reduced site lighting, and existing overhead lines to remain with revised building location.
Existing Building(s)	$6,000,000	Limit work area to avoid triggering an Alteration Level 3. Non-sprinklered building with single means of egress from 3-story structure to remain. Approximately 10,500GSF (~9,600NSF).
New Building	$20,000,000	Reduce square footage from prior SD from approximately 23,000GSF to 18,000GSF.
Addition	n/a	Removed from scope.
Construction Costs (Maximum)	$30,000,000	Furniture, Furnishings, and Equipment are excluded. Approximately 28,000GSF between the existing and the proposed new building.

7.0 APPENDIX

7.1 Appendix A – Site Drawings
- 7.1.1 Site Survey
- 7.1.2 Site Plan
- 7.1.3 Utility Plan
- 7.1.4 Grading Plan

7.2 Appendix B – Reports
- 7.2.1 Indoor Air Quality Report
- 7.2.2 ACM Survey
- 7.2.3 Lead in Potable Water Report
- 7.2.4 Environmental Site Assessment Phase 1
- 7.2.5 Environmental Site Assessment Phase 2
- 7.2.6 Wetlands Delineation & Endangered Species Report
- 7.2.7 Geotechnical Report
- 7.2.8 Geotechnical Stormwater Report

7.3 Appendix C – Exemptions, Variances and Other
- 7.3.1 Wetlands APA Non-Jurisdiction
- 7.3.2 Overhead Power Lines Exemption