Poland Branch Facility Options

- **Overview**

Following a comprehensive, year-long assessment led by architects and engineers from BSHM Architects—supplemented by the expertise of Bialosky and other specialized consultants—the PLYMC Board of Trustees ("the Board") is being asked to review the findings presented by the Building & Sites Committee and render a decision at a special meeting scheduled for May 20, 2025. The Board has been presented with three strategic options to address the facility challenges of the Poland Branch, each representing a distinct approach in terms of investment level, programming capacity, and long-term sustainability.

Facility Strategy Options – Poland
*Please see note on estimation below
Option 1: Maintain the Existing Building
Estimated Cost: ~$8.5 million
Focuses on essential repairs and system replacements, with a 30% contingency to correct design flaws and prevent future system failures.

- **Scope**:
  - Remediation of known site, structural, mechanical, and architectural deficiencies (see detailed list).
  - Specific deficiencies will be corrected without total replacement. As an example, specific sections of siding that show deterioration will be removed and replaced, but the entire building will not be resided.
  - Existing materials to be replaced in-kind.
- **Impact:**
  - Closure of the Poland Branch during construction, with relocation of services required for an extended period (estimated time: 1-2 years). Reduced service delivery from temporary location expected.
  - Costs will be incurred from leasing and renovating a temporary location. (No cost estimate available).
  - Limited long-term benefit to the community, as the project does not address the need for modernized or expanded programmatic space.
  - Continued operational inefficiencies and higher maintenance demands due to the building's inherent design limitations and outdated infrastructure.

Option 2: Renovate the Existing Building
Estimated Cost: ~$16.1 million
Includes all repairs and contingencies in Option 1, with added interior renovations and upgrades to improve function and aesthetics.

- **Scope**:
  - Complete interior reconfiguration and renovation of the first floor and lower level.
  - Includes programmatic improvements through strategic design, including study rooms, dedicated teen space, and contemporary early literacy interactives among other improvements.
  - Includes a contingency amount for "future-proofing" work to improve the longevity of the building structure and mechanicals within the building and grading / water management around the perimeter of the building.
- **Impact**:
  - Closure of the Poland Branch during construction, with relocation of services required for an extended period (estimated time: 1.5-2 years).
  - Costs will be incurred by leasing and renovating a temporary location. (No cost estimate available).
  - The project duration is expected to be extensive due to the complexity of interior reconfiguration and necessary system upgrades.
  - While functionality will be improved, the building remains constrained by its existing footprint and site limitations, restricting flexibility for future growth or service expansion.
  - Operational inefficiencies are expected to decrease but not be fully resolved, as some outdated infrastructure and limitations inherent to the original design may persist.

Option 3: Relocate – Construct New or Renovate Alternate Facility
Estimated Cost Range: ~$11.5 to $15 million
Entails constructing a new 15,000 to 20,000 sq. ft. facility or significantly renovating an alternate building within that square foot range. Bialosky has suggested an 18,000 sq. ft. facility would be adequate for this service area at roughly $13.5 million.

- **Scope**:
  - Land / existing building acquisition necessary.
  - Design services sought following location selection.
  - Design to be based on Masterplan findings, which includes community and staff input, best practices, and a thorough study of successful branches elsewhere. Additional community input will be solicited once a site is selected.
  - Construction to follow an exhaustive study and design process.
  - Resulting goal of the highest efficient operations and enhanced service delivery.
- **Impact**:
  - Temporary relocation of services will not be required during construction or renovation minimizing operational disruption. Current level of service delivery expected to continue without interruption.
  - Provides the greatest long-term value through the creation of a modern, flexible facility tailored to the city of Poland and current and future library service needs.
  - Offers the opportunity to incorporate sustainable design, efficient building systems, and adaptable spaces that can evolve with community demand.
  - Operational efficiencies are expected to be significantly improved, reducing long-term maintenance costs and enhancing user experience.
  - Relocation may allow for strategic site selection based on accessibility, visibility, and community integration.
  - Potential revenue from the sale of the current Poland Branch property could offset project costs, though new site acquisition expenses will apply.

Detailed Deficiency List – Poland
The following deficiencies, identified in reports from Bialosky, BSHM Architects Inc., and Geotechnical Consultants Inc., affect nearly every system in the current facility. The building has been deemed safe by all experts.
I. Structural and Slab Conditions
Floor Slab Heave (Southeast Wing)

- *Fused slag fill beneath slab found to be expansive per geotechnical study. (Open hearth slag left as backfill material – please see note below)
- Significant heaving observed in the slab-on-grade floor areas within the children's area, electrical room, and southeast corridor.
- Differential vertical displacement ranging from 1.5 to 3 inches.
- Cracks observed along joints and floor transitions.
- Disrupted continuity of flooring materials such as carpet tile and vinyl.
- Floor slab pushing against wall base in multiple locations on interior walls.
- Distorted door frames near the affected floor zones.
- Moisture infiltration suspected as a contributing factor due to inadequate perimeter drainage.

II. Architectural Conditions

A. Exterior Envelope
Paver Walkways

- On-grade pavers at the main entrance settled and uneven.
- Exterior balcony pavers have experienced differential movement.

- Poor compaction and base material failure noted in site observations.

Cupola and Roof Elements
- Exterior cupola base shows material deterioration.
- Flashings and trim details around cupola are failing.
- Moldings cracked or separated from substrate.

Chimneys
- Brick and stucco assemblies show cracking, spalling, and water damage.
- Flashing and masonry joints appear worn or missing in sections.

Exterior Doors and Windows
- Multiple active and fixed double doors exhibit warping or water damage.
- Poor alignment and deteriorating thresholds reported.
- Exterior door frames and weather stripping have deteriorated significantly.
- Gaps observed between door frames and walls in some locations.

Siding and Veneers
- Warped and deteriorated Hardie plank siding in numerous areas.
- Cracks visible around window and door penetrations.
- Joint sealant failure observed around trim and fixtures.

EIFS Finishes
- Cracking and staining noted in exterior insulated finish systems.
- Isolated areas show bulging or delamination.

Gutters and Downspouts
- Missing or damaged sections contributing to poor site drainage.
- Rusted metal, disconnected joints, and improper slopes observed.

Railings and Pergolas
- Loose and rusting metal railings at balcony areas.
- Weathered, splintered, or decayed pergola wood elements.

Water Infiltration
- Dormitory wall on lower level shows signs of ongoing water penetration.
- Visible staining, dampness, and efflorescence on interior finishes.

B. Interior Finishes and Fixtures

Flooring
- Buckling and uneven paver flooring in basement level.
- Settlement-related cracking in finished floor surfaces.
- Water stains evident near perimeter slab zones.

Ceilings and Walls
- Hairline cracks present in drywall and plaster, particularly above openings.
- Water-damaged ceiling tiles below cupola and perimeter roof lines.
- Paint failure, bubbling, or discoloration in areas exposed to moisture.

Doors and Hardware
- Several door closers and latches misaligned due to floor or wall movement.
- Evidence of sticking or incomplete closure in door assemblies.

Restrooms
- Basement and first-floor public restrooms lack appropriate clearances for accessibility.
- Family restroom and dormitory restrooms undersized for ADA compliance.
- Water fixtures and toilet stalls are in cramped configurations.

Circulation Desk
- Main service desk lacks compliant accessible transaction counter.
- Millwork design and height inconsistent with ADA guidelines.

III. Mechanical Systems (HVAC)

Air Handling Units (AHUs)
- One AHU observed with recurrent frozen coil issues.

- Inconsistent operation suspected between dual AHUs.
- Noise and airflow imbalances noted by staff.

Chiller and Distribution

- Existing chiller is beyond its expected service life.
- Current refrigerant no longer compliant with environmental standards.
- Leak present in underground chilled water piping, bypassing to domestic water.

Controls

- Remaining pneumatic control systems are aging and outmoded.
- Digital upgrades completed only for certain HVAC components.

IV. Electrical Systems

Lighting Systems

- Interior and exterior lighting controlled by a dated relay panel.
- Inconsistent override switch performance.
- Glare and poor light uniformity in public areas.

Fire Alarm Panel

- Control panel functional but lacks modern interface.

Technology Infrastructure

- Wiring for public computing appears cluttered and disorganized.
- Limited outlets in high-use zones.

V. Site Conditions

Parking and Driveway

- Steep access drive off Main Street; risk of winter slip hazard.
- Parking lot asphalt cracking and ponding noted.
- Accessible spaces not van-compliant; missing warning strips.

Sidewalks and Walkways

- Internal paver walks uneven and settled.
- Poor transitions to curbs and entrances.

Site Furnishings and Landscaping

- No bicycle parking present.
- Overgrown vegetation along foundation walls.
- Trash enclosure shows signs of rust and deterioration.

VI. Additional Improvements

Necessary Long-Term Considerations

- Future-proofing: General design adjustment to improve longevity of envelope and interior finish materials, waterproofing, , drainage / water management upgrades.
- Parking lot resurfacing and restriping.
- Elevator replacement due to obsolete components.

Programmatic Deficiencies

- Lack of:
  - Dedicated Teen space
  - Interactive kids space
  - Indoor or outdoor play spaces
  - Study rooms / additional meeting rooms
  - Innovation lab/maker space
  - Drive-up window
  - Dedicated zones for noise control (e.g., quiet areas, play areas)

***Note on Subbase Heaving**

Core samples of the foundation of Poland Library taken in July, 2024 revealed open hearth slag in the subbase. Similar slag was identified in the core samples done before the building was constructed. Open hearth slag is known to be a very unstable substance. Exposure to moisture and air causes expansion, resulting in slab heaving and structural stress over time. Full

The Public Library of Youngstown & Mahoning County

remediation would require exploratory excavation and replacement of all subbase with fresh engineered fill. This condition severely limits the feasibility of Options 1 and 2 and is completely avoided in Option 3.

Note on Estimation
All cost estimates are preliminary and based on square foot pricing ("Rough Order of Magnitude"). They are subject to change pending future design development and market conditions.

Poland Branch Key Dates May 19, 2025

- July 2022 - PLYMC employs USA concrete to replace brick pavers with colored concrete on back walkway due to safety concerns.

- Summer 2023 - Budgeted carpet replacement and repainting project completed. Clock on tower also repaired.

- Fall 2023 - PLYMC is notified that prior approval of concrete project from Poland Village was required. Aimee speaks with ARB Chair and Zoning Administrator about next steps.

- November 6, 2023 - First Village Council Appearance PLYMC apologized for error following process and offers remediation. Discussions ensue.

- **March 2024 - PLYMC review of building in preparation for budgeted exterior repainting project reveals need for 3rd party structural assessment.**

- March 28, 2024 – Letter to Poland Village notifying them of plans to test seal coating on a segment of the back patio and about the commencement of the 3rd party review of the building status.

- May 9, 2024 - Building and Sites Committee Meeting at Canfield Library. Discussed concerns about the building status with committee members and informed them about the process to select an outside evaluator.

- May 15th, 2024 - BSHM selected for 3rd party review

- May 30, 2024 - PLYMC offers enhanced proposal to re-stain concrete and submits Zoning Permit Application on recommendation of Zoning Administrator.

- May 30th, 2024 - Presentation of re-staining option, with permit application to Poland Village Architectural Review Board. ARB decides to visually inspect and further discuss the proposal. Proposal ultimately not approved.

- June 20, 2024 - Meeting with BSHM - Need for geotechnical analysis communicated

- July 9, 2024 – Walkthrough of building with BSHM and GCI

- July 2nd, 2024 - Geotechnical Consultants, Inc selected for geotechnical analysis

- **July 15, 2024 - Press release informs public of the date for the day-long building closure, geotechnical analysis, and architectural review**

- July 22, 2024 - Core samples drilled

- August 7, 2024 - Core sample report delivered. Open hearth slag found as cause of slab heaving.

- **August 20, 2024 - Press release about core sample findings, safety reminder and public notification about ongoing architectural review**

- August 29, 2024 - Bialosky selected for Facilities Masterplan project. Contract signed October 18th.

- September 18, 2024 - Letter from County Commissioners and Village of Poland requesting specifics on next steps to be taken with building repair.

- November 22, 2024 - Due date for BSHM report

- November 14, 2024 - Masterplan project initial meeting

- November 25-December 16 - Independent assessments of all buildings by Bialosky conducted for Masterplan project. Poland assessment January 13th, 2025.

- **January 6, 2025 - Delivery of BSHM report**

- **February 11, 2025 - Request made to Bialosky for "second opinion" on BSHM report and incorporation into Masterplan project**

- February 19, 2025 - Walkthrough of building with Bialosky team to discuss BSHM findings and "second opinion" analysis

- May 9, 2025 - Final delivery of Bialosky report on building condition and options for addressing

- **May 14, 2025 - Building and Sites Meeting with discussion condition and options – relocate option recommended by staff, committee concurs**

- May 20, 2025 - Special Meeting of the Board for multiple actions, including discussion of condition and option recommendation