



GREEN LINE EXTENSION PROJECT



massDOT
Massachusetts Department of Transportation



December 19, 2017
GLX Community Working Group

GLX Program Update

Agenda

- **Design Build (DB) Entity Selection Process and Outcome**
- **Design Build Methodology**
- **Additive Options**

Design Build Selection Process

- Design Build proposals submitted by 3 competing teams on September 28, 2017.
- Affordability Limit Certification opened on October 23, 2017, with 2 of 3 teams certifying their price proposal was at or under the Affordability Limit (\$1.319 billion)
- Evaluation of Base Technical Concepts completed November 1, 2017
- Additive Option evaluation completed November 13, 2017 (*final step of Quality Score development*)
- Public Price opening occurred Friday, November 17, 2017 (*final step of Proposal Price determination*)

Design Build Selection Process

- Evaluation Formula for “Best Value” determination:

$$\text{Overall Value Rating} = \frac{\text{Proposal Price}}{\text{Quality Score}}$$

Proposal Price includes the GLX Lump Sum, Allowances, and Additive Options Price

Quality Score is the Technical Proposal Score + AO points

- Affordability Limit: \$1.319 billion
- Successful Proposer has the lowest price per quality score, or lowest “Overall Value Rating”

Design Build Team Introduction



GLX Procurement

Design Build (DB) Methodology



Project Delivery Method

- MBTA evaluated range of options for delivery of single contract for major remaining work
- Comparative analysis drove MBTA to best solution:
Design-Build Contract

DB Contract Specifications

- **Performance specifications** present the requirements for the performance of an item and do not address how this performance will be achieved.
- **Prescriptive specifications** present requirements for what must be used or must be done or – conversely – what must not be used or done.
- Vast majority of Specifications will be **Performance**
- Performance Specifications may have some Prescriptive elements in them

Project Delivery Method (cont.)

Benefits of decision to deploy Design-Build:

- Promotes innovation before the bid prices and best-value selection processes are complete
- Promotes more predictable, fixed price bids for the planned scope
- Provides a risk sharing model which assigns risks to the party best suited to handle the risk
- Owner's interface risk between design and construction scopes eliminated
- Allows design-build entity flexibility while complying with performance specifications (results in cost savings)

Additive Options

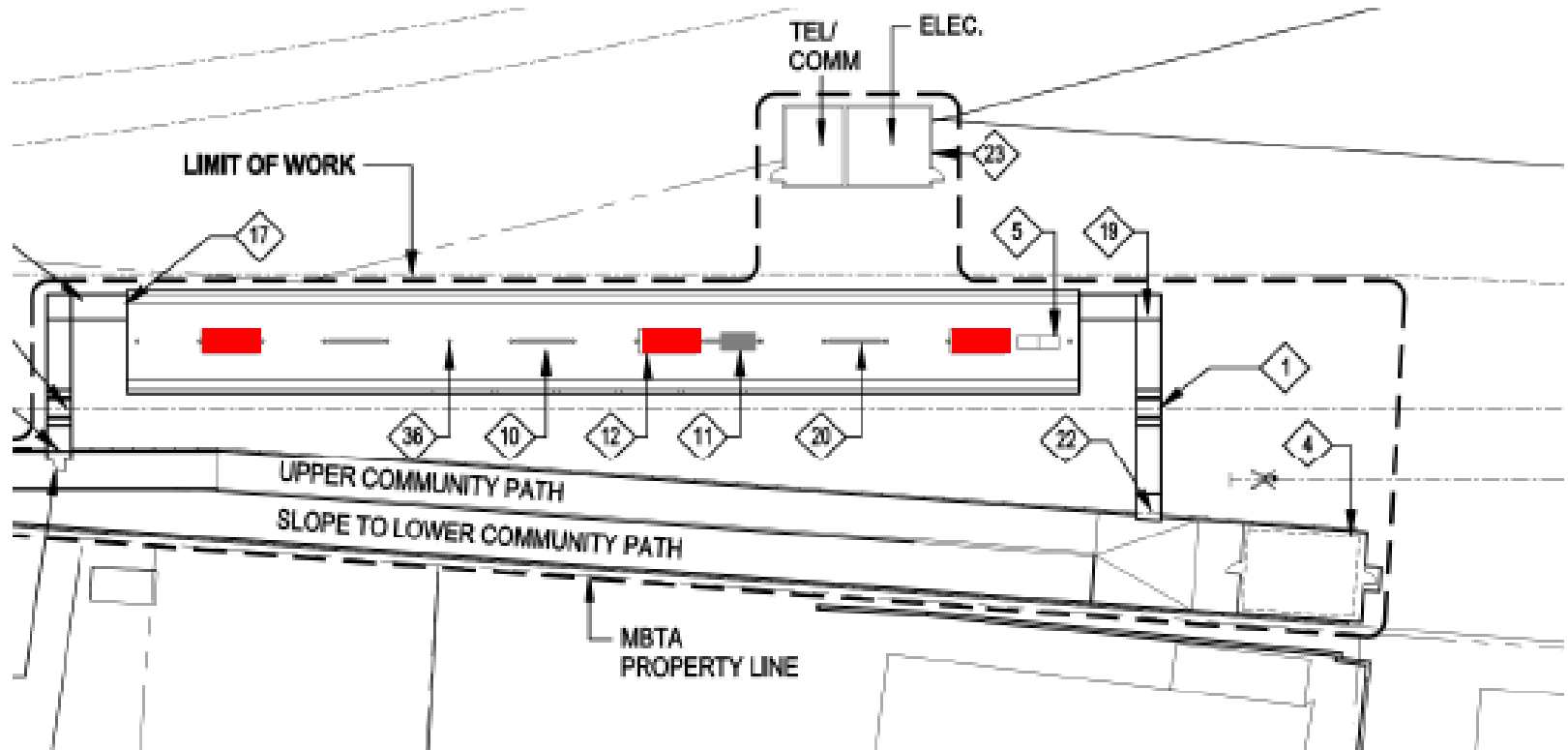
GLX Prioritized Approach

Additive Options

Priority	Additive Option
1.	Design and construction of station canopies to all stations.
2.	Design and construction of elevators to stations proposed for new/additional elevators.
3.	Inclusion of an art program. (This is structured as a \$720,000.00 allowance.)
4.	Design and construction of the community path connection to Chester Street.
5.	Design and construction of the community path connection from East Somerville to Lechmere.
6.	Design and construction of an enhanced VMF.

Additive Option – 1) Station Canopies

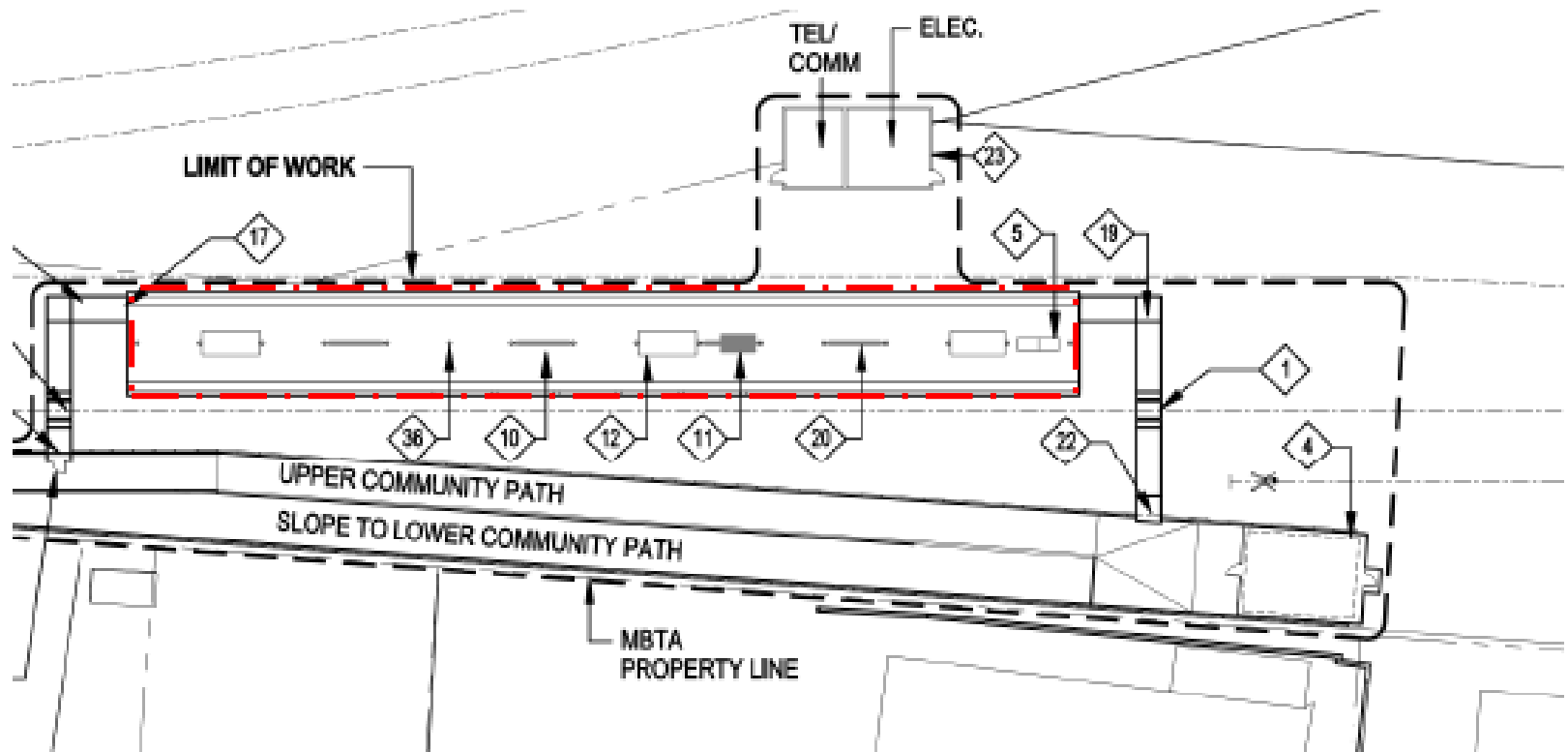
East Somerville Station



Base scope – Shelters on platforms - ■

Additive Option – 1) Station Canopies

East Somerville Station

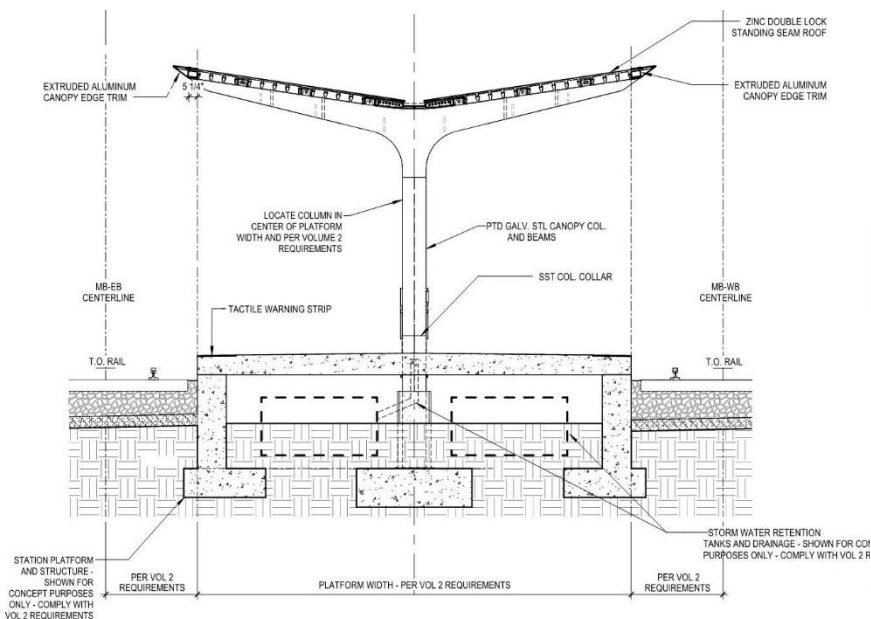


Additive Option – Canopies full length and width of the platform –
Removes shelters required in base scope



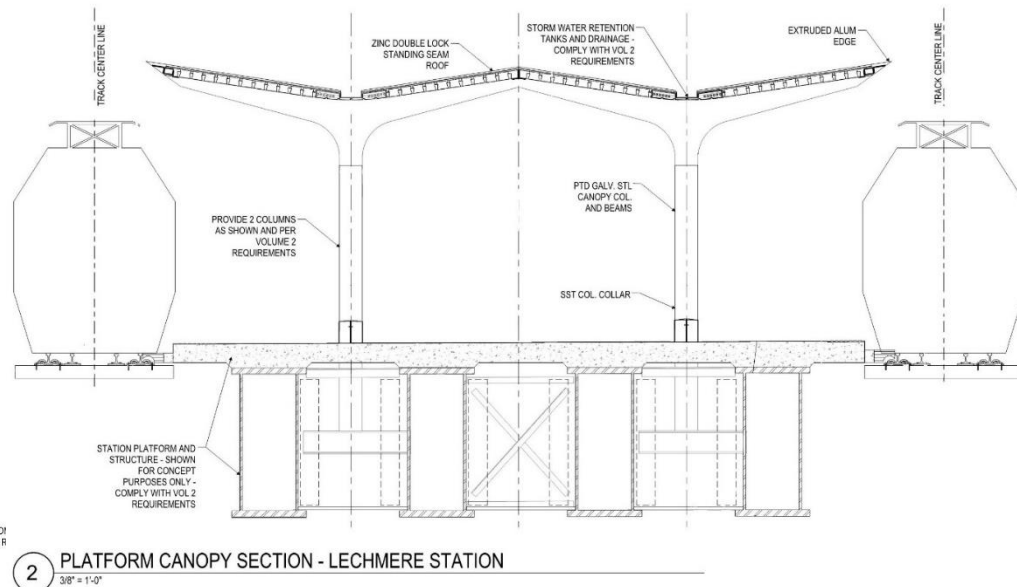
Additive Option – 1) Station Canopies

- Typical Cross section



1 PLATFORM CANOPY SECTION - ALL STATIONS (EXCEPT LECHMERE)
1/4" = 1'-0"

All Stations (except Lechmere)



2 PLATFORM CANOPY SECTION - LECHMERE STATION
3/8" = 1'-0"

Lechmere Station

Additive Option – 2) Elevators

- Lechmere Station – Add 1 elevator at North Headhouse
- Gilman Square Station – Add 1 elevator and staircase from School Street (remove ramp at School Street from base scope)
- Magoun Square Station – Add 1 elevator adjacent to the elevator required in the base scope
- Ball Square Station – Add 1 elevator and staircase from Broadway Bridge to the southeast end of the platform

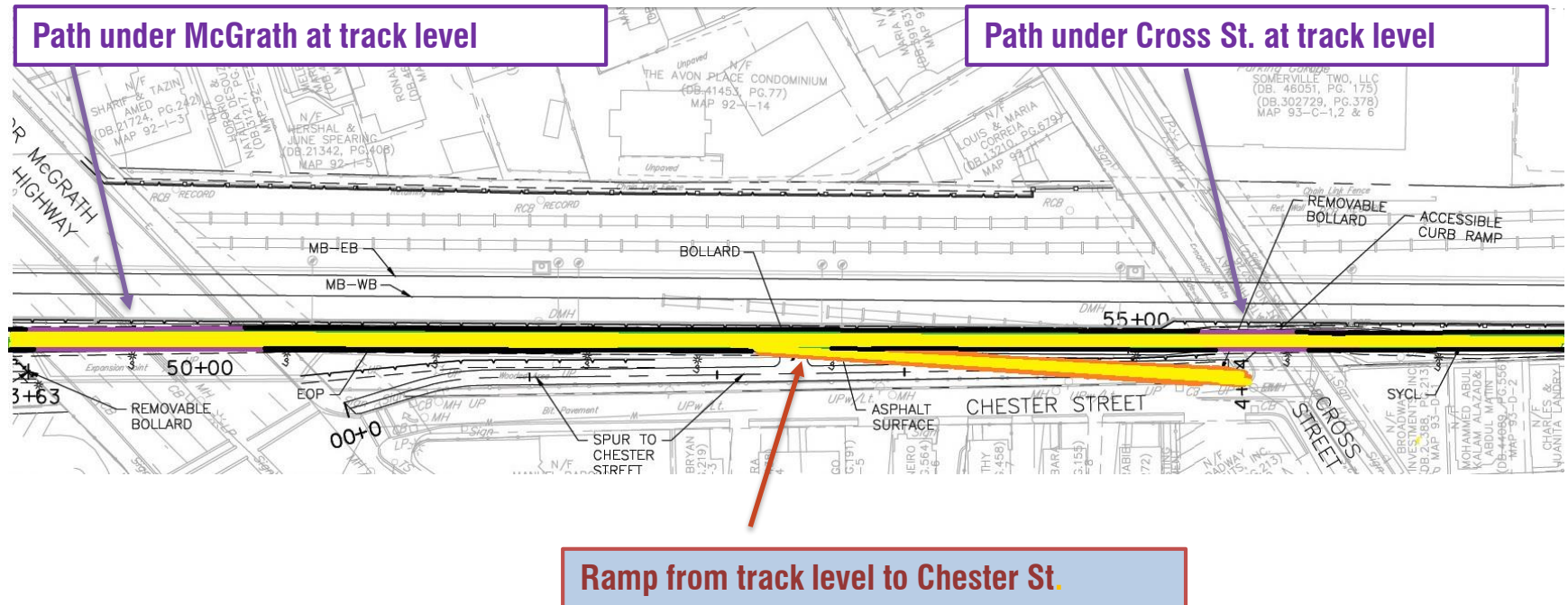
Additive Option – 3) Art Program

- Art program at all seven (7) stations
- \$100k (\$120k at Lechmere) Budget Allowance per station for:
 - design for installation of the artwork on site (not design of the artwork itself)
 - art materials
 - art fabrication
 - installation of the artwork by the DB Entity
- Artistic treatment of fences, screen walls, railings, porcelain enamel panels, site elements, retaining walls, glazing, lighting, ceilings, tile wall surfaces, or other features.

Additive Option – 4) Chester St Path Connection

- ADA Community Path Connection connecting **Community Path** to **Chester St** (between Cross Street and McGrath Highway)
- Path Connection shall not include switchback ramps

Additive Option – 4) Chester St Path Connection



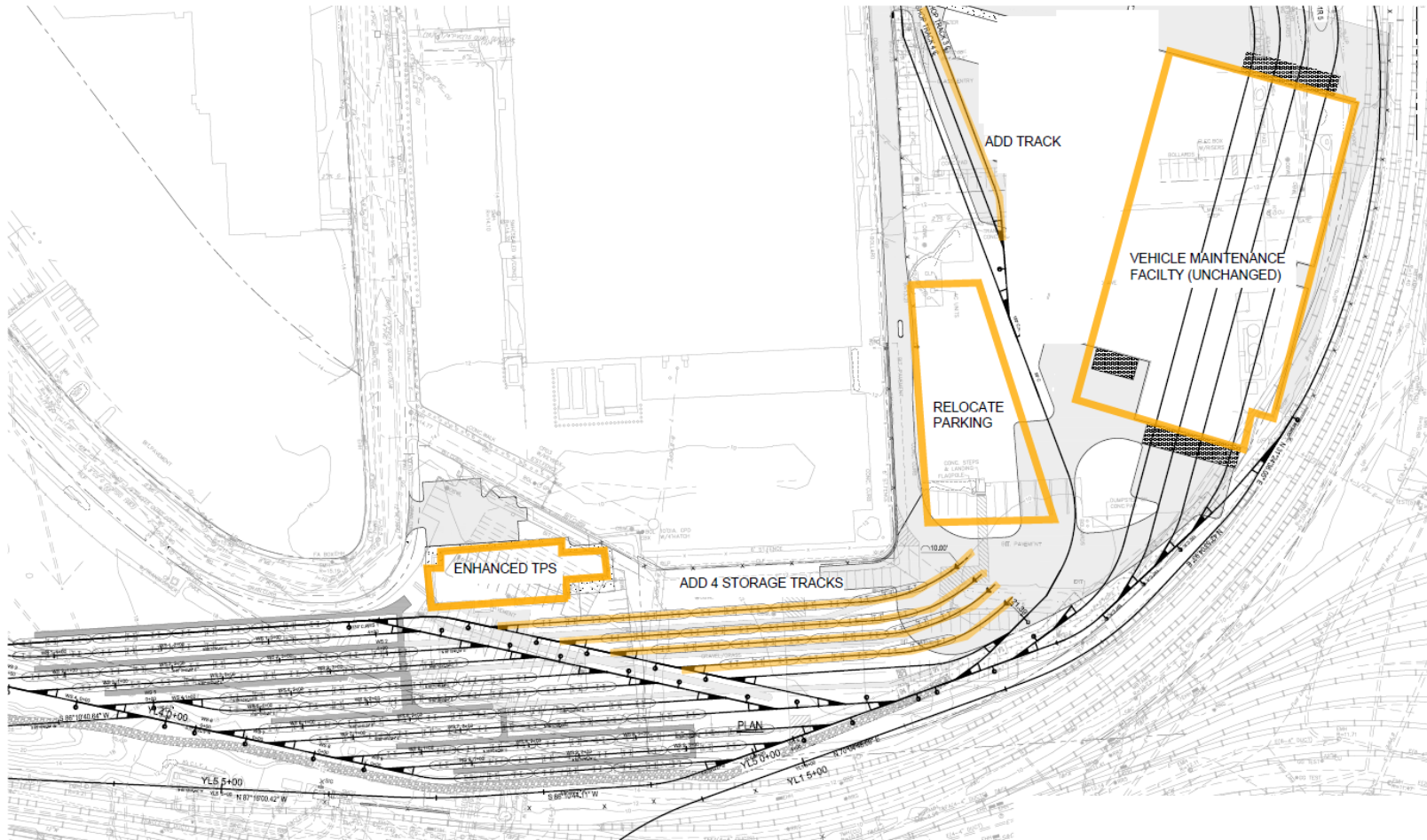
Additive Option – 5) Community Path Connection (East Somerville to Lechmere)

- One ADA compliant connection from East Somerville Station to existing North Point Path Terminus
- Path connection shall include emergency call boxes and all utility, power, signage, and drainage work required

Additive Option – 6) Enhanced VMF

- One wheel truing machine
- Additional 5 Storage Tracks (min 16 cars)
- Additional jacking equipment and bogie setout tracks
- Full height storage within the VMF Maintenance Building
- Enhanced VMF:
 - Site furnishings (benches, bike racks, etc.)
 - Additional landscaping requirements
- Enhanced Transportation Building:
 - Additional rooms/facilities ~4,800 SF (base scope ~1,425 SF)
 - Minimum lifespan of 50 years (base scope 25 years)

Additive Option – 6) Enhanced VMF



Highlighted contextual representation of changes in the Enhanced VMF



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