



BERGMANN

ARCHITECTS ENGINEERS PLANNERS

Town of Lansing Highway Department TOWN BOARD MEETING

October 19, 2022

1

PROJECT
HISTORY

2

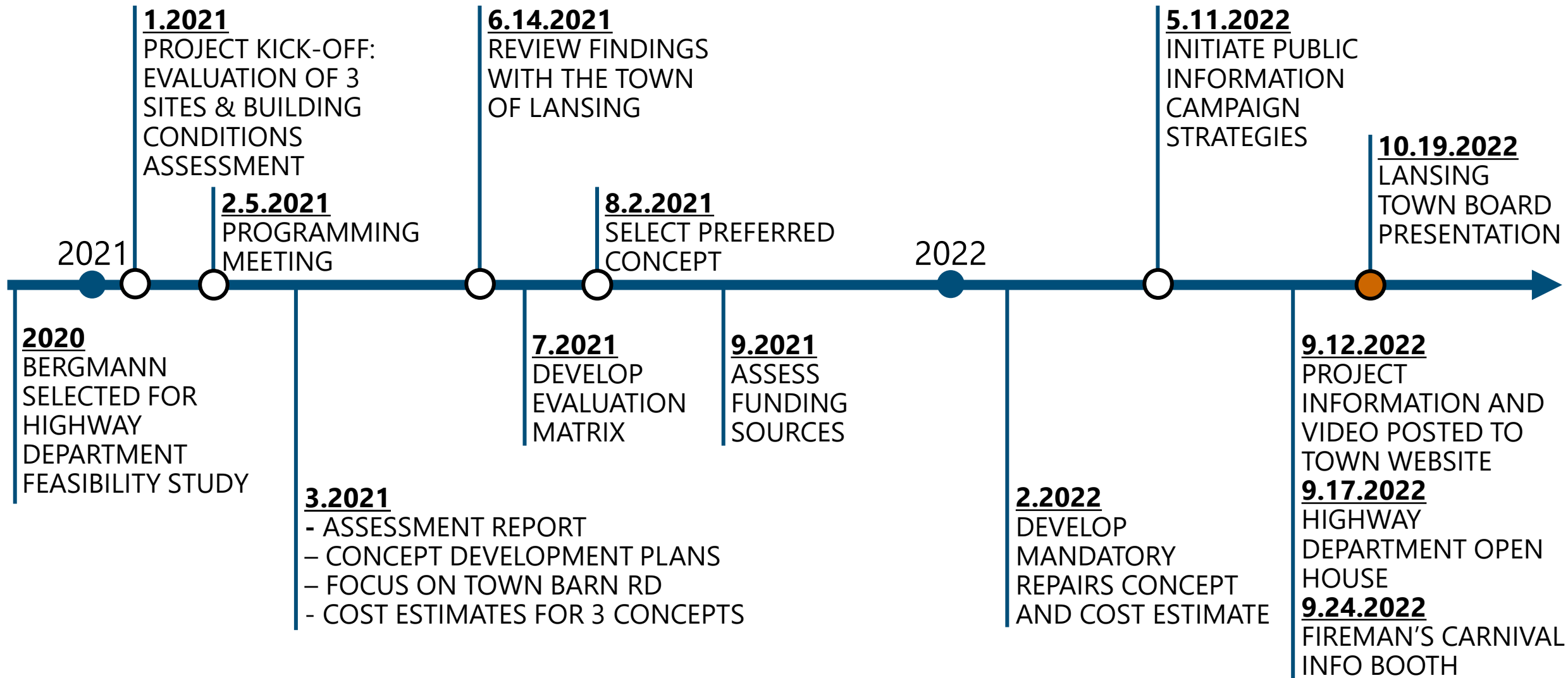
TARGET
ISSUES

3

SCOPE
OVERVIEW

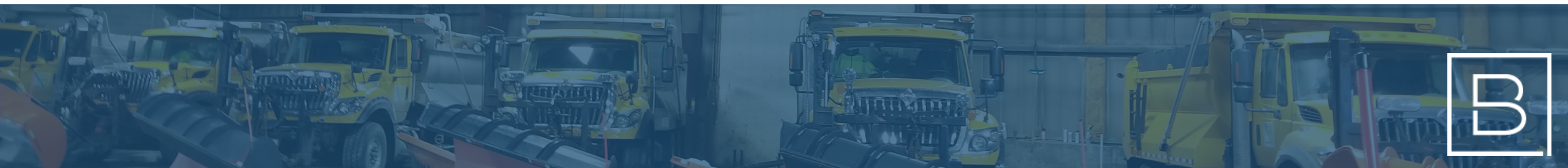
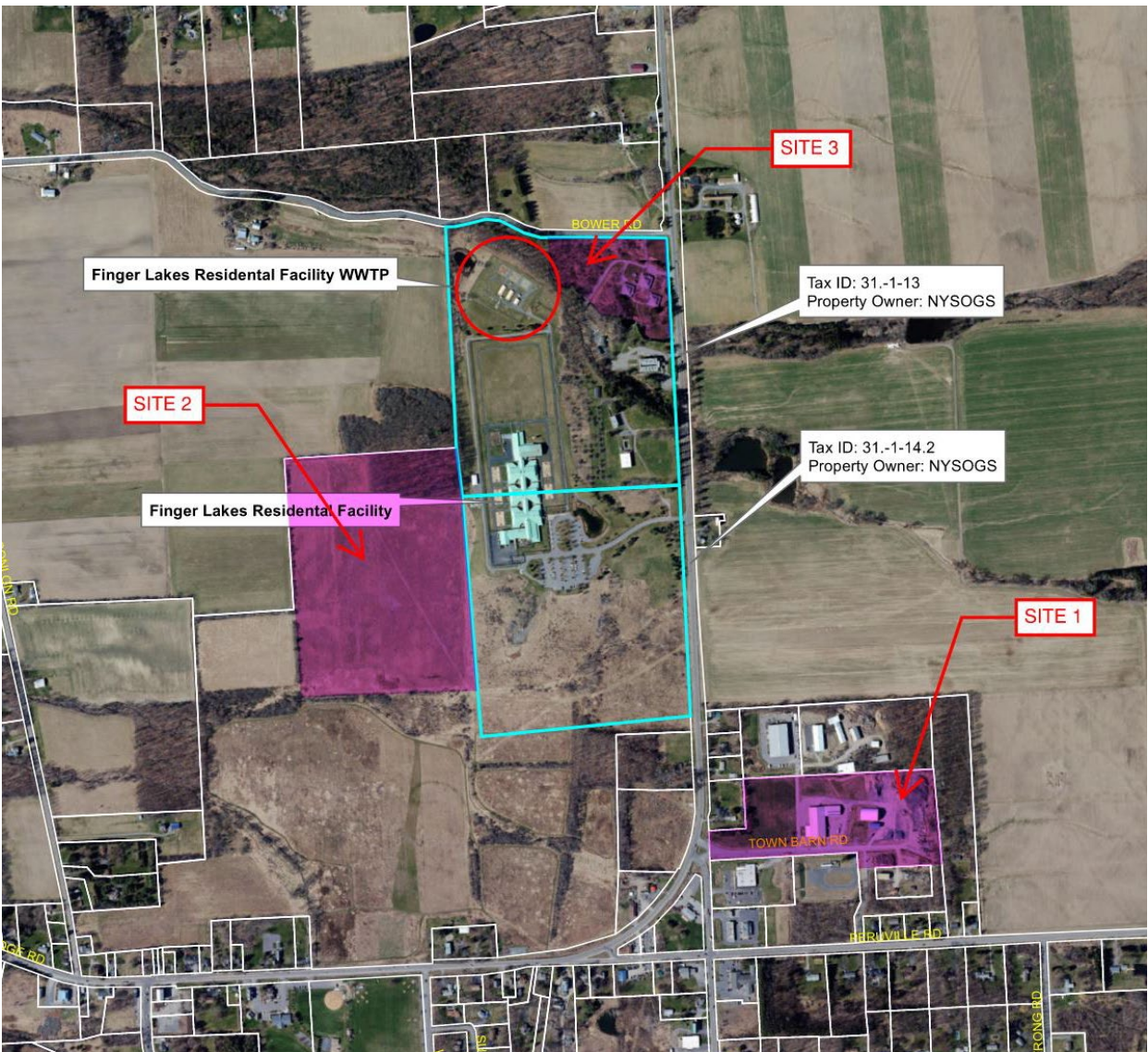
4

FINANCIAL
IMPACT



1 – PROJECT HISTORY







**PARTIAL RE-USE OF
VEHICLE STORAGE
GARAGE; ADDITION;
NEW COLD STORAGE**



**NEW GARAGE CONSTRUCTION;
RELOCATE SALT BARN;
CONVERT EXISTING TO COLD
STORAGE**



**NEW VEHICLE STORAGE
GARAGE ADDITION;
CONVERT EXISTING TO COLD
STORAGE**





Priority- (1-5) 5 is highest priority.
 Ranking- Individuals/ Groups ranking of criteria. (1-5) 5 is highest ranking.
 Total- Factor of Priority multiplied by the Ranking.
 na - Not Applicable



Lansing Highway Department Renovation
 Scheme Evaluation Matrix
 June 14, 2021

Name: _____

Evaluation Factor	Priority	Schemes Studied (Ratings)								
		Scheme 1 - Renovation and Addition; New Cold Storage building			Scheme 2 - New Facility; Convert Existing To Cold Storage			Scheme 3 - New build at Existing Site; Convert Existing to Cold Storage		
		Scheme Performance	Rank	Total	Scheme Performance	Rank	Total	Scheme Performance	Rank	Total
Example: xxx	2	xxx	2	4						
1 Building Area (SF)		Existing SF - 20,800 New SF - 29,300		0	Existing SF - 20,800 New SF - 46,515		0	Existing SF - 20,800 New SF - 40,875		0
2 Storage Area (SF)		Storage SF - 1,750 + Mezz Cold Storage SF - 10,000		0	Storage SF - 1,750 + Mezz Cold Storage SF - 20,800		0	Storage SF - 2,000 + Mezz Cold Storage SF - 14,500		0
3 Preparation for Future Growth / Ability to Expand		Limited for maintenance and shops; may be limited by stormwater capacity		0	Unlimited for truck storage; Limited for maintenance and shops; may be able to expand offices		0	Requires renovation, but space is available		0
4 All LHD Equipment under cover		Yes		0	Yes		0	TBD; limited cold storage		0
5 Minimize amount of work to be done to existing facility for operation		Moderate work - refurbishment for truck storage		0	Less work - conversion to cold storage		0	Most work - cold storage is embedded within building; Maintenance needs new access and equipment		0
6 Minimize amount / difficulty of building demolition		Offices, Pole Barn, and interior Fire Barrier		0	None needed; Offices and Pole Barn recommended		0	Offices, Pole Barn		0
7 Avoid "sins of the past"		All in refurbished garage		0	Very few		0	All in maintenance; New construction surrounds existing and is susceptible		0
8 Estimated Project Cost		\$8,626,280		0	\$13,004,610		0	\$12,155,230		0
9 Minimize amount of Site Grading		Moderate		0	Significant		0	Minor to Moderate		0
10 Ease of site circulation (compared to current conditions)		Similar, with drive-through truck storage		0	Efficient for fuel - park - salt		0	Will require two loops for salt		0
11 Location on site for public access		Near the front of the site		0	Near the back of the site		0	Near the front of the site		0
12 Location on site for adequate separations of functions		Max separation of public parking from operations		0	Shared entry, but public parking in separated lot		0	Public parking along truck exit route		0
13 Adequate site area for functions		Similar to existing conditions		0	Less area for materials storage		0	Similar to existing conditions		0
14 Minimize Building or Site layout constraints		Tight to West property line; tight at fuel island		0	Circulation around new facility is tight		0	Tight to West property line; Cold storage (existing) embedded within footprint		0
15 Re-use of existing septic system		Yes		0	New		0	Yes		0
16 Ability to have shared parking with rec fields redesign		Yes		0	Not of value		0	Some		0
17 Inclusion of an exterior wash bay		Yes		0	Yes		0	Yes, though circulation limited		0
18 Avoid roof challenges that could lead to leaking or snow drift		Minor		0	Yes		0	No		0
19 Opportunities for natural light		Maybe in maintenance and shops; very limited in truck storage		0	Yes		0	Yes in truck storage and shops; limited in maintenance		0
20 Minimize Operational impact during construction (Risk)		Major impact		0	Very minor impact		0	Major - see phasing		0
21 Minimize duration of Construction		One longer phase		0	Two efficient phases		0	Less site work, potentially shorter		0
22 Minimize impact of Staging / Phasing of Construction		Operations have to be relocated during one construction phase		0	Two phases - new construction while fully operational, then demo and conversion to cold storage		0	Possible to remain in offices and operate truck storage through maintenance and side door, but very disruptive		0
23 Minimize exposure to unforeseen conditions or change orders to remedy spaces for code compliance (Risk)		Moderate exposure, as the area of vehicle storage is continuing use		0	Minor exposure, other than soils conditions		0	Most exposure with renovation of existing maintenance area		0
24 Avoid potential delays of renovation work vs. new construction in the current climate (Risk)		Moderate risk		0	Minor risk		0	Significant risk		0
25 Avoid relocation of existing site elements		Fenced storage, Fuel island		0	Salt and soil storage; Fuel island replaced in place		0	Fenced storage, Fuel island		0
26 Location of Fuel Tanks for Fire Department use		Within fenced area, requiring access		0	Outside fenced yard		0	Within fenced area, requiring access		0
27 Limit Amount of fencing		Extensive; large yard; 3 gates required		0	Less yard area; 2 gates		0	Large efficient yard; 2 gates		0
28 Unique benefits		New cold storage building (soft shell or PEMB)		0	All new construction for operations		0	Minimized site usage for inclusion of new spaces		0
29 Long Term Value		Half of the facility is existing (stuff happens to aging structures)		0	50+ year life expectancy		0	Major spaces new; challenges of tying into existing building		0
30				0			0			0
Grand Totals				0			0			0

Clarifications:

1. Building Area includes all spaces for Office, Truck Storage, Maintenance, Shops, Storage, Wash Bay, and Cold Storage. Mezzanine areas not included. Values given in Existing SF (renovation) and New SF (new construction)
2. Storage area is all total storage area except truck storage. Values given in Storage SF (conditioned space) and Cold Storage SF (non-conditioned space)
3. Site grading will require retaining walls in all schemes
4. Base Case Costs do not include temporary move costs related to phasing
5. For the Risk Factors, consider "If the construction were to delay or cease due to changes or unavailability of materials, for example, how would the Highway Department manage?"

19	Opportunities for natural light	3	Maybe in maintenance and shops; very limited in truck storage	2	6	Yes	5	15	Yes in truck storage and shops; limited in maintenance	4	12
20	Minimize Operational impact during construction (Risk)	4	Major impact	1	4	Very minor impact	4	16	Major - see phasing	1	4
21	Minimize duration of Construction	4	One longer phase	1	4	Two efficient phases	4	16	Less site work, potentially shorter	2	8
22	Minimize impact of Staging / Phasing of Construction	2	Operations have to be relocated during one construction phase	2	4	Two phases - new construction while fully operational, then demo and conversion to cold storage	2	4	Possible to remain in offices and operate truck storage through maintenance and side door, but very disruptive	3	6
23	Minimize exposure to unforeseen conditions or change orders to remedy spaces for code compliance (Risk)	5	Moderate exposure, as the area of vehicle storage is continuing use	3	15	Minor exposure, other than soils conditions	5	25	Most exposure with renovation of existing maintenance area	1	5
24	Avoid potential delays of renovation work vs. new construction in the current climate (Risk)	5	Moderate risk	3	15	Minor risk	5	25	Significant risk	1	5
25	Avoid relocation of existing site elements	2	Fenced storage, Fuel island	4	8	Salt and soil storage; Fuel island replaced in place	2	4	Fenced storage, Fuel island	2	4

August 2, 2021

Schemes Studied Summary

Evaluation Factor 5 Items

None

Evaluation Factor 1 Items

None

Team Member Scoring Order	Option 1	Option 2	Option 3
	2	1	3
	3	1	2
	1	2	3
	3	1	2
	2	1	3

Option Totals	1279	1652	1216
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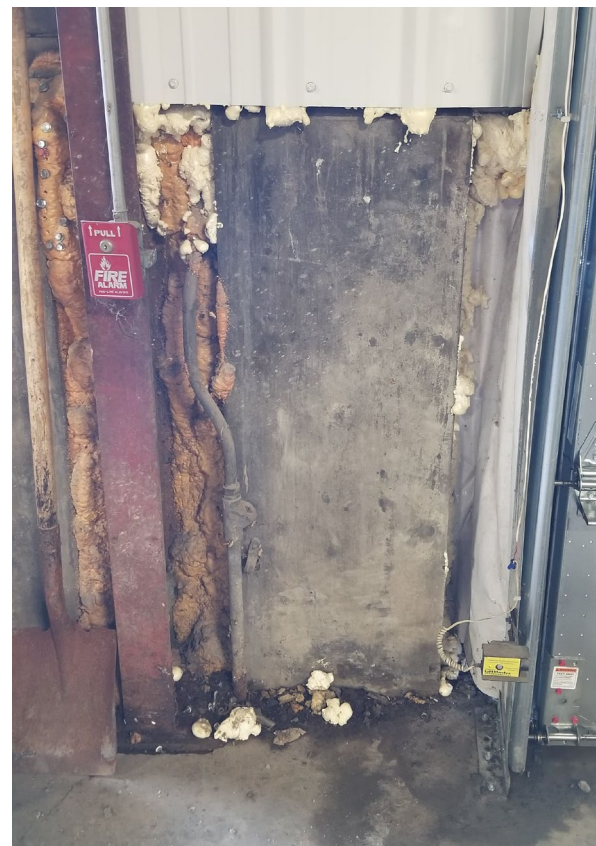
2 – TARGET ISSUES

- ❖ **Outdated Services and Systems**
- ❖ **Elements in disrepair**
- ❖ **Asbestos Containing Material**
- ❖ **Insufficient Space for Trucks**
- ❖ **Crew Demographics**
- ❖ **Roof Leakage**
- ❖ **Concrete Cracking**
- ❖ **Equipment Breakdown**



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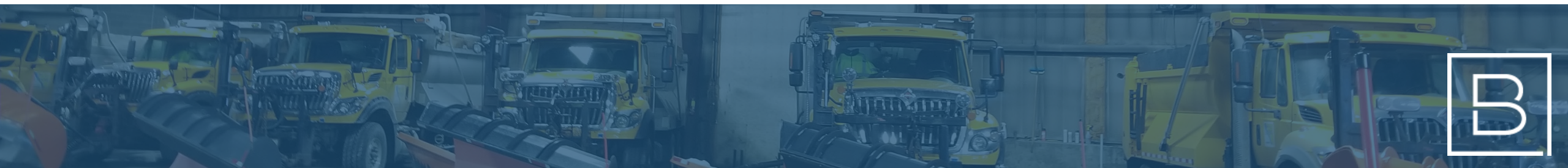


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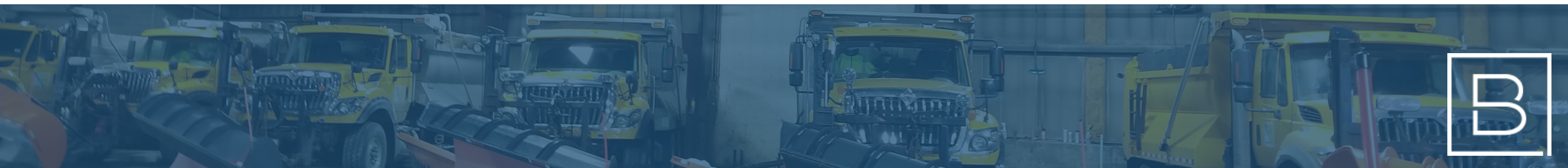


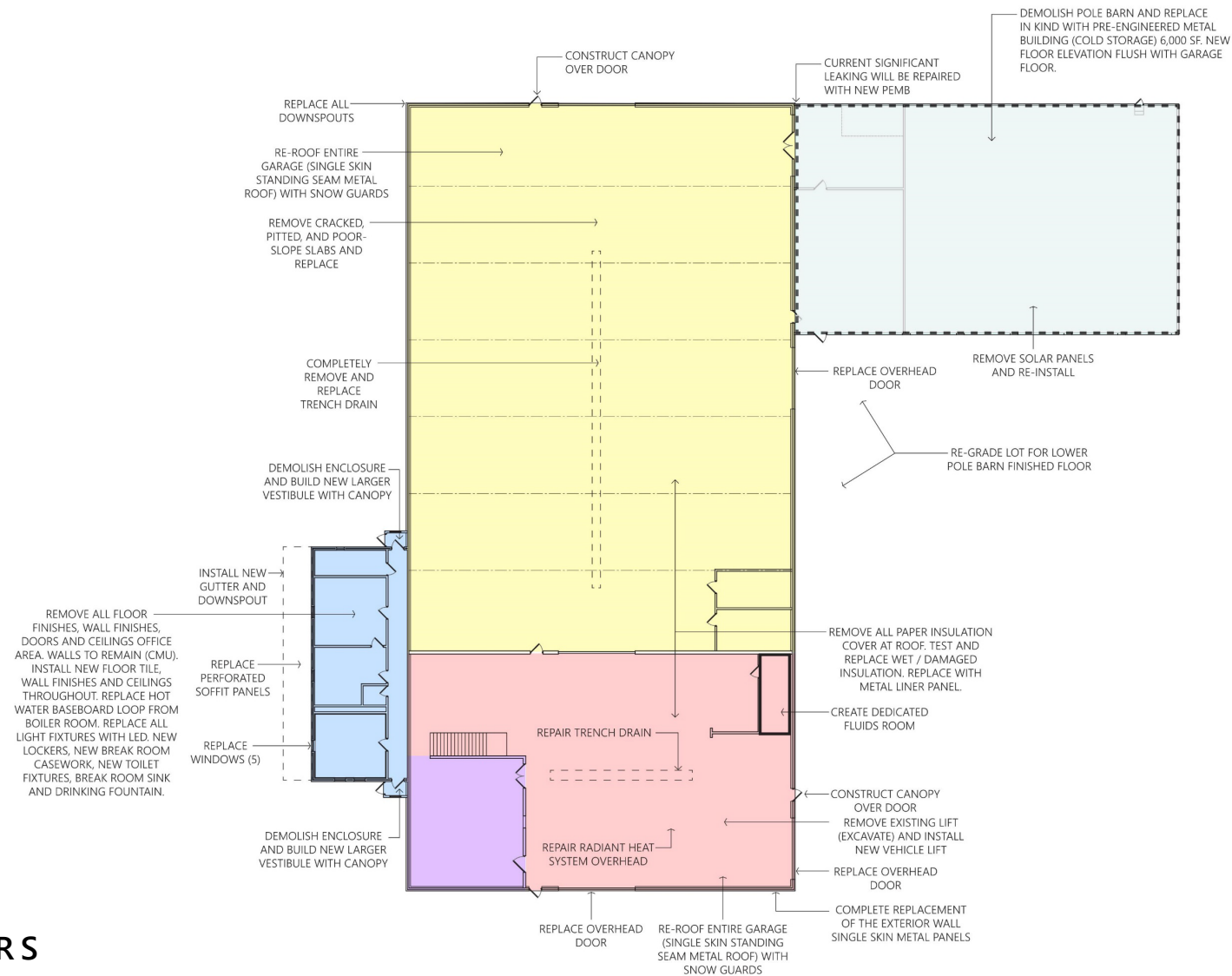
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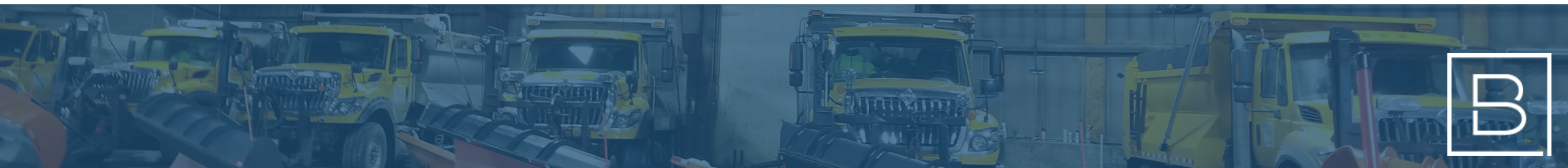
MANDATORY REPAIRS

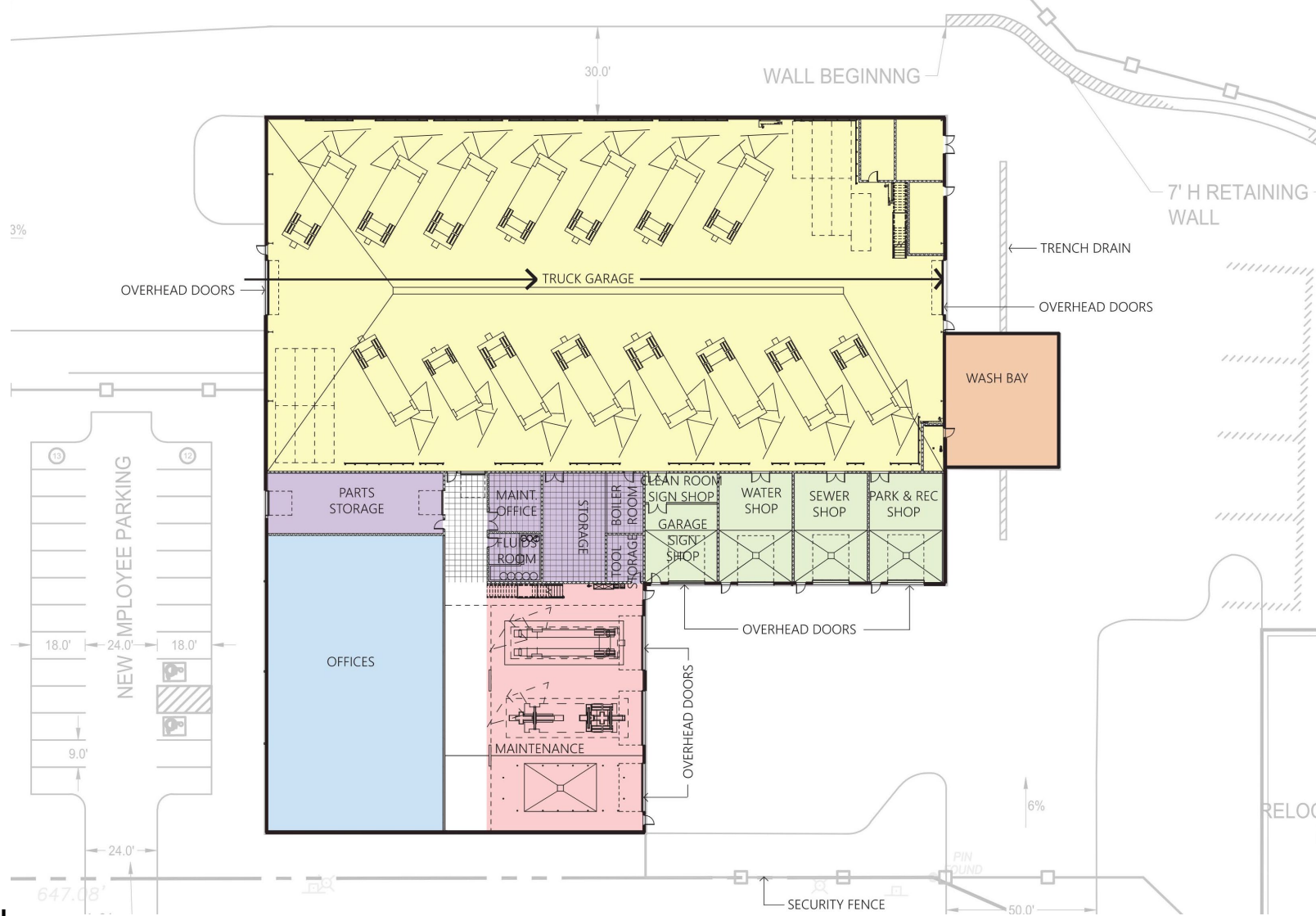
3 – SCOPE OVERVIEW



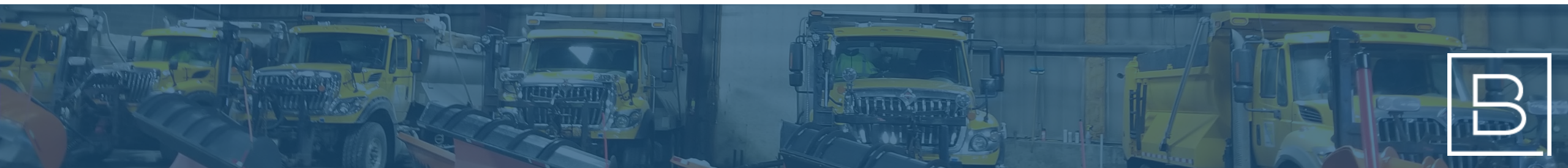


PREFERRED SITE





PREFERRED PLAN





PREFERRED CONCEPT



SCOPE OF WORK

LIFESPAN

COST

MANDATORY REPAIRS

10-15 YEARS

\$6M

PREFERRED CONCEPT

50+ YEARS

\$15M

ESTIMATED PROJECT COSTS

4 – FINANCIAL IMPACT





QUESTIONS?

Steven J. Kushner, AIA
skushner@bergmannpc.com
585.498.7884