

# CITY OF MARSHFIELD

## Streets Division Garage - Space Needs Conceptual Design

August 11, 2020  
**FINAL REPORT**





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# **SECTION 1**

## **EXECUTIVE SUMMARY**

### **SCOPE OF STUDY**

The intention of the study is to evaluate the capacity of the current site on West 2<sup>nd</sup> Street in relation to the needs of the Marshfield Street Division, and then develop concept options for expanding at 2<sup>nd</sup> Street or relocating to a hypothetical site. This analysis was carried out through the completion of the following tasks; Space Needs Assessment, Conceptual Design, and Optimal New Building & Site Plan.

### **HISTORY OF THE SITE & PAST STUDIES**

The original building was constructed on the site in 1943. Since then there have been two major additions—one in 1947 and one in 1966. Various yard buildings have been added to the site over the years of operation. The Unheated Vehicle Storage Building was built in 1983, followed by the Salt Shed in 1988, the Christmas Shed in 1999, and the Heated Vehicle Storage Building in 2002.

In addition to the on-site buildings, the Street Division also operates out of 3 additional off-site locations. The Sign Shop is located at 200 S Oak Ave, off of Adler Rd and includes unheated storage. The building was originally an armory built in the 1940s. There is also a salt shed and outside storage on a 4 acre site located at 1819 East 24<sup>th</sup> St, and an 8.8 acre construction materials yard located at the corner of 25<sup>th</sup> St and Vine Ave.

A Downtown Master Plan was conducted in 2015 that makes note of the location of the Street Division. Surrounded by baseball diamonds and residences, the site is a strong candidate for re-development.

### **FACILITY DATA**

Key factors driving the amount of SF allotted per room are the amount of staff, type and amounts of vehicles, and various distinct room functions. Barrientos Design met with staff to determine department functions, as well as staff and equipment counts.

The information gathered reveals a need for a total of 74,639 SF at the main garage and 21, 406 SF across yard buildings. This is an increase of 48,613 SF to the main garage and a decrease of 11,994 SF to accessory buildings. In an effort to consolidate functions, the accessory buildings would decrease to allow for operational efficiencies at the main garage. The existing tabulation of 59,426 SF includes all Street Division

buildings, of which the Sign Shop is not currently located on the site. For the purposes of this planning effort the Sign Shop is included as an integral function of the Main Garage design.

## CONCEPT OPTIONS

The study generated four Options for expanding at the current 2<sup>nd</sup> Street location, and one hypothetical Option for relocating to a new site elsewhere in the City. During this design process, it was determined that exploring the phasing/demolition of the work should be explored as well.

The construction costs do not include: environmental clean-up, moving and temporary quarters expenses, the added expenses of phasing construction over multiple years and bid packages, and the cost of land when new land is proposed.

These Options involve the following:

1. Option 1 – Reuse of a portion of the existing Garage for parts storage and constructing new Main Garage for all other functions.
  - a. All other site facilities would be demolished and redeveloped. This includes all the cold storage buildings, fueling station and salt shed
  - b. Requires two Phases of work with Phase 1 allowing use of the cold storage buildings and salt shed.
  - c. Total building area is sub-optimal to current operational needs. This includes area for heated and cold storage operations.
  - d. There is no tempered storage building for seasonal equipment and bulk storage
  - e. Yard storage and area for heavy truck circulation is limited and sub-optimal.
  - f. Estimated construction costs of \$13.1 million.
2. Option 2 – Reuse of a portion of the existing Garage with new separate structures for, repair garage and truck parking.
  - a. All other site facilities are demolished and redeveloped including the cold storage building, fuel station and salt shed.
  - b. Requires two Phases of work with Phase 1 allowing use of the cold storage buildings and salt shed.
  - c. Main Garage size is near-optimal and bulk storage area is very limited.
  - d. The repair garage staff would be remote from administrative/accounting staff.
  - e. The one-half remaining of the existing Garage would be used for bulk storage.

- f. Yard storage and area for heavy truck circulation is limited and sub-optimal
  - g. The fueling station and salt shed have constricted heavy vehicle access needed for loading.
  - h. Estimated construction costs of \$15.1 million.
3. Option 3A & 3B – Phased demolition of entire facility with replacement in two buildings; a Main Garage, and a cold storage building.
- a. Salt shed and fuel station are relocated.
  - b. Repair Garage is located with the Main Garage administration.
  - c. The Main Garage is near-optimal and there is optimal cold storage
  - d. Yard storage and area for heavy truck circulation is limited and sub-optimal
  - e. The fueling station and salt shed have constricted heavy vehicle access needed for loading.
  - f. Estimated construction costs of \$15.9 - \$16.1 million.
4. Option 4 – Purchase of additional 1 acre of land and redeveloping entire complex.
- a. In order to allow continued operations, phasing of work is needed and is possible
  - b. The main garage is near-optimal in size
  - c. Bulk storage area is adequate
  - d. Yard storage and truck circulation area is below optimal but far better than the other three options.
  - e. Within downtown CBD, creates a large paved and industrial-like complex up to the sidewalks and very visible.
  - f. Estimated construction costs of \$15.1 million. Does not include the cost of additional land
5. Option 5 – Hypothetical Optimal site.
- a. This option takes the space needs program for building and site operations and creates an optimal plan.
  - b. It assumes the City would buy a parcel of land.
  - c. All the space need for the buildings and site are met along with room for future expansions.
  - d. Allows the Garage to be developed in a sector with other industrial uses and not in a retail/recreational area.
  - e. Estimated construction costs of \$16.2 million. Does not include the cost of additional land.

The development Options, 1-3, of staying within the boundaries of the 2<sup>nd</sup> Avenue site all have operational limits that restrict efficiency, security, circulation, management control and future expansion. Option 4, purchasing adjacent land, creates a facility that meets the Street Division's needs. The Hypothetical new site meets the needs of the Streets Division with capacity for growth and land use compatibility.

#### RECOMMENDED ACTION

Results of the planning analysis demonstrate that the current site at 5.8 acres is too small for the needs of the Marshfield Street Division. All options increase the current capacity of vehicle and equipment storage, welding and repair bays, crew functions, and administration functions. However, site restraints limit circulation and yard storage. This is not optimal for the design of an efficient garage.

The addition of 1 acre in Option 4 significantly improves issues resulting from site restraints. This option has more yard storage and better site circulation. The optimal site option reflects the need for about 10 acres to best meet the needs of the City of Marshfield Street Division and allow for future expansion. The optimal option has appropriate site circulation, bulk storage, and yard storage. Both of these Options result in a safer and more efficient working environment.

It is the opinion of Barrientos Design and Consulting that the City of Marshfield purchase more land for the expansion of the Marshfield City Street Division. At the same time, the City should examine whether spending similar amounts on a new site, are better in the long-run for operational efficiency, room for growth, and land use compatibility.

Recommended next steps include developing preliminary designs for Option 4 and for a new selected Hypothetical site. With advanced levels of architectural, engineering and permitting analysis, the two Options can be thoroughly and equally compared.

# **SECTION 2**

## **STUDY SCOPE AND METHODOLOGY**

### **INTRODUCTION**

Barrientos Design completed architectural planning services for space needs and conceptual planning at the current Street Division site located on West 2<sup>nd</sup> Street.

Current operations are located on a 5.8 acre yard containing the Main Garage building, 4 bulk storage buildings, a fueling station, outdoor yard storage space, and parking space. The Main Garage has had two additions along with some minor renovations and the storage buildings have been built over the years without an increase in yard acreage.

As Marshfield's Street Division operations have grown in service levels and the fleet composition has changed to larger trucks and equipment, the current Garage is too small to house all the needed functions. Not all the trucks can be parked indoors, the repair bay has too low of a ceiling height to allow trucks to extend their beds, there is no dedicated truck washing bay, and parts storage is spread throughout various closets and corners. Mechanical and equipment items are also insufficient. The vehicle lifting equipment is too low and welding & fabrication is in the same shop space as vehicle maintenance despite the need for separate ventilation. Crew spaces are ADA inaccessible, administration offices are interwoven with the Shop, there are no lockers for female employees, and there is one women's bathroom located remotely from the administration offices.

With five buildings on site, the yard has limited vehicle circulation path that limits trucks turning path and restricts loading activities. In addition, an off-site sign shop and unheated storage shed is included in the potential redevelopment program. Since many of the trucks and large equipment pieces cannot fit inside, they are parked outside and take up space that could be used for bulk items.

The purpose of this study was to determine what the current building and yard spatial needs are, evaluate how well the current layout meets these needs, and then develop expansion and rebuilding options at the current site. Barrientos Design provided the work in three major Tasks as follows:

#### **TASKS 1 – SPACE NEEDS ASSESSMENT**

The space needs assessment quantified the amount of space needed for each room along with key architectural criteria such as heights,

clearances and major equipment needs. For Yard functions Barrientos looked at bulk storage, parking, salting, fueling and stockpiling operations.

1. Interviewed key City staff on the operations of parking, repairs, storage, staff support and Yard functions.
2. Onsite, observed the flow of shop operations, vehicles, material and personnel. Recommended the best relationship network the rooms should have to each other.
3. Recorded facility data on: fleet composition, rolling stock, major fixed equipment, parts and bulk storage, mechanics, and operators.
4. Identified the optimal number of parking stalls, repair bays and bulk storage areas needed.
5. Projected out what growth or changes are expected in the fleet, staff and material over the next ten years.
6. Developed an Optimal Room Program that identifies the needed space and configuration for each room. Compared recommended SF against existing SF and identified increases in SF.
7. Created a summary of facility deficiencies beyond SF that cover: ceiling heights, door clearance, drive aisle clearances, equipment needs, accessibility of equipment and parts, and ADA compliance.
8. Developed a written facility program detailing the architectural needs of each major function.
9. Created a to-scale plan diagram reflecting the optimal room program sizes and relationships. Compared this diagram against the current building and Yard layout.

## **TASK 2 – CONCEPTUAL DESIGN**

With the optimal rooms sizes established, the Architect developed layout options at the West 2nd Street site to meet current and future facility needs.

1. Established a base map of the buildings and site layout. Data was gathered from City GIS maps.
2. An initial site assessment was completed that reviewed and diagramed: parcel lines, curb-cuts, adjacent roadways, existing building footprints, adjacent land uses, topography, drainage patterns, utility locations, soil types and zoning ordinances.
3. Created building expansion and site plan arrangements. Up to four layouts were created. Options were developed to a diagrammatic plan level. The scale of options ranged along the following lines:
  - a. Reuse and remodel of most of the existing buildings along with some expansion if possible.

- b. Selective demolition of the existing Garage and rebuild new portions in the same area
  - c. Demolition of the entire Garage and possibly other storage buildings, and making way for a new Garage and cold storage.
  - d. Possibility of purchasing adjacent parcels to expand the Garage development footprint.
4. Met with staff to discuss the merits and drawbacks of each option.
  5. Selected one diagram plan and advanced it to a Conceptual Design level with floor plans, cross sections, building elevations and a site layout plan.
  6. Construction assembly options were explored, including pre-cast, masonry, and metal buildings.
  7. Developed conceptual cost estimates for each type of construction assembly along with the site development costs.
  8. A technical narrative was developed that assesses the features and benefits of the Concept Design.
  9. An implementation schedule for preliminary design, final design and construction was developed.
  10. Barrientos Design met onsite three times during this Task and then provided one final Conceptual Design workshop summarizing the decision process and recommended approach.

### **TASK 3 – OPTIMAL NEW BUILDING & SITE PLAN**

Taking the optimal space and yard needs from Task 2, Barrientos Design developed an optimal floor plan and site plan that best supports Street Division operations. The optimal plan identified the following:

1. To scale room sizes along with major equipment and parking stalls.
2. SF of major room functions.
3. Optimal relationship and adjacencies between operational functions.
4. Yard layout function sizes, relationships, sequences, and security zones.
5. Building and Yard facility function site layout indicating: Main Garage, Cold Storage, Fueling, Stockpiling, Bins, Parking and buffer zones.
6. Optimal circulation patterns and security zones for Street Division vehicles, other City vehicles, vendors, and the public. Street access points and perimeter fencing indicated.
7. Potential footprint expansion locations.
8. Acreage and configuration of the Street Division parcel.
9. In narrative form, identified optimal site infrastructure: roadway capacity, water, sewer, stormwater retention, gas, and power.



# **SECTION 3**

## **EXISTING FACILITY**

### **INTRODUCTION**

The current facility is located on West 2<sup>nd</sup> St—south of W Veterans Pkwy and three blocks from S Central Ave. As part of the information gathering portion of the study, Barrientos Design collected data on the existing facility conditions to assess space needs.

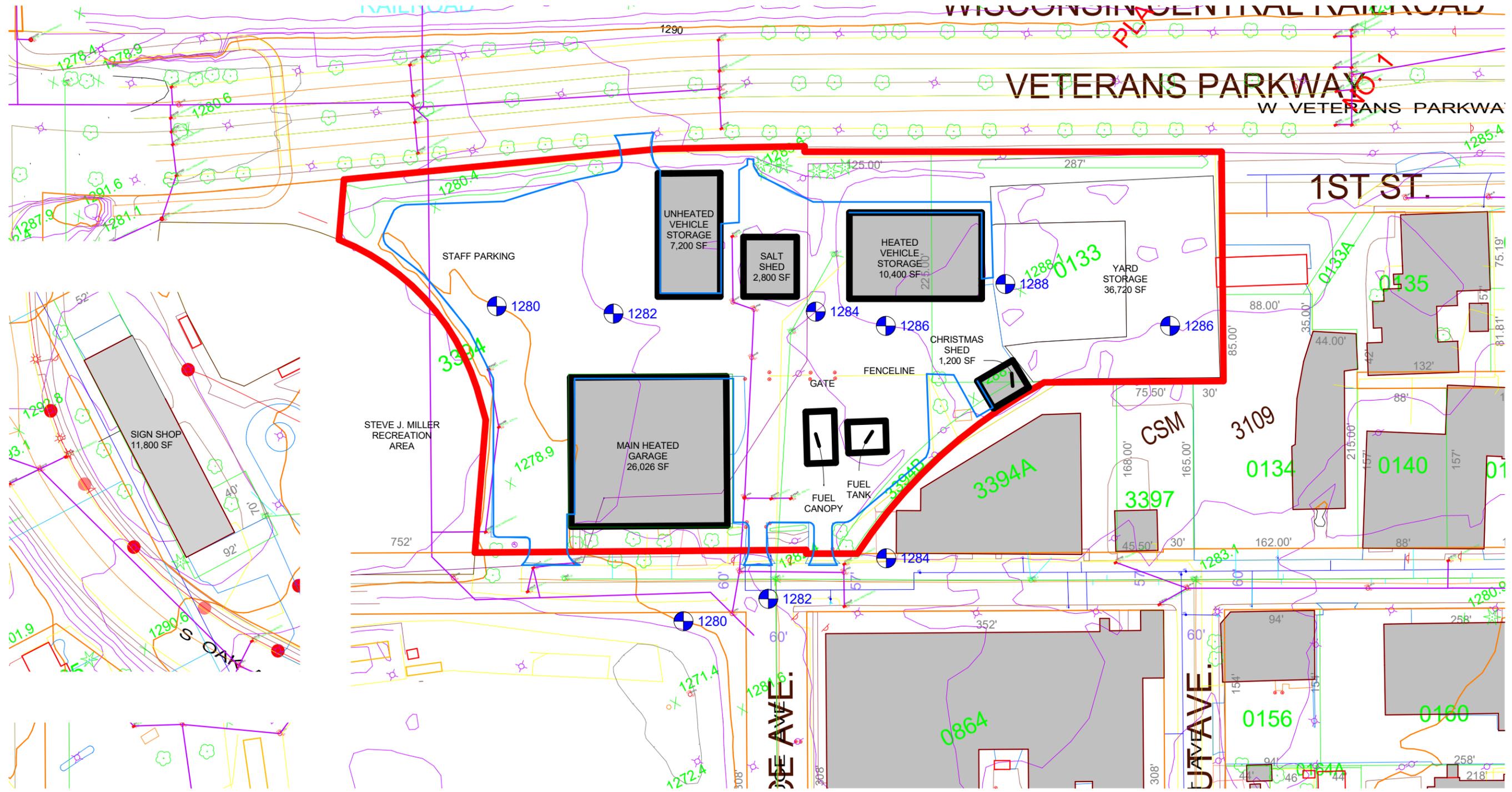
The existing 5.8 acre site has 5 buildings—Main Garage, Heated Vehicle Parking, Unheated Vehicle Parking, Salt Shed, and Christmas Shed—as well as a fueling station.

The Street division also has a sign shop and unheated storage at 200 S Oak Ave, a salt shed and outside storage on a 4 acre site located at 1819 East 24<sup>th</sup> St and an 8.8 acre construction materials yard located at the corner of 25<sup>th</sup> St and Vine Ave.

### **SECTION CONTENTS**

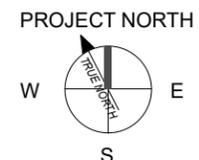
1. Existing Survey – Extended Site
2. Existing Aerial – Extended Site
3. Existing Survey – Immediate Site
4. Existing Aerial – Immediate Site
5. Existing Floor Plans
6. Existing Facility Photos

Existing Plans can be found in the Appendix of this report.



MARSHFIELD CITY DPW

1 EXISTING SURVEY - EXTENDED SITE  
 A-001 1" = 100'-0"

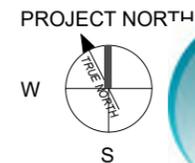


**BARRIENTOS**  
 design & consulting

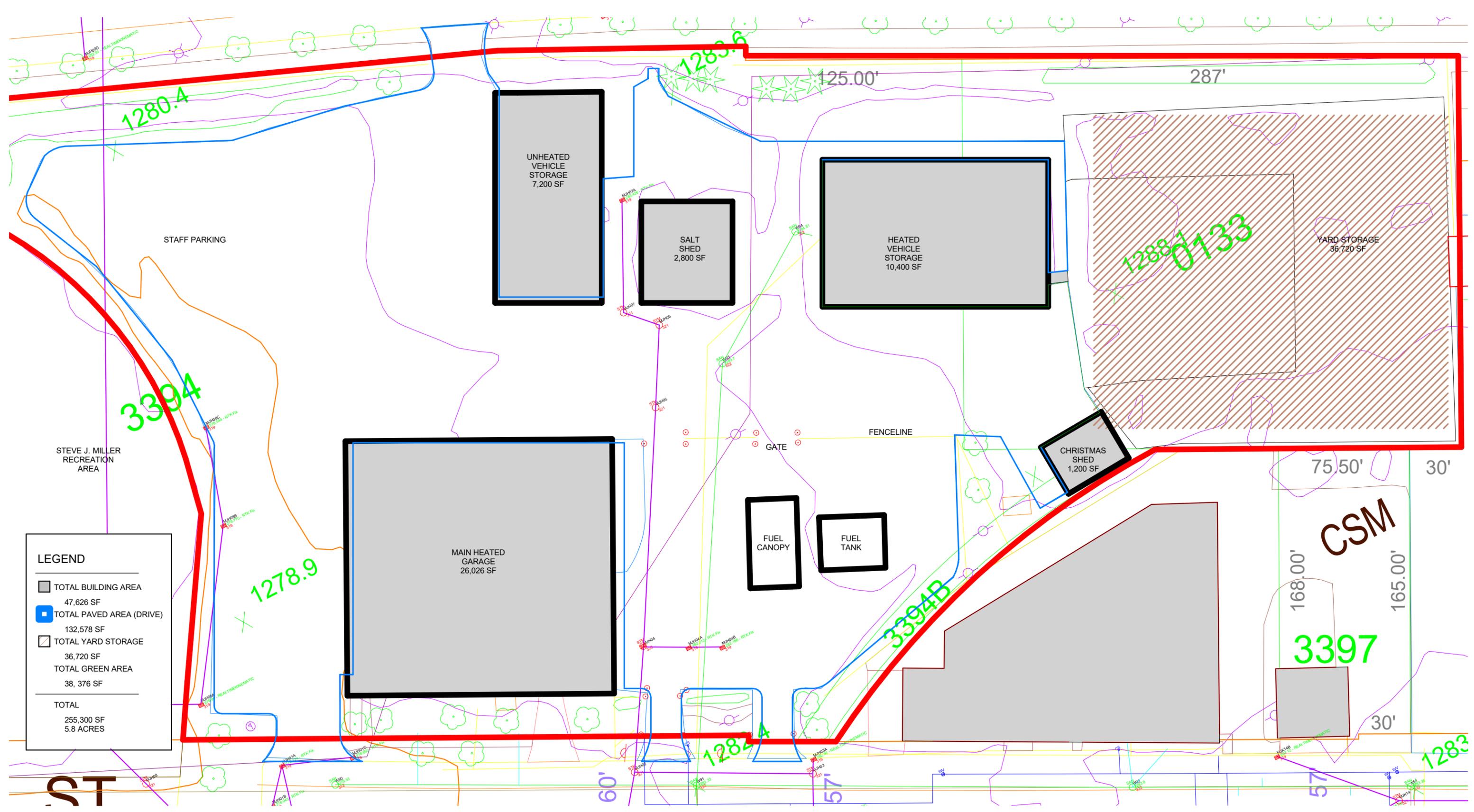


MARSHFIELD CITY DPW

1  
A-002 EXISTING AERIAL - EXTENDED SITE  
1" = 100'-0"



**BARRIENTOS**  
design & consulting

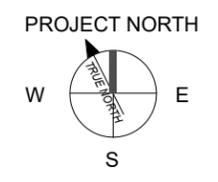


**LEGEND**

	TOTAL BUILDING AREA
	47,626 SF
	TOTAL PAVED AREA (DRIVE)
	132,578 SF
	TOTAL YARD STORAGE
	36,720 SF
	TOTAL GREEN AREA
	38,376 SF
<b>TOTAL</b>	
	255,300 SF
	5.8 ACRES

MARSHFIELD CITY DPW

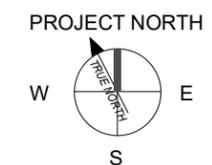
1  
A-003 EXISTING SURVEY - IMMEDIATE SITE  
1" = 50'-0"





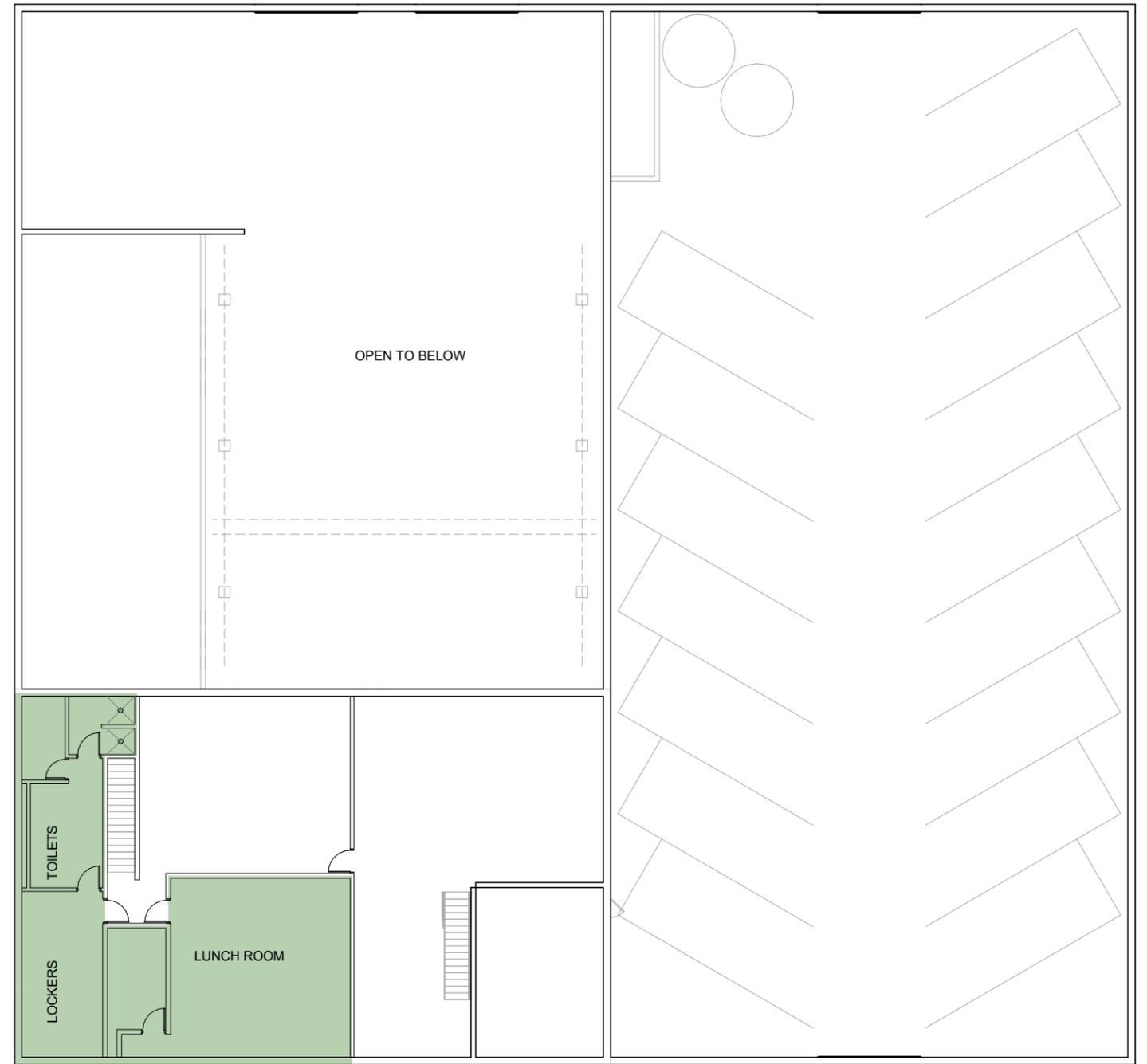
MARSHFIELD CITY DPW

1  
A-004 EXISTING AERIAL - IMMEDIATE SITE  
1" = 50'-0"





① EXISTING FIRST FLOOR  
1" = 20'-0"



② EXISTING SECOND FLOOR  
1" = 20'-0"

MARSHFIELD CITY DPW

ARCHITECTURAL ITEMS: Interiors (Administrative/Crew)

Photo A1.1



Administration/Reception

Photo A1.2



Office

Photo A1.3



Assistant Street Superintendent Office

Photo A1.4



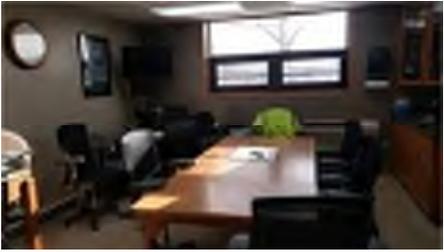
Assistant Street Superintendent Office

Photo A1.5



Street Superintendent Office

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# **SECTION 4**

## **SPACE NEEDS ASSESSMENT**

### **INTRODUCTION**

Broken down by program type, Barrientos Design has determined seven major functions for the City of Marshfield Streets Department. These functions are Vehicle Parking, Welding and Repair, Sign Shop, Truck Wash, Parts Storage, Crew Quarters, and Administration. To complete the space needs assessment the functions were further broken down into room type based on interviews with staff.

After data on SF needs for staff, services, and operations was tabulated, the assessment revealed a need for an additional 48,613 SF to the main garage. This is an increase of 187% to maximize operation efficiencies. Taking the accessory buildings into consideration the increase drops to 62%. This is largely a result of the Sign Shop being located off site. At 11,800 SF it is factored into the tabulation as useable SF of the existing Marshfield Street Division operations. However, the tabulation does not reflect the inefficiencies that result from having program functions off-site. To operate at maximum efficiency a consolidated garage of 74,639 SF is recommended.

### **CLEARANCES AND ACCESSIBILITY**

Vehicle and equipment sizes have changed since the original construction of the Street Division in 1943. As Marshfield's Street Division operations have grown in service levels and the fleet composition has changed to larger trucks and equipment, the current garage is too small to house all the needed functions. Not all the trucks can be parked indoors, the repair bay has too low of a ceiling height to allow trucks to extend their beds, there is no dedicated truck washing bay, and parts storage is spread throughout various closets and corners. Mechanical and equipment items are also insufficient. The vehicle lifting equipment is too low and welding & fabrication is in the same shop space as vehicle maintenance despite the need for separate ventilation. Crew spaces are ADA inaccessible, administration offices are interwoven with the Shop, there are no lockers for female employees, and there is one women's bathroom located remotely from the administration offices.

## **PROGRAM NARRATIVE**

### **SITE AND EXTERIOR**

General and site needs for the Street Division include truck wash, fueling station, staff and visitor parking, perimeter fencing, security cameras, site lighting, entry signage, generator, landscaping, outdoor storage, and stockpiles. Paving will be heavy-duty asphalt throughout. Staff and visitor parking are 9' x 18' stalls with accessible parking as required by code at the entry. Landscaping will include trees and shrubs in key areas such as building entrance and along site perimeter. Outdoor storage will be provided for stockpiles and include five 24' x 24' structured bins. By the truck wash will be a high-volume (1 ½") hose to wash off heavy debris prior to washing truck, along with containment area to catch debris and dirty water. Cold storage will be 21' clear to bottom of structure in drive aisle. Floors will be concrete, walls will be metal, and ceilings will be metal deck with exposed trusses.

### **VEHICLE PARKING**

For Vehicle Parking the garage should be 28' in height. Underside of truss minimum of 21' in larger truck bays to clear truck bed to vertical position and 14' clear where pick-ups are parked. Heavy-duty stalls are 42' x 15', medium-duty stalls are 30' x 14', and light-duty stalls are 24' x 10' with 26' traffic aisles between parking rows. 51 parking stalls will be provided in the heated vehicle garage. Overhead doors are 20' wide by 16' high. Floors will be concrete with liquid densifier, walls will be precast concrete or block, and ceilings will be metal deck with exposed trusses. Plumbing needed includes hand wash sinks, eye wash station, hose bibs, trench drain, and catch basin.

### **TRUCK WASH**

The function of the wash bay is to clean vehicles with steam wash and high pressure hoses mounted to spray guns. An adjacent equipment room is required. Floors will be concrete with liquid densifier, walls will be precast concrete or block, and ceilings will be exposed precast.

### **WELDING & REPAIR**

Functions of the Welding & Repair area include welding and machining of parts and vehicle access for direct repair and unloading of parts. Space for steel stock racks and a workbench area should be provided. Welding space and Repair space should be separated by a partition wall to meet different ventilation needs. Floors will be concrete with liquid densifier, walls will be precast concrete or block, and ceilings will be metal deck with exposed trusses. Natural lighting is preferred with task lighting needed at workbenches. Plumbing includes a floor drain at overhead door, laundry sink (for cleaning paint brushes, etc.), air hose

reels and water hose reels. This function should be adjacent to Vehicle Parking.

### **PARTS STORAGE**

Located between the Repair Garage and the Administration, Parts Storage should have an overhead door to receive vendor trucks as well as a transaction counter. Floors will be concrete with liquid densifier, walls will be precast concrete or block, and ceilings will be metal deck with exposed trusses. Field equipment should be accessible from the Vehicle Parking and the mechanic should have access to both the Repair Garage and Parts Storage.

### **SIGN SHOP**

The Sign Shop is needed for the creation of signs through a computerized plotting system. There should also be storage for signs and wiring as well as workspace. Vehicle access at an overhead door is needed for the shop. Floors will be concrete with liquid densifier, walls will be precast concrete or block, and ceilings will be metal deck with exposed trusses. The Sign Shop should be adjacent to the Welding and Repair area.

### **CREW QUARTERS**

The crew area includes assembly with kitchenette, safety training, PC access/timeclock, male and female locker rooms, and boot wash. Ceiling heights should be 9' with corridor heights at 9'6" and assembly room height at 10'. Fixed equipment includes counters and cabinets, kitchen appliances, washer/dryer, 2' x 2' lockers, common closet for boots and heavy gear, and accessible compliant fixtures. Walls will be concrete masonry units and gypsum board and ceilings will be 2' x 2' acoustical ceiling tiles or gypsum board. The crew area should be separated from the Vehicle Parking to minimize acoustics, dusts, and odors. It should be near the garage for employee access, as well as near staff parking stalls and the administrative area.

### **ADMINISTRATIVE AREAS**

The administrative area includes functions of reception, conferencing/collaborating, mail, and record storage. Ceiling heights in offices should be 9' with lobby and corridor heights at 9'6" or higher. Walls will be steel stud covered with gypsum board and ceilings will be 2' x 2' acoustical ceiling tiles. This function should be adjacent to visitor parking stalls with visual lines to main entry traffic flow and fuel station. It should also be near assembly and locker rooms. The administrative area should be separated from the Repair Garage to minimize acoustics, vibrations, dust, and odors.

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# Staff by Division - Streets Department

Marshfield Public Works Garage

Division	Staffing Classifications & Count						
	Supervisor	Assist./ Mech.	Laborer/ Tech.	Staff by Division	Seasonal / PTE	Future	Totals
Administration	3	1		4	1	1	6
Vehicle & Equip. Maintenance		3	2	5	0	1	6
Field Staff			21	21	9	1	31
<b>Staffing Totals</b>	<b>3</b>	<b>4</b>	<b>23</b>	<b>30</b>	<b>10</b>	<b>3</b>	<b>43</b>

Notes

\* Future tabulation for 1 seasonal laborer, 1 seasonal admin, and 1 operator

# Stall Count & Size by Equipment Type

City of Marshfield

Heated & cold storage equipment pieces needing assigned space

Type	Vehicle Size	Typical Type	Stall Size	Heated	Tempered	Total Vehicles
1	Heavy	Plow, Haul, Tandem, Tri	42' x 15'	11	0	11
2	Medium	Single Axle, Utility Truck, Water/Fuel Tanks	30' x 14'	19	5	26
3	Light	Crew Cabs, Tractors, Mowers	24' x 10'	21	5	26
4	Field Equipment	Towed Field Equipment	12' x 12'	0	42	42
Totals				51	52	105

Type	Vehicle Type/ID	Equip. Name	Heated	Tempered	Total
1. Heavy Vehicles			42' x 15'		
	051-D	TANDEM AXLE DUMP TRUCK	1		1
	052-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	053-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	060-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	068-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	070-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	071-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	072-D-H	DUMP TRUCK/TANDEM AXLE	1		1
	066-D-H	DUMP TRUCK/TRI AXLE	1		1
	(FUTURE)	TRI AXLE	1		1
	(FUTURE)	TRI AXLE	1		1
	Total Heavy		11	0	11
2. Medium Vehicles			30' x 14'		
	077-D-H	SWEeper	1		1
	038-D-L	LOADER, WHEEL		1	1
	039-D-L	LOADER, WHEEL		1	1
	044-D-L	BACKHOE/EXCAVATOR	1		1
	031-D-L	GRADER		1	1
	033-D-L	GRADER		1	1
	034-D-L	GRADER		1	1
	137-D-L	TRUCK CHASSIS AERIAL, FORD 2015	1		1
	054-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	055-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	056-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	057-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	061-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	062-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	064-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	067-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	069-D-H	DUMP TRUCK/SINGLE AXLE	1		1
	077-R-D	STREET SWEEPER	1		1
	107-D-L	PAINT TRUCK	1		1
	059-D-H	TRUCK, WATER	1		1
	026-D-L	MINI EXCAVATOR	1		1
	027-D-L	MINI EXCAVATOR	1		1
	084-D-H	TRUCK/DUMP/CONCRETE CREW	1		1
	094-D-H	TRUCK, ACTERRA	1		1
	Total Medium		19	5	24
3. Light Vehicles			24' x 10'		
	8181	TRAILER NEW 22'		1	1
	045-D-L	LOADER/BACKHOE		1	1
	046-D-L	LOADER/BACKHOE		1	1
	040-D-L	CRAWLER DOZER	1		1

## Stall Count & Size by Equipment Type

City of Marshfield

Heated & cold storage equipment pieces needing assigned space

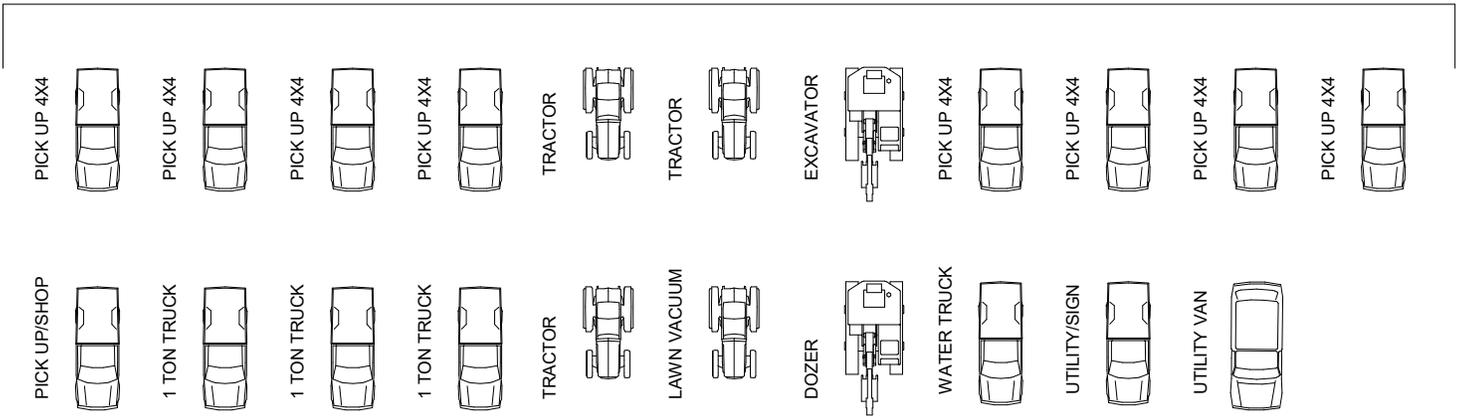
Type	Vehicle Size	Typical Type	Stall Size	Heated	Tempered	Total Vehicles
1	Heavy	Plow, Haul, Tandem, Tri	42' x 15'	11	0	11
2	Medium	Single Axle, Utility Truck, Water/Fuel Tanks	30' x 14'	19	5	26
3	Light	Crew Cabs, Tractors, Mowers	24' x 10'	21	5	26
4	Field Equipment	Towed Field Equipment	12' x 12'	0	42	42
Totals				51	52	105

036-D-L	LOADER, HI LIF				1	1
037-D-L	LOADER, WHEEL				1	1
035-D-L	EXCAVATOR, WHEELED			1		1
103-D-L	FRONT MOUNT TRACTOR			1		1
5182	TRACTOR W/ COMFORT CAB			1		1
102-D-L	TRACTOR W/ COMFORT CAB			1		1
126-U	LAWN VACUUM			1		1
082-D-H	1 TON TRUCK 4 DOOR			1		1
085-U	WATER TRUCK 1 TON 450 GL			1		1
095-D	1 TON TRUCK			1		1
097-D	1 TON TRUCK			1		1
2181	PICK UP 4X4, FORD 2019			1		1
004-U	PICK UP TRUCK/SHOP			1		1
078-U	PICK UP F250 FORD			1		1
090-U	PICK UP 4X4			1		1
091-U	PICK UP 4X4 SUPERDUTY			1		1
092-U	PICK UP 4X4			1		1
093-U	PICK UP 4X4			1		1
098-U	PICK UP TRUCK/SHOP			1		1
2192	2019 F-250			1		1
003-U	UTILITY TRUCK/SIGN SHOP			1		1
083-U	UTILITY VAN			1		1
Total Light				21	5	26

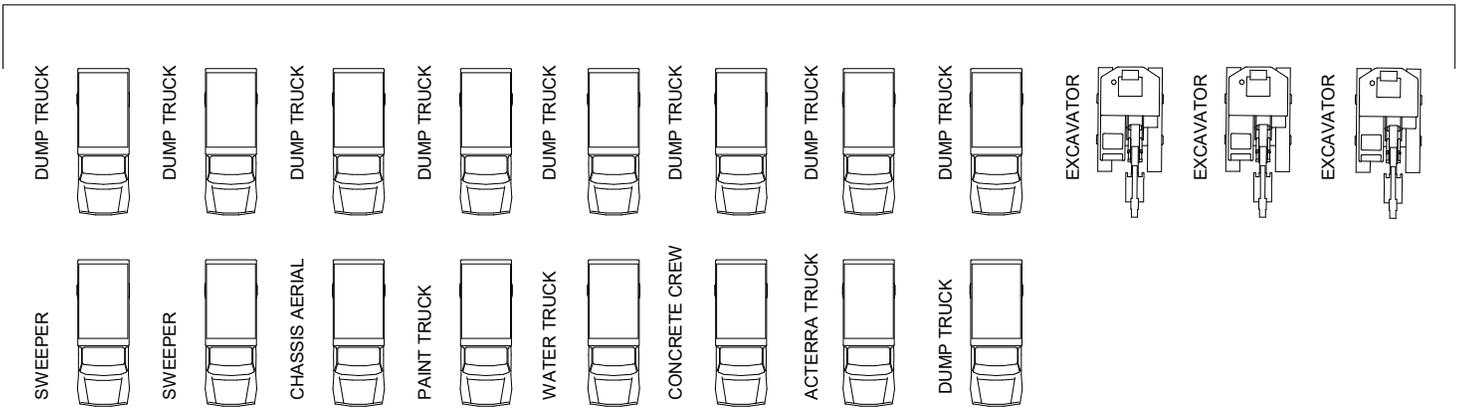
### Notes

\*Vehicle 052 and 062 will be removed from fleet and replaced by the 2 future tri-axle vehicles.

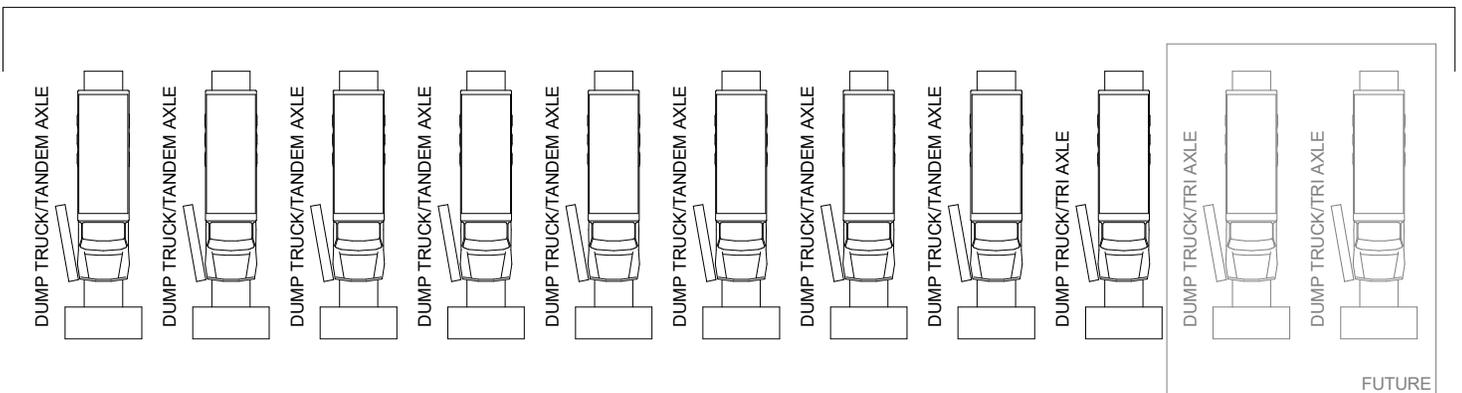
### LIGHT DUTY VEHICLES (21)



### MEDIUM DUTY VEHICLES (19)



### HEAVY DUTY VEHICLES (11)



# Optimal Room Program for Streets Department

City of Marshfield

FUNCTION AREA/ Room	Station Conf		Net SF/Station	# of Sta.	Net Useable SF	Circulation & Wall Allow.	Gross SF	Occupancy Notes		
	X'	Y'						Building Configuration	X'	Y'
<b>Main Garage Heated</b>										
<b>Vehicle Parking</b>						25%	Assumed drive-thru aisle			
Heavy Parking Stall	42	15	630	11	6,930			With wings		
Medium Parking Stall	30	14	420	19	7,980					
Light Parking Stall	24	10	240	21	5,040					
Field Equipment Stall	12	12	144	0	0					
Drive Aisle	26	280	7280	2	14,560					
Water/FP Closet	14	12	168	1	168					
Salt Brine	24	30	720	1	720					
Emergency Generator	16	12	192	1	192					
SUBTOTAL					35,590	8,898	<b>44,488</b>	280	159	
<b>External Truck Wash</b>						25%				
Truck Wash Bay	86	28	2408	1	2,408					
Welding & Mach. Shop	12	20	240	1	240					
SUBTOTAL					2,648	662	<b>3,310</b>	86	38	
<b>Welding &amp; Repair</b>						20%				
Repair Heavy Duty Bays	50	26	1300	4	5,200			Separated		
Repair Light Duty Bays	40	22	880	2	1,760					
Welding & Mach. Shop	60	40	2400	1	2,400					
Workbenches	24	8	192	1	192					
Mechanic's Tool Closet	16	14	224	1	224					
Bulk Fluids	24	18	432	1	432					
Tire Shop & Storage/Hydr. Hoses	28	20	560	1	560					
SUBTOTAL					10,768	2,154	<b>12,922</b>	80	162	
<b>Parts Storage</b>						20%				
Mechanic's Workstation/Catalogues	14	14	196	1	196					
Parts Storage - Vehicles/Equipment	42	40	1680	1	1,680					
Deliveries/Vendor Counter	14	10	140	1	140					
PPE & Power Tools	16	14	224	1	224					
Field Applications	16	14	224	1	224					
Hazardous Fluids, Batteries	16	14	224	1	224					
Trash/Recycling	12	12	144	1	144					
Electrical Closet	12	10	120	1	120					
SUBTOTAL					2,952	590	<b>3,542</b>			80

# Optimal Room Program for Streets Department

City of Marshfield

FUNCTION AREA/ Room	Station Conf		Net SF/Station	# of Sta.	Net Useable SF	Circulation & Wall Allow.	Gross SF	Occupancy Notes Building Configuration	
	X'	Y'						X'	Y'
<b>Sign Shop</b>						20%			
CPU/Plotter Room	16	18	288	1	288			Sign display	
Sign Shop	60	40	2400	1	2,400			Wood shop	
<b>SUBTOTAL</b>					2,688	538	<b>3,226</b>	42	77
<b>Crew Quarters</b>						20%			
Assembly Room/Kitchenette	40	32	1280	1	1,280				
Safety Training	24	18	432	1	432				
Crew Entry	8	8	64	1	64				
PC Access/Timeclock	14	8	112	1	112				
Boot wash/Laundry	12	12	144	1	144				
Lockerroom - Mens	36	24	864	1	864				
Lockerroom - Womens	16	14	224	1	224				
Janitorial Closet/Bldg Supplies	14	12	168	1	168				
<b>SUBTOTAL</b>					3,288	658	<b>3,946</b>	80	49
<b>Administrative Areas</b>						20%			
Reception Lobby/Vestibule	14	12	168	1	168				
Administrative Asst	12	12	144	1	144			Open office	
Intern	8	8	64	1	64			Open office	
Collaboration Space	18	14	252	1	252			GIS, GPS, Monitors	
File Cabinets	14	12	168	1	168				
Streets Supt	16	14	224	1	224			Closed office	
Supervisor Offices	14	14	196	2	392			Closed office	
Conference Room	24	20	480	1	480				
Office Equipment/Supplies/Mail	14	12	168	1	168				
Admin Archive Records	14	14	196	1	196				
Kitchenette - Galley	12	10	120	1	120				
Restroom - Unisex	8	7	56	1	56				
Mechanical Room	12	10	120	1	120				
Telecommunications/IT Closet	12	10	120	1	120				
<b>SUBTOTAL</b>					2,672	534	<b>3,206</b>	80	40

**Main Garage Heated Square Footage**

**74,639**

# Optimal Room Program for Streets Department

City of Marshfield

FUNCTION AREA/ Room	Station Conf		Net SF/Station	# of Sta.	Net Useable SF	Circulation & Wall Allow.	Gross SF	Occupancy Notes	
	X'	Y'						Building Configuration	
								X'	Y'

## Yard Buildings

Cold Storage									
						10%			
Heavy Parking Stall	44	16	704	0	0				
Medium Parking Stall	32	14	448	5	2,240				
Light Parking Stall	24	12	288	5	1,440				
Field Equipment Stall	12	12	144	42	6,048				
Plows, Blades, Attachments	30	30	900	1	900				
Construction Equipment	30	30	900	1	900				
Paletted Bulk Storage	30	30	900	1	900				
Drive Aisle	22	56	1232	1	1,232				
<b>SUBTOTAL</b>					<b>13,660</b>	<b>1,366</b>	<b>15,026</b>	<b>100</b>	<b>150</b>

Salt Shed									
Salt Storage	50	70	3500	1	3,500				
<b>SUBTOTAL</b>					<b>3500</b>	<b>0</b>	<b>3,500</b>	<b>80</b>	<b>44</b>

Structured Block Bins									
Covered Bins	24	24	576	5	2,880				
					<b>2880</b>	<b>0</b>	<b>2,880</b>	<b>24</b>	<b>120</b>

**Yard Building Square Footage**

**21,406**

**Total Heated, Cold, and Bulk Storage**

**96,045**

## Existing SF vs Optimal SF

City of Marshfield

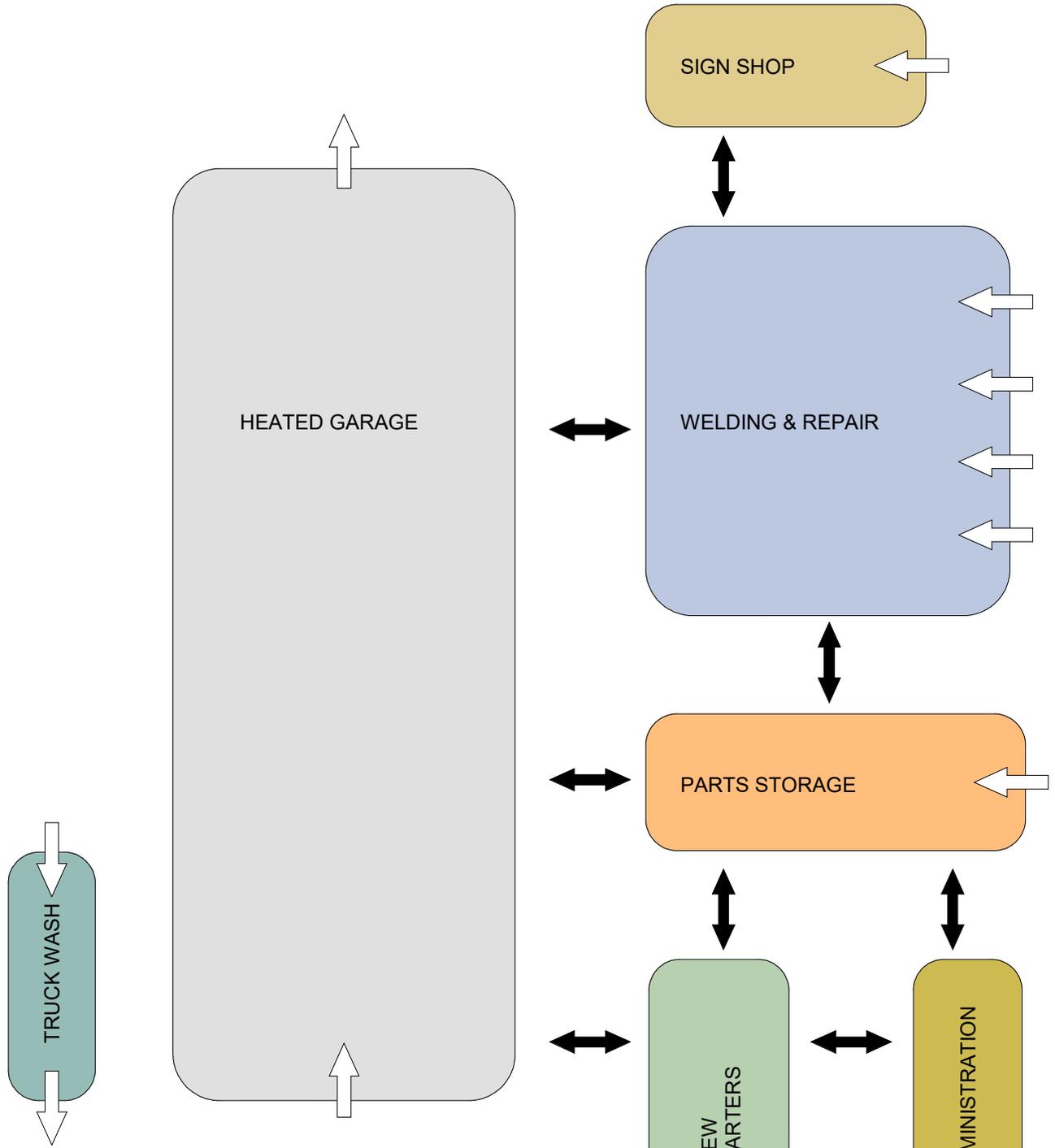
Department Function	Existing SF	Recommended SF	Add'l SF	% of Change
Vehicle Parking	11,530	44,488	32,958	74%
External Truck Wash	0	3,310	3,310	100%
Welding & Repair	7,484	12,922	5,438	42%
Parts Storage	3,585	3,542	-43	1%
Sign Shop	0	3,226	3,226	100%
Crew Quarters	1,361	3,946	2,585	66%
Administrative Areas	2,066	3,206	1,140	36%

**Total Main Garage SF      26,026                  74,639                  48,613                  187%**

Department Function	Existing SF	Recommended SF	Add'l SF	% of Change
Accessory Buildings	33,400	21,406	-11,994	-36%

**Total Yard Storage SF      33,400                  21,406                  -11,994                  -36%**

**Total DPW Buildings SF      59,426                  96,045                  36,619                  62%**



- ADMINISTRATION 3,206 SF
- CREW QUARTERS 3,946 SF
- PARTS STORAGE 3,542 SF
- SIGN SHOP 3,226 SF
- WELDING & REPAIR 12,922 SF
- HEATED GARAGE 45,390 SF
- TRUCK WASH 2,408 SF

TOTAL 74,639 SF



# SECTION 5

## CONCEPTUAL DESIGN

### INTRODUCTION

Using the square footage established in the space needs assessment, 4 options were developed to meet the needs of the Street Division at the current site. These options consider reuse/remodel, demolition/new construction, and purchasing adjacent parcels. These options were then organized into a chart and ranked based on cost, size, and function criteria.

### SECTION CONTENTS

1. Option 1 – Partial Re-Use of Existing
  - a. Narrative
  - b. Phased Site Plans
  - c. Cost Estimate
2. Option 2 – Partial Re-Use of Existing, Split Parking & Welding Garages
  - a. Narrative
  - b. Phased Site Plans
  - c. Cost Estimate
3. Option 3 – All New Construction Within Existing Parcel
  - a. Narrative
  - b. Phased Site Plan A
  - c. Site Plan B
  - d. Cost Estimate A
  - e. Cost Estimate B
4. Option 4 – All New Construction With Adjacent Parcel
  - a. Narrative
  - b. Phased Site Plans
  - c. Extended Site Plan
  - d. Floor Plan
  - e. Elevations
  - f. Sections
  - g. Cost Estimate
5. Option Comparison Chart
6. Option Selection Matrix

In the subsequent section, concept plans for a Hypothetical site option are documented.



## **EXPANSION OPTION 1 – PARTIAL RE-USE OF EXISTING**

Option 1 is a re-use of the newest portion of the existing garage. This saves 12,038 SF to be remodeled to fit the operations of sign shop, parts storage, and bulk storage. This option limits bulk storage to 6,164 SF which is insufficient to meet operational needs targeted at 15,000 SF. All other existing buildings are demolished and the main garage is built around the remodel of the existing.

All major functions are in a consolidated location for operational efficiency. The total new construction is 55,642 SF. Included in new construction are 6 repair bays (4 heavy-duty and 2 light-duty) with a 10 ton overhead crane. There is also a separate welding bay. New crew and admin spaces optimize operations and the sign shop is relocated on site. The main garage features a row of double stacked light-duty parking to minimize footprint size and allow for better traffic and circulation around the building. Welding and repair access is off of Second St. with other traffic largely using Veterans Pkwy or First St.

The fuel island is accessed off of First St. and is adjacent to a new 3,500 SF salt shed with 1,224 SF salt brine lean-to. There are 58 staff and visitor parking stalls located along the west side of the garage, the east yard, and the admin offices. Yard storage is 25,656 SF.

Estimated cost: \$13,081,724

### **OPTION BENEFITS**

- Consolidated garage
- Partial reuse of existing garage
- Ample staff and visitor parking

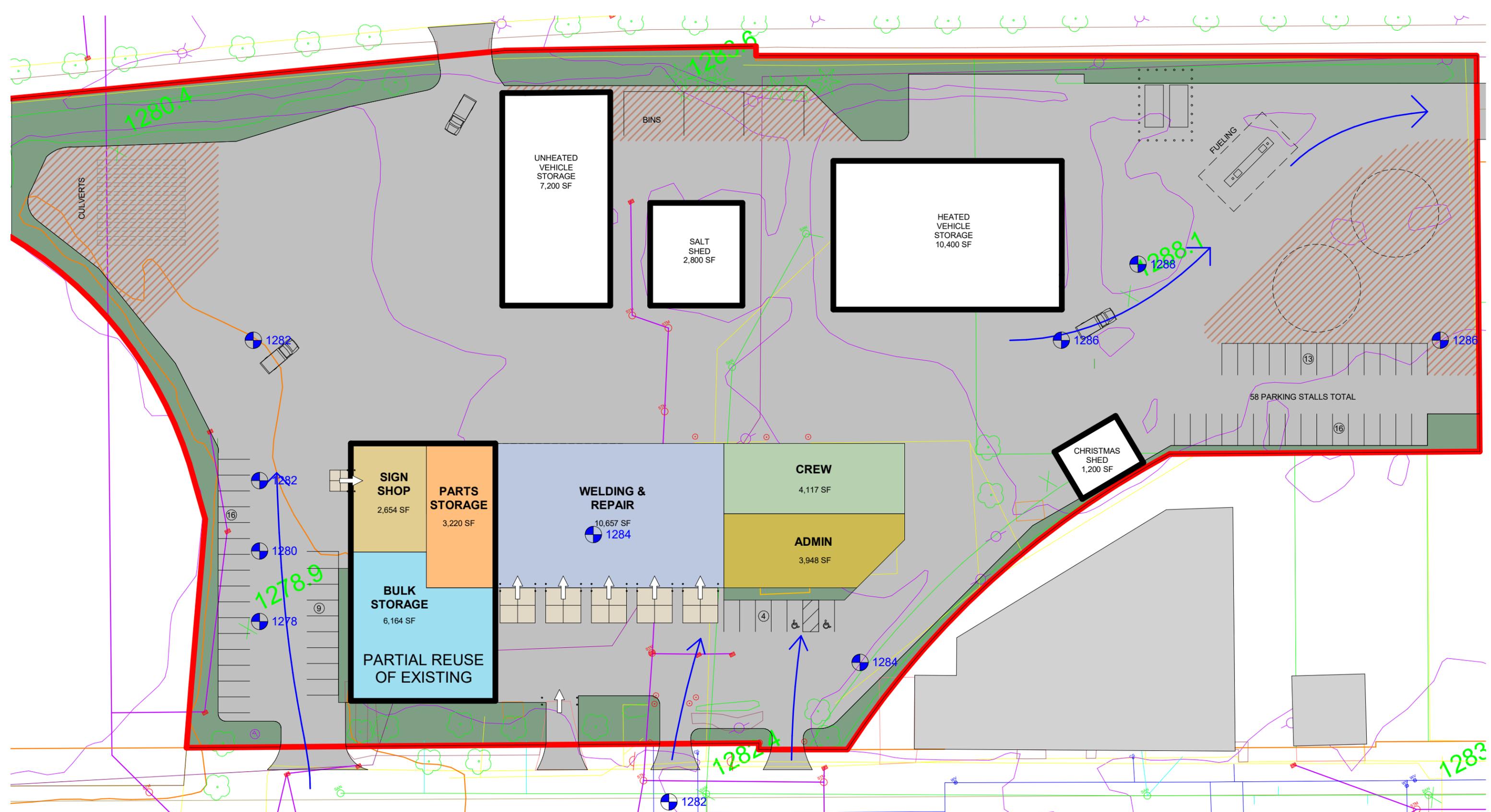
### **OPTION DRAWBACKS**

- Narrow site circulation, limited access to Repair Garage
- Difficult to fence off fueling, vendor loading and public access
- Fueling station cannot be seen directly by admin staff
- Insufficient bulk storage
- Parking scattered on site
- Doubled up light-duty parking
- Tight clearances of the Garage to the site edges will create driving blind-spots for those taking turns around the corners.
- Tight turning radius in some directions
- Congested traffic pattern
- Insufficient site yard storage
- Limited snow piling storage areas
- 1<sup>st</sup> Street access is limited and there is congestion/back-ups when train crosses to the north.

- The large and tall Repair Garage will face 2<sup>nd</sup> Street with many heavy trucks exiting onto the street, and the perimeter will have a chain link security fence.
- Requires construction phasing of work over multiple construction contracts and extended time of construction. If not done in phases, Streets would have to move off site for a year into a rental facility.

#### **RECOMMENDATION**

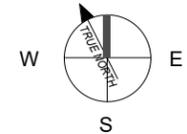
Given the option drawbacks we do not recommend this option. The site marginally meets the needs of drive and yard operations. Of the options that re-use the existing garage, this is the preferred option. This option would only work if the city is willing to deal with restricted traffic patterns and less than needed cold and yard storage.



MARSHFIELD CITY DPW

1 OPTION 1 - PHASE 1  
 A-110 1" = 50'-0"

PROJECT NORTH



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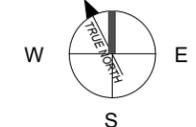
**LEGEND**

TOTAL BUILDING AREA	72,404 SF
TOTAL PAVED AREA (DRIVE)	125,568 SF
TOTAL YARD STORAGE	26,193 SF
TOTAL GREEN AREA	31,135 SF
<b>TOTAL</b>	<b>255,300 SF</b>
	<b>5.8 ACRES</b>

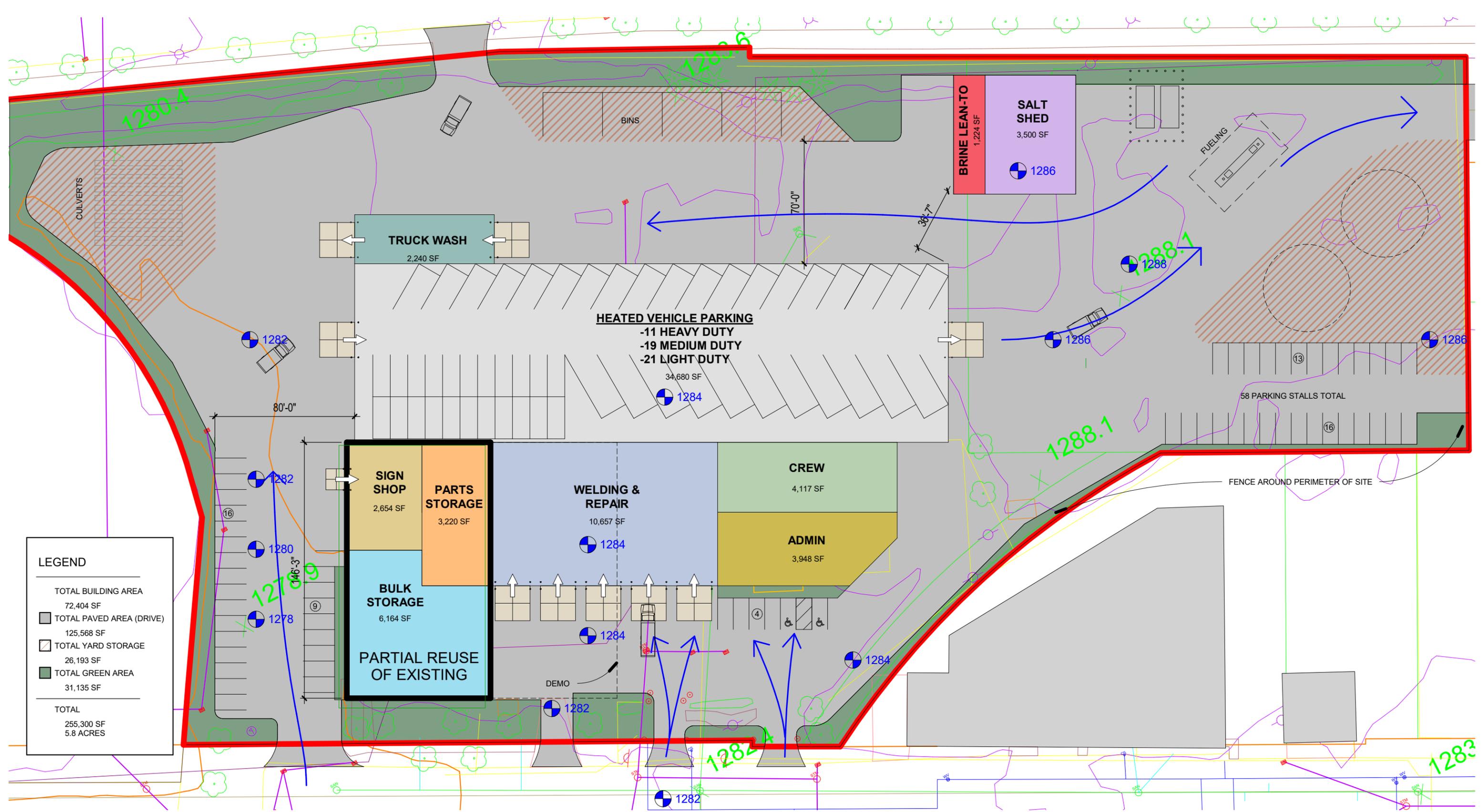
MARSHFIELD CITY DPW

1 OPTION 1 - PHASE 2  
A-111 1" = 50'-0"

PROJECT NORTH



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# Construction Cost Estimate - Option 1

City of Marshfield

Main Garage Precast, Storage Building Pre-Engineered

	SF/Quantity	Cost per SF	Total
<b>Demolition</b>			
Existing Buildings	35,588	12 \$	414,600
	35,588	Total \$	414,600

<b>Remodel</b>			
Main Garage	12,038	105 \$	1,262,184
	12,038	Total \$	1,262,184

<b>Main Garage</b>			
Vehicle Parking	34,680	151 \$	5,252,286
Welding & Repair	10,657	221 \$	2,358,927
Truck Wash	2,240	175 \$	391,440
Crew Quarters	4,117	198 \$	815,372
Administration	3,948	233 \$	919,884
	55,642	Total \$	9,737,909

<b>Site Construction</b>			
Site Work	5.80 \$	152,033 \$	881,789
Fuel Station		allow \$	225,000
Tempered Storage Building	\$	- \$	-
Salt Storage	3,500 \$	82 \$	285,425
Salt Brine Lean-To	1,224 \$	82 \$	99,817
	4,724	Total \$	1,492,031

<b>New Furniture</b>			
Workstations	10 \$	10,000 \$	100,000
Assembly Room	1 \$	35,000 \$	35,000
Safety Training	1 \$	20,000 \$	20,000
Conference Room	1 \$	20,000 \$	20,000
	13	Total \$	175,000

**Total Construction Cost \$ 13,081,724**

## Notes

\*Estimate does not include furnishings, site acquisition costs, moving/relocation expenses, or plan approval and review fees



## **EXPANSION OPTION 2 – PARTIAL RE-USE OF EXISTING, SPLIT PARKING & WELDING**

Option 2 re-uses the newest portion of the existing garage. This saves 12,038 SF to be remodeled to fit the operations of sign shop and bulk storage. A 2,240 SF truck wash and 1,224 SF lean-to salt brine are attached to the existing remodel. This option limits bulk storage to 9,498 SF which is insufficient to meet operational needs targeted at 15,000 SF. All other existing buildings are demolished.

The other major functions are split into two buildings. Heated vehicle parking, crew, and admin areas (53,116 SF) are located at the NE corner of the site. Welding, repair, and parts (13,197 SF) are located at the NW corner of the site. Separating these functions allows for vehicle traffic through the middle of the site. The total new construction is 68,553 SF. Included in new construction are 6 repair bays (4 heavy-duty and 2 light-duty) with a 10 ton overhead crane. There is also a separate welding bay. New crew and admin spaces optimize operations and the sign shop is relocated on site. The main garage has two rows of parking to allow easy access to each vehicle. The form of the garage is oriented to allow for the best possible traffic and circulation.

The site has three access points—Veterans Pkwy, Second St. and First St. The fuel island is accessed off of First St. and a new 3,500 SF salt shed with 1,224 SF salt brine lean-to is accessed off of Second St. There are 50 staff and visitor parking stalls located along the existing building, and the new heated vehicle garage along the admin offices. Site constraints limit yard storage to 10,575 SF.

Estimated cost: \$15,084,068

### **OPTION BENEFITS**

- Partial reuse of existing garage
- Ample staff and visitor parking

### **OPTION DRAWBACKS**

- Garage operations in 3 separate buildings, staff, administration and equipment storage are all separated.
- Truck Wash is too remote from Parking Garage and would have to drive off site to reach Garage.
- Salt Shed location is hard to load into.
- Shop personnel are removed from administrative staff who perform accounting for Shop.
- Vendor access is confusing, they have to run through many parts of the Yard and there is limited loading areas.
- Difficult to fence off fueling, vendor loading and public access

- Public would have to access Garage off of Veterans Pkwy and drive through Yard operations.
- Fueling station cannot be seen directly by admin staff
- Difficult to fence off fueling, vendor loading and public access
- Insufficient bulk storage areas outside
- Narrow site circulation, limited access to Repair Garage
- Tight clearances of the Garage to the site edges will create driving blind-spots for those taking turns around the corners.
- Congested traffic pattern
- Parking scattered on site
- Tight turning radius in some directions
- Congested and cross conflicting traffic pattern
- Insufficient site yard storage
- Limited snow piling storage areas
- 1<sup>st</sup> Street access is limited and there is congestion/back-ups when train crosses to the north.
- Requires construction phasing of work over multiple construction contracts and extended time of construction. If not done in phases, Streets would have to move off site for a year into a rental facility.

#### **RECOMMENDATION**

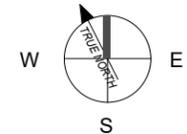
Given the option drawbacks we do not recommend this option. The site marginally meets the needs of drive and yard operations. This option would only work if the city is willing to deal with restricted traffic patterns, less than needed cold and yard storage, and separation of department functions.



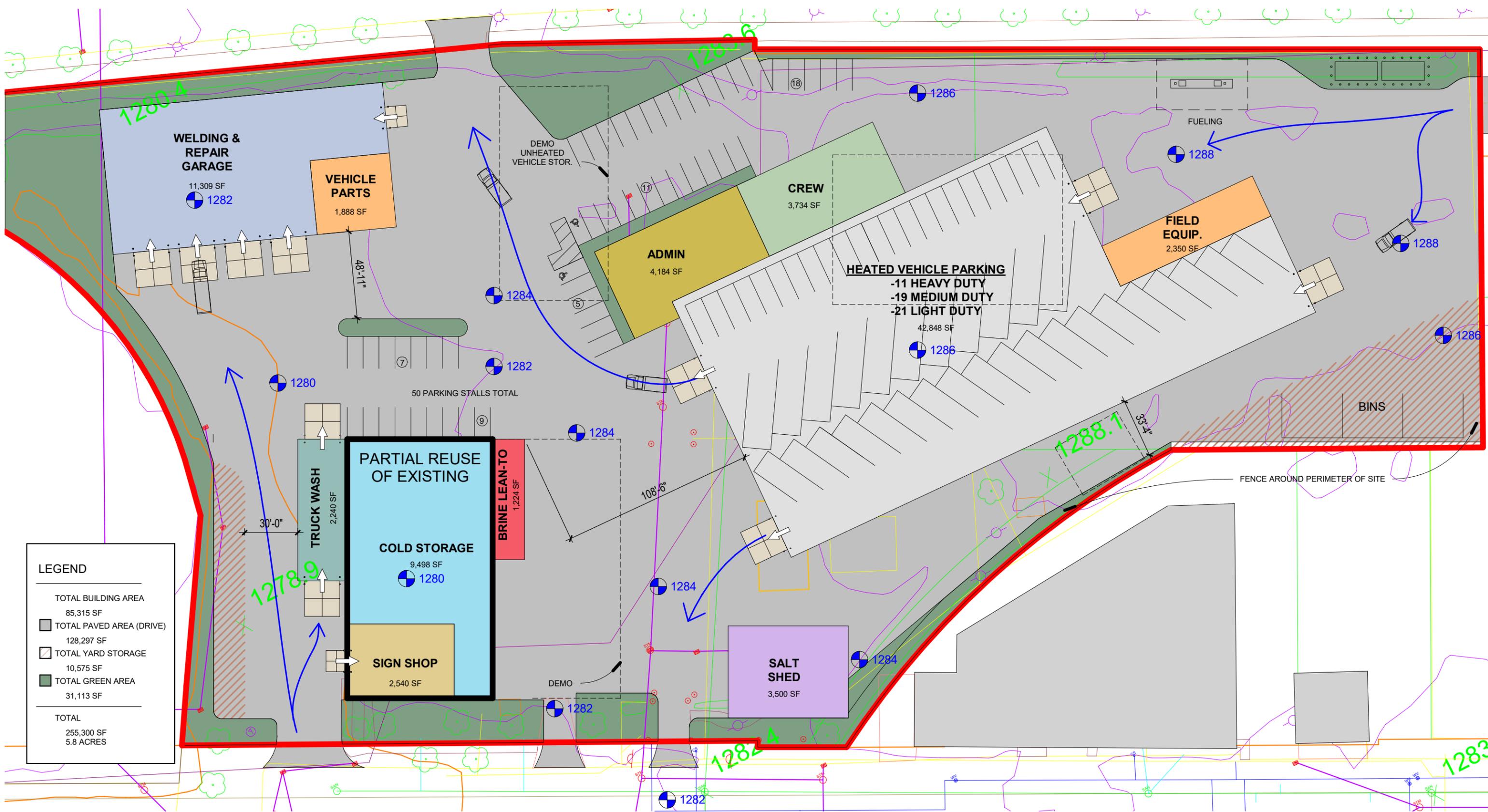
MARSHFIELD CITY DPW

1  
A-120  
OPTION 2 - PHASE 1  
1" = 50'-0"

PROJECT NORTH



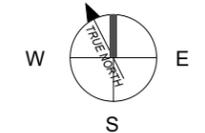
**BARRIENTOS**  
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MARSHFIELD CITY DPW

1 OPTION 2 - PHASE 2  
A-121 1" = 50'-0"

PROJECT NORTH



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## Construction Cost Estimate - Option 2

City of Marshfield

Main Garage Precast, Storage Building Pre-Engineered

	SF/Quantity	Cost per SF	Total
<b>Demolition</b>			
Existing Buildings	35,588	12 \$	414,600
	35,588	Total \$	414,600

<b>Remodel</b>			
Main Garage	12,038	105 \$	1,262,184
	12,038	Total \$	1,262,184

<b>Main Garage</b>			
Vehicle Parking	42,848	151 \$	6,489,330
Welding & Repair	11,309	221 \$	2,503,247
Truck Wash	2,240	175 \$	391,440
Parts Storage	4,238	151 \$	641,845
Crew Quarters	3,734	198 \$	739,519
Administration	4,184	233 \$	974,872
	68,553	Total \$	11,740,253

<b>Site Construction</b>			
Site Work	5.80 \$	152,033 \$	881,789
Fuel Station		allow \$	225,000
Tempered Storage Building	\$	- \$	-
Salt Storage	3,500 \$	82 \$	285,425
Salt Brine Lean-To	1,224 \$	82 \$	99,817
	4,724	Total \$	1,492,031

<b>New Furniture</b>			
Workstations	10 \$	10,000 \$	100,000
Assembly Room	1 \$	35,000 \$	35,000
Safety Training	1 \$	20,000 \$	20,000
Conference Room	1 \$	20,000 \$	20,000
	13	Total \$	175,000

**Total Construction Cost \$ 15,084,068**

### Notes

\*Estimate does not include furnishings, site acquisition costs, moving/relocation expenses, or plan approval and review fees



### **EXPANSION OPTION 3 – ALL NEW CONSTRUCTION WITHIN EXISTING PARCEL**

Option 3 is all new construction. All existing buildings on site are demolished in phases. The main garage is located in a central position on the site to allow for circulation on the exterior of the building. The truck wash and cold storage are at the NE corner of the site. They are angled to allow for the best circulation through and around.

All major functions except truck wash are in a consolidated location for operational efficiency. Included in new construction are 6 repair bays (4 heavy-duty and 2 light-duty) with a 10 ton overhead crane. There is also a separate welding bay. New crew and admin spaces optimize operations and the sign shop is relocated on site. The main garage has two rows of parking to allow easy access to each vehicle. Welding and repair access is off of Second St. with other traffic largely using Veterans Pkwy or First St.

The fuel island is accessed off of First St. in the NE corner of the site and a new 3,500 SF salt shed with 1,224 SF salt brine lean-to is in the NW corner of the site. There are 45 staff and visitor parking stalls located along the west side of the main garage and across from the sign shop. Site constraints limit yard storage to 9,530 SF. Two versions of this option were developed.

**Option 3A** Main Garage is 72,016 SF

Estimated cost: \$15,856,008

**Option 3B** Main Garage is 72,887 SF. This is an 871 SF increase to include two sets of stairs and an elevator core for a second floor expansion above admin and crew to house future engineering offices.

Estimated cost: \$16,041,896

#### **OPTION BENEFITS**

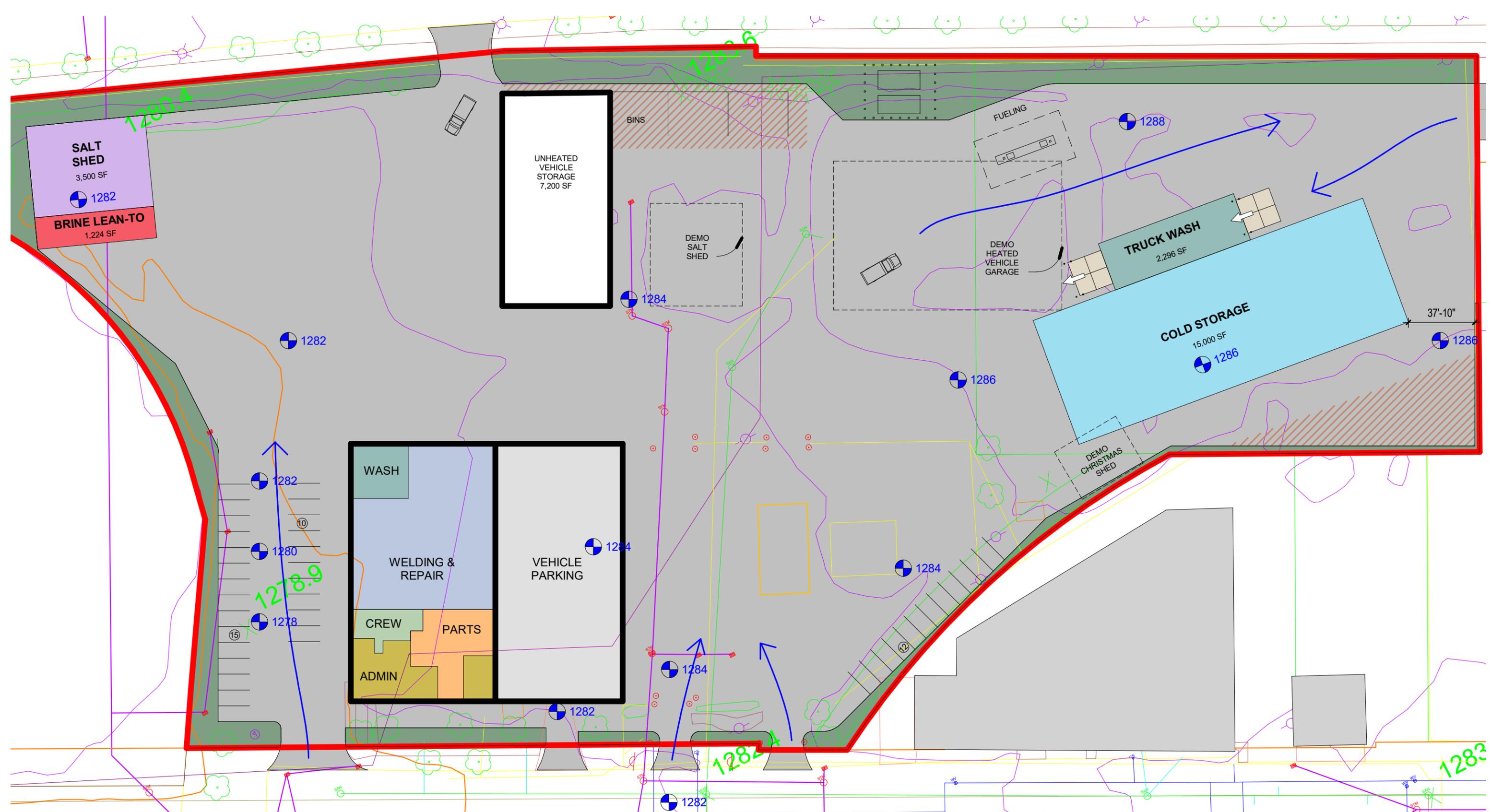
- All new consolidated garage with shop functions under one roof. Staff can work together readily and access their equipment.
- Adequate parking for staff and visitors
- Adequate bulk storage space
- Adequate yard storage
- Clear and safe traffic patterns for vendors and visitors
- Primary access off of 2<sup>nd</sup> Street with less dependence on 1<sup>st</sup> Street access point.
- Ability to fence off yard and fueling station.

#### **OPTION DRAWBACKS**

- Large building footprints take up yard and driving circulation space rendering site parameters below optimal.
- Truck wash separated from heated garage
- Fueling station cannot be seen directly by admin staff
- Narrow site circulation, tight turning radius in some directions.
- Tight driving clearance between Sign Shop and staff parking. Potential for truck vs. car collision as cars back out.
- Tight clearances of the Garage to the site edges will create driving blind-spots for those taking turns around the corners.
- Congested traffic pattern
- Lack of yard storage, plus lack of snow storage
- Salt Shed location is difficult to load into.
- Difficult to fence off Yard for fueling, loading and public visitors.
- Heavy reliance on 1<sup>st</sup> Street access which can back up with train crossings. Gateway is out of view from staff minimizing security.
- The large and tall Repair Garage will face 2<sup>nd</sup> Street with many heavy trucks exiting onto the street, and the perimeter will have a chain link security fence.
- Requires construction phasing of work over multiple construction contracts and extended time of construction. If not done in phases, Streets would have to move off site for a year into a rental facility.

#### **RECOMMENDATION**

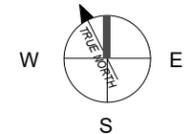
Given the option drawbacks this is not a preferred option. The site marginally meets operation needs. Of the options that re-use the same parcel, this option is the recommended option because it is able to house all targeted SF. Option 3B also allows for future expansion to the admin and crew area. This option would only work if the city is willing to deal with restricted traffic patterns and less than needed yard storage.



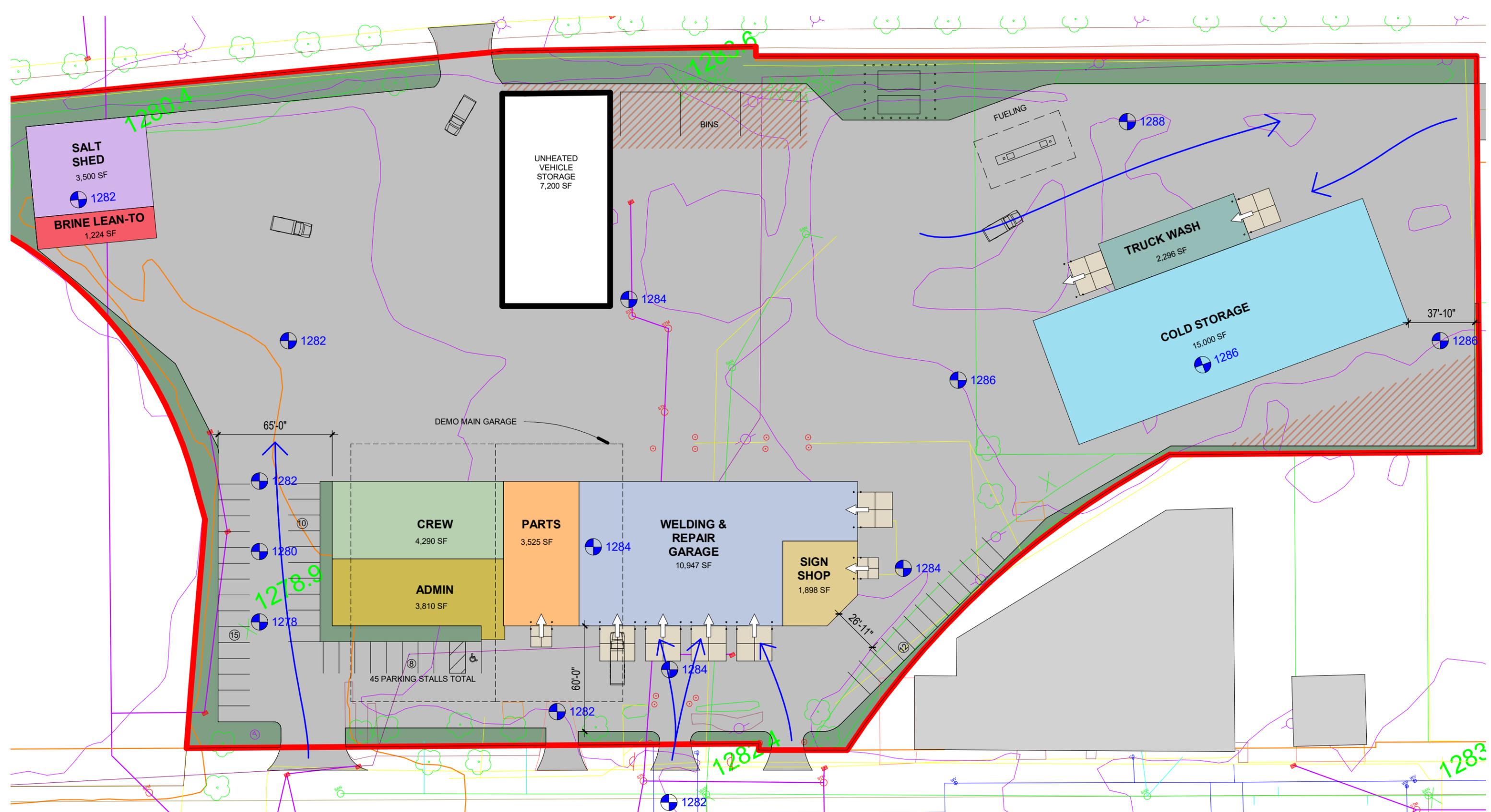
MARSHFIELD CITY DPW

1 OPTION 3 - PHASE 1  
 A-130 1" = 50'-0"

PROJECT NORTH



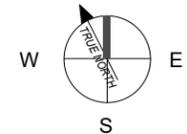
**BARRIENTOS**  
 design & consulting



MARSHFIELD CITY DPW

1 OPTION 3 - PHASE 2  
 A-131 1" = 50'-0"

PROJECT NORTH



**BARRIENTOS**  
 design & consulting

**SALT SHED**  
3,500 SF  
1282

**BRINE LEAN-TO**  
1,224 SF

**HEATED VEHICLE PARKING**  
-11 HEAVY DUTY  
-19 MEDIUM DUTY  
-21 LIGHT DUTY  
45,250 SF  
1284

**FUELING**

**TRUCK WASH**  
2,296 SF

**COLD STORAGE**  
15,000 SF  
1286

**CREW**  
4,290 SF

**ADMIN**  
3,810 SF

**PARTS**  
3,525 SF

**WELDING & REPAIR GARAGE**  
10,947 SF

**SIGN SHOP**  
1,898 SF

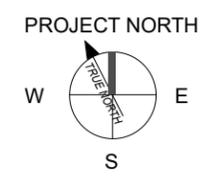
45 PARKING STALLS TOTAL

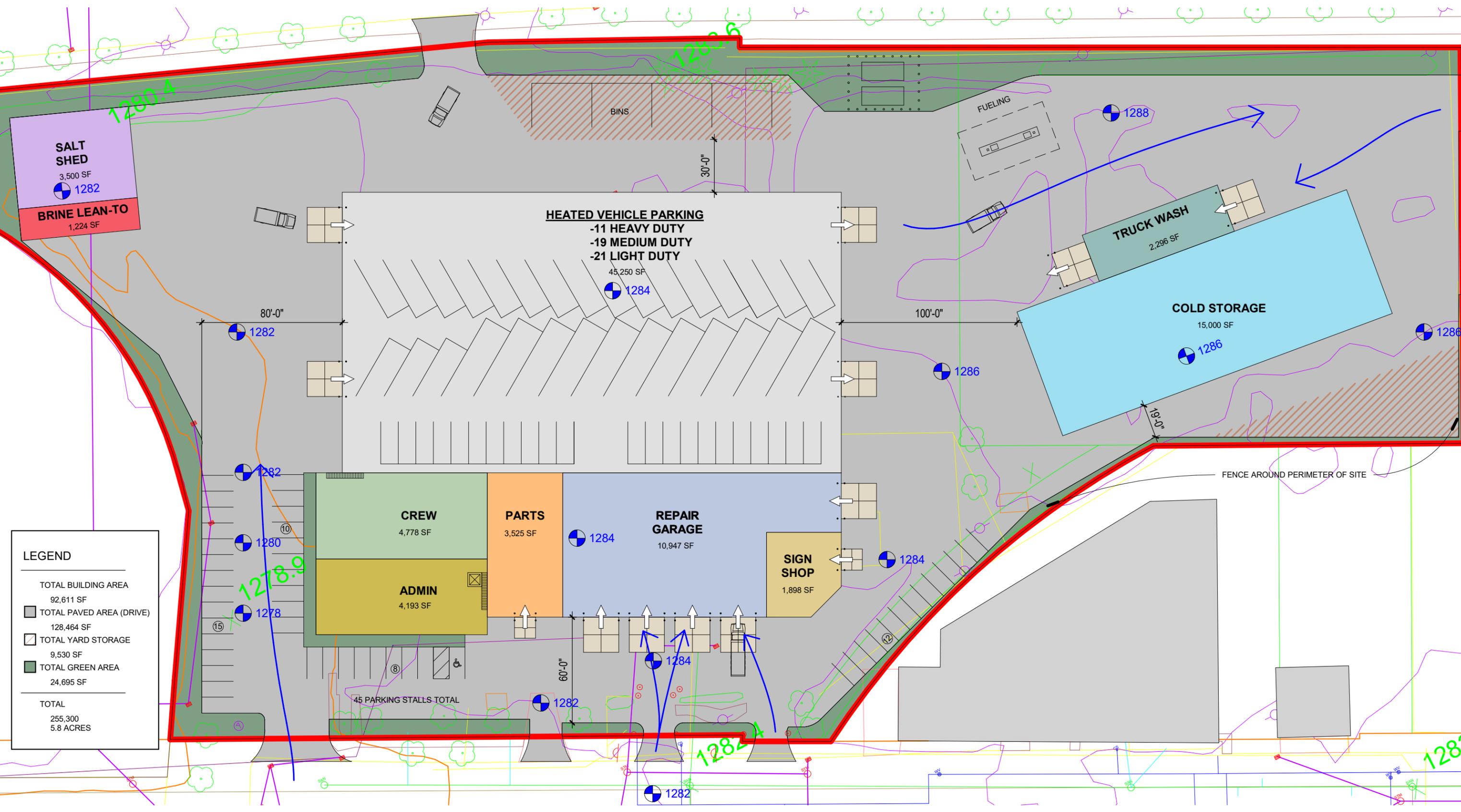
**LEGEND**

TOTAL BUILDING AREA	91,740 SF
TOTAL PAVED AREA (DRIVE)	129,335 SF
TOTAL YARD STORAGE	9,530 SF
TOTAL GREEN AREA	24,695 SF
<b>TOTAL</b>	<b>255,300</b>
	<b>5.8 ACRES</b>

MARSHFIELD CITY DPW

1 OPTION 3A - PHASE 3  
A-132 1" = 50'-0"



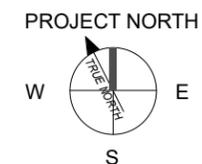


**LEGEND**

TOTAL BUILDING AREA	92,611 SF
TOTAL PAVED AREA (DRIVE)	128,464 SF
TOTAL YARD STORAGE	9,530 SF
TOTAL GREEN AREA	24,695 SF
<b>TOTAL</b>	<b>255,300</b>
	<b>5.8 ACRES</b>

MARSHFIELD CITY DPW

1 OPTION 3B - PHASE 3  
 A-133 1" = 50'-0"



## Construction Cost Estimate - Option 3A

City of Marshfield

Main Garage Precast, Storage Building Pre-Engineered

	SF/Quantity	Cost per SF	Total
<b>Demolition</b>			
Existing Buildings	47,626	12 \$	554,843
	47,626	Total \$	554,843

<b>Main Garage</b>			
Vehicle Parking	45,250	151 \$	6,853,113
Welding & Repair	10,947	221 \$	2,423,118
Sign Shop	1,898	151 \$	287,452
Truck Wash	2,296	175 \$	401,226
Parts Storage	3,525	151 \$	533,861
Crew Quarters	4,290	198 \$	849,635
Administration	3,810	233 \$	887,730
	72,016	Total \$	12,236,135

<b>Site Construction</b>			
Site Work	5.80 \$	152,033 \$	881,789
Fuel Station		allow \$	225,000
Tempered Storage Building	15,000 \$	93 \$	1,398,000
Salt Storage	3,500 \$	82 \$	285,425
Salt Brine Lean-To	1,224 \$	82 \$	99,817
	19,724	Total \$	2,890,031

<b>New Furniture</b>			
Workstations	10 \$	10,000 \$	100,000
Assembly Room	1 \$	35,000 \$	35,000
Safety Training	1 \$	20,000 \$	20,000
Conference Room	1 \$	20,000 \$	20,000
	13	Total \$	175,000

**Total Construction Cost \$ 15,856,008**

### Notes

\*Estimate does not include furnishings, site acquisition costs, moving/relocation expenses, or plan approval and review fees

## Construction Cost Estimate - Option 3B

City of Marshfield

Main Garage Precast, Storage Building Pre-Engineered

	SF/Quantity	Cost per SF	Total
<b>Demolition</b>			
Existing Buildings	47,626	12 \$	554,843
	47,626	Total \$	554,843

<b>Main Garage</b>			
Vehicle Parking	45,250	151 \$	6,853,113
Welding & Repair	10,947	221 \$	2,423,118
Sign Shop	1,898	151 \$	287,452
Truck Wash	2,296	175 \$	401,226
Parts Storage	3,525	151 \$	533,861
Crew Quarters	4,778	198 \$	946,283
Administration	4,193	233 \$	976,969
	72,887	Total \$	12,422,022

<b>Site Construction</b>			
Site Work	5.80 \$	152,033 \$	881,789
Fuel Station		allow \$	225,000
Tempered Storage Building	15,000 \$	93 \$	1,398,000
Salt Storage	3,500 \$	82 \$	285,425
Salt Brine Lean-To	1,224 \$	82 \$	99,817
	19,724	Total \$	2,890,031

<b>New Furniture</b>			
Workstations	10 \$	10,000 \$	100,000
Assembly Room	1 \$	35,000 \$	35,000
Safety Training	1 \$	20,000 \$	20,000
Conference Room	1 \$	20,000 \$	20,000
	13	Total \$	175,000

**Total Construction Cost \$ 16,041,896**

### Notes

\*Estimate does not include furnishings, site acquisition costs, moving/relocation expenses, or plan approval and review fees

## **EXPANSION OPTION 4 – ALL NEW CONSTRUCTION WITH ADJACENT PARCEL**

Option 4 involves acquiring the parcel near the SE corner of the site. The benefit to this is that it squares off the site and adds an additional acre. All existing buildings are demolished. The main garage is located in a central position on the site to allow for circulation on the exterior of the building.

All major functions are in a consolidated location for operational efficiency. The total new construction is 65 SF. Included in new construction are 6 repair bays (4 heavy-duty and 2 light-duty) with a 10 ton overhead crane. There is also a separate welding bay. New crew and admin spaces optimize operations and the sign shop is relocated on site. The main garage features a row of double stacked light-duty parking to eliminate SF imprint and allow for better traffic and circulation. Welding and repair access is off of Second St. with other access drives at Veterans Pkwy and First St.

The fuel island is accessed off of Second St. and a new 3,500 SF salt shed with 1,224 SF salt brine lean-to is located at the NW corner of the site. There are 54 staff and visitor parking stalls located along the west side of the main garage, along the admin offices. Site expansion allows yard storage to increase from the existing 36,720 SF up to 42,765 SF.

Estimated cost: \$15,109,616 (not including site acquisition cost)

### **OPTION BENEFITS**

- Consolidated garage, all assigned staff, parts, plow truck and administration are together
- New, modern and efficient repair garage
- Parking Garage with sufficient parking stalls and sizing
- Fueling station is in a good location directly off of 2<sup>nd</sup> Street with the ability to fence in the station
- Truck wash has good access and fits traffic flow
- Public access point is clearly demarcated, (similar to current situation) and visitors can be contained in parking lot
- Emphasizes main access off of 2<sup>nd</sup> Street and staff can visually see visitors and incoming traffic
- Vendors have clear and short path to their loading areas and they don't need to meander through the yard.
- Enough staff and visitor parking
- Adequate yard storage and portions can be fenced in.
- Increased site circulation, adequate turning radius
- Pulled away from Second St to minimize bulk of industrial building character

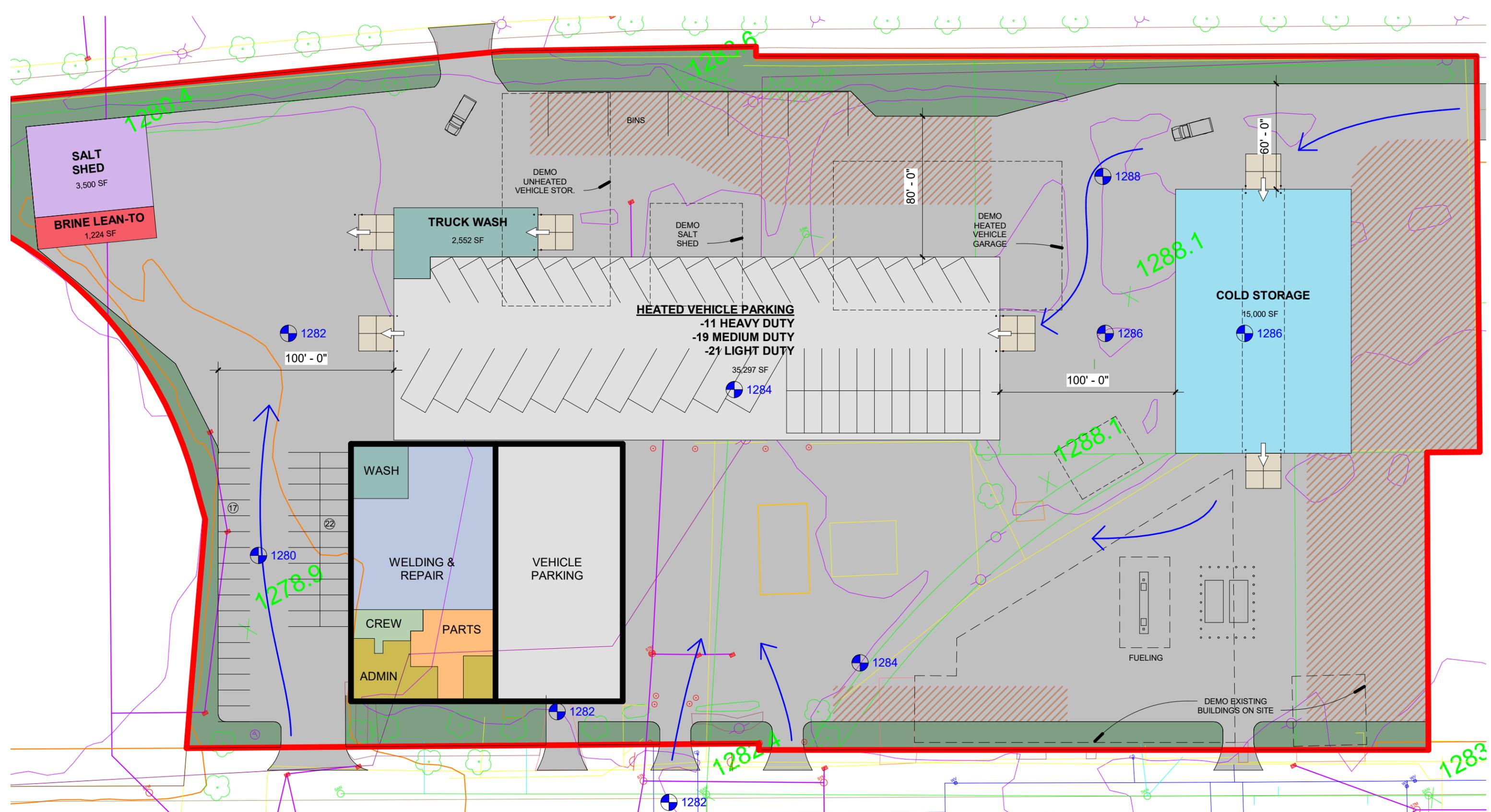
- Cold Bulk Storage building has good vehicle access and clearance from Main Garage traffic
- Better levels of onsite snow storage

#### **OPTION DRAWBACKS**

- Doubled up light-duty parking in one portion of Parking Garage. Will require trucks to back-out in sequence, or some will be blocked for a portion of time.
- Salt Shed is in a corner and is difficult for semi loaders to reach.
- Still some reliance on 1<sup>st</sup> Street for access, but mainly for cold storage parts.
- The large and tall Repair Garage will face 2<sup>nd</sup> Street with many heavy trucks exiting onto the street, and the perimeter will have a chain link security fence.
- Requires construction phasing of work over multiple construction contracts and extended time of construction. If not done in phases, Streets would have to move off site for a year into a rental facility.
- Requires purchase of private productive property for use as a tax-exempt municipal facility.
- Redevelopment and enlargement of an industrial-like facility within the CBD may not be compatible with urban vision and City Master Plan.

#### **RECOMMENDATION**

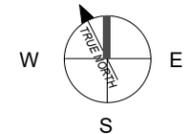
Option 4 is the recommended option. This option meets all the SF and storage needs of the Streets Division. The largest drawback to this option is the proximity to Main St. The functions of the Street Department are not compatible with downtown development. However, if the city wishes to stay at the Second St. location, the department benefits from a central location.



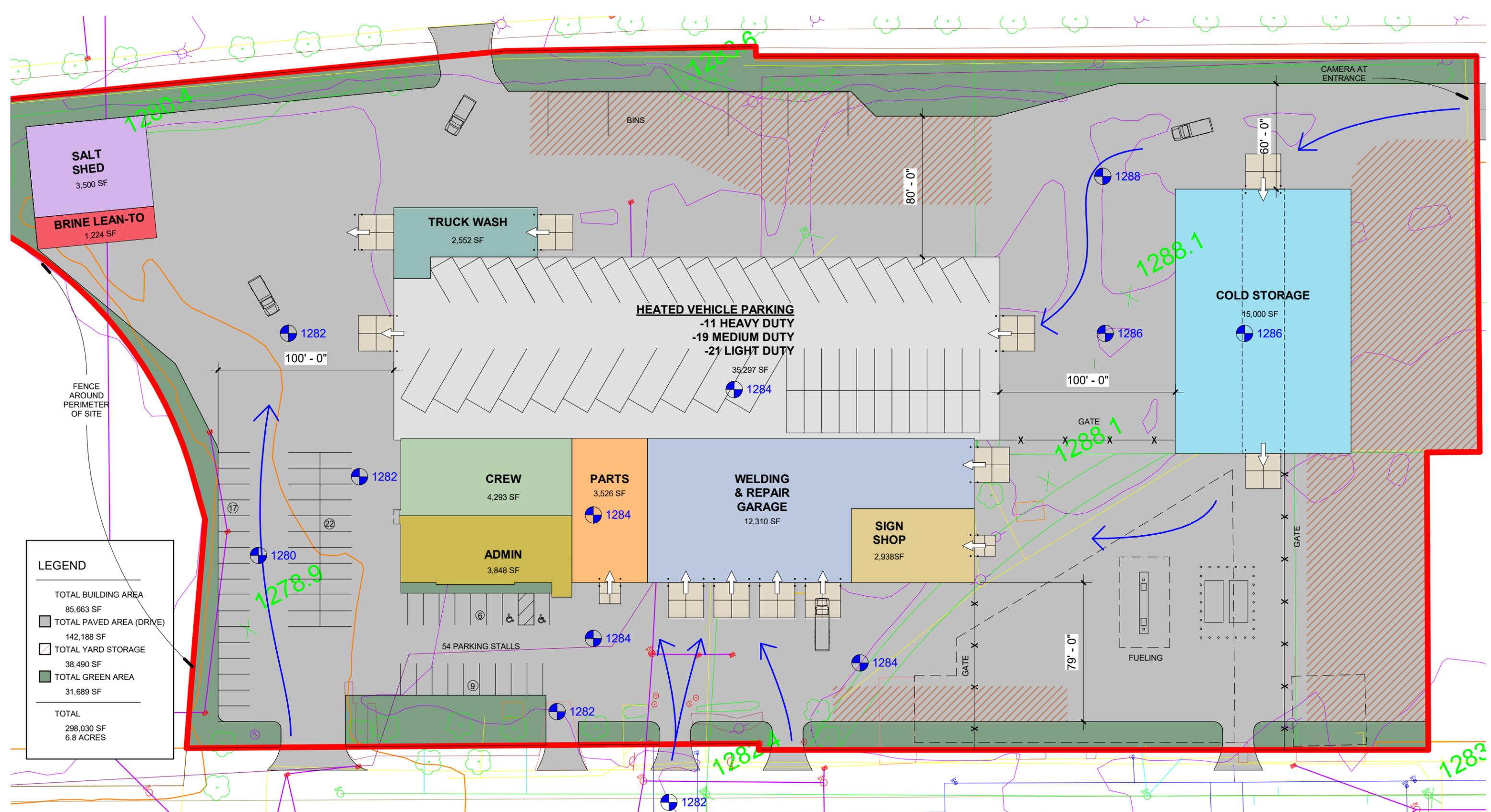
MARSHFIELD CITY DPW

1 OPTION 4 - PHASE 1  
 A-140 1" = 50'-0"

PROJECT NORTH



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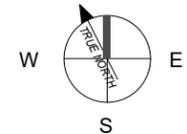
**LEGEND**

TOTAL BUILDING AREA	85,663 SF
TOTAL PAVED AREA (DRIVE)	142,188 SF
TOTAL YARD STORAGE	38,490 SF
TOTAL GREEN AREA	31,689 SF
<b>TOTAL</b>	<b>298,030 SF</b>
	<b>6.8 ACRES</b>

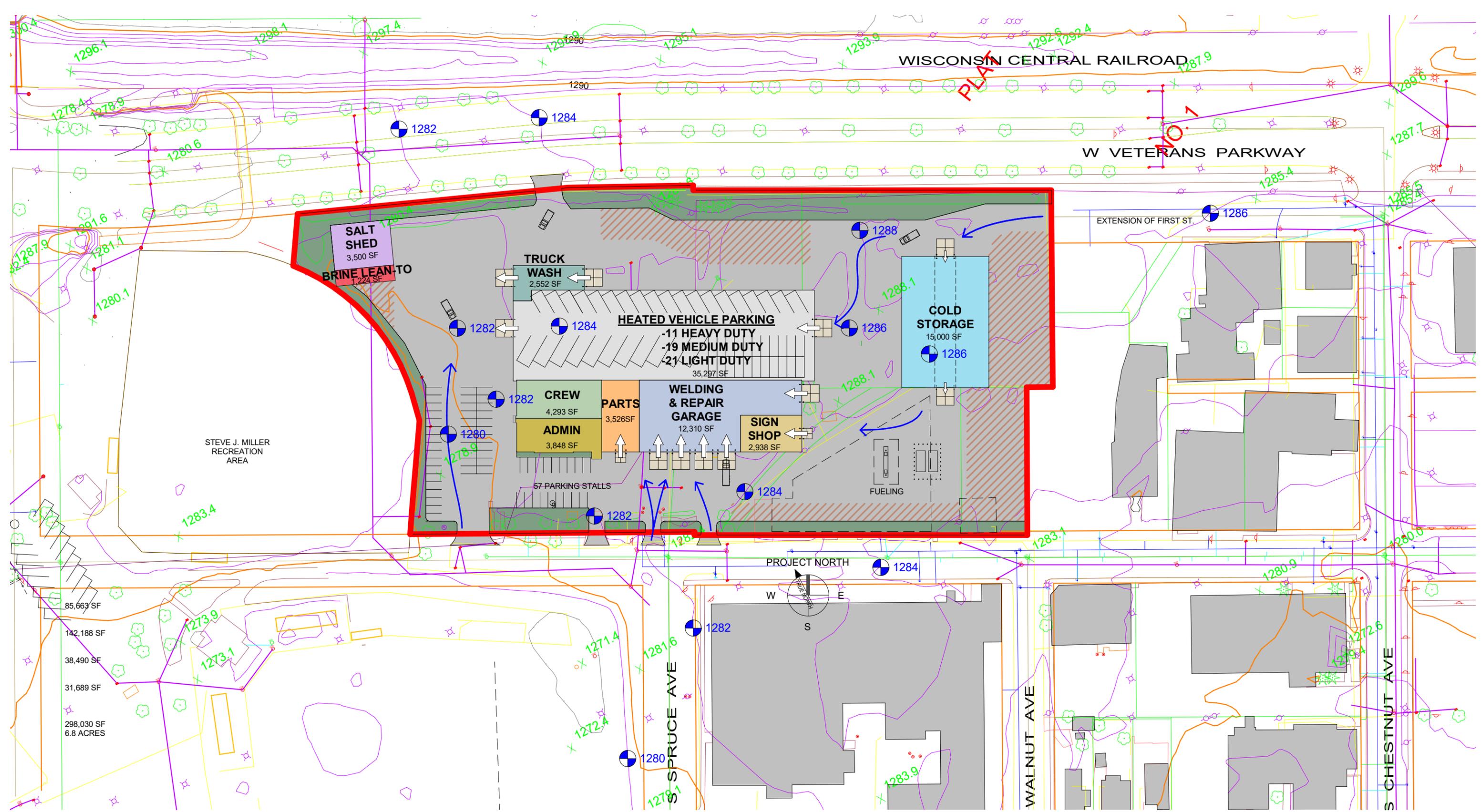
MARSHFIELD CITY DPW

1  
A-141  
OPTION 4 - SITE PLAN  
1" = 50'-0"

PROJECT NORTH

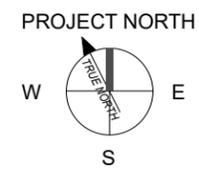


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MARSHFIELD CITY DPW

1 OPTION 4 - SITE PLAN EXTENDED  
 A-142 1" = 100'-0"



**BARRIENTOS**  
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SF SUMMARY -

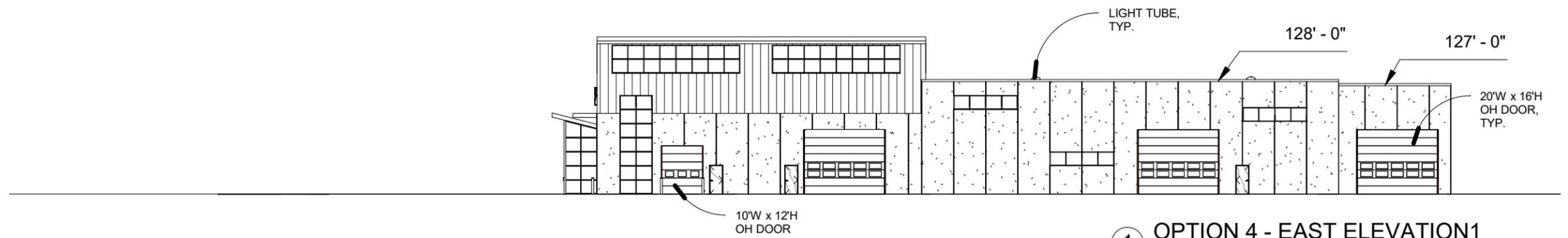
- HEATED VEHICLE GARAGE  
35,297 SF
- TRUCK WASH  
2,552 SF
- CREW  
4,293 SF
- ADMIN  
3,848 SF
- PARTS  
3,526 SF
- WELDING & REPAIR  
12,310 SF
- SIGN SHOP  
2,938 SF
- MEZZANINE  
1,175 SF

TOTAL: 65,939 SF

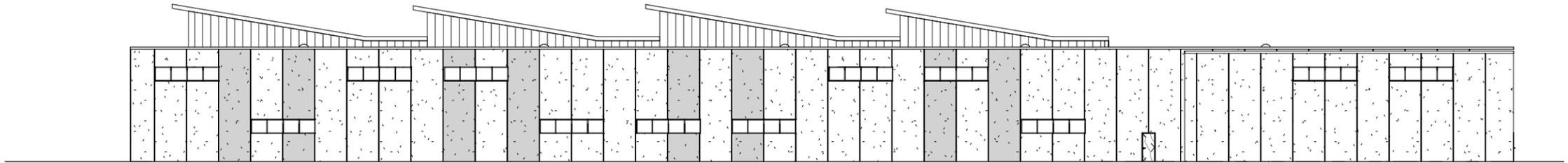


MARSHFIELD CITY DPW

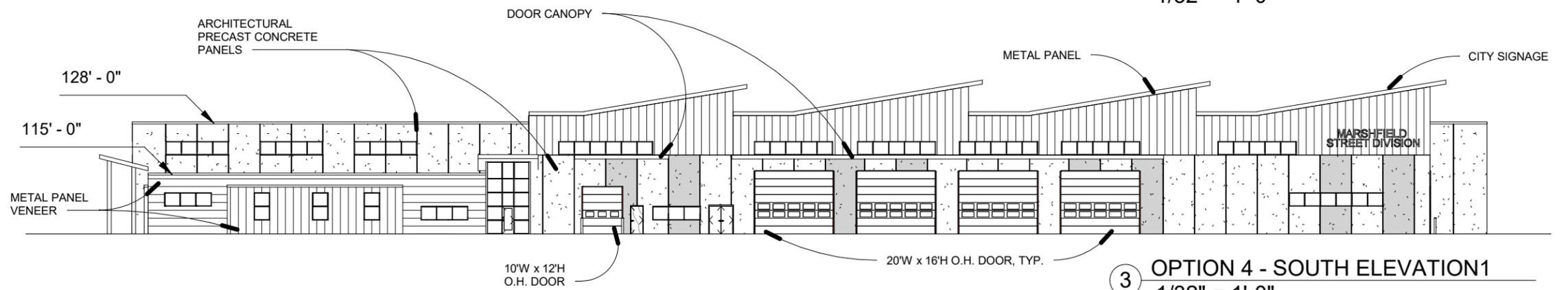
① OPTION 4 - FLOOR PLAN  
1/32" = 1'-0"



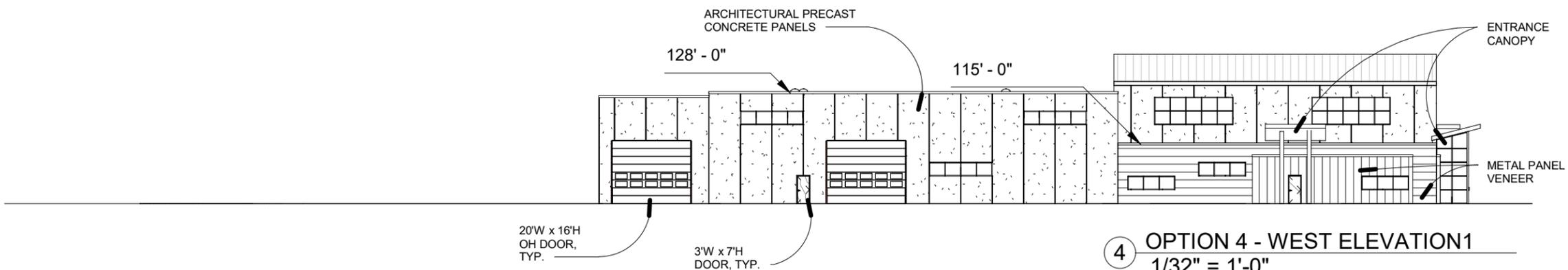
1 OPTION 4 - EAST ELEVATION1  
1/32" = 1'-0"



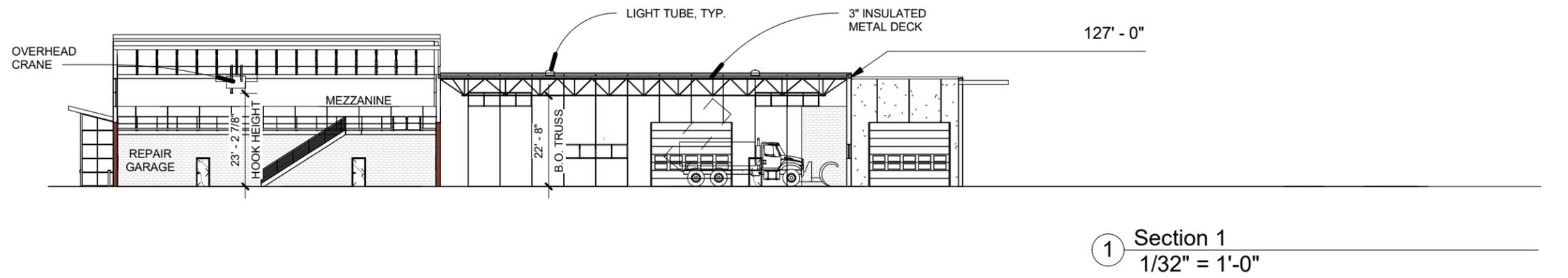
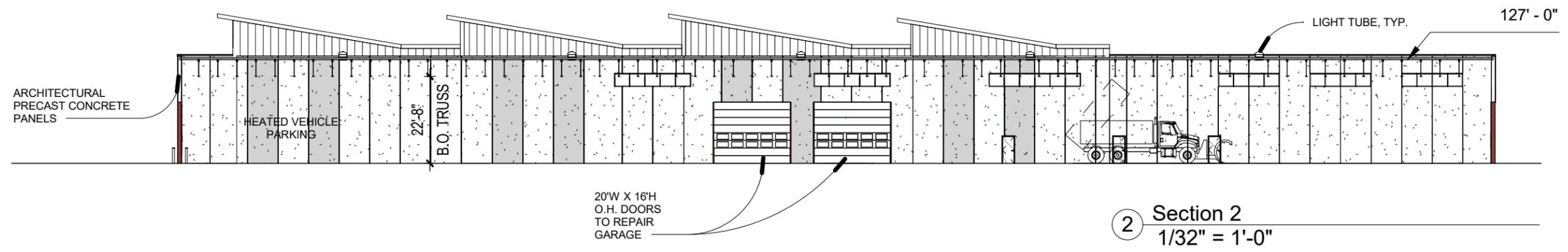
2 OPTION 4 - NORTH ELEVATION1  
1/32" = 1'-0"



3 OPTION 4 - SOUTH ELEVATION1  
1/32" = 1'-0"



4 OPTION 4 - WEST ELEVATION1  
1/32" = 1'-0"



## Construction Cost Estimate - Option 4

City of Marshfield

Main Garage Precast, Storage Building Pre-Engineered

	SF/Quantity	Cost per SF	Total
<b>Demolition</b>			
Existing Buildings	47,626	12 \$	554,843
	47,626	Total \$	554,843

<b>Main Garage</b>			
Vehicle Parking	35,927	151 \$	5,441,144
Welding & Repair	12,310	221 \$	2,724,819
Sign Shop	2,938	151 \$	444,960
Truck Wash	2,552	175 \$	445,962
Parts Storage	3,526	151 \$	534,013
Crew Quarters	4,293	198 \$	850,229
Administration	3,848	233 \$	896,584
	65,394	Total \$	11,337,710

<b>Site Construction</b>			
Site Work	6.80 \$	152,033 \$	1,033,821
Fuel Station		allow \$	225,000
Tempered Storage Building	15,000 \$	93 \$	1,398,000
Salt Storage	3,500 \$	82 \$	285,425
Salt Brine Lean-To	1,224 \$	82 \$	99,817
	19,724	Total \$	3,042,063

<b>New Furniture</b>			
Workstations	10 \$	10,000 \$	100,000
Assembly Room	1 \$	35,000 \$	35,000
Safety Training	1 \$	20,000 \$	20,000
Conference Room	1 \$	20,000 \$	20,000
	13	Total \$	175,000

**Total Construction Cost \$ 15,109,616**

### Notes

\*Estimate does not include furnishings, site acquisition costs, moving/relocation expenses, or plan approval and review fees



# SITE SELECTION MATRIX

## & NEXT STEPS

The following Selection Criteria Matrix provides a comparison for each of the different site options.

The ratings for each of the criteria are scored using a five-point rating system with a rating of five being the most beneficial to the City.

Each selection criteria receives a Weighting Factor to highlight the importance of each in the selection process. More important criteria receive a higher weighting factor. Criteria of less significance to the City, or that can be more easily mitigated during the design or construction phase, receive a lower Weighting Factor.

Based on the selection criteria, Option 4 should be further explored if the City chooses to remain at the current site.

### RECOMMENDED NEXT STEPS

We recommend the City further evaluate the costs and developments between Option 4 and developing on a new site, the Optimal Plan. Key factors of consideration will be:

1. Sufficient square footage of building space for Garage operations
2. Sufficient Yard storage area along with parking for vehicles
3. Adequate and safe truck circulation paths that allow for turning, backing up, loading and staging.
4. Compatible land use develop with the City's master plan or urban vision.
5. Costs of purchasing land downtown versus land in outer portions.
6. Account for other non-construction costs such as, land purchases, relocation expenses, temporary quarters, phasing construction to allow ongoing operations, building demolition, and hazardous materials clean-up.

The above analysis can be accomplished with a preliminary design effort that performs the following:

1. Selecting one Option for staying at 2<sup>nd</sup> Street and one new location and advancing these to a Preliminary Design level.
2. The building design for the buildings onsite would be advanced to a preliminary design level. Each renovated and new building

- design would include floor plans, elevations, sections, initial building engineering and identify utility needs.
3. Develop detail construction phasing plans and identify the sequence of demolition, the extent of each Phase's work, the operational shifts with each Phase, and the costs for demolition, relocation, temporary quarters and the extension of construction time for stretching work out over multiple construction packages.
  4. For site engineering develop concept plans for grading, paving, stormwater management, utilities along with initial permitting assessment.
  5. Review engineering aspects of each Option including traffic impact, curb-cuts, utility upgrades, stormwater permits and any zoning ordinance impacts.
  6. Procure investigations for soils exploration, Alta survey, and environmental remediation assessments. Identify any extenuating conditions for soils, demolition, clean-up and foundations issues that may affect costs, permitting and layout issues.
  7. Meet with targeted property owners for an initial indication of willingness to sell and at what price.
  8. Meet with City Planning and review zoning ordinances, land-use and community development compatibility of proposed Garage plans.
  9. Developed detailed cost estimates that capture construction and soft costs.
  10. Outline a development schedule of how long the permitting, design and construction packages would take.
  11. Present in detail to the City the pro's and con's of each Option.

We estimate the Preliminary Design effort for both Options' analysis to take place over five months.

## Selection Criteria Matrix

City of Marshfield

	Criteria Weighting Factor	Expansion Option 1		Expansion Option 2		Expansion Option 3		Expansion Option 4		Optimal Option	
		Non-Weighted Rating	Weighted Rating								
Criteria 1 <b>Traffic and Circulation</b>	1.4	2.0	2.8	2.0	2.8	3.0	4.2	4.0	5.6	5.0	7.0
Criteria 2 <b>Sufficient Cold Storage</b>	1.3	1.0	1.3	2.0	2.6	5.0	6.5	5.0	6.5	5.0	6.5
Criteria 3 <b>Sufficient Yard Storage</b>	1.2	2.0	2.4	1.0	1.2	1.0	1.2	3.0	3.6	5.0	6.0
Criteria 4 <b>Option Costs</b>	1.3	4.0	5.2	3.0	3.9	2.0	2.6	3.0	3.9	2.0	2.6
Criteria 5 <b>Operation Efficiency</b>	1.0	3.0	3.0	1.0	1.0	3.0	3.0	4.0	4.0	5.0	5.0
Criteria 6 <b>Room for Expansion</b>	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	4.0	4.0
Criteria 7 <b>Land Use/Urban Design Compatibility</b>	1.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	5.0
<b>Total Ranking</b>		<b>14.0</b>	<b>16.7</b>	<b>11.0</b>	<b>13.5</b>	<b>16.0</b>	<b>19.5</b>	<b>22.0</b>	<b>26.6</b>	<b>31.0</b>	<b>36.1</b>

## Option Comparison Chart

City of Marshfield

	Expansion Option 1	Expansion Option 2	Expansion Option 3A	Expansion Option 3B	Expansion Option 4	Recommended
Total Building Area	72,404 SF	85,315 SF	91,740 SF	92,611 SF	85,663 SF	96,045 SF
Remodeled SF	12,038 SF	12,038 SF	N/A	N/A	N/A	N/A
New Construction SF (Main Garage)	55,642 SF	68,553 SF	72,016 SF	72,887 SF	65,939 SF	74,639 SF
Heated Parking Totals	51 Stalls	51 Stalls	51 Stalls	51 Stalls	51 Stalls	51 Stalls
Staff/Visitor Parking Totals	58 Stalls	50 Stalls	45 Stalls	45 Stalls	54 Stalls	53 Stalls
Total Bulk Storage	6,164 SF	9,498 SF	15,000 SF	15,000 SF	15,000 SF	15,000 SF
Total Paved Area (Drive)	125,568 SF	128,297 SF	129,355 SF	128,464 SF	142,188 SF	N/A
Total Yard Storage	26,193 SF	10,575 SF	9,530 SF	9,530 SF	38,490 SF	70,625 SF
Total Green Area	31,135 SF	31,113 SF	24,695 SF	24,695 SF	31,689 SF	N/A
Site Acres	5.8 Acres	5.8 Acres	5.8 Acres	5.8 Acres	6.8 Acres	10 Acres
Estimated Cost	\$ 13,081,724	\$ 15,084,068	\$ 15,856,008	\$ 16,041,896	\$ 15,109,616	N/A

# SECTION 6

## OPTIMAL OPTION

### INTRODUCTION

Using the square footage established in the space needs assessment and taking into consideration the limitations of the current site, Barrientos design developed an optimal floor plan and site plan that best supports Street Division operations. This exercise revealed an optimal site size of 10 acres. Additional site acreage allows for the building SF, yard SF, and site circulation to meet the needs of the Marshfield Street Division. These factors are essential to the design of an efficient garage. The optimal location is either an industrial park or heavy commercial area.

### OPTIMAL OPTION SUMMARY

The optimal garage is all new construction. The main garage is located at the front of the site and has space for circulation around it. The cold storage is located behind the main garage and there is room for future expansion.

All major functions are in a consolidated location for operational efficiency. The total new construction is 73,875 SF. Included in new construction are 6 repair bays (4 heavy-duty and 2 light-duty) with a 10 ton overhead crane. There is also a separate welding bay. New crew and admin spaces optimize operations. The admin space is located at the corner of the site to benefit architectural features and allow staff visibility to the traffic coming in and out of the site for security and management. Additionally, the parts vendors can easily find their entrance. In optimal operations, the sign shop is also located on site. The main garage has two rows of parking to allow easy access to each vehicle. The second drive aisle is on an exterior wall in anticipation of future expansion. The site can be accessed from two streets off of a 90 degree angle. This benefits traffic control and circulation.

The fuel island is accessed off the street, separated from the rest of the yard. A 3,500 SF salt shed is in the NE corner of the site. The 1,224 SF salt brine lean-to is at the NE corner of the main garage. There are 56 staff and visitor parking stalls located along the west side of the main garage at the admin and crew areas. The optimal site has a 70,625 SF yard.

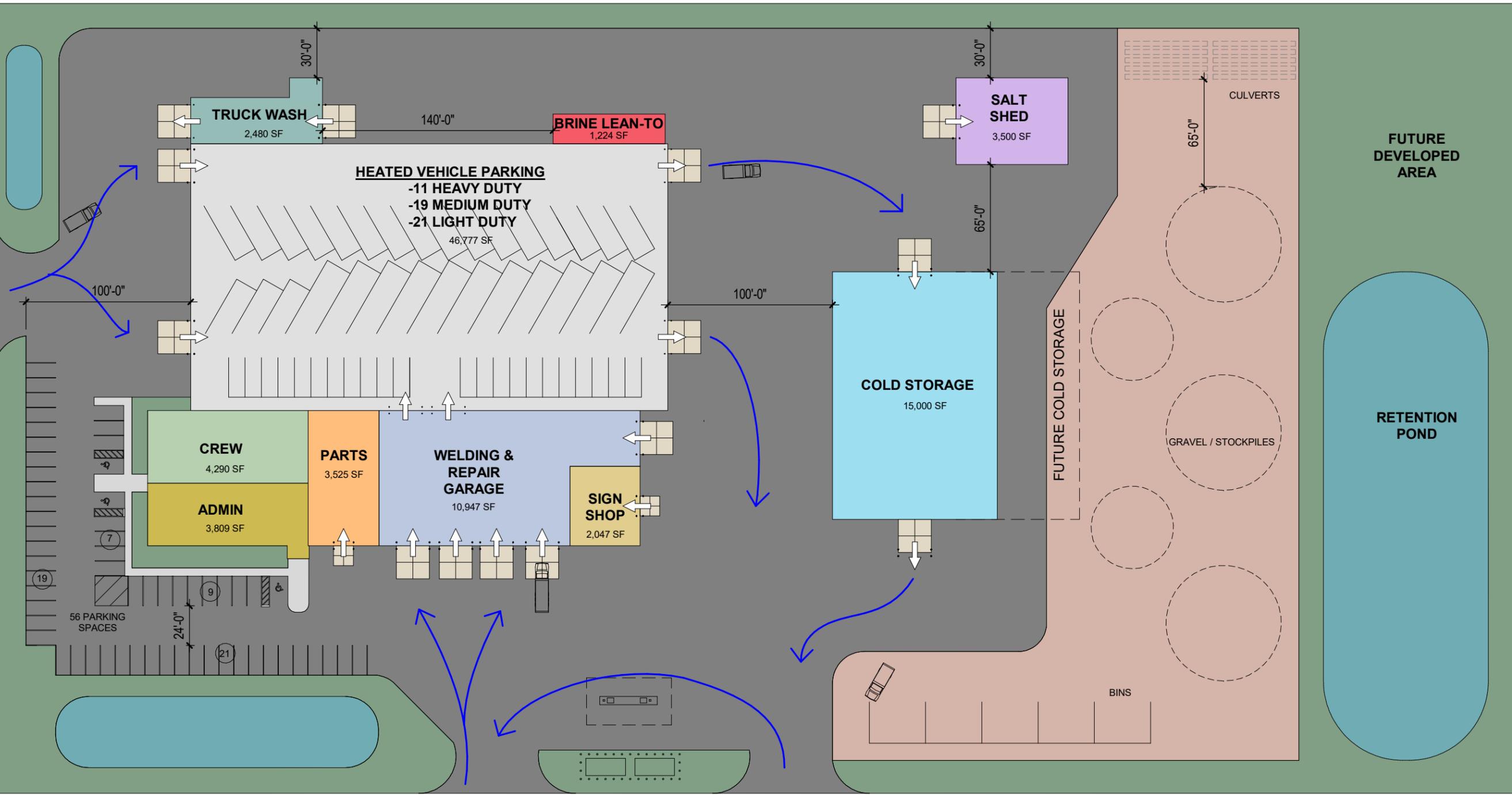
Estimated cost: \$16,246,738 (not including site acquisition cost)

## **OPTIMAL SITE INFRASTRUCTURE**

Optimal site infrastructure includes the following: roadway strength and capacity to handle heavy trucks, water volume and pressure to sprinkler the building and wash trucks, sewer capacity to handle vehicle wash activities, stormwater line out and area to create a detention pond, gas lines for heating and three phase power for repair equipment.

## **SECTION CONTENTS**

1. Optimal Site Plan
2. Optimal Floor Plan
3. Cost Estimate



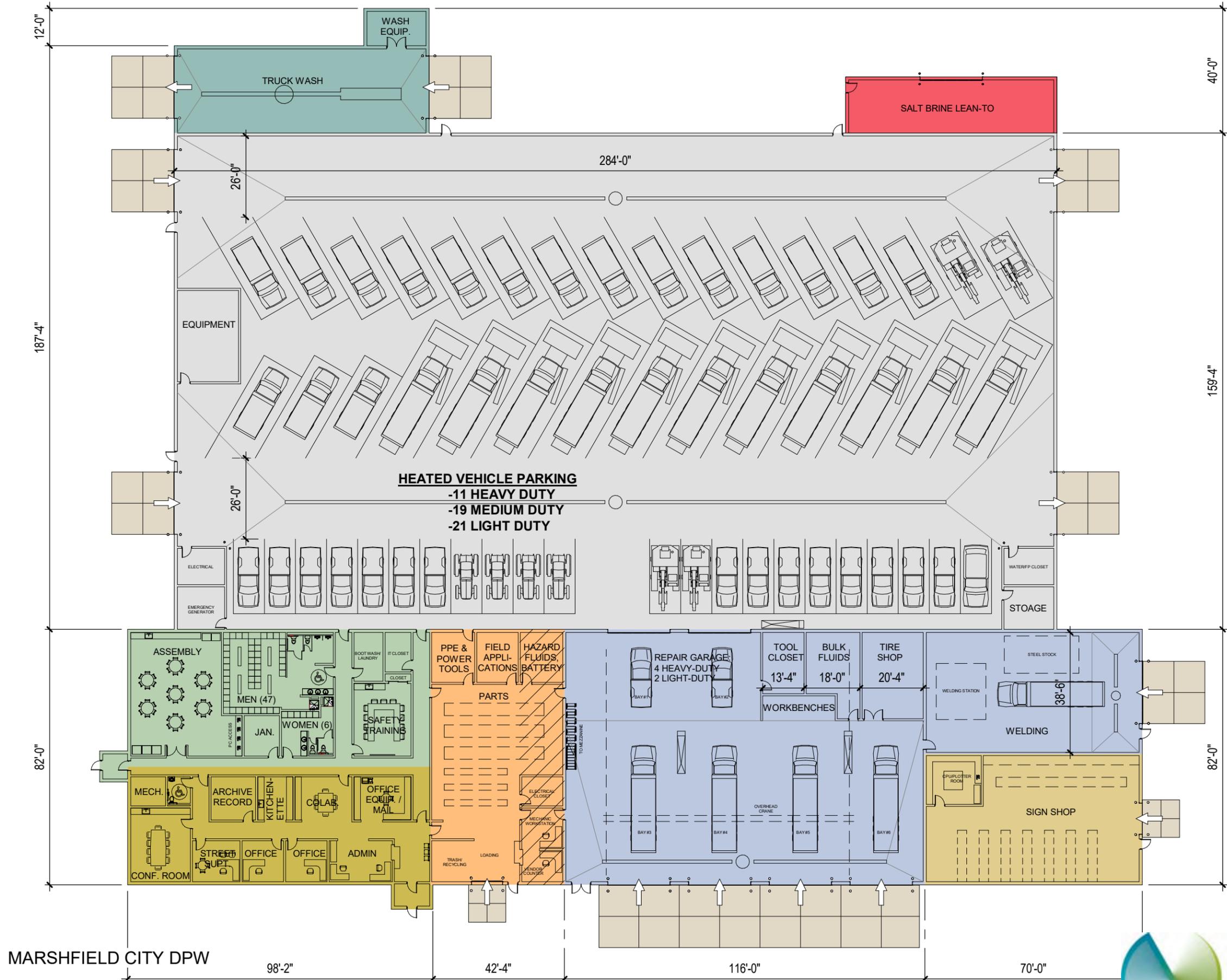
LEGEND	
TOTAL BUILDING AREA	93,599 SF
TOTAL PAVED AREA (DRIVE)	163,836 SF
TOTAL YARD STORAGE	70,625 SF
TOTAL GREEN AREA	113,493 SF
<hr/>	
TOTAL	441,553 SF 10 ACRES

MARSHFIELD CITY DPW

1 OPTIMAL SITE PLAN  
A-150 1/64" = 1'-0"



**BARRIENTOS**  
design & consulting



**SF SUMMARY -**

- HEATED VEHICLE GARAGE  
45,250 SF
- TRUCK WASH  
2,548 SF
- CREW  
4,380 SF
- ADMIN  
3,810 SF
- PARTS  
3,525 SF
- WELDING & REPAIR  
12,310 SF
- SIGN SHOP  
2,938 SF
- MEZZANINE  
1,175 SF

TOTAL: 75,936 SF

MARSHFIELD CITY DPW

1 OPTIMAL FLOOR PLAN  
A-151 1/32" = 1'-0"



**BARRIENTOS**  
design & consulting

## Construction Cost Estimate - Hypothetical Option

City of Marshfield

Main Garage Precast, Storage Building Pre-Engineered

	SF/Quantity	Cost per SF	Total
<b>Main Garage</b>			
Heated Parking Garage	46,777	151 \$	7,084,377
Welding & Repair	10,947	221 \$	2,423,118
Sign Shop	2,047	151 \$	310,018
Truck Wash	2,480	175 \$	433,380
Parts Storage	3,525	151 \$	533,861
Crew Quarters	4,290	198 \$	849,635
Administration	3,809	233 \$	887,497
	73,875	Total \$	12,521,886

<b>Site Construction</b>			
Site Work	10.14 \$	152,033 \$	1,541,610
Fuel Station		allow \$	225,000
Tempered Storage Building	15,000 \$	93 \$	1,398,000
Salt Storage	3,500 \$	82 \$	285,425
Salt Brine Lean-To	1,224 \$	82 \$	99,817
	19,724	Total \$	3,549,852

<b>New Furniture</b>			
Workstations	10 \$	10,000 \$	100,000
Assembly Room	1 \$	35,000 \$	35,000
Safety Training	1 \$	20,000 \$	20,000
Conference Room	1 \$	20,000 \$	20,000
	13	Total \$	175,000

**Total Construction Cost \$ 16,246,738**

### Notes

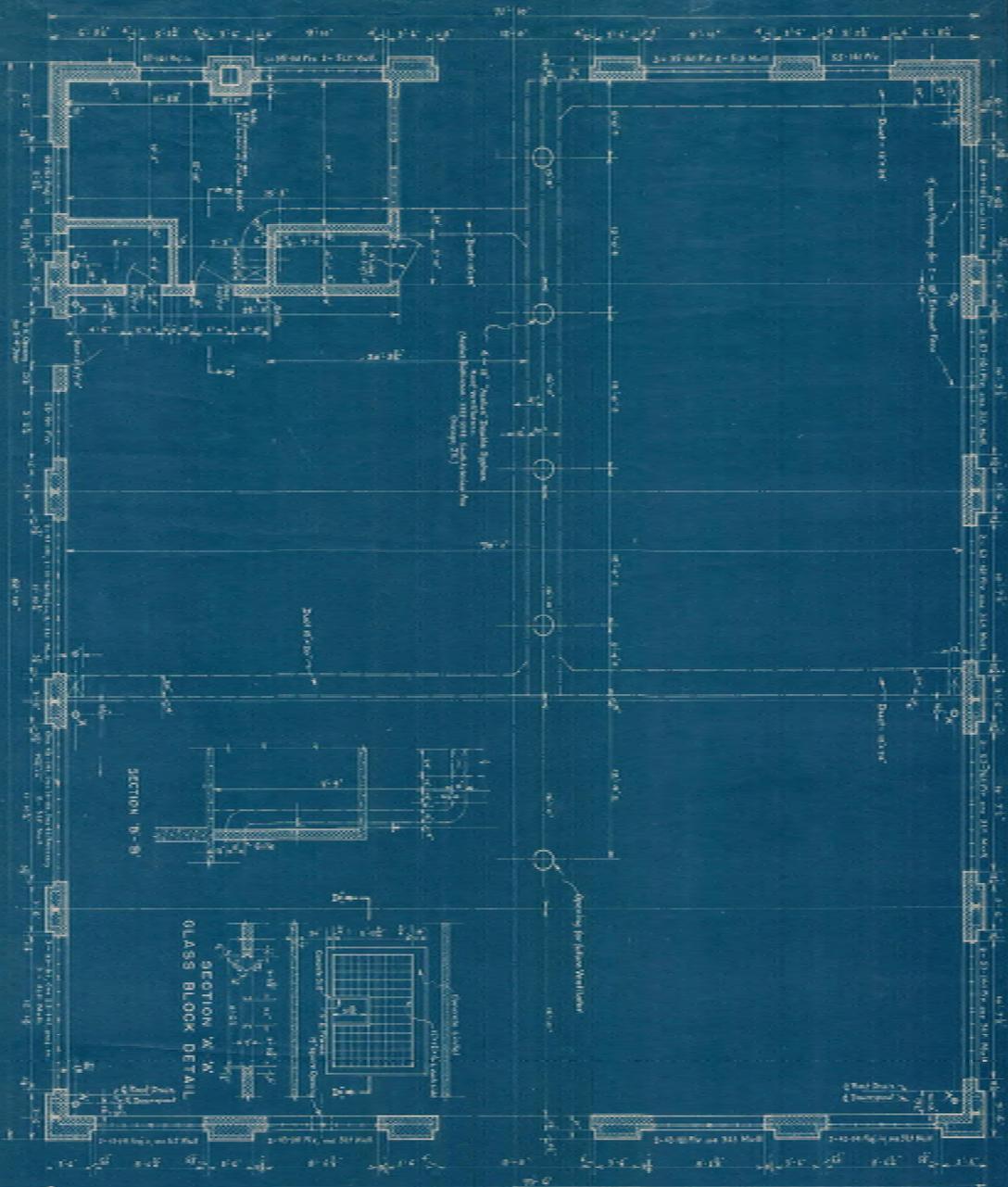
\*Estimate does not include furnishings, site acquisition costs, moving/relocation expenses, or plan approval and review fees



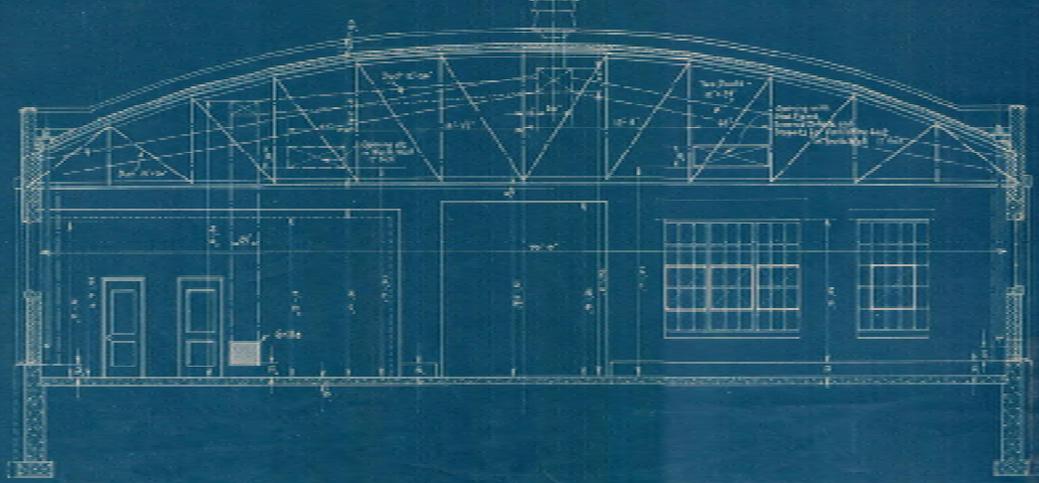
# APPENDIX

ORIGINAL BUILDING 1943 .....	86
BUILDING ADDITION 1947 .....	89
BUILDING ADDITION 1966 .....	90
STREET DIV. EQUIPMENT LIST .....	95

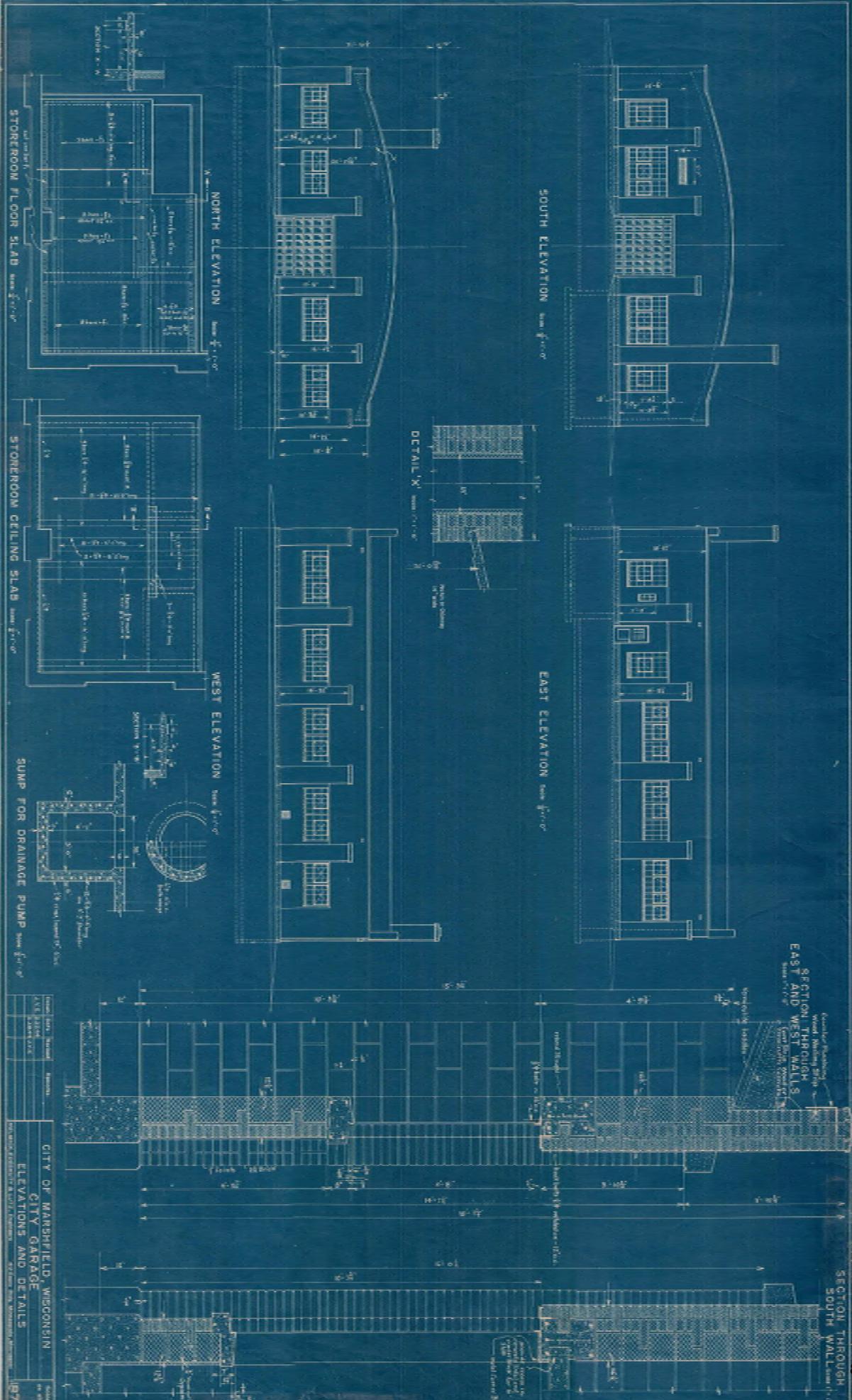




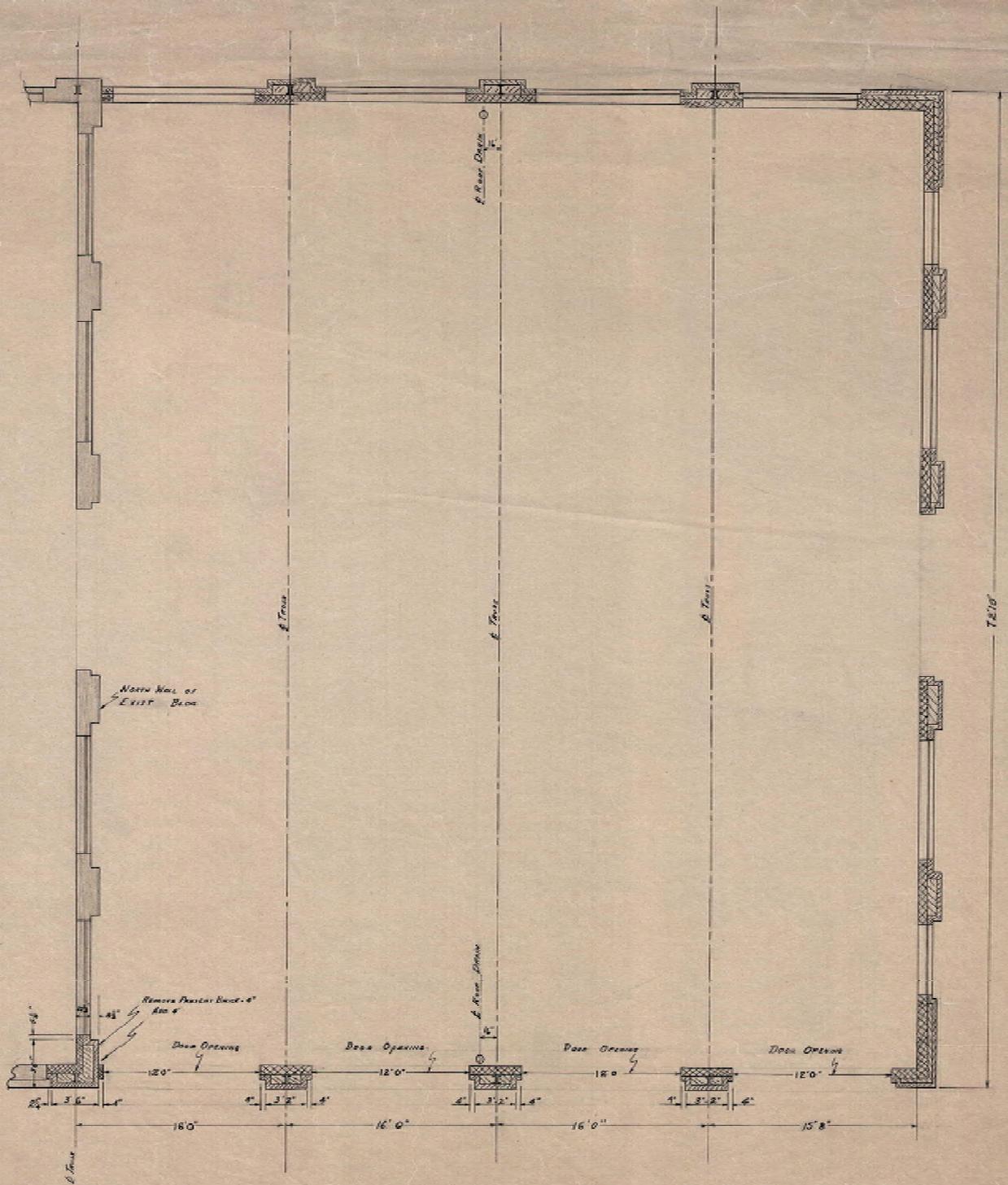
Note: 5'-0\"



Scale: 1/8" = 1'-0"	City of Marshfield, Wisconsin
Drawn by: [Name]	City Garage
Checked by: [Name]	Floor Plan and Cross Section
Project No. [Number]	117-2



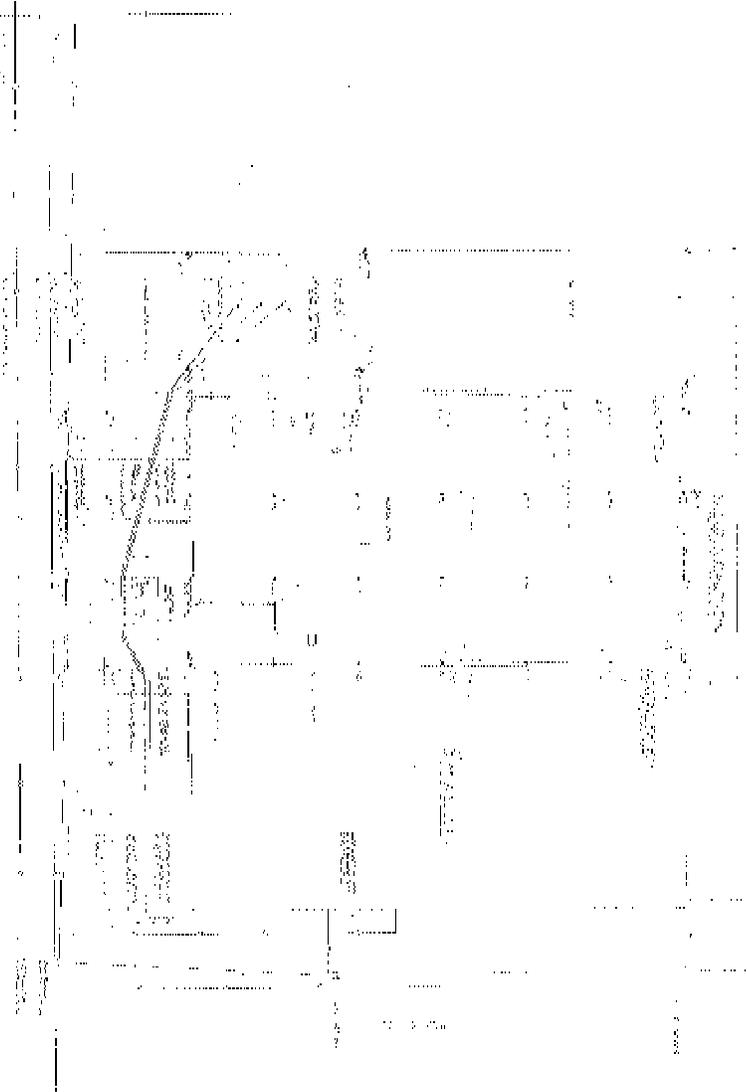
CITY OF MARSHFIELD, WISCONSIN  
 CITY GARAGE  
 ELEVATIONS AND DETAILS  
 197-6



# ADDITION TO CITY GARAGE

MARSHFIELD

WISCONSIN



*Handwritten notes or initials in the upper right corner of the drawing area.*

- SHEET INDEX**
- 1. THE SHEETS 9' X 12' PLAN
  - 2. THE SHEETS 9' X 12' PLAN
  - 3. THE SHEETS 9' X 12' PLAN
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  - 100. THE SHEETS 9' X 12' PLAN

**MATERIAL SYMBOLS**

1	CONCRETE
2	CONCRETE BLOCK
3	STEEL
4	ROOF INSULATION
5	WALL INSULATION
6	CEILING
7	SWATH
8	CLASTER
9	ACRYLIC TILE
10	ROOF WOOD
11	FINISHED WOOD
12	CERAMIC TILE

- LEGEND**
- ST STAIN STEEL
  - SS STAIN STEEL
  - W WATER MAIN
  - E ELECTRICAL
  - T TELEPHONE
  - EXISTING WORK TO BE REMOVED
  - NEW CONCRETE FINISH
  - NEW TOP SOIL
  - EXISTING 12" X 12"
  - NEW ELEC
  - DOOR LIMITS

SEAL

NOTES

407 W. 2ND ST.

4072

SCALE

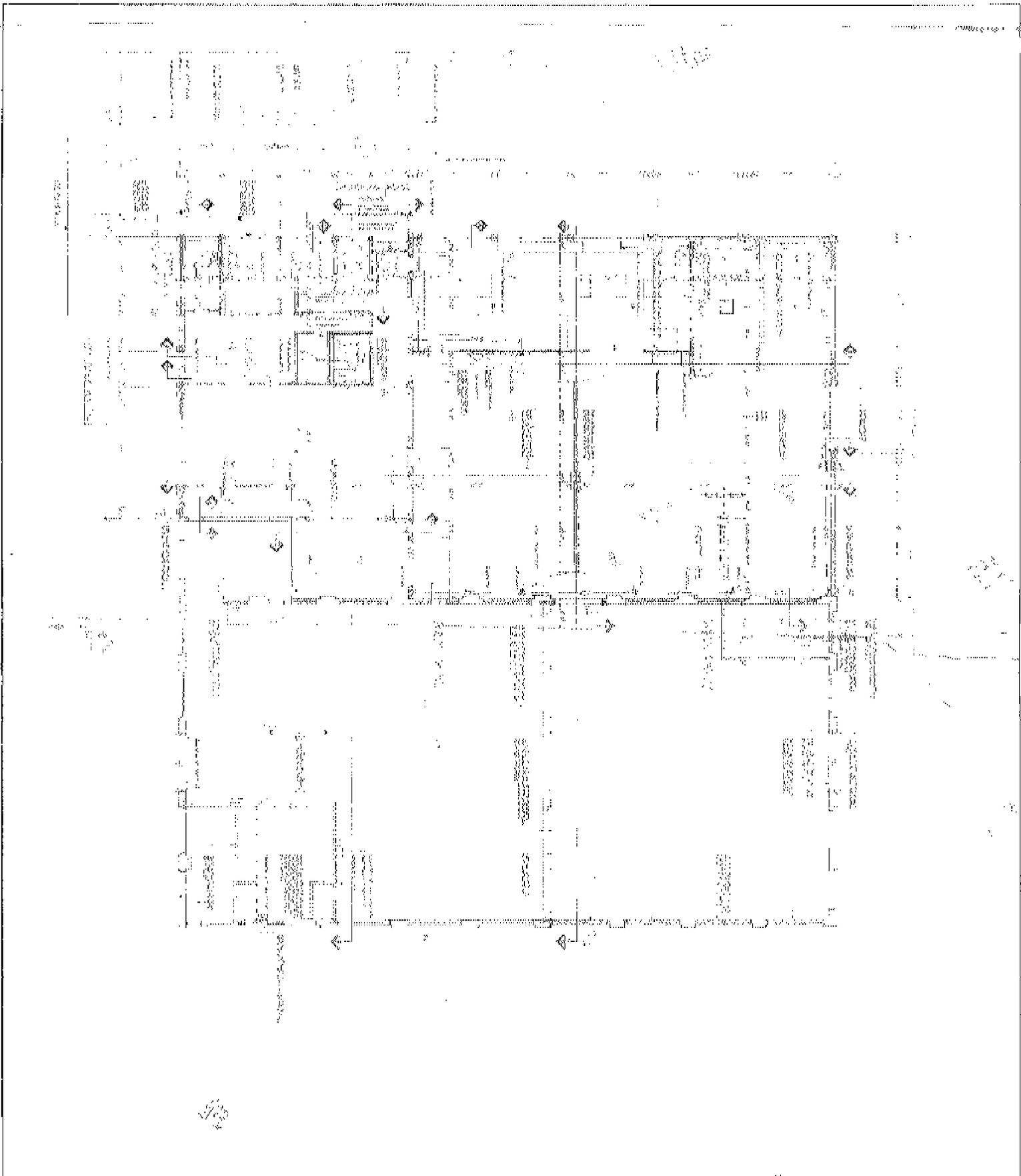
TITLE SHEET - SITE AND FOUND PLAN

ADDITION TO CITY GARAGE

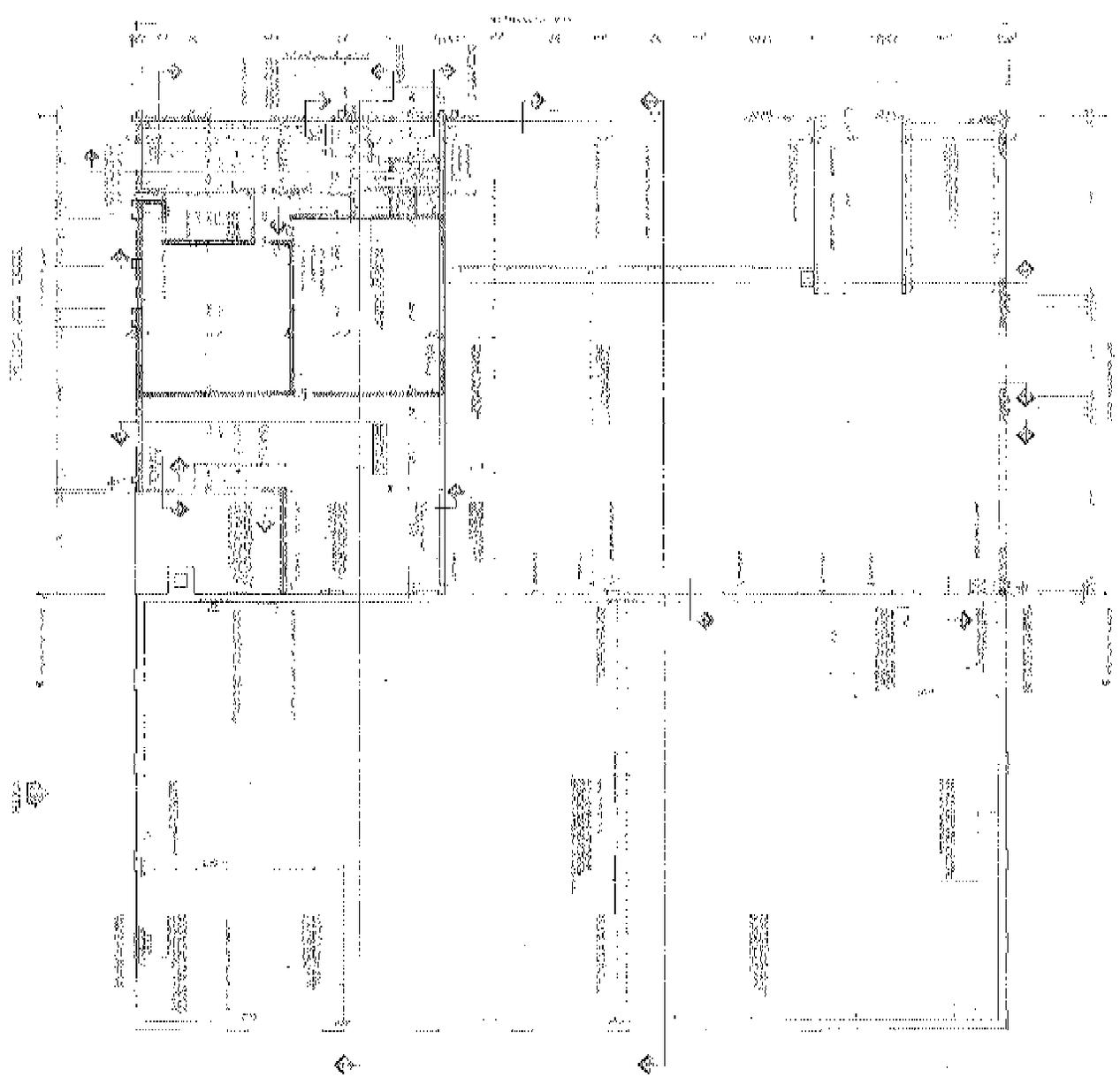
MARSHFIELD, WISCONSIN

JOHN A. FRIED AND ASSOCIATES  
ARCHITECTS  
1000 W. WISCONSIN ST.  
MILWAUKEE, WISCONSIN 53233

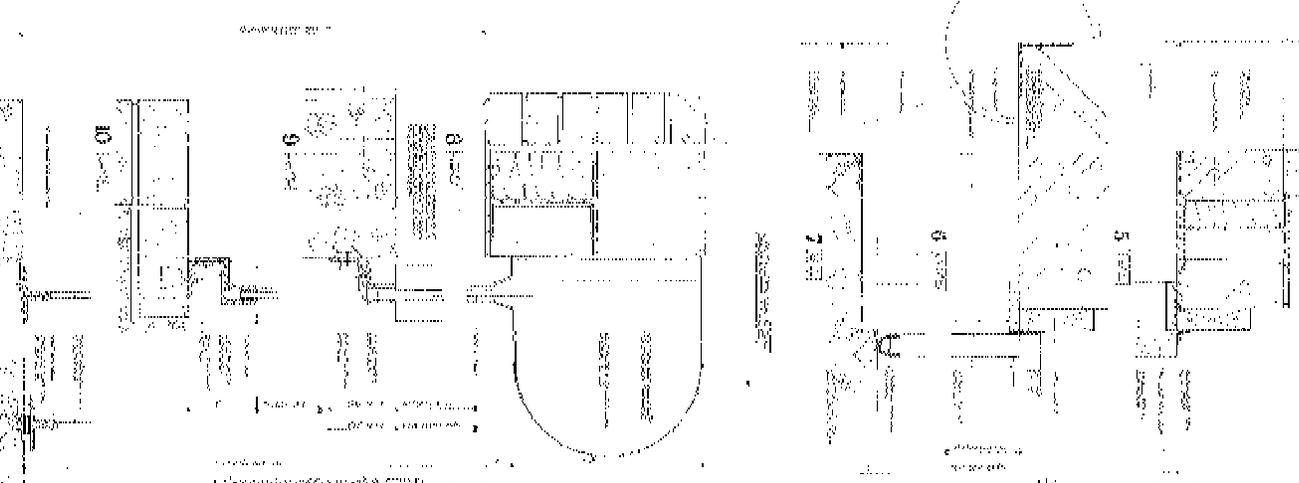
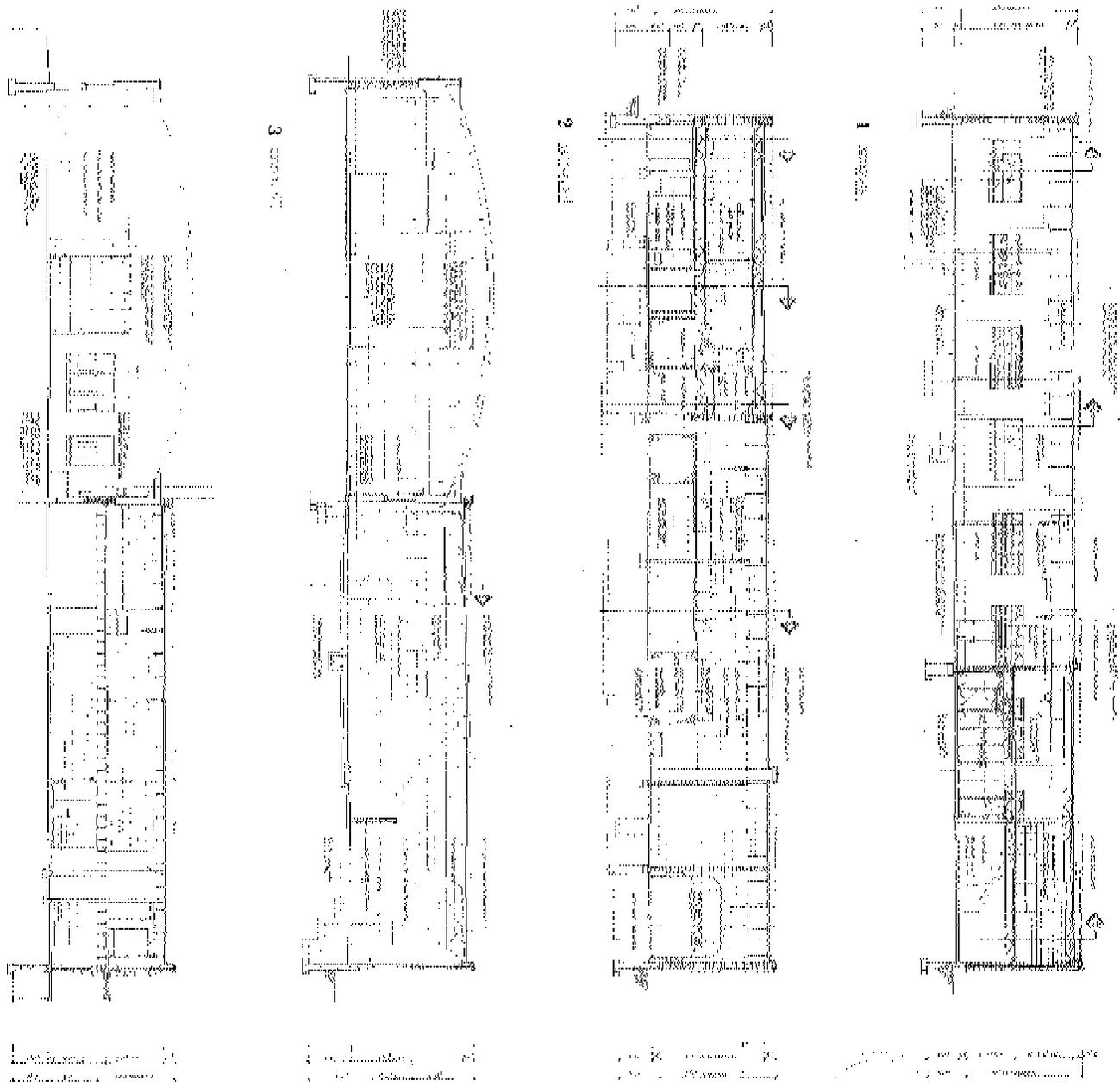




3	A.S. 19 REV.	FIRST FLOOR PLAN	ADDITION TO CITY GARAGE MARSHFIELD, WISCONSIN	JOHN A. FLAN AND ASSOCIATES ARCHITECTS 1000 UNIVERSITY AVENUE, SUITE 1000, MARSHFIELD, WISCONSIN 54449 TEL: 715/231-2100	
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4	A-4	19	SECOND FLOOR PLAN	ADDITION TO CITY GARAGE MARSHFIELD, WISCONSIN	JOHN J. FRANK AND ASSOCIATES ARCHITECTS 1000 CENTRAL AVENUE, MARSHFIELD, WISCONSIN 54449 TEL. 254-2111 FAX. 254-2112	89
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15	DATE	NO.	REVISION	<b>JOHN J. DEAD AND ASSOCIATES</b> ARCHITECTS 400 SOUTH WISCONSIN STREET, MADISON, WISCONSIN	<b>MARSHFIELD, WISCONSIN</b> ADDITION TO CITY GARAGE	<b>BUILDING SECTIONS</b>
	1/3	15				

**Asset**

Fleet

Asset	Budget	Asset Description	Model	Manufacturer	Serial #
5182B	STREET DIVISION	60" SNOW BLOWER JD			
004A	STREET DIVISION	LIFT GATE	TOP LIFTER TT-15	THIEMAN	
025C	STREET DIVISION	BROOM	BROOM 68	BOBCAT	231315370
026A	STREET DIVISION	BREAKER	HP500 (2007MODEL YEAR)	INDECO	24322
028A	STREET DIVISION	SNOW & LM BUCKET 84"	SLMB84	BERLON	70708
028B	STREET DIVISION	SNOW SNOW PUSHER	PB08S	PRO TECH	43663
028D	STREET DIVISION	LAWN RAKE	72 POWER RAKE	MELROE	925100673
028F	STREET DIVISION	SNOW BLOWER 85"	SR321	CAT	SWX00598
028H	STREET DIVISION	CAT STRUMP GRINDER	SG16B	CAT	MAP00533
028S	STREET DIVISION	SHOULDERING MACHINE	B-L	ROAD WIDENER	23-Oct
029A	STREET DIVISION	SNOW & LM BUCKET	SLMB84	BERLON	DBH28091
029D	STREET DIVISION	SALT SPREADER	SP-575	SnowEx	14825
029D	STREET DIVISION	BROOM	BA18	CAT	4ACE00520
031C	STREET DIVISION	GRADER WING		HENKE	2321
033C	STREET DIVISION	GRADER WING		LITTLE FALLS	913203H
034C	STREET DIVISION	GRADER WING		LITTLE FALLS	720597H
036A	STREET DIVISION	SNOW OVER CURB	BUILT FROM OLD SPARE	CUSTOM	
036B	STREET DIVISION	FORKS LOADER	BFL-250-08-42-40-36T	SAS	F4804
037A	STREET DIVISION	SNOW 14"	SNOW LCP 41-87	SNOW RANGER BY MONROE	07-01-1808
038A	STREET DIVISION	SNOW LOADER SCOOP	12X5'	NOBULLY	
039A	STREET DIVISION	SNOW 14" POWER REVERSE	PR-1443	LITTLE FALLS	R4374TAC09
039A-	STREET DIVISION	SNOW (OLD # 64)	RT62PRI179	ROOT	17371
044A	STREET DIVISION	DITCHING BUCKET 72"	B3F-B	BALDERSON	JLS82776
045A	STREET DIVISION	TAMPER	8700LTS	ALLIED	7791
045B	STREET DIVISION	BREAKER	7300A	ALLIED HY-RAM	5309
046A	STREET DIVISION	TAMPER	8700QAP	ALLIED HO-PAC	8310
046A(NE	STREET DIVISION	PLATE COMPACTOR	1000B	ALLIED HO-PAC	1705
046B	STREET DIVISION	BREAKER	SB452	ATLAS-COPCO	AT10217A
047C	STREET DIVISION	FLAIL MOWER	TBF-50	TIGER	807
051A	STREET DIVISION	SNOW 12"	12x42.JS	HENDERSON	RSP-13827
051C	STREET DIVISION	SNOW 10"	HWSxRH10x32	HENDERSON	HWS-13828
052A	STREET DIVISION	SNOW	UTA-12-43H	UNIVERSAL	2785/00
052-BOX	STREET DIVISION	REPLACEMENT DUMP BOX	M1	BIBEAU	M11404860
052C	STREET DIVISION	WING	AHW/PDF 10' DP WING	UNIVERSAL	2764/00
053A	STREET DIVISION	SNOW 12FT	MP4IR12-ISCT	MONROE	16-06-1393
053C	STREET DIVISION	WING	10PWMB	MONROE	16-06-6448
054A	STREET DIVISION	SNOW AND HITCH 12"	RSP-12-42-ISFT	HENDERSON	RSP-15382
054B	STREET DIVISION	SANDER/SALTER AUGER SPREADER	FSH-1	HENDERSON	FSH-31637
054C	STREET DIVISION	WING PLOW 10'	SMART LINK	HENDERSON	HWS-15383
055A	STREET DIVISION	SNOW	MP4IR12-ISCT	MONROE	05-09-1522
055C	STREET DIVISION	SNOW PLOW 9FT.	9DFWB316	MONROE	5/10/6276
056A	STREET DIVISION	SNOW 12' & HITCH	MP4IR12-ISCT	MONROE	15-10-1370
056B	STREET DIVISION	SANDER/SALTER AUGER SPREADER	V-BOX SPREADER	MONROE	15-10-7346
056C	STREET DIVISION	PREWET SYSTEM	PREWET	MONROE	
057A	STREET DIVISION	SNOW	PARAGLIDE WING 10'	MONROE	15-10-6283
057C	STREET DIVISION	SNOW 9FT.	PLOW MP4IR12-ISCT	MONROE	PLOW 06-05-1087
059R	STREET DIVISION	WATER TANK 1100 GAL	WING 9SFWMB316ST	MONROE	WING 06-05-6206
060A	STREET DIVISION	SNOW	1100 GAL.	STAINLESS & REPAIR	N/A
060CL	STREET DIVISION	WING LEFT SIDE	UTA-12-43H	UNIVERSAL	2831-01
060CR	STREET DIVISION	WING	AHW/PDF8LHWING	UNIVERSAL	3020/02
061A	STREET DIVISION	SNOW	AHW/PDF 10' DP WING	UNIVERSAL	2919/01
061C	STREET DIVISION	SNOW 9 FT.	UTA-11-43H	UNIVERSAL	2788/00
062A	STREET DIVISION	SNOW	WING 9SFWMB316ST	MONROE	6/6/6336
062C	STREET DIVISION	SNOW 9' FT.	WING-9SF-WMB	MONROE	2690/97
064A	STREET DIVISION	SNOW	RT62PRI180	ROOT	7/5/6185
064C	STREET DIVISION	SNOW 9 FT.	9DFWMB	MONROE	18391
067A	STREET DIVISION	SNOW 11 FT.	MP4IR11-ISCT	MONROE	94-07-4095
067C	STREET DIVISION	SNOW 9 FT.	TSEPW-9	MONROE	99-01-1147
068A	STREET DIVISION	SNOW	MP4IR12-ISCT	MONROE	94-12-4003
068C	STREET DIVISION	SNOW 9 FT.	10PWMB	MONROE	17-06-2387
069A	STREET DIVISION	SNOW	U.T.A.W-11-43H	UNIVERSAL	17-06-6223
					2691/97

**Asset**

**Fleet**

069C	STREET DIVISION	WING 9 FT.	AHW/PDF 9' T.E.	UNIVERSAL	2570/97
070A	STREET DIVISION	FLOW 12'	MP4IR12-ISCT.10GA	MONROE	9/7/2101
070B	STREET DIVISION	SANDER/SALTER 14' SCREW DRIVE	MCV-168-84-50-LLS44	MONROE	13-12-7735
070C	STREET DIVISION	WING	10SFWMB	MONROE	10/4/6822
071A	STREET DIVISION	WING PLOW	MP4IR12-ISCT	MONROE	05-09-1523
071C	STREET DIVISION	WING PLOW	10DFWMB-FT316	MONROE	5/10/6277
072A	STREET DIVISION	FLOW 12'	MP4IR12-ISCT	MONROE	10-05-1072
072CL	STREET DIVISION	WING 10' LEFT PARAGLIDE	10SFWB-L	MONROE	12/6/6153
072CR	STREET DIVISION	WING 10' RIGHT PARAGLIDE	10SFWB	MONROE	12/6/6151
078A	STREET DIVISION	LIFT GATE TOMMY LIFT	60-1040F11	TOMMY LIFT	338602
082A	STREET DIVISION	FLOW POWER V	RT3	BOSS	46375
098A	STREET DIVISION	LIFTGATE TOMMY GATE	60-1040	TOMMY GATE	00454153M
102A	STREET DIVISION	MOWER DECK	72' MOWER	JOHN DEERE	ITC7295XTFT270676
102B	STREET DIVISION	BROOM	60 IN BROOM	JOHN DEERE	TC60FMX030445
103A	STREET DIVISION	MOWER DECK 72'	1400/1500 FASTBACK	JOHN DEERE	ITC7295XKBT216484
103B	STREET DIVISION	BROOM	1400/1500	JOHN DEERE	TC60FMX020053
103C	STREET DIVISION	SNOW BLOWER, 2 STAGE 60"	1400/1500 SERIES	JOHN DEERE	1M00380XLB100042
103-MB	STREET DIVISION	BROOM 5' ROTARY , TOTALLED	MCT	M-B MLT	Dec-87
137A	STREET DIVISION	BROOM 5' ROTARY , NEW	MCT/5/PW	M-B MLT	MB 00471
027A	STREET DIVISION	AERIAL BUCKET	VST-60001	VERSALIFT	GJ40026
027A	STREET DIVISION	HYD COMPACTOR	500-BCS	ALLIED HOPAC	6327
027AA	STREET DIVISION	ROLLER ATTACHMENT		CUSTOM BUILT	
055B	STREET DIVISION	LIQUID DISPENSING SYSTEM(54B)	LDS-333	MONROE	
055BB	STREET DIVISION	SANDER/SALTER (OLD 54B)	MSV-120-84-56	MONROE	2/4/7142
057B	STREET DIVISION	LIQUID DISPENSING SYSTEM 56B	LDS-333	MONROE	
057BB	STREET DIVISION	SANDER/SALTER (OLD 56B)	FHX10X40955	HENDERSON	FSH20341
072B	STREET DIVISION	LIQUID DISPENSING SYSTEM	LDS-333	MONROE	
072BB	STREET DIVISION	SANDER/SALTER	EV-100SS	SWENSON	97554
085RR	STREET DIVISION	WATER TANK 450 GAL STAINLESS		STAINLESS AND REPAIR	NONE
9182	STREET DIVISION	Pavement Profiler, 24"	PC306B	CATERPILLAR	381-8330
9182A	STREET DIVISION	SNOW BLOWER	60 IN BLOWER	JOHN DEERE	1M00380XLM160062
053B	STREET DIVISION	MOWER DECK	72" RD MOWER DECK	JOHN DEERE	ITC7295XJIT290191
068B	STREET DIVISION	TAILGATE SPREADER	MS969-OW/DD-DD	MONROE	19-01-3174
9191	STREET DIVISION	BROOM 60" ROTARY	MS969-OW/DD-DD	MONROE	19-01-3173
9194	STREET DIVISION	SNOW WOLF QPHD-170	MCT	M-B	05814
9195	STREET DIVISION	SNOW WOLF QPHD-170	QPHD-170 QUATRO	SNOW WOLF	13956
9196	STREET DIVISION	SNOW WOLF ULTRA-96	QPHD-170 QUATRO	SNOW WOLF	13957
5203	STREET DIVISION	TOYOTA FORKLIFT	ULTRA-96	SNOW WOLF	13959
145	STREET DIVISION	PUMP, WATER	8FGU25	TOYOTA	8FGU25-53607
104-U	STREET DIVISION	GENERATOR, EMERGENCY	WX15AX2	HONDA	WZBY1155330
7193	STREET DIVISION	RIDING MOWER	8405-223	ONAN GENSET	L010313313
50	STREET DIVISION	FLYGT PUMP	2004-212.0013	JOHN DEERE	M0SSI8C013272
076-D-L	STREET DIVISION	AIR COMPRESSOR, SHOP	A075V120-3230	FLYGT	1910083
108B	STREET DIVISION	DIRT/ROCK SCREEN	SCALPER 107D	C'AIRE	CA20130927
108-D	STREET DIVISION	SWEEPER	DURASTAR 4300 SBA4X2	THE SCREEN MACHINE	D107D-SC-F-JC1506
150	STREET DIVISION	HOT BOX	HOT BOX	INTERNATIONAL	IHTMMAAN7BH390172
150A	STREET DIVISION	BRINE/BLEND BOSS (BRINE MAKER	RVM HOT-PATCHER	GRAFCO INC.	94HB18
150C	STREET DIVISION	PREWET STORAGE TANK 3000 GAL	BRINE BOSS	SPALDING	T2RSDS-08-1405-389
150D	STREET DIVISION	DE-ICER MIXING TANK	1065 GAL TANK	VARITECH INDUSTRIES	1087469
8181	STREET DIVISION	4000 GALLON POLY TANK		SPRAYER SPECIALTIES	
027E	STREET DIVISION	4000 GALLON POLY TANK			
028E	STREET DIVISION	TRAILER NEW 22'	PJ22CC	PJ TRAILER	4P5CC222XJ1283751
040E	STREET DIVISION	TRAILER 20' TILT BED	TB-20	MIDSOTA	57MBT2020JAO0159
041E	STREET DIVISION	TRAILER, ROAD WARRIOR 15K EQUIP 18'	ROAD WARRIOR 15K EQUIP	HORSE CREEK	5BSCB1829HC033882
048-D-L	STREET DIVISION	TRAILER	T-12DD	TOWMASTER	4KNUT16243L161243
049-U-L	STREET DIVISION	TRAILER CAT	T-16DD	TOWMASTER	4KNUT20291L162545
074-D-L	STREET DIVISION	TRAILER EGGER	D15R24	TRAIL-EZE	1DA12RJ50LP009953
	STREET DIVISION	AIR COMPRESSOR	SD-6	EGGER	150403
	STREET DIVISION	AIR COMPRESSOR	185	SULLAIR	004-1271591
	STREET DIVISION	SEWERJET	C185WKLUBG (F45)	DOOSAN	477697
	STREET DIVISION		600D	JOHN BEAN	JB02790NK

# Asset



## Fleet

075-D	STREET DIVISION	MOBILE PRESSURE WASHER	B5/3500	BEAVER ON H&H TRAILER	18130
118-E	STREET DIVISION	ARROWBOARD TRAILER	WAAW-15-SB-STD	ARROWMASTER	89921113
135-U	STREET DIVISION	WELDER PORTABLE	BIG 40	MILLER	JD698360
143-E	STREET DIVISION	TRAILER 2-WHEEL	CUSTOM BUILT	CON-COR	
144-E	STREET DIVISION	TRAILER 2 WHEEL		CON-COR	
8183	STREET DIVISION	TRAILER 16' TILTBED	T1161	PJ TRAILER	4P5T11617K1310701
8184	STREET DIVISION	Heating Kettle/Melter	EZ1000EB	CRAFCO INC.	IC9ZB1222K1418023
8191	STREET DIVISION	Sign Trailer	CT8222	MIDSOTA	57MBS2224KA001683
8185	STREET DIVISION	HOTBOX 4TON	RMV	SPAULDING	T4DRS0JD-19-1501-2226
8192	STREET DIVISION	HYDRO SEEDER	TURF MAKER 700	TURF MAKER	I79BU1221KR689202
105-U	STREET DIVISION	PAINT MACHINE	248862	GRACO	BA10542
142-D-L	STREET DIVISION	CONCRETE SAW 24'	400-44	MERIT	
144-D-L	STREET DIVISION	CONCRETE SAW 24'	DMFS6600	DIMAS	450209
7191	STREET DIVISION	Pavement Router	30 SP	CRAFCO INC.	183206
045-D-L	STREET DIVISION	Plate Compactor	WP1550 AW	WACKER NELSON	5100018324
046-D-L	STREET DIVISION	LOADER/BACKHOE	710G	JOHN DEERE	T0710GX921292
040-D-L	STREET DIVISION	LOADER/BACKHOE	710J	JOHN DEERE	1T0710JXB0199173
036-D-L	STREET DIVISION	CRAWLER DOZER	700H LPG	JOHN DEERE	T0700HX896996
037-D-L	STREET DIVISION	LOADER, HI LIFT	624K HI LIFT	JOHN DEERE	IDW624KHLDE653059
038-D-L	STREET DIVISION	LOADER, WHEEL	644K (4WD)	JOHN DEERE	IDW644KZPCE646573
039-D-L	STREET DIVISION	LOADER, WHEEL	821G	CASE	NHF240816
9197	STREET DIVISION	LOADER, WHEEL	821E	CASE	NAF208504
035-D-L	STREET DIVISION	B&D ADAPTER COUPLER	190DW	B&D	C03981
044-D-L	STREET DIVISION	EXCAVATOR, WHEELED	320L	JOHN DEERE	FF190DW031020
031-D-L	STREET DIVISION	BACKHOE/EXCAVATOR	672A	CAT	9KK03641
033-D-L	STREET DIVISION	GRADER	672CH	JOHN DEERE	507573
034-D-L	STREET DIVISION	GRADER	672CH	JOHN DEERE	DW672CH586374
041-D-L	STREET DIVISION	ROLLER COMPACTOR, WAFFLE	BW177DPH3	JOHN DEERE	DW672CH565184
042-D-L	STREET DIVISION	ROLLER COMPACTOR, SMOOTH	CA1500D	BOMAG	L0158E+11
037E-D-L	STREET DIVISION	SNOW BLOWER	MP-3D	DYNAPAC (BY ATLAS COPCO)	10000156CFA016318
038F-D-L	STREET DIVISION	SNOW BLOWER	D50-3	SNOGO	3325
137-D-L	STREET DIVISION	SNOW BLOWER	MP-3D	LARUE	D50286
054-D-H	STREET DIVISION	TRUCK CHASSIS AERIAL, FORD 2015	F-750XL	SNOGO	3028
055-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	M108SD	FORD	3FRXF7J2FY658945
056-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	7400 4X2	FREIGHTLINER	1FVAG5CY4FHGH4602
057-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	108SD	INTERNATIONAL	IHTWDAAR26J298204
061-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	L-8500	FREIGHTLINER	1FVAG5CY5GHHK2792
062-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	L-8000	STERLING	2FZAAWDCO7AX71262
064-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	L-8000	STERLING	2FZHBJB4YAB61913
067-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	L-8000	FORD	1FDYK82E4VVA2.6966
069-D-H	STREET DIVISION	DUMP TRUCK/SINGLE AXLE	2554	FORD	1FDYK82ESVA26437
077R-D-	STREET DIVISION	STREET SWEEPER	CROSSWIND J PL	STERLING	2FZHDJBB9XAB61463
107-D-L	STREET DIVISION	PAINT TRUCK	260	ELGIN	IHTGBAAR5VH494377
051-D	STREET DIVISION	TANDEM AXLE DUMP TRUCK	GU533	M-B	J3382D
052-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	L78500	MACK	6-0800
053-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	108SD	STERLING	1M2AX33CEM010251
060-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	L78513	FREIGHTLINER	2FZXMJCBXAB60801
068-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	4700SB	STERLING	1FVHG5CY3HHJA9918
070-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	7400 SBA 6X4	WESTERN STAR	2FZHWAK42A63683
071-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	7500 6X4	INTERNATIONAL	5KKHAXFE0LJLS1542
072-D-H	STREET DIVISION	DUMP TRUCK/TANDEM AXEL	L-8511	INTERNATIONAL	IHTWGAZT9B338120
066-D-H	STREET DIVISION	TRUCK, WATER	L79513	INTERNATIONAL	IHTWGAZT56298205
026-D-L	STREET DIVISION	MINI EXCAVATOR	SK50SR-3 (2007 MODEL	INTERNATIONAL	IHTWNAZT1D1252566
027-D-L	STREET DIVISION	MINI EXCAVATOR	ECR40D	STERLING	2FZHBJB2YAB61912
103-D-L	STREET DIVISION	FRONT MOUNT TRACTOR	1565 4WD	STERLING	2FZXKWB5XAA99839
5182	STREET DIVISION	TRACTOR W/COMFORT CAB	1585 TERRAIN CUT T4	KOBELCO	PJ040949
				VOLVO	VCECR40DK00014138
				JOHN DEERE	1TC1565DCCT110339
				JOHN DEERE	1TC1585VCJS040212

# Asset



## Fleet

	5183	STREET DIVISION	Asphalt Roller - 1 Ton	BW900-50	BOMAG	861834072532
	028-D-L	STREET DIVISION	SKID STEER LOADER 272D	272D XHP	CATERPILLAR	ETL00302
	029-D-L	STREET DIVISION	SKID STEER	236D	CAT	BGZ00594
	079-U-L	STREET DIVISION	BRUSH CHIPPER	BC1000XL	VERMEER	IVRY11197H1024143
	047-D-L	STREET DIVISION	TRACTOR	6410	JOHN DEERE	L06410V307930
<b>UT</b>	102-D-L	STREET DIVISION	TRACTOR W/COMFORT CAB	1575 TERRAIN CUT	JOHN DEERE	1TC1575VPGS020086
	137B	STREET DIVISION	HYD PRUNER	H4702B1	FAIRMONT	92355
<b>W</b>	137C	STREET DIVISION	HYD. SAW	H6311B-1	FAIRMONT	54384
	7186	STREET DIVISION	BRINE SPRAYER/WALK BEHIND	SL-80SS	SnowEx	1.51208E+11
	125	STREET DIVISION	SWEEPER, SHOP	6200E	TENNANT	6200-2086
	130	STREET DIVISION	LASER-STREET	GL710	SPECTRA PRECISION	8835
	131	STREET DIVISION	LASER-STREET	GL710	SPECTRA PRECISION	3182
	132	STREET DIVISION	LASER-STREET	GL710	SPECTRA PRECISION	3821
<b>HE</b>	133	STREET DIVISION	LASER-STREET	GL710	TRIMBLE	8508
<b>B</b>	134	STREET DIVISION	LASER-STREET	GL710	TRIMBLE	12664
	138	STREET DIVISION	LASER-STREET	GL710	SPECTRA PRECISION	3821
	139	STREET DIVISION	LASER-SEWER PIPE	DG711	SPECTRA PRECISION	11084
<b>D</b>	140	STREET DIVISION	LASER-SEWER			9960
	140(OLD)	STREET DIVISION	LASER-SEWER	L1145-S	SPECTRA PRECISION	23396
<b>EN</b>	7181	STREET DIVISION	BLOWER HAND HELD STIHL	BG 86 CE	STIHL	516882309
	7182	STREET DIVISION	WEED TRIMMER	FS 56 RC-E	STIHL	514687544
	7183	STREET DIVISION	WEED TRIMMER	FS 56 RC-E	STIHL	514687545
	7184	STREET DIVISION	CUT-OFF-SAW 14"	K760	HUSQVARNA	967181002
	119	STREET DIVISION	POWERROOM	FS 240R	STIHL	178351404
	120	STREET DIVISION	POWERROOM	62711	SHINDAIWA	4032532
<b>EX</b>	128-U	STREET DIVISION	PUMP, WATER	WT30XK2C	HONDA	8610200179-5
	129-U	STREET DIVISION	PUMP WATER	WT30X	HONDA	3191018
	183-U	STREET DIVISION	LINE REMOVER	RS/TLR	TENNANT	2457
<b>G</b>	184-U	STREET DIVISION	SCREED	VS400	BEST	3661187
	185	STREET DIVISION	SCREED	VS800	STONE	102011354
	198	STREET DIVISION	AIR COMPRESSOR, PORTABLE	AM1-PH65-08M	Mi-T-M	20164598
	199-U	STREET DIVISION	WEED TRIMMER	FS 55R	STIHL	
<b>R</b>	200-U	STREET DIVISION	CHAIN SAW, 12" BAR	MS 192T	STIHL	290516718
	203-U	STREET DIVISION	SCREED POWER	OMS10STD	MORRISON	9805-48161
	204-U	STREET DIVISION	SCREED ONE MAN VIBRATOR	SCREED KING VIBRATOR	CROWN CONSTRUCTION EQUIP	3490
<b>SP</b>	207	STREET DIVISION	LAWN EDGER	986103	ARIENS	1188
	210-U	STREET DIVISION	GENERATOR PORT.	EM3000C	HONDA	EZGL-1006336
	211-U	STREET DIVISION	GENERATOR PORT.	EM2500XK	HONDA	GC02-4551282
	212-U	STREET DIVISION	GENERATOR PORT.	EM2500	HONDA	1059125
<b>HE</b>	213-U	STREET DIVISION	GENERATOR PORT.	EG1400Z	HONDA	GE150-1001200
<b>AE</b>	214-U	STREET DIVISION	GENERATOR PORT.	EM2500	HONDA	EZCN-1018605
	215-U	STREET DIVISION	GENERATOR PORT.	EM2500	HONDA	EZCN-1059124
	216	STREET DIVISION	WEDEATER/TRIMMER	FS 55	STIHL	288267963
<b>EN</b>	217-U	STREET DIVISION	PRUNER, POLESAW	HT 131	STIHL	284203653
	218-U	STREET DIVISION	PRUNER, POLESAW	HT 75	STIHL	255004068
	219*	STREET DIVISION	CHAIN SAW, 18" BAR	MS 260 PRO	STIHL	253615574
	220	STREET DIVISION	CHAIN SAW, 18" BAR	MS 250	STIHL	504345280
<b>SI</b>	220	STREET DIVISION	CHAIN SAW, 18" BAR	026P	STIHL	50018400
	221	STREET DIVISION	CHAIN SAW, 14" BAR	019T	STIHL	43163785
	222	STREET DIVISION	CHAIN SAW, 14" BAR	019T	STIHL	247937006
	223	STREET DIVISION	CHAIN SAW, 25" BAR	MS 460	STIHL	170859801
	224	STREET DIVISION	CHAIN SAW, 24" BAR	284F	OLYMPIK	340330164
	225	STREET DIVISION	CHAIN SAW, 18" BAR	MS 250/18	STIHL	505681518
	226	STREET DIVISION	CHAIN SAW, 14" BAR	MS 201TC	STIHL	182497950
	227	STREET DIVISION	CHAIN SAW, 14" BAR	190 PRO	POULAN	97203D300327-4
	228	STREET DIVISION	CHAIN SAW, 20" BAR	MS 029	STIHL	247659868
	229	STREET DIVISION	CHAIN SAW, 16" BAR	264F	OLYMPIK	580730065

**Asset**



**Fleet**

<b>SP</b>	230-U	STREET DIVISION	CHAIN SAW, 20' BAR	MS 260	STIHL	284362994
	231-U	STREET DIVISION	CHAIN SAW, 20' BAR	980	OLYMPIK	286452060
	232-U	STREET DIVISION	WEED/BRUSHSAW	FS 120	STIHL	41107519
<b>TA</b>	233-U	STREET DIVISION	WEDEATER/TRIMMER	FS 46	STIHL	46328512
	234-U	STREET DIVISION	POWERBROOM/WEED/BRUSHSAW	FS 120	STIHL	41107517
	235-U	STREET DIVISION	WEDEATER/TRIMMER	FS 46	STIHL	271922077
	236-U	STREET DIVISION	WEDEATER/TRIMMER	FS 46	STIHL	247946103
	237	STREET DIVISION	WEDEATER/TRIMMER	FS 46	STIHL	247946110
	237-U	STREET DIVISION	WEED TRIMMER	FS 56	STIHL	500314519
	238-U	STREET DIVISION	WEED/BRUSHSAW	E8510BAV	EFCO	1604374478
	239-U	STREET DIVISION	WEED/BRUSHSAW	E510B	EFCO	1604374371
	240-U	STREET DIVISION	WEED/BRUSHSAW	E8510B	EFCO	1606441481
	241-U	STREET DIVISION	WEED/BRUSHSAW	E8510B	EFCO	1606441449
<b>TA</b>	242-U	STREET DIVISION	WEDEATER/TRIMMER	FS 46	STIHL	270744158
	243-U	STREET DIVISION	TRIMMER / MOWER	52028	TROY-BILT	5.2028 IE+ 11
<b>TR</b>	244-U	STREET DIVISION	TRIMMER / MOWER	52028	TROY-BILT	5.2028 IE+ 11
	245-U	STREET DIVISION	TRIMMER/BRUSH MOWER	H800	BACHTOLD	931792
<b>LI</b>	246-U	STREET DIVISION	CHAIN SAW, 25' BAR	MS 310	STIHL	261099369
<b>MI</b>	247-U	STREET DIVISION	RING SAW	K950 RING	HUSQVARNA	72500049
	248-U	STREET DIVISION	CUT-OFF-SAW 14'	K700 ACTIVE III	PARTNER	34000080
	249-U	STREET DIVISION	CUT-OFF-SAW 14'	K700	PARTNER	31400812
	250	STREET DIVISION	CUT-OFF-SAW 14'	K760	HUSQVARNA	20151400270
<b>MI</b>	250 OLD	STREET DIVISION	CUT-OFF-SAW 14'	BTS1035	WACKER-NEUSON	5263263
	251	STREET DIVISION	CUT-OFF-SAW 14'	K750	HUSQVARNA	81502118
<b>M</b>	252-U	STREET DIVISION	CUT-OFF-SAW 14'	TS 760-14	STIHL	338370666
	253-U	STREET DIVISION	CUT-OFF-SAW 14'	TS 760	STIHL	345745693
	254-U	STREET DIVISION	CUT-OFF-SAW 14'	K700	PARTNER	23301007
	255-U	STREET DIVISION	CUT-OFF-SAW 12'	TS 400	STIHL	150471840
<b>R</b>	256-U	STREET DIVISION	CUT-OFF-SAW 14'	TS 760AV	STIHL	124059699
	257-U	STREET DIVISION	CUT-OFF-SAW 14'	K750	HUSQVARNA	81502521
<b>SK</b>	258-U	STREET DIVISION	CUT-OFF-SAW 14'	K760	HUSQVARNA	20161700415
	259-U	STREET DIVISION	CUT-OFF-SAW 14'	K750	HUSQVARNA	81502510
	260-U	STREET DIVISION	CUT-OFF-SAW 14'	K700	PARTNER	5430308
<b>SP</b>	261-U	STREET DIVISION	CUT-OFF-SAW 14'	K700	PARTNER	22000843
	262-U	STREET DIVISION	BLOWER HAND HELD STIHL	BG-85-DZ	STIHL	266376495
<b>TR</b>	263-U	STREET DIVISION	LAWN MOWER, SELF PROPELLED, 21'	911516	ARIENS	12689
	264-U	STREET DIVISION	CUT-OFF-SAW 14'	TS 420	STIHL	170858-778
	265-U2	STREET DIVISION	LAWN MOWER SELF PROPELLED, HONDA 3 IN 1	HRR216VKA	HONDA	MZCG9951869
<b>UT</b>	265-U	STREET DIVISION	LAWN MOWER S/P	12A-98K9095	MTD	1D121Z40054
	266-U	STREET DIVISION	BLOWER/VAC HAND HELD STIHL	SH 86CE	STIHL	284427640
<b>TO</b>	267	STREET DIVISION	CUT-OFF-SAW 14'	K760 II	HUSQVARNA	20142100698
<b>AT</b>	268-U	STREET DIVISION	LAWN MOWER INDUSTRIAL	ECBV	JACOBSON	3202402184
	269	STREET DIVISION	FAN, MANHOLE VENT	RIP18	HURCO	41701077
	270-U	STREET DIVISION	PLATE TAMPER	MVC-90H	MIKASA	J8528
<b>B</b>	271-U	STREET DIVISION	PLATE TAMPER	MVC-90L	MIKASA	D4423
	272-U	STREET DIVISION	PLATE TAMPER	MVC-90L	MIKASA	S7745
	273-U	STREET DIVISION	PLATE TAMPER	BVP 18/45	BOMAG	252649
	274-U	STREET DIVISION	PLATE TAMPER	EXI7D	MIKASA	4220595
	275	STREET DIVISION	COMPACTOR, GROUND POUNDER	R422H	M-B-W	1724034
<b>95</b>	276-U-L	STREET DIVISION	COMPACTOR, PLATE REVERSING	BPU 3545A	WACKER-NEUSON	GCBUT-1208198
	277-U	STREET DIVISION	GENERATOR 3000W	EB3000C	HONDA	GCBUT-1208198
	278-U-L	STREET DIVISION	COMPACTOR 2-TON REVERSING	BR4600	BARTLELL	590399
	280	STREET DIVISION	HEDGE TRIMMER	HS 80/30	STIHL	256776718
	281-U	STREET DIVISION	PRESSURE WASHER PORT.	580.7526	CRAFTSMAN	1008348721
	7188	STREET DIVISION	POWER SCREED	SCREED KING	WYCO	971812A000
	151	STREET DIVISION	PRESSURE WASHER	B5-2000	BEAVER	17361

Asset

Fleet

G	157	STREET DIVISION	CONCRETE BRAKER	THOR	125432
	158	STREET DIVISION	CONCRETE BRAKER	THOR	127996
	159	STREET DIVISION	CONCRETE BRAKER	THOR	146712
	160	STREET DIVISION	CONCRETE BRAKER	INGERSOLL RAND	16P38A
	161	STREET DIVISION	CONCRETE BRAKER	SULLAIR	55424
	162	STREET DIVISION	CONCRETE BRAKER 90#	HARPER	IG155
	1130	STREET DIVISION	ROTARY HAMMER DRILL	MILWAUKEE	F999CD1922.00122
	208	STREET DIVISION	AIR COMPRESSOR NEW BUILDING	INGERSOLL RAND	211150009
	209-U	STREET DIVISION	AIR COMPRESSOR, PORTABLE	MAKITA	U3530700
	156	STREET DIVISION	BAND SAW SIGN SHOP	ELLIS	15864920
	163	STREET DIVISION	HYD SHOP PRESS	OTC	1136
	164	STREET DIVISION	JIMMEY CRANE	TUBRACRANE	611
	165	STREET DIVISION	LATHE	SOUTH BEND	
	166	STREET DIVISION	LATHE	SOUTH BEND	
	169	STREET DIVISION	POST DRIVER	RHINO	2001341
	170	STREET DIVISION	PNEUMATIC TAMPER	THOR	180047
	171	STREET DIVISION	PNEUMATIC TAMPER	THOR	601704
	173	STREET DIVISION	TIRE CHANGER	COATS	601102925
	174	STREET DIVISION	TIRE EXPANDER	BISHMAN	
	175	STREET DIVISION	WELDER SIGN SHOP	MILLER	W527969
	176	STREET DIVISION	WELDER WIRE FEED	MILLER	KJ272505
	177	STREET DIVISION	PLASMA CUTTER	HYPERTHERM	1250-001725
	186	STREET DIVISION	TIRE CHANGER	COATS	992279859
	186A	STREET DIVISION	BEAD SEATER W/TANK	COATS	AKR40240
	189	STREET DIVISION	SAND BLASTER	WE100	N/A
	190	STREET DIVISION	ELECTRIC AIR HAMMER	MAKITA	2132E
	191	STREET DIVISION	PUMP, SUMP 90 GPM 115 VOLT	FLYGT	750011
	191A	STREET DIVISION	PUMP, SUMP 90 GPM 115 VOLT	FLYGT	730386
	192	STREET DIVISION	SUMP PUMPS	FLYGT	1620233
	192A	STREET DIVISION	SUMP PUMPS	FLYGT	1620244
	195	STREET DIVISION	BAND SAW	BAILEIGH	1404203
	196	STREET DIVISION	DRILL, HORIZONTAL	E-Z DRILL	K1382
	196B	STREET DIVISION	DRILL, HORIZONTAL	E-Z DRILL	U-3468
	197	STREET DIVISION	DRILL PRESS 1-1/2'	BAILEIGH	F1205062
	201	STREET DIVISION	BAND SAW, METAL	ELLIS	20977167
	202	STREET DIVISION	MOBIL LIFT HOIST	SEFAC	
	205	STREET DIVISION	CRANE 10 TON	TOTAL TOOL	10014
	206	STREET DIVISION	PORTABAND SAW	MILWAUKEE	678J404160397
	7185	STREET DIVISION	BRIE SPRAYER/WALK BEHIND	SnowEx	1.60107E+11
	126-U	STREET DIVISION	LAWN VACUUM	LITTLE WONDER	
	082-D-H	STREET DIVISION	1 TON TRUCK 4 DOOR	GMC	IGDHK33FYF495458
	085-U	STREET DIVISION	WATER TRUCK 1 TON 450 GL	FORD	IFDWF36L5XEC16074
	095-D	STREET DIVISION	1 TON TRUCK	FORD	IFDWF36P6XG6D90773
	097-D	STREET DIVISION	1 TON TRUCK	FORD	IFDWF36P06EB14957
	004-U	STREET DIVISION	PICK UP 4X4, FORD 2019	FORD	IFT7X2B61KEC42339
	078-U	STREET DIVISION	PICK UP TRUCK/SHOP	GMC	IGT22XEG1FZ540799
	090-U	STREET DIVISION	PICK UP F250 FORD	FORD	IFTNF2055SEC87731
	091-U	STREET DIVISION	PICK UP 4X4	FORD	IFTFX1EF9CKD38692
	092-U	STREET DIVISION	PICK UP 4X4 SUPERDUTY	FORD	IFTSX215X8ED63429
	093-U	STREET DIVISION	PICK UP 4X4	FORD	IFTSX21589EA61574
	098-U	STREET DIVISION	PICK UP TRUCK	FORD	2FTRF18L02CA56963
	2192	STREET DIVISION	2019 F-250	FORD	IFTRF12248KD81782
	003-U	STREET DIVISION	UTILITY TRUCK/SIGN SHOP	FORD	IFDBF2B64KEF54647
	073-D-H	STREET DIVISION	TRUCK, KENWORTH (2009)	FORD	IFDRF3G64BEB43441
	084-D-H	STREET DIVISION	TRUCK/DUMP/CONCRETE CREW	FORD	2NKHMM6XX9M248018
	094-D-H	STREET DIVISION	TRUCK, ACTERRA	FORD	IFDUF3G70DDEB14890
	083-U	STREET DIVISION	UTILITY VAN	STERLING	2FZAAAFBW81AH29672
	PD75	POLICE	MRAP	GMC	IGDIG3IR811128153
	PD68	POLICE	2002 Chevrolet Impala	CHEVROLET	2G1WF55E629129369
	PD19-97	POLICE	2019 Dodge Charger	DODGE	2C3CDXXK78KH600365
	PD69	POLICE	2013 Dodge Ram 1500	DODGE	1C6RR7KT3DS601790



