



THE CITY OF HUDSON
PUBLIC WORKS FACILITY
FEASIBILITY STUDY
MARCH 2021



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STUDY INTRODUCTION

OBJECTIVES

The goal of these feasibility studies is to provide guidance to the City of Hudson on three main items:

1. Probable Functional Program and Size: Evaluate the desired program as defined and updated by the City of Hudson from the 2017 Public Works Facility Assessment and further analyzed as it pertains to the existing conditions of the Georgetown location (Building 1797 Building 1769, and adjacent undeveloped site). The focus of this objective was to evaluate the ability of these facilities to adequately accommodate the proposed program. The study is comprised of two (2) parts as the information compiled evaluates the Georgetown location, an additional option considering the City Hall location was also evaluated for its feasibility.
2. Probable Construction and Project Cost: In identifying the proposed program and evaluating options in which to incorporate the services and functions in the facilities, the second objective of the feasibility study is to compose a probable construction cost. This square foot cost will be derived from the summation of the existing building conditions and the physical modifications required to accommodate the proposed program. The basis of this cost will utilize some information gathered and utilized in the 2017 needs assessment.
3. Probable Project Schedule: The final objective will be to identify an overall project schedule or time frame required in which to make the necessary alterations to the facilities in which to accommodate the proposed facilities

BACKGROUND

The City of Hudson has been evaluating the conditions and current facilities of the Public Works Facility prior to 2017 and with more focus as DS Architecture was engaged to complete a programming needs assessment and a feasibility study issued in 2017.

The City's Public Works Facility during this time continues to operate out of several facilities and continues to see the need to consolidate operations to a focused location to increase efficiency and effectiveness. Strong consideration is given to explore the feasibility of a long-term home for the Public Works staff, equipment and services that includes a controlled and a secure site.

EXECUTIVE SUMMARY

The feasibility study finds that the proposed 10-acre site that is comprised of two existing facilities (Building 1769 & Building 1797) along with the undeveloped site to the east is appropriate to accommodate the proposed services and daily operations of the City of Hudson Public Works. The proposed approximate 62,000 square feet of program incorporated under the roofs of these adjacent facilities would greatly assist in streamlining the daily operational services of the Public Works. Unifying the sites into one cohesive service facility would address current task and future growth to meet the needs of the City of Hudson.

In addition, located in the Hudson South Commercial Park, the design of the complex and surrounding infrastructure accommodates the vehicle traffic and equipment utilized on daily basis by the Public Works. Along those same characteristics, Building 1797 has specific features to support services activities that are in line with the department.

Included in this document regarding the Georgetown and City Hall locations are the following: departmental square footage analysis, and projected project costs. These documents should inform the City of Hudson the feasible considerations regarding the long-term impacts of consolidating Public Works Facility to a dedicated site and the initial financial requirements required to implement this objective. The results of this study can be used as a planning tool for the next phases of implementation.

GEORGETOWN FEASIBILITY



In reviewing the 2017 Need Analysis Assessment, the City of Hudson Public Works Facility has updated and identified programming and spatial requirements that are key to the providing long-term efficient and effective public works services for the City of Hudson. These interior programming requirements are broken down into six (6) distinctive categories:

- Administration
- Services - Streets, Storm Water, Sign Shop
- Services - Fleet
- Utilities - Water
- Shared Employee Area
- Shared Garage & Storage

In addition to the programming noted to be housed under roof, there is also exterior service space that is important in the day-to-day operations of the Public Works. The programming area totals approximately 62,000 SF and is utilized to store vital equipment and material required to support maintenance and operational needs implemented by Public Works.

The objective of this update is to evaluate the appropriateness and feasibility of incorporating these programs into a composed building site that addresses the needs of the Public Works while identifying probable construction cost and schedule in which to implement such considerations.

With these programs and considerations, the Public Works Facility has identified its current building location at 1769 Georgetown and the adjacent building at 1797 Georgetown in the Hudson South Commercial Park as a viable option in which to consider developing a cohesive service facility. Along with these two structures, a 3.45-acre undeveloped parcel to the east of Building 1797 would also be incorporated to support proposed program. The following information further evaluates this option for its feasibility.

GENERAL BUILDING/SITE OVERVIEW



Building 1769 is situated along the north side of Georgetown Road of the Hudson South Commercial Park. The 1-story approx. 30,900 SF facility situated on 3-acres currently houses a portion of the Hudson Public Works Department for the City of Hudson and has done so under a lease agreement for several years. Overall, the building is divided into two (2) distinct areas comprised of office and administrative support spaces along the front of the building and a maintenance/garage area that is the predominant use of the facility. There are some support spaces throughout the maintenance area that are developed for staff accommodating non-vehicle activities. Although the Public Works team can conduct general day to day operations and activities from this facility, both the current site and structure as comprised does not adequately meet or support the overall needs of the full-service operation. Therefore, the sign shop, service yard, and both indoor/outdoor storage requirements are not appropriately support and has been dispersed to multiple locations throughout the City.



Building 1797 is located to the east is sited on approximately 3.31-acres. The single-story building is similar in size at approx. 30,900 SF but was constructed roughly 10-years after Building 1769. The facility is currently divided into (3) sections by non-loadbearing partitions housing two businesses and a material storage area. Overall, the facility is also similar in construction to Building 1769 composed of masonry exterior walls and steel open web framing creating wide open bay spaces. However, unlike the adjacent structure, Building 1797 was specifically designed to accommodate equipment and similar vehicle traffic utilized by the Public Works Facility. The parking area, drive access and slab on grade building structure is comprised of 8" concrete. In addition, Building 1797 has four (4) bays with 16' high overhead doors along the east and west sides of the building allowing vehicles to drive directly thru the facility. An access drive wrapping around the north side of the site accommodates vehicle traffic patterns. Overall, the facility with direct proximity to the current Public Works facility in addition to undeveloped property to the east, provides for appropriate expansion and configuration to accommodate an ideal service complex for the Public Works.

BUILDING CODE AND ZONING COMPLIANCE

A preliminary code analysis was conducted for both Buildings 1769 & 1797 and can be found in more detail in the appendix of this study. With regards to general considerations and observations, the existing site, and surrounding areas (Business Park) are zoned for industrial/business use accordingly which aligns with the day-to-day activities of the Public Works Facility. The buildings are comprised of masonry exterior walls with steel structure framing and equipped with a fire sprinkler system throughout the facility which is in accordance with facilities of this Use Group.

In the instance of both buildings, the front portion of the facilities are separated from the high-bay portion by a 2-hour fire wall. The buildings are

BUILDING CODE AND ZONING COMPLIANCE CONT.

equipped with multiple exits throughout the high-bay area. Building 1769 has a dedicated tornado shelter area.

In reviewing the zoning and code ordinances regarding modifications to be considered along with the proposed renovations. The site appears to have a riparian setback at the drainage ditch that is located between the parking lots of Buildings 1769 & 1797. This area will require further evaluation as it may not be able to be paved over without special County approval thus potentially impacting the proposed modifications of these parking areas.

Impacted proposed use and modifications of Buildings 1769 & 1797 as relates to the building code would require both facilities to incorporate compliant mechanical ventilation systems to support motor vehicle-related occupancies.

PROBABLE FUNCTIONAL PROGRAM AND SIZE

(Note: See attached diagrams for reference)



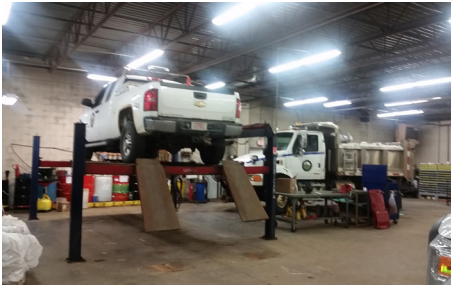
In evaluating the two facilities, the proposed program could be incorporated into building. Ideally, the newer constructed Building 1797 would serve as the primary facility for majority of the administrative services. The front portion of the building closest to Georgetown Road would house the Administration & Services programs. The existing current use of this area as a office space comprised of modular office spaces would make altering this space to meet the needs of Public Works convenient and feasible with a relative short construction timeline to convert.



Moving north in the building in which the roofline and structure transitions to the high-bay area, programming space associated with Shared Employee Areas and Utility-Water would be housed in this area (refer to diagram). This would result in these programmed spaces being more centrally located and convenient to support team members in the front administrative while also accommodating team members that typically address task related to the Service-Fleet.

The Services-Fleet and Shared Garage programs would take up the remaining portion of the building and take advantage of the existing high-bay open areas Building 1797 has to offer. With 16' high overhead doors on the east and west side of the building, vehicles access would be vastly improved from its current conditions in Building 1769. In addition, because the floor to structural clearance height is larger in this building, Public Works can incorporate two much needed lifts for large vehicles to service and maintain. Converting this area from its current storage use to the Service-Fleet program would basically require installing the appropriate equipment required to service and maintain the vehicles.

PROBABLE FUNCTIONAL PROGRAM AND SIZE CONT.



With most of the Public Works administrative and daily operational needs being accommodated in Building 1797, high-bay portion of Building 1769 would be utilized to store materials, equipment & vehicles that is currently at another offsite location. Existing equipment that Public Works may currently be storing outside due to a lack space, could now be housed inside and out of the weatherly elements. To accommodate these materials appropriately, removal of existing non-loadbearing partitions would be required to open the space up and maximize the storage capabilities.

The front of Building 1769 that is currently used as office and administrative space, would be converted to support the Sign Shop department of Public Works. Currently, this activity is also housed at another offsite location and would greatly benefit being incorporated into this building in which raw materials for this department could also be stored in the high-bay area. No specialized building services are required to accommodate this program and therefore the demolition office walls interior finishes would be required to open the space.



With proposed Buildings 1769 and 1797 utilized to accommodate the interior programs required for Public Works Facility, a centralized and efficient service center would be developed in which appropriate space and amenities would support and compliment the functions of this branch of public service.

PROBABLE FUNCTIONAL PROGRAM AND SITE



As with the interior building adjustments to support the Public Works program, so too are proposed site modifications to assist in completing the transition of the two adjacent buildings into a viable and long-term cohesive service facility.

With the existing parking lots next to each other, the proposed plan would connect these spaces by infilling the grass areas with addition parking and access drives to allow vehicles and equipment to transition from the east side of the property to the west without utilizing Georgetown Rd. With both lots constructed of heavy-duty material, the proposed consolidation of the properties would take advantage of quality infrastructure already in place and able to support service vehicles accordingly.

The undeveloped 3.45-acre property to the east of Building 1797 would be utilized as an open-air service yard for the facility to securely store additional materials and equipment. In constructing a service drive out to out to Georgetown Rd., Dedicated traffic can access this portion of the facility without impacting other vehicle activity.

FEASIBILITY CONSIDERATIONS

With the Public Works Facility currently located in Building 1769, there are several points identified that makes this a feasible option in which to consider. The schedule and timeline of constructing a facility to accommodate is significantly reduced or eliminated all together as the structures to house the proposed program is already in place. Modifications would be required to appropriately support the prescribe function, however those adjustments and associated cost would be considered minimal compared to new construction.

With Building 1797 adjacent to the currently facility's location constructed to match the service needs of Public Works, integrating program into a turnkey building and site that addresses the required construction needs is great logistical asset with minor impact.

PROBABLE PROJECT SCHEDULE

In evaluating this option, to incorporate the necessary building and site physical and programming revisions to accommodate the proposed Public Work Facility, the construction timeframe would require an approximate 9 -12-month schedule. This timeframe would take into consideration that site and buildings (in particular, Building 1769) would not entirely be taken out of commission all at once and therefore phasing of construction activities would be required thus anticipating 12-months for this work to be conducted. If the site could be closed altogether to conduct construction, the schedule would be closer to 9-months.

In addition to the anticipated construction timeframe, a project design schedule for this option would be in the range of 4-6 months, giving a total project schedule of approximately 13 – 18 months.

PROGRAM UPDATE

The City of Hudson Public Works Facility has updated and identified programming and spatial requirements utilizing the 2017 Need Analysis Assessment as a base of reference. The programming requirements are broken down into six (6) distinctive categories:

- Administration
- Services – Streets, Storm Water, Sign Shop
- Services - Fleet
- Utilities - Water
- Shared Employee Area
- Shared Garage & Storage

The following programming summaries identify the spaces and associated square footages in which each of the six distinctive categories are comprised.

In addition, the fit plans and equipment plans on the subsequent pages graphically illustrates how these programs may be composed and orientated to assist with initial development of plans, required adjacencies and clearance/storage considerations.

PROGRAM UPDATE

	Proposed SF
Administration	
1 Assistant PW Director – Services Office	150
2 Assistant PW Director – Utilities Office	150
3 Assistant PW Director – Parks/Golf/Cemeteries Office	150
4 Conference Room	450
5 Office Workroom	200
Dept. Program Subtotal	1,100
Building/Circulation Factor (20%)	220
Dept. Total	1,320

	Proposed SF
Services	
1 Superintendent Service/Arborist Office	150
2 Assistant Superintendent Streets/Fleet Office	150
3 Assistant Superintendent Streets/Storm Office	150
4 Open Office	400
5 Workshop	150
6 Storage - Files/Records	100
7 Sign Shop	640
Dept. Program Subtotal	1,740
Building/Circulation Factor (20%)	348
Dept. Total	2,088

	Proposed SF
Services_Fleet	
1 Fleet Specialist Office	150
2 Open Office/Workspace (2) Mechanics	300
3 Fabrication	1,000
4 Lockable Inventory Storage	1,000
5 Fleet Garage - Heated	5,000
Dept. Program Subtotal	7,450
Building/Circulation Factor (20%)	1,490
Dept. Total	8,940

PROGRAM UPDATE

	Proposed SF
Utilities_Water	
1 Superintendent Office	150
2 Assistant Superintendent Office	150
3 Open Office	600
Dept. Program Subtotal	900
Building/Circulation Factor (20%)	180
Dept. Total	1,080

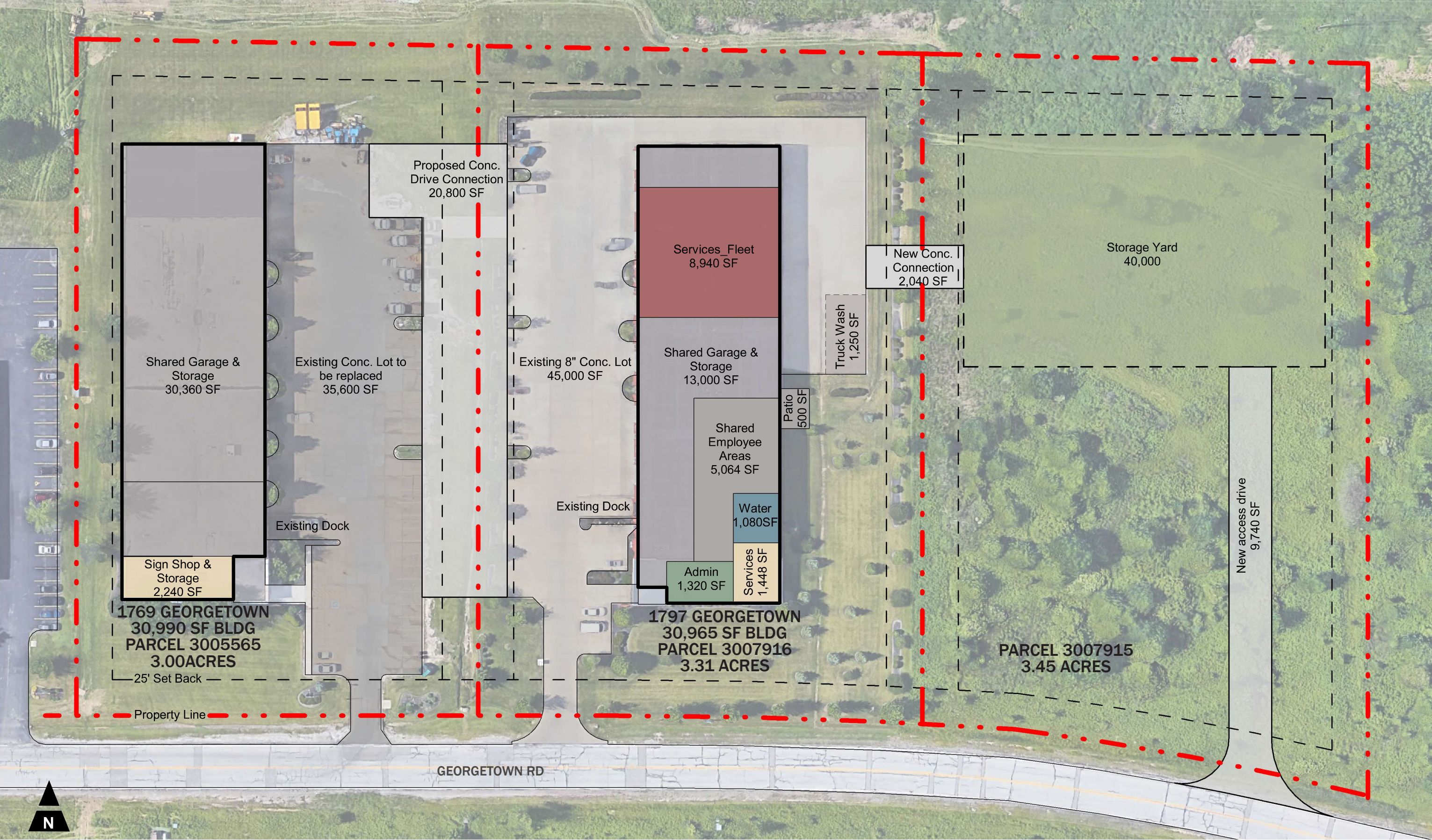
	Proposed SF
Shared Employee Areas	
1 Kitchen/Break Room	750
2 Training Room/Lunch	1,020
3 Open Office/Computer Work Room/Training	750
4 Locker Room (Mud Room)	600
5 Showers	500
6 Staff Restrooms	500
7 Janitorial/Laundry	100
Dept. Program Subtotal	4,220
Building/Circulation Factor (20%)	844
Dept. Total	5,064

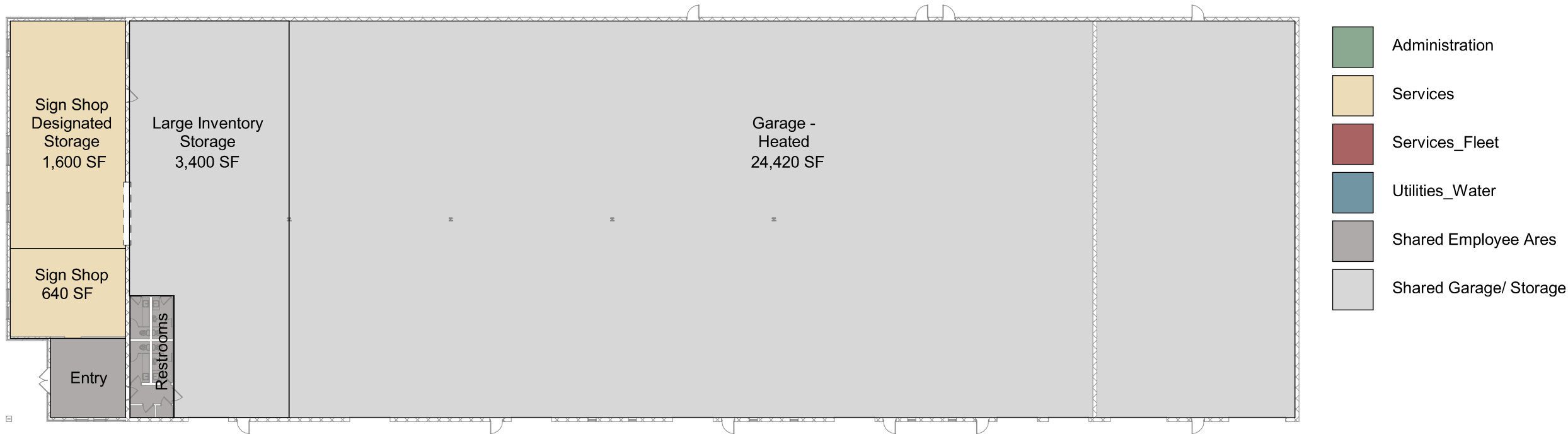
	Proposed SF
Shared Garage & Storage	
1 Large Inventory Storage	5,000
2 Garage - Heated	30,000
3 Truck Wash Bay	1,250
Dept. Program Subtotal	36,250
Building/Circulation Factor (20%)	7,250
Dept. Total	43,500

Department Subtotal	51,660
Building Circulation Total	10,332
Building Total SF	61,992

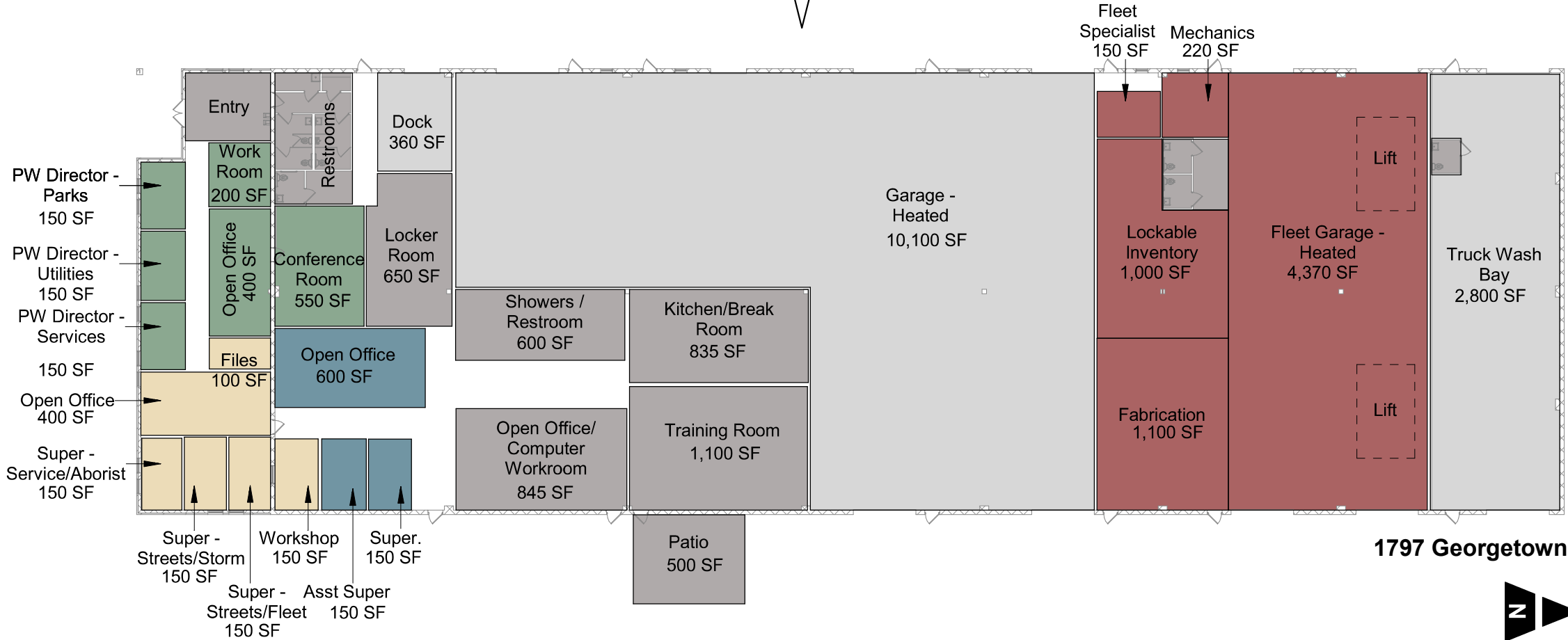
PROGRAM UPDATE

		Proposed SF
Outdoor Space		
1	Covered Parking (Lean to Structure)	TBD
2	Yard	40,000
3	Salt Dome	10,000
4	Patio	500
5	Vehicle Washer	1,250
Outdoor Program Subtotal		51,750
Circulation Factor (n/a)		-
Outdoor Program Total		51,750
Total Programmed SF		113,742



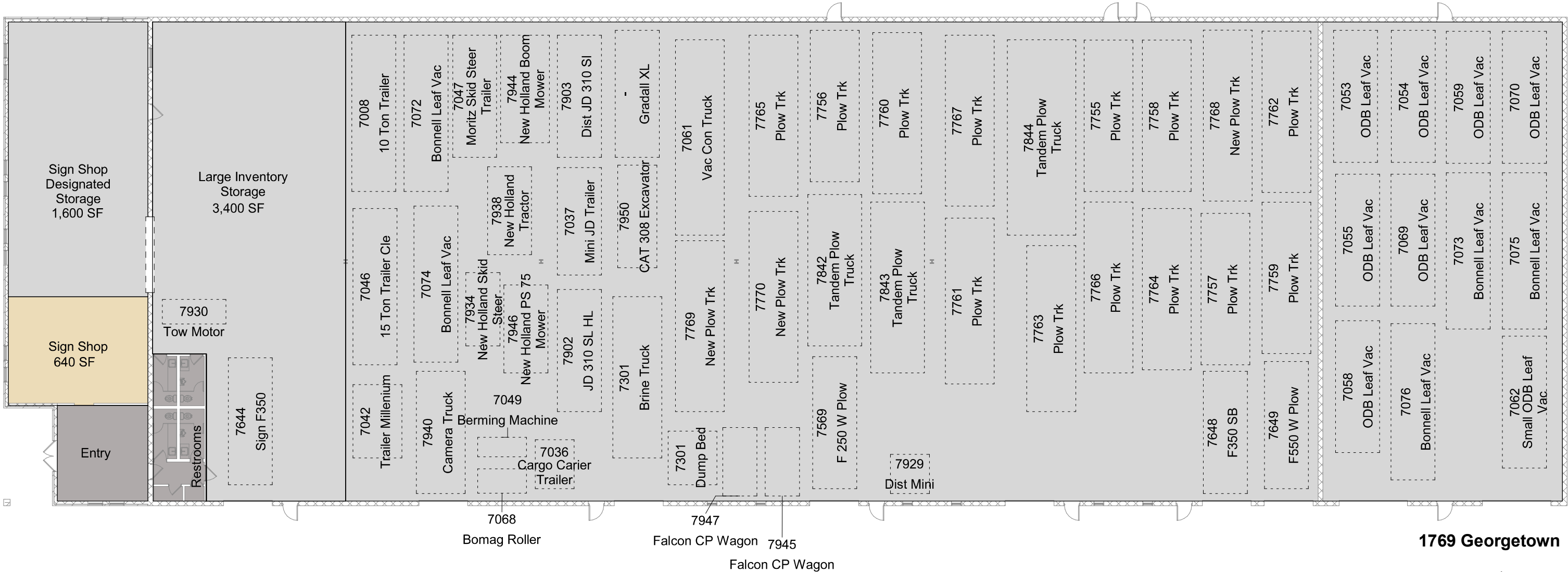


1769 Georgetown



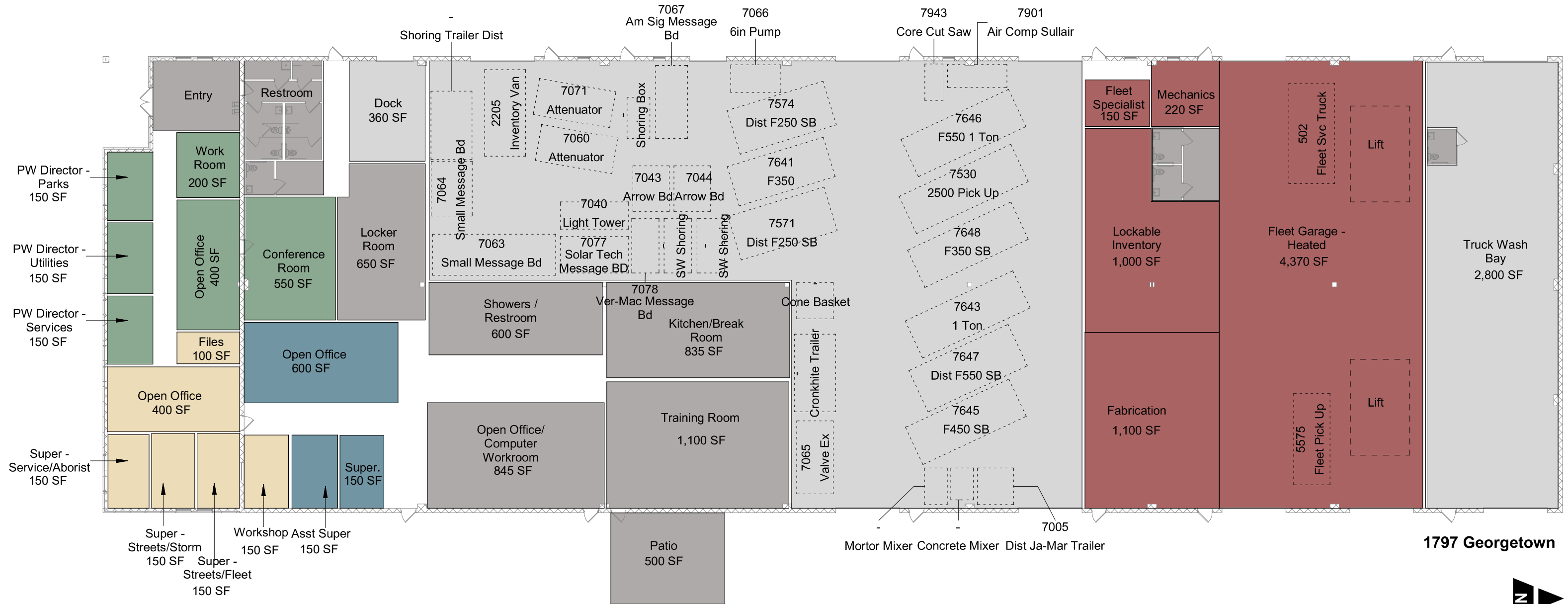
1797 Georgetown





1769 Georgetown





The following Probable Project Cost estimate takes into account current building construction and current market conditions (March 2021). A third Party Estimator assisted in composing the information to contributed to actual market conditions at time of bidding. The range presented captures the minimum & maximum conditions accounting for the various potential options in which is contributed to the construction industry. The Probable Project Cost is to be used as a guide as it relates to this study with the understanding that financial escalation factors may contribute to final project cost.

	Industry Standard	
	Low	High
New Construction Cost/SF:	NA	NA
Square Footage	0	0
Construcion Costs	\$0.00	\$0.00
Renovation Construction Cost/SF:	\$20.00	\$52.75
Square Footage	62000	62000
Construction Cost	\$1,240,000.00	\$3,270,500.00
Site Development Cost/SF:	\$6.50	\$6.50
Site Development Square Feet	155000	155000
Construction Cost	\$1,007,500.00	\$1,007,500.00
TOTAL Construction Cost:	\$2,247,500.00	\$4,278,000.00
Soft Costs		
GC Management	5.0%	5.0%
GC Mangemetn Cost	\$112,375.00	\$213,900.00
GC Overhead and Profit	5.0%	5.0%
GC Overhead and Proft	\$112,375.00	\$213,900.00
Bond and Insurance	2.0%	2.0%
Bond and Insurance Costs	\$44,950.00	\$85,560.00
Escaltion	5.0%	5.0%
Escalation Costs	\$112,375.00	\$213,900.00
Professional Services	10.0%	10.0%
Profesional Services Costs	\$224,750.00	\$427,800.00
Permit Plan Review	0.25%	0.25%
Permit Plan Review Costs	\$5,618.75	\$10,695.00
Construction Contengency	5.50%	5.50%
Construction Contengency Cost	\$123,612.50	\$235,290.00
TOTAL Soft Cost:	\$561,875.07	\$1,401,045.00
OPINION OF PROBABLE COST	\$2,809,375.07	\$5,679,045.00

*Opinion of Probable Cost is related to the date of this document and does not include provisions for FF&E, changes in construction market, purchase of property, ennnvirometnal related items, nor other unknown items specific to the details of the project.

CITY HALL FEASIBILITY

In addition to considering the Georgetown Rd. location for feasibility of incorporating the City of Hudson Public Works Facility, the request was given to analysis the Hudson City Hall property in which a portion of the site along with some existing space within the building would to be studied to assist in identifying if this facility and site warranted merit for consideration. Utilizing the six (6) distinctive program categories, the following is a summary of that analysis.



GENERAL BUILDING/SITE OVERVIEW

Hudson City Hall is along the south side of Terex Rd. and situated on approximately 20-acres. The property has two access points with Terex Rd. to the north and winding drive to the east from Hudson Dr. The property is semi-secluded as the site is surrounded by trees and sits back from Terex Rd. The multi-level building is sited towards the center of the property with parking along the north and south sides of the property. Overall, the site is large enough to support the Public Works Facility programming considerations while also continuing to address the daily operational needs of City Hall.

PROBABLE FUNCTIONAL PROGRAM AND SIZE:

(Note: See attached diagrams for reference)

In evaluating the City Hall location for consideration, the option presented would be a combination of two (2) conditions:

- Utilizing existing space in City Hall to support similar business-like functions.
- New building construction to accommodate the Public Works activities

In utilizing existing space in the City Hall building, the objective would be to incorporate programming that has similar business functions to minimize the construction required. The Administration program for Public Works would capture space in City Hall.

The focus of the Public Works Facility would be concentrated along the south side of the site in the form of new construction. The proposed 1-story building would house the remaining functions of the Public Works Facility with administrative and personnel programs located near the front of the building. Vehicle and equipment associated programmed spaces would comprise the remaining area of the proposed facility with similar construction requirements such as high-bay open areas, overhead garage doors, and vehicle exhaust ventilation systems. The facility would incorporate a fire sprinkler system and rated walls where required to comply with code.

PROBABLE FUNCTIONAL PROGRAM AND SITE

With the proposed new construction for the Public Works Facility, exterior programming needs would be addressed with the construction of a storage yard along the southwest side of the City Hall property. The existing access drive along the east side of the site would be modified to support access to the Storage Yard from the eastside. Similarly, the existing parking lot along the south side of the site would be extended to provide access into the yard from the south.

With the footprint of the proposed new building and heavy-duty drive access consuming the south parking lot for City Hall, new parking areas will have to be implemented around the site to accommodate the daily activity and functions. The conversion of green space to hard surface will also impact and require stormwater management provisions and considerations.

One existing contributing factor to consider with regards to the City Hall location as it relates to incorporating the Public Works Facility and daily operations is the potential zoning and impact use of the site. Currently, the daily activities of this site are more in line with traditional business use. Incorporating a heavier vehicle and traffic pattern and use may require conditional zoning review and approval. In addition, the edge of the proposed Service Yard on the site would be approximately 250' away from residential property which should be taken into consideration.

FEASIBILITY CONSIDERATIONS:

Considering this option to utilize the 20-acre City Hall site to include a new Public Works Facility presents several factors. The schedule and timeline of constructing a facility immediately comes into consideration as design, review, and approval of the concept is compounded on the construction duration. Temporary site provisions may be required as the main parking area for City Hall is immediately impacted by the construction.

Unlike the Georgetown option, the acquisition of property is not a factor. However, the development of infrastructure and underground utilities to accommodate the functions of the Public Works factors into the equation. So with the opportunity to customize the facility from the ground up to address the needs of the program, the feasibility of this option may be impacted by construction required, schedule, short and long-term phasing considerations in addition to creating a shared site.

PROBABLE PROJECT SCHEDULE

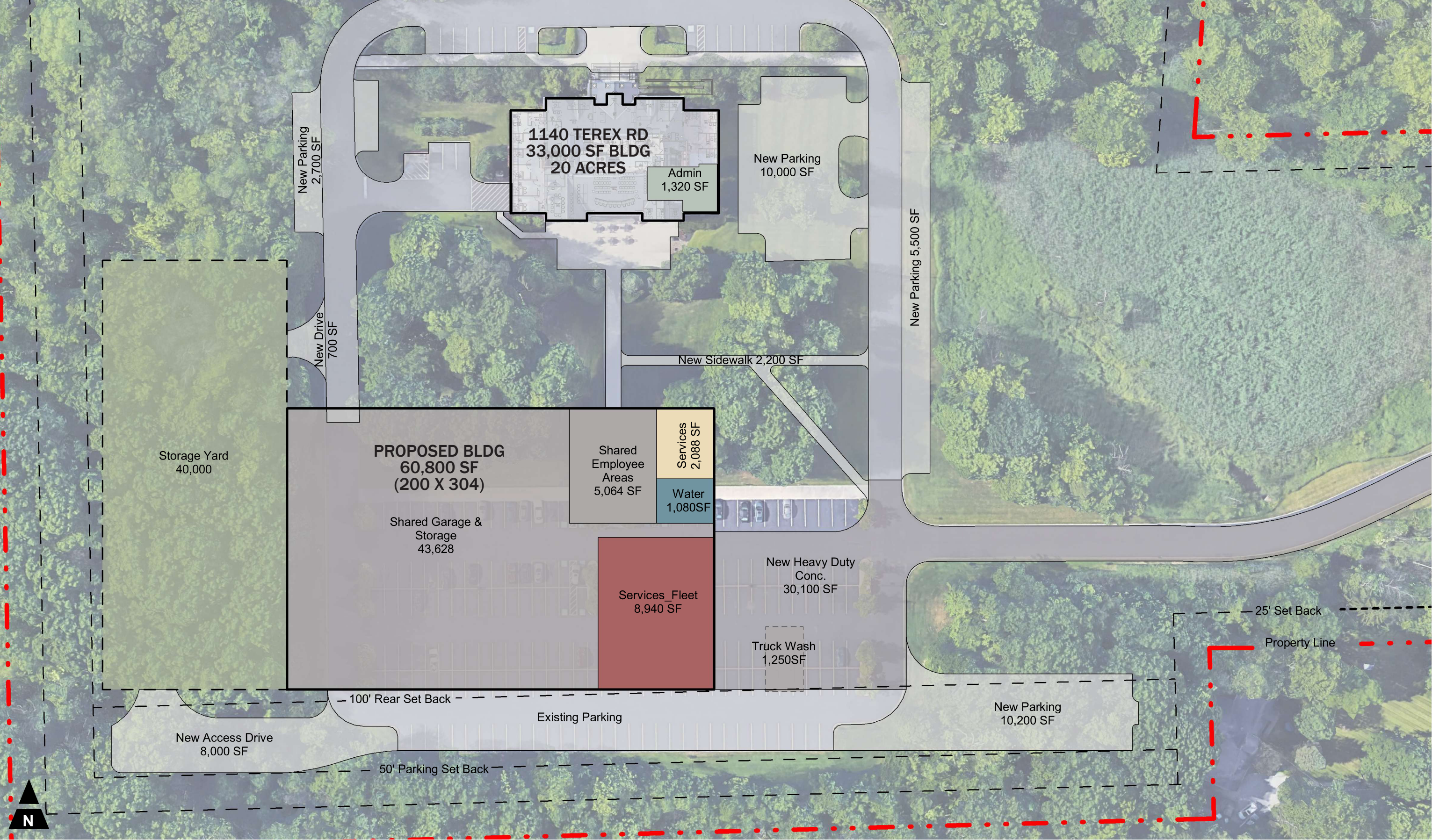
In evaluating this option, to incorporate the necessary new construction and site revisions to accommodate the proposed Public Work Facility, the construction timeframe would require an approximate 8 -9-month schedule. This timeframe takes into consideration that the new facility is a pre-engineered structure. In addition to the anticipated construction timeframe, a project design schedule for this option would be in the range of 3-5 months, giving a total project schedule of approximately 11 – 14 months.

PROGRAM UPDATE

For the purpose of evaluate the appropriateness and feasibility of incorporating the City of Hudson Public Works Facility at City Hall Property the same updated programming breakdown from the Georgetown Rd analysis will be used. The programming requirements are broken down into six (6) distinctive categories:

- Administration
- Services – Streets, Storm Water, Sign Shop
- Services - Fleet
- Utilities - Water
- Shared Employee Area
- Shared Garage & Storage

The subsequent fit plan graphically illustrates how these programs may be composed and orientated to assist with initial development of plans, required adjacencies and clearance/storage considerations.



PROBABLE PROJECT COST

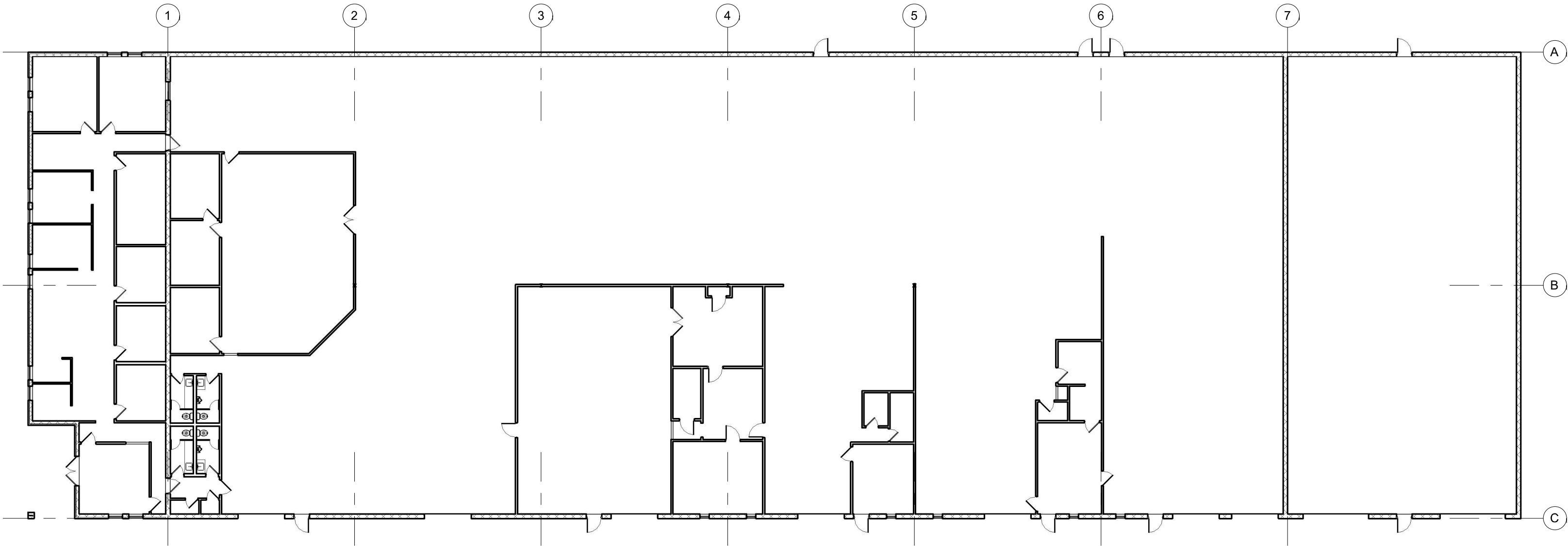
CITY HALL FEASIBILITY

The following Probable Project Cost estimate takes into account current building construction and current market conditions (March 2021). A third Party Estimator assisted in composing the information to contributed to actual market conditions at time of bidding. The range presented captures the minimum & maximum conditions accounting for the various potential options in which is contributed to the construction industry. The Probable Project Cost is to be used as a guide as it relates to this study with the understanding that financial escalation factors may contribute to final project cost.

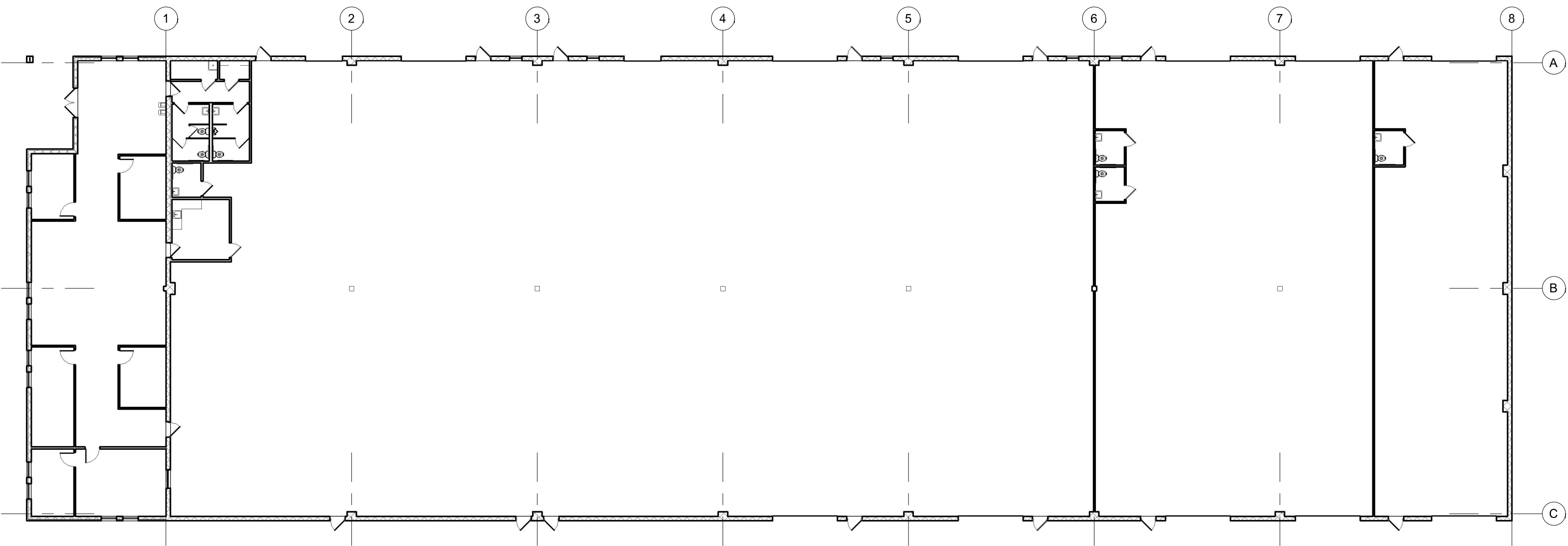
	Industry Standard	
	Low	High
New Construction Cost/SF:	\$70.00	\$112.00
Square Footage	60,800	60,800
Construction Costs	\$4,256,000.00	\$6,809,600.00
Renovation Construction Cost/SF:	\$0.00	\$0.00
Square Footage	1230	1230
Construction Cost	\$0.00	\$0.00
Site Development Cost/SF:	\$10.00	\$10.00
Site Development Square Feet	121000	121000
Construction Cost	\$1,210,000.00	\$1,210,000.00
TOTAL Construction Cost:	\$5,466,000.00	\$8,019,600.00
Soft Costs		
GC Management	5.0%	5.0%
GC Management Cost	\$273,300.00	\$400,980.00
GC Overhead and Profit	5.0%	5.0%
GC Overhead and Profit	\$273,300.00	\$400,980.00
Bond and Insurance	2.0%	2.0%
Bond and Insurance Costs	\$109,320.00	\$160,392.00
Escalation	5.0%	5.0%
Escalation Costs	\$273,300.00	\$400,980.00
Professional Services	10.0%	10.0%
Professional Services Costs	\$546,600.00	\$801,960.00
Permit Plan Review	0.25%	0.25%
Permit Plan Review Costs	\$13,665.00	\$20,049.00
Construction Contingency	5.50%	5.50%
Construction Contingency Cost	\$300,630.00	\$441,078.00
TOTAL Soft Cost:	\$1,366,500.07	\$2,626,419.00
OPINION OF PROBABLE COST	\$6,832,500.07	\$10,646,019.00

*Opinion of Probable Cost is related to the date of this document and does not include provisions for FF&E, changes in construction market, purchase of property, environmental related items, nor other unknown items specific to the details of the project.

APPENDIX



1 Existing Plan - 1769
1" = 20'-0"



1 Existing Plan - 1797
1" = 20'-0"

Vehicle and Equipment List - Service

ID Number	Description	L	W	SQ FT	Priority for inside storage (1 = top priority)
502	Fleet Svc Truck	22	10	220	1
2205	Inventory Van	19	9	171	1
5575	Fleet Pick up	20	8	160	1
7005	Dist Ja-Mar Trailer			0	1
7008	10 Ton trailer ??	32	9	288	3
7036	Cargo Carier Trailer			0	3
7037	Mini JD Trailer	22	9	198	1
7040	Light Tower	15	6	90	1
7042	Trailer Millenium			0	3
7043	Arrow Bd	10	8	80	1
7044	Arrow Bd	10	8	80	1
7046	15 Ton Trailer Cleveland	32	9	288	3
7047	Moritz Skid Steer Trailer	25	9	225	2
7049	Berming Machine	10	4	40	2
7053	ODB Leaf Vac	27	9	243	2
7054	ODB Leaf Vac	27	9	243	2
7055	ODB Leaf Vac	27	9	243	2
7058	ODB Leaf Vac	27	9	243	2
7059	ODB Leaf Vac	27	9	243	2
7060	Attenuator	17	8	136	2
7061	Vac Con Truck	40	10	400	1
7062	Small ODB Vac	27	9	243	2
7063	Small Message Bd	27	9	243	1
7064	Small Message Bd	12	9	108	1
7065	Valve Ex	16	8	128	1
7066	6 inch Pump	11	6	66	1
7067	Am Sig Message Bd	16	7	112	1
7068	Bomag Roller	10	5	50	1
7069	ODB Leaf Vac	27	9	243	2
7070	ODB Leaf Vac	27	9	243	2
7071	Attenuator	17	8	136	2
7072	Bonnell Leaf Vac	32	9	288	2
7073	Bonnell Leaf Vac	32	9	288	2
7074	Bonnell Leaf Vac	32	9	288	2
7075	Bonnell Leaf Vac	32	9	288	2
7076	Bonnell Leaf Vac	32	9	288	2

7077	Solar Tech Message Bd	15	8	120	1
7078	Ver-Mac Message Bd	12	6	72	1
7301	Dump Bed	11	10	110	3
7301	Brine Truck	33	10	330	1
7530	2500 Pick Up	27	9	243	1
7569	F 250 W Plow	27	9	243	1
7571	Dist F250 SB	22	10	220	1
7574	Dist F250 SB	22	10	220	1
7641	F 350	22	9	198	1
7643	1 Ton	26	9	234	1
7644	Sign F350	26	9	234	1
7645	F450 SB	25	9	225	1
7646	F550 1 Ton	26	9	234	1
7647	Dist F550 SB	24	10	240	1
7648	F350 SB	25	9	225	1
7649	F550 W Plow	26	9	234	1
7755	Plow Trk	31	10	310	1
7756	Plow Trk	31	10	310	1
7757	Plow Trk	31	10	310	1
7758	Plow Trk	31	10	310	1
7759	Plow Trk	31	10	310	1
7760	Plow Trk	33	10	330	1
7761	Plow Trk	34	10	340	1
7762	Plow Trk	33	10	330	1
7763	Plow Trk	34	10	340	1
7764	Plow Trk	33	10	330	1
7765	Plow Trk	33	10	330	1
7766	Plow Trk	35	10	350	1
7767	Plow Trk	35	10	350	1
7768	New Plow Trk	35	10	350	1
7769	New Plow Trk	35	10	350	1
7770	New Plow Trk	35	10	350	1
7842	Tandem Plow Truck	31	11	341	1
7843	Tandem Plow Truck	35	11	385	1
7844	Tandem Plow Truck	40	14	560	1
7901	Air Comp Sullair	13	5	65	1
7902	JD 310 SL HL	25	9	225	1
7903	Dist JD 310 SI	25	9	225	1
7929	Dist Mini			0	1
7930	Tow Motor	13	5	65	1
7934	New Holland Skid Steer	15	7	105	2
7938	New Holland Tractor	18	9	162	1

7940	Camera truck	25	10	250	1
7941	Durapatcher	20	8	160	1
7943	Core Cut Saw	8	4	32	1
7944	New Holland Boom Mower	22	10	220	1
7945	Falcon CP Wagon	14	7	98	1
7946	New Holland PS 75 Mower	18	9	162	1
7947	Falcon CP Wagon	14	7	98	1
7950	CAT 308 Excavator	21	8	168	1
	Gradall XL 3300	26	9	234	1
	Cronkhite Trailer	17	9	153	2
	Mortar Mixer	8	5	40	1
	Concrete Mixer	7	5	35	1
	Shoring Trailer Dist	9	15	135	1
	Shoring Box	9	5	45	2
	Cone Basket	8	8	64	3
	SW Shoring	12	6	72	2
	SW Shoring	12	6	72	2
TOTAL SQ FEET				19456	

BUILDING CODE COMPLIANCE SUMMARY

A preliminary code review was conducted for Building 1769 & Building 1797 and is summarized below:

Applicable Codes:

2017 Ohio Building Code, ICC/ANSI A117.1-2009, 2017 Ohio Plumbing Code, 2017 Ohio Mechanical Code, NFPA 70-17; 2017 Ohio Energy Code, 2017 Ohio Fire Code

OBC Chapter 3 - Use and Occupancy Classification

Existing/Proposed Use Groups:

B, Business (office, common areas); S-1 Storage (general moderate-hazard), and S-2 Storage (low-hazard, including vehicles)

Is assumed that none of storage is considered “high-hazard” per the Building Code, but this would need verified prior to completion of construction documents.

OBC Chapter 4 - Special Detailed Requirements Based on Use and Occupancy

Section 406 Motor-Vehicle-Related Occupancies

406.6 Enclosed Parking Garage

- Mechanical ventilation required.
- Automatic sprinkler system required.

406.7 Repair garages

- Mechanical ventilation required.
- Automatic sprinkler system required.

Section 413 Combustible Storage

- High-piled stock or rack storage required to comply with NFPA 13 and Chapter 32 of Ohio Fire Code

OBC Chapter 5 - General Building Heights and Areas

Table 504.3 - Allowable Building Heights in Feet (Sprinklered)

	2B	5B
Use Group B, S	75'	60'
Existing Height		
1769	17'	
1797	27'	

Table 504.4 - Allowable Number Stories (Sprinklered)

	2B	5B
Use Group B	4	3 Stories
Use Group S-1	3	2 Stories
Use Group S-2	4	3 Stories
Existing Stories		
1769, 1797		1 Story

BUILDING CODE COMPLIANCE SUMMARY CONT.

Table 506.2 - Allowable Building Area (At) (Sprinklered)

	2B	5B
Use Group B	92, 000	36,000 SF
Use Group S-1	70,000	36,000 SF
Use Group S-2	104,000	54,000 SF
Existing Areas		
1769	± 30,990 SF	
1797	± 30,990 SF	

Based on area and height of the existing buildings and existing fire suppression systems, building is within code limitations for proposed uses in each building and could potentially increase in area if the existing and proposed construction is entirely non-combustible (i.e., metal stud partitions).

OBC Chapter 6 - Construction Types

The existing building at 1769 Georgetown is a masonry and exposed steel structure. Masonry walls appear to be bearing. Existing interior partition composition is unknown, but drawings from addition classify building as “unprotected, noncombustible” construction type (OBC type 2C). Construction type designation per current code is assumed as 2B, although it could also be classified as a 5B building based on actual size (area, height) constructed.

Based on original construction drawings, the existing building at 1797 Georgetown is also a masonry and exposed steel structure. Interior partitions are shown as metal stud with drywall. Code data on original drawings designates construction type 5B, but if built per the original drawings as noncombustible construction, it could potentially be classified as a construction type 2B building.

Table 601 - Fire-Resistance Rating Requirements for Building Elements (hours)

	2B	5B
Primary Structural Frame	0	0
Bearing Walls, Exterior	0	0
Bearing Walls, Interior	0	0
Nonbearing walls and partitions Exterior	See Table 602	
Nonbearing walls and partitions Interior	0	0
Floor construction and secondary members		0 0
Roof construction and secondary members		0 0

Table 602 - Fire Resistance Rating Requirements for Exterior Walls based on Fire Separation Distance

	B. S-2	S-1	
10 ≤ X < 30	0	0	Hour Rating Required
X ≥ 30	0	0	Hour Rating Required

BUILDING CODE COMPLIANCE SUMMARY CONT.OBC Chapter 7 - Fire and Smoke Protection Features

Table 706.4 - Fire Wall Fire-Resistance Ratings

Although there is an existing masonry wall separating the front office area from back storage area in both buildings, neither wall is designated as a fire wall on the original drawings, nor is such a separation required based on current/proposed uses and building area.

OBC Chapter 8 - Interior Finishes

Table 803.11 - Interior Wall and Ceiling Finish Requirements by Occupancy

Exit Enclosures and Passages	B	
Corridors	B	
Rooms and Enclosed Spaces		C

OBC 804.4 - Interior Floor Finish Requirements

Group X, [Sprinklered / Non-Sprinklered] = Class [I / II]

OBC Chapter 9 - Fire Protection Systems

OBC 903.2 Automatic Sprinkler Systems

Existing Automatic Sprinkler System in 1769. Existing system is also assumed in 1797 based on information from original drawings.

OBC Chapter 10 - Means of Egress

Table OBC 1004.1.2 Occupant Loads

Business (office) areas:	1 /100 GSF
Storage, accessory:	1/300 GSF
Storage, warehouse	1/500 GSF
Parking:	1/200 GSF

OBC 1005 - Egress Width

Other egress components: 0.15 inches per occupant served

Table 1006.2.1 – Spaces with One Exit or Exit Access Doorway

Occupancy	Maximum Occupant Load of Space	Maximum Common Path of Egress Travel (Sprinklered)
B	49	100'
S	29	100'

Table 1006.3.1 - Minimum Number of Exits for Occupant Load

Occupant Load, 1-500, Minimum Number of Exits per story 2

OBC 1007 - Exit and Exit Access Doorway Configuration

Refer to life safety plans for separation distance not less than 1/2 the length of the maximum overall diagonal dimension of the area served.

BUILDING CODE COMPLIANCE SUMMARY CONT.

Table 1017.2 - Exit Access Travel Distance

	S-1	S-2	B
Maximum Allowable Exit Travel Distance (Sprinklered)	250'	400'	300'

Table 1020.1 - Corridor Fire-Resistance Rating

Group B, S, Sprinklered = 0 Hours

OBC Chapter 29 - Plumbing Systems

Table 2902.1 - Minimum Number of Required Plumbing Fixtures

	B	S
Fixture Type	Required	Required
Water Closet	1/50	1/100
Lavatories	1/80	1/100
Drinking Fountain	1/100	1/1000
Service Sink	1	1

Project:	<div><div><div>The City of Hudson</div><div>Public Works Facility - City Hall Site</div><div>Hudson, Ohio</div></div></div>					<div><div><div>&estimate</div><div>a PCS company</div></div><div>March 4, 2021</div><div>17-098</div><div>Lead: BL</div><div>Checked: BL</div></div>		
Design:	DS Architecture							
SUMMARY of "PROGRAM ESTIMATE"								
ITEM	DESCRIPTION	Count or Area SF	A/S/C	M/E/P	TOTAL	Markups*		GRAND TOTAL
1.	ADMINISTRATION:				\$ 126,000		\$ 41,202	\$ 167,202
	- Offices, Work Room, Conference Room, Shared Spaces	1,260 GSF	\$75.00	\$25.00	\$126,000	32.70%	\$41,202	\$ 167,202
2.	SERVICES:				\$313,200		\$ 102,416	\$ 415,616
	- Offices, Work Shop, Storage, Dispatch, Sign Shop	2,088 GSF	\$100.00	\$50.00	\$313,200	32.70%	\$102,416	\$ 415,616
3.	SERVICES - FLEET:				\$894,000		\$ 292,338	\$ 1,186,338
	- Heated Garage;	8,940 GSF	\$70.00	\$30.00	\$894,000	32.70%	\$292,338	\$ 1,186,338
4.	UTILITIES - WATER:				\$162,000		\$ 52,974	\$ 214,974
	- Offices, Storage / Workroom	1,080 GSF	\$100.00	\$50.00	\$162,000	32.70%	\$52,974	\$ 214,974
5.	BUILDING SUPPORT / SHARED SPACES:				\$4,843,680		\$ 1,583,883	\$ 6,427,563
	- Vestibule / Waiting, Kitchen / Break, Training, Offices, Lockers / Showers, Restrooms, MEP Rooms, IT, Janitor, Storage	5,064 GSF	\$120.00	\$50.00	\$860,880	32.70%	\$281,508	\$ 1,142,388
	- Heated Garage and Inventory Storage	39,828 GSF	\$70.00	\$30.00	\$3,982,800	32.70%	\$1,302,376	\$ 5,285,176
6.	OUTDOOR SPACE:				\$1,281,225		\$ 418,961	\$ 1,700,186
	- Yard; Assume Gravel	40,000 GSF	\$4.00	None Included	\$160,000	32.70%	\$52,320	\$ 212,320
	- New Parking	38,400 GSF	\$8.00	None Included	\$307,200	32.70%	\$100,454	\$ 407,654
	- New Access Drive and Heavy Duty Concrete (Allows for site lighting and storm water management)	38,800 GSF	\$20.00	None Included	\$776,000	32.70%	\$253,752	\$ 1,029,752
	- Truck Wash	1,250 GSF	\$12.50	\$10.00	\$28,125	32.70%	\$9,197	\$ 37,322
	- New Sidewlks	2,200 GSF	\$4.50	None Included	\$9,900	32.70%	\$3,237	\$ 13,137
	TOTAL, ALL ITEMS CONSTRUCTION COSTS:				\$ 7,620,105		\$ 2,491,774	\$ 10,111,879
	FF & E, Other Soft Costs and Fees Are Not Included Above		- NIC -	- NIC -				- NIC -
* = 7% GC's.; 5% OH & P; 2% Bond & Insurance; 5% Escalation; 10% Design / Estimating Contingency; .25% Permit; Compounded; 32.7% TOTAL								

This estimate is based on the documents dated July, 2017, received 11/17, conversations with the design team and our best assumptions at this time.

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Project:	<div><div>The City of Hudson</div><div>Public Works Facility - 1769 and 1796 Site Improvement</div><div>Hudson, Ohio</div></div>					<div><div><div>&estimate</div><div>a PCS company</div></div><div>March 4, 2021</div><div>17-098</div><div>Lead: BL</div><div>Checked: BL</div></div>		
Design:	DS Architecture							
SUMMARY of "PROGRAM ESTIMATE"								
ITEM	DESCRIPTION	Count or Area SF	A/S/C	M/E/P	TOTAL	Markups*		GRAND TOTAL
1.	ADMINISTRATION:				\$ 100,800		\$ 32,962	\$ 133,762
	- Offices, Work Room, Conference Room, Shared Spaces	1,260 GSF	\$60.00	\$20.00	\$100,800	32.70%	\$32,962	\$ 133,762
2.	SERVICES:				\$125,400		\$ 41,006	\$ 166,406
	- Offices, Work Shop, Storage, Dispatch, Sign Shop (Fire Door Included)	1,320 GSF	\$75.00	\$20.00	\$125,400	32.70%	\$41,006	\$ 166,406
3.	SERVICES - FLEET:				\$581,100		\$ 190,020	\$ 771,120
	- Heated Garage;	8,940 GSF	\$30.00	\$35.00	\$581,100	32.70%	\$190,020	\$ 771,120
4.	UTILITIES - WATER:				\$86,400		\$ 28,253	\$ 114,653
	- Offices, Storage / Workroom	1,080 GSF	\$60.00	\$20.00	\$86,400	32.70%	\$28,253	\$ 114,653
5.	BUILDING SUPPORT / SHARED SPACES:				\$2,378,260		\$ 777,691	\$ 3,155,951
	- Vestibule / Waiting, Kitchen / Break, Training, Offices, Lockers / Showers, Restrooms, MEP Rooms, IT, Janitor, Storage	5,064 GSF	\$60.00	\$20.00	\$405,120	32.70%	\$132,474	\$ 537,594
	- Heated Garage	13,000 GSF	\$30.00	\$35.00	\$845,000	32.70%	\$276,315	\$ 1,121,315
	- Large Inventory Storage	30,220 GSF	\$22.00	\$15.00	\$1,118,140	32.70%	\$365,632	\$ 1,483,772
	- Patio	500 GSF	\$15.00	\$5.00	\$10,000	32.70%	\$3,270	\$ 13,270
6.	OUTDOOR SPACE:				\$1,008,625		\$ 329,820	\$ 1,338,445
	- Yard; Assume Gravel	40,000 GSF	\$4.00	None Included	\$160,000	32.70%	\$52,320	\$ 212,320
	- Existing Paved Lot (8" Concrete, assumes some refurbishment)	45,000 GSF	\$5.00	None Included	\$225,000	32.70%	\$73,575	\$ 298,575
	- Existing Parking (6" Concrete, assumes some refurbishment)	35,600 GSF	\$3.00	None Included	\$106,800	32.70%	\$34,924	\$ 141,724
	- New Access Drive and Connections (Assumes no utilities required)	32,580 GSF	\$15.00	None Included	\$488,700	32.70%	\$159,805	\$ 648,505
	- Truck Wash	1,250 GSF	\$12.50	\$10.00	\$28,125	32.70%	\$9,197	\$ 37,322
	TOTAL, ALL ITEMS CONSTRUCTION COSTS:				\$ 4,280,585		\$ 1,399,751	\$ 5,680,336
	FF & E, Other Soft Costs and Fees Are Not Included Above		- NIC -	- NIC -				- NIC -
* = 7% GC's.; 5% OH & P; 2% Bond & Insurance; 5% Escalation; 10% Design / Estimating Contingency; .25% Permit; Compounded; 32.7% TOTAL								

This estimate is based on the documents dated July, 2017, received 11/17, conversations with the design team and our best assumptions at this time.

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