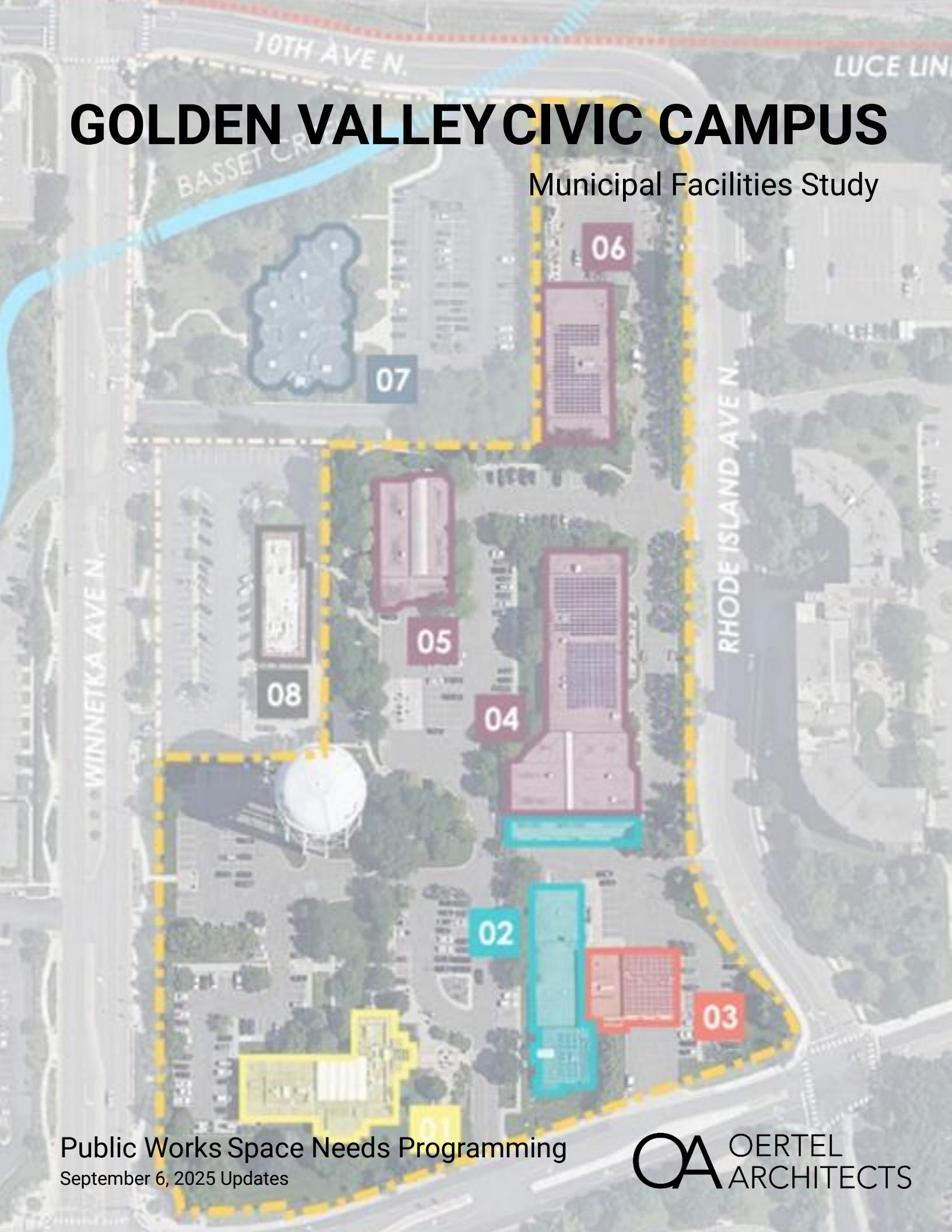


# GOLDEN VALLEY CIVIC CAMPUS

Municipal Facilities Study



Public Works Space Needs Programming  
September 6, 2025 Updates

**OA** OERTEL  
ARCHITECTS

# Golden Valley Civic Campus Municipal Facilities Study – PW Space Needs

## Purpose – Explanation of Space Program Documents

The purpose of this narrative is to provide a brief overview to the way Oertel Architects evaluated data provided by the City of Golden Valley, applied industry standards and best practices, and produced the space needs programs for the public works department.

## Public Works Operations Ultimate Goal

The ultimate goal of the City of Golden Valley Public Works is to **efficiently consolidate operations** into **one central location**, either as a campus of structures or a singular structure. This is a typical best practice scenario for Public Works service delivery. In some scenarios, separation of some operational functions is also efficient, but need to be evaluated based on size, location and need.

Public Works operations, currently located within the Northeast Quadrant of Golden Valley's downtown district will need to consider total space needs, operational phasing, co-location and possible relocation to achieve those operational goals.

### Data Evaluation and Summary

As part of the original information request, the City of Golden Valley provided the design team with a detailed vehicle/equipment list, a staff organizational chart and city growth statistics. We reviewed these resources and incorporated the information into various data collections and calculators that help determine the ultimate space needs, based on best practices within the design, construction, and operation of effective public works facilities.

### Vehicle Fleet Evaluation

The city fleet was reviewed and compartmentalized by city division. Each piece of equipment was categorized for best practice storage methodology: Conditioned (warm storage) or Unconditioned (unheated storage) and size: Large (single axle plow equivalent or larger), Medium (Ford 550 or HD pick-ups or equivalent), or Small (Standard Pick-up or equivalent). Smaller equipment, such as skid steers or elements that take up less than a standard pick-up, are counted as a fraction of the small category. Size and configuration of these parking sizes are included in the space standards summary.

Each work group / division had their respective equipment evaluated and categorized separately for specific space needs.

Departments that have vehicles and equipment requiring service by vehicle maintenance, were counted, and categorized separately for establishing vehicle maintenance metrics, but not vehicle storage space needs.

### Departmental Staff Evaluation

The organizational chart provided was reviewed for the related Public Works Divisions: Administration, Parks, Utilities (Storm-Water-Sewer), Streets and Vehicle Maintenance. Departmental staffing was broken down by Full Time staff and Seasonal Staff.

### City and Departmental Growth

Growth of fleet and staff in Public Works departments is typically reflected in the growth and development of the city for which they serve. The City of Golden Valley is a developed suburban city; thus, growth is going to be generally reflected in population density, rather than area or service development. Growth projections used for this space needs study are limited to an

anticipated percentage of population growth as determined by the city and Met Council. This approach generally reflects a demand on infrastructure, for which public works is ultimately responsible for maintaining.

#### Programming Summary

The current space demands by fleet and staffing levels for the City of Golden Valley, are larger than current facility assets can manage. Facility age and configuration will make the current facilities difficult and not economically feasible to add on to or reconstruct to serve long term space demands. The largest demand is in conditioned vehicle storage, for large equipment and safe circulation of that equipment.

City growth will not have a significant impact on overall space demands for equipment storage and staffing needs. As a result, the delta between current, 10-year, 30-year and even 50-year projections are not as significant for Golden Valley Public Works, as they would be for a city located further out within the Twin Cities Metro Area.

The primary impact on space needs is the size of equipment within industry trends (size trending larger) and staffing allocations (age of workforce and gender issues). Vehicles and Equipment in a city like Golden Valley will typically have a 1:1 replacement. The key to space programming will be to accommodate anticipated vehicle sizes based on historical trends in size increases.

Staffing may increase overtime to provide services but might be seen in a more seasonal / temporary employee application, rather than full time. An example of this is the daily maintenance of parks and landscaping that the city is responsible for increasing as multifamily dwellings increase, the demand for additional public space will also increase. Additionally, space needs for staff based on gender should remain flexible and accommodate changing demographics, making a male to female ratio more equal, and spaced designed as adaptable to gender neutral as attitudes and building codes change to address societal trends. Staff amenities, such as Wellness rooms (small single user private break area), Locker and Break facilities, flexible meeting / multi-function space and flexible office space are important to be accommodated at the space needs level, and further refined during detailed design phases to demonstrate facility adaptability and resiliency.

#### Separate and Consolidated Facility Program Review

Space Needs Programs were developed for each individual division (streets, utilities, parks, and vehicle maintenance), like the current division of facilities within the current Civic Campus. Space programs were also developed for a consolidated facility to demonstrate space efficiencies with combination of divisions and determine an ultimate ideal site size for a consolidated campus.

Each space needs program for the separated divisions of Public Works should be evaluated by those work groups. They should be reviewed to identify if space allocation is meeting staff assumptions, identification of any missing functions (or clarification on function identification) or if space allocation is more than operationally necessary.

Example: For the inclusion of a sign shop on the Streets Division program: Is the size appropriate? Does it need a separated storage area? Is a separate sign making office to be included in this location?

## Programming Documents Provided

Below is a summary of the documents being provided for review:

Overall Program Summary

This chart provides the total space need for each functional solution, at various time extension intervals.

The first section is for a **CONSOLIDATED** Facility. This facility is assumed as a single-story space need at this stage in the planning process.

The second section is for **separated** department facilities, for use in comparison to existing conditions and if separation or phasing of departmental moves is required.

Detailed Programs

Consolidated Central Facility – All departments, single location. A 30-year projection is illustrated.  
Single-story assumption.

Departmental Facility – Individualized space needs by department, similar to existing campus organization. A 30-year projection is illustrated. Single-story assumption.

Vehicle Growth Summary

Demonstrates Vehicle Storage and Service Space Needs over time.

Graphic Demonstration

Space Need Increase versus Existing Facility Conditions.

Space Standards and Best Practices

Size and function description of various spaces.

## City of Golden Valley Public Works

Consolidated Public Works Facility	Existing	2025-26	10 year	30 year	50 year
Administrative	9,032	12,098	12,808	15,655	16,550
Vehicle Maintenance and Wash Bays	10,332	23,679	24,468	26,142	26,142
Conditioned Vehicle Storage	34,534	64,348	67,038	70,502	75,105
Division Workshops	2,020	6,738	6,738	7,250	10,400
<b>Building Subtotal w/ Circulation</b>	<b>59,425</b>	<b>117,596</b>	<b>122,234</b>	<b>132,088</b>	<b>141,004</b>
Site Functions	181,800	135,618	135,902	137,319	137,319
Unconditioned Vehicle Storage	11,250	12,431	12,750	13,387	14,025
Site Circulation	28,958	54,652	55,498	57,490	59,057
Green Space and Storm Water Management		112,104	114,234	119,099	123,091
<b>Total Consolidated Facility Site Need</b>	<b>281,433</b>	<b>432,400</b>	<b>440,617</b>	<b>459,383</b>	<b>474,497</b>

Separated Departmental Facility	Existing	0 yr / Current	10 year	30 year	50 year
<b>Utilities</b>					
Administrative	2,818	3,689	4,059	4,211	4,211
Vehicle Service / Wash Bay	-	1,680	1,680	1,680	1,680
Conditioned Vehicle Storage	13,015	24,664	27,451	28,009	30,140
Division Workshops	724	2,100	2,100	2,100	2,100
<b>Building Subtotal w/ Circulation</b>	<b>16,557</b>	<b>33,744</b>	<b>37,011</b>	<b>37,767</b>	<b>39,898</b>
Site Functions		28,422	28,422	28,422	28,422
Unconditioned Vehicle Storage		3,418	4,170	4,170	4,557
Site Circulation		49,849	52,815	53,334	55,170
<b>Total Separated Facility Space Need</b>		<b>115,432</b>	<b>122,418</b>	<b>123,692</b>	<b>128,047</b>

Separated Departmental Facility	Existing	0 yr / Current	10 year	30 year	50 year
<b>Streets</b>					
Administrative	2,078	3,814	3,835	4,101	4,101
Vehicle Service / Wash Bay	410	1,680	1,680	1,680	1,680
Conditioned Vehicle Storage	12,335	28,195	30,690	32,821	34,565
Division Workshops	420	3,251	3,251	3,251	5,014
<b>Building Subtotal w/ Circulation</b>	<b>17,900</b>	<b>38,587</b>	<b>41,110</b>	<b>43,588</b>	<b>47,095</b>
Site Functions		28,995	28,995	28,995	28,995
Unconditioned Vehicle Storage		4,991	5,797	6,355	6,355
Site Circulation		55,156	57,662	59,900	62,311
<b>Total Separated Facility Space Need</b>		<b>127,729</b>	<b>133,563</b>	<b>138,837</b>	<b>144,755</b>

<b>Separated Departmental Facility</b>	Existing	0 yr / Current	10 year	30 year	50 year
<b>Parks</b>					
Administrative	1,674	3,362	3,383	3,535	3,561
Vehicle Service / <b>Wash Bay</b>	343	1,680	1,680	1,680	1,680
Conditioned Vehicle Storage	7,157	9,877	12,385	12,943	13,330
Division Workshops	876	1,387	1,387	1,899	3,286
<b>Building Subtotal w/ Circulation</b>	<b>10,900</b>	<b>17,819</b>	<b>20,353</b>	<b>21,621</b>	<b>23,429</b>
Site Functions		25,743	25,743	25,743	25,743
Unconditioned Vehicle Storage		3,635	6,324	6,324	6,324
Site Circulation		36,905	41,222	42,093	43,336
<b>Total Separated Facility Space Need</b>		<b>84,102</b>	<b>93,642</b>	<b>95,781</b>	<b>98,832</b>
<b>Separated Departmental Facility</b>	Existing	0 yr / Current	10 year	30 year	50 year
<b>Maintenance / Vehicle Service</b>					
Administrative and Technician Support	2,462	1,491	1,491	1,813	1,813
Vehicle Service Bays	9,579	8,640	11,552	11,552	11,552
Specialty Service Bays	2,027	7,929	8,075	9,415	9,415
Wash Bay	-	1,680	1,680	1,680	1,680
Division Workshops	-	-	-	-	-
<b>Building Subtotal w/ Circulation</b>	<b>14,068</b>	<b>21,714</b>	<b>25,078</b>	<b>26,906</b>	<b>26,906</b>
Site Functions		6,135	6,135	6,135	6,135
Unconditioned Vehicle Storage		-	-	-	-
Site Circulation		19,975	22,287	23,544	23,544
<b>Total Separated Facility Space Need</b>		<b>47,824</b>	<b>53,499</b>	<b>56,585</b>	<b>56,585</b>
Sep. Facility Green Space and Storm Need		112,526	120,937	124,468	128,466
<b>Combined SF of Separated Facilities</b>		<b>111,865</b>	<b>123,552</b>	<b>129,881</b>	<b>137,327</b>
<b>Combined Site Size of Separated Facilities</b>		<b>487,612</b>	<b>524,059</b>	<b>539,363</b>	<b>556,684</b>

City of Golden Valley						Public Works - Central Facility	20-30 Year Space Needs
ROOM	SQ.FT.	SIZE (rough dim)	#	TOTAL	NOTES		
<b>ADMINISTRATIVE</b>					<i>City Staff to Review and Confirm</i>		
					<i>Administrative area space needs forecasted to min. 30 years for Breakrooms, Locker Rooms and Open Office</i>		
Building Entry / Vestibule	64	8' x 8'	2.00	128	Primary Building and Secondary Employee Entry		
Reception Area / Division Assistant	132	12' x 11'	2.00	264	Adjacent to Primary Building Entry Only		
Division Manager Office	192	12' x 16'	1.00	192			
Division Supervisor	144	12' x 12'	4.00	576			
Crew Lead Office	120	10' x 12'	7.00	840			
Field Staff Workstation / Open Office	708	6'x6'(FT + 1/2PT)/3 stf.	1.00	708			
Small Conference Room	120	12' x 10'	2.00	240	4-6 People		
Standard Conference Room	240	12' x 20'	2.00	480	10-12 People		
Large Conference Room / Training Room	500	20' x 25'	1.00	500	24 people		
Copy Area / Document Work Room	144	12' x 12'	3.13	450			
Universal Public Restroom	72	8' x 9'	4.00	288			
Breakroom	2,625	35 sf x Staff #	1.00	2,625	Multi-Function Space; [Possible Combination with Large Training]		
Men's Locker Room	1,309	Varies	1.00	1,309	Lockers per staff + 2 toilet, 1 urinal and 2 Lav fixture Restroom [Min. Restroom Fixtures]		
Women's Locker Room	634	Varies	1.00	634	Lockers per staff + 2 toilet and 2 Lav fixture Restroom [Min. Restroom Fixtures]		
Wellness Room	120	12' x 10' (1 per 24 staff)	4.00	480	Mother's room; Overnight Room		
IT Room & SCADA	99	9' x 11'	2.00	198			
General Storage / Supply Closets	100	10' x 10'	3.00	300			
Janitorial	99	11' x 9'	2.00	198			
Mud Room / Wash Area & Laundry	288	24' x 12'	1.00	288			
Mechanical and Electrical Room	1,605	15% of Supported Area	1	1,605			
ADMINISTRATIVE AREA SPACES SUBTOTAL				12,302	<b>DOES NOT INCLUDE CIRCULATION</b>		
ADMINISTRATIVE AREA SUBTOTAL				16,607	<b>DOES INCLUDE 35% CIRCULATION</b>		
<b>VEHICLE MAINTENANCE</b>							
SEE VEHICLES PAGE Large Maintenance Bay	1,456	28' x 52'	6.00	8,736	Methodology of Vehicle Maintenance Service Delivery determines Bays		
SEE VEHICLES PAGE Small Maintenance Bay	704	22' x 32'	4.00	2,816	Methodology of Vehicle Maintenance Service Delivery determines Bays		
Building Entry / Vestibule	64	8' x 8'	1.00	64			
Parts and Tool Inventory Area	150	10' x 15'	2.00	300			
Crew Lead Office	120	10' x 12'	2.00	240	Crew Room Office/Conference/Breakroom Style Combination		
Field Staff Workstation / Open Office	144	6'x6'(FT + 1/2PT)/3 stf.	1.00	144	Crew Room Office/Conference/Breakroom Style Combination		
Small Conference Room	120	12' x 10'	1.00	120	Crew Room Office/Conference/Breakroom Style Combination		
Copy Area / Document Work Room	144	12' x 12'	1.00	144	Crew Room Office/Conference/Breakroom Style Combination		
Universal Public Restroom	72	8' x 9'	1.00	72			
Breakroom	175	35 sf x Staff #	1.00	175	Crew Room Office/Conference/Breakroom Style Combination		
Men's Locker Area	56	0	1.00	56	Combine to Main Facility Locker Room		
Women's Locker and Restroom	14	0	1.00	14	Combine to Main Facility Locker Room		
IT Room & SCADA	99	9' x 11'	1.00	99			
Janitorial	99	11' x 9'	1.00	99			
Mud Room / Wash Area & Laundry	288	24' x 12'	1.00	288			
Welding and Fabrication Bay	2,560	32' x 80'	1.00	2,560			
Tire Service Bay	960	24' x 40'	1.00	960			
Tire Service Storage	800	20' x 40'	1.00	800			
Bulk Fluids Storage - Waste Oil	60	6' x 10'	1.00	60			
Bulk Fluids Room - Virgin Fluids	392	14'x28'	1.00	392			
Parts Storage	900	30' x 30'	2.00	1,800			
Tool Storage	300	15' x 20'	2.00	600			
Steel Stock Storage	128	8' x 16'	1.00	128			
Mobile Lift and Jack Storage	64	8' x 8'	2.00	128			
Work Bench Bay	960	12' x 80'	1.00	960			
Mechanical and Electrical Room	1,027	5% of Supported Area	1.00	1,027			
Wash Bay	1,680	30' x 56'	2.00	3,360			
VEHICLE MAINTENANCE SUBTOTAL	26,142	MIN. REQ'D AREA			*Does Not Include Mezzanine		

City of Golden Valley						Public Works - Central Facility	20-30 Year Space Needs
ROOM	SQ.FT.	SIZE (rough dim)	#	TOTAL	NOTES		
CONDITIONED VEHICLE STORAGE (WARM)							
Large Space	900	20'x45'	26	23,400	Parking Spaces Only	Single and Tandem Axle Vehicles	
Medium Space	288	12'x24'	26	7,488		F350 or Larger w/ Attachments and Specialized Vehicles (booms, sweepers, etc)	
Pickup Space	200	10'x20'	31	6,200		Standard Pick-up space	
VEHICLE PARKING SUBTOTAL	37,088				Sum of Parking Space Only		
DOUBLE TRAFFIC LANE STORAGE INCREASE	33,414			70,502			
Mezzanine Storage				1,200	Attachment and small equipment storage shelf		
General Storage area				2,500	Area found in corners / edges of angled parking scenarios		
DIVISION OPERATION CRITICAL SPACES / SHOPS							
Parks							
Open Work Shop	875	25' x 35'	1	875			
Secure Tool/Parts/Material Storage	256	16' x 16'	2	512			
Facilities Supply Storage	256	16' x 16'	2	512			
Streets							
Open Work Shop	875	25' x 35'	1	875			
Carpentry / Wood Fabrication Shop	600	30' x 20'	1	600			
Sign Office and Fabrication Shop	1,200	40' x 30'	1	1,200			
Sign Storage	576	24' x 24'	1	576			
Utilities							
Utilities Workshop and Material Storage	1,500	50' x 30'	1	1,500			
Inspection Shop	600	20' x 30'	1	600			
DEPARTMENTAL SHOPS SUBTOTAL	7,250						
BUILDING PROGRAM TOTALS			TOTAL	MINIMUM TOTALS			
SUB-TOTAL				116,195			
CIRCULATION @ 30%				11,533			
TOTAL				127,728	circulation takes maintenance, and office portions only, remainder of numbers have circulation already built in.		
SITE PROGRAM REQUIREMENTS							
Staff Parking and Drive Aisle	283.5	9' x 18'	76	21546	1 per staff on largest shift		
Exterior Equipment Parking Demands	288	12' x 24'	29	8352			
ADA Space plus Aisle	306	9' x 18' +8' Aisle	4	1224			
Brine Making and Storage	1,920	40' x 48'	1	1920			
Trash Area	900	30'x30' (can vary)	1	900			
Fuel Island w/ Canopy	1,500	30' x 50'	1	1500			
Stock Pile Material Bins	672	28' x 24'	8	5376			
Site Collections Area	90,000	varies	1	90000			
Salt Shed - up to 1000 ton (combined)	4,800	60' x 80'	1	4800			
UNCONDITIONED VEHICLE STORAGE (COLD)							
Large Space	900	20'x45'	1	994	Parking Spaces Only		
Medium Space	288	12'x24'	15	4,215		Tandem Axle Trailers typical	
Pickup Space	200	10'x20'	9	1,878		Most Cold Storage Components	
VEHICLE PARKING SUBTOTAL	7,087				Sum of Parking Space Only		
DOUBLE TRAFFIC LANE STORAGE INCREASE	6,300			13,387			
Mezzanine Storage				1,200	Attachment and small equipment storage shelf		
General Storage area				2,500	Area found in corners / edges of angled parking scenarios		
SITE AREA TOTALS							
MAIN BUILDING	127,728						
CIRCULATION AROUND BUILDING	19,159	15% of subtotal					
COLD STORAGE	13,387						
CIRCULATION AROUND BUILDING	3,347	25% of subtotal					
SITE PROGRAM REQUIREMENTS	135,618						
CIRCULATION AROUND SITE PROGRAM	33,905	25% of subtotal					
PROGRAM TOTALS	333,144						
20% GREEN SPACE	66,629						
Stormwater Management	49,972	15% of subtotal					
GRAND TOTAL SITE AREA NEEDED	449,745	10.32		Functionable Site Area			
PROPOSED PROGRAM							

## Vehicle Growth Summary

Vehicle and Equipment Storage Demand	0 yr / Current	10 year	30 year	50 year	Notes
<b>Conditioned (Warm) Storage</b>					
Large Vehicles	23	24	26	28	
Medium Vehicles	24	25	26	28	
Small Equipment	28	29	31	33	
Total SF	64,348	67,038	70,502	75,105	
<b>Unconditioned (Cold) Storage</b>					
Large Vehicles	1	1	1	1	
Medium Vehicles	13	14	15	16	
Small Equipment	9	9	9	10	
Total SF	12,431	12,750	13,387	14,025	
Vehicle Maintenance Summary	0 yr / Current	10 year	30 year	50 year	Notes
<b>Mechanic Based</b>					
Large Bays	5	6	6	6	
Medium/Small Bays	5	4	4	4	
Total Bays	10	10	10	10	
Total SF	10,800	11,552	11,552	11,552	
<b>Total Vehicles per Mechanic</b>					
Large Bays	4	4	4	5	
Medium/Small Bays	4	4	4	4	
Total Bays	8	8	8	8	
Total SF	7,521	7,757	8,157	8,629	
<b>Vehicle Service EQ to Vehicle Size</b>					
Large Bays	5	5	6	6	
Medium/Small Bays	3	3	3	3	
Total Bays	8	8	9	9	
Total SF	9,499	9,818	10,357	10,995	

**Conditioned Storage Demand by Division**

	0 yr / Current	10 year	30 year	50 year	Notes
<b>Utilities</b>					
Large Vehicles	9	10	10	11	
Medium Vehicles	10	11	12	12	
Small Equipment	9	10	10	11	
<b>Parks</b>					
Large Vehicles	1	2	2	2	
Medium Vehicles	9	9	10	10	
Small Equipment	9	10	10	11	
<b>Streets</b>					
Large Vehicles	13	14	15	16	
Medium Vehicles	4	5	5	5	
Small Equipment	9	9	10	10	

**Unconditioned Storage Demand by Division**

	0 yr / Current	10 year	30 year	50 year	Notes
<b>Utilities</b>					
Large Vehicles	0	0	0	0	
Medium Vehicles	3	4	4	4	
Small Equipment	5	5	5	6	
<b>Parks</b>					
Large Vehicles	1	2	2	2	
Medium Vehicles	2	3	3	3	
Small Equipment	2	3	3	3	
<b>Streets</b>					
Large Vehicles	0	0	0	0	
Medium Vehicles	8	9	10	10	
Small Equipment	1	2	2	2	