New York State County Highway Superintendents Association

Six Keys to Designing a DPW Facility

Presented by:

Jeff Alberti, Vice President, Weston & Sampson

January 23, 2019

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New York State County Highway Superintendents Association
Planning and Constructing a New Public Works Facilities

Introduction

- Jeff Alberti – Vice President and Program Manager of Weston & Sampson's Facilities Group
- 25 years experience across the North-East
  - 20 years programming and designing public works facilities
- Involved in more than 120 public works facility projects in the North-East

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Purpose of the Presentation

Outline the process to successfully get from here…..

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Purpose of the Presentation

…..TO HERE

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The Six Step Process to Constructing a New Facility

1. Give the Project a Life
2. Program
3. Educate/Sell
4. Design
5. Construct
6. Operate

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The Six Step Process to Constructing a New Facility

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2. Program
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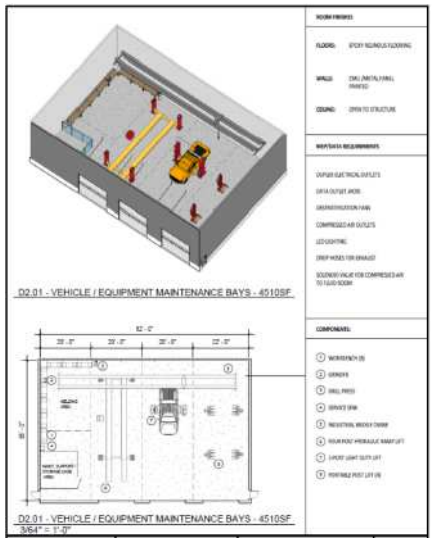

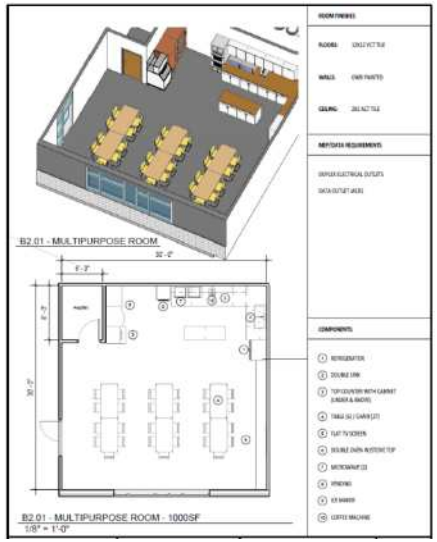

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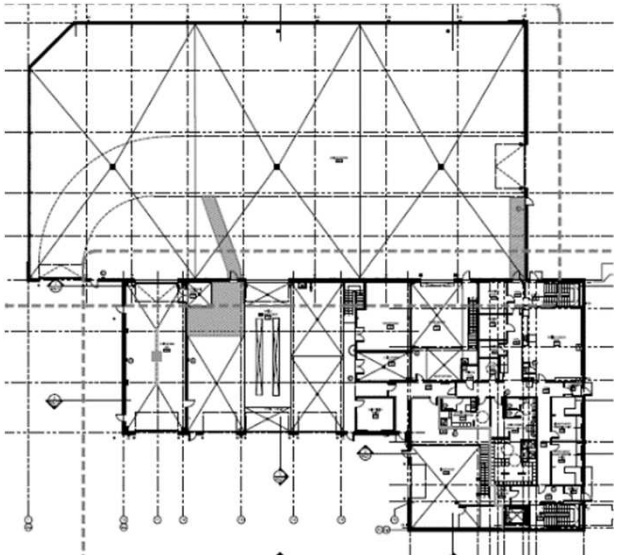

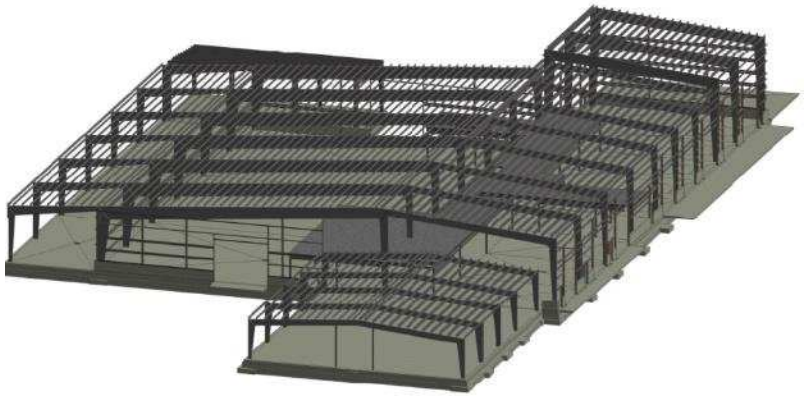

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How do you give the project a proper life?

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- Give the project a proper life – start now

- Before you have a chance to complete a study, you will likely be asked:

  - What's wrong with your current facility?
  - How big do you think your facility needs to be?
  - How much do you think it will cost?

So, how do you answer these questions…….
without getting yourself into trouble down the road?

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- Prepare a summary of your existing facility deficiencies (photos will likely tell the story on their own)
- Research what other communities/counties have programmed or built
- Building size has a direct relationship to:
  - Number of staff
  - Number of divisions (services offered to a community/county)
  - Number of vehicles/equipment
- Identify historic costs. Don't forget to factor in soft costs, escalation and contingencies

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DPW Database

					Metrics which should be used when comparing facilities					
Date	**Town**	**Population**	**Size of Town (Sq. Miles)**	**Miles of Road**	**Number of Operating Groups**	**Staff**	**Number of Vehicles Stored in Facility**	**Proposed Building Size (SF)**	**Canopy Size (SF)**	**Total Facility Size (SF)**
2015	Town of Boylston	4,355	16.0	55	2	7	17	13,926	0	13,926
2012	Town of Charlton	13,000	43.8	127	2	12	19	17,312	2,400	19,712
2018	Town of Rockport	6,952	17.5	33	5	22	26	19,341	5,020	24,361
2005	Town of Chatham	6,100	24.4	66	4	25	26	28,771	1,500	30,271
2018	Town of Upton	7,773	21.7	80	5	16	22	31,950	0	31,950
2018	Village of Rye Brook NY	9,589	3.5	30	3	14	27	32,883	0	32,883
2018	Town of Grafton	17,800	23.3	84	3	12	24	33,710	0	33,710
2017	Town of Orleans	5,900	22.7	51	8	36	33	42,278	0	42,278
2017	Town of Hopkinton	14,900	28.2	106	5	28	32	42,410	0	42,410
2018	Town of Oxford	13,980	27.5	90	5	26	28	42,701	0	42,701
2015	Town of Bourne	19,800	52.9	200	5	38	39	39,040	5,100	44,140
2017	Town of Mansfield	23,200	20.7	113	3	18	33	36,300	8,000	44,300
2011	Town of Weston	11,300	17.3	88	6	29	32	41,846	3,024	44,870
2018	Town of Yarmouth	23,339	28.2	150	5	29	46	41,000	4,800	45,800
2015	Town of Wayland	13,000	15.9	96	5	32	44	39,869	6,652	46,521
2018	Town of Holden	28,600	10.6	110	6	41	35	43,412	7,459	50,871
2015	Town of Norwood	28,600	10.6	110	5	45	53	53,870	0	53,870
2018	Town of Andover	35,490	32.1	186	6	48	47	54,088	7,749	61,837
2008	Town of Lexington	31,400	16.5	117	9	87	66	78,000	4,000	82,000

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DPW Database

Metrics which should be used when comparing facilities					
Number of Operating Groups	**Staff**	**Number of Vehicles Stored in Facility**	**Proposed Building Size (SF)**	**Canopy Size (SF)**	**Total Facility Size (SF)**
2	7	17	13,926	0	13,926
2	12	19	17,312	2,400	19,712
5	22	26	19,341	5,020	24,361
4	25	26	28,771	1,500	30,271
5	16	22	31,950	0	31,950
3	14	27	32,883	0	32,883
3	12	24	33,710	0	33,710
8	36	33	42,278	0	42,278
5	28	32	42,410	0	42,410
5	26	28	42,701	0	42,701
5	38	39	39,040	5,100	44,140
3	18	33	36,300	8,000	44,300
6	29	32	41,846	3,024	44,870
5	29	46	41,000	4,800	45,800
5	32	44	39,869	6,652	46,521
6	41	35	43,412	7,459	50,871
5	45	53	53,870	0	53,870
6	48	47	54,088	7,749	61,837
9	87	66	78,000	4,000	82,000

EXAMPLE

- You have **6** Operating Divisions
- You have **32** Staff
- You have **31** Vehicles

Estimated Facility Size:
40,000 SF to 43,000 SF

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DPW Costs – Construction Cost

Description	Size (SF)	Bid Date	Low Bid Price	Average Bid Price	2014 Avg Cost per SF	2015 Avg Cost per SF	2016 Avg Cost per SF	2017 Avg Cost per SF	2018 Avg Cost per SF	2019 Avg Cost per SF
Wayland Public Works Facility	39,869	2014	$ 8,877,000	$ 10,519,754	$264	$275	$287	$323	$350	$367
Medford Public Works Facility	45,000	2014	$ 12,186,000	$ 12,340,333	$274	$286	$299	$336	$364	$382
Bourne Public Works Facility	39,040	2014	$ 10,441,002	$ 11,063,598	$283	$296	$309	$347	$376	$394
Norwood Public Works Facility	53,870	2014	$ 14,902,289	$ 15,437,343	$287	$299	$312	$351	$380	$399
Boylston Highway Facility	13,926	2015	$ 3,364,000	$ 3,935,419	--	$283	$295	$331	$359	$377
Hopkinton Public Works Facility	42,410	2016	$ 11,532,000	$ 12,112,833	--	--	$286	$321	$348	$365
Orleans Public Works Facility	42,278	2017	$ 11,774,000	$ 12,833,834	--	--	--	$304	$329	$345
Andover Municipal Services Facility	54,088	2017	$ 16,049,000	$ 18,413,675	--	--	--	$340	$368	$387
Longmeadow Public Works Facility	44,858	2018	$ 12,707,000	$ 14,773,364	--	--	--	--	$329	$346
Rye Brook NY Public Works Facility	32,883	2018	$ 11,193,943	$ 13,184,654	--	--	--	--	$401	$421
Grafton DPW Facility	33,710	2018	$ 11,713,205	$ 12,399,201	--	--	--	--	$368	$386
Last Five (5) Years - Average Cost per SF:					**$277**	**$288**	**$298**	**$332**	**$361**	**$379**

Estimated Construction Cost:
40,000 SF @ $379/SF = $15.2 M
43,000 SF @ $379/SF = $16.3 M

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DPW Costs – Total Project Cost

Description	Size (SF)	Bid Date	Total Project Cost	2014 Avg Cost per SF	2015 Avg Cost per SF	2016 Avg Cost per SF	2017 Avg Cost per SF	2018 Avg Cost per SF	2019 Avg Cost per SF
Wayland Public Works Facility	39,869	2014	$ 14,038,757	$352	$367	$383	$431	$467	$490
Medford Public Works Facility	45,000	2014	$ 14,591,270	$324	$338	$353	$397	$430	$451
Bourne Public Works Facility	39,040	2014	$ 12,477,309	$320	$334	$348	$391	$424	$445
Norwood Public Works Facility	53,870	2014	$ 18,000,140	$334	$349	$364	$409	$443	$465
Boylston Highway Facility	13,926	2015	$ 3,824,500	--	$275	$287	$322	$349	$366
Hopkinton Public Works Facility	42,410	2016	$ 14,350,000	--	--	$338	$380	$412	$433
Orleans Public Works Facility	42,278	2017	$ 15,094,715	--	--	--	$357	$387	$406
Andover Municipal Services Facility	54,088	2017	$ 21,548,675	--	--	--	$398	$431	$453
Longmeadow Public Works Facility	44,858	2018	$ 19,115,800	--	--	--	--	$426	$447
Rye Brook NY Public Works Facility	32,883	2018	$ 14,250,000	--	--	--	--	$433	$455
Grafton DPW Facility	33,710	2018	$ 12,700,000	--	--	--	--	$377	$396
Average Cost per SF:				**$333**	**$333**	**$346**	**$386**	**$416**	**$437**

Estimated Total Project Cost:
40,000 SF @ $437/SF = $17.5 M
43,000 SF @ $437/SF = $18.8 M

(Soft Costs can add 15% - 20% to the overall project cost)

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DPW Costs – Historic Data

Project	Bldg Size (SF)	Year Bid	Average Bid	Average Bid Price (Cost / SF)
Dennis Public Works Facility	28,700	2000	$2,750,988	$96
Bedford Public Works Facility	36,250	2003	$5,988,491	$165
Westhampton Highway Garage	8,760	2004	$1,205,390	$138
Chatham Public Works Facility	28,771	2004	$3,723,840	$129
Franklin Public Works Facility	33,480	2006	$7,546,657	$225
Lexington Public Services Facility	78,000	2007	$19,126,468	$245
Weston Public Works Facility	41,846	2009	$11,380,599	$272
Charlton Highway Facility	17,312	2010	$4,047,885	$234
Westbrook DPW Facility	6,700	2012	$1,776,440	$265
Wayland Public Works Facility	39,869	2014	$10,519,754	$264
Medford Public Works Facility	45,000	2014	$12,340,333	$274
Norwood Public Works Facility	53,870	2014	$15,437,343	$287
Bourne Public Works Facility	39,040	2014	$11,063,598	$283
Boylston Highway Facility	13,926	2015	$3,935,419	$283
Hopkinton Public Works Facility	42,410	2016	$12,112,833	$286
Orleans Public Works Facility	42,278	2017	$12,833,834	$304
Andover Public Works Facility	54,088	2017	$18,413,675	$340
Longmeadow Public Works Facility	44,858	2018	$14,773,364	$329
Rye Brook NY Public Works Facility	32,883	2018	$13,184,654	$401
Grafton Public Works Facility	33,710	2018	$12,399,201	$368

You can't build a new facility for $100/SF today!

What is the first step you should take when considering a new facility?

- **Step 1 - ……**
- **Step 2 - ……**
- **Step 3 - ……**
- **Step 4 - ……**
- **Step 5 - ……**
- **Step 6 - ……**

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What is the first step you should take when considering a new facility?

- **Step 1 - Give the Project a life!**
- **Step 2 - ……**
- **Step 3 - ……**
- **Step 4 - ……**
- **Step 5 - ……**
- **Step 6 - ……**

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Which of the following should be the first task used to give your project a life?

1. **Complete a feasibility study and present it to governing authorities and the public**

2. **Document current deficiencies and use benchmarking from other completed facilities to establish a starting point for your facility (size & cost)**

3. **Meet with governing authorities to request funds to complete a feasibility study**

4. **Conduct an analysis of county/town/city/village financials to see if there is capacity to build a new facility**

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PROGRAMMING A NEW PUBLIC WORKS FACILITY

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Programming Process

- Select the right team
  - Operations based effort
  - Industrial equipment experience
- Conduct interviews staff (entire workforce)
  - What does the DPW do / what are their responsibilities
  - What deficiencies impact their operations
  - What are the daily work flow patterns
  - Observe operations

Single most effective way of getting it right!

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Programming Process

- Develop a comprehensive vehicle / equipment list

- Measure each piece of equipment

VEHICLES

Page Totals:
12 Small Vehicles
0 Large Vehicles

UNIT#	YEAR	TYPE	MAKE	MODEL	DIV
001	2011	SUV / Hybrid	Ford	Escape Hybrid	Administration
002	2010	Pickup Truck	Ford	F150	Garage
003	2012	Utility Truck	Ford	F450 Utility	Garage
004	2006	Pickup Truck	Ford	F350 4WD	Garage
005	2011	Dump Truck	IH	7400	RTS.
006	2000	Dump Truck 6 Wheel	IH	S4900	Highway
007	2000	Dump Truck 6 Wheel	IH	S4900	Highway
008	2014	Dump Truck 6 Wheel	IH	7400	Highway
008A	0				
009	2012	Dump Truck 6 Wheel	IH	7400	Highway
010	2010	Dump Truck 6 Wheel	IH	7400	Highway
011	2013	SUV	Ford	Explorer 4WD	S.
012	2009	SUV / Hybrid	Ford	Escape Hybrid	Parks & Forestry
014	2009	Dump Truck 10 Wheel	IH	7600	Water
015	2008	Sedan	Ford	Taurus Sedan	Administration
016	2013	Box Truck	Freightliner		S.
017	2012	Dump Truck	Ford	F550 4WD Dump Truck	S
018P	2000	Pickup Truck	Ford	F150	Garage
019	2010	Dump Truck	IH	7400	S.
020	2009	SUV / Hybrid	Ford	Escape Hybrid	S.
021	2010	Pickup Truck	Ford	F150	Water
022	2009	Utility Truck	Ford	F450	Water
023	2011	Pickup/Utility	Ford	F350 Utility	S.
024	2009	Pickup Truck	Ford	F150	Water
025	2012	Pickup Truck/Utility	Ford	F450 Utility	Water
026	2011	Pickup Truck	Ford	F150	Water
027	2011	Pickup Truck	Ford	F150	Water
028	2001	Cab & Chassis	Ford	F350	S.
029	2008	Sewer Jet Cl.	IH	7400	S.
030	1999	Dump Truck	Ford	F350 4WD	Water
031	2011	Pickup Truck	Ford	F150 4x4	Water
832	2005	Pickup Truck	Ford	F350	Highway
032	2012	Pickup Truck	Ford	F350 4WD Pickup	Highway
034	2001	Tractor	Mack	CH613	RTS.
037	2010	Vactor Truck	IH	7500	D.
038	2007	Cab & Chassis	IH	4300	Parks & Forestry
039	2012	Dump Truck	Ford	F550 4WD	Highway
040	2000	Pickup Truck/Utility	Ford	F350 Utility	Water
041	2009	Pickup Truck	Ford	F350 4WD	Parks & Forestry
042	1999	Rolloff	Mack	RD688S	RTS.
042A	2010	16' Mat. Spread.	HI-WAY	E2020XT-16	

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Programming Process

- Develop a comprehensive vehicle / equipment list
- Measure each piece of equipment

EQUIPMENT

Page Totals:
9 Small Equipment
3 Large Equipment

Loader 231
2003 Caterpillar
(23'-0" x 8'-0")

Loader 232
2001 John Deere
(15'-6" x 6'-6")

Loader 233
2011 Wacker Nueson
(12'-6" x 4'-6")

Tractor 262
2007 Holder
(14'-8" x 4'-6")

Tractor 263
2014 Holder
(16'-0" x 4'-0")

Tractor 341
1998 Kubota
(20'-0" x 8'-0")

Tractor 342
2013 Kubota

Mower 343
2007 Kubota

Tractor 344
1994 Kubota

VEHICLES

Page Totals:
12 Small Vehicles
0 Large Vehicles

Truck 217
1997 International
(16'-6" x 6'-6")

Truck 219
1996 International
(18'-6" x 8'-0")

Sweeper 227
2003 Freightliner/Johnson
(20'-0" x 8'-0")

Truck 201
2012 Ford F250
(16'-6" x 7'-6")

Truck 202
2006 Ford F150
(20'-0" x 7'-6")

Truck 301
2014 Ford F350
(20'-0" x 8'-0")

Truck 302
2015 Ford F350
(19'-0" x 7'-6")

Truck 312
2009 Ford F350
(20'-0" x 8'-0")

Truck 313
2011 Ford F250
(20'-0" x 8'-0")

Truck 314
2001 Ford F250
(20'-0" x 7'-6")

Car 401
2015 Ford Escape AWD
(14'-8" x 6'-6")

Truck 402
2005 Chevy Colorado
(17'-6" x 7'-6")

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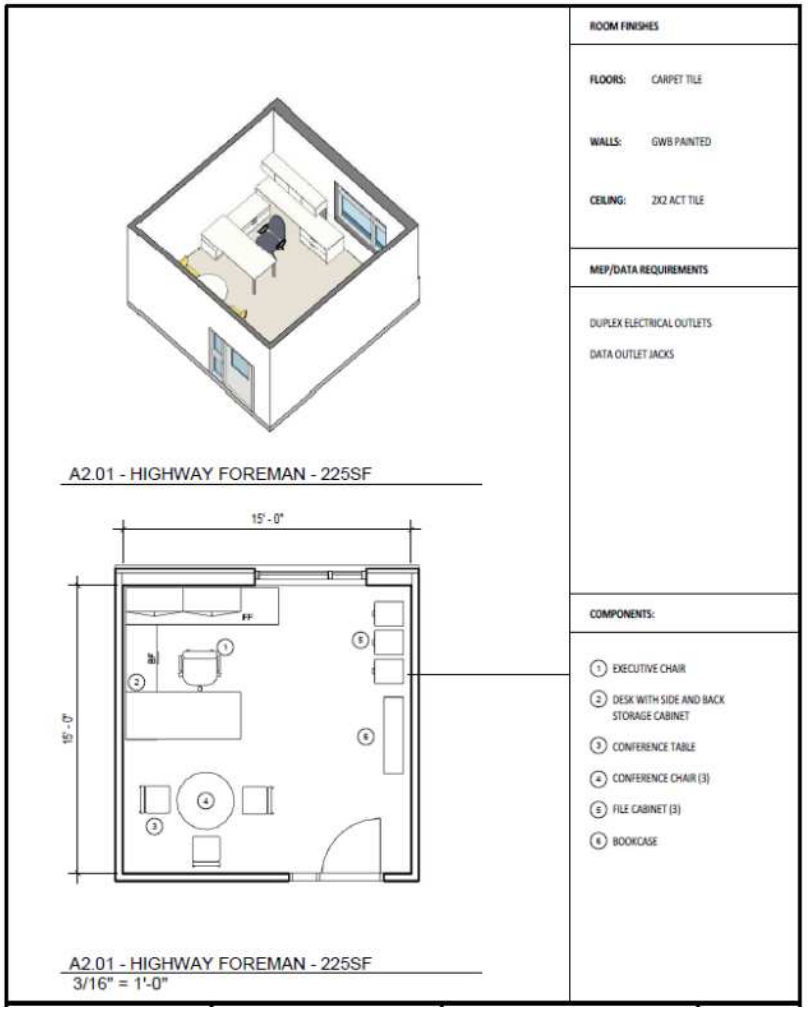
Programming Process

- Develop a comprehensive vehicle / equipment list
- Measure each piece of equipment
- Prepare programming sketches for each space



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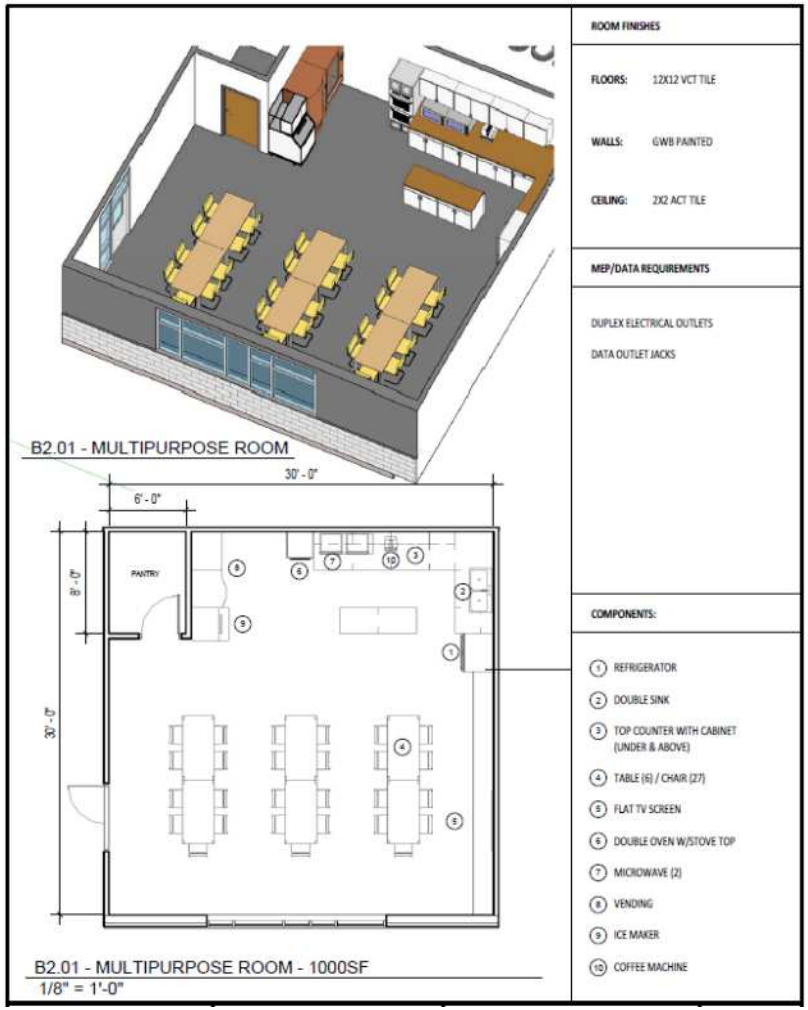

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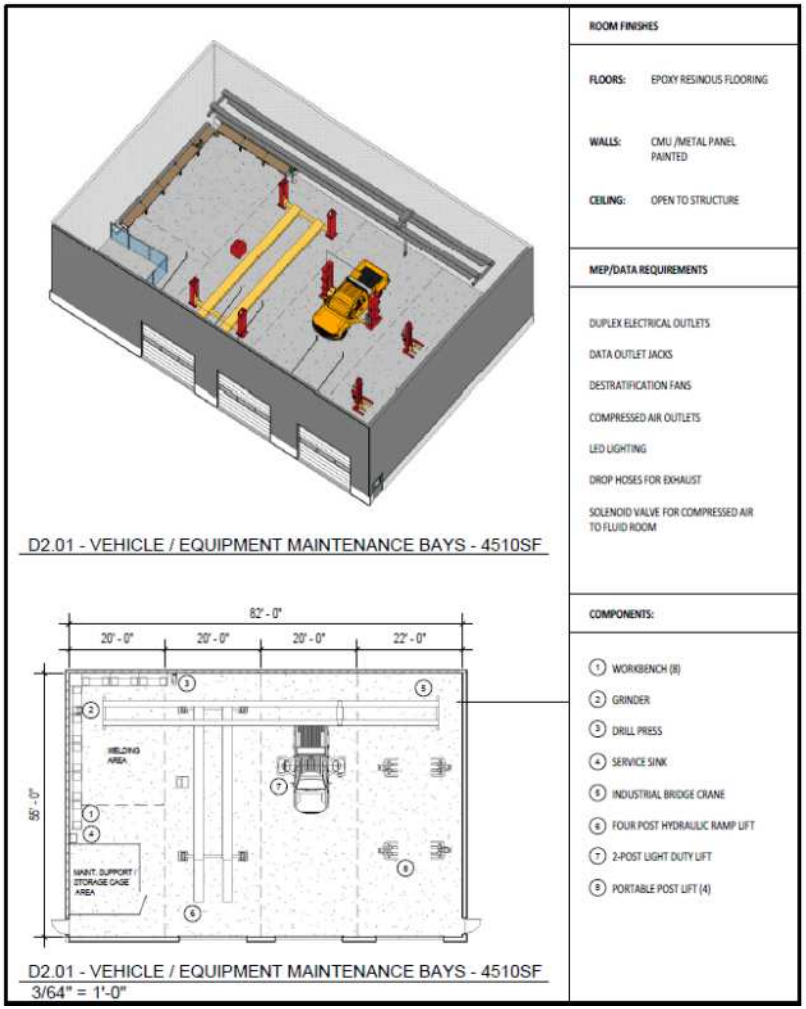

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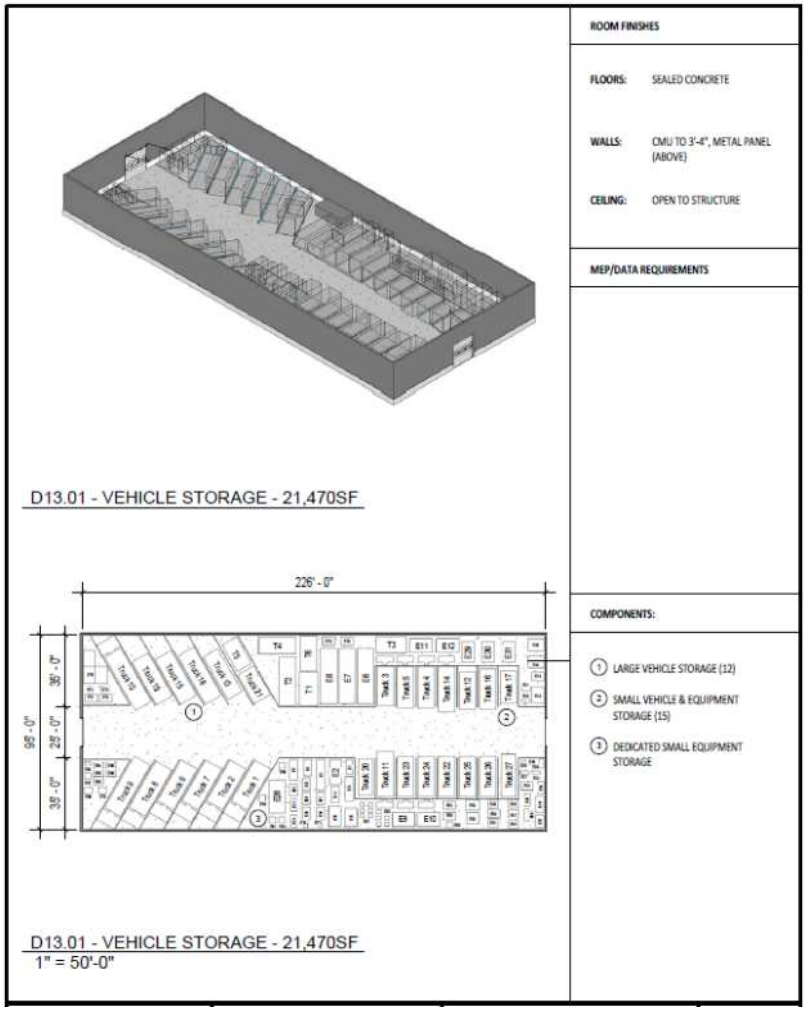

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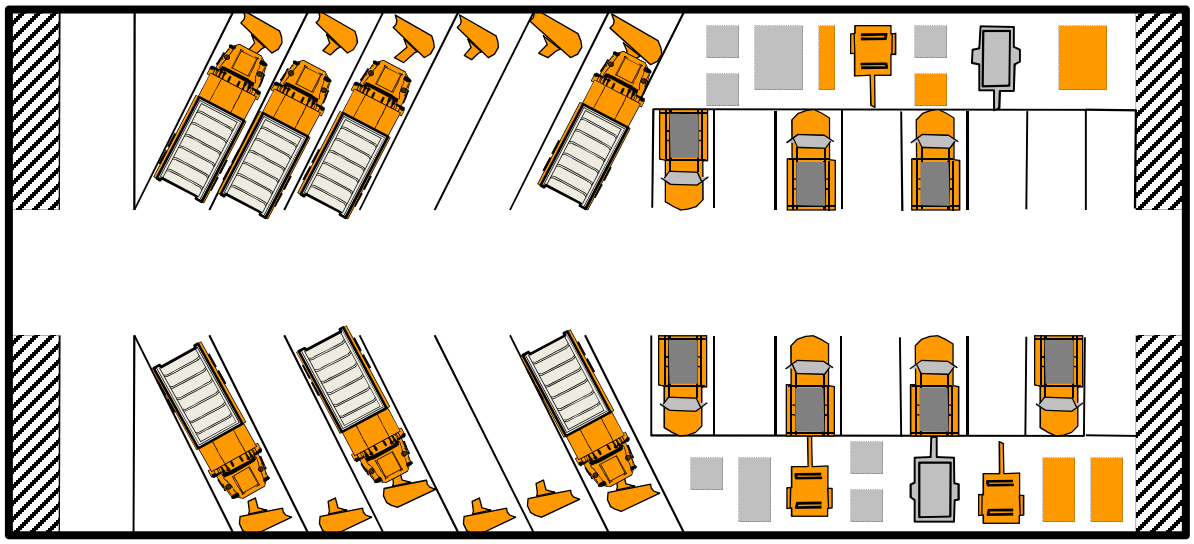

Parking stalls sized to store plows

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Concept Development

Office / Office Support

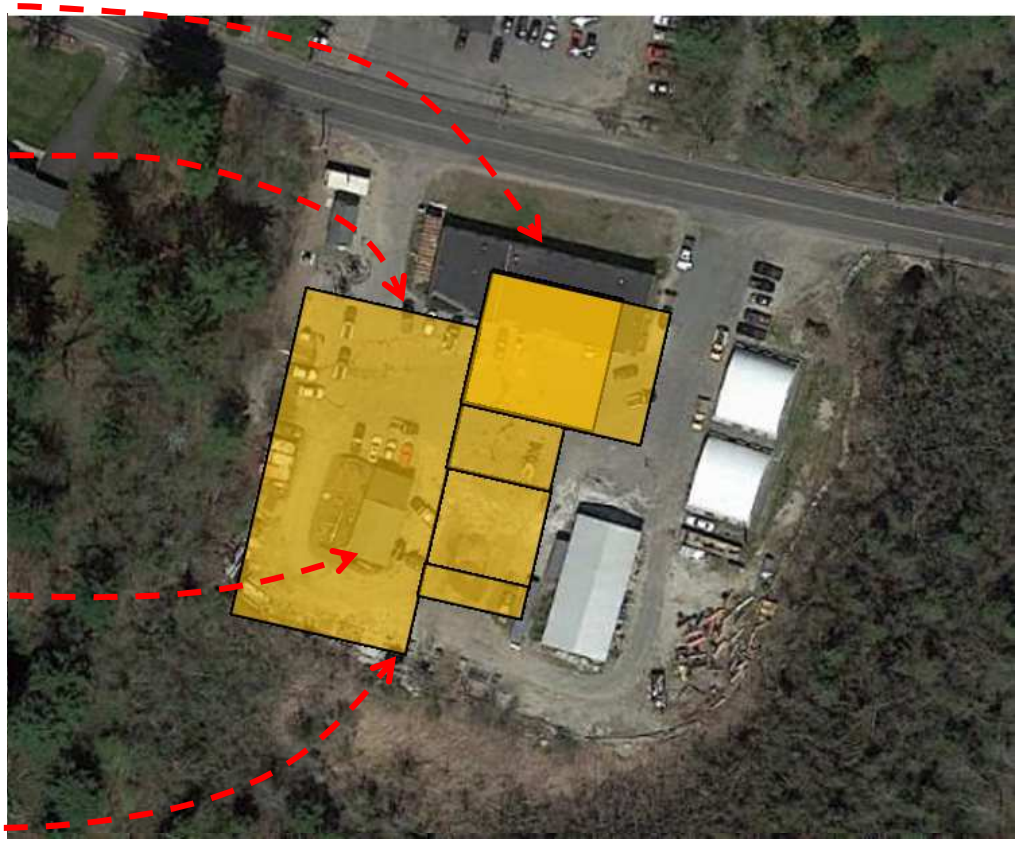
Employee Facilities

Trade Shops

Vehicle Maintenance

Vehicle Wash

Vehicle / Equipment Storage



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Concept Development

Office / Office Support

Employee Facilities

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Vehicle Maintenance

Vehicle Wash

Vehicle / Equipment Storage

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Concept Development

Office / Office Support

Employee Facilities

Trade Shops

Vehicle Maintenance

Vehicle Wash

Vehicle / Equipment Storage

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When developing the program for a new facility, which of the following is most important to "getting it right"?

1. **Develop a program based on what other communities have done**

2. **Meet with DPW staff to ensure the program reflects your operations**

3. **Develop a program that is based on cost rather than needs**

4. **Develop a program that is reflective of your current facility size with some growth**

When developing the program for a new facility, which of the following is most important to "getting it right"?

1. Develop a program based on what other communities have done

2. Meet with DPW staff to ensure the program reflects your operations

3. Develop a program that is based on cost rather than needs

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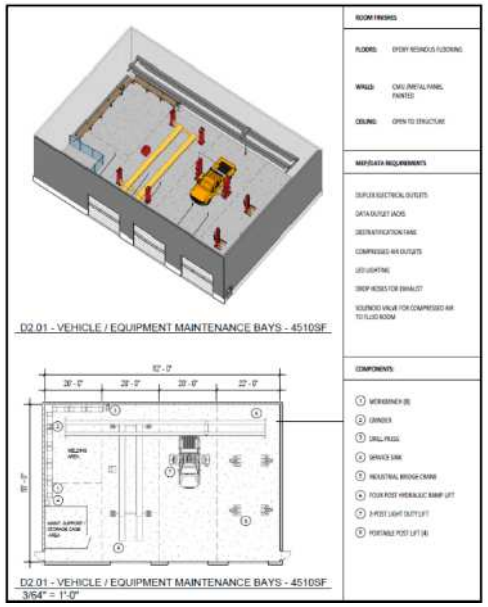
Programming Process - Complete

- Final Program
- Preferred Concept
- Conceptual Cost Estimate



Now the real fun begins…..

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Planning and Constructing a New Public Works Facilities

Project Education / Public Outreach
Gaining Final Support for Your Facility

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Develop a Public Outreach / Public Education Plan

- Address the Why?
- The What?
- And The How Much?

Start your outreach on day one

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Develop a Public Outreach / Public Education Plan

Plan Components

1. Why do we need a new facility?
2. What does the DPW do for the Community?
3. Why do you need to put your equipment inside? 
4. What is proposed?
5. How much does it cost and what will it cost me?
6. Why does it cost so much? 
7. How does it compare to other communities/counties?
8. What are the benefits to the DPW and the Town/County?
9. What if nothing is done?

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What are the key message points?

- What does the DPW do for the Community?
- Why do we need a new facility?
- Why do you need to put your equipment inside?
- What if nothing is done?
- How does it compare to what we have now?
- How does it compare to other communities
- How much does it cost / what will it cost me?
- Why does it cost so much?
- What are the benefits?

The DPW touches the lives of the residents every day by maintaining the infrastructure that the community relies on…….

EXAMPLE OF DPW SERVICES

The DPW is responsible for the maintenance and repair of:

- 125 miles of roads
- 65 miles of water mains
- 35 miles of sewer
- 666 hydrants
- 18 acres of cemeteries
- 14 acres parks and fields
- Maintenance of multi-million dollar vehicle fleet
- On call 24-hours/day to respond to emergencies

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What does the DPW do for the Community

Get the message out about the important role Public Works serves in the community:

Homeland Security Presidential Directive / HSPD-8 defines Public Works as a First Responder

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What does the DPW do for the Community

Get the message out about the important role Public Works serves in the community:

The Public Works First Responder symbol

APWA adopts national Public Works First Responder symbol

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Hollywood example of DPW leading the way of First Responders!

(Home Alone 3)

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What are the key message points?

- What does the DPW do for the Community?
- Why do we need a new facility?
- Why do you need to put your equipment inside?
- What if nothing is done?
- How does it compare to what we have now?
- How does it compare to other communities
- How much does it cost / what will it cost me?
- Why does it cost so much?
- What are the benefits?

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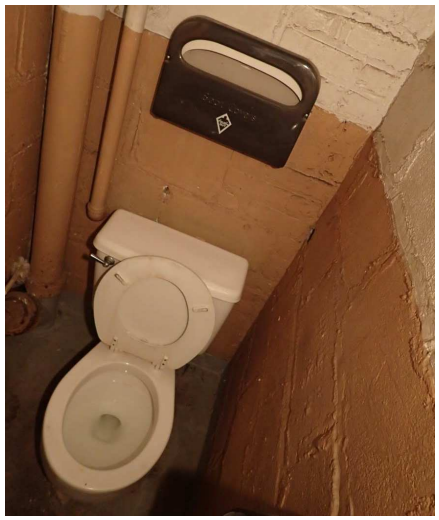
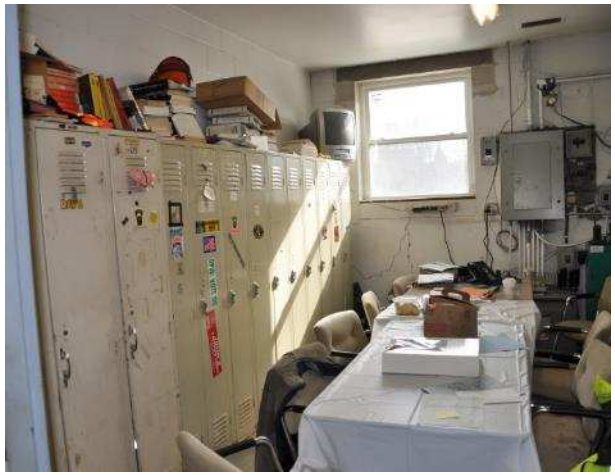
Why Do We Need a New Facility?

Storage areas are inefficient or non-existent impacting ability to protect Town's investment in a multi-million dollar fleet





Inadequate basic employee support facilities

Lack of office space - Employees forced to work out of temporary trailers for the last 10 years

Why Do We Need a New Facility?

- Locker Room
- Lunch Room
- Training Room
- Storm Event Room
- Electric Room
- Tel/Data Room

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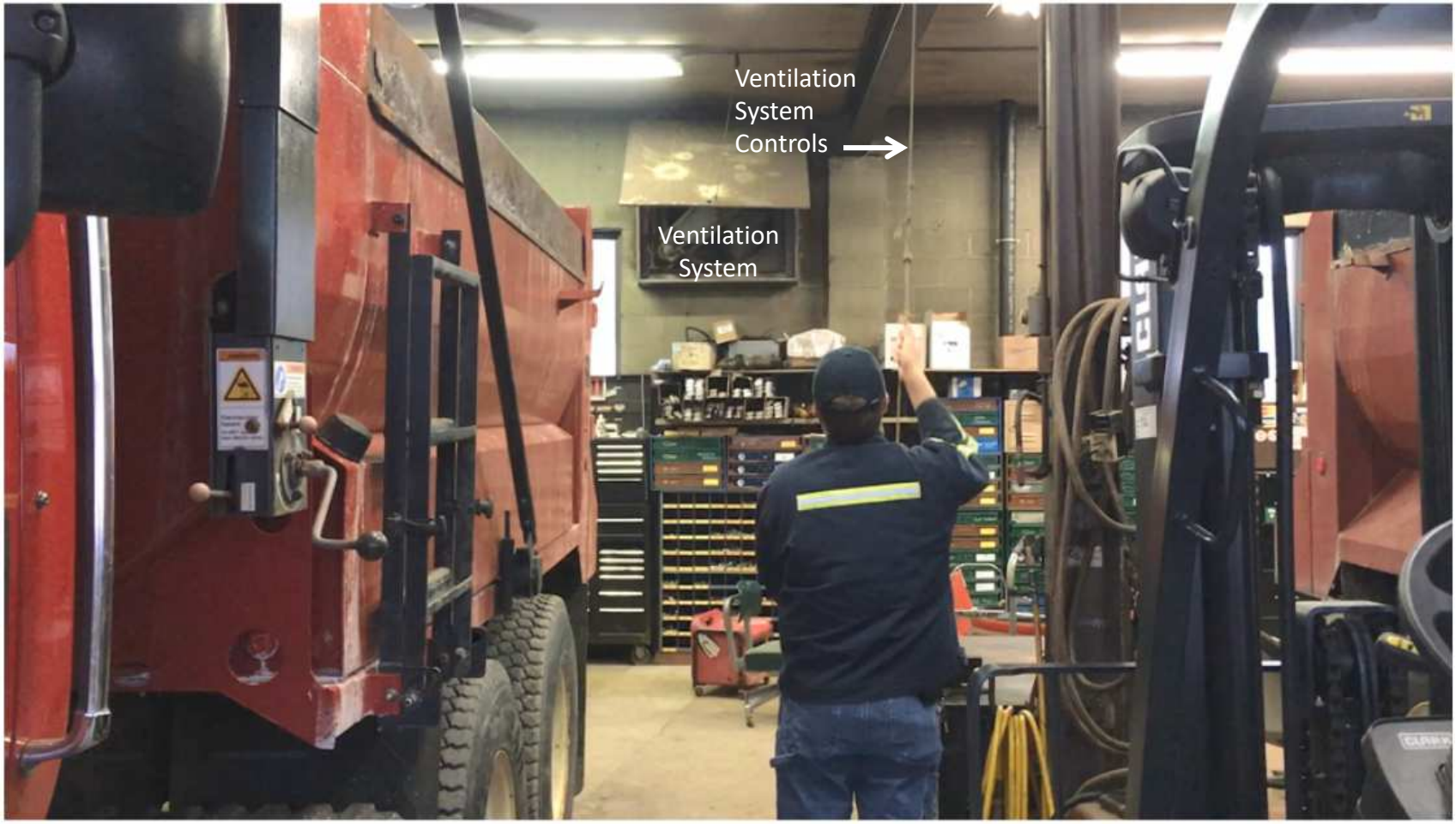
Why Do We Need a New Facility?



Ventilation system – antiquated and non-code compliant

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What are the key message points?

- What does the DPW do for the Community?
- Why do we need a new facility?
- Why do you need to put your equipment inside?
- What if nothing is done?
- How does it compare to what we have now?
- How does it compare to other communities
- How much does it cost / what will it cost me?
- Why does it cost so much?
- What are the benefits?

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Why put the vehicles and equipment indoors…..

1. **Employee Safety**
2. Public Safety
3. Protection of Equipment
4. Stormwater Pollution Control
5. Cost Effective Operations
6. Efficient Operations

Employee safety is compromised when trying to clear off large equipment in inclement weather conditions as shown above

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Why put the vehicles and equipment indoors…..

1. Employee Safety
2. **Public Safety**
3. Protection of Equipment
4. Stormwater Pollution Control
5. Cost Effective Operations
6. Efficient Operations

Vehicles which are covered by snow or ice may take longer to respond to the needs of the community which could result in unsafe conditions for the public

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Why put the vehicles and equipment indoors…..

1. Employee Safety
2. Public Safety
3. **Protection of Equipment**
4. Stormwater Pollution Control
5. Cost Effective Operations
6. Efficient Operations

Outdoor storage contributes to accelerated equipment deterioration

Why put the vehicles and equipment indoors…..

1. Employee Safety
2. Public Safety
3. Protection of Equipment
4. **Stormwater Pollution Control**
5. Cost Effective Operations
6. Efficient Operations

Vehicles stored outdoors on the existing site have inadequate environmental control measures

Why put the vehicles and equipment indoors…..

1. Employee Safety
2. Public Safety
3. Protection of Equipment
4. **Stormwater Pollution Control**
5. Cost Effective Operations
6. Efficient Operations

Any drips or spills from vehicles stored inside will be collected in a closed floor drain system preventing them from reaching the environment

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Why put the vehicles and equipment indoors…..

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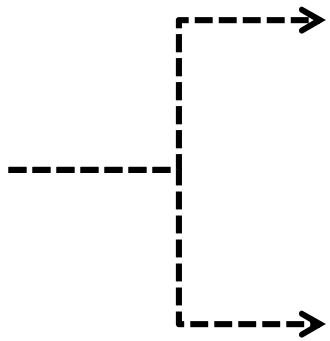
2. Public Safety
3. Protection of Equipment
4. Stormwater Pollution Control
5. **Cost Effective Operations**
6. Efficient Operations



<u>Cost to Construct Storage Garage</u>
- Construction
- Maintenance
- Operation

VERSUS

<u>Cost Associated with Exterior Storage</u>
- Increased Vehicle Maintenance
- Decrease in Vehicle Life Expectancy
- Non-Productive Labor
- Operational impacts
- Employee Safety & Environmental

Analyses has shown that it will cost 2 – 3 times more to store equipment outdoors over the life of a building

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Why put the vehicles and equipment indoors…..

Case Study for increased vehicle life expectancy associated with storage of equipment indoors

- A Town purchased three large dump trucks
- Town only had room to store one indoors
- Remaining two vehicles were stored outdoors
- Two vehicles stored outdoors were removed from service early due to equipment deterioration. Equipment conditions were so poor that they were sold as scrap.
- The vehicles which was stored indoors **<u>remained in service for three more years</u>** and was in suitable condition when it reached its service life that it was able to be sold at auction

Only room to store one (1) new dump truck indoors

Two (2) vehicles stored outdoors due to limited availability of covered storage

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Why put the vehicles and equipment indoors…..

1. Employee Safety
2. Public Safety
3. Protection of Equipment
4. Stormwater Pollution Control
5. Cost Effective Operations
6. **Efficient Operations**

Vehicle starting when stored outdoors

What are the key message points?

- What does the DPW do for the Community?
- Why do we need a new facility?
- Why do you need to put your equipment inside?
- What if nothing is done?

- **Cost will increase due to price escalation**
- **Continue asking Town employees to work in deplorable conditions**
- **Continue operations with less than desirable environmental impacts**
- **Incur continuing budget and capital expenditures to repair existing facility**
- **Increases the risk that the Community/County will be in a situation that facility replacement becomes an emergency rather than a planned replacement**

- How does it compare to what we have now?
- How does it compare to other communities
- How much does it cost / what will it cost me?
- Why does it cost so much?
- What are the benefits?

Snow is too much for roof of DPW building

(Metrowestdailynews.com, 2011)

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Potential risks associated with substandard facilities

Town's Fleet of Plows Crushed in Collapse
(Plymouth CT, NBCConnecticut.com 2011)

Fire destroys town's public works building
Officials say fire was major loss for town (WMUR Hopkinton NH 2012)

Lynnfield DPW Storage Garage Fire *(2013)*

Blaze destroys Henniker snow-removal equipment, leaving 'serious problem'
(Henniker NH, Concord Monitor 2015)

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Potential risks associated with substandard facilities

November 20, 2016
Fire destroys more than $1 million worth of equipment at Tolland DPW garage
(Tolland, MA, Masslive.com)

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Potential risks associated with substandard facilities

Highway Facility Fire Leaves Mass. Town Without Snow Removal Trucks

December 10, 2017 at 8:56 pm

Filed Under: Fire, Local TV

December 10, 2017
Facility Fire Leaves Mass. Town Without Snow Removal Trucks
(Sandisfield, MA, WBZ CBS Boston)

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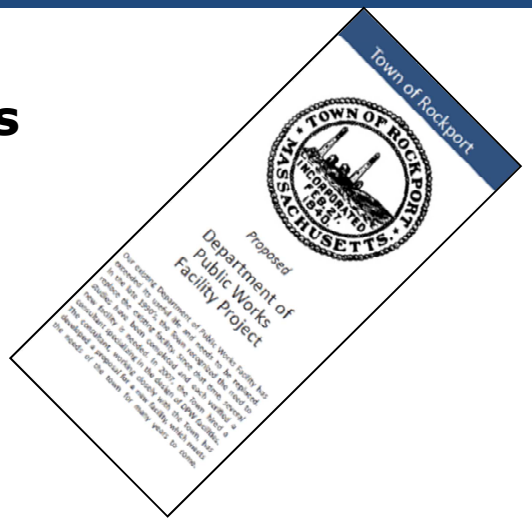
Informing the Public / Governing Authorities

Informational Support Materials:

- Tri-fold information handout
- 8.5 x 11 informational sheet
- PowerPoint Presentations
- Rendered site plans
- Rendered building plans
- Models
- Similar community benchmarking



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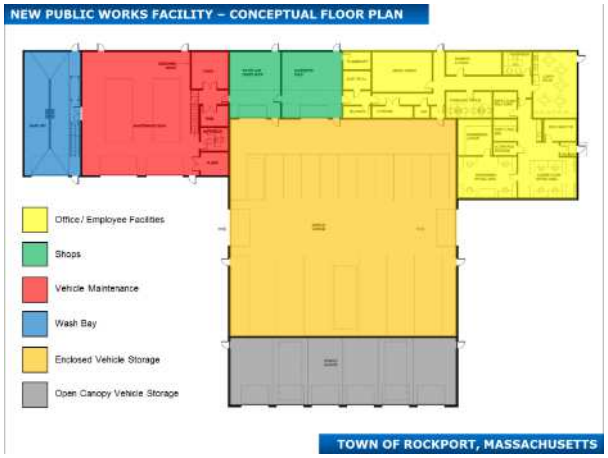

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Rendered Building Perspectives

Photo of Completed Facility – Town of Hopkinton DPW Facility

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Informing the Public / Governing Authorities

Methods for Reaching Target Audience

- **Local newspaper articles**
- Public meetings / workshops
- Website postings
- Public Area Displays
- Open houses / Touch-a-Truck
- Email
- Facebook
- YouTube

Bourne's Public Works Facilities: Time for an Upgrade

Letter: Police chief supports new DPW facility

Apr 29, 2016

Letter: New Rockport DPW facility long overdue

Apr 26, 2016

Now is the Time to Act' on Wayland's New DPW Facility, PMBC Says

LETTER: Time for a new DPW facility in Rockport

Tuesday

Posted Apr 26, 2016 at 11:30 AM Updated Apr 26, 2016 at 11:30 AM

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Informing the Public / Governing Authorities

Methods for Reaching Target Audience

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"Selling the Project" Process - Gaining Public Support

Conduct an open house to get the word out – Sponsor a "touch a truck day"

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Informing the Public

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When should you begin your public outreach / public education process for your project?

1. On day one
2. After you complete the programming
3. After the concept / site plan has been developed
4. After the feasibility study is done

When should you begin your public outreach / public education process for your project?

1. **On day one!!**
2. **After you complete the programming**
3. **After the concept / site plan has been developed**
4. **After the feasibility study is done**

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Planning and Constructing a New Public Works Facilities

Design Considerations for a New Public Works Facility

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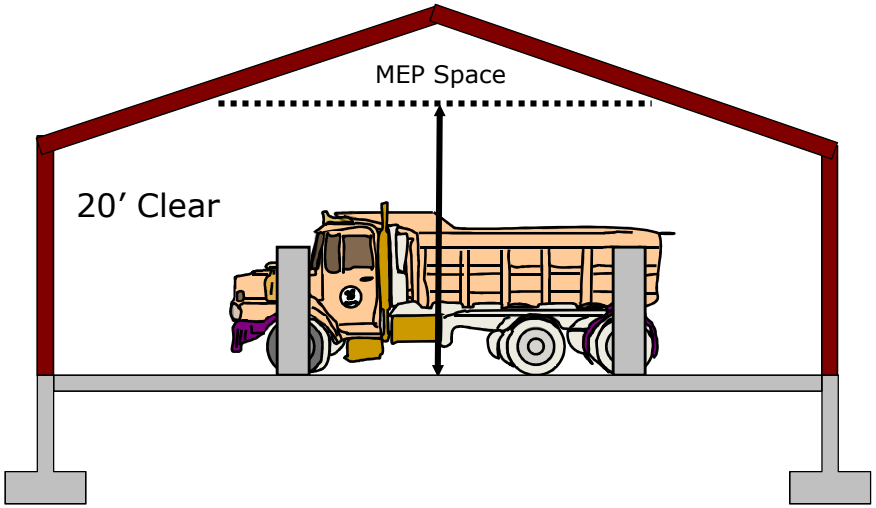
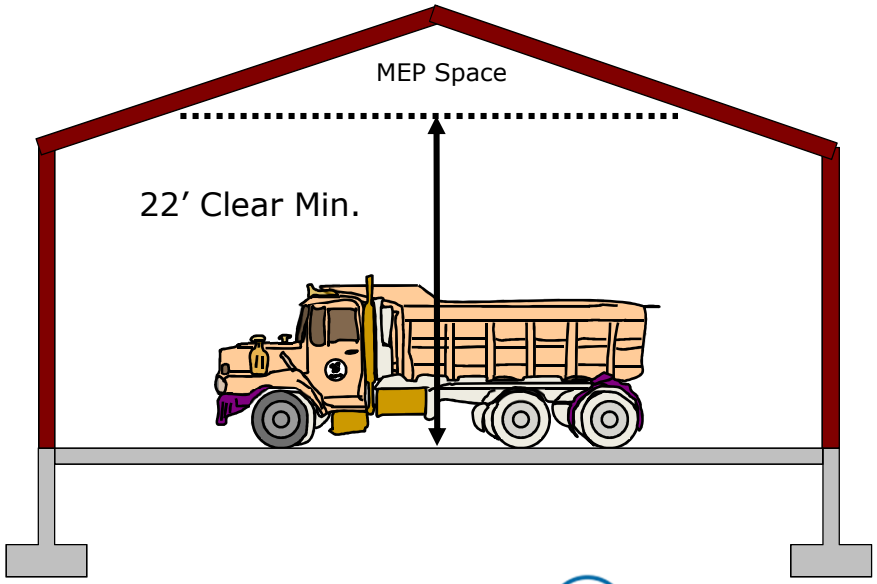
Building Envelope Requirements

- Consider clearance for vehicle lifting
- Consider clearance maintenance of moveable equipment components





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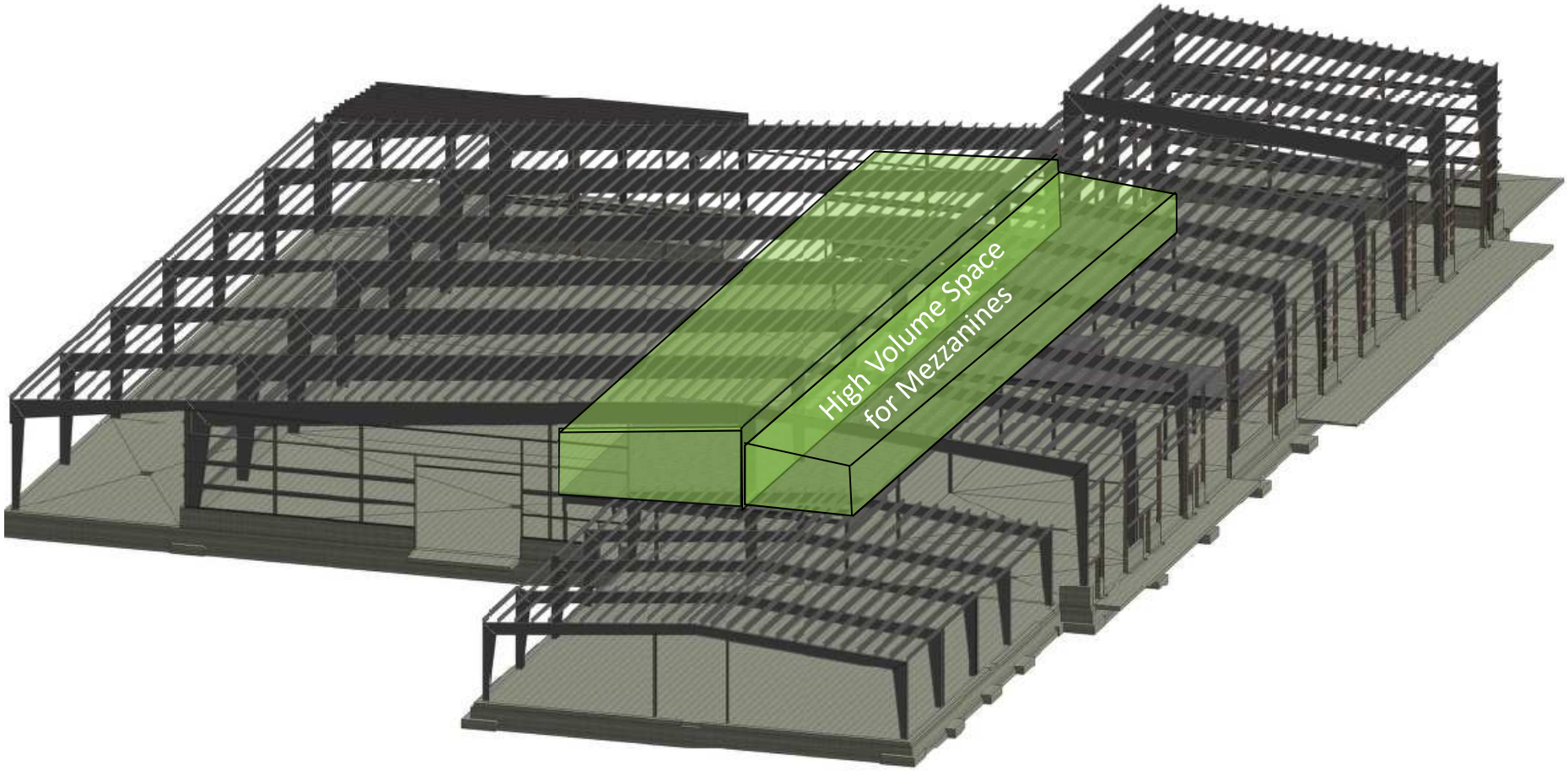
Design Tools – Revit Modeling Software



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Mezzanines

- Take advantage of high bay areas to add inexpensive mezzanine space to maximize your storage capabilities

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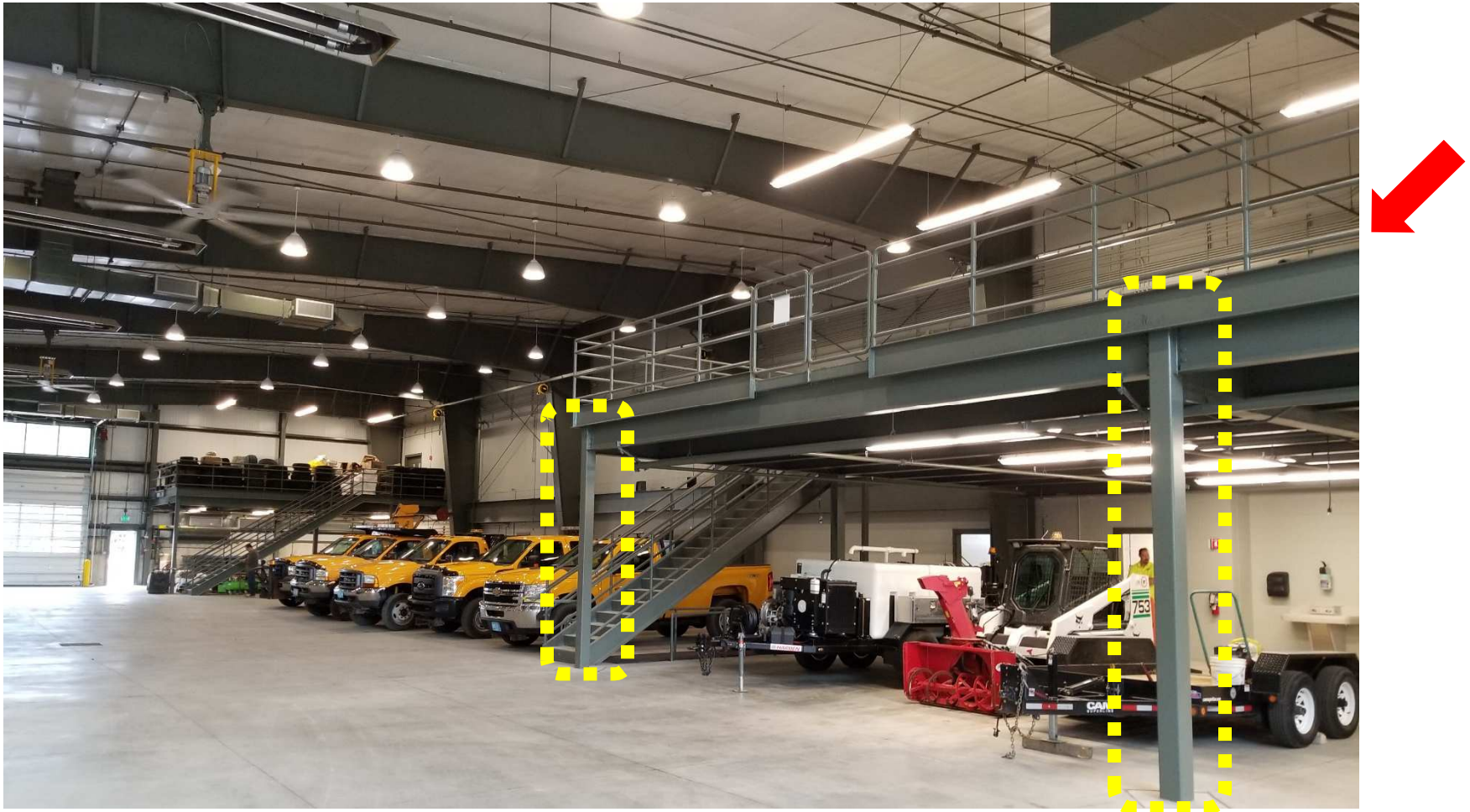
Mezzanines

- Take advantage of high bay areas to add inexpensive mezzanine space to maximize your storage capabilities



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Mezzanines

- Take advantage of high bay areas to add inexpensive mezzanine space to maximize your storage capabilities

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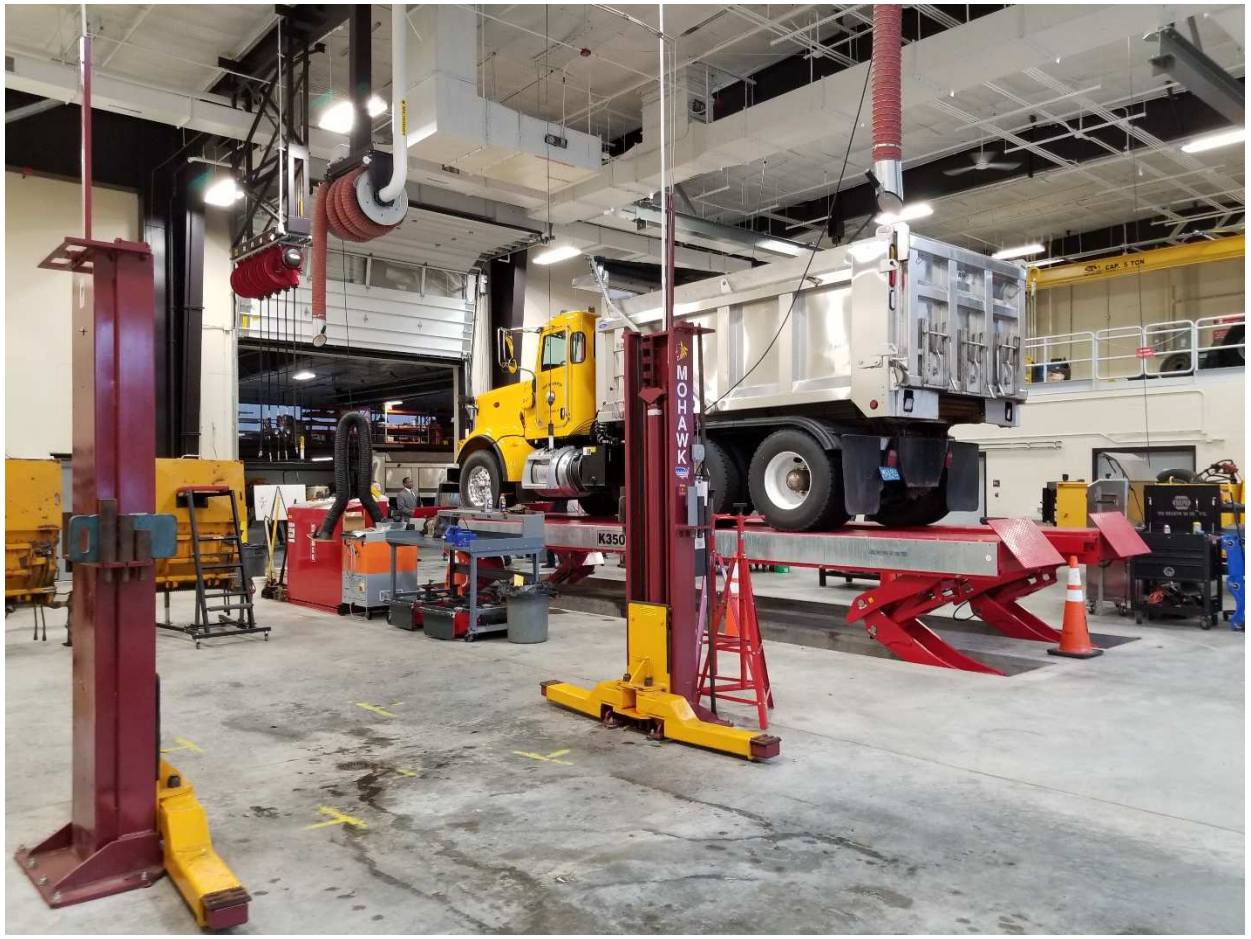
Industrial Equipment

- Provide provisions for industry standard industrial equipment



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Industrial Equipment

- Provide provisions for industry standard industrial equipment

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Industrial Equipment

- Provide provisions for industry standard industrial equipment

Building Options

- Cost Effective Pre-Engineered Metal Buildings – Least Costly

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Building Options

- Conventional Construction – Most Costly

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Building Options

- Combination Conventional Construction & Pre-Engineered Metal Building

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Temporary Facilities During Construction

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Temporary Facilities During Construction

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Construction Considerations

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Construction

- A perfect set of plans is only as good as the contractor that is building your facility
- Don’t wait until the punch list to find out what is missing
- Close construction supervision will play an important role

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Give the Project a Life | Program | Educate/Sell | Design | **Construct** | Operate

Manage the Construction to limit Change Orders!

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Operation of Your Facility

How Do You Make Your Investment Last

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Operate

- Plan ahead for the increase in your operating budget
- Bigger building means bigger and better systems – more maintenance needed

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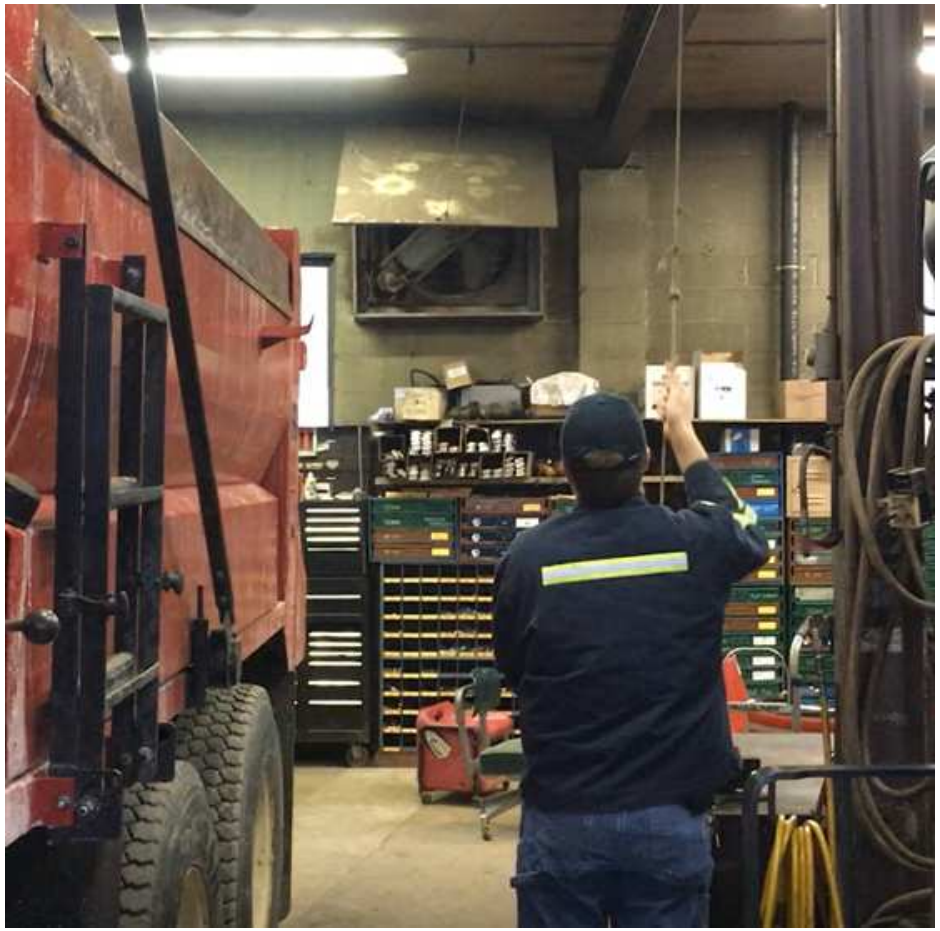

Existing Antiquated Building Systems

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New State-of-the-Art Building System

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Operate

- Identify key personnel responsible for keeping up with the preventative maintenance tasks
- Prepare and Operation & Maintenance Plan to keep up with regularly schedule maintenance
- Take pride in your new building (you may not see another one for 50, 60, or more years……)

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What is the best way to ensure your investment lasts?

1. **Address building maintenance items immediately after the system(s) begin to show signs of failing**

2. **Develop a long-term replacement plan for major systems**

3. **Assign staff to conduct regular maintenance of building systems and develop a preventative maintenance plan once you occupy the building**

4. **Do nothing – the systems are new and should last for many years before any service is needed**

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Planning and Constructing a New Public Works Facilities

QUESTIONS ?

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