

Town of Truro  
New Public Works Facility

The seal of the Town of Truro, featuring a Native American figure holding a bow and arrow, with a ship on the left and a landscape on the right. The text around the seal includes "TOWN OF TRURO", "EXPEDITION OF NOV. 26th", "CORN HILL PAMET 1620", and "INCORPORATED 1709".

Town of Truro  
New Public Works Facility



Feasibility Study - Update Presentation

February 11, 2020

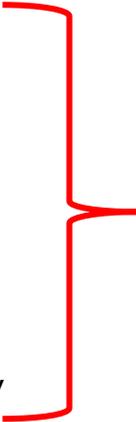
# Town of Truro

## New Public Works Facility

### Discussion from 12/10/19 Select Board Presentation

- Overall cost of \$20,655,000 is too high. Town would like to find ways to reduce this cost.
- Review program to determine if additional space reductions can be made to reduce overall costs.
- Evaluate alternate systems to minimize building size.
- Prepare a more detailed site development estimate to validate site development costs.
- Evaluate high contingencies and market adjustment to determine if these figures can be lowered:

- 2019 Market adjustment
- Design Contingency
- 2020 Escalation
- 2021 Escalation
- Location Factor
- Construction Contingency



**\$5,321,011**

# Town of Truro New Public Works Facility

## Proposed Program and Cost Modifications

- Reduced the overall program by another +/- 8%

<u>Space Needs Assessment</u>	<u>Initial Needs</u>	<u>Rev 1</u>	<u>Rev 2</u>
• Office / Office Support	2,035 SF	1,525 SF	1,300 SF
• Employee Facilities	2,144 SF	1,936 SF	1,700 SF
• Workshops	3,929 SF	3,192 SF	2,900 SF
• Vehicle Maintenance	7,279 SF	5,532 SF	5,400 SF
• Wash Bay	1,750 SF	1,350 SF	1,350 SF
• Vehicle & Equipment Storage	19,551 SF	18,953 SF	16,958 SF
<b>Subtotal:</b>	<b>36,689 SF</b>	<b>32,487 SF</b>	<b>29,608 SF</b>
		<b>11.5% Reduction</b>	<b>19.3% Reduction</b>

Town of Truro  
**New Public Works Facility**

**Proposed Program and Cost Modifications**

- Reduced the overall program by another +/- 8%
- Deferred several industrial equipment purchases (potential bid alternates)
- Reduced mezzanine area by +/- 13%
- Reduced canopy area by +/- 10%
- Adjusted site development costs based on a detailed estimate for the anticipated site development (basic site development work was reduced but specialty site work increased)

# Town of Truro New Public Works Facility

## Detailed Conceptual Site Development Cost Estimate

Description	Unit	2019 Cost	DPW Facility	
			Quantity	Subtotal
DIVISION 2 - SITE WORK				
<u>GENERAL SITE WORK</u>				
Clear and Grub Site	AL	\$10,000.00	1	\$10,000
Field Engineering	Day	\$2,500.00	2	\$5,000
Trench Plated Trench Safety	LS	\$3,500.00	1	\$3,500
Site Contractor Supervision	Mo	\$5,000.00	4	\$20,000
Mobilization	LS	\$5,000.00	1	\$5,000
Construction Entrance	LS	\$5,000.00	1	\$5,000
Dewatering	AL	\$5,000.00	1	\$5,000
Strip & Stockpile Top Layer Surface	CY	\$8.25	4,500	\$37,125
Screen Top Layer	CY	\$5.75	4,500	\$25,875
Respread/Reuse Top Layer	CY	\$10.00	2,000	\$20,000
Site Cuts to Fill	CY	\$13.50	2,500	\$33,750
Import & Place Fill	CY	\$25.00	12,500	\$312,500
Tree Removal	AC	\$10,000.00	3	\$30,000
Stump Removal	AC	\$12,000.00	3	\$36,000
Finish Grading	SY	\$1.50	15,000	\$22,500
Concrete Block Retaining Wall	SF	\$45.00	5,800	\$261,000
Seed	SF	\$0.40	40,000	\$16,000
Granite Curb	LF	\$47.00	600	\$28,200
HMA Berm	LF	\$20.00	1,000	\$20,000
Gravel Pavement Subbase	CY	\$25.00	2,370	\$59,250
Bituminous Concrete (Hot Mix Asphalt)	SY	\$28.00	7,100	\$198,800
Drainage System #1- Underground Infiltration Chambers	SF	\$15.00	4,000	\$60,000
Drainage System #2- Underground Infiltration Chambers	SF	\$15.00	2,000	\$30,000
Street Cut and Patch	SY	\$30.00	200	\$6,000
Drainage System - Manhole	EA	\$5,800.00	8	\$46,400
Drainage System - Catchbasin	EA	\$4,800.00	10	\$48,000
Storm Piping	LF	\$45.00	1,500	\$67,500
OCS	EA	\$11,000.00	2	\$22,000
SWTU	EA	\$10,500.00	2	\$21,000
Precast Flared End and Riprap Level Spreader	EA	\$3,800.00	1	\$3,800
Water Distribution System - Domestic Tap	LS	\$2,500.00	1	\$2,500

Description	Unit	2019 Cost	DPW Facility	
			Quantity	Subtotal
Water Distribution System - Fire Service Tap	LS	\$4,500.00	1	\$4,500
Water Distribution System - 4" Copper	LF	\$55.00	350	\$19,250
Water Distribution System - 6" DI Fire Service	LF	\$65.00	400	\$26,000
Water Distribution System - Hydrant	EA	\$3,700.00	1	\$3,700
Water Distribution System - Valves	EA	\$1,500.00	4	\$6,000
Water Distribution System - Misc. Accessories	LS	\$10,000.00	1	\$10,000
Electrical - 4x4" Concrete Encased Electrical Conduit	LF	\$104.00	350	\$36,400
Electrical - Generator Pad	EA	\$5,500.00	1	\$5,500
Electrical - Transformer Pad	EA	\$3,500.00	1	\$3,500
Sanitary Sewer - Oil/Sand Trap	EA	\$6,500.00	1	\$6,500
Sanitary Sewer - 6" PVC Service	LF	\$45.00	80	\$3,600
Septic System	LS	\$50,000.00	1	\$50,000
Tight Tank System	EA	\$18,500.00	1	\$18,500
Bollards	EA	\$550.00	20	\$11,000
Landscaping	AL	\$60,000.00	1	\$60,000
Sedimentation Control	LF	\$15.00	1,200	\$18,000
Infiltration Filters at CB	EA	\$500.00	10	\$5,000
Chain Link Fence	LF	\$50.00	800	\$40,000
Chain Link Fence Gate	EA	\$15,000.00	2	\$30,000
Pavement Markings	LS	\$5,000.00	1	\$5,000
Traffic Signage	EA	\$250.00	10	\$2,500
Concrete Wash Pad	CY	\$444.27	70	\$31,099
Misc Utility Concrete Pads	CY	\$450.00	20	\$9,000
Main Entry / Approach Concrete Slabs / Side Walks	CY	\$450.00	30	\$13,500
Timber Guardrail	LF	\$36.00	400	\$14,400
Flagpole	LS	\$5,000.00	1	\$5,000
Site Lighting	EA	\$6,000.00	8	\$48,000
Light Pole Bases	EA	\$600.00	8	\$4,800
E&B Site Lighting Conduit	LF	\$14.00	1,200	\$16,800
<b>Retaining Walls &amp; Fill:</b>				<b>\$690,250</b>
Remaining Site Development:				<b>\$1,279,000</b>
<b>TOTAL CONSTRUCTION COST:</b>				<b>\$1,969,250</b>

# Town of Truro

## New Public Works Facility

### Proposed Program and Cost Modifications

- Reduced the overall program by another +/- 8%
- Deferred several industrial equipment purchases (potential bid alternates)
- Reduced mezzanine area by +/- 13%
- Reduced canopy area by +/- 10%
- Adjusted site development costs based on a detailed estimate for the anticipated site development (basic site development work was reduced but specialty site work increased)
- Reduced Market Adjustment from 10% to 7%
- Reduced Design Contingency from 5% to 4% (based on the fact that a detailed site estimate has been provided which accounts for potential unknown conditions)
- Reduced Year 1 escalation from 6% to 5% and Year 2 from 6% to 4% (based on discussions of anticipated escalation rates with four separate contractors)
- Reduced A&E Fee and OPM Fee allowances in line with overall project adjustments
- Reduced Communication / Low Voltage System Allowance by 17%

Town of Truro  
**New Public Works Facility**

<b>Conceptual Cost Estimate</b>	<u>Original</u>	<u>Revised</u>
Building Construction Costs:	\$9,210,000	\$8,398,000
Mezzanines:	\$340,000	\$295,000
Industrial Equipment:	\$589,000	\$440,000
Fuel System Relocation:	\$283,000	\$283,000
Site Development:	\$1,653,000	\$1,969,000
Salt/Sand Storage Structure:	\$280,000	\$280,000
Market & Location Adjustment Factor:	\$1,875,000	\$1,384,000
Design Contingencies & Escalation:	\$2,445,000	\$1,694,000
Construction Contingencies:	\$1,000,000	\$885,000
Owner's Project Development Costs:	<u>\$2,980,000</u>	<u>\$2,354,000</u>

TOTAL PROJECT COST: \$20,655,000    \$17,982,000

**\$2,673,000 Reduction**

Town of Truro  
**New Public Works Facility**

**Conceptual Cost Estimate**

Revised

Building Construction Costs:

\$8,398,000

Mezzanines:

\$295,000

Industrial Equipment:

\$440,000

Fuel System Relocation:

\$283,000

Site Development:

\$1,969,000

Salt/Sand Storage Structure:

\$280,000

Market & Location Adjustment Factor:

\$1,384,000

Design Contingencies & Escalation:

\$1,694,000

Construction Contingencies:

\$885,000

Owner's Project Development Costs:

\$2,354,000

\$14,743,000

29,600 SF

**\$498 per SF**

**TOTAL PROJECT COST: \$17,982,000**

# Town of Truro New Public Works Facility

## Construction Cost Comparison (Does not include soft costs)

Description	Size (SF)	Bid Date	Average Bid Price	2019 Avg Cost per SF	2020 Avg Cost per SF	2021 Avg Cost per SF
Wayland Public Works Facility	39,869	2014	\$ 10,519,754	\$397	\$421	\$438
Medford Public Works Facility	45,000	2014	\$ 12,340,333	\$413	\$438	\$455
Bourne Public Works Facility	39,040	2014	\$ 11,063,598	\$427	\$452	\$470
Norwood Public Works Facility	53,870	2014	\$ 15,437,343	\$431	\$457	\$476
Boylston Highway Facility	13,926	2015	\$ 3,935,419	\$408	\$432	\$449
Hopkinton Public Works Facility	42,410	2016	\$ 12,112,833	\$395	\$419	\$435
Orleans Public Works Facility	42,278	2017	\$ 12,833,834	\$373	\$396	\$412
Andover Municipal Services Facility	54,088	2017	\$ 18,413,675	\$418	\$443	\$461
Longmeadow Public Works Facility	44,858	2018	\$ 14,773,364	\$374	\$396	\$412
Grafton DPW Facility	33,710	2018	\$ 12,399,201	\$418	\$443	\$460
Middleboro DPW Facility	34,000	2019	\$ 14,355,199	\$422	\$448	\$465
Yarmouth DPW Facility	37,990	2019	\$ 16,367,227	\$431	\$457	\$475
Burlington DPW Facility	66,200	2019	\$ 26,074,333	\$394	\$418	\$434
<b>Average Cost per SF:</b>				<b>\$411</b>	<b>\$436</b>	<b>\$453</b>
<b>Average Cost per SF for Southeast / Cape Communities:</b>						<b>\$456</b>

Truro DPW  
 \$14,743,000  
 29,600 SF  
 \$498 per SF

Town of Truro  
**New Public Works Facility**

**Project Inquiries & Responses**

Town of Truro  
**New Public Works Facility**

**Project Inquiries & Responses**

- How were the potential sites analyzed and ranked?
- How will water for domestic and fire protection be handled?
- What protective measures would be incorporated into the new salt shed to prevent pollution?
- What protective measures would be included in the new building to prevent pollution?
- How will stormwater be managed?
- Can the existing buildings be renovated and reused?
- Are there any noise or visual barriers proposed around the site?

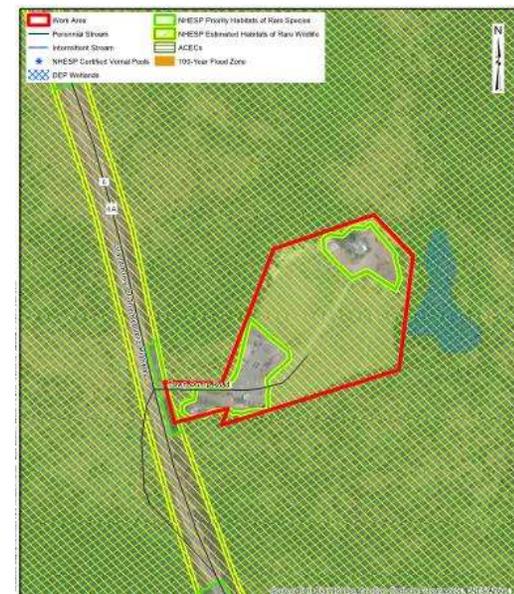
Town of Truro  
**New Public Works Facility**

**How were the potential sites analyzed  
and ranked?**

# Town of Truro New Public Works Facility

## Site Selection Process

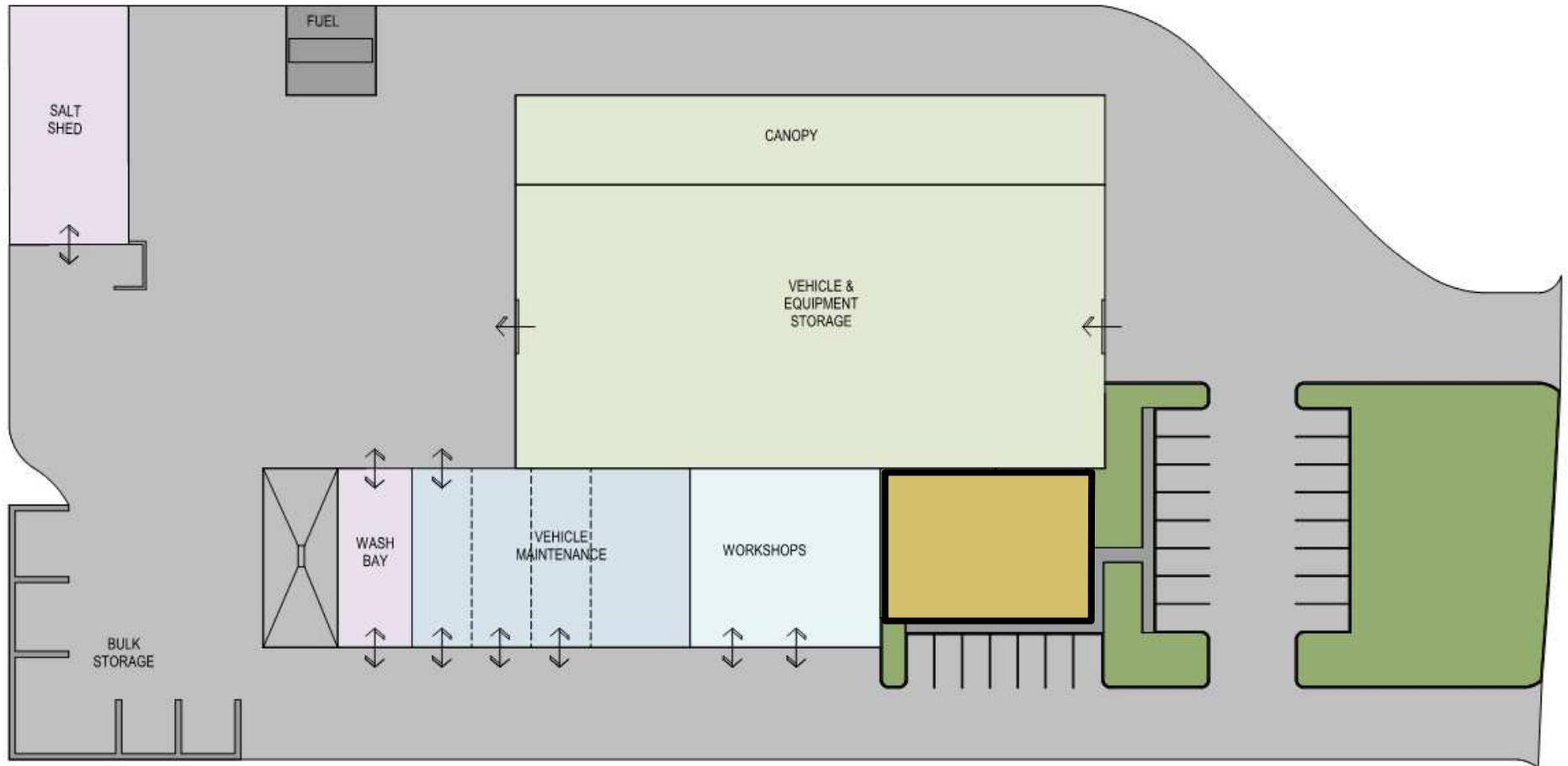
- Worked with the Town to identify potential sites
  - **Site 1** – 340/344 Route 6 (Town owned)
  - **Site 2** – 5 Town Dump Road Transfer Station (Town owned)
  - **Site 3** – Lot 104 Route 6 Adjacent State Parcel (State owned)
  - **Site 4** – 24 Town Hall Road Existing DPW Site (Town owned)
- Conducted a screening analysis of the parcels
  - **Size** – Prepared conceptual generic “test-fit” site plans to determine if site can meet DPW operational requirements.
  - **Environmental Receptor Maps** – Prepared receptor maps to identify potential permitting restrictions which could hinder development.
- Sites which do not pass the initial screening analysis were eliminated



# Town of Truro New Public Works Facility

## Site Selection Process

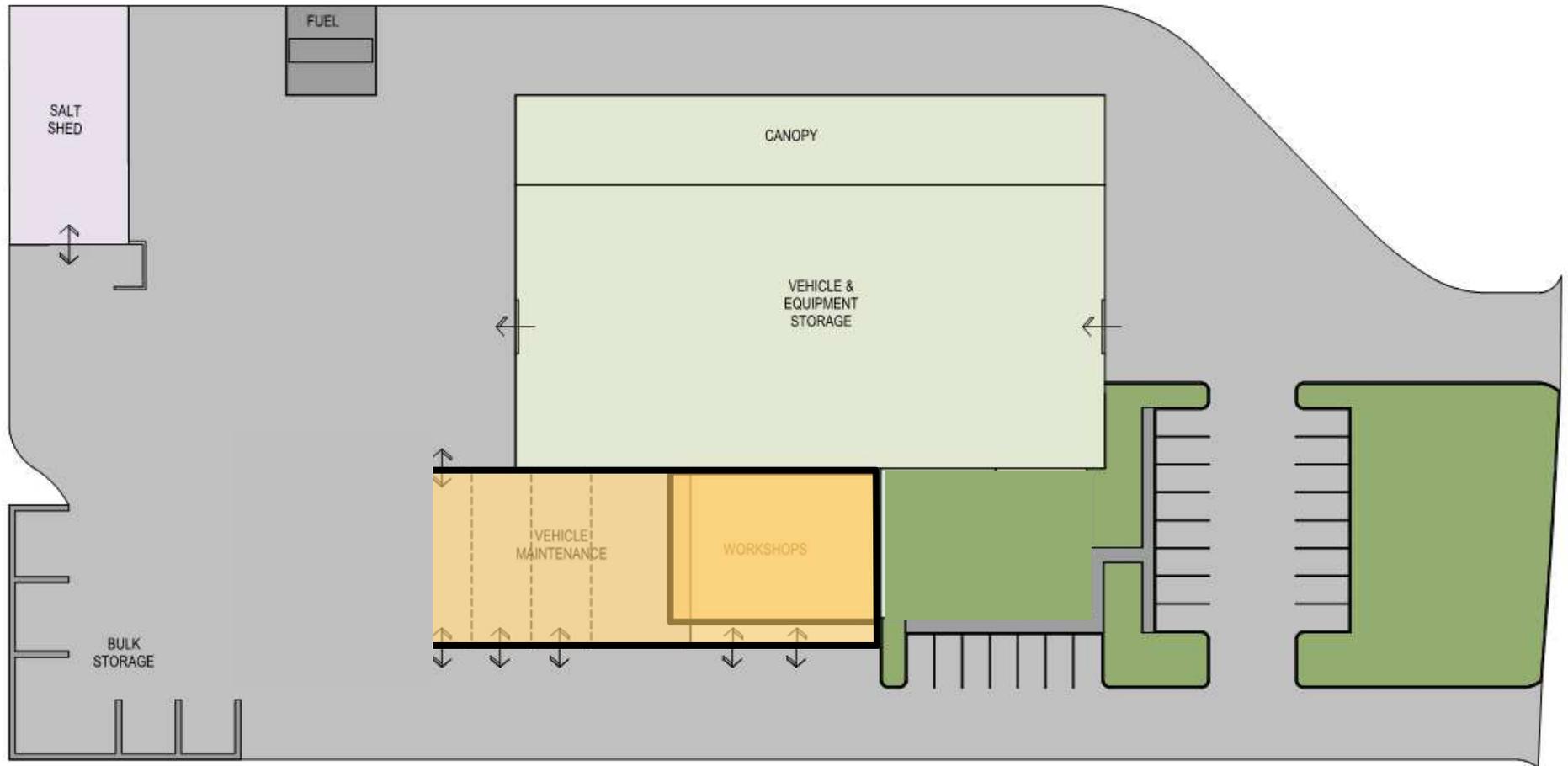
- Generic "Test Fit"



# Town of Truro New Public Works Facility

## Site Selection Process

- Generic "Test Fit"



# Town of Truro New Public Works Facility

## Site Selection Process

- Site 1 – 340/344 Route 6
  - Size: **Passed**
  - Environmental Receptors: **Passed**



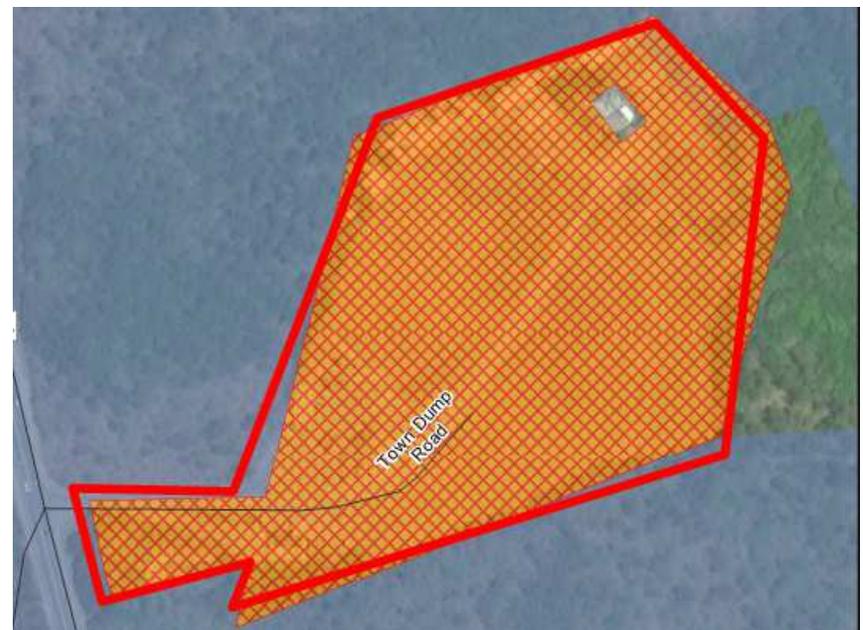
# Town of Truro New Public Works Facility

## Site Selection Process

- Site 2 & 3 – 5 Town Dump Road & Lot 104
  - Environmental Receptors: **Failed**
  - Size: **Failed**

-  NHESP Priority Habitats of Rare Species
-  NHESP Estimated Habitats of Rare Wildlife

-  Solid Waste Facilities - All Landfills



# Town of Truro New Public Works Facility

## Site Selection Process

- Site 2 & 3 – 5 Town Dump Road & Lot 104
  - Size: **Failed**
  - Environmental Receptors: **Failed**



# Town of Truro New Public Works Facility

## Site Selection Process

- Site 2 & 3 – 5 Town Dump Road & Lot 104
  - Size: **Failed**
  - Environmental Receptors: **Failed**

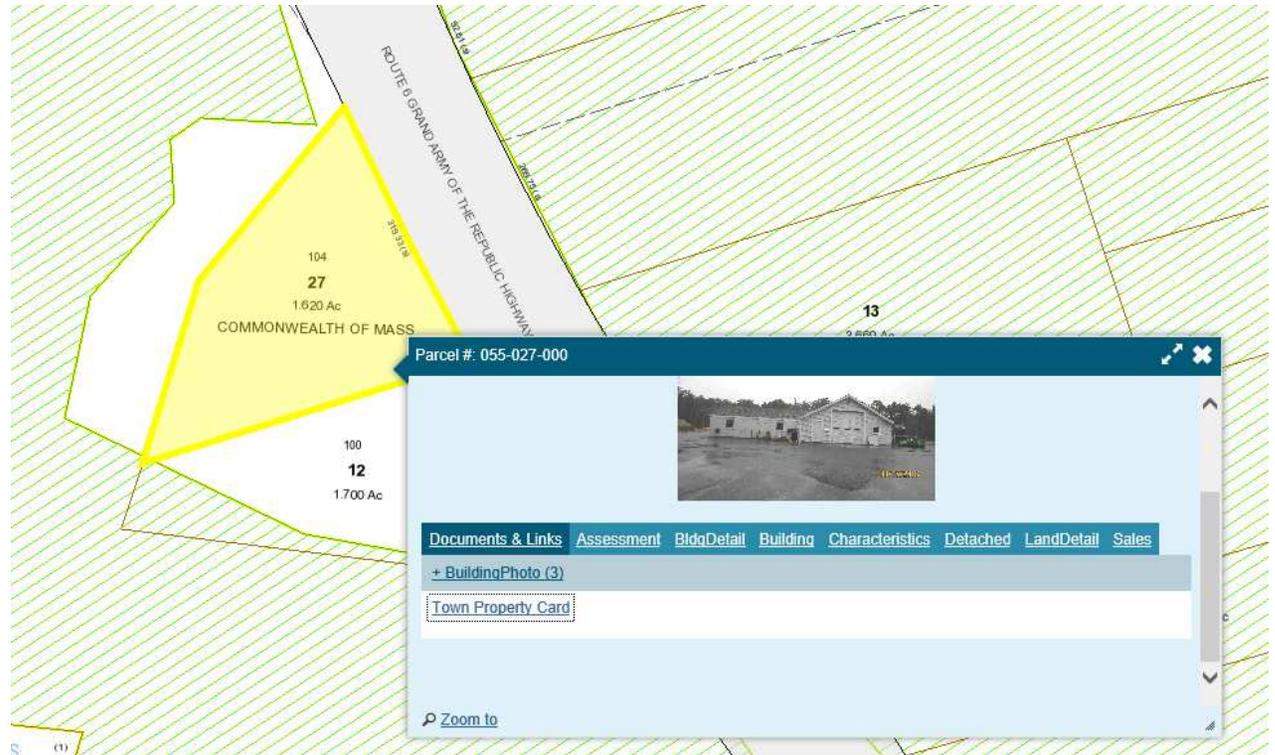


**Program does not fit on site**

# Town of Truro New Public Works Facility

## Site Selection Process

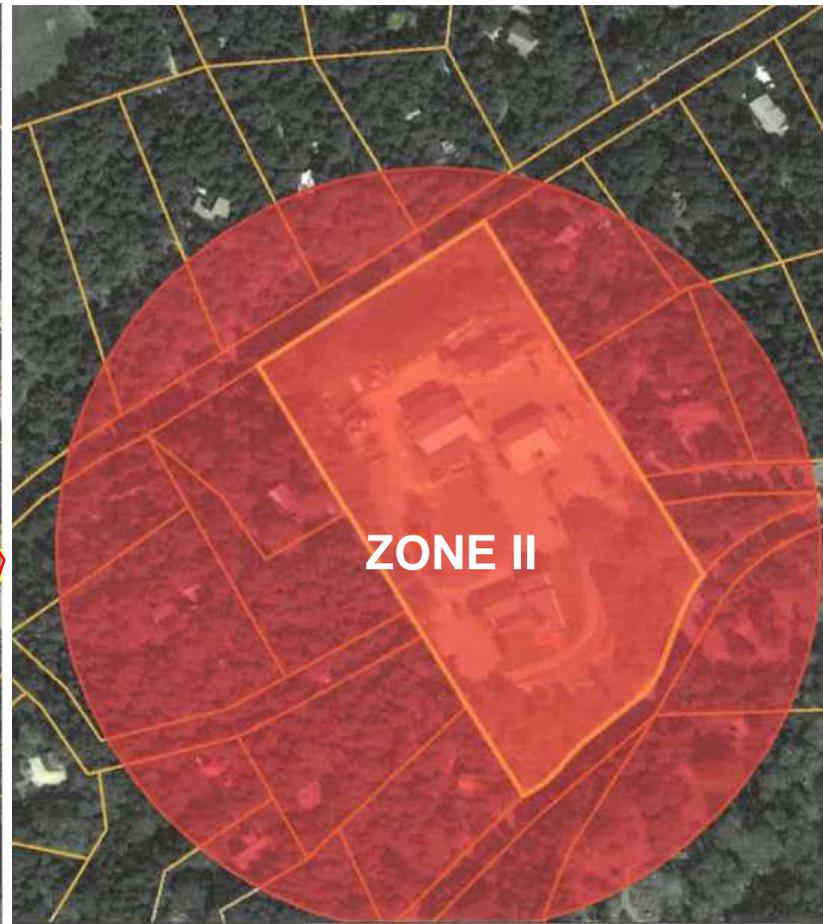
- Site 2 & 3 – 5 Town Dump Road & Lot 104
  - Size: **Failed**
  - Environmental Receptors: **Failed**



# Town of Truro New Public Works Facility

## Site Selection Process

- Site 4 – 24 Town Hall Road
  - Size: **Passed**
  - Environmental Receptors: **Failed**



# Town of Truro New Public Works Facility

## Site Selection Process

- Site 4 – 24 Town Hall Road
  - Size: **Passed**
  - Environmental Receptors: **Failed**

### Statement of Zone I Compliance

- Your system is currently in compliance with Zone I requirements for the following well(s): \_\_\_\_\_  
\_\_\_\_\_ Please be advised that any modifications to the Zone I or activities within are subject to DEP approval.
- Please note that you lack ownership or control of the required **(100 FT)** Zone I protective radius around the following well: **4300041-01G** If you plan to modify or expand this source or to replace any wells, you must notify DEP (in accordance with 310 CMR 22.21(3)(b), 310 CMR 22.04(1) and 22.21(10)(a)). At the time of such notification of a proposed modification or expansion, DEP may require you to comply with the Zone I requirement.
- You are hereby notified that the following well: **4300041-01G** are in non-conformance with the MassDEP's requirement (310 CMR 22.21(1)(b)(5)) that Zone I activities be limited to those directly related to the provision of public water or will have no significant adverse impact on water quality (as specified in Policy 94-03A). To the extent possible, efforts should be made to reduce or eliminate the impacts of non-conforming uses within the Zone I. Pursuant to 310 CMR 22.04(1) and 22.21(a), you must notify the DEP if you plan to modify or expand your source or to replace any wells. At the time of such notification of a proposed modification, expansion, or replacement, DEP may require you to comply with the Zone I requirement that all Zone I activities be limited to those directly related to water supply or will have no significant impact on water quality.

Non-Conforming activities documented within the Zone I: **DPW BUILDING, PARKING LOT**

Town of Truro  
**New Public Works Facility**

**Site Selection Process**

- Site 4 – 24 Town Hall Road
  - Size: **Passed**
  - Environmental Receptors: **Failed**



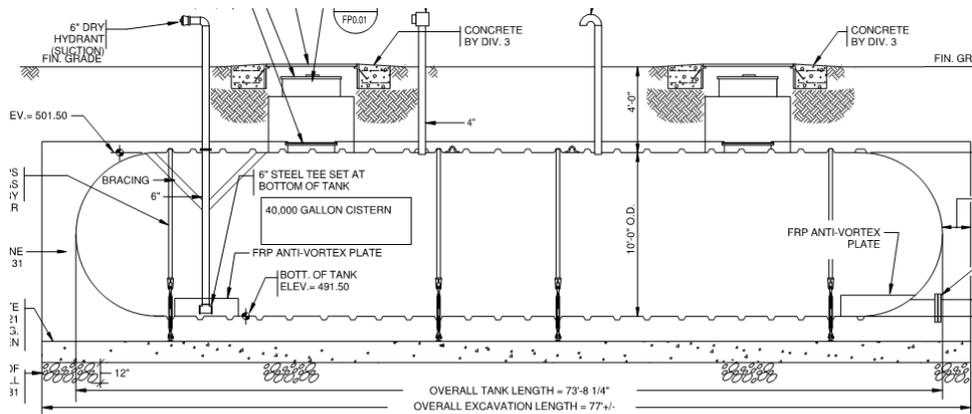
Town of Truro  
**New Public Works Facility**

**How will water for domestic and fire protection be handled?**

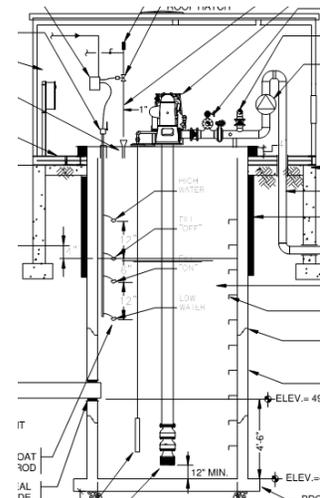
# Town of Truro New Public Works Facility

## Water for Domestic & Fire Protection

- A flow test will be conducted in the next phase of design to check flow and pressure
- Based on preliminary review, it is anticipated that domestic service will be provided from the existing water main
- Fire protection will likely be achieved with a cistern and fire pump



8 FIRE CISTERN DETAIL  
FP0.1



Town of Truro  
**New Public Works Facility**

**What protective measures would be incorporated into the new salt shed to prevent pollution?**

# Town of Truro New Public Works Facility

## Salt Shed Protection Measures

- The salt shed is a fully enclosed structure designed to store salt indoors
- There will be no exterior handling or storage of salt
- Salt is stored on an impervious hot mix asphalt floor
- The structure has been designed to allow the salt to be delivered directly inside the salt shed (no exterior dumping and moving required)
- The salt shed is equipped with a loading ramp to provide the operator with better visibility when loading salt trucks. This loading ramp will reduce the potential for spilling or overfilling of salt
- The DPW will implement housekeeping procedures to immediately clean up any salt that may spill around the loading area and move the product back inside the salt storage structure



Town of Truro  
**New Public Works Facility**

**What protective measures would be included in the new building to prevent pollution?**

# Town of Truro New Public Works Facility

## Building Protection Measures

### VEHICLE STORAGE GARAGE

- Fully enclosed storage garage to store vehicles and equipment inside
- The vehicle storage area is equipped with a trench drain / sump system which will collect any runoff, drips, and/or leaks from vehicles and equipment when stored indoors.
- The trench drain / sump system will be connected to a Massachusetts State Approved gas, oil, and sand separator which will discharge a MA DEP registered tight tank.



# Town of Truro New Public Works Facility

## Building Protection Measures

### WASH BAY

- The building is equipped with a fully enclosed vehicle wash bay to allow washing of vehicles and equipment indoors.
- The wash bay includes a trench drain and deep sump to collect wash water.
- The wash water will be routed through a grit separation tank and a Massachusetts State Approved gas, oil, and sand separator which will discharge to a MA DEP registered tight tank
- No wash water runoff from the wash bay will discharge to the stormwater system

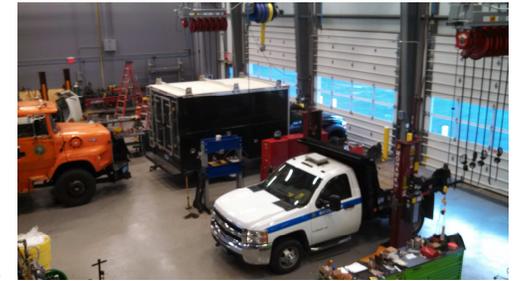


# Town of Truro New Public Works Facility

## Building Protection Measures

### VEHICLE MAINTENANCE AREA

- The building has been designed with a fully enclosed vehicle maintenance area to allow vehicles and equipment to be maintained indoors.
- The maintenance area includes a dedicated fluid storage room equipped with above ground storage and spill containment system for liquid petroleum and associated products used for vehicle maintenance operations. A summary of the fluid storage room mitigation measures includes:
  - Designed in accordance with 527 CMR Fire Prevention Regulations
  - Separate 2-hour fire rated / fully sprinklered room
  - Double-wall bulk storage tanks for maintenance fluids products
  - Overfill alarms to prevent overfilling of tanks
  - The fluid storage room will have an 8-inch thick concrete floor which will drain to a concrete sump with a reservoir capable of storing largest tank + 10% of the remaining volume of fluids in the fluid storage room
  - The concrete sump will have an alarm to notify Fire Department if liquid enters the sump at any time.



Town of Truro  
**New Public Works Facility**

**Building Protection Measures**

VEHICLE MAINTENANCE AREA

- Fluids used for vehicle maintenance operations will be contained in a closed system to limit the potential for leaks or spills.
- The system consists of a closed piped system which will deliver the fluids from the fluid storage room directly to the vehicles via a lube reel dispensing system.
- The pumps for the system are operated by pneumatic (compressed air) pumps. The compressed air system used to operate the pumps will be connected to a solenoid valve which will shut down the system when the building is unoccupied to prevent the potential for an accidental discharge of the fluids during off-hour periods.
- The maintenance area is equipped with a floor drain system which will collect any runoff, drips, and/or leaks from vehicles and equipment within the maintenance area. The floor drain system will be connected to a Massachusetts State Approved gas, oil, and sand separator which will discharge to a MA DEP registered tight tank.

Town of Truro  
**New Public Works Facility**

**Building Protection Measures**

FUELING SYSTEM

- The system includes relocation of the double walled leak detected above-ground storage tanks (ASTs). The tank is vehicle impact, projectile, and blast resistant tanks meeting or exceeding U.L. 2085.
- The entire perimeter of the tanks will be protected with concrete filled steel bollards and steel guardrail barriers to prevent incidental impact of the tank.
- The tank will be installed on a 12" thick impervious reinforced concrete pad surrounded by an 8" thick impervious reinforced concrete fueling area surface. All construction and control joints will be sealed with petroleum resistant sealant.
- The fueling area surface pad includes a positive limiting barrier which consists of continuous  $\frac{3}{4}$ " x  $\frac{3}{4}$ " series of grooves which are interconnected and designed to maintain minor spills of up to 5 gallons for each dispenser. These grooves surround the entire perimeter of the fueling area.
- The dispensing area is equipped with an emergency spill kit to manage potential spills during fueling operations. The Town will implement standard operating procedures to utilize the emergency spill kit and immediately clean any incidental spills which may occur.

# Town of Truro

## New Public Works Facility

### Building Protection Measures

#### FUELING SYSTEM

- The fueling system includes a remote shutoff control switch to shut down the system in the event of an emergency.
- Stormwater runoff from the fuel island area will be collected in deep sump hooded catch basins and will be routed through a stormwater treatment unit (hydrodynamic separator).
- The fuel system will include continual monitoring of the interstitial space for the double walled tanks and will provide remote notification if any fluids are measured within the interstitial space.
- The fuels contained and dispensed from the tanks will be monitored through a fuel management system. This system will provide an inventory of the fuels delivered to the tanks and dispenses from the tanks to allow the Town to verify that the fluids dispensed match the fluids received.



Town of Truro  
**New Public Works Facility**

**How will the Stormwater be managed?**

# Town of Truro New Public Works Facility

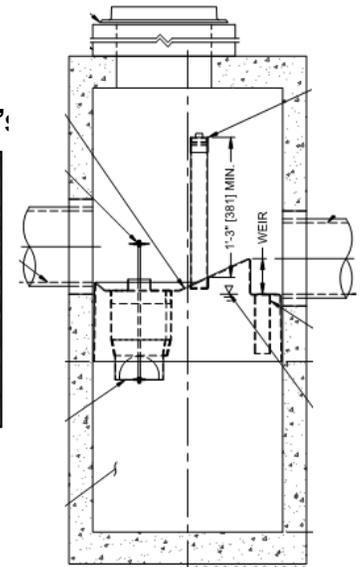
## Stormwater

- Erosion and sedimentation control systems during construction
- New stormwater system which will treat all stormwater runoff (minimum 80% TSS removal)
- Designed in accordance with Massachusetts Stormwater Handbook and in compliance with the standards therein
- Deep-sump hooded catch basins
- Stormwater Treatment Units (Hydrodynamic Separators)
- Infiltration galleries with isolation row
- Infiltration swales
- Perimeter curbing (contains runoff and prevents untreated discharge to surrounding property)
- Peak rate attenuation

DEEP SUMP HOODED CB



WATER QUALITY  
STRUCTURES



UNDERGROUND INFILTRATION  
CHAMBERS WITH ISOLATION ROW



Town of Truro  
**New Public Works Facility**

**Can the existing buildings be renovated and reused?**

Town of Truro  
**New Public Works Facility**

**Are there any noise or visual barriers  
proposed around the site?**

# Town of Truro New Public Works Facility



Town of Truro  
**New Public Works Facility**

**Sustainable / Energy Efficiency Design  
Considerations**

# Town of Truro New Public Works Facility



**New State-of-the-Art Building System**

# Town of Truro

## New Public Works Facility

**Envelope PASSES: Design 13% better than code**

### Envelope Compliance Statement

*Compliance Statement:* The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

**Interior Lighting PASSES: Design 38% better than code**

### Interior Lighting Compliance Statement

*Compliance Statement:* The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

**Exterior Lighting PASSES: Design 59% better than code**

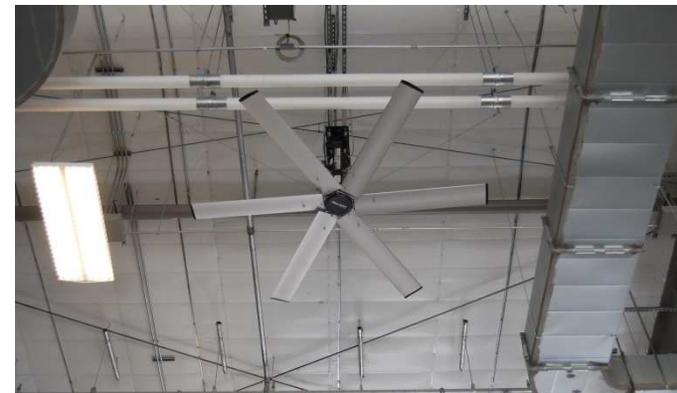
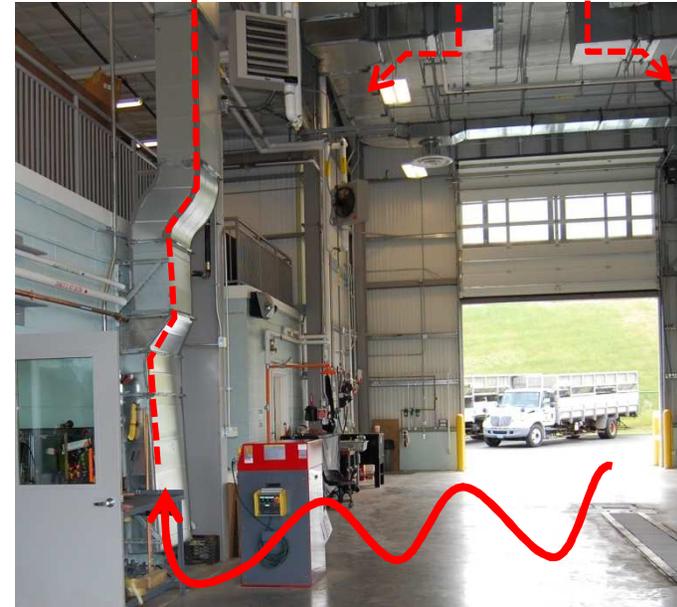
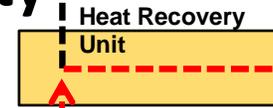
### Exterior Lighting Compliance Statement

*Compliance Statement:* The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2015 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

# Town of Truro New Public Works Facility

## Sustainable Opportunities

- Sustainable Design
  - **Heat Recovery / Destratification**
  - Rainwater harvesting
  - Photovoltaic ready
  - Superinsulation envelope
  - Natural daylighting



Town of Truro  
**New Public Works Facility**  
**Sustainable Opportunities**

- Sustainable Design
  - Heat Recovery / Destratification
  - **Rainwater harvesting**
  - Photovoltaic ready
  - Superinsulation envelope
  - Natural daylighting



# Town of Truro New Public Works Facility

Rainwater  
from the Roof



# Town of Truro New Public Works Facility

## Sustainable Opportunities

- Sustainable Design
  - Rainwater harvesting
  - **Photovoltaic ready**
  - Superinsulation envelope
  - Natural daylighting





**Wayland DPW**

**Wayland DPW**



Town of Truro  
**New Public Works Facility**



**Hopkinton DPW**

*Weston & Sampson*

Town of Truro  
**New Public Works Facility**

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