

## **AGENDA**

1. Schedule
2. DPW
  - ConsCom Presentation Update
  - Cost Update
    - Access Drive
    - Site & Building Development
3. Community Center
  - 10 Elm Street Cost Update
4. Cost Model
5. Next Steps
  - Final Report
  - Outreach

## **TOWN OF BOXFORD**

Targeted Facilities Masterplan

15 August 2018

# COMMUNITY CENTER

Conceptual Design at 10 Elm

Update Design at 4 Middleton

# TOWN HALL / LIBRARY

DPW

COST ESTIMATES

FINAL REPORT

## Report Back to Task Force

23 May

13 June

27 June

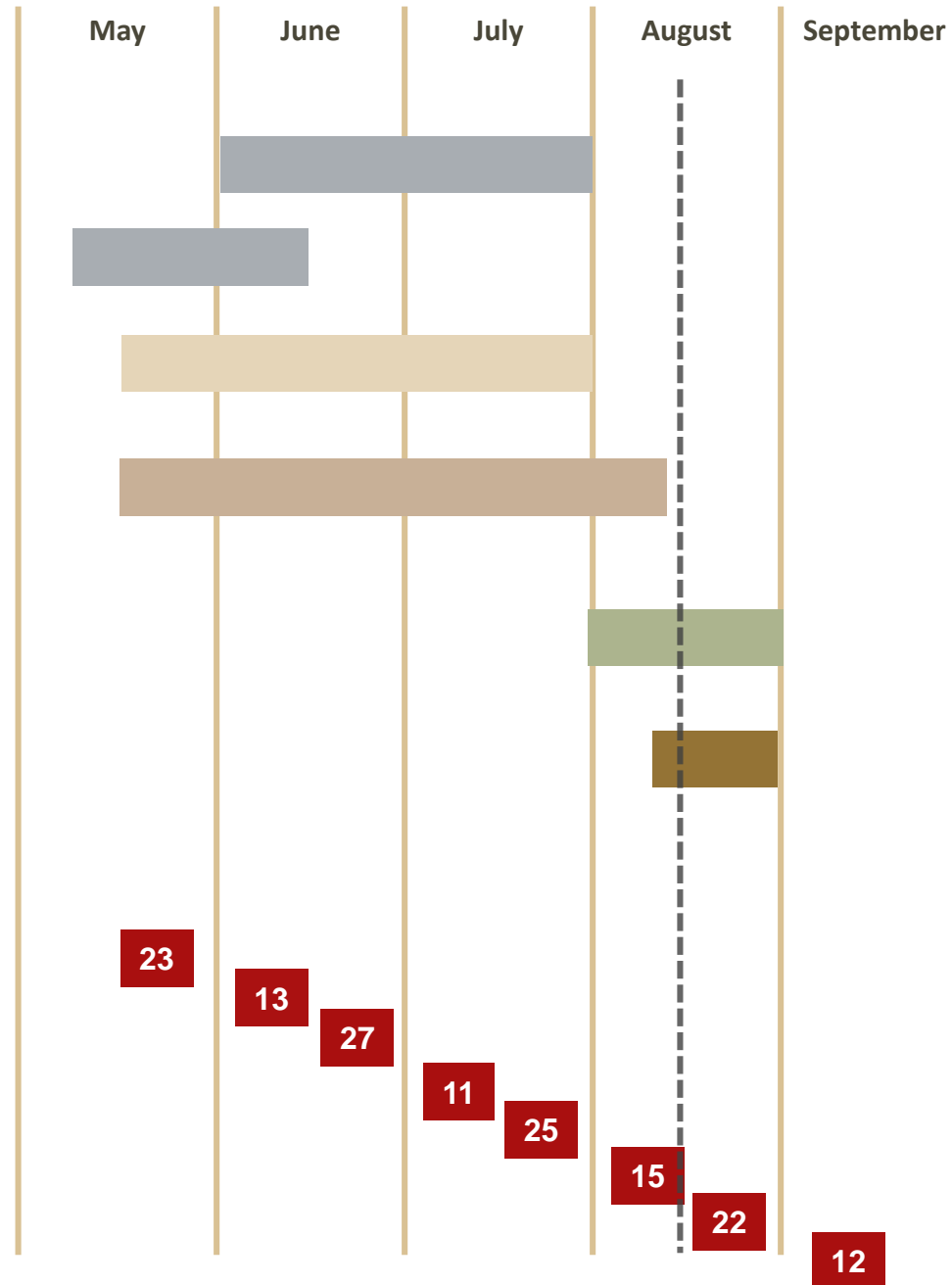
11 July

25 July

**15 August**

22 August

12 September



**DPW**

## SITE ONE ROAD

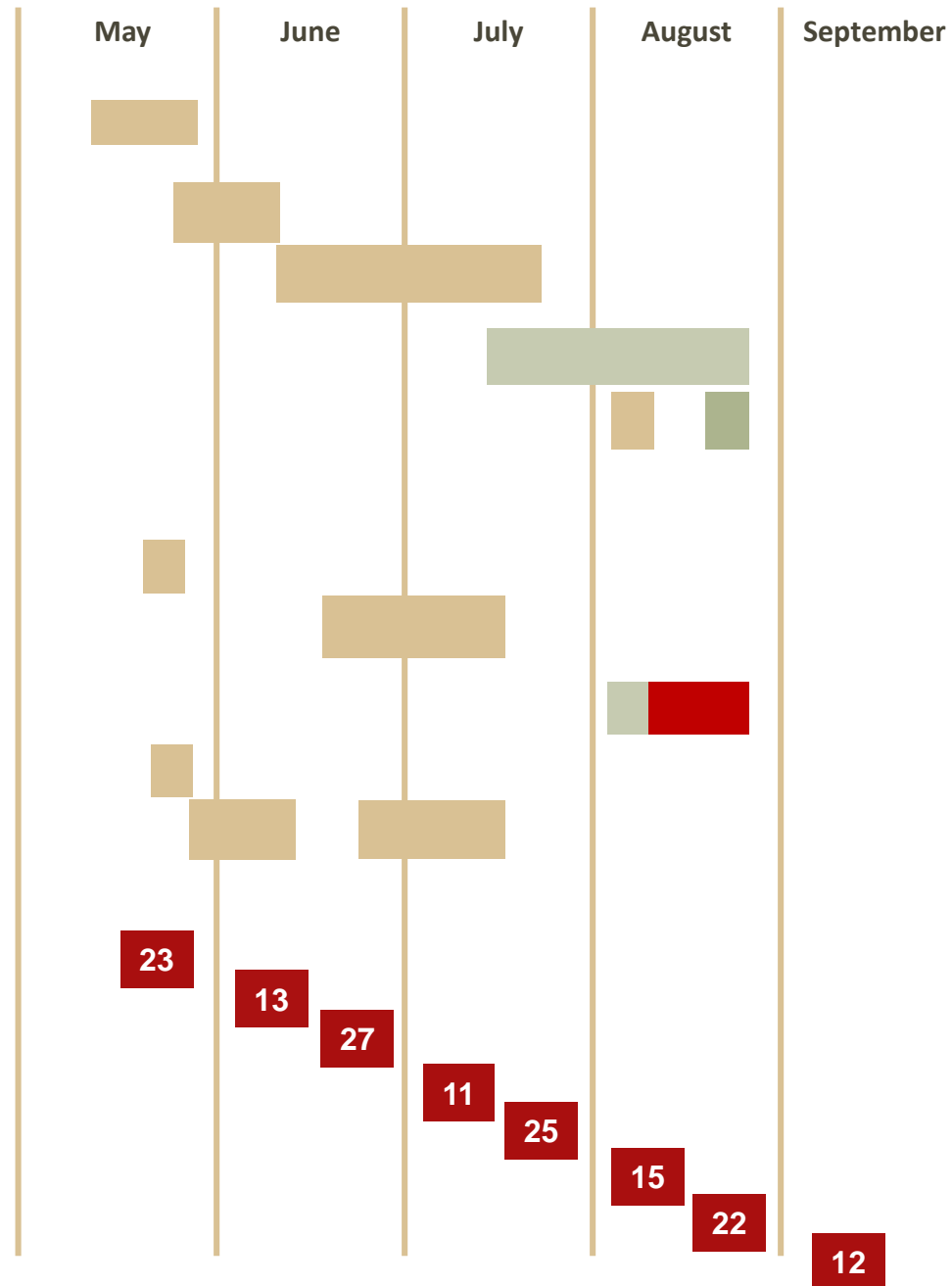
- Site Civil Analysis
- Civil Engineering Design
  - Initial options - 13 June
  - Continue Design
- Regulatory Agency Review
  - Board of Health
- Cost Estimate

## INFORMATION GATHERING

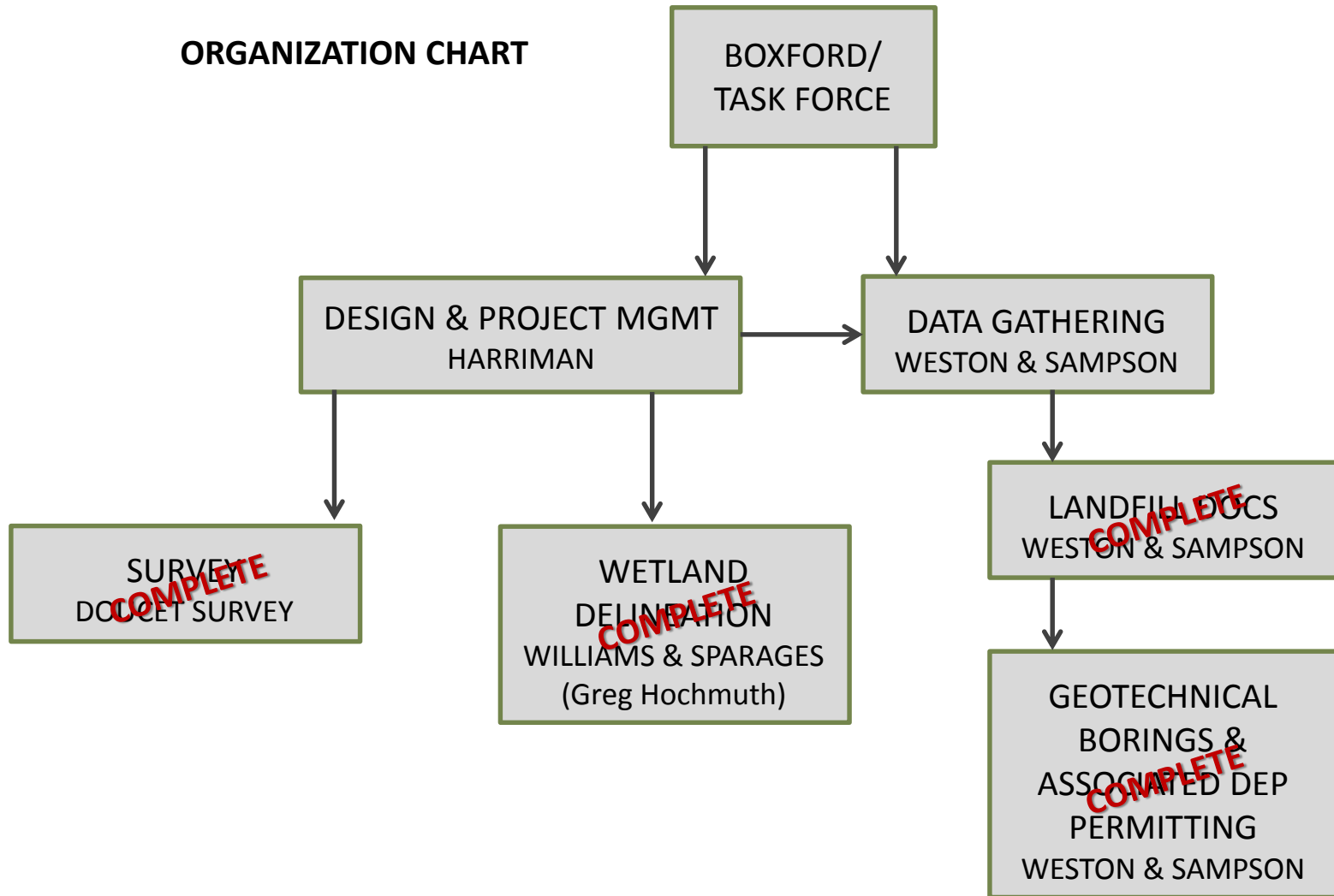
- Geotechnical Study (W&S)
  - SW45 (W&S) Received 11 July
  - Geotech (W&S) On site 6 August, Report 20 August
- Site Survey (Doucet)
  - Survey

### Report Back to Task Force

23 May  
 13 June  
 27 June  
 11 July  
 25 July  
**15 August**  
 22 August  
 12 September



# ORGANIZATION CHART



## WEEK PROGRESS SUMMARY

30 July (week of)

- Conservation Commission presentation 8-2

06 August (week of)

- Geotechnical borings were drilled to 25 feet
- Preliminary findings are positive: sand and gravel fill material found, no organics observed in the boring samples

13 August (week of)

- Continued access drive development

20 August (week of)

- Geotechnical lab data included for final access drive design considerations

# SITE PLAN INDEX



**DPW &  
ACCESS DRIVE**

Segment C Access Drive  
(Stop sign to Existing DPW)

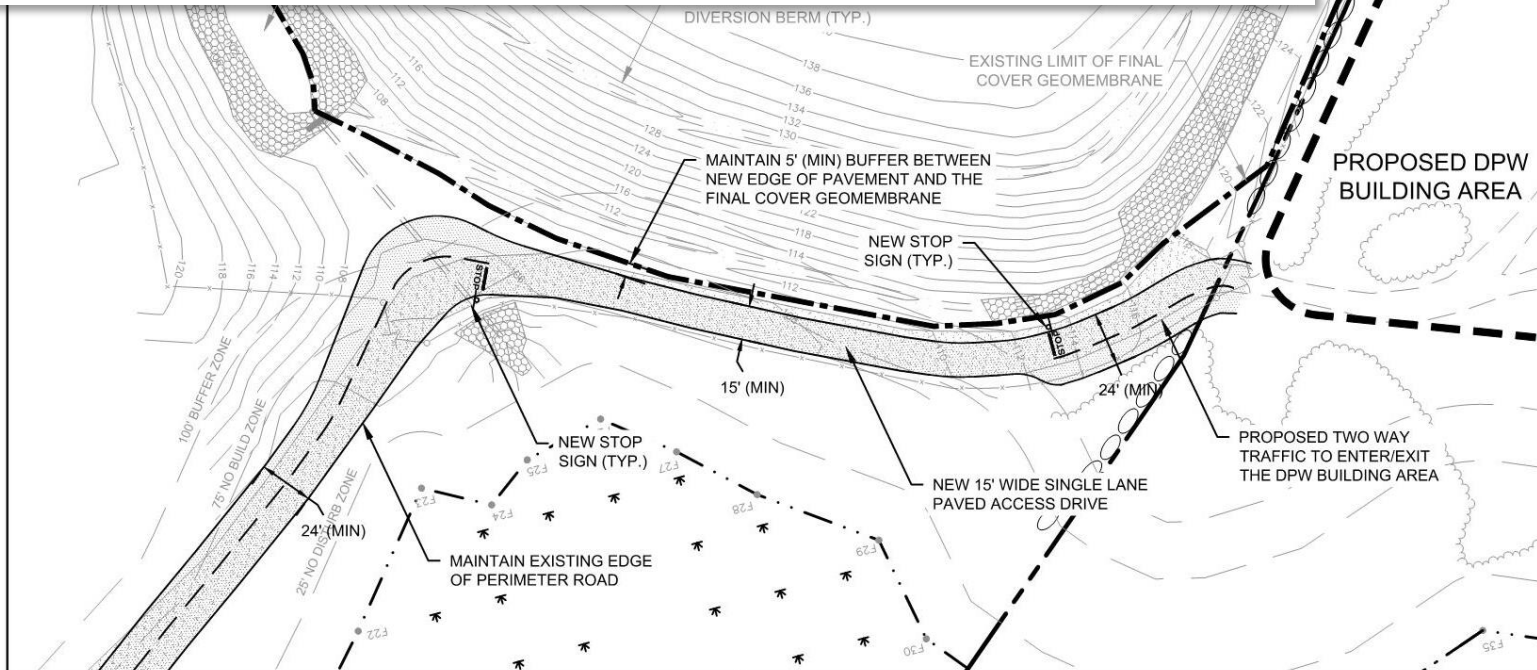
Single Lane Portion of  
Access Drive (250')

Main DPW Building

Free Standing 3-Sided  
Vehicle Storage

### SKETCH ACCESS DRIVE LAYOUT – OPTION 3

- Two-way traffic (two 12'-lanes) throughout most of the access route, which will require signage but not signals for coordinating safe route access to/from the proposed DPW building by improved site lines
- Single lane length is roughly 250 linear feet
- Proposed layout maintains existing edge of the gravel perimeter drive along the eastern edge until clear of wetland buffer
  - Construction would not further encroach upon the adjacent wetlands zones, and would likely be easier for permitting
- Maintains 5'-buffer between the proposed edge of pavement to the limit of final cover geomembrane

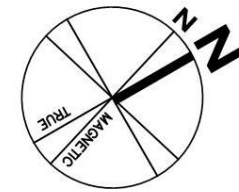


Auburn, ME  
207.784.5100  
Portland, ME  
207.775.0053  
Portsmouth, NH  
603.626.1242  
Boston, MA  
617.426.5050

#### TARGETED FACILITIES MASTER PLAN

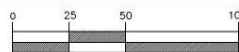
BOXFORD, MASSACHUSETTS

HA Project No. 16576



Date 06-27-18

Scale 1" = 50'



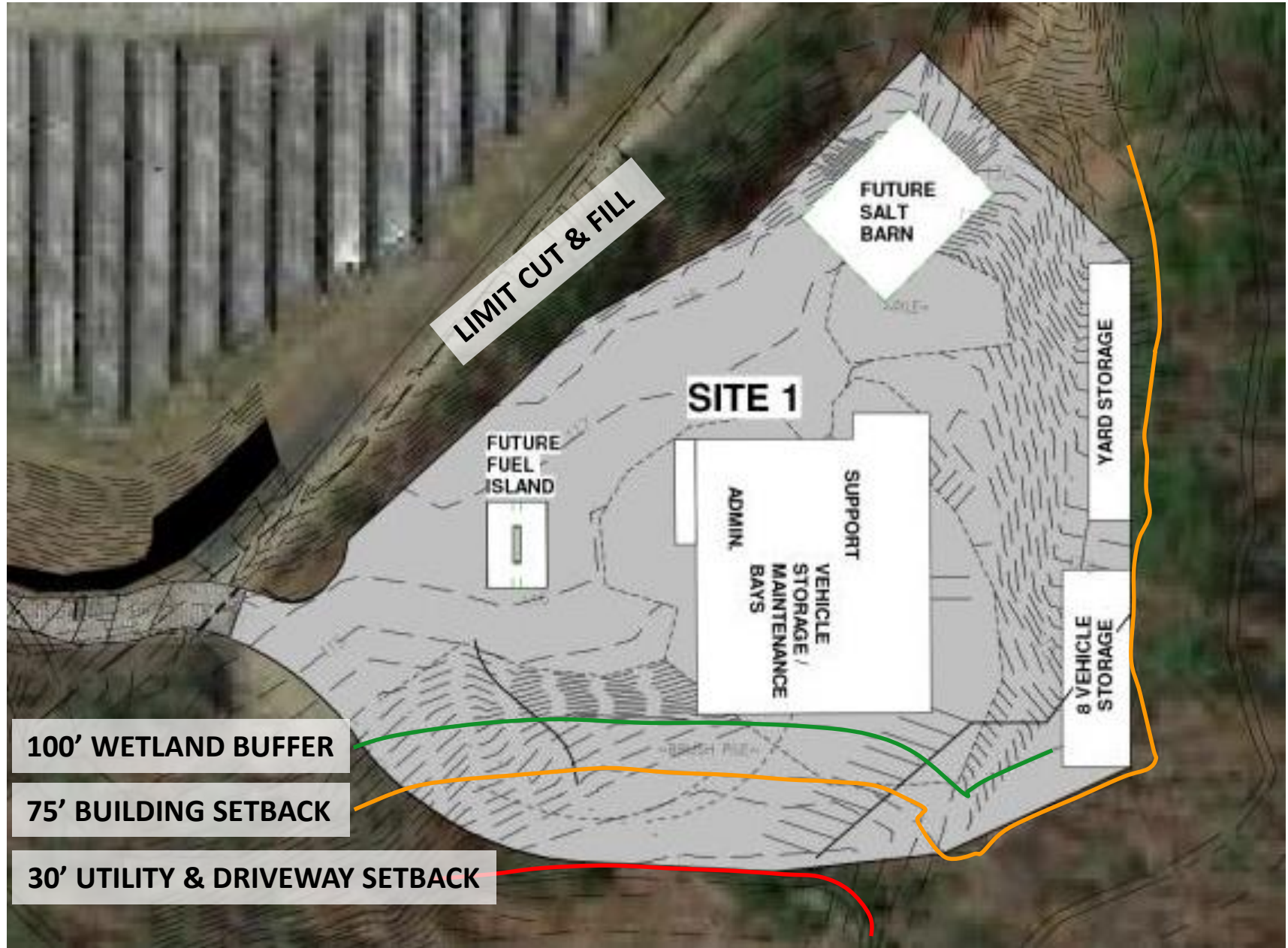
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PERIMETER ACCESS  
ROAD: OPTION-3

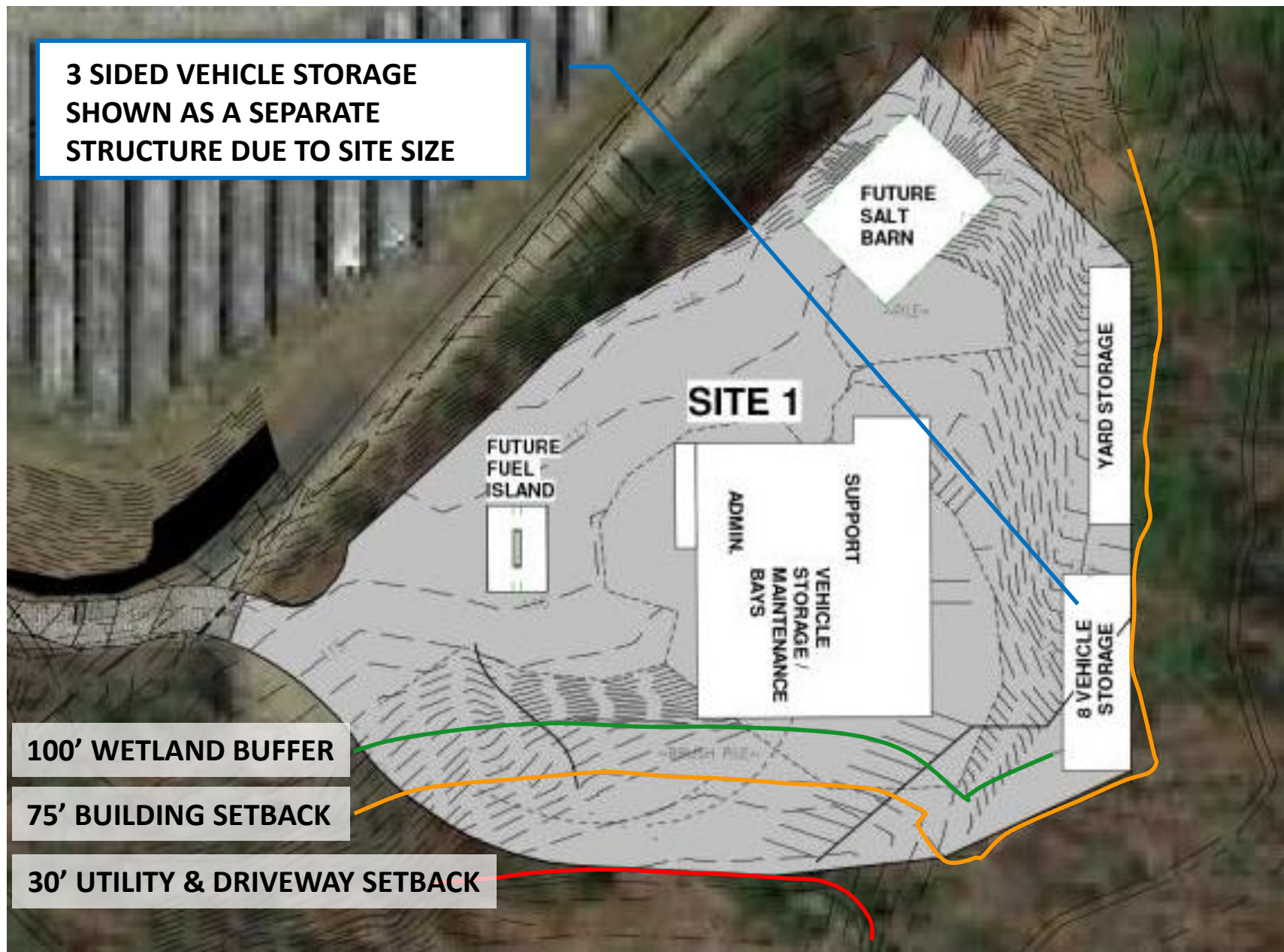
SK4



## SITE 1 UPDATE



## SITE 1 UPDATE





<div> <div>Town of Boxford</div> <div>Department of Public Works - Concept Project Budget</div> <div>HARRIMAN</div> <div>15 August 2018</div> </div>				
I. Construction	Full Scope 18,240 sf DPW	17,000 sf DPW	16,000 and Three Sided DPW	15,000 and Three Sided DPW
Total Construction Costs (full scope 18,000sf b	5,920,647			
Total Construction Costs Reduced Scope Building		5,796,000		
Total Construction Costs Reduced Scope Building plus 800 sf shed			5,776,704	
Total Construction Costs Reduced Scope Building plus 1,600 sf shed				5,776,704
Approximate Value of Road (included above) = \$ 338,381				
<b>TOTAL</b>	<b>\$5,920,647</b>	<b>\$5,796,000</b>	<b>\$5,776,704</b>	<b>\$5,776,704</b>
II. Administrative Cost & Reserve				
Land	0	0	0	0
FF&E (budget)	75,000	75,000	75,000	75,000
Infrastructure Technology (budget)	50,000	50,000	50,000	50,000
Advertising/Printing	5,000	5,000	5,000	5,000
Insurance/Legal	5,000	5,000	5,000	5,000
Bid Contingency (5%)	296,032	289,800	288,835	288,835
Construction Contingency (5%)	296,032	289,800	288,835	288,835
<b>TOTAL</b>	<b>\$727,065</b>	<b>\$714,600</b>	<b>\$712,670</b>	<b>\$712,670</b>
III. Fees & Services				
Architect/Engineer				
<u>Basic A/E Services</u>				
Schematic Design				
Design Development				
Construction Documents				
Bidding and Negotiation				
Construction Administration				
Project Close Out				
Total Basic Services Architect/Engineer	466,251	456,435	454,915	454,915
Additional Services Fees (based on const cost)	22,202	21,735	21,663	21,663
FF&E Fee	2,000	2,000	2,000	2,000
TEL / Data Design	10,000	10,000	10,000	10,000
Fee for Planning Board Permitting (budget)	30,000	30,000	30,000	30,000
A/E Reimbursable	23,313	22,822	22,746	22,746
Survey/Soils/Borings	50,000	50,000	50,000	50,000
OPM	279,751	273,861	272,949	272,949
Special Inspections	30,000	30,000	30,000	30,000
Cost Estimating	12,000	12,000	12,000	12,000
Commissioning	20,000	20,000	20,000	20,000
Misc Fees and Expenses	35,000	35,000	35,000	35,000
Testing and Balancing	20,000	20,000	20,000	20,000
<b>TOTAL</b>	<b>\$1,000,516</b>	<b>\$983,853</b>	<b>\$981,273</b>	<b>\$981,273</b>
<b>Project Cost</b>	<b>\$7,648,228</b>	<b>\$7,494,453</b>	<b>\$7,470,648</b>	<b>\$7,470,648</b>

I. Construction	Segment C Access Drive	Full 2-Lane Access Drive	Fence at Solar Array	Reuse Existing Fuel Island	Reuse Existing Salt Barn
<u>Add Alternates</u>					
Alternate: Segment C Access Drive	49,183				
Alternate Full 2- Lane Access Drive		35,500			
Alternate: Fence at Solar Array			23,800		
<u>Deduct Alternates</u>					
Reuse Existing Fuel Island					
Deduct Cost Fuel Island					
Add Barriers and Shed to House Monitoring and Electrical Equipment				-130,950	
Reuse Existing Salt Barn					
Deduct Cost for Salt Barn					-69,000
Add Fencing around perimeter					
<b>TOTAL</b>	<b>\$49,183</b>	<b>\$35,500</b>	<b>\$23,800</b>	<b>-\$130,950</b>	<b>-\$69,000</b>
<b>II. Administrative Cost &amp; Reserve</b>					
Land	0	0	0	0	0
FF&E (budget)	0	0	0	0	0
Infrastructure Technology (budget)	0	0	0	0	0
Advertising/Printing	0	0	0	0	0
Insurance/Legal	0	0	0	0	0
Bid Contingency (5%)	2,459	1,775	1,190	-6,548	-3,450
Construction Contingency (5%)	2,459	1,775	1,190	-6,548	-3,450
<b>TOTAL</b>	<b>\$4,918</b>	<b>\$3,550</b>	<b>\$2,380</b>	<b>-\$13,095</b>	<b>-\$6,900</b>
<b>III. Fees &amp; Services</b>					
Architect/Engineer	3,873	2,796	1,874	-10,312	-5,434
Additional Services Fees	184	133	89	-491	-259
FF&E Fee	0	0	0	0	0
TEL / Data Design	0	0	0	0	0
Fee for Planning Board Permitting (budget)	0	0	0	0	0
A/E Reimbursable	194	140	94	-516	-272
Survey/Soils/Borings	0	0	0	0	0
OPM	2,324	1,677	1,125	-6,187	-3,260
Special Inspections	0	0	0	0	0
Cost Estimating	0	0	0	0	0
Commissioning	0	0	0	0	0
Misc Fees and Expenses	0	0	0	0	0
Testing and Balancing	0	0	0	0	0
<b>TOTAL</b>	<b>\$6,575</b>	<b>\$4,746</b>	<b>\$3,182</b>	<b>-\$17,506</b>	<b>-\$9,224</b>
<b>Project Cost</b>	<b>\$60,676</b>	<b>\$43,796</b>	<b>\$29,362</b>	<b>-\$161,551</b>	<b>-\$85,124</b>

# NEXT MEETING: 22 AUGUST

## SITE ONE ROAD

- Site Civil Analysis
- Civil Engineering Design
  - Initial options - 13 June
  - Continue Design
- Regulatory Agency Review
  - ConsComm
- Cost Estimate

## INFORMATION GATHERING

- Geotechnical Study
- SW45 (Weston and Sampson)
  - can be expedited
  - Geotech (Weston & Sampson)
  - Site Survey

### Report Back to Task Force

23 May

13 June

27 June

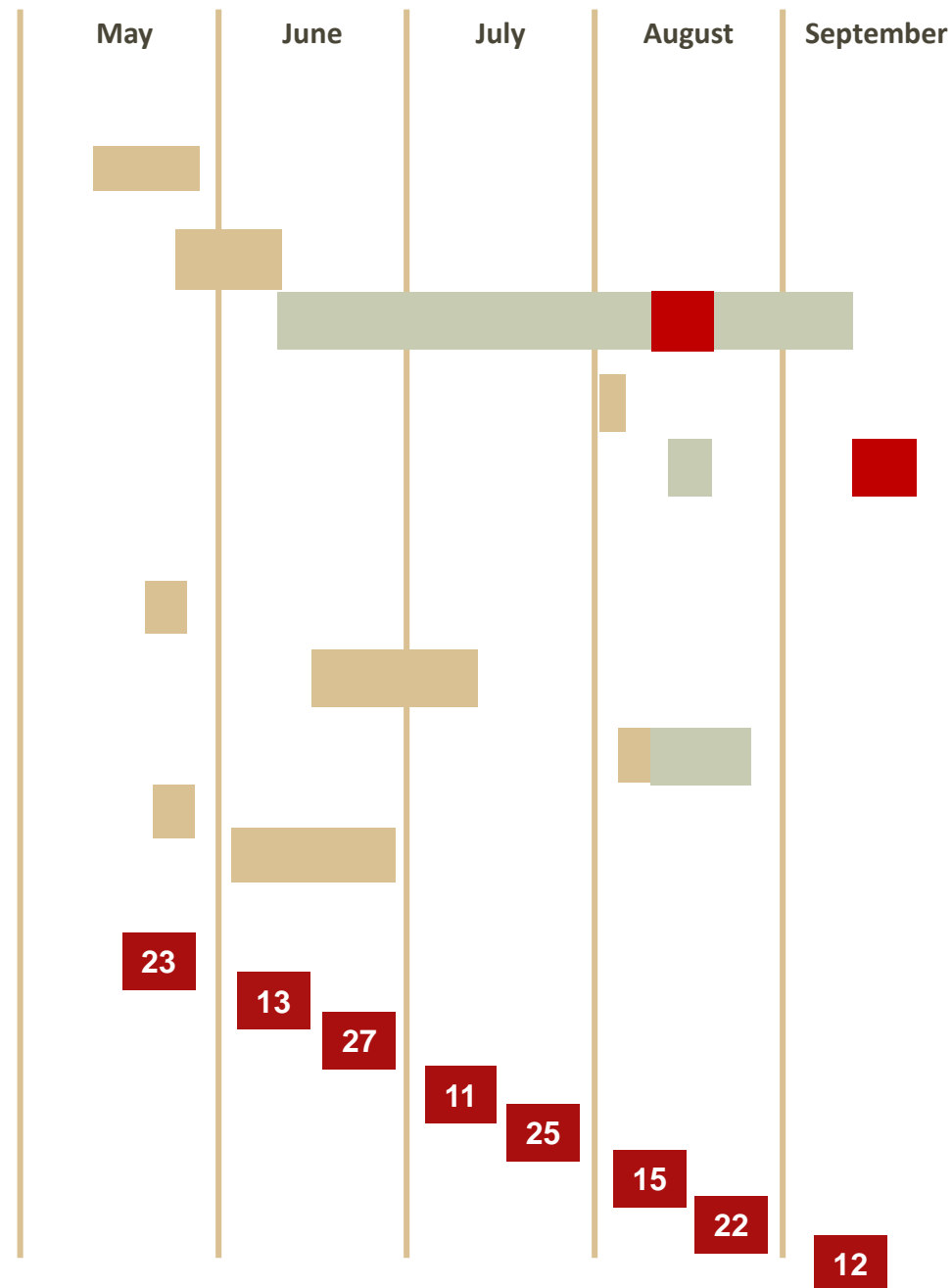
11 July

25 July

**15 August**

22 August

12 September



**10 ELM**



## OPTION D PROPOSED LAYOUT

- 1 Story building
- 9,000 GSF
- New construction is independent of the Cummings House
- Multi-purpose spaces face Pony Field
- Massing faces Elm Street and engages the Village
- 60 Parking spaces



I. Construction	9,000 sf Cummings House not included	10,600 sf Cummings House as separate program	9,000 sf Cummings House moved and incorporated in project
Building Construction	3,959,703	3,959,703	3,959,703
Add Alternate 1 Sprinkler System & Holding Tank	126,050	126,050	126,050
Add Alternate 2 Emergency Generator	108,840	108,840	108,840
 <i>Renovate Cummings House in place</i>		362,708	
 <i>Premium to incorporate Cummings House into new building design</i>			223,121
	<b>\$4,194,593</b>	<b>\$4,557,301</b>	<b>\$4,417,714</b>
II. Administrative Cost & Reserve			
Land	0	0	0
FF&E (budget)	75,000	75,000	75,000
Infrastructure Technology (budget)	50,000	50,000	50,000
Advertising/Printing	5,000	5,000	5,000
Insurance/Legal	5,000	5,000	5,000
Bid Contingency (7.5%)	314,594	341,798	331,329
Construction Contingency (7.5%)	314,594	341,798	331,329
<b>TOTAL</b>	<b>\$764,189</b>	<b>\$818,595</b>	<b>\$797,657</b>
III Fees & Services			
Architect/Engineer			
<u>Basic A/E Services</u>			
Schematic Design			
Design Development			
Construction Documents			
Bidding and Negotiation			
Construction Administration			
Project Close Out			
Total Basic Services Architect/Engineer	464,446	504,607	489,151
Additional Services Fees (based on const cont)	32,403	35,205	34,127
FF&E Fee	12,000	12,000	12,000
TEL / Data Design	10,000	10,000	10,000
Fee for HDC and Planning Board Permitting (budget)	30,000	30,000	30,000
A/E Reimbursable	13,933	15,138	14,675
Survey/Soils/Borings	20,000	20,000	20,000
OPM Fee	192,132	208,454	202,172
Special Inspections	15,000	15,000	15,000
Cost Estimating	12,000	12,000	12,000
Commissioning	20,000	20,000	20,000
Misc Fees and Expenses	25,000	25,000	25,000
Testing and Balancing	20,000	20,000	20,000
<b>TOTAL</b>	<b>\$866,915</b>	<b>\$927,404</b>	<b>\$904,125</b>
<b>Project Cost</b>	<b>\$5,825,697</b>	<b>\$6,303,300</b>	<b>\$6,119,496</b>



**I. Construction**

Total Construction Costs	3,643,598
Alternate 1: Sprinkler System & Holding Tank	114,416
Alternate 2: Emergency Generator	108,840
<b>TOTAL</b>	<b>\$3,866,854</b>

**II. Administrative Cost & Reserve**

Land	0
FF&E (budget)	75,000
Infrastructure Technology (budget)	50,000
Advertising/Printing	5,000
Insurance/Legal	5,000
Bid Contingency (7.5%)	290,014
Construction Contingency (7.5%)	290,014
<b>TOTAL</b>	<b>\$715,028</b>

**III. Fees & Services**

Architect/Engineer			
<u>Basic A/E Services</u>			
Schematic Design	12%	51,379	
Design Development	20%	85,631	
Construction Documents	40%	171,263	
Bidding and Negotiation	2%	8,563	
Construction Administration	24%	102,758	
Project Close Out	2%	8,563	
Total Basic Services Architect/Engineer	100%	428,157	428,157
Additional Services Fees (based on const cont)			29,871
FF&E Fee			12,000
TEL / Data Design			10,000
Fee for HDC and Planning Board Permitting (budget)			30,000
A/E Reimbursable			12,845
Survey/Soils/Borings			20,000
OPM Fee			177,383
Special Inspections			15,000
Cost Estimating			12,000
Commissioning			20,000
Misc Fees and Expenses			25,000
Testing and Balancing			20,000
<b>TOTAL</b>			<b>\$812,257</b>

**Project Cost****\$5,394,139**

# NEXT MEETING: 22 AUGUST

## CONCEPTUAL DESIGN AT 10 ELM

- Concept Plan without Cummings House
- Update Site Plan
- Rendering without Cummings House
- Meeting with HDC June 27 at 6:30 pm
- Cost Estimate

## UPDATE DESIGN AT 4 MIDDLETON

- Conceptual Plan
- Update Site Plan
- Update Rendering
- Meeting with HDC June 27 at 6:30 pm
- Revise Cost Estimate

### Report Back to Task Force

23 May

13 June

27 June

11 July

25 July

15 August

**22 August**

12 September

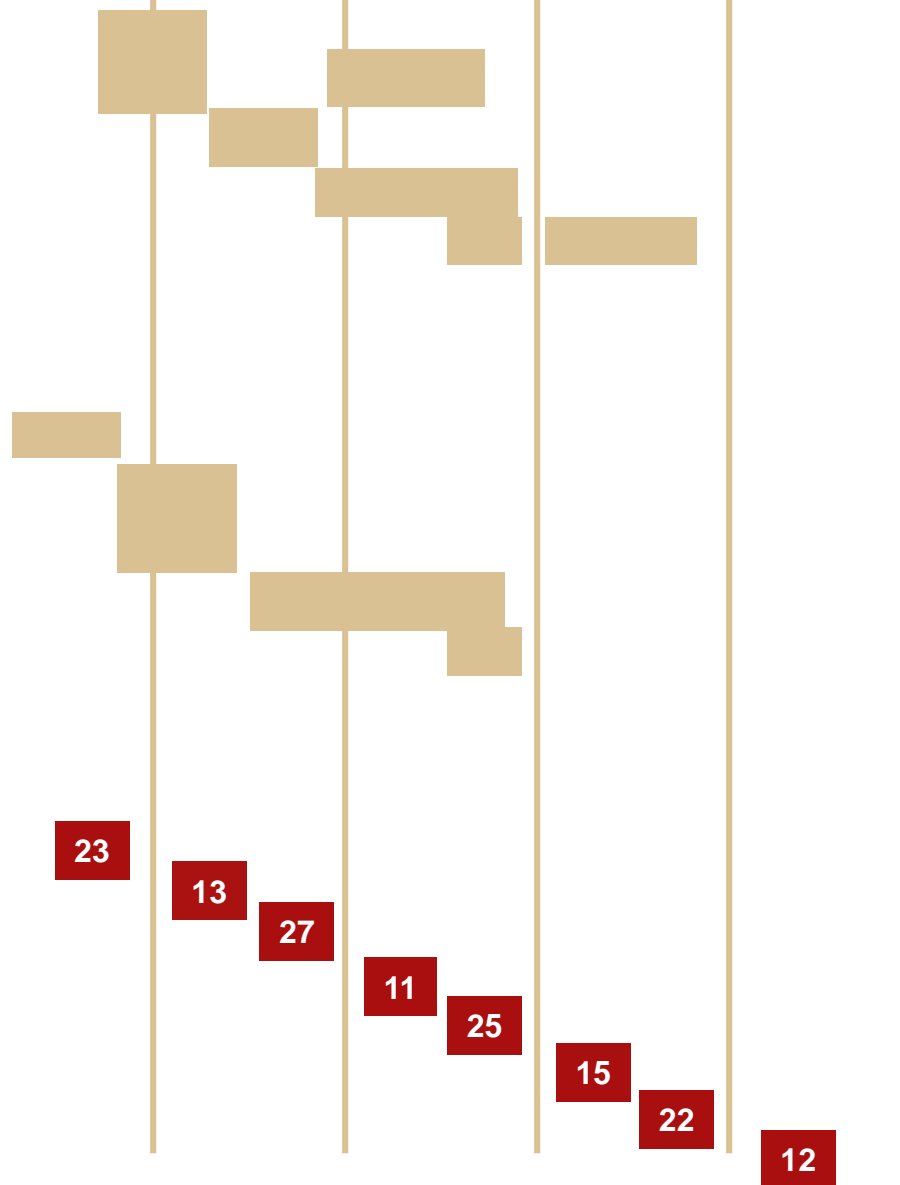
May

June

July

August

September



**TOWN HALL - LIBRARY**

**Town of Boxford**  
**Town Hall / Library - Conceptual Project Budget**  
**With Façade Replaced as Brick**

**HARRIMAN**  
 25 July 2018

I. Construction	Library	Town Hall	Shared Costs	Total
Total Construction Costs	2,238,946	1,001,815		3,240,761
Alt 1: New Finishes in Existing Restrooms	20,109			20,109
Shared Costs				
Circulation			220,653	220,653
Brick Envelope Repairs (siding cost + add alt no 2)			961,429	961,429
<b>TOTAL</b>	<b>\$2,259,055</b>	<b>\$1,001,815</b>	<b>\$1,182,082</b>	<b>\$4,442,952</b>
II. Administrative Cost & Reserve				
Land	0	0	0	0
FF&E (budget)	75,000	5,000	0	80,000
high density book shelves (place holder)	25,000			25,000
tierd shelving (stacks - place holder)	165,000			165,000
Infrastructure Technology (budget)	25,000	25,000	0	50,000
Advertising/Printing	2,500	2,500	0	5,000
Insurance/Legal	2,500	2,500	0	5,000
Bid Contingency (7.5%)	169,429	75,136	88,656	333,221
Construction Contingency (7.5%)	169,429	75,136	88,656	333,221
<b>TOTAL</b>	<b>\$633,858</b>	<b>\$185,272</b>	<b>\$177,312</b>	<b>\$996,443</b>
III. Fees & Services				
Architect/Engineer				
<u>Basic A/E Services</u>				
Schematic Design				
Design Development				
Construction Documents				
Bidding and Negotiation				
Construction Administration				
Project Close Out				
Total Basic Services Architect/Engineer	250,134	110,926	130,886	491,946
Additional Services Fees (based on const cont)	17,451	7,739	9,132	34,322
FF&E Fee	50,000	15,000	0	65,000
TEL / Data Design	10,000	10,000	0	20,000
Permitting (budget)	10,000	10,000	0	20,000
A/E Reimbursable	7,504	3,328	3,927	14,758
Survey/Soils/Borings	10,000	10,000	0	20,000
OPM Fees	109,282	48,463	57,183	214,928
Special Inspections	10,000	10,000	5,000	25,000
Commissioning	10,000	10,000	5,000	25,000
Cost Estimating	6,000	6,000	3,000	15,000
Misc Fees and Expenses	10,000	10,000	5,000	25,000
Testing and Balancing	15,000	15,000	5,000	35,000
<b>TOTAL</b>	<b>\$515,371</b>	<b>\$266,456</b>	<b>\$224,127</b>	<b>\$1,005,954</b>
<b>Project Cost</b>	<b>\$3,408,284</b>	<b>\$1,453,543</b>	<b>\$1,583,522</b>	<b>\$6,445,349</b>

**Town of Boxford**  
**Town Hall / Library - Conceptual Project Budget**  
**With Façade Replaced as Siding**

**HARRIMAN**  
 25 July 2018

I. Construction	Library	Town Hall	Shared Costs	Total
Total Construction Costs	2,238,946	1,001,815		3,240,761
Alt 1: New Finishes in Existing Restrooms	20,109			20,109
Shared Costs				
Circulation			220,653	220,653
Envelope Repairs (siding)			640,994	640,994
<b>TOTAL</b>	<b>\$2,259,055</b>	<b>\$1,001,815</b>	<b>\$861,647</b>	<b>\$4,122,517</b>
II. Administrative Cost & Reserve				
Land	0	0	0	0
FF&E (budget)	75,000	5,000	0	80,000
high density book shelves (place holder)	25,000			25,000
tierd shelving (stacks - place holder)	165,000			165,000
Infrastructure Technology (budget)	25,000	25,000	0	50,000
Advertising/Printing	2,500	2,500	0	5,000
Insurance/Legal	2,500	2,500	0	5,000
Bid Contingency (7.5%)	169,429	75,136	64,624	309,189
Construction Contingency (7.5%)	169,429	75,136	64,624	309,189
<b>TOTAL</b>	<b>\$633,858</b>	<b>\$185,272</b>	<b>\$129,247</b>	<b>\$948,378</b>
III. Fees & Services				
Architect/Engineer				
<u>Basic A/E Services</u>				
Schematic Design				
Design Development				
Construction Documents				
Bidding and Negotiation				
Construction Administration				
Project Close Out				
Total Basic Services Architect/Engineer	250,134	110,926	95,406	456,466
Additional Services Fees (based on const cont)	17,451	7,739	6,656	31,846
FF&E Fee	50,000	15,000	0	65,000
TEL / Data Design	10,000	10,000	0	20,000
Permitting (budget)	10,000	10,000	0	20,000
A/E Reimbursable	7,504	3,328	2,862	13,694
Survey/Soils/Borings	10,000	10,000	0	20,000
OPM Fees	109,282	48,463	41,682	199,427
Special Inspections	10,000	10,000	5,000	25,000
Commissioning	10,000	10,000	5,000	25,000
Cost Estimating	6,000	6,000	3,000	15,000
Misc Fees and Expenses	10,000	10,000	5,000	25,000
Testing and Balancing	15,000	15,000	5,000	35,000
<b>TOTAL</b>	<b>\$515,371</b>	<b>\$266,456</b>	<b>\$169,606</b>	<b>\$951,433</b>
<b>Project Cost</b>	<b>\$3,408,284</b>	<b>\$1,453,543</b>	<b>\$1,160,500</b>	<b>\$6,022,327</b>

# **COST MODEL**

# COST MODELING: 10 ELM OPTION-A

Master Plan Facility	Town Hall / Library-Brick	Use To Be Determined	Community Center / COA	Cummings House Reno.	DPW & Access Drive
Address	7 Spofford Road	4 Middleton Road	10 Elm Street	10 Elm Street	Site 1, 7 Spofford Road
Area	13,149 GSF	3,770 GSF	9,000 GSF	1,600 GSF	18,240 GSF
Last Cost Update	07-20-18	OoM Placeholder	08-13-18	08-13-18	08-13-18
Construction	\$4,443,000	\$500,000	\$4,195,000	\$363,000	\$5,921,000
Administrative Cost & Reserve	\$996,000	\$145,000	\$764,000	\$104,000	\$727,000
Fees & Services	\$1,006,000	\$155,000	\$867,000	\$119,000	\$1,001,000
Total Project Estimate	\$6,445,000	\$800,000	\$5,826,000	\$586,000	\$7,649,000
Total Master Plan	\$21,306,000				

COST MODELING: 10 ELM OPTION-B	Master Plan Facility	Town Hall / Library-Siding	Use To Be Determined	Community Center / COA	Cummings House Integrated	DPW & Access Drive
	Address	7 Spofford Road	4 Middleton Road	10 Elm Street	10 Elm Street	Site 1, 7 Spofford Road
	Area	13,149 GSF	3,770 GSF	9,000 GSF	0 GSF	16,000 GSF
	Last Cost Update	07-20-18	OoM Placeholder	08-13-18	08-13-18	08-13-18
	Construction	\$4,123,000	\$500,000	\$4,195,000	\$223,000	\$5,777,000
	Administrative Cost & Reserve	\$948,000	\$145,000	\$764,000	\$34,000	\$713,000
	Fees & Services	\$951,000	\$155,000	\$867,000	\$37,000	\$981,000
	Total Project Estimate	\$6,022,000	\$800,000	\$5,826,000	\$294,000	\$7,471,000
	Total Master Plan	\$20,413,000				



Master Plan Facility	Town Hall / Library-Siding	Community Center / COA	Site & Septic Infrastructure	Cummings House Reno.	DPW & Access Drive
Address	7 Spofford Road	4 Middleton Road	10 Elm Street	10 Elm Street	Site 1, 7 Spofford Road
Area	13,149 GSF	8,965 GSF	N/A	1,600 GSF	16,000 GSF
Last Cost Update	07-20-18	07-20-18	OoM Placeholder	08-13-18	08-13-18
Construction	\$4,123,000	\$3,867,000	\$125,000	\$363,000	\$5,777,000
Administrative Cost & Reserve	\$948,000	\$715,000	\$24,000	\$104,000	\$713,000
Fees & Services	\$951,000	\$812,000	\$44,000	\$119,000	\$981,000
Total Project Estimate	\$6,022,000	\$5,394,000	\$193,000	\$586,000	\$7,471,000
Total Master Plan	\$19,666,000				

**NEXT STEPS AND  
OTHER BUSINESS**

## ✓ COMMUNITY CENTER

Conceptual Design at 10 Elm

Update Design at 4 Middleton

## ✓ TOWN HALL / LIBRARY

## ✓ DPW

## ✓ COST ESTIMATES

**FINAL REPORT (8-29)**

### Report Back to Task Force

23 May

13 June

27 June

11 July

25 July

**15 August**

22 August

12 September

