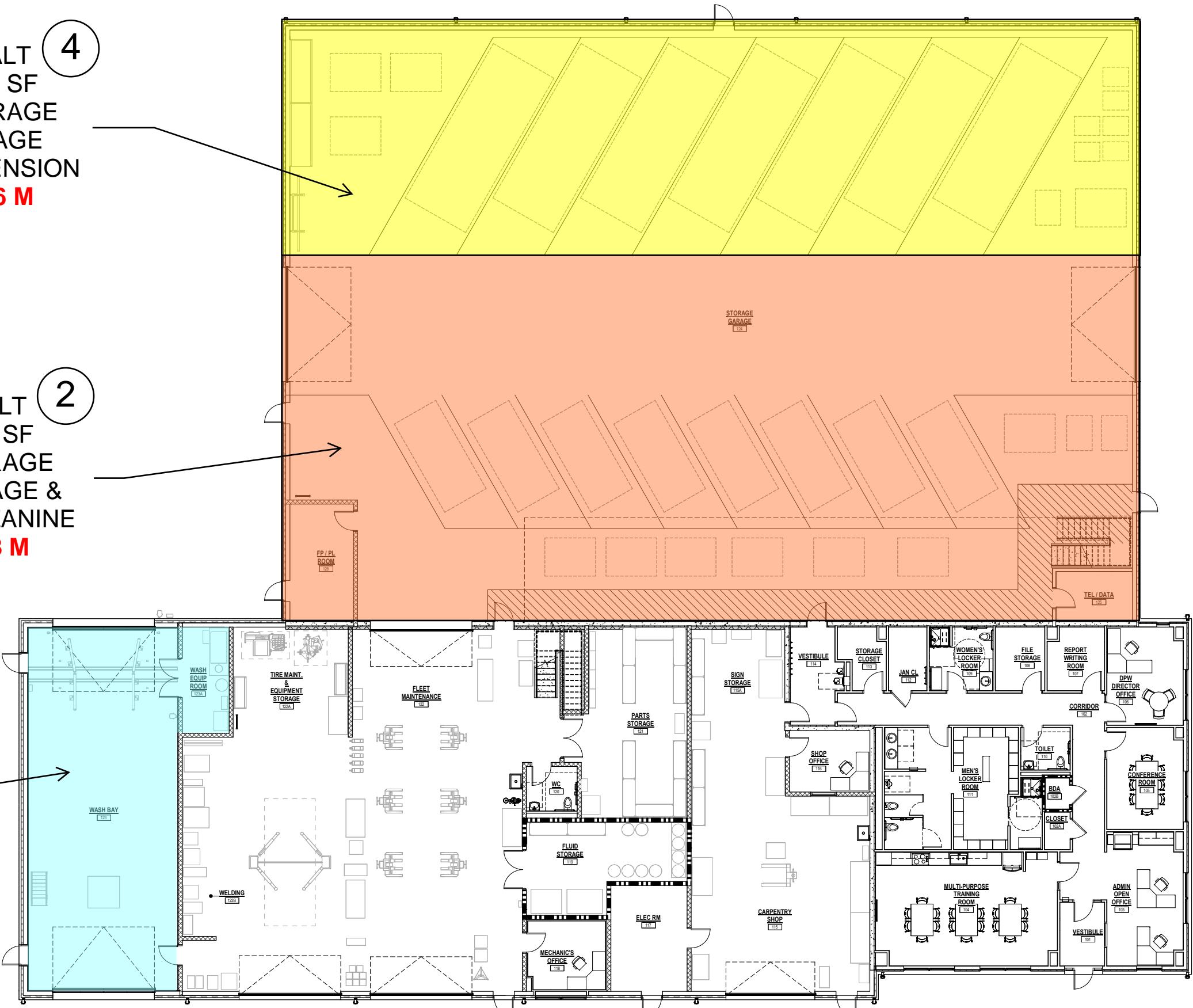
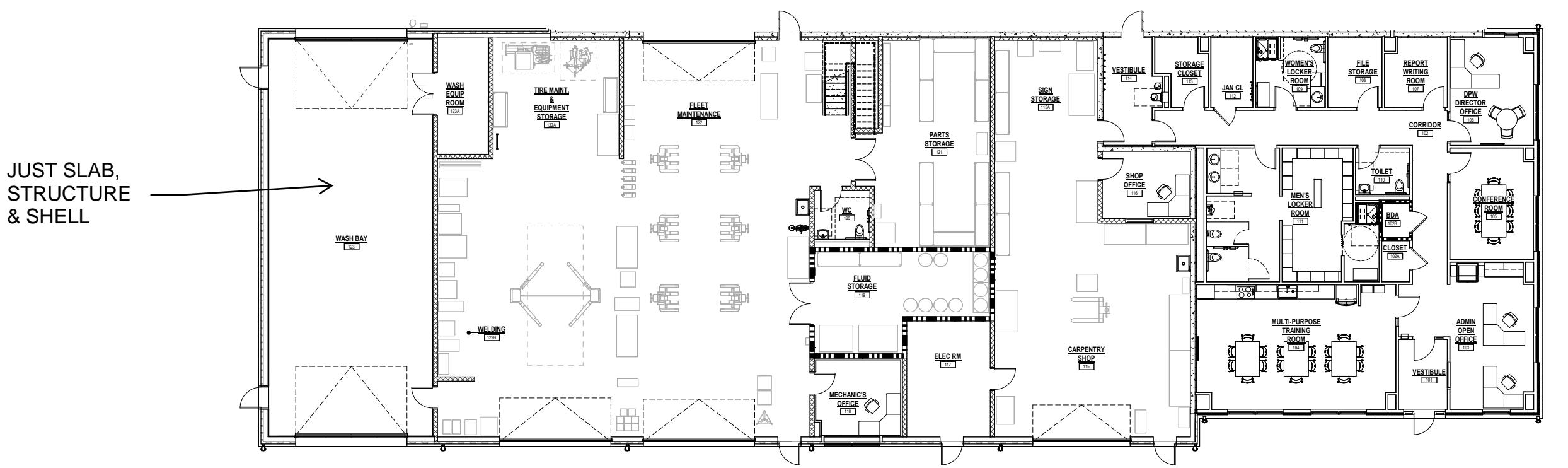


SITE AND BUILDING PLANS - BASE DESIGN



SITE AND BUILDING PLANS - WITH ALTERNATES



Other Design Considerations

- A Mechanical System Design (*Town to decide by mid/late June to stay on schedule*)
Ground Source Heat Pumps in lieu of Air Source Heat Pumps = add \$ 1.2 M
- cost based off of 23,600 SF facility with a 30 ton heating load

- B Solar Rooftop = add \$ 800,000
- cost based of a 142 kW system and a 23,600 SF facility

Estimated Total Project Costs Summary (UPDATED POST-SD REPORT SUBMISSION)

	Base Pricing	Base Price + Pricing Alternates
Construction Costs	± \$ 19,500,000	± \$ 25,695,370
Soft Costs & Contingencies **	± \$ 7,217,550	± \$ 7,217,550
Opinion of Probable Total Project Costs	± \$ 26,717,550	± \$ 32,912,920
2024 Appropriation	(\$ 2,800,000)	(\$ 2,800,000)
Total Remaining Appropriation	± \$ 23,917,550	± \$ 30,112,920

** Soft Cost & Contingencies are based on full design and build out for budgeting & planning purposes.

Alternates (construction costs):

- Alternate 1 – Detached Canopy = \$ 1,105,000
- Alternate 2 – 7,900 SF Storage Garage & 1,665 SF Mezzanines = \$ 2,784,600
- Alternate 3 – Wash Bay Wall Finishes & Vehicle Wash Equipment = \$ 937,100
- Alternate 4 – 5,000 SF Storage Garage = \$ 1,368,670
- Total (construction costs) = \$ 6,195,370

Changes from SD Report:

- Added an alternate for 7,900 SF of fleet storage & 1,665 SF of mezzanine that was formerly in the base design
- Removed the Solar Rooftop alternate from total project costs
 - o It is understood that the town may consider solar in the future
 - o Estimated cost = \$ 800,000
 - o Estimate cost based of a 142 kW system and a 23,600 SF facility
 - o Reduction in roof area and solar system is not expected to be a 1:1 reduction in costs
- Removed Geothermal & Ground Source Heat Pump (GSHP) alternate from total project costs
 - o The Town should decide on what HVAC option to move forward with by mid/late June for the project to stay on schedule (refer to Cost-Benefit Analysis)
 - o Estimated cost of GSHP in lieu of Air Source Heat Pump (ASHP) = \$1,200,000
 - o Estimated cost based off of 23,600 SF facility with a 30 ton heating load
 - o Reduction in roof area and solar system is not expected to be a 1:1 reduction in costs

Truro DPW - Cost-Benefit Analysis
Including Mass Save Incentives & Federal Tax Credit

Option	System	Gross Capital Investment	MassSave Heat Pump Adder Incentive	30% IRA Federal Tax Credit	Net Investment	Total Life-Cycle Costs
1	ASHP base	\$ 3,000,000			\$ 3,000,000	\$ 7,703,863
1a	ASHP with incentives	\$ 3,000,000	\$ 80,000		\$ 2,920,000	\$ 7,573,189
2	GSHP base	\$ 4,200,000			\$ 4,200,000	\$ 9,100,566
2a	GSHP with Incentives	\$ 4,200,000	\$ 135,000		\$ 4,065,000	\$ 8,880,054
2b	GSHPs with Incentives & Tax Credits	\$ 4,200,000	\$ 135,000	\$ 1,260,000	\$ 2,805,000	\$ 6,821,941

Notes:

Cost estimates based on similar project costs and Truro's SD cost estimate.

Incentives based on 2024 prescriptive heat pump incentives per Mass Save's New Construction Incentives Program Federal tax credit based on existing 2022 IRA direct pay tax credit.

<https://www.energy.gov/eere/geothermal/tax-credits-incentives-and-technical-assistance-geothermal-heat-pumps>

Estimated current utility costs based on \$0.29/kWh for electricity.

Assumed 4% escalation rate for utility costs.

Assumed 4% escalation rate for maintenance and replacement costs.

Values based on energy model performed for HVAC System Life Cycle Cost Analysis purposes. A 30% safety factor should be applied for budgeting purposes to account for potential variances to the actual operation of the building.

Per ASHRAE Standard 90.1:

Federal Tax Credit:

Wind & Solar will be seeing credit termination soon, while other technologies (i.e. geothermal) will phase out after 2032.

45Y – Clean Electricity Production Credit & §48E – Clean Electricity Investment Credit

- Placed in Service Deadline for Wind and Solar: Credits would terminate for wind and solar facilities that begin construction after 1 year from enactment and are not placed in service before Jan. 1, 2028—facilities that begin construction within 1 year from enactment would not be subject to the placed in-service deadline.
- Phase-Out for other technologies: All technology other than wind and solar would phase out after 2032 as follows:
 - 100% credit for facilities beginning construction during 2033;
 - 75% credit for facilities beginning construction during 2034;
 - 50% credit for facilities beginning construction during 2035; and
 - 0% credit for facilities beginning construction after Dec. 31, 2035.

[Senate Passes the Big Beautiful Bill with Changes to the House Version - IER](#)

[Effects Of "One Big Beautiful Bill" On Projects | Norton Rose Fulbright - July 2025](#)

