

NOVEMBER 24, 2014

NEEDHAM FACILITIES MASTER PLAN STUDY



Municipal Resources, Inc.



AGENDA: PPBC – COMMUNITY MEETING

- Facilities Master Plan: Purpose and Process
 - Why develop a Facilities Master Plan?
 - How does this plan support the work of Town officials + committees?
 - Summary of work completed during this year-long effort:
 - Review other studies; Programming; Building + Site Assessments
 - Option Development: Existing + potential sites
 - Development of Probable Costs + Timelines
 - Meetings with Facility Working Group
- What Happens Next



FACILITIES MASTER PLAN: WHAT WAS EXPECTED OF THIS STUDY

- Review and build upon prior feasibility studies and plans
- Analyze department + building needs; Develop program requirements
- Study building design options for Town held properties
- Explore alternate locations when current buildings or sites fell short of satisfying a defined programmatic need
- Prepare probable cost estimates + establish capital project priorities
- Meet with Facility Working Group, with representatives from all Town boards and committees, plus professional staff
- Establish priorities and a schedule for future capital projects
- Prepare a Facilities Master Plan report



FACILITIES MASTER PLAN: WHY DEVELOP ONE?

- Town updates the Facilities Master Plan once a decade; this is the third plan following those of 1998 and 2006
- The study focuses on projects anticipated during the coming two decades with a focus on the highest priority projects identified
- The planning process provides a forum for the Town to analyze Town wide priorities and balance jurisdictional needs to develop a capital plan looking into the future
- All citizens of Needham are informed about projects that will need to be done to maintain and enhance their community



FACILITIES MASTER PLAN: HOW DOES THIS PLAN SUPPORT THE WORK OF TOWN OFFICIALS AND PROFESSIONAL STAFF?

- All potential projects are viewed at once
- Groups representing different needs of the Town sit together to analyze Town wide priorities and balance needs
- Highest priority projects were identified by the Selectmen and other boards and committees
- Expenditure Timelines and Scenarios are developed so that a comprehensive and reasonable capital plan is established



FACILITIES MASTER PLAN: WHAT WORK IS COMPLETED?

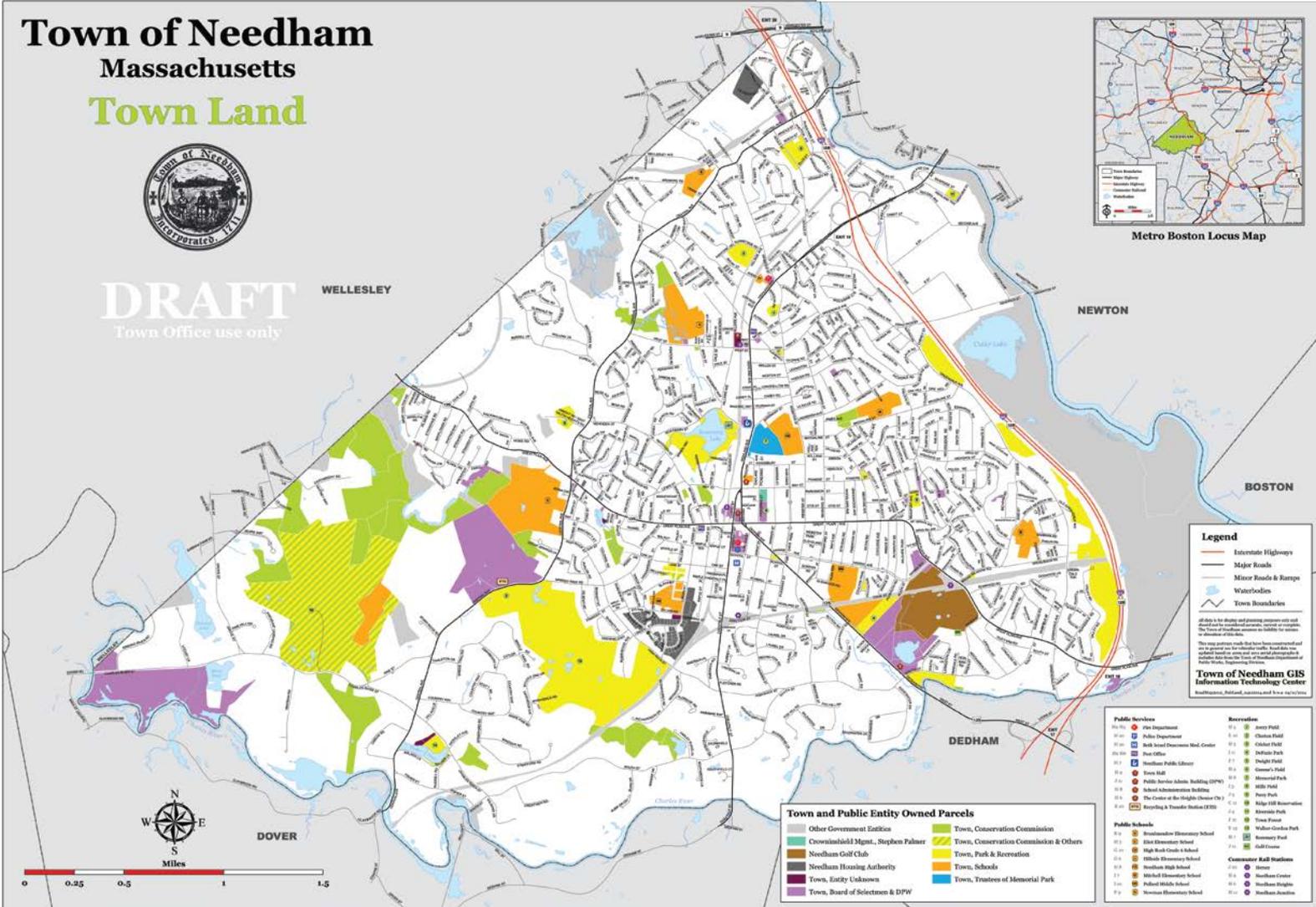
- Prior feasibility studies and plans have been reviewed and that work has been incorporated into this Facilities Master Plan
- Department building and site needs + programs have been established
- Buildings and sites have been assessed
- Options on existing and other sites have been developed
- Probable cost estimates have been prepared + preliminarily capital project priorities have been mapped
- Committee Meetings, Visioning Sessions + Public Dialogues have been held
- Draft report is underway



TOWN LAND MAP

Town and Public Entity Owned Parcels

- Other Government Entities
- Town, Conservation Commission
- Crowninshield Mgmt., Stephen Palmer
- Town, Conservation Commission & Others
- Needham Golf Club
- Town, Park & Recreation
- Needham Housing Authority
- Town, Schools
- Town, Entity Unknown
- Town, Trustees of Memorial Park
- Town, Board of Selectmen & DPW



PROJECT SITES



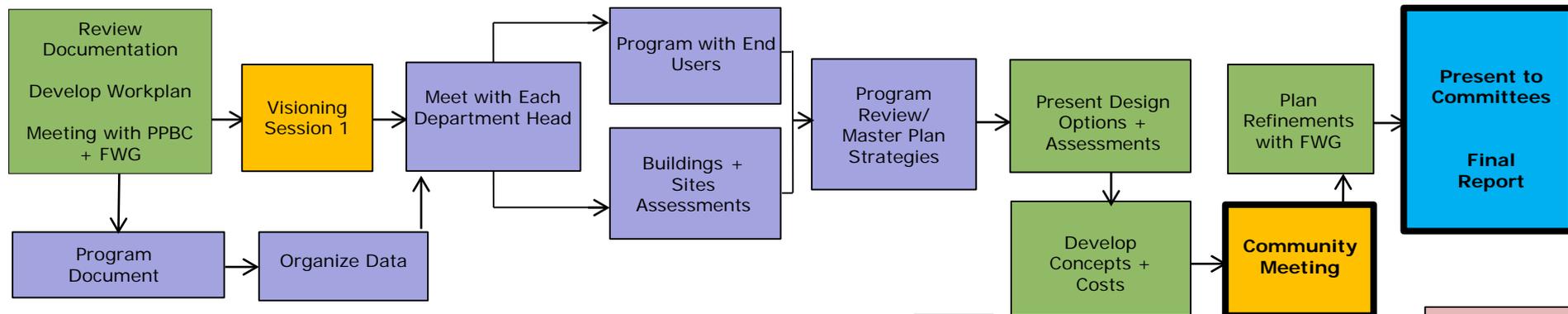
5 PRIMARY CATEGORIES OF WORK

- **Schools + Administration:** Hillside + Mitchell Elementary Schools; Pollard Middle School; Needham High School; Emery Grover Building; Nike Site
- **Department of Public Works:** 470 Dedham Ave – Vehicle storage and Maintenance; 486 Dedham Ave. – Former Water Pumping Station; Recycling and Transfer Station
- **Fire + Police:** Public Safety Building (Police + Station #1); Fire Station #2
- **Recreation:** Rosemary Pool and Building; Cricket Field Building; Community Center; Memorial Park Building
- **Ridge Hill Buildings**



FACILITIES MASTER PLAN: PROCESS

- Workplan + Visioning
- Programming, Site + Building Assessments + Master Plan Strategies
- Site and Criteria Matrix
- Option Development
- Development of Probable Costs
- Presentations to Boards + Community
- Final Report



HOW WERE SITE MATRICES DEVELOPED AND WHAT DID THEY INCLUDE

- Preliminary criteria developed with the FWG: 100 point scale
- Individuals proposed, reviewed + finalized the 7 categories and the numerical value attached to each category
 - Location
 - Accessibility
 - Site features
 - Environmental
 - Site development
 - Availability
 - Special Considerations
- Individuals proposed and agreed on sites to be included based on realistic possibilities
- FWG completed a draft of the matrices then met to review, debate and finalize each potential project on each potential site

HOW MIGHT MATRIX RESULTS INFLUENCE THE MASTER PLAN

- Multiple sites can meet needs
- Land swaps, “Trading” Jurisdictional Control, may provide benefits
- That if re-organization is suggested, the matrix suggests how the change could affect neighborhood schools, emergency response, conversion of a passive recreation site, historical use of property, neighborhoods in general, operations of department, reuse of property
- Will ideal operations be achieved: can needs be met on one site, in the best possible location, in order to meet the operational goals of each department
- Are some sites better able to meet the needs of the department based on size, location or configuration
- Are some costs associated with development considered extreme

CRITERIA MATRIX

CATEGORY	Actual Value	Max Value	COMMENTS
1. LOCATION	0	20	
1.1 Geographic location		5	Central to mission; moderate changes to operations; requires change to existing operations
1.2 Neighborhood		5	Minimal impact on residential neighborhood and community; moderate impact; significant impact
1.3 Current Use		4	Continued use; compatible use; currently undeveloped and used by others (recreational use open space)
1.4 Zoning By-laws		3	Allowed - complies with use, dimensional requirements and performance standards; Use allowed with moderate approval; Use will be difficult or costly to win approval (due to constraints such as historic preservation)
1.5 Public Facade/Screening		3	No private owner abutters, nothing special required; Abutters with adequate area for screening; Abutters with inadequate area for screening
2. ACCESSIBILITY	0	10	
2.1 Site Access		5	Ease of access through existing entry points and roadways; some impact on entry or roadway; significant impact including limited emergency access
2.2 Traffic		5	No impact on traffic patterns; some impact; significant impact
3. SITE FEATURES	0	20	
3.1 Adequate site size		6	Optimum size - allows for expansion; good size but no expansion capability; undersized for full program
3.2 Existing Structures/Historic Preservation		4	Existing structures will not impede development ; some impact on intended use; full impact
3.3 Operations - ease of use		4	Staff and Visitors use of site: Site easily split; site requires some overlap of uses; site uses overlap negatively
3.4 Flexibility/Circulation		6	Site can be reconfigured as needs change; site has limited reconfiguration options; site has no flexibility

4. ENVIRONMENTAL	0	15	
4.1 Wetlands		4	No wetlands or all work will occur outside of ConCom jurisdiction; indirect impact (work in buffer zones); direct impact on existing wetlands, flood plains, endangered species
4.2 Stormwater Management		5	Reasonable cost for stormwater management; moderate costs; excessive costs
4.3 Conservation/DEP Permitting		4	No work within designated vernal pool and/or rare species habitat; normal permitting process; work within vernal pool and/or rare species habitat
4.4 Existing Tree Cover		2	No major reduction; minimum to moderate clearing; major clearing
5. SITE DEVELOPMENT	0	20	
5.1 Utilities		4	Availability of gas, electricity, water, municipal sewage, storm drainage; some utilities need to be brought on site; most utilities need to be brought on site
5.2 Topography		4	Slopes range: % to %: appropriate for buildings parking - full access; some revisions to meet needs; significant access issues
5.3 Soils		4	Adequate for bearing capacity; non-standard foundations required
5.4 Hazardous Materials		4	Free of known contaminants; testing required; site history of contaminants
5.5 Costs of Development		4	Reasonable costs for development: cut/fill, clearing, blasting; moderate costs; excessive costs
6. AVAILABILITY	0	15	
6.1 Jurisdictional Control		5	Jurisdictional control remains same; trade of use acceptable and benefits both; highest and best use displaces traditional use in a less positive manner; change of jurisdictional control or use requires state legislative or agency approval
6.2 Displacement Required		5	Cost of relocation minimal; moderate; excessive
6.3 Acquisition		5	Cost, availability, time schedule, eminent domain: Reasonable costs, available for sale at this time; Costs high but available to meet schedule; Cost high with eminent domain
TOTAL	0	100	
7. SPECIAL CONSIDERATIONS			
7.1 Temporary buildings			Costs to temporarily house intended use minimal; moderate; excessive
7.2 Permanent changes to use			Change in use relatively simple; requires return to state for review, redistricting; loss of traditional use
7.3 Temporary use of site			Additions benefit traditional use; additions reduce traditional use; temporary elimination of traditional use
7.4 Time Schedule			Impact of Delay

CRITERIA MATRIX DETAIL

CATEGORY	Actual Value	Max Value	COMMENTS
1. LOCATION	0	20	
1.1 Geographic location		5	Central to mission; moderate changes to operations; requires change to existing operations
1.2 Neighborhood		5	Minimal impact on residential neighborhood and community; moderate impact; significant impact
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1.4 Zoning By-laws		3	Allowed - complies with use, dimensional requirements and performance standards; Use allowed with moderate approval; Use will be difficult or costly to win approval (due to constraints such as historic preservation)
1.5 Public Facade/Screening		3	No private owner abutters, nothing special required; Abutters with adequate area for screening; Abutters with inadequate area for screening

SITES INCLUDED IN MATRICES

- **School Administration**

- Emery Grover (existing site), Chestnut Street (shared site with PD/FD), PSAB Building, Nike Site

- **Department of Public Works**

- 470 Dedham (existing site), Recycling and Transfer Station, Claxton Field Building and Quarry, Greendale Ave / Parcel 74, Town Forest, Nike Site

- **Fire Department / Police Department**

- Chestnut Street

- **Community Center**

- Greendale Avenue / Parcel 74, Town Forest, Nike / Ridge Hill, 470 Dedham Avenue

DEVELOPMENT OF PROBABLE COSTS FOR IDENTIFIED PROJECTS

- **Current Costs: Shown in 2014 dollars**
 - Buildings: estimated on a square foot basis
 - Sites: estimated as a percentage of construction
 - Premium costs: items specified as unique to the site or program such as specialty materials, site improvements or allowances for masonry construction, special fencing or green roofs
 - Total Project Cost: Construction + 25% Soft Costs + 10% Project Contingency
- **Escalated Costs: Projected for 10 years**
 - Costs projections are based on Total Project Costs
 - Escalation: 6% first two years, 3.8% all remaining years
 - Based these percentages on experience, qualifications and best judgment and in consultation with Town professionals
 - Constant review of market trends

SCHOOLS: FEASIBILITY PROCESS

- **Comprehensive Site & Building Assessment** of the Hillside, Mitchell and Pollard Schools completed in August, 2011 - outlined building, educational and programmatic needs and scale of repairs. Both 40+ year old schools are undersized, need significant upgrades and do not meet contemporary educational or code requirements
- **Pre-Feasibility Study** for the Mitchell & Pollard Schools completed in July, 2012 - includes various options to consider
- **Statement of Interest** outlines problems in a factual manner: MSBA voted to invite Needham to collaborate on a Feasibility Study for Hillside School in July, 2014



SCHOOLS: FEASIBILITY PROCESS NEXT STEPS

- Detailed **Feasibility Study** – Eligibility Period
 - Analyze design options and cost for construction
 - Discuss Rate of Reimbursement
- Town Meeting and Voters must approve funding for full costs of construction
- Items of note:
 - There are limited options for locating temporary or permanent schools
 - Sustaining neighborhood schools is deemed important
 - Some redistricting is involved in each option under consideration
 - All day Kindergarten is an educational goal



SCHOOLS: WHAT ARE THE POSSIBILITIES

- Preference is to re-build on existing sites; issues that affect site selection include site size, topography, parking, access + wetlands
- Locations considered for a new school building
 - Hillside School at Hillside School
 - DeFazio Park – temporary or permanent elementary school or permanent 6th grade center
 - Mitchell Site – both Mitchell and Hillside sharing Mitchell site
 - High Rock – potential conversion back to elementary school
- Temporary space during construction is crucial to plan development
 - DeFazio Park emerged as key location for swing space or new school



SCHOOLS

- Hillside and Mitchell Schools: 40% undersized for projected student populations; Permanent versus temporary location
- What is the impact on DeFazio Field and DPW if either a temporary or permanent school is constructed at this location
 - Site circulation issues – DPW + school traffic
 - DPW materials + cold storage areas must be relocated
- Hillside School: Contaminated soils + wetlands affect rebuilding project
- Pollard School: Addition/renovation
 - Science classrooms, auditorium and administrative offices
 - Facilities: Replace pre-fab classrooms with permanent building



SCHOOLS

- High School
 - Designed for 1,450 students with ability to accommodate 1,600 for short peak durations; now projected to exceed 1,700 for an extended period of time
 - Massachusetts School Building Authority – dictated original program
 - Town student population has exceeded projections during past decade
 - Permanent Pre-fab classrooms with expanded cafeteria are being considered



OTHER SCHOOL RELATED PROPERTY

- Emery Grover Building
 - Not accessible for staff or visitors
 - Undersized meeting rooms + offices
 - Physical condition is poor
 - Historic building
 - Unusable attic
- Daley Building (Public Facilities and DPW use)
 - Supports all Town buildings not just school buildings
- Nike Site: too remote for school, what are alternate uses



TEMPORARY SCHOOL AT DEFAZIO PARK



D & W Prefeasibility Study 2012



PROBABLE COSTS: TEMPORARY SCHOOL AT DEFAZIO PARK: Estimate to Mid-Point of Construction – 2017

Item #1	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	TEMPORARY SCHOOL AT DEFAZIO PARK	56,296	\$12,766,598	\$227	\$17,234,908	\$306

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$18,269,002	\$19,365,142	\$20,101,017	\$20,864,856	\$21,657,721	\$22,480,714	\$23,334,981	\$24,221,710	\$25,142,135	\$26,097,536	\$27,089,242

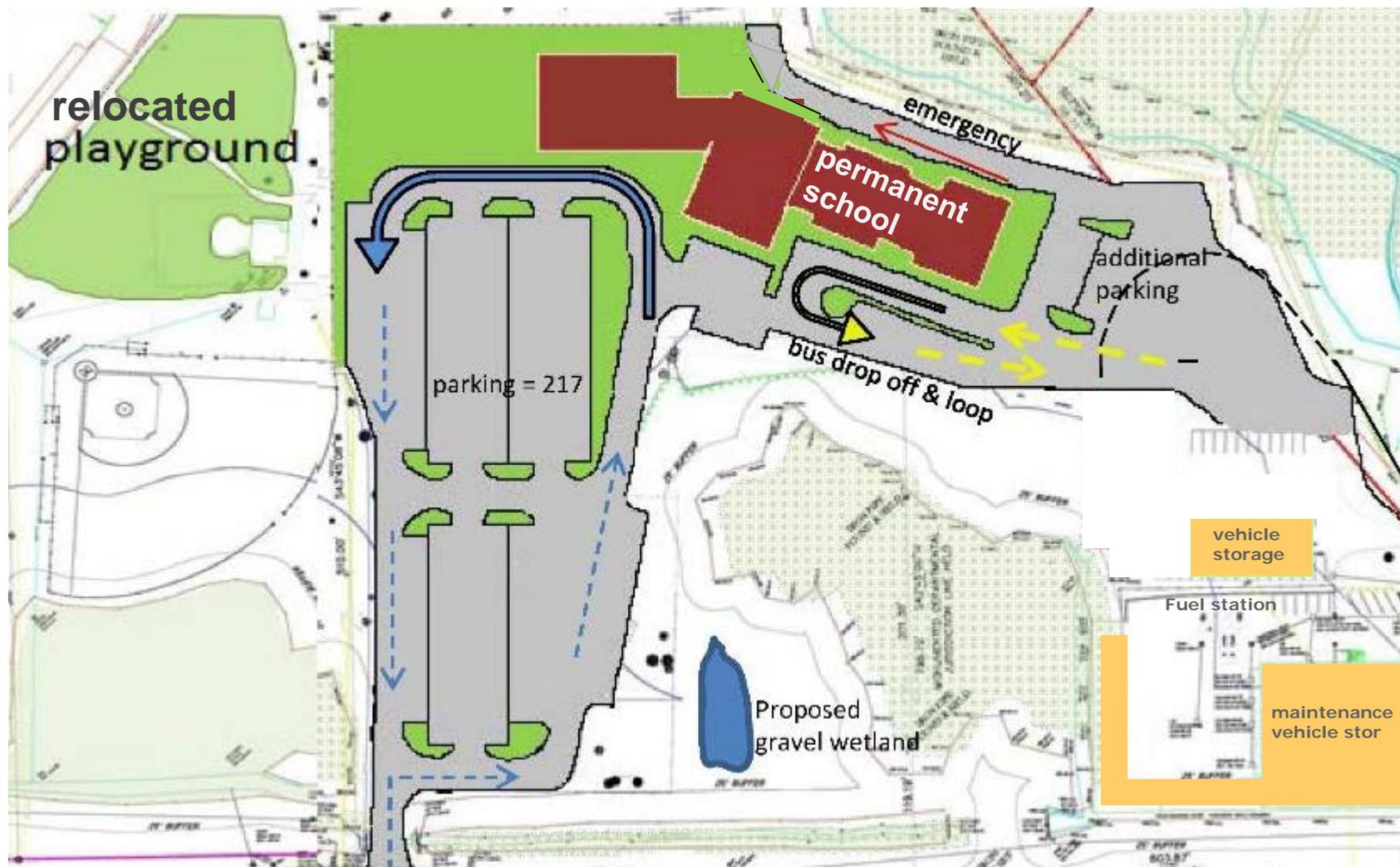
PROBABLE COSTS: HILLSIDE REBUILD: Estimate to Mid-Point of Construction
- 2019

Item #2	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	HILLSIDE REBUILD	80,650	\$30,370,400	\$377	\$43,687,000	\$542

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$46,308,220	\$49,086,713	\$50,952,008	\$52,888,184	\$54,897,935	\$56,984,057	\$59,149,451	\$61,397,130	\$63,730,221	\$66,151,969	\$68,665,744

PERMANENT SCHOOL AT DEFAZIO PARK



D & W Prefeasibility Study 2012

PROBABLE COSTS: PERMANENT SCHOOL AT DEFAZIO PARK: Estimate to Mid-Point of Construction - 2018

Item #3	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	PERMANENT SCHOOL AT DEFAZIO PARK	83,200	\$31,301,000	\$376	\$48,003,000	\$577

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$50,883,180	\$53,936,171	\$55,985,745	\$58,113,203	\$60,321,505	\$62,613,722	\$64,993,043	\$67,462,779	\$70,026,365	\$72,687,367	\$75,449,487

PROBABLE COSTS: HIGH ROCK RENOVATION/ADDITION: *Project not necessary if a Permanent School is not constructed;* Estimate to Mid-Point of Construction – 2019

Item #4	Project	SF <i>Estimated</i>	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	RENOVATION/ADDITION AT HIGH ROCK SCHOOL	7,000	\$2,100,000	\$300	\$2,835,000	\$405

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$3,005,100	\$3,185,406	\$3,306,451	\$3,432,096	\$3,562,516	\$3,697,892	\$3,838,412	\$3,984,272	\$4,135,674	\$4,292,830	\$4,455,958

PROBABLE COSTS: HIGH SCHOOL RENOVATIONS + PRE-FAB CLASSROOMS:
 Estimate to Mid-Point of Construction - 2016

Item #5	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	HIGH SCHOOL RENOVATIONS + PRE-FAB CLASSROOMS	8,062	\$3,453,220	\$428	\$4,144,964	\$514

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$4,393,662	\$4,657,282	\$4,834,259	\$5,017,961	\$5,208,644	\$5,406,572	\$5,612,022	\$5,825,279	\$6,046,640	\$6,276,412	\$6,514,916

PROBABLE COSTS: MITCHELL REBUILD: Estimate to Mid-Point of Construction – 2021

Item #6	Project	SF <i>Estimated</i>	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	MITCHELL REBUILD	82,227	\$30,244,640	\$368	\$43,550,000	\$530

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$46,163,000	\$48,932,780	\$50,792,226	\$52,722,331	\$54,725,780	\$56,805,360	\$58,963,964	\$61,204,595	\$63,530,370	\$65,944,524	\$68,450,416

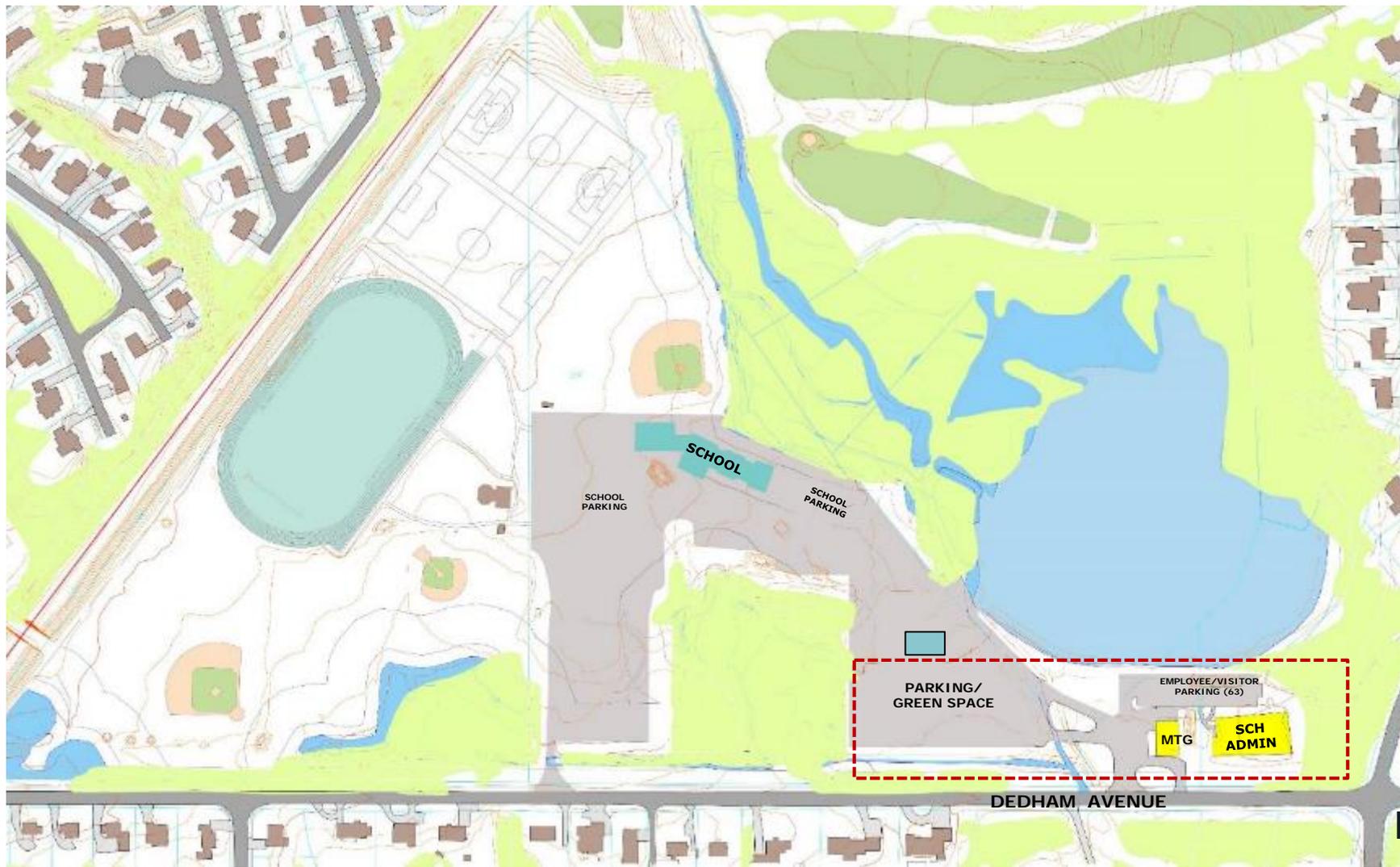
PROBABLE COSTS: POLLARD ADDITION + RENOVATIONS: Estimate to Mid-Point of Construction – 2024

Item #7	Project	SF <i>Estimated</i>	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	POLLARD ADDITION + RENOVATIONS		\$21,650,570		\$29,228,270	

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$30,981,966	\$32,840,884	\$34,088,838	\$35,384,214	\$36,728,814	\$38,124,509	\$39,573,240	\$41,077,023	\$42,637,950	\$44,258,192	\$45,940,003

RELOCATION OF SCHOOL ADMINISTRATION TO PSAB; Renovation of PSAB, Pump Station Building + Additional Parking



PROBABLE COSTS: RELOCATION OF SCHOOL ADMINISTRATION TO PSAB;
 Renovation of PSAB, Pump Station Building + Additional Parking: Estimate to Mid-Point of Construction – 2018 or 2019

Item #9	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	PSAB + PUMP BLDG RENO + PARKING		\$3,794,850 <i>total</i>		\$5,123,048 <i>total</i>	
	LIGHT RENOVATIONS AT PSAB	21,777	\$1,088,850	\$50	\$1,469,948	\$68
	PUMP STATION MEETING ROOM / CONNECTOR with SITE	3,500	\$1,078,000	\$308	\$1,455,300	\$416
	DEMOLISH DPW + SITE CLEANUP		\$1,057,500		\$1,427,625	
	ADDITIONAL PARKING		\$570,500		\$770,175	

10 Year Escalated Costs

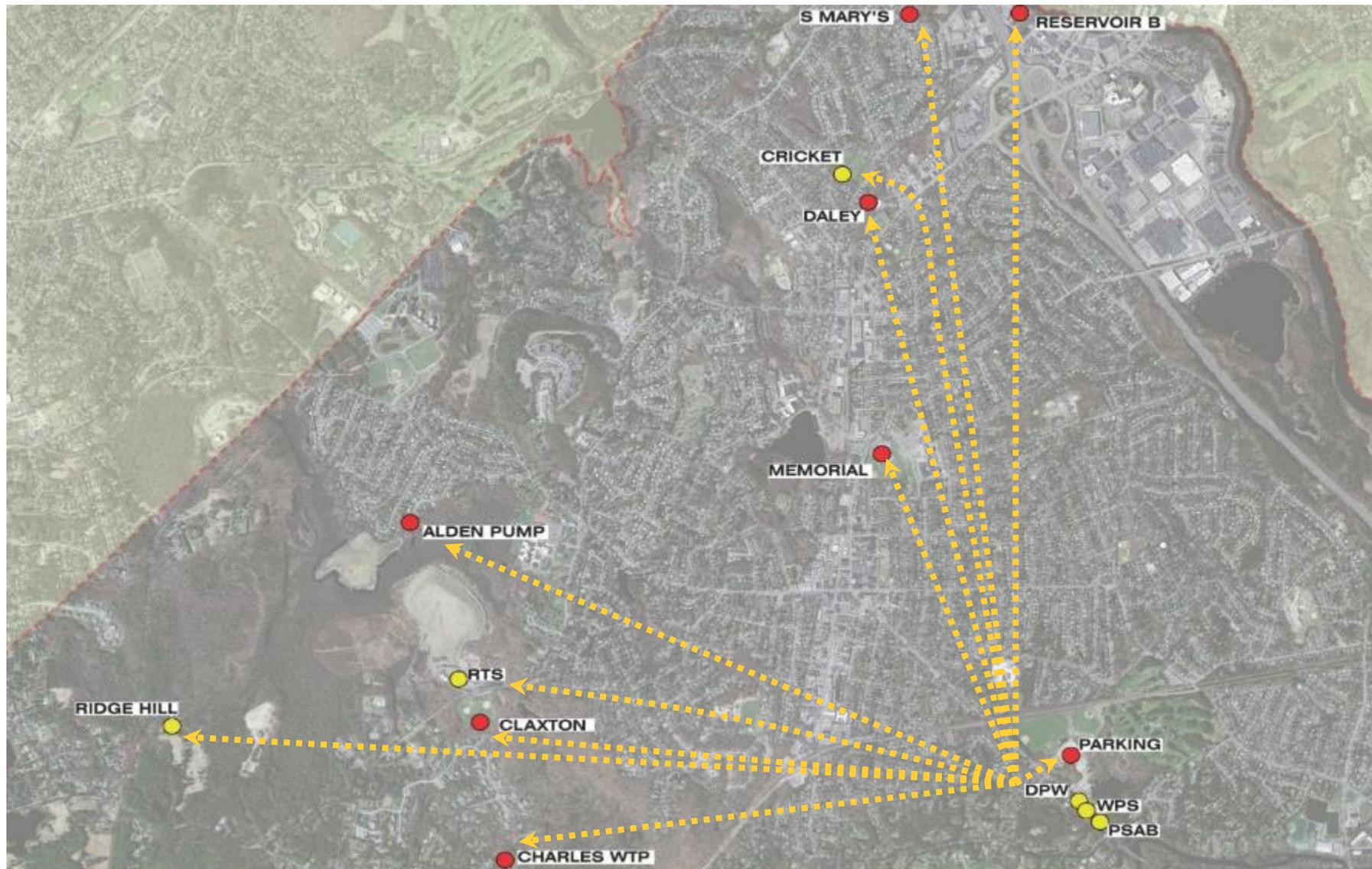
2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$5,430,431 <i>total</i>	\$5,756,257 <i>total</i>	\$5,974,994 <i>total</i>	\$6,202,044 <i>total</i>	\$6,437,722 <i>total</i>	\$6,682,355 <i>total</i>	\$6,936,285 <i>total</i>	\$7,199,864 <i>total</i>	\$7,473,459 <i>total</i>	\$7,757,450 <i>total</i>	\$8,052,233 <i>total</i>
\$1,558,145	\$1,651,634	\$1,714,396	\$1,779,543	\$1,847,165	\$1,917,358	\$1,990,217	\$2,065,845	\$2,144,348	\$2,225,833	\$2,310,414
\$1,542,618	\$1,635,175	\$1,697,312	\$1,761,810	\$1,828,758	\$1,898,251	\$1,970,385	\$2,045,259	\$2,122,979	\$2,203,652	\$2,287,391
\$1,513,283	\$1,604,079	\$1,665,034	\$1,728,306	\$1,793,981	\$1,862,153	\$1,932,914	\$2,006,365	\$2,082,607	\$2,161,746	\$2,243,893
\$816,386	\$865,369	\$898,253	\$932,386	\$967,817	\$1,004,594	\$1,042,769	\$1,082,394	\$1,123,525	\$1,166,219	\$1,210,535

DEPARTMENT OF PUBLIC WORKS

- Current existing structures + outdoor sites
 - Hollis Building, Sheds + Cold Storage: 38,224 GSF
 - New vehicle storage building: 4,998 GSF
 - PSAB building = 21,777 GSF
 - Water Pumping Station = 2,400 GSF
 - Other Sites: DeFazio, Daley, Alden Road Pump Station, Charles River WTP, Reservoir B, St Mary's Pump Station, Cricket Field, Claxton Field, Memorial Field, Ridge Hill = +/- 47,434 GSF
 - Recycling and Transfer Station



EXISTING DEPARTMENT OF PUBLIC WORKS STORAGE LOCATIONS



DEPARTMENT OF PUBLIC WORKS: BUILDING + OPERATIONS DEFICIENCIES

- Existing DPW facilities are undersized for the fleet + personnel
- Employee facilities lacking; not accessible; stairs and egress paths must meet code; building systems neither current nor energy efficient
- No fire suppression system
- No seismic restraints in the structural system
- Main garage is 60' width vs 98', height should be minimally 17' clear of structure or systems, current garage is 18' to top of building; not large enough to house all vehicles and equipment indoors
- Maintenance + Shops: Should have minimum 6-7 bays (current at 3), storage for fluids, tires and parts and supplies; shops per department



DEPARTMENT OF PUBLIC WORKS: RENOVATIONS OR REBUILDING ISSUES

- Raising the roof is impractical and would trigger expensive retrofits
- Due to high groundwater, the vehicle storage slab elevation should be raised
- Foundations would not support the thrust of a pre-engineered building
- If a new building is built adjacent, it must be physically separated + if it is higher than the existing, the existing must be reinforced for snow drifts
- Existing CMU bearing walls within vehicle storage area appear unreinforced. If renovation is desirable, walls must be analyzed for code-prescribed seismic loads. Modifying more than 30% of the total building structure is a “substantial structural alteration” triggering total review. Likely results: replacement + strengthening of walls, installation of steel bracing + foundations, and strengthening of existing floor + roof decks



DEPARTMENT OF PUBLIC WORKS: SITE DEFICIENCIES

- Existing site: high water table, perennial stream/channel, wetlands
- DEP / NPDES compliance issues and concerns
 - DPW is no longer exempt from NPDES requirements
 - Cover site or clean the water runoff
- Storage of vehicles, equipment + materials is located throughout Town
- Materials handling: storage of stock materials + items removed during street sweeping, catch basin cleanout or asphalt repairs or Town construction sites
- Cold storage: sander bodies + spreaders, pipes + manhole covers should be securely located with equipment needed to complete a typical or emergency project



DEPARTMENT OF PUBLIC WORKS: PROGRAM NEEDS

- Building Program
 - Administrative and Operations offices
 - Employee support
 - Maintenance + Shops for divisions
 - Wash Bay + Fuel Island
 - Vehicle Staging and Prep
- Site Program
 - Materials handling, Cold storage, Working yard and Parking
 - Control water runoff to meet NPDES requirements

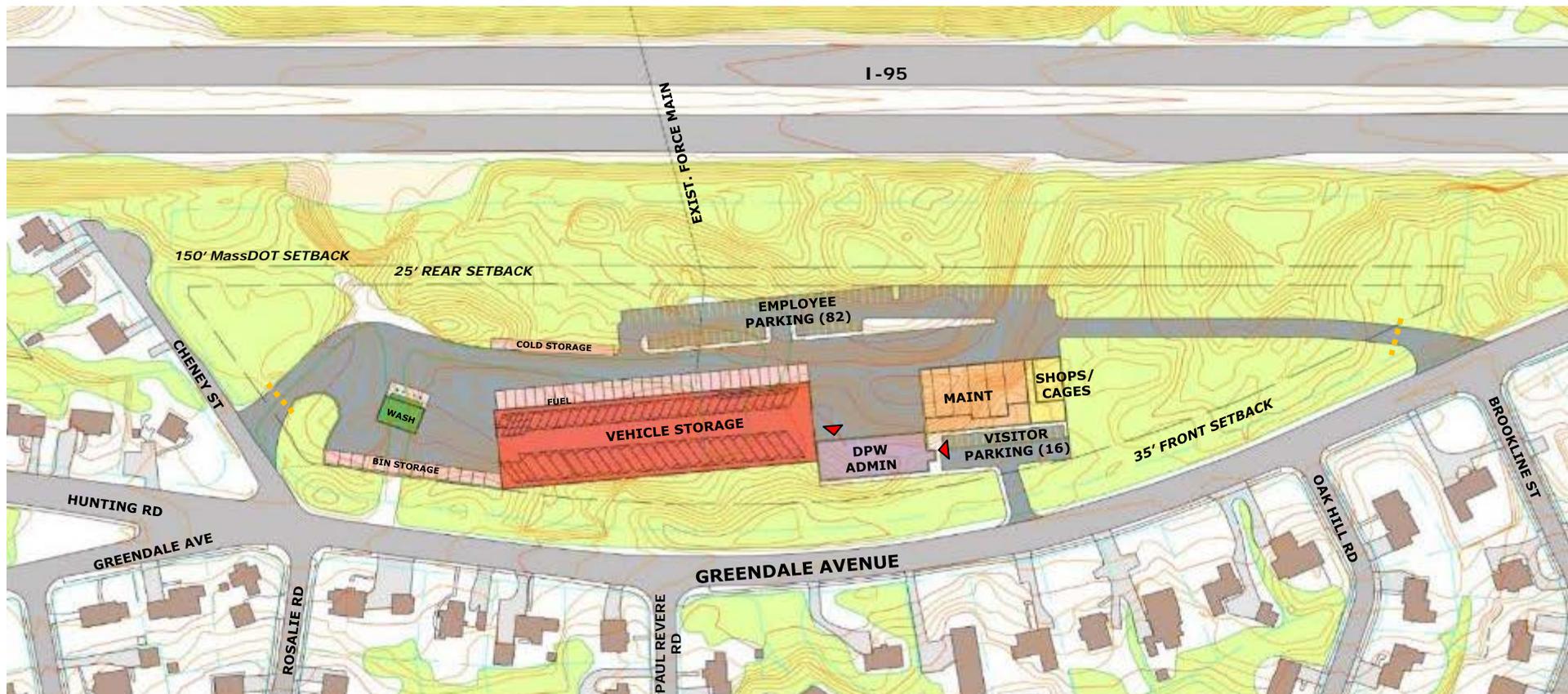


DEPARTMENT OF PUBLIC WORKS

- Total area required to store vehicles + equipment dependent on decision to build a consolidated facility or continue using multiple sites
- Insufficient land space to consolidate and build a comprehensive modern facility at Dedham Ave. within their existing zone of activity
- Benefits to consolidation of personnel + equipment: more supervision, vehicles + materials easily reached and under protection from weather, better response times to work orders and emergencies
- Vehicles stored indoors protect and extend the life of these valuable assets
- Vehicles stored indoors protect help improve localized site conditions and comply with DEP regulations thus possibly avoiding fines



DEPARTMENT OF PUBLIC WORKS AT PARCEL 74/GREENDALE AVE.



PROBABLE COSTS: DEPARTMENT OF PUBLIC WORKS RELOCATES TO PARCEL 74/GREENDALE AVE.: Estimate to Mid-Point of Construction dependent on decision to build Temporary (2017) or Permanent (2018) School

Item #14	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	DPW REBUILD AT PARCEL 74 / GREENDALE AVE	92,442	\$30,591,734	\$331	\$41,298,841	\$447

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$43,776,771	\$46,403,377	\$48,166,705	\$49,997,040	\$51,896,928	\$53,869,011	\$55,916,033	\$58,040,842	\$60,246,394	\$62,535,757	\$64,912,116

DEPARTMENT OF PUBLIC WORKS AT RTS - RENOVATIONS



PROBABLE COSTS: RTS RENOVATIONS: Estimate in Year 2014

Item #15	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	RTS RENOVATIONS	4,320	\$1,623,000	\$376	\$2,191,050	\$507

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$2,322,513	\$2,461,864	\$2,555,415	\$2,652,521	\$2,753,317	\$2,857,943	\$2,966,545	\$3,079,274	\$3,196,286	\$3,317,745	\$3,443,819

POLICE AND FIRE DEPARTMENTS

- Current Existing Station #1: +/- 31,145 SF
 - Police: +/- 13,095 SF
 - Fire: +/- 11,634 SF
 - Shared: +/- 6,416 SF
- Current Existing Fire Station #2: +/- 9,630 SF
- Programming Needs at Police + Fire Station #1: 43,966 SF
 - Police: +/- 21,609 SF
 - Fire: +/- 16,339 SF
 - Shared spaces and building support: +/- 6,019 SF



POLICE AND FIRE DEPARTMENTS

- Current building is undersized for vehicles, equipment + personnel
- Organization of spaces does not reflect police + fire operational needs
- Shared resources: FD + PD dispatch, waiting area, conference and EOC are not well located
- Building is not accessible
- No sallyport – detainees are escorted across open parking lot; No holding area; Booking area too small with too much prisoner access to personnel and equipment; Evidence area lacking
- Fire Apparatus Area: Support spaces inadequate; Height and width do not meet current standards



POLICE AND FIRE DEPARTMENTS

- Site requirements
 - Visitor Parking: 24 hours; prime 7 am to 10 pm
 - Personnel Parking: overlapping shifts for both departments
 - Dumpster
 - Impound area (currently in wash bay)
 - Emergency generator
- Movement of emergency vehicles: Fire and Police vehicles must be able to move quickly and effortlessly from site

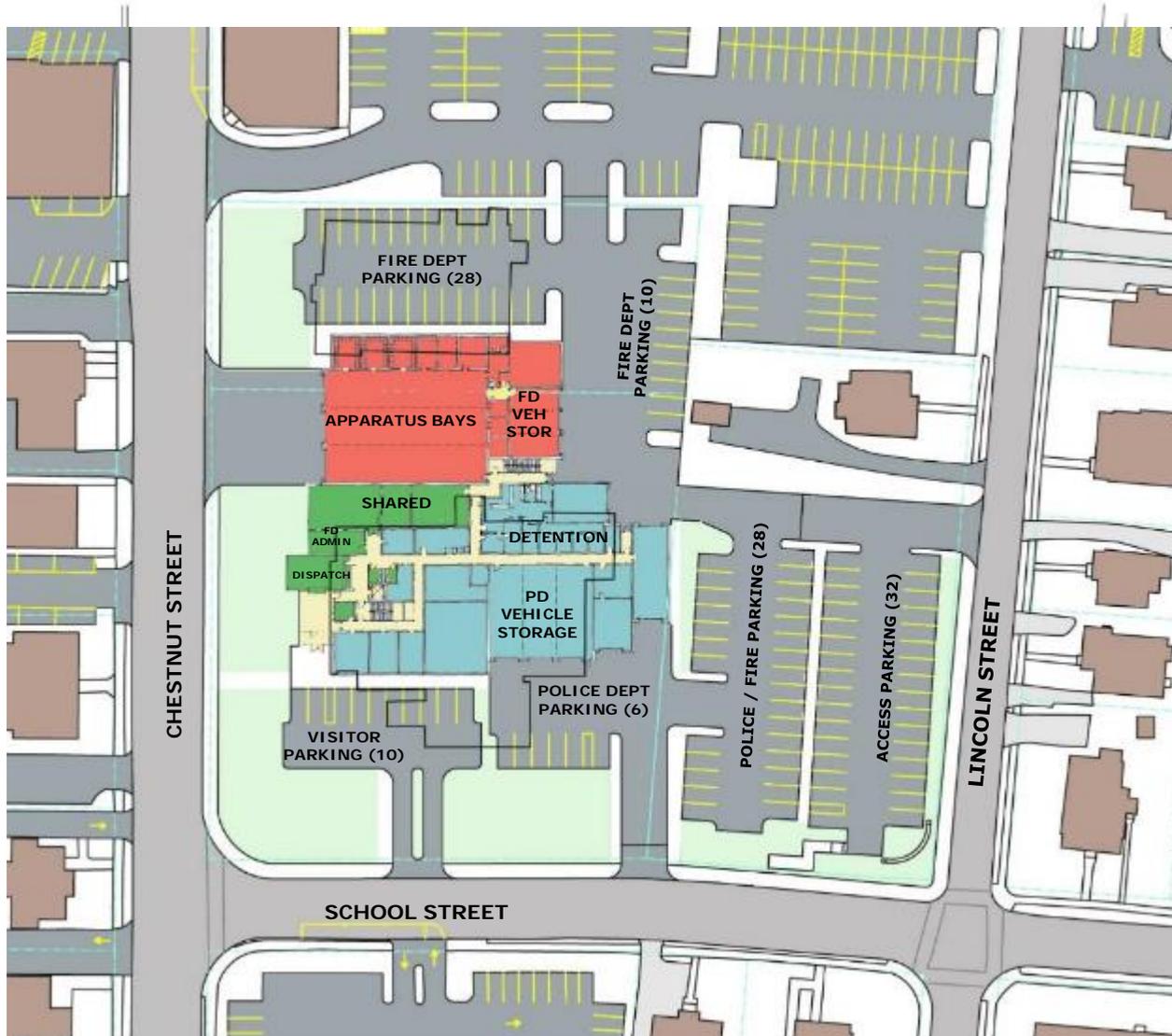


POLICE AND FIRE DEPARTMENTS: PROGRAMMING NEEDS

- Program
 - Shared public areas
 - Police and Fire administrative offices
 - Operations Areas
 - Employee support
 - Detention
 - Garage/maintenance + Wash bay
 - Apparatus area
 - Site support



NEW POLICE/FIRE: OPTION 3 – STAND ALONE



PARKING
 LOSS OF EXISTING PARKING
 ON LINCOLN ST: ACCESS
 PARKING (0)
 LOSS OF EXISTING PARKING
 NORTH COMMERCIAL
 BUILDING: (24)
 TOTAL NET LOSS
 COMMERCIAL PARKING: (24)
 PD/FD PARKING AS SHOWN:
 (82)



PROBABLE COSTS: NEW POLICE/FIRE OPTION 3 – STAND ALONE:
 Estimate to Mid-Point of Construction - 2019

Item #22	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	POLICE/FIRE SITE OPTION 3 – STAND ALONE	51,604	\$22,277,490	\$432	\$30,074,612	\$583

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$31,879,089	\$33,791,834	\$35,075,924	\$36,408,809	\$37,792,344	\$39,228,453	\$40,719,134	\$42,266,461	\$43,872,587	\$45,539,745	\$47,270,255

PARKS AND RECREATION/CONSERVATION

- Parks + Rec and Conservation are largest controllers of land in town
- Current buildings primarily used during summer
- Many buildings include storage component currently used by DPW
- Ridge Hill site has restricted use
- Many community programming needs have been met in other buildings but there are some that remain. Some of those can be accommodated in:
 - School buildings
 - Public / Private developments

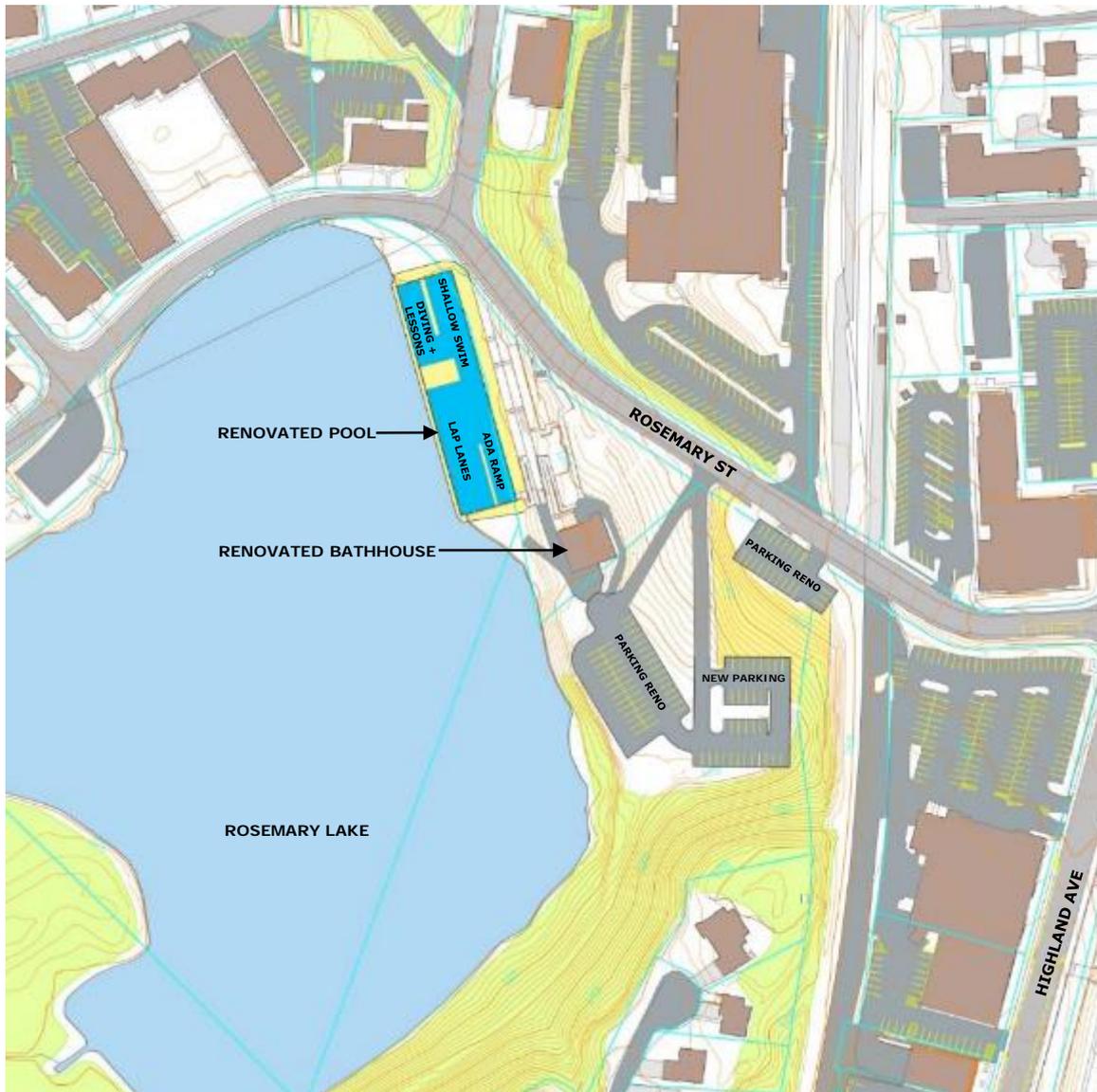


PARKS AND RECREATION/CONSERVATION

- Conservation would like to improve degraded site conditions but recognize current uses
- How can work be accomplished on challenging sites like the existing DPW?
 - Preferable to do mitigation on previously disturbed areas
 - Allow water to move in a more natural manner
 - Provide improvements in another area of the site or on other sites
- Should wildlife, including the appearance of coyotes and an expanding bear population, reduce potential use of any site. What are reasonable mitigation measures?



ROSEMARY POOL – PROPOSED RENOVATION (OPTION 3B)



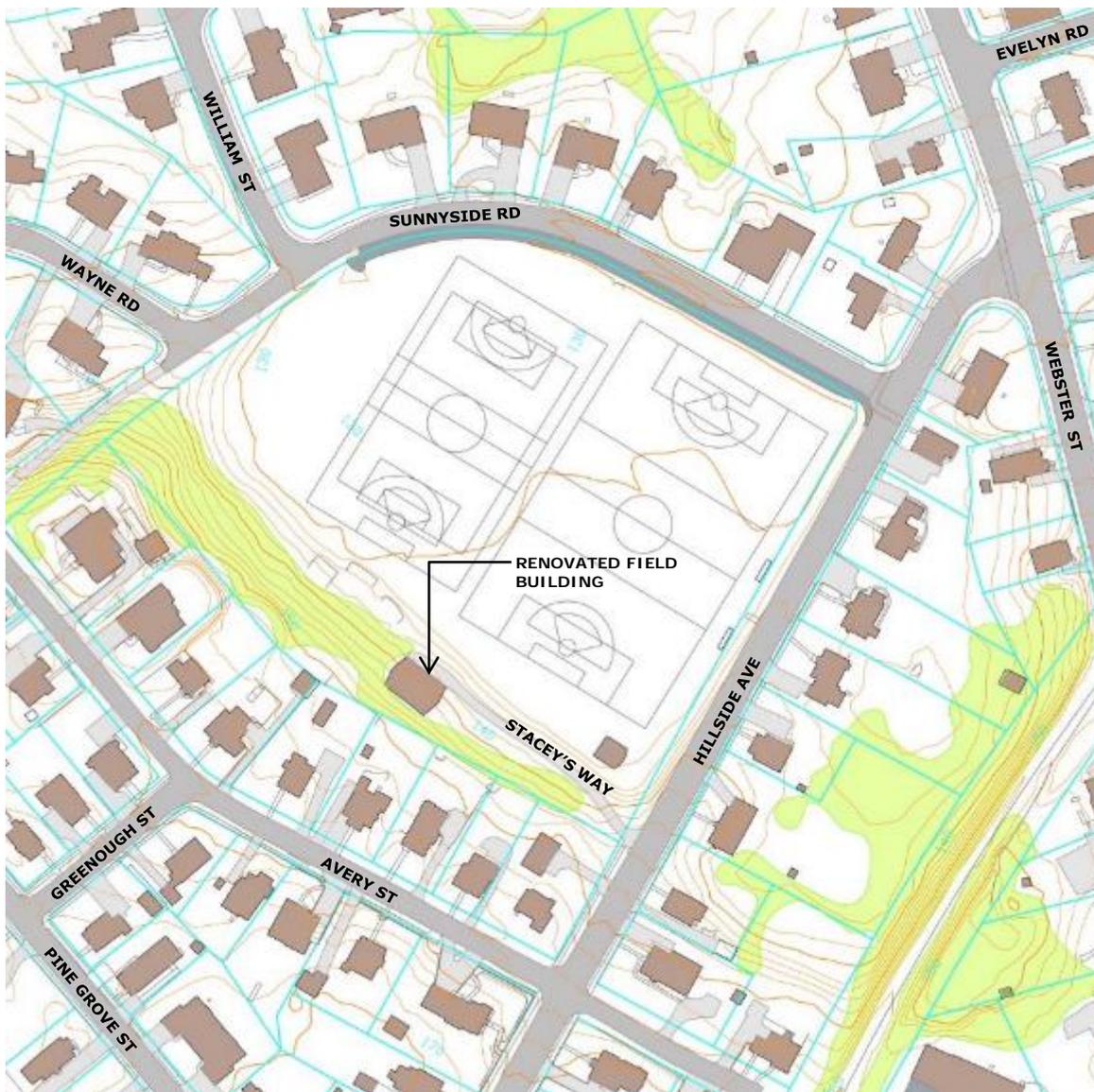
PROBABLE COSTS: ROSEMARY POOL: Estimate to Mid-Point of Construction - 2018

Item #25	Project	SF	Construction Cost	\$ / SF	Total Project Cost YR 2014	\$ / SF
	ROSEMARY POOL		\$6,382,775		\$8,778,869	

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$9,305,601	\$9,863,937	\$10,238,767	\$10,627,840	\$11,031,698	\$11,450,903	\$11,886,037	\$12,337,706	\$12,806,539	\$13,293,187	\$13,798,328

CRICKET FIELD– PROPOSED RENOVATION – 3 SEASON OPTION



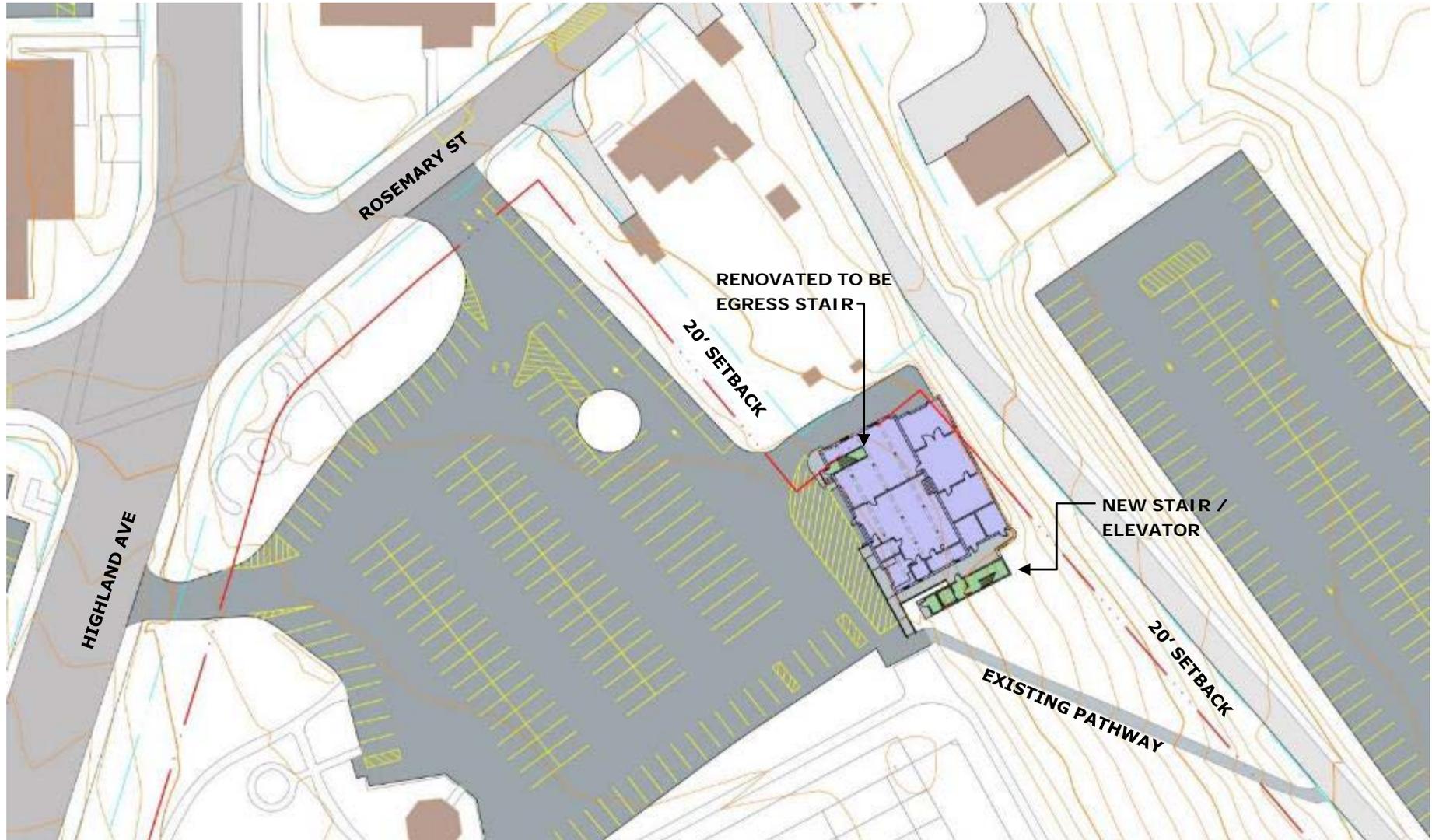
PROBABLE COSTS: CRICKET FIELD BUILDING: Estimate to Mid-Point of Construction - 2015

Item #26	Project	SF	Construction Cost	\$ / SF	Total Project Cost YR 2014	\$ / SF
	CRICKET FIELD BUILDING: 3 SEASON		\$700,566		\$945,764	

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$1,002,510	\$1,062,660	\$1,103,042	\$1,144,957	\$1,188,465	\$1,233,627	\$1,280,505	\$1,329,164	\$1,379,672	\$1,432,100	\$1,486,520

RENOVATION OF MEMORIAL PARK BUILDING



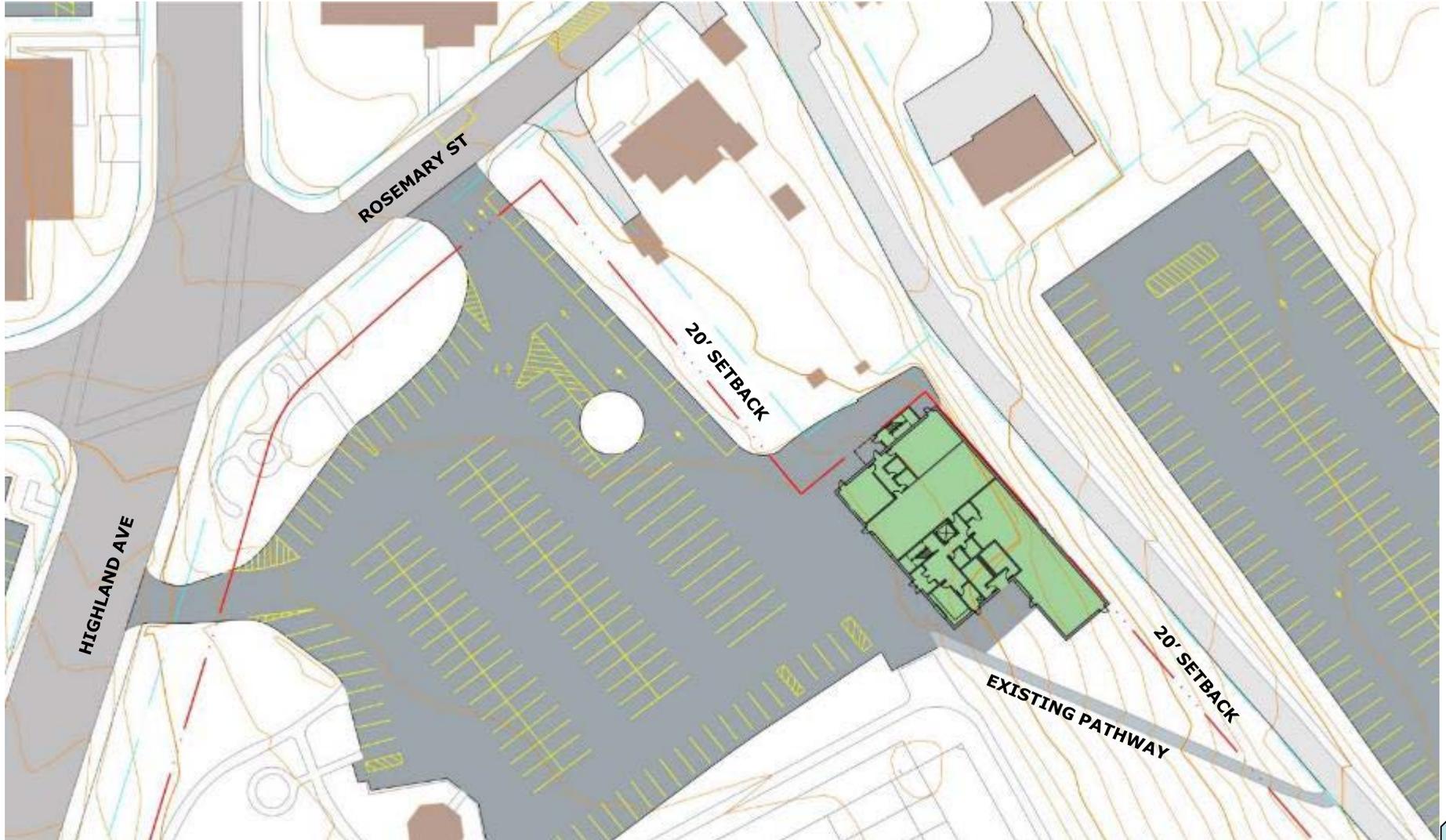
PROBABLE COSTS: RENOVATED BUILDING AT MEMORIAL PARK: Estimate in Year 2014

Item #27	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	MEMORIAL PARK BUILDING - RENOVATION	7,260	\$745,960	\$103	\$1,007,046	\$139

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$1,067,469	\$1,131,517	\$1,174,515	\$1,219,147	\$1,265,475	\$1,313,563	\$1,363,478	\$1,415,290	\$1,469,071	\$1,524,896	\$1,582,842

NEW BUILDING AT MEMORIAL PARK



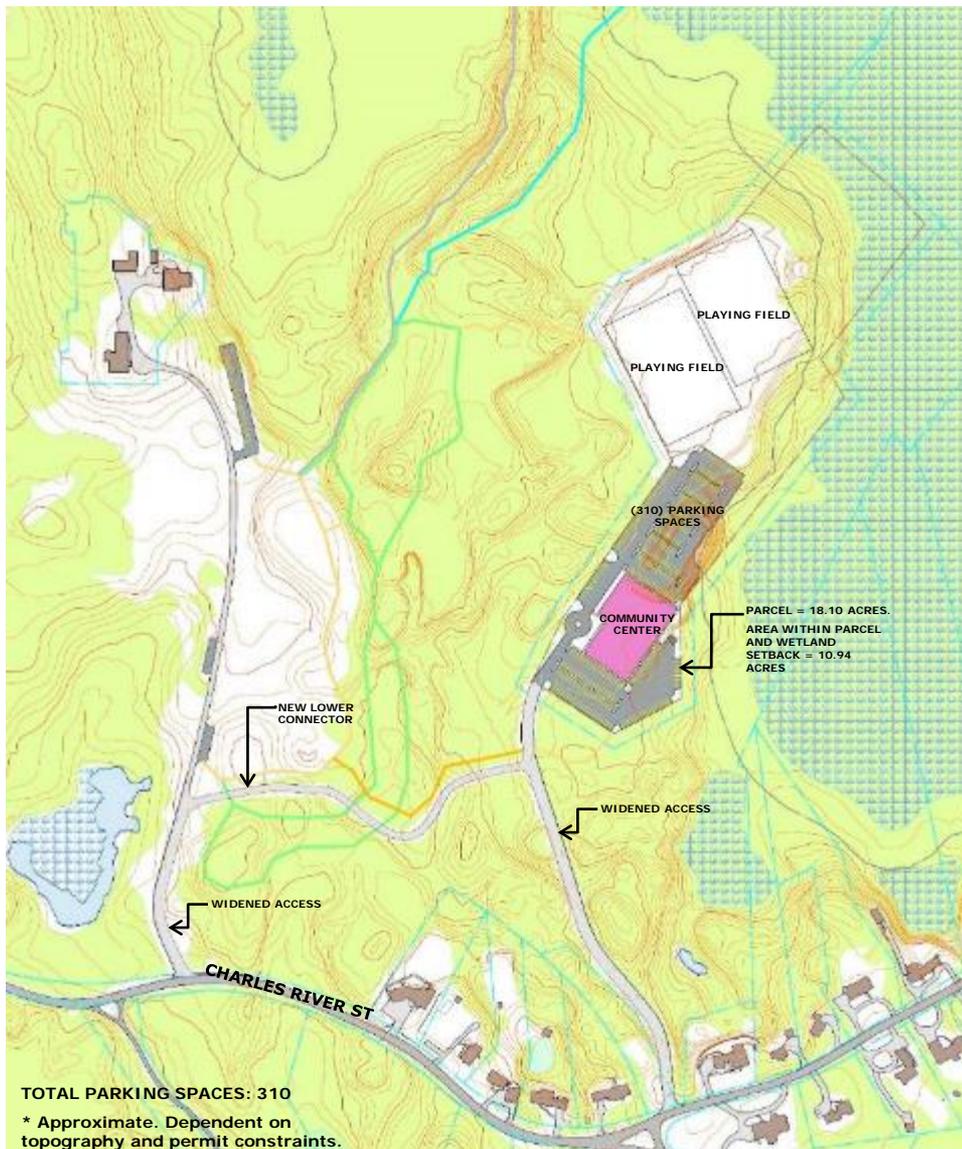
PROBABLE COSTS: NEW BUILDING AT MEMORIAL PARK: Estimate in Year 2014

Item #28	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	MEMORIAL PARK – NEW BUILDING	14,584	\$4,372,236	\$300	\$5,902,519	\$405

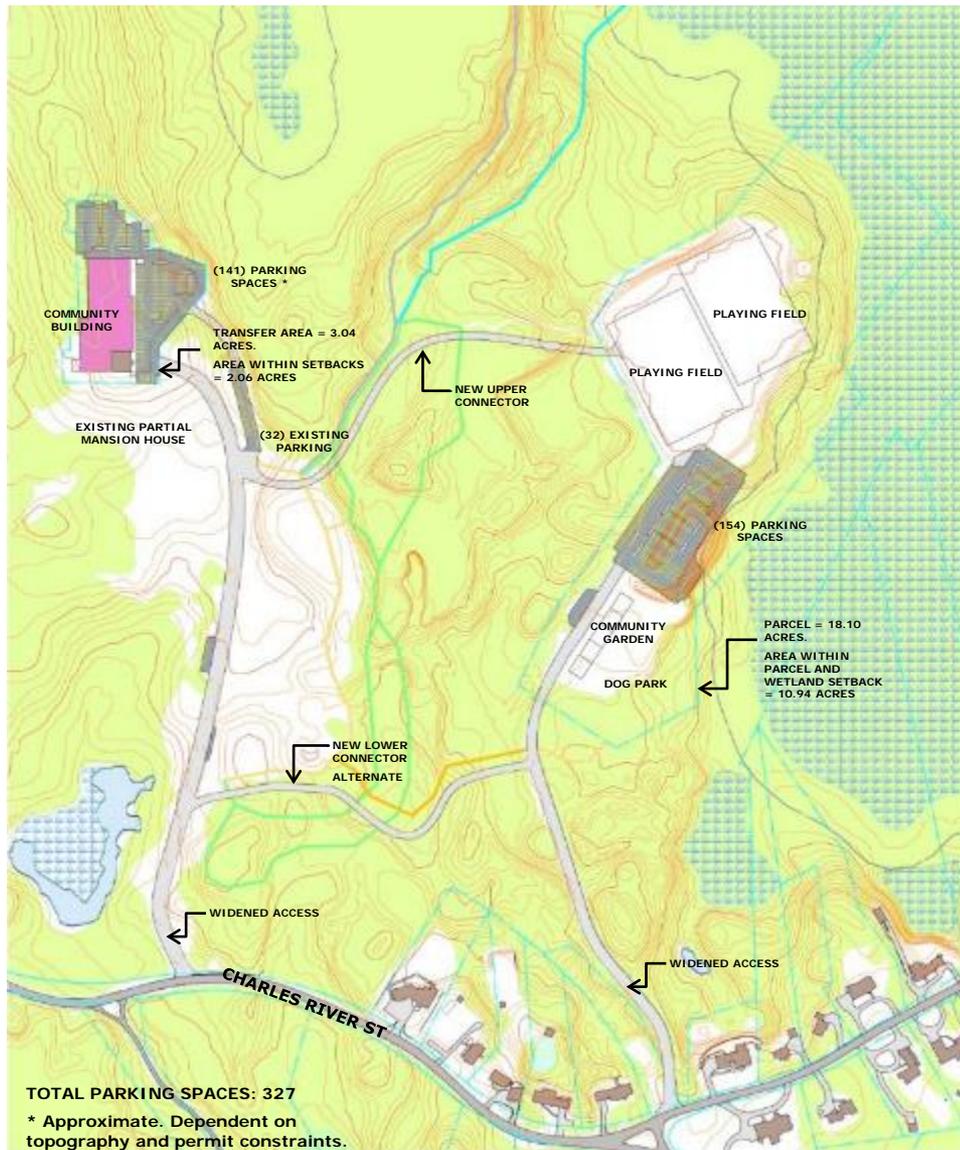
10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$6,256,670	\$6,632,070	\$6,884,089	\$7,145,684	\$7,417,220	\$7,699,074	\$7,991,639	\$8,295,321	\$8,610,543	\$8,937,744	\$9,277,378

COMMUNITY CENTER AT NIKE SITE



COMMUNITY CENTER AT RIDGE HILL + SHARED USE OF NIKE SITE



PROBABLE COSTS: COMMUNITY CENTER AT NIKE SITE: Estimate in Year 2014

Item #29	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	COMMUNITY CENTER AT NIKE SITE	62,000	\$21,419,250	\$345	\$28,915,988	\$466

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$30,650,947	\$32,490,004	\$33,724,624	\$35,006,160	\$36,336,394	\$37,717,177	\$39,150,430	\$40,638,146	\$42,182,396	\$43,785,327	\$45,449,169

ICE RINK AT 470 DEDHAM AVE



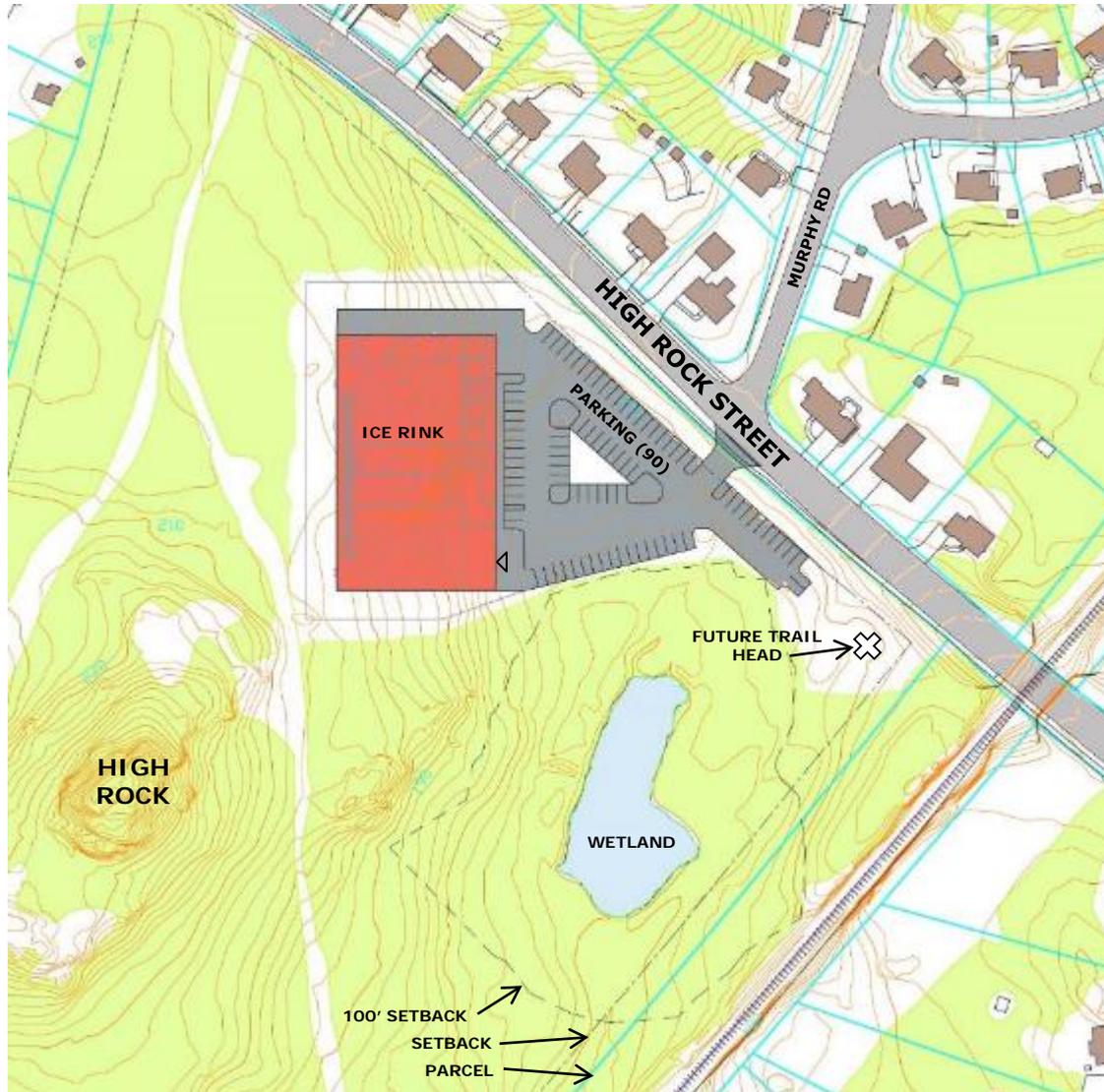
PROBABLE COSTS: ICE RINK AT 470 DEDHAM AVE: Estimate in Year 2014

Item #32	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	DEDHAM AVE ICE RINK	35,272	\$8,817,340	\$250	\$11,903,409	\$337

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$12,617,614	\$13,374,671	\$13,882,908	\$14,410,459	\$14,958,056	\$15,526,462	\$16,116,468	\$16,728,894	\$17,364,592	\$18,024,446	\$18,709,375

ICE RINK AT TOWN FOREST



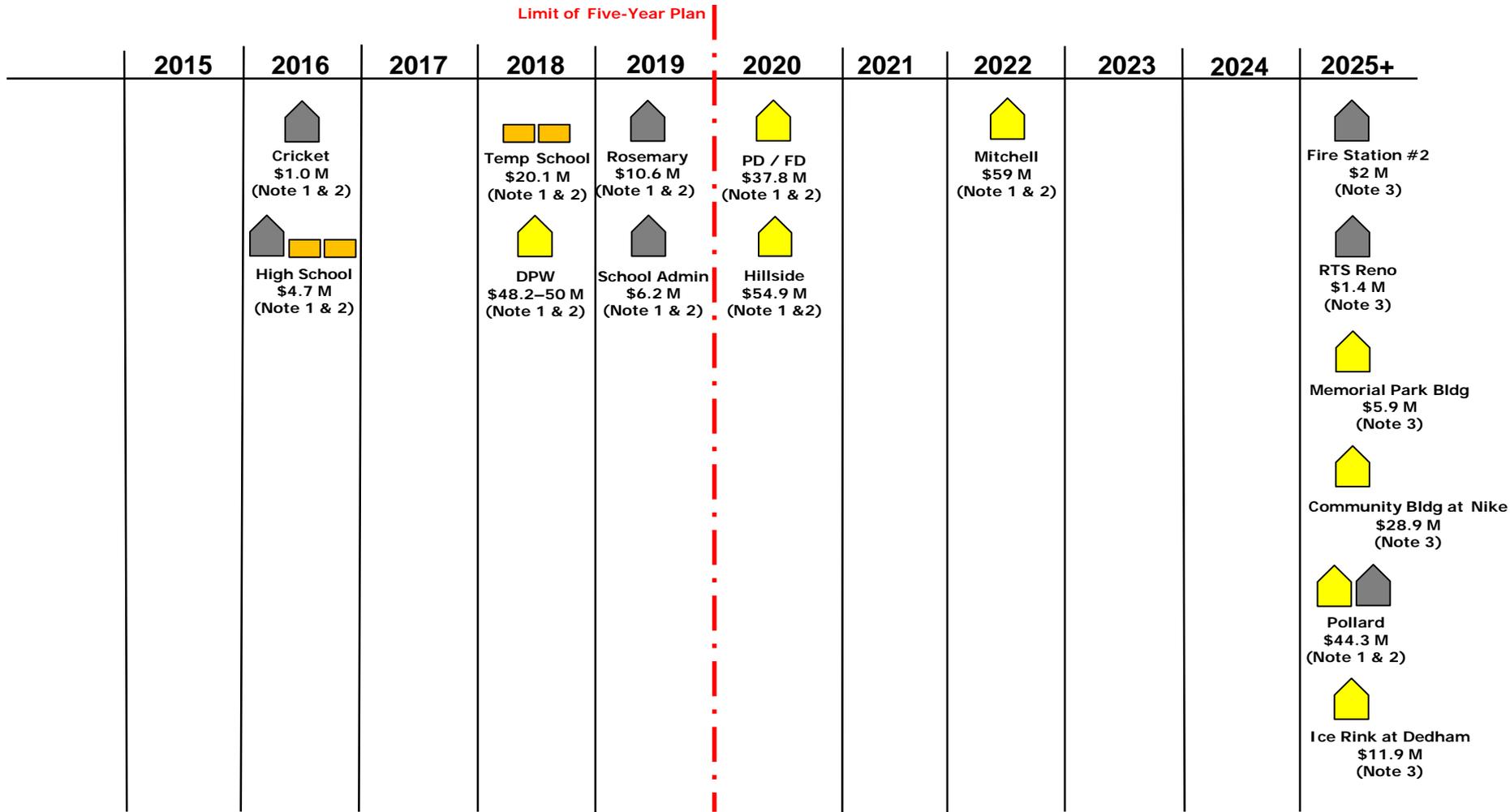
PROBABLE COSTS: ICE RINK AT TOWN FOREST: Estimate in Year 2014

Item #33	Project	SF	Construction Cost YR 2014	\$ / SF	Total Project Cost YR 2014	\$ / SF
	TOWN FOREST ICE RINK	36,839	\$9,758,860	\$265	\$13,174,461	\$358

10 Year Escalated Costs

2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
\$13,964,929	\$14,802,825	\$15,365,332	\$15,949,215	\$16,555,285	\$17,184,386	\$17,837,393	\$18,515,214	\$19,218,792	\$19,949,106	\$20,707,172

MASTERPLAN TIMELINE: SCENARIO 1 - Temporary School at DeFazio Park



Notes

1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. Project costs are estimated to 2014.

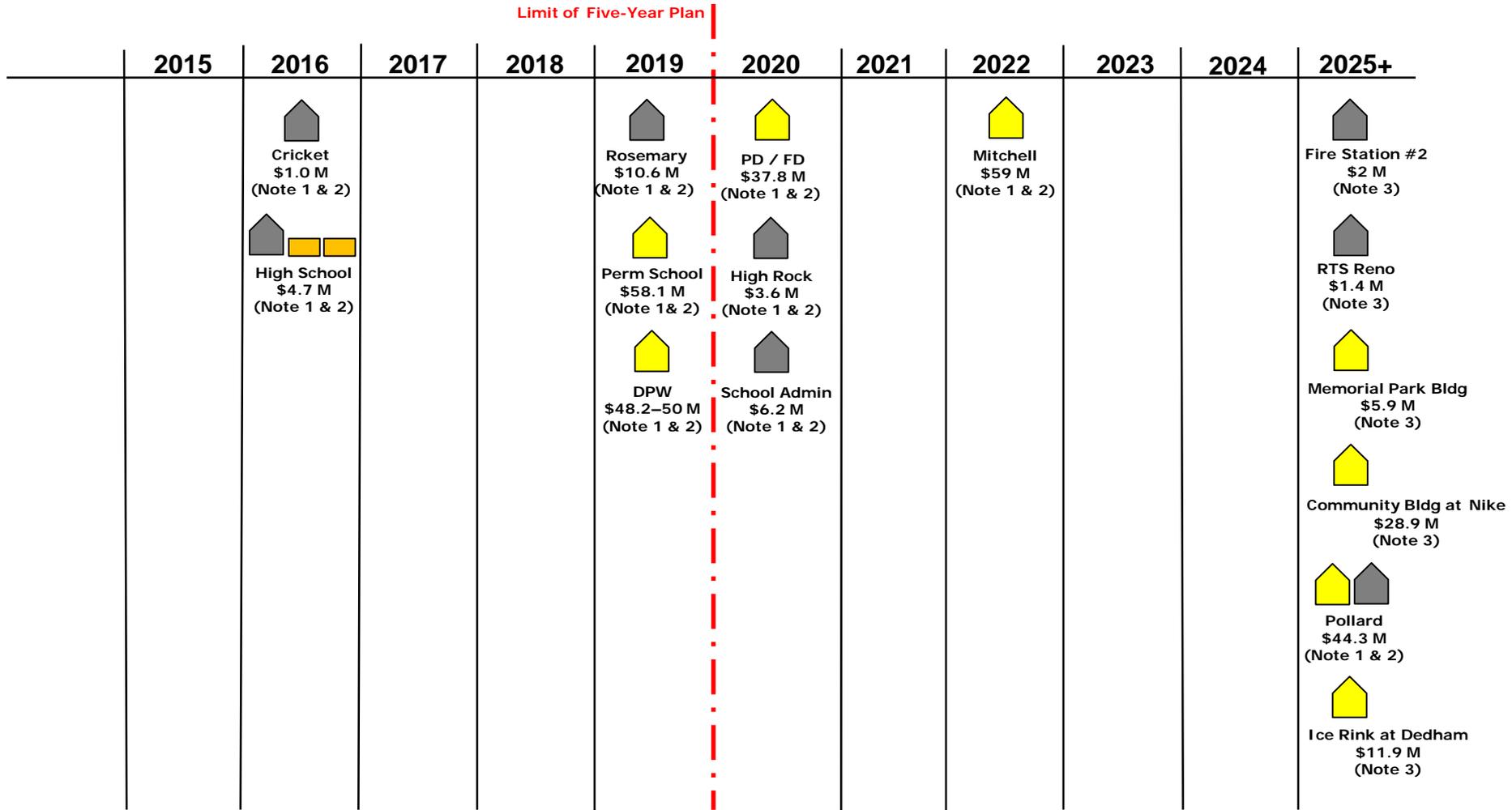
Key

 = New Building

 = Renovation

  = Modular Classrooms

MASTERPLAN TIMELINE: SCENARIO 2 - Permanent School at DeFazio Park



Notes

1. Projects are shown at projected occupancy date.
2. Project costs are projected to the midpoint of construction.
3. Project costs are estimated to 2014.

Key

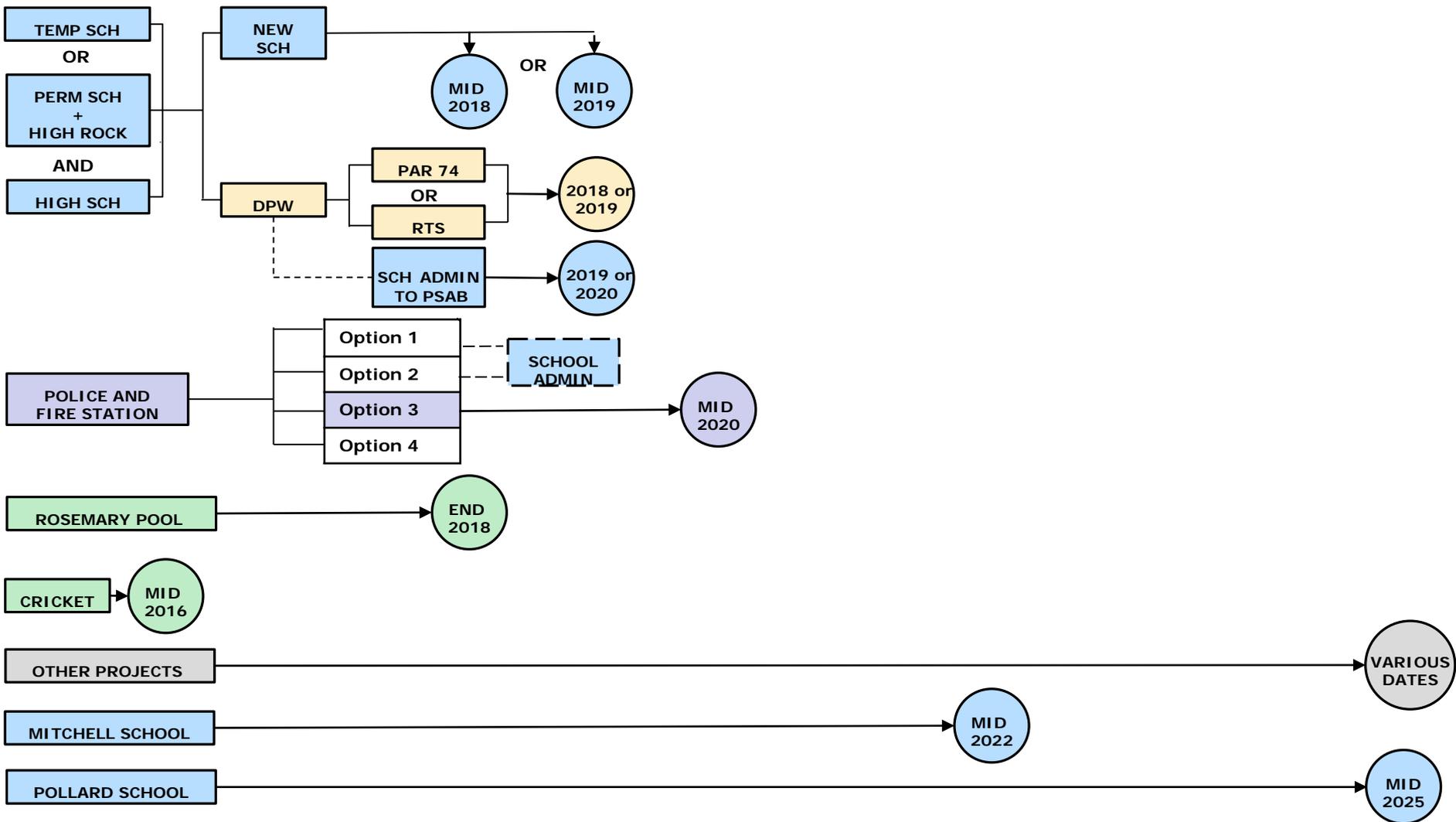
= New Building

= Renovation

= Modular Classrooms

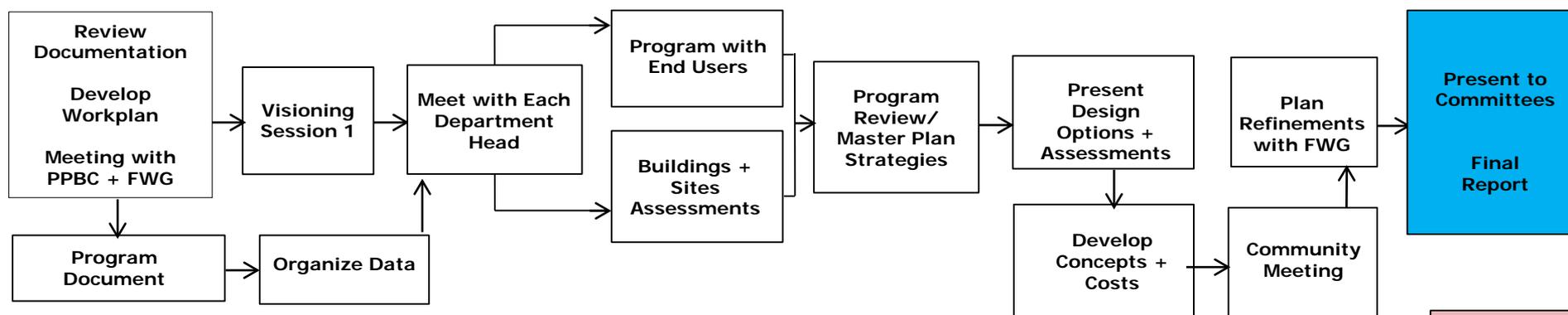
MASTERPLAN TIMELINE: INTERCONNECTIONS

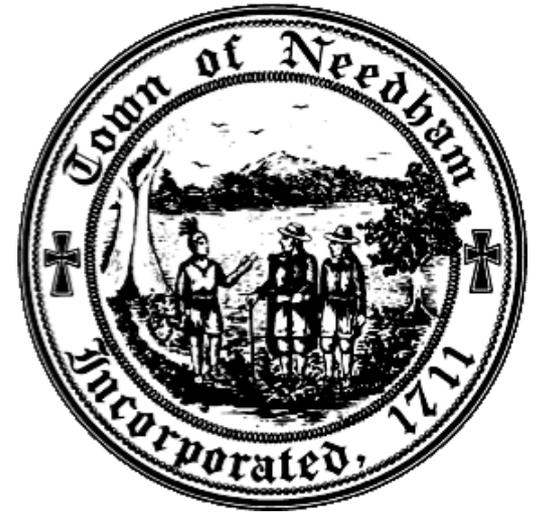
2015 2016 2017 2018 2019 2020 2021 2022 2023 2024 2025+



NEXT STEPS

- Finalize Timelines and Implementation Plan
- Final Report





NOVEMBER 24, 2014

THANK YOU