

NEEDHAM FACILITIES MASTER PLAN STUDY



Municipal Resources, Inc.



AGENDA: FACILITY WORKING GROUP – MEETING 1G

- Schedule
- Summary of Meeting about Memorial Park
- Summary of Meeting for Community Building
- Decision Tree Pathways
- Timeline
- Process for Development of Cost Estimates
- Next Steps



FWG SCHEDULE + OBJECTIVES

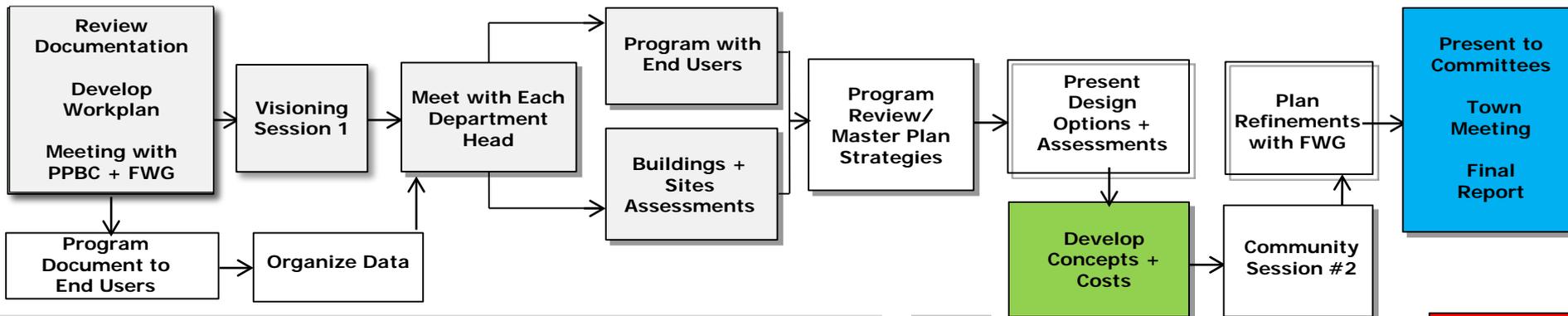
- August + September Mtgs. 1G + 1H:
 - Focus will be on the development of Probable Costs
 - FWG Review and Initial Recommendations

TASK:

Months	December	January	February	March	April	May	June	July	August	September	October	November
Collect documentation, workplan + schedule												
Analyze Documents												
Meeting with FWG		1	1A	1B	1C	1D	1E	1F	1G	1H		
Visioning Session			2			2A						
PPBC Meetings	3					3A		3B		3C		
Selectman Meetings							4			4A		
Programming; Site Assessments		5A	5B	5C	5D							
Programming Review												
Design Options + Assessments												
Plan Refinements												
Presentations to FWG + Committees; Coordinate capital project funding												
Final Report + Town Meeting												

PROGRAMMING/DESIGN OPTION PROCESS

- Memorial Field Program + Plan Options
- Development of Costs
- Begin Process of Presentation to committees prior to Town meeting



OVERVIEW OF TRUSTEES OF MEMORIAL PARK BUILDING MEETING

- Overall Status: Existing GSF 10,420±
 - Not accessible
 - General upgrade due to age and use
- Current Use
 - Upper Level: Meetings of Sports Leagues, Trustees, Exchange Club
 - Lower Level: Garage for storage of field related maintenance equipment and supplies; Sports storage of equipment related to football, baseball and soccer; Concession; Public Toilets accessible from outdoors; Visitors "locker room"; DPW use as needed
- Proposed Program
 - 2 Meeting Rooms; Garage; Storage; Concessions; Public Toilets; Visitors + Home "locker room"; Toilets; Vertical Access
 - Proposed addition of Teen Center

MEMORIAL PARK BUILDING



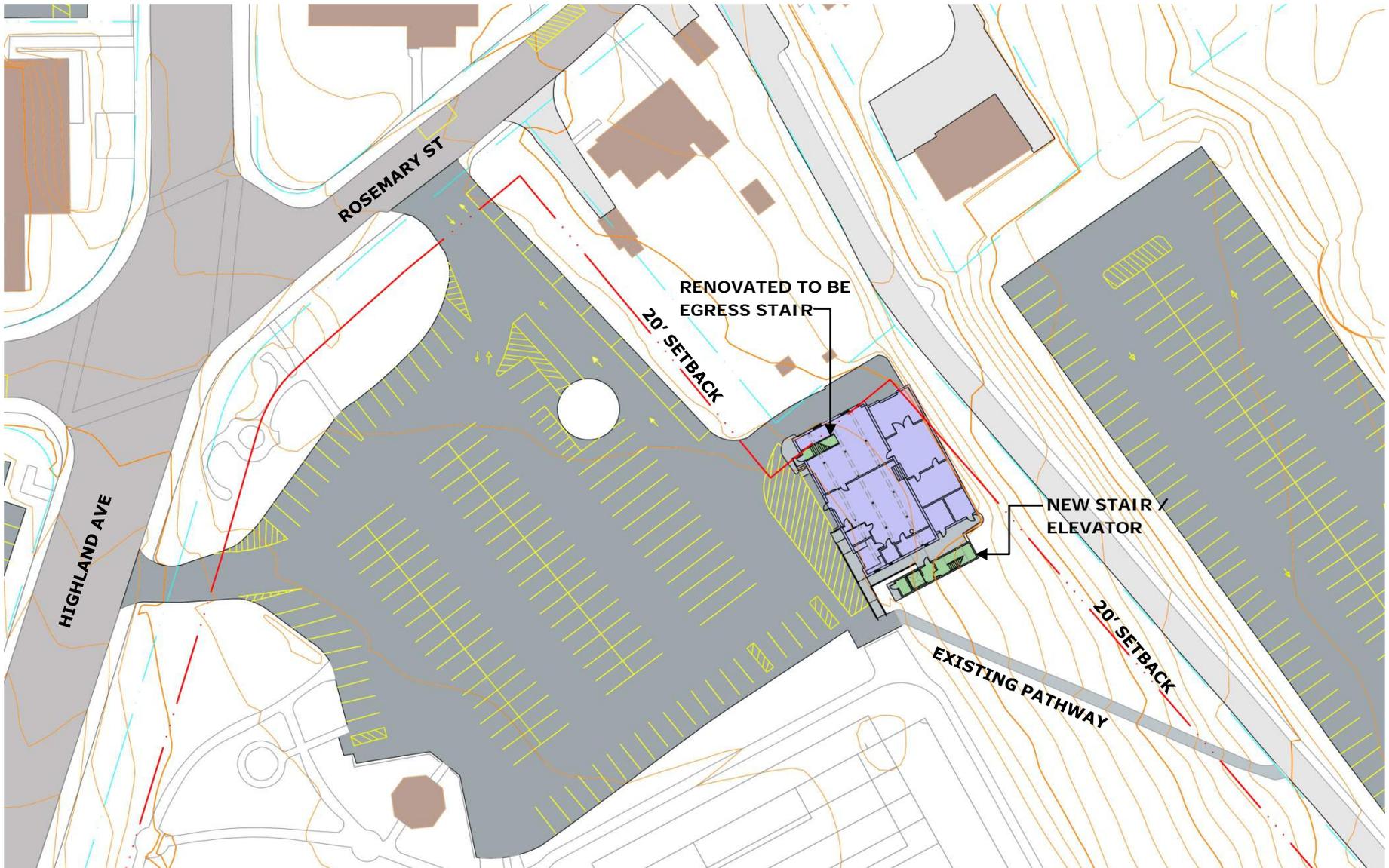
MEMORIAL PARK BUILDING



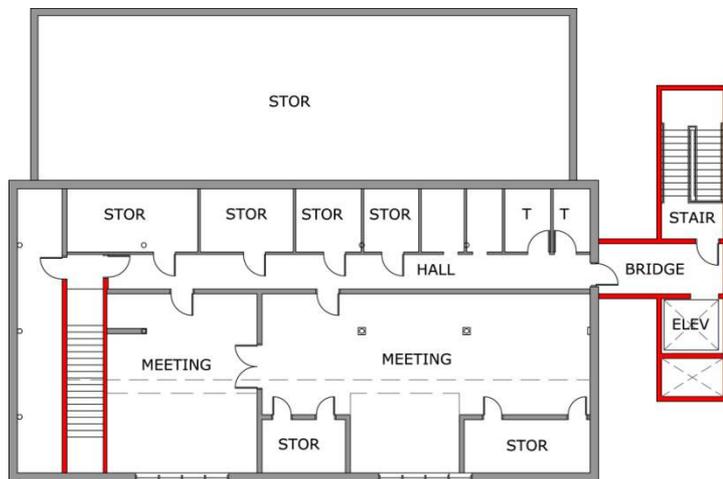
MEMORIAL PARK BUILDING: PRELIMINARY PROPOSED PROGRAM ON 3 LEVELS

Memorial Park	GSF	Total GSF at 25%
Entry, Restrooms, Janitor	376	
Concession	220	
Home + Visitor Team Rooms	1,126	
Garage Bay	1,500	
Public Toilets	380	
Building Storage	1,200	
Subtotal	4,802	6,240
Large + Small Meeting Rooms	1,380	
Trustees Office	144	
Other Sports Offices	300	
Toilets + Janitors	271	
Subtotal	2,095	2,722
Teen Center: 2 Large Meeting Rooms + Office	2,144	
Toilets + Janitors	332	
Subtotal	2,476	3,218
Total Building without Buildign Support		12,180
Building Support at 25%		3,045
Grand Total		15,225

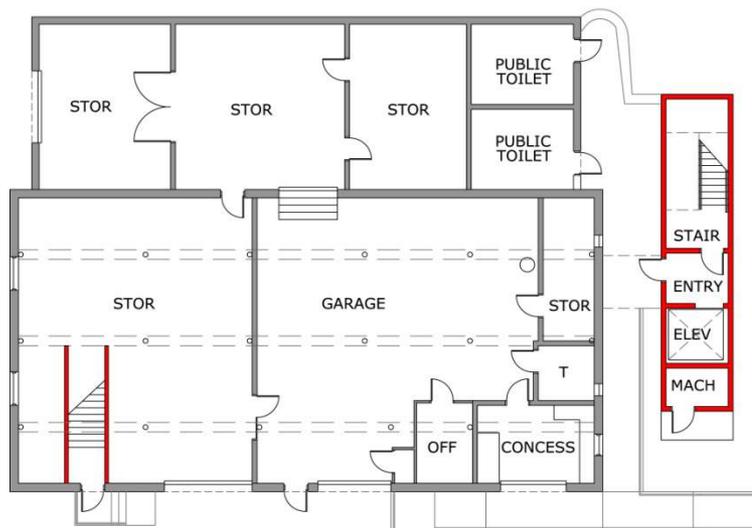
MEMORIAL PARK BUILDING: RENOVATION OPTION



MEMORIAL PARK BUILDING: RENOVATION OPTION

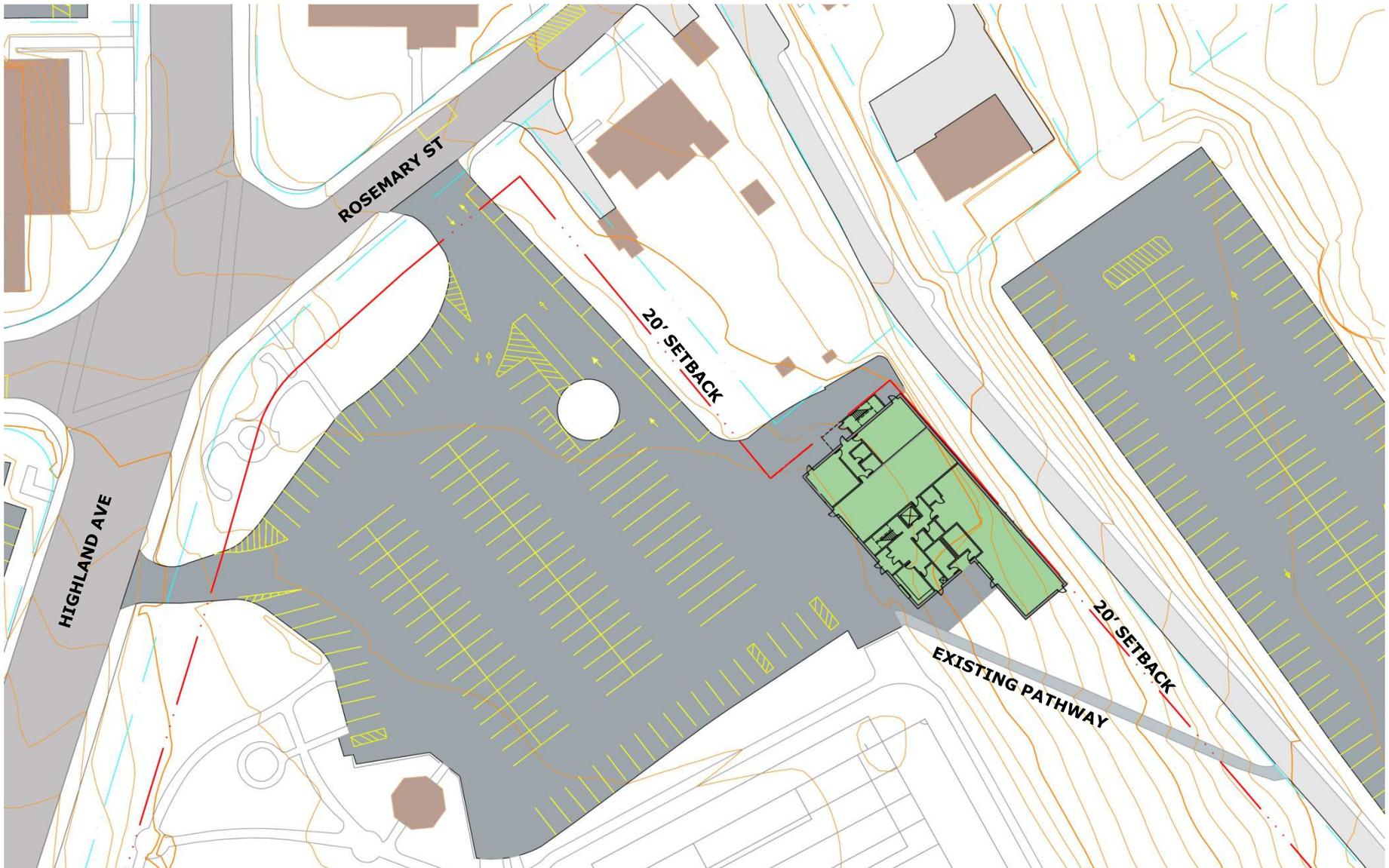


SECOND FLOOR

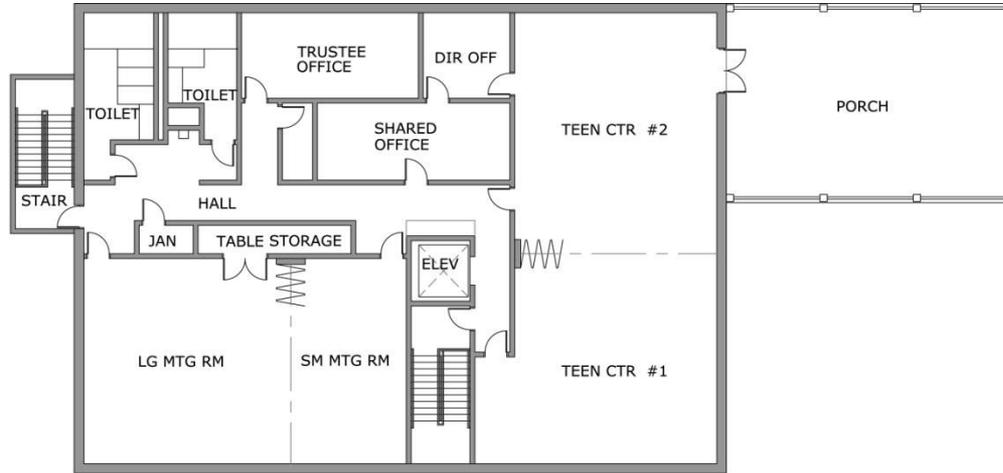


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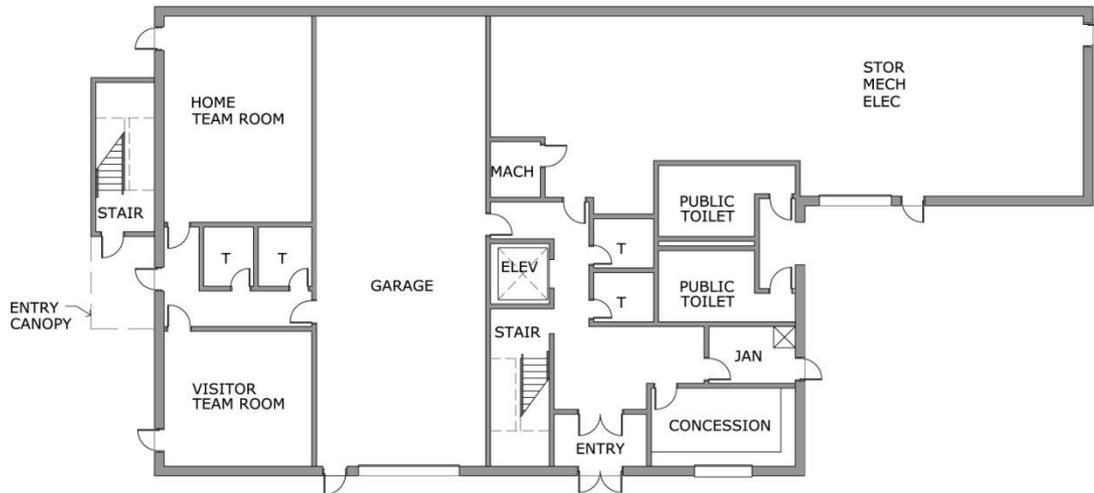
MEMORIAL PARK BUILDING: NEW BUILDING OPTION



MEMORIAL PARK BUILDING: NEW BUILDING OPTION



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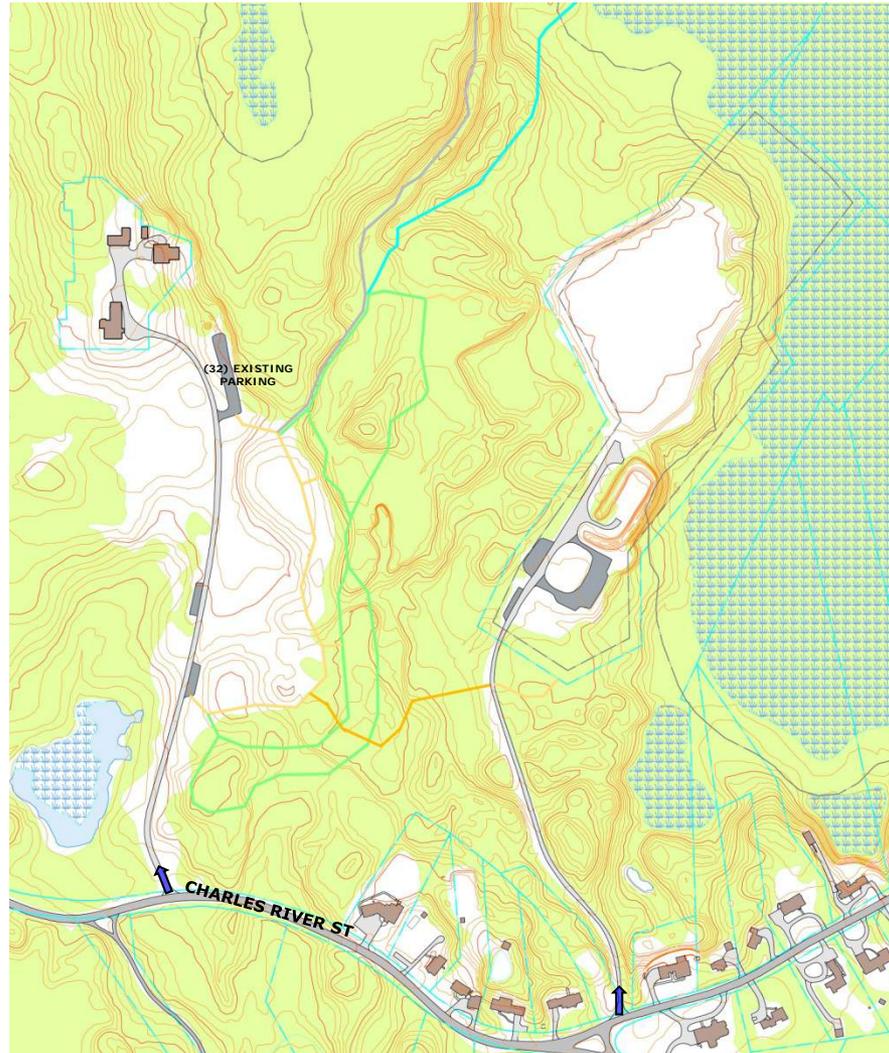


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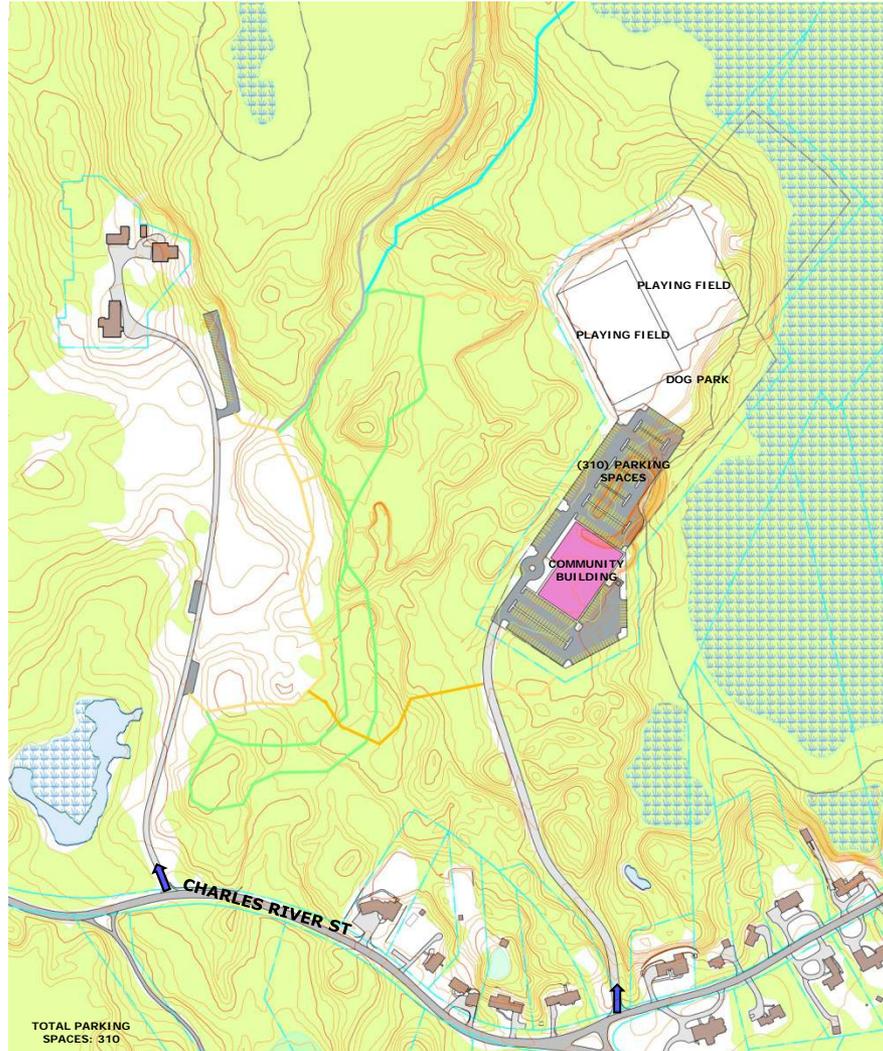
OVERVIEW OF MEETING FOR COMMUNITY BUILDING

- Visited Ridge Hill and Nike Sites
- Discussed Program Needs
 - Approximate program of 60,000 SF including indoor pool, gymnasium, teen center, exercise rooms, community room, child watch, locker rooms and support spaces
 - 2 soccer size fields
 - Parking for approximately 300 vehicles
- Reviewed possible options
 - Program all on one site
 - Program split between sites

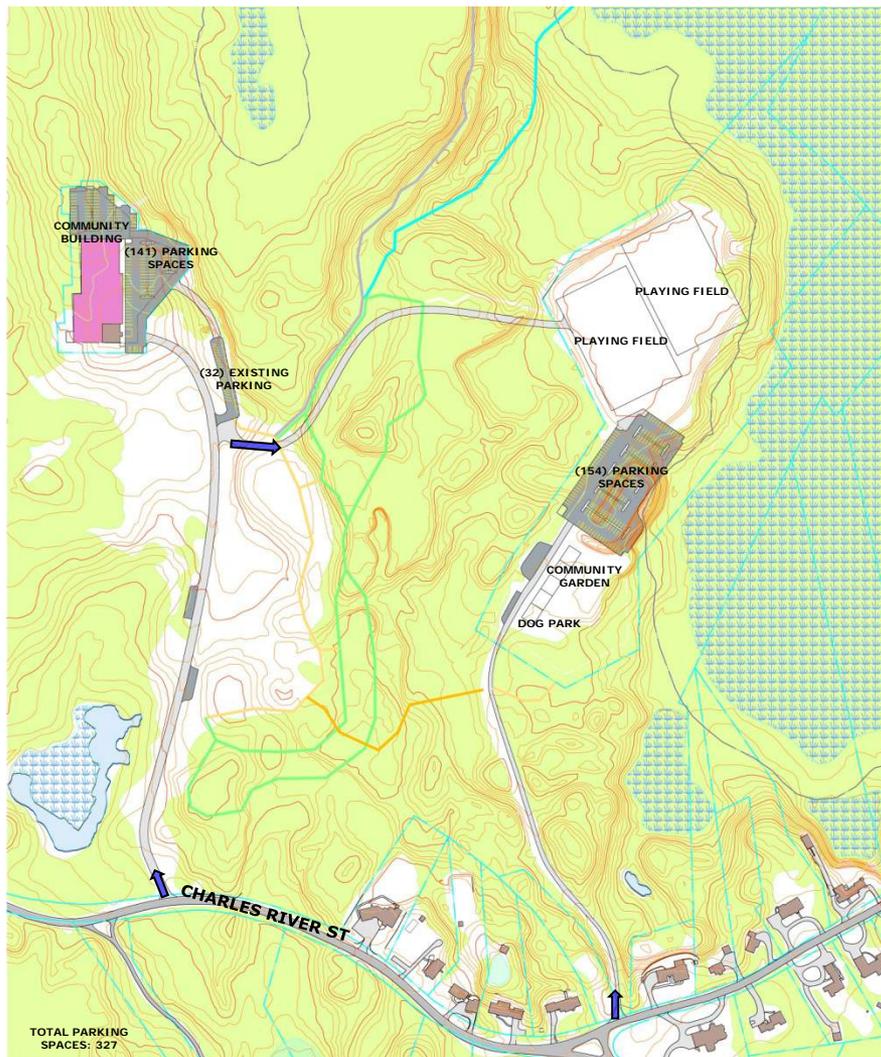
EXISTING CONDITIONS AT NIKE AND RIDGE HILL



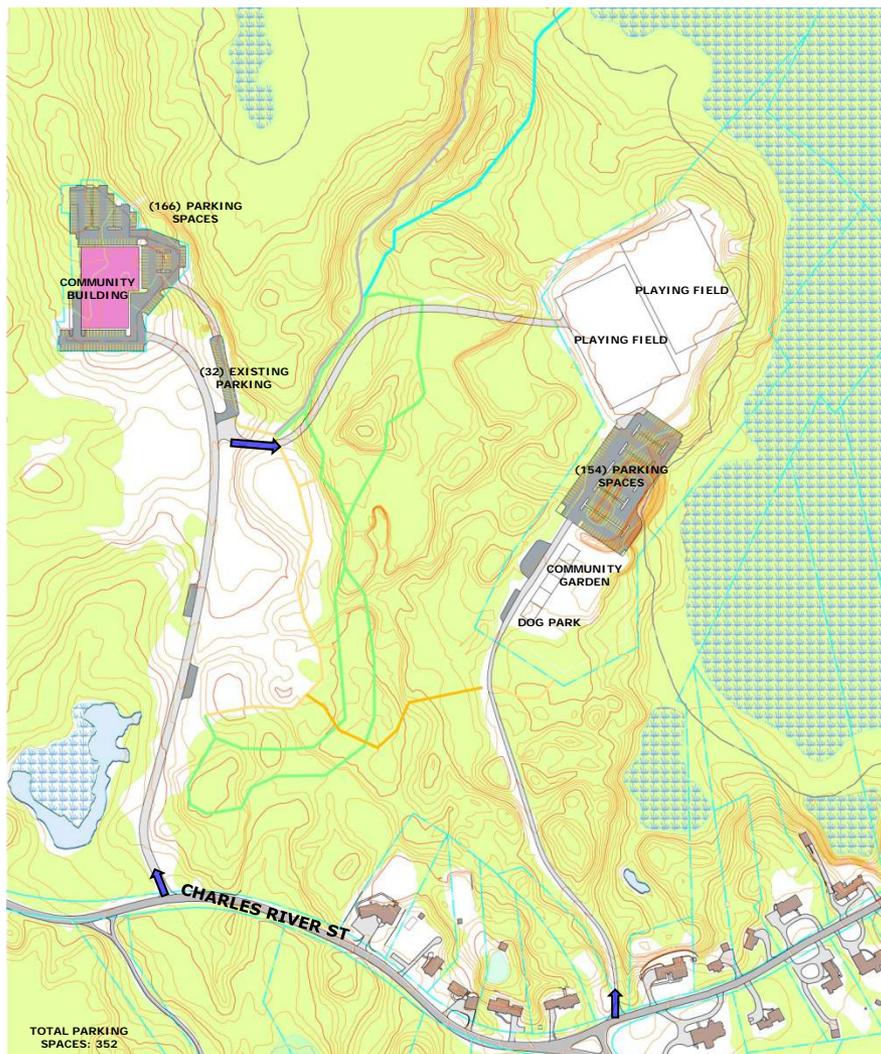
COMMUNITY BUILDING: OPTION 1 – Full Program at Nike Site



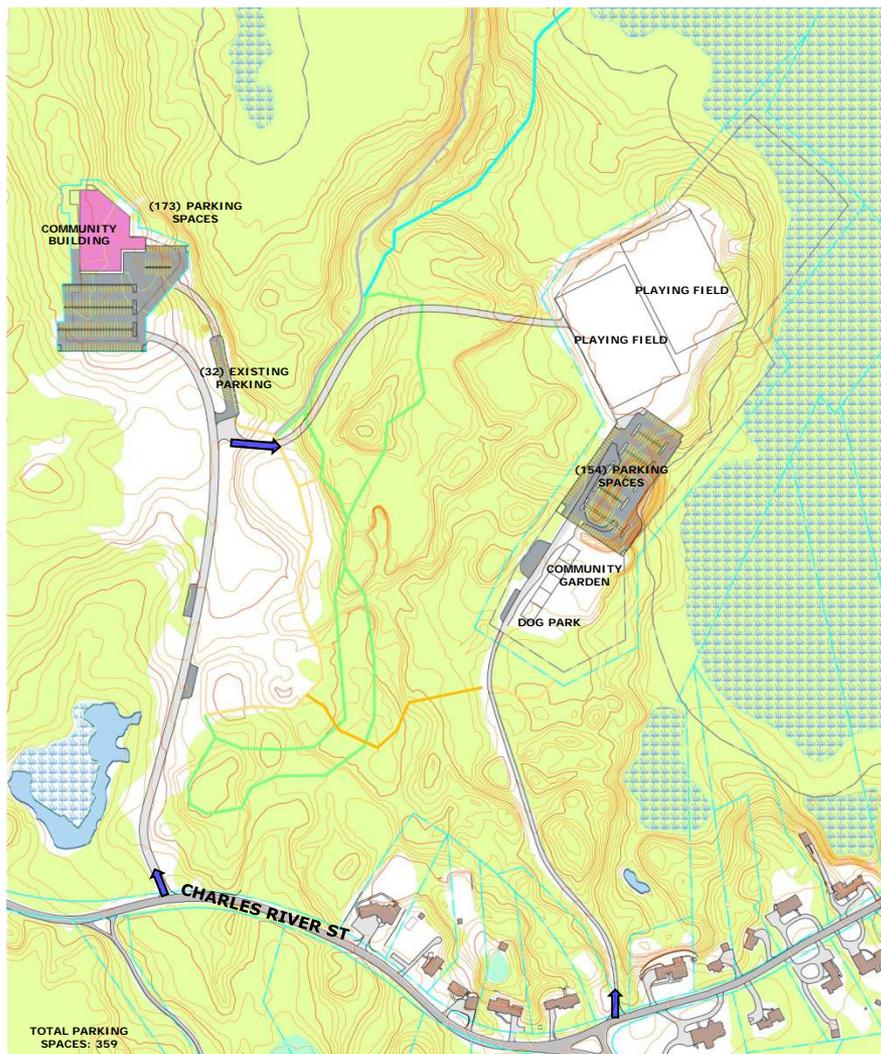
COMMUNITY BUILDING: OPTION 2A – Mansion/Facilities + Parking at Ridge Hill; Upper Connector; 2 Fields, Remaining Parking, Dog Park + Community Gardens at Nike



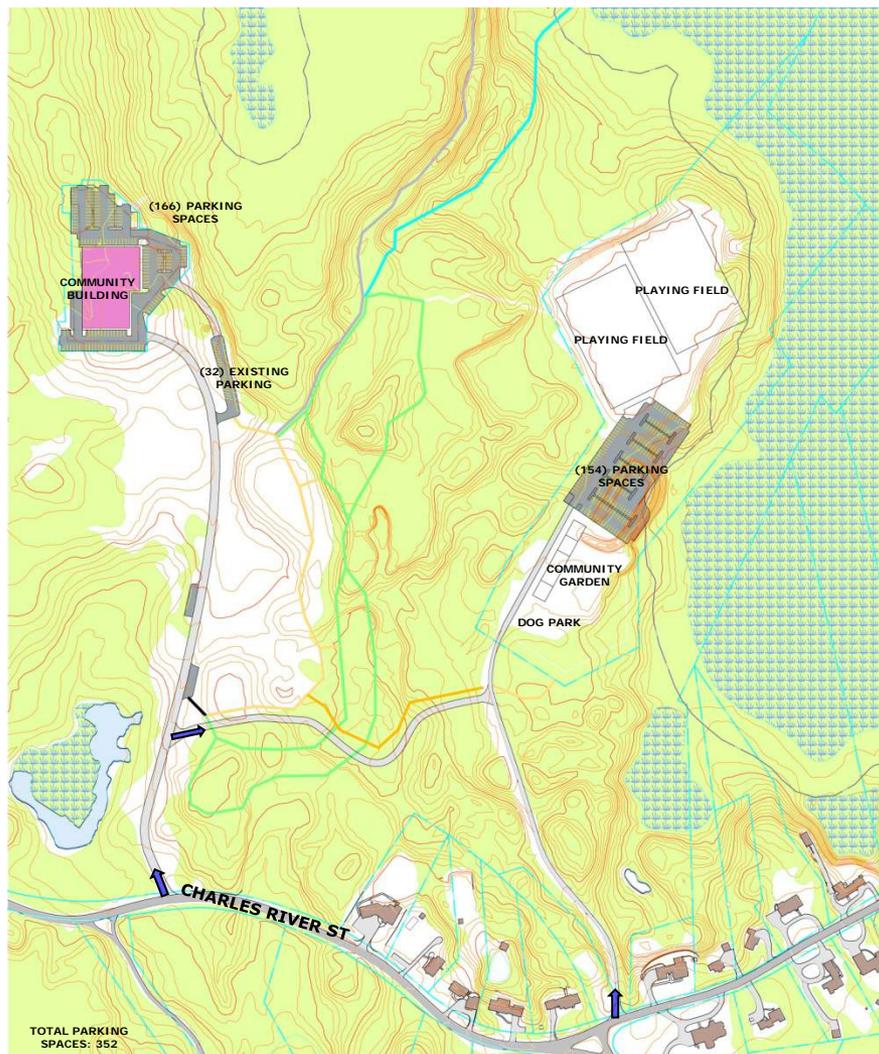
COMMUNITY BUILDING: OPTION 2B – New Facilities and Partial Parking at Ridge Hill; Upper Connector; 2 Fields, Remaining Parking, Dog Park + Community Gardens at Nike



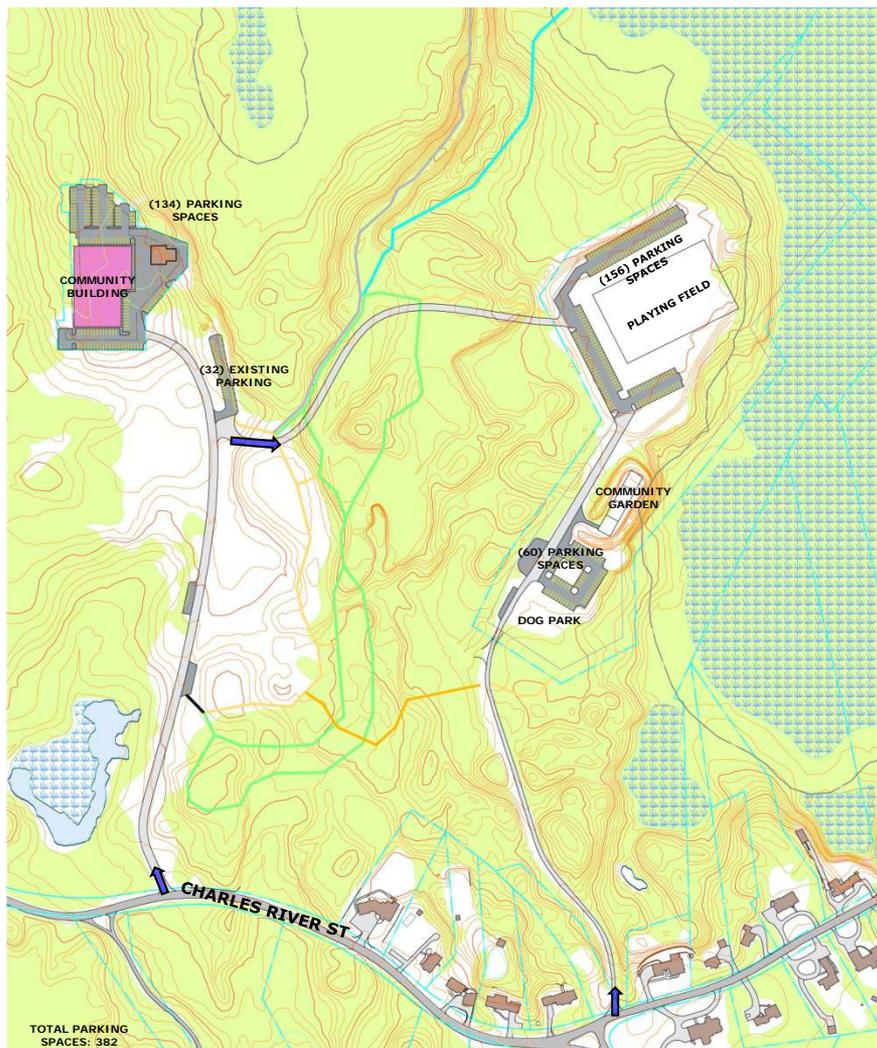
COMMUNITY BUILDING: OPTION 2C – New Facilities and Partial Parking at Ridge Hill; Upper Connector; 2 Fields, Remaining Parking, Dog Park + Community Garden at Nike



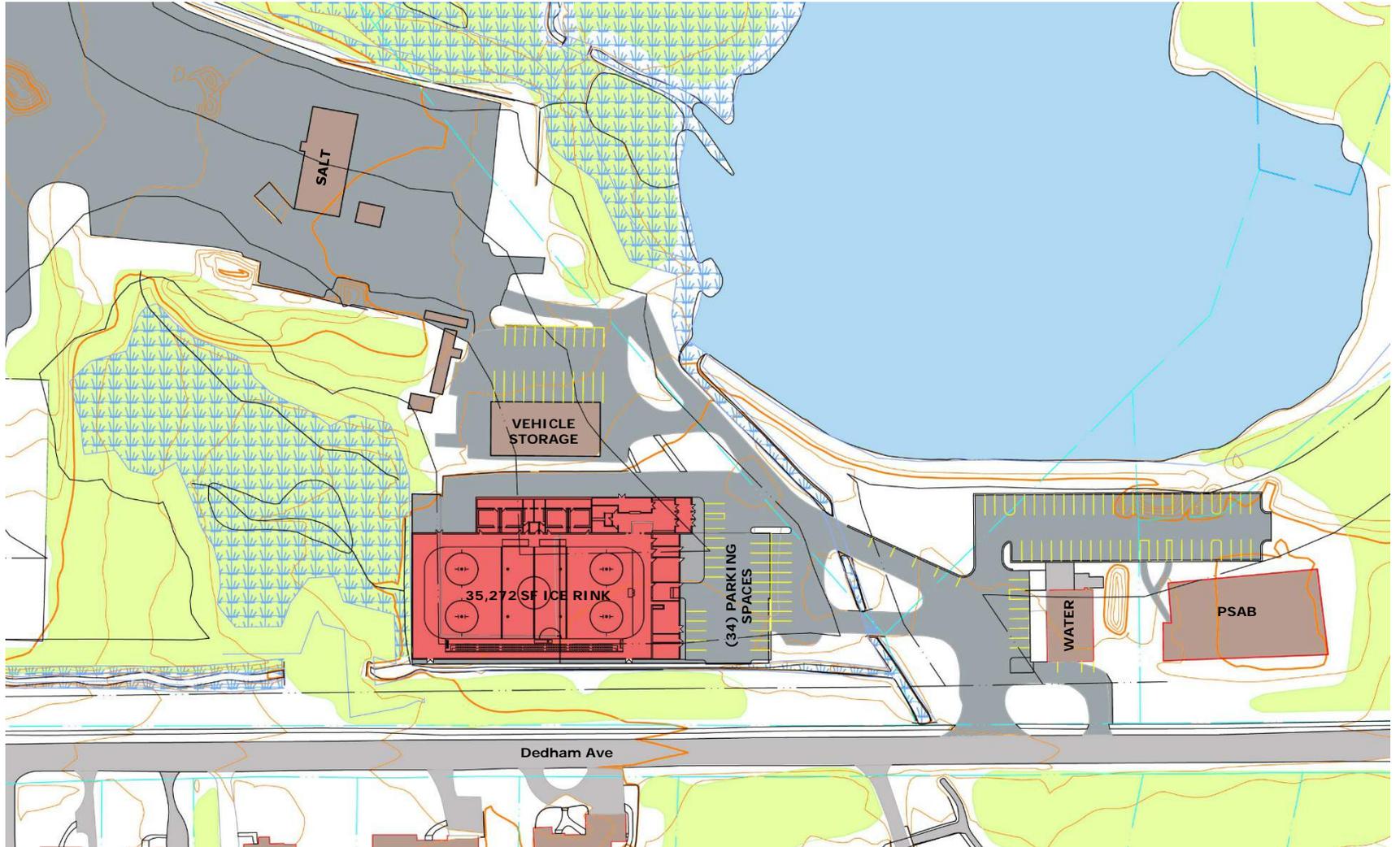
COMMUNITY BUILDING: OPTION 3A – New Facilities and Partial Parking at Ridge Hill; Lower Connector Road; 2 Fields, Remaining Parking, Dog Park + Community Gardens at Nike



COMMUNITY BUILDING: OPTION 3B – Barn/New Facilities and Partial Parking at Ridge Hill; Upper Connector Road, 1 Field, Remaining Parking, Dog Park + Community Garden at Nike



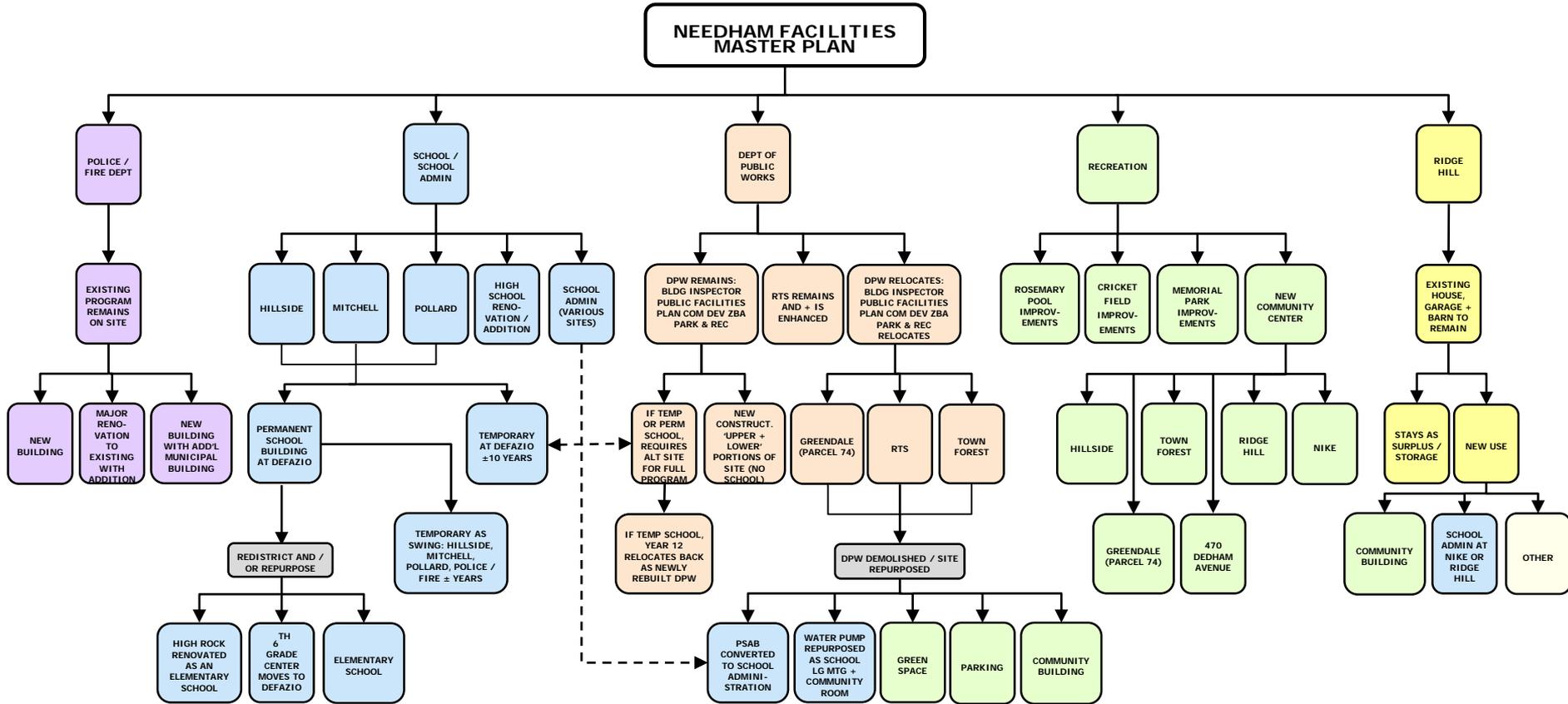
ICE RINK AT 470 DEDHAM AVE



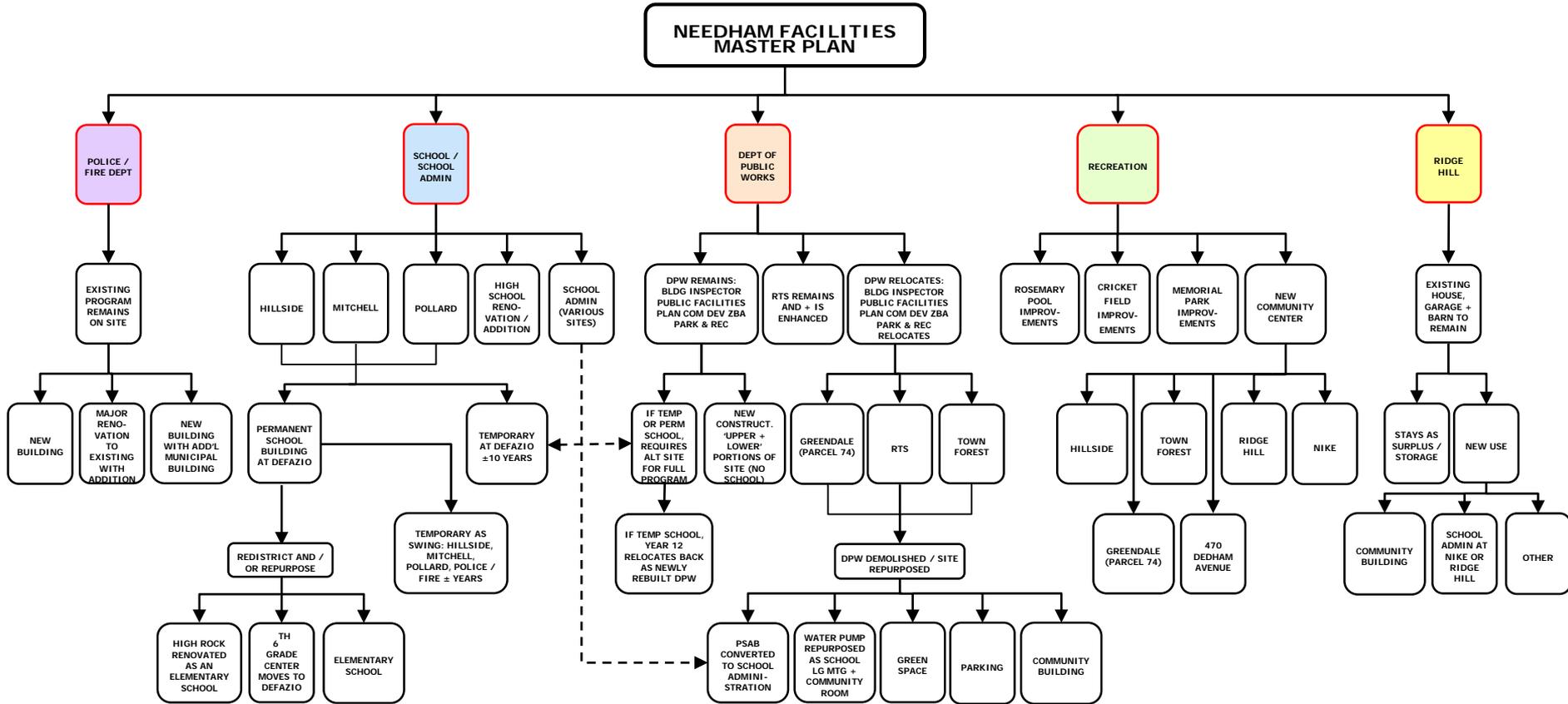
DECISION TREE

- 5 Major Categories:
 - Fire/Police Department
 - Schools/School Administration
 - Department of Public Works
 - Parks + Recreation
 - Ridge Hill
- Issues to consider
 - Which potential projects can stand independently
 - Which potential projects require major reconfiguration of site and operations
 - Which projects require temporary swing space
 - Which projects must be completed at the same time
- Decision Trees A + B

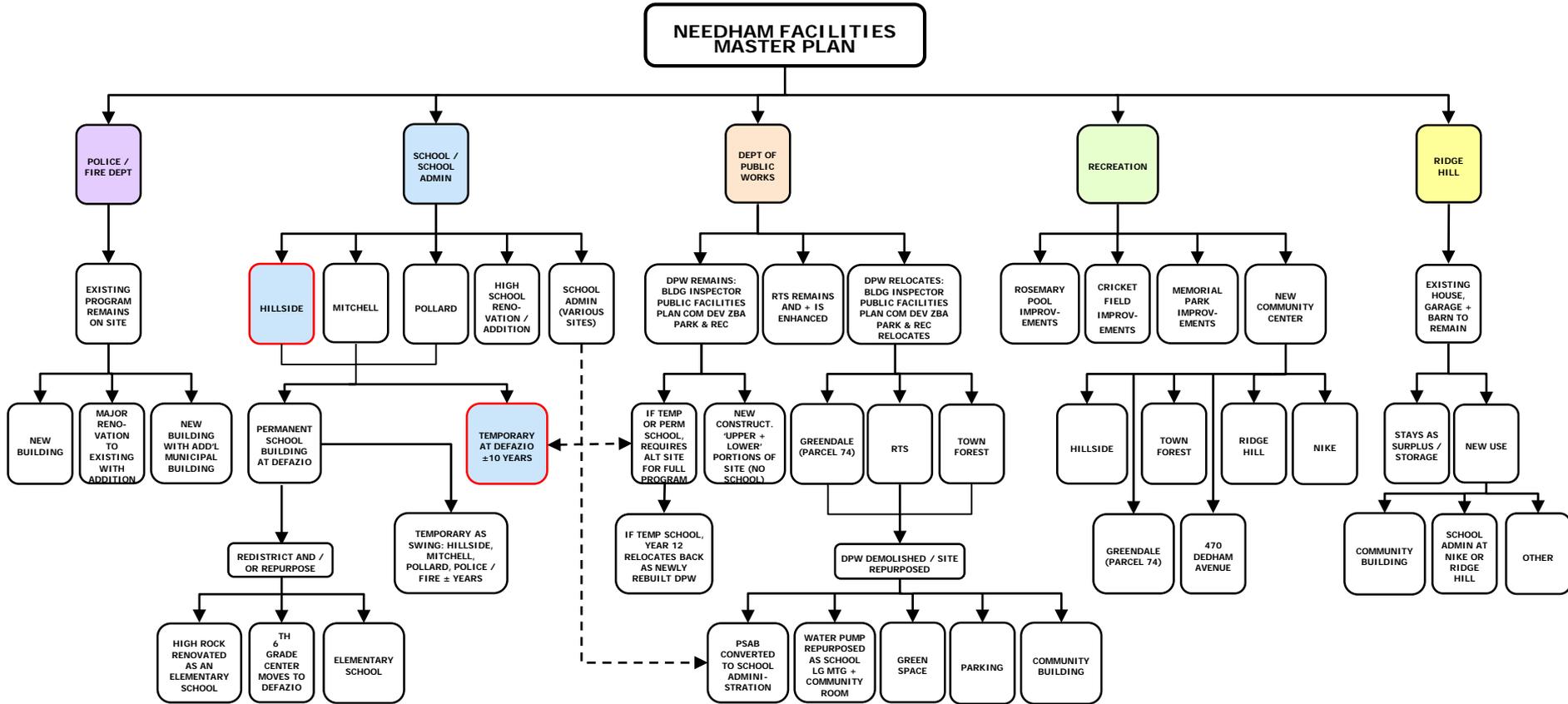
DECISION TREE - A



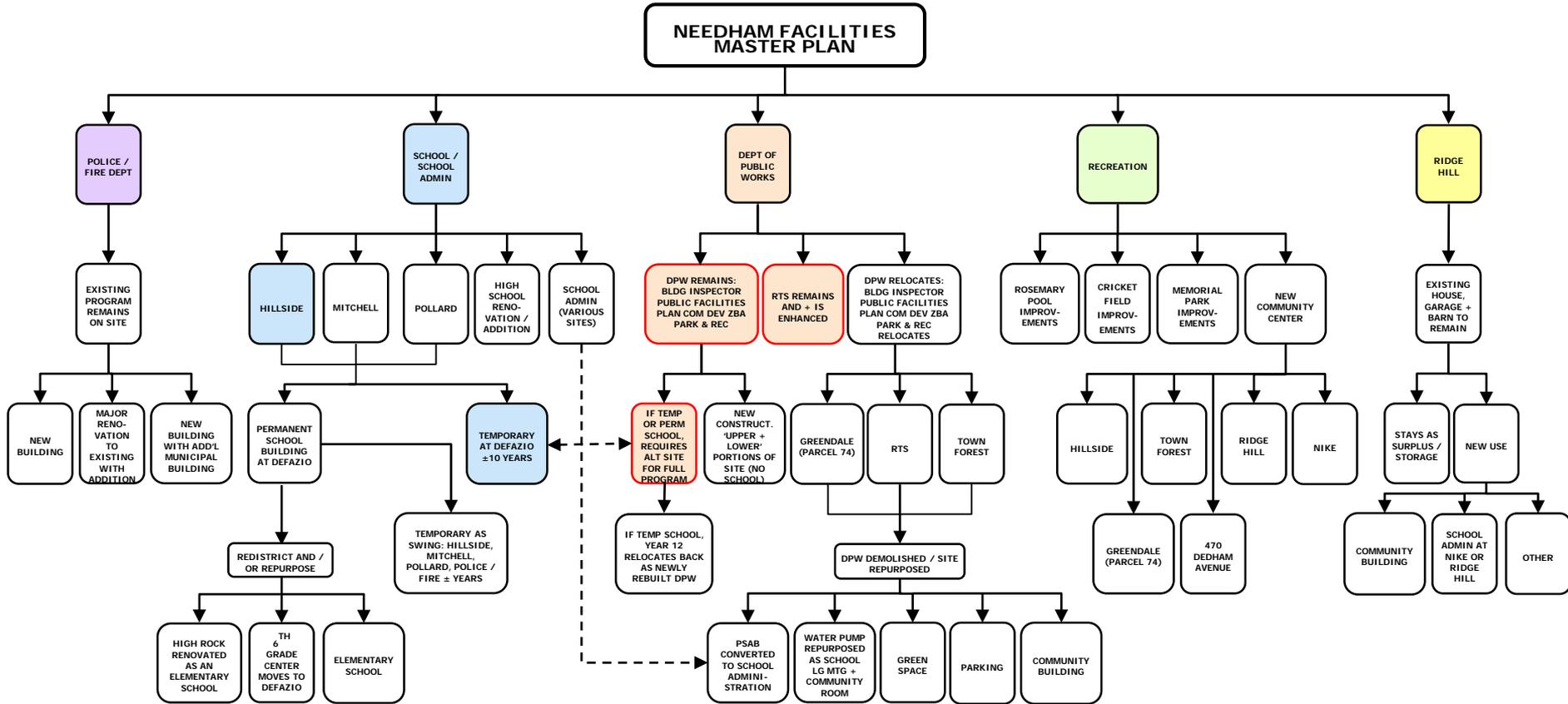
DECISION TREE - A



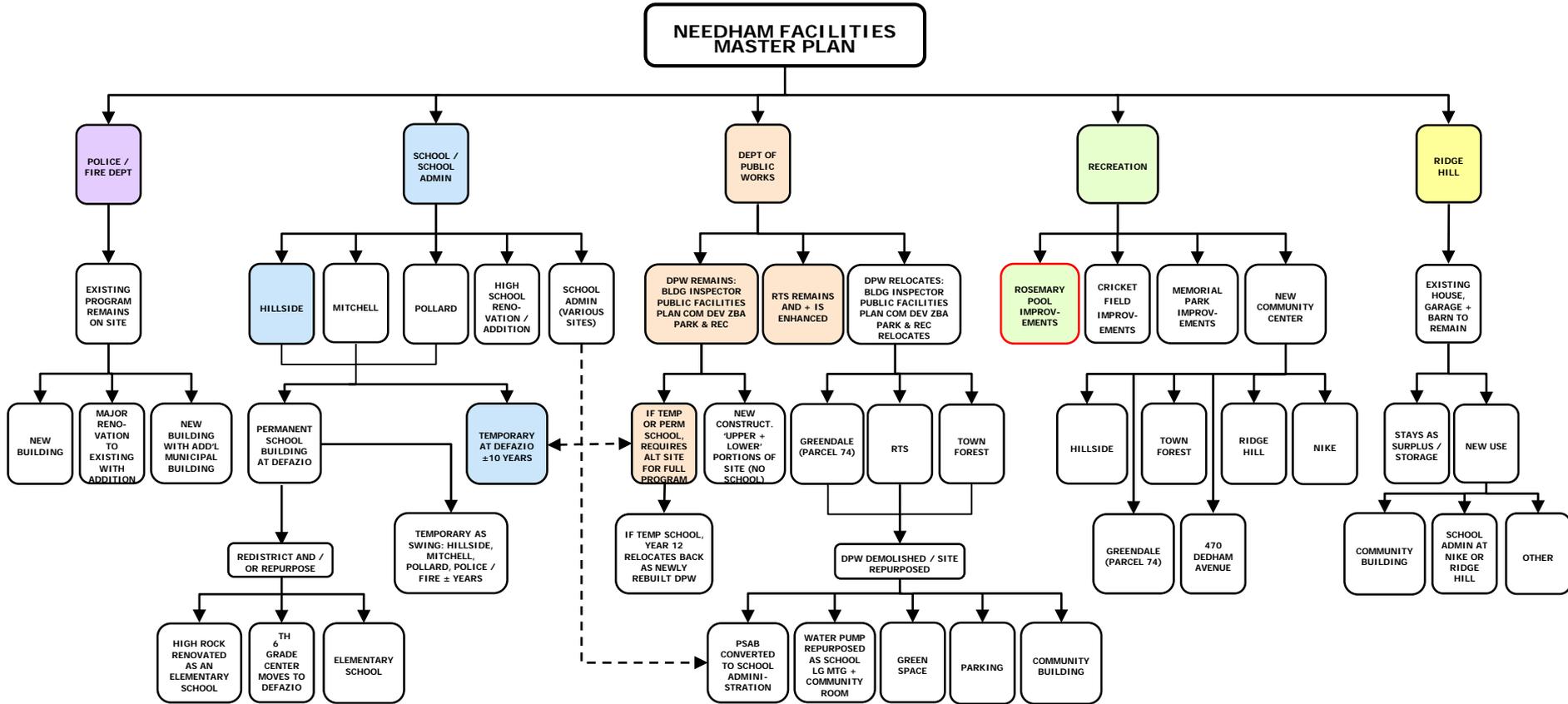
DECISION TREE - A



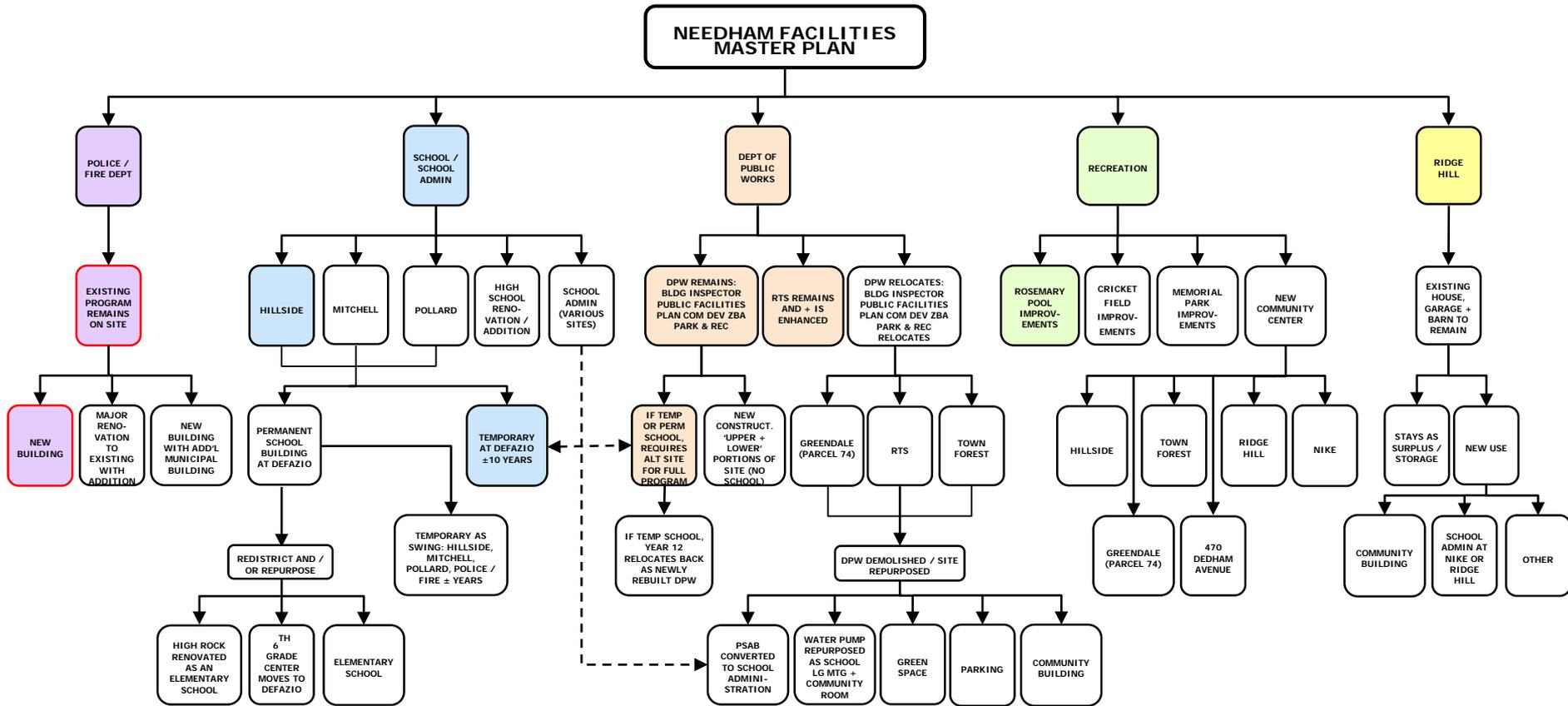
DECISION TREE - A



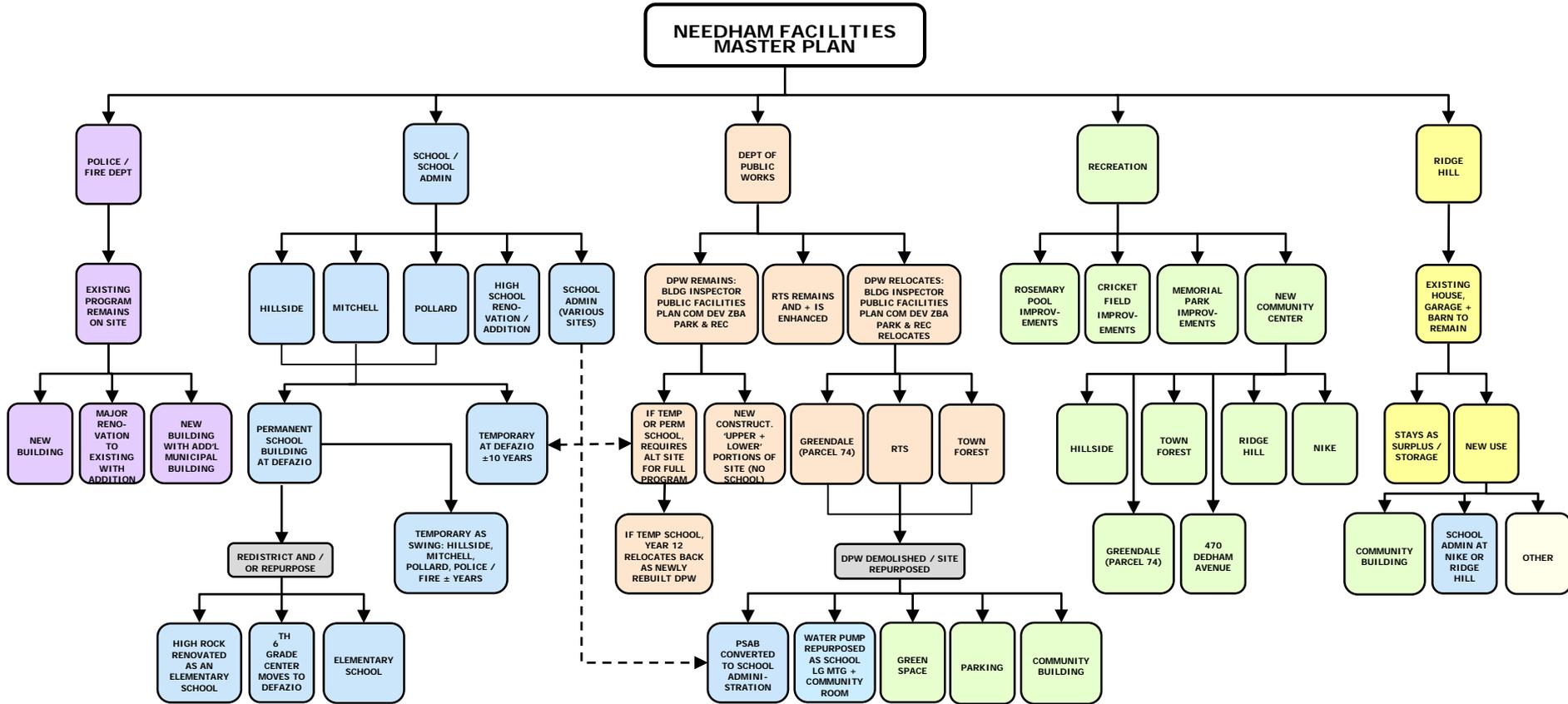
DECISION TREE - A



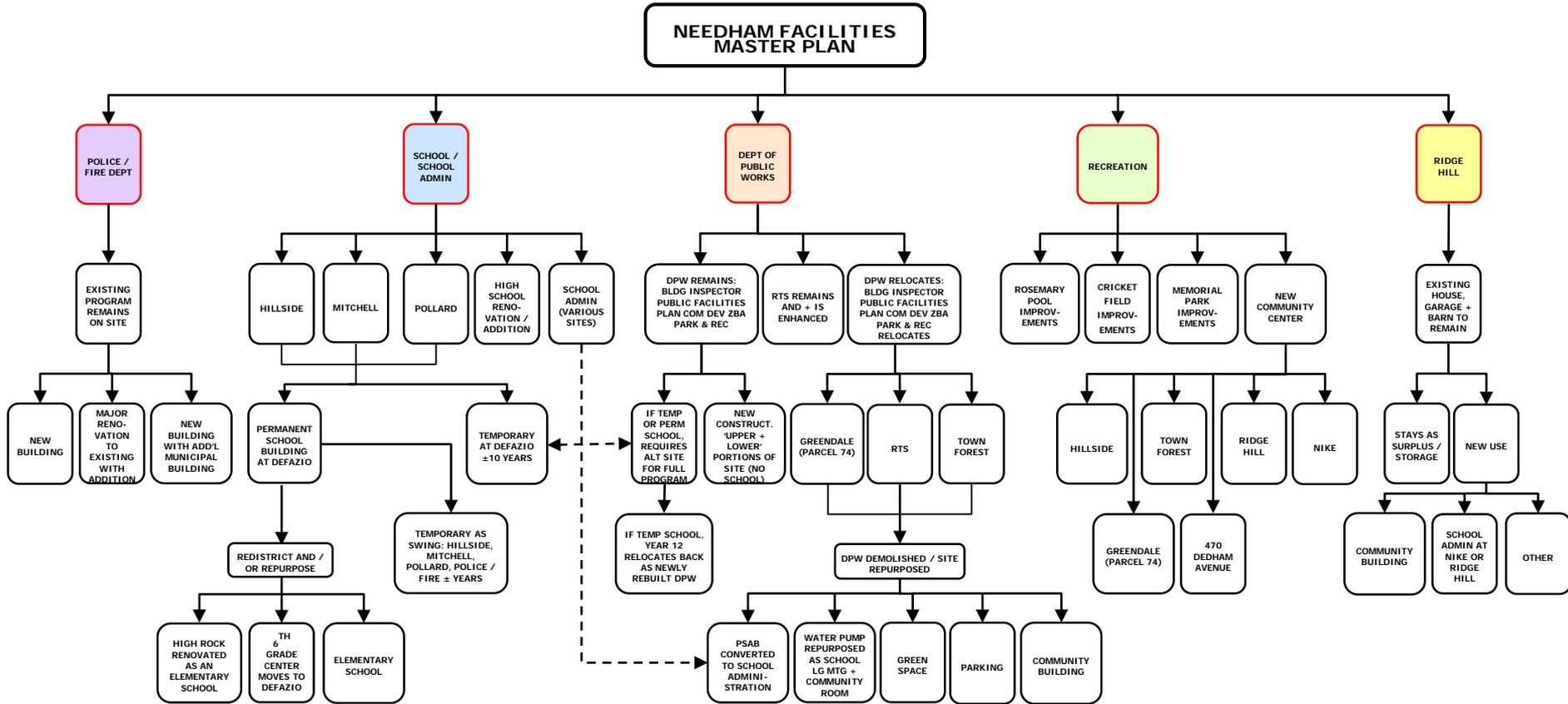
DECISION TREE - A



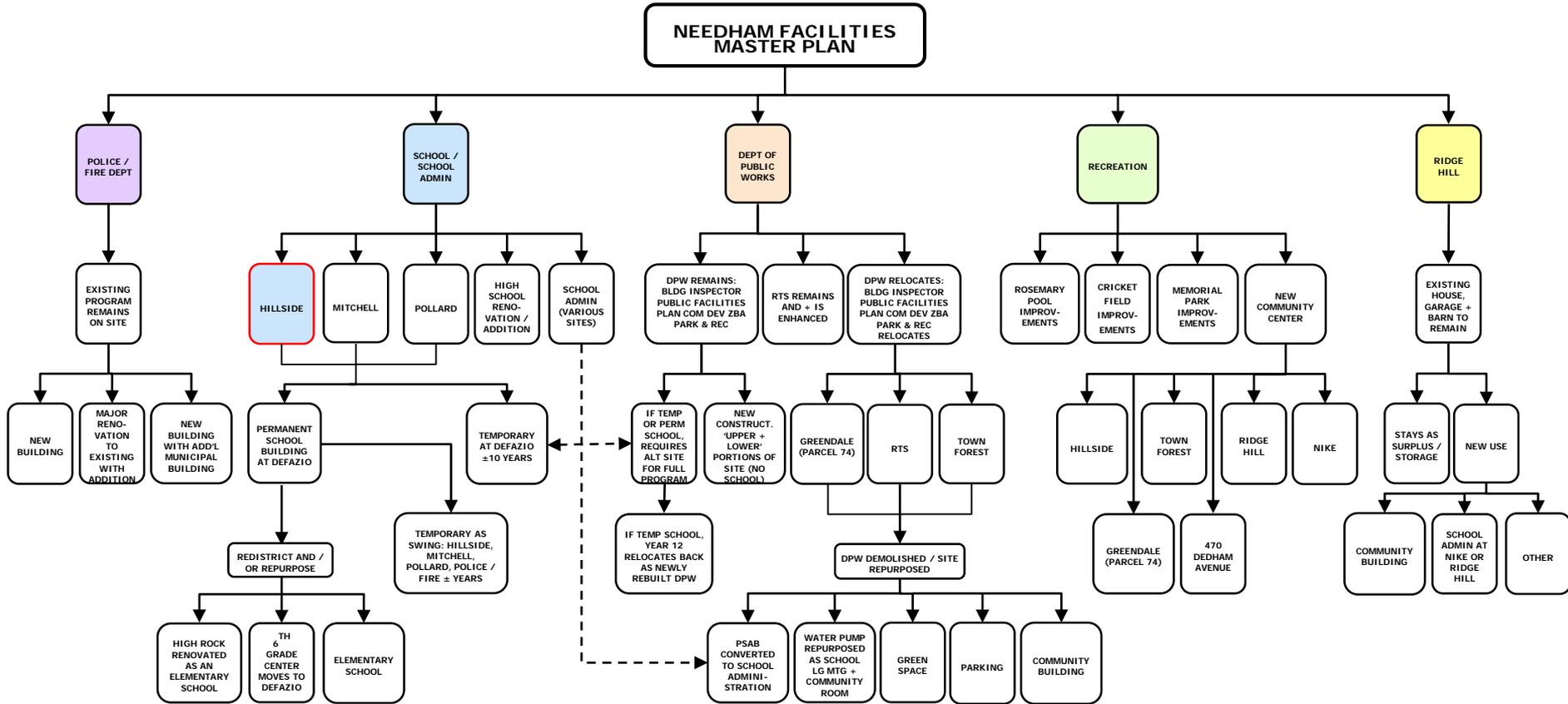
DECISION TREE - B



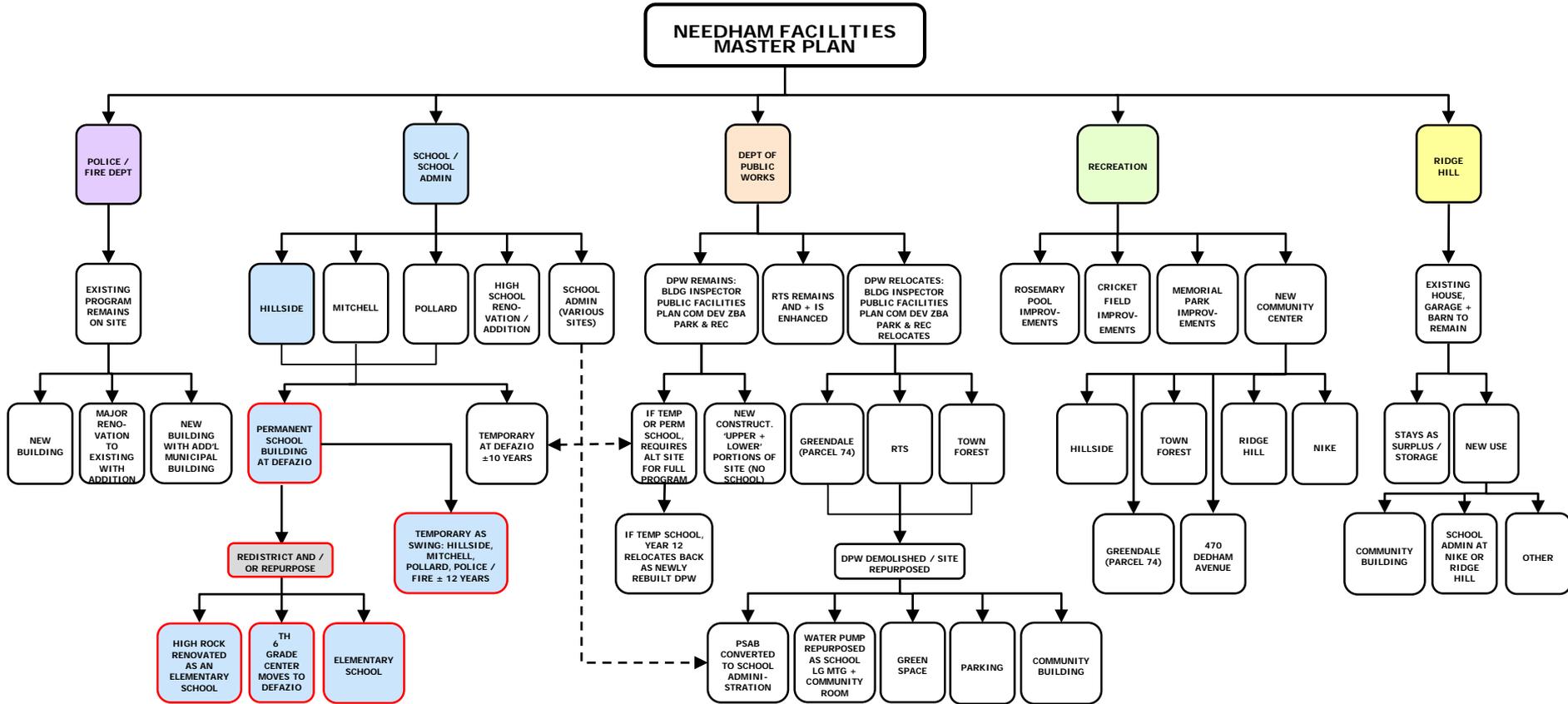
DECISION TREE - B



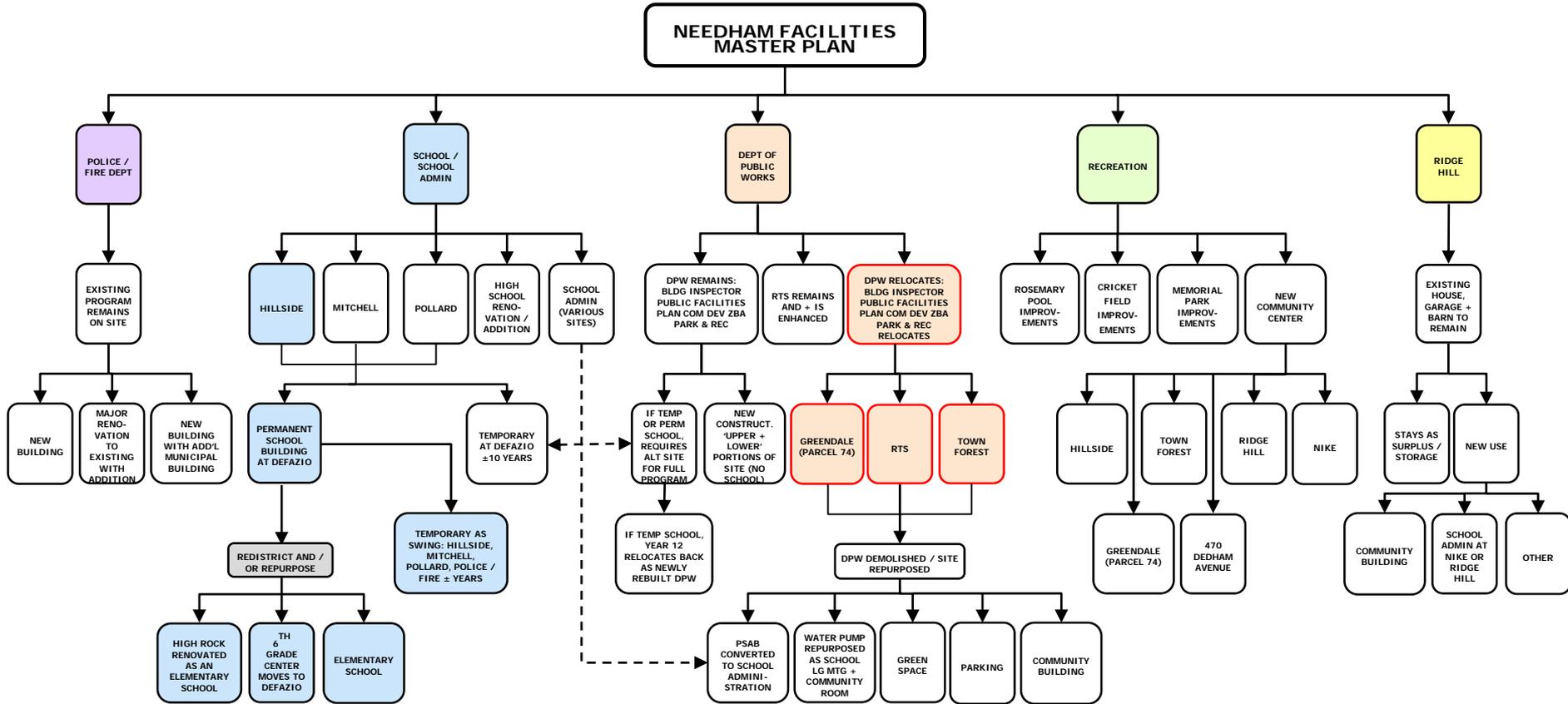
DECISION TREE - B



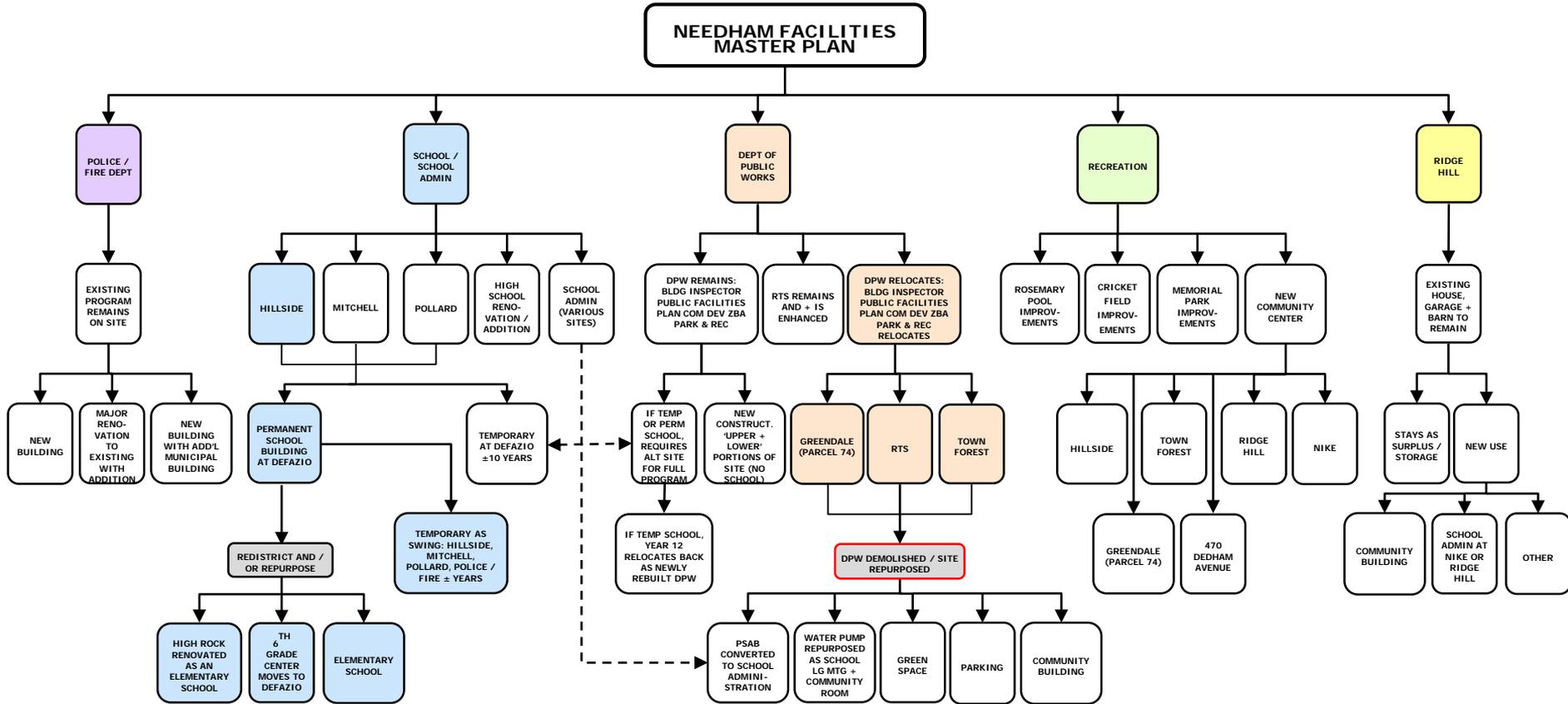
DECISION TREE - B



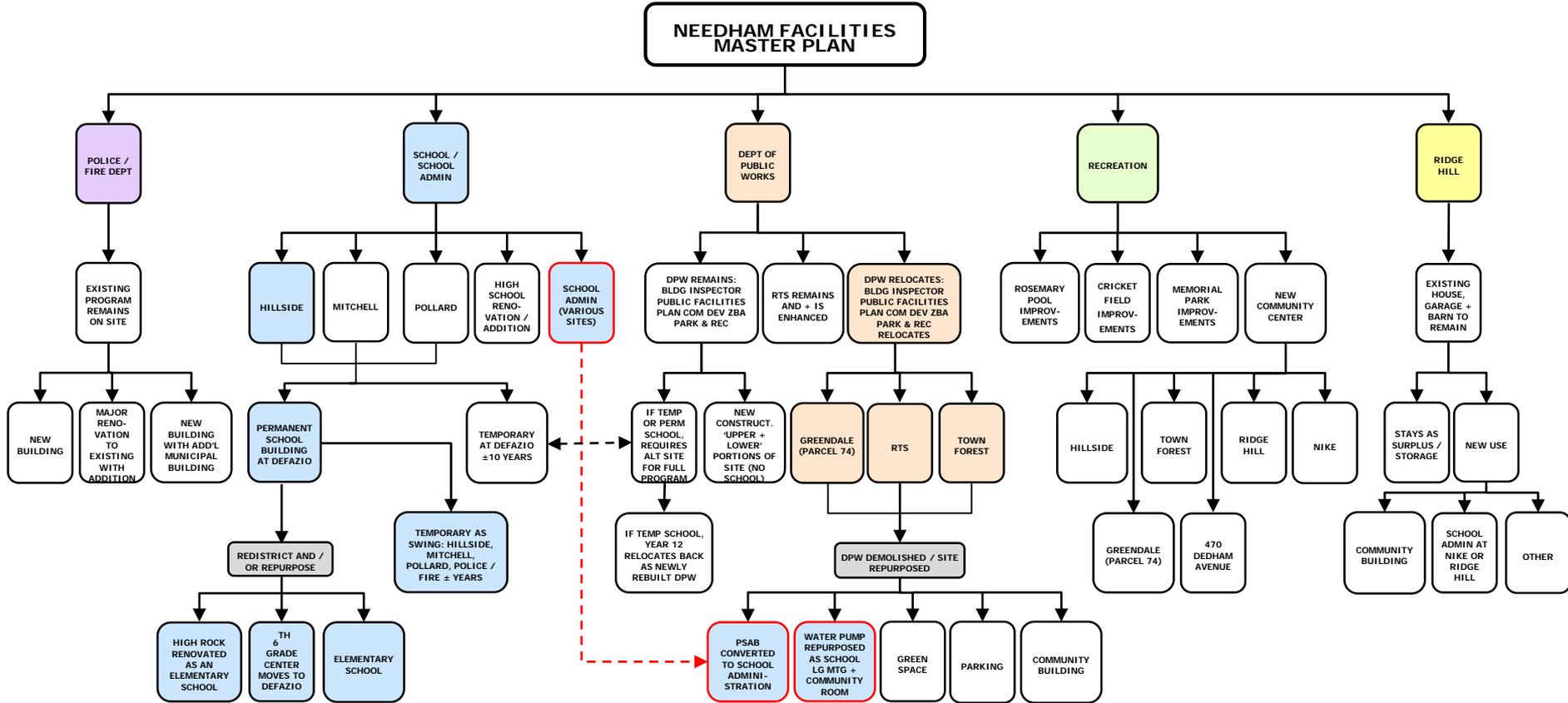
DECISION TREE - B



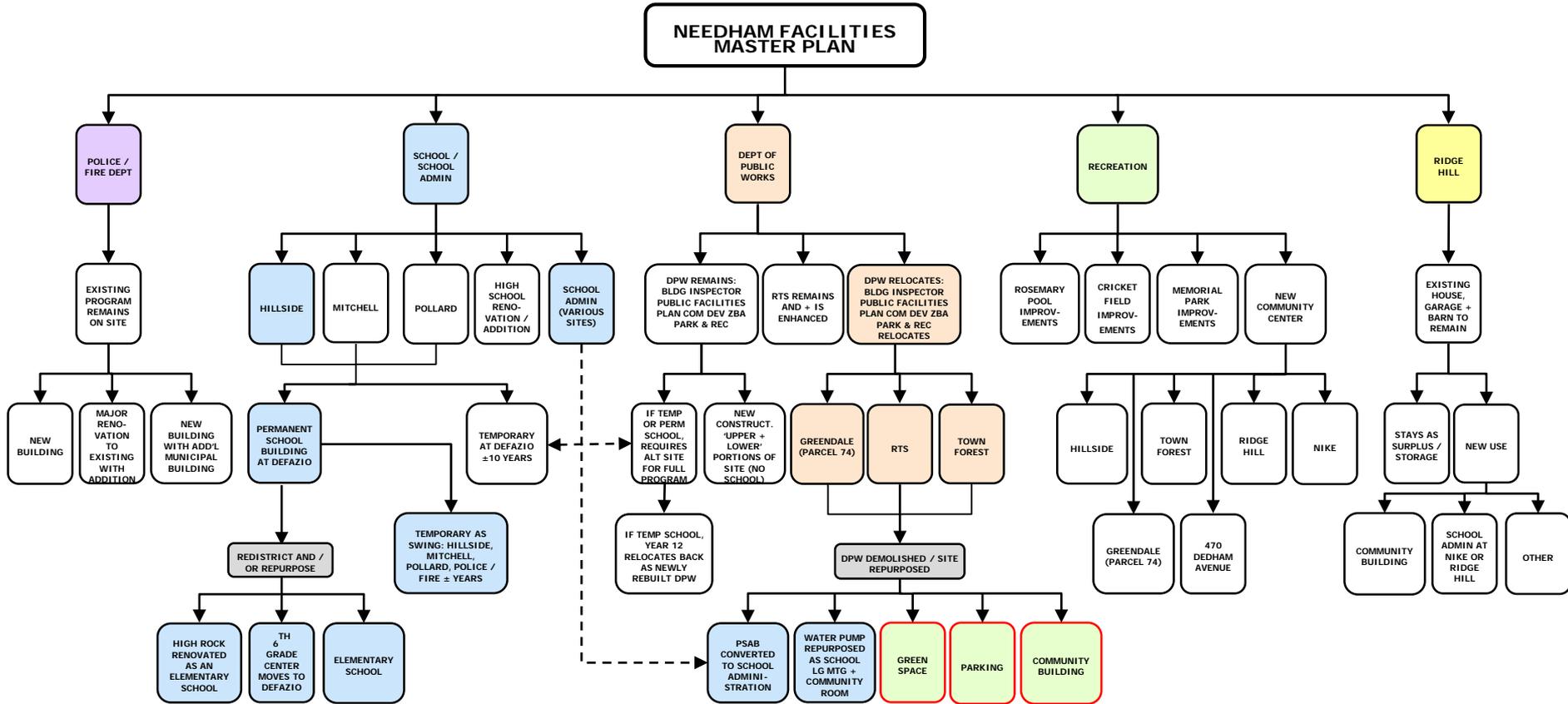
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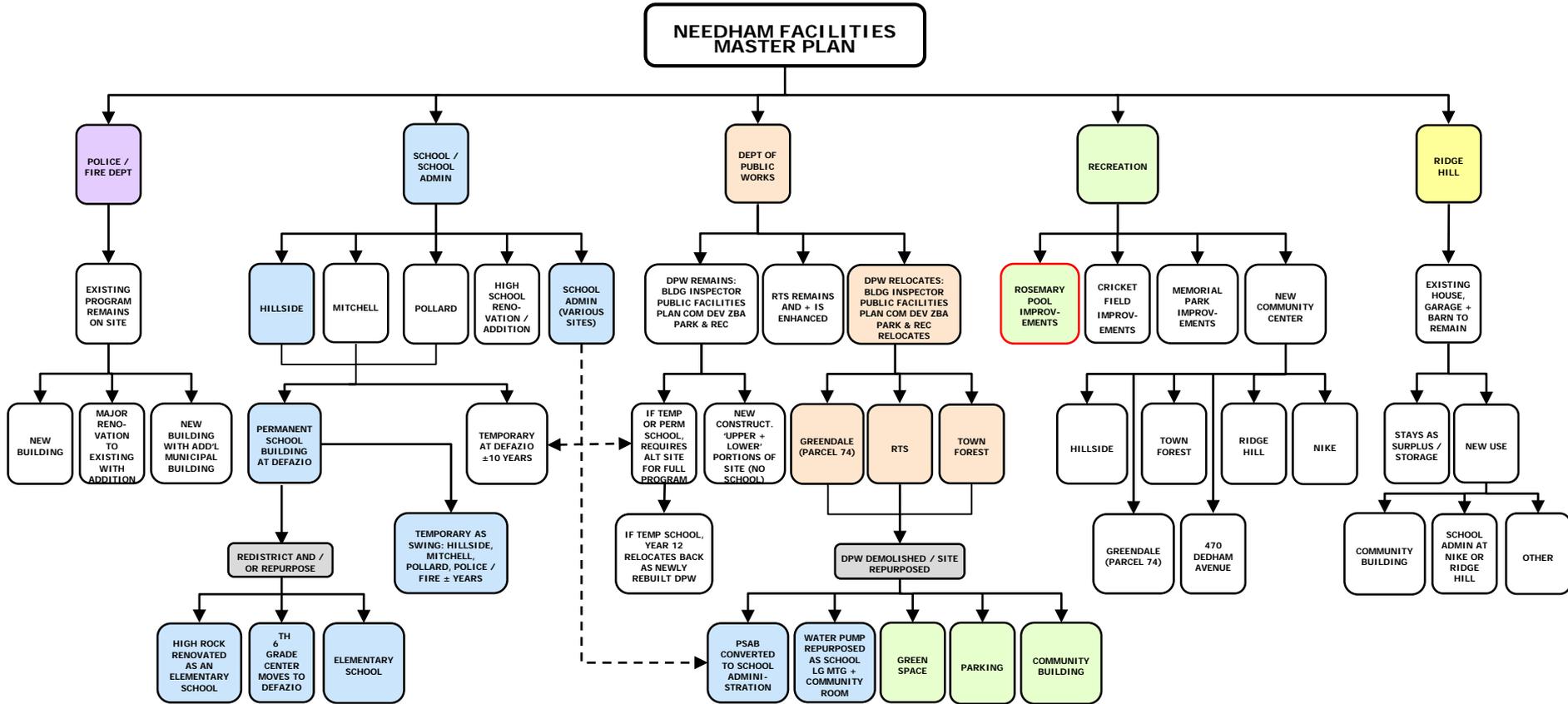
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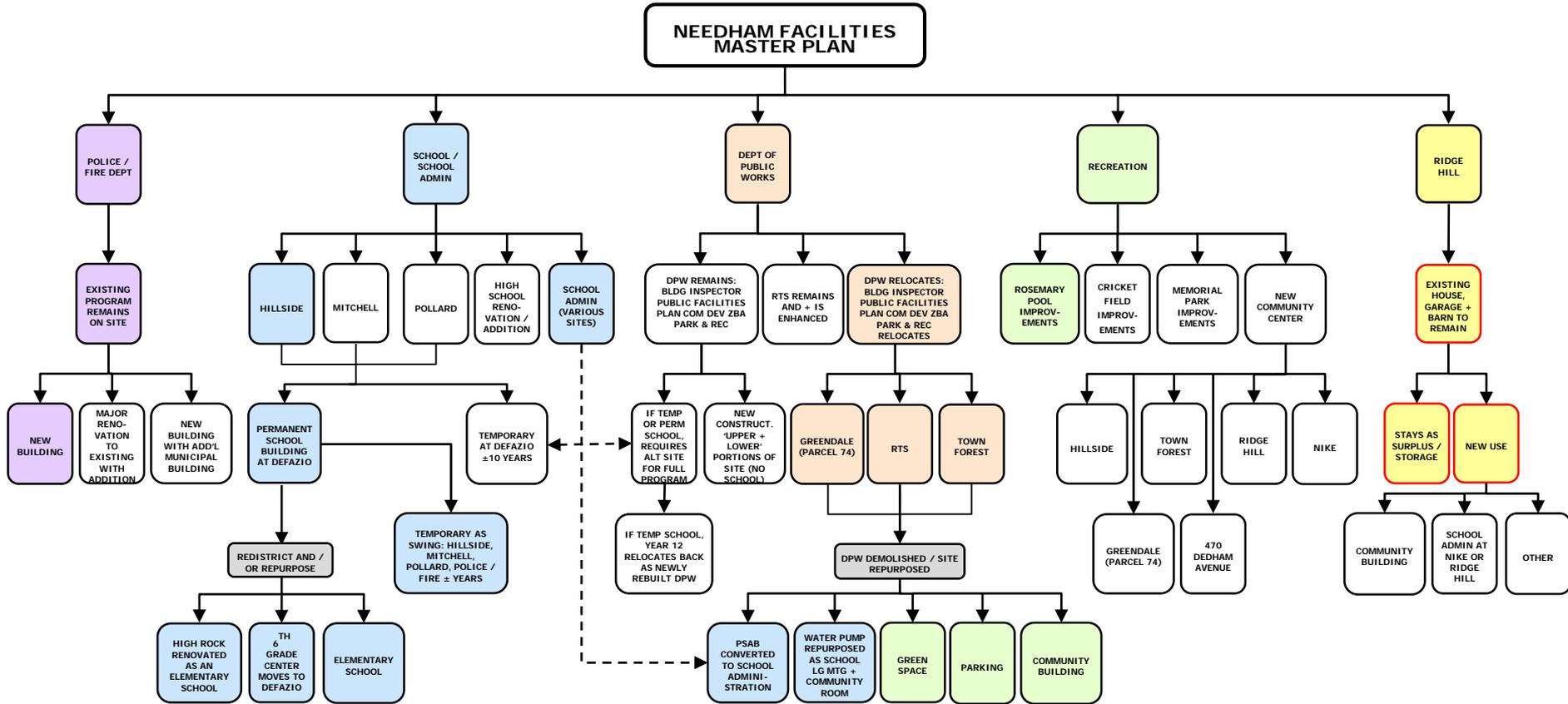
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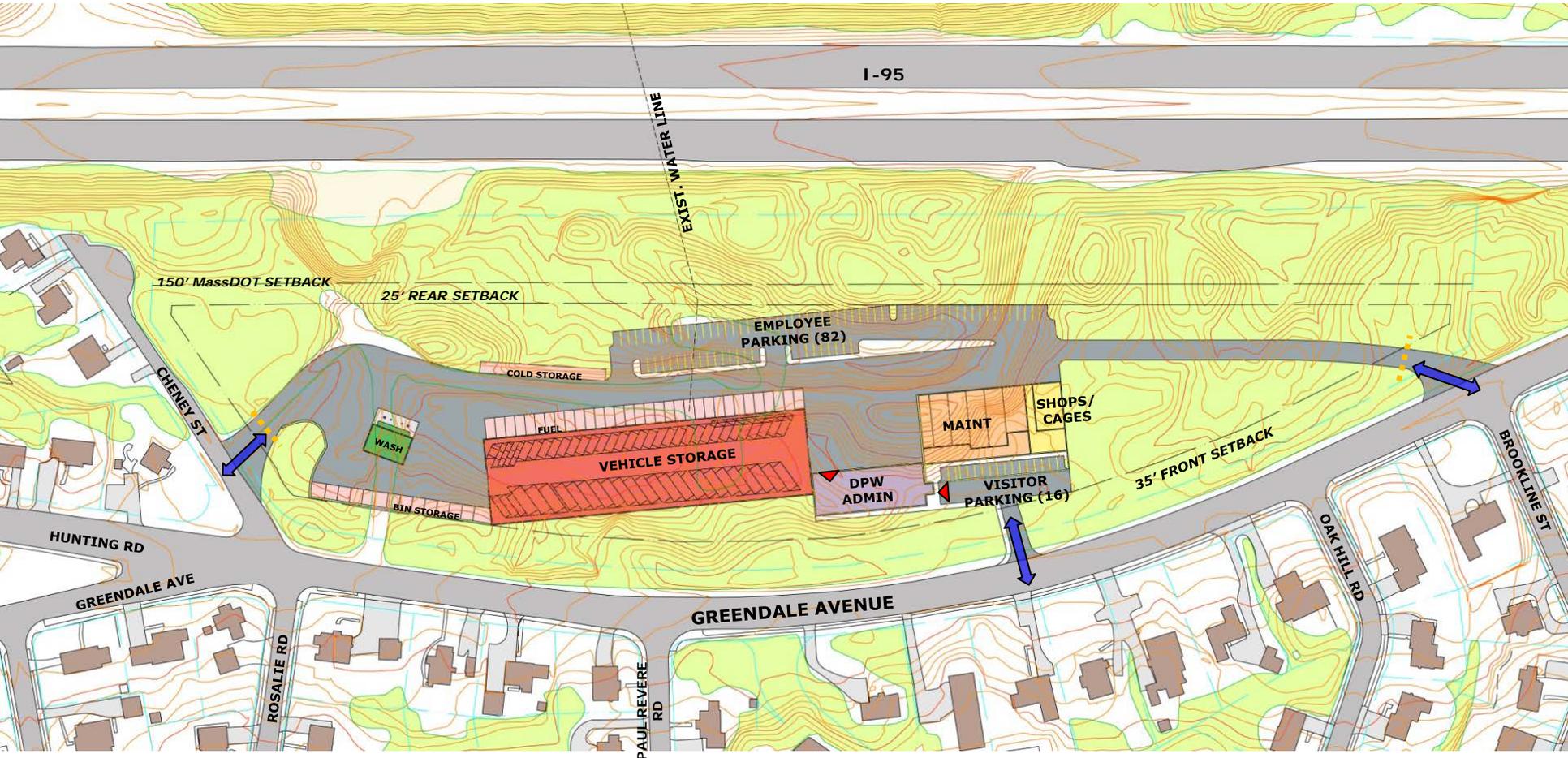
TIMELINE

Master Plan Timeline DRAFT													
Projected Occupancy	Design to Occupancy Timeframe	Cost	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025 plus
Police/Fire Station	X	2.75 yrs: 1.25 yrs design, 1.5 yrs construct											
Fire Station #2	X	2 yrs: 1 yr design, 1 yr construct											
Permanent School at DeFazio	Fall 2020	5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct											
High Rock Renovation into Elementary School	Winter 2021	1.5 yrs: 11 mo design, 7 mo construct											
Hillside as Swing Space for Town Projects	Winter 2021	Plus 10 years of Design thru possible Occupancy											
Mitchell Rebuild	X	5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct											
Pollard Addition + Renovations	X	5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct											
High School Renovation and Modularity	X	1.5 yrs: 11 mo design, 7 mo construct											
School Administration: Renovation or New	X	2.5 yrs: 1 yr design, 1.5 yr construct											
Temporary School at DeFazio	Fall 2018	Plus 10 years of Design thru possible Occupancy											
Hillside Rebuild/Temp Occupancy at DeFazio	Fall 2020	5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct											
Mitchell Rebuild/Temp Occupancy at DeFazio	X	5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct											
Pollard Addition + Renovations/Temp Occupancy at DeFazio	X	5 yrs: 2 yrs feasibility, 1 yr design, 2 yrs construct											
Other Swing Space Needs	X	X											
DPW Renovation at Dedham Ave.	X	2.5 yrs: 1 yr design, 1.5 yr construct											
DPW Relocates	Summer 2018 or 2020	3-5 yrs: 1.5 yrs design, 1.5 yrs construction											
RTS Renovations	X	2.5 yrs: 1 yr design, 1.5 yr construct											
Rosemary Pool	Spring 2019	3.5 yrs: 1.5 yr study, 1 yr design, 1 yr construct											
Cricket Field	X	X											
Memorial Park Building	X	2 yrs: 1 yr design, 1 yr construct											
Community Center	X	2 yrs: 1 yr design, 1 yr construct											
Ridge Hill	X	X											
Nike	X	X											

DEVELOPMENT OF PROBABLE COSTS

- **All sites/programs will be estimated on a Square Foot basis**
 - Buildings
 - Sites
 - Total Project Cost: Construction + 25% Soft Costs + 10% Project Contingency
- **Site-specific premium costs:**
 - Four-story Administration Building, brick exterior
 - Perimeter wrought iron fence at Administration Building
 - Existing water line relocation
 - Brick-face retaining wall at Vehicle Storage

DEPARTMENT OF PUBLIC WORKS: PARCEL 74 OPTION



DEVELOPMENT OF PROBABLE COSTS FOR PARCEL 74

Needham Facilities Master Plan Cost Study
Town of Needham, Ma



8/7/2014 DRAFT

DPW AT PARCEL 74 / GREENDALE AVE

Item #	PROJECT	AREA	UNIT	COST/SF	EST'D COST	SUB TOTAL	TOTAL COST
<u>Buildings</u>							
1	Administration	30,819	sf	285.00	8,783,415		
2	Vehicle Storage	40,848	sf	185.00	7,556,880		
3	Maintenance	14,050	sf	225.00	3,161,250		
4	Shops	4,905	sf	225.00	1,103,625		
5	Wash/Fuel Bay	1,820	sf	450.00	819,000		
6	Canopy Storage	10,000	sf	75.00	750,000	22,174,170	
Total Typical Building - \$/sf		92,442	sf	239.87	22,174,170		
<u>Sitework</u>							
1	Typical sitework - 15-20% of building costs (earthwork, utilities, fencing and all site finishes)	1	ls	3,880,479.75	3,880,480		
2	Cold Storage	2,100	sf	75.00	157,500		
3	Bin Storage	3,870	sf	35.00	135,450	4,173,430	
Total Typical Site - \$/sf		92,442	sf	45.15	4,173,430		
Total Typical Buildings and Site - \$/sf		92,442	sf	285.02	26,347,600		
<u>Premium cost related to building configuration</u>							
1	Four story Admin building (elevator assembly)	1	ls	300,000.00	300,000		
2	Four story Admin building (egress stairs)	8	fits	10,000.00	80,000	380,000	
<u>Premium cost related to site location</u>							
1	Perimeter fence (decorative wrought iron)	1,300	lf	200.00	260,000		
2	Existing water line replace/relocation within site	1	ls	100,000.00	100,000		
3	Retaining wall with brick face at Vehicle Storage	1	ls	150,000.00	150,000	510,000	
						CURRENT 2014 CONSTRUCTION COSTS	\$27,237,600

Notes:

- a. Building square foot costs are based on recent DPW project bid results escalated to 2014. Project bid ranges were within the \$220 - \$290/sf depending on building size

Recent bid results:

	<u>Low - High</u>	<u>Sf</u>
Medford DPW (January 2014 bids)	\$251 - \$275	46,100
Wayland DPW (March 2013 bids)	\$218 - \$270	40,052
Amesbury DPW (September 2013 bids)	\$265 - \$290	13,055

- b. Sitework costs do not assume large quantities of ledge blasting, unsuitable soil replacement or hazardous soil remediation
- c. Additional sitework premiums other than listes are not assumed (offsite utilities, traffic lights or work to public roads)

DEVELOPMENT OF PROBABLE COST ESCALATION

Needham Facilities Master Plan Cost Study

Town of Needham, Ma

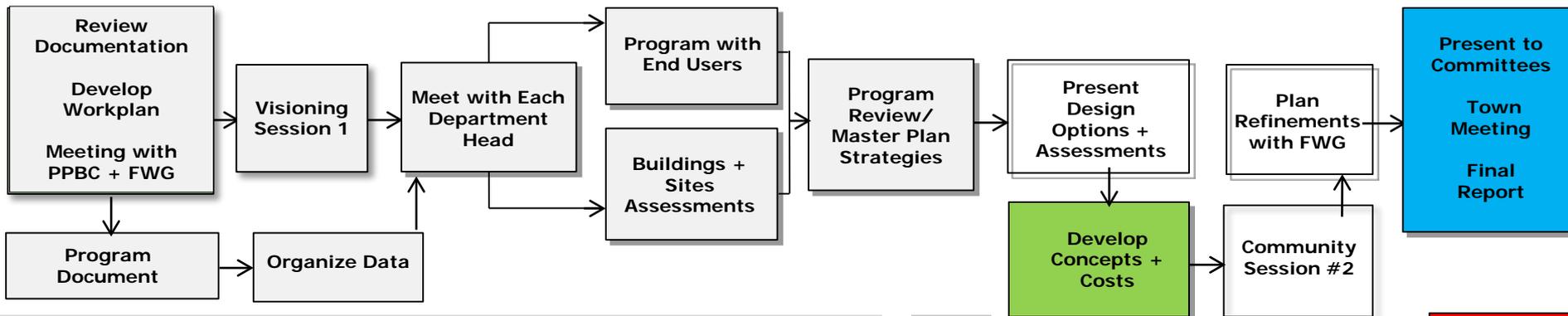
8/7/2014 DRAFT

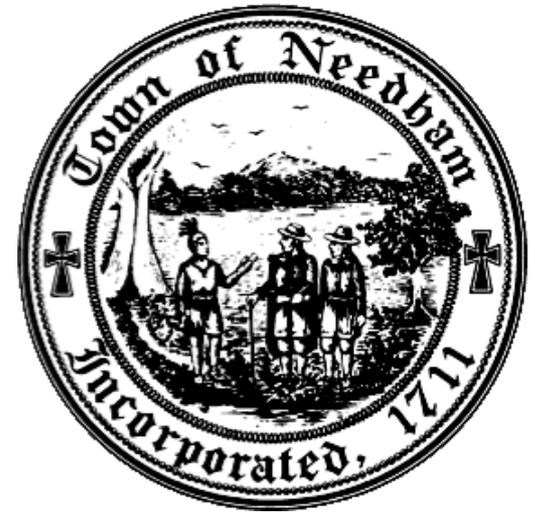


Current Costs (2014 dollars)						10 year escalated costs - 5.6% average per year added											
Item #	Project	SF	Construction Cost	\$/SF	Total Project Cost Includes construction + 25% soft costs + 10% project contingency	\$/SF	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
							DPW PROJECT OPTIONS										
1	DPW AT PARCEL 74 / GREENDALE AVE	92,442	\$27,237,600	\$295	\$36,770,760	\$398	\$38,829,923	\$41,004,399	\$43,300,645	\$45,725,481	\$48,286,108	\$49,396,688	\$52,162,903	\$55,084,026	\$58,168,731	\$61,426,180	\$64,866,046
2	DEDHAM AVE - FULL PROGRAM		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	DEDHAM AVE - PARTIAL PROGRAM		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
4	DPW RTS OPTION 1		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
5	DPW RTS OPTION 2		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
6	DPW RTS OPTION 3		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
7	DPW RTS OPTION 4		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
8	DPW TOWN FOREST OPTION		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
POLICE / FIRE / SCHOOL / ADMIN / PARKING PROJECT OPTIONS																	
9	IF DPW MOVES FROM DEHAM AVE		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
10	TEMP/PERMANENT ELEMENTARY SCHOOL SITE (Dore & Whittier 2012)		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
11	POLICE/FIRE SITE OPTION 1 WITH SCHOOL ADMIN		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
12	POLICE/FIRE SITE OPTION 2 WITH SCHOLL ADMIN		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
13	POLICE/FIRE SITE OPTION 3		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
14	SCHOOL ADMIN MOVES TO NIKE SITE		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COMMUNITY CENTER PROJECT OPTIONS																	
15	PARCEL 74 / GREENDALE AVE		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
16	FULL PROGRAM AT NIKE SITE		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
17	TOWN FOREST SITE		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
18	DEDHAM AVE SITE		\$0		\$0		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

NEXT STEPS

- Define + finalize programming documents for Memorial Field + Community Center
- Develop associated costs for projects
- Plan Fall Schedule





THANK YOU