

Barnstable Town Council CIP Budget Hearing

Department of Public Works
Enterprise and General Funded Projects

April 25, 2024
Town Hall Hearing Room



Town of Barnstable
Department of Public Works



Water Supply Division

Pipe Replacement and Upgrade Project



Pipe Replacement and Upgrade Project

2024-100 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$1,500,000 FOR THE FUNDING THE PIPE REPLACEMENT AND UPGRADE PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$1,500,000 be appropriated for the purpose of funding the Pipe Replacement and Upgrade Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$1,500,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Wells, Pump Stations, Treatment Plant Repair and Upgrade Project

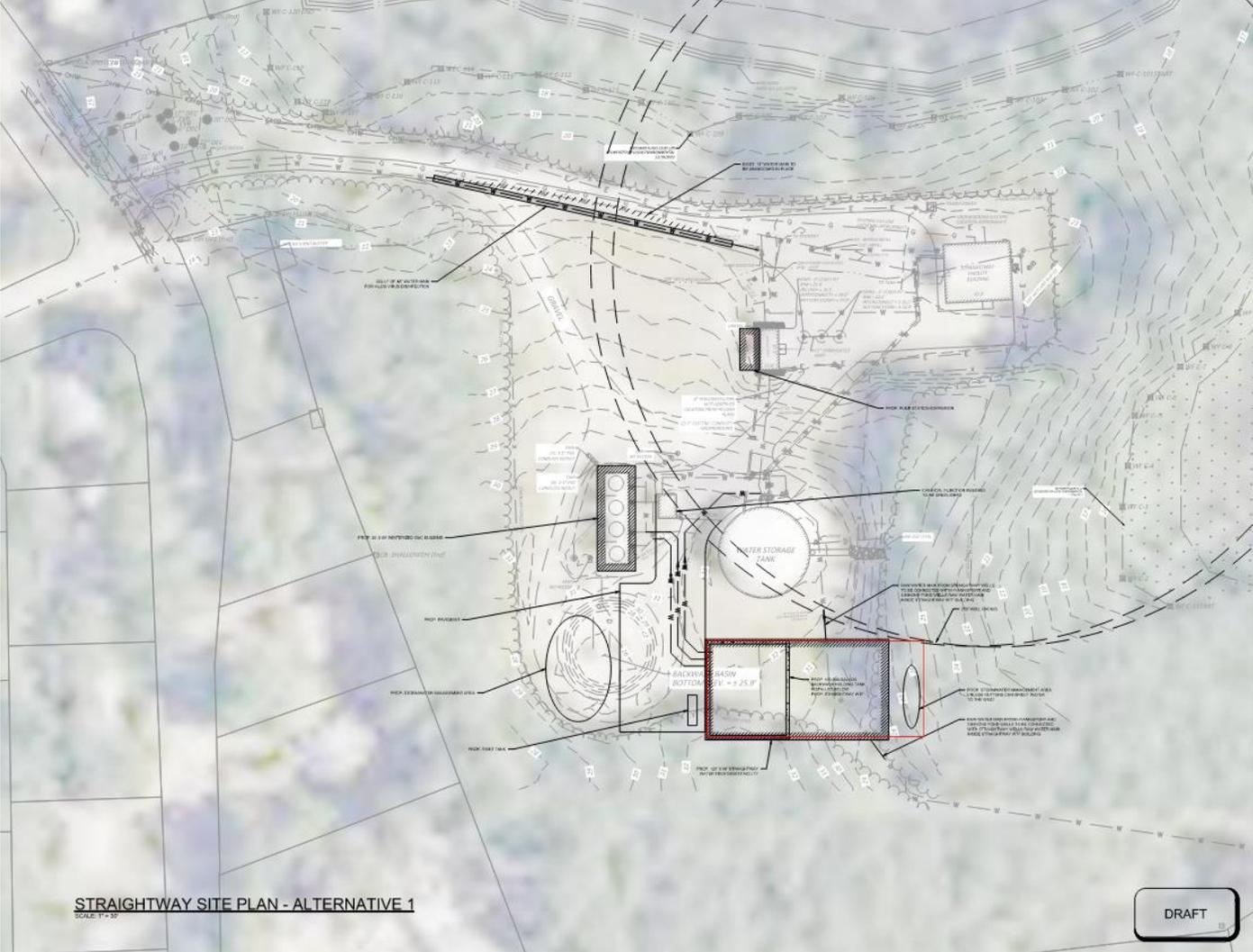


Wells, Pump Stations, Treatment Plant Repair and Upgrade Project

2024-101 APPROPRIATION ORDER IN THE AMOUNT OF \$200,000 FOR FUNDING THE WELLS, PUMP STATIONS, TREATMENT PLANT REPAIR AND UPGRADE PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$200,000 be appropriated for the purpose of funding the Wells, Pump Stations, Treatment Plant Repair and Upgrade Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$200,000 be provided from the Water Supply Enterprise Fund reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Straightway Water Supply Filtration Plant – Construction

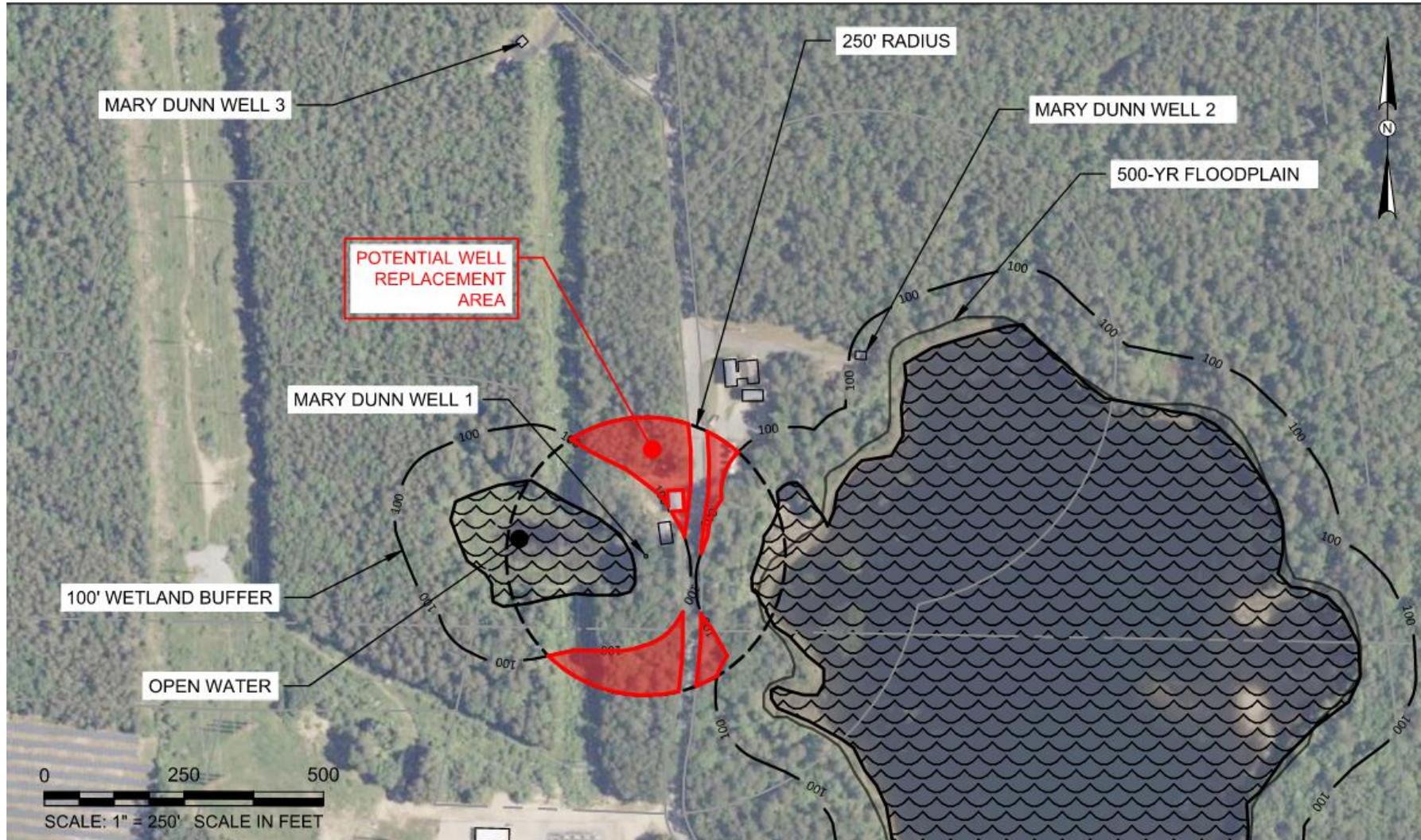


Straightway Water Supply Filtration Plant – Construction

2024-102 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$35,500,000 FOR FUNDING THE STRAIGHTWAY FILTRATION PLANT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 - FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$35,500,000 be appropriated for the purpose of funding the Straightway Filtration Plant Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$35,500,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Mary Dunn Water Supply Filtration Plant – Design



Mary Dunn Water Supply Filtration Plant – Design

2024-103 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$2,600,000 FOR FUNDING THE MARY DUNN FILTRATION PLANT DESIGN PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$2,600,000 be appropriated for the purpose of funding the Mary Dunn Filtration Plant Design Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$2,600,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Tractor Brush-Mower Replacement



Tractor Brush-Mower Replacement

2024-104 APPROPRIATION ORDER IN THE AMOUNT OF \$90,000 FOR FUNDING THE SOLID WASTE TRACTOR BRUSH-MOWER REPLACEMENT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$90,000 be appropriated for the purpose of funding the Solid Waste Tractor Brush-Mower Replacement Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$90,000 be provided from the Solid Waste Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Sweeper Replacement



Sweeper Replacement

2024-105 APPROPRIATION ORDER IN THE AMOUNT OF \$50,000 FOR FUNDING THE SOLID WASTE SWEEPER REPLACEMENT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$50,000 be appropriated for the purpose of funding the Solid Waste Sweeper Replacement Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$50,000 be provided from the Solid Waste Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Compactor Unit Replacement Project



Compactor Unit Replacement Project

2024-106 APPROPRIATION ORDER IN THE AMOUNT OF \$125,000 FOR FUNDING THE SOLID WASTE COMPACTOR UNIT REPLACEMENT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$125,000 be appropriated for the purpose of funding the Solid Waste Compactor Unit Replacement Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$125,000 be provided from the Solid Waste Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Container Unit Replacement Project



Container Unit Replacement Project

2024-107 APPROPRIATION ORDER IN THE AMOUNT OF \$50,000 FOR FUNDING THE SOLID WASTE CONTAINER REPLACEMENT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$50,000 be appropriated for the purpose of funding the Solid Waste Container Replacement Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$50,000 be provided from the Solid Waste Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Water Pollution Control Division

Pump Station Rehabilitation Project



Photo 1: Kalmus Beach Pump Station



Photo 2: Estey Ave Pump Station



Photo 3: Bearnse's Way Pump Station



Photo 4: Bearnse's Way Pump Station Exterior

Pump Station Rehabilitation Project

2024-108 APROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$1,000,000 FOR FUNDING THE WATER POLLUTION CONTROL PUMP STATION REHABILITATION PROGRAM AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$1,000,000 be appropriated for the purpose of funding Water Pollution Control Pump Station Rehabilitation Program as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$1,000,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Effluent Sand Bed Valve Rehabilitation

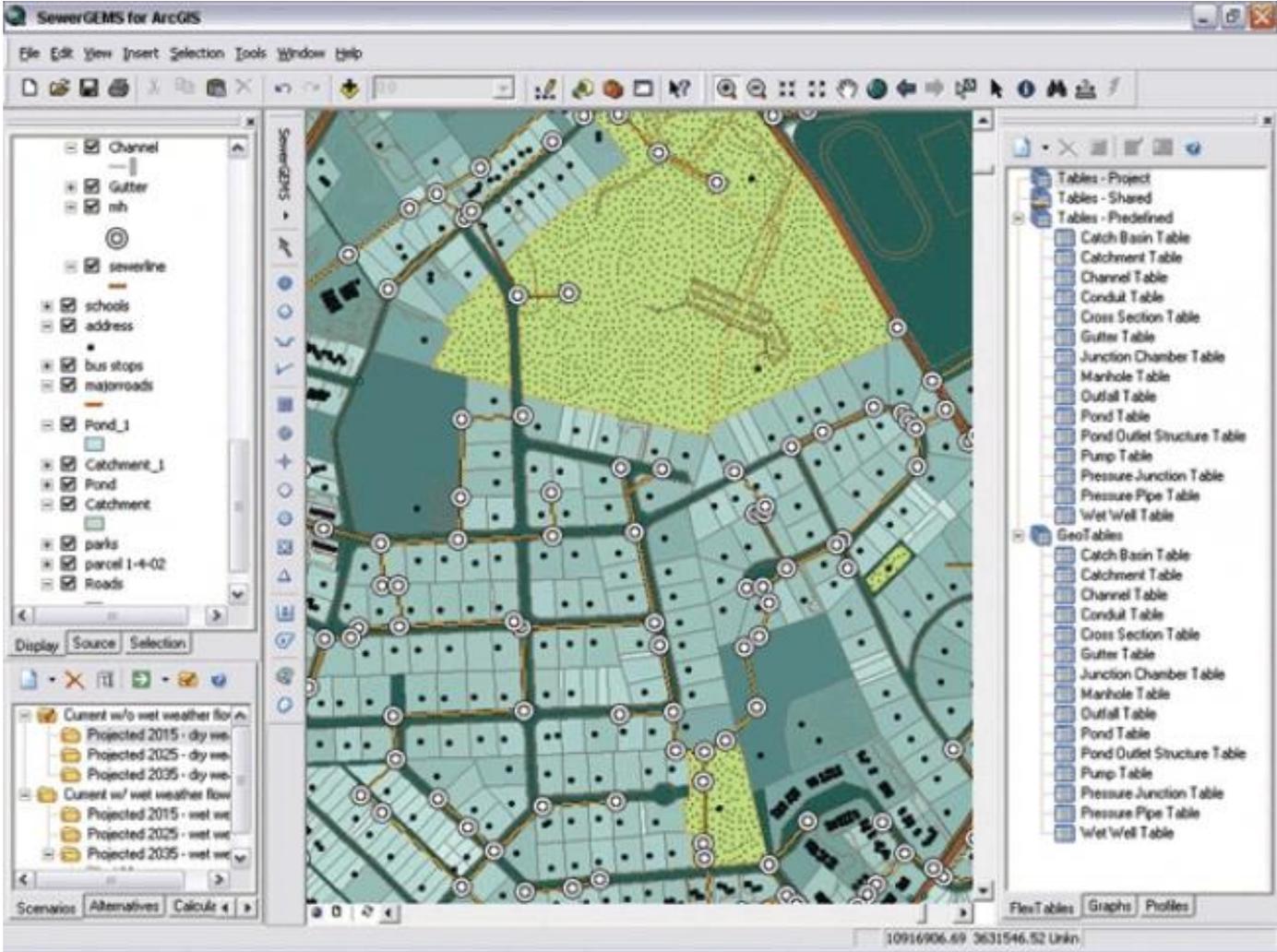


Effluent Sand Bed Valve Rehabilitation

2024-109 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$600,000 FOR FUNDING THE WATER POLLUTION CONTROL EFFLUENT SAND BED VALVE REHABILITATION PROGRAM AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$600,000 be appropriated for the purpose of funding Water Pollution Control Effluent Sand Bed Valve Rehabilitation Program as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$600,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Targeted Sewer System Rehabilitation – Evaluation



Targeted Sewer System Rehabilitation – Evaluation

2024-110 APPROPRIATION ORDER IN THE AMOUNT OF \$150,000 FOR FUNDING THE WATER POLLUTION CONTROL SYSTEM REHABILITATION EVALUATION AND DESIGN PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$150,000 be appropriated for the purpose of funding the Water Pollution Control System Rehabilitation Evaluation and Design Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$150,000 be provided from the Water Pollution Control Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Bypass Pump Replacement



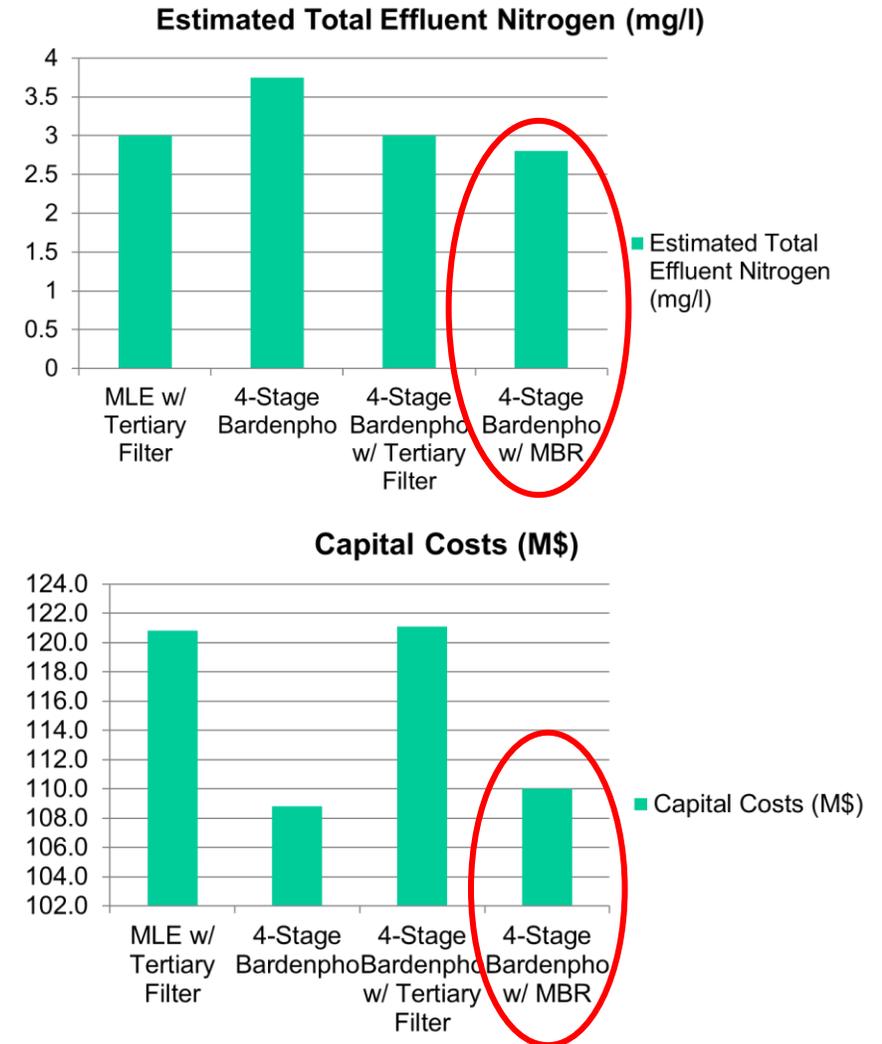
Bypass Pump Replacement

2024-111 APPROPRIATION ORDER IN THE AMOUNT OF \$115,000 FOR FUNDING THE WATER POLLUTION CONTROL BYPASS PUMP PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$115,000 be appropriated for the purpose of funding the Water Pollution Control Bypass Pump Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$115,000 be provided from the Water Pollution Control Enterprise Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

WPCF Upgrade/Nitrogen Removal Improvements – Construction

- Reviewed >10 options
 - multiple additional perturbations each
- 4 emerged
 - Highest potential to achieve 3 mg/l
 - Appropriate in New England
 - Appropriate for anticipated volumes
 - Best positions the WPCF for future requirements
 - Max utilization of existing infrastructure



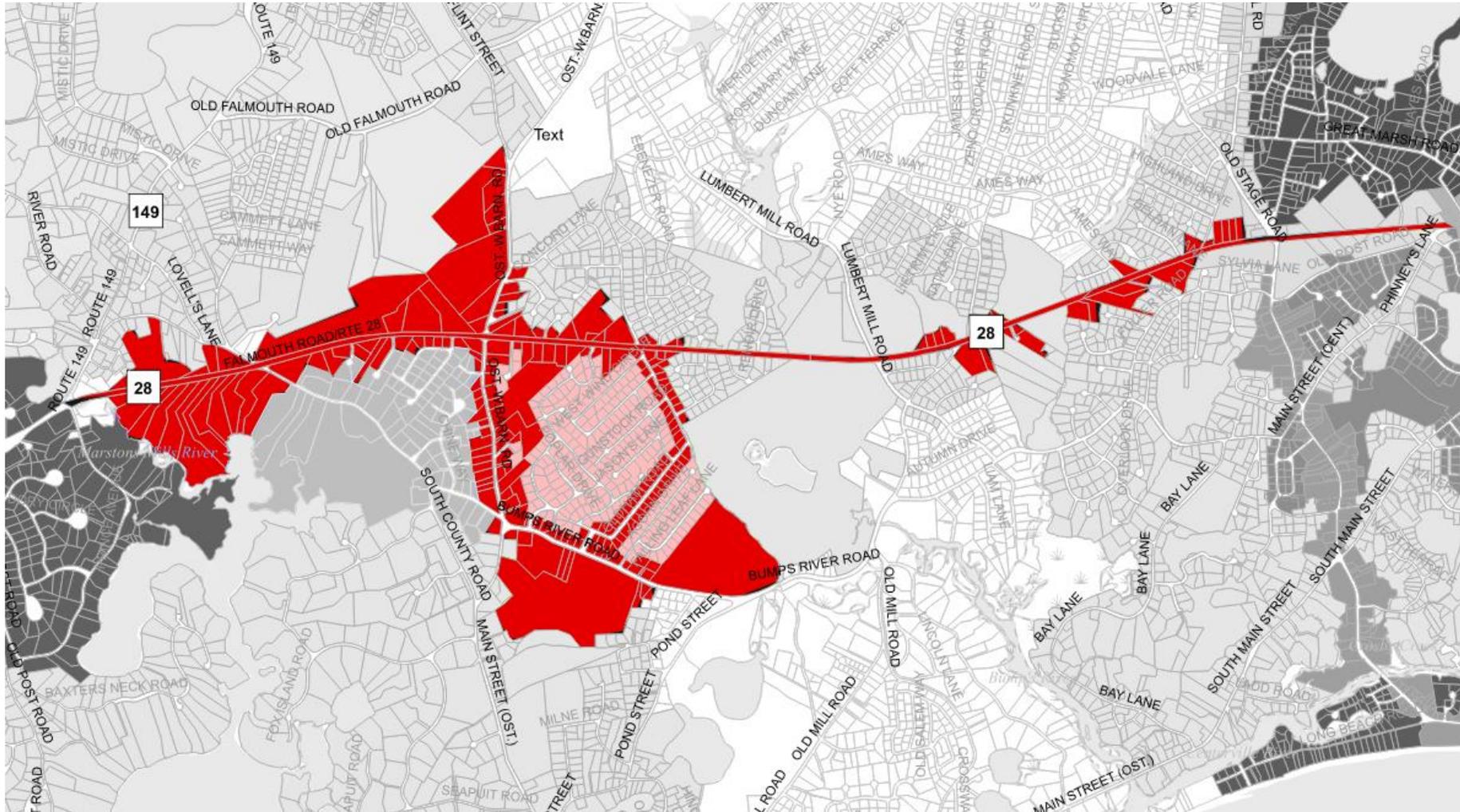
WPCF Upgrade/Nitrogen Removal Improvements – Construction

2024-112 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$109,330,000 FOR FUNDING THE WATER POLLUTION CONTROL FACILITY UPGRADES PROJECT AS OUTLINED IN THE FISCAL YEAR 2025- FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$109,330,000 be appropriated for the purpose of funding the Water Pollution Control Facility Upgrades Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$109,330,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Comprehensive Wastewater Management Plan (CWMP)

Route 28 West Sewer Expansion – Construction



Route 28 West Sewer Expansion – Construction

2024-113 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$59,650,000 FOR FUNDING THE RT. 28 WEST SEWER EXPANSION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$59,650,000 be appropriated for the purpose of funding the Rt. 28 West Sewer Expansion Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$59,650,000 under and pursuant to M.G.L. c. 44, §§7 or 8, M.G.L. c. 29C, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; that the Town is authorized to borrow all or any portion of this appropriation from the Massachusetts Clean Water Trust (the “Trust”) and that the Town Manager or the Treasurer is authorized to sign any financing agreements or project regulatory agreements relating to such borrowing from the Trust; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes

Long Beach Sewer Expansion – Design



Long Beach Sewer Expansion – Design

2024-114 APPROPRIATION ORDER IN THE AMOUNT OF \$750,000 FOR FUNDING THE DESIGN OF THE LONG BEACH SEWER EXPANSION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$750,000 be appropriated for the purpose of funding the Design of the Long Beach Sewer Expansion Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$750,000 be provided from the Sewer Construction and Private Way Improvement Fund reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes

General Fund

Private Road Repairs – School Street and Old Mill Road



Private Road Repairs – School Street and Old Mill Road

2024-115 APPROPRIATION ORDER IN THE AMOUNT OF \$1,520,000 FOR FUNDING THE PRIVATE ROAD REPAIRS TO SCHOOL STREET AND OLD MILL ROAD PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$1,520,000 be appropriated for the purpose of funding the Private Road Repairs to School Street and Old Mill Road Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$1,520,000 be provided from the Sewer Construction and Private Way Improvement Fund reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Public Roads Maintenance Projects



Before

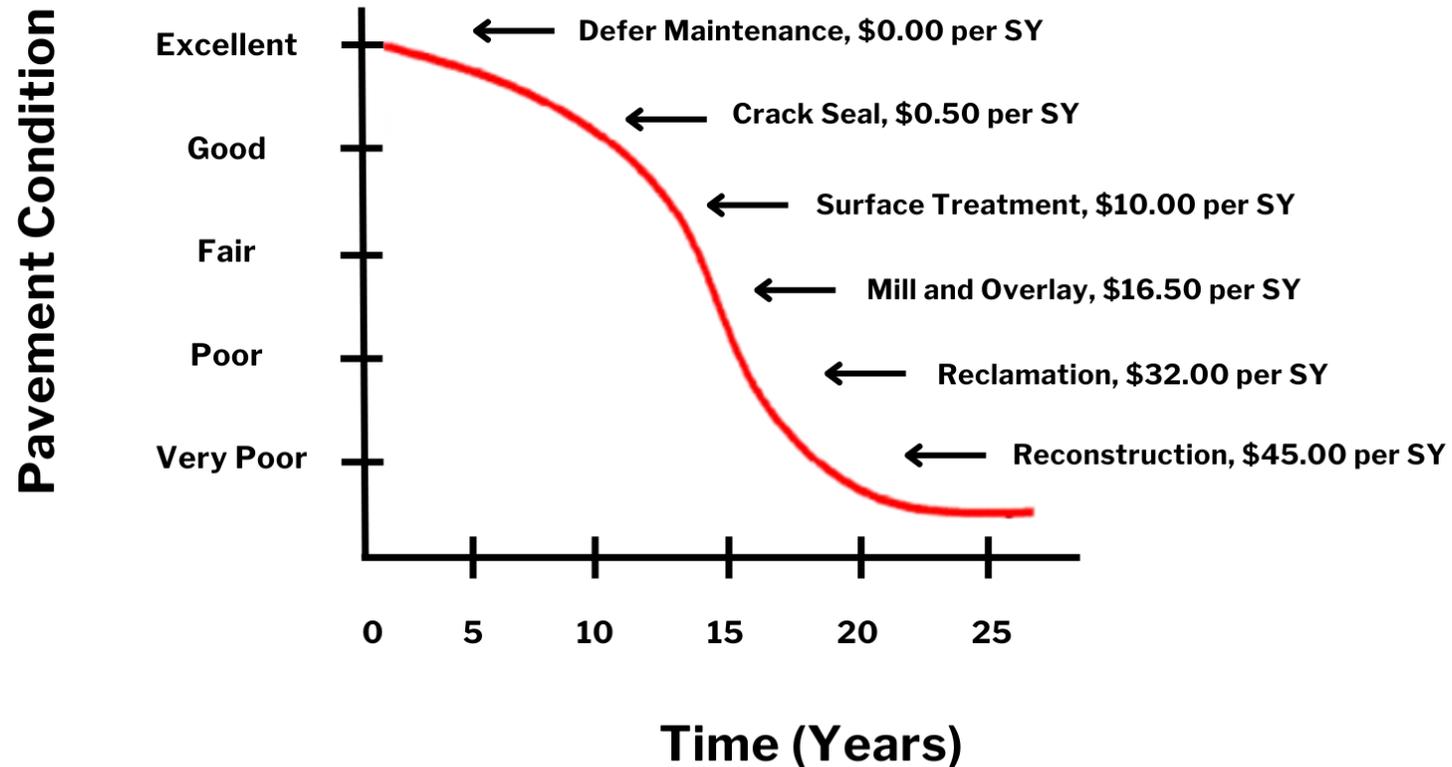


After

Public Roads Maintenance Projects



Public Roads Maintenance Projects



2022 Pricing

Public Roads Maintenance Projects

2024-116 APPROPRIATION ORDER IN THE AMOUNT OF \$2,850,000 FOR FUNDING THE PUBLIC ROADS MAINTENANCE PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$2,850,000 be appropriated for the purpose of funding the Public Roads Maintenance Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$2,850,000 be provided from the Capital Trust Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Curb Ramp and Sidewalks ADA Transition Plan



Curb Ramp and Sidewalks ADA Transition Plan

2024-117 APPROPRIATION ORDER IN THE AMOUNT OF \$350,000 FOR FUNDING THE CURB RAMPS AND SIDEWALK ADA TRANSITION PLAN PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$350,000 be appropriated for the purpose of funding the Curb Ramps and Sidewalk ADA Transition Plan Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$350,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Pond Monitoring & Management Plan – Long Pond Centerville



Pond Monitoring & Management Plan – Long Pond Centerville

2024-118 APPROPRIATION ORDER IN THE AMOUNT OF \$135,000 FOR FUNDING THE MONITORING AND MANAGEMENT PLAN FOR FRESH WATER PONDS PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$135,000 be appropriated for the purpose of funding the Monitoring and Management Plan for Fresh Water Ponds Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$135,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Raised Crosswalks Main Street, Osterville

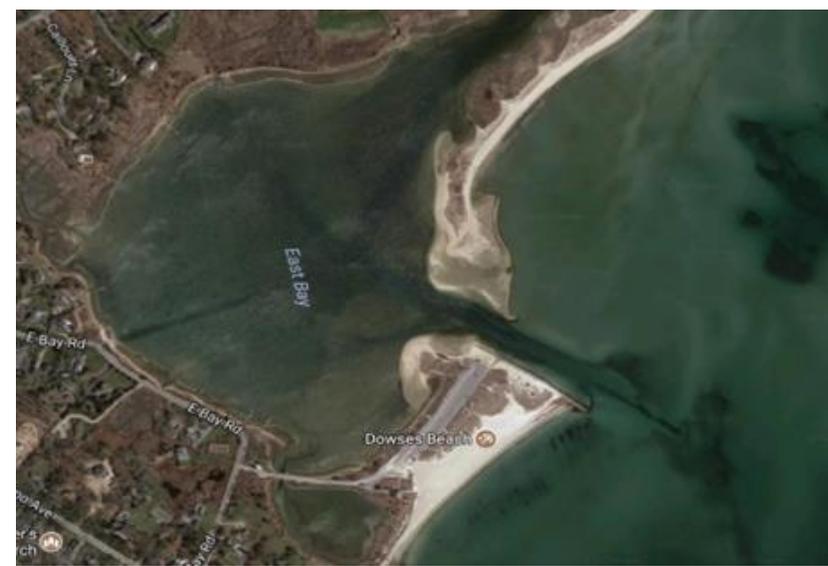


Raised Crosswalks Main Street, Osterville

2024-119 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$685,000 FOR FUNDING THE RAISED CROSSWALKS ON MAIN ST. OSTERVILLE PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$685,000 be appropriated for the purpose of funding the Raised Crosswalks on Main St. Osterville Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$685,000 under and pursuant to M.G.L. c. 44, §§7 or 8, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Channel Dredging Program – Various Locations



Channel Dredging Program – Various Locations

2024-120 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$1,750,000 FOR FUNDING THE CHANNEL DREDGING PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$1,750,000 be appropriated for the purpose of funding the Channel Dredging Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$1,750,000 under and pursuant to M.G.L. c. 44, §§7 or 8, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Bulkhead Improvements – Various Locations



Bulkhead Improvements – Various Locations

2024-121 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$580,000 FOR FUNDING THE BULKHEAD IMPROVEMENTS PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$580,000 be appropriated for the purpose of funding the Bulkhead Improvements Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$580,000 under and pursuant to M.G.L. c. 44, §§7 or 8, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Bay Shore Boat Ramp Project – Design



Bay Shore Boat Ramp Project – Design

2024-122 APPROPRIATION ORDER IN THE AMOUNT OF \$256,000 FOR FUNDING THE BAY SHORE BOAT RAMP PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$256,000 be appropriated for the purpose of funding the Bay Shore Boat Ramp Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$256,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

West Bay Breakwater Improvements – Evaluation



West Bay Breakwater Improvements – Evaluation

2024-123 APPROPRIATION ORDER IN THE AMOUNT OF \$50,000 FOR FUNDING THE WEST BAY BREAKWATER PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$50,000 be appropriated for the purpose of funding the West Bay Breakwater Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$50,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Blish Point Long Term Solution – Design and Permitting



Blish Point Long Term Solution – Design and Permitting

2024-124 APPROPRIATION ORDER IN THE AMOUNT OF \$150,000 FOR FUNDING THE BLISH POINT LONG TERM SOLUTION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$150,000 be appropriated for the purpose of funding the Blish Point Long Term Solution Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$150,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Automatic Beach Gates



Automatic Beach Gates

2024-125 APPROPRIATION ORDER IN THE AMOUNT OF \$240,000 FOR FUNDING THE AUTOMATIC BEACH GATE PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$240,000 be appropriated for the purpose of funding the Automatic Beach Gate Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$240,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Town Hall Elevator Replacement – Design



Town Hall Elevator Replacement – Design

2024-126 APPROPRIATION ORDER IN THE AMOUNT OF \$250,000 FOR FUNDING THE TOWN HALL ELEVATOR REPLACEMENT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$250,000 be appropriated for the purpose of funding the Town Hall Elevator Replacement Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$250,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

School Administration Building Mechanical Cooling Upgrades – Generator Project



School Administration Building Mechanical Cooling Upgrades – Generator Project

2024-127 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$619,000 FOR FUNDING THE SCHOOL ADMINISTRATION BUILDING MECHANICAL UPGRADES PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$619,000 be appropriated for the purpose of funding the School Administration Building Mechanical Upgrades Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$619,000 under and pursuant to M.G.L. c. 44, §§7 or 8, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Marine and Environmental Affairs Building Mechanical Upgrades – Design



Marine and Environmental Affairs Building Mechanical Upgrades – Design

2024-128 APPROPRIATION ORDER IN THE AMOUNT OF \$51,000 FOR FUNDING THE MARINE AND ENVIRONMENTAL AFFAIRS BUILDING MECHANICAL UPGRADES PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$51,000 be appropriated for the purpose of funding the Marine and Environmental Affairs Building Mechanical Upgrades Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$51,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Barnstable Adult Community Center Mechanical Upgrades – Design

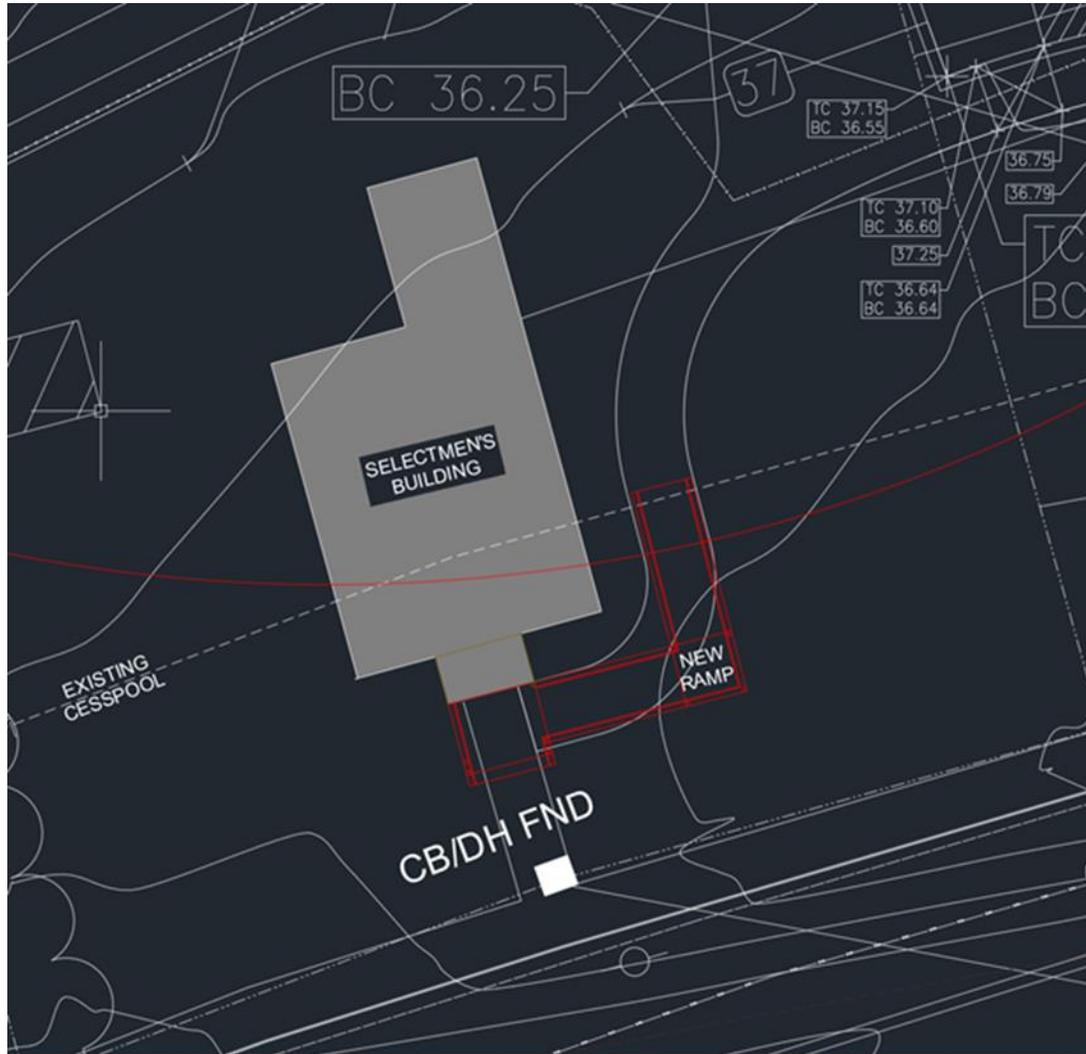


Barnstable Adult Community Center Mechanical Upgrades – Design

2024-129 APPROPRIATION ORDER IN THE AMOUNT OF \$72,000 FOR FUNDING THE BARNSTABLE ADULT COMMUNITY CENTER MECHANICAL UPGRADES PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$72,000 be appropriated for the purpose of funding the Barnstable Adult Community Center Mechanical Upgrades Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$27,000 be provided from the General Fund Reserves and \$45,000 be provided from Sale of Real Estate Special Revenue Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Old Selectmen's Building Handicap Ramp



Old Selectmen's Building Handicap Ramp

2024-130 APPROPRIATION ORDER IN THE AMOUNT OF \$89,000 FOR FUNDING THE OLD SELECTMAN'S BUILDING HANDICAP RAMP PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$89,000 be appropriated for the purpose of funding the Old Selectman's Building Handicap Ramp Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$89,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Mosswood Cemetery Building Improvements – Design

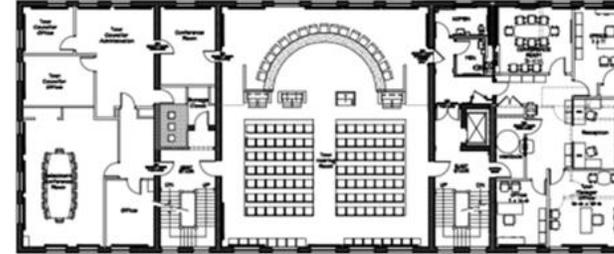


Mosswood Cemetery Building Improvements – Design

2024-131 APPROPRIATION ORDER THE AMOUNT OF \$90,300 FOR THE MOSSWOOD CEMETERY BUILDING IMPROVEMENTS PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$90,300 be appropriated for the purpose of funding the Mosswood Cemetery Building Improvements Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$90,300 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

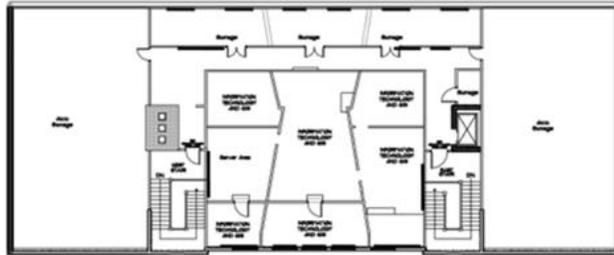
Town Office Relocation Project



2 SECOND FLOOR - SCHEME A



3 FIRST FLOOR - SCHEME A



5 FOURTH FLOOR - SCHEME A



4 THIRD FLOOR - SCHEME A



1 BASEMENT PLAN - SCHEME A

Town Office Relocation Project

2024-132 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$618,759 FOR THE TOWN OFFICE RELOCATION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$618,759 be appropriated for the purpose of funding the Town Office Relocation Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$618,759 under and pursuant to M.G.L. c. 44, §§7 or 8, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Barnstable Police Department Facility Improvements – Design



Barnstable Police Department Facility Improvements – Design

2024-133 APPROPRIATION ORDER IN THE AMOUNT OF \$370,000 FOR THE BARNSTABLE POLICE FACILITY IMPROVEMENT PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$370,000 be appropriated for the purpose of funding the Barnstable Police Facility Improvement Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$370,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Marine and Environmental Affairs Building Exterior Restoration

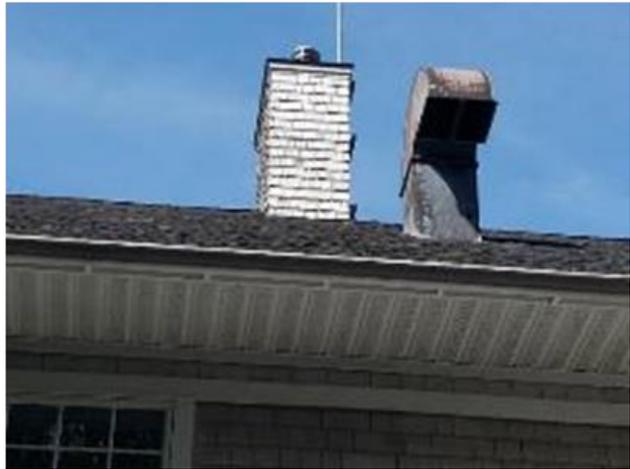


Marine and Environmental Affairs Building Exterior Restoration

2024-134 APPROPRIATION ORDER IN THE AMOUNT OF \$359,623 FOR THE MARINE AND ENVIRONMENTAL AFFAIRS EXTERIOR RESTORATION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$359,623 be appropriated for the purpose of funding the Marine and Environmental Affairs Exterior Restoration Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$359,623 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Barnstable Adult Community Center Exterior Restoration – Design



Barnstable Adult Community Center Exterior Restoration – Design

2024-135 APPROPRIATION ORDER IN THE AMOUNT OF \$48,000 FOR THE BARNSTABLE ADULT COMMUNITY CENTER EXTERIOR RESTORATION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$48,000 be appropriated for the purpose of funding the Barnstable Adult Community Center Exterior Restoration Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$48,000 be provided from the Sale of Real Estate Special Revenue Fund, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Hyannis Youth and Community Center Mechanical Improvements Project – Design



Hyannis Youth and Community Center Mechanicals Improvements Project – Design

2024-136 APPROPRIATION ORDER IN THE AMOUNT OF \$300,000 FOR THE HYANNIS YOUTH AND COMMUNITY CENTER MECHANICAL IMPROVEMENTS PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$300,000 be appropriated for the purpose of funding the Hyannis Youth and Community Center Mechanical improvements Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$300,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Hyannis Youth and Community Center Security System Upgrade

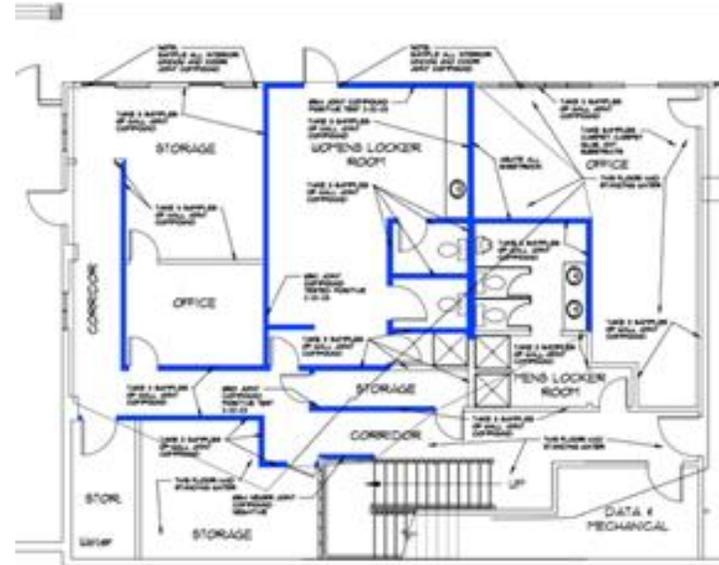


Hyannis Youth and Community Center Security System Upgrade

2024-137 APPROPRIATION ORDER IN THE AMOUNT OF \$285,059 FOR THE HYANNIS YOUTH AND COMMUNITY CENTER SECURITY SYSTEM PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN,

ORDERED: That the amount of \$285,059 be appropriated for the purpose of funding the Hyannis Youth and Community Center Security System Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$285,059 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Hyannis Golf Course Club House Restoration Project



Hyannis Golf Course Club House Restoration Project

2024-138 APPROPRIATION AND LOAN ORDER IN THE AMOUNT OF \$2,950,000 FOR THE HYANNIS GOLF COURSE CLUB HOUSE RESTORATION PROJECT AS OUTLINED IN THE FISCAL YEAR 2025- FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$2,950,000 be appropriated for the purpose of funding the Hyannis Golf Course Club House Restoration Project as outlined in the Fiscal Year 2025- Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that the Town Treasurer, with the approval of the Town Manager, is authorized to borrow \$2,950,000 under and pursuant to M.G.L. c. 44, §§7 or 8, or pursuant to any other enabling authority, and to issue bonds or notes of the Town therefor; and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes, and further that the amount received from any insurance settlement reduce the appropriation and amount authorized to borrow under this order.

Joshua Pond Accessibility & Beach Improvements – Design



Joshua Pond Accessibility & Beach Improvements – Design

2024-139 APPROPRIATION ORDER IN THE AMOUNT OF \$305,000 FOR THE JOSHUA POND HANDICAP ACCESSIBILITY AND BEACH IMPROVEMENT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$305,000 be appropriated for the purpose of funding the Joshua Pond Handicap Accessibility and Beach Improvement as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$305,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Centerville Recreation Building Mechanical Improvements – Design



Centerville Recreation Building Mechanical Improvements – Design

2024-140 APPROPRIATION ORDER IN THE AMOUNT OF \$243,000 FOR THE CENTERVILLE RECREATION MECHANICAL IMPROVEMENTS PROJECT AS OUTLINED IN THE FISCAL YEAR 2025 – FISCAL YEAR 2029 CAPITAL IMPROVEMENT PLAN

ORDERED: That the amount of \$243,000 be appropriated for the purpose of funding the Centerville Recreation Mechanical Improvements Project as outlined in the Fiscal Year 2025 – Fiscal Year 2029 Capital Improvement Plan, including the payment of costs incidental or related thereto; and that to meet this appropriation, that \$243,000 be provided from the General Fund Reserves, and that the Town Manager is authorized to contract for and expend the appropriation made available for these purposes.

Resources

WPCF Upgrade/Nitrogen Removal Improvements – Construction

- **Video: Revisiting the Water Pollution Control Division 4 Years Later**

As a follow-up to the previous treatment plant tour, Department of Public Works Communications Manager, Kelly Collopy, revisits the facility four years later to discuss with Water Pollution Control Division Supervisor, Andrew Boule, how treatment technology is evolving.

Boule provides a refresher on the current wastewater treatment process while identifying areas of the treatment plant that need significant upgrades. Together, Boule and Collopy shed light on how Barnstable is pursuing next generation wastewater treatment through the Town's proposed Nitrogen Improvements and New Headworks Facility Project.

<https://www.youtube.com/watch?v=s6zQwOyJo8o&t=2s>

- **Video: A Conversation about Wastewater**

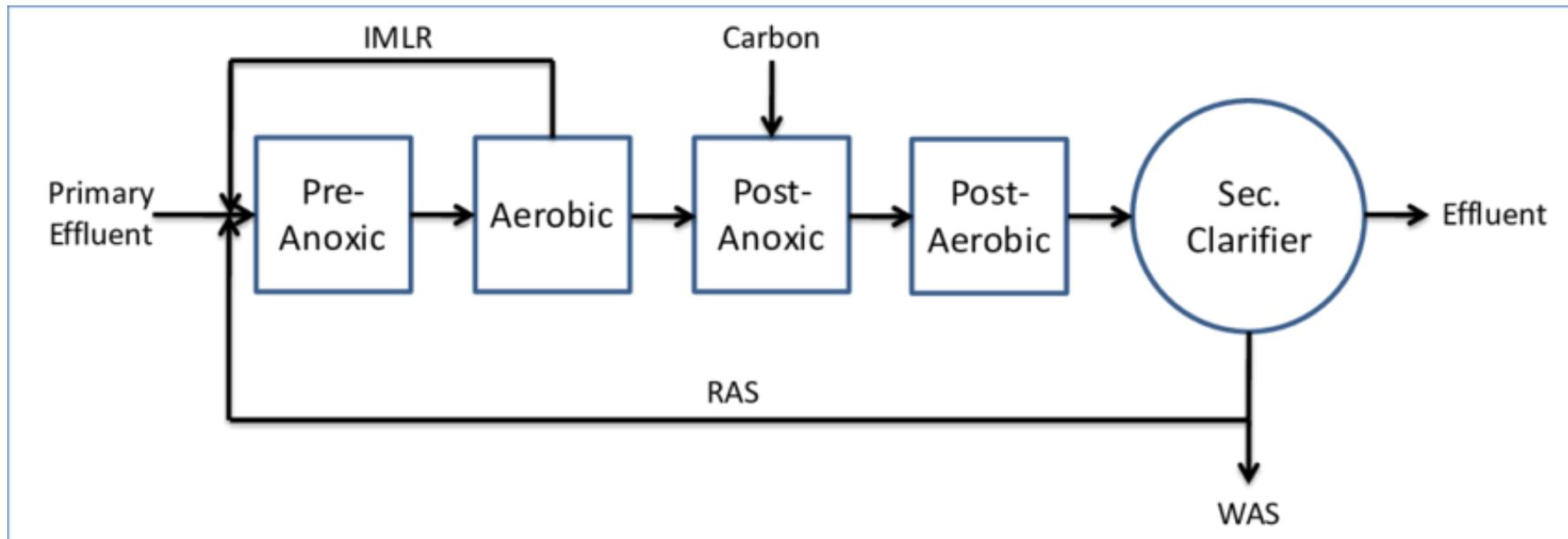
Department of Public Works Communications Manager, Kelly Collopy, sits down with Department of Public Works Assistant Director Robert Steen, P.E. and Water Pollution Control Division Supervisor, Andrew Boule, to discuss the next generation of wastewater treatment being pursued in Barnstable.

Together the group works through common questions heard from the community regarding the costs associated with expanding and upgrading our wastewater infrastructure, the timing, the role of alternative technologies, and effluent. The conversation also includes a look at how upgrading the current wastewater treatment facility will position the Town well for addressing future needs, such as contaminants of emerging concern.

<https://www.youtube.com/watch?v=ccmeCNGRGBs&t=4s>

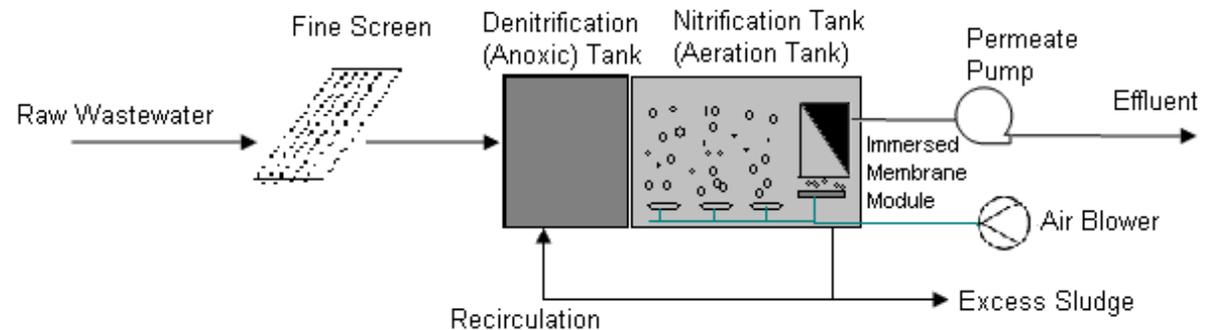
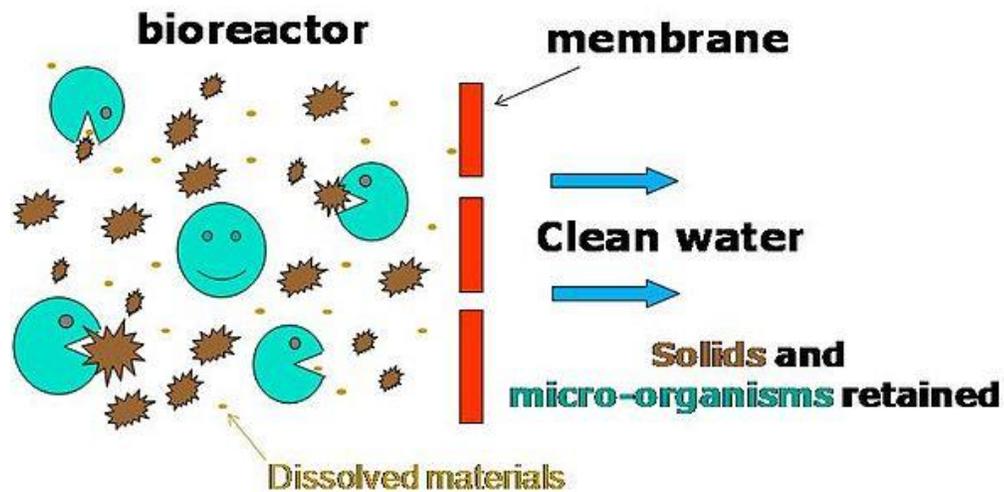
WPCF Upgrade/Nitrogen Removal Improvements – Construction

- Component – 4-Stage Bardenpho
 - Biological Process
 - Includes multiple anoxic and aerobic zones
 - Can additionally remove phosphorus (with addition of an anaerobic zone)



WPCF Upgrade/Nitrogen Removal Improvements – Construction

- Component – Membrane Bioreactor (MBR)
 - Physical filtration and biological processes
 - Drawing treated wastewater through a “porous straw”
 - Very high-quality effluent



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WPCF Upgrade/Nitrogen Removal Improvements – Construction

- Component – Membrane Bioreactor (MBR)
 - Advantages:
 - Very high-quality effluent
 - Almost complete solids and bacterial removal
 - Consistent Performance
 - Expandability
 - Less odor
 - Disadvantages:
 - Membrane fouling
 - Higher energy costs



WPCF Upgrade/Nitrogen Removal Improvements – Construction

- Potential Future Needs
 - PFAS/PFOA
 - Reverse Osmosis (RO)
 - Granular Activated Carbon (GAC)
 - Neither of these can happen if the plant only has secondary clarifiers
 - Requires the Membrane Bioreactor (MBR)
 - Effluent Options
 - Both well positioned by this project, but not funded
 - \$68M CIP

WPCF Upgrade/Nitrogen Removal Improvements – Construction

- Reverse Osmosis (RO)
 - Removes up to 99%+ of the dissolved salts (ions), particles, colloids, organics and bacteria from the feed water
 - Recent EPA studies have indicated PFAS removal rates from the RO process to be between 90 and 99%.
 - RO could further improve effluent nitrogen concentrations, likely removing another 0.5 to 1.0 mg/l of nitrogen.

