

JASON L. MAMMONE, P.E.
DIRECTOR OF ENGINEERING

NATHAN S. BUTTERMORE, P.E.
INFRASTRUCTURE ENGINEER

RONALD I. LAWRENCE
PROJECT ENGINEER

EMAN SAYEGH
GIS MANAGER

TOWN OF DEDHAM
Commonwealth of Massachusetts



55 RIVER STREET
DEDHAM, MA 02026-2935

(781) 751-9350
FAX (781) 751-9359

www.dedham-ma.gov

DEPARTMENT OF INFRASTRUCTURE ENGINEERING

MEMORANDUM

TO: Leon Goodwinn, Town Manager
Select Board

FROM: Jason L. Mammone, P.E., Director of Engineering
Joseph M. Flanagan, Director of Public Works

DATE: September 11, 2020

SUBJECT: Recommended Pavement Improvements for CY2021-CY2022

As part of the annual pavement management program, please find an analysis of the costs associated with the FY2020 Pavement Management road improvements which are currently being undertaken this contract year along with the recommended CY2021-CY2022 pavement improvements for review and consideration.

The FY2020 Recommended Pavement Improvements were presented to the Board and approved on June 25, 2019 as part of the continuing three-year FY2020-FY2022 Recommended Pavement Management Improvements. A summary of the work as originally proposed and approved can be found in Table 1.

Table 1 – FY2020 Approved Road Improvements

Repair Type	Length in Feet	Cost
Reclamation	10,076	\$997,285.33
Mill and Overlay	8,488	\$459,239.18
Overlay	0	\$0
Preventative Maintenance	0	\$0
Routine Maintenance	14,653	\$29,612.54
Totals	60,127	\$1,486,137.05

The remainder of the FY2019 roads that were not completed by 7/1/19 were completed under the current FY2020 contract before the end of the construction season in 2019. Unfortunately, due to the pandemic, we were unable to start the FY2020 roads in March and were delayed until mid-July for the start of our roadwork. We are anticipating that we should still be able to complete all the FY2020 roads before the end of the year. Prior to the stop of work in 2019, we were able to complete the mill & overlay of Country Club

Road and all of the Routine Maintenance (Crack Sealing) as part of the approved work to be completed in FY2020. Under our current contracts, the FY2020 routine maintenance work was completed by Crack-Sealing, Inc., the mill & overlay and reclamation work is to be completed by Lorusso Corporation.

Again, due to the delayed start this year, we completed approximately 20 percent of the FY2020 to date. There is approximately \$1,150,000 worth of roadwork remaining for the FY2020 roads. These roads are to be rehabilitated by either mill & overlay or reclamation. We will continue to work on the remaining FY20 roads before the end of the year.

A summary of the completed work to date can be found below in Table 2.

Table 2 – FY2020 Completed Improvements To Date

Repair Type	Length in Feet	Cost
Reclamation	0	\$0
Mill and Overlay	4,069	\$295,367.61
Overlay	0	\$0
Preventative Maintenance	0	\$0
Routine Maintenance	14,653	\$41,027.00
Totals	15,993	\$336,394.61

A summary of the estimated versus actual unit costs for the FY2019 roadwork is shown below in Table 3.

Table 3 – FY2019 Units Costs (Estimated vs. Actual)

Repair Type	Estimated Unit Cost (per SY)	Actual Unit Cost (per SY)
Reclamation (Major Collector)	\$40.00	-
Reclamation (Minor Collector & Residential)	\$35.00	\$28.48
Mill and Overlay	\$20.00	\$16.00
Overlay	\$15.00	-
Preventative Maintenance	\$12.00	-
Routine Maintenance	\$0.75	\$0.16

Based upon our favorable contract prices and oversight of the contract with in-house personnel, the Town was also able to complete the wholesale sidewalk replacement for a majority of the roads that were reclaimed in FY2019. In total, the Town replaced approximately 16,917 linear feet of asphalt sidewalk.

The Town is now entering into our fourteenth year of Pavement Management. This year we have switched consultant's and have gone from Vanasse Hangen Brustlin, Inc.'s (VHB) Pavement Management Program (PMP) to now using BETA Group, Inc.'s (BETA) PMP. The reason for the switch is that BETA's PMP will be able to provide the Town with the ability to develop a more comprehensive program that will allow the Town to prioritize our rehab efforts on all of our existing roadway assets including roads, sidewalks and access ramps based upon their condition and their compliance with the American Disability Acts (ADA). This function was not available with VHB's PMP.

Back in 1992 the United States Department of Justice and Department of Transportation mandated that any public agency with more than 50 employees develop and submit a 504 Transition Plan before 1995. The 504 Transition Plan requires public agencies to assess its existing Right-Of-Way infrastructure specifically utilized by those with disabilities (sidewalks and access ramps) for compliance with ADA requirements. The agencies must then develop a 3-year ongoing plan to repair non-compliant sidewalks and access ramps to be in compliance with ADA.

The Town of Dedham developed and submitted a 504 Transition Plan in 1993 but was more geared towards addressing accessibility issues with our publicly owned properties/building rather than our sidewalks and access ramps.

Although this plan was approved by the State a strategy for addressing our non-compliant sidewalks and access ramps was never addressed and developed to make these required improvements. It imperative that the Town correct this and develop a comprehensive plan that can be incorporated into our ongoing 3-year PMP that would be updated yearly. Every year we receive emails and phone calls from those with disabilities pointing out areas in Town where our sidewalks and access ramps are non-compliant and asking when we plan to repair these deficiencies. By combining sidewalks and access ramps into our roadway PMP, it will provide the residents of Dedham the ability to view our 3-year PMP on the Town's website and see exactly where improvements are being made and when they are anticipated to be completed. Having a comprehensive 504 Plan will also allow Dedham to apply for various ADA grants in the future.

We should be able to include our sidewalks and access ramps into our 3-year PMP starting next year. In the Spring of 2021, BETA will inspect all our sidewalks and access ramps for ADA compliance and develop an inventory of these assets to be utilized in the PMP. Until then, we propose to finish out years 2 and 3 of the Road Program approved by the Select Board last year.

As of December 31, 2019 our overall roadway network pavement condition index (PCI) was 81 which is up significantly from our initial PCI of 70 from thirteen years ago. If the proposed improvements are approved and implemented, we can anticipate maintaining the roadway PCI at 81 by the end of CY2022.

The funding scenario for the recommended CY2021 – CY2022 pavement improvements is based on the assumption of a local funding level of \$900,000 and utilizing

approximately \$650,000 from State Chapter 90 funds for CY2022 and a local funding level of \$700,000 and utilizing approximately \$650,000 from State Chapter 90 funds for CY2022. As always, if the Town receives more than the assumed State Chapter 90 funding, we will utilize that money during the current construction season to rehabilitate roads identified in the following year's program. As of 07/01/20, the Town's current backlog of repairs for its Public Ways is \$11,157,866.

The recommended improvements proposed in this document are associated with asphalt roadway pavement only. Sidewalks, curbing, drainage, and other geometric changes are not included in this proposal, however if during the design process these improvements are found to be necessary or desirable we will work to incorporate those items within the available budget(s).

In summary, the DPW and Engineering Departments are pleased to report that we are on target to successfully complete the FY2020 Pavement Management Plan approved last year within the available budget. Through the diligent efforts of both departments we believe we are able to deliver these improvements in an efficient and cost effective manner. All oversight of the design, bidding, contract administration, field engineering, and inspection was performed using in-house resources. Through these efforts we have been able to raise the Town's PCI to 81 from the initial rating of 70 thirteen years ago.

The proposed work throughout Town over the course of CY2021-CY2022 is summarized in the attached table and maps. Please review the attached information and provide us with any questions or comments.

Cc: Nathan S. Buttermore, P.E., Infrastructure Engineer
Ronald I. Lawrence, Project Engineer

Dedham, MA

Pavement Management Road Program

CY2021 to CY2022

*Costs Serve For Estimating Purposes Only. Not to be used for Bidding/Construction.

Name	From	To	PCI	Length (ft)	Square Yards	Total
2021						
Repair Type: Preventative Maintenance						
COMMON ST-04	36' W OF HAVEN ST	1155' W OF WEST ST	95.00	2,160.70	7,202.33	\$86,428.00
GREENLODGE ST-01	SPRAGUE ST	MARGARET RD	89.00	528.70	2,056.06	\$24,672.67
GREENLODGE ST-02	MARGARET RD	STOUGHTON RD	89.00	830.20	2,859.58	\$34,314.93
MILTON ST-02	WALNUT ST	150' S OF MYRTLE ST	95.00	587.70	4,113.90	\$49,366.80
MILTON ST-03	150' S OF MYRTLE ST	200' N OF RIVER ST	95.00	1,649.60	6,598.40	\$79,180.79
MILTON ST-04	200' N OF RIVER ST	140' S OF RIVER ST	95.00	389.30	2,552.08	\$30,624.93
MILTON ST-05	140' S OF RIVER ST	TOWNLIN	95.00	1,066.70	3,911.23	\$46,934.81
RIVER ST-02	180' W OF MILTON ST	TOWNLIN	95.00	1,218.80	4,604.36	\$55,252.27
WEST ST-01	COMMON ST	965' N OF COMMON ST	89.00	964.20	3,214.00	\$38,568.00
WESTFIELD ST-03	2530' E OF CUL DE SAC	CUL DE SAC	65.00	3,019.51	5,368.01	\$64,416.16
Repair Type Total:				12,415.41	42,479.95	\$509,759.36
Repair Type: Reclamation						
ADAMS ST-01	SHIRETOWN RD	50' E OF NETTA RD	52.00	473.80	1,263.47	\$44,221.32
BENJAMIN ST	ASHCROFT ST	DALE ST	56.00	629.60	1,818.84	\$63,659.56
EDISON AVE	FULTON ST	MORSE AV	52.00	699.78	2,021.58	\$70,755.23
LILLY LN	ADAMS ST	DEAD END	46.00	566.38	1,510.34	\$52,861.73
MADISON ST-01	CEDAR ST	MT VERNON ST	61.00	1,631.40	4,894.20	\$171,297.00
MORSE AVE-03	EDISON AV	FENCE	52.00	186.40	497.07	\$17,397.36
NETTA RD	ADAMS ST	DEAD END	49.00	472.97	1,261.26	\$44,144.16
REED ST	PRATT AV	BORDER ST	82.00	1,144.56	3,052.15	\$106,825.42
SHIRETOWN RD	CIRCUIT RD	DEAD END	60.00	1,209.65	3,225.72	\$112,900.20
WILLIAMS AVE	ASHCROFT ST	DALE ST	87.00	675.50	1,876.39	\$65,673.62
Repair Type Total:				7,690.03	21,421.02	\$749,735.59
Repair Type: Routine Maintenance						
ALLINDALE WAY	VILLAGE AV	WAMPATUCK RD	90.00	406.62	993.97	\$745.48
AMES ST-02	333' S OF PLEASANT ST	654' N OF HIGH ST	95.00	426.30	1,421.00	\$1,065.75

ManageMyRoads by BETA

Name	From	To	PCI	Length (ft)	Square Yards	Total
AMES ST-03	654' N OF HIGH ST	HIGH ST	99.00	654.76	2,328.02	\$1,746.01
BEAR HILL	CHUTE RD	DEAD END	90.00	283.59	441.14	\$330.85
CHESTNUT ST	HIGH ST	MARTIN BATES ST	100.00	975.30	2,275.70	\$1,706.78
CHICKERING RD	WASHINGTON ST	CUL DE SAC	100.00	1,928.86	4,286.36	\$3,214.77
CHURCH ST-01	HIGH ST	FRANKLIN SQ	95.00	516.20	1,204.47	\$903.35
CHURCH ST-02	FRANKLIN SQ	COURT ST	93.00	521.60	1,217.07	\$912.80
COUNTRY CLUB RD-03	330' N OF SCHOOL MASTER LA	337' E OF THE TOWN LIN	99.00	1,200.70	2,668.22	\$2,001.17
COUNTRY CLUB RD-04	337' E OF THE TOWN LINE	TOWN LINE	87.00	336.42	747.60	\$560.70
COUNTY ST	CHESTNUT ST	BULLARD ST	100.00	642.40	1,498.93	\$1,124.20
COURT ST-01	HIGH ST	BATES CT	99.00	331.40	1,657.00	\$1,242.75
COURT ST-02	BATES CT	CHURCH ST	99.00	387.80	1,594.29	\$1,195.72
COURT ST-03	CHURCH ST	MARSH ST	98.00	912.14	3,141.82	\$2,356.36
COURT ST-04	MARSH ST	WETHERBEE ST	100.00	757.94	2,694.91	\$2,021.18
EASTERN AVE-01	HIGH ST	50' N OF BRYANT ST	88.00	342.00	2,470.00	\$1,852.50
FAIR OAK RD	CHICKERING RD	DEAD END	100.00	448.65	947.15	\$710.37
FRANKLIN SQ	SCHOOL ST	CHURCH ST	95.00	281.73	1,252.13	\$939.10
GARDEN WAY	PACELLA DR	CUL DE SAC	100.00	275.18	733.82	\$550.36
GLENRIDGE RD	COMMON ST	HAVEN ST	95.00	1,138.86	2,783.89	\$2,087.92
HIGH ST-10	250' N OF EASTERN AV	EASTERN AV	98.00	247.70	1,238.50	\$928.88
HIGH ST-11	EASTERN AV	MAPLE PL	95.00	505.10	3,255.09	\$2,441.32
HIGH ST-12	MAPLE PL	AMES ST	87.00	644.30	2,434.02	\$1,825.52
HIGHLAND ST-02	RICHARDS ST	WASHINGTON ST	88.00	4,677.00	11,432.67	\$8,574.50
LEE TERR	ORCHARD ST	DEAD END	100.00	458.10	967.10	\$725.32
LOWDER ST-01	HIGHLAND ST	570' N OF HIGHLAND ST	93.00	569.30	1,265.11	\$948.83
LOWDER ST-02	570' N OF HIGHLAND ST	SAWYER DR	79.00	1,073.00	2,146.00	\$1,609.50
MARION ST	WASHINGTON ST	WILLOW ST	95.00	377.36	1,090.15	\$817.61
MARSH ST	WASHINGTON ST	COURT ST	94.00	508.30	1,129.56	\$847.17
MARTIN BATES ST	HIGHLAND ST	CHESTNUT ST	78.00	1,154.44	2,308.87	\$1,731.65
NORFOLK ST-01	CHURCH ST	50' E OF PEARL ST	100.00	135.20	570.84	\$428.13
NORFOLK ST-02	50' E OF PEARL ST	COURT ST	100.00	288.37	640.83	\$480.62
ORCHARD ST-01	ELM ST	WILSON AV	100.00	805.50	2,148.00	\$1,611.00
PACELLA DR	HIGHLAND ST	FAY RD	100.00	2,041.74	5,217.78	\$3,913.33
PEARL ST	HIGH ST	NORFOLK ST	100.00	279.30	806.87	\$605.15
POND FARM RD	CHICKERING RD	DEAD END	100.00	543.29	1,388.41	\$1,041.31

Name	From	To	PCI	Length (ft)	Square Yards	Total
PROSPECT ST	WILLOW ST	WASHINGTON ST	95.00	344.85	842.96	\$632.22
RICHARDS ST-02	COURT ST	HIGHLAND ST	86.00	1,086.92	2,898.44	\$2,173.83
RODMAN PL	VILLAGE AV	CUL DE SAC	77.00	227.03	479.29	\$359.47
SANDY VALLEY RD-01	HIGHLAND ST	300' S OF DAVE WAY	75.00	1,502.10	3,171.10	\$2,378.33
SANDY VALLEY RD-02	300' S OF DAVE WAY	179' S OF DEAD END	87.00	1,188.70	1,981.17	\$1,485.87
SANDY VALLEY RD-03	179' S OF DEAD END	CUL DE SAC	89.00	178.92	278.32	\$208.74
SCHOOL ST	WASHINGTON ST	COURT ST	100.00	1,065.45	2,841.21	\$2,130.91
SPRUCE ST	WASHINGTON ST	WILLOW ST	89.00	505.66	1,067.51	\$800.64
STONE LEA RD-01	SANDY VALLEY RD	709' E OF STONEY LEA R	86.00	3,556.50	7,508.17	\$5,631.12
VILLAGE AVE-01	COURT ST	CHESTNUT ST	95.00	1,049.50	2,915.28	\$2,186.46
VILLAGE AVE-02	CHESTNUT ST	HIGH ST	95.00	1,893.60	4,628.80	\$3,471.60
WAMPATUCK RD	LOWDER ST	LOWDER ST	100.00	1,202.92	2,673.15	\$2,004.87
WASHINGTON ST-04	HIGH ST	SCHOOL ST	95.00	306.85	2,591.18	\$1,943.38
WASHINGTON ST-05	SCHOOL ST	BRYANT ST	95.00	356.60	1,822.60	\$1,366.95
WEST ST-02	BURGESS LN	NEEDHAM TOWN LINE	89.00	1,973.30	5,700.64	\$4,275.48
WILLOW ST	SPRUCE ST	PROSPECT ST	88.00	878.30	2,537.31	\$1,902.98
WILSON AVE	WASHINGTON ST	DEAD END	87.00	893.70	2,383.20	\$1,787.40
WORTHINGTON ST	WASHINGTON ST	SCHOOL ST	100.00	560.09	1,182.41	\$886.80

Repair Type Total: 45,847.44 121,900.01 \$91,425.01

Year Total: 65,952.88 185,800.98 \$1,350,919.9

2022

Repair Type: Mill and Overlay

EAST ST-03	CLARK ST	WHITING AV	86.00	1,254.00	4,180.00	\$83,600.00
EAST ST-04	WHITING AV	100' N OF GREENWOOD	88.00	4,584.50	15,281.67	\$305,633.34
HIGH ST-09	122' S OF HARRIS ST	250' N OF EASTERN AV	65.00	257.20	1,286.00	\$25,719.98
MT. VERNON ST-07	JEFFERSON ST	GRANT AV	78.00	693.44	2,619.68	\$52,393.58
NELSON DR	SPRAGUE ST	CARLISLE RD	82.00	477.50	1,326.40	\$26,527.98
PINE ST-01	BRIDGE ST	79' W OF KIELY RD	87.00	1,725.60	5,368.53	\$107,370.68

Repair Type Total: 8,992.25 30,062.28 \$601,245.56

Repair Type: Reclamation

BERLIN ST	GREENHOOD ST	DEAD END	51.00	454.09	1,311.81	\$45,913.20
BIRCH ST-01	DEDHAM BLVD	ROWAN ST	44.00	845.00	2,628.89	\$92,011.11
BIRCH ST-02	ROWAN ST	DEAD END	44.00	353.59	1,100.04	\$38,501.51

Name	From	To	PCI	Length (ft)	Square Yards	Total
EVERGREEN WAY	MAVERICK ST	CUL DE SAC	57.00	235.52	549.56	\$19,234.46
GAFFNEY RD	CURVE ST	DEAD END	54.00	995.59	2,876.16	\$100,665.55
GARFIELD RD	HARDING TERR	DEAD END	60.00	982.40	2,838.04	\$99,331.56
RIDGE AVE	OAK ST	DEAD END	48.00	612.60	1,701.67	\$59,558.35
SCHILLER RD-01	TOWNLINE	OAK ST	95.00	124.00	344.44	\$12,055.54
SCHILLER RD-02	OAK ST	DEAD END (S)	47.00	760.32	2,111.99	\$73,919.80
WARE ST	DEAD END (E)	DEAD END (W)	48.00	1,379.30	3,678.13	\$128,734.66
Repair Type Total:				6,742.41	19,140.74	\$669,925.73
Repair Type: Routine Maintenance						
ARLINGTON RD	BRIDGE ST	DEAD END	98.00	804.40	1,876.93	\$1,407.70
BAYARD ST	RIVERSIDE DR	VINE ROCK ST	99.00	795.19	2,120.49	\$1,590.37
BEACON ST	BRIDGE ST	COMMONWEALTH AVE	100.00	814.89	2,173.05	\$1,629.79
BERKELEY RD	BRIDGE ST	ARLINGTON RD	95.00	903.88	2,410.34	\$1,807.75
COMMONWEALTH AVE	MARLBORO ST	BRIDGE ST	100.00	1,654.10	4,594.72	\$3,446.04
FAIRFIELD ST	BRIDGE ST	COMMONWEALTH AVE	100.00	910.70	2,630.91	\$1,973.18
FISHER RD	AMES ST	MAYNARD RD (E)	100.00	815.50	2,174.67	\$1,631.00
GRANDFIELD ST	RIVERSIDE DR	VINE ROCK ST	99.00	854.20	2,277.87	\$1,708.40
HILLSIDE RD	NEEDHAM ST	VINE ROCK ST	88.00	1,270.90	3,389.07	\$2,541.80
KIELY RD-01	BRIDGE ST	42' N OF HILLCREST AVE	94.00	706.60	2,041.29	\$1,530.97
KIELY RD-02	42' N OF HILLCREST AVE	PINE ST	99.00	780.27	2,167.42	\$1,625.57
LINDALE AVE	NEEDHAM ST	MARLBORO ST	100.00	709.26	1,891.36	\$1,418.52
MARLBORO ST-01	MASSACHUSETTS AVE (E)	LINDALE AVE	100.00	681.60	1,893.33	\$1,420.00
MARLBORO ST-02	LINDALE AVE	MASSACHUSETTS AVE (100.00	234.26	676.74	\$507.55
MASSACHUSETTS AVE	RIVERVIEW ST	DEAD END	100.00	1,726.80	4,604.81	\$3,453.61
MAYNARD RD	FISHER RD	BINGHAM AVE	100.00	1,065.72	2,841.93	\$2,131.45
NEEDHAM ST-01	RIVERSIDE DR	90' E OF CHARLESBANK R	99.00	290.90	969.67	\$727.25
NEEDHAM ST-02	90' E OF CHARLESBANK RD	200' E OF HILLSIDE RD	99.00	714.70	2,461.74	\$1,846.31
NEEDHAM ST-03	200' E OF HILLSIDE RD	ROTARY	90.00	1,261.40	3,924.36	\$2,943.27
NEEDHAM ST-04	ROTARY	ROTARY	100.00	240.00	320.00	\$240.00
NEEDHAM ST-05	ROTARY	100' S OF LYNCH AV	100.00	434.70	1,352.40	\$1,014.30
NEEDHAM ST-06	100' S OF LYNCH AV	CLAY BANK RD	95.00	1,267.60	3,802.80	\$2,852.10
NEEDHAM ST-07	CLAY BANK RD	1508' E OF TOWNLINE	87.00	1,113.70	3,341.10	\$2,505.83
NEEDHAM ST-08	1508' E OF TOWNLINE	1435' E OF TOWNLINE	100.00	73.00	186.56	\$139.92
NEEDHAM ST-09	1435' E OF TOWNLINE	TOWNLINE	100.00	1,431.98	4,773.26	\$3,579.94

Name	From	To	PCI	Length (ft)	Square Yards	Total
OAK TREE RD	NEEDHAM ST	VALLEY RD	95.00	557.77	1,487.39	\$1,115.54
PINE HILL RD-01	NEEDHAM ST	VALLEY RD	98.00	567.90	1,514.40	\$1,135.80
PINE HILL RD-02	VALLEY RD	RIVERSIDE DR	95.00	713.57	1,902.85	\$1,427.14
PINE ST-02	79' W OF KIELY RD	NEEDHAM ST	98.00	2,365.71	7,359.98	\$5,519.98
RIVERDALE RD	HILLSIDE RD	VINE ROCK ST	99.00	715.00	1,906.67	\$1,430.00
RIVERSIDE DR EAST	RIVERSIDE DR (S)	RIVERSIDE DR (N)	94.00	584.88	1,559.67	\$1,169.76
RIVERSIDE DR-03	37' N OF VINE ROCK ST (E)	1842' W OF VINE ROCK S	95.00	1,805.40	4,814.40	\$3,610.80
RIVERVIEW ST	BRIDGE ST	COMMONWEALTH AVE	95.00	1,040.20	2,773.87	\$2,080.40
ROSEMARY RD-01	NEEDHAM ST (E)	880' W OF VINE ROCK ST	87.00	882.90	2,452.50	\$1,839.37
ROSEMARY RD-02	880' W OF VINE ROCK ST	CUNNINGHAM RD (S)	95.00	1,244.60	3,595.51	\$2,696.63
ROSEMARY RD-03	CUNNINGHAM RD (S)	NEEDHAM ST (W)	93.00	304.10	878.51	\$658.88
SAMOSSET RD	RIVERSIDE DR	PINE HILL RD	100.00	350.30	934.13	\$700.60
SHORT ST	VIOLET AVE	KIELY RD	95.00	241.19	589.58	\$442.19
TRIMOUNT ST	RIVERSIDE DR	VINE ROCK ST	99.00	792.10	2,112.27	\$1,584.20
VALLEY RD	HILLSIDE RD	RIVERSIDE DR	100.00	722.00	1,925.33	\$1,444.00
VINE ROCK ST-01	NEEDHAM ST	275' E OF NEEDHAM ST	100.00	275.00	641.67	\$481.25
VINE ROCK ST-02	275' E OF NEEDHAM ST	RIVERSIDE DR (W)	100.00	937.80	2,240.30	\$1,680.23
VINE ROCK ST-03	RIVERSIDE DR (W)	RIVERSIDE DR (E)	99.00	1,174.46	3,131.89	\$2,348.92
VIOLET AVE-01	COMMONWEALTH AVE	50' W OF SHORT ST	94.00	220.00	586.67	\$440.00
WOODLAWN ST	RIVERSIDE DR	VINE ROCK ST	95.00	817.35	2,088.79	\$1,566.59
ZOAR AVE-01	BRIDGE ST	BROOKSIDE AV	99.00	162.60	469.73	\$352.30
ZOAR AVE-02	BROOKSIDE AV	MORELAND AVE	95.00	551.10	1,592.07	\$1,194.05

Repair Type Total: 38,582.18 107,454.99 \$80,591.24

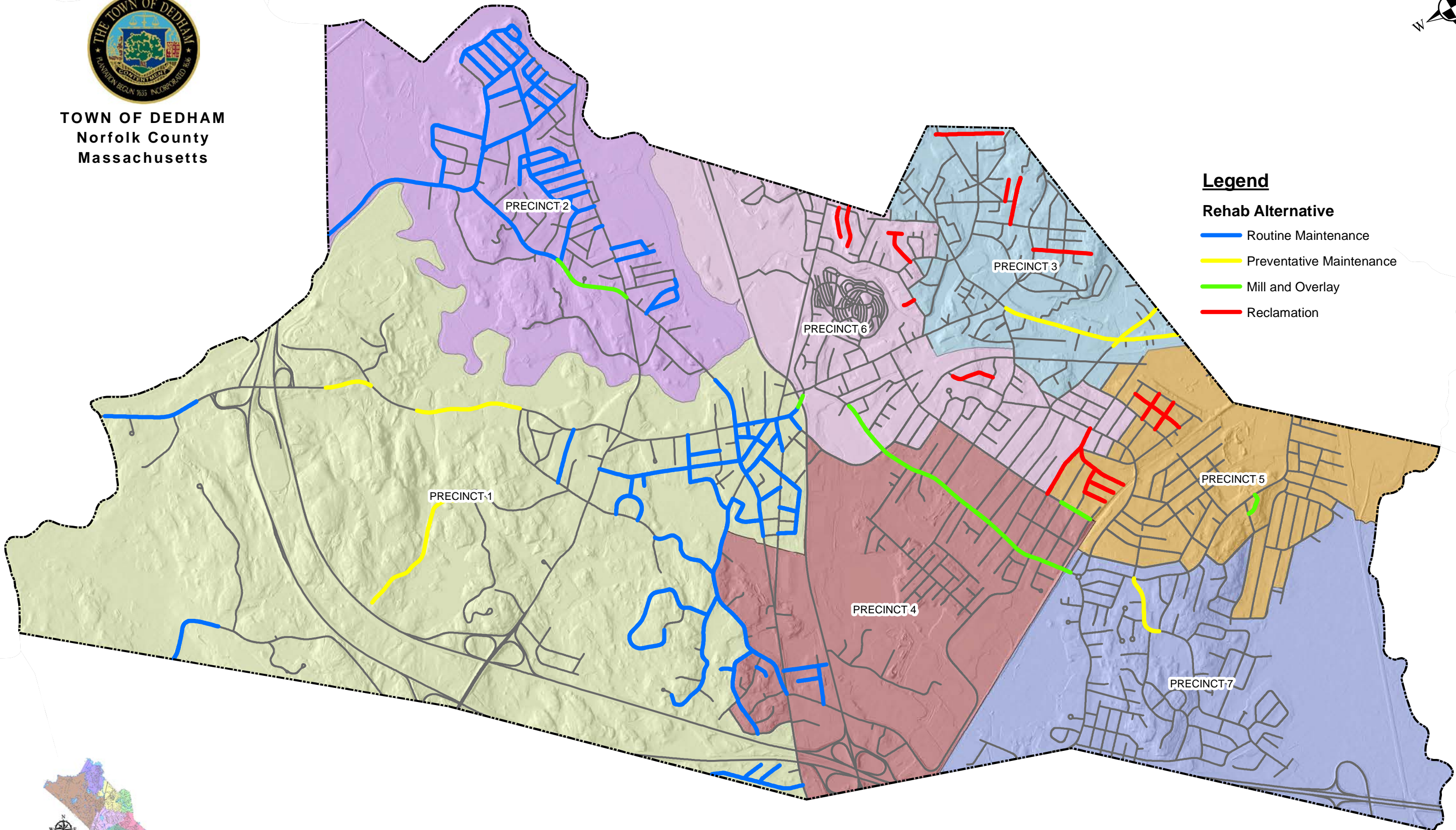
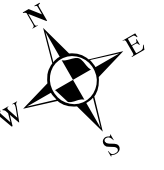
Year Total: 54,316.83 156,658.00 \$1,351,762.5

CIP Total:
120,269.71
342,458.98
\$2,702,682.49

PAVEMENT MANAGEMENT
CY2021 - CY2022 ROAD PROGRAM







TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

Rehab Alternative

-  Routine Maintenance
-  Preventative Maintenance
-  Mill and Overlay
-  Reclamation



DEDHAM GIS

This document is intended for
Town of Dedham planning and
analysis purposes only.

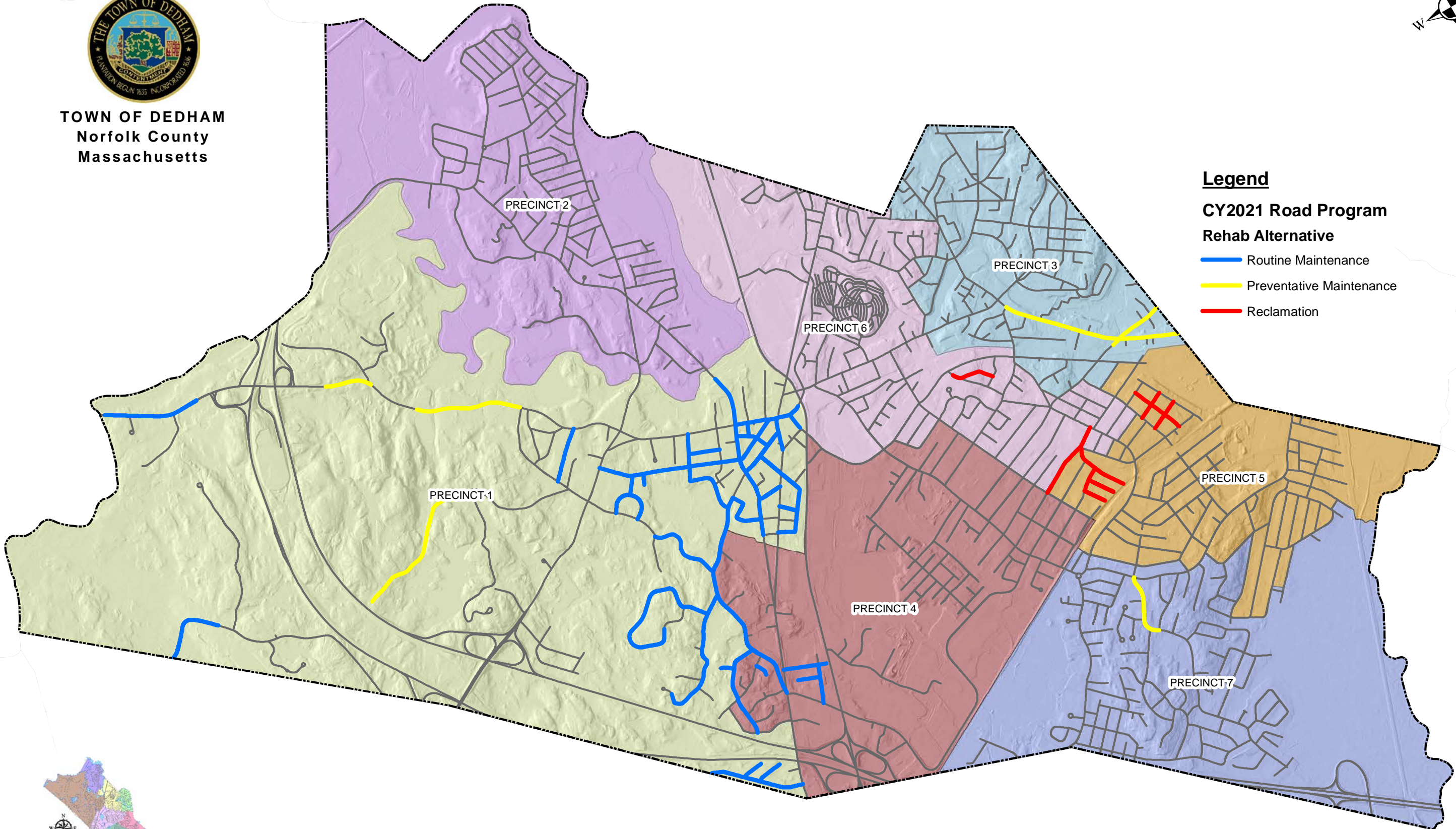
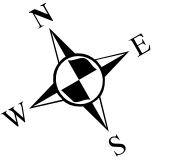
1 inch = 2,000 feet

Produced by:
The Town of Dedham
Engineering Department

PAVEMENT MANAGEMENT
CY2021 - CY2022 ROAD PROGRAM




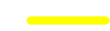

TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

CY2021 Road Program

Rehab Alternative

-  Routine Maintenance
-  Preventative Maintenance
-  Reclamation



This document is intended for
Town of Dedham planning and
analysis purposes only.

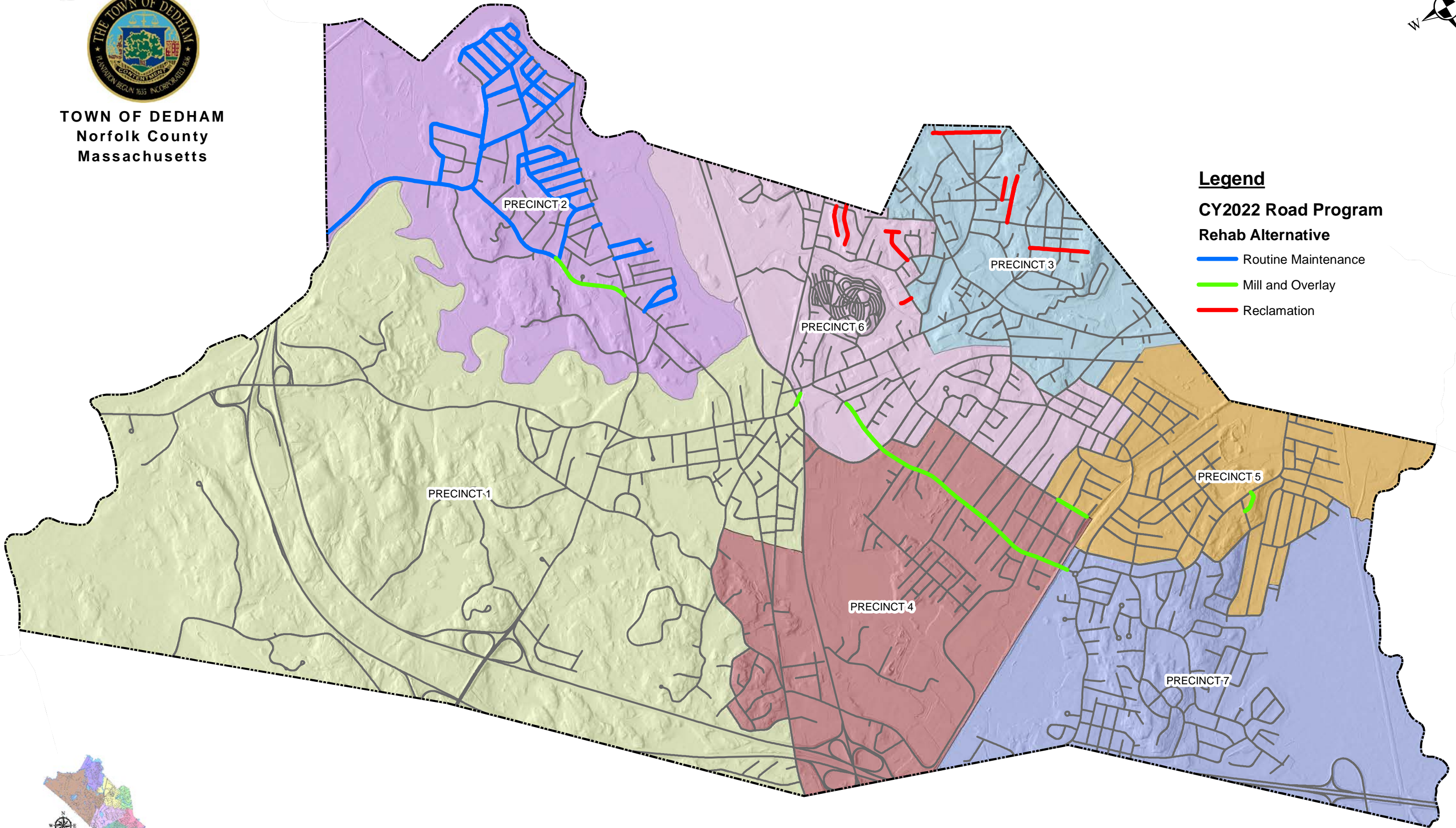
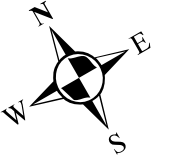
1 inch = 2,000 feet

Produced by:
The Town of Dedham
Engineering Department

PAVEMENT MANAGEMENT
CY2021 - CY2022 ROAD PROGRAM






TOWN OF DEDHAM
Norfolk County
Massachusetts



Legend

CY2022 Road Program

Rehab Alternative

-  Routine Maintenance
-  Mill and Overlay
-  Reclamation



This document is intended for
Town of Dedham planning and
analysis purposes only.

1 inch = 2,000 feet

Produced by:
The Town of Dedham
Engineering Department