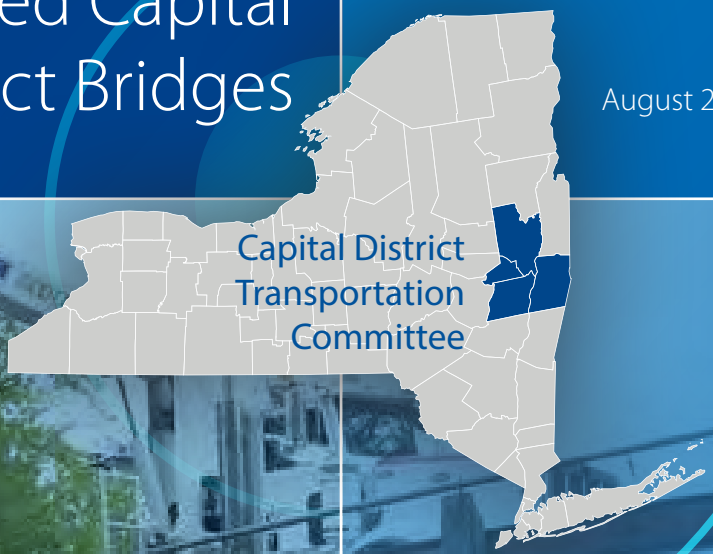
BRIDGE PRESERVATION REPORT

Identification of Bridge Preservation Candidates, Treatments, and Costs for Locally Owned Capital District Bridges

August 2021



CDTC
Capital District Transportation Committee

CDM Smith®

Table of Contents

Introduction 1
Background 1
Bridge Information 2
Bridge Condition 3
Bridge Work Strategies 3
Evaluation of "At-Risk" Bridges 5
Programming Schedule 6
Conceptual Construction Cost 6
Conceptual Construction Cost Projections 7
In-Depth Bridge Assessments 8
Evaluation Results 11
Condition Rating Updates 13
Summary 14

Appendices

Appendix A – Cost Estimate Template
Appendix B – Study Guidelines
Appendix C – Enhanced Bridge Data Spreadsheet
Appendix D – In-Depth Inspection Reports
Appendix E – Estimated Service Life
Appendix F – Condition Rating Calculation

Capital District Local Bridge Preservation Study

INTRODUCTION

The Capital District Transportation Committee (CDTC) serves as the Metropolitan Planning Organization (MPO) for the Capital District of New York State. As the region's MPO, CDTC carries out federal requirements for cooperative transportation planning and programming through implementation of its New Visions 2050 Regional Transportation Plan. The New Visions 2050 plan prioritizes preservation of transportation infrastructure and has identified local bridges as a key network element for further study and investment.

The approach to addressing bridge deficiencies throughout New York State shifted from routine replacement to bridge preservation with the passage of the federal highway funding law MAP-21 and adoption of the New York State Department of Transportation's (NYSDOT) "Preservation First" strategy. Federal and State policies now emphasize the optimization of the existing infrastructure through cost-effective preventive and corrective maintenance activities. This strategy of performing less expensive and shorter life cycle repairs will continue for the foreseeable future due to diminished infrastructure funding at all levels of government.

CDTC commissioned this study of the region's locally owned bridges in order to identify candidates that could benefit from timely preservation strategies. This report chronicles the methods and results from the review of 377 locally owned bridges in Albany, Rensselaer, Saratoga, and Schenectady Counties as well as the Cities of Albany and Schenectady.

BACKGROUND

There are 377 bridges within the CDTC's jurisdiction that are owned and maintained by local municipalities (counties, cities, towns, and villages). According to 2019 and 2020 NYSDOT Bridge Inspection Reports, approximately 189 of the 377 locally owned bridges are either structurally deficient (81) or functionally obsolete (108). The Federal Highway Administration (FHWA) defines bridges as structurally deficient if significant load carrying elements are found to be in poor or worse condition due to deterioration, or the bridge has inadequate load carrying capacity. A bridge which does not meet current standards for managing traffic volume is considered functionally obsolete. In addition, 14 bridges are closed to all traffic and 1 bridge was closed due to construction during the most recent biennial inspection.

CDM Smith conducted a similar study to this one in 2015. In October 2020, CDTC again contracted with CDM Smith to assist in the evaluation of the region's locally owned bridges and to develop work strategies for selected bridges. CDM Smith's evaluation is intended to help CDTC develop a strategic approach to managing infrastructure work for locally owned bridges in its planning area. The format of the 2015 study was used to help identify and prioritize local bridge preservation projects. However, the evaluation methods were updated for the 2020 study to reflect changes to AASHTO and NYSDOT element inspection methods.

BRIDGE INFORMATION

CDM Smith utilized current bridge condition and inventory data from NYSDOT's Bridge Safety Inspection program as the basis for this study. NYSDOT provided access to the 2019 and 2020 data via their Bridge Data Information System (BDIS) and the associated bridge inspection reports generated by their biennial inspection program. The NYSDOT inventory data was transferred to a spreadsheet and combined with the information developed during CDTC's 2015 Local Bridge Preservation Study, prior year bridge data records, and the preservation recommendations developed by CDM Smith to create an updated, sortable local bridge data worksheet.

Prior to the 2016 Inspection cycle, NYSDOT changed the inspection method from a 1-7 rating system to condition states. The current system uses element quantities in the ratings. For instance, primary members are rated based on a per foot basis. If 2 feet of the end of a single beam is in poor condition, the inspector assigns a rating of CS-3 for 2 linear feet. If the rest of the primary members are in good condition, the inspector assigns a CS-1 rating for the remainder of the total length of the primary members. The condition states are defined as follows:

Condition State	Condition Type	General Condition Guideline
CS-1	Good	That portion of the element that has either no deterioration or the deterioration is insignificant to the management of the element, meaning that portion of the element has no condition based preventive maintenance needs or repairs. Areas of an element that have received long lasting structural repairs that restore the full capacity of the element with an expected life equal to the original element may be coded as good condition.
CS-2	Fair	That portion of the element that has minor deficiencies that signify a progression of the deterioration process. This portion of the element may need condition based preventive maintenance. Areas of the element that have received repairs that improve the element, but the repair is not considered equal to the original member may be coded as fair.
CS-3	Poor	That portion of the element that has advanced deterioration but does not warrant structural review. This portion of the element may need condition based preventative maintenance or other remedial action.
CS-4	Severe	That portion of the element that warrants a structural review to determine the effect on strength or serviceability of the element or bridge; OR a structural review has been completed and the defects impact strength or serviceability of the element or bridge; OR a condition where that portion of the element is no longer effective for its intended purpose.
CS-5	Unknown	That portion of the element not assessable due to lack of access.

The previous system for inspecting bridge included a 1-9 element rating. For instance, if the primary member conditions existed above, the inspector would assign a rating to the element

based on the overall condition of the girder system. Several elements were previously rated on a "worst of" condition. For instance, if 4 bearings are in good condition and 1 bearing was in poor condition, the inspector would assign a rating based on the bearing. The 1-9 rating system is defined as follows:

Condition Rating	General Condition Guideline
9	Condition and/or existence unknown
8	Not applicable/element does not exist
7	New condition or no deterioration
6	Used to shade between ratings of 5 and 7
5	Minor deterioration but functioning as originally designed
4	Used to shade between ratings of 3 and 5
3	Serious deterioration or not functioning as originally designed
2	Used to shade between ratings of 1 and 3
1	Totally deteriorated or in failed condition

Currently, NYSDOT still uses the Condition Ratings of 1-7 to calculate the Computed Condition Rating (CCR) for each bridge. The general calculation is the same as it was prior to 2016, but NYSDOT has developed a system to convert the current Condition States, based on percentages of deteriorated elements, to the 1-7 rating system before entering this data into the CCR formula. Attempts have been made to obtain the conversion from NYSDOT to no avail. CDTC and CDM Smith worked collaboratively to attempt to replicate the NYSDOT CCR. The formula that was develops is within approx. 20% of the NYSDOT values.

BRIDGE CONDITION

CDM Smith conducted the assessment process by making a thorough review of the bridge inspection reports, combined with selective site visits, to evaluate the bridges in the study area. Next, the type of preservation treatment and timing was identified for each bridge. The evaluation lead to development of a list of bridges requiring repair for each county. This list was not based solely on the General Recommendation or Computed Condition Ratings in the bridge inspection reports. Bridges were instead prioritized using engineering judgment regarding the existing condition of individual bridge components.

The first phase of the evaluation involved a review of existing structural conditions. The information contained within the NYSDOT Bridge Inspection Reports were reviewed for all locally owned bridges within Albany, Rensselaer, Saratoga, and Schenectady Counties as well the Cities of Albany and Schenectady. CDM Smith also reviewed the bridge inventory information available from NYSDOT's BDIS database.

BRIDGE WORK STRATEGIES

The bridge inspection reports and other information were used to develop a repair work strategy for all bridges with individual elements rated CS-3 or lower. Work strategies include:

- Full Replacement
- Major Rehabilitation
- Minor Rehabilitation
- Element Specific Repair
- Preventative Maintenance

The Major Rehabilitation strategy can be further subdivided into a Superstructure Replacement and Deck Replacement repair treatment categories. Element Specific Repair and Preventative Maintenance strategies can also be subdivided into several treatment categories such as Paint – Complete, Replace Bearings, Concrete Patch Repairs, etc. Refer to Appendix A for a detailed list of repair treatments.

Full Replacement
A Full Replacement strategy involves the replacement of the superstructure and substructures of the bridge because the substructures are deteriorated beyond repair, cause a constriction of the stream channel and have associated significant scour problems, and/or other factors. It was assumed that all bridges with a Computed Condition Rating of 3.5 or less would require full replacement.

Major Rehabilitation
A Major Rehabilitation strategy consists of the replacement of the deck and/or primary members because they are beyond repair due to deterioration, damage, age or other factors.

Minor Rehabilitation
A Minor Rehabilitation strategy includes limited repair of structural elements and repair or replacement of non-structural elements. The repair of these specific items should raise the Computed Condition Rating above a 5.5.

Element Specific Repair
An Element Specific Repair strategy consists of limited repair to structural or non-structural elements. The repair of these specific items should raise the Computed Condition Rating above a 5.5.

Preventative Maintenance
A Preventative Maintenance Strategy consists primarily of preventive maintenance measures which can be taken to minimize potential future damage and/or deterioration of the bridge.

All the selected bridges were evaluated using a set of guidelines developed during the review process. The guidelines are intended to provide a uniform standard so that all bridges are evaluated on the same basis. The guidelines were updated based on the new condition state ratings as needed. The review guidelines are included in Appendix B.

Several factors were used to determine the work strategy for each bridge in the study. Factors such as the number of deteriorated elements, type of element, significance or extent of deterioration, and the reviewer's engineering judgement were used to develop a work strategy.

- Bridge Replacement: A bridge with four (4) or more structural elements, such as structural deck, primary members and abutment stem, rated CS-3 or lower

- Superstructure Replacement (Major Rehabilitation): A bridge with poor structural deck and primary member ratings but with substructures in fair to good condition and no significant scour concerns
- Deck Replacement (Major Rehabilitation): A bridge with a poor structural deck rating, but primary members and substructures in fair to good condition
- Minor Rehabilitation: Recommended for a bridge where there were three or four specific elements which required repair. The specific elements generally were non-structural deficiencies or limited structural repairs such as performing structural repairs to a girder end.
- Element Specific: Recommended for a bridge requiring only one or two specific elements which needed repair. As with the minor rehabilitation work strategy, specific elements were generally non-structural deficiencies or limited structural repairs. Element specific repair recommendations which would outlast the structure as a whole were avoided.
- Preventative Maintenance: Recommended for a bridge which had one or two elements in fair condition. This work strategy was also assigned to a bridge when a preventative maintenance measure, such as sealing the deck, could safeguard a bridge in good condition.

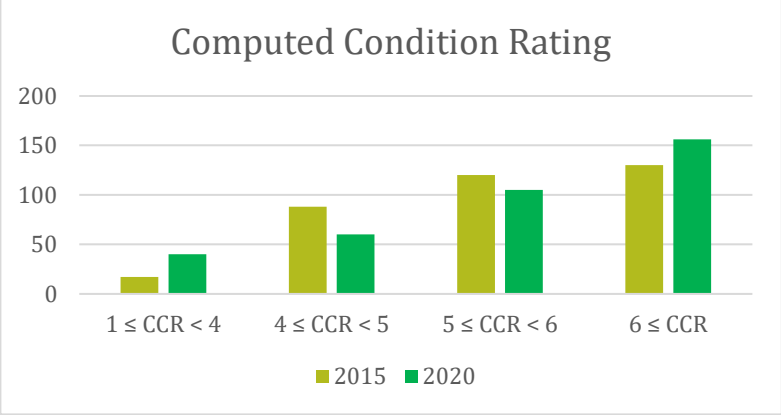
EVALUATION OF "AT-RISK" BRIDGES

The evaluation also included a review of bridges considered to be "at-risk" for requiring immediate repair or replacement. At-risk bridges are defined as bridges with a Red or Yellow Condition Flag. Red Condition Flags are issued during biennial safety inspections and indicate that there is a primary structural component of the bridge which has failed or has the potential to fail before the next biennial bridge inspection. Yellow Condition Flags are issued during biennial safety inspections and indicate that there is a primary structural component of the bridge which has the potential to become a Red Condition Flag before the next biennial bridge inspection.

In addition, bridges with prestressed concrete primary members rated CS-3 or lower or bridge that have been posted for loads were defined as at-risk. Any bridge the reviewer deemed to have a significant structural problem which poses an imminent risk of closure or capacity reduction was also included as an at-risk bridge.

Computed condition rating criteria for at-risk bridges varied by owner as follows:

- Schenectady County and City of Schenectady: Computed Condition Rating < 6.0
- Albany County, City of Albany and Saratoga County: Computed Condition Rating < 5.0
- Rensselaer County: Computed Condition Rating < 4.0



The City of Schenectady requested that BIN 2203110 be defined as an at-risk bridge. At-risk bridges are specifically identified in the enhanced bridge data spreadsheet. A total of 75 at-risk bridges were identified during the evaluation. A work strategy and program timing were also developed for all at-risk bridges.

PROGRAMMING SCHEDULE

A recommended program timing or schedule was assigned to each bridge during the evaluation. The timing indicates the period within which the work strategy for the bridge should be undertaken in order to achieve the greatest benefit from the preservation strategy. Program timing categories include Immediate, 2 years, 5 years, and 10 years. The indicated timing is based on the severity of deterioration, the significance of the deterioration in regard to the overall structure, acceleration of deterioration, and the reviewer's engineering judgment. Bridges with major structural elements which rate CS-3 or less generally require repairs within 2 years. As an example, a bridge with a primary member condition rating of CS-3 would warrant repair sooner than a bridge with a non-structural element condition rating of CS-3. There is also the possibility that certain types of deterioration will accelerate if left untreated. For instance, when an inspection report notes significant increased scour since the last inspection at a wingwall which lacks stone fill protection. Left untreated, the wingwall footing can quickly become undermined and potentially fail during a flood event. The placement of stone fill at the wingwall would alleviate the situation. A bridge in good condition may have a recommended preventative maintenance work strategy to be implemented immediately to prolong the service life of the structure. A bridge with structural elements in fair condition and/or severely deteriorated non-structural elements would warrant repair within 5 years. Bridges in good condition may not require repair of an element until 10 years.

In some instances, the structure as a whole may be on the borderline of poor condition and near the end of its service life, and not warrant repair at all. The structure would be left as is and replaced in 10 years after the remaining service life has been spent. Program timing should be weighed carefully when considering prioritization of projects.

From the list of 75 at-risk bridges, each Owner chose which bridges they wished to have CDM Smith perform in-depth field visits on. The in-depth visits consisted of verification of the extent of repairs required, confirm the findings from the previous Biennial Inspection Report, identify any additional areas requiring repairs, confirm the work strategy, review the initial cost estimate, and identify site specific conditions which may influence construction and the related costs. Site specific conditions included utilities, Right-of-Way, adjacent residences or business, wetlands or endangered species in the vicinity of the bridge, etc.

CONCEPTUAL CONSTRUCTION COST

A 2020 conceptual construction cost was developed for each bridge which had an in-depth inspection performed. Costs for work strategies and repair treatments were determined based on 2019/2020 NYSDOT unit cost data available on NYSDOT's website and bid information CDM Smith collected on recent projects within the Capital District. The pricing information available for this study was generated prior to the COVID pandemic. Therefore, based on recent bid pricing increases observed to date during the 2021 construction season, material costs can be expected

to increase by approximately 10% above the historic bid pricing used for the in-depth work strategies. Rehabilitation/repair work item cost guidelines were developed from the bid pricing data for various types of work to streamline development of individual bridge conceptual construction cost estimates. The cost guidelines are included in Appendix A. These guidelines ensure that costs for work strategies and treatments are applied uniformly and consistently over the evaluation study group.

Work strategy and repair treatment costs are generally based on a 32-foot-wide bridge with a span of up to 100 feet. These bridge dimensions were selected as they represent a typical bridge size among the population of locally owned Capital District bridges. The conceptual cost is modified if the bridge has multiple spans, a significantly larger span or width, and/or higher traffic volume. A cost for work zone traffic control and working over a railroad (where applicable) are also included in the guidelines. Costs for engineering design, construction inspection, inflation to the year of construction, significant environmental mitigation efforts, and right-of-way acquisition are also included in the 2020 conceptual construction cost for each bridge.

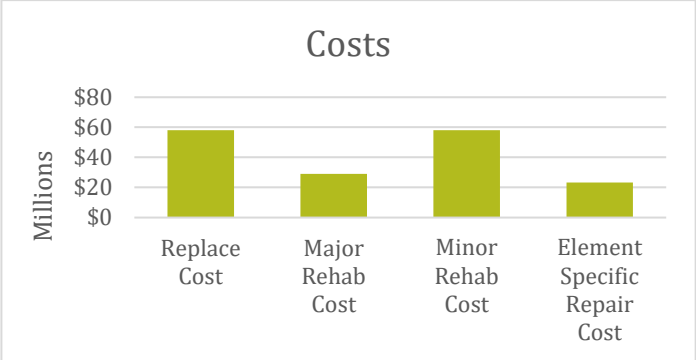
CONCEPTUAL CONSTRUCTION COST PROJECTIONS

This study did not include development of individual construction cost estimates for repair work strategies for every locally owned bridge requiring repairs. Instead, the study focused on providing a higher level of detail for the bridges selected for in-depth assessment. To support CDTC's goal of identifying total bridge preservation program costs for locally owned bridges, CDM Smith utilized the conceptual construction costs developed from the in-depth assessments to develop projected average construction costs for each type of bridge preservation work strategy, as follows:

- Full Replacement - $2.0M
- Major Rehabilitation - $1M
- Minor Rehabilitation - $500k
- Element Specific Repairs $200k

These average project construction costs can be used by CDTC to determine projected total program funding needs to address the deterioration of the full locally owned bridge inventory. It should be understood that the projected average construction costs are based on a small sample size of projects evaluated as part of the in-depth assessments, and do not include engineering design or right of way acquisition costs.

Using this approach, the total funding need to address replacement and repair costs for the 274 locally owned bridges requiring repair is approximately $168M, with bridge preservation-only projects making up approximately $110M of this total. By comparison with the 2015 Local Bridge Preservation Study, projected bridge preservation-only costs have increased



by approximately $30M (was $80.5M in 2015). This increase in total repair cost is attributed in part to the more detailed bridge element condition information that results from the AASHTO Element-level inspection methods now being used by NYSDOT to document bridge conditions.

IN-DEPTH BRIDGE ASSESSMENTS

For the second phase of the evaluation, CDM Smith completed site visits on a select sampling of bridges within Albany and Schenectady Counties and the Cities of Albany and Schenectady to further refine the scope of work for each priority bridge. South Col Engineering completed site visits on a select sampling of bridges within Saratoga County. The purpose of the In-Depth field visits was to confirm the work strategies for the individual bridges, determine any additional areas requiring repairs, review the environmental, Right-of-Way and other impacts which could affect the construction activities and the subsequent construction costs. Final evaluation results were verified or updated based on the field reviews. Field note summaries and photo logs are included in Appendix F of this report.

ALBANY COUNTY

Field visits were made to five (5) bridges in Albany County. The bridges that were evaluated included BINs 3301020, 3301040, 3301500, 3301580 and 3302920. Tony Fernandez from Albany County joined CDM Smith for the field visit at each County Owned bridge. A construction cost estimate and field review sheet were created for BIN 2256840, owned by the City of Albany, but no field visit was conducted due to confined space entry being required. The field visits resulted in the following additional work:

- BIN 3301020: replacement of the non-ratable joints at both abutments
- BIN 3301040: clean scuppers on bridge deck, replace bottom rail of bridge rail, seal longitudinal joint along bottom of both curbs, repoint masonry joints at wingwalls and headwalls
- BIN 3301500: additional substructure repairs, joint replacement not required (Photo 1)
- BIN 3301580: additional deck repairs, approach asphalt pavement reconstruction
- BIN 3302920: replace bridge rail at both fascias

Photo 1: BIN 3301500 - Looking Towards Left Across Top of Begin Joint

Photo 2: BIN 3301580 – Looking Towards Left at End Right (Other Locations Similar)

RENSSELAER COUNTY

No bridges slated for in-depth evaluation were identified by Rensselaer County.

SARATOGA COUNTY

Field visits were made to six (6) bridges in Saratoga County. The bridges that were evaluated include BIN 2202830, 2202970, 3304210, 3304520, 3304560 and 3304790. No County representative joined South Col Engineering for the field visits at these bridges. The field visits resulted in the following additional work:

- BIN 2202830: additional substructure repairs
- BIN 2202970: approach sidewalk repairs, approach asphalt pavement reconstruction, additional substructure repairs
- BIN 3304210: reset curbs on both bridge fascias, approach guide rail replacement
- BIN 3304520: additional substructure repairs
- BIN 3304560: superstructure replacement (Refer to Photo 3), substructure repairs, stream bank armoring

- BIN 3304790: additional superstructure and substructure repairs (Refer to Photo 4), stream bank armoring, approach rail replacement, wearing surface replacement, approach slab reconstruction

Photo 3: BIN 3304560 – Looking Towards End Left at Right Face of Girder 6

Photo 4: BIN 3304790 – Looking Towards End at Underside of Stone Masonry Arch (Steel Plate Arch in Background)

SCHENECTADY COUNTY

Field visits were made to one (1) bridge in Schenectady County and one (1) bridge in the City of Schenectady. The bridges that were evaluated include BIN 2203110 in the City of Schenectady and BIN 3050510 in Schenectady County. Chris Wallen from the City of Schenectady accompanied CDM Smith during the field visit for BIN 2203110. Paul Sheldon from Schenectady County joined

CDM Smith for the field visit to BIN 3050510. The field visits resulted in the following additional work:

- BIN 2203110: no additional work
- BIN 3050510: additional substructure repairs, removal of large trees from stream channel

Photo 5: BIN 2203110 - End Diaphragm at Begin Abutment – Holes in Web

Photo 6: BIN 3050510 – Looking Right From Bridge at Downstream Channel

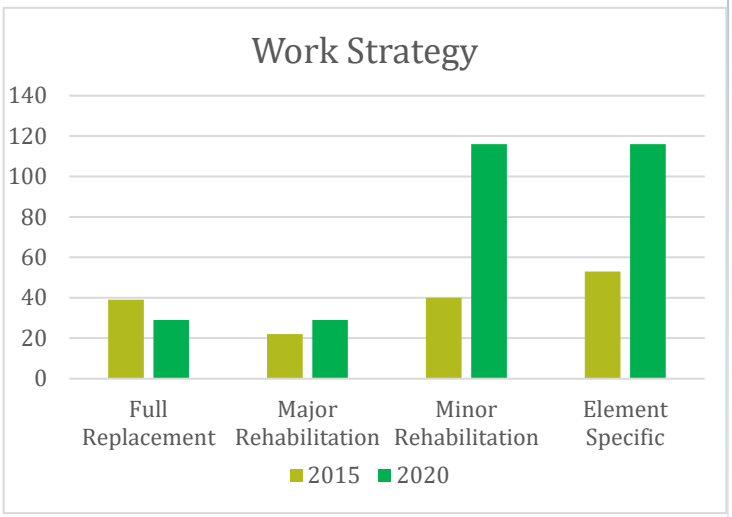
EVALUATION RESULTS

The results of the evaluation have been tabulated and presented in spreadsheet format in order to document the bridge management recommendations. The spreadsheet is intended to present evaluation information in sufficient detail to aid the CDTC Planning Committee in identifying and prioritizing projects for inclusion in their funding program. The spreadsheet contains basic information such as BIN, location and description of the bridge, AADT and current condition

rating along with evaluation information such as recommended work strategy and repair treatments, 2020 conceptual cost for the in-depth bridges which had a field visit, and program timing. The spreadsheet is easily searchable and can be sorted by any category desired. A print of the enhanced bridge data spreadsheet is included in Appendix C. The spreadsheet also has the ability for the user to create bridge fact sheets for each bridge they select which includes only the most pertinent information for each bridge in a different format that can be more easily presented to the general public. The needs and recommendations of a particular bridge can be easily ascertained by referring to its respective bridge fact sheet. Sample bridge fact sheets are included in Appendix E. These documents will assist the CDTC in developing a strategic approach to manage infrastructure work for locally owned bridges that is consistent with NYSDOT's Preservation First strategy. It will also serve as a communication tool to clearly present the recommendations to municipalities and the public in the CDTC's planning area.

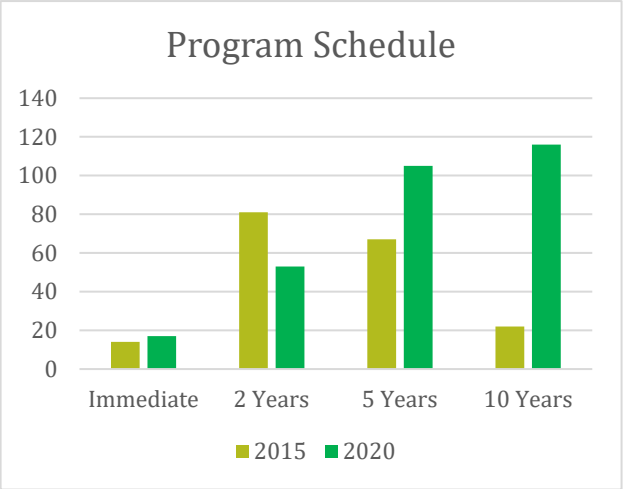
A recommended work strategy was determined for all 290 bridges in the study group which had elements with a CS-3 or CS-4 rating during the most recent biennial inspection. Refer to the Bridge Work Strategy section for the methodology of classifying work strategies. All the bridges were reviewed between December 2020 to March 2021 based on 2019 and 2020 biennial inspection reports. Federal aid eligible and NHS bridges were given first priority for review during the evaluation. The following summarizes the work strategies:

- Closed to Traffic or have not been inspected under the NYSDOT inspection program within the past 6 years and were excluded from further analysis – 21
- Currently on the TIP and scheduled for repair or replacement and were excluded from further analysis – 17
- Replacement or Non-Preservation work strategy recommended: 29
- Major Rehabilitation: 29 (16 superstructure replacements and 13 deck replacements)
- Minor Rehabilitation: 116
- Element Specific: 116



Refer also to Figure 2. See Appendix D for additional tables which breakdown the number of bridges in relation to Federal Aid status.

The bulk of the bridges are recommended for programing within 2 to 5 years. A recommendation for immediate repair was given to 17 bridges. A 2-year repair period is recommended for 53 bridges, a 5-year repair period is recommended for 105 bridges, and 116 bridges are recommended for a 10-year repair period.



Due to changes in the inspection methods between the 2015 and 2020 studies, several bridges require additional work that could not be thoroughly identified during the 2015 study. For instance, if a deck previously had 1% of its area spalled, it could potentially have been rated '5' which would require no note or photo in the inspection report. However, with the new condition state rating system, that 1% of deck is identified and documented. Subsequently, that work is included even though conditions may have existed during the previous study.

The 2020 conceptual construction costs were estimated for the bridges that in-depth varied greatly for each work strategy. The Replacement work strategy ranges in cost between $0.30 and $4.3 million. The cost ranged from $0.60 to $2.0 million for the Major Rehabilitation work strategy. The Minor Rehabilitation work strategy ranges from $0.10 to $1.2 million. The Element Specific work strategy ranges in cost between $0.30 and $1.1 million. The cost ranged from $0.03 to $0.6 million for the Preventative Maintenance work strategy.

See Appendix D for a more detailed breakdown of the results based on Federal Aid eligibility in table form.

CONDITION RATING UPDATES

CDTC requested that we try to replicate the Computed Condition Rating (CCR) which NYSDOT uses to evaluate the health of their bridges. The general calculation is the same as it was prior to 2016, but NYSDOT has developed a system to convert the current Condition States, based on percentages of deteriorated elements, to the 1-7 rating system before entering this data into the CCR formula. Attempts have been made to obtain the conversion from NYSDOT to no avail. CDTC and CDM Smith worked collaboratively to attempt to replicate the NYSDOT CCR. The formula that was develops is within approx. 20% of the NYSDOT values. The calculations are included in the spreadsheet. Increased CCR is often used to perform a cost-benefit analysis and determine which bridges with the Owner's population should be targeted for replacements, rehabilitations, or other work. As an example, a bridge undergoing bearing replacement would be assumed to have its abutment and/or pier bearing ratings increased to CS-1 reflecting their new condition after the project is complete. The worksheet incorporates the updated rating into the CCR calculation and provides the predicted condition rating based on the planned repairs. In this manor, CDTC will be able to see the direct impact of future repairs on targeted bridge candidates based on the current rating system. See Appendix F additional information.

SUMMARY

The purpose of this study is to assess the condition of the 377 local bridges in CDTC's jurisdiction and provide recommendations on potential preservation strategies that will assist the CDTC in making programming decisions when selecting bridge preservation projects for inclusion in the CDTC TIP. The primary focus of the study is to develop a work strategy, programming schedule and estimated construction cost for the 290 bridges with elements rated CS-3 or CS-4. The condition assessment is based on the latest NYSDOT Bridge Inspection Reports. The bridges were sorted into four (4) work strategies consisting of Replacement, Major Rehabilitation, Minor Rehabilitation and Element Specific. Programming consists of an Immediate, 2-Year, 5-Year or 10-Year schedule. Selective site visits were made to a few bridges in each county to verify their condition and confirm the recommended work strategy.

The results of the evaluation have been tabulated and presented in spreadsheet format in order to document the bridge management recommendations. The spreadsheet contains basic information about the bridges along with the study results. The bridge fact sheets include only the most pertinent information for each bridge in a different format that can be more easily presented to the general public. The study determined that 40% of the bridges fall into the Element Specific work strategy and 40% fall into the Minor Rehabilitation work strategy. Most (40%) of the bridges are recommended for a 10-Year programing schedule.

Appendix A

PRELIMINARY ENGINEER'S ESTIMATE (TYPE OF WORK)

Rehabilitation of:

BIN XXXXXXX

FEATURE CARRIED

Over

FEATURE CROSSED

TOWN

COUNTY

ITEM	DESCRIPTION	UNITS	UNIT COST	TOTAL	
				QUANTITY	COST
202.120001	Removing Existing Superstructures	LS	$75,000.00	0	$0
202.19	Removal of Substructures	CY	$250.00	0	$0
202.2201	Removal of Steel Supported Structural Slabs (With Shear Connectors) - Type A	SF	$35.00	0	$0
202.2202	Removal of Steel Supported Structural Slabs (With Shear Connectors) - Type B	SF	$30.00	0	$0
202.2301	Removal of Steel Supported Structural Slabs (Without Shear Connectors) - Type A	SF	$30.00	0	$0
202.2302	Removal of Steel Supported Structural Slabs (Without Shear Connectors) - Type B	SF	$25.00	0	$0
202.24	Removal of Concrete Superstructure Supported Concrete Slabs (With Shear Connectors)	SF	$25.00	0	$0
202.25	Removal of Concrete Superstructure Supported Concrete Slabs (Without Shear Connectors)	SF	$20.00	0	$0
204.02	Controlled Low Strength Material (CLSM) (No Fly Ash)	CY	$200.00	0	$0
402.098304	9.5 F3 Top Course HMA, 80 Series Compaction	TON	$200.00	0	$0
490.30	Miscellaneous Cold Milling of Bituminous Concrete	SY	$12.00	0	$0
553.010001	Cofferdam (Type 1)	EA	$18,000.00	0	$0
553.020002	Cofferdam (Type 2)	EA	$18,000.00	0	$0
555.09	Concrete for Structures, Class HP	CY	$1,200.00	0	$0
557.0109	Superstructure Slab with Integral Wearing Surface - Bottom Formwork Required - Type 9 Friction	SY	$390.00	0	$0
557.0509	Superstructure Slab with Integral Wearing Surface - Bottom Formwork Not Required - Type 9 Friction	SY	$300.00	0	$0
557.2009	Structural Approach Slab with Integral Wearing Surface - Type 9 Friction	SY	$275.00	0	$0
559.16960118	Protective Sealing of Structural Concrete	SF	$1.50	0	$0
559.17960118	Protective Sealing of Structural Concrete for Existing Bridge Decks	SF	$2.50	0	$0
560.01	Dimension Stone Masonry	SF	$150.00	0	$0
560.09	Tuck Pointing	SF	$60.00	0	$0
560.40000008	Repair Stone Masonry	SF	$200.00	0	$0
563.02	Prestressed Concrete Box Beam Units	SF	$85.00	0	$0
563.03	Prestressed Concrete Hollow Slab Units	SF	$210.00	0	$0
564.510001	Structural Steel	LB	$6.00	0	$0
564.75020004	Structural Steel Repair, Type II	EA	$18,000.00	0	$0
564.75030004	Structural Steel Repair, Type III	EA	$6,000.00	0	$0
564.75040004	Structural Steel Repair, Type IV	EA	$4,000.00	0	$0
565.2023	Type E.B. Fixed Bearing (112 to 168 Kips)	EA	$3,500.00	0	$0
565.2033	Type E.B. Expansion Bearing (112 to 168 Kips)	EA	$3,500.00	0	$0
564.46000009	Resetting of Existing Bearings	EA	$800.00	0	$0
567.60	Armorless Bridge Joint	LF	$220.00	0	$0
568.51	Steel Bridge Rail (Four-Rail)	LF	$165.00	0	$0
568.70	Transition Bridge Railing	LF	$150.00	0	$0
570.150001	Class A Containment	LS	$120,000.00	0	$0
570.160001	Class B Containment	LS	$60,000.00	0	$0
573.010001	Structural Steel Painting Field Applied - Total Removal	LS	$180,000.00	0	$0
574.020001	Structural Steel Painting: Overcoating	LS	$90,000.00	0	$0
574.030001	Structural Steel Painting: Localized	SF	$50.00	0	$0
576.03210011	Cleaning Scuppers	EA	$250.00	0	$0
578.120901	Overlay Concrete, Class E - Type 9 Friction	SF	$6.00	0	$0
578.130001	Slab Reconstruction Concrete, Class D or E	SF	$12.00	0	$0
580.01	Removal of Structural Concrete	CY	$2,500.00	0	$0
580.04	Removal of Concrete Approach Slab	SF	$8.00	0	$0
581.01	Removal of Bituminous Concrete Overlay (Bridge)	SF	$2.50	0	$0
581.02	Removal of Cement Concrete Overlay (Bridge)	SF	$1.25	0	$0
582.05	Removal of Structural Concrete - Replacement with Class A Concrete	CY	$6,500.00	0	$0
582.06	Removal of Structural Concrete - Replacement with Class D Concrete	SF	$200.00	0	$0
582.07	Removal of Structural Concrete - Replacement with Vertical and Overhead Patching Material	SF	$120.00	0	$0
585.01	Structural Lifting Operations - Type A	EA	$6,500.00	0	$0
586.0201	Drilling and Grouting Bolts or Reinforcing Bars	EA	$50.00	0	$0
587.01	Bridge Railing Removal and Disposal	LF	$60.00	0	$0
588.02010109	Rehabilitation of Bridge Joint Systems - Repair Type XX	LF	$270.00	0	$0
595.50000018	Sheet-Applied Waterproofing Membrane	SF	$5.00	0	$0
606.10	Box Beam Guide Railing	LF	$60.00	0	$0
606.120201	Box Beam Guide Railing End Assembly Type IIA	EA	$1,800.00	0	$0
606.71	Removing & Disposing Corrugated Beam Guide Railing	LF	$6.00	0	$0
619.01	Basic Workzone Traffic Control	LS	$18,000.00	0	$0
620.05	Stone Filling (Heavy)	CY	$95.00	0	$0
621.02	Cleaning Culverts With Span of More Than 50 in.	LF	$60.00	0	$0
621.05	Clean, Grade and Shape Existing Roadside Section	LF	$30.00	0	$0
625.01	Survey Operations	LS	$7,500.00	0	$0
637.11	Engineer's Field Office - Type 1	MO	$1,800.00	0	$0
641.91010011	Maintenance Cleaning and Washing of Bridges	EA	$5,500.00	0	$0
				Subtotal 1	$0
697.03	Field Change Payment (FCP)	DC	$1.00	0	$0
				Subtotal 2	$0
699.040001	Mobilization (4%)	LS	$0	1	$0
				Subtotal 3	$0
	Contingency (25%)	LS	$0	1	$0
			Total:	**$0**	
			TOTAL ESTIMATED CONSTRUCTION COSTS:	**$0**	
	ROW	LS	$0	1	$0
	Design Fees	LS	$0	1	$0
	Construction Inspection	LS	$0	1	$0
			TOTAL ESTIMATED BRIDGE COSTS:	**$0**	

Appendix B

CDTC BRIDGE STUDY GUIDELINES

General work strategy guidelines used to determine the repairs for the bridges include:

- Placement of stone fill was recommended for bridges where the stone fill was washed away or when lacking stone fill. The placement timeframe was based on the existing scour/undermining damage, existing structural flags, and the progression of further damage.
- Paint total removal with a Class A containment system was recommended for bridges with >25% Paint Element Ratings of CS-3 or CS-4. A paint overcoat with Class B containment system was recommended for bridges with <25% Paint Element Ratings of CS-3 or CS-4. Localized painting with a Class B containment system was generally recommended on bridges where the joints were leaking and the paint failed at only the beam ends.
- Joint replacement within a 2-year period was recommended for any bridge with actively leaking deck joints.
- Replacement of the asphalt wearing surface was recommended where the asphalt pavement had not been replaced recently and was cracked and/or raveling.
- A recommendation to seal the deck within a 2-year period was given to concrete decks with integral wearing surfaces which were cracked or were constructed between >10 years ago.

Appendix C

Green Highlight Indicates In-Depth Inspection Performed

BIN	County	Political Unit	Primary Owner	Maintenance Responsibility Primary	Year Built	Year of Last Major Rehabilitation	2020 In-Depth	Work Strategy	Preservation Eligible	Treatment 1	2020 Conceptual Construction Cost	TIP Funding	Program Schedule (years)	Comments
1038660	1 - County 1 - ALBANY	0187 - Town of COLONIE	30 - County	30 - County	2002	8888		Minor Rehab					5 Yrs	
1053380	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	42 - City	1968	2008		Element Specific					10 Yrs	
1054320	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	72 - Other	1965	8888		Full Replacement					2 Yrs	CCR < 4.0
1071940	5 - County 5 - SARATOGA	2029 - City of MECHANICVILLE	42 - City	42 - City	1982	2016		Element Specific					10 Yrs	
2000170	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1886	1989		Minor Rehab					5 Yrs	Bank protection (concrete wall) repair
2000930	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1934	8888		Minor Rehab					5 Yrs	
2000940	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1875	8888		Element Specific					10 Yrs	Remove fallen log from stream
2024650	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1985	8888		Minor Rehab					5 Yrs	
2024660	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1875	8888		Full Replacement					2 Yrs	CCR < 3.5
2025330	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1929	1985		Minor Rehab					5 Yrs	
2200130	1 - County 1 - ALBANY	0068 - Town of BERNE	40 - Town	40 - Town	1978	2010		Element Specific					10 Yrs	
2200140	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	40 - Town	40 - Town	2014	8888		No Work Needed					N/A	
2200210	1 - County 1 - ALBANY	0071 - Town of BETHLEHEM	30 - County	30 - County	2014	8888		Element Specific					10 Yrs	
2200270	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	42 - City	1980	2018		Element Specific					10 Yrs	
2200300	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	42 - City	1905	8888		Closed	Yes				N/A	
2200390	1 - County 1 - ALBANY	2009 - City of COHOES	42 - City	42 - City	2010	8888		Element Specific					10 Yrs	
2200460	1 - County 1 - ALBANY	2009 - City of COHOES	42 - City	42 - City	1994	8888		Minor Rehab					5 Yrs	
2200470	1 - County 1 - ALBANY	2009 - City of COHOES	42 - City	42 - City	1986	8888		Element Specific					10 Yrs	
2201460	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	40 - Town	40 - Town	1975	8888		Minor Rehab					Immediate	YSF Abutment UM
2201470	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	40 - Town	40 - Town	1940	8888		Full Replacement					Immediate	YSF Cracked Welds (Truss), CCR < 4.0 and PL = 10T
2201480	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	40 - Town	40 - Town	1935	1991		Minor Rehab					Immediate	YSF Begin Abutment UM, YSF End Abutment UM
2201490	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	30 - County	30 - County	2015	8888		No Work Needed					N/A	
2201530	4 - County 4 - RENSSELAER	0099 - Town of BRUNSWICK	40 - Town	40 - Town	2012	8888		No Work Needed					N/A	
2201540	4 - County 4 - RENSSELAER	0099 - Town of BRUNSWICK	30 - County	30 - County	1990	8888		Minor Rehab					5 Yrs	
2201550	4 - County 4 - RENSSELAER	0099 - Town of BRUNSWICK	40 - Town	40 - Town	1940	8888		Full Replacement					2 Yrs	CCR < 4.0
2201560	4 - County 4 - RENSSELAER	0099 - Town of BRUNSWICK	40 - Town	40 - Town	2015	8888		Element Specific					10 Yrs	
2201570	4 - County 4 - RENSSELAER	0249 - Town of EAST GREENBUSH	40 - Town	40 - Town	1938	1991		Full Replacement					Immediate	YSF Web SL, CCR < 4.0 and PL = 18T
2201620	4 - County 4 - RENSSELAER	0398 - Town of HOOSICK	40 - Town	40 - Town	2014	8888		Element Specific					10 Yrs	
2201630	4 - County 4 - RENSSELAER	0398 - Town of HOOSICK	40 - Town	40 - Town	2003	8888		Element Specific					10 Yrs	
2201640	4 - County 4 - RENSSELAER	0398 - Town of HOOSICK	40 - Town	40 - Town	2010	8888		Element Specific					10 Yrs	
2201650	4 - County 4 - RENSSELAER	0398 - Town of HOOSICK	40 - Town	40 - Town	1920	1990		Full Replacement					Immediate	RSF Load Posting, YSF Stringer Web SL, YSF Stringer Flange SL, YSF Abutment UM, CCR < 4.0 and PL = 15T
2201660	4 - County 4 - RENSSELAER	0398 - Town of HOOSICK	40 - Town	40 - Town	1900	8888		Closed	Yes				N/A	
2201670	4 - County 4 - RENSSELAER	0595 - Town of NORTH GREENBUSH	40 - Town	40 - Town	2013	8888		Element Specific					10 Yrs	
2201680	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	1948	8888		Minor Rehab					5 Yrs	
2201700	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	1922	8888		Closed					N/A	Jack arch
2201710	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	1947	1989		Major Rehab		Superstructure Replacement			2 Yrs	CCR < 4.0
2201720	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	1948	8888		Minor Rehab					5 Yrs	Remove fallen tree from stream, CCR < 4.0
2201730	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	1985	8888		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4
2201740	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	2016	8888		No Work Needed					N/A	
2201760	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	40 - Town	40 - Town	1988	8888		Minor Rehab					5 Yrs	Steel culvert repair, bank protection (concrete lagging) replacement
2201770	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	40 - Town	40 - Town	1960	8888		Major Rehab		Superstructure Replacement			2 Yrs	Superstructure replacement, replace pedestals
2201780	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	40 - Town	40 - Town	1910	2016		Full Replacement					2 Yrs	CCR < 4.0
2201790	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	40 - Town	40 - Town	1910	2014		Minor Rehab					5 Yrs	
2201800	4 - County 4 - RENSSELAER	1238 - Village of HOOSICK FALLS	40 - Town	40 - Town	2004	8888		Element Specific					10 Yrs	
2201820	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	40 - Town	40 - Town	1920	8888		Full Replacement	Yes				2 Yrs	CCR < 3.5
2201840	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	40 - Town	40 - Town	1950	1998		Full Replacement					2 Yrs	CCR < 3.5, YSF Web SL
2201850	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	40 - Town	40 - Town	1991	8888		Element Specific					10 Yrs	Headwall repair
2201860	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	30 - County	30 - County	1927	8888		Full Replacement					2 Yrs	CCR < 3.5, Jack arch
2201870	4 - County 4 - RENSSELAER	1575 - Village of EAST NASSAU	40 - Town	40 - Town	1950	8888		Full Replacement					2 Yrs	CCR < 3.5
2201880	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	40 - Town	40 - Town	2006	8888		No Work Needed					N/A	
2201890	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	40 - Town	40 - Town	1985	8888		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4
2201900	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	40 - Town	40 - Town	2005	8888		Minor Rehab					5 Yrs	Bank protection (masonry wall) reconstruction
2201910	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	40 - Town	40 - Town	2006	8888		Element Specific					10 Yrs	
2201920	4 - County 4 - RENSSELAER	0249 - Town of EAST GREENBUSH	40 - Town	40 - Town	1986	8888		Element Specific					10 Yrs	
2201960	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	40 - Town	40 - Town	1950	8888		Full Replacement					2 Yrs	CCR < 4.0 and PL = 15T
2201980	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	40 - Town	40 - Town	1938	8888		Major Rehab		Superstructure Replacement			Immediate	YSF Void in Footing Concrete and CCR < 4.0, Jack arch
2201990	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	40 - Town	40 - Town	1950	1995		Minor Rehab					5 Yrs	
2202000	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	40 - Town	40 - Town	1950	8888		Full Replacement					2 Yrs	PL = 10T
2202010	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	40 - Town	40 - Town	1940	8888		Full Replacement					2 Yrs	CCR < 3.5
2202020	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	40 - Town	40 - Town	1988	8888		Element Specific					10 Yrs	
2202070	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	40 - Town	40 - Town	1985	8888		Element Specific					10 Yrs	
2202080	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1931	8888		Major Rehab		Superstructure Replacement			2 Yrs	PL = 10T, Jack arch
2202090	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1939	2020		Minor Rehab					5 Yrs	
2202100	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1936	8888		Major Rehab		Superstructure Replacement			2 Yrs	Jack arch
2202110	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1950	8888		Major Rehab		Superstructure Replacement			2 Yrs	CCR < 4.0
2202120	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1947	8888		Closed					N/A	
2202140	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1912	1989		Minor Rehab					5 Yrs	Selective stringer and floorbeam replacement, YSF Stringer Web SL and CCR < 4.0
2202160	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1947	1992		Minor Rehab					5 Yrs	Slective stringer replacement, YSF Stringer Web SL and CCR < 4.0
2202190	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1940	1987		Minor Rehab					5 Yrs	Remove fallen log from stream
2202200	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1929	8888		On 2019-2024 TIP					N/A	
2202220	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1975	2012		Element Specific					10 Yrs	
2202240	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1997	8888		Element Specific					10 Yrs	
2202250	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1986	8888		Element Specific					10 Yrs	
2202260	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1940	1986		Major Rehab		Deck Replacement			2 Yrs	Bank protection (concrete wall and steel sheet piles) reconstruction
2202270	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1997	8888		Element Specific					10 Yrs	
2202280	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1935	8888		Full Replacement					2 Yrs	CCR < 3.5
2202290	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1980	8888		On 2019-2024 TIP					N/A	YSF PS Box Beams and Rated CS-3/CS-4
2202330	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1900	8888		Full Replacement					2 Yrs	CCR < 3.5
2202340	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1930	1989		Minor Rehab					5 Yrs	
2202370	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	2015	8888		Element Specific					10 Yrs	
2202460	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1960	8888		Element Specific					10 Yrs	Steel culvert repair
2202550	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	40 - Town	40 - Town	1925	1995		Major Rehab		Deck Replacement			2 Yrs	Secondary member repairs, CCR < 5.0
2202570	5 - County 5 - SARATOGA	0174 - Town of CLIFTON PARK	30 - County	30 - County	1974	8888		On 2019-2024 TIP					N/A	CCR < 5.0
2202580	5 - County 5 - SARATOGA	0360 - Town of HALFMOON	30 - County	30 - County	2003	8888		No Work Needed					N/A	
2202600	5 - County 5 - SARATOGA	0200 - Town of CORINTH	30 - County	30 - County	1980	8888		Element Specific					10 Yrs	
2202630	5 - County 5 - SARATOGA	0220 - Town of DAY	30 - County	30 - County	2001	8888		Element Specific					10 Yrs	
2202640	5 - County 5 - SARATOGA	0255 - Town of EDINBURG	40 - Town	40 - Town	1986	8888		Full Replacement					2 Yrs	CCR < 3.5
2202670	5 - County 5 - SARATOGA	0255 - Town of EDINBURG	40 - Town	40 - Town	1932	8888		On 2019-2024 TIP					Immediate	RSF Web SL (Inactive), YSF Bottom Flange SL, CCR < 5.0 and PL = 16
2202690	5 - County 5 - SARATOGA	0314 - Town of GALWAY	30 - County	30 - County	1973	8888		Minor Rehab					5 Yrs	CCR < 5.0
2202700	5 - County 5 - SARATOGA	0314 - Town of GALWAY	30 - County	30 - County	1974	8888		Element Specific					10 Yrs	
2202720	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1960	2001		Element Specific					10 Yrs	

Green Highlight Indicates In-Depth Inspection Performed

BIN	County	Political Unit	Primary Owner	Maintenance Responsibility Primary	Year Built	Year of Last Major Rehabilitation	2020 In-Depth	Work Strategy	Preservation Eligible	Treatment 1	2020 Conceptual Construction Cost	TIP Funding	Program Schedule (years)	Comments
2202740	5 - County 5 - SARATOGA	0357 - Town of HADLEY	30 - County	30 - County	1885	2006		Minor Rehab	Yes				5 Yrs	
2202750	5 - County 5 - SARATOGA	0360 - Town of HALFMOON	30 - County	30 - County	1927	1987		On 2019-2024 TIP					N/A	
2202760	5 - County 5 - SARATOGA	0360 - Town of HALFMOON	30 - County	30 - County	1977	8888		Full Replacement					2 Yrs	CCR < 3.5
2202770	5 - County 5 - SARATOGA	0360 - Town of HALFMOON	30 - County	30 - County	1987	8888		Element Specific					10 Yrs	
2202790	5 - County 5 - SARATOGA	1034 - Village of BALLSTON SPA	40 - Town	40 - Town	1991	8888		Element Specific					10 Yrs	
2202800	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	2001	8888		No Work Needed					N/A	
2202810	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	2001	8888		No Work Needed					N/A	
2202820	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	1914	1987		On 2019-2024 TIP					N/A	CCR < 5.0 and PL = 17T
2202830	**5 - County 5 - SARATOGA**	**0693 - Town of PROVIDENCE**	**30 - County**	**30 - County**	**1982**	**8888**	**2020 In-Depth**	**Major Rehab**		**Superstructure Replacement**	**$ 209,000.00**		**2 Yrs**	**PS Box Beams Rated CS-3/CS-4 and CCR < 5.0**
2202840	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	1930	2001		Element Specific					10 Yrs	
2202850	5 - County 5 - SARATOGA	1507 - Village of VICTORY	41 - Village	41 - Village	1985	8888		Major Rehab		Superstructure Replacement			2 Yrs	PS Box Beams Rated CS-3/CS-4 and CCR < 5.0
2202860	5 - County 5 - SARATOGA	0747 - Town of SARATOGA	30 - County	30 - County	2007	8888		Element Specific					10 Yrs	
2202870	5 - County 5 - SARATOGA	0917 - Town of WILTON	30 - County	30 - County	1950	8888		Element Specific					10 Yrs	
2202880	5 - County 5 - SARATOGA	0917 - Town of WILTON	30 - County	30 - County	2010	8888		Element Specific					10 Yrs	Remove beaver dam from stream
2202940	5 - County 5 - SARATOGA	2029 - City of MECHANICVILLE	42 - City	42 - City	2015	8888		Minor Rehab					5 Yrs	
2202950	5 - County 5 - SARATOGA	2029 - City of MECHANICVILLE	42 - City	42 - City	2016	8888		Element Specific					10 Yrs	Bank protection (masonry wall) reconstruction
2202960	5 - County 5 - SARATOGA	2029 - City of MECHANICVILLE	42 - City	42 - City	2014	8888		No Work Needed					N/A	
2202970	**5 - County 5 - SARATOGA**	**2029 - City of MECHANICVILLE**	**30 - County**	**30 - County**	**1946**	**8888**	**2020 In-Depth**	**Minor Rehab**			**$ 279,000.00**		**2 Yrs**	**CCR < 5.0**
2202980	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	72 - Other	72 - Other	1886	8888		Closed					N/A	
2202990	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	40 - Town	40 - Town	1889	8888		Minor Rehab					5 Yrs	CCR < 6.0
2203020	6 - County 6 - SCHENECTADY	0726 - Town of ROTTERDAM	40 - Town	40 - Town	1991	8888		Closed					N/A	
2203060	6 - County 6 - SCHENECTADY	0726 - Town of ROTTERDAM	40 - Town	40 - Town	1991	8888		Closed					N/A	
2203070	6 - County 6 - SCHENECTADY	0726 - Town of ROTTERDAM	40 - Town	40 - Town	1870	1976		Data > 6 Yrs Old	Yes				N/A	Multi-use trail bridge
2203080	6 - County 6 - SCHENECTADY	2053 - City of SCHENECTADY	42 - City	42 - City	1981	8888		On 2019-2024 TIP					N/A	CCR < 6.0
2203090	6 - County 6 - SCHENECTADY	2053 - City of SCHENECTADY	42 - City	42 - City	1953	1986		Minor Rehab					5 Yrs	CCR < 6.0
2203110	**6 - County 6 - SCHENECTADY**	**2053 - City of SCHENECTADY**	**60 - Railroad**	**42 - City**	**1976**	**8888**	**2020 In-Depth**	**Major Rehab**		**Superstructure Replacement**	**$ 2,223,000.00**		**2 Yrs**	**PS Box Beams Rated CS-3/CS-4, YSF PS Box Beam Deteriorate, CCR < 6.0 (Requested by City of Schenectady)**
2203120	6 - County 6 - SCHENECTADY	2053 - City of SCHENECTADY	42 - City	42 - City	1988	8888		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4 and CCR < 6.0
2203680	5 - County 5 - SARATOGA	1558 - Village of ROUND LAKE	30 - County	30 - County	1997	8888		Element Specific					10 Yrs	
2256670	6 - County 6 - SCHENECTADY	2053 - City of SCHENECTADY	42 - City	42 - City	1968	8888		Data > 6 Yrs Old					N/A	Pedestrian trail bridge
2256680	6 - County 6 - SCHENECTADY	2053 - City of SCHENECTADY	42 - City	42 - City	1968	8888		Data > 6 Yrs Old					N/A	Pedestrian trail bridge
2256690	6 - County 6 - SCHENECTADY	2053 - City of SCHENECTADY	42 - City	42 - City	1968	8888		Data > 6 Yrs Old					N/A	Pedestrian trail bridge
2256840	**1 - County 1 - ALBANY**	**2001 - City of ALBANY**	**42 - City**	**42 - City**	**1900**	**8888**	**2020 In-Depth**	**Minor Rehab**			**$ 840,000.00**		**5 Yrs**	**CCR < 5.0**
2259460	4 - County 4 - RENSSELAER	0752 - Town of SCHAGHTICOKE	40 - Town	40 - Town	1984	8888		Minor Rehab					5 Yrs	
2259570	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	42 - City	1867	8888		Data > 6 Yrs Old	Yes				N/A	Pedestrian trail bridge
2259580	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	42 - City	1970	8888		Data > 6 Yrs Old					N/A	Pedestrian trail bridge
2259590	1 - County 1 - ALBANY	0443 - Town of KNOX	41 - Village	41 - Village	1950	8888		Closed					N/A	
2259980	5 - County 5 - SARATOGA	0174 - Town of CLIFTON PARK	40 - Town	40 - Town	1910	8888		Full Replacement					2 Yrs	CCR < 3.5
2259990	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1957	8888		Minor Rehab					5 Yrs	
2260000	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	40 - Town	40 - Town	1907	8888		Major Rehab		Superstructure Replacement			2 Yrs	Jack arch
2260010	5 - County 5 - SARATOGA	0357 - Town of HADLEY	40 - Town	40 - Town	1969	8888		Minor Rehab					5 Yrs	Headwall repair, CCR < 5.0
2260020	5 - County 5 - SARATOGA	0917 - Town of WILTON	30 - County	30 - County	1956	8888		Minor Rehab					5 Yrs	
2260030	5 - County 5 - SARATOGA	2052 - City of SARATOGA SPRINGS	30 - County	30 - County	1950	8888		Minor Rehab					5 Yrs	
2260040	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	2001	8888		Minor Rehab					5 Yrs	
2260050	5 - County 5 - SARATOGA	2052 - City of SARATOGA SPRINGS	42 - City	42 - City	1956	8888		Minor Rehab					5 Yrs	
2266060	4 - County 4 - RENSSELAER	2057 - City of TROY	42 - City	42 - City	1980	8888		Data > 6 Yrs Old					N/A	Pedestrian trail bridge
2266750	4 - County 4 - RENSSELAER	0752 - Town of SCHAGHTICOKE	40 - Town	40 - Town	1915	1993		Minor Rehab	Yes				Immediate	YSF Abutment UM, YSF Uncertified Crack Repair and PL = 18T
2267170	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	40 - Town	40 - Town	1999	8888		Element Specific					10 Yrs	
2267360	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	40 - Town	40 - Town	1924	2005		Element Specific					10 Yrs	
2267780	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1990	8888		Element Specific					10 Yrs	
2267790	4 - County 4 - RENSSELAER	2047 - City of RENSSELAER	42 - City	42 - City	1990	8888		Minor Rehab					5 Yrs	
2267980	5 - County 5 - SARATOGA	0875 - Town of WATERFORD	30 - County	30 - County	1988	8888		No Work Needed					N/A	
2268980	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1998	8888		Major Rehab		Superstructure Replacement			2 Yrs	CCR < 4.0
2269230	1 - County 1 - ALBANY	1509 - Village of VOORHEESVILLE	41 - Village	41 - Village	1999	8888		Minor Rehab					2 Yrs	
2269320	5 - County 5 - SARATOGA	0174 - Town of CLIFTON PARK	40 - Town	40 - Town	1988	8888		Element Specific					10 Yrs	
2269330	5 - County 5 - SARATOGA	0174 - Town of CLIFTON PARK	40 - Town	40 - Town	1988	8888		Element Specific					10 Yrs	
2269640	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	42 - City	2002	8888		Data > 6 Yrs Old					N/A	Multi-use trail bridge
2269650	1 - County 1 - ALBANY	0187 - Town of COLONIE	30 - County	30 - County	2002	8888		Element Specific					10 Yrs	Concrete culvert repair
2270320	1 - County 1 - ALBANY	0180 - Town of COEYMANS	40 - Town	40 - Town	1939	1995		Minor Rehab					5 Yrs	Repair headwall, CCR < 5.0
2270560	5 - County 5 - SARATOGA	0501 - Town of MALTA	30 - County	30 - County	2009	8888		No Work Needed					N/A	
2270570	5 - County 5 - SARATOGA	0501 - Town of MALTA	30 - County	30 - County	2009	8888		No Work Needed					N/A	
2270580	5 - County 5 - SARATOGA	0501 - Town of MALTA	30 - County	30 - County	2009	8888		No Work Needed					N/A	
2270610	5 - County 5 - SARATOGA	2052 - City of SARATOGA SPRINGS	42 - City	42 - City	2010	8888		No Work Needed					N/A	
2270960	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	40 - Town	40 - Town	2013	8888		Element Specific					10 Yrs	
2271040	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	40 - Town	40 - Town	1968	8888		Full Replacement					2 Yrs	CCR < 4.0
2271140	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	2011	8888		No Work Needed					N/A	
2271170	4 - County 4 - RENSSELAER	0561 - Town of NASSAU	40 - Town	40 - Town	1953	9999		Minor Rehab					2 Yrs	
3050510	**6 - County 6 - SCHENECTADY**	**0587 - Town of NISKAYUNA**	**30 - County**	**30 - County**	**1987**	**8888**	**2020 In-Depth**	**Minor Rehab**			**$ 199,000.00**		**5 Yrs**	**Replace 2 pedestals, CCR < 6.0**
3200240	1 - County 1 - ALBANY	0443 - Town of KNOX	30 - County	30 - County	2007	8888		Element Specific					10 Yrs	
3200250	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	2004	8888		No Work Needed					N/A	
3259480	6 - County 6 - SCHENECTADY	0331 - Town of GLENVILLE	30 - County	30 - County	1969	2016		No Work Needed					N/A	
3300860	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1992	8888		Element Specific					10 Yrs	Repair concrete culvert
3300870	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1997	8888		Minor Rehab					5 Yrs	
3300880	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1939	2018		No Work Needed					N/A	
3300890	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1949	2007		Element Specific					10 Yrs	
3300900	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1990	8888		Minor Rehab					5 Yrs	
3300910	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1973	1999		Major Rehab		Deck Replacement			2 Yrs	
3300920	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1997	8888		Element Specific					10 Yrs	
3300930	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	2008	8888		No Work Needed					N/A	
3300940	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	2017	8888		No Work Needed					N/A	
3300960	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1932	8888		On Albany Schedule					N/A	CCR < 5.0; Albany County Program Bridge 2021-2022
3300970	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	20 - State - Other	1925	1933		Closed					N/A	
3301000	1 - County 1 - ALBANY	0068 - Town of BERNE	30 - County	30 - County	1988	8888		Element Specific					10 Yrs	
3301010	1 - County 1 - ALBANY	0071 - Town of BETHLEHEM	30 - County	30 - County	2004	8888		Element Specific					10 Yrs	
3301020	**1 - County 1 - ALBANY**	**0071 - Town of BETHLEHEM**	**30 - County**	**30 - County**	**1949**	**1991**	**2020 In-Depth**	**Minor Rehab**			**$ 776,000.00**		**5 Yrs**	**PS Box Beams Rated CS-3/CS-4**
3301030	1 - County 1 - ALBANY	0180 - Town of COEYMANS	30 - County	30 - County	1975	8888		On Albany Schedule					N/A	
3301040	**1 - County 1 - ALBANY**	**0071 - Town of BETHLEHEM**	**30 - County**	**30 - County**	**1934**	**1971**	**2020 In-Depth**	**Minor Rehab**			**$ 190,000.00**		**5 Yrs**	**CCR < 5.0, Clean scuppers**
3301050	1 - County 1 - ALBANY	0071 - Town of BETHLEHEM	30 - County	30 - County	1976	8888		Element Specific					10 Yrs	Steel culvert repair
3301070	1 - County 1 - ALBANY	0180 - Town of COEYMANS	30 - County	30 - County	1928	1991		Minor Rehab					5 Yrs	
3301080	1 - County 1 - ALBANY	0180 - Town of COEYMANS	30 - County	30 - County	1955	1990		Minor Rehab					5 Yrs	
3301090	1 - County 1 - ALBANY	0180 - Town of COEYMANS	30 - County	30 - County	1993	8888		Minor Rehab					5 Yrs	
3301100	1 - County 1 - ALBANY	0180 - Town of COEYMANS	30 - County	30 - County	1955	1991		Minor Rehab					5 Yrs	

Green Highlight Indicates In-Depth Inspection Performed

BIN	County	Political Unit	Primary Owner	Maintenance Responsibility Primary	Year Built	Year of Last Major Rehabilitation	2020 In-Depth	Work Strategy	Preservation Eligible	Treatment 1	2020 Conceptual Construction Cost	TIP Funding	Program Schedule (years)	Comments
3301140	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1933	1971		Closed	Yes				N/A	
3301150	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	2014	8888		Minor Rehab					5 Yrs	
3301160	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1933	8888		Minor Rehab					5 Yrs	
3301170	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1987	8888		Minor Rehab					5 Yrs	
3301180	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1999	8888		Minor Rehab					5 Yrs	
3301190	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1963	1992		Element Specific					10 Yrs	
3301200	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1943	1991		Minor Rehab					5 Yrs	
3301210	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1975	2019		No Work Needed					N/A	
3301250	1 - County 1 - ALBANY	0443 - Town of KNOX	30 - County	30 - County	1988	8888		Element Specific					10 Yrs	
3301260	1 - County 1 - ALBANY	0443 - Town of KNOX	30 - County	30 - County	1989	8888		No Work Needed					N/A	
3301270	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	1939	1992		Minor Rehab					5 Yrs	Repair truss, repair gusset plate
3301280	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	1999	8888		Element Specific					10 Yrs	
3301290	1 - County 1 - ALBANY	0355 - Town of GUILDERLAND	30 - County	30 - County	1991	8888		Element Specific					10 Yrs	
3301300	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	1882	1989		Minor Rehab					5 Yrs	
3301310	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	1886	1991		Minor Rehab					5 Yrs	CCR < 5.0
3301320	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	2001	8888		Element Specific					10 Yrs	
3301330	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	1931	2002		Element Specific					10 Yrs	
3301340	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	1898	1999		Major Rehab		Deck Replacement			Immediate	YSF Broken Timber Deck Boards, YSF Abutment UM, CCR < 5.0 and PL = 12T
3301350	1 - County 1 - ALBANY	0581 - Town of NEW SCOTLAND	30 - County	30 - County	2015	8888		Element Specific					10 Yrs	
3301360	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	2004	8888		No Work Needed					N/A	
3301370	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1897	1990		Minor Rehab					Immediate	RSF Abut Rotation (Inactive)
3301380	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1999	8888		Minor Rehab					5 Yrs	Repair 3 LF truss, repair 1 gusset plate, repair secondary members
3301390	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1999	8888		Minor Rehab					5 Yrs	Secondary Member repair
3301400	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1935	1990		On Albany Schedule					N/A	CCR < 5.0; Albany County Program Bridge 2021-2022
3301410	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1984	8888		Full Replacement					Immediate	YSF Culvert Invert Deterioration
3301420	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	2018	8888		No Work Needed					N/A	
3301430	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1980	8888		Element Specific					10 Yrs	
3301440	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1956	1990		Minor Rehab					5 Yrs	
3301450	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1989	8888		Element Specific					10 Yrs	
3301460	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1952	1987		On Albany Schedule					N/A	PS Box Beams Rated CS-3/CS-4; Albany County Program Bridge 2021-2022
3301470	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1955	1993		Minor Rehab					5 Yrs	
3301480	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1960	2001		Minor Rehab					5 Yrs	
3301490	1 - County 1 - ALBANY	0706 - Town of RENSSELAERVILLE	30 - County	30 - County	1982	8888		Minor Rehab					5 Yrs	
3301500	**1 - County 1 - ALBANY**	**0706 - Town of RENSSELAERVILLE**	**30 - County**	**30 - County**	**1951**	**1991**	**2020 In-Depth**	**Minor Rehab**			**$ 552,000.00**		**5 Yrs**	**CCR < 5.0**
3301510	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	2007	8888		Element Specific					10 Yrs	
3301520	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	2004	8888		Element Specific					10 Yrs	
3301530	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	1980	8888		Element Specific					10 Yrs	
3301540	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	2009	8888		Element Specific					10 Yrs	
3301550	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	2014	8888		Element Specific					10 Yrs	
3301560	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	1949	1991		Minor Rehab					5 Yrs	
3301570	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	1940	1991		Minor Rehab					5 Yrs	
3301580	**1 - County 1 - ALBANY**	**0890 - Town of WESTERLO**	**30 - County**	**30 - County**	**1935**	**1987**	**2020 In-Depth**	**Minor Rehab**			**$ 244,000.00**		**5 Yrs**	**PS Box Beams Rated CS-3/CS-4, Replace approach pavement, reset approach rail posts**
3301590	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	1933	1987		On Albany Schedule					N/A	
3302920	**1 - County 1 - ALBANY**	**0180 - Town of COEYMANS**	**30 - County**	**30 - County**	**1970**	**8888**	**2020 In-Depth**	**Minor Rehab**			**$ 133,000.00**		**5 Yrs**	**PL = 20T**
3302980	1 - County 1 - ALBANY	0180 - Town of COEYMANS	40 - Town	40 - Town	2011	8888		Element Specific					10 Yrs	
3303330	4 - County 4 - RENSSELAER	0752 - Town of SCHAGHTICOKE	30 - County	30 - County	1949	8888		Minor Rehab					5 Yrs	
3303340	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	2016	8888		Element Specific					10 Yrs	Remove timber debris from stream
3303370	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1947	8888		Minor Rehab					5 Yrs	CCR < 4.0
3303400	4 - County 4 - RENSSELAER	0752 - Town of SCHAGHTICOKE	30 - County	30 - County	1935	2014		Minor Rehab					5 Yrs	
3303410	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1948	8888		Minor Rehab					2 Yrs	
3303420	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1949	8888		Major Rehab		Deck Replacement			2 Yrs	
3303430	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1945	8888		Minor Rehab					2 Yrs	
3303440	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1938	8888		Full Replacement					2 Yrs	CCR < 4.0
3303450	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1965	1994		Full Replacement					2 Yrs	CCR < 3.5
3303460	4 - County 4 - RENSSELAER	0752 - Town of SCHAGHTICOKE	30 - County	30 - County	1949	8888		Major Rehab		Deck Replacement			Immediate	RSF Web SL (Inactive), YSF Web SL and PL = 10T
3303480	4 - County 4 - RENSSELAER	0398 - Town of HOOSICK	30 - County	30 - County	1850	2005		Minor Rehab	Yes				5 Yrs	Selective truss member, stringer and bracing replacement, PL = 12T
3303500	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	1989	8888		Full Replacement					2 Yrs	CCR < 3.5
3303510	4 - County 4 - RENSSELAER	0670 - Town of PITTSTOWN	30 - County	30 - County	2018	8888		No Work Needed					N/A	
3303550	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1939	8888		Major Rehab		Deck Replacement			2 Yrs	
3303560	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1982	8888		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4
3303570	4 - County 4 - RENSSELAER	0099 - Town of BRUNSWICK	30 - County	30 - County	1985	8888		Element Specific					10 Yrs	
3303580	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1939	8888		Major Rehab		Superstructure Replacement			2 Yrs	CCR < 4.0 and PL = 12T
3303590	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1940	8888		Minor Rehab					5 Yrs	
3303610	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1945	2009		On 2019-2024 TIP					N/A	PL = 15T
3303620	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1988	8888		Minor Rehab					5 Yrs	
3303630	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	2007	8888		No Work Needed					N/A	
3303640	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1982	8888		Minor Rehab					5 Yrs	
3303650	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1988	8888		Major Rehab		Superstructure Replacement			Immediate	Safety PIA (Inactive), YSF cracked cover PL welds, YSF web SL, CCR < 4.0 and PL = 10T
3303660	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	30 - County	30 - County	1950	1990		Major Rehab		Superstructure Replacement			Immediate	YSF Flange SL and CCR < 4.0
3303670	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	30 - County	30 - County	1912	1988		Full Replacement					2 Yrs	CCR < 3.5, RSF Web SL (Inactive)
3303680	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	30 - County	30 - County	2014	8888		Minor Rehab					5 Yrs	
3303690	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	30 - County	30 - County	1923	1988		Minor Rehab					5 Yrs	
3303700	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	30 - County	30 - County	1991	8888		Minor Rehab					5 Yrs	
3303720	4 - County 4 - RENSSELAER	0656 - Town of PETERSBURG	30 - County	30 - County	1990	8888		Element Specific					10 Yrs	Remove timber debris from stream
3303740	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	30 - County	30 - County	1935	8888		Minor Rehab					5 Yrs	Steel culvert repair
3303750	4 - County 4 - RENSSELAER	0067 - Town of BERLIN	30 - County	30 - County	1989	8888		Minor Rehab					5 Yrs	Concrete culvert repair
3303760	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	30 - County	30 - County	1935	8888		Major Rehab		Superstructure Replacement			Immediate	RSF Load Posting (Inactive), RSF Web SL, RSF Mid-Span SL, YSF Bottom Flange Crack/Tear, CCR < 4.0 and PL = 12T
3303780	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	30 - County	30 - County	1932	8888		Full Replacement					2 Yrs	CCR < 4.0, Jack arch
3303790	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	30 - County	30 - County	1950	8888		Minor Rehab					5 Yrs	
3303800	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	30 - County	30 - County	1991	8888		Major Rehab		Deck Replacement			2 Yrs	
3303820	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	30 - County	30 - County	2012	8888		No Work Needed					N/A	
3303840	4 - County 4 - RENSSELAER	0804 - Town of STEPHENTOWN	30 - County	30 - County	1950	2018		No Work Needed					N/A	
3303850	4 - County 4 - RENSSELAER	1575 - Village of EAST NASSAU	30 - County	30 - County	1990	8888		Element Specific					10 Yrs	
3303860	4 - County 4 - RENSSELAER	1575 - Village of EAST NASSAU	30 - County	30 - County	1991	8888		Minor Rehab					5 Yrs	Secondary member repair, remove fallen log from stream
3303870	4 - County 4 - RENSSELAER	0561 - Town of NASSAU	30 - County	30 - County	1990	2018		Element Specific					10 Yrs	
3303880	4 - County 4 - RENSSELAER	0561 - Town of NASSAU	30 - County	30 - County	1949	8888		Major Rehab		Deck Replacement			2 Yrs	PL = 23T
3303890	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	30 - County	30 - County	2012	8888		No Work Needed	Yes				N/A	
3303900	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	30 - County	30 - County	2002	8888		Minor Rehab					5 Yrs	
3303910	4 - County 4 - RENSSELAER	1333 - Village of NASSAU	30 - County	30 - County	1997	8888		Element Specific					10 Yrs	
3303920	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	30 - County	30 - County	1990	8888		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4
3303930	4 - County 4 - RENSSELAER	0561 - Town of NASSAU	30 - County	30 - County	1989	2013		Element Specific					10 Yrs	

Green Highlight Indicates In-Depth Inspection Performed

BIN	County	Political Unit	Primary Owner	Maintenance Responsibility Primary	Year Built	Year of Last Major Rehabilitation	2020 In-Depth	Work Strategy	Preservation Eligible	Treatment 1	2020 Conceptual Construction Cost	TIP Funding	Program Schedule (years)	Comments
3303960	4 - County 4 - RENSSELAER	0561 - Town of NASSAU	30 - County	30 - County	1990	8888		Element Specific					10 Yrs	
3303980	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	30 - County	30 - County	1930	1992		Minor Rehab					5 Yrs	Reset gabion bank protection, CCR < 4.0
3304000	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	30 - County	30 - County	1997	8888		Minor Rehab					5 Yrs	
3304010	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	30 - County	30 - County	1932	1997		Element Specific					10 Yrs	
3304020	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	30 - County	30 - County	1908	1998		Major Rehab		Deck Replacement			2 Yrs	Full stringer and floorbeam replacement, isolated truss repairs, RSF Stringer SL (Inactive), RSF Floorbeam SL (Inactive) and CCR < 4.0
3304030	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	30 - County	30 - County	2005	8888		Element Specific					10 Yrs	
3304040	4 - County 4 - RENSSELAER	0741 - Town of SAND LAKE	30 - County	30 - County	2002	8888		No Work Needed					N/A	
3304080	4 - County 4 - RENSSELAER	0752 - Town of SCHAGHTICOKE	30 - County	30 - County	1950	8888		Full Replacement					Immediate	YSF Culvert X-Bracing Deterioration and PL = 15T
3304110	4 - County 4 - RENSSELAER	0676 - Town of POESTENKILL	30 - County	30 - County	1939	8888		Minor Rehab					5 Yrs	Headwall repair, culvert floor undermining repair, YSF Culvert Outlet UM
3304160	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1930	2018		Element Specific					10 Yrs	
3304170	5 - County 5 - SARATOGA	0255 - Town of EDINBURG	30 - County	30 - County	2004	8888		No Work Needed					N/A	
3304190	5 - County 5 - SARATOGA	0255 - Town of EDINBURG	30 - County	30 - County	2012	8888		Element Specific					10 Yrs	
3304200	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1931	1995		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4
3304210	**5 - County 5 - SARATOGA**	**0220 - Town of DAY**	**30 - County**	**30 - County**	**2009**	**8888**	**2020 In-Depth**	**Minor Rehab**			**2 Options**		**Immediate**	**YSF Culvert Support Wall UM, Replace approach rail**
3304230	5 - County 5 - SARATOGA	0357 - Town of HADLEY	30 - County	30 - County	1997	8888		Element Specific					10 Yrs	
3304240	5 - County 5 - SARATOGA	0220 - Town of DAY	30 - County	30 - County	1994	8888		No Work Needed					N/A	
3304250	5 - County 5 - SARATOGA	0220 - Town of DAY	30 - County	30 - County	1992	8888		Element Specific					10 Yrs	
3304270	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	2001	8888		No Work Needed					N/A	
3304280	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	2013	8888		No Work Needed					N/A	
3304290	5 - County 5 - SARATOGA	0314 - Town of GALWAY	30 - County	30 - County	2000	8888		No Work Needed					N/A	
3304300	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	1996	8888		Element Specific					10 Yrs	
3304310	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	1930	1992		No Work Needed					N/A	
3304320	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	2004	8888		Element Specific					10 Yrs	
3304330	5 - County 5 - SARATOGA	1034 - Village of BALLSTON SPA	30 - County	30 - County	1994	8888		Element Specific					10 Yrs	
3304340	5 - County 5 - SARATOGA	1034 - Village of BALLSTON SPA	30 - County	30 - County	1993	8888		Element Specific					10 Yrs	
3304350	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	1932	1989		Minor Rehab					5 Yrs	
3304360	5 - County 5 - SARATOGA	0807 - Town of STILLWATER	30 - County	30 - County	1992	8888		Element Specific					10 Yrs	
3304370	5 - County 5 - SARATOGA	0501 - Town of MALTA	30 - County	30 - County	2001	8888		No Work Needed					N/A	
3304380	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	30 - County	30 - County	1998	8888		Element Specific					10 Yrs	
3304390	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	30 - County	30 - County	1991	8888		No Work Needed					N/A	
3304400	5 - County 5 - SARATOGA	1558 - Village of ROUND LAKE	30 - County	30 - County	1991	8888		Element Specific					10 Yrs	
3304410	5 - County 5 - SARATOGA	0747 - Town of SARATOGA	30 - County	30 - County	1961	8888		Minor Rehab					5 Yrs	
3304420	5 - County 5 - SARATOGA	1507 - Village of VICTORY	30 - County	30 - County	1990	8888		Element Specific					10 Yrs	
3304430	5 - County 5 - SARATOGA	0747 - Town of SARATOGA	30 - County	30 - County	1961	8888		Minor Rehab					5 Yrs	
3304440	5 - County 5 - SARATOGA	0747 - Town of SARATOGA	30 - County	30 - County	1969	2015		Element Specific					10 Yrs	
3304450	5 - County 5 - SARATOGA	0501 - Town of MALTA	30 - County	30 - County	1962	1998		Minor Rehab					5 Yrs	Secondary member repair, CCR < 5.0
3304460	5 - County 5 - SARATOGA	2052 - City of SARATOGA SPRINGS	30 - County	30 - County	1966	2015		Element Specific					10 Yrs	
3304470	5 - County 5 - SARATOGA	0601 - Town of NORTHUMBERLAND	30 - County	30 - County	1961	2015		No Work Needed					N/A	
3304480	5 - County 5 - SARATOGA	0601 - Town of NORTHUMBERLAND	30 - County	30 - County	1951	1997		Minor Rehab					5 Yrs	Longitudinal joint repair
3304490	5 - County 5 - SARATOGA	0601 - Town of NORTHUMBERLAND	30 - County	30 - County	1969	8888		Element Specific					10 Yrs	
3304500	5 - County 5 - SARATOGA	0917 - Town of WILTON	30 - County	30 - County	2007	8888		Element Specific					10 Yrs	
3304510	5 - County 5 - SARATOGA	0917 - Town of WILTON	30 - County	30 - County	1941	8888		Element Specific					10 Yrs	Headwall repair
3304520	**5 - County 5 - SARATOGA**	**0200 - Town of CORINTH**	**30 - County**	**30 - County**	**1968**	**8888**	**2020 In-Depth**	**Minor Rehab**			**$ 306,000.00**		**5 Yrs**	**CCR < 5.0, Remove curb to allow proper cross-drainage**
3304530	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1937	1989		Element Specific					10 Yrs	
3304540	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1967	8888		Element Specific					10 Yrs	PS Box Beams Rated CS-3/CS-4
3304550	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	2016	8888		No Work Needed					N/A	
3304560	**5 - County 5 - SARATOGA**	**0534 - Town of MILTON**	**30 - County**	**30 - County**	**1953**	**1990**	**2020 In-Depth**	**Major Rehab**		**Superstructure Replacement**	**$ 367,000.00**		**2 Yrs**	**CCR < 5.0**
3304570	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	1952	2017		Element Specific					10 Yrs	
3304580	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	1991	8888		Element Specific					10 Yrs	
3304590	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	1998	8888		Element Specific					10 Yrs	
3304600	5 - County 5 - SARATOGA	0534 - Town of MILTON	30 - County	30 - County	2002	8888		No Work Needed					N/A	
3304610	5 - County 5 - SARATOGA	1034 - Village of BALLSTON SPA	30 - County	30 - County	1958	2010		No Work Needed					N/A	
3304620	5 - County 5 - SARATOGA	1034 - Village of BALLSTON SPA	30 - County	30 - County	2006	8888		No Work Needed					N/A	
3304630	5 - County 5 - SARATOGA	0147 - Town of CHARLTON	30 - County	30 - County	1966	1992		Minor Rehab					5 Yrs	
3304640	5 - County 5 - SARATOGA	0147 - Town of CHARLTON	30 - County	30 - County	1934	1987		Minor Rehab					5 Yrs	
3304650	5 - County 5 - SARATOGA	0147 - Town of CHARLTON	30 - County	30 - County	1966	1993		No Work Needed					N/A	
3304660	5 - County 5 - SARATOGA	0147 - Town of CHARLTON	30 - County	30 - County	1984	8888		Element Specific					10 Yrs	Headwall repair
3304670	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	30 - County	30 - County	1962	8888		Element Specific					10 Yrs	
3304680	5 - County 5 - SARATOGA	0174 - Town of CLIFTON PARK	30 - County	30 - County	1936	1995		Minor Rehab					5 Yrs	CCR < 5.0
3304690	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	30 - County	30 - County	1950	2000		Element Specific					10 Yrs	
3304700	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	30 - County	30 - County	1949	8888		On 2019-2024 TIP					N/A	CCR < 5.0
3304710	5 - County 5 - SARATOGA	0049 - Town of BALLSTON	30 - County	30 - County	1990	2013		Element Specific					10 Yrs	
3304720	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	1991	8888		Element Specific					10 Yrs	
3304730	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	1996	8888		Element Specific					10 Yrs	
3304740	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	1937	8888		On 2019-2024 TIP					N/A	YSF Culvert Deterioration
3304750	5 - County 5 - SARATOGA	0693 - Town of PROVIDENCE	30 - County	30 - County	1958	1999		Element Specific					10 Yrs	
3304760	5 - County 5 - SARATOGA	0220 - Town of DAY	30 - County	30 - County	1940	1996		Element Specific					10 Yrs	
3304770	5 - County 5 - SARATOGA	0220 - Town of DAY	30 - County	30 - County	1939	8888		Major Rehab		Deck Replacement			2 Yrs	
3304780	5 - County 5 - SARATOGA	0220 - Town of DAY	30 - County	30 - County	1995	8888		Major Rehab		Deck Replacement			2 Yrs	PS Box Beams Rated CS-3/CS-4
3304790	**5 - County 5 - SARATOGA**	**0255 - Town of EDINBURG**	**30 - County**	**30 - County**	**1937**	**8888**	**2020 In-Depth**	**Minor Rehab**	**Yes**		**$ 442,000.00**		**2 Yrs**	**CCR < 5.0**
3304800	5 - County 5 - SARATOGA	0255 - Town of EDINBURG	30 - County	30 - County	2004	8888		Element Specific					10 Yrs	
3304820	5 - County 5 - SARATOGA	0807 - Town of STILLWATER	30 - County	30 - County	1967	2015		No Work Needed					N/A	
3304850	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	30 - County	30 - County	1998	8888		Minor Rehab					5 Yrs	Remove timber debris from stream, CCR < 6.0
3304860	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	30 - County	30 - County	1993	8888		Minor Rehab					5 Yrs	CCR < 6.0
3304870	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	30 - County	30 - County	1996	8888		Element Specific					10 Yrs	Headwall repair
3304880	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	30 - County	30 - County	1990	8888		Element Specific					10 Yrs	
3304890	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	30 - County	30 - County	1907	1984		Element Specific					10 Yrs	
3304900	6 - County 6 - SCHENECTADY	1125 - Village of DELANSON	30 - County	30 - County	2003	8888		Element Specific					10 Yrs	
3304920	6 - County 6 - SCHENECTADY	0331 - Town of GLENVILLE	30 - County	30 - County	1993	8888		Minor Rehab					5 Yrs	
3304930	6 - County 6 - SCHENECTADY	0331 - Town of GLENVILLE	30 - County	30 - County	2015	8888		No Work Needed					N/A	
3304940	6 - County 6 - SCHENECTADY	0331 - Town of GLENVILLE	30 - County	30 - County	1997	8888		Element Specific					10 Yrs	
3304960	6 - County 6 - SCHENECTADY	0692 - Town of PRINCETOWN	30 - County	30 - County	1991	2014		Element Specific					10 Yrs	
3304970	6 - County 6 - SCHENECTADY	0692 - Town of PRINCETOWN	30 - County	30 - County	1978	8888		Minor Rehab					5 Yrs	Bank protection (masonry wall) reconstruction, CCR < 6.0
3304980	6 - County 6 - SCHENECTADY	0692 - Town of PRINCETOWN	30 - County	30 - County	1935	2000		Minor Rehab					5 Yrs	
3304990	6 - County 6 - SCHENECTADY	0692 - Town of PRINCETOWN	30 - County	30 - County	2013	8888		No Work Needed					N/A	
3305030	6 - County 6 - SCHENECTADY	0726 - Town of ROTTERDAM	60 - Railroad	30 - County	1991	8888		Minor Rehab					5 Yrs	
3305070	6 - County 6 - SCHENECTADY	0726 - Town of ROTTERDAM	30 - County	30 - County	1983	8888		Minor Rehab					5 Yrs	CCR < 6.0
3305510	5 - County 5 - SARATOGA	1115 - Village of CORINTH	30 - County	30 - County	1997	8888		Major Rehab		Deck Replacement			2 Yrs	
3363610	1 - County 1 - ALBANY	0071 - Town of BETHLEHEM	30 - County	30 - County	1976	8888		On Albany Schedule					N/A	
3364160	5 - County 5 - SARATOGA	0357 - Town of HADLEY	30 - County	30 - County	1955	2012		Minor Rehab					5 Yrs	PS Box Beams Rated CS-3/CS-4
3364170	5 - County 5 - SARATOGA	0357 - Town of HADLEY	30 - County	30 - County	1929	2001		Minor Rehab					5 Yrs	

Green Highlight Indicates In-Depth Inspection Performed

BIN	County	Political Unit	Primary Owner	Maintenance Responsibility Primary	Year Built	Year of Last Major Rehabilitation	2020 In-Depth	Work Strategy	Preservation Eligible	Treatment 1	2020 Conceptual Construction Cost	TIP Funding	Program Schedule (years)	Comments
3364180	5 - County 5 - SARATOGA	0344 - Town of GREENFIELD	30 - County	30 - County	1938	1989		Element Specific					10 Yrs	
3364190	5 - County 5 - SARATOGA	1518 - Village of WATERFORD	41 - Village	41 - Village	1999	8888		Element Specific					10 Yrs	
3367490	4 - County 4 - RENSSELAER	0753 - Town of SCHODACK	40 - Town	40 - Town	1990	8888		Full Replacement					2 Yrs	CCR < 3.5
3368290	5 - County 5 - SARATOGA	0549 - Town of MOREAU	30 - County	30 - County	1993	8888		Minor Rehab					5 Yrs	
3369040	4 - County 4 - RENSSELAER	0561 - Town of NASSAU	30 - County	30 - County	1995	8888		Full Replacement					2 Yrs	CCR < 3.5
3369300	1 - County 1 - ALBANY	0890 - Town of WESTERLO	30 - County	30 - County	1960	1992		On Albany Schedule					N/A	CCR < 5.0; Albany County Program Bridge 2021-2022
3370070	1 - County 1 - ALBANY	0443 - Town of KNOX	30 - County	30 - County	2002	8888		No Work Needed					N/A	
3370850	6 - County 6 - SCHENECTADY	0242 - Town of DUANESBURG	30 - County	30 - County	2012	8888		No Work Needed					N/A	
4415050	5 - County 5 - SARATOGA	0875 - Town of WATERFORD	30 - County	30 - County	1908	8888		Closed					N/A	
5513570	1 - County 1 - ALBANY	2001 - City of ALBANY	42 - City	2L - NYS Thruway Authority	1954	8888		Element Specific					10 Yrs	
7005610	5 - County 5 - SARATOGA	0174 - Town of CLIFTON PARK	30 - County	30 - County	1930	1960		Data > 6 Yrs Old					N/A	Rail trail bridge
7032650	1 - County 1 - ALBANY	0071 - Town of BETHLEHEM	30 - County	30 - County	1912	8888		Data > 6 Yrs Old					N/A	Rail trail bridge
7038350	6 - County 6 - SCHENECTADY	0587 - Town of NISKAYUNA	20 - State - Other	40 - Town	1941	8888		Minor Rehab					5 Yrs	CCR < 6.0

Appendix D

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

CONDITION SUMMARY REPORT

BIN:	2256840
Feature Carried:	Albany City Streets
Feature Crossed:	Beaver Relief Sewer
Owner:	City of Albany
Date and Time:	N/A
Weather Conditions:	N/A
Inspector:	Mark Fabend
Computed Condition Rating:	4.333 / 2019
Direction of Orientation:	North

Recommendations: A field visit was not conducted due to confined space entry being required. The following recommendations are based the conditions observed during the 2019 Biennial Bridge Inspection and the 2017 Diving Inspection:

- Repair the roof slab and walls inside of the culvert. (PH 1 and PH 2) The 2019 Biennial Inspection reported that the worst of the deteriorated areas are located at 1/4 the length of the culvert, at approx. 3/4 the length of the culvert and at the outlet. There are also several transverse cracks in the roof slab and walls at scattered locations not specifically defined in the 2019 Biennial Inspection Report.
- Repair concrete at outlet by installing a cofferdam, removing any remaining deteriorated concrete to expose the rebar cage and reconstructing these areas. The 2017 Diving Inspection indicated the spalled areas at each abutment and the pier were typically 6 ft high by 2-3 ft wide by approx. 4” deep. (PH 3)
- Install riprap at outlet (No Photo)

Cost Estimate: $841,000

Potential Construction Related Issues: Confined space entry required, difficult access for movement of materials into and out of the culvert

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 1 **DESCRIPTION:** Looking at Top Slab of Culvert at Manhole 3 Entrance (Photo From 2019 Biennial Inspection Report)	
PHOTO NO: 2 **DESCRIPTION:** Looking at Typical Spall in Roof Slab of Culvert (Photo From 2019 Biennial Inspection Report)	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
3

DESCRIPTION:
Looking at Centerwall/Pier at Outlet (Photo Taken From 2017 Diving Inspection)

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN: 3301020

Owner:	30-County
Date and Time:	3/4/21. AM
Weather Conditions:	Clear, 34F
Inspector:	Michael Lemme
Computed Condition Rating:	5.083 (2020)
Direction of Orientation:	8-Northwest
Feature Carried:	South Albany Road CR53
Feature Crossed:	One Squethaw Creek

Preliminary Recommendations:

- Repair scour and undermining repairs with Grout Bags (See 2020 report for photos).
- Protective sealing for structural concrete and deck (Photo 1).
- Concrete removal and repairs, Type A & D concrete used for deck and substructure repairs (Photos 2 -10).
- WZTC & Construction Inspection included in estimate.

Preliminary Cost Estimate: $ 750,000

Field Visit Notes:
The begin and end joints are shown as NSCO elements in the 2020 report, as they are beyond the backwalls (Photos 11 &12). The fillable type joint material appears to be allowing leakage below deck at both locations (Photo 14). A repair would likely include the removal and replacement of the pourable joint material for 28', both abutments.

Revised Cost Estimate: $ 776,000

Potential Construction Related Issues:

- Residential property exists with a driveway at the bridge End Left.
- Overhead utilities exist at the bridge left.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
1

DESCRIPTION:
Top of Deck, Looking Towards The end

PHOTO NO:
2

DESCRIPTION:
Top of Deck near the begin, Looking Towards The Left.

Spall near the begin, with some surrounding hollowness.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
3

DESCRIPTION:
Span 2, end most Cantilever Support on the right.

Cracking, Spalling and exposed rebar with rust staining visible.

PHOTO NO:
4

DESCRIPTION:
Span 2 End Face Deck Support at Pier 1.

Cracking, Spalling and exposed rebar. Section loss with rust staining visible.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
5

DESCRIPTION:
Pier 1, Span 2, End Face at the Left, Looking Towards The Begin.

Spalling

PHOTO NO:
6

DESCRIPTION:
Pier 1, Span 2 End Face at the Right, Looking Towards The Begin.

Spalling

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
7

DESCRIPTION:
End Abutment at the Left, Looking Towards The End.

Spalling, cracking with some rust staining, and some areas of de-laminations/ hollowness

PHOTO NO:
8

DESCRIPTION:
Pier 1, Span 1 Begin Face at the Right, Looking Towards The End.

Spalling with no exposed rebar.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
9

DESCRIPTION:
Pier 1, Span 1 at the end, Looking Towards the End.

Deck support has spalling with cracking and rust staining on the begin face.

PHOTO NO:
10

DESCRIPTION:
Reinforced Concrete Approach Slab at the begin, Looking Towards The Left.

Spalling and patchwork exists.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
11

DESCRIPTION:
Begin Deck Joint, Looking Towards the Left.

Pourable portion of the Joint is in poor condition

PHOTO NO:
12

DESCRIPTION:
End Joint, Looking Towards the Left.

Pourable portion of the Joint is in poor condition.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN: 3301040
Owner: 30- County
Date and Time: 3/4/21, 10:20 to 11 AM
Weather Conditions: Clear, 34F
Inspector: Michael Lemme
Computed Condition Rating: 4.947
Direction of Orientation: 2-NorthEast
Feature Carried: County Road 102
Feature Crossed: One Squethaw Creek

Preliminary Recommendations:

- Concrete repairs to the cap below the bridge rail (Photos 1 & 2)
- Heavy Stone filling for scour repair (see 2019 report)

Preliminary Cost Estimate: $ 116,000

Field Visit Notes:

- Clean scuppers to reduce water ponding along shoulders (Photo 2).
- Remove and replace existing box beam bridge rail, bottom rail (Photos 3 & 4).
- Placing asphalt in the longitudinal joint between the edge of the wearing surface and curb, to reduce water infiltration into the Arch below (Photo 2 & 5).
- Re-pointing masonry joints with minor stone resets, at the wingwalls and headwalls (Photos 6, 7, 8 & 9).

Revised Cost Estimate: $190,000

Potential Construction Related Issues:
Overhead utilities exist on bridge left.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 1 **DESCRIPTION:** Left Concrete Cap Below Bridge Rail, Looking Towards the Begin. Repair cracks in concrete to reduce infiltration. Repair spalling exposing reinforcement .	
PHOTO NO: 2 **DESCRIPTION:** Left Concrete Cap Below Bridge Rail, Looking Towards the End. Repair cracks in cap to reduce infiltration & Seal the longitudinal joint at the edge of the wearing surface and edge of curb.	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 3 **DESCRIPTION:** Bottom Bridge Rail, at the begin Right, Looking Towards the End. Replace 50% of bottom rail due to corrosion.	
PHOTO NO: 4 **DESCRIPTION:** Bottom Bridge Rail, Looking Towards The End Left. End Right Similar. Replace 50% of bottom rail due to corrosion.	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
5

DESCRIPTION:
Underside of Arch, Looking Towards The Begin.

Underside is damp. Recommend sealing along the curb and edge of the wearing surface to reduce inflitration.

PHOTO NO:
6

DESCRIPTION:
End Right Wingwall, Looking Towards The Left.

Re-point masonry.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 7 **DESCRIPTION:** End Left Wingwall, Looking Towards The Right. Re-point masonry.	
PHOTO NO: 8 **DESCRIPTION:** Left Headwall Beyond Midspan, Looking Towards The Right. Re-point masonry and reset masonry stones.	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 9

DESCRIPTION: Right Headwall Beyond Midspan, Looking Towards The Begin Left.

Re-point masonry.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN:	3301500
Feature Carried:	Fox Creek Road (CR 352)
Feature Crossed:	Fox Creek
Owner:	Albany County
Date and Time:	3/3/2021 9:45 AM – 10:45 AM
Weather Conditions:	40 Clear
Inspector:	Mark Fabend
Computed Condition Rating:	4.918 / 2019
Direction of Orientation:	East

Preliminary Recommendations: Replace joint (PH 1), repair beam ends (PH 2), repaint fascia girders (PH 3), repair substructure concrete (PH 4)

Preliminary Cost Estimate: $496,000

Field Visit Notes: Agree with preliminary recommendations except for replacing the Begin Joint since there is no evidence of leakage below deck and, therefore, the joint is watertight. (PH 5) The following additional areas requiring repairs were observed:

- Full height by approx. 1/8” wide vertical crack in Begin Abutment stem below Girder G5
- Full height by approx. 1/8” wide vertical crack in End Abutment stem below Girder G2 (PH 6)

Additional Recommendations: repair substructure concrete, no joint replacement, recommend adding Emseal type material (as discussed with Tony Fernandez in the field) to the gap between the bridge deck and cheekwall in all 4 quadrants to reduce drainage onto the fascia girder beam ends in all 4 quadrants

Revised Cost Estimate: $552,000

Potential Construction Related Issues: No wetlands in vicinity of bridge, no significant ROW impacts, no OH utilities near bridge

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
1

DESCRIPTION:

Looking Towards Left Across Top of Begin Joint

PHOTO NO:
2

DESCRIPTION:

Looking Towards Begin Right at Left Face of Girder G1 at Begin Abutment (Other Fascia Girder Beam Ends Similar)

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 3 **DESCRIPTION:** Looking Towards Begin Left Along Right Face of Girder G6 (Girder G1 Similar)	
PHOTO NO: 4 **DESCRIPTION:** Looking Towards Begin at Begin Abutment Stem and Begin Right Wingwall (End Abutment Spalling Similar)	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 5 **DESCRIPTION:** Looking Towards Begin at Lack of Water Leakage in Girder Bay 1 (Typical Condition)	
PHOTO NO: 6 **DESCRIPTION:** Looking Towards End at Top of End Abutment Stem Below Girder G4 (Arrow Indicates Location of Crack, Crack at Begin Abutment Similar)	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN:	3301580
Feature Carried:	CR 404 (Bear Swamp Road)
Feature Crossed:	Basic Reservoir
Owner:	Albany County
Date and Time:	3/3/2021 11:00 AM – 11:45 AM
Weather Conditions:	40 Clear
Inspector:	Mark Fabend
Computed Condition Rating:	5.086 / 2019
Direction of Orientation:	East

Preliminary Recommendations: Repair fascias with Item 582.07 (PH 1), replace wearing surface (PH 2), repair girders (undersides of girders inaccessible during this field visit due to minimal freeboard and unstable ice on reservoir), repair substructure concrete (PH 3)

Preliminary Cost Estimate: $127,000

Field Visit Notes: Agree with preliminary recommendations. The following additional areas requiring repairs were observed:

- The asphalt pavement on both approaches is moderately cracked and should milled and filled, assume 200 ft long by 25 ft wide on each approach (PH 4)
- Approach guide rail posts should be reset and reconnected to the box beam guide rail approx. 75 ft length in each quadrant (PH 5)
- Recommend overhead patching (Item 582.07) and protective sealing (Item 559.16960118) for repairs to the undersides of the girders

Revised Cost Estimate: $244,000

Potential Construction Related Issues: No wetlands in vicinity of bridge, no significant ROW impacts, no OH utilities near bridge. Limited (<12”) freeboard will require reducing water level at the bridge to perform repairs.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 1 **DESCRIPTION:** Looking Towards Right at Left Fascia Adjacent to End Abutment (Other Locations Similar at Each Rail Post on Both Fascias)	
PHOTO NO: 2 **DESCRIPTION:** Looking Towards End Left Across Top of Bridge	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN: 3302920
Owner: Albany County
Date and Time: 3/4/21 PM
Weather Conditions: Clear 35F
Inspector: Michael Lemme
Computed Condition Rating: 5.346 / 2019
Direction of Orientation: 3- East

Preliminary Recommendations:

- Replace existing bridge Rail with box beam rail.
- Replace wearing surface with new membrane.
- Add stone filling to address scour concerns.

Preliminary Cost Estimate: $170,000

Field Visit Notes:

- A wearing surface was placed on the approaches and deck prior to the visit (Photo 1 &2). This appears to address the item shown in the preliminary estimate. Estimate revised.
- Some W-Rail and vertical posts were repaired in kind prior to the visit (Photo 2). Remaining rail on the left and right shows active corrosion and section loss (Photos 3 & 4). The revised estimate includes new box beam rail to be placed full length.

Revised Cost Estimate: $133,000

Potential Construction Related Issues:
Overhead utilities exist on Bridge Right.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 1 **DESCRIPTION:** End Approach, Looking Towards The Begin. Asphalt Wearing Surface Placed at the approaches and Deck	
PHOTO NO: 2 **DESCRIPTION:** Current Bridge Deck Wearing Surface, Looking Towards The End. Newley Placed Wearing Surface and Deficient Bridge Rail	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 3 **DESCRIPTION:** Right Bridge Rail, Looking Up And Towards The End Replace Deficient Bridge Rail	
PHOTO NO: 4 **DESCRIPTION:** Left Bridge Rail, Looking Up and Towards The End Replace Deficient Bridge Rail	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 3 **DESCRIPTION:** Looking Towards Begin at Begin Left Wingwall Adjacent to Bridge	
PHOTO NO: 4 **DESCRIPTION:** Looking at End Approach From Bridge (Begin Approach Similar)	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO:
5

DESCRIPTION:
Looking at End Left Approach Railing From Bridge (Other Quadrants Similar)

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

FIELD VISIT REPORT

BIN:	2202830
FEATURE CARRIED:	Hans Creek Road
FEATURE CROSSED:	Hans Creek
Town/ City:	Town of Providence
Owner:	Saratoga County
Date and Time:	3/10/2021 9:20 AM – 10:20 AM
Weather Conditions:	30° F Sunny
Inspector:	Hao Cui
Computed Condition Rating:	4.021 / 2020
Direction of Orientation:	East

Preliminary Recommendations: Major Rehab: Superstructure Replacement

Preliminary Cost Estimate: $700,000

Field Visit Notes: The following repairs are included in 2020 Item specific recommendations:

- All concrete beams have efflorescence leakage between the beams. There are reflective cracks in the wearing surface above indicating the shear keys have failed and are allowing some movement (PH 1 & 2). Removing existing asphalt wearing surface and placing a new concrete wearing surface are recommended.

- Begin and end abutment stem exhibit multiple up to 1/8” wide x full height vertical cracks (PH 4). The begin and end abutment left and right cheek walls exhibit spalls (PH 3). Repairing the vertical cracks (Class D concrete repair) in the abutments and repairing the cheek wall spalls (Class A or Class D concrete repair depends on depth of spalls) are recommended.

Revised Cost Estimate: $209,000

Potential Construction Related Issues:

- No Wetland in the immediate vicinity of the bridge.

- Driveway adjacent to bridge at begin left and begin right quadrant, no other significant ROW impacts. The bridge has an utility conduit at the right fascia which is no longer attached and sagging (PH 5). In addition, the bridge has an overhead utility on the left side but does not appear to significantly affect proposed construction (PH 6).

- The length of the available construction detour is approximately 4 miles as per NYSDOT bridge inventory data.

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 1 **DESCRIPTION:** The deck wearing surface (Looking towards end left).	
PHOTO NO: 2 **DESCRIPTION:** Typical framing (Looking towards end left).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 3 **DESCRIPTION:** End abutment left cheek wall (Looking towards end).	
PHOTO NO: 4 **DESCRIPTION:** Begin abutment (Looking towards begin right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 5 **DESCRIPTION:** Right fascia utility (Looking towards end).	
PHOTO NO: 6 **DESCRIPTION:** End Approach.	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

FIELD VISIT REPORT

BIN:	2202970
FEATURE CARRIED:	Viall Avenue
FEATURE CROSSED:	Anthony Kill
Town/City:	City of Mechanicville
Owner:	Saratoga County
Date and Time:	3/8/2021 8:45 AM – 10:15 AM
Weather Conditions:	23°F Sunny
Inspector:	Hao Cui
Computed Condition Rating:	4.167 / 2020
Direction of Orientation:	North

Preliminary Recommendations: Item Specific: Replace Asphalt WS, Place Stone Fill

Preliminary Cost Estimate: $100,000

Field Visit Notes: Field conditions appear to agree with the previous assessment. The following repairs are included in 2020 minor rehab recommendations:

- Begin left and begin right approach sidewalks are heavily cracked (PH 1). Installing 15' new concrete sidewalk on each side of begin approach is recommended.

- Wearing surface along the center near begin is heavily cracked and settled up to 2" for approximately 15'L x 3'-5' W area (PH 2). The end approach wearing surface is similar. The condition is possibly due to underlying roadway subbase and/or drainage issues. Although a new wearing surface overlay was placed in 2018, a full depth pavement reconstruction over the arch, potentially adding underdrains is recommended.

- Scour with localized undermining along the begin and end abutment footings were reported in general inspections (PH 3). The begin left, end left and end right streambanks exhibit signs of erosion (PH 6). Adding stone bank protection (medium stone fill) in these areas is recommended.

- Begin right wingwall is spalled at the bottom near the middle (PH 4). The end left wingwall is spalled at the end corner. Class A concrete repair is recommended.

- The end right side of the arch near scour apron is spalled (PH 5). Class A concrete repair is recommended.

Revised Cost Estimate: $279,000

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

Potential Construction Related Issues:

- Driveway immediately adjacent to bridge at all four quadrants. OH utilities on the left side of the bridge. Temporary removal of the pedestrian fence is needed to gain access for construction. Temporary construction easements maybe required to gain access below the bridge.

- Based on environmental resource mapper, this location is in the vicinity of animals listed as endangered or threatened – contact NYSDEC Regional Office for more information.

- The length of the available construction detour is approximately 2 miles as per NYSDOT bridge inventory data.

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 1 **DESCRIPTION:** Begin right approach sidewalk, begin left approach sidewalk similar (looking towards begin).	
PHOTO NO: 2 **DESCRIPTION:** Wearing surface along the center near the begin (looking towards right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 3 **DESCRIPTION:** The end abutment footing, begin footing is similar (Looking towards right).	
PHOTO NO: 4 **DESCRIPTION:** Begin right wingwall (looking towards begin left).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 5 **DESCRIPTION:** End right side of arch at the bottom (looking towards end).	
PHOTO NO: 6 **DESCRIPTION:** End right stone bank protection (looking towards end right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

FIELD VISIT REPORT

BIN:	3304210
FEATURE CARRIED:	S. Shore Rd (CR 7)
FEATURE CROSSED:	Daly Creek
Town/ City:	Town of Day
Owner:	Saratoga County
Date and Time:	3/10/2021 12:00 PM – 1:30 PM
Weather Conditions:	40° F Sunny
Inspector:	Hao Cui
Computed Condition Rating:	6.304 / 2020
Direction of Orientation:	Northeast

Preliminary Recommendations: Not Reviewed

Preliminary Cost Estimate: N/A

Field Visit Notes:

Work strategy (Option 1): Minor Rehabilitation to address immediate end abutment scour issue and redirect stream flow. The following repairs are recommended:

- The left and right bridge curbs exhibit gaps/separations but currently are not significantly loose (PH 1). Resetting of bridge curb is recommended.

- The begin left and right approach guide railing exhibit impact damage (PH 2). Repair of the guide railing is recommended.

- The end side of the pier foundation and end abutment exhibit significant of scour and undermining (PH 3 & 4). The end abutment footing is undermined as per 2020 general inspection and diving inspection reports (condition could not be verified during 2021 field visit due to snow/ice cover and water depth. No sign of repair works was observed). Undermining/Scour repair at the end abutment and the end side of the pier is recommended.

- Installing rock vanes with bank protections at the upstream channel to re-direct streamflow to the center of the bridge opening.

Cost Estimate: $261,000

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

Work strategy (Option 2): Full replacement of the existing structure with stream re-alignment.

- According to a nearby resident, the bridge is frequently overtopped/near overtopped during flood events. Significant bank erosion on the upstream channel provides additional confirmation of the increased streamflow experienced at this site. Replacement of the existing bridge with a one-span bridge structure should be considered to alleviate the severe scour and overtopping issues that are occurring with the existing two span structure. This option should be pursued on an expedited schedule before it becomes an emergency repair situation due to failure of the existing bridge. Stream channel re-alignment and restoration (rock vane, bank protection, debris clean, etc) are also recommended.

Cost Estimate: $2,565,558

Potential Construction Related Issues:

- No Wetland in the immediate vicinity of the bridge.
- No significant ROW impacts. No OH utilities near the bridge.
- The length of the available construction detour is approximately 11 miles.

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 1 **DESCRIPTION:** Left bridge curb near the end, right curb similar (Looking towards begin).	
PHOTO NO: 2 **DESCRIPTION:** Begin left approach guide railing, begin right similar (Looking towards begin left).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 3 **DESCRIPTION:** End abutment (Looking towards end right).	
PHOTO NO: 4 **DESCRIPTION:** General view of pier foundation (Looking towards end right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

FIELD VISIT REPORT

BIN:	3304520
FEATURE CARRIED:	Heath Road
FEATURE CROSSED:	Sturdevant Creek
Town/ City:	Town of Corinth
Owner:	Saratoga County
Date and Time:	3/8/2021 11:45 AM – 1:00 PM
Weather Conditions:	31°F Sunny
Inspector:	Hao Cui
Computed Condition Rating:	4.771 / 2020
Direction of Orientation:	North

Preliminary Recommendations: Major Rehab: Superstructure Replacement, Reshape Channel

Preliminary Cost Estimate: $400,000

Field Visit Notes: Field conditions appear to agree with the preliminary assessment. Based on the in-depth assessment, the recommended bridge preservation approach has been changed to a minor rehabilitation that includes the following repairs:

- There is leakage between the longitudinal joints, as well as some rust stained leakage from the beam drains (PH 1). Beam B5 is spalled near the end (appears to be as-built condition, PH 2). There are reflective cracks in the wearing surface above indicating the shear keys have failed and are allowing some movement (PH 3). Removing the existing asphalt wearing surface and placing a new concrete wearing surface are recommended.

- Begin and end abutment stem and wingwalls exhibit multiple up to 1/8” wide x 1/2 to full stem width horizontal cracks (PH 4). Class A concrete repair is recommended.

- Waterway opening is reduced due to a silt/vegetation island built up under the bridge. In addition, the stream alignment has resulted in bank erosion and substructure footing exposure (PH 5 & 6). Stream channel regrading with stone bank protection is recommended.

- The bridge has a build-up of sand debris along the curb and the curb is trapping drainage on the deck, leading to leakage through the beam shear keys (PH 7). Removing curb to improve drainage is recommended.

Revised Cost Estimate: $306,000

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

Potential Construction Related Issues:

- Based on environmental resource mapper, this bridge is in the vicinity of one or more Regulated Freshwater Wetlands. Contact NYSDEC Regional Office for more details.

- No significant ROW impacts. The bridge has an utility conduit along the fascia (PH 7). There are no overhead utilities near the bridge (PH 8).

- The length of the available construction detour is approximately 7 miles as per NYSDOT bridge inventory data.

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 1 **DESCRIPTION:** Typical framing (Looking towards begin).	
PHOTO NO: 2 **DESCRIPTION:** Left edge of Beam 5 near the end (Looking towards left).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 3 **DESCRIPTION:** The deck wearing surface (Looking towards begin right).	
PHOTO NO: 4 **DESCRIPTION:** End abutment stem near the middle (looking towards end).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 5 **DESCRIPTION:** Upstream Channel (Looking towards left).	
PHOTO NO: 6 **DESCRIPTION:** Left elevation (Looking towards right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 7 **DESCRIPTION:** Utility at left fascia, Debris along the curb (Looking towards begin left).	
PHOTO NO: 8 **DESCRIPTION:** End approach	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

FIELD VISIT REPORT

BIN:	3304560
FEATURE CARRIED:	CR 49 W Milton Rd
FEATURE CROSSED:	Kayaderosseras Ck
Town/ City:	Town of Milton
Owner:	Saratoga County
Date and Time:	3/8/2021 10:30 AM – 11:30 AM
Weather Conditions:	27°F Sunny
Inspector:	Hao Cui
Computed Condition Rating:	4.654 / 2020
Direction of Orientation:	Northeast

Preliminary Recommendations: Minor Rehab: Reconstruct Approaches (PH 1), Replace Joints, Paint Girder Ends

Preliminary Cost Estimate: $300,000

Field Visit Notes: Minor Rehab is recommended based on 2020 review as follows:

- Both approach pavements are cracked and/or settled up to 2" (PH 1). Replacing existing deck and approach wearing surface is recommended.

- The begin left, end left and end right guide railings exhibit impact damages (PH 2). Repairing guide railing is recommended.

- The begin and end abutments exhibit random spalls up to 4" deep (PH 3 & 4). Concrete repair (Class D) is recommended.

- The steel protective coating (patina) is in poor or failed condition throughout (PH 5 & 6). The condition is worse at the exterior side of fascia girders and girder ends. Painting of those areas is recommended.

- All bearings are rusted with thin delaminations to steel plates and minor section losses (PH 7). Cleaning and lubricating all bearings are recommended.

- All steel backwalls are rusted with thin delaminations to steel plates and minor section losses (PH 8). Replacing steel backwalls with new concrete backwall to improve drainage over abutment is recommended.

- Girders G1 and G6 pedestal at the end abutment exhibit spalls up to 4" deep (PH 9). Concrete repair (Class D) is recommended.

- The streambank adjacent to the end right wingwall exhibits signs of erosion. Adding stone bank protection in this area is recommended (PH 10)

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

Revised Cost Estimate: $ 367,000

Potential Construction Related Issues:

- This location is in the vicinity of one or more Regulated Freshwater Wetlands. No significant ROW impacts. No OH utilities near the bridge.

- The length of the available construction detour is approximately 3 miles as per NYSDOT bridge inventory data.

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO:
1

DESCRIPTION:

Begin approach wearing surface, end approach similar (looking towards left).

PHOTO NO:
2

DESCRIPTION:

Begin left guide railing (looking towards begin left)

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO:
3

DESCRIPTION:
End abutment stem (looking towards end right).

PHOTO NO:
4

DESCRIPTION:
Begin abutment stem (looking towards begin)

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO:
5

DESCRIPTION:
Typical framing (looking towards begin).

PHOTO NO:
6

DESCRIPTION:
The steel protective coating of Girder G6 (looking towards end left).

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO:
7

DESCRIPTION:
Girder G1 bearing at end abutment (Looking towards end right).

PHOTO NO:
8

DESCRIPTION:
End abutment backwall at left fascia, typ. (looking towards end right).

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 9 **DESCRIPTION:** Girder G1 pedestal at end abutment, G6 pedestal similar but less severe (Looking towards end end).	
PHOTO NO: 10 **DESCRIPTION:** End right bank (Looking towards end right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

FIELD VISIT REPORT

BIN:	3304790
FEATURE CARRIED:	North Shore Road
FEATURE CROSSED:	Beecher Creek
Town/ City:	Town of Edinburg
Owner:	Saratoga County
Date and Time:	3/10/2021 10:35 AM – 11:45 AM
Weather Conditions:	39° F Sunny
Inspector:	Hao Cui
Computed Condition Rating:	3.667 / 2020
Direction of Orientation:	Northeast

Preliminary Recommendations: Item Specific: Steel Repairs, Rebuild/Repoint Masonry

Preliminary Cost Estimate: $150,000

Field Visit Notes: Field conditions appear to agree with the previous assessment. The following repairs are included in 2020 minor rehab recommendations:

- Bridge is composed of two types of primary members.

  The underside of the stone masonry arch on the left side exhibits longitudinal cracks up to 3" wide along the left fascia (PH 1). There are several small loose stones along the cracks. The left spandrel wall exhibits up to ½" wide crack on the end side (PH 1). These cracks were first reported in the 2006 inspection and are progressively getting wider since then. The spandrel wall also bulges 4" near the end. Active leaking through the left headwall is noticed near the begin and end (PH 2). The capstones are missing along the arch and end left wingwall. Rebuilding/Repairing/Repointing stone masonry arch is recommended.

  The steel arch on the right side exhibits corrosion with perforations along the begin and end footings (PH 3). The worst conditions were observed on the right side. Concrete encasement for the lower 1' of the steel arch is recommended.

- The right concrete headwall near the end exhibits up to 1/8" wide diagonal cracks (PH 4). Class D concrete repair of the right headwall is recommended.

- The begin scour apron exhibit cracks and spalls near the left side (PH 5). Class D concrete repair of the begin scour apron is recommended.

- The begin right, end left and end right streambanks exhibit signs of erosion. The existing stone protection is displaced. The begin left wingwall is undermined due to erosion. Adding stone bank protection in these areas is recommended (PH 6)

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

- The end left and end right guide railings exhibit impact damages (PH 7). Many of the left and right deck railing posts are not connected and leaning away. Replacement of the guide railing is recommended.

- The approach and deck wearing surface exhibits up to 1/8" wide cracks for approximately 40% of area. Replacing the wearing surface is recommended (PH 8).

Revised Cost Estimate: $ 438,000

Potential Construction Related Issues: There are no wetlands near the vicinity of the bridge. No significant ROW impacts. No OH utilities near the bridge appear to affect the minor rehab works. The bridge is possibly registered as a historical bridge.

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 1 **DESCRIPTION:** The left side of the stone masonry arch (Looking towards end).	
PHOTO NO: 2 **DESCRIPTION:** The stone masonry arch spandrel wall near the begin (Looking towards right).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 3 **DESCRIPTION:** The steel arch at the begin, end side is similar (Looking towards begin right).	
PHOTO NO: 4 **DESCRIPTION:** The right concrete headwall near end abutment (looking towards left).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 5 **DESCRIPTION:** The concrete apron of the begin footing (Looking towards right).	
PHOTO NO: 6 **DESCRIPTION:** The end left streambank (Looking towards end left).	

SCE
SOUTH COL ENGINEERING, P.C.

1 Marcus Blvd.
Suite 103
Albany, NY 12205
(518) 608-5800

PHOTO NO: 7 **DESCRIPTION:** The end right approach guide railing (looking towards begin left).	
PHOTO NO: 8 **DESCRIPTION:** The deck wearing surface (Looking towards begin right).	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN: 2203110
Owner: City of Schenectady
Date and Time: 2/26/21 & 3/5/21
Weather Conditions: 25F, partly clear
Inspector: Michael Lemme
Computed Condition Rating: 3.774 / 2020
Direction of Orientation:2-NorthEast

Preliminary Recommendations:
Major Rehabilitation including a superstructure replacement with substructure repairs.

Preliminary Cost Estimate: $ 2,223,000

Field Visit Notes:
The field visit confirmed the conditions as detailed in the 2020 inspection report.
At the time of the review, the NYSDOT PEW Work Sheet was referenced to estimate the cost of a full replacement, +/- $3.0m is estimated, plus the potential cost for any required approach work. Due to the significant cost difference, a Major Rehabilitation is assumed to be preferred method of repair.

Revised Cost Estimate: No change.

Potential Construction Related Issues:
Featured Crossed is railroad property and requires permission and access costs.
Residence at end left with nearby overhead utilities.

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 1 **DESCRIPTION:** Span 2 Framing, Looking Towards The Begin. Corner Spalling, soft concrete, and widespread tight cracking	
PHOTO NO: 2 **DESCRIPTION:** Span 2 Below Deck, Between Beams 9 & 10, Corner Spalling, soft concrete, and widespread tight cracking	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 3

DESCRIPTION: Bridge Wearing Surface, Looking Towards The Begin.

Longitudinal reflective cracking along beam joints

PHOTO NO: 4

DESCRIPTION: Right Elevation, Looking Towards the Left.

Special Access Required for RR property Access

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 5 **DESCRIPTION:** Pier 2 Begin Face, Looking Towards The End. The Cap Beam and Column #2 has hollowness, rust staining, and spalling with exposed rebar.	
PHOTO NO: 6 **DESCRIPTION:** Pier 2, Column 2 Begin Face, Looking Towards The End. Advanced Column Deterioration	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

FIELD VISIT REPORT

BIN:	3050510
Feature Carried:	Rosendale Road
Feature Crossed:	Lisha Kill
Owner:	Schenectady County
Date and Time:	3/1/2021 9:45 AM – 11:00 AM
Weather Conditions:	40 Overcast
Inspector:	Mark Fabend
Computed Condition Rating:	5.846 / 2019
Direction of Orientation:	North

Preliminary Recommendations: Repair concrete deck overhangs and fascias (PH 1), scour repairs, armor stream banks (PH 2), repair 2 pedestals (PH 3)

Preliminary Cost Estimate: $78,000

Field Visit Notes: Agree with preliminary recommendations. The following additional areas requiring repairs were observed:

- 2 ft long hairline crack with heavy rust leakage and efflorescence on Begin Abutment stem below Girders G8 and G9 (PH 4)

- 12” high by 4” wide by up to 4” deep spall with no exposed rebar and rust bleed below the spall at the Right corner of the End Abutment (PH 5)

- 3 ft long by 1/8” wide horizontal crack at top of End Abutment stem below Girder G4 (PH 6)

- Leakage and light efflorescence between Girders G5 and G6 and between Girders G6 and G7 for near full length (PH 7) and between all girders adjacent to the End Abutment. To address, recommend replacing wearing surface and installing waterproofing membrane in addition to protective sealing of the existing bridge deck, fascias and outboard faces of the fascia girders.

- Large trees fallen into and across downstream channel (PH 8)

Revised Cost Estimate: $199,000

Potential Construction Related Issues: Wetland downstream and adjacent to bridge prevents removal of fallen logs, driveway immediately adjacent to bridge in Begin Left quadrant, no significant ROW impacts, no OH utilities near bridge

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 1 **DESCRIPTION:** Looking Towards Begin Along Left Fascia (Right Fascia Similar But Less Severe)	
PHOTO NO: 2 **DESCRIPTION:** Looking at End Right Stream Bank (Other Locations Similar)	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 3 **DESCRIPTION:** Looking Towards Left at Right Face of Girder G4 Pedestal (Girder G9 Pedestal Similar)	
PHOTO NO: 4 **DESCRIPTION:** Looking Towards Begin at Begin Abutment Stem Below Girders G8 and G9	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 5 **DESCRIPTION:** Looking Towards End at Top of End Abutment Stem Below Girder G4	
PHOTO NO: 6 **DESCRIPTION:** Looking Towards End at Right Corner of End Abutment	

11 British American Blvd.
Suite 200
Latham, NY 12110
(518) 782-4500

PHOTO NO: 7 **DESCRIPTION:** Looking Towards End at Underside of Girders G6 and G7	
PHOTO NO: 8 **DESCRIPTION:** Looking Right From Bridge at Downstream Channel	

Appendix E

CDTC BRIDGE PRESERVATION STUDY
ESTIMATED SERVICE LIFE

The estimated service life for common repairs and work strategies is indicated below. The estimated service lives indicated below are based on information obtained from the NYSDOT Fundamentals of Bridge Maintenance & Inspection Manual and the NYSDOT Deck Evaluation Manual. Service life is defined as the length of time that a particular treatment will last before additional work is required.

Specific Items	**Service Life (Years)**
Wash Bridge	2
Seal Deck	4
Clean/Lubricate Bearings	4
Replace Joints	5
Place/Replace Asphalt Wearing Surface	12
Paint	12
Place/Replace Concrete Overlay Wearing Surface	30
Work Strategies	**Service Life (Years)**
Replacement	75
Major Rehabilitation – Superstructure Replacement	50
Major Rehabilitation – Deck Replacement	40
Minor Rehabilitation	See Above for Specific Elements
Preventative Maintenance	See Above for Specific Elements

Appendix F

CDTC BRIDGE PRESERVATION STUDY
CALCULATING THE COMPUTED CONDITION RATING

To assist with evaluating bridge improvements in relation to the Computed Condition Rating (CCR), a spreadsheet calculation was developed to predict the overall rating based on improvements made to individual bridge elements. The cost of the proposed repair could then be evaluated versus the potential benefit based on the new CCR. The spreadsheet calculation is based on the procedure outlined in the New York State Department of Transportation Structures Management Manual, August 2010, Appendix C and information provided by NYSDOT. Shown here, the CCR is computed as a numerical value utilizing a structural condition formula. The formula uses 13 bridge elements considered most important for the bridge evaluation. Element values are then weighted in proportion to importance with the values summed and divided by the sum of the weighted values. The result is a CCR for the rehabilitated bridge. Elements not considered in the condition rating formula include erosion and scour, stream hydraulics, approach items, bridge rail, scuppers and downspouts, medians, paint, lighting, sign structures and utilities and supports. Elements considered in the general recommendation and the associated weighted values are listed below:

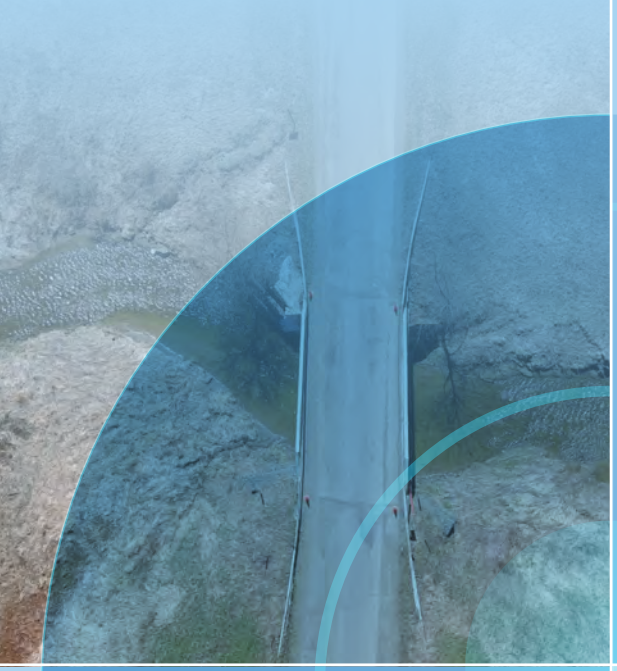
Element	Weighted Value
Primary Members	10
Abutments	8
Piers	8
Structural Deck	8
Bridge Seats/Pedestals	6
Bearings	6
Wingwalls	5
Backwalls	5
Secondary Members	5
Joints	4
Wearing Surface	4
Sidewalks	2
Curbs	1
Total:	72

In order to convert from the current Condition State rating system to the older 1-7 rating system, weighted values needed to be used. These weighted values are based on a combination of the individual element's weight as listed above and the percentages of the ratings which fall into each of the condition states. Once an equivalent 1-7 rating is calculated, the formula calculates the CCR. The following list, provides the weight values for the current NYSDOT elements:

Element	Weighted Value
12 - Reinforced Concrete Deck	8
13 - Prestressed Concrete Deck	8
15 - Prestressed Concrete Top Flange	8

16 - Reinforced Concrete Top Flange	8
28 - Steel Deck with Open Grid	8
29 - Steel Deck with Concrete Filled Grid	8
30 - Steel Deck Corrugated/Orthotropic/Etc.	8
31 - Timber Deck	8
38 - Reinforced Concrete Slab	10
54 - Timber Slab	10
60 - Other Deck	8
65 - Other Slab	10
104 - Prestressed Concrete Closed Web/Box Girder	10
105 - Reinforced Concrete Concrete Web/Box Girder	10
107 - Steel Open Girder/Beam	10
109 - Prestressed Concrete Open Girder/Beam	10
110- Reinforced Concrete Open Girder/Beam	10
111 - Timber Open Girder/Beam	10
113 - Steel Stringer	10
117 - Timber Stringer	10
120 - Steel Truss	10
135 - Timber Truss	10
144 - Reinforced Concrete Arch	10
145 - Masonry Arch	10
152 - Steel Floor Beam	10
156 - Timber Floor Beam	10
162 - Steel Gusset Plate	10
202 - Steel Column	8
205 - Reinforced Concrete Column	8
210 - Reinforced Concrete Pier Wall	8
213 - Masonry Pier Wall	8
215 - Reinforced Concrete Abutment	8
216 - Timber Abutment	8
217 - Masonry Abutment	8
218 - Other Abutment	8
219 - Steel Abutment	8
220 - Reinforced Concrete Pile Cap/Footing	5
225 - Steel Pile	5
227 - Reinforced Concrete Pile	5
228 - Timber Pile	5
229 - Other Pile	5
231 - Steel Pier Cap	5
234 - Reinforced Concrete Pier Cap	5
240 - Steel Culvert	10

241 - Reinforced Concrete Culvert	10
243 - Other Culvert	10
244 - Masonry Culvert	10
300 - Strip Seal Expansion Joint	4
301 - Pourable Joint Seal	4
302 - Compression Joint Seal	4
303 - Assembly Joint with Seal	4
304 - Open Expansion Joint	4
305 - Assembly Joint without Seal	4
306 - Other Joint	4
310 - Elastomeric Bearing	6
311 - Movable Bearing	6
312 - Enclosed/Concealed Bearing	6
313 - Fixed Bearing	6
314 - Pot Bearing	6
315 - Disk Bearing	6
316 - Other Bearing	6
321 - Reinforced Concrete Approach Slab	8
330 - Metal Bridge Railing	4
331 - Reinforced Concrete Bridge Railing	4
332 - Timber Bridge Railing	4
334 - Masonry Bridge Railing	4
510 - Wearing Surfaces	4
515 - Steel Protective Coating	5
800 - Erosion or Scour	6
801 - Stream Hydraulics	5
810 - Sidewalk	2
811 - Curb	1
830 - Secondary Members	5
831 - Steel Beam End	0
850 - Backwall	5
851 - Abutment Pedestal	6
852 - Pier Pedestal	6
853 - Wingwall	8
860 - Headwall	8



CDM Smith®

cdmsmith.com