ANNUAL SURVEY REPORT ON CONDITION OF SOUTHERN CONNECTOR TOLL ROAD

Interstate 185 - Toll

Greenville County, South Carolina

May 3, 2024

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Southern Connector Toll Road

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1 INTRODUCTION

Bridge 185-117: I-185 NB over I-85 [2024]

The Southern Connector Toll Road was completed in early 2001 and opened to traffic in February of that year. The Connector 2000 Association contracted Benesch in 2024 to conduct a maintenance condition survey (inspection) of the roadway and bridges as part of the requirements under their Master Indenture. The condition survey performed by Benesch took place March 28-30, 2024, and focused primarily on condition of the pavement and bridges. The survey also included assessment of drainage, roadway slopes, signs, and traffic appurtenances along the project.

The Southern Connector Toll Road includes 43 bridge structures from the I-385/I-185 & I-85/I-185 Interchanges and all freeway bridges and overpasses along the I-185 corridor between I-385 and I-85. Table 1 in this report provides a list and description of the 43 bridge structures covered in this condition assessment. Figure 1 shows the limits of the Southern Connector and identifies the location of each of the 43 bridges and the two toll plazas located on the Southern Connector Toll Road.

The bridge numbering system used to identify the bridge structures begins at the eastern I-385 end of the Southern Connector. The bridges along I-185 are numbered consecutively based on a north-south direction of travel leading from I-385 to the junction with I-85 in Greenville. The identifier for dual bridges on I-185 begins with “1” for the northbound (NB) direction and “3” for the southbound (SB) direction.

For example, the I-185 dual bridges over Ranch Road are numbered 185-103 for the northbound direction and 185-303 for the southbound direction. Bridges for overpasses and ramps over I-185 are based on the number of the crossroad assigned by SCDOT.

Benesch contacted the South Carolina Department of Transportation (SCDOT) Bridge Maintenance personnel in District 3 (Greenville, SC) to obtain copies of the latest bridge inspection reports prepared by SCDOT. The SCDOT Bridge Inspection Program requires that all statewide public road bridges longer than 20 feet undergo a specific level of inspection on a biennial basis. These inspections are a requirement of the program administered by the Federal Highway Administration (FHWA) through the National Bridge Inspection Standards (NBIS) under Title 23 of the United States Federal Code of Laws. SCDOT maintains a database of the NBIS reports as these are the official records to locate and evaluate existing bridge deficiencies. Benesch was able to obtain a copy of the latest NBIS inspection records for inspections performed by SCDOT in 2022. No structure received an NBI Condition value of 6 or below, meaning all these bridge structures are considered to be in satisfactory or better condition. Only structures having an NBI condition value of 4 or less are structurally deficient.

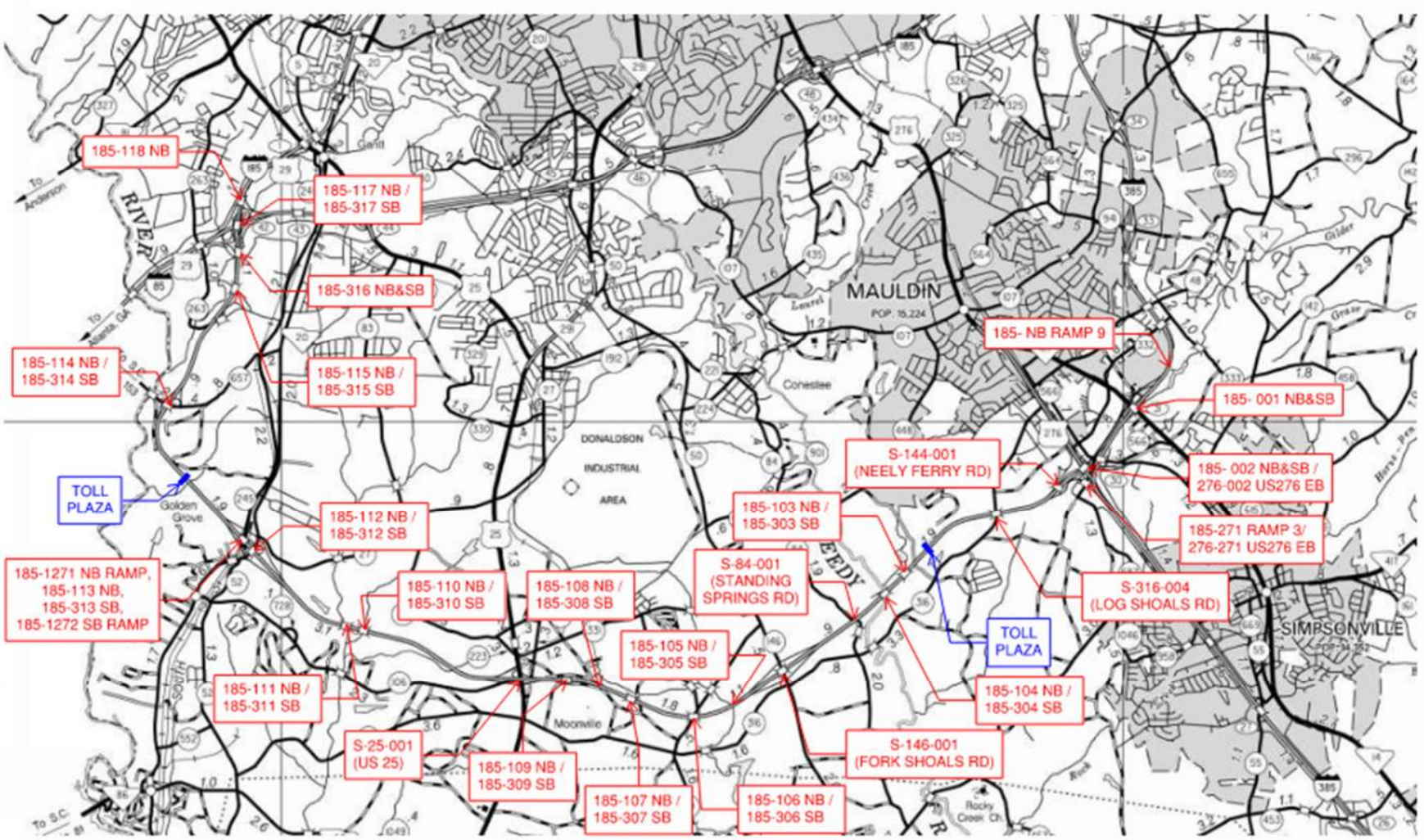
Benesch's condition assessment is not intended to be as detailed as the NBIS inspections conducted by SCDOT and does not rate the bridge structural components but is limited to observation of each bridge to look for components that may need maintenance or repair as necessary to maintain public safety. We have also highlighted current deficiencies that may potentially result in a more costly repair if not addressed soon. This report primarily assesses the structural conditions of the bridge deck, superstructure, substructure, joints, bearings and approach pavement condition. An overall pavement assessment was performed for all northbound and southbound segments of I-185 along the Southern Connector Toll Road.

Bridge 185-317: I-185 SB. over I-85 [2024]

TABLE 1: SOUTHERN CONNECTOR BRIDGE IDENTIFICATION

NBIS Bridge #	Description
185-171	I-185 Ramp 9 over I-385
185-001	I-185 NB & SB over SC 417
185-002	I-185 NB & SB over US 276 Ramp 11, Ramp 2 & Railroad
276-002	US 276 EB over I-185 Ramp 2
185-271	I-185 Ramp 3 over East Standing Springs Road
276-271	US 276 EB over East Standing Springs Road
S-144-001	Neely Ferry Road over I-185 NB & SB
S-316-004	Log Shoals Road over I-185 NB & SB
185-103	I-185 NB over Ranch Road
185-303	I-185 SB over Ranch Road
185-104	I-185 NB over Reedy River
185-304	I-185 SB over Reedy River
S-84-001	Standing Springs Road over I-185 NB & SB
S-146-001	Fork Shoals Road over I-185 NB & SB
185-105	I-185 NB over Huff Creek
185-305	I-185 SB over Huff Creek
185-106	I-185 NB over Reedy Fork Road
185-306	I-185 SB over Reedy Fork Road
185-107	I-185 NB over Lost Swamp Road
185-307	I-185 SB over Lost Swamp Road
185-108	I-185 NB over Future Railroad
185-308	I-185 SB over Future Railroad
185-109	I-185 NB over Flora Louise Drive
185-309	I-185 SB over Flora Louise Drive
S-25-001	US 25 over I-185 NB & SB
185-110	I-185 NB over Grove Creek Tributary
185-310	I-185 SB over Grove Creek Tributary
185-111	I-185 NB over Grove Creek
185-311	I-185 SB over Grove Creek
185-112	I-185 NB over SC 20
185-312	I-185 SB over SC 20
185-113	I-185 NB over NS & CSX RR
185-313	I-185 SB over NS & CSX RR
185-1271	Ramp onto I-185 NB over NS & CSX RR
185-1272	Ramp off I-185 SB over NS & CSX RR
185-114	I-185 NB over SC 153
185-314	I-185 SB over SC 153
185-115	I-185 NB over Stables Road
185-315	I-185 SB over Stables Road
185-316	I-185 SB over I-85 NB Ramp (Line 2)
185-117	I-185 NB over I-85
185-317	I-185 SB over I-85
185-118	I-185 NB over I-185 SB Ramp (Line 7)

FIGURE 1: BRIDGE LOCATION MAP



2 CONDITION ASSESSMENT OVERVIEW

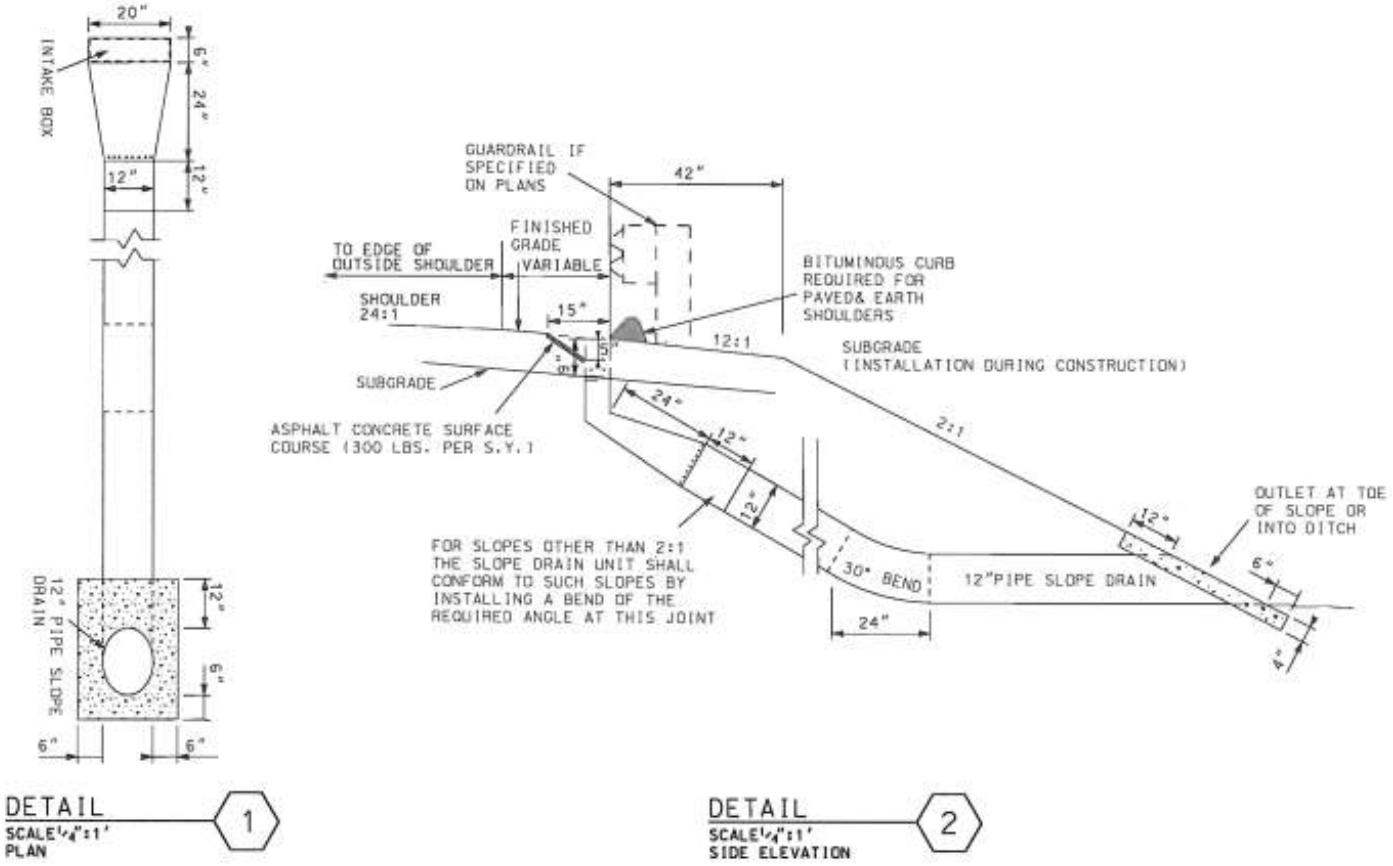
The assessment Benesch performed in March 2024 consisted of walking over, under, and around each of the 43 bridge sites to perform a visual inspection of the different bridge elements as could be best accessed by foot. The bridge elements assessed included the bridge deck, joints, barrier rail, girders, substructure components, slope protection and drainage features. The assessment of roadway features consisted of a drive through and observation of roadway conditions visible from a vehicle. A more in-depth review was performed at the bridge approaches while assessing the bridge structures. The roadway assessment focused on the general condition of the pavement, along with checking for issues with the surface drainage, surface erosion, guardrails, traffic signs, pavement markers and pavement striping.

Benesch has referenced the Annual Survey Reports prepared in prior years to document changes at each bridge site, with special consideration given to locations documented in prior years' reports as needing attention to restore and maintain serviceability or prevent further deterioration. SCDOT has performed many repairs over the past few years to address drainage issues at many of the bridge sites and repaired bridge components that directly impact rideability and driver safety. Repairs have included adding flumes or pipes alongside the roadway shoulder at the low end of the bridge approach to divert storm water runoff away from the structure. Details of two types of drainage improvements are summarized on the following two pages as: (1) pipe slope drains per SCDOT Standard Drawing 803-105-00 & (2) paved asphalt flumes per SCDOT Standard Drawing 403-210-00.

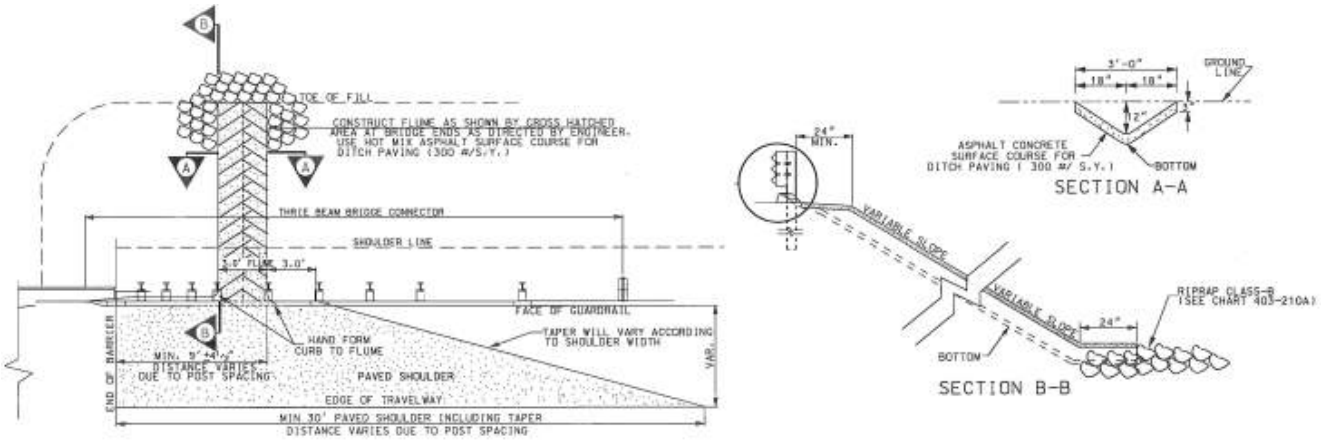
Other repairs have included replacing a 12 to 18-inch wide segment of asphalt along the entire length of the transverse joint at each end of the bridge approach slab with a flexible asphalt binder as shown below. In past assessments, these locations have deteriorated and spalled at most of the bridge sites; these repairs have improved safety as a user transitions from the paved approach to the bridge riding surface. During the 2024 inspection we did not encounter any new joint patching at any of the bridge structures.

Typical asphalt joint repair

SCDOT Std. 803-105-00, 12” Slope Drain (Metal Intake Spillway Assembly)



SCDOT Std. 403-210-00, HMA Surface Course (Ditch Paving & Flume)



In addition to the joint repairs made to many of the sites over the past years, SCDOT has continued to make improvements to:

1. Eroded and undermined conditions previously noted at the corners of the interface between approach slabs and end bent backwall/wingwalls using a Flowable Fill or expanding poly-foam material to fill voided areas.
2. Eroded areas along the top of Mechanically Stabilized Earth (MSE) walls that wrap around the bridge end bents using a combination of the expanding poly-foam material to seal cracks and openings within the MSE wall and applying an asphalt binder topping at the surface to further prevent water infiltration.
3. Swales alongside the bridge approaches that tie into drainage flumes/funnels.

An itemized list of key observations made during the 2024 condition survey is summarized in Section 3.1, Southern Connector Bridge Site Repairs, on a bridge-by-bridge basis. A few common issues noted at many of the bridge sites that could become a safety concern over time include:

1. Spalling at the joints at both the beginning and end of the approach slab and at the deflection joint where the approach slab ties into the integral end bents.
2. Various types of cracking of the asphalt overlay covering the concrete approach slabs.
3. Erosion issues adjacent to the approach slabs, end bents and/or concrete slope protection. During the March 2024 inspection, the striping was observed to be in good condition.

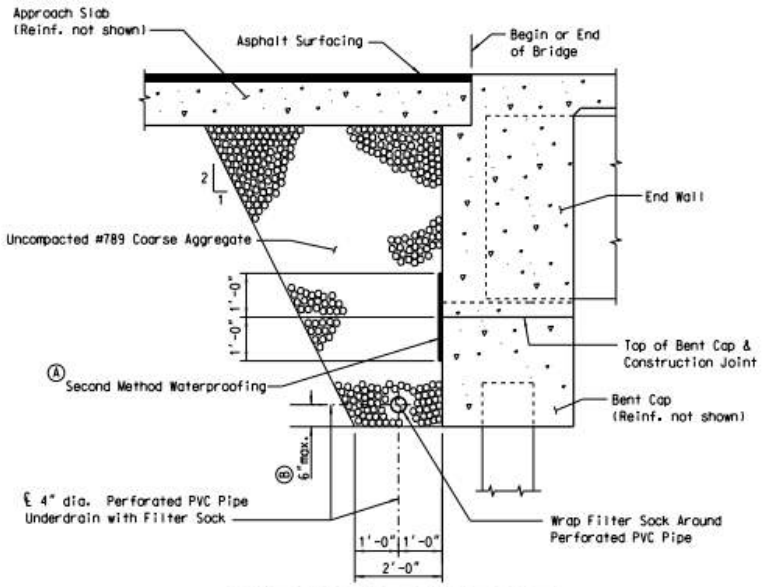
3 BRIDGE CONDITION SURVEY

A brief description of the condition assessment findings and discussion of appropriate preventive maintenance and repairs is presented below. Benesch's visual inspection specifically targeted the condition of primary bridge features such as the bridge decks, approach slabs, barrier rails, beams, joints, bearings, end bents and bents.

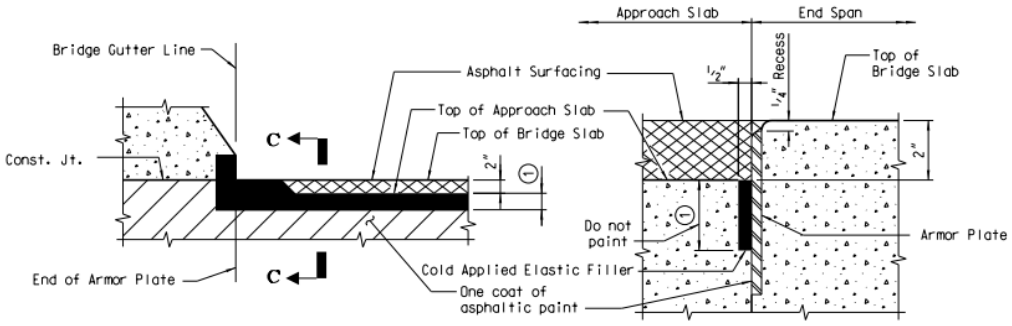
Each bridge is constructed with a concrete approach slab 20 feet in length, with one end resting on top of the end bent backwall or seat. The other end of the approach slab sits on the roadway sub-grade. The concrete approach slab is constructed so the surface of the slab is 1½ inches lower than the bridge deck, allowing 1½ inches of asphalt pavement to be placed on top of the concrete slab to provide a smooth interface and riding surface. This arrangement creates a joint between the bridge deck and the approach slab, and a second joint between the approach slab end and the full-depth asphalt pavement. Because the bridges generally have integral end bents, expansion of the bridge occurs at the ends of the approach slabs where cracks form in the pavement. These cracks have typically been sawn out and waterproof seals poured in the gap to prevent water from seeping into the sub-grade and eroding support for the concrete approach slab. The joints need to be inspected and filled periodically to resist leaking.

Integral bent and integral end bent substructures were utilized for most of the bridges constructed along the Southern Connector. The use of integral connections eliminates expansion joints and reduces maintenance costs associated with them due to deterioration of the expansion material and resulting leakage. A deflection joint is located between the integral end bent and approach slab. At many of the bridge sites, the relatively thin asphalt overlay on top of the approach slab has started to crack and delaminate at this deflection joint. The elastomeric joint filler at this deflection joint has deteriorated leaving the joint more susceptible to water infiltration and further damage to the concrete substructure and/or approach slab during freeze/thaw cycles. For reference, the following SCDOT standard details are provided to help illustrate the components of a typical integral end bent and deflection joint detail.

Integral bents and end bents were not feasible for some of the longer or heavily skewed bridges at the I-385 and I-85 interchanges. These bridges received expansion joints at the bridge ends of either a compression joint seal or strip seal variety as illustrated in the following SCDOT standard details. During past condition surveys, we have encountered rainy weather which allowed us to better understand the condition of several bridges with expansion joints. Water intrusion was noted at several expansion joints at the I-85 interchange bridges. Runoff was visibly pouring through the expansion joints and onto the bearing seat of the substructure below these joint locations during previous inspections. As a result of this water intrusion, the service life of the bearing assemblies may be shortened due to corrosion and weathering associated with the bearings being in frequent contact with moisture.



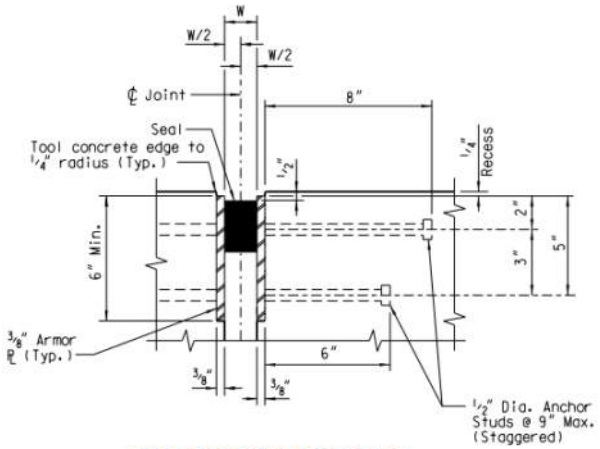
INTEGRAL END BENT



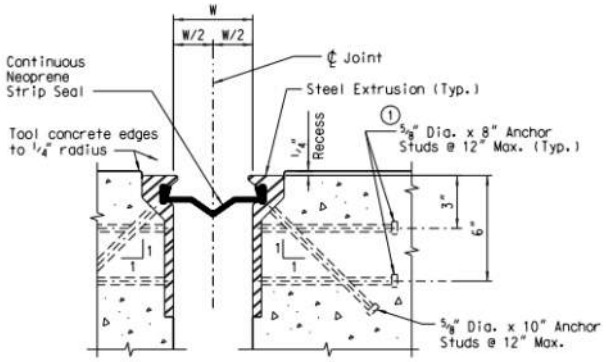
SECTION ALONG DEFLECTION JOINT

SECTION C-C

DEFLECTION JOINT DETAIL



COMPRESSION SEAL EXPANSION JOINT



STRIP SEAL EXPANSION JOINT

Items noted during the condition survey that directly affect rideability include settlement of the approach slab, consolidation of the approach embankment, cracks in the asphalt pavement and/or approach slab, deterioration of the joint seals, surface water intrusion around the bridge wing walls, and voids under the approach slab. The settlement of the approach slab or approach embankment causes a dip in the pavement surface, which can result in a noticeable bounce when large SUV type vehicles or trucks cross the bridge. In several locations, the voids observed under the approach slab are much deeper than expected from normal consolidation settlements in the subsurface soil strata. These voids appeared to have been caused by erosion where the slabs are undermined by the intrusion of surface water around the approach slabs and end bent wing walls.

Specific conditions relating to the bridge superstructure or substructure that need attention are mostly associated with storm water runoff infiltration around bridge ends and erosion and settlement of the approach fills. The primary deficiencies noted at bridge approaches were consolidation and settlement of embankments and underlying soils below the bridge approach slab, surface water infiltration at the joints, and erosion at the end bent wing walls. Over the years, the cycle of water infiltration and erosion at the bridge approaches has resulted in undermining adjacent to and below the approach slab. The undermining has then caused settlement at the approaches which has led to uneven pavement and poor rideability at these locations.

Furthermore, the following bridge sites discussed in Section 3.1 are believed to have issues that require closer monitoring and additional review from SCDOT, potentially requiring sooner repair.

3.1 Southern Connector Bridge Site Repairs

185-171 – I-185 Ramp 9 over I-385

There is significant debris piling up in the shoulders of the joints at both ends of the bridge. As debris continues to fill in the joint there is risk of the expansion material splitting resulting in leakage onto the end bent and bearings. See photo #1. The 4-inch-thick concrete layer previously added to the top of far MSE wall is still intact and functioning as intended. See photo #2. Severe erosion is occurring along the base of the MSE wall adjacent to I-385 at the trailing end of the bridge. Multiple block panels have broken off from the wall at this location and are missing. As a result, there is a significant gap forming between the MSE wall block panels with sediment backfill flowing out the gaps. See photo #3. A large tree was previously growing on the top of the MSE wall at trailing end of the bridge, it has since grown back. See photo #4. Both delineators at the leading end of the bridge have lost their retroreflective quality.

185-001 – I-185 over SC 417

Severe block cracking and potholes were noted along the asphalt just before the approach slabs at each end of the bridge. See photo #5. There are multiple spalls in the median rail at both ends of the bridge. See photos #6-#7. Heavy vegetation growth has been cut and is dead along the MSE wall. See photo #8. At the northeast corner of the bridge, there is a large hole underneath the drainage flume and the drainage flume is partially clogged with debris. See photo #9. Cracks are beginning to form at the bridge joints with vegetation growing in the shoulders. See photo #10. There are multiple guardrail post blocks that are damaged or completely missing at the southwest approach. See photo #11. The delineator at the southwest corner has lost its retroreflective quality.

185-002 – I-185 NB & SB over US 276 Ramp 11, Ramp 2 & Railroad

The NB bridge approach end has several defects: clogged drainage flume, loose guardrail anchorage bolt, and undermining of the approach slab. See photos #12-#14. The expansion joints at both ends of the bridge have significant debris buildup throughout the entire length of the joint and tears are beginning to develop. See photo #15. The NB bridge trailing slope protection was previously repaired for the entire length and is still in good condition. Spall repair on the north side of the last interior bent column on the NB bridge is beginning to delaminate. The NB bridge trailing end has 4 inch shoulder settlement and cracking adjacent to the catch basin. See photos #16-#17. At the top of the northwest slope protection corner, there is large cracking with settlement occurring. See photo #18.

276-002 – US 276 EB over East Standing Springs Rd.

Transverse cracks are still present at both approaches. At the approach end of the bridge, there is a clogged drainage inlet. See photo #19. At the concrete slope protection at both ends of the bridge, there are areas of undermining with cracking and heavy vegetation growth. See photo #20. There is guardrail damage to the rail and post at the trailing end of the bridge. See photo #21.

185-271 – Ramp 3 over East Standing Springs Rd.

There is a loose guardrail attachment bolt at the leading end of the bridge. Cracks at end of south approach are still present. Areas of undermining of the slope protection with full depth cracks. See photo #22. Joint cracks in the shoulders with vegetation growth. See photo #23. Both delineators have lost their retroreflective coating.

276-271 – US 276 EB over East Standing Springs Rd.

North and south approach roadways were paved prior to 2023, cracks are still present at the ends of the approach. See photo #24. Heavy vegetation on both slopes protections. See photo #25.

S-144-001 – Neely Ferry Road over I-185 & US 276 Access Ramps

There are full depth cracks at the end of the approach slabs in the shoulders at both ends of the bridge. See photos #26-#27. The slope protection along both berms has been repaired; however, there are small cracks already forming at the top of the berms and at the bottom. See photo #28. At the top of the slope protection, there are multiple areas of undermining due to animal dwellings. See photo #29. At the northwest corner, the flume has 6 inch settlement. See photo #30.

S-316-004 – Logs Shoals Road over I-185 NB & SB

Previous gaps in MSE wall have been covered with a 4 inch thick concrete layer, coating is in good condition. See photo #31. There are also several missing blocks on top of the same MSE wall. See photo #32. There was approximately 5 feet of missing control access fencing adjacent to the bridge where the 4 inch thick concrete was placed on the MSE wall. There was severe erosion with rutting in the side slopes at the northeast quadrant approximately 30 feet from the bridge. See photo #33.

185-103 & 185-303 – I-185 NB & SB over Ranch Road

Bridge 185-103 has block and longitudinal cracking with potholes occurring near both approach slabs. See photos #34-#35. Up to 2 inch settlement is occurring at the bottom of the concrete slope protection with heavy vegetation growth. See photo #36. Bridge 185-303 has cracking up to 1 inch wide on both approach slab joints. See photo

#37. Cracking and 1 inch settlement occurring along concrete slope protection. See photo #38. There is a section of control access fencing missing and damaged segments at both ends of the bridge. See photo #39.

185-104 – I-185 NB over Reedy River

The trailing end guardrail terminal has moderate impact damage. See photo #40. Moderate block and longitudinal cracking with potholes in both approach roadways. See photo #41. Deterioration of the approach slab joint. See photo #42. The joints at both ends of the bridge are deteriorated adjacent to the deck forming large holes in the shoulders and complete separation along the travel lanes. See photo #43. Approach slabs at both ends of the bridge have bumps due to settlement. See photo #44. Previously placed stream bank stabilization is slowly washing away. See photo #45.

185-304 – I-185 NB over Reedy River

Moderate block cracking with longitudinal cracking in both approach roadways. See photo #46. The far approach slab joint has a 2 inch bump in the roadway and cracking in the shoulder. See photo #47. Downstream from the bridge, there is erosion of the streambanks with a tree that has fallen into the Reedy River. See photo #48.

S-84-001 – Standing Springs Rd over I-185 NB & SB

Past patching at the north end has severely deteriorated and has cracking with vegetation growing through. See photo #49. There is an erosion hole at the northeast and southwest corners with undermining of the approach slabs. See photo #50. There is also a large area of erosion on the side slope adjacent to I-185 SB lanes. Control access fencing missing at northeast quadrant of the bridge. See photo #51. There is moderate vegetation growth in the approach slab shoulders. See photo #52. Top of berm at north concrete slope protection has minor cracking and settlement. See photo #53.

S-146-001 – Fork Shoals Rd. over I-185

There is severe block cracking and alligator cracking on both approach roadways. Deterioration of approach slab joint. See photo #54. Cracking and settlement in the top of berm on concrete slope protection. See photo #55.

185-105 & 185-305 – 185 NB & SB over Huff Creek

Bridge 185-105 has a 4 inch diameter x 1 inch deep spall in span 3 in the right lane. See photo #56. Minor spalling in the bottom flange with exposed rebar stirrup in span 1 girder. See photo #57. Previous channel bank erosion has been mitigated with large rip rap on both sides of the bank at bridge 185-105. Bridge 185-305 has three damaged guardrail posts at the southwest corner of the bridge. See photo #58. The approach roadway has longitudinal cracks with multiple potholes. See photo #59. Channel banks are eroding and there is a threat of scour at columns during a high-water event. If significant scour occurs at the piles, there is risk of pile settlement or loss of pile stability. See photos #60-#61. The approach slabs at both ends of the bridge and at both bridges have significant bumps causing vehicles to lift off the ground at high speeds.

185-106 & 185-306 – I-185 NB & SB over Reedy Fork Road

Bridge 185-106 has multiple dislodged rail post blocks next to the approach terminal. See photo #62. There are multiple longitudinal cracks in the approach roadway that extend onto the approach slab. See photo #63. Both structures have cracking and settlement of the concrete berm and heavy vegetation throughout the concrete slope protection. See photos #64- #65. Bridge 185-106 has two girders with minor spalls in the bottom flange. See

photos #66-#67. Bridge 185-106 has crack with efflorescence build up on backside of rail at guardrail attachment. See photo #68.

185-107 & 185-307 – I-185 NB & SB over Lost Stump Road

Both bridges have missing and dislodged guardrail post blocks at both ends of the bridge. See photos #69-#70. Bridge 185-107 has impact damage at the leading end. See photo #71. Bridge 185-307 has significant cracking and spalls in the approach slab joint shoulder with vegetation growth. See photos #72-#73. There are multiple longitudinal cracks with potholes in the approach roadways that extend onto the approach slab. See photo #74. Both bridges have large cracks with up to 1 inch settlement occurring along the concrete slope protection with heavy vegetation growth. See photos #75-#76.

185-108 & 185-308 – I-185 NB & SB over Future Railroad

Moderate to severe block cracking occurring at both approaches with multiple potholes. See photos #77. Bridge 185-308 has cracking in the approach slab joint at the far end. Cracking and up to 3 inch settlement at top of berm of both bridges. See photos #78-#79. Bridge 185-308 has cracking occurring along the concrete berm with heavy vegetation at both ends.

185-109 & 185-309 – I-185 NB & SB over Flora Louise Drive

Clogged drainage flume at leading end of bridge 185-109. See photo #80. Severe block cracking with potholes is occurring in both approach roadways at both structures. See photos #81-#82. Both bridges have seal adhesion loss throughout with water leakage onto the cap below. See photo #83. Settlement with cracking is occurring throughout all concrete slope protections. See photos #84.

25-001 – US 25 over I-185

Concrete deck has moderate wearing of the riding surface with significant loss to the deck grooving scattered throughout. See photo #85. Cracking and delamination underneath girders at end bents. See photo #86. There is a section of broken curb above the catch basin at the northeast corner of bridge. See photo #88. Cracking and settlement along the concrete slope protection. See photo #89.

185-110 & 185-310 – I-185 NB & SB over Grove Creek Tributary

Moderate ravel, moderate block and longitudinal cracking with potholes present in both approach roadways. See photo #90. Broken compression joint seals were observed in the shoulders with water leakage onto the caps. See photos #91-#92. Dead vegetation growth on barrier rail. See photo #93. Both bridges have partially clogged drainage flumes. See photos #94-#95. Bridge 185-310 has multiple areas of undermining at both end bents. See photos #96-#97. Bridge 185-110 has streambed erosion control device installed along the west bank only, in good condition. See photo #98. Bridge 185-110 east bank has severe erosion with vertical banks eroding up to the bent 3 piles. See photo #99.

185-111 & 185-311 – I-185 NB & SB over Grove Creek

There are multiple damaged guardrail blocks near the terminal. See photo #100. Severe block cracking is present in the approach roadway and extends onto the approach slab with potholes in the joint. See photos #101-#102. Spalls around compression joint seal with water leakage onto bent caps below. See photo #103. A streambed erosion control device has been placed along the channel banks under bridge 185-111 to mitigate scour around

piles. See photo #104. Bridge 185-311 has streambank erosion up to the piles with rip rap washing out. See photo #105.

185-112 & 185-312 – I-185 NB & SB over SC 20

Moderate to severe block cracking present in both approach roadways and approach slabs with potholes scattered throughout. See photo #106. Bridge 185-312 has a small spall in the bent diaphragm. See photo #107. Erosion of side slope at both ends of bridge 185-312. See photo #108.

185-1271 – Ramp on I-185 over NS & CSX RR

Moderate block cracking is occurring at both approaches with longitudinal cracking extending onto the approach slab. See photo #109. The top of the leading slope protection berm has a large crack and settlement. See photo #110. Heavy vegetation growth on top of berm on both ends of bridge. See photo #111.

185-113 & 185-313 – I-185 NB & SB over NS & CSX RR

Severe block cracking occurring in approach roadway extending onto the approach slab at both ends of the structures with potholes in the approach slab joints. See photo #112. Deterioration of the approach slab joint at bridge 185-113. See photo #113. Heavy vegetation growth on top of berm on ends of bridges.

185-1272 – Ramp on I-185 over NS & CSX RR

The top of bridge rail at the trailing end has a significant crack with efflorescence. Moderate cracking is occurring at the top of the slope protection berm. See photo #114. Large tree growing on top of berm at leading end. See photo #115.

185-114 & 185-314 – I-185 NB & SB over SC 153

Bridge 185-314 has a split rail and twisted blocks at the leading end of the bridge. See photo #116. Severe block and severe alligator cracking occurring at both ends of each structure. See photo #117. Potholes/depressions, deterioration, and cracking throughout newly paved patched joints. See photos #118-#119. Bridge 185-114 has undermining of the far approach slab. See photo #120.

185-115 & 185-315 – I-185 NB & SB over Stables Road

Moderate to severe block cracking at all approaches. See photos #121-#122. Deterioration throughout joints with potholes. See photo #123. Significant erosion is occurring under the concrete slope protection. See photo #124. Large vegetation growth in the area between the two bridges. See photo #125. Bridge 185-315 leading end west side has missing control access fencing.

185-316 – I-185 SB over I-85 NB Ramp

Cracking and large bump at leading approach slab. See photo #126. Moderate to severe block cracking and severe alligator cracking in both approach roadways. See photo #127.

185-117 & 185-317 – I-185 NB & SB over I-85

The guardrail terminal at bridge 185-117 near approach has been hit and is damaged. See photo #128. Both bridges have severe block cracking at both approaches with potholes. See photo #129. Bridge 185-117 has approach slab joint deterioration with exposed steel plate. See photo #130. Both bridges have seal adhesion loss in the compression joint and water is intruding onto the cap below. If this continues, the increased moisture will

enhance the corrosion process of the bearings and girder ends. See photos #131-#132. Joints have loss of adhesion with water leakage evident on caps below. See photo #133. Both bridges have shallow spalls with exposed steel. See photos #134-#136. Both bridges have minor cracking in the slope protection. Heavy vegetation growth is beginning to develop adjacent to the concrete slope protection at both bridges. See photo #137.

185-118 – I-185 NB over I-185 SB Ramp

Severe block and alligator cracking is occurring along both ends of the bridge. See photos #138-#139. Deterioration and depressions are present throughout the approach slab joints. See photo #140. Minor cracking and vegetation growth occurring along the concrete slope protection berm. See photo #141.

4 ROADWAY CONDITION SURVEY

Benesch was retained to perform a network level Pavement Condition Survey (PCS) of the Southern Connector I-185 toll road. The methodology and approach used for the PCS is generally consistent with the method developed by NC State University's Institute for Transportation Research and Education (ITRE). The PCS was conducted in March 2024 and included approximately 15.1 centerline miles (59.5 lane miles) of paved roadway.

The PCS was completed in general accordance with the ITRE method and used to determine a Pavement Condition Rating **(PCR)**. The **ITRE** method is a windshield-based approach to collecting data and using that data to determine a **PCR**.

The following pavement distresses and conditions were collected in the survey:

1. Alligator Cracking
2. Block/Transverse Cracking
3. Reflective Cracking
4. Rutting
5. Raveling
6. Bleeding
7. Ride Quality
8. Patching
9. Spalling
10. Pavement Marking Condition*

** Pavement Marking Condition does not affect the pavement condition rating*

The pavement condition rating is determined based on nine (9) surface distresses as described below:

1. **Alligator Cracking**

   Alligator cracking is comprised of longitudinal cracks generally in the wheel paths of the road and is the most serious pavement distress. The distress starts as single cracks that eventually progress to an alligator pattern. It is a structural pavement failure that may be caused by traffic overload, inadequate design thickness, base or sub-grade failure, poor drainage, or a combination of these factors. Cracking occurs from the 'bottom up', meaning it starts at the bottom of the flexible pavement layer due to a lack of support from the underlying layers and propagates upward. Note that alligator cracking at the edge of

pavement, often called 'edge cracking', is included in this category. Since the cracks start at the bottom of the pavement layer, full replacement of the layer and corrections to the underlying layers are often required to repair the distress.

2. **Block/Transverse Cracking**

   Block/Transverse cracking is not load associated but is caused by the shrinkage of asphalt generally due to age and temperature fluctuations. This category includes all cracks that aren't considered alligator or reflective. The severity can increase if water penetrates the cracks. Sealing the block/transverse cracks to prevent water penetration into the pavement's base materials can help to extend the pavement life.

3. **Reflective Cracking**

   Reflective cracking is generally not load associated but occurs on asphalt concrete which has been overlaid on old jointed concrete pavement. Reflective cracking is characterized by bulged joints above the riding surface and caused by movement of the concrete slab beneath the roadway surface.

4. **Rutting**

   Rutting is a surface depression that typically occurs in the wheel path(s) or at the edge of the pavement. It occurs within either the subgrade or in any one of the pavement layers when they move or consolidate due to traffic loads. Rutting represents a structural failure and often occurs in conjunction with alligator cracking.

5. **Raveling**

   Raveling is the wearing away of the pavement surface either by loss of aggregate particles or asphalt binder. It typically occurs on, but not limited to, bituminous surface treated (BST) streets, sometimes referred to as "tar-and-gravel".

6. **Bleeding**

   Bleeding is the formation of a thin film of bituminous materials on pavement surface, typically caused by excess asphalt cement in the mix. A plant mix resurfacing is usually required to correct this problem.

7. **Ride Quality**

   Ride quality is a relative indication of roughness and how the street rides to the public. Any number of factors including rutting, cracking, utility cuts, localized dips, or poor patching can cause rough ride quality.

8. **Patching**

   Patching is only an indication of the amount of surface area that has received some type of maintenance repair. The quality or condition of the patch is not considered in the evaluation. Severe patching, for example, indicates that a large amount of patching exists on the pavement, rather than indicating that the patches are in poor condition.

9. **Spalling**

   Spalling is the cracking, breaking, chipping, or fraying of concrete edges at joints and cracks. This is a common distress in jointed concrete pavements. Spalling reduces pavement serviceability, and if left unrepaired, it can become hazardous to highway users.

The roadway was driven at low speed to collect the pavement distress data. The data was entered into software that calculates the pavement condition rating (PCR). While the numerical rating established with the ITRE method does not correlate directly with the more complex Pavement Quality Index (PQI) rating used by SCDOT, the condition descriptions, i.e. Good, Fair and Poor, can be used to generally compare the current pavement condition with the condition found in the past PQI rating.

For this survey, the roadway was divided into segments corresponding to the Exits, as shown on the next page:

TABLE 2: PAVEMENT CONDITION RATINGS

Street Block	Begin	End	2017 PCR	2018 PCR	2019 PCR	2020 PCR	2021 PCR	2022 PCR	2023 PCR	2024 PCR	PCR Condition	Marking Condition
NB - I-385 to Exit 31	NB - I-385	SC 417	84	81.5	81.5	79	59	45.1	42.6	30.1	**Very Poor**	**Fair**
NB - Exit 31 to Exit 30	NB – SC 417	SC 276	84	74.1	74.1	71.6	30.1	60.1	45.1	34.0	**Very Poor**	**Fair**
NB - Exit 30 to HWY 146	NB - SC 276	SC 146	76.5	74	68	68	45.1	45.1	45.1	45.1	**Very Poor**	**Fair**
NB - HWY 146 to Exit 7	NB - SC 146	US 25	74	74	74	71.5	45.1	30.1	30.1	34	**Very Poor**	**Fair**
NB - Exit 7 to Exit 10	NB - US 25	SC 20	82.5	79	79	76.5	60.1	45.1	45.1	49	**Very Poor**	**Fair**
NB - Exit 10 to Exit 12	NB - SC 20	SC 153	74	69.1	63.1	63.1	45.1	30.1	30.1	30.1	**Very Poor**	**Fair**
NB - Exit 12 to Exit 14	NB-Brown Rd	I-85	61.5	57.6	51.6	51.6	30.1	30.1	27.6	30.1	**Very Poor**	**Fair**
SB - Exit 12 to Exit 14	SB – Brown Rd	I-85	67.5	57.6	51.6	51.6	39.1	40.1	37.6	40.1	**Very Poor**	**Good**
SB - Exit 10 to Exit 12	SB – SC 20	SC 153	79	72.6	72.6	70.1	45.1	30.1	27.6	30.1	**Very Poor**	**Fair**
SB - Exit 7 to Exit 10	SB - US 25	SC 20	79	77.6	77.6	75.1	60.1	45.1	45.1	30.1	**Very Poor**	**Fair**
SB - HWY 146 to Exit 7	SB - SC 146	US 25	80	72.6	72.6	70.1	60.1	45.1	42.6	45.1	**Very Poor**	**Good**
SB - Exit 30 to HWY 146	SB - US 276	SC 146	82.5	79	79	76.5	57.6	45.1	42.6	42.6	**Very Poor**	**Fair**
SB - Exit 31 to Exit 30	SB – SC 417	SC 276	79	66.6	60.6	60.6	30.1	30.1	27.6	25.1	**Very Poor**	**Fair**
Overall rating			**77.1**	**74.1**	**70.5**	**68.9**	**49.3**	**40.3**	**37.6**	**38.0**	**Very Poor**	

Based on the data collected during this survey, shown in Table 2, I-185 has a weighted pavement condition in the "Very Poor" range (PCR 38.0), rising 0.4 points from the 2023 survey. This contrasts greatly to the (2017) PCR rating for the same roadway sections indicating the pavement condition was in the "Fair" range. The marginal rise in the rating is attributed to the increase in patching of potholes along the Southern Connector with approximately 75% having been filled in.

The majority of the pavement markings were found to be in "Fair" condition during this survey. The markings on the bridges are largely in good condition with only isolated areas where the pavement markings are not adhering properly to the pavement or bridge decks.

Raised pavement markers were present and spaced appropriately along the majority of the length of the Southern Connector.

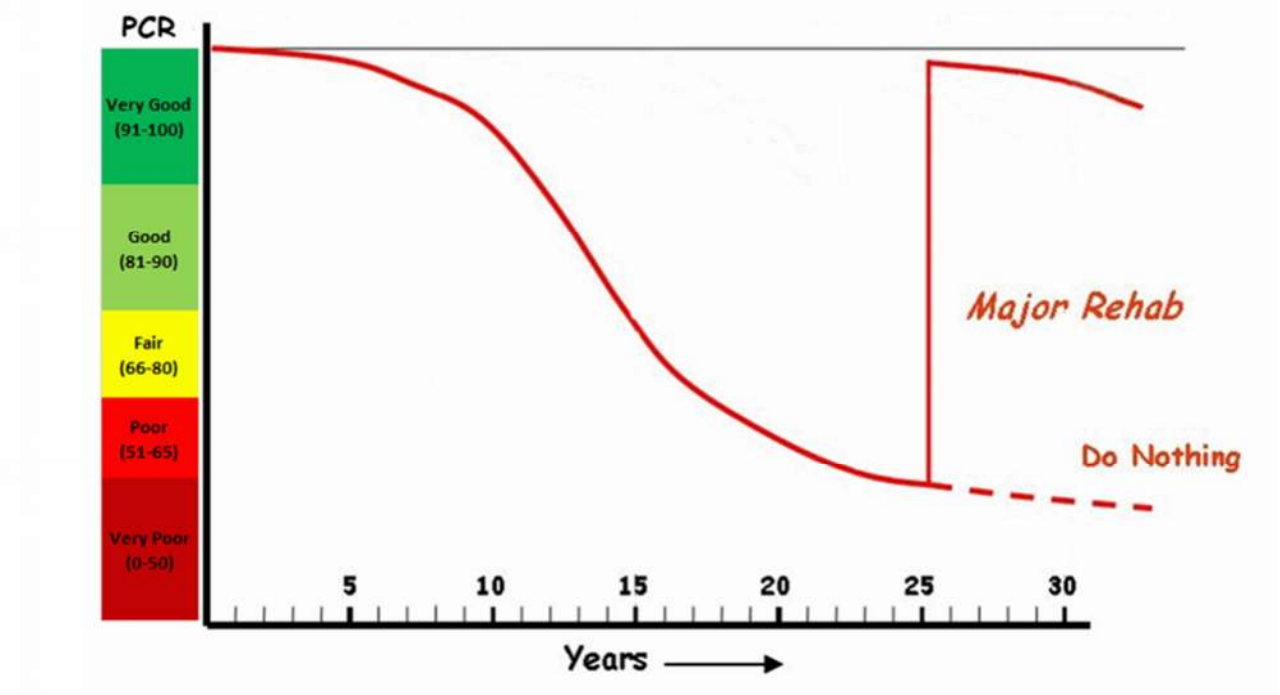
This survey included the entire asphalt pavement up to the bridge approaches. Further details of the asphalt condition of the bridge approaches are found with the respective bridge reports in Section 6: Condition Survey of Bridge Components.

It was noted that for a few of the bridge locations, the transition from the pavement on and off the bridges was not smooth, with several towed trailers making substantial noise when traversing these areas. Two "bump" signs were observed on two different bridge approaches.

The findings show the pavement condition continues to deteriorate over time, as the asphalt is nearing the end of its serviceable lifecycle. Typical pavement distresses observed in this survey include block/transverse cracking, raveling and alligator cracking. Asphalt joint deterioration was observed across all of the segments, with numerous small potholes forming in the surface course at the pavement joints. While many of these potholes have been filled by maintenance crews, additional ones have appeared with more expected to form as the pavement continues to deteriorate. Asphalt surface course delamination was also observed. A color-coded graphical representation of the pavement condition is shown in Figure 2.

The graph below shows the typical lifecycle for asphalt pavement. The 2024 average weighted PCR value of 38.0 correlates with the value predicted by the curve after 25 years.

FIGURE 2: TYPICAL ASPHALT PAVEMENT LIFECYCLE



Based on the conditions observed, deterioration is apparent throughout the corridor. Each recorded PCR is deemed "Very Poor," falling within the range of 25-50. Many segments share three major distresses block cracking, raveling and severe alligator cracking (potholes) which are found mostly along the pavement joints.

Based on observations during the survey and the results of the PCS, it appears the surface course is in the final stages of its lifecycle. All segments are beyond effective preventative maintenance methods to significantly prolong service life. Typical asphalt lifecycle studies show that once significant cracking develops – as is the case with the Southern Connector – the asphalt will begin to deteriorate more rapidly. Due to the budget and schedule requirements for repairs and resurfacing, Benesch recommends roadway resurfacing planning begin immediately.

Benesch recommends the entire Southern Connector be surveyed as part of a Pavement Repair Survey (PRS). Before this survey is performed, it is critical that staff document specifically what asphalt is included in the Southern Connector. All beginning and end points should be marked, with acceleration/deceleration lanes and entrance/exit ramps identified. In the meantime, Benesch recommends all current maintenance procedures continue. This PRS would help derive quantities and bids for resurfacing. Based on the present conditions, it would not be practical to repair and resurface only some of the segments. Due to the amount of cracking present and the pavement joint deterioration, increased water infiltration is likely to increase the rate of pothole formation and may require more routine pothole patching until the highway can be resurfaced.

In addition, Benesch recommends the approaches to each bridge structure be surveyed at the same time. Most approaches exhibit similar conditions and would also warrant repairs and resurfacing. For the locations with rough transitions, these should be examined closely; bumps or dips can likely be corrected by additional milling or by wedging of the pavement and could be combined with resurfacing for minimal cost.

Geotechnical testing should be included as part of the PRS. While the visual inspection indicates most of the distresses are in the surface layer of asphalt, with few extending into the intermediate layer, geotechnical testing will show if there are any structural issues underneath the roadbed as well as how deep the block cracking extends into the pavement. Any structural issues discovered should be addressed at the time of resurfacing so that the new asphalt will hold up over time.

During the PRS, staff will measure and quantify the various pavement distresses. Coupled with the geotechnical testing results, resurfacing and repair recommendations can be made. A rough timescale and engineer's estimates can also be made for the needed work.

Note that if the pavement is not resurfaced and instead allowed to deteriorate further, it may discourage use of the Southern Connector, driving down revenue and leading to claims against SCDOT, thereby increasing expenses. It is understood that the Connector 2000 Association does at present receive complaints regarding the roadway condition from users. Fewer users may be willing to pay a toll to use a road that is uncomfortable to use due to bumps, dips, potholes as well as increased road noise.

If resurfacing is deferred, a higher frequency of maintenance activities should be performed to manage the number of potholes and maintain the safety and functionality of the roadway.

Typical pavement marking delamination on bridge (Bridge 185-306)

Typical patched pothole (Bridge approach 185-305)

Pothole (Bridge approach 185-109)

Typical block cracking on bridge approach roadway (Bridge approach 185-117)

Typical block cracking on bridge approach roadway (Bridge approach 185-315)

5” elevation change on bridge approach shoulder (Bridge approach 185-002)

5 ROADWAY CONCLUSIONS AND RECOMMENDATIONS

Based on our review of the pertinent documentation and our own direct field observations, we conclude the Southern Connector Toll Road bridges are in good condition, while the roadway is in very poor condition. Refer to the Pavement Condition Rating Map (Figure 3) on the next page for the roadway conditions. Conclusions and recommendations are noted below:

The surface course pavement along the Southern Connector is reaching the end of its useful life. Benesch recommends resurfacing and rehabilitation planning begin as soon as is possible. The start of this planning should start with a Pavement Repair Survey (PRS) and geotechnical testing. Additionally, all bridge and structure approaches should be included in this survey. The PRS will help establish a timetable and rough cost estimate for budgeting purposes. Based on visual observations, the Southern Connector will likely need to be resurfaced in the next few years. If resurfacing is deferred, higher frequency maintenance activities should be performed to maintain safety and functionality or the roadway.

The signs along the roadway vary in their effectiveness. All of the deficient major guide signs appear to have been replaced in the past year and now offer excellent wayfinding, including at night. The deficient signs that remain are mostly toll related and isolated to the yellow insert portions of the signs being illegible only at night. To minimize expenditures, it is recommended that all toll related signs be replaced when the toll rate is next adjusted. All other smaller signs that are deficient should be replaced as soon as is convenient. Smaller signs that appear in good condition should have their retro reflectivity measured to confirm they still meet requirements, and if not, should also be replaced.

Several bridge and roadway locations along the Southern Connector have damage, show signs of deterioration, or show failures related to poor construction. The specific locations noted should be monitored closely and receive additional investigation by a certified pavement inspector or professional engineer to further address these conditions.

There are many bridge sites with approach pavements showing significant cracking, settlement, and joint spalling. These conditions are not ideal for safe rideability and in many cases the deteriorated pavements and poor asphalt patching at the bridge approaches should be considered for resurfacing. Both the northbound and southbound directions have segments with moderate block cracking with some of the segments featuring severe block cracking. Moderate to severe raveling and pavement joint deterioration with potholes was noted throughout all segments. These distresses indicate the asphalt is at the end of its useful life and requires a mill and overlay in the next few years. Due to the amount of cracking present and the pavement joint deterioration, increased water infiltration is likely to increase the rate of pothole formation and may require more routine pothole patching until the highway can be resurfaced.

The drainage improvements performed over the past couple of years at many of the bridge sites appear appropriate for each site. The installation of an approach drain inlet, funnel drain, or pipe drain to intercept and redirect the storm water runoff away from the approach slab should substantially reduce the erosion conditions and allow for permanent repairs. Field observations revealed many of the drainage structures have debris or overgrowth of vegetation surrounding them; it is recommended they be cleared to ensure proper drainage.

FIGURE 3: PAVEMENT CONDITION RATING MAP

6 CONDITION SURVEY OF BRIDGE COMPONENTS

185-171	**I-185 Ramp 9 over I-385**
Description:	2-span continuous steel plate girder bridge with composite concrete deck, integral bent and expansion joint at end bents.
Approaches:	Moderate to severe asphalt ravel, longitudinal cracking and light alligator cracking. Approach slab joints were newly patched in 2020.
Superstructure:	Transverse hairline cracking near center of bridge deck. Vertical hairline cracking in concrete parapets at 5-6 feet intervals. Evidence of frequent ponding noted on low side of bridge deck within 3 feet of bridge rail. Debris and sediment build-up noted in expansion joints. New pavement markers.
Substructure:	Erosion and spill through of stone backfill at base of MSE wall located along the side of wall facing I-385 NB. At trailing MSE wall, a 4-inch thick concrete layer has been placed over MSE blocks that had previous large gaps with backfill spilling through. The large tree growing on top of the MSE wall at the trailing end was previously cut but is growing back. Erosion hole 15 feet in front of the trailing end MSE wall.
185-001	**I-185 NB & SB over SC 417**
Description:	Single span steel plate girder bridge with composite concrete deck and integral end bents.
Approaches:	Severe block cracking with 3-inch deep potholes and severe raveling of asphalt at both approaches. Hole under flume on NB side of bridge leading end. Obstructed drainage flume.
Superstructure:	Vertical hairline cracking in concrete bridge rails throughout the entire bridge length. Damage to median barrier at the leading end of the bridge. Transverse hairline cracking along bridge deck. New pavement markers.
Substructure:	Vegetation along slope protection and around top of MSE wall has been cut back but dead vegetation remains. Gaps forming in top of MSE wall with backfill spilling through. Erosion/washout is occurring along the base of the MSE wall closest to NC 417. Hairline cracks with efflorescence present in the end bent backwalls between girders.

185-002	**I-185 NB & SB over US 276 Ramp 11, Ramp 2 & Railroad**
Description:	9-span continuous curved steel plate girder bridge with composite concrete deck. Modular expansion joints at end bents, disc bearings at bents.
Approaches:	Moderate block and alligator cracking with moderate to severe raveling. Joints recently patched in 2020. Pothole forming along northbound approach.
Superstructure:	Some debris and sediment build-up in modular expansion joints at leading and trailing ends of bridge. Vertical hairline cracking scattered throughout bridge railings. Transverse hairline cracking along bridge deck. New pavement markings.
Substructure:	Crack in top of berm on southbound bridge leading end. Northbound bridge trailing end, cracked/collapsed slope protection at berm has been repaired and is in good condition. Patch repair to column on north side of bent at I-185 northbound bridge has delaminated. Vines noted on slope protection. Vertical hairline cracks in the end bent backwalls between girders.
276-002	**US 276 EB over I-185 Ramp 2**
Description:	3-span curved steel plate girder bridge with composite concrete deck and integral end bents.
Approaches:	Approach asphalt has been replaced since the 2021 inspection. Minor cracking observed in approach roadway.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 5 feet intervals. Transverse hairline cracking along bridge deck. New pavement markings.
Substructure:	Erosion hole at top of slope protection at trailing end bent. Longitudinal joint separation in slope protection and severe vegetation growing across concrete slope protection at the leading end.

185-271	**I-185 Ramp 3 over East Standing Springs Road**
Description:	3-span curved steel plate girder bridge with composite concrete deck and integral end bents.
Approaches:	Moderate block cracking, longitudinal cracking, and severe raveling in asphalt at leading end of bridge, 3 missing dashed lane lines before bridge. Asphalt roadway has been repaved at the trailing end.
Superstructure:	Vertical hairline cracking in concrete bridge rails at 4 feet intervals. New pavement markings.
Substructure:	Flowable Fill has been used to address undermining and eroded areas at end bents. Erosion hole at top of slope protection. Minor cracking with up to 2-inch settlement along slope protection.
276-271	**US 276 EB over East Standing Springs Road**
Description:	3-span continuous plate girder bridge with composite concrete deck and integral end bents.
Approaches:	Both approaches have been repaved since the previous 2021 inspection. Minor cracking observed in the approach roadway at both ends.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 4-5 feet intervals. Sediment and debris build-up along low side of bridge deck. New pavement markings.
Substructure:	Slope protection cracked and settled 2-inch along berm at northeast bridge end. Hairline crack on bent cap.

S-144-001	**Neely Ferry Road over I-185 & US 276 Access Ramps**
Description:	3-span continuous curved steel plate girder bridge with composite concrete deck and integral end bents.
Approaches:	Longitudinal cracking and severe raveling in asphalt with a pothole. Previous patchwork on approach is cracking and deteriorating. Dip and bump in pavement on approach slabs. Full depth cracks in the approach shoulders.
Superstructure:	Severe flaking of coating on barrier rail with hairline cracks with efflorescence. Hairline cracking throughout deck.
Substructure:	Previous cracked and failing slope protections have been repaired and exhibit minor cracking in the top of berm. Animal dwellings with undermining at the top of leading and trailing slope protections.
S-316-004	**Log Shoals Road (SR 316) over I-185**
Description:	2-span AASHTO prestressed girder bridge with composite concrete deck, integral bent and integral end bents.
Approaches:	Moderate longitudinal cracking with severe raveling in asphalt approaches and a few potholes present. Asphalt joints patched and re-sealed recently; however, cracks are forming in joints.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 5-6 feet intervals. Potholes noted in bridge deck. Sediment buildup in shoulders. Pavement markings fading.
Substructure:	Missing cap stone and blocks from top of MSE wall. Previous gaps in the north MSE have been covered with a 4-inch thick concrete wall. Side slope at leading end has severe slope failure and erosion.

185-103	**I-185 NB over Ranch Road**
Description:	3-span AASHTO prestressed girder bridge w/ composite concrete deck, integral bents and integral end bents.
Approaches:	Moderate longitudinal/block cracking and moderate raveling with potholes. Asphalt joints patched and re-sealed recently. Bump in approach joint.
Superstructure:	Vertical hairline cracking in concrete bridge rail 5-6 feet intervals. Hairline crack forming along bridge deck. Vegetation growing on underside face of barrier rail. New pavement markings fair.
Substructure:	Significant graffiti on bent columns. Significant vegetation along end bents and slope protection. Slope protection has cracking and up to 2-inch settlement in the berm and adjacent to columns.
185-303	**I-185 SB over Ranch Road**
Description:	3-span AASHTO prestressed girder bridge w/ composite concrete deck, integral bents and integral end bents.
Approaches:	Moderate raveling at each approach with longitudinal cracking and light alligator cracking at the leading end of bridge with a pothole. Asphalt joints patched and re-sealed recently; however, there is 2-inch settlement in the joint at the trailing end of bridge. Damaged concrete curb on bridge approach slab.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 5-6 feet intervals. Hairline cracking along bridge deck and poor grooving of the concrete surface. New pavement markings.
Substructure:	Significant joint separation in longitudinal joint in slope protection. Moderate horizontal cracking and up to 2-inch settlement in concrete slope protection with heavy vegetation. Graffiti previously noted on columns has been repaired; however, repair patching has begun to bubble and flake off.

185-104	**I-185 NB over Reedy River**
Description:	4-span AASHTO prestressed girder bridge w/ composite concrete deck, integral bents and integral end bents.
Approaches:	Moderate block cracking, light alligator cracking and moderate raveling. Joints are deteriorating at both ends of bridge with minor spalling along joints at each end of bridge. Pothole forming on approach slab at leading end of bridge. Poor overlay bump. Debris clogging drainage flume. Joint separation and deterioration adjacent to bridge. Damaged guardrail terminal at trailing end.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 10 feet intervals. Hairline cracking noted in bridge deck. New pavement markings.
Substructure:	Erosion adjacent to end bents with rutting along fill slope. Additional rip rap has been placed adjacent to columns; however, there are areas of missing rip rap with increasing erosion. Dead vegetation on the bents and columns.
185-304	**I-185 SB over Reedy River**
Description:	4-span AASHTO prestressed girder bridge w/ composite concrete deck, integral bents and integral end bents.
Approaches:	Asphalt joint patching is showing signs of deterioration. Pothole with depression forming in joint patch at trailing end of bridge. Light block cracking and moderate raveling at each end of bridge. Bump in approach joint.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals. Hairline cracking along the bridge deck. New pavement markings.
Substructure:	Additional Rip Rap that was previously installed is beginning to wash away and bank erosion is increasing downstream of structure. Heavy vegetation along end bents and columns and rutting along fill slope. Several animal dwellings are adjacent to the columns.

S-84-001	**Standing Springs Road (SR 84) over I-185**
Description:	2-span AASHTO girder bridge with composite deck, integral bent and integral end bents.
Approaches:	Asphalt joint patching good at 3 locations, but the one older joint at north end of bridge is cracking/deteriorating and has vegetation growth. Severe alligator cracking and severe ravel at north end with potholes. The south end has moderate alligator and longitudinal cracking and moderate ravel.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 10 feet intervals and along the bridge deck. Heavy vegetation growth in the shoulders and both ends of the bridge. Pavement markings are faded. Delineator color is faded at southeast corner.
Substructure:	Vegetation noted on the end bents, cracking, and settlement in top of concrete slope protection. Missing control access fencing at northeast corner of bridge.
S-146-001	**Fork Shoals Road (SR 146) over I-185**
Description:	2-span AASHTO girder bridge with composite deck, integral bent and integral end bents
Approaches:	Minor guardrail impact damage (kink) at southeast and northeast end. Severe block cracking at the south end and light alligator cracking at the north end with moderate ravel at both approaches. The north approach has a small pothole and slight bump in the roadway.
Superstructure:	Striping in poor/faint condition. Vertical hairline cracking in concrete bridge rail at 10 feet intervals. Hairline cracking throughout deck.
Substructure:	Significant cracking along berm section of concrete slope protection at both bridge ends with up to 1-inch settlement and vegetation growth at the top of the slope protection. Rutting and erosion of the side slopes adjacent to the bridge. Moderate vegetation growth adjacent to end bents and wingwalls.

185-105	**I-185 NB over Huff Creek**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Light longitudinal and alligator cracking and moderate raveling at each end. Small pothole on approach slab at leading end of bridge has been patched; however, patch is failing. Settlement in trailing end approach slab.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 5 feet intervals and along bridge deck. Shallow spalls in girder bottom flanges with exposed rebar. New pavement markings.
Substructure:	Class II Rip Rap is still in place and functioning properly.
185-305	**I-185 SB over Huff Creek**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Moderate to severe raveling and moderate block cracking at both bridge ends. Block cracking, 2-inch separation between pavement joint, and small pothole in approach roadway at leading end of bridge. Joint cracking in the trailing end approach slab.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 10 feet intervals and bridge deck. New pavement markings.
Substructure:	Moderate vegetation along end bents. Rutting noted along end slopes. Severe stream bank erosion adjacent to both drilled pier foundations. Original silt fences installed for bank stabilization have failed. Moderate vegetation growth adjacent to bridge.

185-106	**I-185 NB over Reedy Fork Rd.**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents w/ heavy skew.
Approaches:	Moderate to severe raveling, longitudinal cracking, and light alligator cracking. Asphalt joint patching observed as new in 2019; however, cracking and settlement has formed. Pothole on trailing end has been patched and potholes on the leading end are present Rutting was observed in the trailing end roadway, right travel lane. Several detached and damaged guardrail blocks.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals and bridge deck. New pavement markings.
Substructure:	Cracking with efflorescence in end bents. Moderate vegetation along slope protection, slope protection is cracked with settlement at trailing end of bridge.
185-306	**I-185 SB over Reedy Fork Rd.**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents w/ heavy skew
Approaches:	Severe block cracking, moderate asphalt raveling, and light alligator cracking. New asphalt joint patching performed in 2019; however, cracking and settlement has formed. Approximately 250 feet before bridge, 6 feet guardrail impact damage. Leading end approach slab joint has minor cracking in the shoulder.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals and bridge deck. New pavement markings.
Substructure:	Vegetation moderate along columns and severe on slope protection. Significant cracks and settlement in berm section of concrete slope protection and gaps widening between sections.

185-107	**I-185 NB over Lost Swamp Rd.**
Description:	3-span AASHTO girder bridge with composite deck and integral bents/end bents on heavy skew.
Approaches:	Asphalt joint patching was performed in 2019 at each end of bridge. Moderate longitudinal and alligator cracking and moderate raveling at both ends of the bridge. The trailing end exhibits moderate alligator cracking with previous potholes now patched. Approximately 100 feet before the bridge, 1 dislodged guardrail block and guardrail impact damage at southeast quadrant.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals and minor hairline cracking in the bridge deck. New pavement markings.
Substructure:	Moderate vegetation growth across berm section of slope protection. Moderate cracks and up to 2-inch settlement in concrete slope protection.
185-307	**I-185 SB over Lost Swamp Rd.**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents on heavy skew
Approaches:	Moderate raveling and longitudinal cracking in wheel path and along construction joint. Asphalt joint patching has been performed at each end of the bridge in 2019; however, there is a pothole at the leading end with an exposed steel plate. Settlement and cracking has also occurred in that area. Poor patched areas, depressions, and cracking in the shoulders with vegetation growth. Three dislodged guardrail blocks on trailing side of bridge.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals and bridge deck. Diagonal cracks in deck at ends of bridge. New pavement markings.
Substructure:	Moderate cracking along concrete slope protection with up to 2-inch settlement. Moderate vegetation growth across surface of slope protection and around end bents.

185-108	**I-185 NB over Future Railroad**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Longitudinal cracking and severe block cracking at each end of bridge with moderate raveling. Trailing end drainage flume is blocked with debris. One dislodged guardrail block on leading end of bridge.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals and minor hairline cracking in the bridge deck. New pavement markings.
Substructure:	End slope & slope protection steep at 1:1; 1-inch wide cracks in top of slope protection with up to 3-inch settlement. Severe vegetation between adjacent structures and on slope protection.
185-308	**I-185 SB over Future Railroad**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Severe block cracking with moderate longitudinal cracking and raveling. Asphalt joint patching has been performed at each end of the bridge in 2019; however, cracking in joint has occurred.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 6 feet intervals and minor hairline cracking in the bridge deck. New pavement markings.
Substructure:	End slope & slope protection steep at 1:1; ¼-inch wide cracks in slope protection. Moderate vegetation on slope protection and end bents.

185-109	**I-185 NB over Flora Louise Drive**
Description:	3-span AASHTO girder bridge with composite deck and integral end bents, interior bents have expansion joints.
Approaches:	Severe block cracking with moderate longitudinal cracking and raveling on approach slabs. Asphalt joint patching has been performed at each end of the bridge in 2019; however, settlement has occurred. Leading end drainage flume is partially clogged with vegetation and debris.
Superstructure:	Bridge deck contains a small pothole approximately 1.5-inch deep and wearing of the deck in the wheel path. Asphalt joint patching has been performed at each end of the bridge in 2019. Minor debris accumulation in the deck joint. Vertical hairline cracking in concrete bridge rail at 6-8 feet intervals and hairline cracking in bridge deck. Seal adhesion loss throughout joint with leakage evident on bent caps below. New pavement markings.
Substructure:	Severe vegetation overgrowth on slope protection and between NB and SB bridges. Settlement with gaps forming between concrete slope protection sections.
185-309	**I-185 SB over Flora Louise Drive**
Description:	3-span AASHTO girder bridge with composite deck and integral end bents, interior bents have expansion joints.
Approaches:	Severe block cracking with moderate longitudinal cracking and moderate to severe raveling on approach slabs. Previous pothole was previously patched at leading end of bridge and is starting to fail. Asphalt joint patching has been performed at each end of the bridge in 2019; however settlement has occurred. One dislodged guardrail block on trailing end of bridge.
Superstructure:	Minimal spalling of deck at location of expansion joint seals with minor debris in joints at shoulders. Separation between joints and deck with water leakage evident on pier caps. Vertical hairline cracking in concrete bridge rail at 6-8 feet intervals and minor cracking in bridge deck. Seal adhesion loss throughout joint with leakage evident on bent caps below.
Substructure:	Cracking of slope protection and settlement with gaps forming between concrete slope protection sections and a minor spall at the top of berm. Vegetation overgrowth on slope protection and severe overgrowth between NB and SB bridges.

S-25-001	**US 25 over I-185**
Description:	2-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Light block cracking, alligator cracking, and raveling near joints. Multiple depressions in joints at the south end of bridge. Multiple dislodged guardrail post at the northwest corner and damaged guardrail at the southwest corner. Spall in curb over the drainage catch basin at the northeast corner.
Superstructure:	Hairline cracking and moderate wearing of bridge deck. Barrier rail coating is delaminating and vertical hairline cracking at 6-8 feet intervals with sediment build up on the sidewalk. Striping on bridge is in poor/faint condition. Minor surface spalls in the girder bottom flanges with exposed rebar.
Substructure:	Moderate cracking and settlement along berm section of concrete slope protection has been patched but has begun to crack again. Minor cracking and areas of delamination underneath beams at end bents.
185-110	**I-185 NB over Grove Creek Tributary**
Description:	6-span bridge consisting of 1 main AASHTO girder span with composite deck and 5 reinforced concrete slab spans with slab build-downs at each substructure with pile bent substructure.
Approaches:	Moderate block cracking and raveling at both approaches of bridge. Asphalt joint patching observed as new in 2019. Uneven pavement and significant bump at leading approach still exists.
Superstructure:	Multiple potholes in the main span of deck slab have been patched but have started to settle. Spall adjacent to joint and deterioration of joint at both expansion joints with water leakage onto caps below. Vertical hairline cracking in concrete bridge rail at 10 feet intervals and minor hairline cracking in bridge deck. Pavement markings are in good condition; however, there is a 20-foot section of white line that is faded towards the trailing end of the bridge. Insignificant cracks observed in the deck underside.
Substructure:	Rutting and bank erosion along fill slopes at each end of bridge. Severe erosion of the stream bank adjacent to bent 3. Bags filled with concrete have been placed along the streambank adjacent to bent 4 as a scour preventative measure. Severe vegetation at bents and on columns.

185-310	**I-185 SB over Grove Creek Tributary**
Description:	6-span bridge consisting of 1 main AASHTO girder span with composite deck and 5 reinforced concrete slab spans with slab build-downs at each substructure with pile bent substructure.
Approaches:	Moderate to severe block/longitudinal cracking at both ends of bridge with moderate raveling. Potholes in the asphalt just past the trailing end approach slab.
Superstructure:	Vertical hairline cracking in concrete bridge rail at 5-6 feet intervals and minor hairline cracking in the bridge deck. Minor vegetation growth on barrier rail. Joints have spalls in the adjacent deck, are filled with debris, and leaking onto caps below. Clogged drainage flume at the trailing end of the bridge. New pavement markings.
Substructure:	Runoff infiltration behind and under end bent resulting in undermining and a gully on the end slope at the northbound end. Undermining also noted at southbound end. Rutting severe in front of end bents. Severe vegetation at bents and on columns. Severe stream bank erosion adjacent to bent 3.
185-111	**I-185 NB over Grove Creek**
Description:	6-span reinforced concrete slab span bridge (two 3-span sections with expansion joint at mid-span).
Approaches:	Asphalt joint patching observed as new in 2019. Joint patch at leading end of bridge is experiencing deterioration with 8-inch diameter pothole. Moderate block cracking in the leading end with severe block cracking with potholes in the trailing end of bridge and moderate raveling at both ends. Guardrail posts, approximately 150 feet from the leading end of bridge, are damaged.
Superstructure:	Rubber expansion joint material at mid-span of bridge is deteriorating with evidence of water leakage onto the cap below. Longitudinal hairline crack in top of deck is scattered throughout and hairline cracking with efflorescence in the bottom of the deck in span 6. Vertical hairline cracking of concrete bridge rail. New pavement markings.
Substructure:	Runoff infiltration behind and under end bent resulting in undermining and a gully on the end slope at the leading end. Repair equipment used has caused minor spalling of bottom edge of deck above the berm at the leading end of the bridge. Bags filled with concrete have been placed along both sides of the streambank to prevent scouring of the adjacent piles in good condition. Moderate vegetation adjacent to and between structures.

185-311	**I-185 SB over Grove Creek**
Description:	6-span reinforced concrete slab span bridge (two 3-span sections with expansion joint at mid-span).
Approaches:	Asphalt joint patching observed as new in 2019. Moderate to severe block/longitudinal cracking with potholes and moderate raveling at both ends of bridge. Damage and dislodged guardrail posts at the leading end adjacent to terminal.
Superstructure:	Rubber expansion joint material at mid-span of bridge is deteriorating. Vertical hairline cracking of concrete bridge rail. New pavement markings.
Substructure:	Moderate vegetation growth around interior pile bents and between structures. Scour occurring along both sides of streambank at pile bents. Severe rutting along end slope in front of end bents with multiples areas of undermining. Bent 4 column 6 has 8-inch x 6-inch x 1/2-inch deep spall.
185-112	**I-185 NB over SC 20**
Description:	3-span AASHTO girder bridge with composite deck and integral bents/end bents.
Approaches:	Asphalt joint patching performed at each end of bridge in 2019. Severe block/longitudinal cracking and raveling. Asphalt shoving at trailing end of bridge. Minor spalls in the girder bottom flange. Moderate tree growing at the leading end of the bridge blocking delineator.
Superstructure:	Minor hairline cracking in bridge deck with 5 feet diameter patch in span 1. Vertical hairline cracking of concrete bridge rail at 10 feet intervals. New pavement markings.
Substructure:	Minor horizontal cracking on slope protection at trailing end. Vegetation growing in slope protection joints and end bents.

185-312	**I-185 SB over SC 20**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching performed at each end of bridge in 2019. Moderate block/longitudinal cracking with potholes and moderate raveling.
Superstructure:	Minor hairline cracking in bridge deck. Vertical hairline cracking of concrete bridge rail at 10 feet intervals. Toll sign attached to bridge has illegible letters. New pavement markings.
Substructure:	Minor erosion along sides of slope protection. Minor cracking in concrete slope protection. Moderate vegetation growth around end bents and adjacent to slope protection. Side slopes adjacent to bridge have significant erosion.
185-1271	**I-185 NB Ramp (to SC 20) over NS & CSX Railroad**
Description:	2-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching at each end of the bridge observed as new in 2019. Light raveling and block cracking at each end of bridge. Asphalt shoving and minor crack in joint noted at leading end of bridge.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 8 feet intervals. New pavement markings.
Substructure:	Cracking of slope protection noted at acute corners at each end bent with moderate vegetation. End slope & slope protection steep at 1:1.

185-113	**I-185 NB over NS & CSX Railroad**
Description:	2-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Severe block cracking, moderate raveling, and longitudinal cracking at each end. Asphalt joint patching at each end of the bridge observed as new in 2019. Minor joint patch spalling is occurring at both ends of the bridge.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 6-8 feet intervals. Spalls in deck up to 3-inch diameter. New pavement markings.
Substructure:	Minor cracking along top of berm of slope protection. End slope & slope protection steep at 1:1. Vegetation growth on top of concrete berm behind wingwall.
185-313	**I-185 SB over NS & CSX Railroad**
Description:	2-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching has been performed at each end of the bridge in 2019; however, spalls and deterioration is occurring in joint repair at trailing end of bridge. Severe block cracking with potholes, moderate raveling and longitudinal cracking at each end.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 8 feet intervals. Hairline cracking along bridge deck. Insignificant cracking in the girders webs at the end bents.
Substructure:	End slope & slope protection steep at 1:1. Heavy vegetation growth on concrete berm in front of wingwalls and between structures with cracking along berm of slope protection.

185-1272	**I-185 SB Ramp (off SC 20) over NS & CSX Railroad**
Description:	2-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching at each end of the bridge observed as new in 2019. Moderate to severe block cracking, moderate raveling, and longitudinal cracking at each end of bridge. Cracking in asphalt joint at trailing end of bridge with vegetation growth in the shoulder.
Superstructure:	A 3-inch diameter core drilled hole is on left side of bridge deck at mid-span. Vertical hairline cracking of concrete bridge rail at 8 feet intervals. ¼-inch wide crack in top of barrier rail at southeast corner. New pavement markings.
Substructure:	Heavy vegetation growth on and near slope protection and cracking along top of slope protection berm. End slope & slope protection steep at 1:1.
185-114	**I-185 NB over SC 153**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching has been performed at each end of the bridge in 2019; however, potholes and depression were observed. Moderate block/longitudinal cracking with low rutting at leading end of bridge. Light block cracking with moderate raveling at trailing end of bridge. Minor approach slab undermining was observed at the trailing end right corner.
Superstructure:	Shrinkage cracking in deck along skew and concrete spall near mid-span. Vertical hairline cracking of concrete bridge rail at 6-8 feet intervals. Multiple potholes in bridge deck. New pavement markings.
Substructure:	Cracking along top of slope protection berm with severe vegetation in cracks and on slope protection as well as between adjacent structures at end bents.

185-314	**I-185 SB over SC 153**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Severe block cracking and severe ravel at both approaches. Deterioration in newly patched asphalt joint at trailing end with cracking in the shoulder. Broken curb at trailing end of bridge. Several damaged guardrail posts at leading end of bridge approximately 75 feet from the bridge.
Superstructure:	Hairline cracking with wearing in the concrete deck. Vertical hairline cracking of concrete bridge rail at 6-8 feet intervals. New pavement markings.
Substructure:	Cracking along top of slope protection berm. Joint separation noted in longitudinal joints in slope protection with severe vegetation in cracks and on slope protection.
185-115	**I-185 NB over Stables Rd.**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching has been performed at each end of the bridge and was observed as new in 2019; however, there are multiple areas of deterioration of repair material and spalling. Vegetation has started to grow through cracking in recent joint patching. Moderate block/longitudinal cracking and raveling at each end of bridge.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 6 feet intervals. New pavement markings. Minor spall in the girder bottom flange.
Substructure:	Graffiti on bridge columns and slope protection. Soot stains on bent cap and bridge girders resulting from past fire under bridge. Cracking with minor vegetation growth on top of slope protection and along sides of end bent. Erosion and undermining along edge of slope protection berm. Moderate vegetation growth between structures.

185-315	**I-185 SB over Stables Rd.**
Description:	3-span AASHTO girder bridge with composite deck and integral bents and integral end bents.
Approaches:	Asphalt joint patching at each end of the bridge observed as new in 2019 with one area of deterioration in joint at the leading end of bridge. Moderate to severe block cracking and moderate to severe raveling at each end of bridge. Longitudinal cracking at trailing end of bridge.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 6-8 feet intervals and moderate delamination of concrete coating. Cracks with efflorescence buildup on deck underside. New pavement markings.
Substructure:	Insignificant cracking throughout end bent backwall. Significant cracking and settlement of slope protection noted along berm. Erosion and undermining along edge of slope protection berm. Vegetation heavy along sides of end bents and creeping onto slope protection. Vegetation growing between slope protection cracks and joints. Large area of control access fencing removed at northwest corner.
185-316	**I-185 SB over I-85 NB Ramp (Line 2)**
Description:	3-span continuous steel plate girder bridge with composite deck and integral end bents.
Approaches:	Asphalt joint patching at each end of bridge observed as new in 2019. Moderate block/longitudinal cracking and raveling at each end of bridge. Severe alligator cracking at trailing end of bridge and asphalt shoving at leading end of bridge. Minor deterioration of asphalt joint repair material with cracks in the shoulder. Large hump in roadway at the trailing end and slight hump in roadway at the leading end. Missing guardrail blocks at southwest corner.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 5-6 feet intervals.
Substructure:	Moderate vegetation along end slopes with moderate cracking. Areas of erosion on the east side slopes.

185-117	**I-185 NB over I-85**
Description:	4-span continuous steel plate girder bridge with composite deck and integral end bents.
Approaches:	Asphalt joint patching at each end of the bridge observed as new in 2019; however, there are multiple spalls and cracking throughout. Moderate block/longitudinal cracking and raveling at each end of bridge. The leading end guardrail terminal has impact damage.
Superstructure:	Compression joint seals are severely deteriorated and have loss of adhesion with significant water infiltration evidence by staining on the cap and columns on Bents 1 and 3. Vertical hairline cracking along concrete bridge rail. New pavement markings.
Substructure:	Vertical hairline cracks with efflorescence scattered throughout the backwalls. Hairline cracking at base of beam pedestal at Bent 1. Heavy water staining along full length of caps. Bent 1 has minor spalling with exposed rebar at bottom of column. Bent 3 cap has horizontal cracks below girders and minor spalls on the soffit with exposed rebar. Bent 3 column 3 has exposed rebar just above the slope protection. Horizontal cracking in slope protection below berm measuring greater than 1-inch in width. Moderate vegetation growth onto the slope protection, end bents, and growing in cracks.
185-317	**I-185 SB over I-85**
Description:	4-span simple steel plate girder bridge (simple chorded spans on curve) with composite deck and integral end bents.
Approaches:	Asphalt joint patching has been performed at each end of the bridge in 2019 only on the eastern half of the bridge. There is moderate spalling of pavement at joint between bridge deck and approach slab at each end of the trailing end of bridge. Longitudinal and alligator cracking with moderate raveling at each end. Potholes are present on the leading end.
Superstructure:	Compression joint seals are severely deteriorated and have loss of adhesion with significant water infiltration evidence by staining on the cap and columns on Bents 1 and 3. Vertical hairline cracking in concrete bridge rail at 5-6 feet intervals. Area of minor flaking paint on girders. New pavement markings.
Substructure:	Water ponding on beam seat due to leaking compression joint seals. Cracking up to 1.5-inch wide in slope protection with moderate vegetation along concrete slope protection. Exposed rebar chairs in bottom of bent caps.

185-118	**I-185 NB over I-185 SB Ramp (Line 7)**
Description:	3-span continuous steel plate girder with composite deck and integral end bents.
Approaches:	Asphalt joint patching at each end of the bridge observed as new in 2019; however, areas of poor consolidation with spalls were noted and settlement has occurred at both approaches. Moderate to severe block/longitudinal cracking with potholes, light alligator cracking, and moderate raveling at each end of bridge.
Superstructure:	Vertical hairline cracking of concrete bridge rail at 6-8 feet intervals. Cracking with efflorescence in deck overhangs. New pavement markings.
Substructure:	Horizontal hairline cracking in the backwall was observed with minor corrosion beneath the bottom flanges. Transverse cracking and heavy vegetation noted on slope protection. Erosion of side slopes at southwest, southeast and northeast corners.

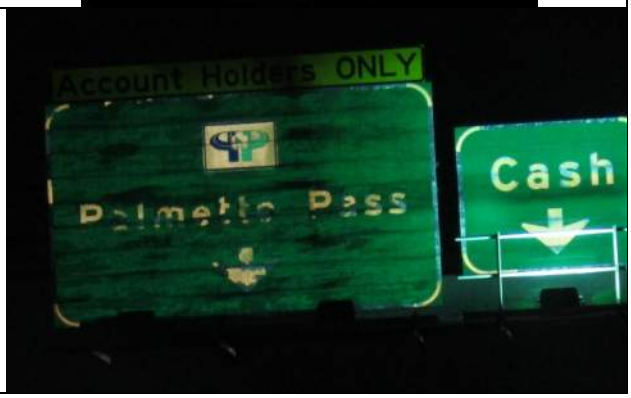
7 CONDITION SURVEY SIGN COMPONENTS

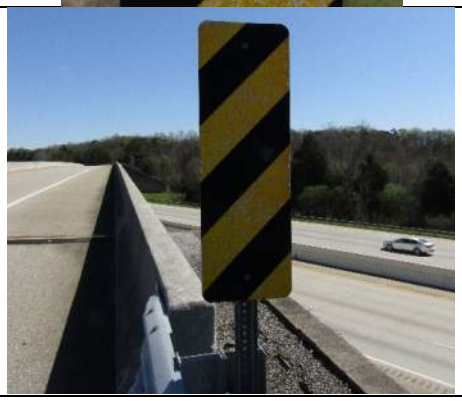
At the request of the Connector 2000 Association, Inc., a visual review of the signs was conducted. Detailed assessment using reflectometer was not conducted and is recommended as part of further evaluation. Below are the findings of the visual survey in March 2024.

Sign Description	Location and Condition	Photo
Palmetto Pass Left Lane Only	Northbound, "ONLY" illegible at night, loss of retro reflectivity; typical all similar signs	
Palmetto Pass	East Plaza, "ONLY" illegible at night, loss of retro reflectivity; typical all other signs	

Sign Description	Location and Condition	Photo
Exit 10 Piedmont Highway Exit	Exit 10 NB, "Pay Toll" words illegible at night, loss of retro reflectivity	
Palmetto Pass Left Lane Only	Northbound, "ONLY" illegible at night, loss of retro reflectivity; typical all similar signs	
Palmetto Pass	West Plaza, "Only" illegible at night, loss of retro reflectivity; typical all similar signs	
Stop Ahead	Toll Plaza, "Pay Toll" illegible at night, loss of retro reflectivity; typical all similar signs	

Sign Description	Location and Condition	Photo
Posted Speed Limit	I-185 NB before Exit 14, loss of retro reflectivity, similar other signs	
Buck Mickel Memorial Southern Connector	Loss of retro reflectivity, similar other signs	
I-385 Destination	Southbound, number illegible, loss of retro reflectivity	

Sign Description	Location and Condition	Photo
Exit 4 Fork Shoals Road	Exit 4 SB, "Toll" not visible at night, loss of retro reflectivity	
Exit 4 Fork Shoals Road	Exit 4 SB, "Pay Toll" not visible at night, loss of retro reflectivity	
Palmetto Pass	East Plaza, "Palmetto Pass" and Arrow illegible at night, letter degradation, loss of retro reflectivity, lighting appeared out	

Sign Description	Location and Condition	Photo
SR 417 Mauldin Simpsonville	185-01, firearm damage	
Object marker	185-01, peeling, color cracking and degraded, typically for older delineators	
Object marker	185-171, color degraded and faded	

Sign Description	Location and Condition	Photo
Object marker	276-271, sign installed too low, blocked by guardrail	
Object marker	S146-001, peeling, color cracking and degraded, typically for older	

It was noted that all of the major guide signs that were illegible during the day have been replaced since the 2023 annual inspection and are expected to provide proper wayfinding in excess of the next decade.

Illegible signs from March 2022

New signs from March 2024

Signs that are deteriorated are now generally limited to tolling information signs, less critical information signs and object markers. The illegible portions of the tolling information signs are generally limited to the yellow portions of the signs at night only, and while an overlay could be made for these portions to restore the legibility, the rest of the sign does suffer from decreased retro reflectivity based on the visual comparison with the updated cost overlays that have been installed. See the example to the right.

To minimize expenditures, it is recommended that all the toll related signs be replaced the next time the toll rate is adjusted. This would eliminate the need to procure and install new toll cost overlays for the next rate adjustment after replacing the current signs vs. if the signs were replaced immediately.

The other smaller signs denoting the toll road name, destination distances, speed limits, objects markers, and other miscellaneous information can be replaced at any time.

In addition, signs that appear in good condition should have their retro reflectivity measured to confirm they still meet requirements, and if not, the signs should be replaced as well.

8 CONDITION PHOTOGRAPHS

#1 185-171: Debris buildup full length of joint

#2 185-171: 4 inch thick layer added to MSE wall

#3 185-171: Missing MSE wall blocks

#4 185-171: Tree growing on top of MSE wall

#5 185-001: Severe block cracking and potholes

#6 185-001: Spalls in median rail

#7 185-001: Spalls in median rail

#8 185-001: Dead vegetation on MSE

#9 185-001: Missing guardrail post blocks

#10 185-001: Joints cracking with vegetation growth

#11 185-001: Missing guardrail post blocks

#12 185-002: Loose anchor bolt nut

#13 185-002: Erosion underneath approach slab

#14 185-002: Clogged drainage flume

#15 185-002: Debris in joints

#16 185-002: Shoulder settlement and cracking

#17 185-002: Shoulder settlement and cracking

#18 185-002: Slope protection cracking and settlement

#19 276-002: Clogged drainage inlet

#20 276-002: Undermining of slope protection

#21 276-002: Guardrail and post damage

#22 185-271: Slope protection undermining with cracks

#23 185-271: Joint cracking in shoulders

#24 276-271: Cracks in pavement shoulder

#25 276-271: Heavy slope protection vegetation

#26 S-144-001: Full depth crack at end of approach slab

#27 S-144-001: Full depth crack at end of approach slab

#28 S-144-001: Cracking in slope protection

#29 S-144-001: Animal hole with undermining of slope

#30 S-144-001: Flume settlement

#31 S-316-004: Concrete coating on MSE wall

#32 S-316-004: Missing blocks on top of MSE wall

#33 S-316-004: Side slope erosion

#34 185-103: Moderate block and longitudinal cracking

#35 185-103: Filled in pothole

#36 185-103: Heavy vegetation on slope protection

#37 185-303: Cracking in approach slab joint

#38 185-303: Slope protection cracking and settlement

#39 185-303: Damaged control access fence

#40 185-104: Guardrail terminal impact damage

#41 185-104: Longitudinal cracks with potholes

#42 185-304: Approach slab joint deterioration

#43 185-104: Joint deterioration adjacent to deck

#44 185-104: Bump at end of approach slab

#45 185-104: Streambank rip rap washing away

#46 185-304: Approach roadway block cracking

#47 185-304: Far approach slab, bump and cracking in shoulder

#48 185-304: Streambank erosion with fallen tree

#49 S-84-001: Severe deterioration of approach slab joint

#50 S-84-001: Erosion hole

#51 S-84-001: Missing control access fencing

#52 S-84-001: Moderate vegetation in approach slab

#53 S-84-001: Minor cracking and settlement in slope protection

#54 S-146-001: Approach slab joint deterioration

#55 S-146-001: Moderate cracking in concrete berm

#56 185-105: 4 inch x 1 inch deep spall in deck

#57 185-105: Exposed rebar in bottom flange

#58 185-305: Damaged guardrail posts and blocks

#59 185-305: Longitudinal cracks with potholes

#60 185-305: Severe streambank erosion

#61 185-305: Severe streambank erosion

#62 185-106: Multiple dislodged guardrail post blocks

#63 185-106: Longitudinal cracking in approach roadway

#64 185-106: Cracking and settlement in concrete slope

#65 185-306: Cracking and settlement in concrete slope protection

#66 185-106: Minor spall in bottom flange

#67 185-106: Minor spall in bottom flange

#68 185-106: Rail crack with efflorescence

#69 185-107: Multiple dislodged guardrail post blocks

#70 185-307: Missing guardrail post block

#71 185-107: Guardrail impact damage

#72 185-307: Cracking and vegetation growth in approach slab joint

#73 185-307: Approach slab joint pothole

#74 185-307: Longitudinal cracking in approach roadway

#75 185-107: Cracking and settlement in slope protection

#76 185-307: Cracking and vegetation in slope protection

#77 185-108: Block cracking with potholes

#78 185-108: Cracking and settlement in top berm

#79 185-308: Top berm concrete spall

#80 185-109: Clogged drainage flume

#81 185-109: Severe block cracking

#82 185-109: Severe block cracking with pothole

#83 185-309: Seal adhesion loss

#84 185-309: Cracking and settlement of concrete berm

#85 25-001: Moderate wearing and cracking in deck

#86 25-001: Cracking beneath girders and abutments

#87 25-001: Cracking beneath girders and end bents

#88 25-001: Broken curb above catch basin

#89 25-001: Cracking and minor settlement along concrete berm

#90 185-310: Longitudinal crack with pothole

#91 185-110: Deteriorated compression joint seal

#92 185-110: Broken compression joint seal

#93 185-110: Dead vegetation on barrier rail

#94 185-110: Partially clogged drainage flume

#95 185-110: Partially clogged drainage flume

#96 185-310: Undermining of end bent

#97 185-310: Undermining of end bent

#98 185-110: Streambank erosion control device

#99 185-110: Streambank erosion

#100 185-311: Damaged block by terminal

#101 185-311: Block cracking with potholes

#102 185-111: Block cracking with potholes

#103 185-311: Spall adjacent to compression joint

#104 185-111: Erosion control device

#105 185-311: Streambank erosion adjacent to bent

#106 185-112: Severe block cracking

#107 185-312: Spall at bent diaphragm

#108 185-312: Side slope erosion

#109 185-1271: Block cracking and pothole in joint

#110 185-1271: Concrete berm crack and settlement

#111 185-1271: Heavy vegetation on top of berm

#112 185-313: Severe block cracking with potholes

#113 185-113: Approach slab joint deterioration

#114 185-1272: Concrete berm cracking

#115 185-1272: Tree growing on top of berm

#116 185-314: Twisted guardrail blocks

#117 185-314: Severe block cracking with potholes

#118 185-114: Approach slab joint deterioration

#119 185-314: Approach slab joint deterioration

#120 185-114: Approach slab undermining

#121 185-115: Severe block cracking

#122 185-315: Severe block cracking

#123 185-115: Approach slab joint deterioration

#124 185-115: Erosion holes under slope protection

#125 185-115: Large trees growing between bridges

#126 185-316: Cracking and large bump in roadway

#127 185-316: Severe block cracking with potholes

#128 185-117: Guardrail end treatment damage

#129 185-117: Severe block cracking with potholes

#130 185-117: Deteriorated joint with exposed plate

#131 185-117: Compression joint adhesion loss

#132 185-317: Compression joint adhesion loss

#133 185-117: Water stains in bent cap

#134 185-317: Spall in column

#135 185-117: Column spall with exposed rebar

#136 185-317: Column spall with exposed rebar

#137 185-117: Heavy vegetation on slope protection

#138 185-118: Severe block cracking

#139 185-118: Severe block cracking

#140 185-118: Approach slab joint depressions

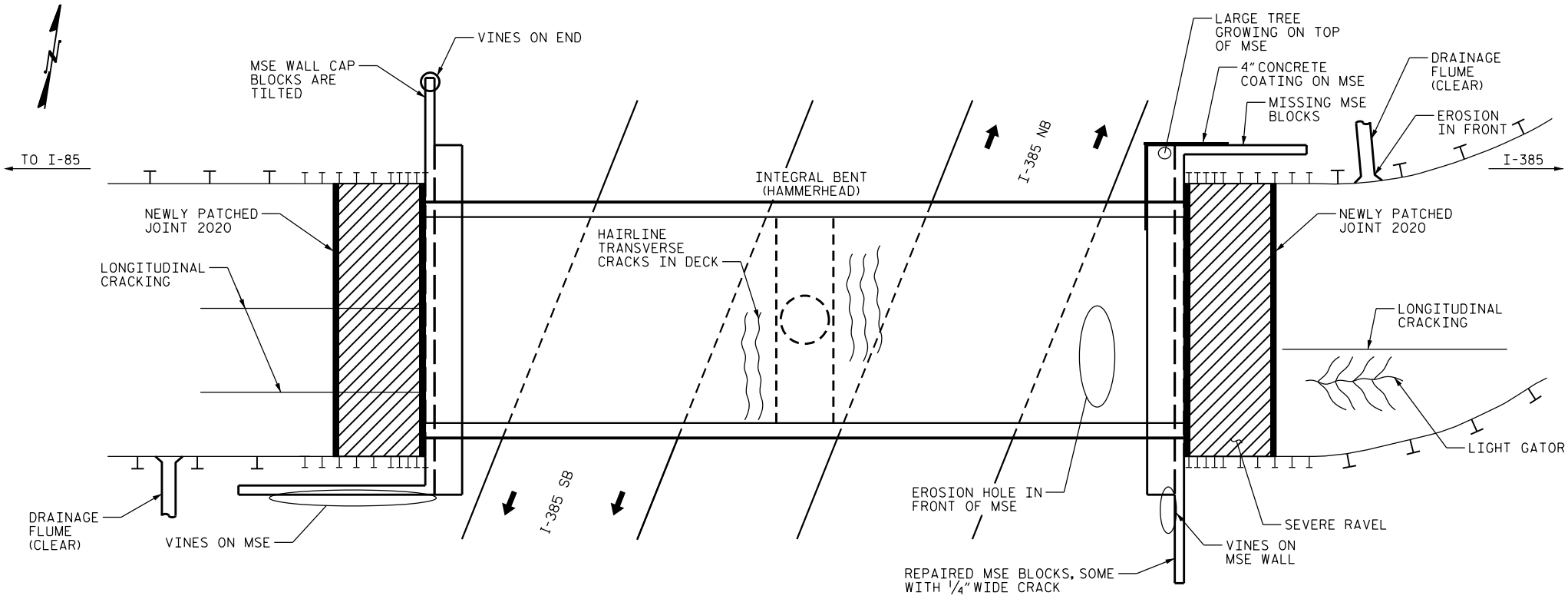
#141 185-118: Cracks in slope protection

9 APPENDIX

9.1 Condition Survey Sketches

1. 185-171
2. 185-001
3. 185-002
4. 276-002
5. 185-271
6. 276-271
7. S-144-001
8. S-316-004
9. 185-103
10. 185-303
11. 185-104
12. 185-304
13. S-84-001
14. S-146-001
15. 185-105
16. 185-305
17. 185-106
18. 185-306
19. 185-107
20. 185-307
21. 185-108
22. 185-308
23. 185-109
24. 185-309
25. S-25-001
26. 185-110
27. 185-310
28. 185-111
29. 185-311
30. 185-112
31. 185-312
32. 185-113
33. 185-313
34. 185-1271
35. 185-1272
36. 185-114
37. 185-314
38. 185-115
39. 185-315
40. 185-316
41. 185-117
42. 185-317
43. 185-118

BRIDGE NO. 185-171 ROAD OVER I-185 NB RAMP 9 FACILITY UNDER I-385 DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - FADED

PAVEMENT MODERATE RAVEL LIGHT GATOR & LONGITUDINAL CRACKING

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT LIGHT CRACKING

APPROACH SLAB MODERATE TO SEVERE RAVEL LONGITUDINAL CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS GOOD

SUPERSTRUCTURE

BRIDGE TYPE 2 SPAN CONTINUOUS STEEL (4) GIRDERS TOTAL MSE WALL ABUTMENTS

DECK FEW MINOR HAIRLINE CRACKS AND EXPOSED AGGREGRATE EFFLORESCENCE IN OVERHANGS

JOINTS DEBRIS BUILDUP IN SHOULDERS

RAILS HAIRLINE CRACKING @ 5' TO 6' SPACING

BEARINGS POT/DISC MULTI-ROTATIONAL BEARINGS

GIRDERS SURFACE RUST ON BOTTOM FLANGES

SITE

VEGETATION MODERATE ALONG ABUTMENTS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING AT BASE OF MSE WALL

SUBSTRUCTURE

	Y	N
INTEGRAL END	☐	☒

SEATS GOOD

ABUTMENT CAP ON PILES W/ MSE WALL

CAPS INTEGRAL BENT (HAMMERHEAD)

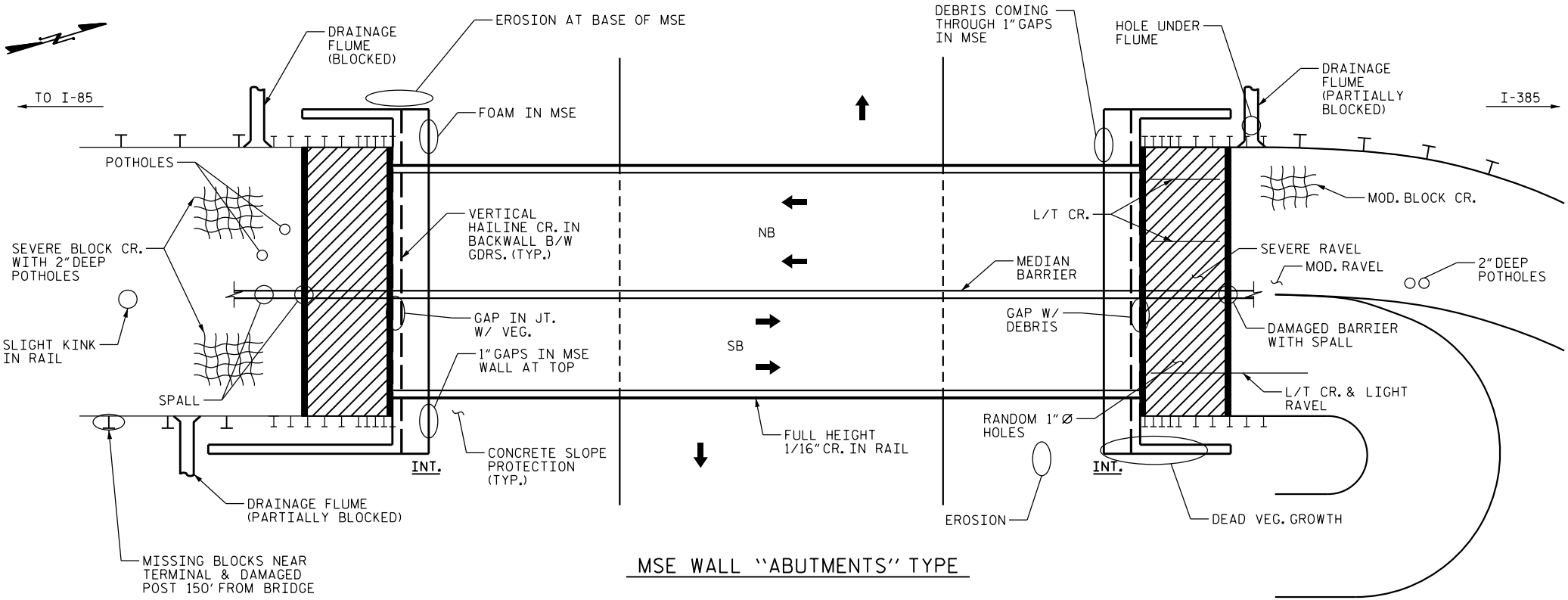
COLUMNS SINGLE COLUMN

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION N/A (MSE WALLS)

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-001 ROAD OVER I-185 FACILITY UNDER SC 417 DATE MARCH 2024



MSE WALL "ABUTMENTS" TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - FADED AND HAS HOLE

PAVEMENT MODERATE TO SEVERE RAVEL / SEVERE BLOCK

GUARDRAIL ALL CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE MISSING BLOCKS AND POSTS DAMAGE 160' FROM BRIDGE

JOINT IN PAVEMENT PATCHED GOOD, CRACKS FORMING

APPROACH SLAB SEVERE RAVEL / SEVERE BLOCK

DRAINAGE CLOGGED

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 2 SPAN STEEL (10 GIRDERS TOTAL)

DECK WEARING AND TRANSVERSE HAIRLINE CRACKS IN DECK AND EFFLORESCENCE IN OVERHANGS

JOINTS INTEGRAL

RAILS HAIRLINE CRACKING AT 6' SPACING, MAP CRACKING IN BOTTOM 1'

BEARINGS N/A

GIRDERS GOOD

SITE

VEGETATION DEAD VINES ON MSE

SCOUR / BANK EROSION ALONG SIDE OF MSE

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CAPS ON PILES CRACKS BETWEEN GIRDERS IN BACKWALL

CAPS N/A

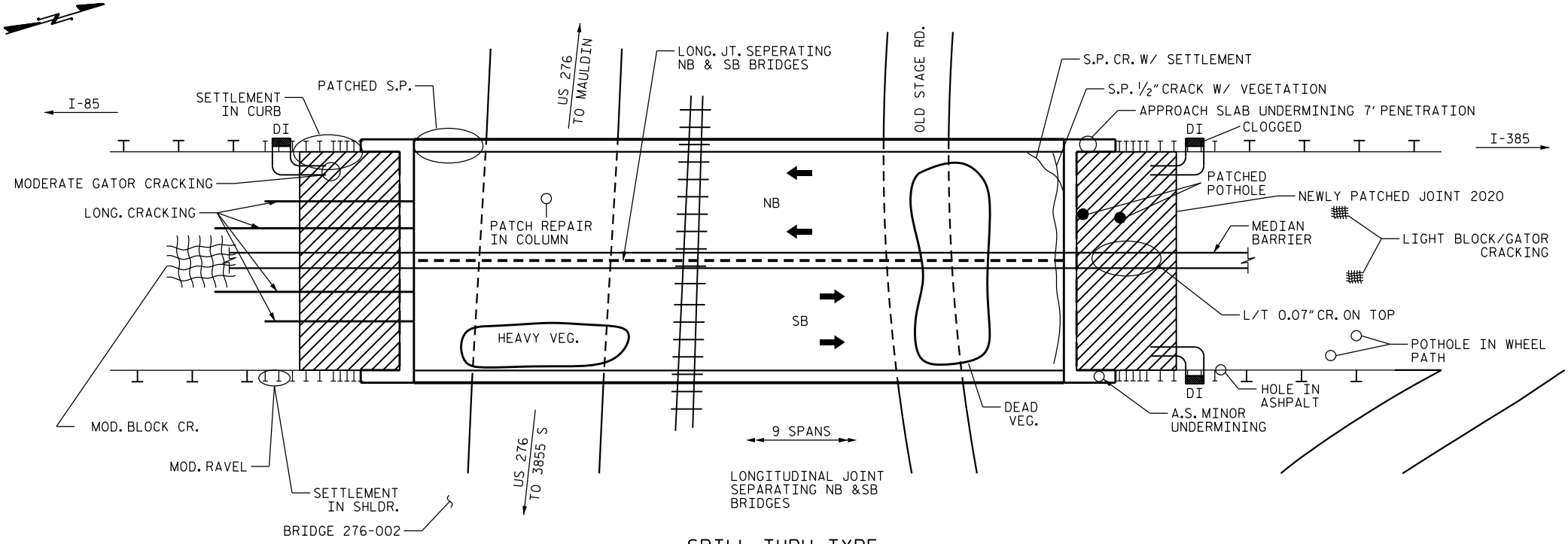
COLUMNS N/A

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION VEGETATION GROWTH AT WEST END

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 188-002 ROAD OVER I-185 NB/SB FACILITY UNDER US 276 RAMP 11, RAMP 2 & RAILROAD DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT SEVERE & MOD RAVEL. LIGHT/MODERATE BLOCK & GATOR.

GUARDRAIL ALL CORNERS

ANCHORAGE LOOSE BOLT @ S.E. CORNER

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT NEWLY PAVED/LONG CRACK

APPROACH SLAB MODERATE BLOCK/RAVEL

DRAINAGE FULLY CLOGGED AT S.E.

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 9 SPAN CONTINUOUS STEEL PG (10 GIRDERS TOTAL)

DECK WEARING, NB & SB SUPERSTRUCTURES ARE NOT CONNECTED 4' SPACE TRANSVERSE HAIRLINE CRACKS MEDIUM LINE CRACKS WITH EFFLORESCENCE IN OVERHANGS

JOINTS EXPANSION JOINT SEALS, LARGE TEARS/DEBRIS THROUGHOUT

RAILS HAIRLINE CRACKS/MISSING REFLECTORS. SOUTHEAST CORNER GUARDRAILS.

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION NONE

SLOPE EROSION / UNDERMINING AROUND SLOPE PROTECTION

SUBSTRUCTURE

INTEGRAL END Y ☐ N ☒

SEATS N/A

ABUTMENT CAP ON PILES, HAIRLINE CRACK IN BACKWALL, WATER PONDING ON TOP AT SOUTH ABUTMENT, WATER STAINS BETWEEN BRIDGES

CAPS GOOD

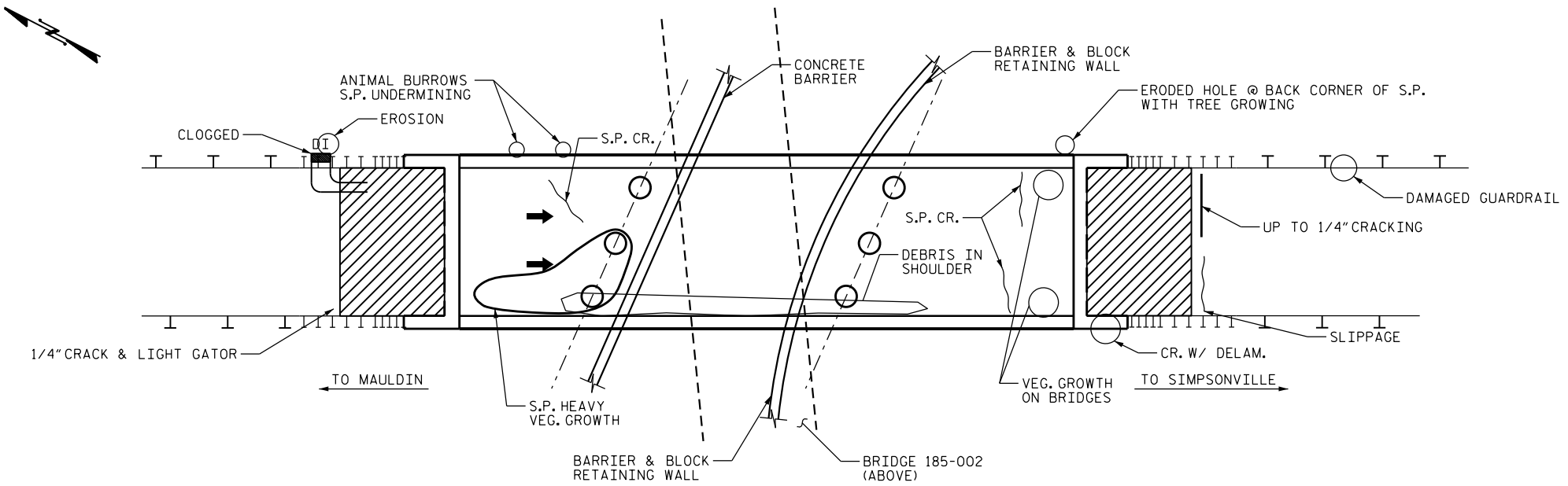
COLUMNS (4) PER BENT WITH GRAFFITI

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION COVERED IN VEGETATION, CRACKS WITH VEGETATION, UP TO 1" GAP @ ABUTMENTS, GAP BETWEEN SEGMENTS, CRACKS

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 276-002 ROAD OVER US 276 EB FACILITY UNDER I-185 RAMP 2 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT NEWLY PAVED AND CRACKNG

GUARDRAIL ALL CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE MINOR DAMAGES

JOINT IN PAVEMENT GOOD

APPROACH SLAB NEWLY PAVED. CRACKS AT END OF JOINTS.

DRAINAGE POOR

PAVEMENT MARKINGS OLD

SUPERSTRUCTURE

BRIDGE TYPE 3-SPAN CONTINUOUS STEEL PG (5 GIRDERS TOTAL) BEAM 3 MINOR CORROSION AT ABUTMENT 2

DECK DEBRIS

JOINTS PATCHED

RAILS MEDIUM CRACKING @ 5' SPA

BEARINGS N/A

GIRDERS GOOD

SITE

VEGETATION SEVERE ALONG BOTH END BENTS & ON S.P.

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING 1/8" CRACKING & VEGETATION

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT CAP ON PILES, HAIRLINE CRACKING BETWEEN GIRDERS AND AT ENDS

CAPS GOOD

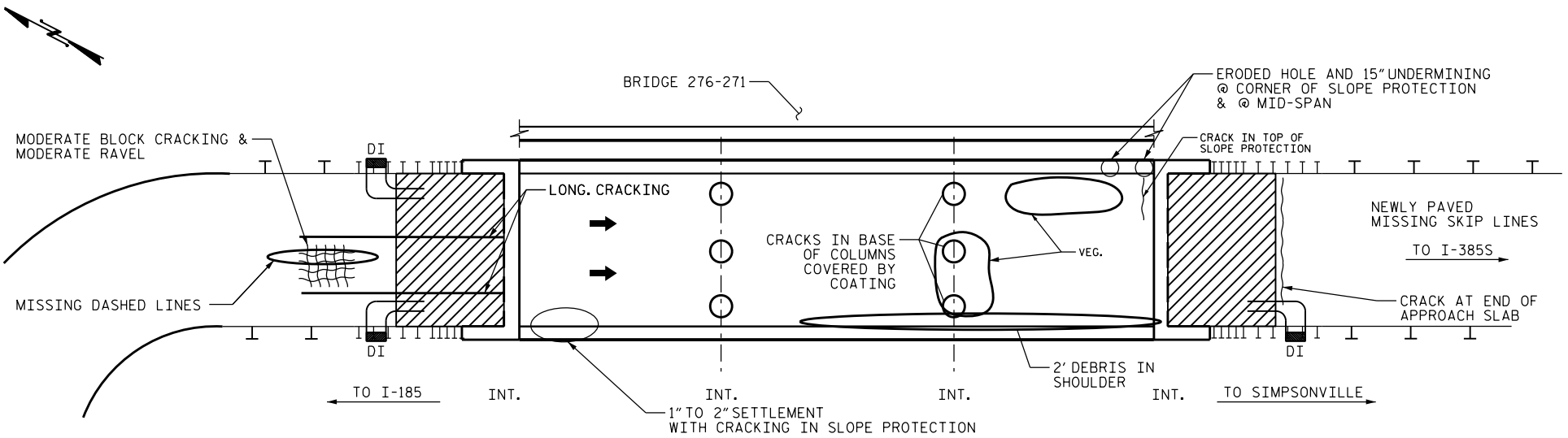
COLUMNS (3) PER BENT

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION LIGHT VEG. & CRACKING, SEPARATION W/ VEG. GROWTH & UNDERMINING

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-271 RAMP 3 ROAD OVER US 276 EB (I-385 SB EXIT RAMP) FACILITY UNDER EAST STANDING SPRINGS RD DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL & MODERATE BLOCK CRACKING

GUARDRAIL ALL CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT MEDIUM TO 1" CRACK. NEWLY PATCHED 2020.

APPROACH SLAB MEDIUM RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 3-SPAN CONTINUOUS STEEL PG

DECK GOOD, OVERHANG EXPOSED REBAR

JOINTS GOOD

RAILS MEDIUM CRACKING @ 4' SPA

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION NONE

SLOPE EROSION / UNDERMINING EDGES & CORNERS OF SLOPE PROTECTION

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CAP ON PILES

CAPS NORTH FACE MINOR HAIRLINE CRACKING AT P2 ABOVE C3

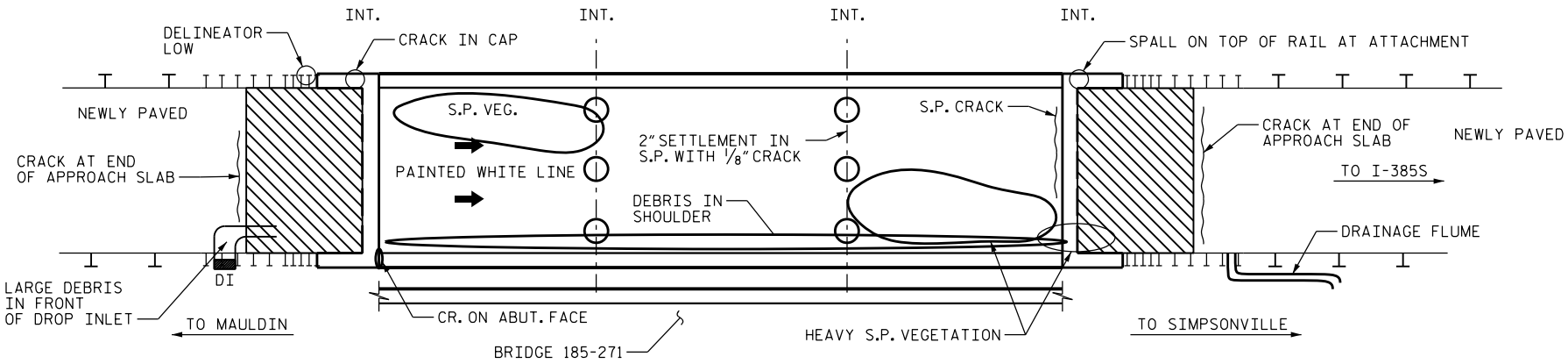
COLUMNS

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION MINOR CRACKING & VEGETATION 1"-2" SETTLEMENT AT TOP & IN MIDDLE

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 276-271 ROAD OVER US 276 EB FACILITY UNDER EAST STANDING SPRINGS RD. DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT GOOD

GUARDRAIL ALL CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT PAVED

APPROACH SLAB LIGHT CRACKING AT END

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 3-SPAN CONTINUOUS STEEL PG

DECK MINOR HAIRLINE/ GAP CRACK DEBRIS IN SHOULDER

JOINTS PATCHED

RAILS MEDIUM CRACKING

BEARINGS GOOD

GIRDERS GOOD, FRECKLED RUST

SITE

VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING GOOD

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CAP ON PILES, MEDIUM CRACK AT END

CAPS HAIRLINE CRACK IN ABUTMENT AND BOTTOM CAP

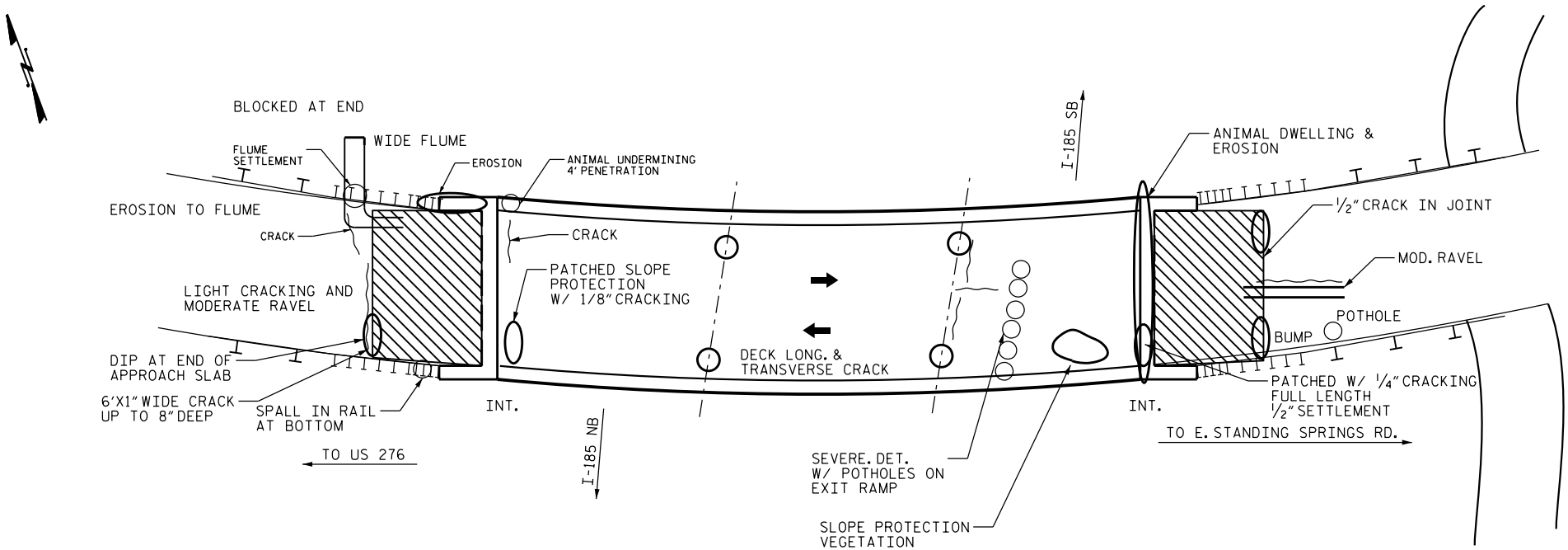
COLUMNS GOOD

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION CRACKING W/ HEAVY VEGETATION IN JOINT
CRACKING AT TOP
GAP B/W SEGMENT

2024 ASSESSMENT: TOM/COX

BRIDGE NO. S-144-001 ROAD OVER NEELY FERRY RD. FACILITY UNDER I-185 & US 276 ACCESS RAMPS DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (4) DELINEATORS - GOOD

PAVEMENT LIGHT CRACKING AND MODERATE RAVEL

GUARDRAIL ALL CORNERS

ANCHORAGE MINOR DAMAGE AT ATTACHMENT

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT OLD PATCHING

APPROACH SLAB MODERATE RAVEL, LIGHT SEDIMENT BUILD-UP ON DECK

DRAINAGE GOOD

PAVEMENT MARKINGS FAIR TO POOR

SUPERSTRUCTURE

BRIDGE TYPE 3-SPAN CONTINUOUS STEEL PG COVERED

DECK MEDIUM CRACK. AREAS OF WEARING.

JOINTS PATCHED

RAILS HAIRLINE CRACKING/PEELING COATING W/ EFFLORESCENCE 3' SPACING

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION VINES EXTENDING ONTO DECK

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING ALONG SLOPE PROTECTION

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CRACK W/ EFFLORESCENCE ON SIDE HAIRLINE CRACK IN BACKWALL AT CONSTRUCTION JOINT. FULL LENGTH

CAPS GOOD

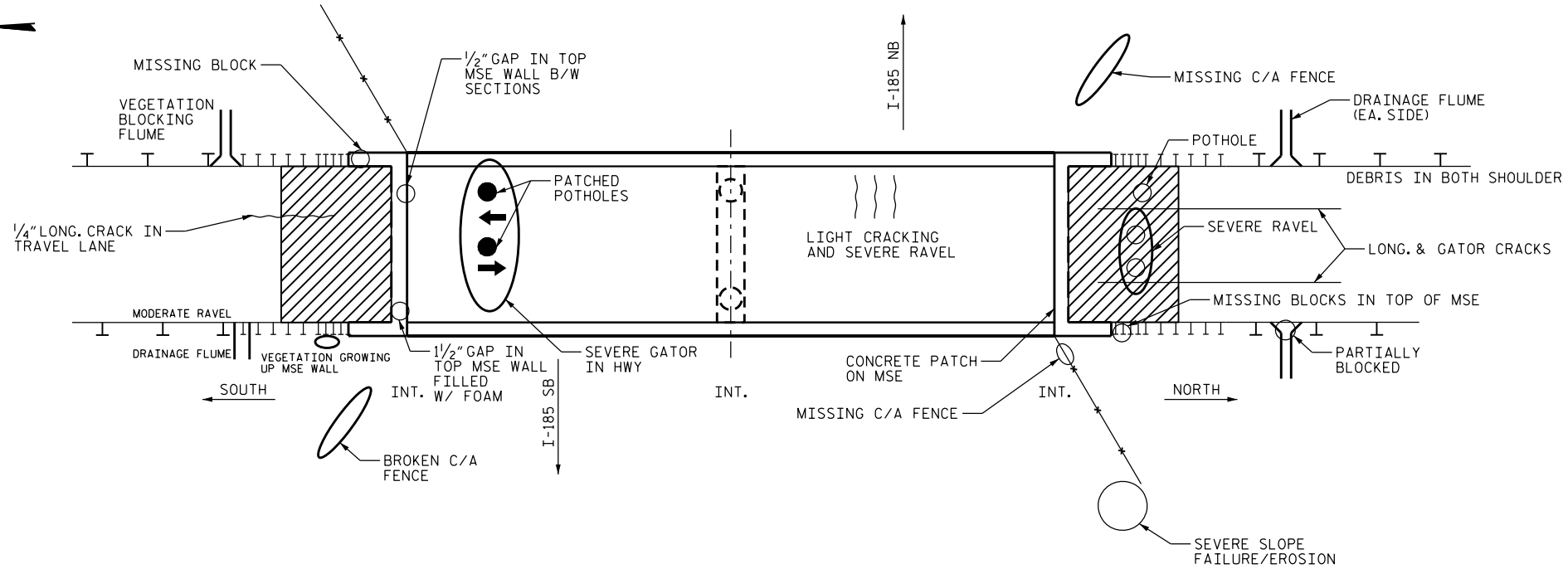
COLUMNS GOOD

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION VEGETATION & MODERATE UNDERMINING. CRACKS REFORMING AT TOP OF SLOPE. 1 1/2" GAP AT TOP.

2024 ASSESSMENT: TOM/COX

BRIDGE NO. S-316-004 ROAD OVER LOG SHOALS RD. (SR 316) FACILITY UNDER I-185 DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT LOW RUTTING, LIGHT CRACKING & SEVERE/MODERATE RAVEL

GUARDRAIL ALL CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT PATCHED. CRACKS FORMING IN JOINTS.

APPROACH SLAB SEVERE AND MODERATE RAVEL AND LONG CRACKING

DRAINAGE VEGETATION IN FLUME

PAVEMENT MARKINGS POOR ON BRIDGE, GOOD ON APPROACHES

SUPERSTRUCTURE

BRIDGE TYPE (5 AASHTO GIRDERS/SPAN) MSE WALL ABUTMENTS

DECK SEDIMENT BUILD UP IN SHOULDER

JOINTS INTEGRAL

RAILS MEDIUM CRACKS AT 8'

BEARINGS EXPOSED BEARINGS

GIRDERS GOOD

SITE

VEGETATION MODERATE VEG. ALONG EB'S & ON RETAINING WALLS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CAP ON PILES, EXPOSED REBAR

CAPS GOOD

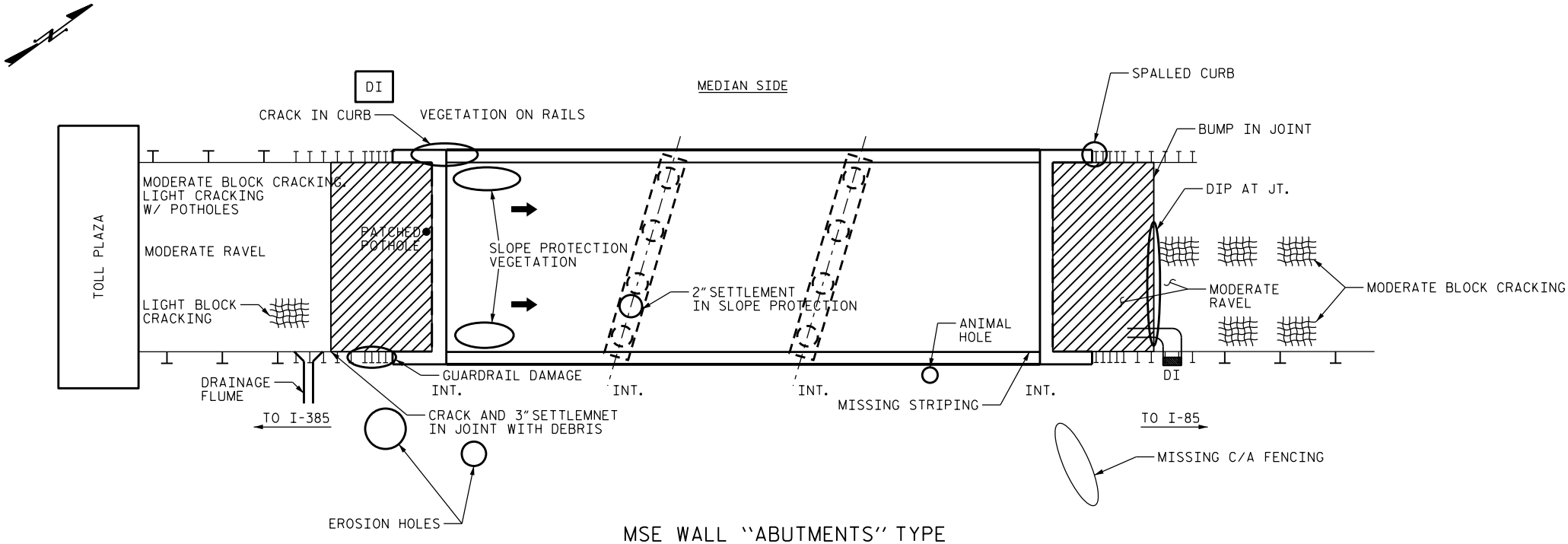
COLUMNS TWO COLUMNS

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION N/A

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-103 ROAD OVER I-185 NB FACILITY UNDER RANCH ROAD DATE MARCH 2024



MSE WALL "ABUTMENTS" TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE BLOCK CRACKING/MODERATE RAVEL

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT PATCHED GOOD. BUMP AT NORTH APPROACH SLAB.

APPROACH SLAB MODERATE RAVEL, LONGITUDINAL CRACK W/ PATCHED POTHOLES

DRAINAGE CLEAR TO PARTIALLY BLOCKED

PAVEMENT MARKINGS GOOD

SUPERSTRUCTURE

BRIDGE TYPE (7 AASHTO GIRDERS/SPAN) CONCRETE CAPS ON CONCRETE PILES

DECK MEDIUM TRANSVERSE CRACKS

JOINTS GOOD

RAILS MEDIUM CRACKS AT 8' SPACING

BEARINGS GOOD

GIRDERS MINOR GRAFFITI

SITE

VEGETATION ALONG ABUTMENT & SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT HORIZONTAL CRACKS AT ENDS, GRAFFITI, CRACKS WITH EFFLORESCENCE BELOW BEAMS AND AT CONSTRUCTION JOINT

CAPS GOOD

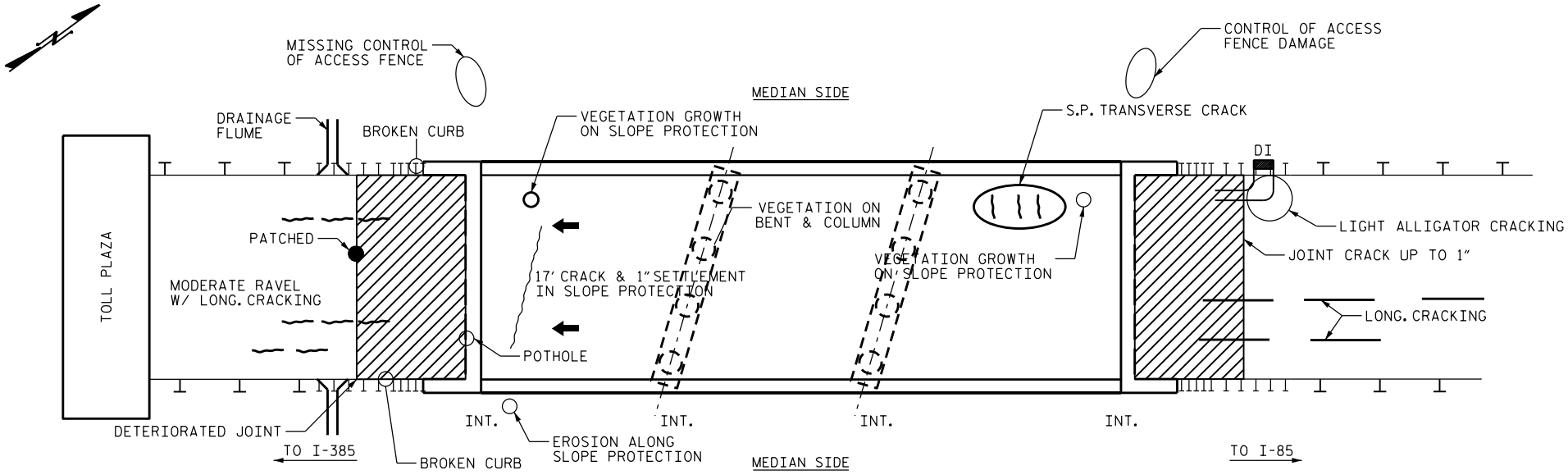
COLUMNS GRAFFITI PEELING COATING

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION HEAVY VEGETATION THROUGHOUT SLOPE PROTECTION, 1½"-2" SETTLEMENT, ANIMAL HOLES

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-303 ROAD OVER I-185 SB FACILITY UNDER RANCH ROAD DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL & LONG CRACKING

GUARDRAIL ALL CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT PATCHED, 1" CRACK

APPROACH SLAB MODERATE RAVEL & LONG CRACKING

DRAINAGE CLEAR

PAVEMENT MARKINGS GOOD

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO GIRDERS/SPAN

DECK MEDIUM CRACKING/POOR GROOVING CRACKS W/ EFFLORESCENCE IN OVERHANGS

JOINTS INTEGRAL

RAILS HAIRLINE CRACKING @ 5'-6' CONSTRUCTED W/ CONTROL JOINTS

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION SIGNIFICANT ALONG SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CAP ON PILES, CRACKING WITH EFFLORESCENCE BELOW BEAMS AT CONSTRUCTION JOINT, VEGETATION

CAPS CRACKING W/ EFFLORESENCE BELOW BEAMS AT CONSTRUCTION JOINT

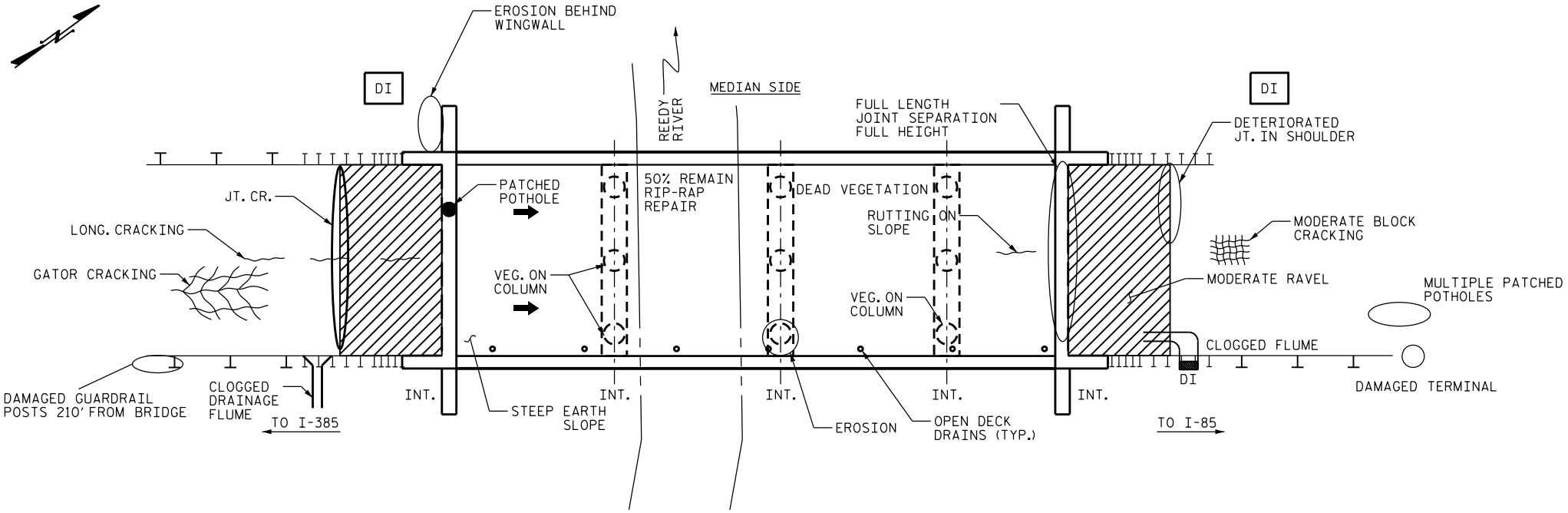
COLUMNS PAINTED OVER GRAFFITI & VINES

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION MODERATE TO HEAVY HEGETATION DEBRIS PILED UP @ BASE OF SLOPE PROTECTION SEPARATION W/ VEGETATION GROWTH

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-104 **ROAD OVER** I-185 NB **FACILITY UNDER** REEDY RIVER **DATE** MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE BLOCK CRACKING, MODERATE RAVEL/POOR OVERLAY WITH BUMP

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS DAMAGED AT BOTH ENDS

DAMAGE NONE

JOINT IN PAVEMENT CRACKING IN JOINT

APPROACH SLAB MODERATE RAVEL/LIGHT CRACKS

DRAINAGE CLOGGED FLUME

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO BULB TEES/SPAN

DECK MEDIUM CRACK/DETERIORATING JOINT, WEARING

JOINTS INTEGRAL

RAILS HAIRLINE CRACKING @ 6'-10' SPACING CONSTRUCTED W/ CONTROL JOINTS

BEARINGS FULL DEPTH CONCRETE

GIRDERS GOOD

SITE

VEGETATION SIGNIFICANT ALONG ABUTMENT, COLUMNS AND OVERHANGS

SCOUR / BANK EROSION RUTTING ON END SLOPE

SLOPE EROSION / UNDERMINING RUTTING ON END SLOPE

SUBSTRUCTURE

INTEGRAL END Y ☒ N ☐

SEATS GOOD

ABUTMENT LIGHT EFFLORESCENCE AT BOTH FLANGES, CRACKING WITH EFFLORESCENCE BELOW BEAMS AT CONSTRUCTION JOINT

CAPS GOOD

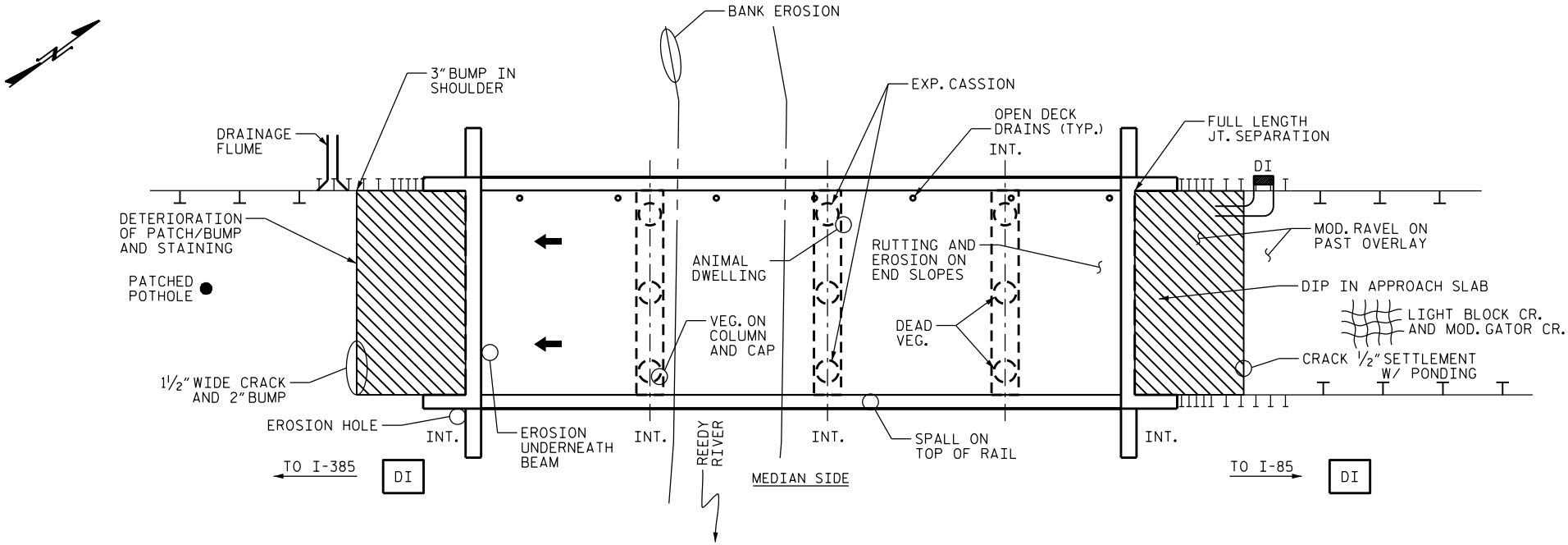
COLUMNS DEAD VEGETATION GROWTH

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION EROSION @ EB W/ COLLAPSE IN SLOPE

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-304 ROAD OVER I-185 SB FACILITY UNDER REEDY RIVER DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL/LIGHT BLOCK CRACKING, LOW GATOR

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT JOINT SEPARATION, PATCHED WITH BUMP

APPROACH SLAB MODERATE RAVEL/LIGHT GATOR CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO BULB TEES/SPAN

DECK MEDIUM CRACK AND MINOR WEARING

JOINTS INTEGRAL

RAILS HAIRLINE CRACKING @ 6'-0' SPACING CONSTRUCTED W/ CONTROL JOINTS

BEARINGS FULL DEPTH CONCRETE

GIRDERS GOOD

SITE

VEGETATION ALONG ABUTMENTS & COLUMNS

SCOUR / BANK EROSION STREAM BANK SLUMPING WITH TREE FALLING IN STREAM

SLOPE EROSION / UNDERMINING RUTTING ALONG ABUTMENTS

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT LIGHT EFFLORESCENCE AT BOTTOM FLANGES

CAPS GOOD

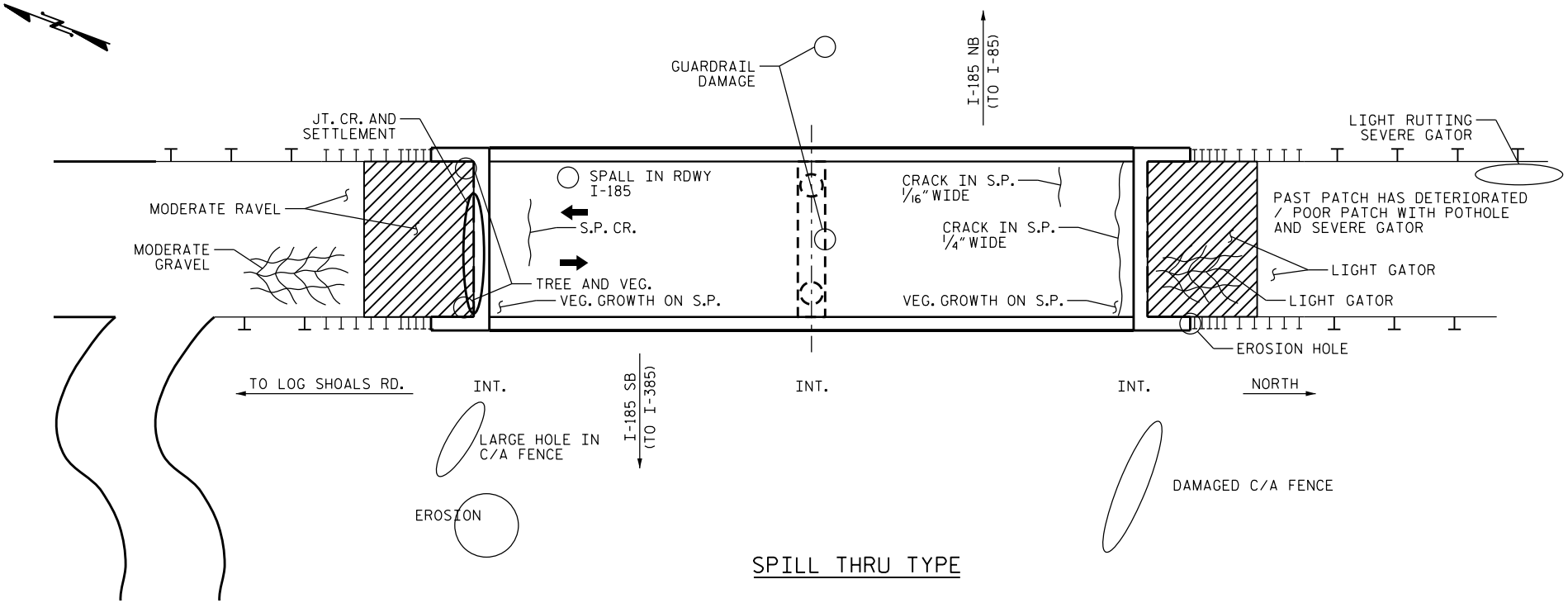
COLUMNS LIGHT VEGETATION

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION EROSION RUTTING IN SLOPE

2024 ASSESSMENT: TOM/COX

BRIDGE NO. S-84-001 ROAD OVER STANDING SPRINGS RD. (SR 84) FACILITY UNDER I-185 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE TO SEVERE RAVEL/MODERATE TO SEVERE GATOR CRACKING

GUARDRAIL (4) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT GOOD IN 3 LOCATIONS

APPROACH SLAB DETERIORATED PATCHING AND SEVERE GATER MAINLY AT EAST END, MODERATE RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS POOR MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 4 AASHTO BULB TEES/SPAN

DECK MEDIUM CRACK AND MINOR WEARING

JOINTS INTEGRAL

RAILS MEDIUM CRACKING @ 10'-0' SPACING

BEARINGS FULL DEPTH CONCRETE

GIRDERS GOOD

SITE

VEGETATION ALONG ABUTMENTS & SLOPE PROTECTION JOINTS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT HAIRLINE CRACK WITH EFFLORESCENCE BELOW BEAMS

CAPS GOOD

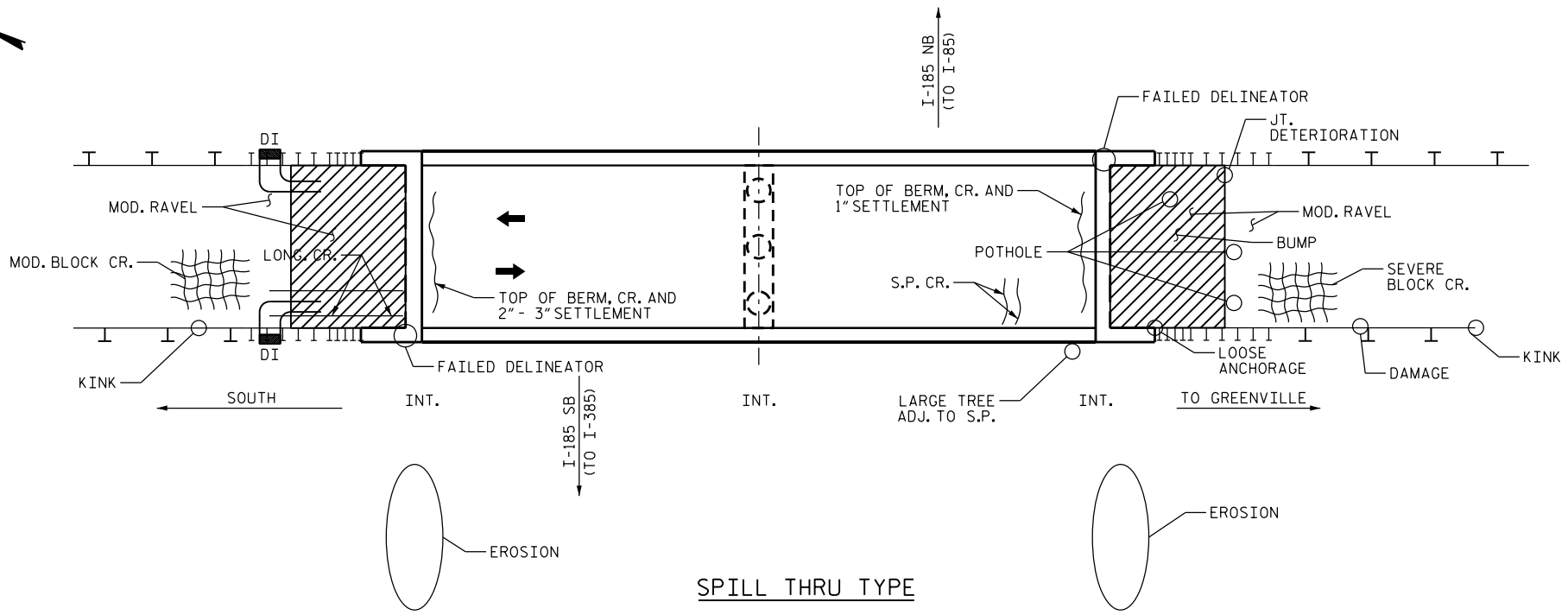
COLUMNS GOOD

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION CRACK ON BERM, LIGHT VEGETATION

2024 ASSESSMENT: TOM/COX

BRIDGE NO. S-146-001 **ROAD OVER** FORK SHOALS RD.(SR 146) **FACILITY UNDER** I-185 **DATE** MARCH 2024



SPILL THRU TYPE

SOUTHWEST DELINEATOR TWISTED AND LOSING RETROREFLETIVITY

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT SEVERE BLOCK, MODERATE RAVEL

GUARDRAIL MINOR KINK, (4) CORNERS

ANCHORAGE LOOSE BOLT

TERMINUS GOOD

DAMAGE KINK

JOINT IN PAVEMENT FULL LENGTH CRACKING ADJACENT TO BRIDGE

APPROACH SLAB MODERATE RAVEL, BUMPY OVERLAY, POTHOLE AND RUTTING

DRAINAGE GOOD

PAVEMENT MARKINGS POOR MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK MEDIUM CRACK AND HEAVY VEGETATION AT CORNERS

JOINTS INTEGRAL

RAILS MEDIUM CRACKING @ 10'-0' SPACING

BEARINGS FULL DEPTH CONCRETE

GIRDERS GOOD

SITE

VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT HAIRLINE CRACK BELOW AND BETWEEN BEAMS

CAPS GOOD

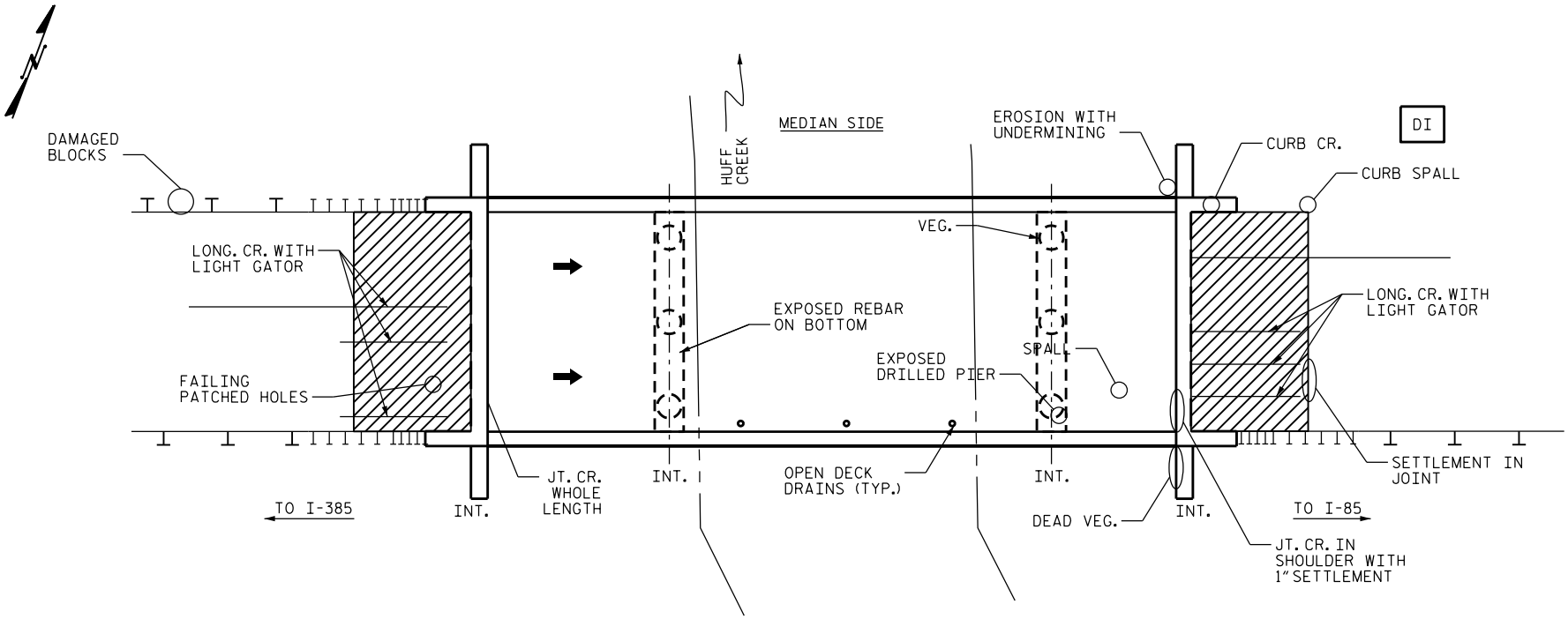
COLUMNS GOOD

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION CRACKING AND SETTLEMENT AT TOP OF BERM AT BOTH ABUTMENTS, VEGETATION GROWING THROUGH GAPS

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-105 ROAD OVER I-185 NB FACILITY UNDER HUFF CREEK DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT LONG. CRACK, MOD. RAVEL

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT PATCHED, CRACKING THROUGHOUT

APPROACH SLAB LONG. CRACKING, MOD. RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK MEDIUM CRACKING AND WEARING, EFFLORESCENCE IN OVERHANG

JOINTS INTEGRAL

RAILS MEDIUM CRACKS @ 5' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION VINES ON CAPS AND N. ABUTMENT AND OVERHANGS

SCOUR / BANK EROSION RIP RAP LINED BANKS

SLOPE EROSION / UNDERMINING NONE

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT VINES ON ABUTMENTS, CRACKS WITH EFFLORESCENCE ADJACENT TO BEAMS

CAPS EXPOSED REBAR IN CAP

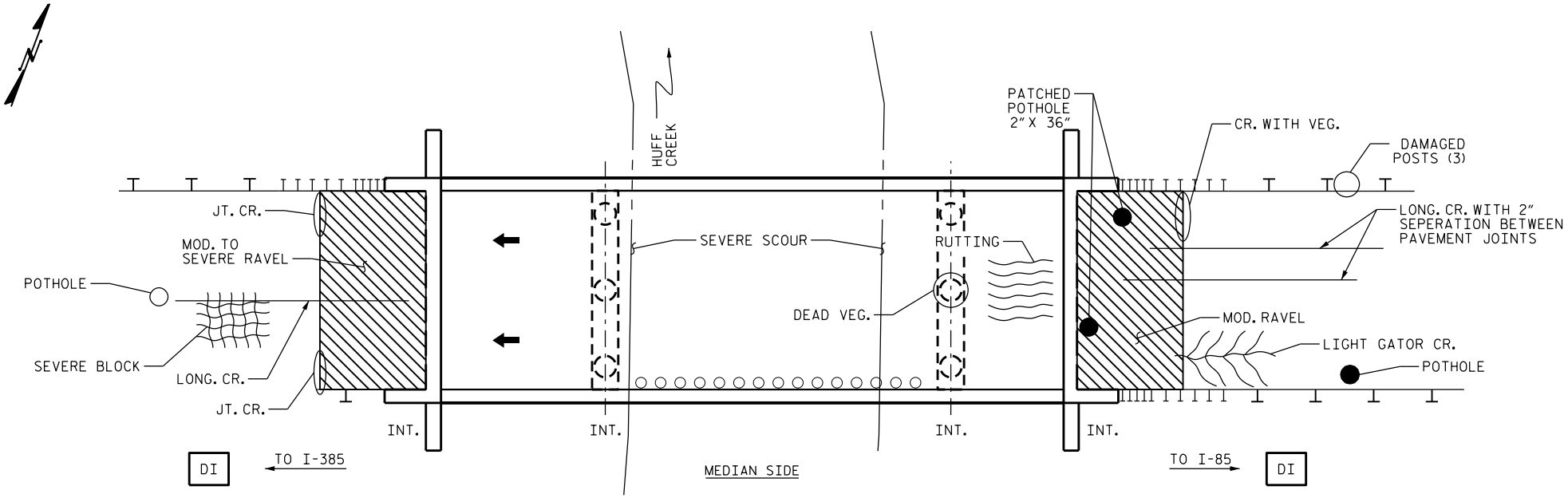
COLUMNS GOOD

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION N/A

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-305 ROAD OVER I-185 SB FACILITY UNDER HUFF CREEK DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MOD. BLACK, MOD. RAVEL

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE NONE

JOINT IN PAVEMENT PATCHED WITH DETERIORATION

APPROACH SLAB MOD. TO SEVERE RAVEL, LONG. CR.

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK MEDIUM CRACKING AND WEARING

JOINTS INTEGRAL

RAILS HAIRLINE CRACKING AT 10' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ABUTMENTS, COLUMNS AND OVERHANGS

SCOUR / BANK EROSION SEVERE EROSION WITH VERTICAL BANKS

SLOPE EROSION / UNDERMINING EROSION RUTTS ON SLOPE

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS N/A

ABUTMENT CAP ON PILES

CAPS VEG. ON BENT CAPS

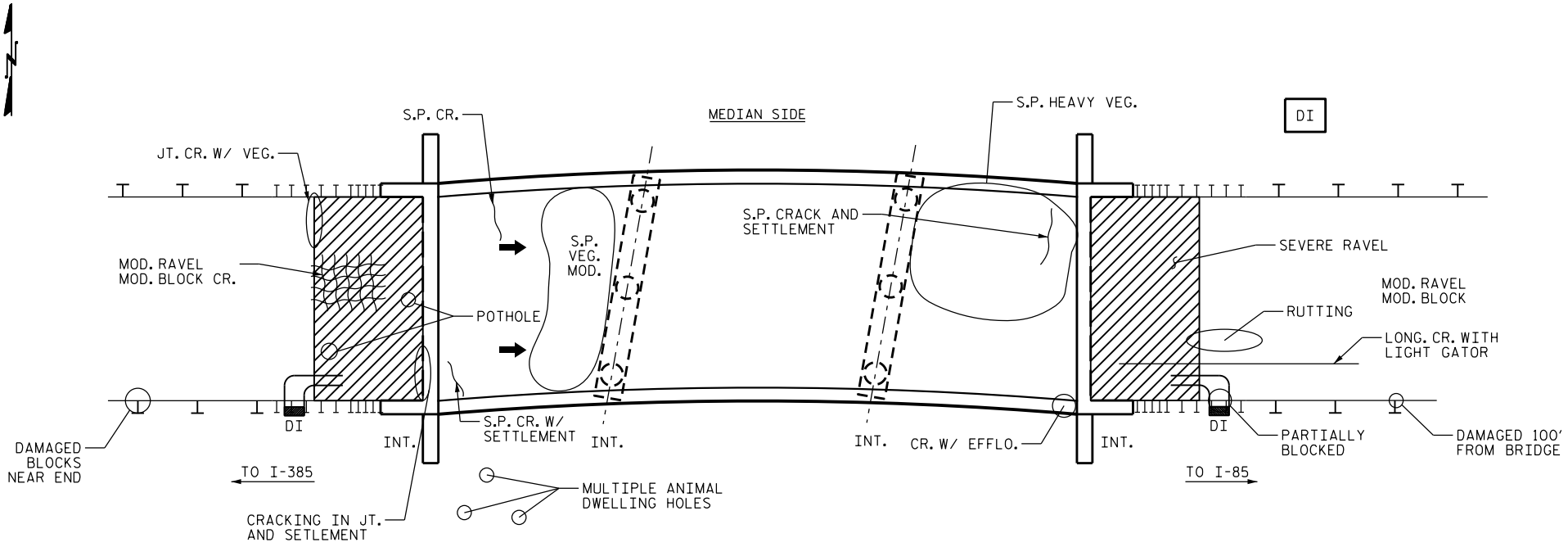
COLUMNS VEG. ON COLUMNS

FOUNDATIONS N/A

CONCRETE SLOPE PROTECTION N/A

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-106 ROAD OVER I-185 NB FACILITY UNDER REEDY FORK RD. DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT RUTTING, MODERATE RAVEL, MODERATE BLOCK CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE AT END LONGITUDINAL FROM BRIDGE

JOINT IN PAVEMENT GOOD

APPROACH SLAB MODERATE TO SEVERE RAVEL

DRAINAGE PART BLOCKED

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK EFFLORESCENCE ON ENDS

JOINTS INTEGRAL

RAILS MEDIUM CRACKING AT SPACES

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION ON S.P.

SCOUR / BANK EROSION NONE

SLOPE EROSION / UNDERMINING NONE

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT EFFLORESCENCE AND CRACKING

CAPS GOOD

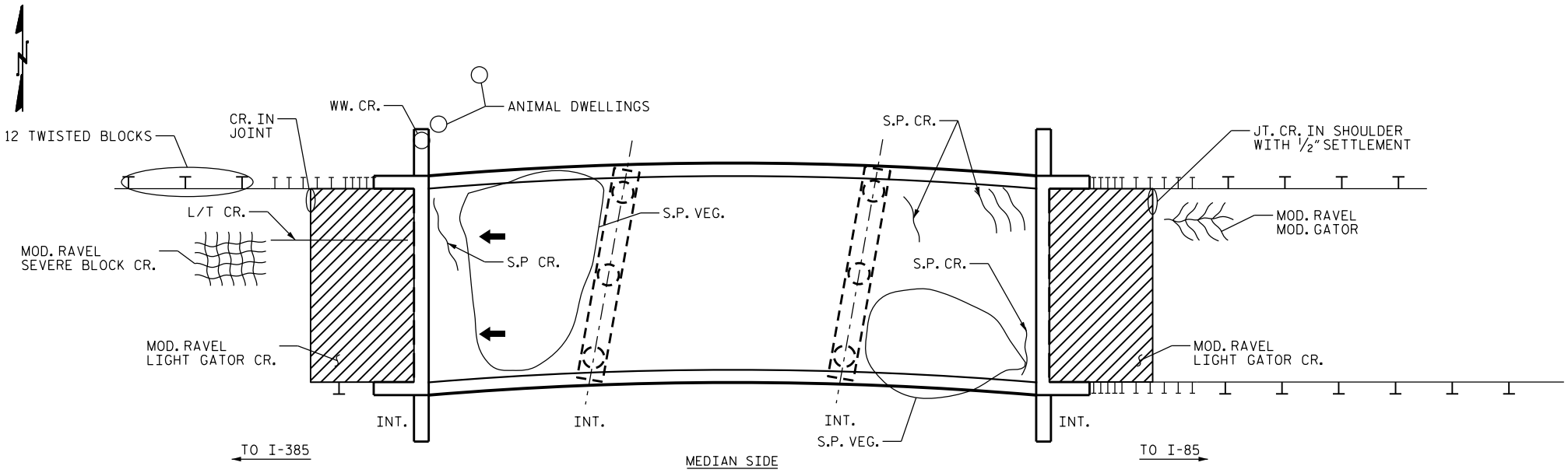
COLUMNS VINES

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION MODERATE VEGETATION
VEGETATION GROWTH IN JOINT

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-306 ROAD OVER I-185 SB FACILITY UNDER REEDY FORK RD. DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MOD. RAVEL, SEVERE BLOCK.

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE TWISTED BLOCKS

JOINT IN PAVEMENT GOOD

APPROACH SLAB GOOD

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK MEDIUM CRACKING

JOINTS INTEGRAL

RAILS HAIRLINE CRRACKS @ 6' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GAPS WITH VEGETATION CRACKS BELOW GIRDERS AND AT ENDS

CAPS GOOD

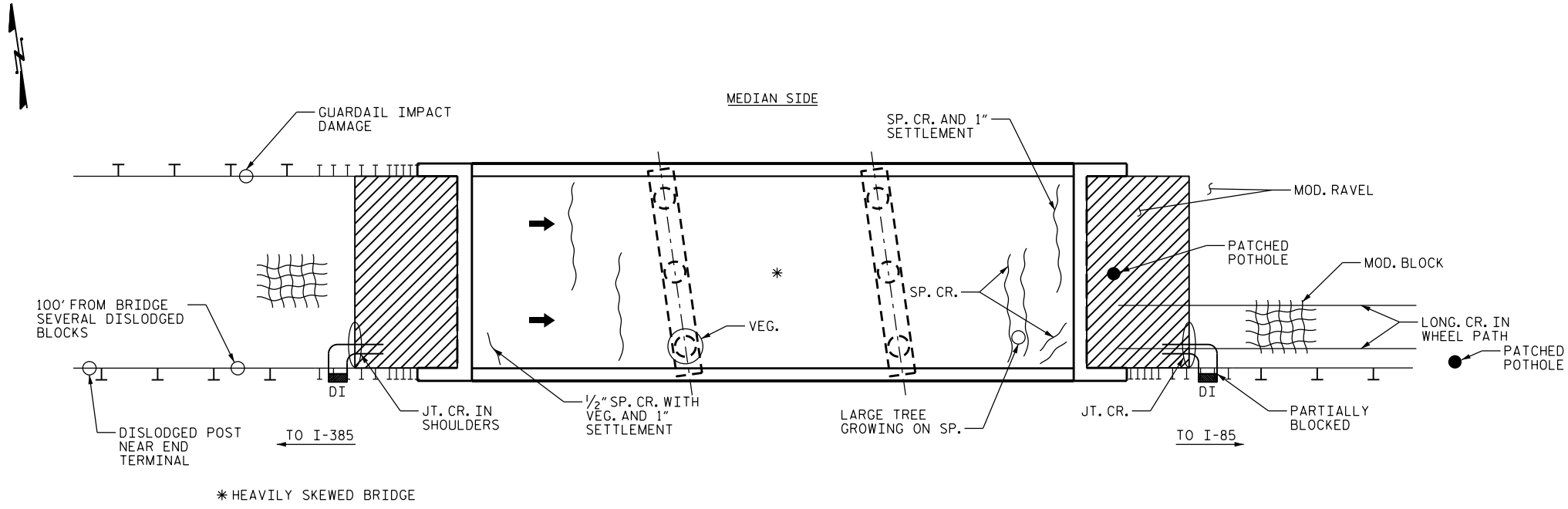
COLUMNS (3) PER BENT, VINES, GRAFFITI

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION GRAFFITI

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-107 ROAD OVER I-185 NB FACILITY UNDER LOST STUMP RD. DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL/SEVERE GATOR WITH POTHOLES, SEVERE BLOCK AND LONGITUDINAL CRACKS

GUARDRAIL DAMAGE

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, JOINT CRACKS IN SHOULDERS

APPROACH SLAB MODERATE RAVEL/LONGITUDINAL CRACKS

DRAINAGE PARTIALLY BLOCKED

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK MINOR CRACKS IN DECK/EFFLORESCENCE IN OVERHANGS

JOINTS INTEGRAL

RAILS MEDIUM CRACKS @ 6' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ON SLOPE PROTECTION, AND OVERHANGS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT CAP ON PILES

CAPS HORIZONTAL CRACKS WITH EFFLORESCENCE AT ABUTMENT 2

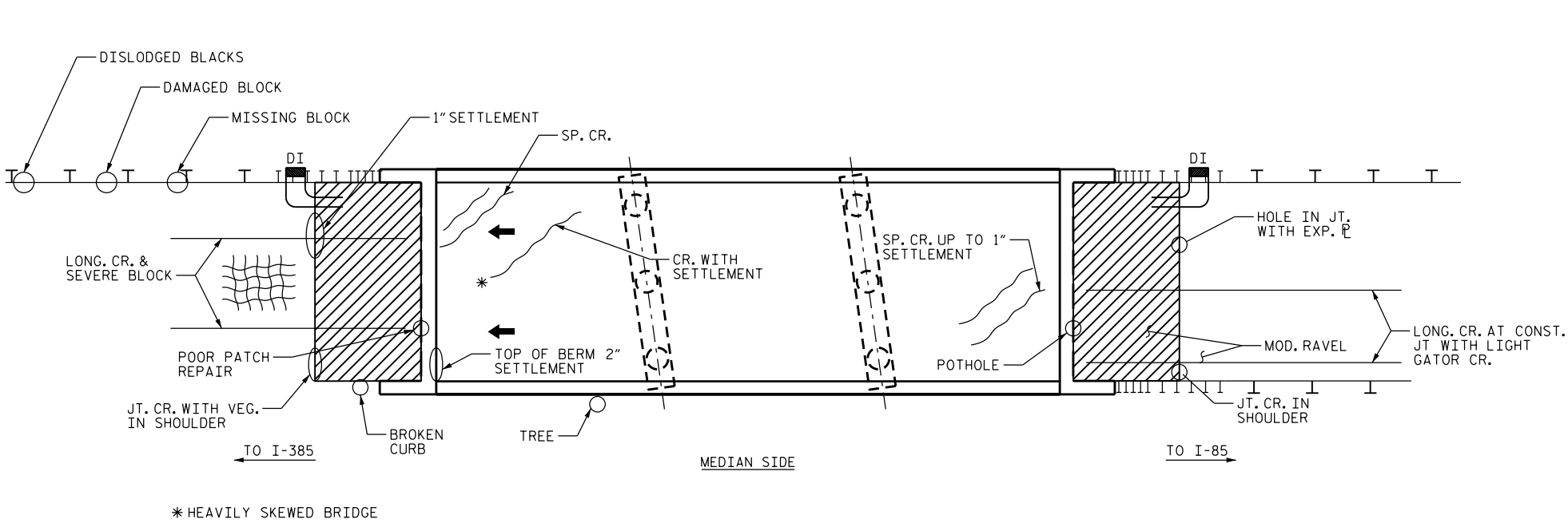
COLUMNS MINOR VEGETATION

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION HEAVY VEGETATION AND CRACKS UP TO 1" WIDE WITH SETTLEMENT

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-307 ROAD OVER I-185 SB FACILITY UNDER LOST STUMP RD. DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT LIGHT TO MODERATE RAVEL, LONGIDUTINAL CRACK AND LIGHT GATOR

GUARDRAIL MISSING, DAMAGE DISLODGED BLOCKS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, MINOR DAMAGE AND SETTLEMENT

APPROACH SLAB MODERATE RAVEL/LONGITUDINAL CRACKS

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK TRANSVERSE CRACKS ADJACENT TO JOINT, MEDIUM CRACKS AND WEARING

JOINTS INTEGRAL

RAILS MEDIUM CRACKS @ 6' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT CAP ON PILES

CAPS ABUTMENT 1 AND 2, HORIZONTAL CRACK WITH EFFLORESCENCE

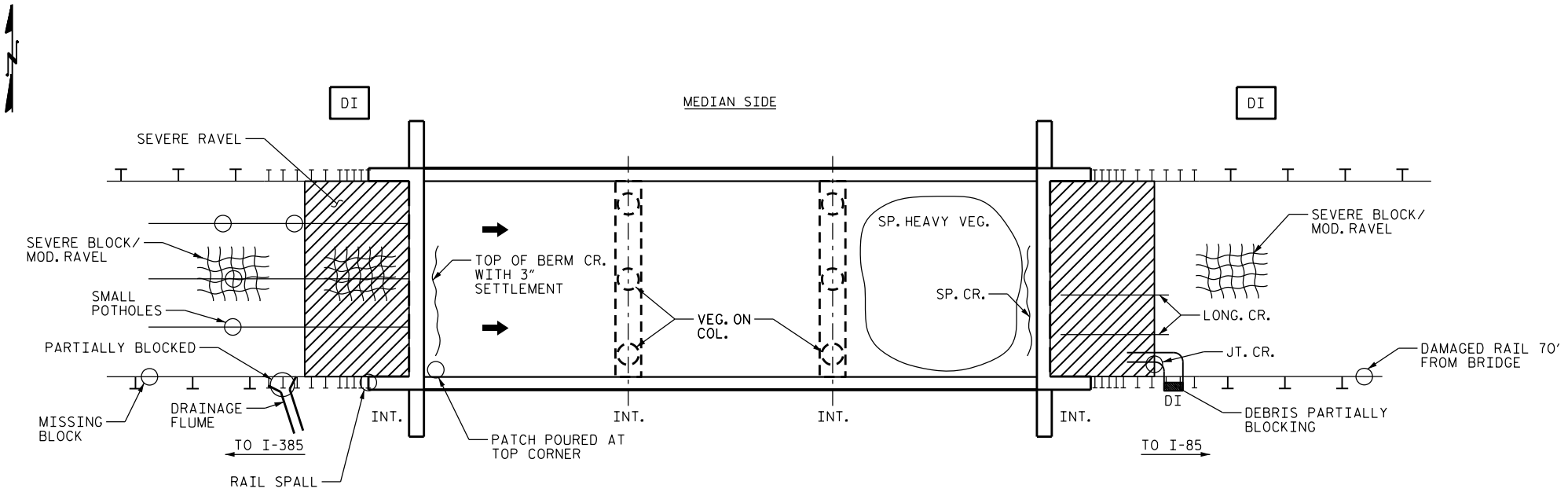
COLUMNS LIGHT VEGETATION

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION ABUTMENT 1 TOP OF BERM 2" SETTLEMENT, TREE AND MOD. VEG. GROWING BETWEEN JTS.

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-108 ROAD OVER I-185 NB FACILITY UNDER FUTURE RAILROAD DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, LONGIDUTINAL CRACK AND LIGHT GATOR

GUARDRAIL MISSING BLOCK

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED WITH SETTLEMENT

APPROACH SLAB SEVERE RAVEL AND BLOCK

DRAINAGE ½ CLOGGED FLUME

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO GIRDERS/SPAN

DECK TRANSVERSE CRACKS ADJACENT TO JOINT, MEDIUM CRACKS AND WEARING

JOINTS INTEGRAL

RAILS SPALLS AND HAIRLINE CRACKS @ 6' SPACING,

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ALONG ABUTMENTS AND ON SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT CAP ON PILES

CAPS ABUTMENT 1 AND 2, HORIZONTAL CRACK WITH EFFLORESCENCE

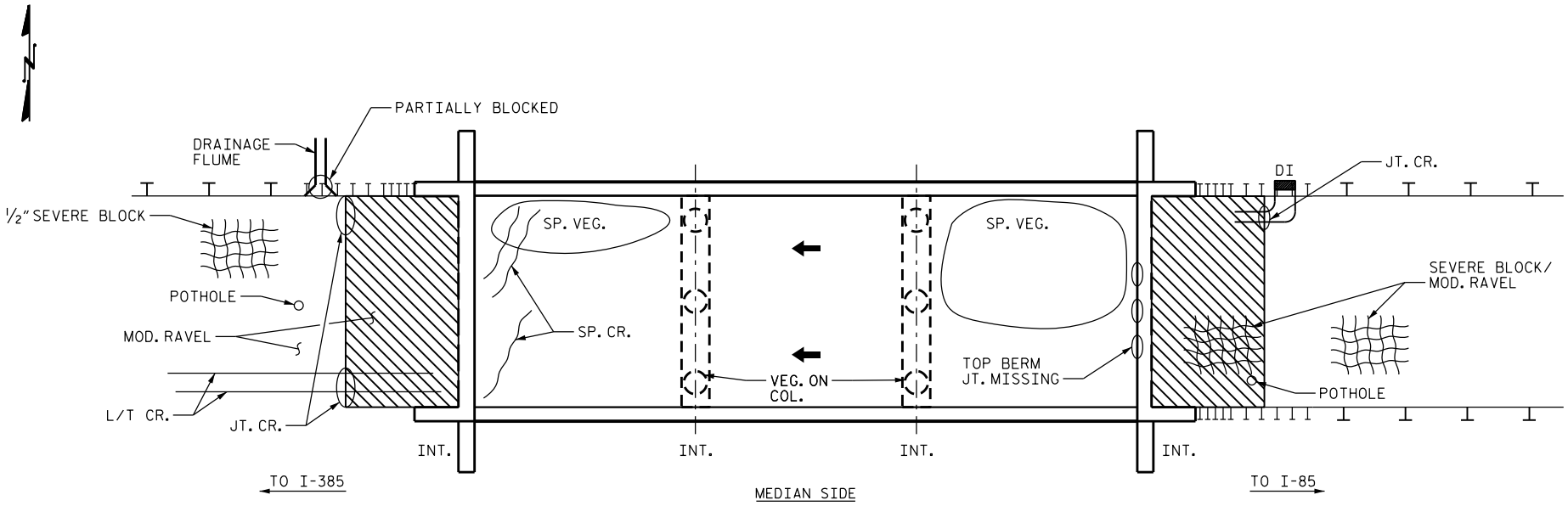
COLUMNS VEGETATION, PATCHES AT TOP

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION 1.5:1 SLOPES HEAVY VEGETATION AND CRACKS ALONG BERM

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-308 ROAD OVER I-185 SB FACILITY UNDER FUTURE RAILROAD DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL/SEVERE BLOCK

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED WITH CRACKS LIGHT SETTLEMENT

APPROACH SLAB MODERATE RAVEL/SEVERE BLOCK

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE (6 AASHTO GIRDERS/SPAN) CONCRETE CAPS ON CONCRETE PILES

DECK MEDIUM CRACKS

JOINTS INTEGRAL

RAILS MEDIUM CRACKS AT 6' SPA.

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION HEAVY ALONG ABUTMENTS AND SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT CRACKS WITH EFFLORESCENCE, GRAFFITI ON WINGWALLS

CAPS LOTS OF PATCHES ON BENT CAPS

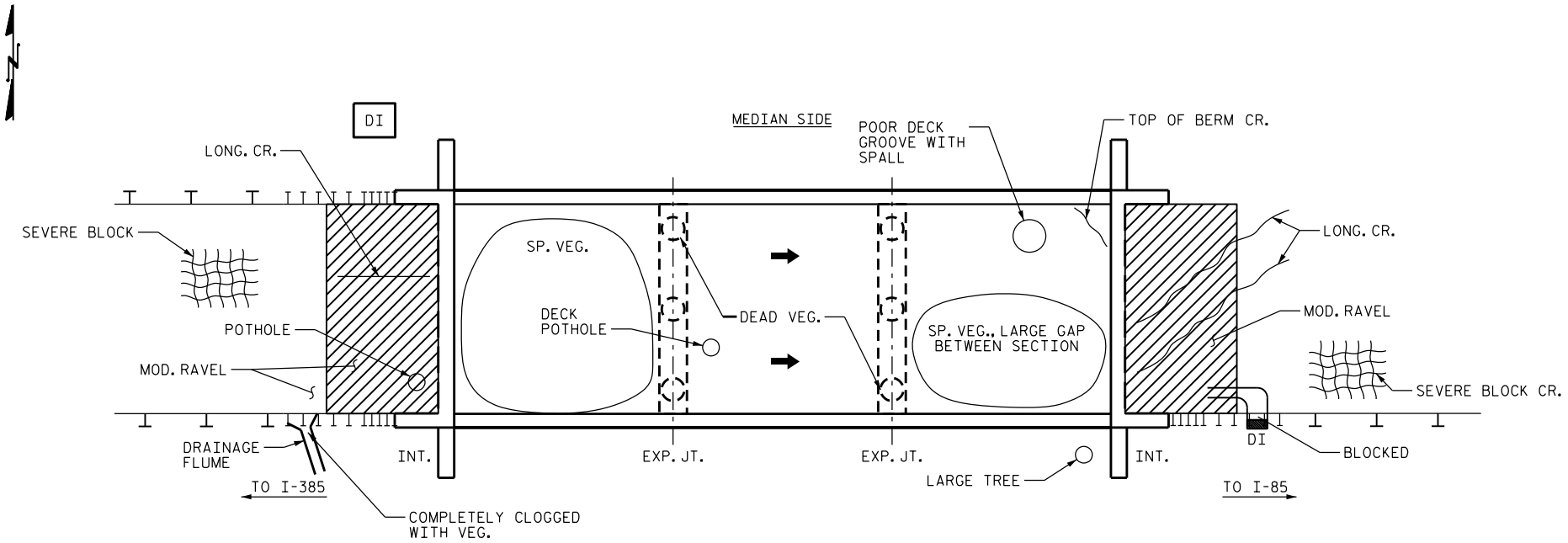
COLUMNS VEGETATION

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION 1.5 : 1 SLOPES CRACKS WITH 1" SETTLEMENT, HEAVY VEGETATION

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-109 ROAD OVER I-185 NB FACILITY UNDER FLORA LOUISE DR. DATE MARCH 2024



CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, SEVERE BLOCK

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED 2020

APPROACH SLAB MODERATE/SEVERE RAVEL LONGITUDINAL CRACKS

DRAINAGE COMPLETELY BLOCKED WITH VEG.

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK HORIZONTAL CRACKS AND WEARING DEBRIS IN JOINT SHOULDER

JOINTS INTEGRAL EXPANSION JOINT AT BENT, ADHESION LOSS

RAILS MEDIUM CRACKS AT 6' TO 8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION HEAVY ALONG SLOPE PROTECTION AND OVERHANGS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT HORIZONTAL CRACKS IN BACKWALL BELOW GIRDERS WITH EFFLORESCENCE, WATER LEAKAGE EVIDENT

CAPS BENT STEP CRACK WITH EFFLORESCENCE

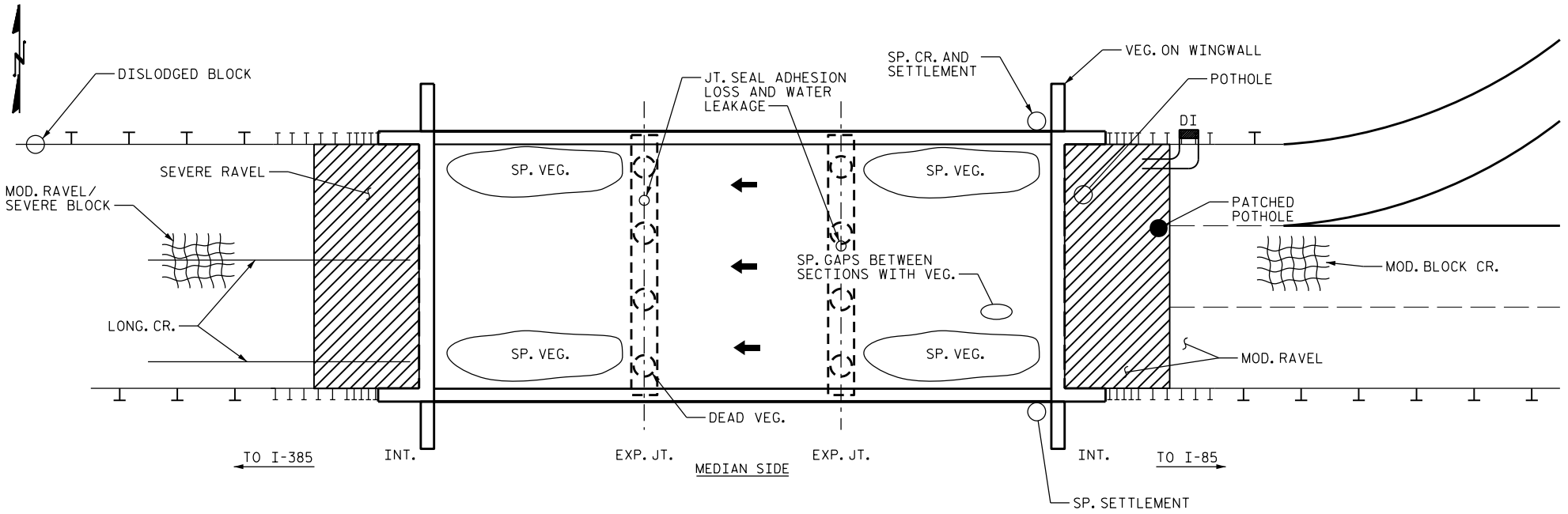
COLUMNS DEAD VEGETATION

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION HEAVY VEGETATION AND CRACKS ON TOP OF BERM

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-309 ROAD OVER I-185 SB FACILITY UNDER FLORA LOUISE RD. DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, LONG. CR. AND SEVERE BLOCK

GUARDRAIL DISLODGED BLOCK

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED 2020

APPROACH SLAB MODERATE/SEVERE RAVEL. MOD. BLOCK AND POTHOLES

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 8 BULB TEE MAIN SPAN, 8 AASHTO GIRDERS/SPAN

DECK MEDIUM TRANSVERSE CRACKS AND ABRASION

JOINTS EXPANSION JOINTS AT BENTS MINOR DEBRIS IN SHOULDER ADHESION LOSS

RAILS MEDIUM CRACKS AT 6' TO 8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION HEAVY ALONG SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT HORIZONTAL CRACKS IN BACKWALL BELOW GIRDERS WITH EFFLORESCENCE

CAPS WATER LEAKAGE EVIDENT, GRIFFITI

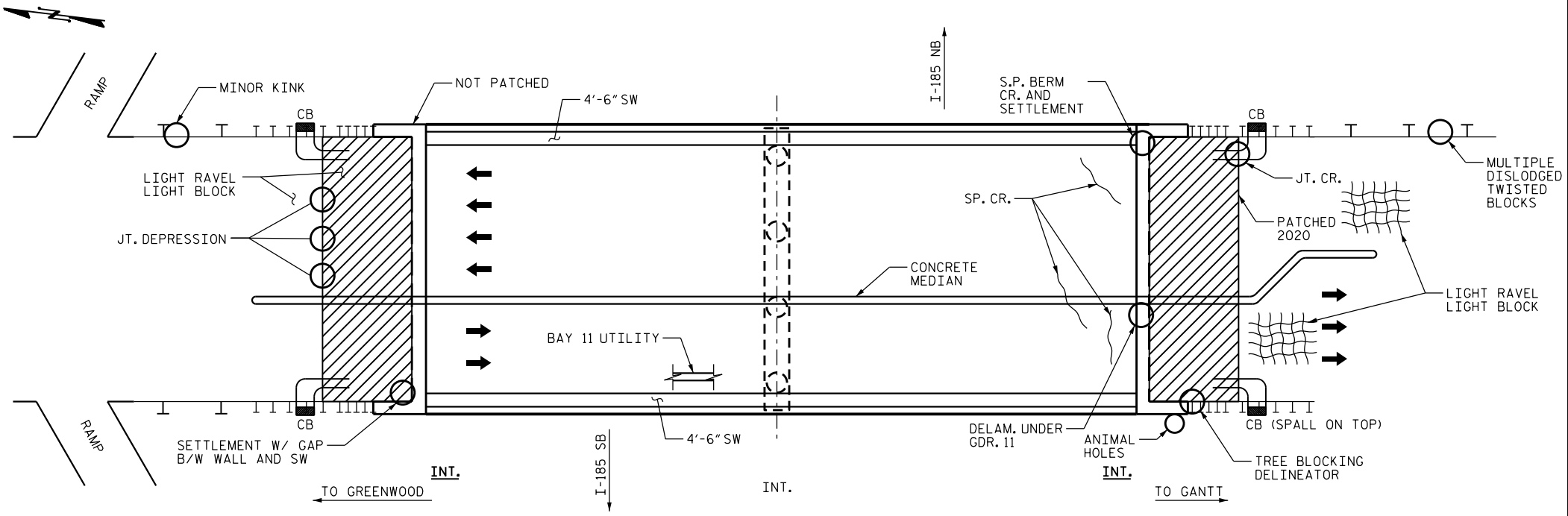
COLUMNS GRIFFITI

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION HEAVY VEG. AND CR. 1" SETTLEMENT ON TOP OF BERM

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 25-001 ROAD OVER US-25 FACILITY UNDER I-85 DATE MARCH 2024



MSE WALL "ABUTMENTS" TYPE

CONDITION SURVEY

APPROACHES

SIGNS DELINEATORS - GOOD, (1) - BLOCKED

PAVEMENT GOOD

GUARDRAIL MINOR KINK/DISLODGED BLOCKS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE KINK

JOINT IN PAVEMENT PATCHED 2020 DEPRESSIONS THROUGHOUT

APPROACH SLAB LIGHT RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS POOR

SUPERSTRUCTURE

BRIDGE TYPE 12 AASHTO BULB TEES/SPANS

DECK MODERATE CRACKS AND WEARING SEDIMENT BUILDUP IN SOUTHWEST CORNER

JOINTS INTEGRAL

RAILS HORIZONTAL CRACKING AT 6' TO 8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS MINOR EXPOSED REBAR SPAN 1, GIRDER 5 AND SPAN 2

SITE

VEGETATION VINES AND VEGETATION ON SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS CRACKS WITH EFFLORESCENCE IN WINGWALLS HORIZONTAL CRACKS BETWEEN POURS IN BACKWALL

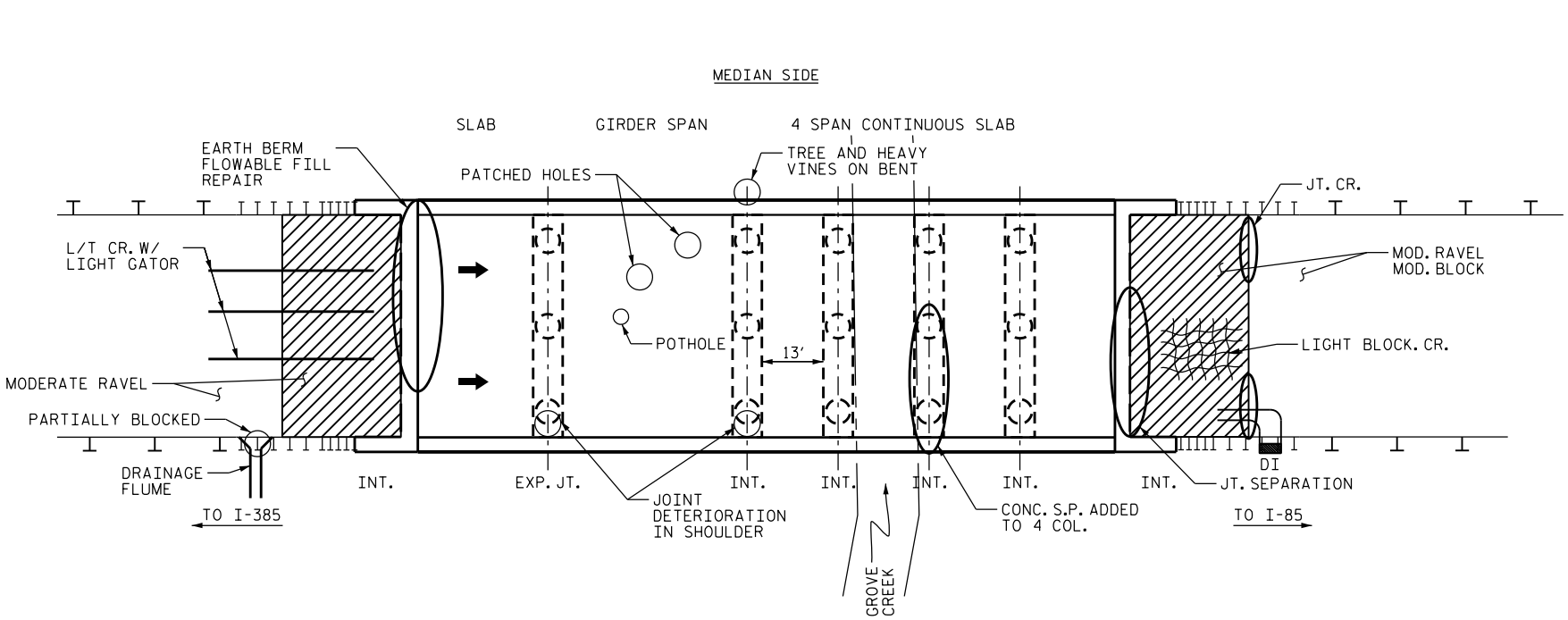
COLUMNS 5 COLUMNS

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION CRACKING AND SETTLEMENT VEGETATION BETWEEN SEGMENTS AND IN CRACKS

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-110 ROAD OVER I-185 NB FACILITY UNDER GROVE CREEK TRIBUTARY DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT LONGITUDINAL AND GATOR CRACKING MODERATE RAVEL AND BLOCK CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS DAMAGED AT BOTH ENDS

DAMAGE GOOD

JOINT IN PAVEMENT MODERATE SEPARATION PREVIOUSLY PATCHED

APPROACH SLAB LONGITUDINAL AND LIGHT GATOR CRACKING MODERATE RAVEL/BLOCK CRACKING

DRAINAGE PARTIALLY CLOGGED, PARTIALLY BLOCKED

PAVEMENT MARKINGS MOSTLY GOOD

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO SLAB AND GIRDER 6 SPANS

DECK MINOR HONEYCOMBING AND CRACKS IN SOFFIT MEDIUM CRACKS AND WEAR

JOINTS LOSS OF ADHESION DETERIORATED IN SHOULDER

RAILS MEDIUM CRACKS AT 10' SPACING

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION HEAVY AT BENTS AND COLUMNS AND BOTTOM OF SLAB

SCOUR / BANK EROSION RUTTING ONABUTMENT FILL SLOPES

SLOPE EROSION / UNDERMINING EROSION AT SOUTH BANK, EROSION CONTROL DEVICE CN. BANK FLOWABLE FILL ADDED

SUBSTRUCTURE

	Y	N
INTEGRAL END	☐	☒

SEATS GOOD

ABUTMENT GOOD

CAPS VEGETATION ON CAPS MINOR WATER LEAKAGE ON BENT CAPS

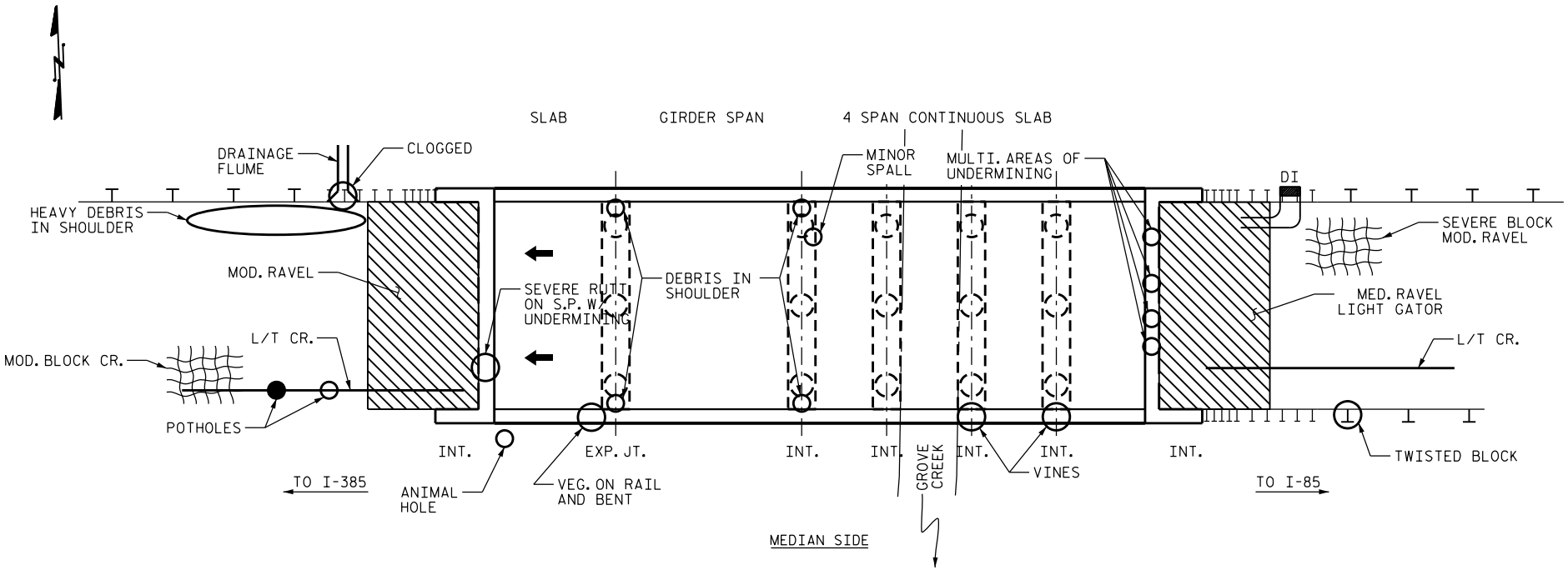
COLUMNS PILE BENTS HEAVY VEGETATION AND CONCRETE PATCHES THROUGHOUT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION RUTTING IN EARTH PROTECTION

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-310 ROAD OVER I-185 SB FACILITY UNDER GROVE CREEK TRIBUTARY DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, MODERATE/SEVERE BLOCK LONGITUDINAL CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT GOOD

APPROACH SLAB MODERATE TO SEVERE RAVEL LIGHT GATOR

DRAINAGE CLOGGED

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE SLAB AND 5 GIRDERS

DECK CRACKING IN SOFFIT HORIZONTAL CRACKS AND WEAR

JOINTS DEBRIS AND ADHESION LOSS

RAILS MEDIUM CRACKS 5'-6' SPACING VEGETATION

BEARINGS GOOD

GIRDERS PATCHES IN BOTTOM GLANGES

SITE

VEGETATION ALONG ABUTMENTS, BENTS, COLUMNS, DECK SOFFIT AND RAILS

SCOUR / BANK EROSION RUTTING AND VERTICAL BANKS

SLOPE EROSION / UNDERMINING ABUTMENT FILL SLOPES

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT WATER INFILTRATING

CAPS HEAVY VEGETATION WATER INFILTRATING

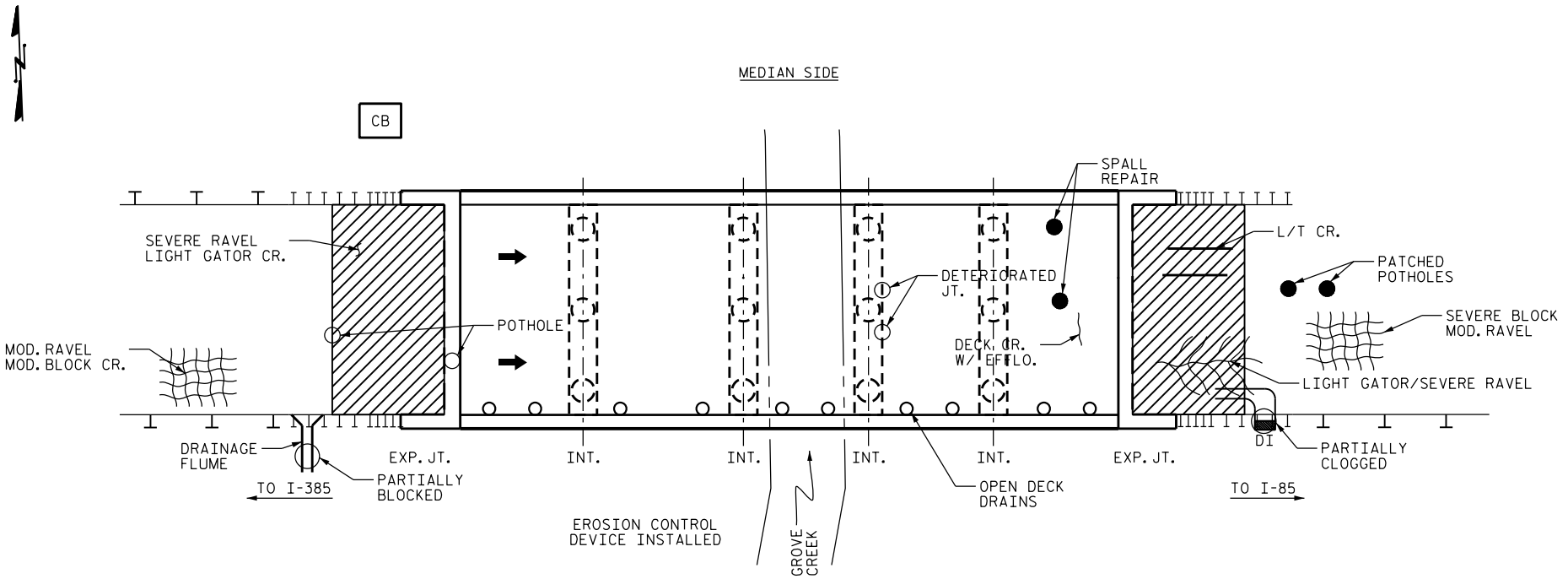
COLUMNS PILE BENTS HEAVY VEGETATION

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION RUTTING IN EARTH SLOPES

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-111 ROAD OVER I-185 NB FACILITY UNDER GROVE CREEK DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE TO SEVERE RAVEL SEVERE BLOCK

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE POST

JOINT IN PAVEMENT PATCHED SPALL

APPROACH SLAB SEVERE RAVEL LIGHT GATOR CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE SLAB (2-3 SPAN CONTINUOUS)

DECK CRACKING IN SOFFIT WITH EFFLORESCENCE CRACKING AND WEARING

JOINTS DETERIORATED AT BENTS

RAILS MEDIUM CRACKING

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION MODERATE ENDS OF BENTS ON TOP

SCOUR / BANK EROSION EROSION CONTROL DEVICE INSTALLED 2023

SLOPE EROSION / UNDERMINING RUTTING ALONG ABUTMENT FILL SLOPES

SUBSTRUCTURE

INTEGRAL END Y ☐ N ☐

SEATS GOOD

ABUTMENT CRACK WITH EFFLORESCENCE

CAPS GOOD

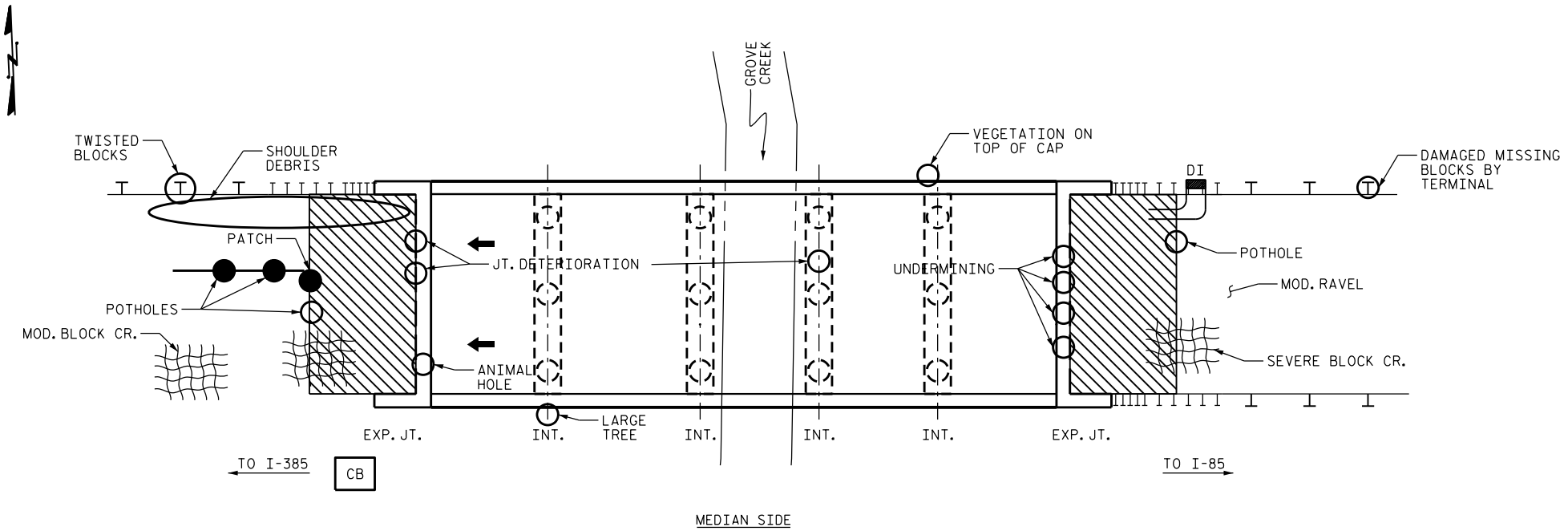
COLUMNS SPALL AT BENT 4 COLUMN 2
SPALL AT BENT 5 COLUMN 7
PATCHES THROUGHOUT SOUTH FACE

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION GOOD

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-311 ROAD OVER I-185 SB FACILITY UNDER GROVE CREEK DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL
MODERATE TO SEVERE BLOCK CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE DAMAGED NEAR TERMINAL

JOINT IN PAVEMENT PATCHED AND SETTLEMENT

APPROACH SLAB LIGHT BLOCK/MODERATE RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE SLAB (2-3 SPAN CONTINUOUS)

DECK MINOR HORIZONTAL CRACKING
CRACKS IN SOFFIT WITH EFFLORESCENCE

JOINTS DETERIORATED MAINLY IN SHOULDERS

RAILS MEDIUM CRACKING

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION MODERATE AT BENTS, COLUMNS AND DECK SOFFIT

SCOUR / BANK EROSION SCOUR ALONG STREAMBANK BOTH SIDES, LINED WITH RIP RAP

SLOPE EROSION / UNDERMINING RUTTING ON ABUTMENT FILL SLOPES

SUBSTRUCTURE

INTEGRAL END Y ☐ N ☐

SEATS GOOD

ABUTMENT WATER INFILTRATION

CAPS WATER INFILTRATION AT CAP ENDS

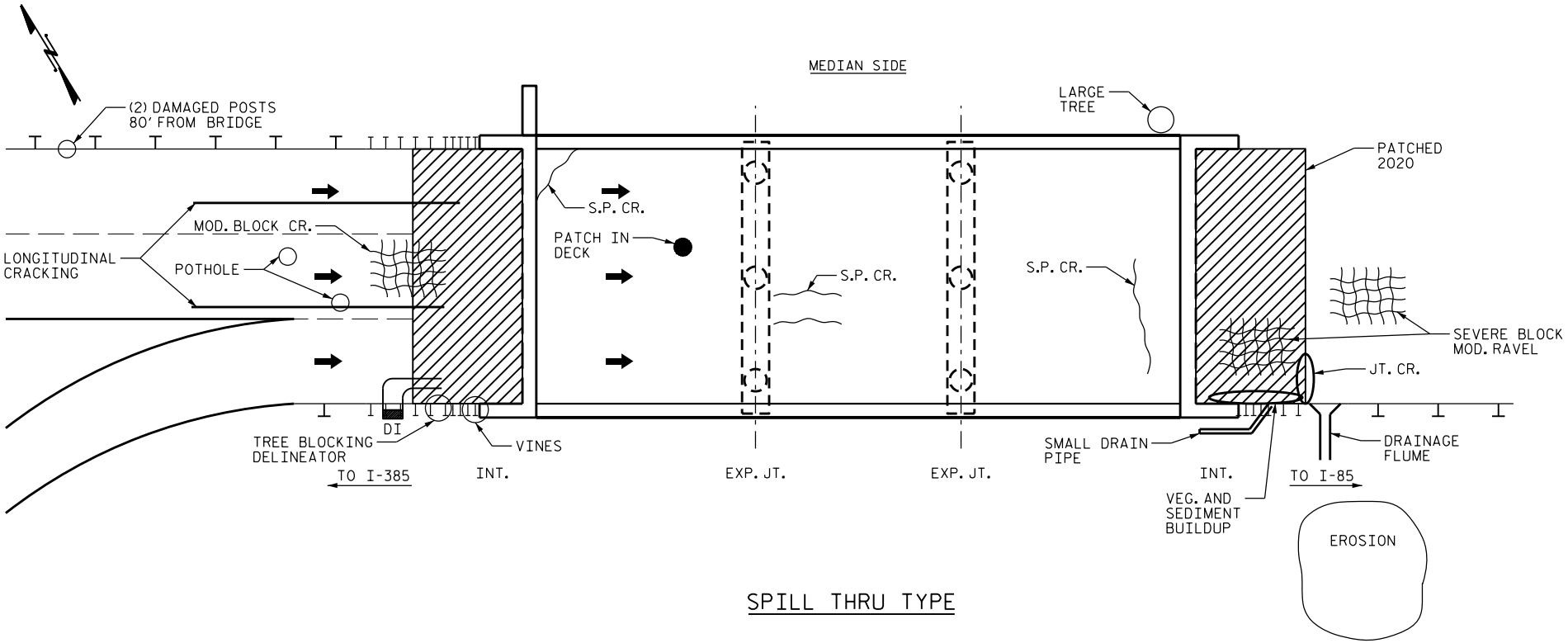
COLUMNS PILE BENTS
VEGETATION ON COLUMNS

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION GOOD

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-112 ROAD OVER I-185 NB FACILITY UNDER SC 20 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, MODERATE TO SEVERE BLOCK CRACKING

GUARDRAIL (2) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT CRACKS FORMING IN SHOULDER PATCHED 2020

APPROACH SLAB MODERATE RAVEL AND LONGITUDINAL CRACKING, MODERATE AND SEVERE BLOCK CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 8 AASHTO GIRDERS/SPAN

DECK MINOR HORIZONTAL CRACKING

JOINTS INTEGRAL

RAILS HORIZONTAL CRACKING AT 10' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM EFFLORESCENCE IN BENT DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ON SIDES OF SLOPE PROTECTION, ALONG ABUTMENTS AND IN JOINT

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS CRACKING ADJACENT TO BOTTOM FLANGES

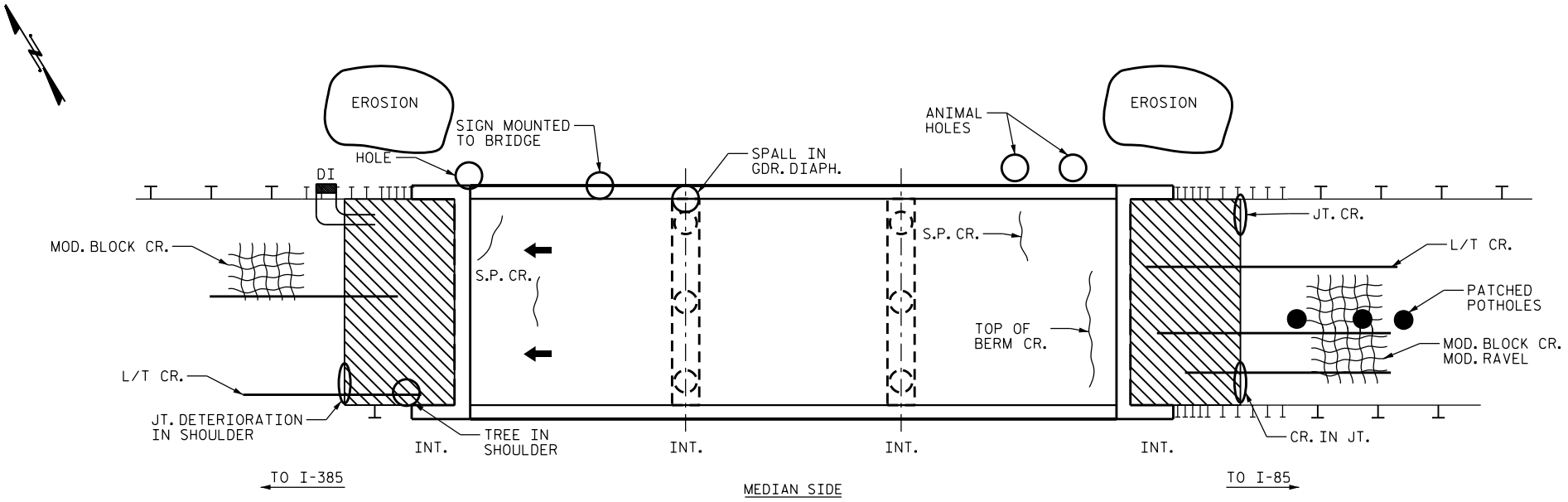
COLUMNS GRAFFITI PAINTED OVER

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION MEDIUM CRACKING AT TOP OF BERM, GRAFFITI, VEGETATION GROWING BETWEEN SEGMENTS

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-312 ROAD OVER I-185 SB FACILITY UNDER SC 20 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE BLOCK CRACKING AND MODERATE RAVEL

GUARDRAIL (2) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED 2020, SETTLEMENT

APPROACH SLAB MODERATE RAVEL AND LONGITUDINAL CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK MINOR HORIZONTAL CRACKING

JOINTS INTEGRAL

RAILS MEDIUM CRACKS AT 10' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGMS

GIRDERS MINOR GRAFFITI

SITE

VEGETATION ALONG SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS MINOR EFFLORESCENCE AND CRACKS IN BACKWALL BELOW GIRDERS

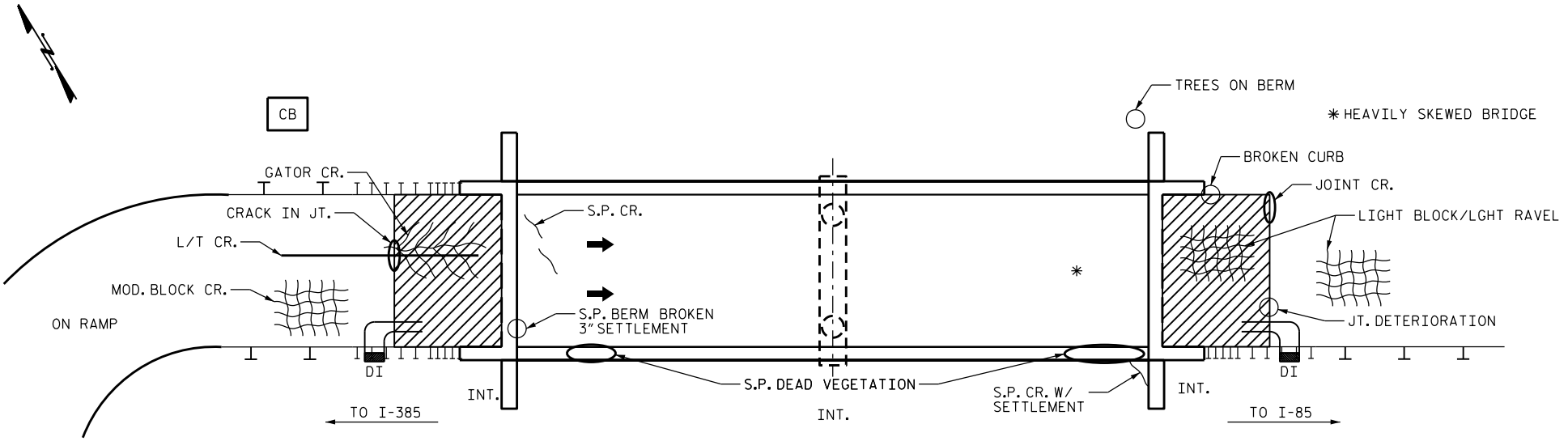
COLUMNS (3) PER BENT, PAINTED OVER GRAFFITI

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION CRACK AT TOP OF BERM AND THROUGHOUT, UNDERMINING AT ANIMAL HOLE

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-1271 ROAD OVER RAMP ON I-185 (OFF SC 20) FACILITY UNDER NS & CSX RR DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, LONG. CR. AND SEVERE BLOCK

GUARDRAIL GOOD

ANCHORAGE NE GUARDRAIL ATTACHMENT MISSING (1) BOLT

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, CRACKS IN JOINT, SLIGHT BUMP

APPROACH SLAB MODERATE RAVEL.

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 4 AASHTO BULB TEES/SPAN

DECK DEAD VEGETATION AT ENDS

JOINTS INTEGRAL

RAILS HORIZONTAL CRACKS AT 8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ALONG ABUTMENT ON SLOPE PROTECTION, BERM, AND OVERHANGS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS HORIZONTAL CRACKS AT CONSTRUCTION JOINT IN BACKWALL

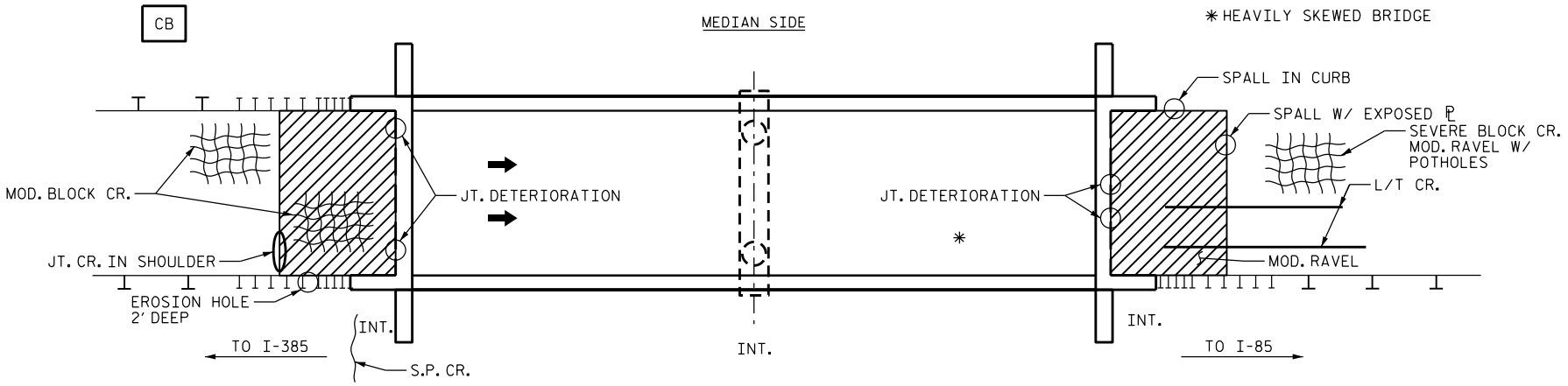
COLUMNS GRIFFITI, (2) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION 1.5:1 SLOPES, TREES ON BERM, HEAVY VEGETATION

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-113 ROAD OVER I-185 NB FACILITY UNDER NS & CSX RR DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, MEDIUM BLOCK CRACKING

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED WITH SPALLS AND CRACKING, SETTLEMENT

APPROACH SLAB MODERATE RAVEL/BLOCK AND GATOR CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 BULB TEES/SPAN

DECK HORIZONTAL CRACKING AND WEAR

JOINTS INTEGRAL

RAILS MEDIUM CRACKING AT 6'-8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION HEAVY ON TOP OF BERMS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS HORIZONTAL CRACKS AT CONSTRUCTION JOINT IN BACKWALL

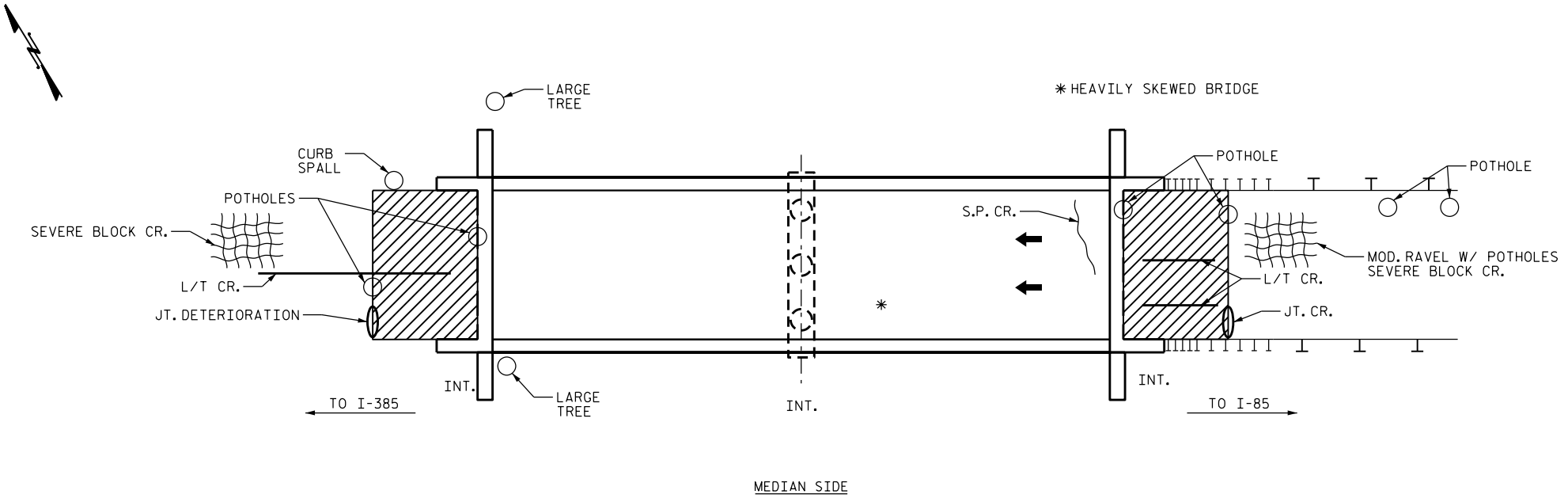
COLUMNS GRAFFITI, (3) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION 1.5:1 SLOPES, MINOR GRAFFITI, CRACKING ALONG BERM

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-313 ROAD OVER I-185 SB FACILITY UNDER NS & CSX RR DATE MARCH 2024



MEDIAN SIDE

SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, SEVERE BLOCK

GUARDRAIL (2) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, SPALLS, CRACKS AND SETTLEMENT

APPROACH SLAB MODERATE RAVEL, LONGITUDINAL CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO BULB TEES/SPAN

DECK HORIZONTAL CRACKING AND WEARING

JOINTS INTEGRAL

RAILS MEDIUM CRACKING AT 8' SPACING WITH EFFLORESCENCE

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION HEAVY TOP OF BERM

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS BENT 1 PATCH REPAIR, GRAFFITI, CRACK BELOW GIRDERS IN ABUTMENT

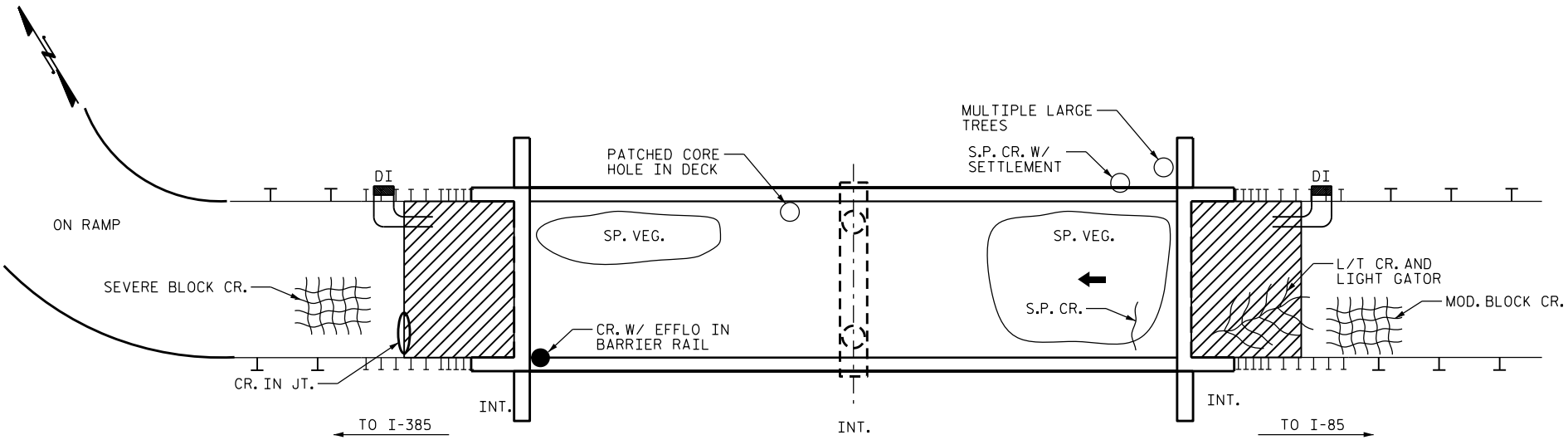
COLUMNS GRIFFITI, (3) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION 1.5:1 SLOPES, HEAVY VEGETATION AND CRACKING ON TOP OF BERM, GRIFFITI

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-1272 ROAD OVER RAMP ON I-185 (OFF SC 20) FACILITY UNDER NS & CSX RR DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, MODERATE TO SEVERE BLOCK

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED CRACKS WITH VEGETATION, DEPRESSIONS THROUGHOUT

APPROACH SLAB MODERATE RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 4 BULB TEES/SPAN

DECK GOOD

JOINTS INTEGRAL

RAILS MEDIUM CRACKS AT 8' SPACING, HORIZONTAL BACKSIDE

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS GRAFFITI, RACKS BELOW GIRDERS IN BACKWALL

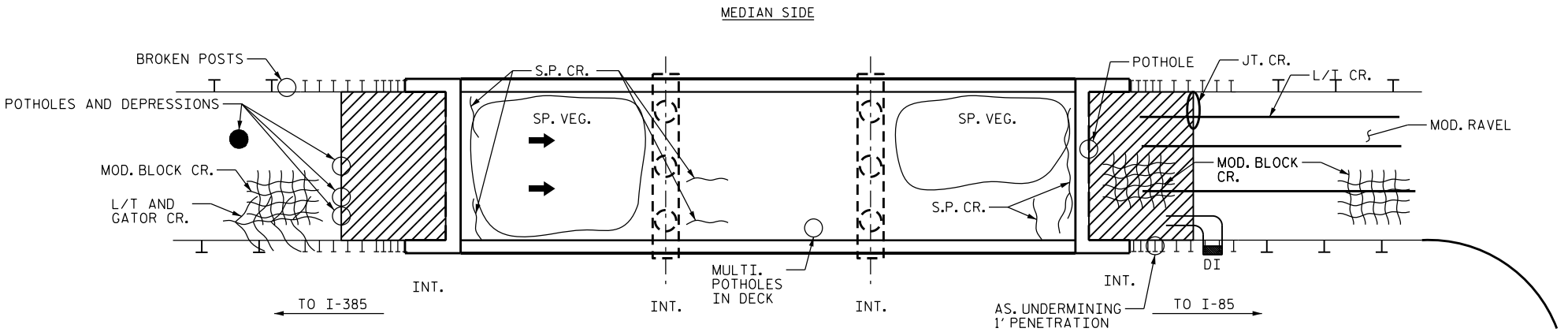
COLUMNS MODERATE VEGETATION, (2) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION 1.5:1 SLOPES, HEAVY VEGETATION AND CRACKING TOP OF BERM, SLOPE PROTECTION SETTLEMENT

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-114 / BUILT 1999 ROAD OVER I-185 NB FACILITY UNDER SC 153 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, BLOCK CRACKING, LONGITUDINAL CRACKING

GUARDRAIL (2) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE DAMAGED AT BROKEN POST

JOINT IN PAVEMENT PATCHED, POTHOLES, SETTLEMENT AND CRACKING

APPROACH SLAB MODERATE RAVEL/LIGHT BLOCK, LONGITUDINAL CRACKING, UNDERMINING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 7 AASHTO GIRDERS/SPAN

DECK POOR GROOVING THROUGHOUT
MINOR HORIZONTAL CRACKING AND WEAR

JOINTS INTEGRAL

RAILS MEDIUM CRACKS @ 6' TO 8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION HEAVY ALONG SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS HORIZONTAL CRACKS WITH EFFLORESCENCE IN CONSTRUCTION JOINT IN BACKWALL

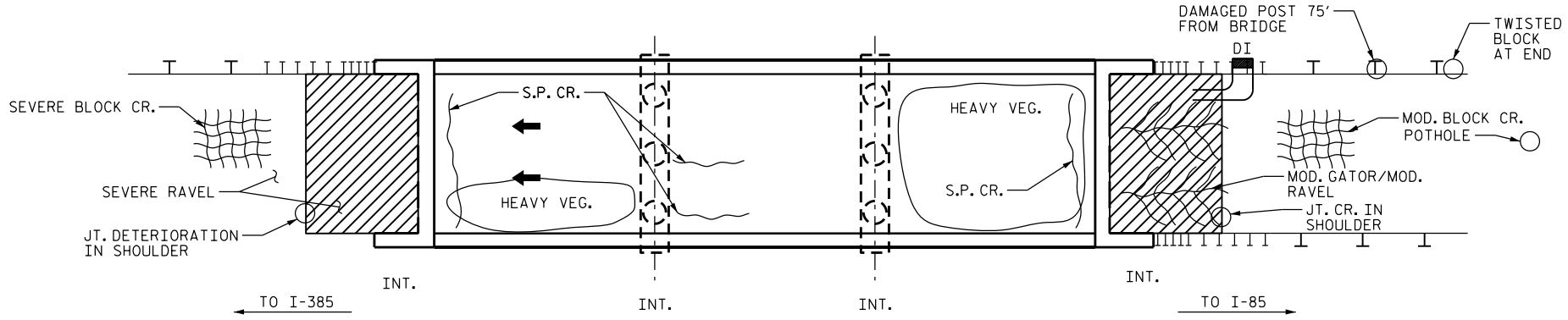
COLUMNS (3) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION CRACKING ON TOP OF BERM

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-314 ROAD OVER I-185 SB FACILITY UNDER SC 153 DATE MARCH 2024



MEDIAN SIDE

SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE TO SEVERE RAVEL
MODERATE TO SEVERE BLOCK CRACKING

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE 75' FROM BRIDGE

JOINT IN PAVEMENT PATCHED WITH CRACKING
1/2" SETTLEMENT

APPROACH SLAB SEVERE RAVEL
SEVERE BLOCK CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 6 AASHTO GIRDERS/SPAN

DECK CRACKS AND WEARING

JOINTS INTEGRAL

RAILS MEDIUM CRACKING WITH EFFLORESCENCE AT 6'-8' SPACING

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ALONG SLOPE PROTECTION AND OVERHANGS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS HORIZONTAL CRACKS BETWEEN CONSTRUCTION JOINT IN BACKWALL

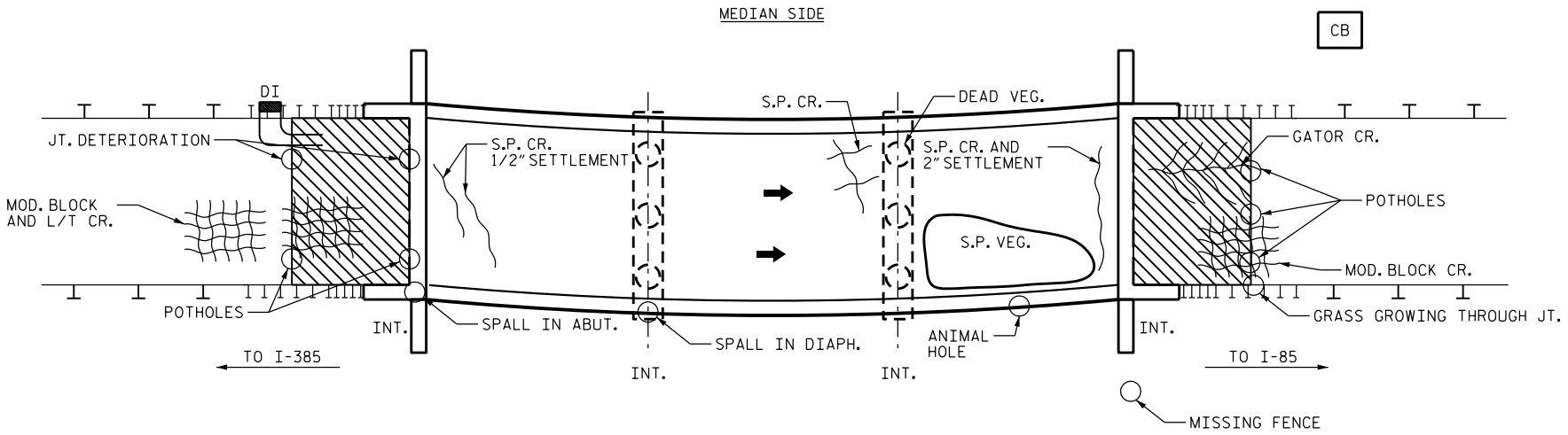
COLUMNS VEGETATION AT BOTTOM

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION CRACKING ALONG BERM, HEAVY VEGETATION, COATING APPLIED TO GRAFFITI, 1" SETTLEMENT TOP OF BERM

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-115 ROAD OVER I-185 NB FACILITY UNDER STABLES RD. DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL, MODERATE BLOCK AND LONGITUDINAL CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, POTHOLES THROUGHOUT

APPROACH SLAB MODERATE RAVEL, LONGITUDINAL CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO GIRDERS/SPAN

DECK WEARING

JOINTS INTEGRAL

RAILS PEETING COATING, MEDIUM CRACKING AT 6' SPACING, EFFLORESCENCE ON BACKSIDE

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GOOD

SITE

VEGETATION ALONG SLOPE PROTECTION AND ON SIDES

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS SMOKE STAIN FROM FIRE HORIZONTAL CRACKS IN BACKWALL BELOW GIRDERS

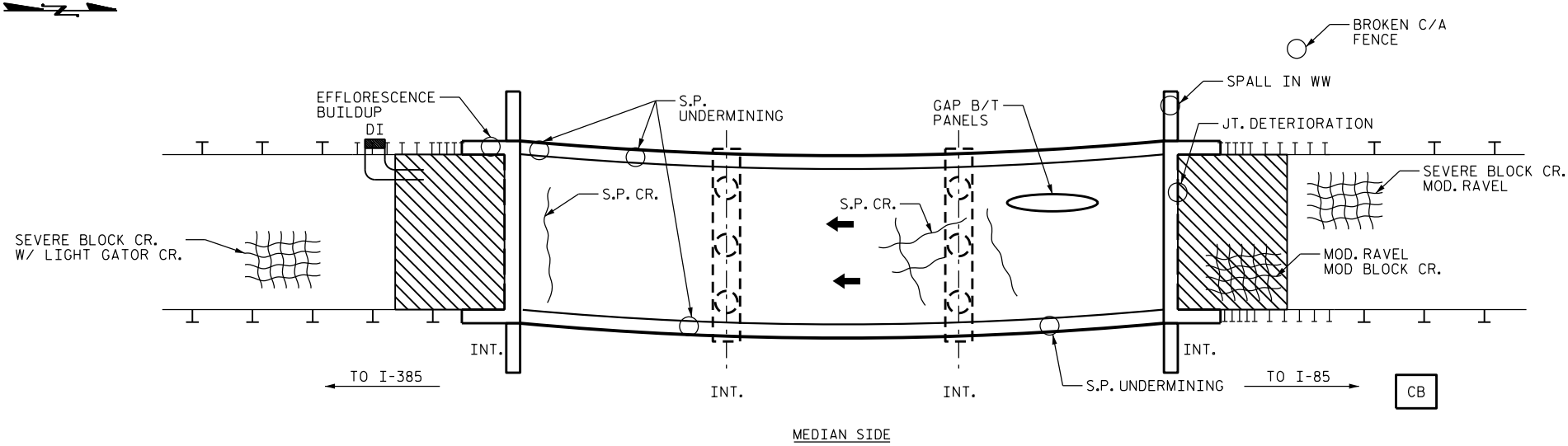
COLUMNS GRAFFITI, (3) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION COVERED GRAFFITI, SLOPE PROTECTION CRACKING WITH SETTLEMENT, LARGE TREES BETWEEN BRIDGE ON BOTH SIDES, VEGETATION ON SIDES, UNDERMINING

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-315 ROAD OVER I-185 SB FACILITY UNDER STABLES RD. DATE MARCH 2024



MEDIAN SIDE

SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT SEVERE RAVEL, MODERATE TO SEVERE BLOCK, LIGHT GATOR CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, DETERIORATED, DEPRESSIONS THROUGHOUT

APPROACH SLAB SEVERE RAVEL, MODERATE BLOCK AND LIGHT GATOR CRACKING

DRAINAGE GOOD

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 5 AASHTO GIRDERS/SPAN

DECK WEARING WITH POOR GROOVING

JOINTS INTEGRAL

RAILS HEAVY EFFLORESCENCE, PEELING COATING BACKSIDE HORIZONTAL CRACKING 6'-8' SPACING,

BEARINGS FULL DEPTH CONCRETE DIAPHRAGM

GIRDERS GRAFFITI ON BENT 1 END

SITE

VEGETATION SIGNIFICANT ALONG SLOPE PROTECTION SIDES

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS MINOR CRACKING WIHT EFFLORESCENCE, 1"SETTLEMENT IN TOP OF BERM

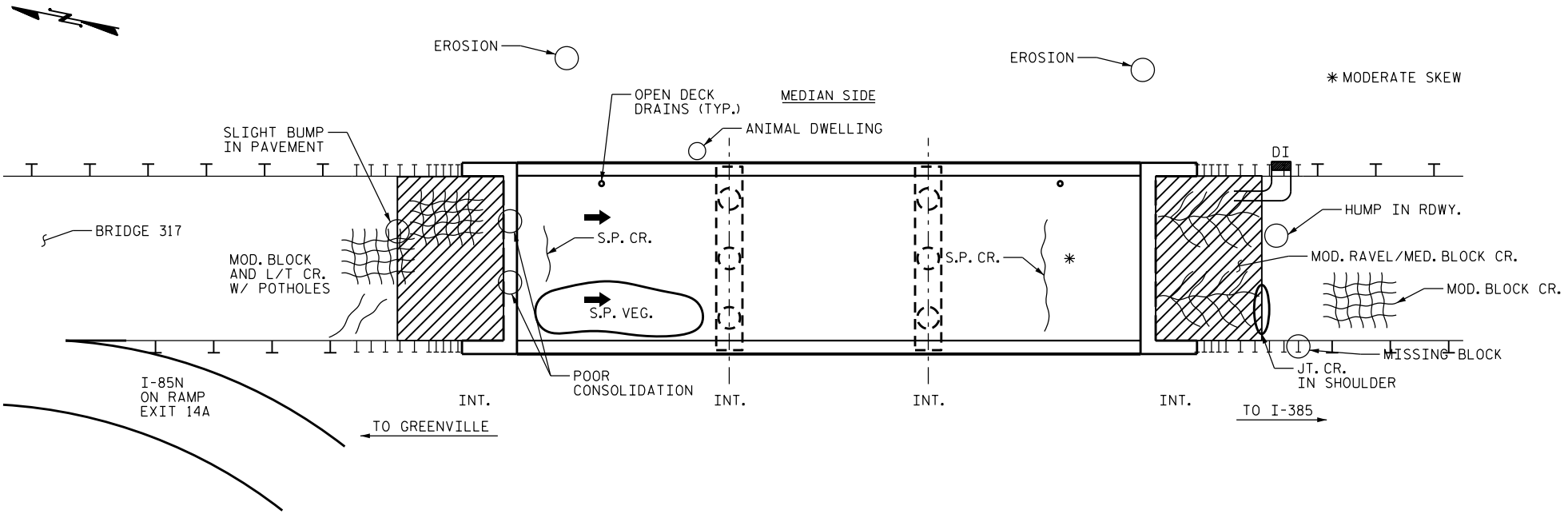
COLUMNS PAINTED OVER GRAFFITI

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION CRACKING AND VEGETATION BETWEEN JOINT AND TOP OF BERM, GAPS WITH VEGETATION, UNDERMINING ALONG EDGES, PAINTED OVER GRAFFITI, TREE GROWING ON SLOPE PROTECTION

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-316 ROAD OVER I-185 SB FACILITY UNDER I-85 NB RAMP (LINE 2) DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE TO SEVERE RAVEL, MODERATE BLOCK, LONGITUDINAL AND GATOR CRACKING

GUARDRAIL (4) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, JOINT CRACKING THROUGHOUT

APPROACH SLAB MODERATE TO SEVERE RAVEL LIGHT GATOR, POTHOLE

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 7 CONTINUOUS STEEL PLATE GIRDERS

DECK CRACKS WITH EFFLORESCENCE AND OVERHANGS

JOINTS INTEGRAL

RAILS PEELING COATING, HORIZONTAL CRACKS AT 5'-6' SPACING

BEARINGS BENT ANCHOR

GIRDERS GOOD

SITE

VEGETATION MODERATE

SCOUR / BANK EROSION EROSION OF SLOPE

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOD

ABUTMENT GOOD

CAPS HORIZONTAL CRACK IN ABUTMENT AND JOINT BELOW GIRDERS, VERTICAL CRACK IN BACKWALL

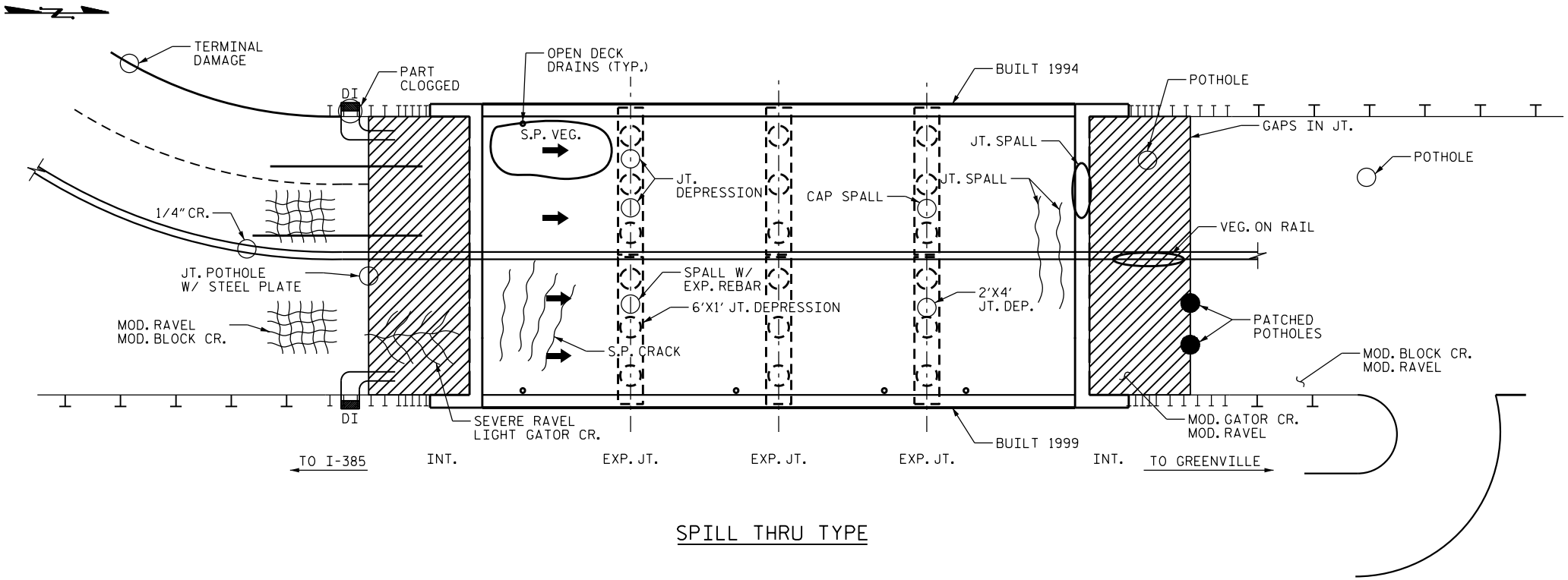
COLUMNS PAINTED OVER GRAFFITI

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION MODERATE VINE AND TREE UNDERMINING AT ANIMAL DWELLING ALONG EDGES, CRACKS THROUGHOUT

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-117 ROAD OVER I-185 NB FACILITY UNDER I-85 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE RAVEL AND MODERATE BLOCK CRACKING

GUARDRAIL GOOD

ANCHORAGE GOOD

TERMINUS DAMAGE

DAMAGE GOOD

JOINT IN PAVEMENT FULL DEPTH ADHESION LOSS PATCHED FAILED

APPROACH SLAB MODERATE RAVEL, MODERATE BLOCK CRACKING, POTHOLES

DRAINAGE JOINTS LEAKING ONTO BENTS

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 5 STEEL PLATE GIRDERS, SIMPLE SPAN CONTINUOUS SPANS 2-3

DECK CRACKS AND WEARING POOR GROOVING

JOINTS DEPRESSIONS WITH ADHESION LOSS

RAILS CRACKS AT 6'-8' SPACING

BEARINGS WATER INFILTRATION

GIRDERS GOOD

SITE

VEGETATION VINES ON SLOPE PROTECTION AND BENTS, COLUMNS, AND CAPS

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS WATER INFILTRATION

ABUTMENT ABUTMENT CRACKS WITH EFFLORESCENCE

CAPS LEAKING ON SEATS AND CAPS EXPOSED REBAR, CRACKS BELOW BEAMS

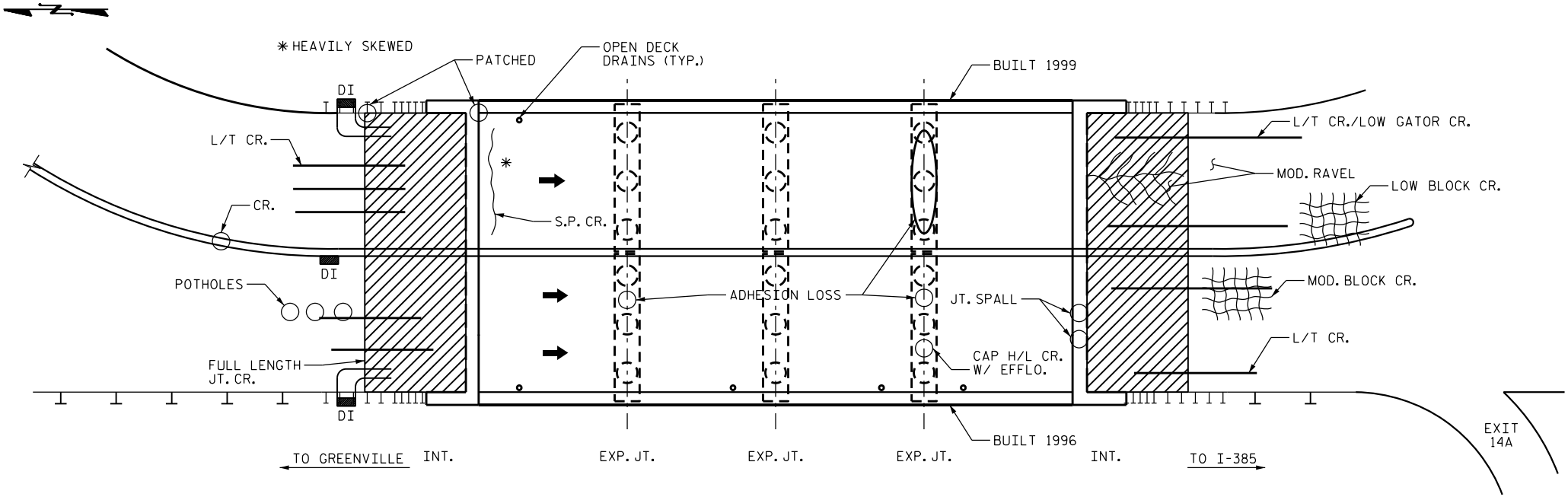
COLUMNS VEGETATION, SPALL WITH EXPOSED REBAR

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION VEGETATION BETWEEN SEGMENTS, CRACKS TOP OF BERM, DIRT AND DEBRIS ON SLOPE PROTECTION, SEALED CRACKS THROUGHOUT

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-317 ROAD OVER I-185 SB FACILITY UNDER I-85 DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT LIGHT GATOR, LONGITUDINAL CRACKING, MODERATE RAVEL

GUARDRAIL (4) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT NEWLY PATCHED SPALLING

APPROACH SLAB GATOR, MODERATE RAVEL

DRAINAGE JOINT SEALS ARE BROKEN WITH LOSS OF ADHESION

PAVEMENT MARKINGS NEW

SUPERSTRUCTURE

BRIDGE TYPE 5 STEEL PLATE GIRDERS, SIMPLE SPAN TAPERED EXTERIOR GIRDER AT END SPANS

DECK CRACKS IN DECK AND OVERHANGS

JOINTS DEBRIS IN SHOULDER, LOSS OF ADHESION, DETERIORATION

RAILS CRACK AT 5'-6' SPACINGS, BACKSIDE CRACKS WITH EFFLORESCENCE

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION VINES GROWING ON ROADWAY APPROACH AND SLOPE PROTECTION

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS WATER INFILTRATION

ABUTMENT GOOD

CAPS LEAKAGE ON CAPS, CRACKS IN BACKWALL BETWEEN BEAMS

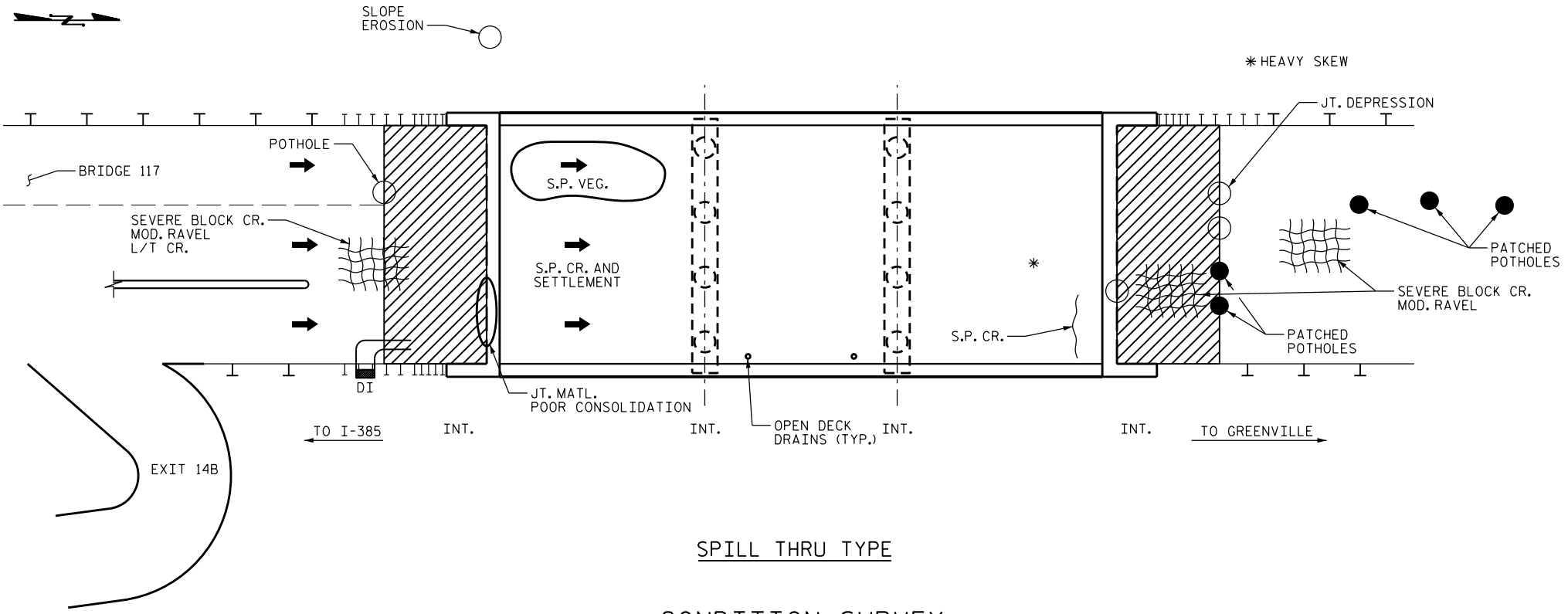
COLUMNS WATER STAINS, DEAD VINES

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION VEGETATION AND CRACKS

2024 ASSESSMENT: TOM/COX

BRIDGE NO. 185-118 ROAD OVER I-185 NB FACILITY UNDER I-85 SB RAMP (LINE 7) DATE MARCH 2024



SPILL THRU TYPE

CONDITION SURVEY

APPROACHES

SIGNS (2) DELINEATORS - GOOD

PAVEMENT MODERATE TO SEVERE BLOCK CRACKING, MODERATE RAVEL, LIGHT GATOR CRACKING

GUARDRAIL (3) CORNERS

ANCHORAGE GOOD

TERMINUS GOOD

DAMAGE GOOD

JOINT IN PAVEMENT PATCHED, POOR CONSOLIDATION, POTHOLES AND SETTLEMENT

APPROACH SLAB SEVERE BLOCK CRACKING, MODERATE RAVEL

DRAINAGE GOOD

PAVEMENT MARKINGS NEW MARKINGS

SUPERSTRUCTURE

BRIDGE TYPE 3-SPAN CONTINUOUS STEEL PLATE GIRDER, 8 GIRDERS

DECK WEARING AND CRACKS IN OVERHANG AND DECK

JOINTS INTEGRAL

RAILS CRACKS AT 6'-8' SPACING

BEARINGS GOOD

GIRDERS GOOD

SITE

VEGETATION N/A

SCOUR / BANK EROSION N/A

SLOPE EROSION / UNDERMINING N/A

SUBSTRUCTURE

	Y	N
INTEGRAL END	☒	☐

SEATS GOOD

ABUTMENT GOOD

CAPS CRACKS BETWEEN POURS IN BACKWALL

COLUMNS (4) PER BENT

FOUNDATIONS GOOD

CONCRETE SLOPE PROTECTION MODERATE VEGETATION AND CRACKS UP TO 1/4" WIDE

2024 ASSESSMENT: TOM/COX