CITY OF DETROIT

IN CO-OPERATION WITH

MICHIGAN DEPARTMENT OF TRANSPORTATION
&
FEDERAL HIGHWAY ADMINISTRATION

PLAN & DETAIL OF PROPOSED REHABILITATION OF THE SOUTH SERVICE DRIVE BRIDGE OVER THE JEFFRIES FWY.

JOB NO.: PW-7001
CONTROL SECTION NO.: 82122

INDEX OF SHEETS

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MDOT STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE ALLED FOR ON THE PLANS THEY ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARD PLAN GIVEN BELOW OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

DRIVEWAY OPENING & APPROACHES AND CONCRETE SIDEWALK	R-29-I
INTEGRAL CURB AND INTEGRAL CURB & GUTTER	R-31-F
CHAIN LINK FENCE (USING TENSION WIRE)	R-98-B
MOLDING, BEVEL, LIGHT STANDARD ANCHOR BOLT ASSEMBLY AND NAME PLATE DETAILS	B-103-E

MDOT SPECIAL DETAILS

WHERE THE FOLLOWING ITEMS ARE ALLED FOR ON THE PLANS THEY ARE TO BE CONSTRUCTED ACCORDING TO THE SPECIAL DETAIL GIVEN BELOW OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

SIDEWALK RAMP DETAILS	R-28-J
PLACEMENT OF TAMPORARY CONCRETE BARRIER	R-126-I
BRIDGE RAILING, AESTHETIC PARAPET TUPE	B-25-F

*SEE WZO-125-D FOR TEMPORARY TRAFFIC CONTROL DEVICE DETAILS.

GENERAL NOTE

The contractor must restore all MDOT ROW that has been damaged during it's use for construction, to a condition similar and equal to that existing before the damage occurred, when the project is completed.

THE WORK INCLUDED CONSISTS OF CONSTRUCTING A SHALLOW OVERLAY, PARTIAL STRUCTURAL STEEL COATING, AND REPLACEMENT OF JOINTS, SUBSTRUCTURE REPAIR, AND APPROACH WORK AND TRAFFIC MAINTENANCE.

EXCEPT WHERE OTHERWISE INDICTED ON THESE PLANS, THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARDS SPECIFICATIONS FOR CONSTRUCTION 2012 EDITION.

ALL EXPOSED CONCRETE CORNERS SHOWN SQUARE ON THE PLANS SHALL BE BELIEVE WITH ½" TRIANGULAR MOLDINGS EXCEPT AS OTHERWISE NOTED.

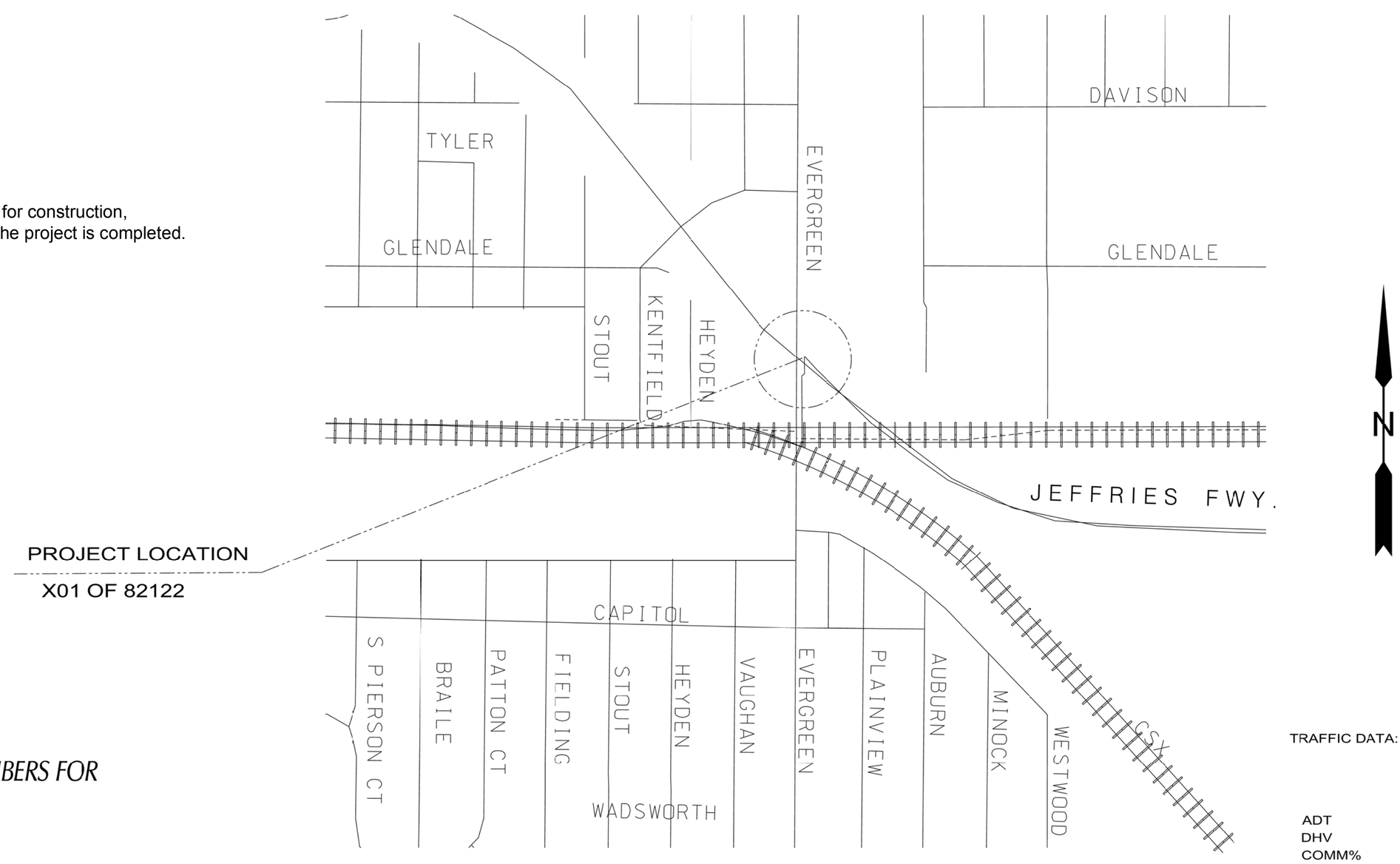
THE DESIGN OF THE STRUCTRAL MEMBERS IS BASED ON MATERIALS OF THE FOLLOWING GRADES AND STRESSES.

CONCRETE:	GRADE S2	f'c = 3,000 PSI
CONCRETE:	GRADE D	f'c = 4,000 PSI
STEEL REINFORCEMENT:		fy = 60,000 PSI

ALL DIMENSIONS ON THESE PLANS ARE IN INCHES EXCEPT AS NOTED.

THE STATIONING AS SHOWN ON THESE PLANS FOR THE INTERSECTION OF THE CENTERLINE OF BRIDGE AND ROADWAY (AND THE RAILROAD) CENTERLINE IS BELIEVING TO BE CORRECT. IT SHALL, BE CHECKED AT THE TIME OF STARTING CONSTRUCTION AND IF THE STATIONING SHOWN ON THE PLANS IS INCORRECT, IT SHALL BE REPORTED TO THE ENGINEER AND THE STRUCTURE SHALL BE STAKE OUT USING THE ACTUAL INTERSECTION OF THE CENTERLINE OF THE BRIDGE AND ROADWAY (AND THE RAILROAD) CENTERLINE AS THE CONTROL POINT.

BIDDERS WLL BE FURNISHED WITH SCANNED IMAGES OF PLAN SHEETS OF THE EXISTING STRUCTURES IF REQUESTED. [USE ON ALL PROJECTS WHERE EXISTING STRUCTURE PLANS ARE KNOWN TO EXIST] (I.U. 2-22-2006)



TRAFFIC DATA:

	YEAR 1997	YEAR 2026
ADT	-----	-----
DHV	-----	-----
COMM%	-----	-----
DESIGN SPEED		-----
POSTED SPEED		-----

THE REGULATED WASTE ACTIVITY INDENTIFICATION NUMBERS FOR THIS PROJECT ARE AS FOLLOWS: MIK950702199
CONTROL SECTION NUMBER: 82122

CONTRACT FOR STRUCTURE REHABILITATION PROJECT
SOUTH SERVICE DRIVE BRIDGE

LOCAL AUTHORITY APPROVAL
CITY OF DETROIT
CITY ENGINEERING DIVISION
DEPARTMENT OF PUBLIC WORKS

APPROVED BY _____ DATE

APPROVED BY _____ DATE

PREPARED UNDER THE SUPERVISION OF

LICENSED PROFESSIONAL ENGINEER — DATE

CITY OF DETROIT
ORGANIZATION

CITY ENGINEERING DIVISION, D.P.W.
2 WOODWARD AVE. SUITE 601 DETROIT MI 48216
ADDRESS

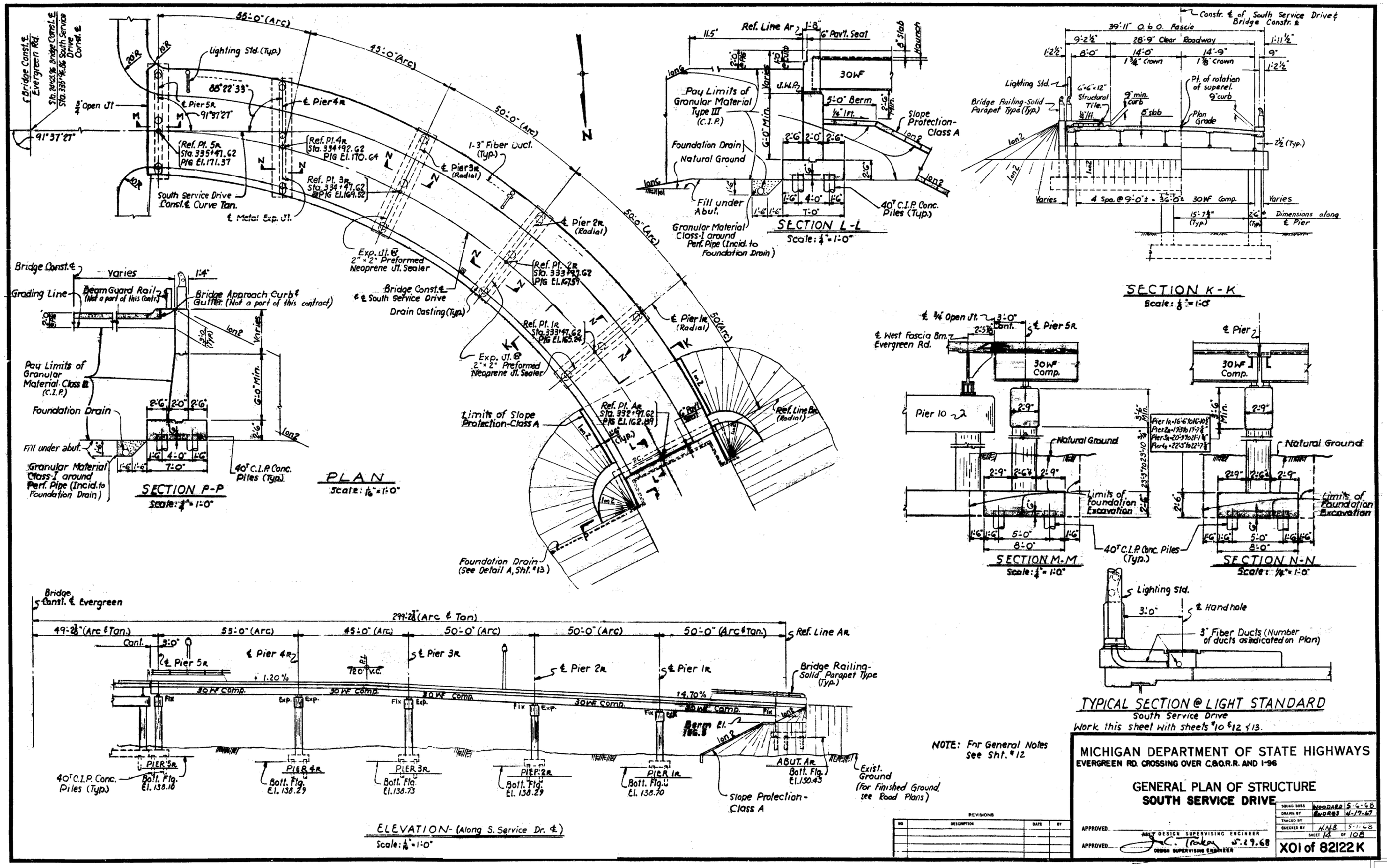
CONTROL SECTION	JOB NUMBER	FEDERAL NUBBERS PROJECT	FEDERAL NUBBERS ITEM	SHEET NO.
				01

BRO. PW-7001

DATE:
CHECKED BY:
JOB NUMBER
DATE:
CONTROL SECTION X01 OF 82122
CHECKED BY:
DATE: APRIL 26, 2019
DRAWN BY: SA
FILE NAME: South Service Drive Bridge - Title.dgn

SCALE	HORIZONTAL / VERTICAL	BOOK NO. PG. / PAVING COMPLETED	LEVEL / DATE	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

BENCH MARKS ELEV



MICHIGAN DEPARTMENT OF STATE HIGHWAYS
EVERGREEN RD. CROSSING OVER C.&O.R.R. AND I-96

GENERAL PLAN OF STRUCTURE
SOUTH SERVICE DRIVE

ROAD BOSS	WOODARD	5-6-68
DRAWN BY	RWDRES	4-17-67
TRACED BY		
CHECKED BY	H.N.B.	5-1-68
SHEET 14 OF 102		

APPROVED _____ ASST. DESIGN SUPERVISING ENGINEER
APPROVED J. C. Trokey 5-29-68 DESIGN SUPERVISING ENGINEER

XO1 of 82122K

REVISIONS

NO.	DESCRIPTION	DATE	BY

EXISTING

FOR INFORMATION ONLY

DO NOT WORK FROM THIS SHEET. THE INFORMATION SHOWN HERE IS FOR REFERENCE ONLY. NO PAY ITEMS ARE SHOWN.

DESCRIPTION	DR	NCK	APV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:
CHIEF ENGINEER OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

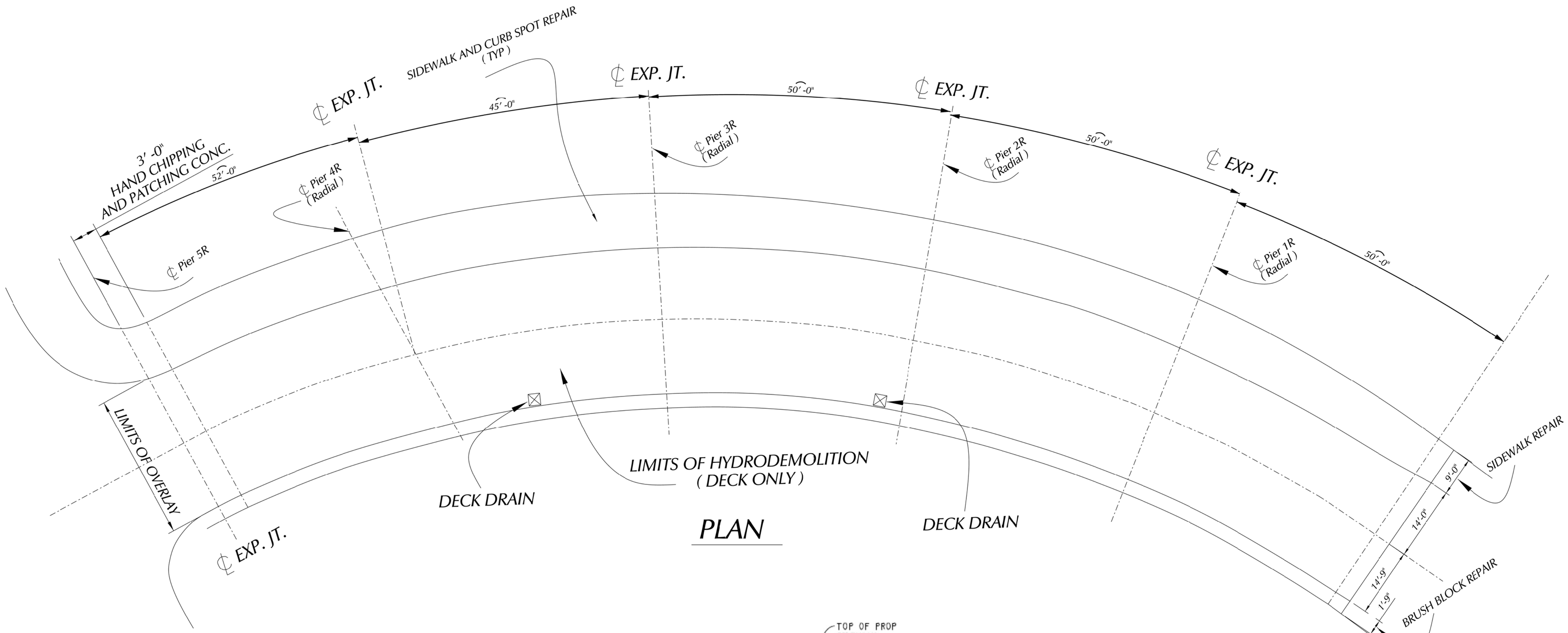
South Service Drive Bridge

EXISTING GENERAL PLAN OF STRUCTURE

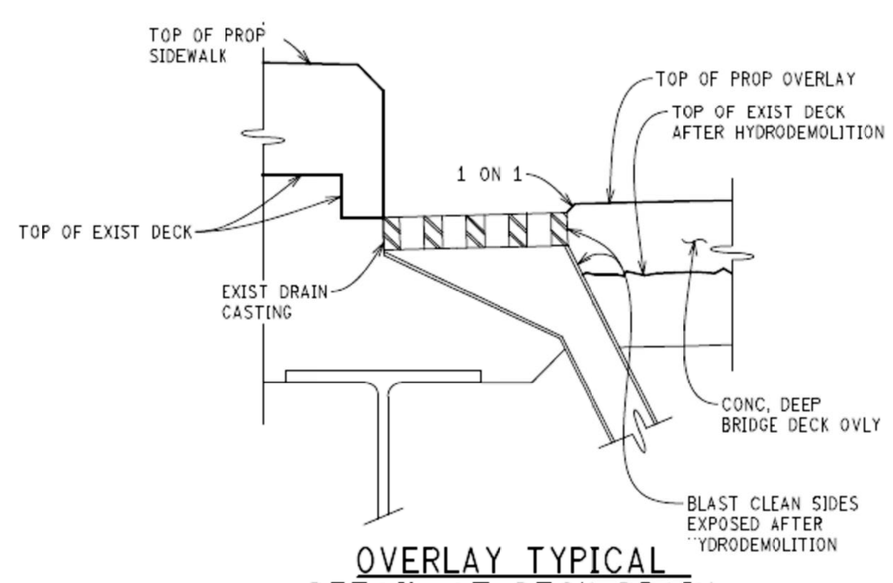
SHEET 02 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE 04/26/2019

SCALE	HORIZONTAL	BOOK NO.	PG.	LEVEL	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.
	VERTICAL	PAVING COMPLETED		DATE	

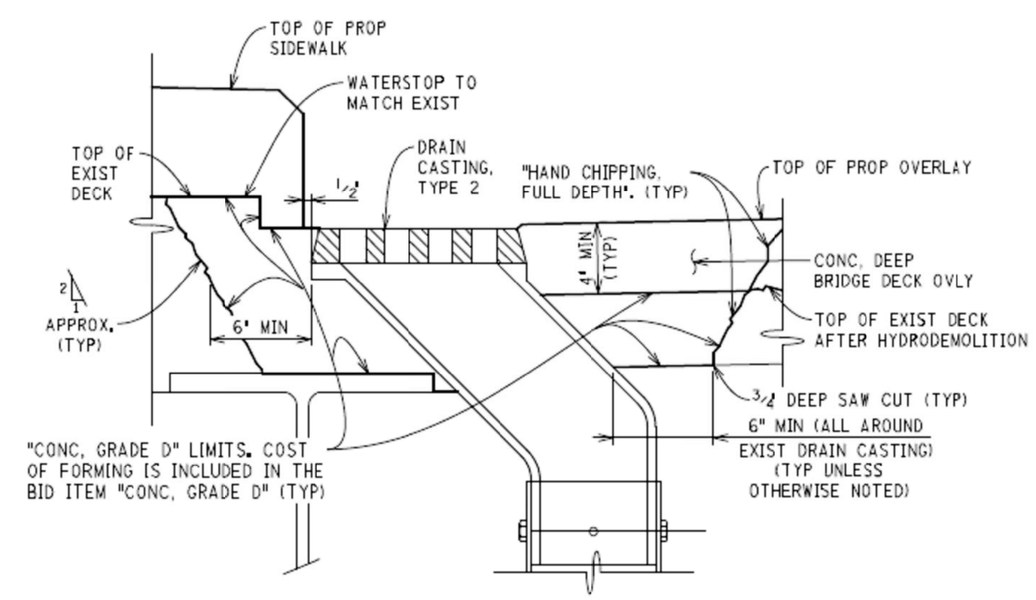
BENCH MARKS ELEV



PLAN



OVERLAY TYPICAL DETAIL AT DECK DRAIN



DRAIN CASTING REPLACEMENT DETAIL

EXIST REBARS NOT SHOWN FOR CLARITY. SALVAGE AND BLAST CLEAN ALL PARTIALLY EXPOSED REBARS.
(THE 2 LOCATIONS OF DRAIN CASTING REPLACEMENT ARE TO BE DETERMINED BY THE ENGINEER)

NOTE:

1. CONTRACTOR SHALL LOCATE ALL ACTIVE UNDERGROUND UTILITES PRIOR TO STARTING WORK AND SHALL CONDUCT THIS OPERATION IN SUCH A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRED RELOCATION WILL BE NOT DISTURBED.

REMOVAL QUANTITIES

200 SYD	COLD MILLING CONC. PAVEMENT
500 FT	INTEGRAL CURB & SIDEWALK
515 FT	CURB, REM
* 150 SYD	SIDEWALK, REM
** 0.5 Acre	CLEARING
2 EA.	DECK DRAIN, ADJ.

* THIS QUANTITIES FOR SIDEWALK PATCH REMOVAL ON APPROACHES.

EXACT LOCATION SHALL BE DETERMINE IN THE FIELD.

** THIS QUANTITIES FOR CLEANING BRUSHES AND OTHER VEGETATION ON BRIDGE SIDEWALKS, APPROACHES AND OTHER AREAS AS DIRECTED BY THE ENGINEER

NOTE:

PROTECTIVE TREATMENT FOR BRIDGE DECK IS TO BE APPLIED TO ALL SUPERSTRUCTURE CONCRETE SURFACES BETWEEN FASCIA LINES.

DESCRIPTION	DR	NCK	DAPV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:

CHIEF ENGINEER OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

South Service Drive Bridge

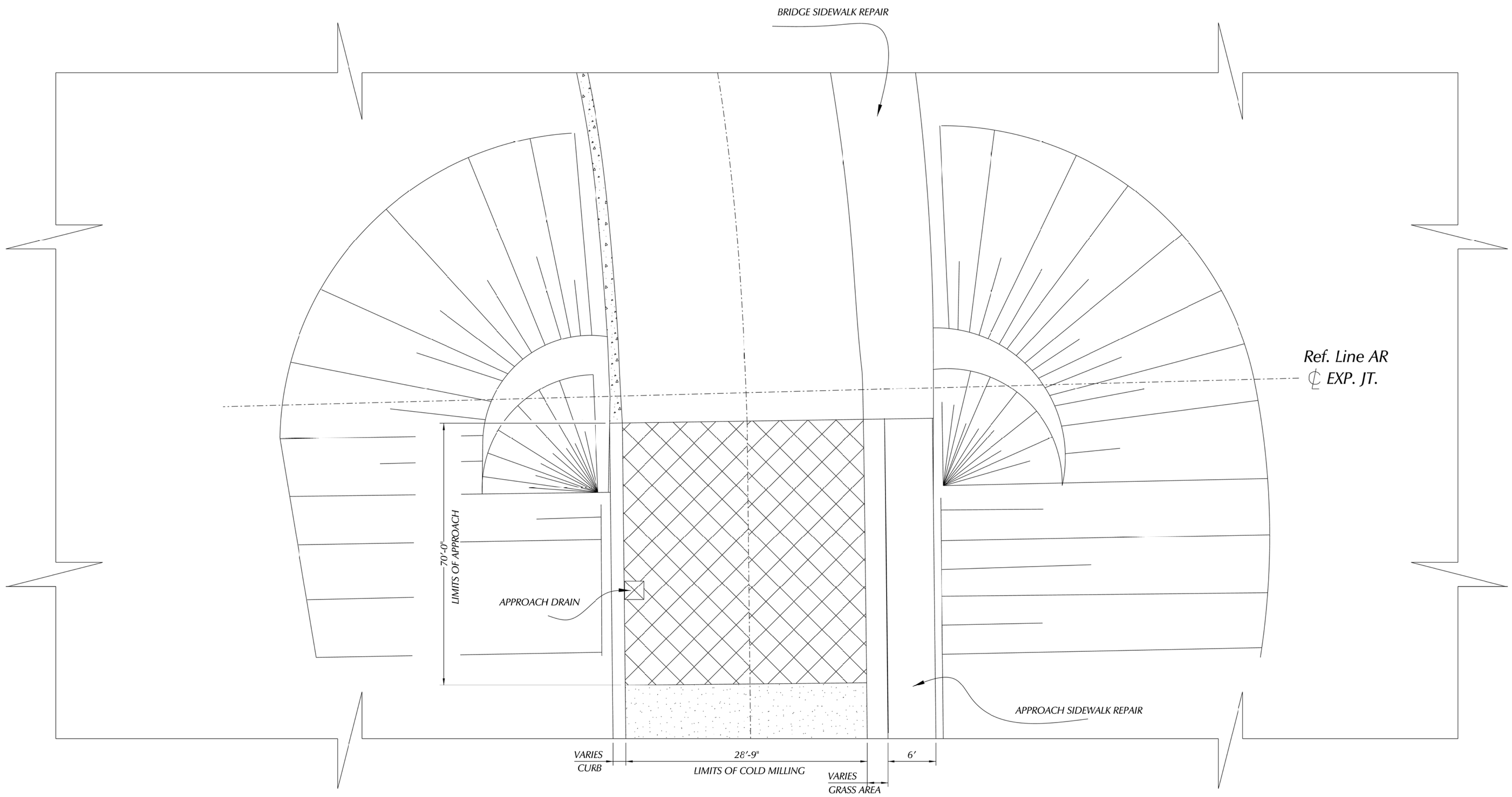
REMOVAL PLAN

SHEET 06 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE

SCALE	HORIZONTAL	BOOK NO. PG.	LEVEL
	VERTICAL	PAVING COMPLETED	DATE

BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

BENCH MARKS ELEV



APPROACH PLAN

APPROACH WEDGE (CONC. PAVE.)
DIRECTED BY ENGINEER

ASPHALT

REMOVAL QUANTITIES

200 SYD	COLD MILLING CONC. PAVEMENT
1 EA.	DR. SRTRUCTURAL COVER ADJ. CASE 1 MODIFIED

DESCRIPTION	DR	NCK	DAPV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	RECHK

APPROVED:

CHIEFTAIN OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

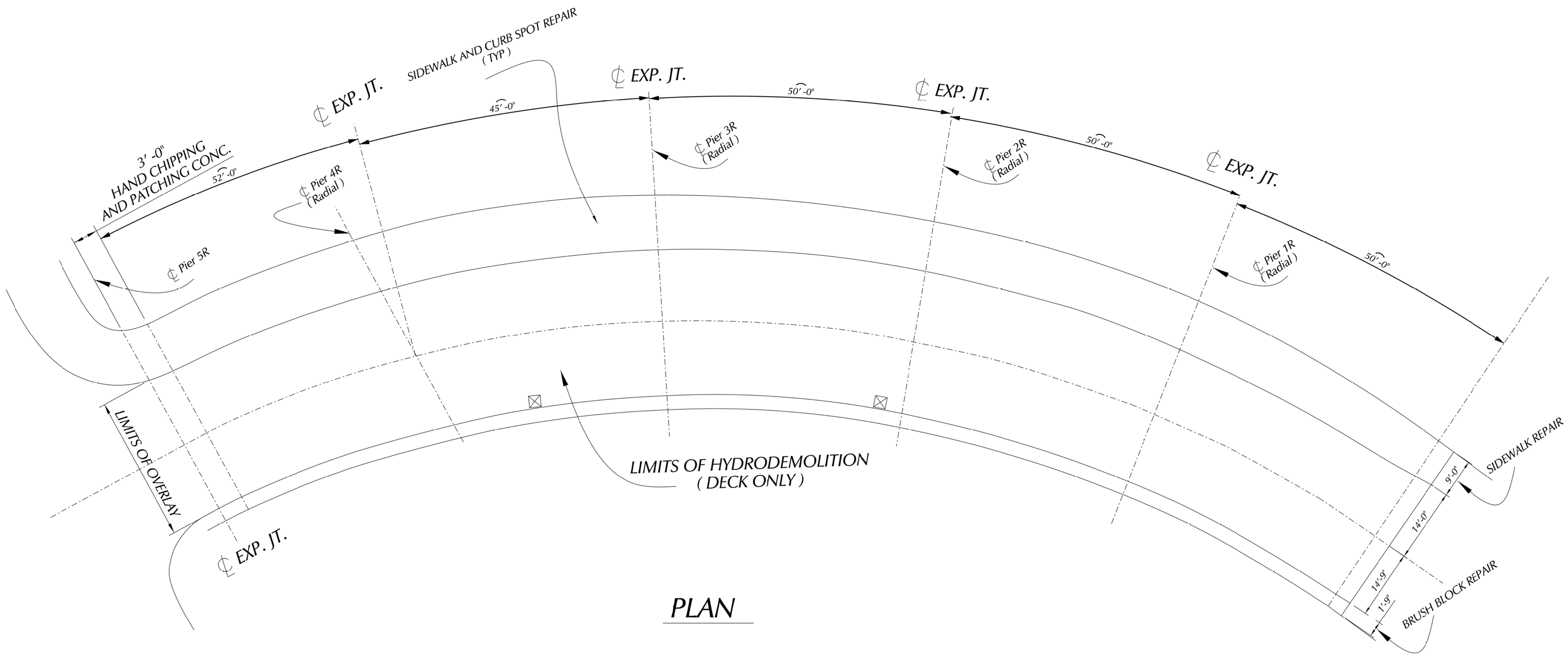
South Service Drive Bridge

REMOVAL PLAN

SHEET 07 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE 04/26/2019

SCALE	HORIZONTAL / VERTICAL	BOOK NO. PG. / PAVING COMPLETED	LEVEL / DATE	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

BENCH MARKS ELEV



PLAN

CONSTRUCTION QUANTITIES

500 SYD	CONC PAVEMENT OVLY FINISHING AND CURING
250 CYD	CONC PAVEMENT OVLY FURNISHING AND PLACING
3 EA	DR. STRUCTURE, CLEANING, MODIFIED
200 LB	DR. STRUCTURE, COVER, MODIFIED
1	DR. STRUCTURE, COVER, ADJ., CASE 1, MODIFIED
1 LS	PAV'T CLEANING

NOTE:

PROTECTIVE TREATMENT FOR BRIDGE DECK IS TO BE APPLIED TO ALL SUPERSTRUCTURE CONCRETE SURFACES BETWEEN FASCIA LINES.

DESCRIPTION	DR	NCK	APV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:

COMMISSIONER OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

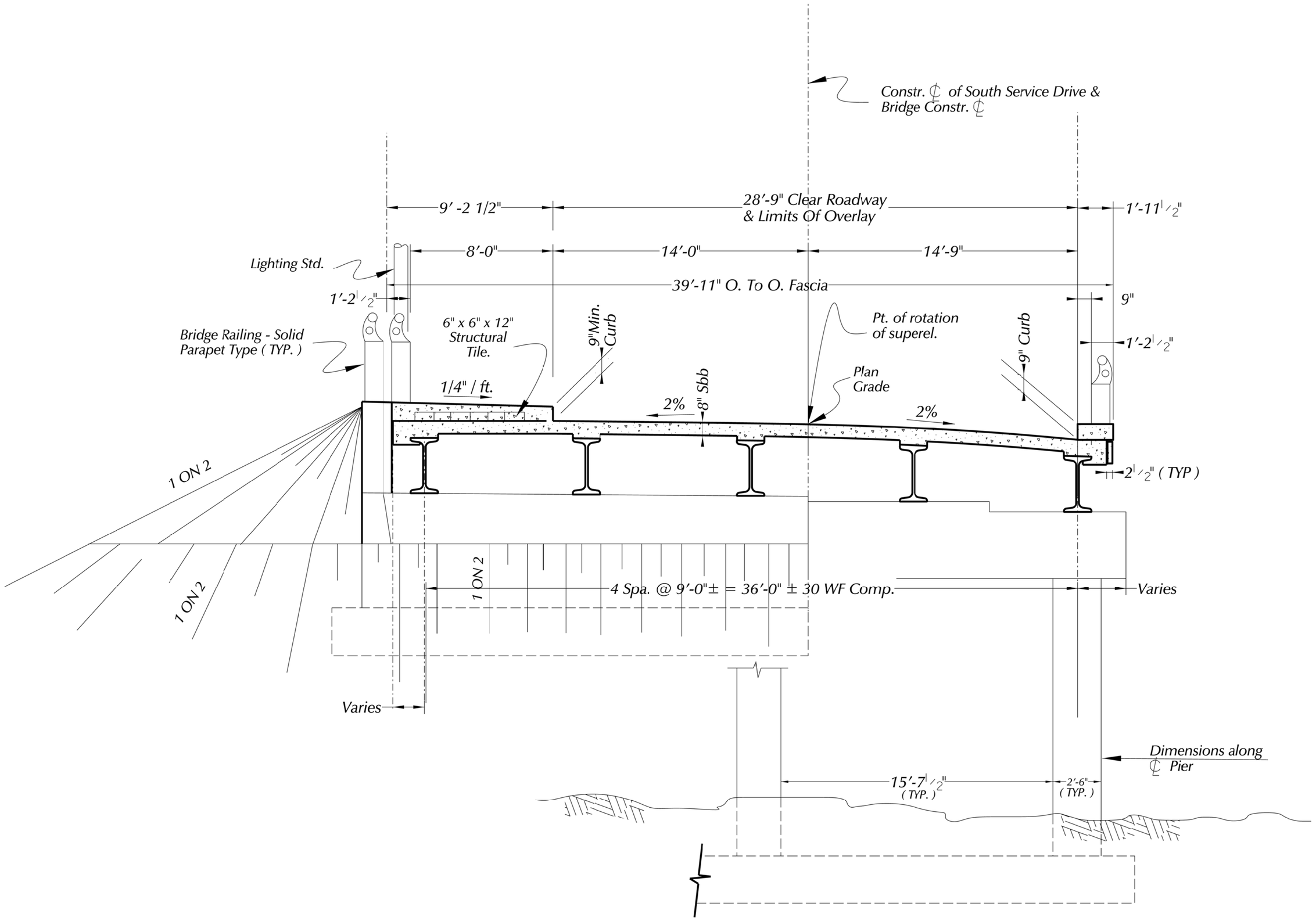
South Service Drive Bridge

ROAD CONSTRUCTION PLAN

SHEET 08 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE

SCALE	HORIZONTAL / VERTICAL	BOOK NO. PG. PAVING COMPLETED	LEVEL DATE	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

BENCH MARKS ELEV



SECTION K-K

DESCRIPTION	DR	NCK	DAPV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:

CHIEF ENGINEER OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

South Service Drive Bridge

TYPICAL CROSS-SECTION

SHEET 09 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE 04/26/2019

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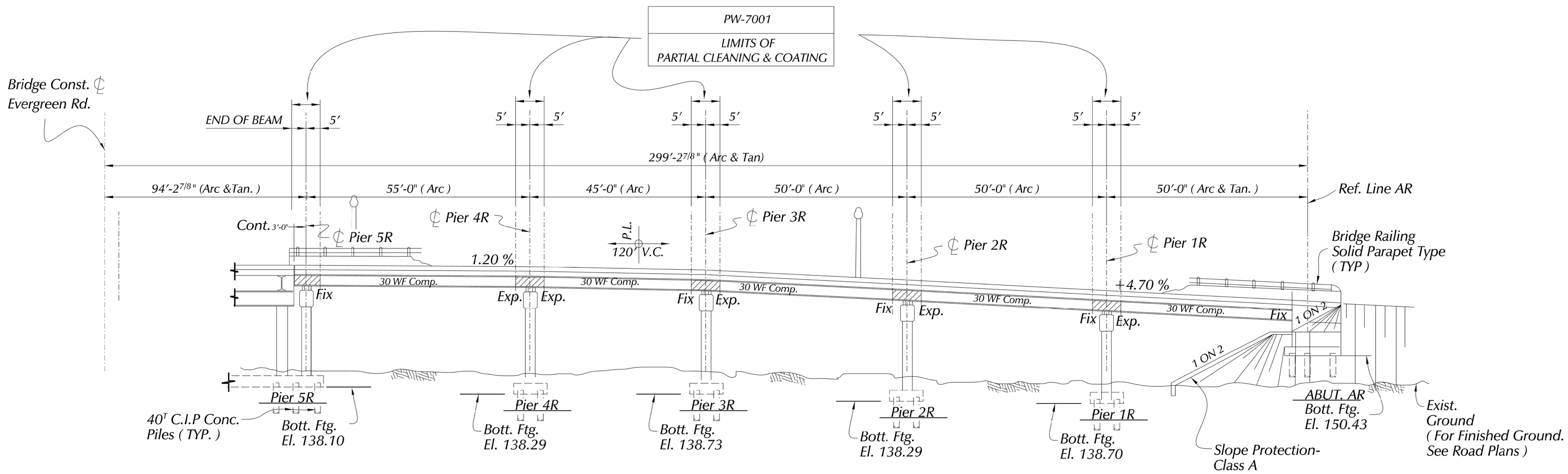
BENCH MARKS ELEV



ELEVATION (Along S. Service Dr. ℄

DESCRIPTION	DR	NCK	DAPV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:

CHIEF OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

South Service Drive Bridge

LONGITUDINAL SECTION

SHEET 10 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE 04/26/2019

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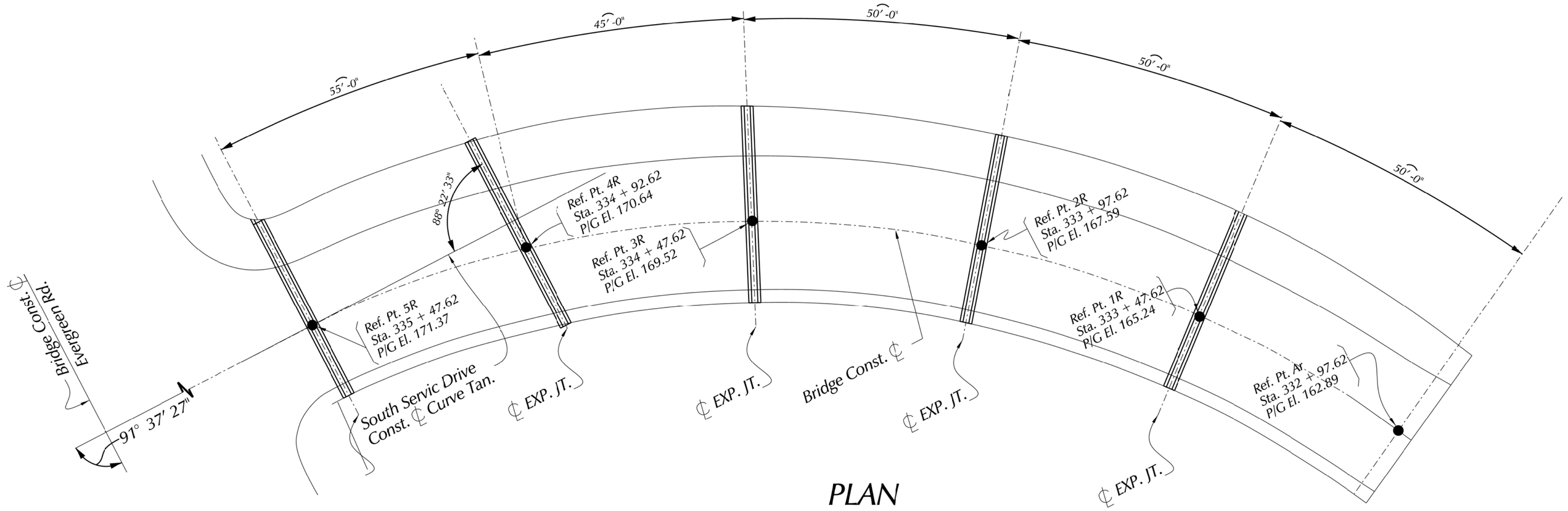
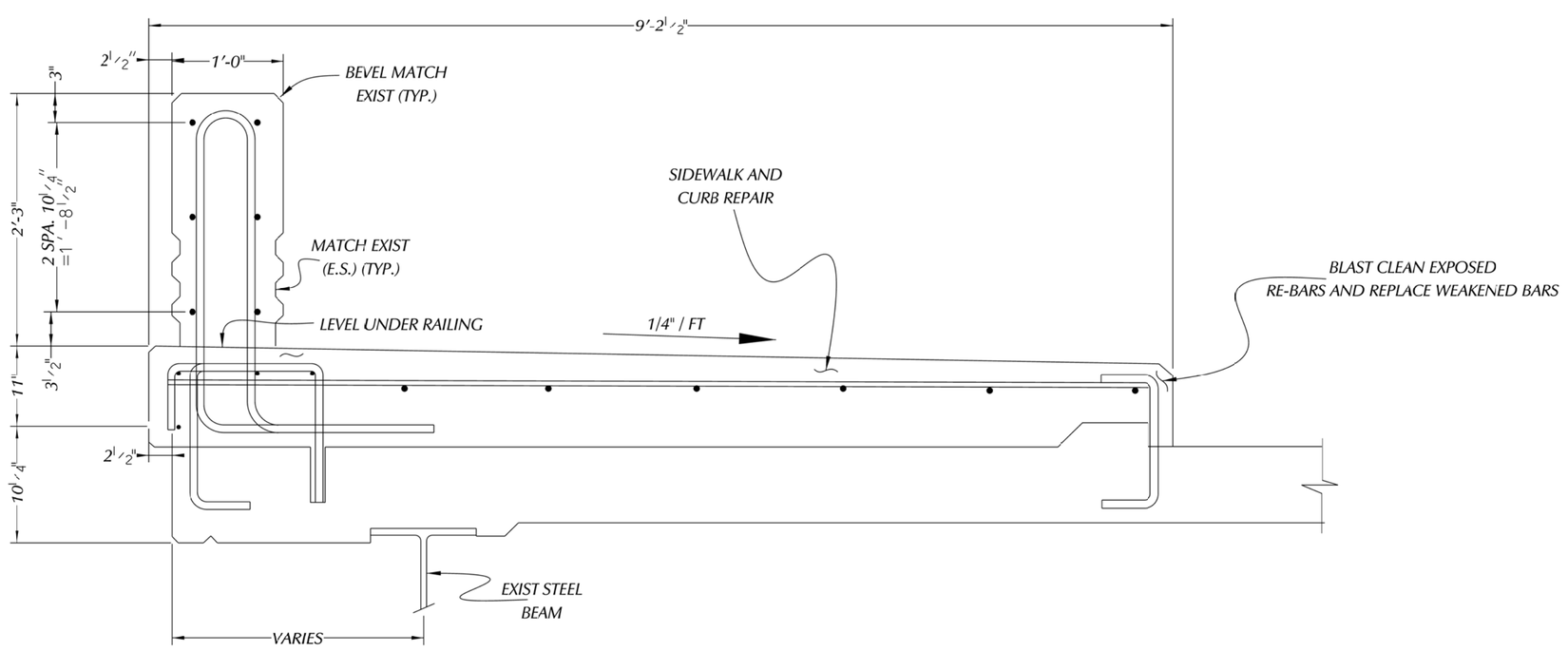
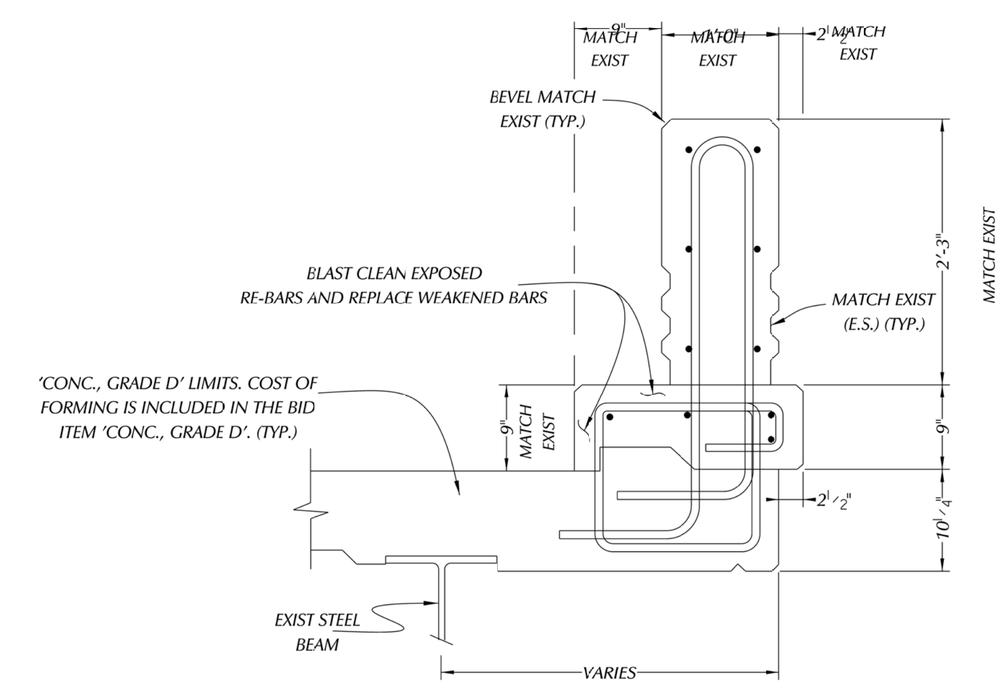


PLAN



RAILING AND SIDEWALK SECTION

FENCE AND BARS IN DECK NOT SHOWN FOR CLARITY



CURB REPLACEMENT SECTION

FENCE AND BARS IN DECK NOT SHOWN FOR CLARITY

DESCRIPTION	DR	NCK	DAPV	DATE
REVISIONS				

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	RECHK

APPROVED:

CHIEF ENGINEER OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

South Service Drive Bridge

DECK RESURFACING DETAILS

SHEET 46 OF 47 SHEETS
CONTRACT NO. PW-7001
ASSIGNMENT NO.
DATE 04/26/2019

SCALE	HORIZONTAL / VERTICAL	BOOK NO. PG. / PAVING COMPLETED	LEVEL / DATE	BEFORE STARTING CONSTRUCTION CONTRACTOR MUST CHECK WITH UTILITIES FOR LOCATIONS OF EXISTING STRUCTURES WHETHER OR NOT INDICATED ON PLANS.

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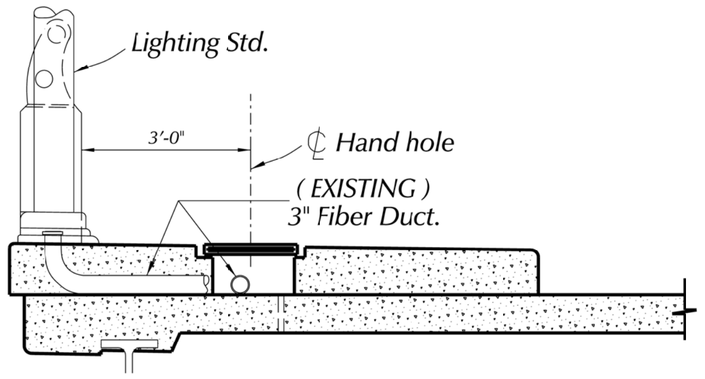
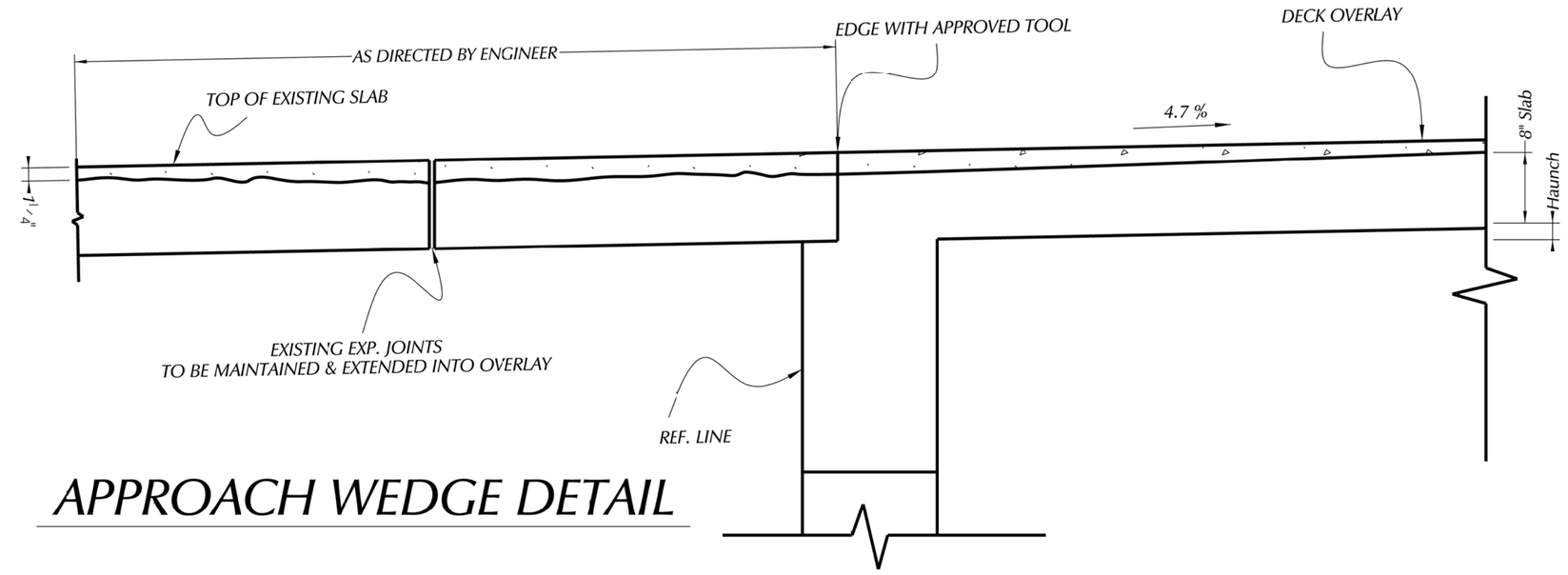
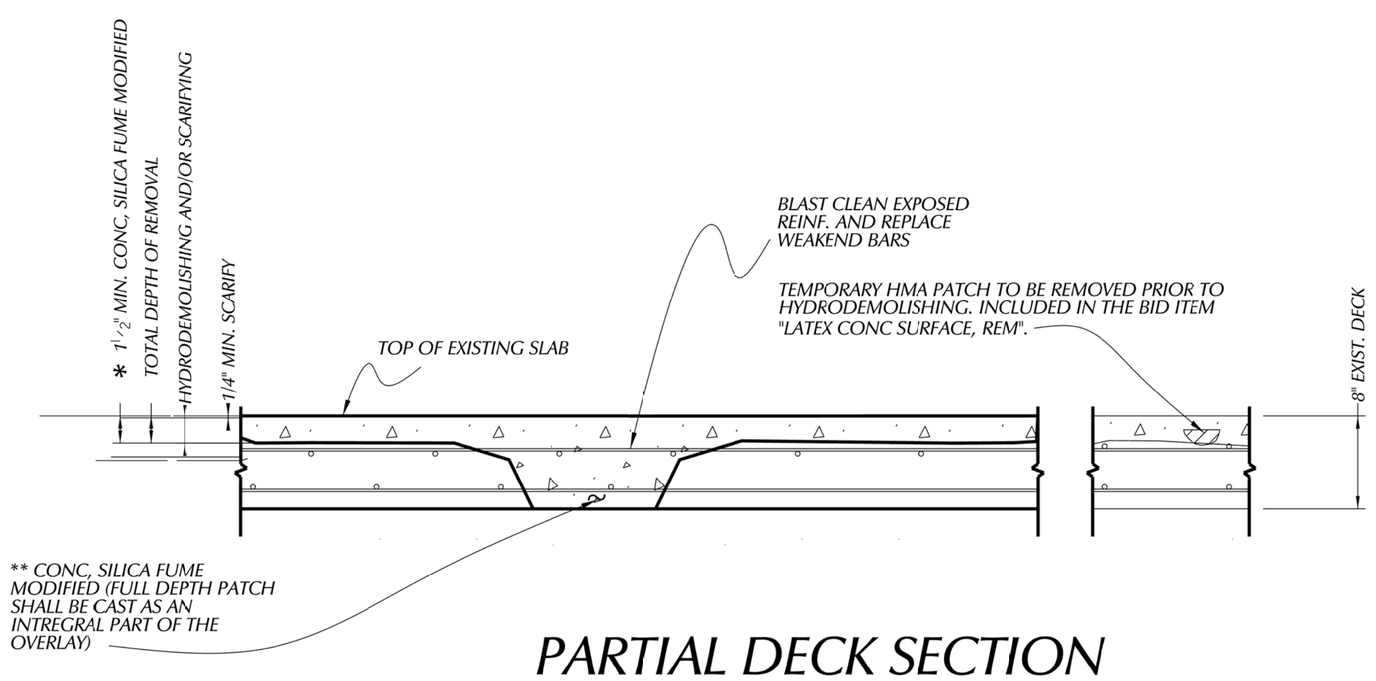


TYPICAL SECTION @ LIGHT STANDARD

South Service Drive

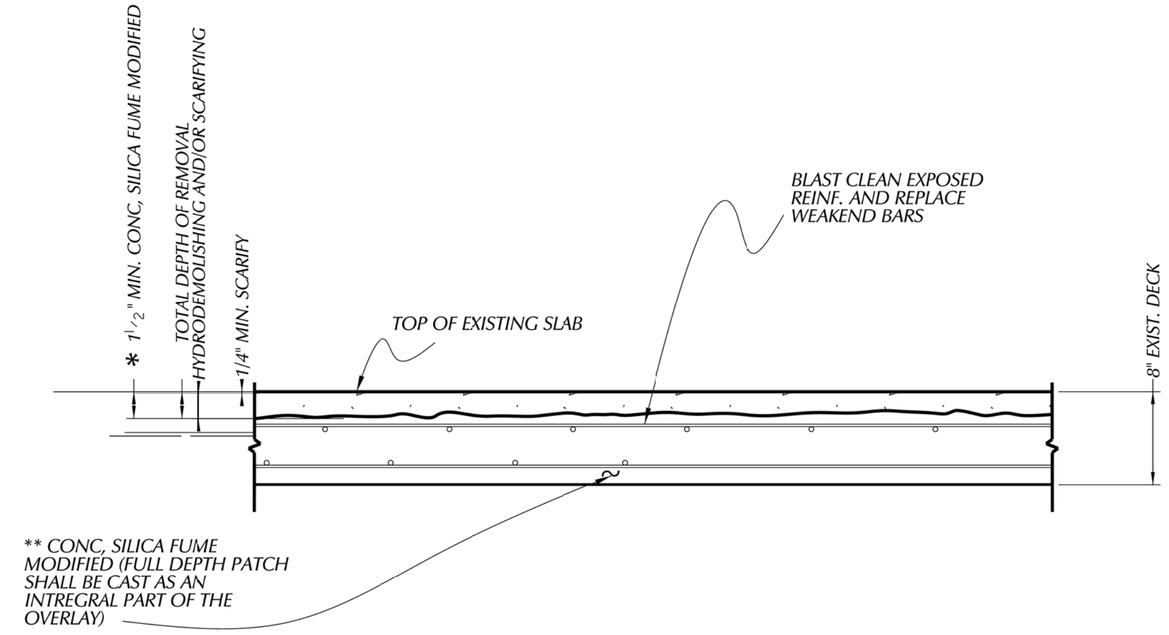


APPROACH WEDGE DETAIL



PARTIAL DECK SECTION

PROPOSED TOP OF DECK SHALL BE APPROXIMATELY 1⅜" ABOVE EXISTING TOP OF DECK AT CROWN POINT. 4" MAXIMUM OR ½" BELOW TOP MAT OF STEEL REINFORCEMENT WHICHEVER IS LESS.
** WHERE FORMING IS REQUIRED FROM THE UNDERSIDE OF THE DECK, THE WORK INVOLVED IN FORMING, FORM REMOVAL AND CLEANUP, AS WELL AS ANY MAINTAINING TRAFFIC REQUIRED UNDERNEATH THE STRUCTURE DUE TO THE WORK



PARTIAL DECK SECTION

DESCRIPTION	DR	CK	DA	PV	DATE
REVISIONS					

	BY	CHECKED BY
PLAN		
GRADE		
ESTIMATE		
FINAL	CHECK	REVIEW

APPROVED:

CHIEF OF STREETS

CITY OF DETROIT
CITY ENGINEERING DIVISION - D.P.W.
BUREAUS OF STREETS AND HIGHWAYS
FOR

South Service Drive Bridge

DECK RESURFACING DETAILS

SHEET 47 OF 47 SHEETS
CONTRACT NO. PW-7001
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