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TRAFFIC DATA

TIREMAN AVENUE	
YEAR 2008 AVERAGE DAILY TRAFFIC	2558
ESTIMATED YEAR 2023 AVERAGE DAILY TRAFFIC	4218
ESTIMATED CURRENT % COMMERCIAL	<5%
ESTIMATED YEAR 2023 % COMMERCIAL	<5%
POSTED SPEED	25 MPH
DESIGN SPEED	45 MPH

MDOT STANDARD PLANS (NOT TO BE PRINTED)

WHERE THE FOLLOWING ITEMS ARE CALLED FOR IN THE PLANS, THEY ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARD PLANS GIVEN BELOW, OPPOSITE EACH ITEM UNLESS OTHERWISE INDICATED.

TITLE	PLAN NO.
SOIL EROSION & SEDIMENTATION CONTROL MEASURES	R-96-E

TRAFFIC AND SAFETY STANDARD PLANS

WHERE THE FOLLOWING ITEMS ARE CALLED FOR IN THE PLANS THEY ARE TO BE CONSTRUCTED ACCORDING TO THE STANDARDS GIVEN BELOW, OPPOSITE EACH ITEM, UNLESS OTHERWISE INDICATED.

GROUND DRIVEN SIGN SUPPORTS FOR TEMP SIGNS	WZD-100-A*
TEMPORARY TRAFFIC CONTROL DEVICES	WZD-125-D
* DESIGNATES SPECIAL DETAILS	

UTILITY AND INTERESTED PARTIES CONTACT INFORMATION

CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS ENGINEERING DIVISION 65 CADILLAC SQUARE 313-224-3955 ATTENTION: MR. RICHARD DOHERTY	DETROIT EDISON MCGC ONE ENERGY PLAZA - 5185B DETROIT, MI 48226
MICHIGAN DEPARTMENT OF TRANSPORTATION 425 OTTAWA P.O. BOX 30050 LANSING, MI 48909 517-3352844 ATTENTION: MR. CHRIS TENNES, CTAP METRO	DETROIT PUBLIC LIGHTING ENGINEERING DEPARTMENT 9449 GRINNELL DETROIT, MI 48213 313-267-7227
DEPARTMENT OF ENVIRONMENTAL QUALITY LAND AND WATER MANAGEMENT DIVISION PERMIT CONSOLIDATION UNIT P.O. BOX 30204 LANSING, MI 48909 ATTENTION: MR. ALEX SANCHEZ	MICH CON GAS DISTRIBUTION MCGC26 BARBARA SAUDERS ONE ENERGY PLAZA 335-SB DETROIT, MI 48226 313-235-5111 saudersb@teenergy.com
AT&T BERNIE MCKENZIE 54 N. MILL STREET PONTIAC, MI 48342 248-972-0102 Bm1519@att.com	WAYNE COUNTY DPS SAM KHALDI 33809 MICHIGAN AVE WAYNE, MI 48184 734-595-6504 skhaldi@co.wayne.mi.us
COMCAST DARYL WOOD 25626 TELEGRAPH SOUTHFIELD, MI 48034 248-359-6582	GLOBAL CROSSINGS N. AMERICAN NETWORK LARS NYQUIST 4804 N. 40TH STREET SHEBOYGAN, WI 53083 920-395-7118 Lnyquist@gobes.com
DETROIT CITY DPW CITY ENGINEERING LESLIE LORD 65 CADILLAC SQUARE SUITE 701 DETROIT, MI 48226 313-224-3935 lordl@cadtrwr.cl.detroit.mi.us	
DETROIT WATER & SEWER K. V. RAMACHANDRAN 3501 CHENE DETROIT, MI 48207 313-833-8443 ramachandran@dwad.org	
BUCKEYE PIPELINE JOMARIE JENKINS FIVE TEK PARK / 9999 HAMILTON BLVD BREINIGSVILLE, PA 18031 610-904-4135 jjenkins@buckeye.com	

CITY OF DETROIT IN CO-OPERATION WITH MICHIGAN DEPARTMENT OF TRANSPORTATION AND THE FEDERAL HIGHWAY ADMINISTRATION PLANS OF THE PROPOSED PLYMOUTH ROAD OVER ROUGE RIVER SPINOZA DRIVE OVER ROUGE RIVER TIREMAN AVE OVER ROUGE RIVER

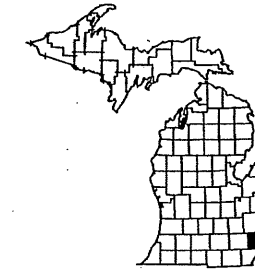
T2S, R10E, SECTION 3, WAYNE COUNTY
CONTROL SECTION NO:
STRUCTURE NOS: 12443, 12458, 12442
JOB NO: JN 113969A
FED PROJ NO: STP 1182(169)
FED ITEM NO: HH 7589

GENERAL NOTES

THE PROPOSED IMPROVEMENTS COVERED BY THESE PLANS ARE IN ACCORDANCE WITH MICHIGAN DEPARTMENT OF TRANSPORTATION LOCAL AGENCY PROGRAMS GUIDELINES FOR GEOMETRICS, (3R), DATED AUGUST 28, 2008.

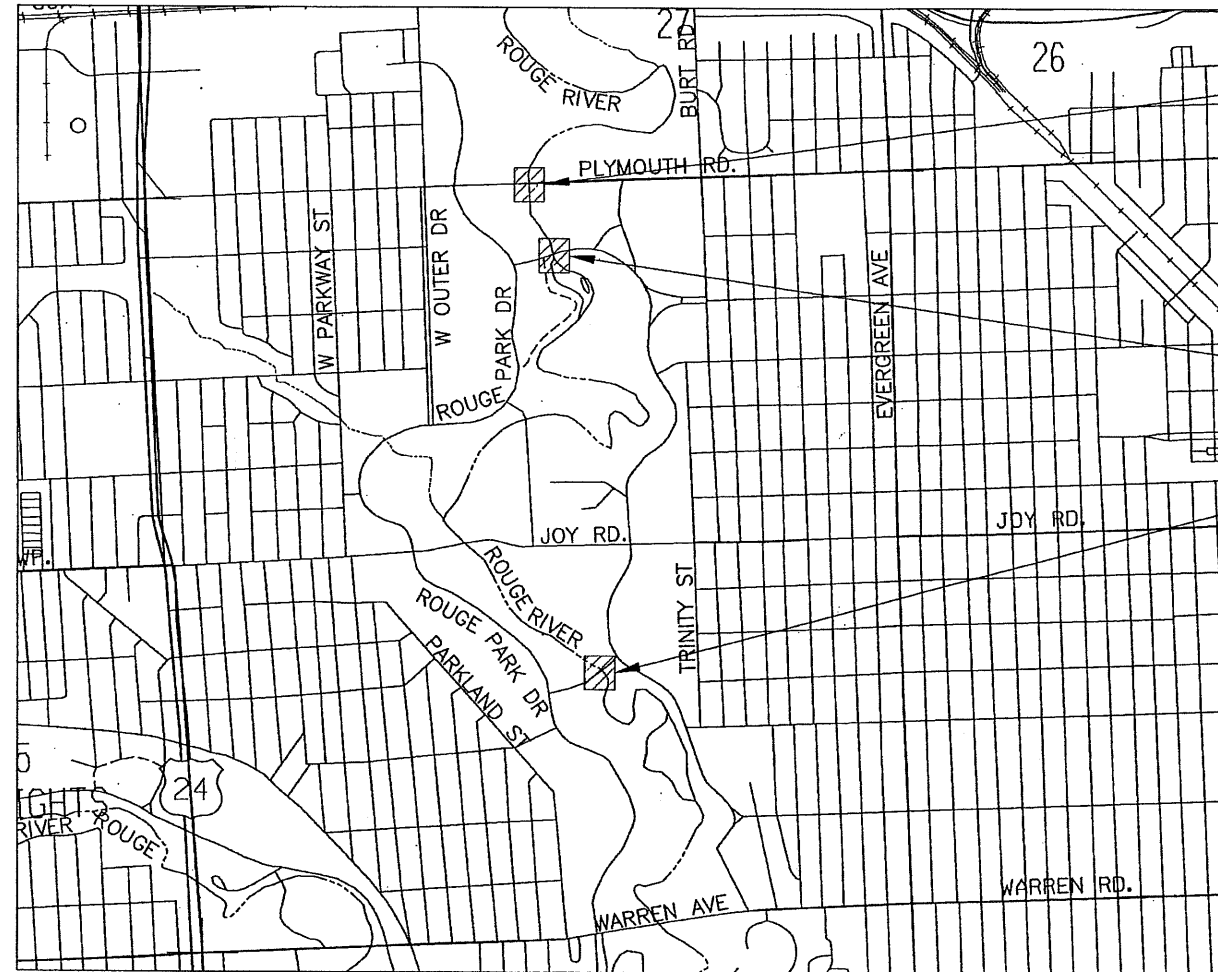
THE PLACING OF PAVEMENT MARKINGS AND TRAFFIC CONTROL SIGNS SHALL BE DONE IN ACCORDANCE WITH THE 2005 MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.

THE IMPROVEMENTS COVERED BY THESE PLANS SHALL BE DONE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2012 STANDARD SPECIFICATIONS FOR CONSTRUCTION AND SUPPLEMENTAL SPECIFICATIONS, EXCEPT AS MODIFIED BY THESE PLANS AND SPECIAL PROVISIONS.



PLYMOUTH ROAD
SPINOZA DRIVE
TIREMAN AVE
WAYNE COUNTY
MICHIGAN

KEY MAP
NO SCALE



VICINITY MAP
WAYNE COUNTY, MICHIGAN

PLYMOUTH AVENUE BRIDGE

SPINOZA DRIVE BRIDGE

TIREMAN AVENUE BRIDGE

CONTRACT FOR: PLACEMENT OF
RIP RAP AT SUBSTRUCTURES

Richard Doherty
RICHARD DOHERTY, P.E.

W-T REF. NO. DTE2025-02G SHEET 1

WADETRIM
500 Griswold Avenue, Suite 2000
Detroit, MI 48226
313.991.2000
FAX: 313.991.0000
www.wadetrims.com

PREPARED UNDER THE SUPERVISION OF:
Stephen E. Wright
STATE OF MICHIGAN
STEPHEN E. WRIGHT
ENGINEER
No. 43298
43298
STEPHEN E. WRIGHT, P.E.
REGISTRATION NO.

PROJECT MANAGER: CLYDE W. WICKERMAN, WICKERMAN CONSULTANTS, 10000 W. BURGESS ST., SUITE 100, WESTLAND, MI 48090
FIELD BOOK INFORMATION: - PLOTTED 10/27/2011 10:55 AM BY CHERNINSKI, JEROME
FULL SCALE MONOCHROME/EST - 1 - FULL SCALE MONOCHROME/EST

© Wade Trim Group, Inc. TIREMAN AVE OVER ROUGE RIVER

PROJECT MANAGER: CHELSEA ENGINEERING, INC. (CONTRACT NO. 2025-02G)
 FIELD SUPERVISOR: CHELSEA ENGINEERING, INC. (CONTRACT NO. 2025-02G)
 FIELD BOOK INFORMATION: REVISED 10/27/2011 11:15 AM BY: CHELSEA ENGINEERING, INC.

	EXISTING	PROPOSED
ELECTRICAL		
CIRCUIT BREAKER PANEL	△	△
HANDHOLE	△	△
MANHOLE NO BLOCK		△
OUTLET	△	△
PEDESTAL	⊠	⊠
TRANSFORMER BOX	⊠	⊠
METER	⊙	⊙
POWER POLE	⊙	⊙
TRANSFORMER TOWER	⊠	⊠
GAS		
VENT	▽	▽
BLOW OFF	▽	▽
FILLER PIPE	▽	▽
METER	▽	▽
STOP BOX	▽	▽
SHUTOFF VALVE	▽	▽
MONUMENTS		
IRON	•	•
BENCH MARK	•	•
BRASS PLATE	•	•
CONCRETE NAIL	•	•
DRILL HOLE	•	•
GOVERNMENT CORNER	•	•
GPS MONUMENT	⊙	⊙
IRON PIPE	•	•
MONUMENT BOX	⊙	⊙
MONUMENT	⊙	⊙
MERE STONE	•	•
NOS MONUMENT	⊙	⊙
NAIL & TAG	•	•
FINCH IRON	•	•
PK NAIL	•	•
RAILROAD SPIKE	•	•
RIGHT-OF-WAY MARKER	•	•
SPIKE	•	•
SHIPS SPIKE	•	•
T-IRON	•	•
USGS MONUMENT	⊙	⊙
CROSS CUT	•	•
CROSS CUT IN MONUMENT	•	•
WOOD STAKE	•	•
OVER HEAD UTILITIES		
DEADMAN ANCHOR	•	•
FLOOD LIGHT	•	•
GUY WIRE ANCHOR	•	•
GUY POLE	•	•
LAMP POLE	•	•
POWER & LIGHT POLE	•	•
METAL LIGHT POLE	•	•
ORNAMENTAL LIGHT	•	•
POWER & TELEPHONE POLE	•	•
TELE, CTV, PWR & LOT POLE	•	•
TELE, CTV, & POWER POLE	•	•
TELE, & CTV POLE	•	•
TELE, CTV, & LIGHT POLE	•	•
TELE, & LIGHT POLE	•	•
TELE, POWER, & LIGHT POLE	•	•
TELE, CTV, & POWER POLE	•	•
SANITARY SEWER		
CLEAN OUT	⊙	⊙
PUMPSTATION MANHOLE	⊙	⊙
SANITARY MANHOLE	⊙	⊙
SEPTIC TANK	⊙	⊙
SEWER VENT	⊙	⊙
UNDERGROUND UTILITIES		
UTILITY MANHOLE	⊙	⊙
PAVT, REM -		

	EXISTING	PROPOSED
STORM SEWER		
ROUND CATCH BASIN	⊙	⊙
SQUARE CATCH BASIN	⊠	⊠
CISTERN	•	•
BOX CULVERT	•	•
CULVERT HEADWALL	•	•
CULVERT END SECTION	•	•
DOWN SPOUT	•	•
ROUND INLET	⊙	⊙
SQUARE INLET	⊠	⊠
STORM MANHOLE	⊙	⊙
TELEPHONE		
TELEPHONE POLE	⊙	⊙
TELEPHONE MANHOLE	⊙	⊙
TELEPHONE PEDESTAL	⊠	⊠
TOPOGRAPHIC FEATURES		
FLAG POLE	•	•
UNDERGROUND GAS TANK	•	•
MONITORING WELL	•	•
ROUND POST	•	•
SQUARE POST	•	•
TRAFFIC SIGNAL	•	•
SIGN POST	•	•
EXISTING		
BRUSH LINE	~~~~~	~~~~~
BOUNDARY	-----	-----
BUILDING		
BUILDING SETBACK	-----	-----
CONTOURS (MINOR)	100	100
CONTOURS (MAJOR)	100	100
DITCH CENTERLINE	-----	-----
DITCH TOP OF BANK	-----	-----
DITCH TOE OF BANK	-----	-----
EASEMENT	-----	-----
ELECTRIC OVERHEAD	---E---	---E---
ELECTRIC UNDERGROUND	---UE---	---UE---
FENCE	---X---	---X---
FLOOD FLAIIH	-----	-----
GUARD RAIL	-----	-----
GAS	---G---	---G---
LANDSCAPE	---LS---	---LS---
SANITARY SEWER	-----	-----
SECTION LINE	-----	-----
SHORE LINE	-----	-----
STORM SEWER	-----	-----
SILT FENCE	-----	-----
SWALE	-----	-----
TOP OF BANK	-----	-----
TOE OF BANK	-----	-----
TREE LINE	~~~~~	~~~~~
UNDERGROUND ELECTRIC	---UE---	---UE---
UNDERGROUND TELEPHONE	---UT---	---UT---
WALL	---O---	---O---
WATER MAIN	-----	-----
EXISTING		
PROPOSED		
VEGETATION		
CONIFEROUS BUSH	•	•
CONIFEROUS TREE	*	*
DECIDUOUS TREE	⊙	⊙
DECIDUOUS BUSH	•	•
MULTISTEM CONIFEROUS	*	*
MULTISTEM DECIDUOUS	⊙	⊙

GENERAL NOTES

- UNDERGROUND UTILITIES FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 53, 1974, THE CONTRACTOR SHALL DIAL 1-800-482-7171 A MINIMUM OF THREE FULL WORKING DAYS, EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS PRIOR TO BEGINNING EACH EXCAVATION IN AREAS WHERE PUBLIC UTILITIES HAVE NOT BEEN PREVIOUSLY LOCATED. MEMBERS WILL, THIS BE ROUTINELY NOTIFIED, THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO MAY NOT BE A PART OF THE "MISS DIG" ALERT SYSTEM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE WORK WITH OWNERS OF AFFECTED UTILITIES AND TO PROTECT THOSE UTILITIES THROUGHOUT THE PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR LOCATION OF EXISTING UNDERGROUND UTILITIES. LOCATIONS SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC UTILITIES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAKE THE NECESSARY COORDINATION WITH UTILITY COMPANIES AND TO ASSURE HIMSELF OF THE ACTUAL LOCATIONS OF ALL UTILITIES EFFECTED BY THE WORK AND TO TAKE APPROPRIATE PRECAUTIONS IN THE PERFORMANCE OF HIS WORK TO PROTECT PUBLIC UTILITIES. LOCATIONS OF PUBLIC UTILITIES SHOWN ON THE PLANS ARE BASED ON THE BEST INFORMATION MADE AVAILABLE TO THE ENGINEER. THE ENGINEER IS NOT RESPONSIBLE FOR LOCATION OR PROTECTION OF EXISTING PUBLIC UTILITIES.
- SITE AND SUBSURFACE CONDITIONS BIDDERS AND THEIR SUBCONTRACTORS SHALL MAKE A PERSONAL INVESTIGATION OF EXISTING SITE, SURFACE AND SUBSURFACE CONDITIONS PRIOR TO SUBMITTING BIDS. SUBMITTAL OF BIDS SHALL BE CONSIDERED PRIMA FACIE EVIDENCE THAT BIDDERS HAVE MADE THESE INVESTIGATIONS AND HAVE INCLUDED ALL COSTS ASSOCIATED WITH SITE AND SUBSURFACE CONDITIONS IN THE UNIT PRICE BID FOR CONTRACT PAY ITEMS. SOIL BORINGS AND PAVEMENT CORE DATA IN THESE SPECIFICATIONS REPRESENT POINT INFORMATION AT THE APPROXIMATE STATION SHOWN FOR THESE CORES AND BORINGS. PRESENTATION OF THIS INFORMATION IN NO WAY INFERS THAT SUB SURFACE CONDITIONS ARE THE SAME OTHER THAN THE EXACT LOCATION OF THE CORES AND BORINGS SHOWN. ALL COSTS FOR DEWATERING NECESSARY TO PERFORM THE WORK AS SPECIFIED SHALL BE INCLUDED IN THE UNIT PRICES BID FOR EFFECTED CONTRACT PAY ITEMS.
- PRESERVATION OF PROPERTY IRONS THE CONTRACTOR SHALL PROTECT AND PRESERVE ALL EXISTING PROPERTY IRONS (OR SIMILAR) LOCATED WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLACING STAKES AND/OR FLAGS AT EACH PROPERTY IRON TO ENSURE THAT THEY ARE NOT DISTURBED DURING CONSTRUCTION OPERATIONS. IF PROPERTY IRONS ARE DISTURBED DUE TO THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPLACEMENT OF THOSE IRONS, AS APPROVED, AT HIS OWN COST. ANY PROPERTY CORNERS OR GOVERNMENT CORNERS DISTURBED OR REMOVED BY THIS PROJECT MUST BE RESET BY A LICENSED SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
- THE CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL REGULATIONS FOR WORK AT THE SITE. THIS SHALL INCLUDE ALL M.I.O.S.H.A. REGULATIONS AND MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT REQUIREMENTS.
- PAYMENT FOR TRAFFIC CONTROL REGULATOR SHALL BE ONE (1) LUMP SUM AND SHALL COVER WORK ON ALL THREE (3) STRUCTURES.
- PAYMENT FOR MINOR TRAF DEVICES SHALL BE ONE (1) LUMP SUM AND SHALL COVER WORK ON ALL THREE (3) STRUCTURES.

GENERAL PLAN OF SITE NOTES

- THE WORK COVERED BY THESE PLANS INCLUDES DREDGING EXISTING CHANNEL AND PLACING RIP RAP OVER A GEOTEXTILE LINER ALONG RIVER BOTTOM.
- DATUM REFERS TO NGVD29 DATUM FOR PLYMOUTH ROAD AND CITY OF DETROIT DATUM FOR SPINOZA DRIVE AND TIREMAN AVENUE.
- THE WATER LEVEL IS SUBJECT TO CHANGE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING A DETERMINATION OF WATER LEVELS THAT MAY EXIST DURING CONSTRUCTION.
- TEMPORARILY STORED EXCAVATED MATERIAL SHALL BE STORED ON AN UPLAND SITE, AND SHALL NOT BE ALLOWED TO ERODE INTO THE WATERCOURSE.
- MEASURES SHALL BE TAKEN TO PREVENT DEBRIS FROM FALLING FROM THE STRUCTURE INTO THE RIVER. IF DEBRIS FALLS INTO THE RIVER, IT SHALL BE REMOVED IMMEDIATELY. HOWEVER, DISTURBANCE OF THE BOTTOM OF THE WATERWAY MAY BE HARMFUL AS THE DEBRIS ITSELF, THEREFORE, PREVENTATIVE MEASURES SHOULD BE STRINGENTLY FOLLOWED.

SOIL EROSION AND SEDIMENTATION CONTROL PLAN NOTES

- CONTRACTOR SHALL PLACE ALL SOIL EROSION & SEDIMENTATION CONTROL MEASURES AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER IN ACCORDANCE WITH MDOT STANDARD PLAN R-96-SERIES.
- CONSTRUCTION OPERATIONS SHALL BE SCHEDULED AND PERFORMED SO THAT PREVENTATIVE EROSION CONTROL MEASURES ARE IN PLACE PRIOR TO EXCAVATION AND TEMPORARY STABILIZATION MEASURES ARE IN PLACE IMMEDIATELY FOLLOWING BACKFILLING AND / OR GRADING OPERATIONS.
- TIMING AND SEQUENCING OF EROSION CONTROL DEVICES FOR THE MAJOR ITEMS OF WORK SHALL BE IDENTIFIED AND SUBMITTED TO THE CONSTRUCTION ENGINEER AT THE PRECONSTRUCTION MEETING.
- PERMANENT SOIL EROSION CONTROL MEASURES FOR ALL SLOPES AND DITCHES OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 5 CALENDAR DAYS AFTER FINAL GRADING OR THE FINAL EARTH CHANGE HAS BEEN COMPLETED.
- SPECIAL PRECAUTIONS WILL BE TAKEN IN THE USE OF CONSTRUCTION EQUIPMENT TO PREVENT SITUATIONS THAT PROMOTE EROSION.
- CLEANUP WILL BE DONE IN A MANNER TO INSURE THAT EROSION CONTROL MEASURES ARE NOT DISTURBED.
- THE PROJECT WILL CONTINUALLY BE INSPECTED FOR SOIL EROSION AND SEDIMENT CONTROL COMPLIANCE. DEFICIENCIES WILL BE CORRECTED BY THE CONTRACTOR WITHIN 24 HOURS.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE COMPLETELY REMOVED BY THE CONTRACTOR UPON ESTABLISHMENT OF PERMANENT CONTROL MEASURES.
- A N.P.D.E.S. PERMIT IS REQUIRED FOR THIS PROJECT. AREA OF DISTURBANCE IS AS FOLLOWS:
 PLYMOUTH RD (STRUCT NO 12443) APPROX. 0.40 ACRES
 SPINOZA DR (STRUCT NO 12458) APPROX. 0 ACRES
 TIREMAN AVE (STRUCT NO 12442) APPROX. 0.28 ACRES

MISCELLANEOUS QUANTITIES (STRUCT NO 12443)

QUANTITY	UNITS	DESCRIPTION
1	LS	TRAFFIC CONTROL REGULATOR
2	EA	LIGHTED ARROW, TYPE C, FURN
2	EA	LIGHTED ARROW, TYPE C, OPER
1	LS	MINOR TRAF DEVICES
10	EA	PLASTIC DRUM, HIGH INTENSITY, PRISMATIC FURN
10	EA	PLASTIC DRUM, HIGH INTENSITY, PRISMATIC OPER
200	SFT	SIGN, TYPE B, TEMP, FURN
200	SFT	SIGN, TYPE B, TEMP, OPER
320	FT	EROSION CONTROL, SILT FENCE
154	FT	EROSION CONTROL, TURBIDITY CURTAIN, SHALLOW
2000	SYD	RIP RAP, HEAVY, MODIFIED
250	SYD	SLOPE RESTORATION, TYPE B
250	SYD	SLOPE RESTORATION, TYPE C

MISCELLANEOUS QUANTITIES (STRUCT NO 12458)

QUANTITY	UNITS	DESCRIPTION
1	LS	TRAFFIC CONTROL REGULATOR
2	EA	LIGHTED ARROW, TYPE C, FURN
2	EA	LIGHTED ARROW, TYPE C, OPER
1	LS	MINOR TRAF DEVICES
10	EA	PLASTIC DRUM, HIGH INTENSITY, PRISMATIC FURN
10	EA	PLASTIC DRUM, HIGH INTENSITY, PRISMATIC OPER
200	SFT	SIGN, TYPE B, TEMP, FURN
200	SFT	SIGN, TYPE B, TEMP, OPER
120	FT	EROSION CONTROL, SILT FENCE
214	FT	EROSION CONTROL, TURBIDITY CURTAIN, SHALLOW
1000	SYD	RIP RAP, HEAVY, MODIFIED
500	SYD	SLOPE RESTORATION, TYPE C

MISCELLANEOUS QUANTITIES (STRUCT NO 12442)

QUANTITY	UNITS	DESCRIPTION
1	LS	TRAFFIC CONTROL REGULATOR
2	EA	LIGHTED ARROW, TYPE C, FURN
2	EA	LIGHTED ARROW, TYPE C, OPER
1	LS	MINOR TRAF DEVICES
10	EA	PLASTIC DRUM, HIGH INTENSITY, PRISMATIC FURN
10	EA	PLASTIC DRUM, HIGH INTENSITY, PRISMATIC OPER
200	SFT	SIGN, TYPE B, TEMP, FURN
200	SFT	SIGN, TYPE B, TEMP, OPER
200	FT	EROSION CONTROL, SILT FENCE
200	FT	EROSION CONTROL, TURBIDITY CURTAIN, SHALLOW
1335	SYD	RIP RAP, HEAVY, MODIFIED
500	SYD	SLOPE RESTORATION, TYPE C

REV#	DATE	DESCRIPTION	BY

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

WADETRIM
 500 General Avenue, Suite 200
 Detroit, MI 48207
 Phone: 313.961.1000
 Fax: 313.961.1008
 www.wadetrtrim.com

Making modifications on a foundation of excellence

CITY OF DETROIT
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION

SCOUR PROTECTION
LEGEND & NOTES

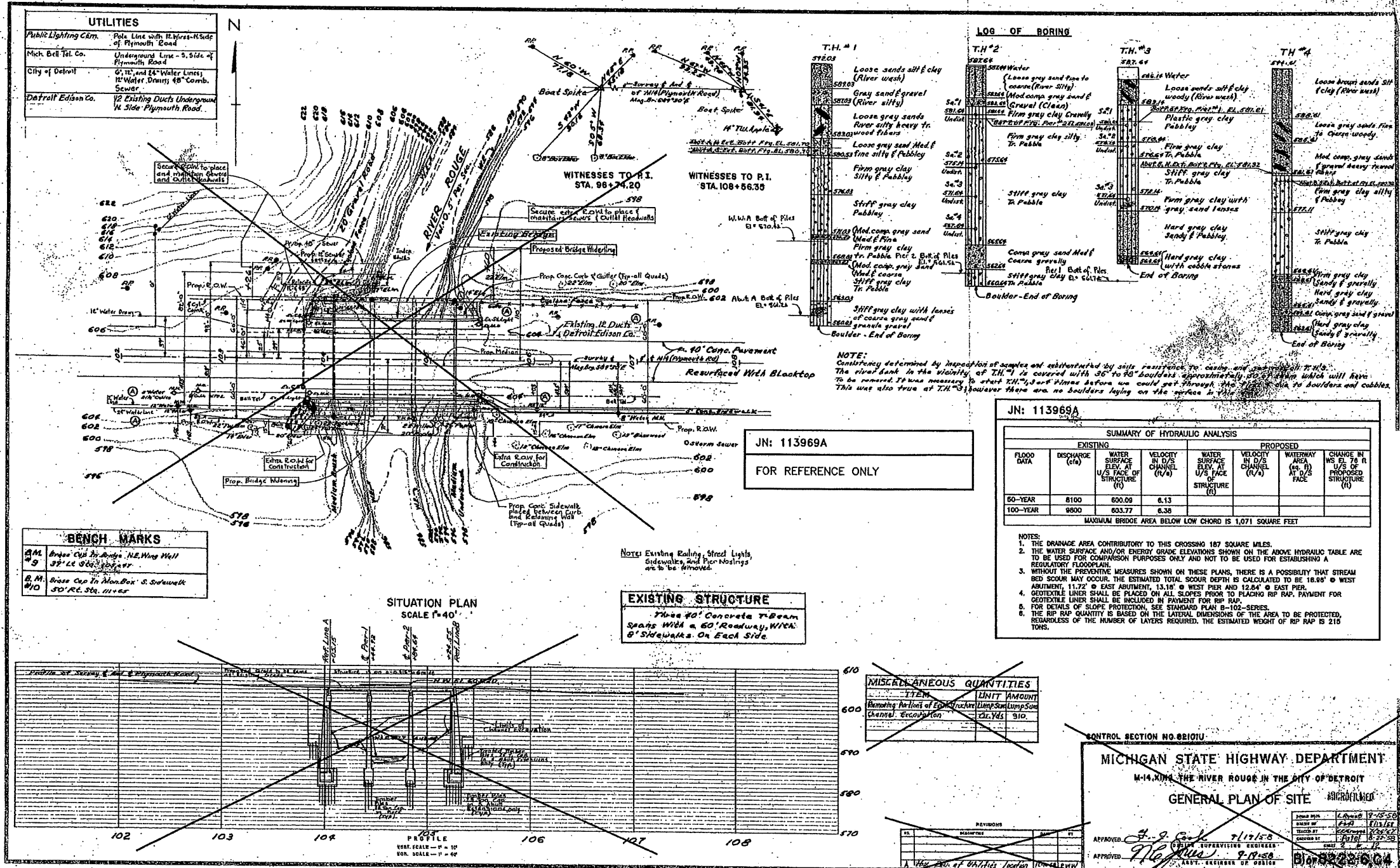
ISSUED FOR: DATE: BY:

JOB NO.
DTE2025-02G

SHEET
2

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PROJECT MANAGER - C:\PW\WORK\CHERWINOS\0000076\PLAN & PROFILE.PWG - 3 - PLOTTED 8/23/2011 1:50 PM BY CHERWINSKI, JEROME



ISSUED FOR:	DATE:	BY:
JOB NO.	DTE2025-026	
SHEET	3	

CITY OF DETROIT
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
 PLYMOUTH ROAD OVER RIVER ROUGE
 SCOUR PROTECTION
 GENERAL PLAN OF SITE

WADE IRM
 800 Grand Avenue, Suite 2500
 Detroit, MI 48226
 PHONE: 313.963.1000
 FAX: 313.963.1000
 WWW.WADEIRM.COM

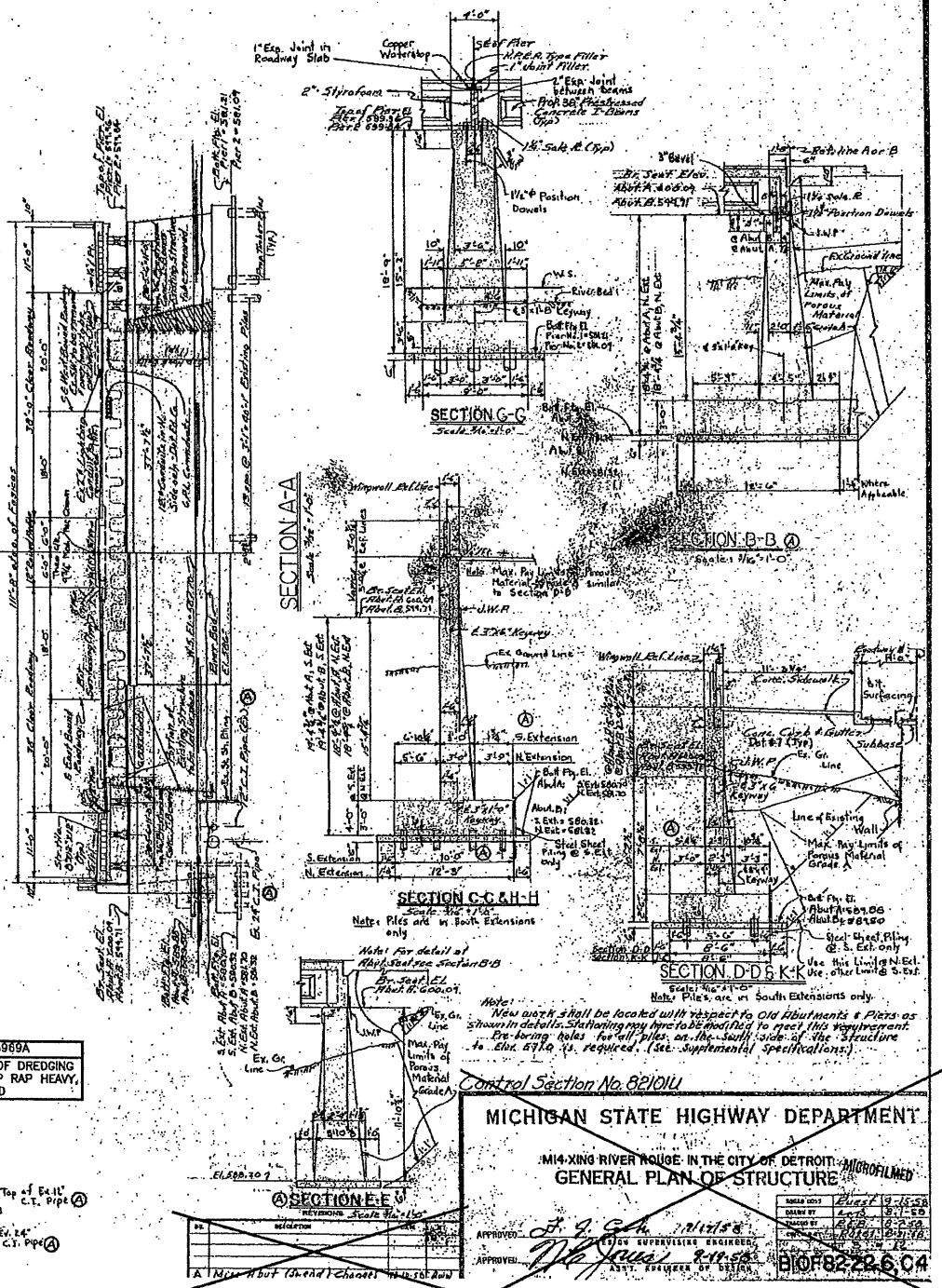
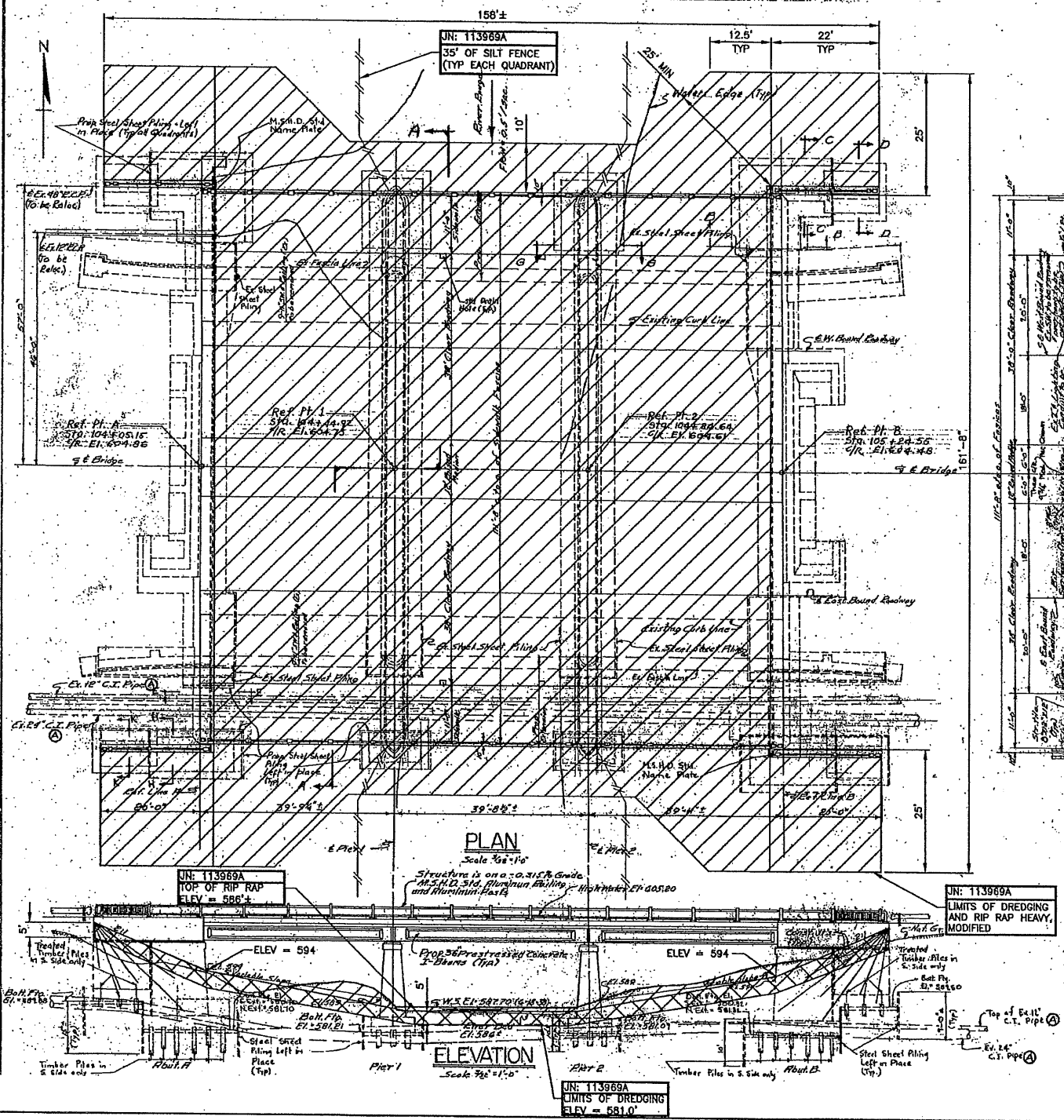
JN: 113969A

THE ONLY ITEMS OF WORK TO BE DONE FROM THIS SHEET ARE IDENTIFIED BY USING THE LEGEND BELOW, LABELED WITH THIS PROJECTS JOB NUMBER.

LEGEND

- LIMITS OF DREDGING

- LIMITS OF RIP RAP



MICHIGAN STATE HIGHWAY DEPARTMENT

M4-XING RIVER ROUGE IN THE CITY OF DETROIT - MICROFILMED

GENERAL PLAN OF STRUCTURE

APPROVED: *[Signature]* PROJECT ENGINEER

APPROVED: *[Signature]* CIVIL ENGINEER

APPROVED: *[Signature]* ASST. PROJECT ENGINEER

DATE: 10/15/58

PROJECT NO. DTE 2025-02G

SHEET 4

CITY OF DETROIT
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
PLYMOUTH ROAD OVER RIVER ROUGE
SCOUR PROTECTION
GENERAL PLAN OF STRUCTURE

NOT VALID FOR CONSTRUCTION
UNLESS SHOWN AND DATED:

WADE TRIM
300 Woodward Avenue, Suite 2000
Detroit, MI 48226
Phone: 313.963.1000
Fax: 313.963.1000

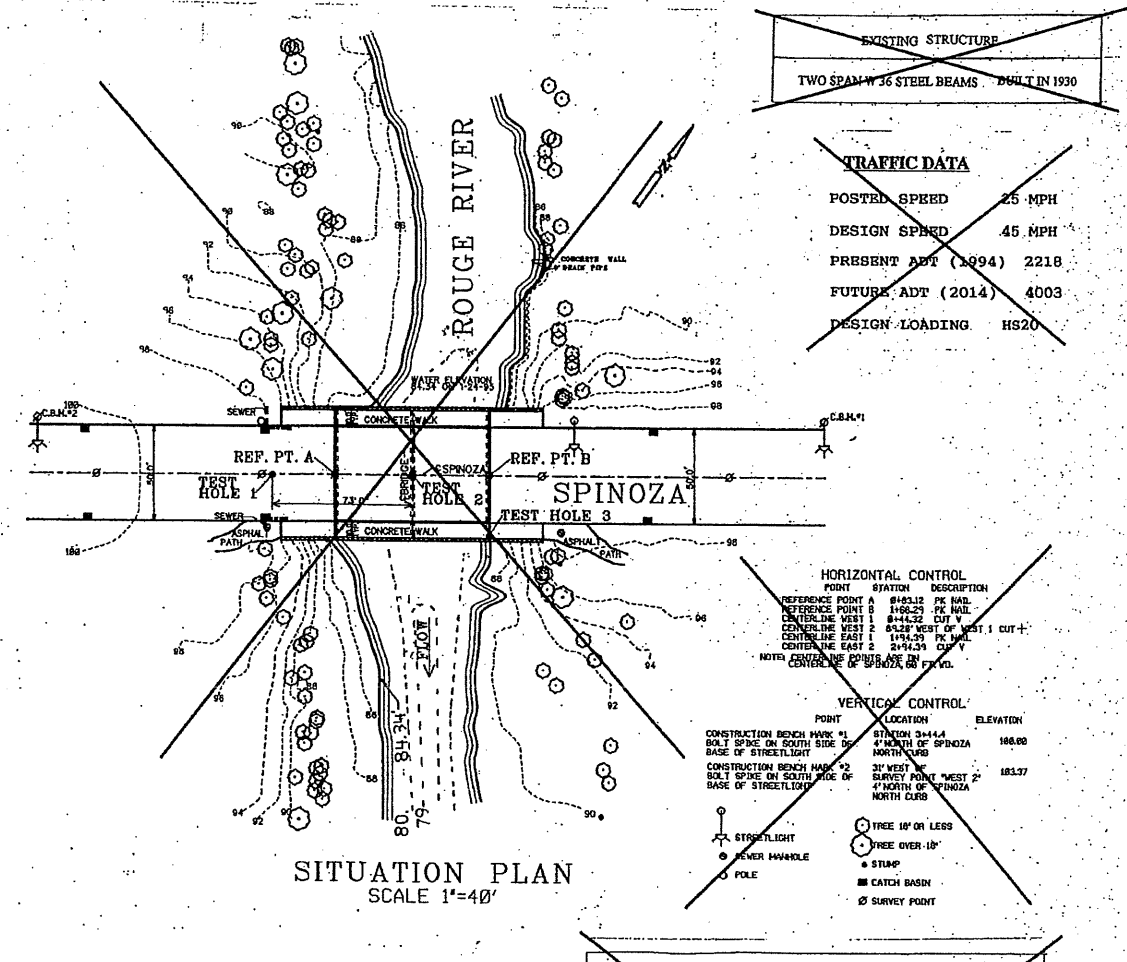
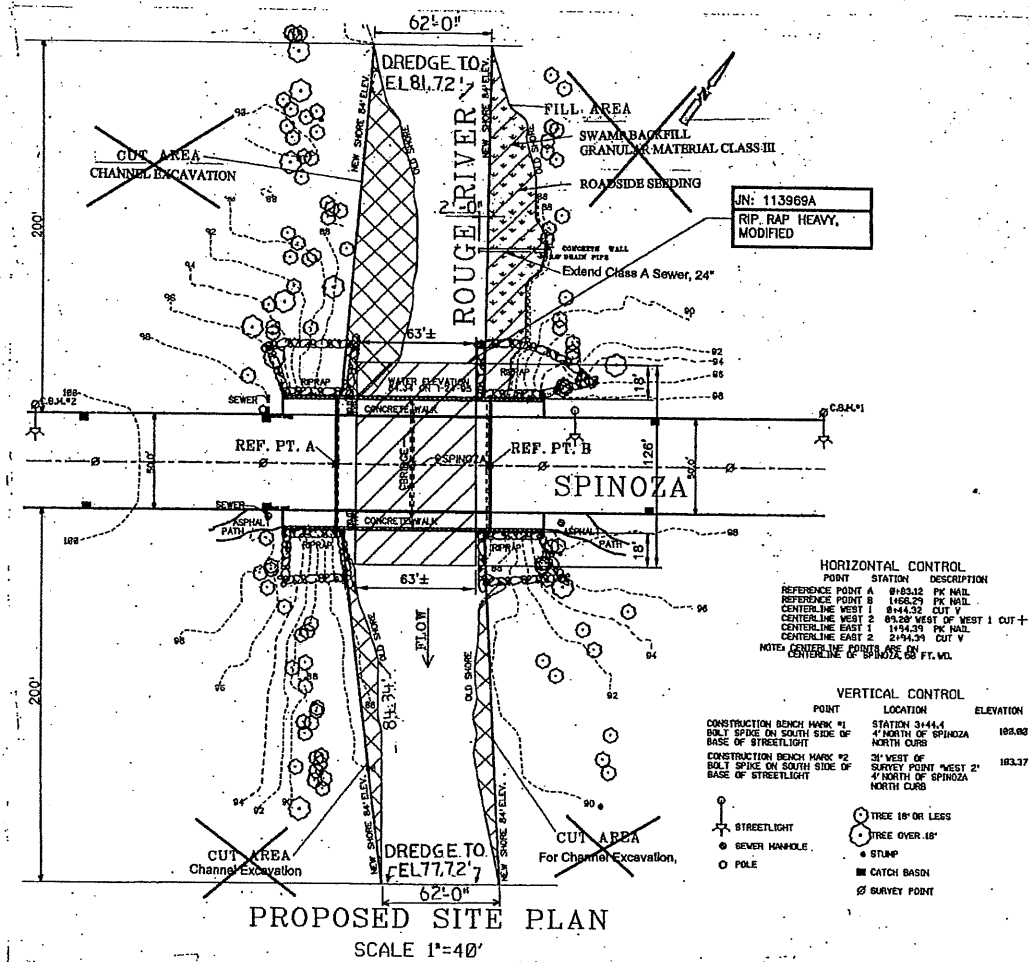
ISSUED FOR: DATE: BY:

JOB NO. DTE 2025-02G

SHEET 4

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PROJECT MANAGER: C.V. WOODRUFF, CIVIL ENGINEER, LICENSE NO. 15574
FIELD BOOK INFORMATION: C.V. WOODRUFF, CIVIL ENGINEER, LICENSE NO. 15574
DATE: 10/15/58



TRAFFIC DATA

POSTED SPEED	25 MPH
DESIGN SPEED	45 MPH
PRESENT ADT (1994)	2218
FUTURE ADT (2014)	4003
DESIGN LOADING	HS20

HORIZONTAL CONTROL

POINT	STATION	DESCRIPTION
REFERENCE POINT A	8165.52	PK NAIL
REFERENCE POINT B	1468.25	PK NAIL
CENTERLINE WEST 1	8144.32	CUT V
CENTERLINE WEST 2	8129.00	WEST 1 CUT +
CENTERLINE EAST 1	1154.30	PK NAIL
CENTERLINE EAST 2	2194.20	CUT V

VERTICAL CONTROL

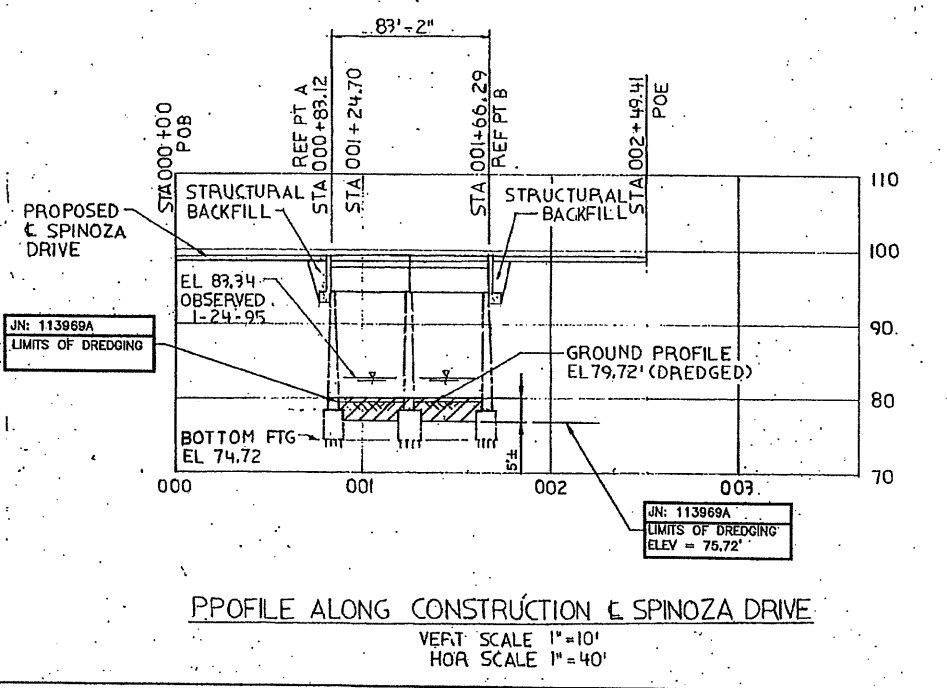
POINT	LOCATION	ELEVATION
CONSTRUCTION BENCH MARK #1	STATION 3+44.4 4" NORTH OF SPINOZA NORTH CURB	103.80
CONSTRUCTION BENCH MARK #2	30" WEST OF SURVEY POINT WEST 2 4" NORTH OF SPINOZA NORTH CURB	103.17

HORIZONTAL CONTROL

POINT	STATION	DESCRIPTION
REFERENCE POINT A	8165.12	PK NAIL
REFERENCE POINT B	1468.25	PK NAIL
CENTERLINE WEST 1	8144.32	CUT V
CENTERLINE WEST 2	8129.00	WEST 1 CUT +
CENTERLINE EAST 1	1154.30	PK NAIL
CENTERLINE EAST 2	2194.20	CUT V

VERTICAL CONTROL

POINT	LOCATION	ELEVATION
CONSTRUCTION BENCH MARK #1	STATION 3+44.4 4" NORTH OF SPINOZA NORTH CURB	103.80
CONSTRUCTION BENCH MARK #2	30" WEST OF SURVEY POINT WEST 2 4" NORTH OF SPINOZA NORTH CURB	103.17

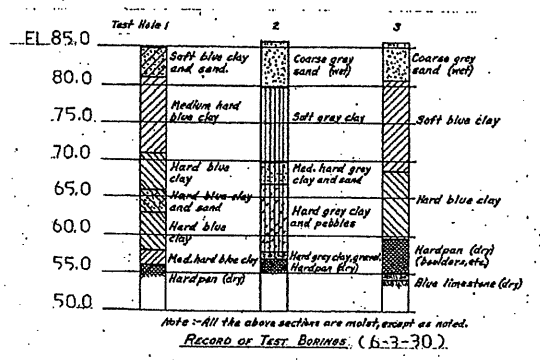


JN: 113969A

THE ONLY ITEMS OF WORK TO BE DONE FROM THIS SHEET ARE IDENTIFIED BY USING THE LEGEND BELOW, LABELED WITH THIS PROJECT'S JOB NUMBER.

LEGEND

▨ - LIMITS OF DREDGING



PAY QUANTITIES

ITEMS	QUANTITY	PAY UNIT
TOPSOIL SURFACE, 3"	968	SYD
FIELD OFFICE	6	MOS
MISC. MOBILIZATION, MAX. \$66,000.00	0.5	LSUM
ROADSIDE SEEDING	20	LBS
CHEMICAL FERTILIZER NUTRIENT	48	LBS
MULCH	0.4	TON
ANCHORING MULCH	0.2	ACRE
MULCH BLANKETS	968	SYD
SWAMP BACKFILL	310	CYD
CHANNEL EXCAVATION CLASS A SEWER 24"	620	CYD
TRENCH DETAIL A	30	LFT

NOTES:

Traffic is to be maintained per Traffic Control and Detour Plan. Water level is subject to change. The Contractor is responsible for making his own determination of water levels that will exist during construction.

Measures shall be taken to prevent debris from falling from the existing or proposed structure. If debris falls into the waterway, it shall be removed within 24 hours. Since disturbance of the waterway bottom may be as harmful as the debris itself, the preventive measures must be made as effective as possible.

Immediately after the repair of an abutment is complete, seeding and slope protection shall be placed on the adjacent embankment slopes.

Channel Excavation and Swamp Backfill Bid items includes removal and disposal of all materials, of whatever nature encountered such as masonry, concrete, rock, tree and debris.

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

WADETRIM
300 Cleveland Avenue, Suite 2500
Detroit, MI 48224
Phone: 313.967.0000
Fax: 313.967.0000
www.wadetrिम.com

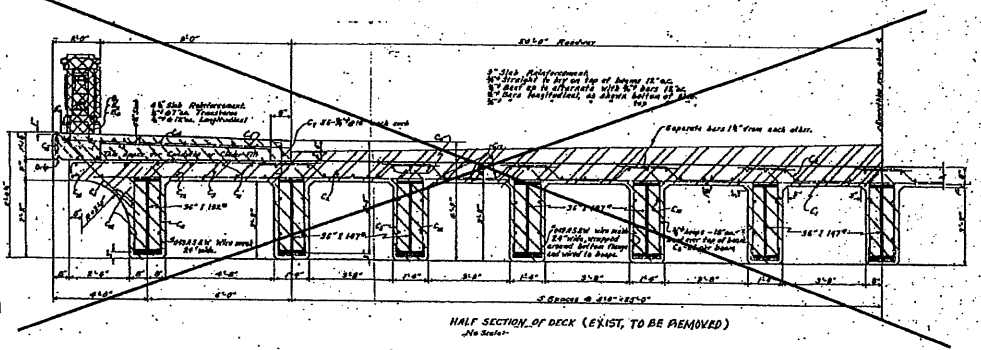
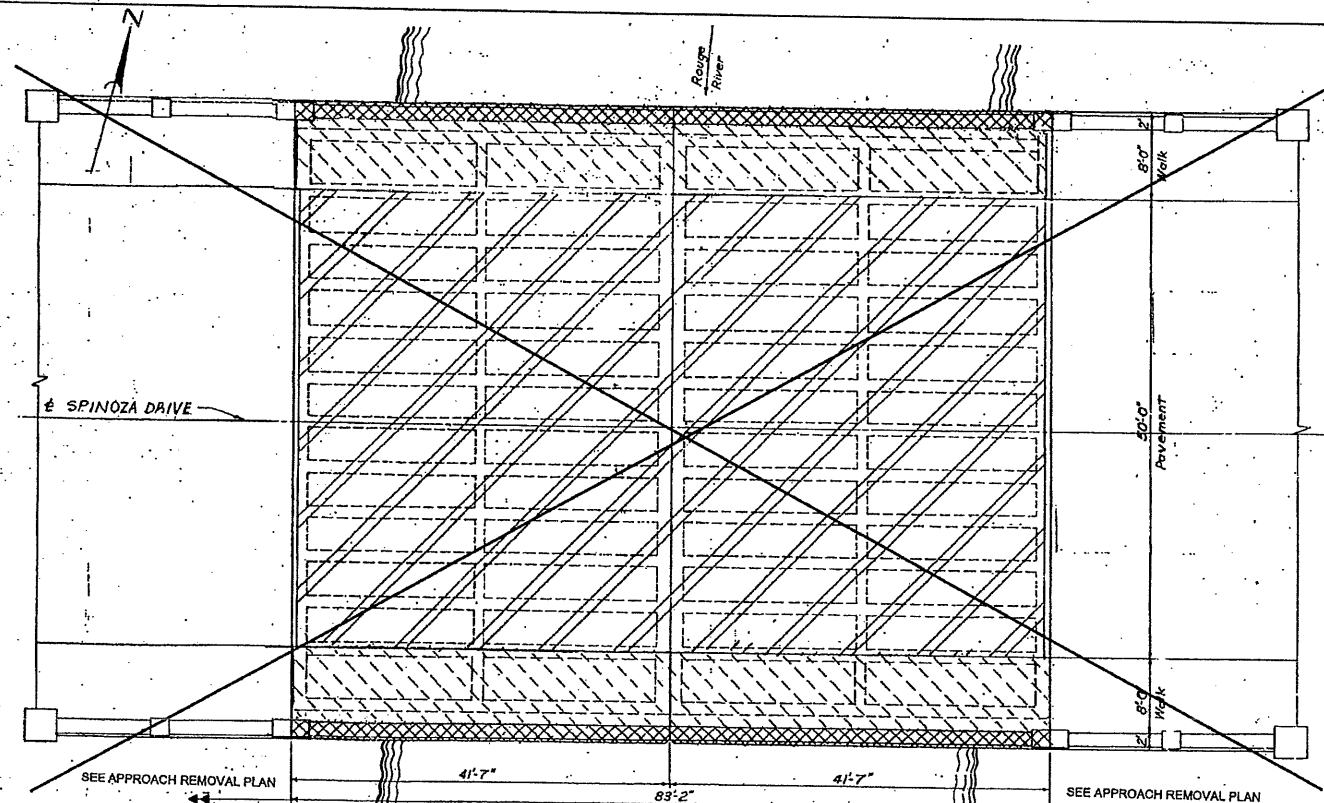
CITY OF DETROIT
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
SPINOZA DRIVE OVER RIVER ROUGE
SCOUR PROTECTION
GENERAL PLAN OF SITE

ISSUED FOR: DATE: BY:

JOB NO. DTE2025-02G
SHEET 5

JOB NO. 36916A

PROJECT MANAGER - C:\P\WORK\CHERWINSKI\0228057A\PLAN & PROFILE.DWG - 5 - PLOTTED 9/23/2011 1:50 PM BY: CHERWINSKI, JEROME



- LEGEND***
- REMOVE PARAPET
 - REMOVE DECK
 - REMOVE SIDEWALK ON THE DECK
 - REMOVE BEAMS, BEARINGS, ANCHOR BOLTS AND GROUTS
 - *1 REFER TO THIS SHEET ONLY

JN: 113969A

SUMMARY OF HYDRAULIC ANALYSIS

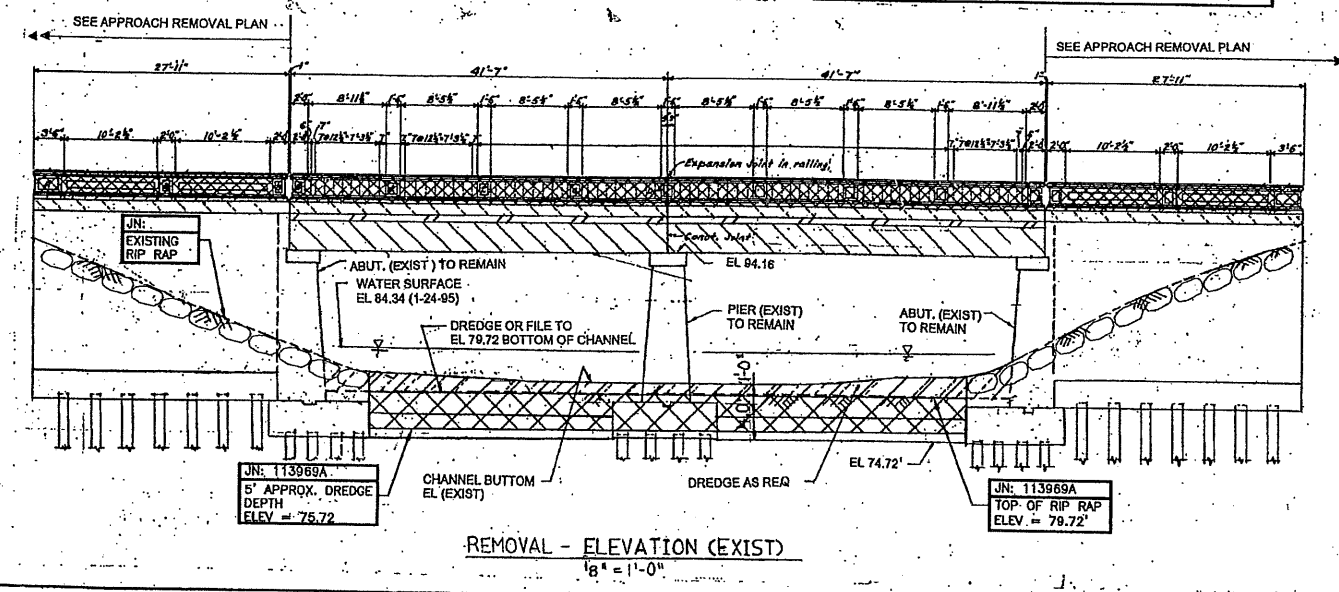
FLOOD DATA	EXISTING			PROPOSED		
	DISCHARGE (cfs)	WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE (ft)	VELOCITY IN D/S CHANNEL (ft/s)	WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE (ft)	VELOCITY IN D/S CHANNEL (ft/s)	WATERWAY AREA (sq. ft) AT D/S FACE
50-YEAR	7100	92.24	10.48			
100-YEAR	8500	94.16	12.21			

MAXIMUM BRIDGE AREA BELOW LOW CHORD IS 1,055 SQUARE FEET

NOTES:

- THE DRAINAGE AREA CONTRIBUTORY TO THIS CROSSING 187 SQUARE MILES.
- THE WATER SURFACE AND/OR ENERGY GRADE ELEVATIONS SHOWN ON THE ABOVE HYDRAULIC TABLE ARE TO BE USED FOR COMPARISON PURPOSES ONLY AND NOT TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN.
- WITHOUT THE PREVENTIVE MEASURES SHOWN ON THESE PLANS, THERE IS A POSSIBILITY THAT STREAM BED SCOUR MAY OCCUR. THE ESTIMATED TOTAL SCOUR DEPTH IS CALCULATED TO BE 25.31' @ WEST ABUTMENT, 27.84' @ EAST ABUTMENT AND 21.83' @ CENTER PIER.
- GEOTEXTILE LINER SHALL BE PLACED ON ALL SLOPES PRIOR TO PLACING RIP RAP. PAYMENT FOR GEOTEXTILE LINER SHALL BE INCLUDED IN PAYMENT FOR RIP RAP. HEAVY, MODIFIED.
- FOR DETAILS OF SLOPE PROTECTION, SEE STANDARD PLAN B-102-SERIES.
- THE RIP RAP QUANTITY IS BASED ON THE LATERAL DIMENSIONS OF THE AREA TO BE PROTECTED, REGARDLESS OF THE NUMBER OF LAYERS REQUIRED. THE ESTIMATED WEIGHT OF RIP RAP IS 89 TONS.

- JN: 113969A**
- THE ONLY ITEMS OF WORK TO BE DONE FROM THIS SHEET ARE IDENTIFIED BY USING THE LEGEND BELOW, LABELED WITH THIS PROJECTS JOB NUMBER.
- LEGEND**
- LIMITS OF DREDGING
 - LIMITS OF RIP RAP



PAY QUANTITIES

ITEMS	QUANTITY	PAY UNIT
MISC. REMOVAL OF PORTIONS OF STRUCTURES, B01-82-18-85	1	LSUM

- NOTES:**
- REMOVAL OF PARAPET, DECK, SIDEWALK ON DECK, BEAMS, BEARINGS, ANCHOR BOLTS, GROUT AND ANY OTHER ITEMS ON THE BRIDGE DECK WILL BE PAID FOR AS MISC. REMOVAL OF PORTIONS OF STRUCTURES, B01-82-18-85 LSUM.
 - REMOVAL AND DISPOSAL OF THE MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 2.06 OF 1990 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PROJECT MANAGER: C:\PW\WORK\CHERWINSKI\022807A\PLAN & PROFILES\DWG - 6 - PLOTTED 5/23/2011 1:51 PM BY: CHERWINSKI, JEROME

SPINOZA DRIVE BRIDGE OVER ROUGE RIVER (BW-270)

CITY OF DETROIT
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
SPINOZA DRIVE OVER RIVER ROUGE
SCOUR PROTECTION
GENERAL PLAN OF STRUCTURE

JOB NO. DTE2025-02G

SHEET 6

JOB NO. 36916A

a.o. con she dra det

ISSUED FOR: DATE: BY:

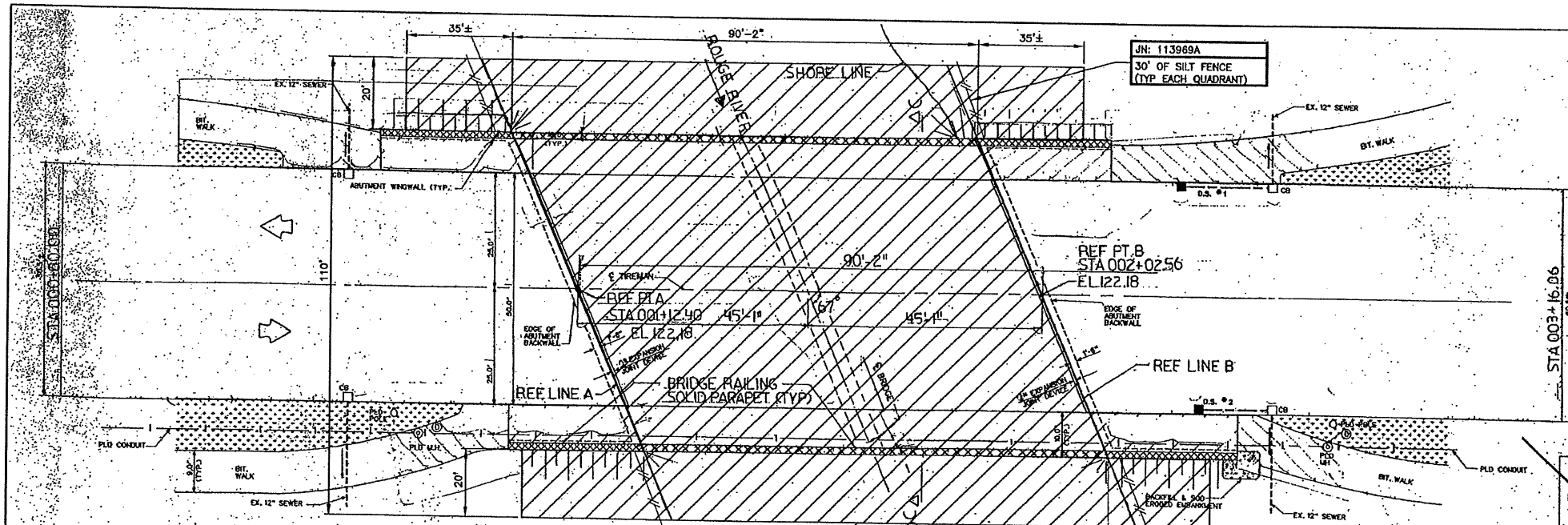
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WADETRIM
200 Corporate America, Suite 200
37100 W. 130th St.
Farmington Hills, MI 48334
TEL: 248-881-7000
FAX: 248-881-7008
www.wadetrिम.com

CITY DIVISION
DEPT. OF PUBL. WORKS

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draw. by
check. by
app. by

REV# DATE DESCRIPTION



JN: 113969A

THE ONLY ITEMS OF WORK TO BE DONE FROM THIS SHEET ARE IDENTIFIED BY USING THE LEGEND BELOW, LABELED WITH THIS PROJECTS JOB NUMBER.

LEGEND

- LIMITS OF DREDGING

- LIMITS OF RIP RAP

JN: 113969A

SUMMARY OF HYDRAULIC ANALYSIS

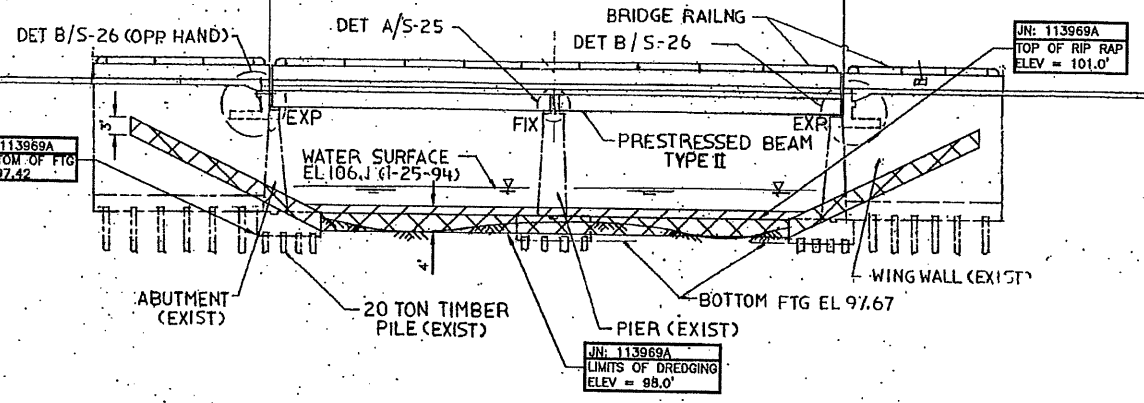
FLOOD DATA	EXISTING			PROPOSED			CHANGE IN WS ELEV. AT U/S OF PROPOSED STRUCTURE (ft)
	DISCHARGE (cfs)	WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE (ft)	VELOCITY IN D/S CHANNEL (ft/s)	WATER SURFACE ELEV. AT U/S FACE OF STRUCTURE (ft)	VELOCITY IN D/S CHANNEL (ft/s)	WATERWAY AREA (sq. ft) AT D/S FACE	
50-YEAR	7400	115.22	7.55				
100-YEAR	8900	116.52	8.28				

MAXIMUM BRIDGE AREA BELOW LOW CHORD IS 1181.3 SQUARE FEET

NOTES:

- THE DRAINAGE AREA CONTRIBUTORY TO THIS CROSSING 187 SQUARE MILES.
- THE WATER SURFACE AND/OR ENERGY GRADE ELEVATIONS SHOWN ON THE ABOVE HYDRAULIC TABLE ARE TO BE USED FOR COMPARISON PURPOSES ONLY AND NOT TO BE USED FOR ESTABLISHING A REGULATORY FLOODPLAIN.
- WITHOUT THE PREVENTIVE MEASURES SHOWN ON THESE PLANS, THERE IS A POSSIBILITY THAT STREAM BED SCOUR MAY OCCUR. THE ESTIMATED TOTAL SCOUR DEPTH IS CALCULATED TO BE 15.55' @ WEST ABUTMENT, 15.53' @ EAST ABUTMENT AND 18.99' @ CENTER PIER.
- GEOTEXTILE LINER SHALL BE PLACED ON ALL SLOPES PRIOR TO PLACING RIP RAP. PAYMENT FOR GEOTEXTILE LINER SHALL BE INCLUDED IN PAYMENT FOR RIP RAP. FOR DETAILS OF SLOPE PROTECTION, SEE STANDARD PLAN B-102-SERIES.
- THE RIP RAP QUANTITY IS BASED ON THE LATERAL DIMENSIONS OF THE AREA TO BE PROTECTED, REGARDLESS OF THE NUMBER OF LAYERS REQUIRED. THE ESTIMATED WEIGHT OF RIP RAP IS 87 TONS.

Flood Data Frequency (Yr)	Waterway Discharge Cfs	Water Surface El. FL	Velocity in Channel with or without Str. FL/Sec.	Waterway Area Below W.S. EL. Sqft.	Backwater above W.S. EL. FL	Fin. W.S. EL. FL
Existing Structure Q Design (100 Yr.)	4160	107.13	8.1	807	0.10	107.03
Existing Structure Q Overlapping (500 Yr.)	NA	NA	NA	NA	NA	NA
Proposed Structure Q Design (100 Yr.)	4118	107.13	8.1	807	0.10	107.03
Proposed Structure Q Overlapping (500 Yr.)	NA	NA	NA	NA	NA	NA
Natural Channel Q Design (50 Yr.)	3680	106.13	4.7	718	0.10	106.03
1998 Witnessed Flood of Record		107.23				



ELEVATION
1" = 12'-0"

VERIFY ALL ELEVATIONS BEFORE CONSTRUCTION.

REV#	DATE	DESCRIPTION	BY

NOT VALID FOR CONSTRUCTION UNLESS SIGNED AND DATED:

Wade Trm

300 General Avenue, Suite 200
Detroit, MI 48208
PH: 313.961.0808
www.wadefirm.com

CITY OF DETROIT
IN CO-OPERATION WITH
MICHIGAN DEPARTMENT OF TRANSPORTATION
TIREMAN AVENUE OVER RIVER ROUGE
SCOUR PROTECTION
GENERAL PLAN OF SITE

ISSUED FOR: DATE: BY:

JOB NO. DTE2025-02G

SHEET

7

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PROJECT MANAGER - CIVIL WORK: CHERWINSKA; DESIGNER: CHERWINSKA, JEROME; PLOTTED: 8/23/2011 1:51 PM BY: CHERWINSKA, JEROME