

HURON PINES IN COOPERATION WITH THE MONTMORENCY COUNTY ROAD COMMISSION

PLANS OF PROPOSED IMPROVEMENTS
HOSSLER ROAD OVER THUNDER BAY RIVER
SECTION 20, T30N, R2E, BRILEY TOWNSHIP
MONTMORENCY COUNTY, MICHIGAN

GENERAL NOTES

EXCEPT WHERE OTHERWISE INDICATED ON THESE PLANS OR IN THE PROPOSAL AND SUPPLEMENTAL SPECIFICATIONS CONTAINED HEREIN, ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE MICHIGAN DEPARTMENT OF TRANSPORTATION 2020 STANDARD SPECIFICATIONS FOR CONSTRUCTION.

FOR PROTECTION OF UNDERGROUND UTILITIES AND IN CONFORMANCE WITH PUBLIC ACT 174, 2013, THE CONTRACTOR SHALL DIAL 811 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 THUS 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.



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TITLE SHEET

SCALE
N/A

ENGINEER
RIVARD

DATE
JULY 18, 2024

SITE NUMBER
TBM003

JOB NUMBER
24.018



SHEET NO.

1



GENERAL PLAN NOTES

SOIL BORING DATA
 SOIL BORING LOGS REPRESENT POINT INFORMATION. PRESENTATION OF THIS INFORMATION IN NO WAY INFERS THAT SUBSURFACE CONDITIONS ARE THE SAME OTHER THAN AT THE EXACT LOCATION OF BORINGS.

SOIL EROSION MEASURES
 PLACE TOPSOIL, FERTILIZER, AND MULCH AS SOON AS POSSIBLE. CRITICAL GRADES SHOULD BE PROTECTED WITH MULCH BLANKETS AS DIRECTED BY THE ENGINEER. CIRCLED NUMBERS ON PLANS REFER TO ITEMS ON THE MDOT STANDARD PLAN-96-SERIES.

PUBLIC UTILITIES

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES

NAME OF OWNER	KIND OF UTILITY
FRONTIER/VERIZON 3249 FOREST ROAD GAYLORD, MI 49732 CONTACT PERSON: JOHN KUZIEL PH: 989-657-6659	TELEPHONE/FIBER
RIVERSIDE ENRGY MICHIGAN 10691 E CARTER ROAD UNIT 201 TRAVERSE CITY, MI 49684 PH: 231-995-4000	GAS
PRESQUE ISLE ELECTRIC & GAS CO-OP 19831 M-68 HWY, PO BOX 308 ONAWAY, MI 49765 CONTACT PERSON: ANDY BISCHER PH: 1-800-423-6634 EXT 1041	ELECTRIC

NOTES APPLYING TO STANDARD PLANS

THE EXISTING UTILITIES LISTED BELOW AND SHOWN ON THESE PLANS REPRESENT THE BEST INFORMATION AVAILABLE. THIS INFORMATION DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY AS TO ITS ACCURACY AND THE LOCATION OF EXISTING UTILITIES

- R-96-E SOIL EROSION & SEDIMENTATION CONTROL MEASURES
- *R-100-I SEEDING AND TREE PLANTING
- R-105-D GRADING CROSS-SECTIONS

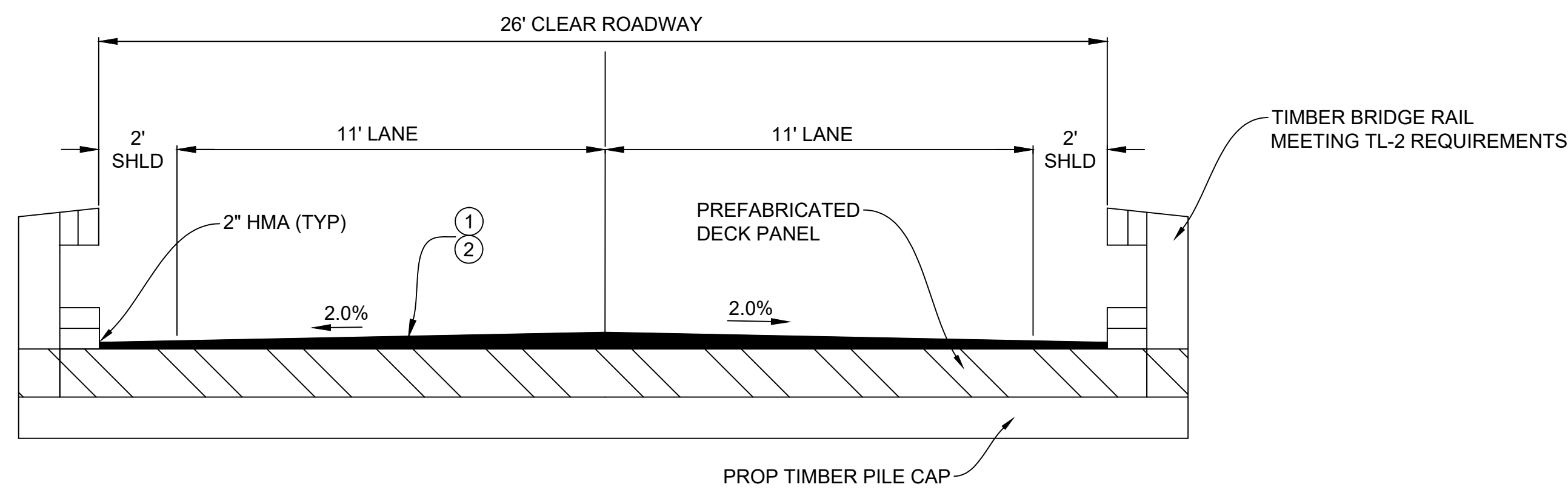
*SPECIAL DETAIL - INCLUDED IN THE PLANS

SUMMARY OF HYDRAULIC ANALYSIS

FLOOD EVENT	DISCHARGE (CFS)	EXISTING		PROPOSED		CHANGE IN WS ELEV
		WATER SURFACE ELEV AT U/S FACE OF STRUCTURE (FT)	VELOCITY AT D/S FACE (FPS)	WATER SURFACE ELEV AT U/S FACE OF STRUCTURE (FT)	VELOCITY AT D/S FACE (FPS)	
50 YEAR (2%)	800	905.20	2.14	904.12	2.14	-1.08
100 YEAR (1%)	900	905.36	2.27	905.17	2.27	-0.19

THE CONTRIBUTING DRAINAGE AREA IS 32.3 SQUARE MILES.

THE WATER SURFACE AND/OR ENERGY GRADE ELEVATIONS SHOWN ON THE HYDRAULIC TABLE ARE TO BE USED FOR COMPARISON ONLY

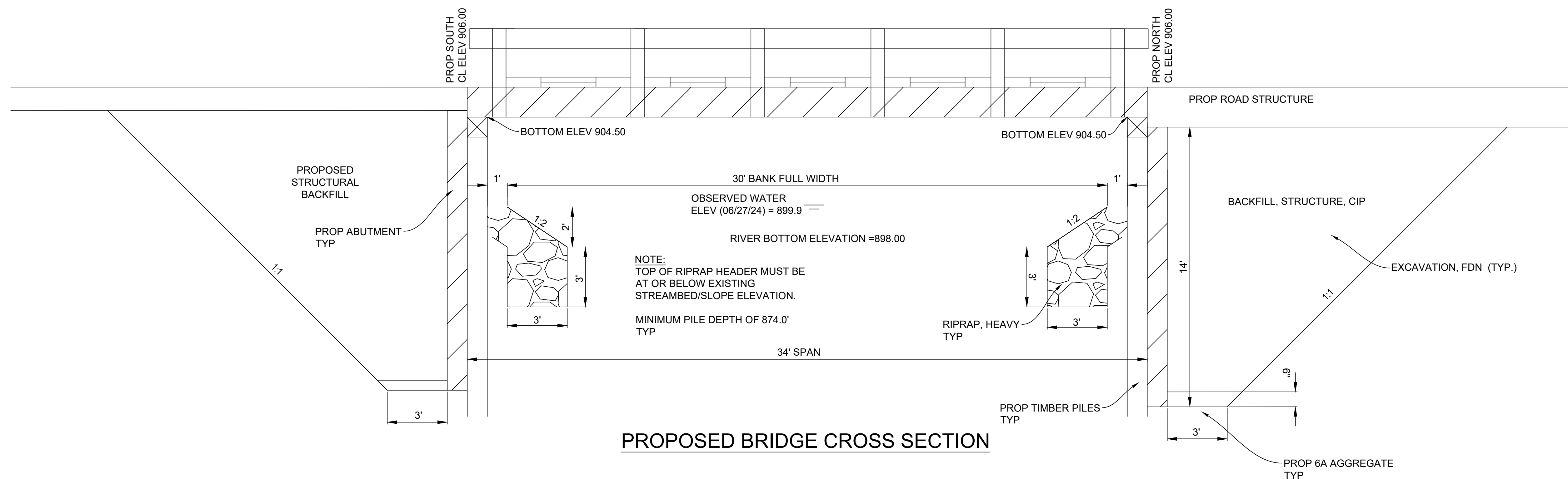


PROPOSED BRIDGE DECK CROSS SECTION

NOT TO SCALE

HMA APPLICATION TABLE

IDENT.	PAY ITEM	#/SYD	PERFORMANCE GRADE	REMARKS
1	HMA, 13A	220	58-28	TOP COURSE
2	HMA, 13A	VARIES	58-28	WEDGE
HMA BOND COAT		0.05-0.15 GAL/SYD (FOR INFORMATION ONLY)		



PROPOSED BRIDGE CROSS SECTION

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WATER & DRAINAGE SYMBOLS

- EXISTING CATCH BASIN
- PROPOSED CATCH BASIN
- EXISTING MANHOLE
- PROPOSED MANHOLE
- EXISTING CULVERT END SECTION
- PROPOSED CULVERT END SECTION
- EXISTING HEADWALL
- PROPOSED HEADWALL
- WATER SHUTOFF(Service Valve)
- GATE VALVE
- GATEWELL
- WATER METER
- WATER MANHOLE
- EXISTING FIRE HYDRANT
- PROPOSED FIRE HYDRANT
- ADJUST FIRE HYDRANT
- ADJUST DRAINAGE STRUCTURE
- ADJUST DRAINAGE STRUCTURE W/COVER
- ADJUST DRAINAGE STRUCTURE BY OTHERS
- RELOCATE - BY OTHERS
- SIDEWALK RAMP TYPE
- CHECK DAM (PROFILES)
- DIKE (PROFILES)
- WATER TABLE (PROFILES)
- POST
- WATER WELL

REAL ESTATE SYMBOLS

- PROPERTY OWNERSHIP ARROW
- CONTIGUOUS PROPERTY SYMBOL
- PARCEL NUMBER BOX
- PARCEL LINES

UTILITIES SYMBOLS

- POWER POLE
- TELEPHONE POLE
- GUY POLE
- LIGHT POLE
- POWER LIGHT POLE
- TELEPHONE MANHOLE
- POWER TOWER
- GAS VALVE
- WALK/NO-WALK
- GUY ANCHOR
- RAILROAD SIGNAL
- ELECTRICAL MANHOLE
- ELECTRICAL HANDHOLE
- TELEPHONE PEDESTAL/RISER
- FIBER OPTIC MARKER

MISCELLANEOUS SYMBOLS

- RIPRAP
- SIGN
- STUMP
- SWAMP
- DECIDUOUS TREE
- CONIFEROUS TREE
- BUSH
- MAIL BOX
- FLAG
- BAR & CAP
- SECTION CORNER
- QUARTER SECTION
- BENCHMARK
- USGS MARKER
- CONTROL POINT
- BEAM G. R. RUN NUMBER (EXISTING)
- BEAM G. R. RUN NUMBER (PROPOSED)

HAZARDOUS OR FLAMMABLE MATERIAL USED WITH UNDERGROUND GAS & ELECTRICAL LINES

CAUTION - CRITICAL UNDERGROUND UTILITY USED WITH FIBER OPTICS LINES

PROP 36" PROPOSED CULVERT/SEWER

EX 12" CMP EXISTING CULVERT/SEWER

UTILITY PATTERNS

- ELEC ELECTRICAL LINE
- 24" GAS GAS LINE
- 12" OIL OIL LINE
- TELE TELEPHONE LINE
- 36" WM WATER LINE
- CTV CABLE TV
- FO FIBER OPTICS
- POWER TRANSMISSION LINE

R.O.W. PATTERNS

- EX. LIMITED ACCESS R.O.W.
- EXISTING R.O.W.
- PROP LIMITED ACCESS R.O.W.
- PROP FREE ACCESS R.O.W.
- SECTION LINE
- GRADING EASEMENT

TOPO PATTERNS

- HEDGE LINE
- TREE LINE
- EXISTING FENCE
- PROPOSED FENCE
- EXISTING GUARD RAIL
- PROPOSED GUARD RAIL
- DRAINAGE CRS/EDGE OF WATER
- WETLANDS AREA
- ABANDON ANY UTILITY
- CITY LIMITS
- RAILROAD
- SOUND ABATEMENT WALL
- CONCRETE MEDIAN BARRIER
- SLOPE STAKE LINE

DRIVE/APPROACH LEGEND

- CONCRETE
- HMA
- AGGREGATE
- GRASS

REMOVAL LEGEND

- REMOVING (R)
- ABANDONING (A)
- SAVE (S)
- BULKHEAD (B)
- REMOVING CURB & GUTTER

SPECIAL LEGEND THIS PROJECT

- STANDARD PLAN R-96-E SOIL EROSION & SEDIMENTATION SILT FENCE (26)
- STANDARD PLAN R-96-E SOIL EROSION & SEDIMENTATION CHECK DAM (37)
- ROAD BORING LOCATION (SBOR 1)

LEGEND SHEET

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DURING STREAM ENCLOSURE ACTIVITIES AND ALL CONSTRUCTION ACTIVITIES PLACE EROSION CONTROL MEASURES TO PREVENT SEDIMENT FROM ENTERING THE WATERWAY.

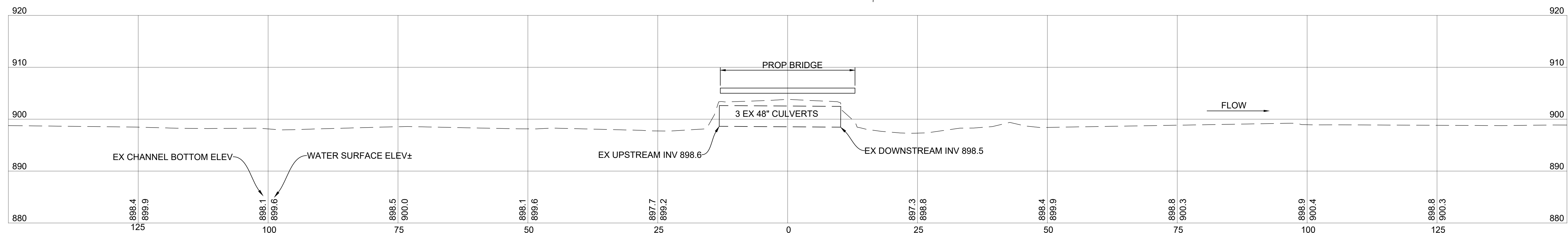
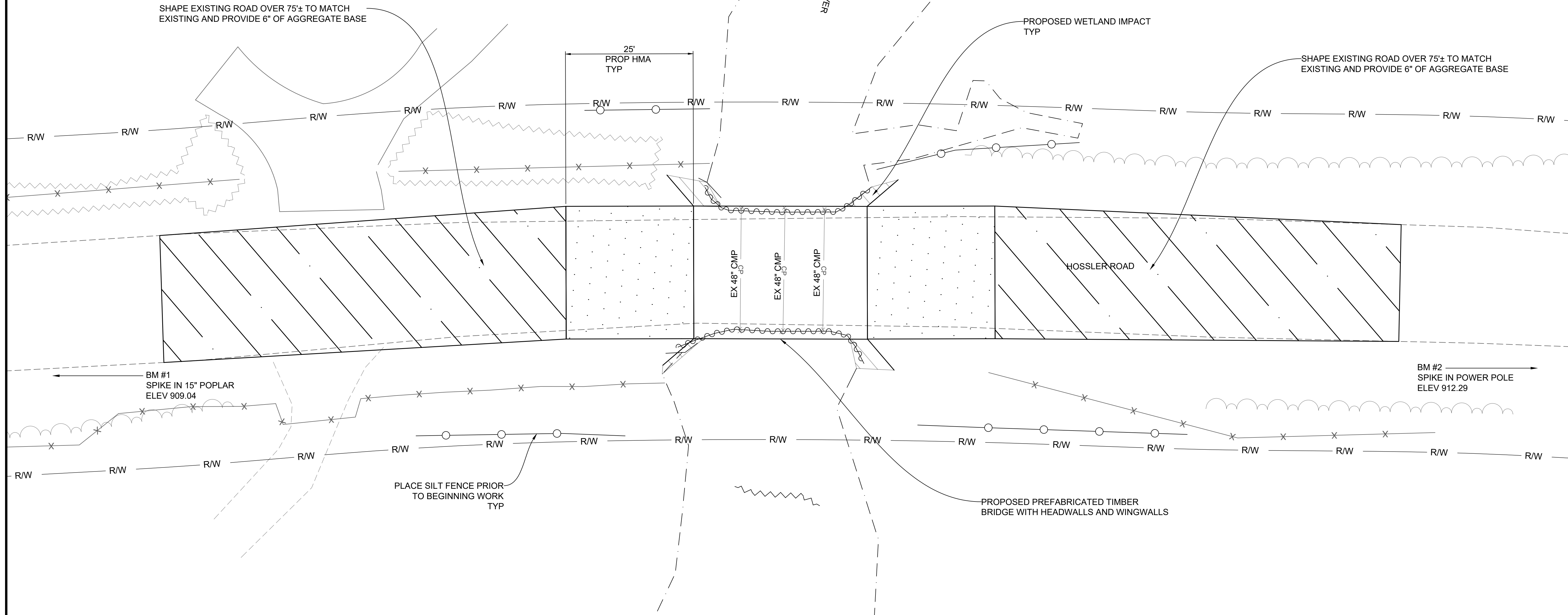
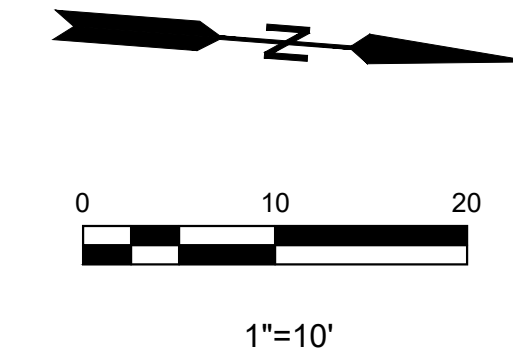
ALL EROSION CONTROL MATERIALS SHALL USE WILDLIFE SAFE NETTING PER THE FISH AND WILDLIFE SERVICE SPECIFICATIONS.

ALL EQUIPMENT WILL BE SPRAYED WITH WATER PRIOR TO MOVING TO THE SITE TO AVOID THE INTRODUCTION OF INVASIVE SPECIES.

SILT FENCE WILL BE INSTALLED A MINIMUM OF 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

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STREAM PROFILE DETAIL

PLAN SHEET

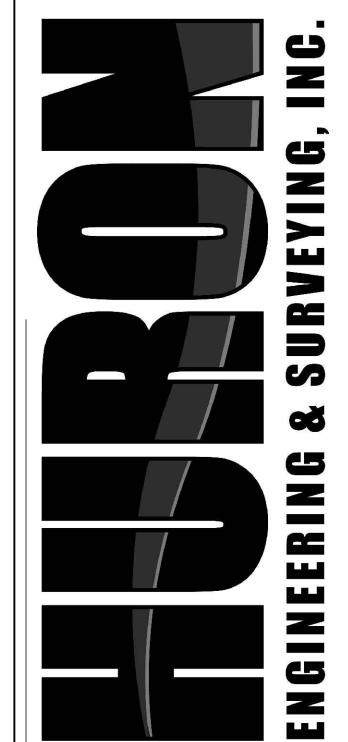
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