

Information for File #2009-00228-DAS

Applicant City of La Crescent

Corps Contact David Studenski

Address 1114 South Oak Street, La Crescent, MN 55947

E-Mail david.a.studenski@usace.army.mil

Phone (651) 290-5902

Primary County Houston, MN

Section 10 and 11

Township T. 104N.

Range R. 4W.

Information Complete On April 30, 2013

Posting Expires On June 29, 2013

Authorization Type LOP-05-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above. An approved jurisdictional determination will be made prior to reaching a permit decision, and will be posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/>.

PROJECT DESCRIPTION AND PURPOSE: The applicant has proposed the construction of a 1.04 mile pedestrian and bicycle trail along existing streets and an old roadbed component from Sycamore Street to Shore Acres Road in the city of La Crescent, MN. The trail is identified as the Wagon Wheel Trail - Phase I. The trail will eventually connect regional trails in Minnesota and Wisconsin. According to the applicant, the purpose of the trail is to provide a safe and reliable connection, for non-motorized modes of transportation between La Crescent, MN and La Crosse, WI while enhancing utilization of the Upper Mississippi Wildlife Refuge.

NAME, AREA AND TYPES OF WATERS (INCLUDING WETLANDS) SUBJECT TO LOSS: The proposed project would include the discharge of fill material into a total of 0.5554 acre of seasonally flooded wetland and 0.0624 acre of shallow marsh wetland that is adjacent to the Mississippi River in conjunction with minor side slope grading of the old roadbed, repair of a previously blown out section of the roadbed, and the installation of a precast box culvert. The impacts have been minimized by utilizing the old roadbed and by closely following the existing ground and adjusting the horizontal alignment. The impacts are located in the Upper Mississippi-Black-Root Watershed.

ALTERNATIVES CONSIDERED: Current pedestrian and bicycle traffic between La Crescent and La Crosse are limited to the shoulder of a high-speed and high-volume highway. The shoulder is not separated from vehicle traffic. The no-build alternative would not provide an alternative that is considered conducive to inexperienced bicyclists and pedestrians and would not enhance access to the US Fish and Wildlife Refuge. An alternative alignment constructed along the highway would result in additional wetland impacts, impacts to the Wildlife Refuge, and was more costly.

COMPENSATORY MITIGATION: As compensatory mitigation for the wetland impacts described above, 0.6177 acre of wet meadow wetland credit and 0.6177 acre of upland buffer credit would be withdrawn from a mitigation bank site that has been approved by the Corps of Engineers. The bank site is located in the SW ¼, Sec. 29, the SE ¼, Sec. 30, and Sec. 31, T. 104N, R. 4W; and the SE ¼, Sec. 36, T. 104N, R. 5W, Houston County, Minnesota. The bank site is located in the Root River watershed, approximately 5 miles southwest of the impact site.

Drawings See attached.

MINNESOTA DEPARTMENT OF TRANSPORTATION CITY OF LA CRESCENT, MN WAGON WHEEL TRAIL - PHASE 1 SYCAMORE STREET TO SHORE ACRES ROAD SP 236-090-01

CONSTRUCTION PLAN FOR GRADING, AGGREGATE BASE, BITUMINOUS SURFACE AND SHOULDERS.

LOCATED ON WAGON WHEEL TRAIL FROM SYCAMORE ROAD TO SHORE ACRES ROAD,
IN THE CITY OF LA CRESCENT

LOCATED IN SECTIONS 10 & 11 T104N R4W, HOUSTON COUNTY, MN

SYMBOL LEGEND

- ▲ CONTROL POINT
- EXISTING SANITARY CLEANOUT
- ⊙ EXISTING SANITARY MANHOLE
- ⊙ EXISTING STORM MANHOLE
- ⊙ EXISTING HYDRANT
- ⊙ EXISTING GATE VALVE
- ⊙ PROPOSED HYDRANT
- ⊙ PROPOSED GATE VALVE
- ⊙ PROPOSED MANHOLE
- ⊙ EXISTING CONIFER TREE
- ⊙ EXISTING DECIDUOUS TREE
- ⊙ EXISTING SOIL BORE
- ⊙ EXISTING SHRUB
- ⊙ EXISTING POWER POLE
- ⊙ EXISTING GUY WIRE
- ⊙ EXISTING TELEPHONE PEDESTAL
- ⊙ EXISTING CURB STOP
- ⊙ EXISTING ELECTRIC PEDESTAL
- ⊙ EXISTING CABLE TV PEDESTAL
- ⊙ EXISTING SATELLITE DISH
- ⊙ EXISTING MAILBOX
- ⊙ EXISTING SIGN
- ⊙ EXISTING WELL
- ⊙ EXISTING LIGHTPOLE
- ⊙ EXISTING BOLLARD
- ⊙ EXISTING STUMP
- ⊙ EXISTING GAS VALVE
- ⊙ BENCHMARK
- ⊙ EXISTING GAS METER
- ⊙ EXISTING TRAFFIC LIGHT

LINE LEGEND

- FIB — FIB — FIBER OPTIC
- □ — □ — CONTROLLED ACCESS
- — — — — ROW
- — — — — UTILITY
- — — — — EX. DRAINAGE DITCH
- — — — — MNDOT-ROW
- X — X — X — X — BARBWIRE FENCE
- — — — — CHAINLINK FENCE
- — — — — SECTION LINE
- — — — — QUARTER SECTION LINE
- — — — — WOODEN FENCE
- — — — — TRESLINE
- — — — — RETAINING WALL
- — — — — EX. SEALCOAT
- — — — — GUARD RAIL
- — — — — EX. WATERMAIN
- — — — — UNDERGROUND ELECTRIC
- — — — — UNDERGROUND CABLE TV
- — — — — EX. CRUSHED ROCK
- — — — — UNDERGROUND TELEPHONE
- — — — — UNDERGROUND GAS
- — — — — EX. CONTOUR
- — — — — EX. STORM SEWER
- — — — — PERMANENT EASEMENT
- — — — — TEMPORARY EASEMENT
- — — — — OVERHEAD ELECTRIC
- — — — — OVERHEAD TELEPHONE
- — — — — EX. SANITARY SEWER
- — — — — CENTERLINE
- — — — — SILT FENCE
- W — W — W
- UE — UE — UE
- CTV — CTV — CTV
- UT — UT — UT
- UG — UG — UG
- OH — OH — OH
- OHT — OHT — OHT
- S — S — S

HATCH LEGEND

- ▨ TREE REMOVAL
- ▨ BITUMINOUS DRIVEWAY REPLACEMENT

UTILITY LOCATION
THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL C. THIS UTILITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA."

UTILITY LOCATION PERFORMED ON: 04-17-12
GOPHER ONE CALL TICKET NUMBERS: 121022776

UTILITY DESIGN MEETING HELD ON: I.B.D.

GROSS LENGTH 5503 FEET 1.04 MILES
BRIDGE LENGTH — FEET — MILES
EXCEPTIONS LENGTH — FEET — MILES
NET LENGTH 5503 FEET 1.04 MILES

INDEX
THIS PLAN CONTAINS 18 SHEETS

SHEET 1	TITLE SHEET
SHEET 2	ESTIMATED QUANTITIES & TABULATIONS
SHEET 3	ROADWAY TYPICAL SECTIONS
SHEET 4	TRAIL TYPICAL SECTIONS
SHEET 5	STANDARD DETAILS
SHEET 6-16	PLAN AND PROFILE
SHEET 17	SWPPP
SHEET 18	TRAFFIC CONTROL PLAN
SHEET 19-30	CROSS SECTIONS

DESIGN DATA

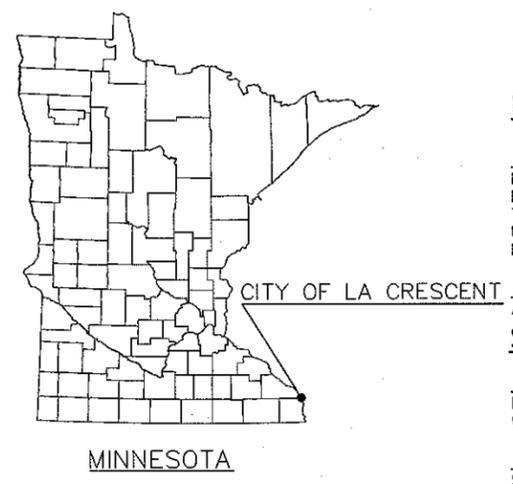
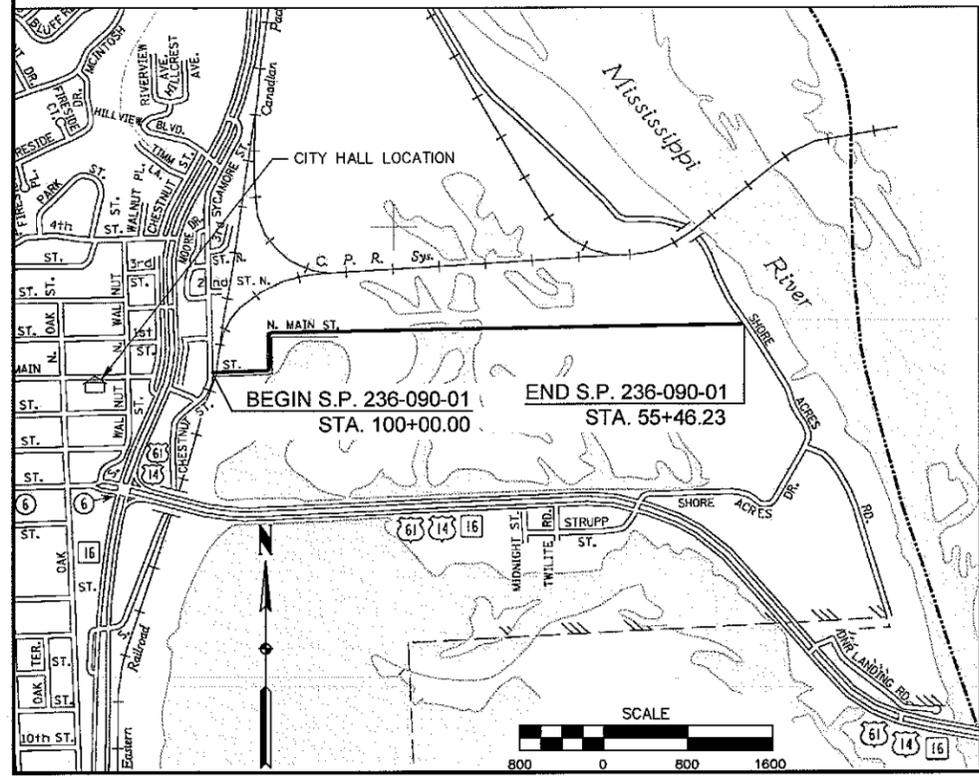
TRAFFIC LANE WIDTH	10.0'
PARKING LANE WIDTH	NA
ADT 2011	20 (ESTIMATED)
PROJ. ADT 2031	20 (ESTIMATED)
STRUCTURAL DESIGN STRENGTH	NA
FUNCTIONAL CLASSIFICATION	LOCAL
NO. OF TRAFFIC LANES	2
NO. OF PARKING LANES	0
R VALUE	15 (ESTIMATED)
ESAL (20-YEAR)(FLEXIBLE)	85,000
ESAL (35-YEAR)(FLEXIBLE)	—
DESIGN SPEED	30 MPH
BASED ON SIGHT DISTANCE	STOPPING
HEIGHT OF EYE	3.5'
HEIGHT OF OBJECT	2.0'

GOVERNING SPECIFICATIONS
THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND ANY SUPPLEMENTAL SPECIFICATIONS SHALL GOVERN.

- CITY OFFICIALS**
- MAYOR: MIKE POELLINGER
COUNCIL: BERNIE BUEHLER
GREG HUSMANN
DALE WILLIAMS
SCOTT YEITER
CITY ADMINISTRATOR: BILL WALLER
PUBLIC WORKS SUPERINTENDENT: MICHAEL ALBRECHT



PROJECT LOCATION



LOCAL AGENCY SIGNATURES:

DESIGN ENGINEER: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
DATE _____ LICENSE NUMBER 44930

APPROVED: CITY ENGINEER _____ DATE: _____

STATE AID APPROVALS:

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY _____ DATE: _____

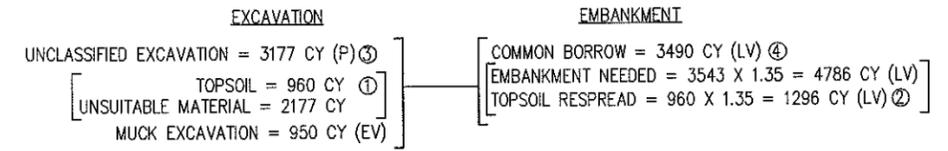
STATE AID ENGINEER: APPROVED FOR FEDERAL & STATE FUNDING _____ DATE: _____



ESTIMATED QUANTITIES					
NOTE	ITEM NO.	ITEM	UNIT	ESTIMATED QUANTITIES	FINAL QUANTITIES
	2021.501	MOBILIZATION	LS	1	
	2101.501	CLEARING	ACRE	0.5	
	2101.506	GRUBBING	ACRE	0.5	
	2104.501	REMOVE METAL CULVERT	LF	79	
	2104.501	REMOVE FENCE	LF	28	
	2104.523	SALVAGE METAL APRON	EACH	2	
1	2105.505	MUCK EXCAVATION (EV)	CY	950	
2	2105.515	UNCLASSIFIED EXCAVATION (P)	CY	3177	
3	2105.523	COMMON BORROW (LV)	CY	3490	
4	2105.525	TOPSOIL BORROW (LV)	CY	180	
5	2105.541	STABILIZING AGGREGATE	CY	680	
6	2105.604	GEOTEXTILE FABRIC TYPE V	SY	4080	
	2118.607	AGGREGATE SURFACING (CV) CLASS 5	CY	590	
	2211.503	AGGREGATE BASE (CV) CLASS 5	CY	1504	
	2221.503	AGGREGATE SHOULDERING (CV) CLASS 2	CY	58	
7	2360.501	TYPE SP 9.5 WEARING COURSE MIXTURE (2,C)	TON	1340	
	2360.609	BITUMINOUS DRIVEWAY	SY	53	
	2412.511	6X4 PRECAST CONCRETE BOX CULVERT	LF	24	
	2412.512	6X4 PRECAST CONCRETE BOX CULVERT END SECTION	EACH	2	
	2501.511	36" CS PIPE CULVERT	LF	11	
	2501.511	15" RC PIPE CULVERT CLASS III	LF	79	
	2501.515	15" RC PIPE APRON	EACH	1	
	2501.573	INSTALL METAL APRON	EACH	2	
	2501.602	TRASH GUARD FOR 15" PIPE APRON	EACH	1	
	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN H	EACH	1	
	2506.602	CONNECT INTO EXISTING STORM SEWER	EACH	2	
	2511.501	RANDOM RIPRAP CLASS III	CY	80	
	2557.603	BOLLARD	EACH	2	
	2563.601	TRAFFIC CONTROL	LS	1	
	2571.505	DECIDUOUS SHRUB 2' HT CONT.	EACH	110	
	2573.502	SILT FENCE, TYPE MACHINE SLICED	LF	9500	
	2573.505	FLOTATION SILT CURTAIN TYPE STILL WATER	LF	800	
	2573.55	EROSION CONTROL SUPERVISOR	LS	1	
	2573.602	TEMPORARY ROCK CONSTRUCTION ENTRANCE	EACH	2	
8	2575.502	SEED MIXTURE 310	LB	80	
8	2575.502	SEED MIXTURE 328	LB	40	
	2575.523	EROSION CONTROL BLANKETS CATEGORY 2	SY	5110	
8	2575.532	FERTILIZER TYPE 2	LB	290	
9	2575.571	RAPID STABILIZATION METHOD 3	MGAL	12	
	2582.502	4" SOLID LINE WHITE-EPOXY	LF	2460	

STANDARD PLATES	
THE FOLLOWING STANDARD PLATES APPROVED BY THE FHWA SHALL APPLY ON THIS PROJECT	
PLATE NO.	DESCRIPTION
4006L	MH OR CATCH BASIN
3022C	PRECAST CONCRETE APRON
3000L	REINFORCED CONCRETE PIPE
3006G	GASKET JOINT FOR R.C. PIPE
3139A	RIPRAP AT RCP END SECTIONS
3133C	RIPRAP AT RCP OUTLETS
8000I	STANDARD BARRICADES

EARTHWORK BALANCE



- ① TOPSOIL EXCAVATION AS ESTIMATED @ 6" ACROSS THE SITE.
- ② TOPSOIL RESPREAD SHALL BE USED ON ALL SIDE SLOPES TO A MINIMUM DEPTH OF 4".
- ③ IT IS ESTIMATED THAT THERE IS NO SUITABLE GRADING MATERIAL GENERATED FROM THE UNCLASSIFIED EXCAVATION.
- ④ COMMON BORROW WILL BE A LOOSE VOLUME.

- ① EXCESS AND/OR UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OFF SITE. THIS IS AN EXCAVATED VOLUME QUANTITY.
- ② EXCESS AND/OR UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND BE DISPOSED OFF SITE. THIS IS A PLAN QUANTITY.
- ③ COMMON BORROW IS MEASURED AS A LOOSE VOLUME.
- ④ TOPSOIL SHALL ONLY BE USED AS DIRECTED BY THE ENGINEER.
- ⑤ STABILIZING AGGREGATE SHALL ONLY BE USED AS DIRECTED BY THE ENGINEER.
- ⑥ GEOTEXTILE FABRIC TYPE V SHALL ONLY BE USED AS DIRECTED BY THE ENGINEER.
- ⑦ BITUMINOUS WAS CALCULATED AS 115#/SY-IN.
- ⑧ APPLICATION RATES ARE LISTED IN DIVISION 2 OF THE SPECIFICATIONS.
- ⑨ THIS ITEM IS FOR TEMPORARY SEEDING.



I hereby certify that this plan, specification or report was prepared by me or under my direct personal supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
 Timothy A. Husko
 License No. 44930
 Date

REVISIONS	DESCRIPTION	NO.	DATE

ESTIMATED QUANTITIES
 WAGON WHEEL TRAIL
 PHASE 1 - SYCAMORE TO SHORE ACRES
 LA CRESCENT, MN
 2012

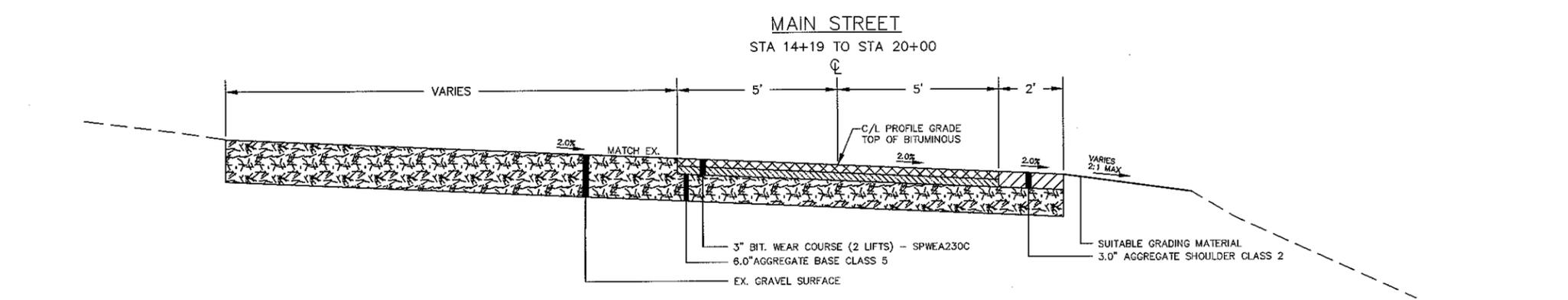
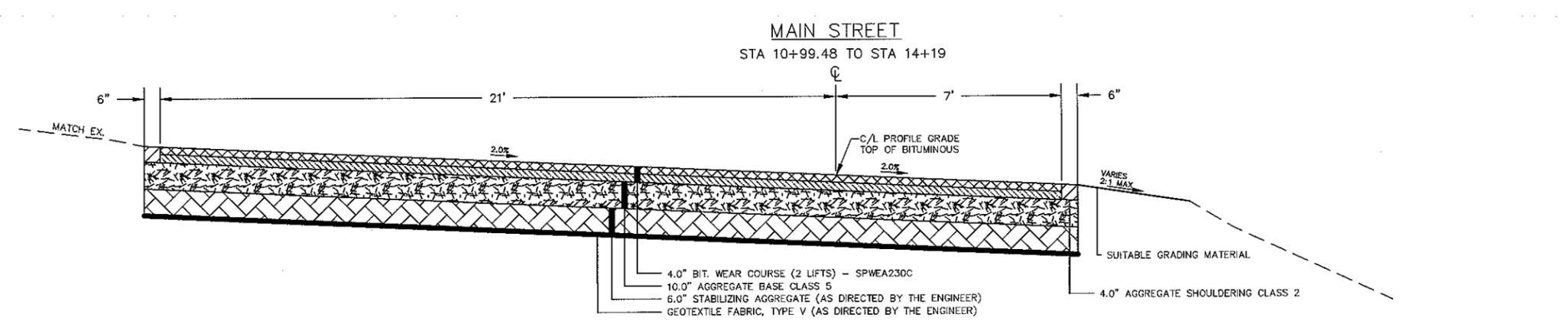
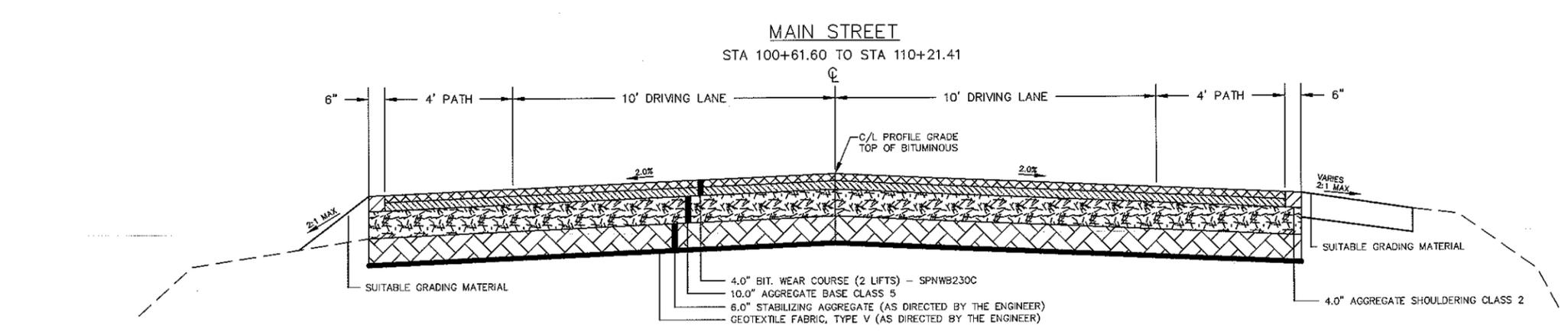
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WHKS PROJECT:	7364.00
DRAWN BY:	BWT
CHECKED BY:	WKA
MINN PROJ NO:	SP 236-090-01
SHEET	

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 Timothy A. Husko License No. 44930
 Date _____

NO.	DATE	DESCRIPTION

TYPICAL SECTIONS
 WAGON WHEEL TRAIL - PHASE 1
 LA CRESCENT, MN
 2012

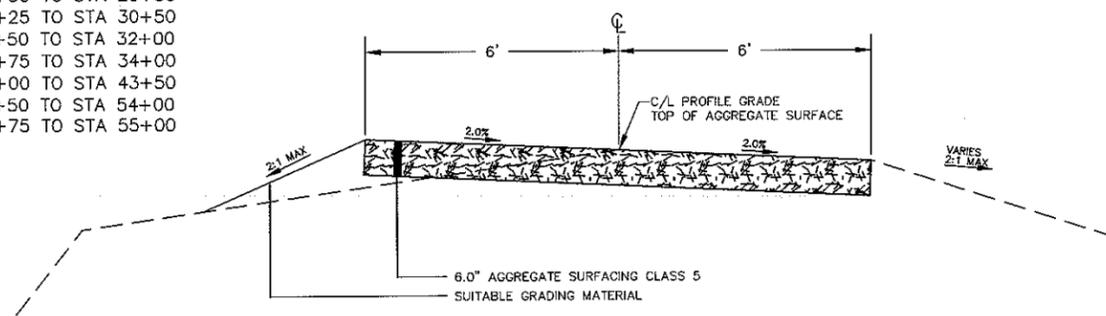
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SHEET	



* BEGIN 2 FT BITUMINOUS TAPER AT THE SOUTH EDGE OF THE TRAIL (STA. 14+19) AND END 2 FT BITUMINOUS TAPER AT THE SOUTH EDGE OF THE TRAIL (STA. 15+19).

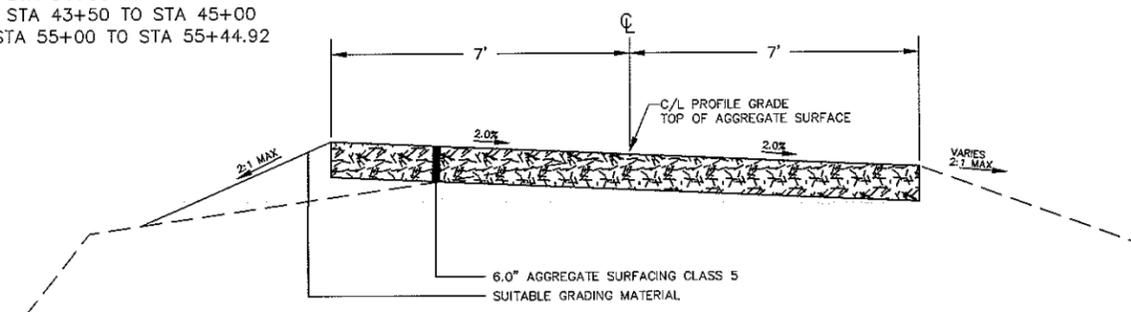
STA 24+00 TO STA 24+50
 STA 27+50 TO STA 29+50
 STA 30+25 TO STA 30+50
 STA 31+50 TO STA 32+00
 STA 33+75 TO STA 34+00
 STA 38+00 TO STA 43+50
 STA 51+50 TO STA 54+00
 STA 54+75 TO STA 55+00

12' UNPAVED WAGON WHEEL TRAIL



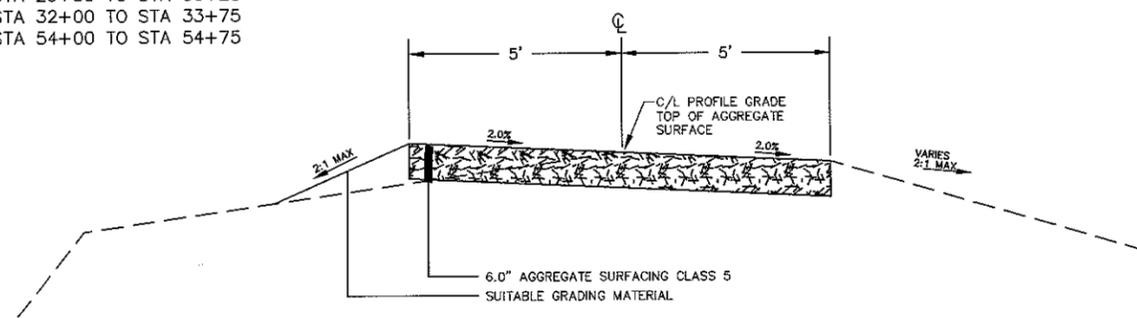
STA 22+69.98 TO STA 24+00
 STA 30+50 TO STA 31+50
 STA 34+00 TO STA 38+00
 STA 43+50 TO STA 45+00
 STA 55+00 TO STA 55+44.92

14' UNPAVED WAGON WHEEL TRAIL



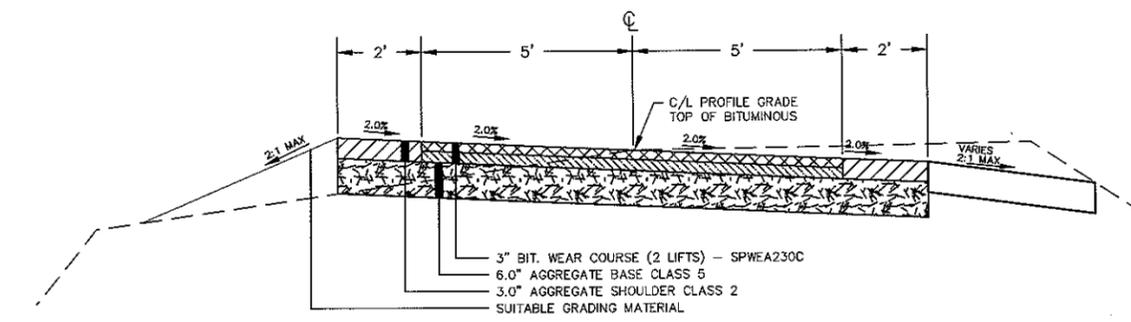
STA 24+50 TO STA 27+50
 STA 29+50 TO STA 30+25
 STA 32+00 TO STA 33+75
 STA 54+00 TO STA 54+75

10' UNPAVED WAGON WHEEL TRAIL



STA 20+00 TO STA 22+69.98
 STA 45+00 TO STA 51+50

10' PAVED W/ 2' SHOULDERS WAGON WHEEL TRAIL



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TYPICAL SECTIONS
 WAGON WHEEL TRAIL
 PHASE 1 - SYCAMORE TO SHORE ACRES
 LA CRESCENT, MN
 2012

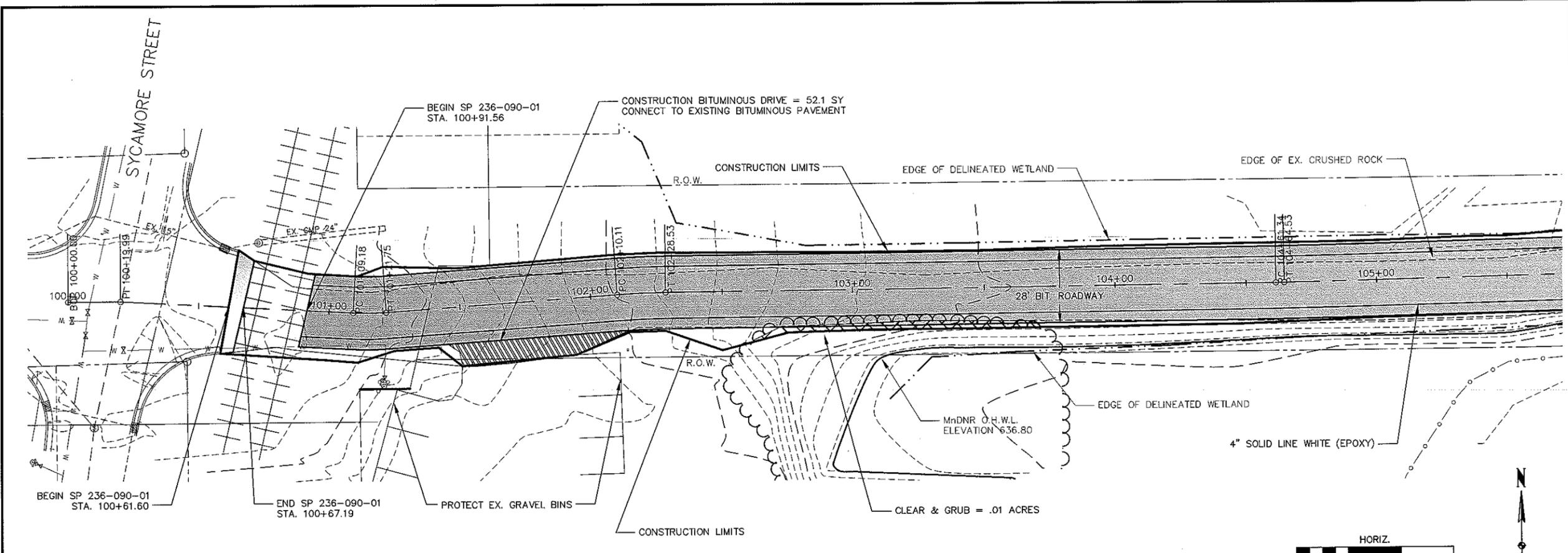
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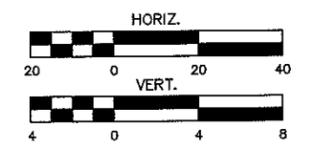
PLAN AND PROFILE
WAGON WHEEL TRAIL
PHASE 1 - SYCAMORE TO SHORE ACRES
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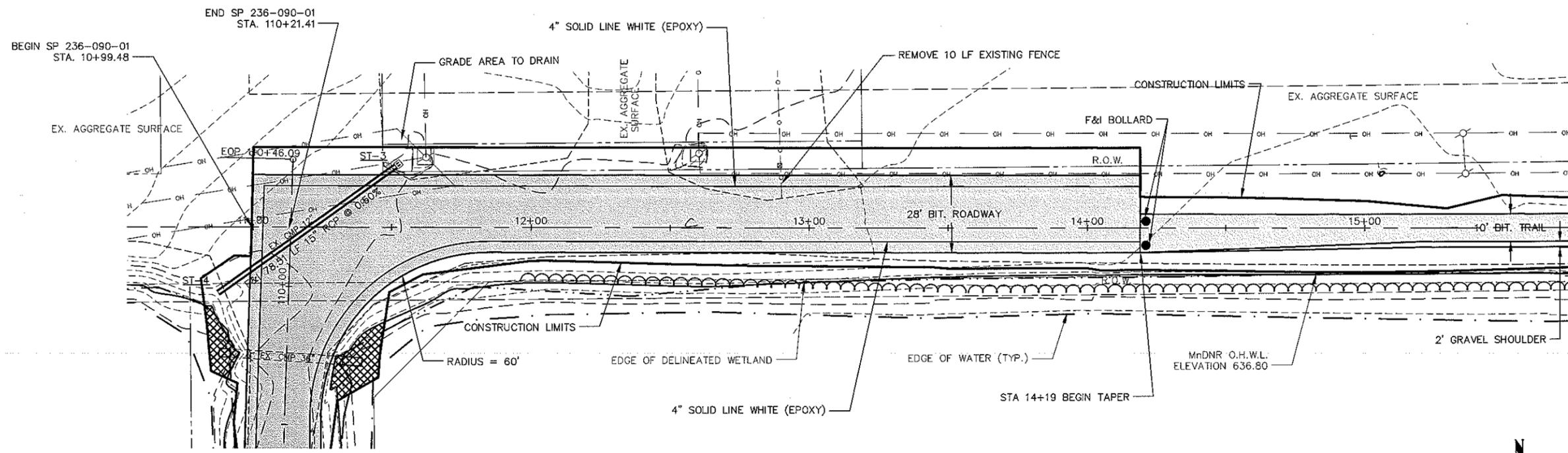


NOTE:
CONTRACTOR SHALL VERIFY UNDERGROUND UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ALL INPLACE UTILITIES MAY NOT BE SHOWN ON THIS PLAN. GOPHER STATE ONE-CALL 1-800-252-1166

WAGON WHEEL TRAIL

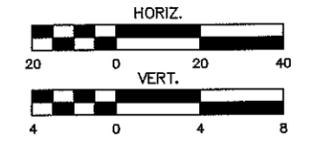


EXISTING C/L GRADES	652.14	651.92	652.05	651.91	651.75	650.60	649.12	647.22	645.57	644.03	642.85	641.82	641.07	640.33	640.08	639.80	639.68	639.55	639.50	639.65	639.68	639.71	639.78	
FINISHED C/L GRADES			652.05	652.08	651.97	650.69	649.25	647.82	646.39	644.96	643.65	642.60	641.68	640.85	640.43	640.33	639.87	639.55	640.10	640.02	639.95	639.87	639.78	
STATIONS	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	
655																								
650																								
645																								
640																								
635																								
STATIONS	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	+75	+00	+25	+50	



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NOTE:
BEGIN 2 FT BITUMINOUS TAPER AT THE SOUTH EDGE OF THE PATH (STA. 14+19) AND END 2 FT BITUMINOUS TAPER AT THE SOUTH EDGE OF THE TRAIL (STA. 15+19).



WAGON WHEEL TRAIL

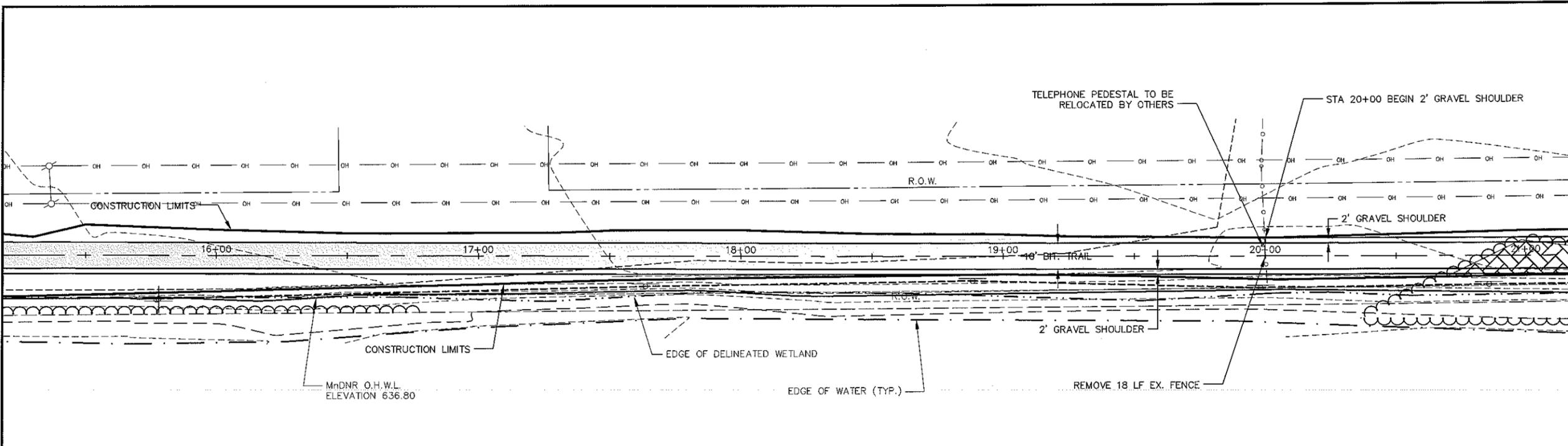
EXISTING C/L GRADES	643.20		642.98		641.84	640.65	640.37	639.66	639.87	639.96	639.76	639.36	638.58	638.30	638.18	638.00	637.92	637.74	637.68			
FINISHED C/L GRADES				641.49	640.95	640.42	639.89	639.51	639.37	639.30	639.08	638.77	638.14	637.88	637.69	637.55	637.41	637.27	637.21	637.15	637.40	
STATIONS	+00	+25	+50	+75	+100	+125	+150	+175	+200	+225	+250	+275	+300	+325	+350	+375	+400	+425	+450	+475	+500	
650																					655	
645																						650
640																						645
635																						640
630																						635
STATIONS	+00	+25	+50	+75	+100	+125	+150	+175	+200	+225	+250	+275	+300	+325	+350	+375	+400	+425	+450	+475	+500	630

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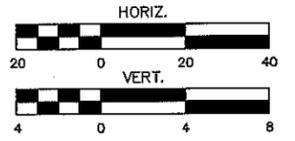
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WAGON WHEEL TRAIL



STATIONS	EXISTING C/L GRADES	FINISHED C/L GRADES	STATIONS	EXISTING C/L GRADES	FINISHED C/L GRADES	STATIONS	EXISTING C/L GRADES	FINISHED C/L GRADES	STATIONS	EXISTING C/L GRADES	FINISHED C/L GRADES
+50		637.40	+50	637.87	637.87	+50	637.40	637.40	+50	637.87	637.87
+75		637.53	+75	637.87	637.87	+75	637.53	637.53	+75	637.87	637.87
+00		637.67	+00	637.94	637.94	+00	637.67	637.67	+00	637.94	637.94
+25		637.80	+25	638.03	638.03	+25	637.80	637.80	+25	638.03	638.03
+50		637.93	+50	638.11	638.11	+50	637.93	637.93	+50	638.11	638.11
+75		638.07	+75	638.25	638.25	+75	638.07	638.07	+75	638.25	638.25
+00		638.23	+00	638.45	638.45	+00	638.23	638.23	+00	638.45	638.45
+25		638.44	+25	638.67	638.67	+25	638.44	638.44	+25	638.67	638.67
+50		638.67	+50	639.00	639.00	+50	638.67	638.67	+50	639.00	639.00
+75		638.85	+75	639.34	639.34	+75	638.85	638.85	+75	639.34	639.34
+00		638.96	+00	639.43	639.43	+00	638.96	638.96	+00	639.43	639.43
+25		639.01	+25	639.41	639.41	+25	639.01	639.01	+25	639.41	639.41
+50		639.07	+50	639.43	639.43	+50	639.07	639.07	+50	639.43	639.43
+75		639.12	+75	639.46	639.46	+75	639.12	639.12	+75	639.46	639.46
+00		639.13	+00	639.50	639.50	+00	639.13	639.13	+00	639.50	639.50
+25		639.08	+25	639.35	639.35	+25	639.08	639.08	+25	639.35	639.35
+50		639.00	+50	639.18	639.18	+50	639.00	639.00	+50	639.18	639.18
+75		638.91	+75	639.03	639.03	+75	638.91	638.91	+75	639.03	639.03
+00		638.82	+00	638.88	638.88	+00	638.82	638.82	+00	638.88	638.88
+25		638.75	+25	638.88	638.88	+25	638.75	638.75	+25	638.88	638.88
+50		638.74	+50	638.94	638.94	+50	638.74	638.74	+50	638.94	638.94
+75		638.74	+75	639.01	639.01	+75	638.74	638.74	+75	639.01	639.01
+00		638.74	+00	638.74	638.74	+00	638.74	638.74	+00	638.74	638.74

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Timothy A. Hruska License No. 44930 Date

NO.	DATE	REVISIONS DESCRIPTION

PLAN AND PROFILE
WAGON WHEEL TRAIL
PHASE 1 - SYCAMORE TO SHORE ACRES
LA CRESCENT, MN
2012

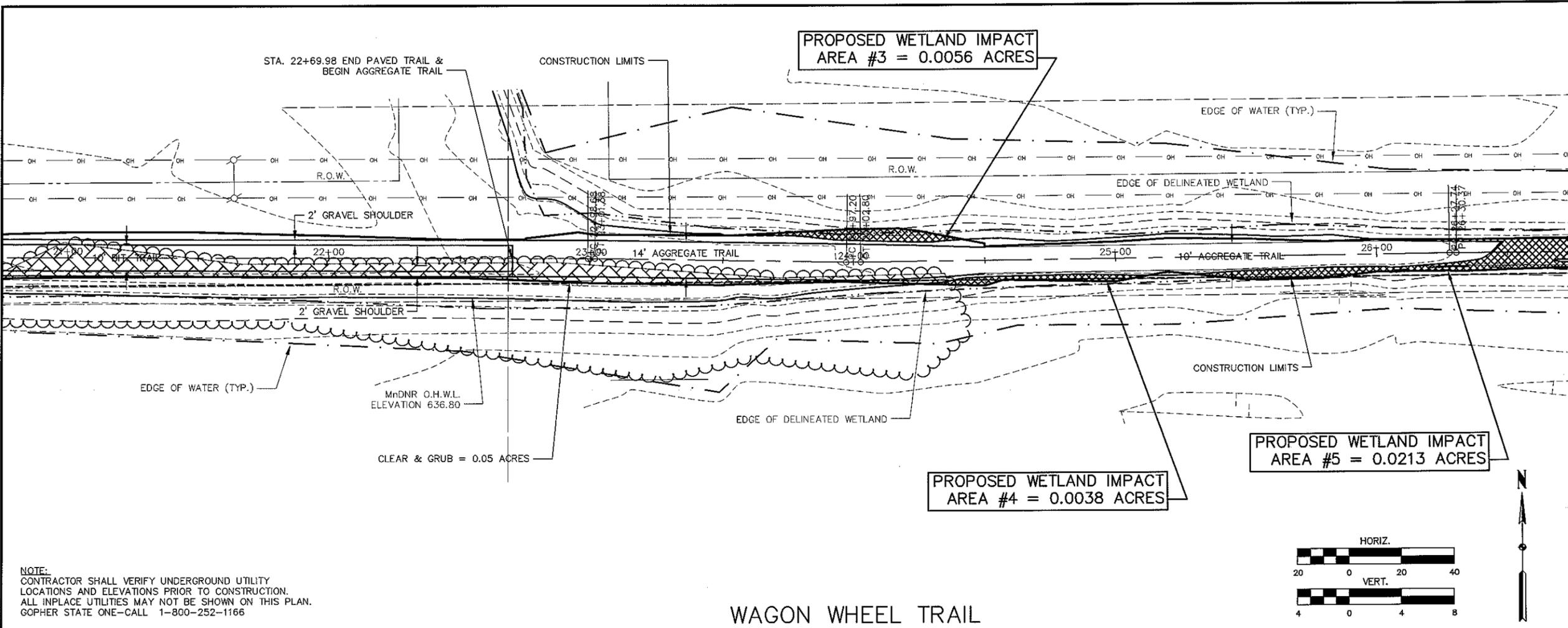
SCALE: AS SHOWN
WHKS PROJECT: 7364.00
DRAWN BY: BWT
CHECKED BY: WKA
MINN PROJ NO: SP 236-090-01
SHEET 9 OF 30

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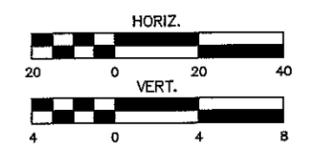
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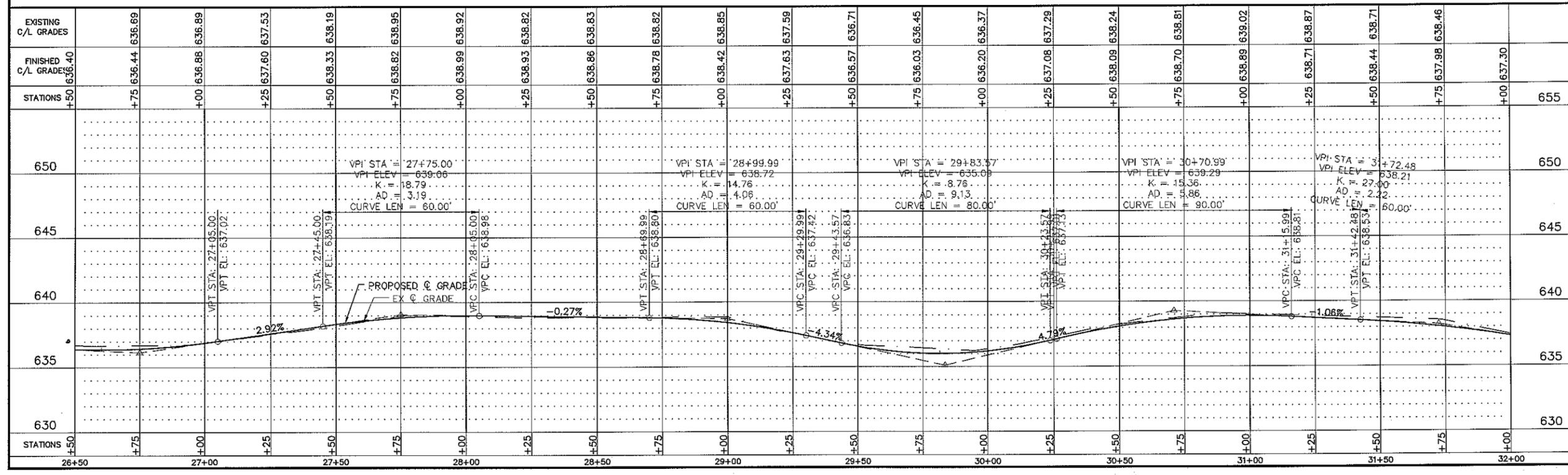
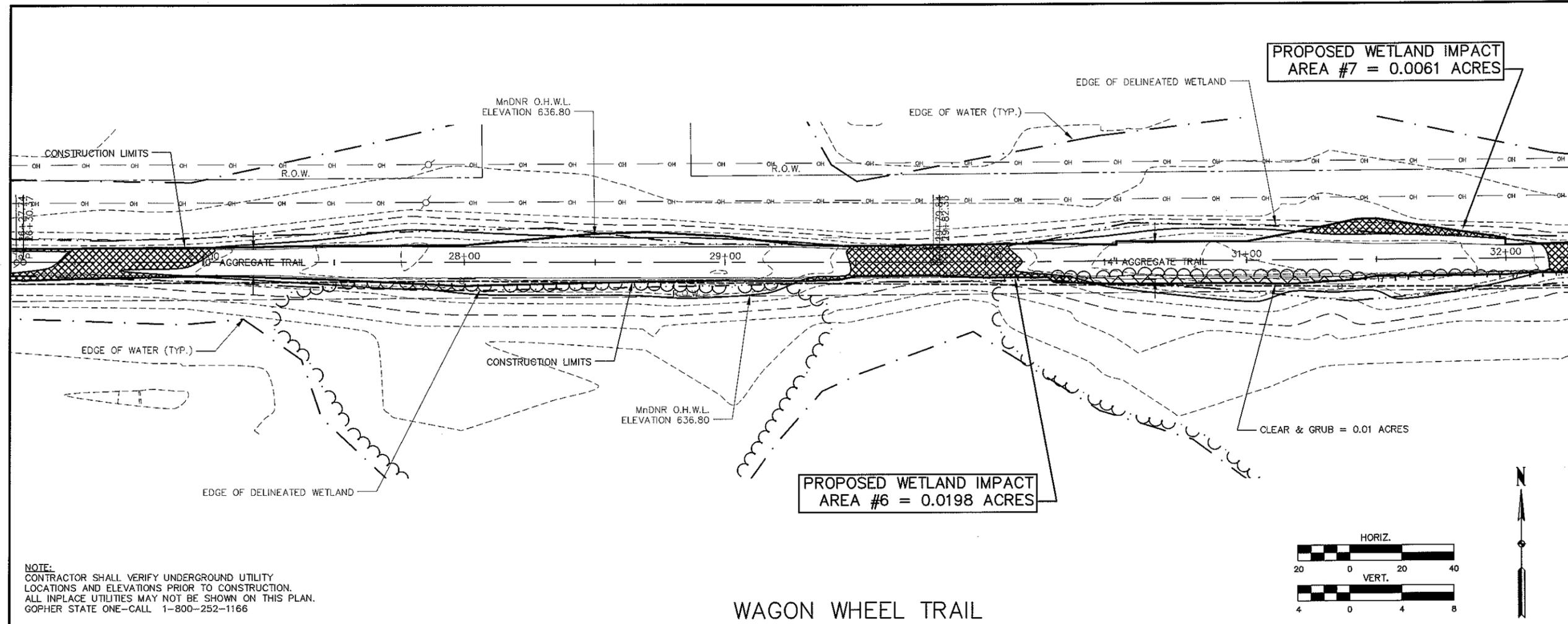


NOTE:
CONTRACTOR SHALL VERIFY UNDERGROUND UTILITY LOCATIONS AND ELEVATIONS PRIOR TO CONSTRUCTION.
ALL INPLACE UTILITIES MAY NOT BE SHOWN ON THIS PLAN.
GOPHER STATE ONE-CALL 1-800-252-1166

WAGON WHEEL TRAIL

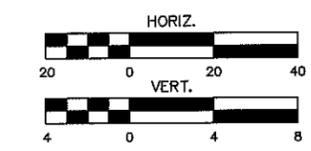


EXISTING C/L GRADES	FINISHED C/L GRADES	STATIONS	650	645	640	635	630	STATIONS
638.74	638.74	+00						+00
639.13	639.13	+25						+25
639.20	639.20	+50						+50
639.20	639.20	+75						+75
639.16	639.16	+00	VPI STA = 22+25.00 VPI ELEV = 638.75 K = 134.63 AD = 0.45 CURVE LEN = 60.00'					+00
639.14	639.14	+25						+25
638.95	638.95	+50		VFC STA: 22+45.00 VFC EL: 638.62				+50
638.94	638.94	+75						+75
638.86	638.86	+00			VPT STA: 22+45.00 VPT EL: 638.85			+00
638.44	638.44	+25	VPI STA = 23+25.00 VPI ELEV = 638.32 K = 327.35 AD = 0.18 CURVE LEN = 60.00'					+25
638.37	638.37	+50						+50
638.42	638.42	+75						+75
637.91	637.91	+00			VFC STA: 23+55.00 VFC EL: 638.13			+00
637.62	637.62	+25						+25
637.45	637.45	+50	VPI STA = 24+37.12 VPI ELEV = 637.62 K = 97.87 AD = 0.41 CURVE LEN = 40.00'					+50
637.66	637.66	+75			VPT STA: 24+37.12 VPT EL: 637.58			+75
637.72	637.72	+00						+00
637.73	637.73	+25						+25
637.62	637.62	+50	VPI STA = 25+50.00 VPI ELEV = 637.39 K = 76.38 AD = 0.79 CURVE LEN = 60.00'					+50
637.18	637.18	+75						+75
637.18	637.18	+00			VFC STA: 25+80.00 VFC EL: 637.09			+00
637.05	637.05	+25						+25
636.40	636.40	+50						+50
655	655							
650	650		VPI STA = 26+75.00 VPI ELEV = 636.14 K = 15.32 AD = 3.92 CURVE LEN = 60.00'					
645	645							
640	640							
635	635							
630	630							
		+00						+00
		+25						+25
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WAGON WHEEL TRAIL

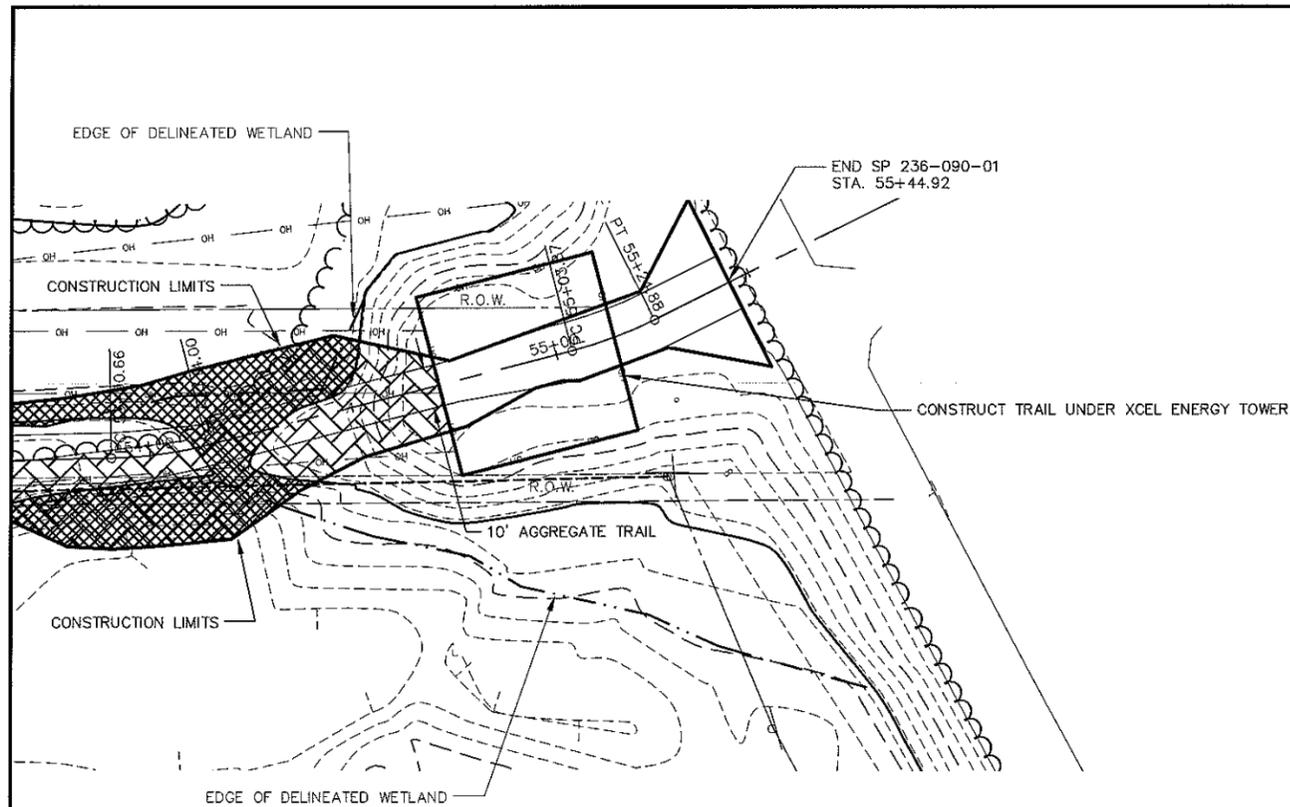


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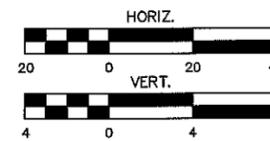
PLAN AND PROFILE
WAGON WHEEL TRAIL
PHASE 1 - SYCAMORE TO SHORE ACRES
LA CRESCENT, MN
2012

SCALE: AS SHOWN
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SHEET 11 OF 30



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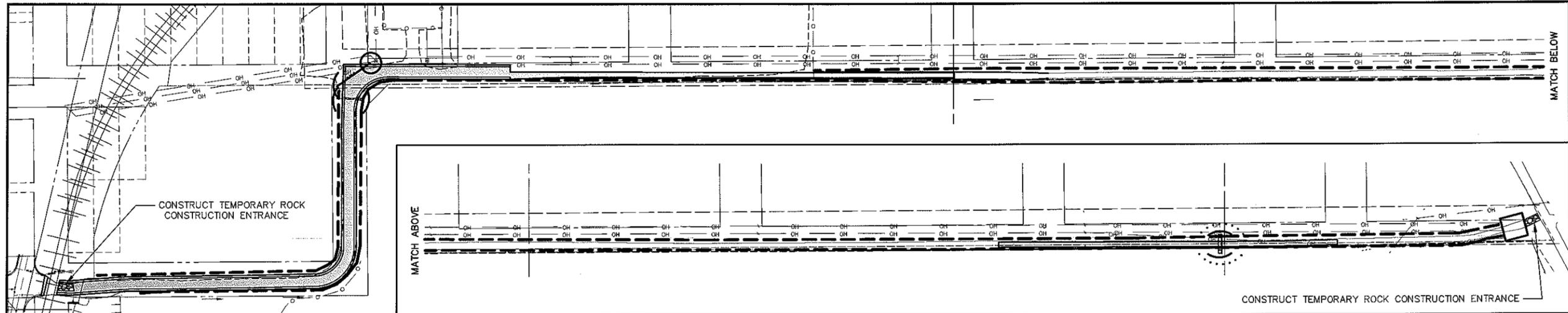
EXISTING C/L GRADES	FINISHED C/L GRADES	STATIONS	PROPOSED C GRADE	EXISTING C/L GRADES	FINISHED C/L GRADES	STATIONS
	640.36	+00		636.50	636.50	+00
		+25		641.12	641.12	+25
		+50		641.82	638.30	+50
		+75		642.28	642.36	+75
		+00		642.49	642.32	+00
		+25		642.62	642.51	+25
		+50		642.73	642.75	+50
		+72				+72
650						
645						
640						
635						
630						
		+00				+00
		+25				+25
		+50				+50
		+75				+75
		+00				+00
		+25				+25
		+50				+50
		+72				+72
		54+00				54+00
		54+50				54+50
		55+00				55+00
		55+50				55+50
		55+72				55+72

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PLAN AND PROFILE
 WAGON WHEEL TRAIL
 PHASE 1 - SYCAMORE TO SHORE ACRES
 LA CRESCENT, MN
 2012

SCALE:
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whks
engineers • planners • land surveyors

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 Timothy A. Hruska License No. 44930 Date _____

REVISIONS	
NO.	DATE

SWPPP WAGON WHEEL TRAIL
 PHASE 1 - SYCAMORE TO SHORE ACRES
 LA CRESCENT, MN
 2012

SCALE: AS SHOWN
 WHKS PROJECT: 7364.00
 DRAWN BY: BWT
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 MINN PROJ NO: SP 236-090-01
 SHEET

GENERAL NOTES:

- 1) CONTRACTOR IS NOTIFIED THAT ACTIONS ON THE PROJECT GOVERNED BY AN INDIVIDUAL STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THIS PLAN SHEET, THE PLANS AND SPECIFICATIONS AND THE SWPPP INCORPORATES SEDIMENTATION AND EROSION CONTROL MEASURES THAT THE CONTRACTOR MUST COMPLY WITH.
- 2) THE CONTRACTOR IS RESPONSIBLE TO SIGN AND SUBMIT THE NPDES PERMIT APPLICATION FOR GENERAL STORM WATER PERMIT FOR CONSTRUCTION ACTIVITY AND PAY THE APPLICATION FEE.
- 3) THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING IF THE PERMITS HAVE BEEN SECURED PRIOR TO STARTING WORK.
- 4) THE CONTRACTOR WILL PROVIDE EROSION CONTROL SUPERVISOR WHO WILL ROUTINELY INSPECT THE ENTIRE CONSTRUCTION SITE ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL GREATER THAN 0.5 INCHES IN 24 HOURS. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION MUST BE RECORDED IN WRITING AND THESE RECORDS MUST BE RETAINED WITH THE SWPPP. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY SHALL INCLUDE:
 - A. DATE AND TIME OF INSPECTIONS;
 - B. NAME OF PERSONS CONDUCTING INSPECTIONS;
 - C. FINDINGS OF INSPECTIONS; INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
 - D. CORRECTIVE ACTIONS TAKEN INCLUDING DATES, TIMES AND PARTY COMPLETE MAINTENANCE ACTIVITIES;
 - E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS;
 - F. DOCUMENTS AND CHANGES MADE TO SWPPP.
- 5) THE EROSION CONTROL SUPERVISOR WILL INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPs TO ENSURE INTEGRITY AND EFFECTIVENESS AND COMPLY WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS:
 - A. SILT FENCE REPAIRS SHOULD BE MADE WHEN IT BECOMES NON-FUNCTIONAL OR SEDIMENT REACHES 1/3 THE HEIGHT OF THE FENCE WITHIN 24 HOURS OF DISCOVERY
 - B. INLET PROTECTION DEVICES SHOULD BE REPAIRED WHEN THEY BECOME NON-FUNCTIONAL OR SEDIMENT REACHES 1/3 THE HEIGHT AND/OR DEPTH OF THE DEVICE
 - C. TEMPORARY SEDIMENT BASIN MUST HAVE THE SEDIMENT REMOVED ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME WITHIN 72 HOURS
 - D. TRACKED SEDIMENT MUST BE REMOVED WITHIN 24 HOURS OF DISCOVERY OF OFF SITE TRACKING ONTO PAVED SURFACES
 - E. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL BMPs UNTIL WORK HAS BEEN COMPLETED, SITE HAS GONE UNDER FINAL STABILIZATION, AND THE NOTICE OF TERMINATION HAS BEEN SUBMITTED TO THE MPCA IN ACCORDANCE WITH PART II.8.5 OF THE CONSTRUCTION GENERAL PERMIT.
- 6) ALL STORM SEWER INLETS AND CULVERTS SHALL BE PROTECTED TO PREVENT SEDIMENT FROM ENTERING THE SYSTEM BY APPROVED TREATMENT.
- 7) CONTRACTOR SHALL PHASE SITE CONSTRUCTION TO MINIMIZE THE EXPOSED SOIL.
- 8) CHEMICAL SPILLS OF ANY KIND (OIL, FUEL, FERTILIZER, ETC.) MUST BE CLEANED UP AND REMOVED FROM THE SITE IMMEDIATELY. THE CONTRACTOR MUST HAVE A SPILL KIT ON SITE AT ALL TIMES.
- 9) THE CONTRACTOR MUST USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT DISCHARGE OR PLACEMENT OF BITUMINOUS GRINDINGS, CUTTINGS, MILLINGS, AND OTHER BITUMINOUS WASTES FROM AREAS OF EXISTING OR FUTURE VEGETATED SOILS, AND ALL WATER CONVEYANCE SYSTEMS, INCLUDING INLETS.
- 10) THE CONTRACTOR MUST CONTAIN ALL LIQUID AND SOLID WASTES GENERATED BY CONCRETE WASHOUT OPERATIONS IN A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER

PROJECT LOCATION
 THE PROJECT IN THE CITY OF LA CRESCENT, MN WILL BE CONTAINING PORTIONS OF SYCAMORE ROAD, SHORE ACRES ROAD & MAIN STREET.

ENVIRONMENTALLY SENSITIVE AREAS
 THIS PROJECT HAS WETLANDS THAT WILL NOT BE IMPACTED DURING CONSTRUCTION

SPECIAL OR IMPAIRED WATERS
 THE MISSISSIPPI RIVER RECEIVES RUNOFF WITHIN 1 MILE FOR THE PROJECT SITE IS A SPECIAL WATER

THE MISSISSIPPI RIVER RECEIVES RUNOFF WITHIN 1 MILE FOR THE PROJECT SITE IS A IMPAIRED WATER

CALCAREOUS FENS
 THERE ARE NO CALCAREOUS FENS WITHIN THE PROJECT LIMITS

PROJECT CONTACTS

PROJECT ENGINEER
 TIM HRUSKA
 WHKS & CO.
 507-288-3923

SWPPP DESIGNER
 BRANDON THEOBALD
 WHKS & CO.
 507-288-3923

PUBLIC WORKS
 BILL WALLER
 CITY OF LA CRESCENT, MN
 507-895-2595

OTHER CONTACTS

MPCA 24 HOUR EMERGENCY NOTIFICATION 651-649-5451 OR 800-422-0798

TURF RESTORATION

TEMPORARY PROTECTION:

ALL DISTURBED AREAS SHALL BE SEEDED WITH MNDOT MIXTURE 150 APPLIED AT A RATE OF 40 LBS. PER ACRE, AND MULCHED WITH MULCH MATERIAL, TYPE 1, APPLIED AT A RATE OF 2 TONS PER ACRE. WHERE REQUIRED BY NPDES GENERAL PERMIT; IF PERMANENT COVER IS NOT ANTICIPATED WITHIN THE TURF RESTORATION SCHEDULE.

PERMANENT COVER:

GENERAL ROADSIDES, SHALL BE SEEDED WITH MNDOT MIXTURE 250 APPLIED AT A RATE 70 LBS. PER ACRE, AND MULCHED WITH MULCH MATERIAL, TYPE 1, APPLIED AT A RATE OF 2 TONS PER ACRE.

INFILTRATION BASINS AND DITCHES, SHALL BE SEEDED WITH MNDOT MIXTURE 310 APPLIED AT A RATE 82 LBS. PER ACRE, AND MULCHED WITH MULCH MATERIAL, TYPE 1, APPLIED AT A RATE OF 2 TONS PER ACRE.

RESIDENTIAL YARDS, SHALL BE SEEDED WITH MNDOT MIXTURE 270 APPLIED AT A RATE 120 LBS. PER ACRE, AND MULCHED WITH MULCH MATERIAL, TYPE 1, APPLIED AT A RATE OF 2 TONS PER ACRE.

RESIDENTIAL YARDS, SHALL BE SODDED WITH MNDOT TYPE LAWN SOD.

IN ANY EVENT, PERMANENT COVER SHALL BE PLANTED AND MAINTAINED AS SPECIFIED BY MNDOT SPECIFICATION 2575, PRIOR TO ACCEPTANCE. ANY TEMPORARY PROTECTION SHALL BE CONSIDERED INCIDENTAL.

EROSION & SEDIMENT CONTROL SCHEDULE:

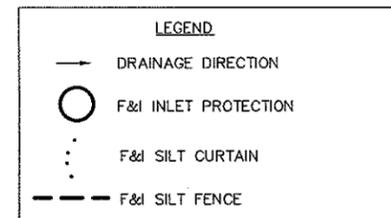
- 1) MARK GRADING LIMITS AND "DO NOT DISTURB AREAS"
- 2) INSTALL PERIMETER EROSION CONTROL
- 3) CONSTRUCT TEMPORARY SEDIMENT BASINS
- 4) CONSTRUCT STABILIZED VEHICLE EXITS
- 5) BEGIN GRADING OPERATIONS
- 6) COMPLETE "RAPID" STABILIZATION IN ACCORDANCE WITH GRADING SCHEDULE WHERE REQUIRED
- 7) INSTALL INLET PROTECTION AS INLETS ARE CREATED
- 8) DISCHARGE DEWATERING TO APPROVED BASINS
- 9) INCREMENTALLY SEED AND MULCH AREAS AS GRADING PROGRESSES
- 10) MAINTAIN AND UPDATE INLET PROTECTION THROUGH JOB PHASES
- 11) COMPLETE MAINTENANCE AND REPAIRS OF EROSION AND SEDIMENT CONTROLS
- 12) STABILIZE FINAL INCREMENT OF GRADING AREA
- 13) MONITOR GRASS GROWTH AND RESEED WHERE NEEDED UNTIL SITE IS STABILIZED
- 14) REMOVE TEMPORARY SEDIMENT BASINS
- 15) REMOVE SILT FENCE AND OTHER TEMPORARY EROSION CONTROLS
- 16) CLEAN BASINS OF ALL CONSTRUCTION RELATED SEDIMENTATION
- 17) FILE "NOTICE OF TERMINATION" WITH THE MPCA

SEDIMENT CONTROL:

- 1) STABILIZED VEHICLE EXIT MUST BE PROVIDED AT ALL EXIT POINTS.
- 2) CONTRACTOR IS RESPONSIBLE FOR CLEANING UP ANY SEDIMENT DEPOSITED ON ADJOINING PROPERTIES, IN THE STREETS, OR OTHER ON OR OFF SITE LOCATIONS.
- 3) EXCESS FILL SHALL BE GRADED AND LEVELED AS DIRECTED BY THE ENGINEER

EROSION CONTROL:

- 1) CONTRACTOR TO REFER TO PLANS FOR LOCATION OF EROSION CONTROL PRACTICES.
- 2) MAINTENANCE AND MONITORING OF EROSION CONTROL PRACTICES ARE THE CONTRACTOR'S RESPONSIBILITY. RECORD KEEPING OF BOTH INSPECTIONS AND MAINTENANCE IS REQUIRED BY THE PERMIT AND SWPPP.
- 3) ADDITIONAL TEMPORARY EROSION CONTROL MAY BE NEEDED IN THE FIELD.
- 4) ALL STOCKPILES ARE TO BE PROTECTED BY EARTH BERMS OR SILT FENCE.
- 5) FINAL STABILIZATION OF ALL DISTURBED AREAS SHALL INCLUDE PLACEMENT OF TOPSOIL, SEEDING, EROSION MAT AND MULCH.



TABULATION OF PROJECT AREAS	
TOTAL PROJECT AREA EXISTING	2.96 ACRES
TOTAL GRADING AREA	2.96 ACRES
ESTIMATED TOTAL EXISTING IMPERVIOUS SURFACE OF PROJECT	1.18 ACRES
ESTIMATED TOTAL EXISTING PERVIOUS SURFACE OF PROJECT	1.78 ACRES
ESTIMATED IMPERVIOUS SURFACE ULTIMATE DEVELOPMENT	2.00 ACRES
ESTIMATED PERVIOUS SURFACE OF ULTIMATE DEVELOPMENT	0.96 ACRES

TURF RESTORATION SCHEDULE

SLOPE	MAXIMUM TIME AREA CAN BE OPEN (NOT STABILIZED)
SPECIAL WATERS	7 DAYS

