MEDLEY PARK STORMWATER IMPROVEMENT **CITY OF GOLDEN VALLEY** GOLDEN VALLEY, MN CITY PROJECT #20-26

MEDICINE LAKE RD



JEFF OLIVER, PE

PROJECT CONTACTS:

KATIE TURPIN-NAGEL, PE BARR ENGINEERING CO. PHONE: 952-842-3690 FAX: 952-832-2601 EMAIL: KJN2@BARR.COM

KURT LEUTHOLD, PE BARR ENGINEERING CO. PHONE: 952-832-2859 FAX: 952-832-2601 EMAIL: KAL@BARR.COM

CITY OF GOLDEN VALLEY PHONE: 763-593-8034 EMAIL: JOLIVER@GOLDENVALLEYMN.GOV

CITY OF GOLDEN VALLEY PHONE: 763-593-8084 EMAIL: EECKMAN@GOLDENVALLEYMN.GOV

COORDINATE SYSTEM: HENNEPIN COUNTY HORIZONTAL DATUM: NAD83 (2011) VERTICAL DATUM NAVD88



CALL BEFORE YOU DIG.

1-800-252-1166

ERIC ECKMAN



DATE____



EBY CERTIFY THAT THIS PLAN WAS PREPARED BY R UNDER MY DIRECT SUPERVISION AND THAT I AM /

MEDLEY MEDLEY POND PARK KINGS VALLEY POND

PROJECT LOCATION MAP



_					I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT	CLIENT	12/10/21	04/22/22						situ of	Scale	AS SHOWN	
-	-				SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE	CONSTRUCTION									Date	04/22/2022	
					STATE OF MINNESOTA.		_						BARR	oolden 🗸	Drawn	BARR	GUIT OF GOLDEN VALLE
В	GGN P	JN2 KAL	04/22/2022	ISSUED FOR 90% DESIGN REVIEW	PRINTED NAME									NO NO	Checked	KJN2	GOLDEN VALLEY, MN
A	DB2	JN2 KAL	12/10/2021	ISSUED FOR REVIEW	SIGNATI IDE	RELEASED	Α	В	С	0 1	2	3	Corporate Headquarters: Minneepolie, Minneepole	valley	Designed	BARR	1
ю.	BY	HK. APP.	DATE	REVISION DESCRIPTION	DATE LICENSE #	TO/FOR		D	ATE RE	ELEASE	D		Ph: 1-800-632-2277		Approved	KAL	1

Item 5A. BCWMC 5-19-22

INDEX OF SHEETS

- TITLE SHEET AND SITE LOCATION MAP G-01
- STATEMENT OF ESTIMATED QUANTITIES G-02
- EXISTING CONDITIONS, PED/TRAFFIC CONTROL, & EROSION CONTROL REMOVALS C-01 C-02 C-03 C-04 C-05 C-06 C-07 C-08 C-09 C-10 C-11 GRADING AND STORM SEWER PLAN PONDS AND STORM SEWER PROFILES STREAM AND BERM OVERFLOW PLAN, PROFILE & SECTION EMERGENCY OVERFLOW DETAILS BITUMINOUS TRAIL PAVING PLAN **BITUMINOUS TRAIL PAVING PROFILES** DETAILS - STORM SEWER DETAILS - BITUMINOUS TRAIL, CONCRETE PAD, AND BENCH DETAILS - SITE FEATURES C-12 TEMPORARY WINTER EROSION CONTROL SW-01 STORMWATER POLLUTION PREVENTION PLAN (SWPPP) STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SW-02 SW-03 **EROSION & SEDIMENT CONTROL DETAILS** SW-04 **EROSION & SEDIMENT CONTROL DETAILS**
- LANDSCAPE PLANTING PLAN L-01 L-02 LANDSCAPE PLAN AND DETAILS
- SOIL BORING LOGS B-01

IEDLEY L

Т		BARR PROJECT No.		
		23/27-1901 00		
	STORMWATER IMPROVEMENT	CLIENT PROJECT No.		
F				
	TITLE SHEET AND	20-26		
Т		DWG. No.	REV. No.	
	SITE LOCATION MAP	G-01	В	

		STATEMENT OF ESTIMATED QUANTITIES		
LINE	ITEM NO.	ITEM DESCRIPTION	UNITS	TOTAL ESTIMATED QUANTITY
1		Mobilization	LS	1
2		Traffic and Pedestrian Safety Control Measures	LS	1
3		Construction Layout and Staking	LS	1
4		Remove and Dispose Electrical Conduit, Light Poles, and Fixtures	LS	1
5		Dewatering	LS	1
6		Silt Fence, Machine Sliced (P)	LF	1,622
7		Storm Drain Inlet Protection (P)	EA	5
8		Flotation Silt Curtain, Light Duty (P)	LF	40
9		Tree Protection Fencing	LF	585
10		Stabilized Construction Entrance	EA	1
11		Daily Street Sweeping	LS	1
12		Clearing and Grubbing Trees/Shrubs less than 8" Diameter	LS	1
13		Removal and Disposal of Tree Stump 12 inch to 24 inch Diameter	EA	5
14		Removal and Disposal of Tree 32 inch Diameter	EA	1
15		Sawcut Bituminous Pavement (Full Depth)	LF	45
16		Remove and Dispose Bituminous Pavement	SY	705
17		Remove and Dispose of Concrete Pavement (P)	SY	31
18		Salvage and Place Topsoil (P)	CY	1,408
19		Excavation (P)	CY	23,291
20		Trail Subgrade Excavation	CY	972
21		Contaminated Sediment Excavation	CY	1,499
22		Offsite Disposal of Excavated Soil (Clean)	CY	21,440
23		Offsite Disposal of Excavated Sediment (Contaminated)	TON	2,398
24		Common Borrow Import	СҮ	647
25		Aggregate Base (CV), Class 5	CY	286
26		Bituminous Pavement (Typ)	SY	1,392
27		Concrete Pad for Bench, 6" reinforced (P)	SY	58
28		Victor Stanley, Inc. Model 8 Bench (Recycled Plastic, 6')	EA	4
29		60" CPEP Pipe Sewer #1 with Mitered Ends (Complete)	EA	1
30		60" CPEP Pipe Sewer #2 with Mitered Ends (Complete)	EA	1
31		60" CPEP Pipe Sewer #3 with Mitered Ends (Complete)	EA	1
32		Random Riprap, Class II with Filter Fabric (P)	TON	75
33		Granite Riprap, Class II (P)	TON	188
34		Granular Filter Material (P)	TON	78
35		Articulated Concrete Block	SF	1,500
36		Light Poles and Solar Fixtures (Complete)	EA	15
37		Erosion Control Blanket, Category 3N2S (Natural Net, includes maintenance)	SY	10,170
38		Seed, Oats Cover Crop	AC	2

lson							I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR	CLIENT	12/10/21	04/22/22			_1	—			Scale	AS SHOWN	
ag Ne							REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED	BID	—		_					city of	Date	04/22/2022	
е Б			-				STATE OF MINNESOTA.	CONSTRUCTION			=				BARR	oolden V	Drawn	ADB2	CITY OF GOLDEN VALLEY
USE	вΘ	GN KJ	N2 KA	_ 04/22/2	22 ISSUED FOR 90% D	ESIGN REVIEW	PRINTED NAME		—	·						VI DI	Checked	KJN2	GOLDEN VALLEY, MN
8	A A	DB2 KJ	N2 KA	_ 12/10/2	21 ISSUED FOR REVIE	W	SIGNATURE	RELEASED	Α	В	С	0 1	2	3	Corporate Headquarters: Minneapolis Minnesota	valley	Designed	BARR	,,
Q Q	NO.	вү сн	IK. APF	P. DAT	REVIS	SION DESCRIPTION	DATELICENSE #	TO/FOR		D.	ATE R	ELEASE	D		Ph: 1-800-632-2277	J	Approved	KAL	

	BARR PROJECT No.		
	23/27-1901.00		
STORMWATER IMPROVEMENT	CLIENT PROJECT No		
	20.00		
STATEMENT OF	20-20		
	DWG. No.	REV. No.	
ESTIMATED QUANTITES	G-02	В	
	MEDLEY PARK STORMWATER IMPROVEMENT STATEMENT OF ESTIMATED QUANTITES	MEDLEY PARK STORMWATER IMPROVEMENT STATEMENT OF ESTIMATED QUANTITES G-02	



MEDLEY PARK STORMWATER IMPROVEMENT	BARR PROJECT No. 23/27-1901.	.00
EXISTING CONDITIONS	20-26	
PED/TRAFFIC CONTROL & EROSION CONTROL	DWG. №. C-01	REV. No. B



EXISTIN	IG COND
910 ·	
908 -	
ST	ST
SAN	SAN
W	- W
GAS	- GAS
UE	- UE
x	×
ST	
*	
\odot	
÷	

ITIONS LEGEND 10-FT CONTOUR 5-FT CONTOUR PROPERTY LINE NORMAL WATER LEVEL STORM SEWER SANITARY SEWER WATER GAS UNDERGROUND ELECTRIC FENCELINE STORM SEWER MANHOLE LIGHT POLE DECIDUOUS TREE CONIFEROUS TREE SOIL BORING CONCRETE

BITUMINOUS TRAIL

REMOVALS LEGEND

~~~~~
X
, ,
βl
$\sim$
$\otimes$

____ CONSTRUCTION LIMITS UTILITY REMOVAL LIGHT POLE REMOVAL INFIELD SAND REMOVAL CONCRETE REMOVAL BITUMINOUS REMOVAL CLEARING AND GRUBBING

TREE STUMP REMOVAL

TREE REMOVAL

### PEDESTRIAN/TRAFFIC CONTROL LEGEND

o	CONSTRUCTION FENCING
$\longleftrightarrow$	HAUL ROAD
EROSION CON	TROL LEGEND
-000	FLOATING SILT CURTAIN
SF SF	SILT FENCE
<u> </u>	TREE PROTECTION

#### NOTES:

- NOTES: 1) CONFIRM LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. NOTIFY OWNER OF ANY DISCREPANCIES. 2) UTILITY LOCATIONS ARE APPROXIMATE. ALL UTILITIES IN THE PROJECT AREA SHOULD BE MARKED AND POTHOLED PRIOR TO EXCAVATION. 3) UTILITY RELOCATION TO BE COORDINATED BY CONTRACTOR PRIOR TO CONSTRUCTION 4) PROTECT ALL EXISTING UTILITIES DURING DEMOLITION AND CONSTRUCTION. 5) BITUMINOUS AND CONCRETE PAVEMENT TO BE RECYCLED, ALL OTHER DEMOLITION DEBIS SHALL BE DISPOSED AT APPROPRIATE, LICENSED LANDFILLS. 6) LIGHT POLES AND FIXTURES WITHIN CONSTRUCTION LIMITS SHALL BE REMOVED AND NEW LIGHT POLES/FIXTURES INSTALLED. SEE C-03.

	BARR PROJECT No.	
MEDLEY PARK	23/27-1901	.00
STORMWATER IMPROVEMENT	CLIENT PROJECT No.	
REMOVALS	20-26	
I I I I I I I I I I I I I I I I I I I	DWG. No.	REV. No.
	C-02	В





	BARR PROJECT No.		
	23/27-1901.00		
STORMWATER IMPROVEMENT	CLIENT PROJECT No.		
	20.00		
PONDS AND STORM SEWER	20-26		
	DWG. No.	REV. No.	
PROFILES	C-04	В	
		_	



LICENSE #

DATE RELEASED

. BY CHK. APP.





KAL



C-05

В



KAL

neapolis, Minn 1-800-632-22

TO/FOR

DATE RELEASED

DATE

). BY CHK. APP.

**REVISION DESCRIPTION** 

**ATE** 

LICENSE #

	BARR PROJECT No.			
	23/27-1901 00			
STORMWATER IMPROVEMENT	CLIENT PROJECT No.			
	20.00			
EMERGENCY OVERELOW	20-26			
	DWG. No.	REV. No.		
DETAILS	C-06	В		





MEDLEY PARK	BARR PROJECT No.			
	23/27-1901.00			
STORMWATER IMPROVEMENT	CLIENT PROJECT No.			
BITUMINOUS TRAIL	20-26			
	DWG. No.	REV. No.		
PAVING PROFILES	C-08	В		
	-			



PEP CORRUGATION OPENEL	D HDPE SHEET	STOCK
IONS_	5 DETAIL: WEEP HC	VERT 1/2" WEEP HOLE (TYP.) DLES
	TOPSOIL SUITABLE COMMON BACKFILL ONSITE GRANULAR BORROW	
	EDDING - SELECT GRANULAR BORROW MNDOT SPEC. 3149.2D.3	
	NDOT SPEC. 3149.2D.3 IEPTH TO BE DETERMINED IN FIELD BY ENGINEER) E	90% DESIGN DT FOR CONSTRUCTION
STC	MEDLEY PARK DRMWATER IMPROVEMENT	BARR PROJECT No. 23/27-1901.00 CLIENT PROJECT No. 2026

DETAILS

STORM SEWER

DWG. No

C-09

EV. No

В







Ľ,																	-	
slso						I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR	CLIENT	12/10/21 0	14/22/22		-					Scale	AS SHOWN	
g Ne						SUPERVISION AND THAT I AM A DULY LICENSED	BID								city of 🔨 👝	Date	04/22/2022	
- Gr	_	_				PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	CONSTRUCTION			_ _		-  -	=	RADD	golden	Drawn	BARR	CITY OF GOLDEN VALLEY
JSER	B GG	N KJN2	KAL	04/22/2022	ISSUED FOR 90% DESIGN REVIEW	PRINTED NAME							$\equiv$	DANN	Sunding	Checked	KJN2	
00	A ADE	2 KJN2	KAL	12/10/2021	ISSUED FOR REVIEW	SIGNATURE	RELEASED	Α	В	C 0	1	2	3	Corporate Headquarters: Minneepelie Minneepete	valley	Designed	BARR	
S	NO. B	снк	APP.	DATE	REVISION DESCRIPTION	DATELICENSE #	TO/FOR		DA	TE RELE	ASEC	)		Ph: 1-800-632-2277		Approved	KAL	

MEDLEY PARK STORMWATER IMPROVEMENT	BARR PROJECT No. 23/27-1901.00 CLIENT PROJECT No.		
DETAILS - BITUMINOUS TRAIL, CONCRETE PAD, AND BENCH	20-26 DWG. No. C-10	REV. No. B	



	BARR PROJECT No. 23/27-1901.00			
	CLIENT PROJECT No. 20-26			
SITE FEATURES	DWG. No. C-11	REV. No. B		





#### EXISTING CONDITIONS LEGEND



#### CONSTRUCTION LEGEND

	GRADING LIMITS
890	5 FT CONTOUR
889	1 FT CONTOUR
o o	FENCELINE
*	LIGHT POLE

#### WINTER EROSION CONTROL LEGEND

$\sum$	
$\bigcirc \frown$	I

CLASS 5 AGGREGATE

EROSION CONTROL BLANKET OATS COVER CROP

- NOTES:
  ALL MATERIAL 3" OR LARGER MUST BE REMOVED PRIOR TO SEEDING AND PLACEMENT OF EROSION CONTROL BLANKET.
  MNDDT OATS COVER CROP SEED MIX 21-111 SHALL BE SEEDED AT A RATE OF 100 POUNDS PER ACRE, INSTALL ACCORDING TO MNDOT 3876, PLACE OVER BARE SOIL, NOT OVER SNOW. REMOVE SNOW AS NECESSARY PRIOR TO SEEDING.
  COVER OATS COVER CROP SEED WITH EROSION CONTROL BLANKET (CATEGORY 3N2S (EITHER STRAW OR WOOD FIBER)), PLACE OVER BARE SOIL, NOT OVER SNOW. REMOVE SNOW AS NECESSARY PRIOR TO PLACEMENT.
  ANCHOR EROSION CONTROL BLANKET ON NON-FROZEN GROUND WITH 6 INCH STELL WIRE PRESSED STRAIGHT INTO THE GROUND WITH HOUT BENDING. ANCHOR EROSION CONTROL BLANKET ON FROZEN GROUND WITH 60D (6-INCH) COMMON NAIL WITH WASHER HAMMERED FLUSH WITH ANCHOR FREQUENCY PER MANUFACTURER'S RECOMMENDATIONS.
- ANCHOR FREQUENCY DER MANUSATUR WASHER'S FRAMMENDATIONS. 5. TEMPORARY WINTER EROSION CONTROL SHALL BE IN PLACE NO LATER THAN MARCH 15. 6. REVIEW SWPPP. SEE SHEET SW-01 THROUGH SW-04 FOR ADDITIONAL
- EROSION CONTROL REQUIREMENTS.



MEDLEY PARK STORMWATER IMPROVEMENT	BARR PROJECT No. 23/27-1901.00 CLIENT PROJECT No.		
TEMPORARY WINTER EROSION CONTROL	20-26 ^{DWG. No.} C-12	REV. No. B	

#### 1.0 GENERAL CONSTRUCTION ACTIVITY INFORMATION:

THIS STORMWATER POLLUTION PREVENTION PLAN (SWPPP) HAS BEEN PREPARED IN COMPLIANCE WITH THE MINNESOTA GENERAL STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY NO. MNR100001 (GENERAL PERMIT), AS REQUIRED BY THE MINNESOTA POLLUTION CONTROL AGENCY (MPCA) UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM/STATE DISPOSAL SYSTEM (NPDES/SDS) PROGRAM.

THE PROJECT IS LOCATED IN THE CITY OF GOLDEN VALLEY, HENNEPIN COUNTY, MINNESOTA. PROPOSED CONSTRUCTION ACTIVITIES WILL TAKE PLACE AT MEDLEY PARK. THE APPROXIMATE CENTROID OF THE PROJECT HAS A LATITUDE OF 45.00519 AND A LONGITUDE OF -93.39679.

THIS PROJECT INVOLVES EROSION CONTROL, CONSTRUCTION OF NEW PONDS, INSTALLATION OF CULVERTS, CONSTRUCTION OF NEW PAVED TRAIL, REPLACEMENT OF LIGHT POLES AND FIXTURES, AND SITE RESTORATION. THE PROJECT AS PROPOSED HAS A TOTAL DISTURBANCE AREA OF 4.02 ACRES. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES ARE REQUIRED TO MINIMIZE SEDIMENT FROM BEING TRANSPORTED INTO THE KINGS VALLEY POND (CITY OF GOLDEN VALLEY POND ML-2), WHICH IS NOT AN IMPAIRED WATER BODY AND FURTHER DOWNSTREAM TO MEDICINE LAKE, WHICH IS AN IMPAIRED WATER BODY. REFER TO PROJECT DRAWINGS FOR FURTHER DETAILS. (CSW PERMIT PART III.A.1)

- 1.1 PROJECT SIZE AND CUMULATIVE IMPERVIOUS SURFACE: THE ANTICIPATED AREA OF DISTURBANCE IS APPROXIMATELY 4.02 ACRES.
- THE TOTAL AREA OF PRE-CONSTRUCTION IMPERVIOUS AREA IS APPROXIMATELY 0.20 ACRES
- THE TOTAL AREA OF POST-CONSTRUCTION IMPERVIOUS AREA IS APPROXIMATELY 0.31 ACRES. THE TOTAL NEW IMPERVIOUS AREA IS APPROXIMATELY 0.11 ACRES.

1.2 DATES OF CONSTRUCTION: ANTICIPATED START DATE: NOVEMBER, 2022. ANTICIPATED END DATE: JUNE, 2023.

#### 1.3 CONTACT INFORMATION:

OWNER: CITY OF GOLDEN VALLEY					
MAILING ADDRESS: 7800 GOLDEN VALLEY RD, GOLDEN VALLEY, MN S	55427				
CONTACT PERSON: JEFF OLIVER	TITLE: CITY ENGINEER				
PHONE NUMBER: 763-593-8034	EMAIL ADDRESS: JOLIVER@GOLDENVALLEYMN.GOV				
ALTERNATE CONTACT PERSON: ERIC ECKMAN	TITLE: ENVIRONMENTAL RESOURCES SUPERVISOR				
PHONE NUMBER: 763-593-8084	EMAIL ADDRESS: EECKMAN@GOLDENVALLEYMN.GOV				
	-				

OPERATOR / GENERAL CONTRACTOR (WILL OVERSEE IMPLEMENTATION OF THE SWPPP): TBD MAILING ADDRESS: TBD TITLE TBD

CONTACT PERSON: TBD PHONE NUMBER: TBD

PARTY RESPONSIBLE FOR LONG-TERM OPERATION AND MAINTENANCE OF THE PERMANENT STORMWATER MANAGEMENT SYSTEM CITY OF GOLDEN VALLEY

EMAIL ADDRESS: TBD

MAILING ADDRESS: 7800 GOLDEN VALLEY RD, GOLDEN VALLEY, MN 55427						
CONTACT PERSON: AL LUNDSTROM	TITLE: PARK MAINTENANCE SUPERINTENDENT					
PHONE NUMBER: 763-593-8046	EMAIL ADDRESS: ALUNDSTROM@GOLDENVALLEYMN.GOV					

#### 2.0 RECEIVING WATERS:

WATERS WITHIN ONE MILE (NEAREST STRAIGHT LINE DISTANCE) THAT ARE LIKELY TO RECEIVE STORMWATER RUNOFF FROM THE PROJECT SITE (CSW PERMIT ITEM 5.10) INCLUDE

NAME OF WATER BODY		WATER BODY ID (2)	SPECIAL WATER? ⁽³⁾	IMPAIRED WATER? ⁽³⁾	PUBLIC WATER WITH WORK IN WATER RESTRICTIONS?
KINGS VALLEY POND (ML-2)	POND	-	NO	NO	NO
ML-3	POND	-	NO	NO	NO
MEDICINE LAKE	LAKE	27-0104-00	NO	YES	YES

(1) TYPE EXAMPLES: DITCH, POND, WETLAND, CALCAREOUS FEN, LAKE, STREAM, RIVER

- WATER BODY IDENTIFICATION (ID) MIGHT NOT BE AVAILABLE FOR ALL WATER BODIES. USE THE SPECIAL AND IMPAIRED (2) WATERS SEARCH TOOL AT: HTTPS://WWW.PCA.STATE.MN.US/WATER/STORMWATER-SPECIAL-AND-IMPAIRED-WATERS-SEARCH REFER TO CSW PERMIT SECTION 23. IMPAIRED WATER FOR THE FOLLOWING POLLUTANT(S) OR STRESSOR(S): PHOSPHORUS (3)
- (NUTRIENT EUTROPHICATION BIOLOGICAL INDICATORS), TURBIDITY, TOTAL SUSPENDED SOLIDS (TSS), DISSOLVED OXYGEN, OR AQUATIC BIOTA (FISH BIOASSESSMENT, AQUATIC PLANT BIOASSESSMENT, AND AQUATIC MACROINVERTEBRATE BIOASSESSMENT)

2.1 SPECIAL AND IMPAIRED WATERS: THE MPCA'S SPECIAL AND IMPAIRED WATERS SEARCH TOOL WAS USED TO LOCATE SPECIAL AND IMPAIRED WATERS WITHIN ONE MILE (AERIAL RADIUS MEASUREMENT) OF THE PROJECT SITE. MEDICINE LAKE HAS AN EPA-APPROVED IMPAIRMENT FOR MERCURY IN FISH TISSUE; NUTRIENTS. THESE IMPAIRMENTS ARE CONSIDERED CONSTRUCTION RELATED AND DO REQUIRE ADDITIONAL BEST MANAGEMENT PRACTICES (BMPS) OR PLAN REVIEW FOR COMPLIANCE WITH THE GENERAL PERMIT. (CSW PERMIT ITEM 2.7 AND SECTION 23)

ADDITIONAL BMPS OR OTHER SPECIFIC CONSTRUCTION RELATED IMPLEMENTATION ACTIVITIES IDENTIFIED IN AN APPROVED TOTAL MAXIMUM DAILY LOAD (TMDL) INCLUDE STABILIZING EXPOSED SOIL AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE TEMPORARILY OR PERMANENTLY CEASES. (CSW PERMIT ITEM 5.19)

2.2 PUBLIC WATERS WITH WORK IN WATER RESTRICTIONS: THIS PROJECT DOES NOT INCLUDE WORK IN PUBLIC WATERS. (CSW PERMIT ITEM 5.11)

2.3 WETLAND IMPACTS: THIS PROJECT MAY HAVE TEMPORARY ADVERSE IMPACTS TO WETLANDS, INCLUDING: EXCAVATION, DEGRADATION OF WATER QUALITY, DRAINING, PERMANENT INUNDATION, OR FLOODING. PERIMETER SEDIMENT CONTROLS WILL BE INSTALLED DURING CONSTRUCTION TO HELP MITIGATE WATER QUALITY DEGRADATION. THE PROJECT WILL RESULT IN A NET INCREASE IN WETLAND AREA. (CSW PERMIT ITEMS 2.4 AND 2.10, AND SECTION 22)

2.4 ENVIRONMENTAL REVIEW AND OTHER REQUIRED REVIEWS: STORMWATER MITIGATION MEASURES ARE NOT REQUIRED AS A RESULT OF AN ENVIRONMENTAL REVIEW (E.G., EAW OR EIS), ENDANGERED OR THREATENED SPECIES REVIEW, ARCHEOLOGICAL SITE REVIEW, OR OTHER LOCAL, STATE, OR FEDERAL REVIEW CONDUCTED FOR THE PROJECT. (CSW PERMIT ITEMS 2.8, 2.9, AND 5 16)

2.5 KARST AREAS OR DRINKING WATER SUPPLY MANAGEMENT AREAS: THIS PROJECT DOES NOT INCLUDE ANY KARST OR DRINKING WATER SUPPLY MANAGEMENT AREAS. (CSW PERMIT ITEMS 16.19, 16.20, AND 18.10)

#### 3.0 PROJECT PLANS AND SPECIFICATIONS:

RI

Q	UIRED FEATURE	SHEET NUMBER	
	PROJECT LOCATION AND CONSTRUCTION LIMITS	G-01, C-01	
	EXISTING AND FINAL GRADES, INCLUDING DRAINAGE AREA BOUNDARIES, DIRECTIONS	C-01, C-03	
	OF FLOW AND ALL DISCHARGE POINTS WHERE STORMWATER IS LEAVING THE SITE OR		
	ENTERING A SURFACE WATER		
	SOIL TYPES AT THE SITE	B-01	
	LOCATIONS OF IMPERVIOUS SURFACES	C-01, C-03	
	LOCATIONS OF AREAS NOT BE BE DISTURBED (E.G., BUFFER ZONES, WETLANDS, ETC.)	C-01	2
	LOCATIONS OF AREAS OF STEEP SLOPES	C-01, C-03	
	LOCATIONS OF AREAS WHERE CONSTRUCTION WILL BE PHASED TO MINIMIZE DURATION	C-03	

- OF EXPOSED SOILS PORTIONS OF THE SITE THAT DRAIN TO A PUBLIC WATER WITH DNR WORK IN WATER RESTRICTIONS FOR FISH SPAWNING TIMEFRAMES N/A
- LOCATIONS OF ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL C-01,L-01
- BMPS AS REQUIRED IN PERMIT SECTIONS 8 THROUGH 10 AND 14 THROUGH 19 BUFFER ZONES AS REQUIRED IN PERMIT ITEMS 9.17 AND 23.11 N/A
- LOCATIONS OF POTENTIAL POLLUTION-GENERATING ACTIVITIES IDENTIFIED IN PERMIT N/A SECTION 12
- STANDARD DETAILS FOR EROSION AND SEDIMENT CONTROL BMPS TO BE INSTALLED SW-03,04 AT THE SITE

4.0 BEST MANAGEMENT PRACTICES (BMPS):

- 4.1 EROSION PREVENTION PRACTICES: 1. BEFORE LAND DISTURBING ACTIVITIES BEGIN, THE LIMITS OF THE AREAS TO BE DISTURBED DURING CONSTRUCTION WILL BE DELINEATED WITH FLAGS, STAKES, SIGNS, SILT FENCE, ETC.
- 2. TEMPORARY STABILIZATION OF SOILS AND SOIL STOCKPILES: (CSW PERMIT ITEMS 8.4, 8.5, AND 23.9) a. AREAS OF EXPOSED SOIL WILL BE STABILIZED WITH EROSION CONTROL BLANKET, PRESERVATION OF MATURE VEGETATION, MULCH, VEGETATIVE SLASH OR EQUIVALENT MEASURES.
  - IF PRESENT, SOIL STOCKPILES WILL BE STABILIZED WITH MULCH (SUCH AS STRAW MULCH, SLASH MULCH, WOOD CHIP, OR OTHER APPROPRIATE MULCH (IF SLOPES ≤3H:1V), COVER MATERIAL SUCH AS TARPS, PLASTIC SHEETING OR EQUIVALENT MEASURES.
  - c. TEMPORARY STOCKPILES WITHOUT SIGNIFICANT SILT, CLAY, OR ORGANIC COMPONENTS (E.G., CLEAN AGGREGATE STOCKPILES, DEMOLITION CONCRETE STOCKPILES, SAND STOCKPILES) AND THE CONSTRUCTED BASE COMPONENTS OF ROADS, PARKING LOTS, AND SIMILAR SURFACES ARE EXEMPT FROM THESE STABILIZATION REQUIREMENTS.
- 2. STABILIZATION OF DITCH AND SWALE WETTED PERIMETERS: (CSW PERMIT ITEMS 8.6 THROUGH 8.8) a. IF SOILS WITHIN EXISTING STORMWATER DITCHES OR SWALES ARE DISTURBED, THEY WILL BE STABILIZED WITH CHANNEL EROSION CONTROL BLANKET, TURF REINFORCEMENT MAT OR EQUIVALENT MEASURES.
  - b. MULCH, HYDROMULCH, TACKIFIER, POLYACRYLAMIDE, OR SIMILAR EROSION PREVENTION PRACTICES WILL NOT BE USED TO STABILIZE ANY PART OF AN EXISTING STORMWATER DITCH OR SWALE WITH A CONTINUOUS SLOPE OF GREATER THAN 2 PERCENT.
  - THE LAST 200 LINEAL FEET OF LENGTH OF THE NORMAL WETTED PERIMETER OF ANY TEMPORARY OR PERMANENT DITCH OR SWALE THAT DRAINS WATER FROM ANY PORTION OF THE CONSTRUCTION SITE, OR DIVERTS WATER AROUND THE SITE, WITHIN 200 LINEAL FEET FROM THE PROPERTY EDGE, OR FROM THE POINT OF DISCHARGE INTO ANY SURFACE WATER WILL BE STABILIZED WITHIN 24 HOURS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE.
  - d. STABILIZATION OF THE REMAINING PORTIONS OF ANY TEMPORARY OR PERMANENT DITCHES OR SWALES WILL BE COMPLETED WITHIN 14 CALENDAR DAYS AFTER CONNECTING TO A SURFACE WATER OR PROPERTY EDGE AND CONSTRUCTION IN THAT PORTION OF THE DITCH HAS TEMPORARILY OR PERMANENTLY CEASED.
- 3. ENERGY DISSIPATION AT PIPE OUTLETS: ENERGY DISSIPATION AT PIPE OUTLETS WILL BE PROVIDED WITH ONE OR MORE OF THE FOLLOW METHODS: RIP RAP, SPLASH PADS, GABIONS, OR EQUIVALENT MEASURES. (CSW PERMIT ITEM 8.9)
- 4. ÈROSION PREVENTION IMPLEMENTATION TIMELINES: (CSW PERMIT ITEMS 5.4, 8.4 THROUGH 8.6, AND 23.9)
  - a. STABILIZATION OF EXPOSED SOIL AREAS (INCLUDING STOCKPILES) WILL BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHENEVER ANY CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING 14 CALENDAR DAYS.
  - b. IF THE EXPOSED SOIL AREAS DRAIN TO A DISCHARGE POINT THAT IS WITHIN ONE MILE (AERIAL RADIUS MEASUREMENT) OF A SPECIAL OR IMPAIRED WATER (SEE SECTION 2.0), STABILIZATION OF EXPOSED SOIL AREAS (INCLUDING STOCKPILES) WILL BE INITIATED IMMEDIATELY TO LIMIT SOIL EROSION WHENEVER ANY CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED ON ANY PORTION OF THE SITE AND WILL NOT RESUME FOR A PERIOD EXCEEDING <u>7</u> CALENDAR DAYS. c. THE FOLLOWING ACTIVITIES CAN BE TAKEN TO INITIATE STABILIZATION: PREPPING THE SOIL FOR
  - VEGETATIVE OR NON-VEGETATIVE STABILIZATION, APPLYING MULCH OR OTHER NON-VEGETATIVE PRODUCT TO THE EXPOSED SOIL AREA, OR SEEDING OR PLANTING THE EXPOSED AREA.

5. ADDITIONAL EROSION PREVENTION MEASURES: THE FOLLOWING ADDITIONAL EROSION PREVENTION METHODS WILL BE IMPLEMENTED AT THE SITE DURING CONSTRUCTION: (CSW PERMIT ITEMS 8.2, 8.3, AND 8.10)

- a. CONSTRUCTION PHASING WILL BE UTILIZED TO MINIMIZE THE AREA OF SOIL EXPOSED AT ANY ONE TIME
- b. SOIL DISTURBANCE WILL BE MINIMIZED WHEREVER POSSIBLE TO AID IN EROSION PREVENTION EXISTING VEGETATION WILL BE PRESERVED WHEREVER POSSIBLE TO LIMIT EXPOSED SOIL AND THUS C.
- WILL SERVE AS NATURAL VEGETATIVE BUFFERS. d. EXPOSED SOIL ON STEEP SLOPES (≤3H:1V) WILL BE STABILIZED USING EROSION CONTROL BLANKETS
- AND SEEDING.
- HORIZONTAL SLOPE GRADING WILL BE UTILIZED TO MINIMIZE EROSION POTENTIAL.
- TERRACING WILL BE USED TO MINIMIZED EROSION POTENTIAL.

- 4.2 SEDIMENT CONTROL PRACTICES: 1. DOWNGRADIENT PERIMETER CONTROLS: (CSW PERMIT ITEMS 9.2 THROUGH 9.6) a. SEDIMENT CONTROL PRACTICES WILL BE ESTABLISHED ON ALL DOWNGRADIENT PERIMETERS AND LOCATED UPGRADIENT OF ANY BUFFER ZONES. PERIMETER SEDIMENT CONTROLS WILL INCLUDE: SILT FENCE, SEDIMENT CONTROL LOGS / BIOROLLS (FILLED WITH COMPOST, WOOD CHIPS, BOCK ETC.), VEGETATIVE SLASH BARRIERS, OTHER NATIVE MATERIAL BARRIERS, VEGETATIVE BUFFERS (RETAIN EXISTING VEGETATION WHERE POSSIBLE), EARTHEN BERMS OR EQUIVALENT MEASURES
  - b. PERIMETER SEDIMENT CONTROL PRACTICES MUST BE INSTALLED BEFORE ANY UPGRADIENT LAND-DISTURBING ACTIVITIES BEGIN AND REMAIN IN PLACE UNTIL PERMANENT COVER HAS BEEN ESTABLISHED.

(SEE PAGE 2 OF 2)

EREBY CERTIFY THAT THIS PLAN, SPECIFICATION, AS SHOWN EPORT WAS PREPARED BY ME OR UNDER MY DIREC SUPERVISION AND THAT I AM A DULY LICENSED 04/22/2022 CITY OF GOLDEN VALLEY BARR olden₁₁ STATE OF MINNESOTA ADB2 KJN2 GOLDEN VALLEY, MN ED FOR 90% DESIGN REVIEW RINTED NAME vallev A B C 0 1 2 3 BARR SUED FOR REVIEW RELEASE **REVISION DESCRIPTION** DATE TO/FOR KAL LICENSE # DATE RELEASED

9.17)

4.5 BMP QUANTITIES: ANTICIPATED EROSION PREVENTION AND SEDIMENT CONTROL BMP QUANTITIES NEEDED FOR THE LIFE OF THE PROJECT: SEE G-02

- - SAND. GRAVEL

c. IF SEDIMENT CONTROL PRACTICES HAVE BEEN ADJUSTED OR REMOVED TO ACCOMMODATE SHORT-TERM ACTIVITIES (SUCH AS CLEARING, GRUBBING, OR PASSAGE OF VEHICLES), THE CONTROLS MUST BE RE-INSTALLED IMMEDIATELY AFTER THE SHORT-TERM ACTIVITY HAS BEEN COMPLETED. SEDIMENT CONTROL PRACTICES MUST BE RE-INSTALLED BEFORE THE NEXT

PRECIPITATION EVENT, EVEN IF THE SHORT-TERM ACTIVITY IS NOT COMPLETE d. IF THE DOWNGRADIENT SEDIMENT CONTROLS ARE OVERLOADED (BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE REQUIREMENT), INSTALL ADDITIONAL UPGRADIENT SEDIMENT CONTROL PRACTICES OR REDUNDANT BMPS TO ELIMINATE THE OVERLOADING AND AMEND THE SWPPP TO IDENTIFY THESE ADDITIONAL PRACTICES.

SOIL STOCKPILE PERIMETER CONTROLS: TEMPORARY SOIL STOCKPILES WILL BE SURROUNDED BY: SILT FENCE, SEDIMENT CONTROL LOGS / BIOROLLS (FILLED WITH COMPOST, WOOD CHIPS, ROCK, ETC.) OR EQUIVALENT MEASURES, AND SHALL NOT BE PLACED IN ANY NATURAL BUFFERS OR SURFACE WATERS.(CSW PERMIT ITEMS 9.9 AND 9.10)

 STORM DRAIN INLET PROTECTION: (CSW PERMIT ITEMS 9.7 AND 9.8)
 a. INLET PROTECTION BMPS WILL BE INSTALLED AROUND ALL STORM DRAIN INLETS DOWNGRADIENT OF CONSTRUCTION ACTIVITIES.

STORM DRAIN INLETS WILL BE PROTECTED UNTIL ALL SOURCES WITH POTENTIAL FOR DISCHARGING TO THE INLET HAVE BEEN STABILIZED.

c. INLET PROTECTION BMPS WILL BE: SEDIMENT CONTROL LOG, FILTER SACK, ROCK WITH FILTER FABRIC, FILTER FENCE BOX OR EQUIVALENT MEASURES.

4. VEHICLE TRACKING BMPS: (CSW PERMIT ITEMS 9.11 AND 9.12)

a. VEHICLE TRACKING BMPS WILL BE INSTALLED TO MINIMIZE THE TRACKING OUT OF SEDIMENT FROM THE CONSTRUCTION AREA AND WILL INCLUDE: ROCK PADS, MUD MATS, OR STEEL WASH RACKS OR AN EQUIVALENT SYSTEM

IF SUCH VEHICLE TRACKING BMPS ARE NOT ADEQUATE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO THE PAVED ROAD, STREET SWEEPING WILL ALSO BE EMPLOYED. SEDIMENT WILL BE REMOVED BY SWEEPING WITHIN 24 HOURS.

5. PROTECTION OF INFILTRATION AREAS: IF NECESSARY, ADDITIONAL SEDIMENT CONTROLS (E.G., DIVERSION BERMS) WILL BE INSTALLED TO KEEP RUNOFF AWAY FROM PLANNED INFILTRATION AREAS WHEN EXCAVATED PRIOR TO ESTABLISHING PERMANENT COVER WITHIN THE CONTRIBUTING DRAINAGE AREA. (CSW PERMIT ITEMS 16.4 AND 16.5)

6. MINIMIZATION OF SOIL COMPACTION AND PRESERVATION OF TOPSOIL: SOIL COMPACTION WILL BE MINIMIZED AND TOPSOIL WILL BE PRESERVED WHERE POSSIBLE. (CSW PERMIT ITEMS 5.24, 9.14, AND 9.15) 7. PRIORITIZATION OF ONSITE INFILTRATION AND SEDIMENT REMOVAL: (CSW PERMIT ITEM 9.16) a. PRIOR TO OFFSITE DISCHARGE, INFILTRATION AND SEDIMENT REMOVAL WILL BE IMPLEMENTED ONSITE WHERE POSSIBLE.

DISCHARGES FROM BMPS WILL BE DIRECTED TO VEGETATED AREAS OF THE SITE (INCLUDING ANY NATURAL BUFFERS) IN ORDER TO INCREASE SEDIMENT REMOVAL AND MAXIMIZE STORMWATER INFILTRATION, IF EROSION IS NOTED TO OCCUR AS THE RESULT OF SUCH A DISCHARGE, VELOCITY DISSIPATION BMPS WILL BE CONSIDERED AND INSTALLED AS NECESSARY TO PREVENT EROSION. 8. BUFFER ZONE OR REDUNDANT SEDIMENT CONTROLS TO PROTECT SURFACE WATERS: (CSW PERMIT ITEM

a. A 50-FOOT NATURAL BUFFER WILL BE PRESERVED IN CONSTRUCTION AREAS DISCHARGING TO A NON-SPECIAL/NON-IMPAIRED SURFACE WATER OR WETLAND. IF A NON-SPECIAL/NON-IMPAIRED SURFACE WATER OR WETLAND IS LOCATED WITHIN 50 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER, OR WHEN A BUFFER IS INFEASIBLE, REDUNDANT SEDIMENT CONTROLS WILL BE PROVIDED

b. A 100-FOOT NATURAL BUFFER WILL BE PRESERVED IN CONSTRUCTION AREAS DISCHARGING TO A SPECIAL OR IMPAIRED SURFACE WATER. IF A SPECIAL OR IMPAIRED SURFACE WATER IS LOCATED WITHIN 100 FEET OF THE PROJECT'S EARTH DISTURBANCES AND STORMWATER FLOWS TO THE SURFACE WATER, OR WHEN A BUFFER IS INFEASIBLE, REDUNDANT SEDIMENT CONTROLS WILL BE PROVIDED.

REDUNDANT PERIMETER CONTROLS WILL BE INSTALLED AT LEAST 5 FEET APART UNLESS LIMITED BY LACK OF AVAILABLE SPACE.

9. SEDIMENTATION TREATMENT CHEMICALS: NOT APPLICABLE; USE OF SEDIMENTATION TREATMENT CHEMICALS (E.G., POLYMERS, FLOCCULANTS, ETC.) IS NOT ANTICIPATED AS PART OF THE PROJECT. (CSW PERMIT ITEMS 5.22 AND 9.18)

10. TEMPORARY SEDIMENT BASIN(S): THE PROJECT WILL NOT INCLUDE 10 OR MORE ACRES OF DISTURBED SOIL DRAINING TO A COMMON LOCATION OR 5 OR MORE ACRES DRAINING TO A COMMONLOCATION WITHIN 1 MILE OR A SPECIAL OR IMPAIRED WATER THEREFORE TEMPORARY SEDIMENT BASINS ARE NOT REQUIRED. (CSW PERMIT ITEMS 5.6, 9.13, AND 23.10 AND SECTION 14)

4.3 DEWATERING AND BASIN DRAINING: (CSW PERMIT SECTION 10 AND ITEM 10.5) a. THE FOLLOWING WILL BE USED TO TREAT/DISPOSE OF TURBID OR SEDIMENT-LADEN WATER DURING DEWATERING OR BASIN DRAINING: IN-STREAM SILT FENCE, ROCK CHECKS, SEDIMENT FILTER BAGS OR EQUIVALENT MEASURES.

THE FOLLOWING WILL BE USED TO PREVENT EROSION OR SCOUR OF DISCHARGE POINTS DURING DEWATERING OR BASIN DRAINING: IN-STREAM SILT FENCE, ROCK CHECKS, SEDIMENT FILTER BAGS OR EQUIVALENT MEASURES.

c. NOT APPLICABLE: FILTERS FOR BACKWASH WATER

4.4 BMP DESIGN FACTORS: THE FOLLOWING BMP DESIGN FACTORS HAVE BEEN CONSIDERED IN DESIGNING THE TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL BMPS:

EXPECTED AMOUNT, FREQUENCY, INTENSITY, AND DURATION OF PRECIPITATION: APPROXIMATELY 2.5 INCHES OF PRECIPITATION FROM THE 1-YEAR, 24-HOUR STORM EVENT (NOAA ATLAS 14) 2. NATURE OF STORMWATER RUNOFF AND RUN-ON AT THE SITE, INCLUDING FACTORS SUCH AS EXPECTED

FLOW FROM IMPERVIOUS SURFACES, SLOPES, AND SITE DRAINAGE FEATURES: THE SITE ACCUMULATES RUNOFF FROM MANY SIDE SLOPES. CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENTATION CONTROL DEVICES TO HANDLE THIS SITE RUNOFF.

STORMWATER VOLUME, VELOCITY, AND PEAK FLOW RATES TO MINIMIZE DISCHARGE OF POLLUTANTS IN STORMWATER AND TO MINIMIZE CHANNEL AND STREAMBANK EROSION AND SCOUR IN THE IMMEDIATE VICINITY OF DISCHARGE POINTS: PEAK FLOW RATES AND TOTAL STORMWATER VOLUME SHOULD NOT BE INCREASED DURING THIS PROJECT. STORMWATER CHANNELIZATION IS ANTICIPATED. CHANNELIZED FLOW WILL BE ROUTED TO VEGETATED AREAS WHERE APPROPRIATE

RANGE OF SOIL PARTICLE SIZES EXPECTED TO BE PRESENT: CLAY, SANDY CLAY, SANDY SILT, SILTY SAND,

	BARR PROJECT No.				
	23/27-1901 00				
STORMWATER IMPROVEMENT					
	20-26				
STORM WATER POLITION PREVENTION PLAN					
STORW WATER FOLDHON FREVENHON FLAN	DWG. No.	REV. No.			
(SWPPP) PAGE 1 OF 2	SW/ 01	в			
· · · ·	300-01	0			

#### 5.0 PERMANENT STORMWATER MANAGEMENT SYSTEM:

A PERMENANCT STORMWATER MANAGEMENT SYSTEM IS REQUIRED IF THE PROJECT RESULTS IN ONE ACRE OR MORE OF NEW IMPERVIOUS SURFACES OR RESULTS IN A NET INCREASE OF ONE OR MORE ACRES OF CUMMULATIVE NEW IMPERVIOUS SURFACES IN TOTAL OR IF THE PROJECT IS PART OF A LARGER PLAN OF DEVELOPMENT. (CSW PERMIT ITEM 15.3)

5.1 A PERMANENT STORMWATER TREATMENT SYSTEM IS NOT REQUIRED. (CSW PERMIT ITEMS 5.15, 15.4-15.9, AND 23.14)

5.2 THIS IS NOT A LINEAR PROJECT WITH LACK OF RIGHT OR WAY. (CSW PERMIT ITEM 15.9)

5.3 THIS PROJECT DOES NOT DISCHARGE TO A TROUT STREAM (OR A TRIBUTARY TO A TROUT STREAM). (CSW PERMIT ITEM 23.12)

#### 6.0 INSPECTION AND MAINTENANCE ACTIVITIES:

1 PERSONS WITH REQUIRED TRAINING: TRAINED INDIVIDUALS INCLUDE THOSE PARTIES RESPONSIBLE FOR INSTALLING, SUPERVISING, REPAIRING, INSPECTING, AND MAINTAINING EROSION PREVENTION AND SEDIMENT CONTROL BMPS AT THE SITE. TRAINED INDIVIDUALS ARE ALSO RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP AND COMPLIANCE WITH THE GENERAL PERMIT UNTIL THE CONSTRUCTION ACTIVITIES ARE COMPLETE, PERMANENT COVER HAS BEEN ESTABLISHED, AND A NOTICE OF TERMINATION (NOT) HAS BEEN SUBMITTED. (CSW PERMIT ITEMS 5.20, 5.21, AND 11.9 AND SECTION 21)

THESE INDIVIDUALS WILL BE TRAINED IN ACCORDANCE WITH THE REQUIREMENTS OF THE GENERAL PERMIT. INCLUDING THE REQUIREMENT THAT THE CONTENT AND EXTENT OF TRAINING WILL BE COMMENSURATE WITH THE INDIVIDUAL'S JOB DUTIES AND RESPONSIBILITIES.

BELOW IS A LIST OF PEOPLE RESPONSIBLE FOR THIS PROJECT WHO ARE KNOWLEDGEABLE AND EXPERIENCED IN THE APPLICATION OF EROSION PREVENTION AND SEDIMENT CONTROL BMPS

TRAINED INDIVIDUAL ALEC BATEMAN	RESPONSIBILITY PREPARATION OF THE SWPPP	TRAINING ENTITY* UNIVERSITY OF MINNESOTA	TRAINING DATE APRIL, 2021
TBD	OVERSIGHT OF SWPPP IMPLEMENTA- TION, REVISION, AND AMMENDMENT	TBD	TBD
TBD	PERFORMANCE OF SWPPP INSPECTIONS	TBD	TBD
TBD	PERFORMANCE OR SUPERVISION OF INSTALLATION, MAINTENANCE, AND REPAIR OF BMPS	TBD	TBD

#### ***TRAINING DOCUMENTATION AVAILABLE UPON REQUEST**

6.2 FREQUENCY OF INSPECTIONS: A TRAINED PERSON WILL ROUTINELY INSPECT THE ENTIRE CONSTRUCTION SITE. (CSW PERMIT ITEMS 11.2, 11.10, AND 23.13)

- AT LEAST ONCE EVERY 7 DAYS DURING ACTIVE CONSTRUCTION
- WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS

INSPECTION FREQUENCY MAY BE ADJUSTED UNDER THE FOLLOWING CIRCUMSTANCES:

- WHERE PARTS OF THE CONSTRUCTION AREAS HAVE PERMANENT COVER, BUT WORK REMAINS ON OTHER PARTS OF THE SITE, INSPECTIONS OF THE AREAS WITH PERMANENT COVER MAY BE REDUCED TO ONCE PER MONTH.
- WHERE CONSTRUCTION AREAS HAVE PERMANENT COVER AND NO CONSTRUCTION ACTIVITY IS OCCURRING ON THE SITE, INSPECTIONS CAN BE REDUCED TO ONCE PER MONTH AND, AFTER 12 MONTHS, MAY BE SUSPENDED COMPLETELY UNTIL CONSTRUCTION ACTIVITY RESUMES.
- WHERE CONSTRUCTION ACTIVITY HAS BEEN SUSPENDED DUE TO FROZEN GROUND CONDITIONS. THE INSPECTIONS MAY BE SUSPENDED. THE REQUIRED INSPECTIONS AND MAINTENANCE SCHEDULE MUST BEGIN WITHIN 24 HOURS AFTER RUNOFF OCCURS AT THE SITE OR UPON RESUMING CONSTRUCTION, WHICHEVER COMES FIRST

6.3 INSPECTION REQUIREMENTS: EACH CONSTRUCTION STORMWATER SITE INSPECTION WILL INCLUDE INSPECTION OF THE FOLLOWING AREAS: (CSW PERMIT ITEMS 11.3 THROUGH 11.8)

- ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS AND POLLUTION PREVENTION MANAGEMENT MEASURES
- SURFACE WATERS FOR EVIDENCE OF EROSION AND SEDIMENT DEPOSITION
- CONSTRUCTION SITE VEHICLE EXIT LOCATIONS FOR EVIDENCE OF OFFSITE SEDIMENT TRACKING STREETS AND OTHER AREAS ADJACENT TO THE PROJECT FOR EVIDENCE OF OFF SITE ACCUMULATIONS OF SEDIMENT

MAINTENANCE REQUIREMENTS: MAINTENANCE OF THE FOLLOWING AREAS AND BMPS WILL BE PERFORMED AS FOLLOWS: (CSW PERMIT ITEMS 11.3 THROUGH 11.8)

- NONFUNCTIONAL BMPS WILL BE REPAIRED REPLACED OR SUPPLEMENTED WITH FUNCTIONAL BMPS BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY OR AS SOON AS FIELD CONDITIONS ALLOW ACCESS.
- PERIMETER CONTROL DEVICES WILL BE REPAIRED, REPLACED, OR SUPPLEMENTED WHEN THEY BECOME NONFUNCTIONAL OR THE SEDIMENT REACHES 1/2 OF THE HEIGHT OF THE DEVICE.
- TEMPORARY AND PERMANENT SEDIMENTATION BASINS WILL BE DRAINED AND THE SEDIMENT REMOVED WHEN THE DEPTH OF SEDIMENT COLLECTED IN THE BASIN REACHES 1/2 THE STORAGE VOLUME.
- DELTAS AND SEDIMENT DEPOSITED IN SURFACE WATERS WILL BE REMOVED, AND THE AREAS WHERE SEDIMENT REMOVAL RESULTS IN EXPOSED SOIL WILL BE RE-STABILIZED. THE REMOVAL AND STABILIZATION WILL BE COMPLETED WITHIN 7 CALENDAR DAYS OF DISCOVERY UNLESS PRECLUDED BY LEGAL, REGULATORY, OR PHYSICAL ACCESS CONSTRAINTS. IF PRECLUDED DUE TO ACCESS CONSTRAINTS, REASONABLE EFFORTS TO OBTAIN ACCESS WILL BE USED, REMOVAL AND STABILIZATION WILL TAKE PLACE WITHIN 7 CALENDAR DAYS OF **OBTAINING ACCESS**
- TRACKED SEDIMENT ON PAVED SURFACES WILL BE REMOVED WITHIN 1 CALENDAR DAY OF DISCOVERY. AREAS UNDERGOING STABILIZATION WILL BE RESTABILIZED AS NECESSARY TO ACHIEVE REQUIRED COVER.

### 6.5 RECORDKEEPING REQUIREMENTS: (CSW PERMIT ITEMS 11.11 AND 24.5 AND SECTIONS 6 AND 20)

ALL INSPECTIONS AND MAINTENANCE ACTIVITIES WILL BE RECORDED IN WRITING WITHIN 24 HOURS OF BEING CONDUCTED AND THESE RECORDS WILL BE RETAINED WITH THE SWPPP. RECORDS OF EACH INSPECTION AND MAINTENANCE ACTIVITY WILL INCLUDE THE DATE AND TIME; NAME OF INSPECTOR(S); FINDINGS OF INSPECTIONS; CORRECTIVE ACTIONS (INCLUDING DATES, TIMES, AND PARTY COMPLETING MAINTENANCE ACTIVITIES); AND

DATE OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCHES IN 24 HOURS AND THE AMOUNT OF RAINFALL FOR FACH EVENT

a. IF ANY DISCHARGE IS OBSERVED DURING THE INSPECTION, THE LOCATION AND APPEARANCE OF THE DISCHARGE (I.E., COLOR, ODOR, SETTLED OR SUSPENDED SOLIDS, OIL SHEEN, AND OTHER OBVIOUS INDICATORS OF POLLUTANTS) WILL BE DOCUMENTED AND A PHOTOGRAPH WILL BE TAKEN

2. THE SWPPP WILL BE AMENDED TO INCLUDE ADDITIONAL OR MODIFIED BMPS TO CORRECT PROBLEMS OR ADDRESS SITUATIONS WHENEVER THERE IS A CHANGE IN DESIGN, CONSTRUCTION, OPERATION, MAINTENANCE, WEATHER, OR SEASONAL CONDITIONS THAT HAS A SIGNIFICANT EFFECT ON THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER.

- THE SWPPP WILL BE AMENDED WHEN INSPECTIONS OR INVESTIGATIONS BY THE SITE OWNER, OPERATOR, OR CONTRACTORS OR BY USEPA/MPCA OFFICIALS INDICATE THAT THE SWPPP IS NOT EFFECTIVE IN ELIMINATING OR MINIMIZING THE DISCHARGE OF POLLUTANTS TO SURFACE WATERS OR GROUNDWATER; THE DISCHARGES ARE CAUSING WATER QUALITY STANDARD EXCEEDANCES; OR THE SWPPP IS NOT CONSISTENT WITH A USEPA APPROVED TMDL
- ANY AMENDMENTS TO THE SWPPP PROPOSED AS A RESULT OF THE INSPECTION WILL BE DOCUMENTED AS REQUIRED WITHIN 7 CALENDAR DAYS.
- AMENDMENTS WILL BE COMPLETED BY AN APPROPRIATELY TRAINED INDIVIDUAL. CHANGES INVOLVING THE USE OF A LESS STRINGENT BMP WILL INCLUDE A JUSTIFICATION DESCRIBING HOW THE REPLACEMENT BMP IS EFFECTIVE FOR THE SITE CHARACTERISTICS
- RECORDS RETENTION: THE SWPPP, INCLUDING ALL CHANGES TO IT, AND INSPECTION AND MAINTENANCE RECORDS WILL BE KEPT AT THE SITE DURING CONSTRUCTION BY THE PERMITTEE WHO HAS OPERATIONA CONTROL OF THE SITE. THE SWPPP CAN BE KEPT IN EITHER A FIELD OFFICE OR IN AN ON SITE VEHICLE DURING NORMAL WORKING HOURS
- RECORD AVAILABILITY: THE PERMITTEES WILL MAKE THE SWPPP, INCLUDING INSPECTION REPORTS, MAINTENANCE RECORDS, AND TRAINING RECORDS, AVAILABLE TO FEDERAL, STATE, AND LOCAL OFFICIALS WITHIN THREE DAYS UPON REQUEST FOR THE DURATION OF THE PERMIT COVERAGE AND FOR THREE YEARS FOLLOWING THE NOTICE OF TERMINATION.

#### 7.0 POLLUTION PREVENTION MEASURES:

- ANY CONSTRUCTION PRODUCTS AND LANDSCAPE MATERIALS THAT HAVE THE POTENTIAL TO LEACH POLLUTANTS WILL BE STORED UNDER COVER (E.G., PLASTIC SHEETING OR TEMPORARY ROOFS) TO PREVENT DISCHARGE OF POLLUTANTS THROUGH MINIMIZATION OF CONTACT WITH STORMWATER. STORAGE OF SUCH MATERIALS WITHIN THE PROJECT AREA WILL BE MINIMIZED TO THE EXTENT POSSIBLE. (CSW PERMIT ITEM 12.2)
- PESTICIDES, FERTILIZERS, AND TREATMENT CHEMICALS WILL BE STORED UNDER COVER (E.G., PLASTIC SHEETING, TEMPORARY ROOFS, WITHIN A BUILDING, OR IN WEATHER-PROOF CONTAINERS) TO PREVENT DISCHARGE OF POLLUTANTS THROUGH MINIMIZATION OF CONTACT WITH STORMWATER. STORAGE OF SUCH MATERIALS WITHIN THE PROJECT AREA WILL BE MINIMIZED TO THE EXTENT POSSIBLE. (CSW PERMIT ITEM 12.3)
- HAZARDOUS MATERIALS AND TOXIC WASTE (E.G., OIL, DIESEL FUEL, GASOLINE, HYDRAULIC FLUIDS, PAINT 3 SOLVENTS, PETROLEUM-BASED PRODUCTS, WOOD PRESERVATIVES, ADDITIVES, CURING COMPOUNDS, AND ACIDS) WILL BE STORED AND DISPOSED OF IN COMPLIANCE WITH MINNESOTA RULES CHAPTER 7045, INCLUDING SECONDARY CONTAINMENT (AS APPLICABLE). HAZARDOUS MATERIALS WILL BE PROPERLY STORED IN SEALED CONTAINERS TO PREVENT SPILLS, LEAKS, OR OTHER DISCHARGES AND PREVENT PRECIPITATION FROM FALLING ONTO THE CONTAINERS OR STORED HAZARDOUS MATERIALS. (CSW PERMIT ITEMS 2.3 AND 12.4)
- SOLID WASTE WILL BE COLLECTED, STORED, AND DISPOSED OF PROPERLY IN COMPLIANCE WITH MINNESOTA RULES CHAPTER 7035. THIS INCLUDES STORAGE WITHIN COVERED TRASH CONTAINERS AND DAILY REMOVAL OF LITTER AND DEBRIS. STORAGE OF SOLID WASTE WITHIN THE PROJECT AREA WILL BE MINIMIZED TO THE EXTENT POSSIBLE. (CSW PERMIT ITEM 12.5)
- PORTABLE TOILETS WILL BE LOCATED AWAY FROM SURFACE WATERS AND POSITIONED AND SECURED TO THE GROUND SO THEY WILL NOT BE TIPPED OR KNOCKED OVER. SANITARY WASTE WILL BE DISPOSED OF IN ACCORDANCE WITH MINNESOTA RULES. CHAPTER 7041. PORTABLE TOILETS WILL BE PERIODICALLY EMPTIED AND THE WASTE HAULED OFF-SITE BY A LICENSED HAULER. (CSW PERMIT ITEM 12.6)
- VEHICLE FUELING WILL ONLY OCCUR IN DESIGNATED AREAS. SPILL KITS SIZED APPROPRIATELY FOR THE AMOUNT OF REFUELING TAKING PLACE WILL BE LOCATED. SPILL KITS WILL BE CLEARLY LABELED AND CONTAIN MATERIALS TO ASSIST IN SPILL OF FANUP INCLUDING ABSORBENT PADS, BOOMS FOR CONTAINING SPILLS, AND HEAVY-DUTY PROTECTIVE GLOVES. SPILLS WILL BE REPORTED TO THE MINNESOTA DUTY OFFICER AS REQUIRED BY MINNESOTA STATUTES, SECTION 115.061. (CSW PERMIT ITEMS 2.3 AND 12.7)
- ANY FUEL TANKS BROUGHT ON-SITE WILL HAVE PROPERLY SIZED CONTAINMENT AND WILL NOT BE TOPPED OFF TO AVOID SPILLS FROM OVERFILLING. FUEL TANKS WILL MEET INDUSTRY STANDARDS (DESIGNED TO HOLD FUEL TYPE, PROPERLY MAINTAINED, NOT ILLEGALLY MODIFIED, NOT MISSING LEAK INDICATOR FLOATS FOR DOUBLE WALLED TANKS, SIGHT GAUGES NOT USED, ETC.) OR BE REMOVED FROM THE WORK
- b. GUIDELINES FOR SPILL PREVENTION AND RESPONSE INCLUDE:
  - TAKE REASONABLE STEPS TO PREVENT THE DISCHARGE OF SPILLED OR LEAKED CHEMICALS, INCLUDING FUEL, FROM ANY AREA WHERE CHEMICALS OR FUEL WILL BE LOADED OR UNLOADED, INCLUDING THE USE OF DRIP PANS OR ABSORBENTS UNLESS INFEASIBLE
  - PERFORM REGULAR PREVENTATIVE MAINTENANCE ON TANKS AND FUEL LINES; INSPECT PUMPS, CYLINDERS, HOSES, VALVES, AND OTHER MECHANICAL EQUIPMENT ON-SITE FOR DAMAGE OR DETERIORATION;
  - DO NOT WASH OR RINSE FUELING AREAS WITH WATER;
  - MAINTAIN ADEQUATE SUPPLIES TO CLEAN UP DISCHARGED MATERIALS AND PROVIDE AN APPROPRIATE DISPOSAL METHOD FOR RECOVERED SPILLED MATERIALS:
  - REPORT AND CLEAN UP SPILLS IMMEDIATELY AS REQUIRED BY MINNESOTA STATUTES, SECTION
  - 115.061, USING DRY CLEAN UP MEASURES WHERE POSSIBLE; AND MAINTAIN COPIES OF SAFETY DATA SHEETS (SDSS) FOR HAZARDOUS MATERIALS ON-SITE IN LOCATIONS READILY AVAILABLE TO EMERGENCY RESPONDERS.
- 7. IF VEHICLE AND EQUIPMENT WASHING IS NECESSARY, A VEHICLE WASH STATION WILL BE LOCATED IN A DESIGNATED AREA. RUNOFF FROM THE WASHING AREA WILL BE CONTAINED IN A SEDIMENT BASIN AND WASTE FROM THE WASHING ACTIVITY WILL BE PROPERLY DISPOSED OF ANY SOAPS, DETERGENTS, OR SOLVENTS WILL BE PROPERLY USED AND STORED. ANY DETERGENTS AND OTHER CLEANERS NOT PERMITTED FOR DISCHARGE WILL NOT BE USED. (CSW PERMIT ITEMS 2.3 AND 12.8)
- THE PROJECT WILL NOT RESULT IN CONCRETE OR OTHER WASHOUT ACTIVITIES. IF NECESSARY, A DESCRIPTION OF THE STORAGE AND DISPOSAL OF CONCRETE AND OTHER WASHOUT WASTES SO THAT WASTES DO NOT CONTACT THE GROUND WILL BE ADDED. (CSW PERMIT ITEMS 2.3 AND 12.9)

#### 8.0 PERMANENT COVER AND PERMIT TERMINATION CONDITIONS:

- THE AREAS DISTURBED DURING CONSTRUCTION WILL BE STABILIZED WITH PERMANENT COVER UPON COMPLETION OF WORK. PERMANENT COVER MAY BE VEGETATIVE OR NON-VEGETATIVE, AS APPROPRIATE. ESTABLISHMENT OF PERMANENT COVER MAY INCLUDE THE FOLLOWING ACTIVITIES: A COMBINATION OF SEEDING, MULCHING, EROSION CONTROL BLANKETS, AND/OR PLACEMENT OF IMPERVIOUS SURFACES. (CSW PERMIT ITEM 5 17
- FOR A CONSTRUCTION-SITE TO ACHIEVE "PERMANENT COVER", THE FOLLOWING REQUIREMENTS MUST BE

																_		
						I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR	CLIENT	12/10/21	04/22/22		_		-			Scale	AS SHOWN	
						SUPERVISION AND THAT I AM A DULY LICENSED	BID		—	—					city of	Date	04/22/2022	
			_			PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.	CONSTRUCTION			-					rolden	Drawn	ADB2	1 CITY OF GOLDEN VALLEY
														DARR	$Y U U U U U 1 1 1 \bullet$		71882	4
E	GGN	KJN2 KJ	AL C	04/22/2022	ISSUED FOR 90% DESIGN REVIEW	PRINTED NAME									VO DV	Checked	KJN2	GOLDEN VALLEY, MN
A	ADB2	KJN2 KJ	AL 1	12/10/2021	ISSUED FOR REVIEW	SIGNATURE	RELEASED	Α	В	С	0	1 :	2 3	Corporate Headquarters:	valley	Designed	BARR	
N	D. BY	CHK. AF	PP.	DATE	<b>REVISION DESCRIPTION</b>	DATELICENSE #	TO/FOR		C	ATE R	RELEAS	ED		Ph: 1-800-632-2277	7	Approved	KAL	

Statev

OF A SAND FILTER)

COMPLETED PRIOR TO TERMINATION OF PERMIT COVERAGE: (CSW PERMIT SECTIONS 4 AND 13) a ALL SOIL DISTURBING CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED AND PERMANENT COVER HAS BEEN INSTALLED OVER ALL AREAS. VEGETATIVE COVER CONSISTS OF A UNIFORM PERENNIAL VEGETATION WITH A DENSITY OF 70% OF ITS EXPECTED FINAL GROWTH. VEGETATION IS NOT REQUIRED WHERE THE FUNCTION OF A SPECIFIC AREA DICTATES NO VEGETATION (SUCH AS IMPERVIOUS SURFACES OR THE BASE

ALL SEDIMENT HAS BEEN REMOVED FROM CONVEYANCE SYSTEMS, INCLUDING CULVERTS.

ALL TEMPORARY SYNTHETIC EROSION PREVENTION AND SEDIMENT CONTROL BMPS HAVE BEEN REMOVED BMPS DESIGNED TO DECOMPOSE ON-SITE MAY BE LEFT IN PLACE.

WITHIN 30 DAYS AFTER THE TERMINATION CONDITIONS ARE COMPLETE, A NOTICE OF TERMINATION (NOT) FORM WILL BE SUBMITTED TO THE MPCA.



MEDI EY PARK	BARR PROJECT No.			
	23/27-1901.	.00		
STORMWATER IMPROVEMENT	CLIENT PROJECT No. 20-26			
	DWG. No.	REV. No.		
(SWPPP) PAGE 2 OF 2	SW-02	В		





NOTES:

- 1. REFER TO MANUFACTURER RECOMMENDATIONS FOR STAPLE PATTERNS FOR SLOPE INSTALLATIONS.
- 2. PREPARE SOIL BY LOOSENING TOP 1-2 INCHES AND APPLY SEED (AND FERTILIZER WHERE REQUIRED) PRIOR TO INSTALLING BLANKETS. GROUND SHOULD BE SMOOTH AND FREE OF DEBRIS.
- 3. BEGIN (A) AT THE TOP OF THE SLOPE AND ROLL THE BLANKETS DOWN OR (B) AT ONE END OF THE SLOPE AND ROLL THE BLANKETS HORIZONTALLY ACROSS THE SLOPE.
- 4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 6" OVERLAP, WITH THE UPHILL BLANKET ON TOP.
- 5. WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH APPROXIMATELY 6" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART.
- 6. BLANKET MATERIALS SHALL BE AS SPECIFIED OR AS APPROVED BY ENGINEER.





DETAIL: TREE PROTECTION FENCE NOT TO SCALE



					-												
					I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR	CLIENT	12/10/2	1 04/22/22							Scale	AS SHOWN	
n n					SUPERVISION AND THAT I AM A DULY LICENSED	BID	-	·		·				city of	Date	04/22/2022	
5					STATE OF MINNESOTA.	CONSTRUCTION							RARR	olden V	Drawn	ADB2	CITY OF GOLDEN VALLEY
	B GGN KJN	KAL	04/22/2022	ISSUED FOR 90% DESIGN REVIEW	PRINTED NAME									S VO OV	Checked	KJN2	GOLDEN VALLEY, MN
	A ADB2 KJN	KAL	12/10/2021	ISSUED FOR REVIEW	SIGNATURE	RELEASED	Α	В	С	0	1	2 3	Corporate Headquarters: Minneapolis Minnesota	valley	Designed	BARR	,,
5	NO. BY CH	. APP.	DATE	REVISION DESCRIPTION	DATELICENSE #	TO/FOR		[	DATE F	RELEAS	SED		Ph: 1-800-632-2277	J	Approved	KAL	1

- NOTES: 1. ENSURE FENCE IS PULLED TAUGHT BETWEEN POSTS AND ANCHOR SECURELY AS SHOWN, ENSURE CABLE TIES ARE PULLED TAUGHT AGAINST POST TO PREVENT SLIPPING.
- SCILPFING.
  PROVIDE 6" TYP. SPACE AT BOTTOM OF FENCE AS SHOWN TO PREVENT SMALL ANIMAL ENTRAPMENT IN FENCED AREA.
  ENSURE CABLE TIES ARE EXTREME WEATHER COLD TEMPERATURE UV STABILIZED

- STEEL T-POSTS

- FENCING

GAP AT BOTTOM OF FENCE,

6" TYP

1. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE FENCE IN AN ORDERLY AND UPRIGHT CONDITION FOR ONE FULL

- YEAR AFTER INSTALL. CONTRACTOR WILL REPAIR FENCE WITHIN 7 DAYS OF
- NOTIFICATION FROM OWNER OR ENGINEER.

	BARR PROJECT No.				
MEDLET FARM	23/27-1901.00				
STORMWATER IMPROVEMENT	CLIENT PROJECT No.				
	20.26				
EROSION & SEDIMENT CONTROL		DEV/ No			
DETAILS	DWG. NO.	REV. NO.			
DETAILO	SVV-04	в			





	BARR PROJECT No.				
	23/27-1901.00				
STORMWATER IMPROVEMENT	CLIENT PROJECT No.				
LANDSCAPE PLAN AND	•				
	DWG. No.	REV. No.			
DETAILS	L-02	В			
DETAILS	L-02	B			



NOTE:

1) SEE SHEET C-01 FOR SOIL BORING LOCATIONS

Ē																		
osla						I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR	CLIENT	12/10/21	)4/22/22 —		_		-			Scale	AS SHOWN	
ž						SUPERVISION AND THAT I AM A DULY LICENSED	BID								city of 🔨 🦱	Date	04/22/2022	
ő						PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MININESOTA	CONSTRUCTION	<u> </u>						DADD	roldon	Drawn	DADD	CITY OF GOLDEN VALLEY
Ë						STATE OF MININESOTA.								DARK	$g_{0} u e_{11}$	Observed	DARK	
ISI	B GG	N KJN	2 KAL	04/22/2022	ISSUED FOR 90% DESIGN REVIEW	PRINTED NAME									VI VI	Спескеа	KJN2	GOLDEN VALLEY, MN
8	A ADE	2 KJN	2 KAL	12/10/2021	ISSUED FOR REVIEW	SIGNATURE	RELEASED	Α	В	C 0	1	1 2	3	Corporate Headquarters: Minneepolie Minneepte	valley	Designed	BARR	,
CA	NO. B	′ СН	K. APP.	DATE	REVISION DESCRIPTION	DATELICENSE #	TO/FOR		DA	TE RELI	EASE	D		Ph: 1-800-632-2277		Approved	KAL	1

EER. Gwg Mekon FILE: M:/DESIGN23271901.00/2327190100_B01_SOL BORNGS_SED LOGS DWG PLOT SCALE: 1/2 PLOT

			Ba 43	arr Engineering Compan	y Suite :	200	LOG OF BORING SED	-02
	B/	١R	R Te	inneapolis, MN 55435 elephone: 952-832-2600	)	200	SHEET 1 OF	1
	Proje Proje Local	ct: ct No tion:	: :	Medly Park 23270051.51 Solden Valley, MN			Surface Elevation: 897.0 Drilling Method: Vibracore Samplion Method: Vibracore	
	Coor	dinate m:	s: I	NAD83			Completion Depth: 5.6 ft	_
	Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	
	-0.0				OL- OH		OROANC SOIL (OL-OH): Black and dark grey, wet, acit, organic sits with leaves and trace note, trace very fine grained sand, cohesive; non-pleate; no odor; no sitient; no discolatedon.	- ;
	2.5		1	D/O/S:None/ None/ None	РТ		PEAT (PT): Dark brown; molet; soft; organic peaks with tiny roots, trace black organic silts, cohesive; non-plastic; no odor, no sheen; no discoloration.	-
	5.0- - 7.5- - 10.0-						End of boring 5.8 feet	
EDI-CADICADIGINTIPROJECT8/23270051.51 MEDI	12.5 - - - - - - - - - - - - - - - - - - -	Borine Borine ed By ig Cor	g Stari g Con tracto	ted: 10/13/20 pieted: 10/13/20 JWJ yr: Barr Ioho Rost V	ibrao		Remarks: Pond water dspth at sediment coring location was 1.0 feet. PD = Heatquest, DOI = DissistantionOptimer, PDAC = PEMAtters Consult @BP = GreatBashPvas Addition any how its month in the def what has a reflectation at the log.	

	BARR PROJECT No.				
	23/27-1901.00				
STORMWATER IMPROVEMENT	CLIENT PROJECT No.				
	20-26				
SOIL BORINGS AND SEDIMENT LOGS	DWG. No.	REV. No.			
	B-01	В			