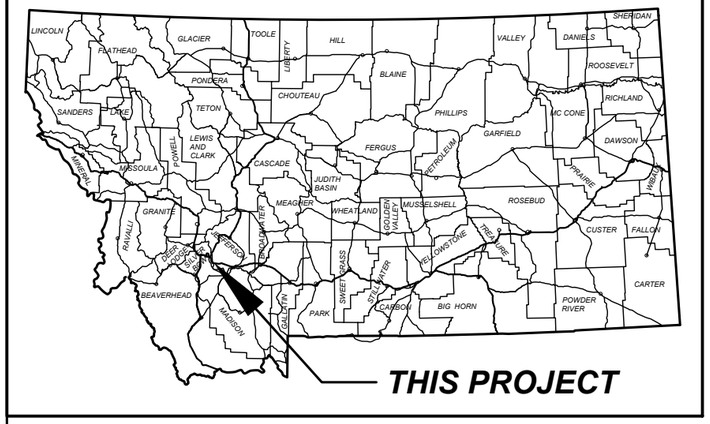
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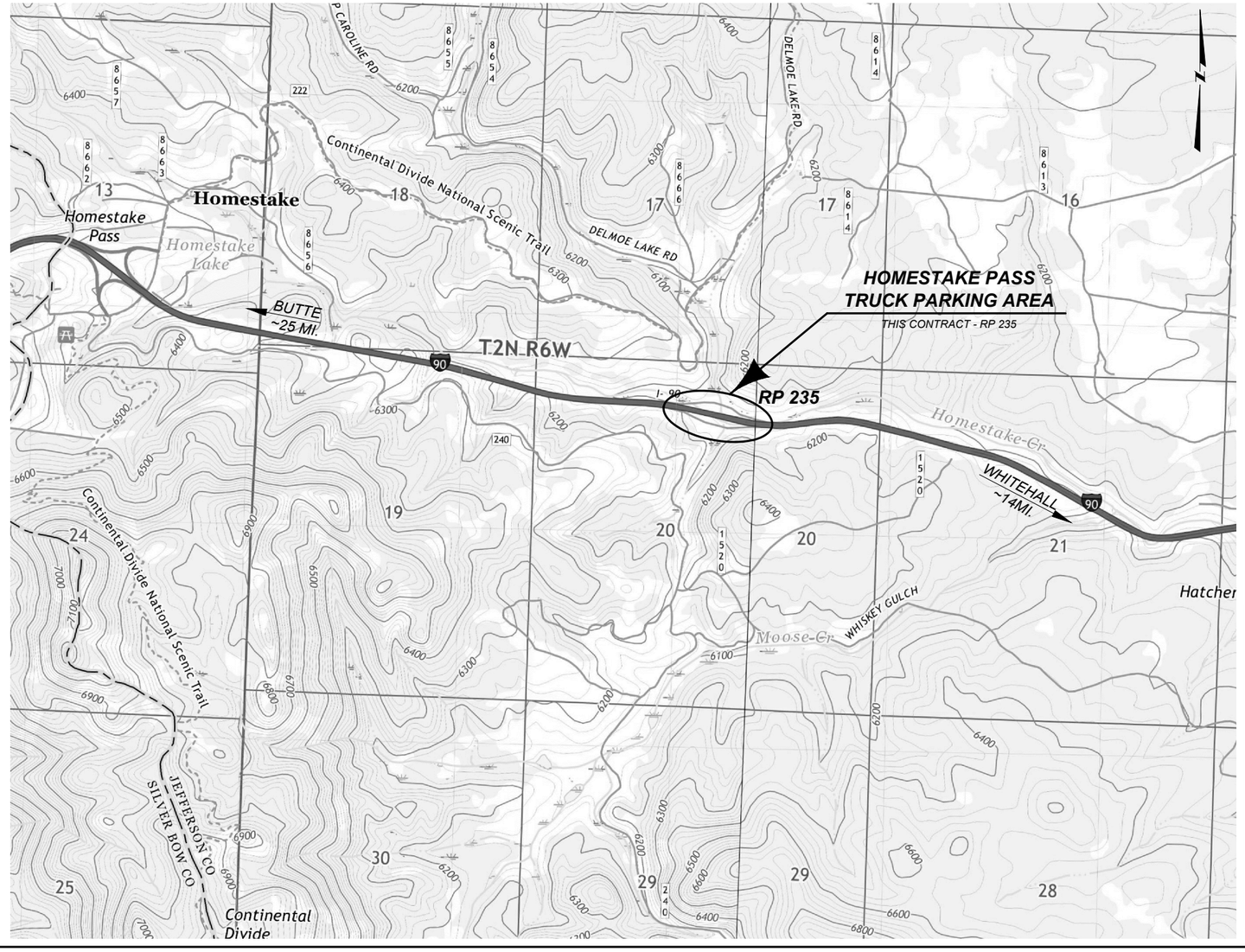
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MONTANA DEPARTMENT OF TRANSPORTATION

IM 90-5(96)233
SAFETY REST AREA
HOMESTAKE PASS PARKING AREA
JEFFERSON COUNTY

PROJECT LENGTH = N/A



DOWL

ASSOCIATED PROJECT AGREEMENT NUMBERS	
R/W	
I.C.	
P.E.	IM 90-5(95)233

SURFACING SOURCES - CONTRACTOR FURNISHED

DOWL

APPROVED BY:

MONTANA
DOUGLAS R. ENDERSON
No. 16520 PE
LICENSED PROFESSIONAL ENGINEER

Signed by: Douglas Enderson 6/5/2025
03D5181C158C4D2... DATE

MONTANA
DEPARTMENT OF TRANSPORTATION

DocuSigned by: Kelly Williams 6/5/2025
EF7F5DDAB5A7471... DATE

SHEET NO. 1

TITLE SHEET

PROJECT NAME	HOMESTAKE PASS PARKING AREA
COUNTY	JEFFERSON COUNTY
PROJECT ID	IM 90-5(96)233
UPN	10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA
Department of Transportation

ROAD PLANS

4/2/2025 11:28 AM

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NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

COMP. AGGREGATE WEIGHT	= 3700 LBS. PER CUBIC YARD
COMP. WEIGHT OF PL. MIX BIT. SURF.	= 3855 LBS. PER CUBIC YARD
ASPHALT CEMENT - GRADE S - 3/4" AGG.	= 5.4% OF PL.MIX BIT.SURF.
ASPHALT CEMENT - GRADE S - 3/8" AGG.	= 6.2% OF PL.MIX BIT.SURF.
ASPHALT CEMENT	= 3.0% OF RECYCLED PL.MIX (50% RAP)
BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
EMULSIFIED ASPHALT - TACK (ALL OTHER SURFACES)	= 0.05 GAL. PER SQ.YARD (UNDILUTED)
PORTLAND CEMENT	= 4% OF CTB DRY WT.

FULL ACCESS CONTROL

THIS PROJECT IS A FULL ACCESS CONTROL FACILITY. OBTAIN APPROVAL FROM THE CHIEF OF THE RIGHT-OF-WAY BUREAU PRIOR TO ADDING, DELETING OR RELOCATING ANY APPROACHES.

UTILITIES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

SOILS INFORMATION

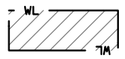
SEE SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION. THE LOCATION OF GEOTECHNICAL BORINGS IS SHOWN ON THE PLAN VIEW WITH THE FOLLOWING SYMBOL:

BORING NUMBER

(GEOTECHNICAL BORING)

WETLANDS

WETLANDS EXIST ADJACENT TO THE ROADWAY/PARKING AREAS AND DO EXIST BEYOND THE PROJECT LIMITS. A WETLAND DELINEATION WAS COMPLETED FOR THIS PROJECT AND WETLAND BOUNDARIES ARE SHOWN ON THE PLANS. PERMANENT IMPACTS TO WETLAND AREAS ARE NOT ANTICIPATED IN ASSOCIATION WITH THE PROPOSED WORK. TEMPORARY WETLAND IMPACTS, HOWEVER, ARE PROPOSED AND ARE COVERED UNDER CLEAN WATER ACT SECTION 404 NON-NOTIFYING NATIONWIDE PERMIT 3 - MAINTENANCE. ANY ACTION IMPACTING WETLAND AREAS (BOTH TEMPORARY AND PERMANENT) OUTSIDE OF WHAT HAS ALREADY BEEN PERMITTED IS THE RESPONSIBILITY OF THE CONTRACTOR.



DELINEATED WETLAND AREAS

WETLAND DELINEATION TABLE

WETLAND DESIGNATION	STORM DRAIN STATION		WETLAND AREA (acres)		REMARKS
	FROM	TO	DELINEATED AREA	TEMPORARY IMPACTED AREA ##	
WETLAND 2	3+54.60	3+57.33	0.73	0.002	EXISTING STORM DRAIN REMOVAL
TOTAL			0.73	0.002	

\# AREA OF EXISTING WETLAND EXTENDS BEYOND PLAN LIMITS
TEMPORARY IMPACT AREAS ARE ESTIMATED AND PROVIDED FOR INFORMATIONAL PURPOSES ONLY. TEMPORARY WETLAND IMPACTS SHOWN IN THE TABLE AND ANY OTHER IMPACTS ASSOCIATED WITH CONTRACTOR OPERATIONS ARE TO BE PERMITTED BY CONTRACTOR.

SHEET NO. 2

TABLE OF CONTENTS & NOTES

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	REVIEWED BY	CHECKED BY
DOWL 03/2025	DOWL 03/2025	DOWL 03/2025

MONTANA Department of Transportation

ROAD PLANS

4/2/2025 11:28 AM 10327RDTTLZ01.DWG

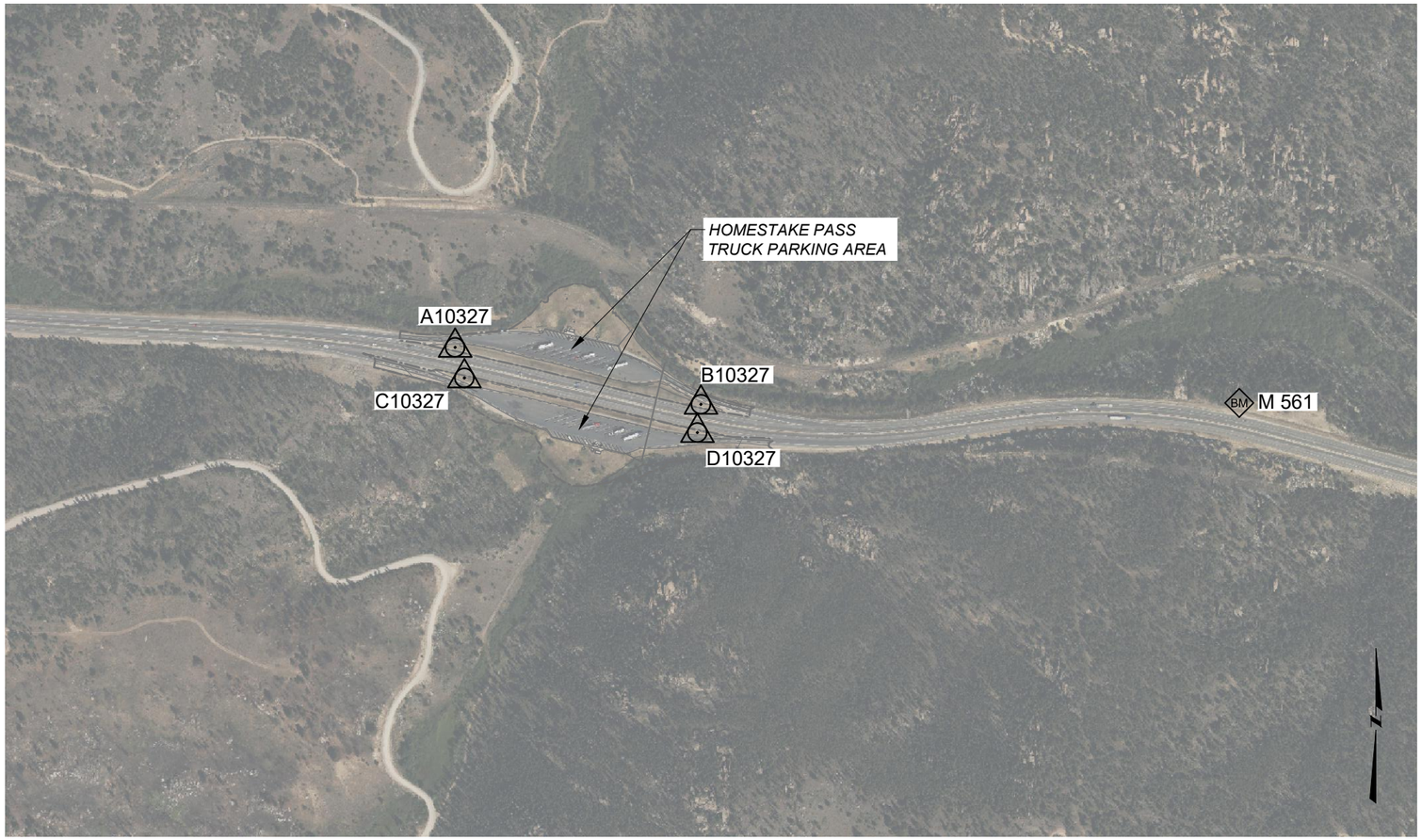
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DOWL

CONTROL ABSTRACT				
POINT NAME\NUMBER	N OR Y COORDINATE	E OR X COORDINATE	POINT ELEVATION	LOCATION AND DESCRIPTION
A10327	620,728.484	1,236,174.718	6,080.56	SET MDOT 2 IN. ALUMINUM CAP ON 5/8-INCH X 30-INCH REBAR STAMPED A10327 2023, AT THE WESTERLY RAMP TO THE NORTHERLY REST AREA. POINT IS IN GRASSY AREA BETWEEN RAMP AND INTERSTATE. POINT IS 12.0 FEET NORTHERLY OF THE EDGE OF PAVEMENT OF THE INTERSTATE AND 12.6 FEET SOUTHERLY OF THE EDGE OF PAVEMENT OF SAID RAMP AND 46.2 FEET EASTERLY OF A HIGHWAY DELINEATOR POST.
B10327	620,528.980	1,237,035.971	6,076.00	SET MDOT 2 IN. ALUMINUM CAP ON 5/8-INCH X 30-INCH REBAR STAMPED B10327 2023, AT THE EASTERLY RAMP TO THE NORTHERLY REST AREA. POINT IS IN GRASSY AREA BETWEEN RAMP AND INTERSTATE. POINT IS 12.6 FEET NORTHERLY OF THE EDGE OF PAVEMENT OF THE INTERSTATE AND 9.3 FEET SOUTHERLY OF THE EDGE OF PAVEMENT OF SAID RAMP AND 32.0 FEET EASTERLY OF THE NORTHERLY POST FOR "TRUCK PARKING" SIGN.
C10327	620,621.276	1,236,207.079	6,077.31	SET MDOT 2 IN. ALUMINUM CAP ON 5/8-INCH X 30-INCH REBAR STAMPED C10327 2023, AT THE WESTERLY RAMP TO THE SOUTHERLY REST AREA. POINT IS IN GRASSY AREA BETWEEN RAMP AND INTERSTATE. POINT IS 8.9 FEET SOUTHERLY OF THE EDGE OF PAVEMENT OF THE INTERSTATE, 15.2 FEET EAST OF THE POST FOR "WRONG WAY" SIGN AND 14.5 FEET EASTERLY OF THE NORTHERLY POST FOR "TRUCK PARKING" SIGN.
D10327	620,430.114	1,237,023.462	6,078.40	SET MDOT 2 IN. ALUMINUM CAP ON 5/8-INCH X 30-INCH REBAR STAMPED D10327 2023, AT THE WESTERLY RAMP TO THE SOUTHERLY REST AREA. POINT IS IN GRASSY AREA BETWEEN RAMP AND INTERSTATE. POINT IS 9.8 FEET SOUTHERLY OF THE EDGE OF PAVEMENT OF THE INTERSTATE AND 7.7 FEET NORTHERLY OF THE EDGE OF PAVEMENT OF SAID RAMP AND 20.7 FEET WESTERLY OF A HIGHWAY DELINEATOR POST.
M 561	620,533.693	1,238,922.171	6,117.93	NGS MONUMENT AS DESCRIBED

CONTROL DIAGRAM

SCALE: 1"=500'



NOTE:

THIS PROJECT IS ON THE MONTANA COORDINATE SYSTEM NAD83-2011 NORTHING AND EASTING COORDINATES ARE EXPRESSED IN UNITS OF INTERNATIONAL FEET AND ELEVATIONS ARE IN UNITS OF U.S. SURVEY FEET. DIMENSIONS SHOWN ON THE PLANS ARE GRID. ALL SURVEY AND STAKING REQUIRE THE USE OF A COMBINATION SCALE FACTOR (CSF) TO CONVERT GRID DIMENSIONS TO GROUND DIMENSIONS (GRID DISTANCE / CSF = GROUND DISTANCE). THE CSF FOR THIS PROJECT IS 0.99928584

BEARING SOURCE

GRID -- MONTANA COORDINATE SYSTEM NAD 83-2011

LEVEL DATUM SOURCE

GRID -- MONTANA COORDINATE SYSTEM NAD 83-2011
NAVD 88 ELEVATIONS DERIVED FROM DIFFERENTIAL LEVELS HOLDING NGS PUBLISHED ELEVATION AT M 561

SHEET NO. 3

CONTROL DIAGRAM

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	03/2025	REVIEWED BY	03/2025	CHECKED BY	03/2025
DOWL		DOWL		DOWL	

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MONTANA Department of Transportation

ROAD PLANS

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SUMMARY

GRADING

SITE LOCATION	cu. yards UNCL. EXC.*	cu. yards EXCESS EXC.	cu. yards EMB.+	REMARKS
WESTBOUND	20		235	MEDIAN DITCH REGRADING
WESTBOUND	924		264	SITE GRADING
WESTBOUND	2		1	STORM DRAIN OUTLET GRADING
EASTBOUND	247			MEDIAN DITCH REGRADING
EASTBOUND	1,453		163	SITE GRADING
EASTBOUND	1		3	STORM DRAIN INLET GRADING
TOTAL	2,647	# 1,981	# 666	

FOR INFORMATION ONLY
NOTE: QUANTITIES DO NOT INCLUDE UTILITY OR BUILDING EXCAVATION & ARE BASED ON EXISTING GROUND.
*INCLUDES ASPHALT AND CONCRETE REMOVAL QUANTITIES

REMOVE STRUCTURE

SITE LOCATION	each REMOVE STRUCTURE *	lump sum REMOVE MISC. ITEMS	each REMOVE MISC. ITEMS #	REMARKS
WESTBOUND	1			REMOVE SINGLE VAULTED TOILET STRUCTURE
WESTBOUND	1			REMOVE DOUBLE VAULTED TOILET STRUCTURE
WESTBOUND		1		REMOVE EXISTING PRESSURE TANK WITH VAULT
WESTBOUND			2	REMOVE AND RESET HISTORICAL DISPLAY STAND
EASTBOUND	1			REMOVE SINGLE VAULTED TOILET STRUCTURE
EASTBOUND	1			REMOVE DOUBLE VAULTED TOILET STRUCTURE
EASTBOUND			2	REMOVE AND RESET HISTORICAL DISPLAY STAND
TOTAL	4	1	4	

* INCLUDES REMOVAL OF VAULT TANKS.
# SEE SPECIAL PROVISIONS FOR INDIVIDUAL PAY ITEM

SURFACING

SITE LOCATION	AGGREGATE tons COMM. MIX 3/8" PG 58V-34	AGGREGATE tons COMM. MIX 3/4" PG 58V-34 #	AGGREGATE cu. yards CRUSHED AGG. COURSE	BITUMINOUS MATERIAL gals. EMULSIFIED ASPHALT TACK##	BITUMINOUS MATERIAL sq. yards AGG. TREAT.	REMARKS
WESTBOUND	81	189	420	126	840	WESTBOUND PARKING AREA - MEASURED IN CAD
EASTBOUND	96	230	495	149	989	EASTBOUND PARKING AREA - MEASURED IN CAD
WESTBOUND	3	7	16	5	31	WESTBOUND INTERSTATE - MEASURED IN CAD
EASTBOUND	3	7	16	5	31	EASTBOUND INTERSTATE - MEASURED IN CAD
TOTAL	183	433	947	285	1,891	

PAID FOR AS COMMERCIAL MIX-PG 58V-34 PER TON.
BASED ON 3 APPLICATIONS

CULVERTS

SITE LOCATION	each PLUG INLET & ABANDON PIPE	REMARKS
WESTBOUND	1	EXISTING OUTFALL PIPE
EASTBOUND	1	EXISTING OUTFALL PIPE
TOTAL	2	

PERMANENT EROSION CONTROL

SITE LOCATION	cu. yards ANCILLARY ARMOR CL. 1	sq. yards GEOTEXTILE PERM. EROS. CNTRL. HIGH SURV. CLASS B	sq. yards EROSION CONTROL BLANKET LONG-TERM	sq. yards EROSION CONTROL BLANKET HIGH PERFORMANCE	REMARKS
EASTBOUND			76		EASTBOUND PARKING AREA
WESTBOUND	9.5	19			STORMWATER POND DRAINAGE CHUTE
EASTBOUND	11.8	24			STORMWATER POND DRAINAGE CHUTE
WESTBOUND				121	STORMWATER POND WEIR
EASTBOUND				128	STORMWATER POND WEIR
WESTBOUND			3,372		WESTBOUND PARKING AREA DITCH
EASTBOUND			2,812		EASTBOUND PARKING AREA DITCH
TOTAL	21.3	43	6,260	249	

SIDEWALK

SITE LOCATION	sq. yards CONCRETE SIDEWALK REINFORCED 6"	sq. yards CONCRETE SIDEWALK 6" CONCRETE-HEATED	sq. yards DETECTABLE WARNING DEVICES TYPE 1	REMARKS
WESTBOUND	305.5	67.4	1.1	WESTBOUND PARKING AREA
EASTBOUND	316.6	67.4	1.1	EASTBOUND PARKING AREA
SUBTOTAL	622.1	134.8	2.2	
TOTAL	622.1	134.8	2.2	

REVEGETATION*

SITE LOCATION	lump sum REVEGE-TATION	cu. yards TOPSOIL SALVAGING & PLACING	acres SEED	acres FERTILIZER	acres CONDITION SEEDBED	REMARKS
WESTBOUND	0.5	157	0.3	0.3	0.3	WESTBOUND PARKING AREA
EASTBOUND	0.5	164	0.3	0.3	0.3	EASTBOUND PARKING AREA
TOTAL	1	# 321	# 0.6	# 0.6	# 0.6	

FOR INFORMATION ONLY.
* SEE SPECIAL PROVISIONS.

SHEET NO. 4

SUMMARY FRAMES

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY DOWL 03/2025
REVIEWED BY DOWL 03/2025
CHECKED BY DOWL 03/2025
10327RDSUM201.DWG

MONTANA Department of Transportation

ROAD PLANS

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SUMMARY

CURB

SITE LOCATION	linear feet: CONCRETE CURB AND GUTTER	sq. yards: CONCRETE VALLEY GUTTER	REMARKS
WESTBOUND	256.0	22.3	WESTBOUND PARKING AREA
EASTBOUND	266.0	17.3	EASTBOUND PARKING AREA
SUBTOTAL	522.0	39.6	
TOTAL	522.0	39.6	

TRASH RECEPTACLE

SITE LOCATION	each: TRASH RECEPTACLE *	REMARKS
WESTBOUND	4	WESTBOUND PARKING AREA
EASTBOUND	4	EASTBOUND PARKING AREA
TOTAL	8	

* PAID FOR AS MISCELLANEOUS ITEMS-INSTALL PER EACH. SEE SPECIAL PROVISIONS

WATER LINE

SITE LOCATION	linear feet: WATER SERVICE # 2"	REMARKS
WESTBOUND	125	WESTBOUND PARKING AREA
EASTBOUND	125	EASTBOUND PARKING AREA
TOTAL	250	

SEE DETAILS

STORM DRAIN PIPE

PIPE SECTION	STORM DRAIN STATION		linear feet: REMOVE STORM DRAIN ###	linear feet: STORM DRAIN PIPE #	each: F.E.T.S.##	REMARKS
NAME	FROM	TO		36" EQ. CLASS 3	36" EQ. CLASS 3	
EXISTING	0+00	3+50	350.0			EXISTING PIPE CROSSING I-90
DP-1	0+11.4	1+33.2		121.8	1	INLET TO MI-1
DP-2	1+33.2	2+63.1		129.9		MI-1 TO MI-2
DP-3	2+63.1	3+43.39		80.3	1	MI-2 TO OUTLET
TOTAL			350.0	332.0	~	

GRANULAR BEDDING MATERIAL INCIDENTAL TO STORM DRAIN PIPE, SEE DETAILED DRAWINGS FOR BEDDING QUANTITIES AND DETAILS.
PIPE LENGTH INCLUDES F.E.T.S.
EXCAVATION INCIDENTAL TO PIPE REMOVAL

PAVEMENT MARKINGS

ITEM	UNIT	FINAL APPLICATION	TOTAL
CURB MARKING - BLUE PAINT	gallon	1	1
STRIPING - WHITE EPOXY	gallon	28	28
STRIPING - YELLOW EPOXY	gallon	12	12
WORDS & SYMBOLS - WHITE PAINT	gallon	1	1
WORDS & SYMBOLS - BLUE PAINT	gallon	1	1
WORDS & SYMBOLS - WHITE EPOXY	gallon	15	15

BASED ON 1 APPLICATION.

MISCELLANEOUS ITEMS

SITE LOCATION	each: VAULTED TOILETS*	each: MAINTENANCE BUILDING*	lump sum: WATER SYSTEM#	REMARKS
WESTBOUND	2			ADA VAULTED TOILET (2 STALL)
EASTBOUND	2			ADA VAULTED TOILET (2 STALL)
WESTBOUND		1		MAINTENANCE BUILDING
EASTBOUND		1		MAINTENANCE BUILDING
WESTBOUND			0.5	WESTBOUND PARKING AREA
EASTBOUND			0.5	EASTBOUND PARKING AREA
TOTAL	6		1	

* PAID FOR AS MISCELLANEOUS ITEMS-EACH PER EACH. SEE DETAILS & SPECIAL PROVISIONS.
# SEE DETAILS AND SPECIAL PROVISIONS

STORM DRAIN STRUCTURE SCHEDULE

NAME	STORM DRAIN STATION	each: STORM DRAIN STRUCTURE: REMOVE DROP INLET	each: STORM DRAIN STRUCTURE: MANHOLE BASE 72"	each: STORM DRAIN STRUCTURE: DROP INLET FRAME AND GRATE#	Cu. yards: TRENCH PLUG*	Cu. yards: FOUNDATION MATERIAL ##	sq. yards: STABILIZATION GEOTEXTILE ##	REMARKS
EXISTING	1+33 & 2+63	2						EXISTING MEDIAN INLETS
INLET	0+11.4				8			
MI-1	1+33.2		1	1				
MI-2	2+63.1		1	1				
OUTLET	3+43.4							
	0+11.4 - 3+43.4					180		STORM DRAIN FOUNDATION - AS DIRECTED
	0+11.4 - 3+43.4						270	STORM DRAIN FOUNDATION - AS DIRECTED
TOTAL		2	2	2	8	180	270	

* SEE SPECIAL PROVISIONS AND PLAN SHEET FOR LOCATION DETAILS
# SEE DETAILS
SEE SPECIAL PROVISION

SHEET NO. 5

SUMMARY FRAMES

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY DOWL 03/2025
REVIEWED BY DOWL 03/2025
CHECKED BY DOWL 03/2025
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MONTANA Department of Transportation

ROAD PLANS

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HYDRAULIC DATA SUMMARY *

STORM DRAIN STATION	STREAM NAME (IF NAMED)	DRAINAGE AREA (mi^2)	SIZE/TYPE STRUCTURE ① ② ⑤	DESIGN FLOOD MAGNITUDE (cfs)	DESIGN FLOOD FREQUENCY (%)	DESIGN FLOOD H.W. ELEV. (ft)	BASE FLOOD (1%) MAGNITUDE (cfs)	BASE FLOOD (1%) H.W. ELEV. (ft)	OVERTOPPING FLOOD ③ ④ MAGNITUDE (cfs)	OVERTOPPING FLOOD ③ ④ APPROX. FREQUENCY (%)	OVERTOPPING FLOOD ③ ④ H.W. ELEV. (ft)	REMARKS (FLOOD OF RECORD), Qp(max), etc.) ⑥
0+11.4	N/A	0.4	36" EQ. RCPA	16	2	6070.21	21	6070.69	> 21 cfs	> 1%	6072.13	

NOTES: * H.W. ELEVATIONS SHOWN ARE BASED UPON PEAK FLOW ANALYSIS UNLESS NOTED IN REMARKS COLUMN.

① STRUCTURE SIZE OR TYPE AND RELATED HYDRAULIC DATA MAY NOT REFLECT CHANGES MADE DUE TO R/W OR OTHER CONSIDERATIONS (I.E. STOCKPASS ADDED, STRUCTURE SIZE OR TYPE CHANGED, ROAD GRADE CHANGED DURING CONSTRUCTION, ETC.)

② BRIDGE LENGTH SHOWN EQUALS THE WATER SURFACE WIDTH IN THE OPENING AT THE DESIGN H.W. ELEVATION MEASURED NORMAL TO FLOW.

③ OVERTOPPING IS DEFINED AS FLOW OVER THE ROAD, FLOW THROUGH A SIGNIFICANT RELIEF STRUCTURE OR FLOW OVER THE BASIN DIVIDE WHICHEVER IS LOWER.

④ FOR THOSE CROSSINGS NOTED BY Qp(max) IN THE REMARKS COLUMN OVERTOPPING DOES NOT OCCUR AND THE FLOOD MAGNITUDE LISTED CORRESPONDS TO THE FLOOD OF SECTION 650.115 (a)(1)(ii) OF FEDERAL-AID POLICY GUIDE; SUBCHAPTER G, PART 650, SUBPART A (DEC. 1991).
THE FLOOD SPECIFIED IS SUBJECT TO STATE-OF-THE-ART CAPABILITY TO ESTIMATE THE EXCEEDANCE PROBABILITY

⑤ HIGH WATER ELEVATIONS MAY VARY SLIGHTLY DEPENDING UPON THE PIPE OPTION SELECTED.

⑥ PROCEDURE MEMORANDUM NO. 10, HYDRAULICS MANUAL CHAPTER 9 APPENDIX H.

EXCEEDANCE PROBABILITIES

25 YEAR 4% CHANCE
50 YEAR 2% CHANCE
100 YEAR 1% CHANCE
200 YEAR .5% CHANCE
500 YEAR .2% CHANCE

SHEET NO. 6

HYDRAULIC DATA SUMMARY

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA Department of Transportation

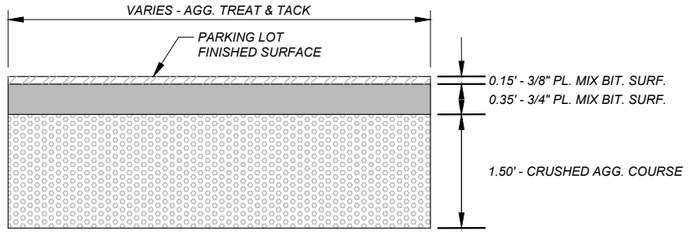
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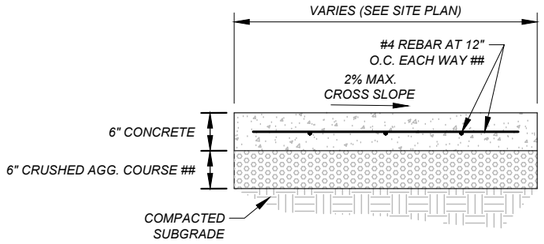
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DETAIL



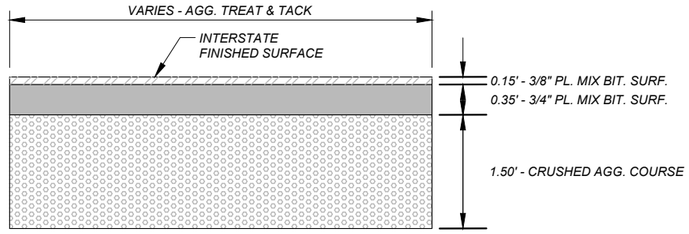
ASPHALT PAVEMENT DETAIL

NOT TO SCALE



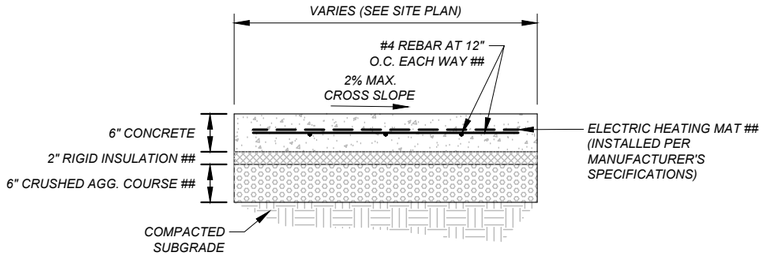
REINFORCED CONCRETE DETAIL

NOT TO SCALE



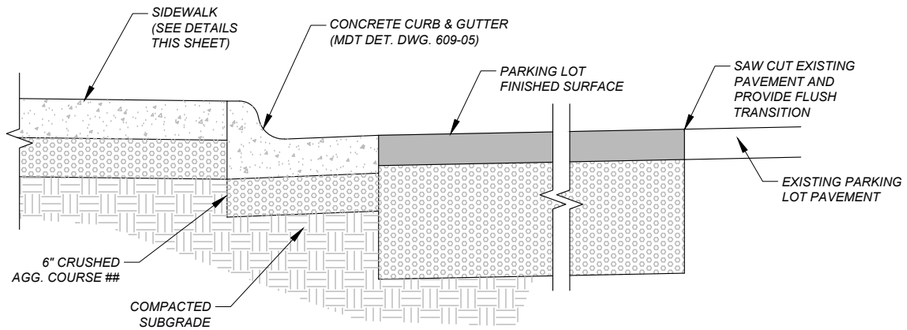
I-90 ASPHALT PAVEMENT DETAIL

NOT TO SCALE



HEATED SIDEWALK DETAIL

NOT TO SCALE



CURB & GUTTER DETAIL

NOT TO SCALE

ITEMS NOT MEASURED FOR PAYMENT AND INCLUDED IN THE COST OF NEW SIDEWALK OR CURB AND GUTTER

DOWL

SHEET NO.
7

ASPHALT AND CONCRETE DETAILS

PROJECT NAME
HOMESTAKE PASS PARKING AREA

COUNTY
JEFFERSON COUNTY

PROJECT ID
IM 90-5(96)233

UPN
10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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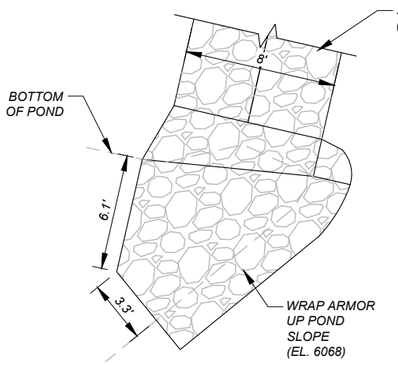
MONTANA
Department of Transportation

ROAD PLANS

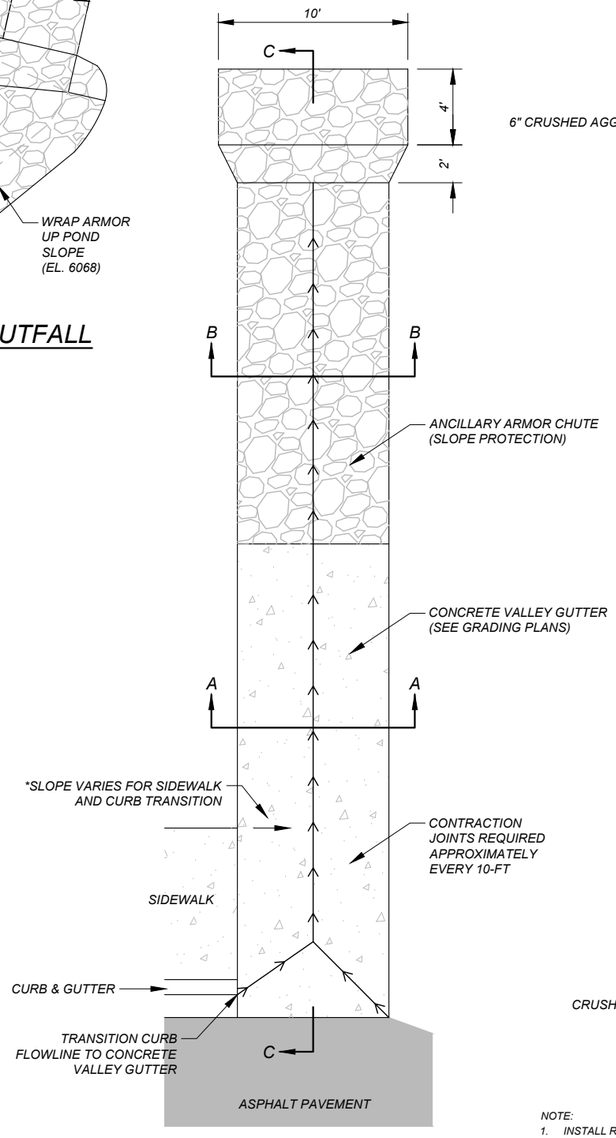
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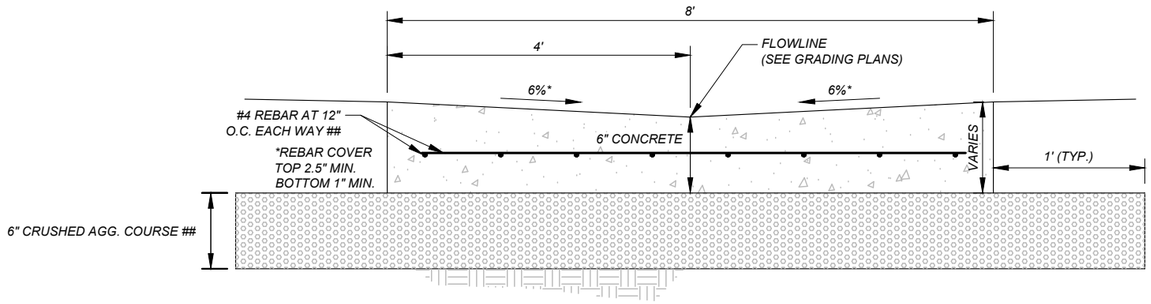
DETAIL



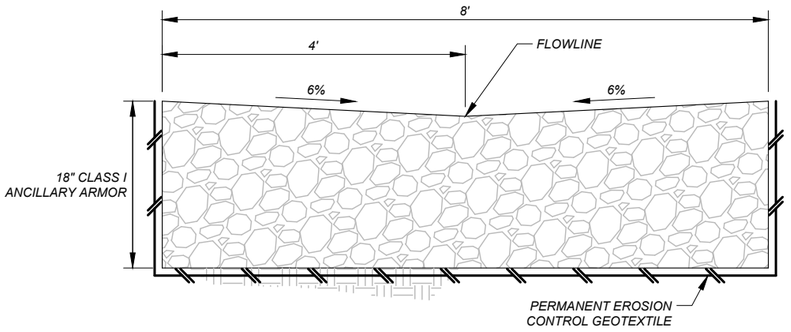
EASTBOUND OUTFALL



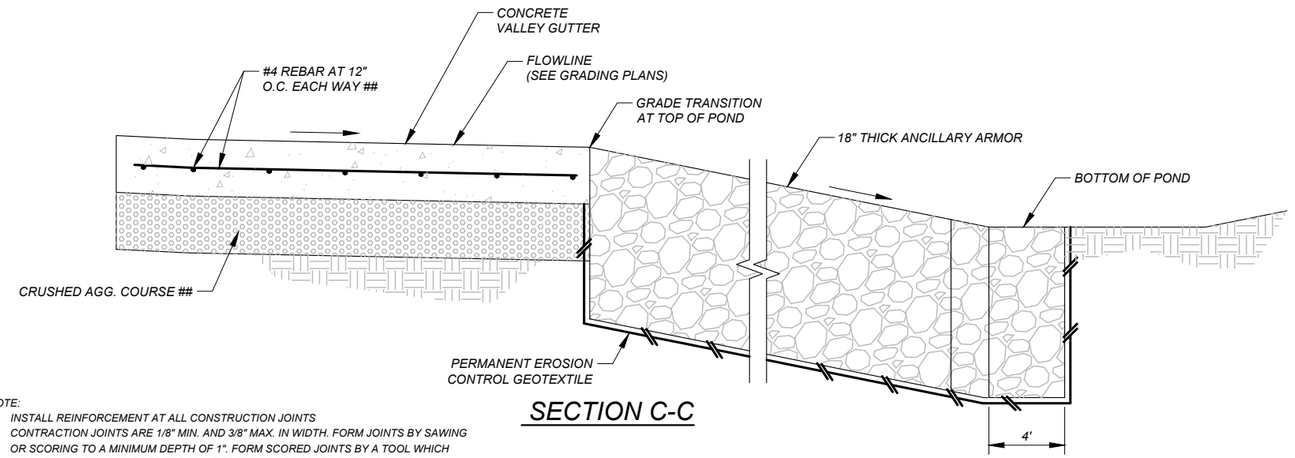
PLAN VIEW



SECTION A-A



SECTION B-B



SECTION C-C

NOTE:
1. INSTALL REINFORCEMENT AT ALL CONSTRUCTION JOINTS
2. CONTRACTION JOINTS ARE 1/8" MIN. AND 3/8" MAX. IN WIDTH. FORM JOINTS BY SAWING OR SCORING TO A MINIMUM DEPTH OF 1". FORM SCORED JOINTS BY A TOOL WHICH WILL LEAVE ROUNDED CORNERS AND DESTROY AGGREGATE INTERLOCK TO A MINIMUM DEPTH OF 1".
3. WESTBOUND REST AREA SHOWN. EASTBOUND GRADING TRANSITIONS FROM THE PARKING AREA AND POND ARMOR VARY. SEE SITE AND GRADING PLANS FOR DETAILS.

ITEMS NOT MEASURED FOR PAYMENT AND INCLUDED IN THE COST OF NEW SIDEWALK OR CURB AND GUTTER

DRAINAGE CHUTE DETAIL

NOT TO SCALE

DOWL

SHEET NO. 8

DRAINAGE CHUTE DETAILS

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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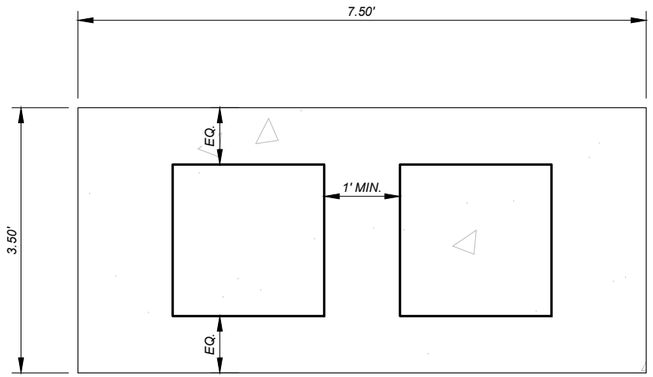
MONTANA Department of Transportation

ROAD PLANS

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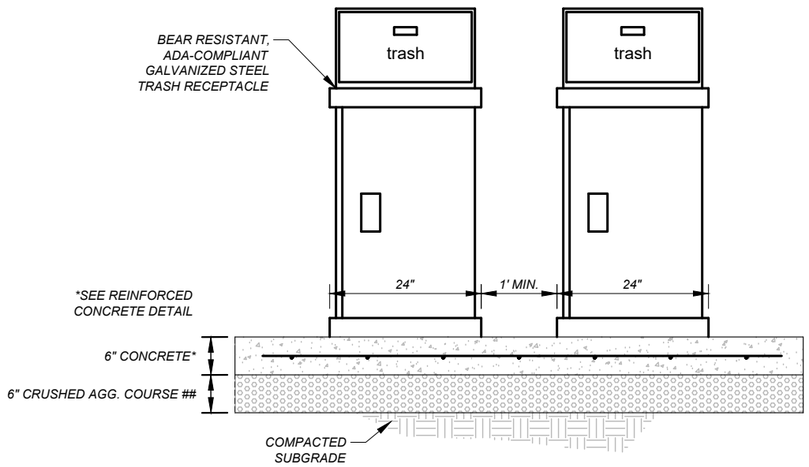
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DETAIL



PLAN VIEW

NOTE:
1. CONCRETE PADS UNDER TRASH RECEPTACLES WILL BE PAID UNDER CONCRETE SIDEWALK
2. SEE SITE PLAN FOR CONCRETE PAD LOCATIONS
3. TRASH RECEPTACLES TO BE BEAR RESISTANT AND ADA COMPLIANT WITH WIDE LOADING CHUTE. BEARSAVER HA SERIES (ITEM HA-CH) OR APPROVED EQUAL
4. ANCHOR TRASH RECEPTACLES TO THE CONCRETE PAD PER THE MANUFACTURER'S SPECIFICATIONS
5. SEE SPECIAL PROVISION FOR MORE INFORMATION



FRONT VIEW

ITEMS NOT MEASURED FOR PAYMENT AND INCLUDED IN THE COST OF NEW SIDEWALK

TRASH RECEPTACLE DETAIL

NOT TO SCALE

DOWL

SHEET NO. 9

TRASH RECEPTACLE DETAIL

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY		REVIEWED BY		CHECKED BY	
DOWL	03/2025	DOWL	03/2025	DOWL	03/2025

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MONTANA Department of Transportation

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DETAIL

NOTES:

1. UPPER PART IS A CONE TO REDUCE DIAMETER FROM 48" TO 24". CUT BOTTOM OF LOWER SECTION SQUARE TO FIT BASE. GROUT JOINT BETWEEN BASE AND WALL. A GROUT CONSISTING OF ONE PART PORTLAND CEMENT AND TWO PARTS APPROVED SAND MAY BE USED; AN APPROVED PREMIXED GROUT, AVAILABLE COMMERCIALLY, MAY BE USED.

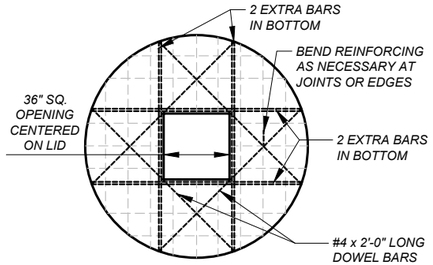
2. CONFORM ALL MANHOLE CONSTRUCTION, EXCEPT FRAME, LID, AND BASE, TO AASHT0 M 199. THIS PROVIDES THAT REINFORCEMENT MAY BE MADE OF (1) COLD DRAWN STEEL WIRE-AASHTO M 32, (2) STEEL WIRE FABRIC- AASHTO M 55, OR (3) STEEL BARS- AASHTO M 31.

3. THE CONSTRUCTION AND REINFORCEMENT OF THE BASE FOR EACH TYPE MUST BE COMPATIBLE WITH THE CONDITIONS AND THE WEIGHT OF THE SUPER-STRUCTURE. AASHTO M 199 PROVIDES FOR 4000 PSI CONCRETE. THE MIX CALLS FOR 6 SACKS OF CEMENT PER CUBIC YARD. REINFORCEMENT SHOWN IS ILLUSTRATIVE ONLY. SEE AASHTO M 199.

4. THE ECCENTRIC CONE TRANSITION WILL BE PERMITTED WHEN ITS USE WILL BE AS GOOD OR BETTER THAN THE ONES SHOWN, OR IF IT IS MORE ADAPTABLE TO EXISTING CONDITIONS.

5. USE MANHOLE STEPS THAT ARE METALLIC AND COATED WITH COPOLYMER POLYPROPYLENE, OR AN APPROVED EQUAL. THE MINIMUM DESIGN LIVE LOAD FOR A SINGLE CONCENTRATED LOAD IS 300 POUNDS.

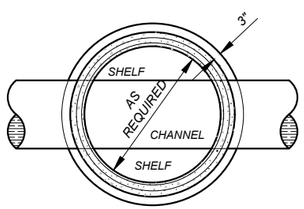
TYPE 3 MANHOLE ROOF SLAB					
PIPE DIA.	SLAB DIA.	T	K	BOTTOM BARS	TOP BARS
48"	58"	6"	6"	#4_AT_6"	~
54"	65"	8"	6"	#4_AT_6"	~
60"	72"	8"	7"	#4_AT_6"	#3_AT_6"
66"	79"	8"	7"	#4_AT_6"	#3_AT_6"
72"	86"	8"	8"	#4_AT_6"	#3_AT_6"
78"	93"	8"	8"	#4_AT_4"	#4_AT_4"
84"	100"	8"	9"	#4_AT_4"	#4_AT_4"
90"	107"	8"	9"	#4_AT_4"	#4_AT_4"
96"	114"	8"	9"	#5_AT_4"	#4_AT_4"
102"	121"	8"	9"	#5_AT_4"	#4_AT_4"



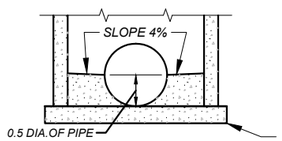
TYPE 3 MANHOLE ROOF SLAB

NOTE:

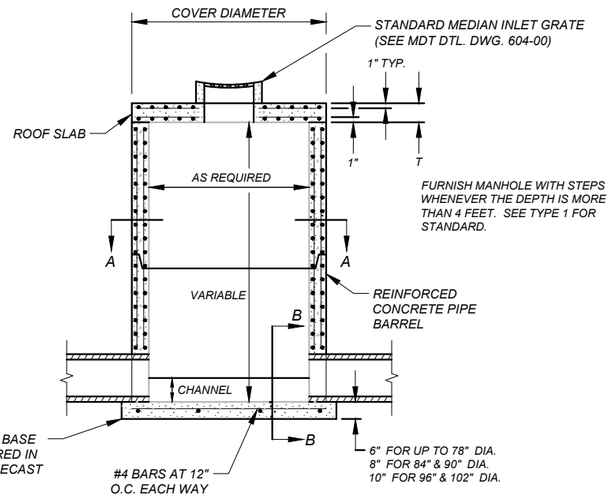
CENTER THE OPENING OVER THE ROOF SLAB FOR TYPE I, II, IV AND V INLETS ON 48" COMBINATION TYPE 3 MANHOLES.



TYPE 3 SECTION A-A



TYPE 3 SECTION B-B



TYPE 3 MANHOLE

SHEET NO. 10

MEDIAN INLET STRUCTURE DETAILS

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	REVIEWED BY	CHECKED BY
DOWL	DOWL	DOWL
03/2025	03/2025	03/2025

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MONTANA Department of Transportation

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DETAIL

DEMO

SCALE: 1"=50'

COORDINATE ALL EXISTING ELECTRICAL REMOVALS AND IMPROVEMENTS WITH ELECTRICAL PLANS (TYP.)

PROTECT IN PLACE

ABANDON IN PLACE

PROTECT EX. TREES (TYP.)

REMOVE EXISTING PRESSURE TANK AND MANHOLE STRUCTURE

APPROX. LIMITS OF DISTURBANCE

REMOVE LIGHTING AND BUILDING ELECTRICAL (TYP.) (COORDINATE WITH ELECTRICAL PLANS)

REMOVE & RESET EXISTING HISTORICAL STANDS

REMOVE EXISTING CONCRETE (TYP.)

REMOVE EXISTING INLET

PLUG INLET AND ABANDON EXISTING PIPE IN PLACE

EXISTING DUMPSTER TO BE REPLACED. REMOVAL AND REPLACEMENT BY OTHERS.

REMOVE EXISTING BUILDINGS (SEE SPECIAL PROVISIONS)

REMOVE EXISTING ASPHALT AND SUBGRADE AS NEEDED

SAWCUT AND PROVIDE NEAT EDGE. SEE SITE & GRADING PLANS

SAWCUT AND PROVIDE NEAT EDGE. SEE SITE & GRADING PLANS

PROTECT IN PLACE

WETLAND 2

REMOVE AND DISPOSE EXISTING STORM DRAIN, END TREATMENTS, AND INLET STRUCTURES (TYP.)

HOMESTAKE CREEK

I-90

DOWL

SHEET NO. 11

WESTBOUND PARKING AREA
EXISTING SITE & DEMOLITION PLAN

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA
Department of Transportation

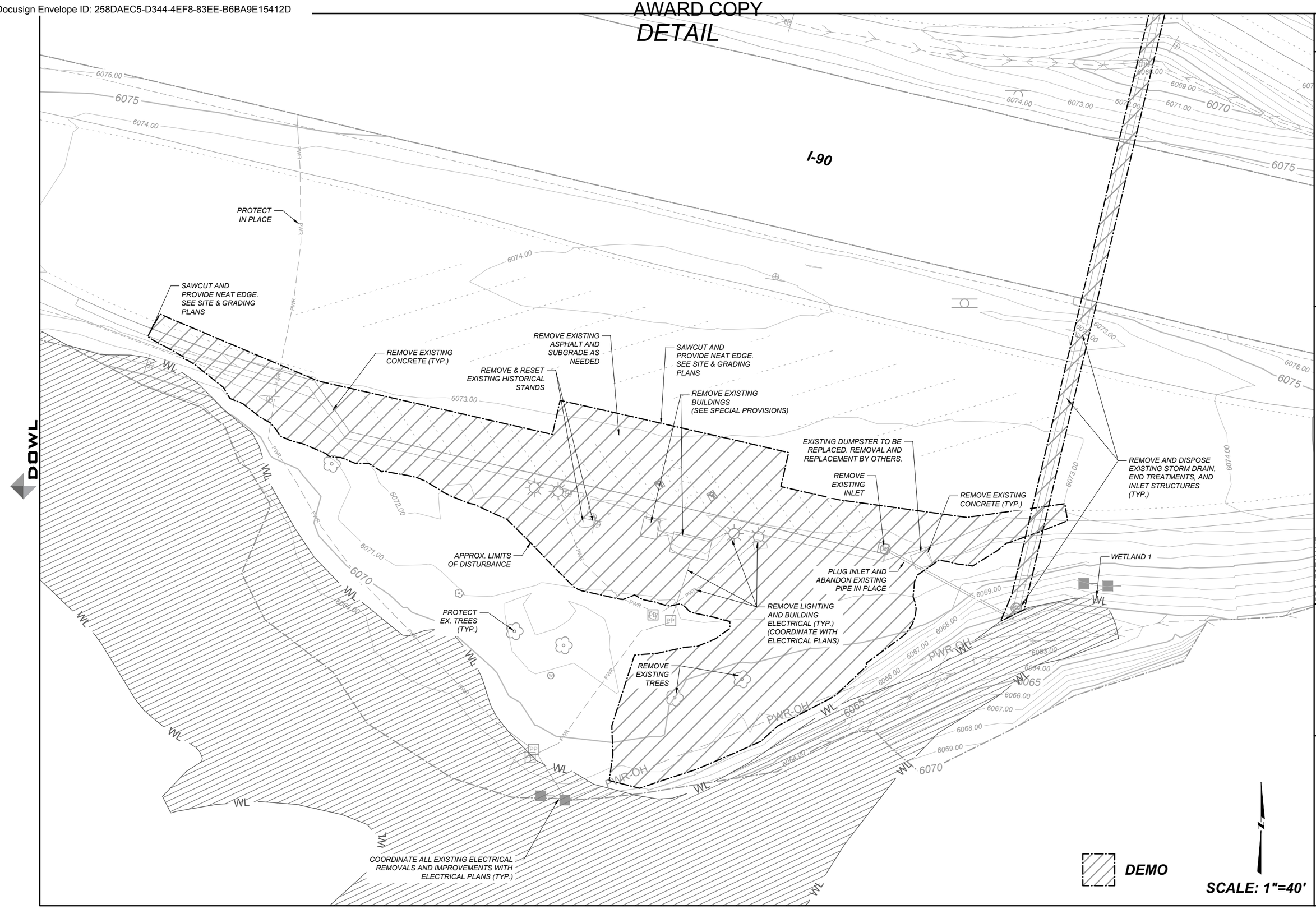
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AWARD COPY

DETAIL



DOWL

SHEET NO. 12

EASTBOUND PARKING AREA
EXISTING SITE & DEMOLITION PLAN

PROJECT NAME	HOMESTAKE PASS PARKING AREA
COUNTY	JEFFERSON COUNTY
PROJECT ID	IM 90-5(96)233
UPN	10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA
Department of Transportation

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DETAIL

KEY NOTES

1. ASPHALT PAVEMENT
2. CONCRETE CURB & GUTTER
3. CONCRETE SIDEWALK
4. CONCRETE PEDESTRIAN RAMP
5. CONCRETE DUMPSTER PAD (SEE REINFORCED CONCRETE DETAIL)
6. CONCRETE VALLEY GUTTER
7. TRASH RECEPTACLE
8. HISTORIC PLACEMARK
9. EXISTING WATER WELL
10. WATER LINE
11. UG POWER
12. LIGHT POLE

HEATED SIDEWALK

DIMENSIONS SHOWN ARE IN FEET UNLESS NOTED OTHERWISE

SCALE: 1"=30'

VAULTED TOILETS
MAINT. BLDG.
VAULTED TOILETS
LANDING
2' CHAMFER
STORMWATER RETENTION POND & DRAINAGE CHUTE (SEE GRADING PLAN)
RE-ESTABLISH EXISTING DRAINAGE SWALE (SEE DETAILS)
HOMESTAKE CREEK
I-90

SHEET NO. 13

WESTBOUND PARKING AREA
SITE PLAN

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

MONTANA Department of Transportation

ROAD PLANS

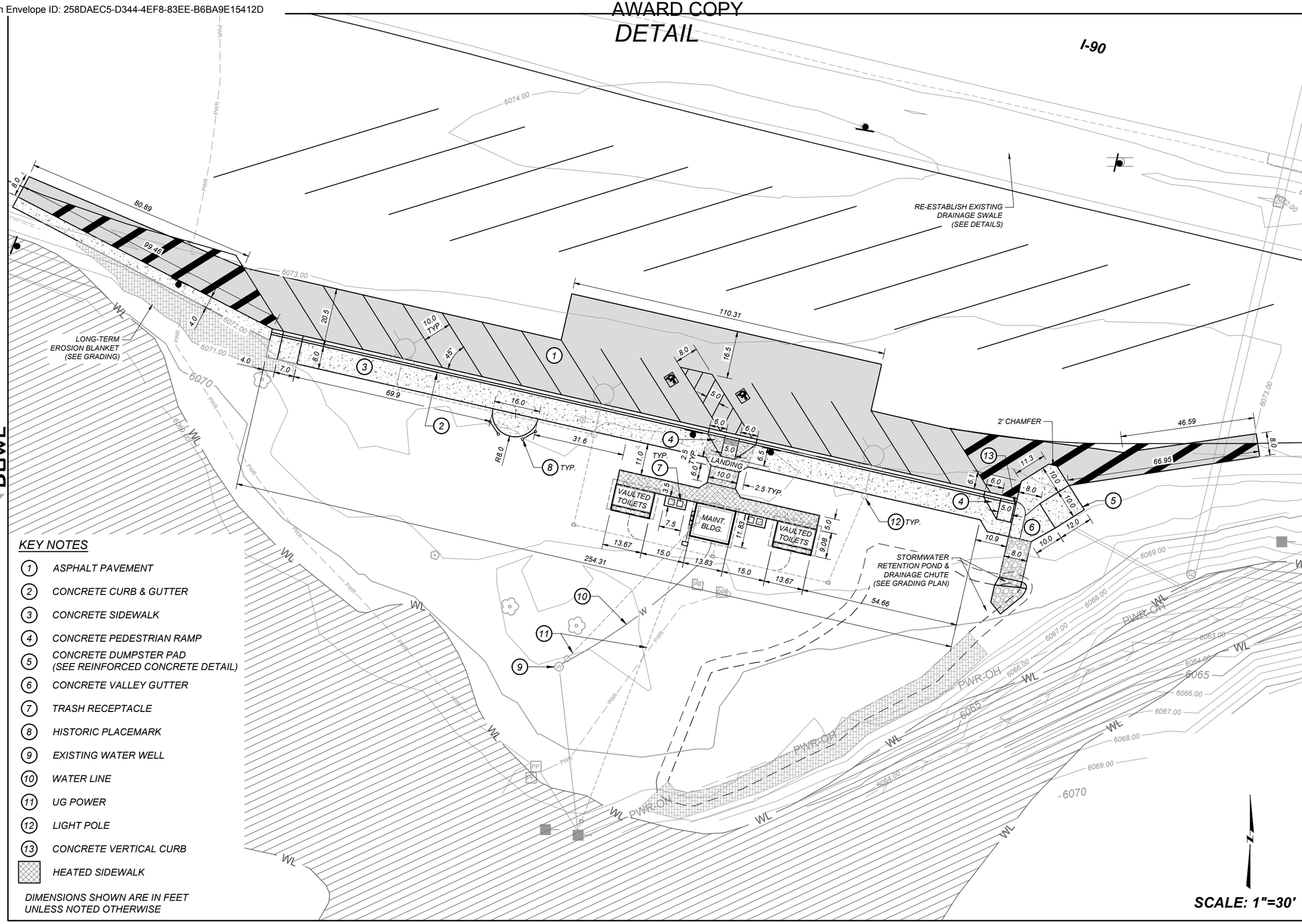
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DETAIL



KEY NOTES

1. ASPHALT PAVEMENT
2. CONCRETE CURB & GUTTER
3. CONCRETE SIDEWALK
4. CONCRETE PEDESTRIAN RAMP
5. CONCRETE DUMPSTER PAD (SEE REINFORCED CONCRETE DETAIL)
6. CONCRETE VALLEY GUTTER
7. TRASH RECEPTACLE
8. HISTORIC PLACEMARK
9. EXISTING WATER WELL
10. WATER LINE
11. UG POWER
12. LIGHT POLE
13. CONCRETE VERTICAL CURB

HEATED SIDEWALK

DIMENSIONS SHOWN ARE IN FEET UNLESS NOTED OTHERWISE

SCALE: 1"=30'

SHEET NO. 14

EASTBOUND PARKING AREA SITE PLAN

PROJECT NAME	HOMESTAKE PASS PARKING AREA
COUNTY	JEFFERSON COUNTY
PROJECT ID	IM 90-5(96)233
UPN	10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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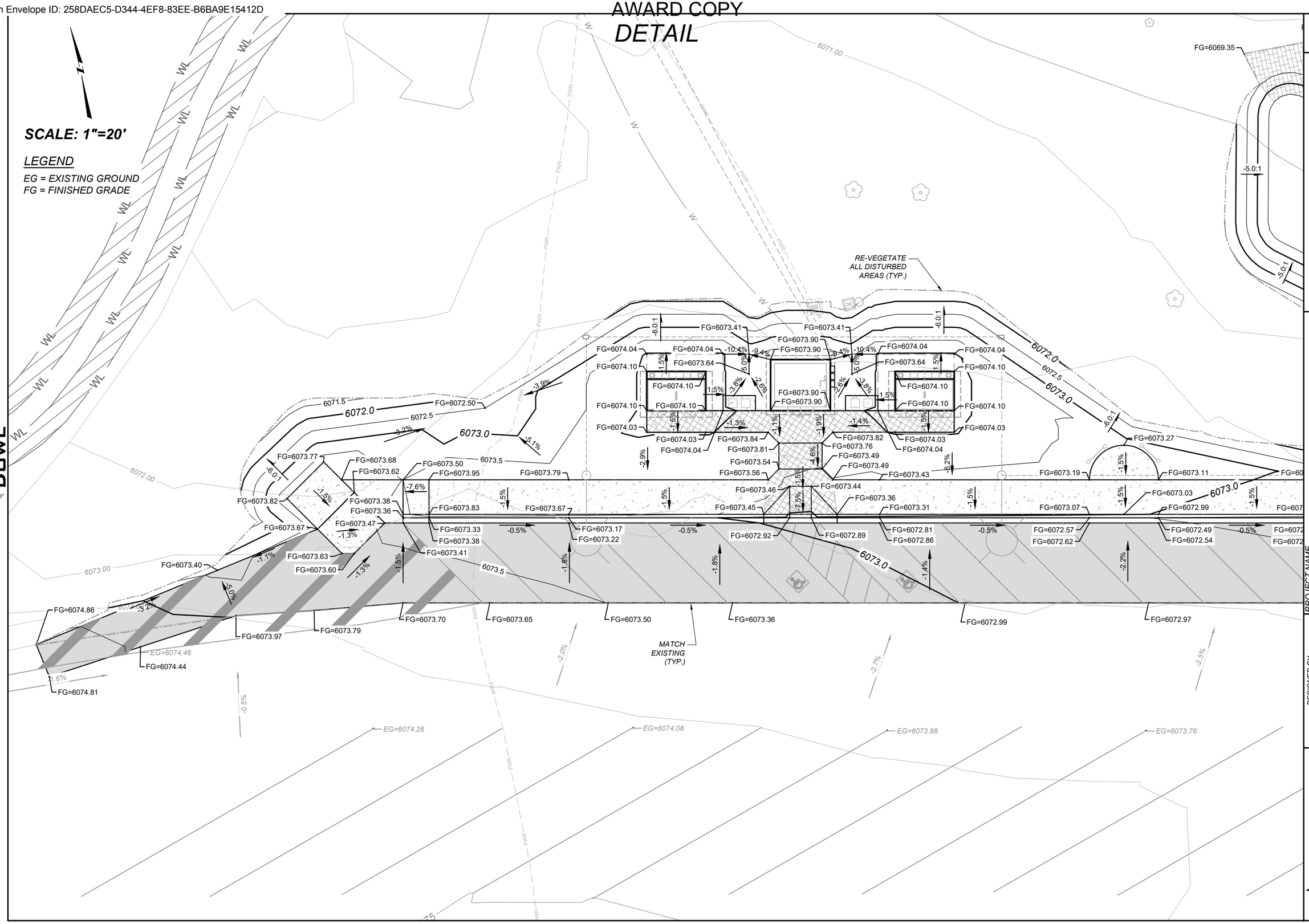
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DETAIL

SCALE: 1"=20'

LEGEND

EG = EXISTING GROUND
FG = FINISHED GRADE



SHEET NO.	15
	WESTBOUND PARKING AREA GRADING PLAN
PROJECT NAME	HOMESTAKE PASS PARKING AREA
COUNTY	JEFFERSON COUNTY
PROJECT ID	IM 90-5(96)233
UPN	10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

MONTANA
Department of Transportation

ROAD PLANS

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DETAIL

HIGH PERFORMANCE EROSION BLANKET

POND DATA:
2-YEAR, 24-HR. VOLUME = 3,170 CF
VOLUME PROVIDED = 3,344 CF
SPILL ELEVATION = 6069.5
BOTTOM OF POND = 6068.5

FG=6068.75
FG=6068.83
FG=6069.35
FG=6068.93
FG=6068.86
FG=6069.07
FG=6069.46
FG=6068.50
FG=6071.41
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6073.0
6072.5
6071.00
6072.00
6073.00
6065
6070
6075

-5.0:1
-6.0%
-2.0%
-12.7%
-6.1%
-7.5%
-1.5%
-0.5%
-2.2%
-2.8%
-3.0%
-4.0%
-2.5%
-1.2%

NEW DRAINAGE CHUTE (SEE DETAIL)
RE-VEGETATE ALL DISTURBED AREAS (TYP.)
NEW OUTLET INVERT EL=6066.76 (SEE DETAIL)
MATCH EXISTING (TYP.)
MATCH EXISTING (TYP.)

HOMESTAKE CREEK

WL

SCALE: 1"=20'

LEGEND

EG = EXISTING GROUND
FG = FINISHED GRADE

DOWL

SHEET NO. 16

WESTBOUND PARKING AREA GRADING PLAN

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA Department of Transportation

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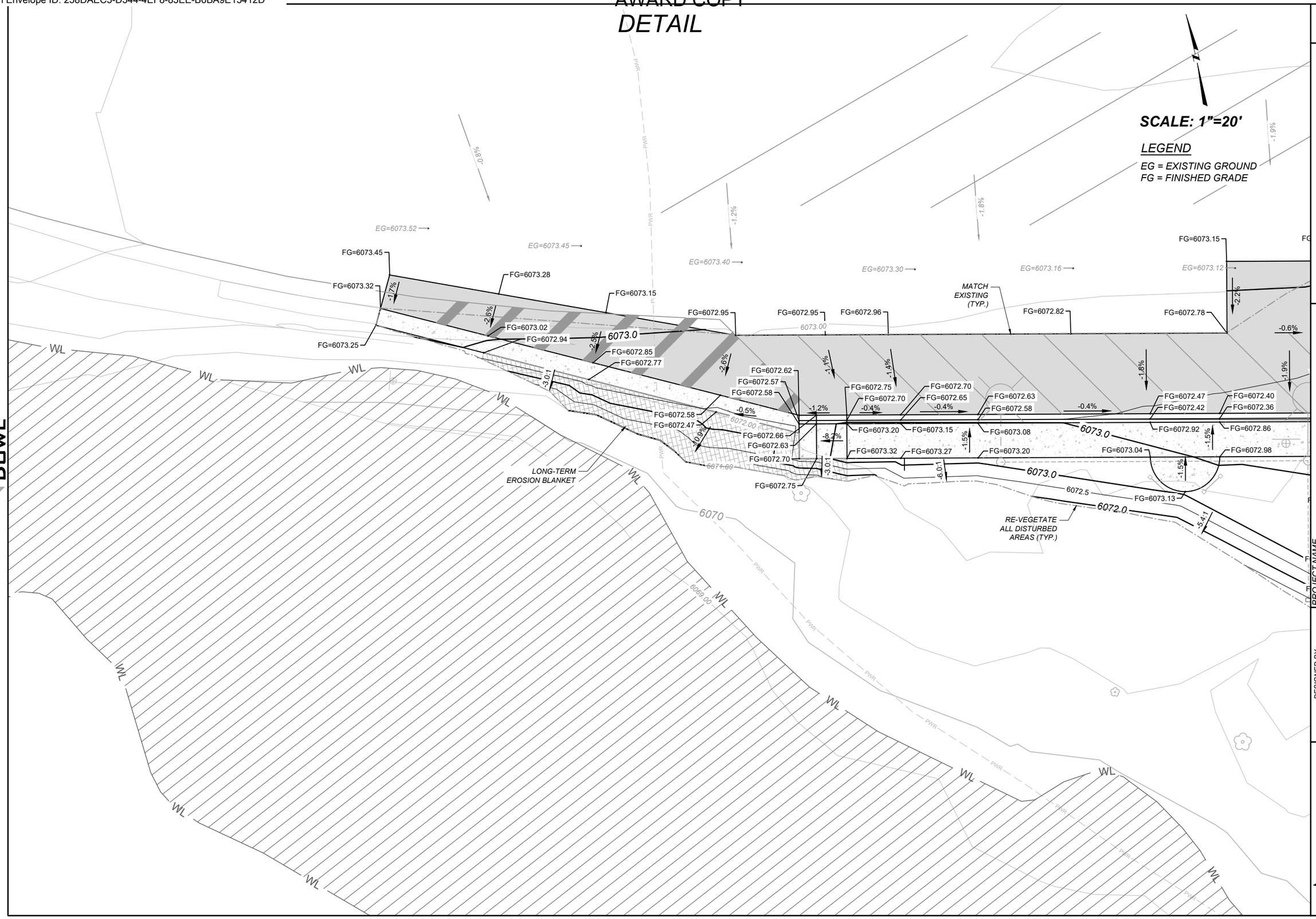
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DETAIL

SCALE: 1"=20'

LEGEND

EG = EXISTING GROUND
FG = FINISHED GRADE



SHEET NO. 17

EASTBOUND PARKING AREA GRADING PLAN

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DOWL	03/2025
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CHECKED BY	DOWL	03/2025

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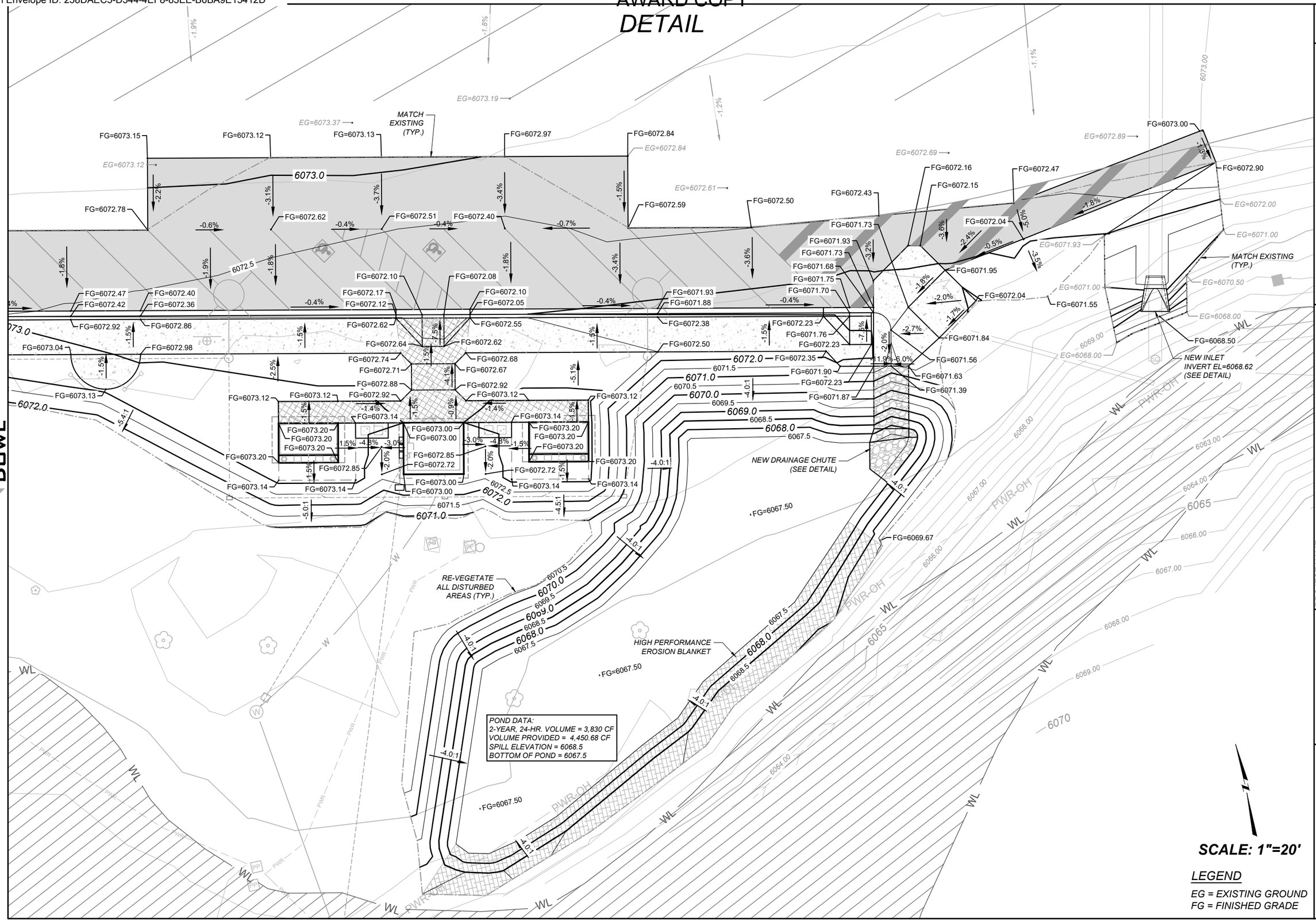
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DETAIL



DOWL

SHEET NO. 18

EASTBOUND PARKING AREA GRADING PLAN

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	REVIEWED BY	CHECKED BY
DOWL 03/2025	DOWL 03/2025	DOWL 03/2025

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MONTANA Department of Transportation

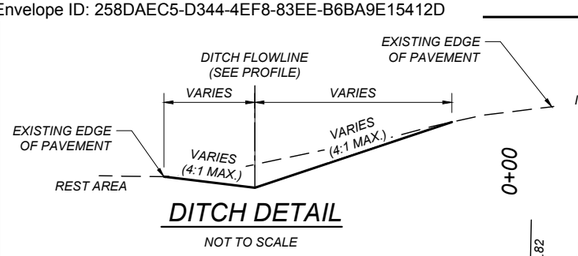
ROAD PLANS

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DETAIL

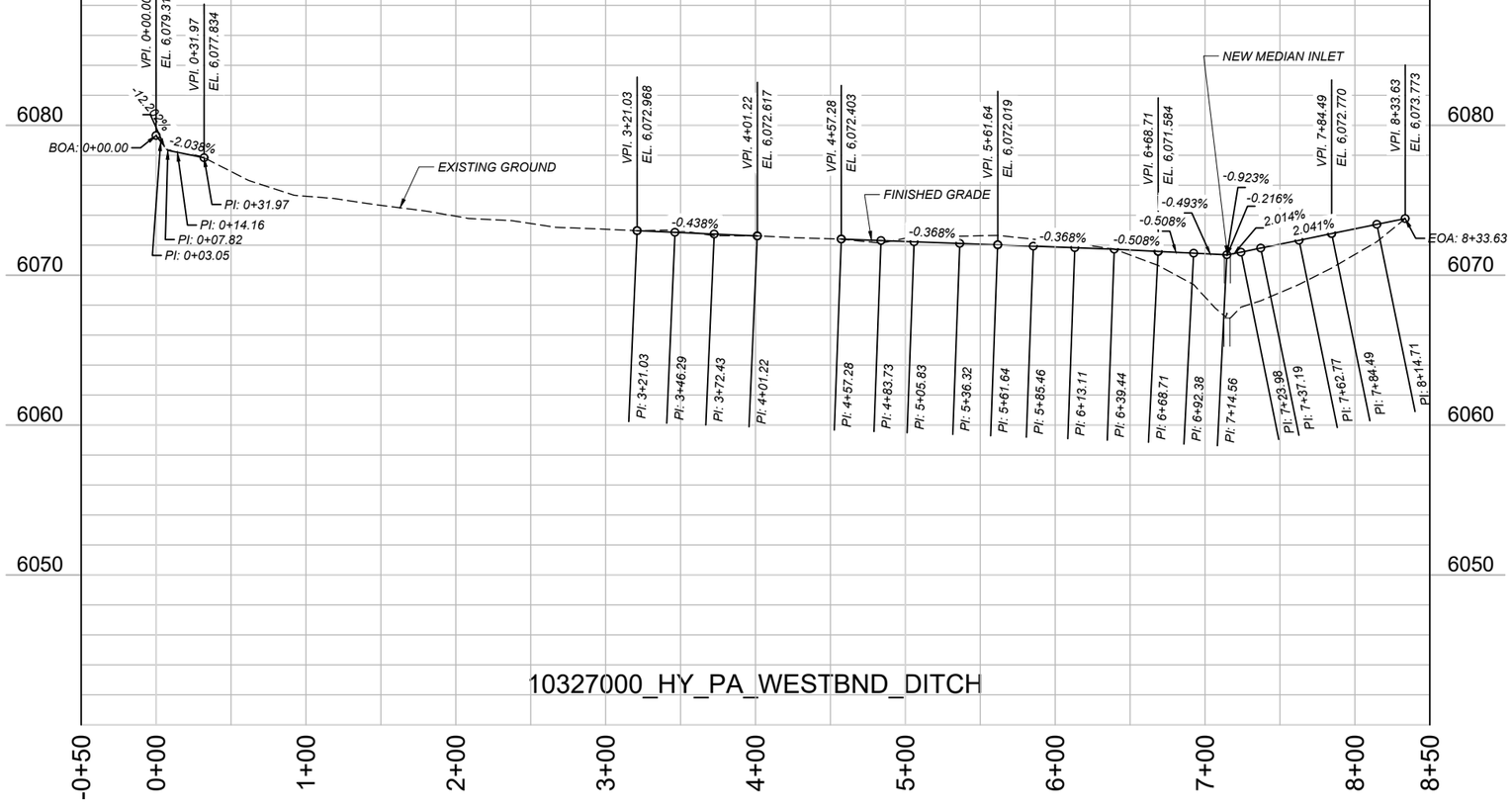


DITCH DETAIL

NOT TO SCALE

NOTE:
EXISTING CONDITIONS MAY VARY FROM TIME OF SURVEY. CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.

SCALE: 1"=100'



DOWL

SHEET NO.
19

WESTBOUND PARKING AREA
DITCH PLAN AND PROFILE

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

MONTANA
Department of Transportation

ROAD PLANS

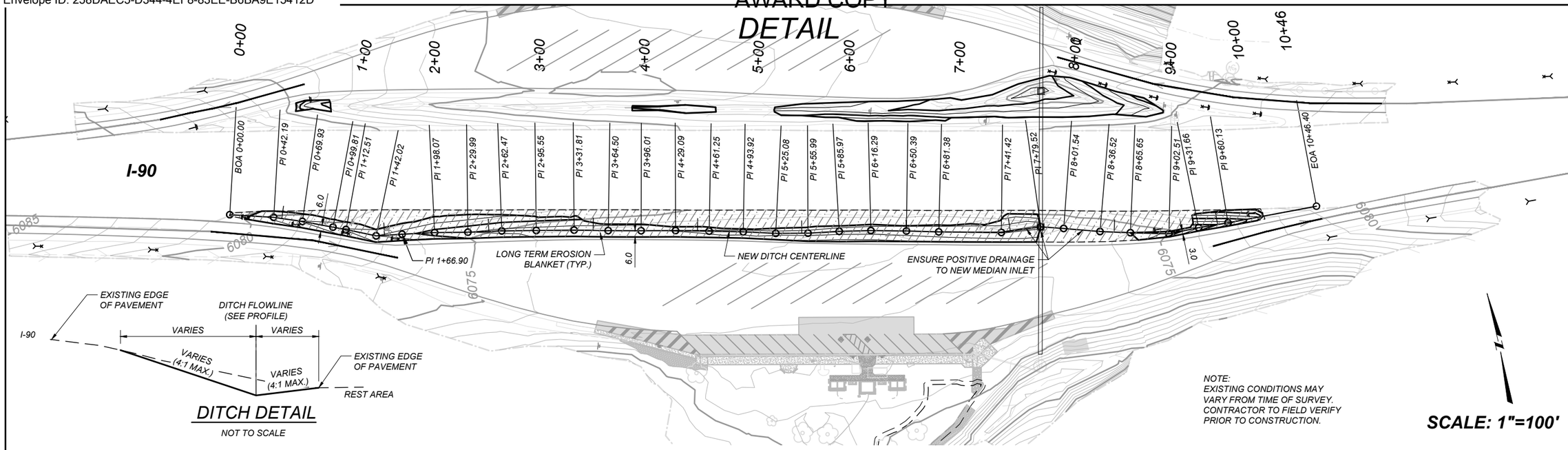
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DETAIL

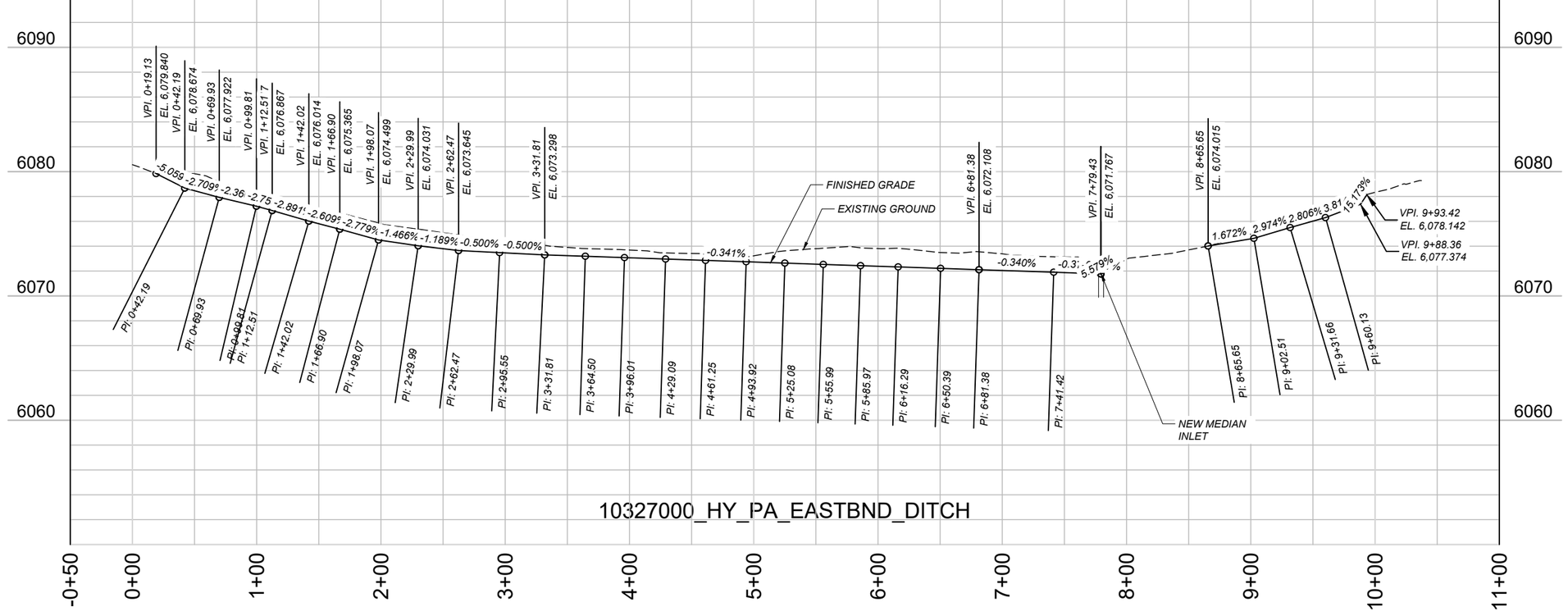


DITCH DETAIL

NOT TO SCALE

NOTE:
EXISTING CONDITIONS MAY VARY FROM TIME OF SURVEY. CONTRACTOR TO FIELD VERIFY PRIOR TO CONSTRUCTION.

SCALE: 1"=100'



SHEET NO.
20

EASTBOUND PARKING AREA
DITCH PLAN AND PROFILE

DOWL

MONTANA
Department of Transportation

ROAD PLANS

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

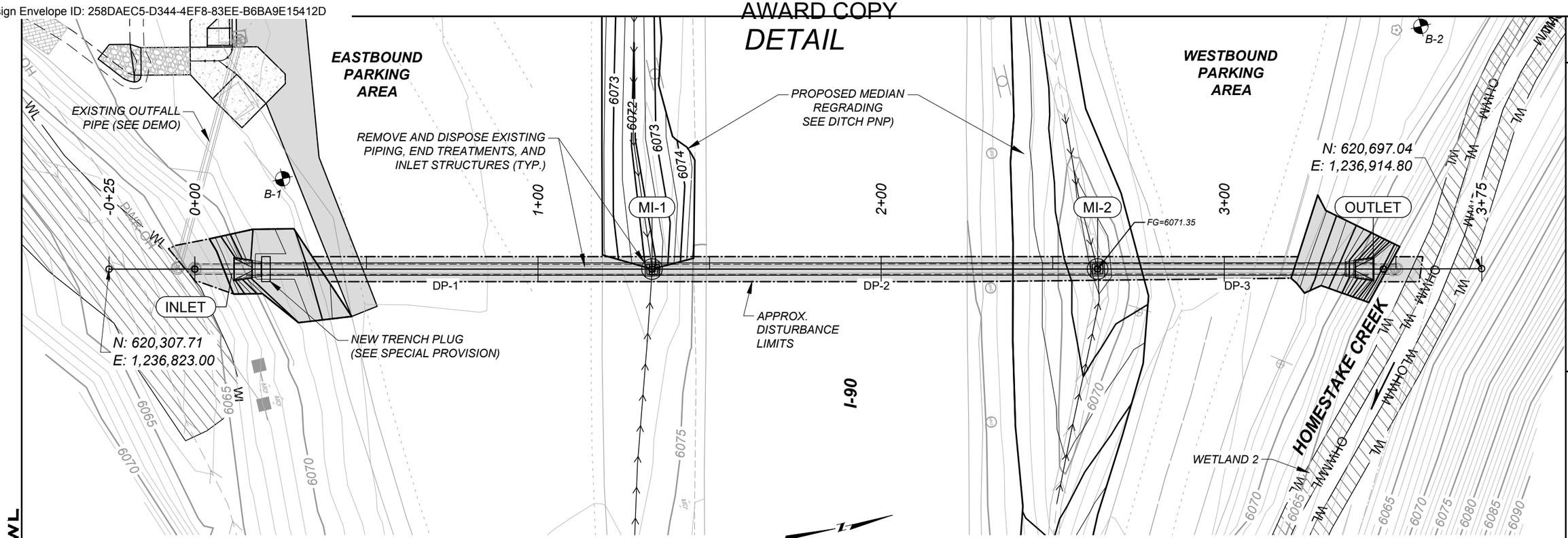
PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000
10327RDPLP201.DWG

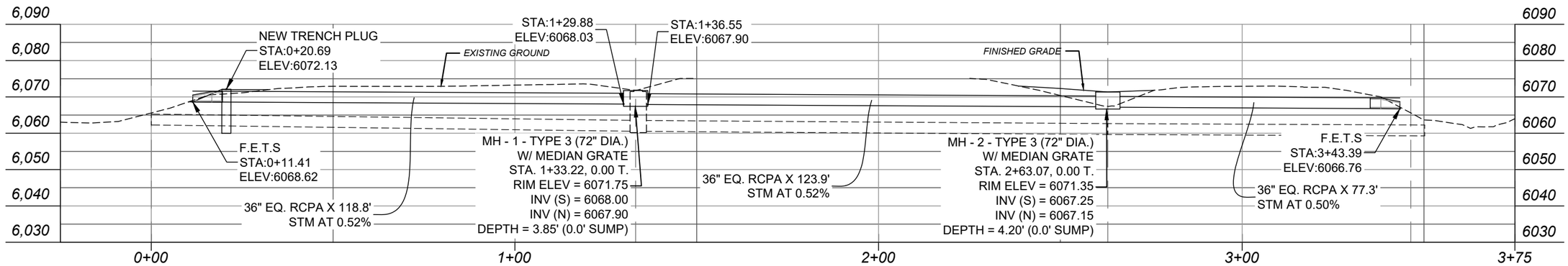
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DETAIL





NOTES:

1. STRUCTURE STATION AND OFFSET MEASURED AT CENTER OF STRUCTURE.

2. INVERT ELEVATIONS REPORTED AT INSIDE EDGE OF DROP INLET, MEDIAN INLET, OR MANHOLE.

3. PROFILE SLOPES CALCULATED FROM CENTER TO CENTER OF STRUCTURE.

PIPE TABLE					
INLET	OUTLET	PIPE SIZE (IN) /TYPE	EDGE TO EDGE LENGTH (FT)	CENTER TO CENTER LENGTH (FT)	REMARKS
INLET	MI-1	36" EQ. RCPA	118.8	121.8	INCLUDES F.E.T.S.
MI-1	MI-2	36" EQ. RCPA	123.9	129.9	
MI-2	OUTLET	36" EQ. RCPA	77.3	80.3	INCLUDES F.E.T.S.

SHEET NO. 21

STORM DRAIN PLAN AND PROFILE

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	REVIEWED BY	CHECKED BY
DOWL 03/2025	DOWL 03/2025	DOWL 03/2025

MONTANA Department of Transportation

ROAD PLANS

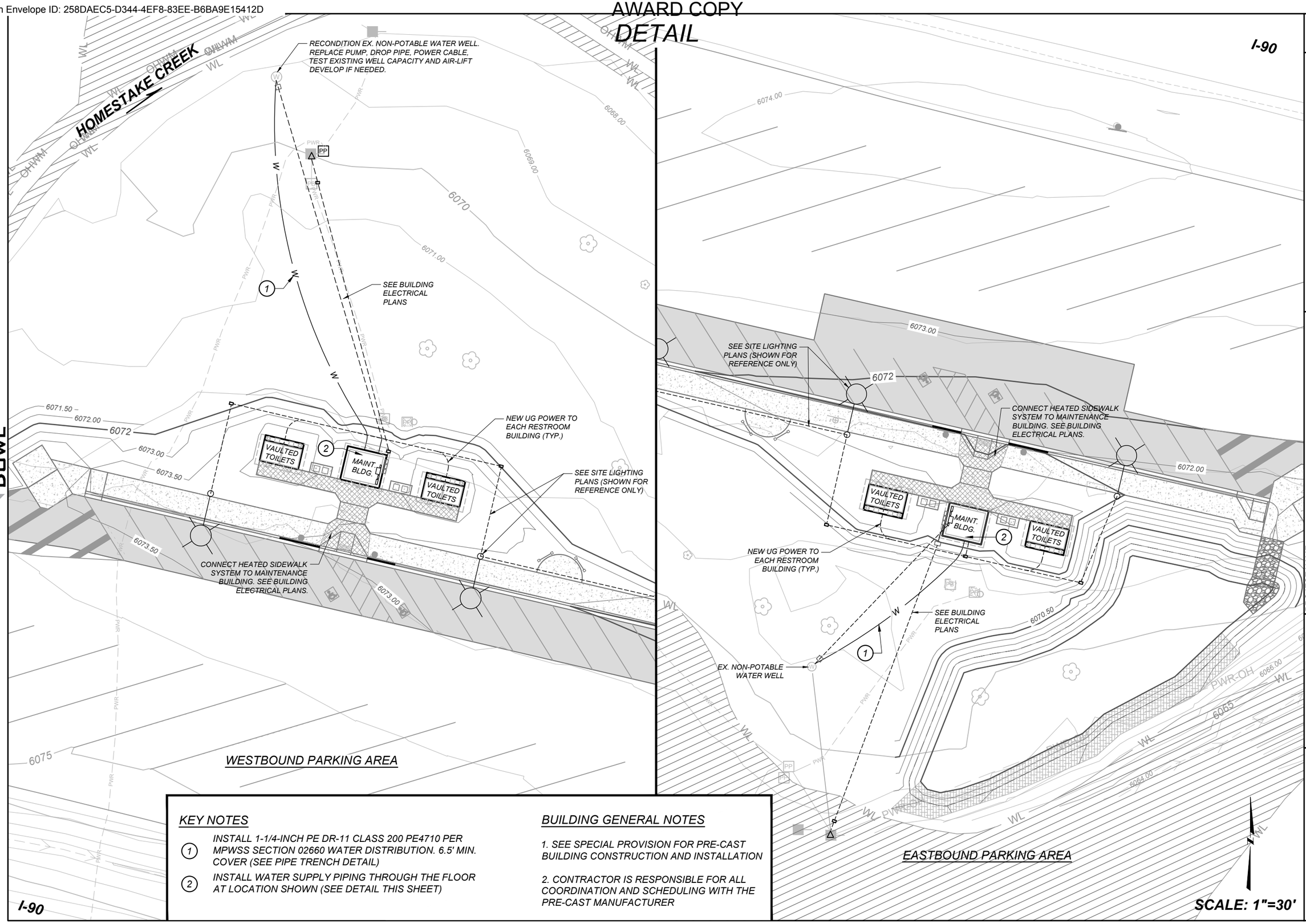
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DETAIL



KEY NOTES

1. INSTALL 1-1/4-INCH PE DR-11 CLASS 200 PE4710 PER MPWSS SECTION 02660 WATER DISTRIBUTION. 6.5' MIN. COVER (SEE PIPE TRENCH DETAIL)
2. INSTALL WATER SUPPLY PIPING THROUGH THE FLOOR AT LOCATION SHOWN (SEE DETAIL THIS SHEET)

BUILDING GENERAL NOTES

1. SEE SPECIAL PROVISION FOR PRE-CAST BUILDING CONSTRUCTION AND INSTALLATION
2. CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION AND SCHEDULING WITH THE PRE-CAST MANUFACTURER

SCALE: 1"=30'

SHEET NO. 22

UTILITY PLAN

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA Department of Transportation

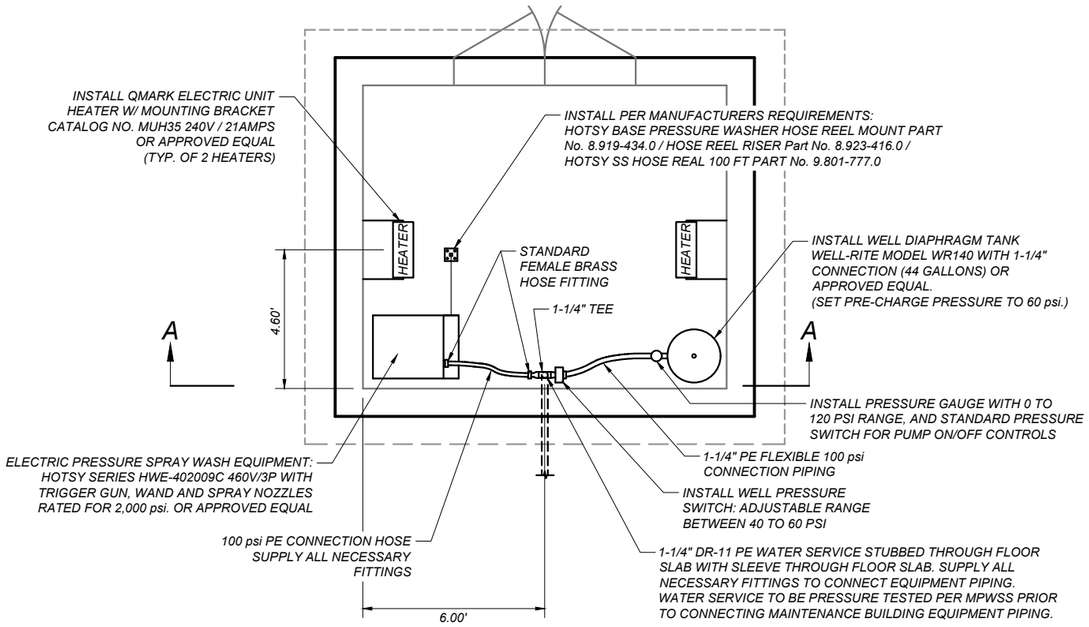
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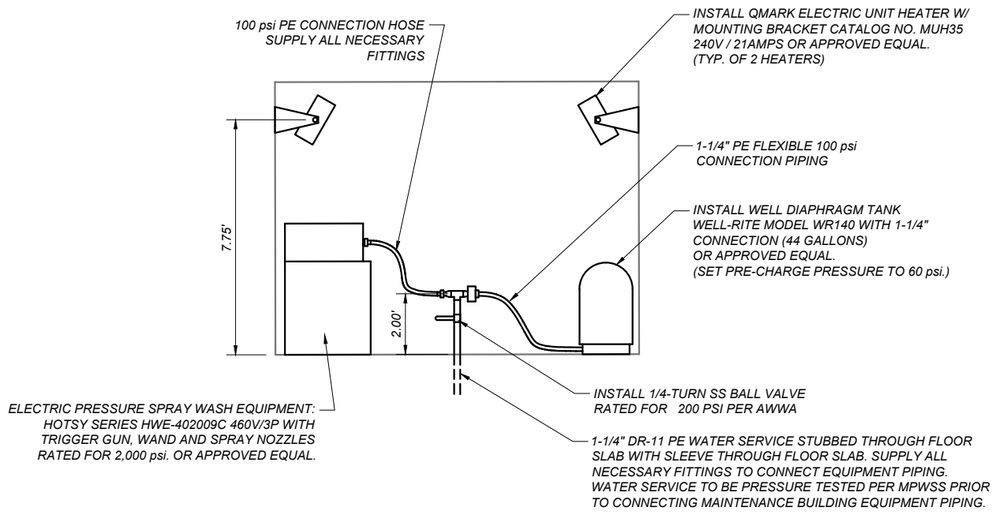
AWARD COPY

DETAIL



UTILITY BUILDING DETAIL - PLAN VIEW

SCALE: 1"=5'



UTILITY BUILDING DETAIL - SECTION A-A

SCALE: 1"=5'

COORDINATE ALL INSTALLATIONS WITH BUILDING ELECTRICAL. SEE ELECTRICAL PLANS.

DOWL

SHEET NO. 23

MAINTENANCE BUILDING UTILITY PLAN

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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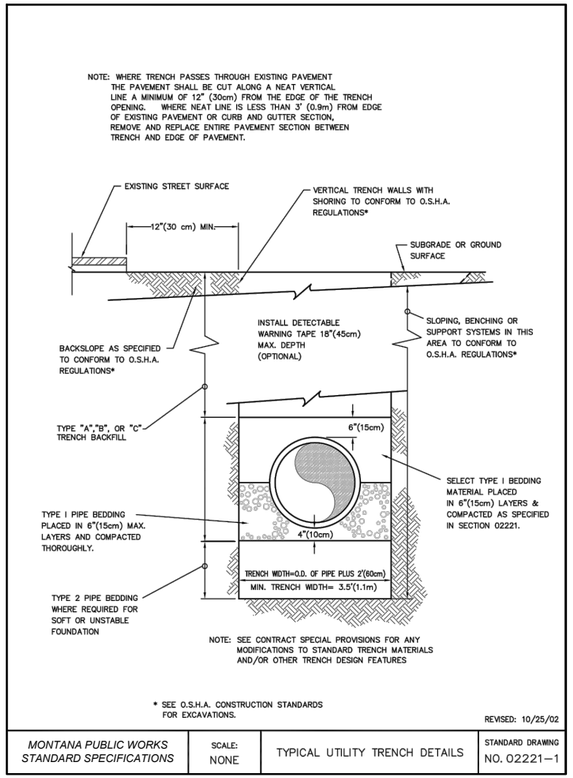
MONTANA Department of Transportation

ROAD PLANS

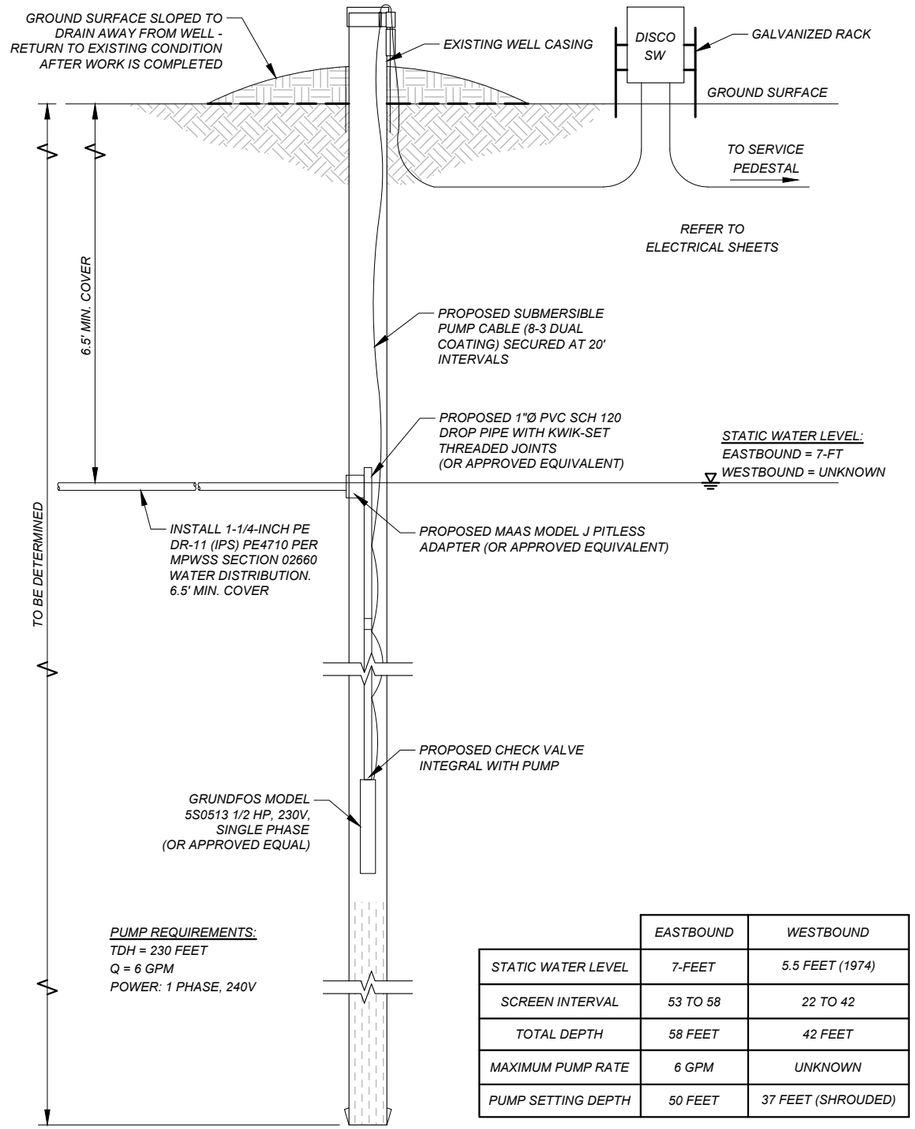
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DETAIL



MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS	SCALE: NONE	TYPICAL UTILITY TRENCH DETAILS	STANDARD DRAWING NO. 02221–1



	EASTBOUND	WESTBOUND
STATIC WATER LEVEL	7-FEET	5.5 FEET (1974)
SCREEN INTERVAL	53 TO 58	22 TO 42
TOTAL DEPTH	58 FEET	42 FEET
MAXIMUM PUMP RATE	6 GPM	UNKNOWN
PUMP SETTING DEPTH	50 FEET	37 FEET (SHROUDED)

WELL DETAIL

NOT TO SCALE

NON-POTABLE WATER DO NOT DRINK

METAL SIGN (18"x12") WITH 1-1/2" RED LETTERING. POST PROMINENTLY NEAR WATER SOURCE INSIDE MAINTENANCE BUILDINGS

METAL SIGN DETAIL

NOT TO SCALE

SHEET NO. 24

WATER SYSTEM DETAILS

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DOWL	03/2025
REVIEWED BY	DOWL	03/2025
CHECKED BY	DOWL	03/2025

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MONTANA Department of Transportation

ROAD PLANS

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DOWL

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DOWL

SUMMARY
SIGNING & DELINEATION QUANTITIES

MATERIAL	TOTALS	UNIT
SIGNS-SHEET ALUM SHT INCR XI	444.6	SQFT
SIGNS-ALUM REFL SHEET XI	209.8	SQFT
REMOVE SIGN	22	EACH
REMOVE SIGN-GUIDE	6	EACH
POSTS-TUBULAR STEEL	210	LB
POSTS-STEEL U SIGN	70	LB
POSTS-STEEL STRUCTURAL SIGN	628	LB
POSTS-TUBULAR STEEL-SQ-PERF	176	LB
POLES-TREATED WOOD 4 IN	98	LNFT
POLES-TREATED WOOD 5 IN	86	LNFT
FRANG SIGN POST BKWY-S5 X 10	4	EACH
FRANG SIGN POST BKWY-3.5 IN RD	2	EACH
DELINEATOR-TYPE 1	44	EACH

SHEET NO.
S1

SIGNING QUANTITIES

PROJECT NAME
HOMESTAKE PASS PARKING AREA

COUNTY
JEFFERSON COUNTY

PROJECT ID
IM 90-5(96)233

UPN
10327000

DESIGNED BY
D. VERNON 03/2025

REVIEWED BY
S. PATTERSON 03/2025

CHECKED BY
A. MILES 03/2025

MONTANA
Department of Transportation

SIGNING PLANS

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SIGN LOCATION AND SPECIFICATION

WB	STATION / A.M.	EB	RAMP NO.	SIGN NO.	PANEL SIZE	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT	CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM XI	SIGN PANEL (SQ. FT.): ALUM. SHEET INCREMENT XI	SIGN PANEL (SQ. FT.): ALUMINUM SHT OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.	TIMBER POLE (LINEAR FT.): 6" TOP DIA.	STEEL POST (LBS.): ROUND TUBULAR	STEEL POST (LBS.): SQUARE TUBULAR	STEEL POST (LBS.): STRUCTURAL STEEL	STEEL POST (LBS.): "U" POST	BREAKAWAY	SIGNS: REMOVE	SIGNS: RESET	GUIDE: REMOVE	GUIDE: RESET		REMARKS
WESTBOUND PARKING AREA (EAST TO WEST)																														
WB	A.M. 235.258			D7-3B	48"X36"X30"	5'-0"	2'-5"	4" DIA. POLE		X= 13'-10" Y= 14'-6"				8.8			30												BBR	HISTORIC POINT 2 MILES
WB	A.M. 235.239			D5-3	144" X 66"	REPLACE SIGN FACE ONLY									66.0											1		BBR	PARKING AREA 2 MILES
				IS6-2	144" X 42"										42.0														NEXT REST AREA 29 MILES
				D7-3B	REMOVE																								HISTORIC POINT 2 MILES
WB	A.M. 233.653			D5-1B D9-16	144" X 60" 24" X 30"	REPLACE SIGN FACE ONLY								5.0	60.0											1		BBR	PARKING AREA NEXT RIGHT TRUCK PARKING
WB	1			W13-2	36" X 48"	5'-0"		5" DIA. POLE		15'-5"		7'-0"	3'-6	12.0				16						X	1				BBR	EXIT 45 MPH FY
WB	2			D5-2A	78" X 78"	10'-0"	3'-11"	S5 X 10		X= 15'-2" Y= 16'-3"		7'-0"	3'-6"		42.3							314		■			1		BBR	PARKING AREA ↗
WB	3			R5-1A	42" X 30"	10'-0"		4" DIA. POLE		11'-6"		4'-0"	3'-0"	8.8			12								1				WRONG WAY
WB	4			R5-1A	42" X 30"	10'-0"		4" DIA. POLE		11'-6"		4'-0"	3'-0"	8.8			12								1				WRONG WAY
WB	5			R6-1L R5-1	36" X 12" 36" X 36"	10'-0"		5" DIA. POLE		17'-6"		7'-0"	3'-6"	3.0 9.0				18						X	1					ONE WAY LEFT DO NOT ENTER
WB	6			R6-1R R5-1	36" X 12" 36" X 36"	10'-0"		5" DIA. POLE		17'-6"		7'-0"	3'-6"	3.0 9.0				18						X	1					ONE WAY RIGHT DO NOT ENTER
WB	7			D10-6	12" X 48"	4'-0"		3 LB/FT STL "U"		11'-8"		4'-0"	3'-0"	4.0									35		1					MILE 235
WB	8			D9-16 MT-2 R5-15	48" X 48" 24" X 18"	10'-0"		3.5" DIA. PIPE		11'-6"		7'-0"	3'-0"	16.0 3.0							105			■	1				BBR	CAR/CAR W/ TRAILER/TRUCK NO CAMPING
WB	9			N7-1 N7-1P	36" X 48" REUSE	10'-0"		5" DIA. POLE		16'-6"		7'-0"	3'-6"	12.0				18						X	1					ADOPT A HIGHWAY MILE HI LIONS
WB	10			R6-1R	36" X 12"	10'-0"		4" DIA. POLE		12'-9"		7'-0"	3'-0"	3.0			14								1					ONE WAY RIGHT
WB	11			R7-8A R7-8aP	12" X 18" 12" X 6"	2'-0"		2" SQ. TUBE		12-1"		7'-0"	3'-0"	1.5 0.5							44			▲	1					RESERVED PARKING VAN ACCESSIBLE
WB	12			R7-8A R7-8aP	12" X 18" 12" X 6"	2'-0"		2" SQ. TUBE		12-1"		7'-0"	3'-0"	1.5 0.5							44			▲	1					RESERVED PARKING VAN ACCESSIBLE

X STANDARD BREAKAWAY FOR TIMBER POLES. SEE DETAILED DRAWING 619-20.

■ FRANGIBLE SIGN POST BREAKAWAY REQUIRED

▲ SINGLE SQUARE TUBES MOUNTED IN HEAVY DUTY STUB.

FY= TYPE XI FLUORESCENT YELLOW SHEETING REQUIRED

A.M.= ACCUMULATED MILEAGE

BBR = BACKBRACING REQUIRED

MOUNTING HEIGHT REQUIREMENTS:
MOUNTING HEIGHT SHOWN REFERS TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DAWINGS 619-00 & 619-08

DOWL

SHEET NO. S2

SIGN LOCATION & SPECIFICATION

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	03/2025
D. VERNON	
REVIEWED BY	03/2025
S. PATTERSON	
CHECKED BY	03/2025
A. MILES	

MONTANA Department of Transportation

SIGNING PLANS

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SIGN LOCATION AND SPECIFICATION

WB	STATION / A.M.	EB	RAMP NO.	SIGN NO.	PANEL SIZE	FEET: CLEARANCE	FEET: SIGN SUPPORT SPACING	TYPE OF SUPPORT	CANTILEVER	FEET: SUPPORT LENGTH (ESTIMATED)	FEET: SUPPORT LENGTH (INSTALLED)	FEET: MOUNTING HEIGHT	FEET: FOUNDATION DEPTH	SIGN PANEL (SQ. FT.): SHEET ALUMINUM XI	SIGN PANEL (SQ. FT.): ALUM. SHEET INCREMENT XI	SIGN PANEL (SQ. FT.): ALUMINUM SHT OVERLAY	TIMBER POLE (LINEAR FT.): 4" TOP DIA.	TIMBER POLE (LINEAR FT.): 5" TOP DIA.	TIMBER POLE (LINEAR FT.): 6" TOP DIA.	STEEL POST (LBS.): ROUND TUBULAR	STEEL POST (LBS.): SQUARE TUBULAR	STEEL POST (LBS.): STRUCTURAL STEEL	STEEL POST (LBS.): "U" POST	BREAKAWAY	SIGNS: REMOVE	SIGNS: RESET	GUIDE: REMOVE	GUIDE: RESET		REMARKS
EASTBOUND PARKING AREA (WEST TO EAST)																														
A.M. 231.946		EB		D5-3A IS6-2A D9-10 D7-3A	144" X 66" 144" X 42" 144" X 24" REMOVE	REPLACE SIGN FACE ONLY									66.0 42.0 24.0																BBR	PARKING AREA 1 MILE NEXT REST AREA 41 MILES* VISITOR INFO HISTORIC POINT 1 MILE
A.M. 231.965		EB		D7-3A	48"X36"X30"	5'-0"	2'-5"	4" DIA. POLE		X= 13'-10" Y= 14'-6"				8.8			30												BBR	HISTORIC POINT 1 MILE
A.M. 232.611		EB		D5-1B D9-16	144" X 60" 24" X 30"	REPLACE SIGN FACE ONLY								5.0	60.0														BBR	PARKING AREA NEXT RIGHT TRUCK PARKING
	13	EB		W13-2	36" X 48"	10'-0"		5" DIA. POLE		14'-6"		7'-0"	3'-6"	12.0				16						X	1				BBR	EXIT 45 MPH FY
	14	EB		R5-1A	42" X 30"	REPLACE SIGN FACE ONLY								8.8											1					WRONG WAY
	15	EB		R5-1A	42" X 30"	REPLACE SIGN FACE ONLY								8.8											1					WRONG WAY
	16	EB		D5-2A	78" X 78"	10'-0"	3'-11"	S5 X 10		X= 15'-2" Y= 16'-3"		7'-0"	3'-6"		42.3							314		■			1		BBR	PARKING AREA ↗
	17	EB		R6-1L R5-1	36" X 12" 36" X 36"	REPLACE SIGN FACE ONLY								3.0 9.0											1					ONE WAY LEFT DO NOT ENTER
	18	EB		R6-1R R5-1	36" X 12" 36" X 36"	REPLACE SIGN FACE ONLY								3.0 9.0											1					ONE WAY RIGHT DO NOT ENTER
	19	EB		D9-16 MT-2 R5-15	48" X 48" 24" X 18"	10'-0"		3.5" DIA. PIPE		11'-6"		7'-0"	3'-0"	16.0 3.0						105				■	1				BBR	CAR/CAR W/ TRAILER/TRUCK NO CAMPING
	20	EB		R6-1L	36" X 12"	REPLACE SIGN FACE ONLY								3.0											1					ONE WAY LEFT
	21	EB		D7-4R	REMOVE																				1					HISTORIC POINT →
	22	EB		R7-8 R7-8aP	12" X 18" 12" X 6"	2'-0"		2" SQ. TUBE		12-1"		7'-0"	3'-0"	1.5 0.5							44			▲	1					RESERVED PARKING VAN ACCESSIBLE
	23	EB		R7-8 R7-8aP	12" X 18" 12" X 6"	2'-0"		2" SQ. TUBE		12-1"		7'-0"	3'-0"	1.5 0.5							44			▲	1					RESERVED PARKING VAN ACCESSIBLE
	24	EB		R6-1R	36" X 12"	REPLACE SIGN FACE ONLY								3.0											1					ONE WAY RIGHT
	25	EB		D10-6	12" X 48"	4'-0"		3 LB/FT STL "U"		11'-8"		4'-0"	3'-0"	4.0									35		1					MILE 235
ALL SHEET TOTALS														209.8	444.6		98	86		210	176	628	70		22		6			

X = STANDARD BREAKAWAY FOR TIMBER POLES. SEE DETAILED DRAWING 619-20.

■ = FRANGIBLE SIGN POST BREAKAWAY REQUIRED

▲ = SINGLE SQUARE TUBES MOUNTED IN HEAVY DUTY STUB.

FY= TYPE XI FLUORESCENT YELLOW SHEETING REQUIRED

*NEXT REST AREA SIGN UPDATED FROM 72 MILES TO 41 MILES DUE TO NEW HEADWATERS REST AREA

A.M.= ACCUMULATED MILEAGE

BBR = BACKBRACING REQUIRED

DELINEATOR LEGEND

⊣⊢	DELINEATOR DES "B"	4
—<	DELINEATOR DES "G"	16
×⊣⊢	DELINEATOR DES "BJ"	9
×—<	DELINEATOR DES "GJ"	15

MOUNTING HEIGHT REQUIREMENTS:
MOUNTING HEIGHT SHOWN REFERS TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DAWINGS 619-00 & 619-08

SHEET NO.
S3

SIGN LOCATION & SPECIFICATION

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY		REVIEWED BY		CHECKED BY	
D. VERNON	03/2025	S. PATTERSON	03/2025	A. MILES	03/2025

MONTANA Department of Transportation

SIGNING PLANS

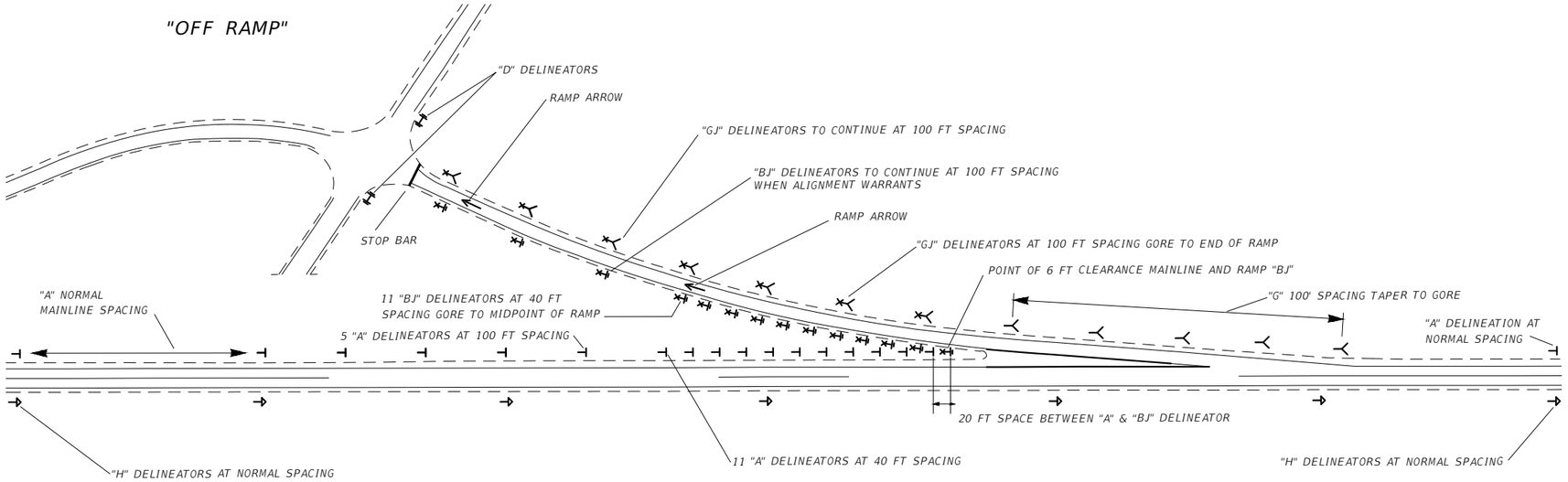
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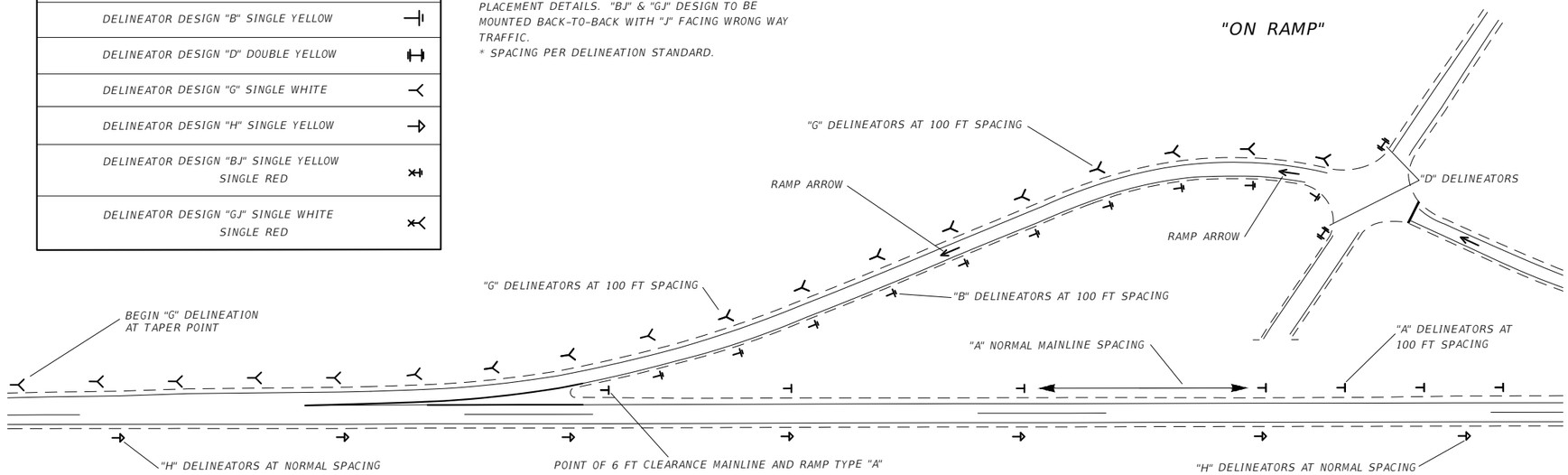
SIGNING DETAIL



LEGEND

DELINEATOR DESIGN "A" SINGLE WHITE	⊣
DELINEATOR DESIGN "B" SINGLE YELLOW	⊣
DELINEATOR DESIGN "D" DOUBLE YELLOW	⊣⊣
DELINEATOR DESIGN "G" SINGLE WHITE	≺
DELINEATOR DESIGN "H" SINGLE YELLOW	→
DELINEATOR DESIGN "BJ" SINGLE YELLOW SINGLE RED	⊣≺
DELINEATOR DESIGN "GJ" SINGLE WHITE SINGLE RED	≺≺

NOTE:
ALL DELINEATORS AT 6 FT CLEARANCE FROM EDGE OF PAVEMENT. SEE DETAILED DRAWING 619-34 FOR DELINEATOR DETAILS & 619-36 FOR DELINEATOR PLACEMENT DETAILS. "BJ" & "GJ" DESIGN TO BE MOUNTED BACK-TO-BACK WITH "J" FACING WRONG WAY TRAFFIC.
* SPACING PER DELINEATION STANDARD.



NOTE:
NO "H" DELINEATORS IN MEDIANS WHERE CABLE GUARDRAIL IS PRESENT.

RAMP DELINEATION

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	D. VERNON	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	A. MILES	03/2025

10327000SIDET201.DWG

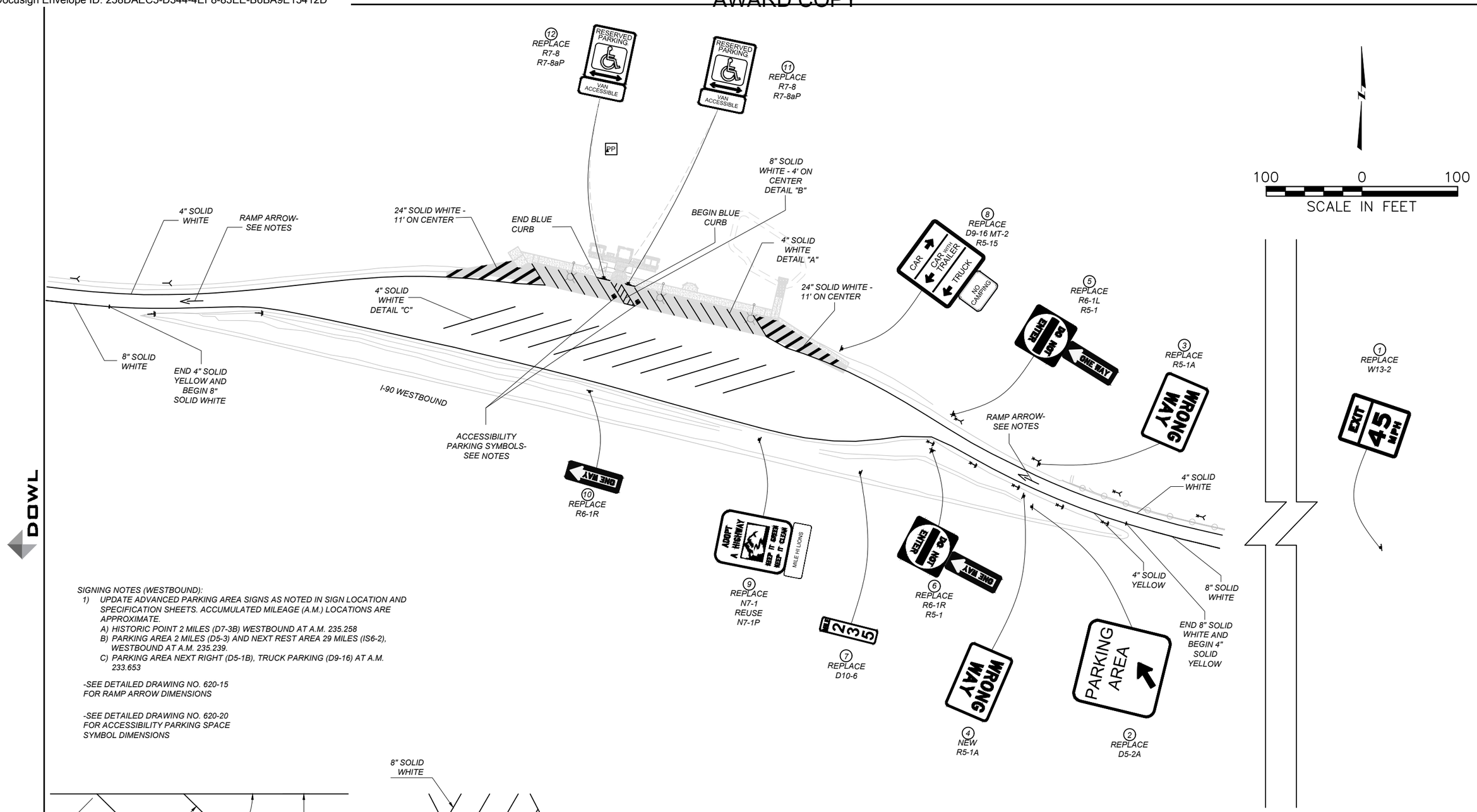
MONTANA
Department of Transportation

SIGNING PLANS

3/20/2025 5:18 PM

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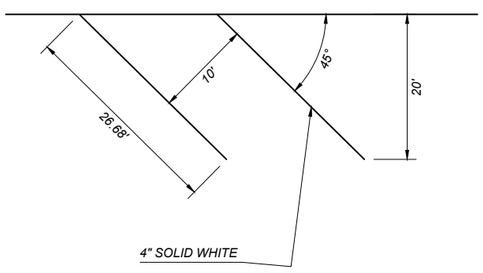
DOWL

SIGNING NOTES (WESTBOUND):

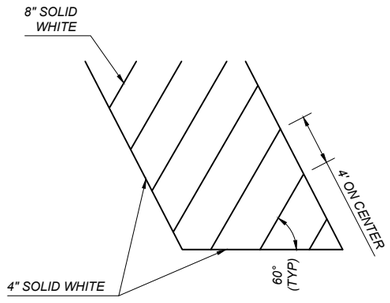
1) UPDATE ADVANCED PARKING AREA SIGNS AS NOTED IN SIGN LOCATION AND SPECIFICATION SHEETS. ACCUMULATED MILEAGE (A.M.) LOCATIONS ARE APPROXIMATE.
   - A) HISTORIC POINT 2 MILES (D7-3B) WESTBOUND AT A.M. 235.258
   - B) PARKING AREA 2 MILES (D5-3) AND NEXT REST AREA 29 MILES (IS6-2), WESTBOUND AT A.M. 235.239.
   - C) PARKING AREA NEXT RIGHT (D5-1B), TRUCK PARKING (D9-16) AT A.M. 233.653

-SEE DETAILED DRAWING NO. 620-15 FOR RAMP ARROW DIMENSIONS

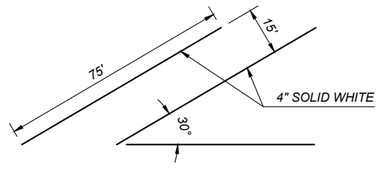
-SEE DETAILED DRAWING NO. 620-20 FOR ACCESSIBILITY PARKING SPACE SYMBOL DIMENSIONS



DETAIL "A"
CAR PARKING DETAIL
NOT TO SCALE



DETAIL "B"
PARKING LOT HATCHING
NOT TO SCALE



DETAIL "C"
TYPICAL TRUCK STALL
NOT TO SCALE

SHEET NO.
S5

WESTBOUND PARKING AREA SIGNING & STRIPING PLANS

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 103270000

DESIGNED BY	D. VERNON	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	A. MILES	03/2025

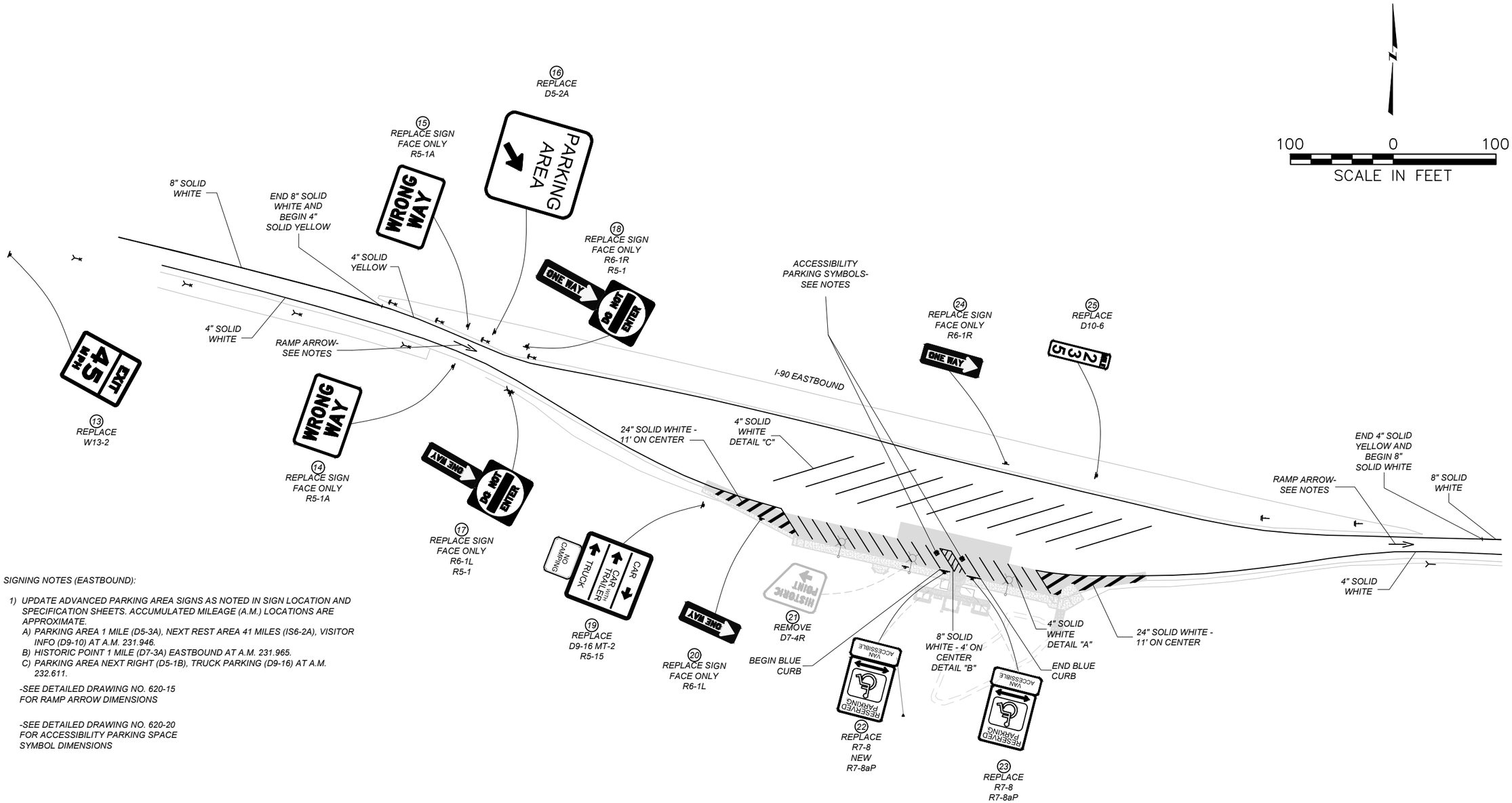
10327000SIPLNZ01.DWG

MONTANA
Department of Transportation

SIGNING PLANS

3/25/2025 3:16 PM

Docusign Envelope ID: 258DAEC5-D344-4EF8-83EE-B6BA9E15412D

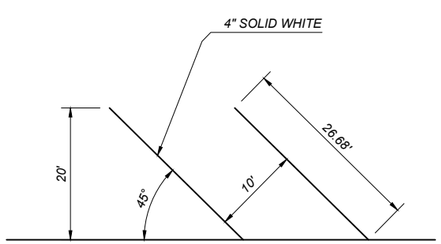


SIGNING NOTES (EASTBOUND):

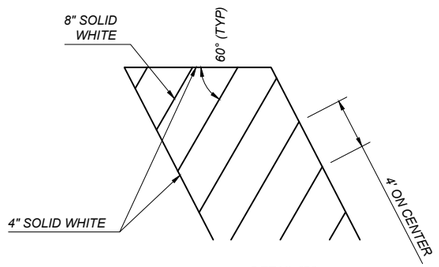
1) UPDATE ADVANCED PARKING AREA SIGNS AS NOTED IN SIGN LOCATION AND SPECIFICATION SHEETS. ACCUMULATED MILEAGE (A.M.) LOCATIONS ARE APPROXIMATE.
   A) PARKING AREA 1 MILE (D5-3A), NEXT REST AREA 41 MILES (IS6-2A), VISITOR INFO (D9-10) AT A.M. 231.946.
   B) HISTORIC POINT 1 MILE (D7-3A) EASTBOUND AT A.M. 231.965.
   C) PARKING AREA NEXT RIGHT (D5-1B), TRUCK PARKING (D9-16) AT A.M. 232.611.

-SEE DETAILED DRAWING NO. 620-15 FOR RAMP ARROW DIMENSIONS

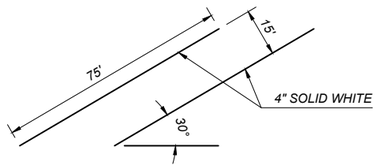
-SEE DETAILED DRAWING NO. 620-20 FOR ACCESSIBILITY PARKING SPACE SYMBOL DIMENSIONS



DETAIL "A"
CAR PARKING DETAIL
NOT TO SCALE



DETAIL "B"
PARKING LOT HATCHING
NOT TO SCALE



DETAIL "C"
TYPICAL TRUCK STALL
NOT TO SCALE

DOWL

SHEET NO.
S6

EASTBOUND PARKING AREA SIGNING & STRIPING PLANS

PROJECT NAME	HOMESTAKE PASS PARKING AREA
COUNTY	JEFFERSON COUNTY
PROJECT ID	IM 90-5(96)233
UPN	10327000

DESIGNED BY	D. VERNON	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	A. MILES	03/2025

10327000SIPLNZ01.DWG

MONTANA
Department of Transportation

SIGNING PLANS

3/25/2025 3:16 PM

Docusign Envelope ID: 258DAEC5-D344-4EF8-83EE-B6BA9E15412D

AWARD COPY

DOWNTOWN BOWL

ELECTRICAL QUANTITY SUMMARY

ITEM NO.	MATERIAL	TOTAL	UNIT
104 030 065	MISCELLANEOUS ITEMS A - LNFT	890 *	LNFT
616 343 920	CONDUIT - PLASTIC 2 IN	893	LNFT
616 783 007	PULL BOX - COMPOSITE TYPE 2	10	EACH
617 000 000	FOUNDATION - CONCRETE	3	CUYD
617 123 101	CONDUCTOR - COPPER AWG1 - 600V	223	LNFT
617 123 110	CONDUCTOR - COPPER AWG10 - 600V	2540	LNFT
617 183 056	STANDARD -STL TYPE 10-A-500-6	6	EACH
617 303 300	HIGH EFFICACY LUMINAIRE LED	6	EACH
617 333 100	SERV ASSEMBLY	2	EACH
617 343 100	ENCLOSURE - NEMA TYPE 3R	2	EACH
617 781 000	REMOVE AND SALVAGE MISC ELECTRICAL	1	LS

NOTE: QUANTITIES ONLY SHOWN FOR COMPONENTS RELATED TO OVERHEAD SITE LIGHTING

* QUANTITY OF CONDUCTOR - COPPER AWG 350KCMIL - 600V

NOTES:

1. THE 350kcmil CONDUCTORS SHALL BE RATED FOR 90 DEGREES C. ALL OTHER POWER CONDUCTORS SHALL BE RATED AT NOT LESS THAN 75 DEGREES C.

SHEET NO.
E1

ELECTRICAL QUANTITY SUMMARY
SITE LIGHTING

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	04/2025
K. KING	
REVIEWED BY	04/2025
S. PATTERSON	
CHECKED BY	04/2025
D. OTO	

10327000ELSUMZ01.DWG

MONTANA Department of Transportation

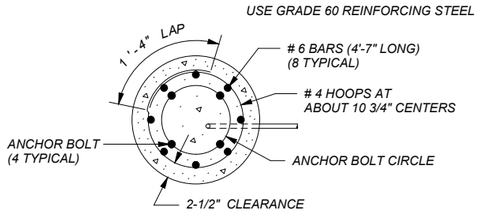
ELECTRICAL PLANS

4/2/2025 12:13 PM

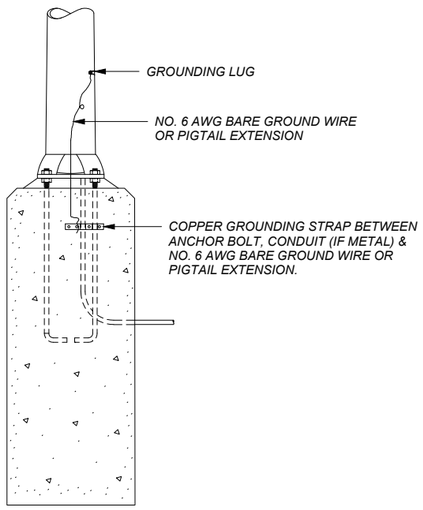
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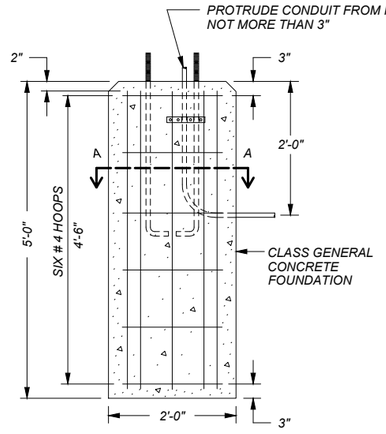
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ELECTRICAL DETAILS
SITE LIGHTING

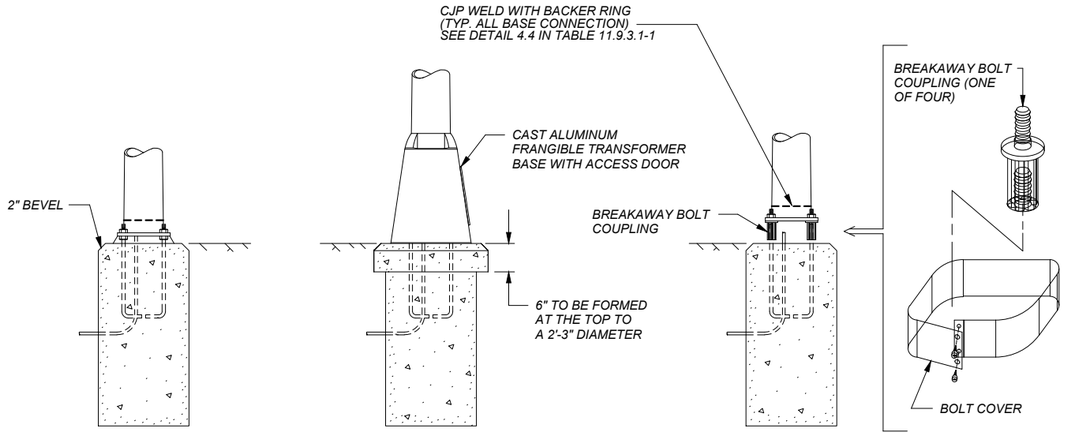


SECTION A-A





TYPICAL OF ALL FOUNDATIONS



ANCHOR (DOUBLE NUT CONNECTION REQUIRED)

TRANSFORMER (BREAKAWAY TYPE)

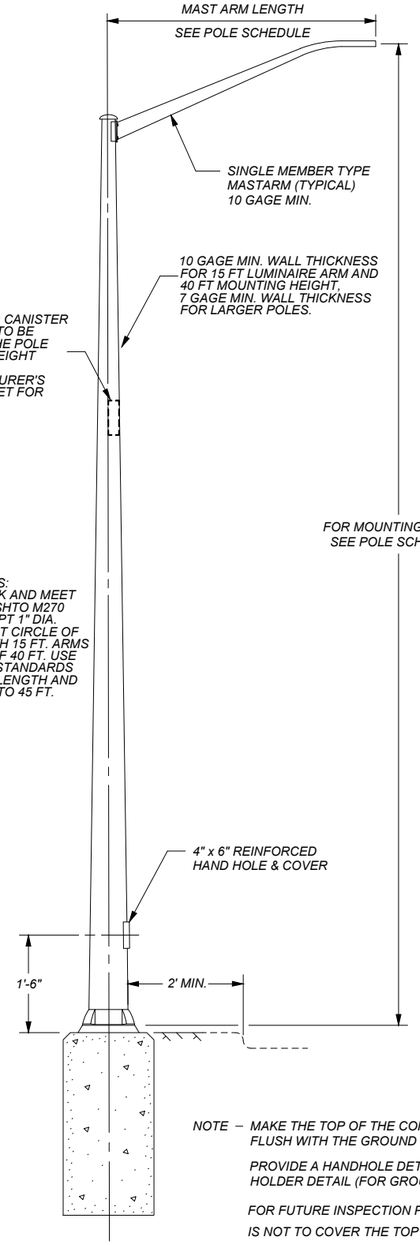
BOLT COUPLING (BREAKAWAY TYPE)

BASE TYPES FOR LUMINAIRE STANDARDS

NOTES –
INSTALL AND PRETENSION ANCHOR BOLTS PER THE STANDARD SPECIFICATIONS
PERMANENTLY MARK GRADE OF ANCHORS PER ASTM F1554 S3

FACTORY INSTALLED CANISTER VIBRATION DAMPER TO BE INSTALLED INSIDE THE POLE TWO THIRDS POLE HEIGHT FROM THE BASE. PROVIDE MANUFACTURER'S PRODUCT DATA SHEET FOR MDT APPROVAL.

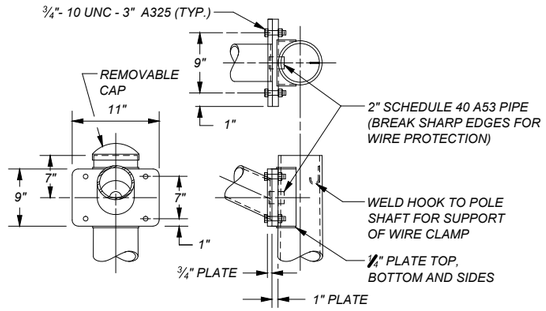
BASE PLATE REQUIREMENTS:
BASE PLATES TO BE 1" THICK AND MEET THE REQUIREMENTS OF AASHTO M270 GRADE 50. HOLES TO ACCEPT 1" DIA. ANCHOR BOLTS WITH A BOLT CIRCLE OF 13 1/2" FOR STANDARDS WITH 15 FT. ARMS AND A MOUNTING HEIGHT OF 40 FT. USE A BOLT CIRCLE OF 15" FOR STANDARDS WITH ARMS UP TO 25 FT. IN LENGTH AND MOUNTING HEIGHTS OF UP TO 45 FT.



TYPE I0-A POLE

NOTE – MAKE THE TOP OF THE CONCRETE FOUNDATION FLUSH WITH THE GROUND LINE.
PROVIDE A HANDHOLE DETAIL AND A ½" NUT HOLDER DETAIL (FOR GROUNDING) .
FOR FUTURE INSPECTION PURPOSES, FILL MATERIAL IS NOT TO COVER THE TOP OF THE FOUNDATIONS

LUMINAIRE ARM CONNECTION REQUIRES 4 BOLT DESIGN WITH A325 BOLTS, NUTS AND WASHERS (FULLY TENSIONED)
TUBE TO PLATE CONNECTION TO BE SOCKET TYPE CONNECTION WITH TWO FILLET WELDS PER 14.4.4.6 OF THE SPECIFICATIONS.



NOTE – FOR ARMS BETWEEN 16 FT. AND 25 FT. IN LENGTH, USE AN 11" SQUARE PLATE WITH A BOLT SPACING OF 9" VERTICAL AND 9" HORIZONTAL

DESIGN, FABRICATE, ERECT, AND INSPECT STANDARDS IN ACCORDANCE WITH THE CURRENT EDITION AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (AND ANY AMENDMENTS THERETO).

DESIGN PARAMETERS:

DESIGN WEIGHT = DEAD LOAD, ICE.

DESIGN AREA = AREA WITH MAXIMUM WIND LOAD (WIND IS PERPENDICULAR TO STANDARD, AS SHOWN).

DIRECTIONAL FACTOR Kd = 0.95, GUST FACTOR = 1.14 DRAG COEFFICIENTS LFRD TABLE 3.8.7-1

HEIGHT AND EXPOSURE FACTOR Kz
zg = TAKEN AS 900 FEET FOR EXPOSURE C
α= 9.5
z = 16 FEET

DESIGN WIND VELOCITY 700 YEAR MRI BASIC WIND SPEED (115 MPH)

TYPE 10-A LUMINAIRE STANDARDS, POLE BASES & FOUNDATION DETAILS

NO SCALE

LS
REVISED 5-DEC-2023

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

10327000ELDETZ01.DWG

MONTANA Department of Transportation

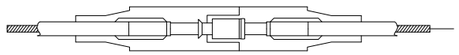
ELECTRICAL PLANS

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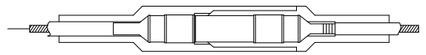
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TYPES 1, 6, 11 & 16



NON-FUSED BREAKAWAY

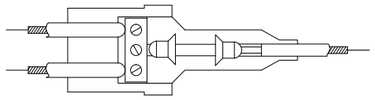
TYPES 2, 7, 12 & 17



FUSED BREAKAWAY

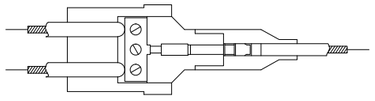
IDENTITY NO.	DESCRIPTIVE SYMBOL & WIRE SIZES
1	8 — 8
2	8 — 10
3	8 — 10, 8
4	8, 8 — 8
5	8, 8 — 8
6	6 — 6
7	6 — 10
8	6 — 10, 6
9	6, 6 — 6
10	6, 6 — 6
11	4 — 4
12	4 — 10
13	4 — 10, 4
14	4, 4 — 4
15	4, 4 — 4
16	10 — 10
17	10 — 10
18	10, 10 — 10
19	10, 10 — 10
20	10, 10 — 10
	VARIES — VARIES

TYPES 3, 8, 13 & 18



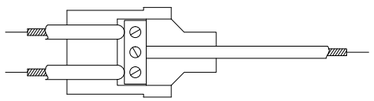
FUSED BREAKAWAY

TYPES 4, 9, 14 & 19



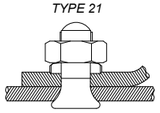
NON-FUSED BREAKAWAY

TYPES 5, 10, 15 & 20



NON-FUSED NON-BREAKAWAY

TYPE 21



COPPER SPLIT BOLT - MAKE WATERTIGHT USING SELF ADHERING MASTIC

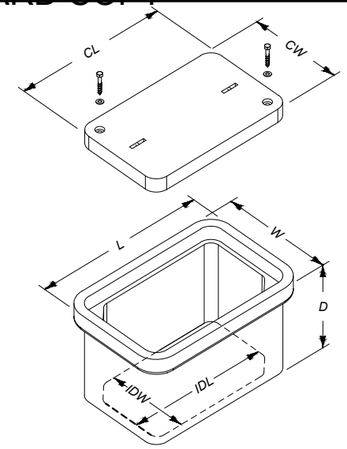
PROVIDE A PLUG AND RECEPTACLE HOUSED IN WATER-RESISTANT, SYNTHETIC RUBBER CAPABLE OF BURIAL IN THE GROUND OR INSTALLATION IN SUNLIGHT. THE HOUSING, CONSISTING OF 2 SECTIONS, PROVIDES A WATERTIGHT SEAL AROUND THE CABLE AND A WATERTIGHT SEAL BETWEEN THE TWO SECTIONS AT THE POINT OF DISCONNECTION. SUPPLY EACH KIT WITH SUFFICIENT SILICONE COMPOUND TO LUBRICATE METAL PARTS AND THE RUBBER HOUSINGS FOR EASY ASSEMBLY.

WHERE INDICATED, CRIMP A COPPER PIN AND A COPPER RECEPTACLE TO THE CABLE. THE RECEPTACLE IS TO ESTABLISH CONTACT PRESSURE WITH THE PIN THROUGH THE USE OF A COPPER BERYLLIUM SPRING AND BE EQUIPPED WITH A DISPOSABLE MOUNTING PIN. THE PIN IS TO BE CONSTRUCTED OF AT LEAST HALF-HARD MATERIAL. THE CRIMPING PORTION IS TO BE FULLY ANNEALED WHILE THE REST OF THE PIN IS MAINTAINED IN ITS ORIGINAL STATE OF HARDNESS. THE RECEPTACLE IS TO BE FULLY ANNEALED. THE PIN AND RECEPTACLE ARE TO LOCK TOGETHER SO THE CONNECTION IS MAINTAINED WHEN A MINIMUM FORCE OF 20 POUNDS TENSION IS APPLIED TO THE ATTACHED CABLES.

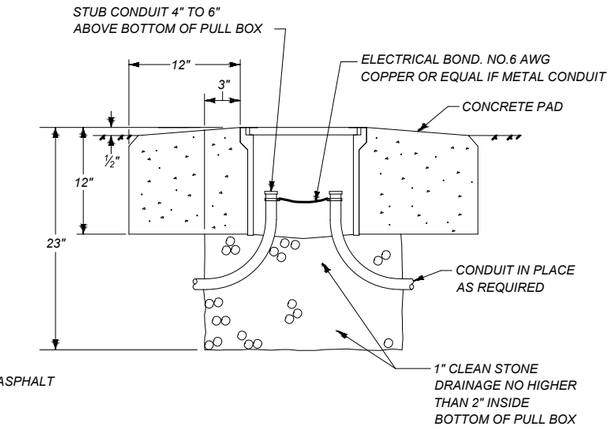
PROVIDE FUSED CONNECTOR KITS CONTAINING A PAIR OF SPRING LOADED 90% CONDUCTIVITY CONTACTS FOR GRIPPING A STANDARD MIDGET FERRULE TYPE FUSE. THE CONTACTS MUST BE FULLY ANNEALED AND ADAPTED TO BE CRIMPED TO THE CABLE.

WATERTIGHT CONNECTORS

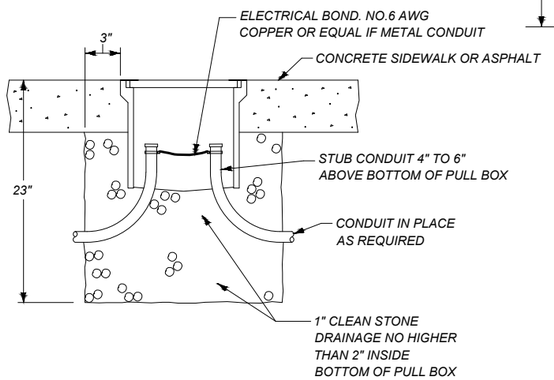
NO SCALE



PULL BOX - COMPOSITE MINIMUM DIMENSIONS					
TYPE 1		TYPE 2		TYPE 3	
L =	20"	L =	25"	L =	32"
W =	13"	W =	15"	W =	19"
D =	12"	D =	12"	D =	12"
I D L =	17"	I D L =	21"	I D L =	28"
I D W =	10"	I D W =	11"	I D W =	15"
C L =	18"	C L =	23"	C L =	30"
C W =	11"	C W =	13"	C W =	17"



PULL BOX INSTALLED IN DIRT



PULL BOX INSTALLED IN A SIDEWALK OR ASPHALT

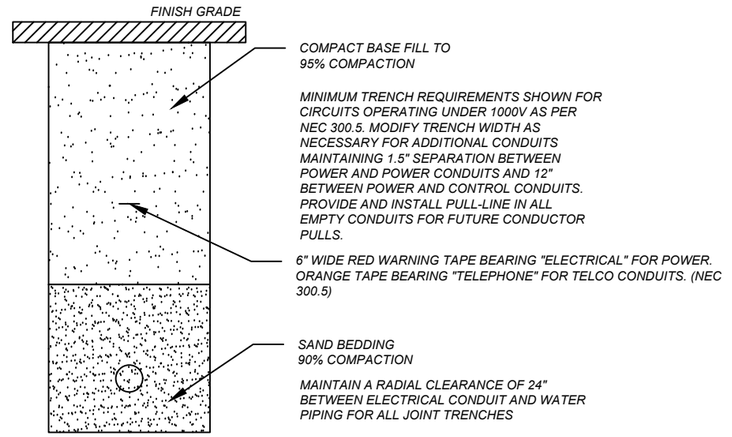
PULL BOX-COMPOSITE

TYPE 1,2 & 3

NO SCALE

PB2

REVISED: 15-APR-2014



TYPICAL TRENCH

NO SCALE

SHEET NO.
E3

ELECTRICAL DETAILS

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

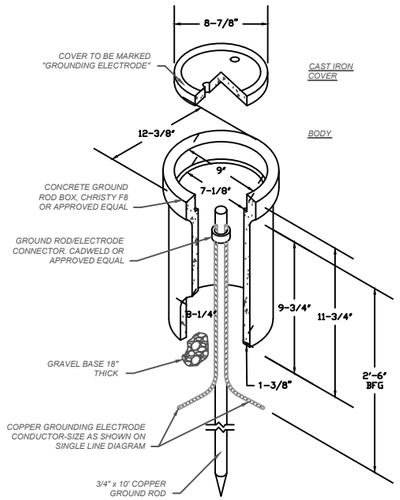
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MONTANA
Department of Transportation

ELECTRICAL PLANS

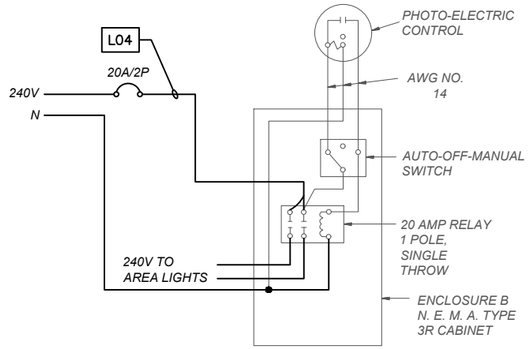
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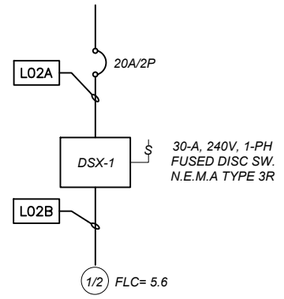
CONCRETE GROUND ROD HANDHOLE DETAIL

NO SCALE



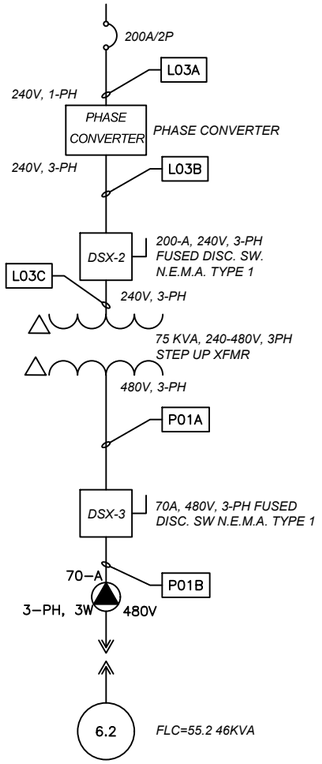
AREA LIGHTS CONTROL DIAGRAM

NO SCALE



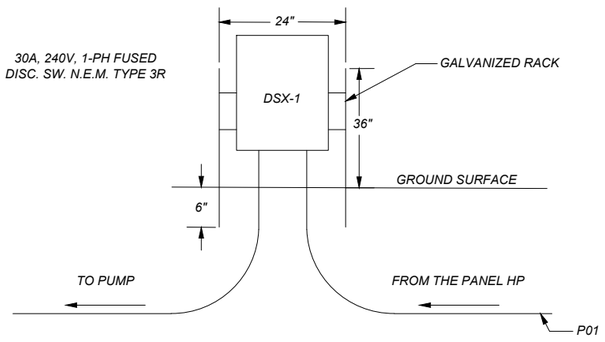
WELL PUMP WIRING DIAGRAM

NO SCALE



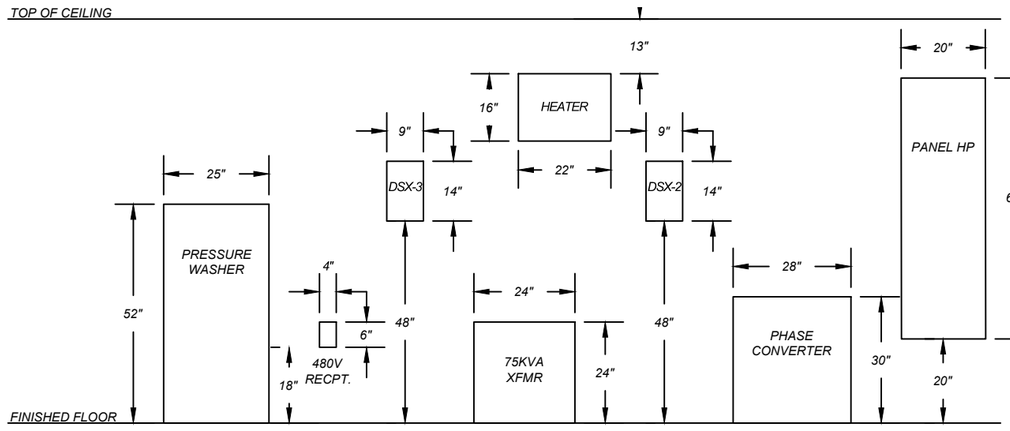
HOT-WATER PRESSURE WASHER WIRING DIAGRAM

NO SCALE



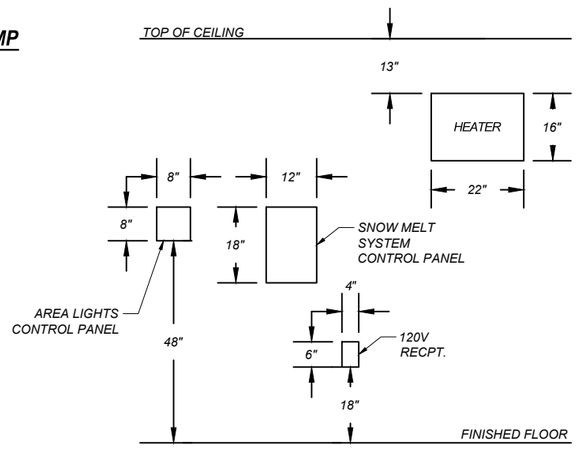
DISCONNECT SWITCH AT WELL PUMP

NO SCALE



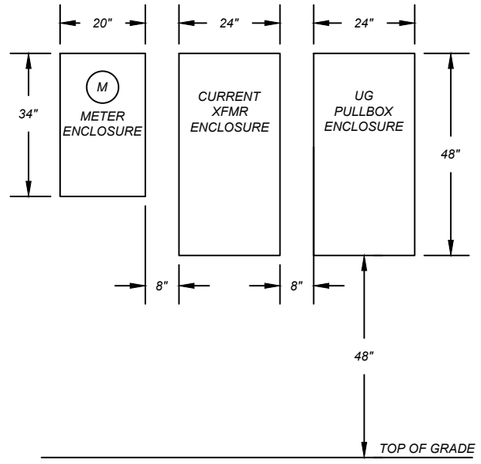
ELEVATION VIEW MAINTENANCE BUILDING - INTERIOR WALL 1

SCALE: 1"-3'



ELEVATION VIEW MAINTENANCE BUILDING - INTERIOR WALL 2

SCALE: 1"-3'



ELEVATION VIEW MAINTENANCE BUILDING - EXTERIOR WALL

SCALE: 1"-3'

DOWL

SHEET NO.
E4

ELECTRICAL DETAILS

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

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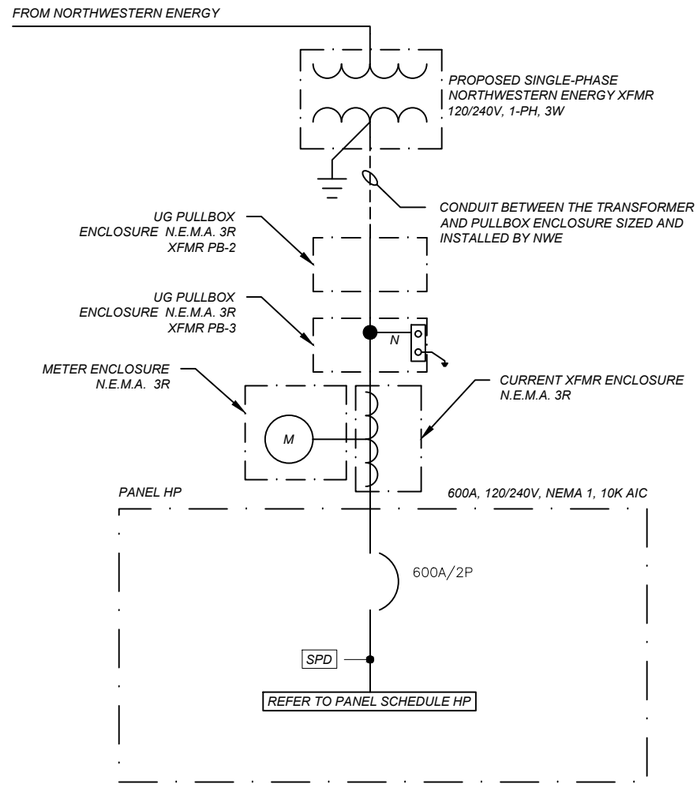
MONTANA Department of Transportation

ELECTRICAL PLANS

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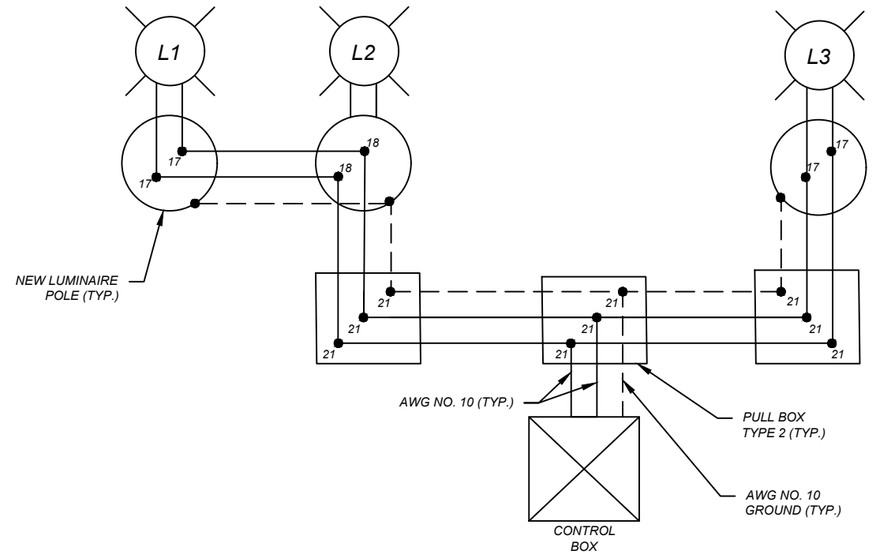
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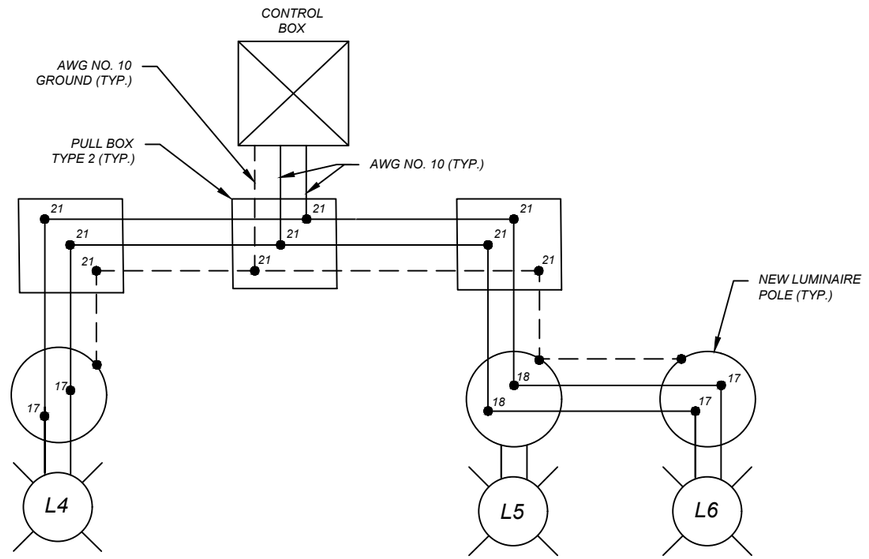


UNDERGROUND SERVICE SINGLE LINE DIAGRAM

NO SCALE



EASTBOUND PARKING AREA



WESTBOUND PARKING AREA

LIGHTING WIRING DIAGRAM

NO SCALE

LEGEND

INDICATES NEW WATERTIGHT CONNECTOR, PER ELECTRICAL DETAIL DRAWING ON SHEET E3.

USES FUSES RATED AT 6 AMPS.

SHEET NO. E5

WIRING DIAGRAMS

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

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MONTANA Department of Transportation

ELECTRICAL PLANS

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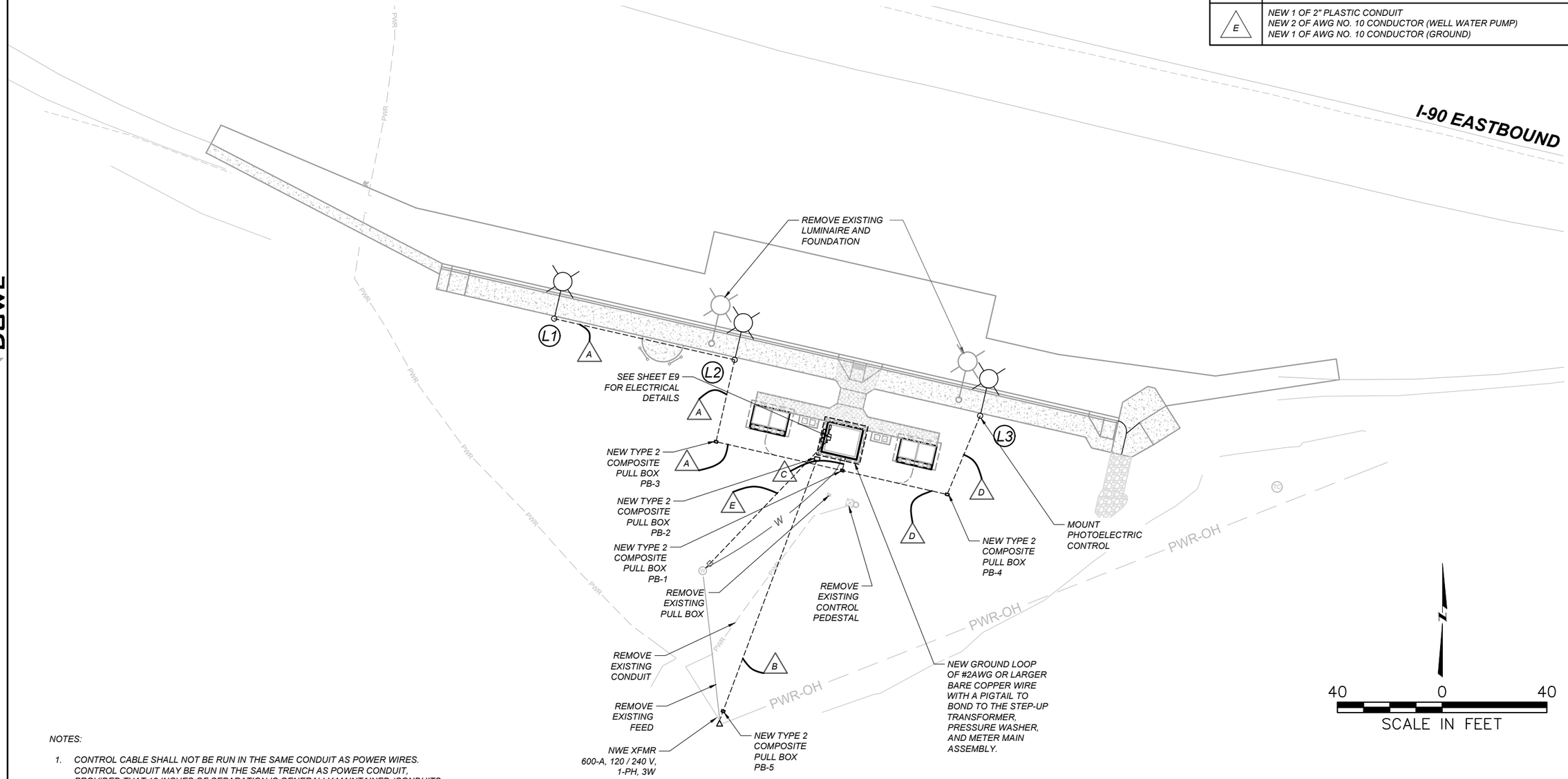
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DOWL

LUMINAIRE POLE SCHEDULE									
POLE NO.	ITEM NO.	TYPE	TYPE POLE BASE	FOUNDATION DIA. X DEPTH	LUMINAIRE MAST ARM	LUMINAIRE HEIGHT	LUMINAIRE LUMENS (DISTRIBUTION)	X COORDINATE	Y COORDINATE
L1	617 183 056	10-A-500-6	BREAKAWAY	2' x 5'	15'	40'	17,600 LUMENS (TYPE 3)	1,236,552.7595	620,396.6398
L2	617 183 056	10-A-500-6	BREAKAWAY	2' x 5'	15'	40'	17,600 LUMENS (TYPE 3)	1,236,621.7006	620,380.9197
L3	617 183 056	10-A-500-6	BREAKAWAY	2' x 5'	15'	40'	17,600 LUMENS (TYPE 3)	1,236,715.4605	620,359.5403

SYMBOLS	
	LUMINAIRE
	SERVICE
	PULL BOX
— —	CONDUIT & WIRE

CONDUIT AND WIRE SCHEDULE	
A	NEW 1 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 10 CONDUCTOR (LIGHTING) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)
B	CONDUIT BY NWE NEW 4 OF AWG 350kcmil CONDUCTOR (MAIN POWER LINE) NEW 1 OF AWG NO. 1 CONDUCTOR (GROUND)
C	NEW 2 OF 2" PLASTIC CONDUIT NEW 20 OF AWG NO. 10 CONDUCTOR (LIGHTING AND HEATING) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)
D	NEW 2 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 10 CONDUCTOR (LIGHTING) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND) NEW 1 OF 3 AWG NO. 14 CABLE (PHOTOELECTRIC CONTROL)
E	NEW 1 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 10 CONDUCTOR (WELL WATER PUMP) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)



NOTES:

1. CONTROL CABLE SHALL NOT BE RUN IN THE SAME CONDUIT AS POWER WIRES. CONTROL CONDUIT MAY BE RUN IN THE SAME TRENCH AS POWER CONDUIT, PROVIDED THAT 12 INCHES OF SEPARATION IS GENERALLY MAINTAINED (CONDUITS MAY CROSS WITHIN THE 12 INCH BOUNDARY, BUT SHALL NOT RUN PARALLEL WITHOUT MAINTAINING SEPARATION).

COORDINATE ALL INSTALLATIONS WITH SITE ELECTRICAL AND UTILITY PLANS

SHEET NO.
E6

EASTBOUND PARKING AREA LIGHTING LAYOUT

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

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MONTANA Department of Transportation

ELECTRICAL PLANS

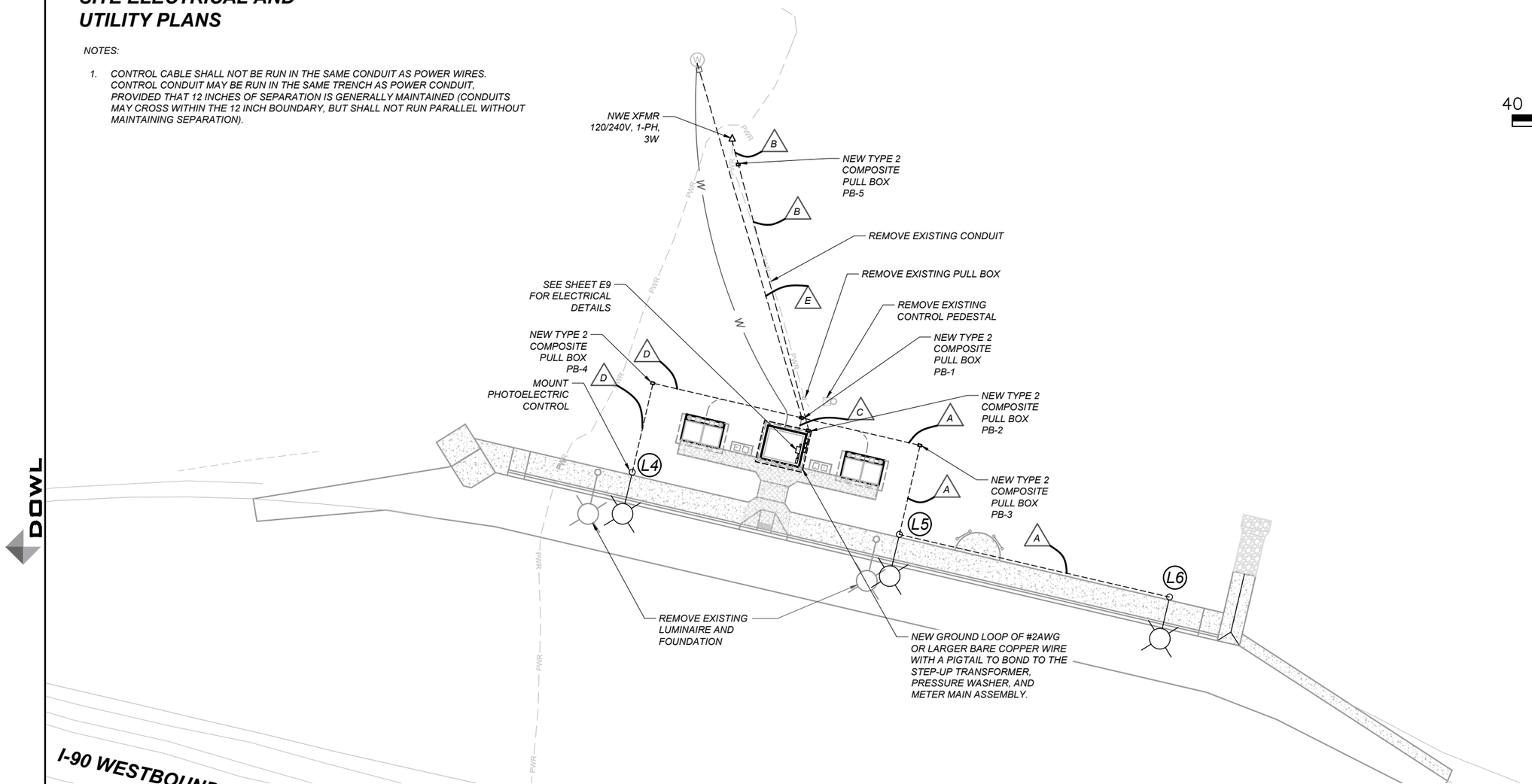
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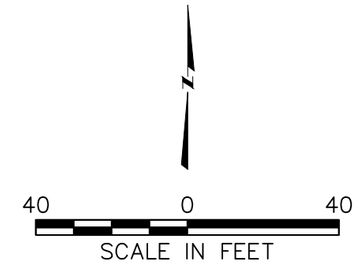
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COORDINATE ALL INSTALLATIONS WITH SITE ELECTRICAL AND UTILITY PLANS

NOTES:

1. CONTROL CABLE SHALL NOT BE RUN IN THE SAME CONDUIT AS POWER WIRES. CONTROL CONDUIT MAY BE RUN IN THE SAME TRENCH AS POWER CONDUIT, PROVIDED THAT 12 INCHES OF SEPARATION IS GENERALLY MAINTAINED (CONDUITS MAY CROSS WITHIN THE 12 INCH BOUNDARY, BUT SHALL NOT RUN PARALLEL WITHOUT MAINTAINING SEPARATION).





LUMINAIRE POLE SCHEDULE									
POLE NO.	ITEM NO.	TYPE	TYPE POLE BASE	FOUNDATION DIA. X DEPTH	LUMINAIRE MAST ARM	LUMINAIRE HEIGHT	LUMINAIRE LUMENS (DISTRIBUTION)	X COORDINATE	Y COORDINATE
L4	617 183 056	10-A-500-6	BREAKAWAY	2' x 5'	15'	40'	17,600 LUMENS (TYPE 3)	1,236,531.1823	620,791.7120
L5	617 183 056	10-A-500-6	BREAKAWAY	2' x 5'	15'	40'	17,600 LUMENS (TYPE 3)	1,236,624.8441	620,769.9069
L6	617 183 056	10-A-500-6	BREAKAWAY	2' x 5'	15'	40'	17,600 LUMENS (TYPE 3)	1,236,719.5821	620,747.9337

SYMBOLS
LUMINAIRE
SERVICE
PULL BOX
CONDUIT & WIRE

CONDUIT AND WIRE SCHEDULE	
A	NEW 1 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 10 CONDUCTOR (LIGHTING) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)
B	CONDUIT BY NWE NEW 4 OF AWG 350kcmil CONDUCTOR (MAIN POWER LINE) NEW 1 OF AWG NO. 1 CONDUCTOR (GROUND)
C	NEW 2 OF 2" PLASTIC CONDUIT NEW 20 OF AWG NO. 10 CONDUCTOR (LIGHTING AND HEATING) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)
D	NEW 2 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 10 CONDUCTOR (LIGHTING) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND) NEW 1 OF 3 AWG NO. 14 CABLE (PHOTOELECTRIC CONTROL)
E	NEW 1 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 10 CONDUCTOR (WELL WATER PUMP) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)

SHEET NO.
E7

WESTBOUND PARKING AREA LIGHTING LAYOUT

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	DATE
K. KING	03/2025
REVIEWED BY	DATE
S. PATTERSON	03/2025
CHECKED BY	DATE
D. OTO	03/2025

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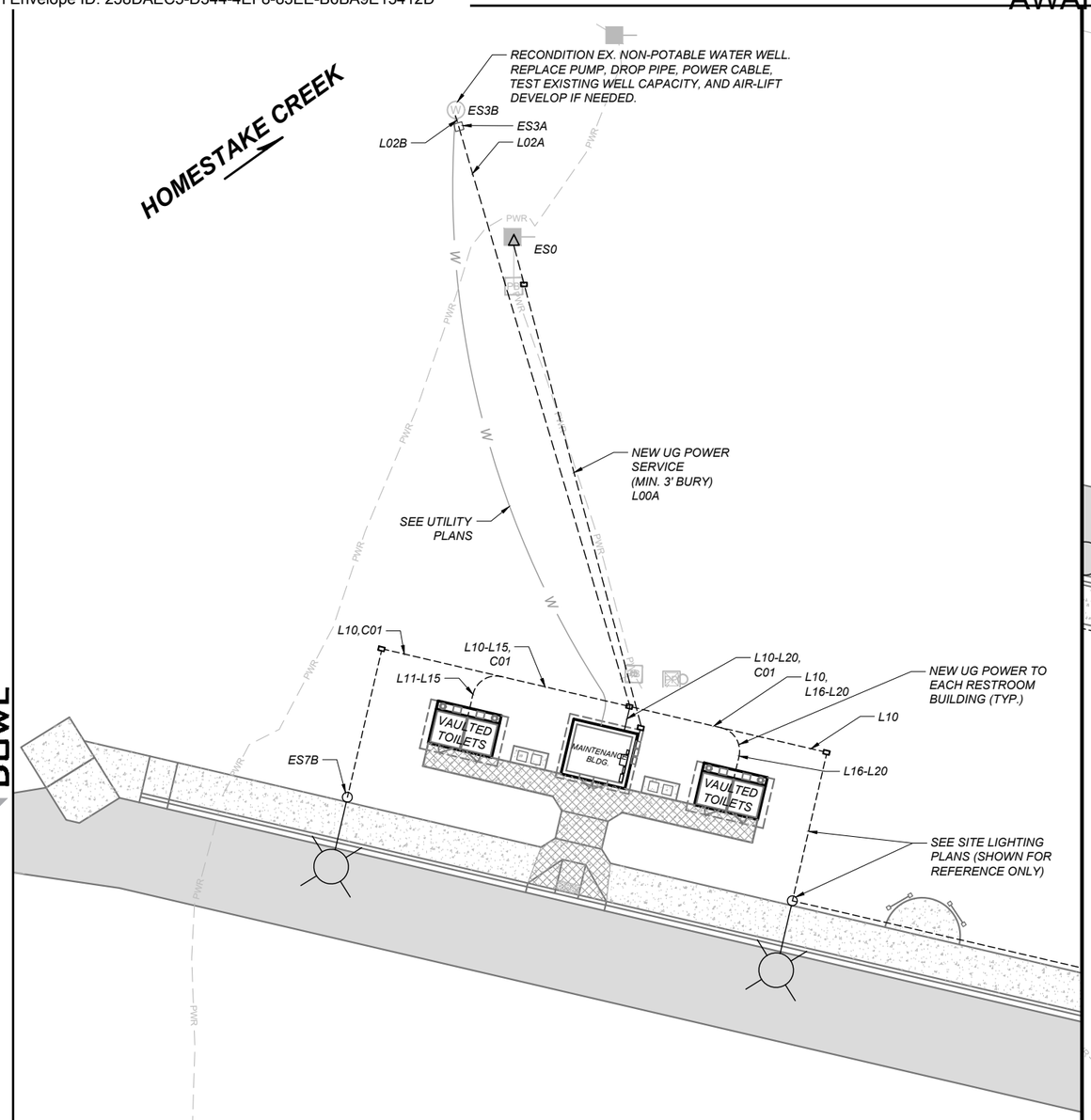
MONTANA
Department of Transportation

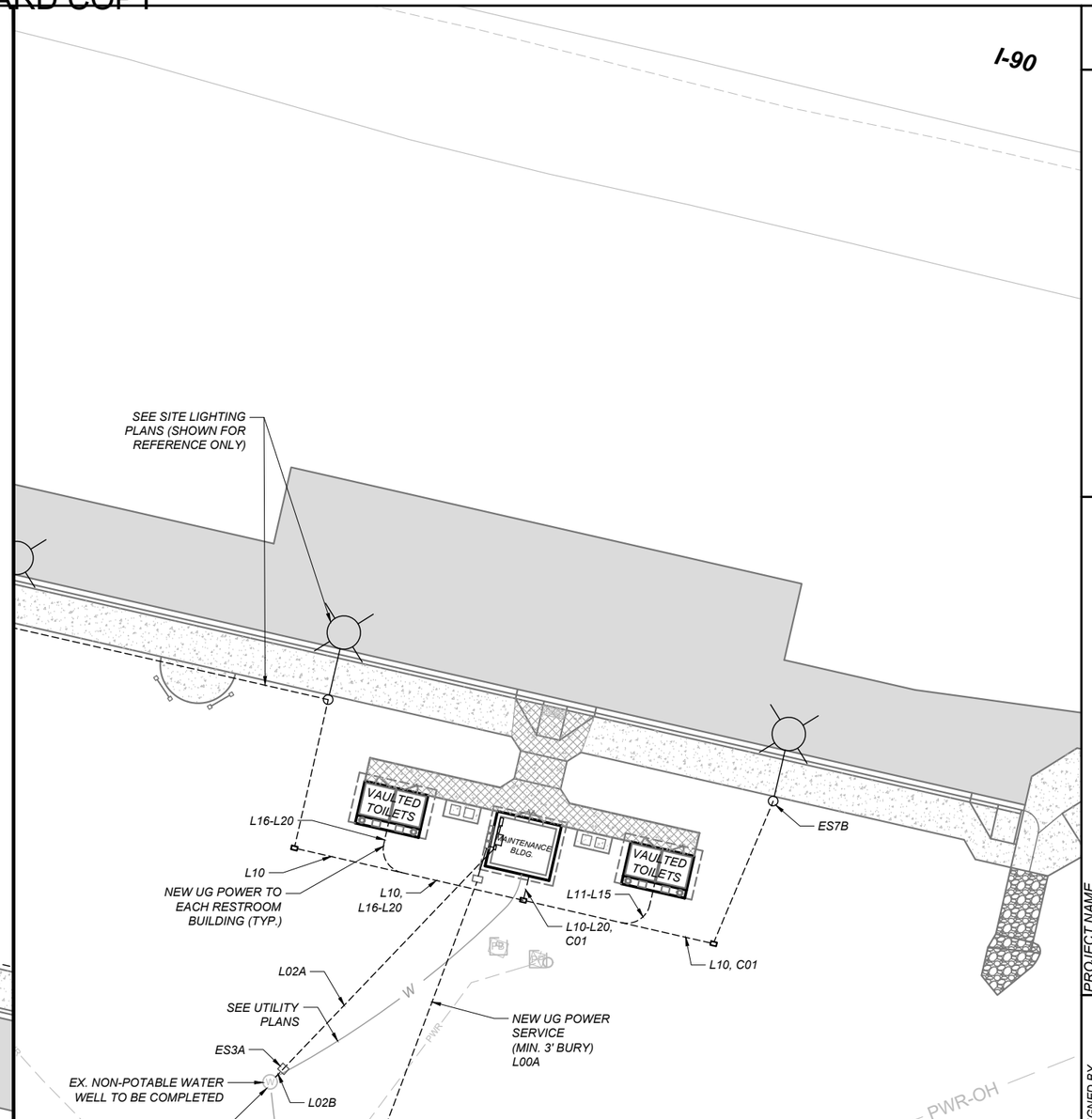
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KEY NOTES

HEATED SIDEWALK
(INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND CONNECT TO MAINTENANCE BUILDING)

SCALE: 1"=30'

SHEET NO.
E8

BUILDING PLAN

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

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MONTANA
Department of Transportation

ELECTRICAL PLANS

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DOWL

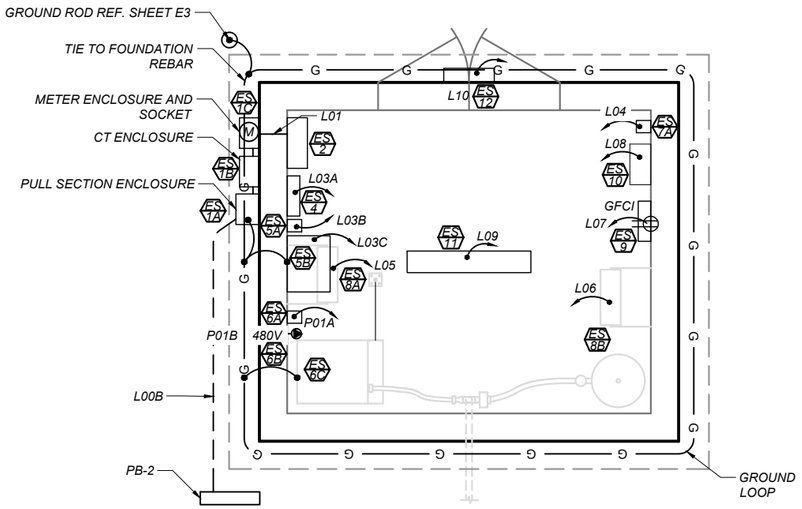
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AWARD COPY

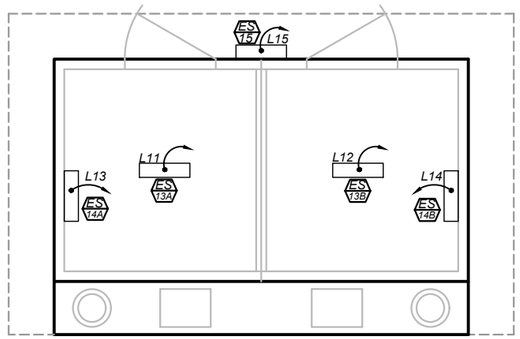
COORDINATE ALL INSTALLATIONS WITH SITE ELECTRICAL AND UTILITY PLANS

NOTE:

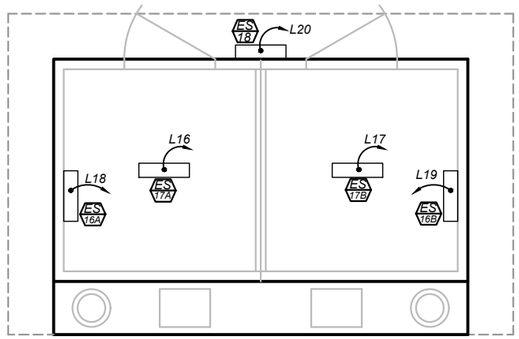
1. WESTBOUND AND EASTBOUND BUILDINGS ARE IDENTICAL.



MAINTENANCE BUILDING - PLAN VIEW
SCALE: NTS



VAULT TOILET 1 - PLAN VIEW
SCALE: NTS



VAULT TOILET 2 - PLAN VIEW
SCALE: NTS

BUILDING CONDUIT AND WIRE LIST

			CONDUIT			POWER		GROUND	
CONDUIT	FROM	TO	QTY	SIZE	TYPE	QTY	SIZE	SIZE	COMMENT
L00A	ES0 - NEW XFMR	PB-2 - PULLBOX				4	350MCM	#1	CONDUCTORS AND TERMINATIONS TO BE 90 DEGREES C RATED. CONDUIT TO BE SPECIFIED BY NWE
L00B	PB-2 - PULLBOX	ES1A - METER MAIN PULLBOX	1	3"	PVC-SCHED 40	4	350MCM	#1	CONDUCTORS AND TERMINATIONS TO BE 90 DEGREES C RATED
L01	ES1C - METER MAIN ENCLOSURE	ES2 - PANEL HP	1	3"	PVC-SCHED 40	4	350MCM	#1	CONDUCTORS AND TERMINATIONS TO BE 90 DEGREES C RATED
L02A	ES2 - PANEL HP	ES3A - DSX-1	1	2"	PVC-SCHED 40 / GRC	2	#10	#10	
L02B	ES3A - DSX-1	ES32B - 0.5HP PUMP	1	2"	PVC-SCHED 40 / GRC	2	#10	#10	
L03A	ES2 - PANEL HP	ES4 - PHASE CONVERTER	1	2"	PVC-SCHED 40 / GRC	4	#1	#4	DERATED DUE TO 4x WIRES IN CONDUIT
L03B	ES4 - PHASE CONVERTER	ES5A - DSX-2	1	1.5"	GRC	3	#2	#4	
L03C	ES5A - DSX-2	ES5B - 75kVA 240V - 480V, 3PH, 3W XFRM	1	1.5"	GRC	3	#2	#6	
L04	ES2 - PANEL HP	ES7A- AREA LIGHTS CONTROL PANEL	1	2"	GRC / PVC-SCHED 40	2	#10	#10	
C01	ES7A- AREA LIGHTS CONTROL PANEL	ES7B- MOUNT PHOTOELECTRIC CONTROL	1	2"	GRC	3	#14		
L05	ES2 - PANEL HP	ES8A - UNIT HEATER (MAINTENANCE SHOP)	1	2"	GRC	2	#10	#10	
L06	ES2 - PANEL HP	ES8B - UNIT HEATER (MAINTENANCE SHOP)	1	2"	GRC	2	#10	#10	
L07	ES2 - PANEL HP	ES9 - GFCI RECEPTACLE	1	2"	GRC	2	#10	#10	
L08	ES2 - PANEL HP	ES10 - SNOW MELT PANEL	1	2"	GRC	4	#1	#4	DERATED DUE TO 6x WIRES IN CONDUIT
L09	ES2 - PANEL HP	ES11 - INTERIOR LED LIGHT FIXTURE, MAINT BLDG	1	2"	GRC	2	#10	#10	
L10	ES2 - PANEL HP	ES12 - EXTERIOR LIGHTS - MAINT BLDG FIXTURE & AREA LIGHTS	1	2"	GRC	2	#10	#10	
L11	ES2 - PANEL HP	ES13A - INTERIOR LED LIGHT FIXTURE, VAULTED TOILET 1	1	2"	GRC	2	#10	#10	
L12	ES2 - PANEL HP	ES13B - INTERIOR LED LIGHT FIXTURE, VAULTED TOILET 1	1	2"	GRC	2	#10	#10	
L13	ES2 - PANEL HP	ES14A - UNIT HEATER, VAULTED TOILET 1	1	2"	GRC	2	#10	#10	
L14	ES2 - PANEL HP	ES14B - UNIT HEATER, VAULTED TOILET 1	1	2"	GRC	2	#10	#10	
L15	ES2 - PANEL HP	ES15 - EXTERIOR LED LIGHT FIXTURE, VAULTED TOILET 1	1	2"	GRC	2	#10	#10	
L16	ES2 - PANEL HP	ES16A - INTERIOR LED LIGHT FIXTURE, VAULTED TOILET 2	1	2"	GRC	2	#10	#10	
L17	ES2 - PANEL HP	ES16B - INTERIOR LED LIGHT FIXTURE, VAULTED TOILET 2	1	2"	GRC	2	#10	#10	
L18	ES2 - PANEL HP	ES17A - UNIT HEATER: VAULTED TOILET 2	1	2"	GRC	2	#10	#10	
L19	ES2 - PANEL HP	ES 17B - UNIT HEATER, VAULTED TOILET 2	1	2"	GRC	2	#10	#10	
L20	ES2 - PANEL HP	ES 18 - EXTERIOR LED LIGHT FIXTURE, VAULTED TOILET 2	1	2"	GRC	2	#10	#10	
P01A	ES5B - 75kVA 240V - 480V, 3PH, 3W XFRM	ES6A - DSX-3	1	1"	GRC	3	#6	#8	
P01B	ES6A - DSX-3	ES6B - 480V RECEPTACLE	1	1"	GRC	3	#6	#8	

NOTES:
1. PXX - 480V AND ABOVE CONDUCTOR AND CONDUIT RUN(S)
2. PB-X - PULLBOX
3. LXX - 120V, 208V, 240V CONDUCTOR AND CONDUIT RUN(S).
4. CXX - CONTROL CONDUCTOR AND CONDUIT RUN(S).
5. ES# - DESIGNATES ELECTRICAL EQUIPMENT SCHEDULE ITEM.

BUILDING ELECTRICAL EQUIPMENT SCHEDULE

THIS TABLE IS A SUMMARY DESCRIPTION ONLY THAT INCLUDES MAJOR ITEMS, BUT IS NOT ALL INCLUSIVE.
REFER TO TECHNICAL SPECIFICATIONS AND DRAWINGS FOR FULL REQUIREMENTS, OPTIONS, AND OTHER INFORMATION

ITEM	QTY	DESCRIPTION
ES1A	1	UNDERGROUND PULL ENCLOSURE II RATED FOR 800 AMPS, 600VAC SINGLE-PHASE NEMA 3R II 50K AIC II MILBANK PB-018 OR EQUAL.
ES1B	1	CT MOUNTING RACK WITH CT ENCLOSURE II RATED FOR 800-AMPS, 600VAC, SINGLE-PHASE, NEMA 3R II 50K AIC II MILBANK K4797 WITH CT244811-HC OR EQUAL.
ES1C	1	METER ENCLOSURE AND SOCKET II 7-TERMINAL BOLT-IN, 600VAC, 480A, 3-PH, EUSERC APPROVED, NEMA 3R II MILBANK UA4667-X-8062 OR EQUAL.
ES2	1	DISTRIBUTION PANELBOARD HP, 120/240V, 1PH, 3W, NEMA 1, 10KAIC WITH BREAKER SIZES AS SHOWN ON THE CONTRACT DOCUMENTS. EATON NQ84L6C OR EQUAL
ES3A	1	FUSED DISCONNECT SWITCH, 30-AMP, 240V, NEMA 3R, LOCKABLE, SQUARE D D221NRB OR EQUAL.
ES3B	1	PUMP, 230V, 1/2 HP. SEE CIVIL SHEETS.
ES4	1	PHASE CONVERTER II 240V 1-PH TO 240V 3-PH II BUILT-IN MOTOR STARTER II NEMA 1 II AMERICAN ROTARY PRO-LINE PL-80 OR EQUAL.
ES5A	1	FUSED DISCONNECT SWITCH, 200-AMP, 600V, 3PH, 3W, NEMA 1, SQUARE D VH364N OR EQUAL.
ES5B	1	DRY TYPE STEP-UP 75KVA TRANSFORMER II 240V 3PH DELTA TO 480V 3PH DELTA II ANSI, NEMA, IEEE STANDARDS.
ES6A	1	FUSED DISCONNECT SWITCH - 100-AMP, 600V, 3PH, 3W, NEMA 1, SIEMENS HF363 OR EQUAL
ES6B	1	RECEPTACLE, 480V 3-PH WITH GROUND II PROVIDE WITH WATERPROOF COVER.
ES6C	1	HOT WATER PRESSURE WASHER (HWPW), 2000 PSI, 6.2 HP, 55.2 FLA, 50-FT HOSE, HOTSEY #HWE-402009C
ES7A	1	AREA LIGHTS CONTROL PANEL, NEMA 3R, 8"x8"x6" WITH LOCKABLE COVER.
ES7B	1	MOUNT PHOTOELECTRIC CONTROL, TWISTLOCK TYPE
ES8A	1	UNIT HEATER, 240V, 1-PH, TEMP RANGE -40 TO 90-DEF F, CFM=210, WITH BUILT-IN TEMPERATURE CONTROL, QMARK MUH35 OR EQUAL.
ES8B	1	UNIT HEATER, 240V, 1-PH, TEMP RANGE -40 TO 90-DEF F, CFM=210, WITH BUILT-IN TEMPERATURE CONTROL, QMARK MUH35 OR EQUAL.
ES9	1	120V, 20-AMP DUPLEX RECEPTACLE, GFCI, WEATHER RESISTANT, WITH COVER. LEVITON OR EQUAL.
ES10	1	SNOW MELT PANEL, REFER TO SNOW MELT SYSTEM DRAWINGS.
ES11	1	LED LIGHT FIXTURE, 120V, CEILING MOUNT, VANDAL RESISTANT, WITH BUILT-IN OCCUPANCY SENSOR.. REFER TO FIXTURE SCHEDULE.
ES12	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT, WITH BUILT-IN PE CELL.. REFER TO FIXTURE SCHEDULE.
ES13A	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT, WITH BUILT-IN OCCUPANCY SENSOR.. REFER TO FIXTURE SCHEDULE.
ES13B	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT, WITH BUILT-IN OCCUPANCY SENSOR.. REFER TO FIXTURE SCHEDULE.
ES14A	1	UNIT HEATER, 240V, 1-PH, TEMP RANGE -40 TO 90-DEF F, CFM=210, WITH BUILT-IN TEMPERATURE CONTROL, QMARK MUH35 OR EQUAL.
ES14B	1	UNIT HEATER, 240V, 1-PH, TEMP RANGE -40 TO 90-DEF F, CFM=210, WITH BUILT-IN TEMPERATURE CONTROL, QMARK MUH35 OR EQUAL.
ES15	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT WITH BUILT-IN PE CELL. REFER TO FIXTURE SCHEDULE.
ES16A	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT, WITH BUILT-IN OCCUPANCY SENSOR.. REFER TO FIXTURE SCHEDULE.
ES16B	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT, WITH BUILT-IN OCCUPANCY SENSOR.. REFER TO FIXTURE SCHEDULE.
ES17A	1	UNIT HEATER, 240V, 1-PH, TEMP RANGE -40 TO 90-DEF F, CFM=210, WITH BUILT-IN TEMPERATURE CONTROL, QMARK MUH35 OR EQUAL.
ES17B	1	UNIT HEATER, 240V, 1-PH, TEMP RANGE -40 TO 90-DEF F, CFM=210, WITH BUILT-IN TEMPERATURE CONTROL, QMARK MUH35 OR EQUAL.
ES18	1	LED LIGHT FIXTURE, 120V, WALL MOUNT, VANDAL RESISTANT WITH BUILT-IN PE CELL. REFER TO FIXTURE SCHEDULE.

NOTES:
1. CONTRACTOR TO COORDINATE EQUIPMENT SCHEDULE QUANTITIES WITH ALL DRAWINGS AND NOTIFY ENGINEER IF DISCREPANCIES EXIST.
2. WESTBOUND AND EASTBOUND BUILDINGS ARE IDENTICAL.

DOWL

SHEET NO.
E9

BUILDING DETAIL

PROJECT NAME: HOMESTAKE PASS PARKING AREA
COUNTY: JEFFERSON COUNTY
PROJECT ID: IM 90-5(96)233
UPN: 10327000

DESIGNED BY	DATE	REVIEWED BY	DATE	CHECKED BY	DATE
K. KING	03/2025	S. PATTERSON	03/2025	D. OTO	03/2025

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MONTANA
Department of Transportation

ELECTRICAL PLANS

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NOTE:
1. USE GFCI BREAKER

PANEL HP SCHEDULE

LOCATION:	MAINTENANCE BLDG				MAIN BKR:	**600A**			
VOLTAGE:	240V				SYSTEM:	**1-PH, 3W**			
TRIM:	Surface				BUS RATING:	**600A**			
				LINE LOADS					
CKT	LOAD	VA	CB	L1	L2	CB	VA	LOAD	CKT
1	HOT WATER PRESSURE WASHER (NOTE 1)	23000	250/2	43800		250/2	20800	SIDEWALK HEATING SYSTEM	2
3		23000			43800		20800		4
5	SITE LIGHTS	190	20/2	244.3		20/1	54.3	RESTROOM 1A LIGHTS	6
7		190			244.3	20/1	54.3	RESTROOM 1B LIGHTS	8
9	RESTROOM HEATER 1A	1250	20/2	1304.3		20/1	54.3	RESTROOM 2A LIGHTS	10
11		1250			1304.3	20/1	54.3	RESTROOM 2B LIGHTS	12
13	RESTROOM HEATER 1B	1250	20/2	1304.3		20/1	54.3	MAINTENANCE BLDG LIGHT	14
15		1250			3750	30/2	2500	MAINTENANCE BLDG HEATER 1	16
17	RESTROOM HEATER 2A	1250	20/2	3750			2500		18
19		1250			3750	30/2	2500	MAINTENANCE BLDG HEATER 2	20
21	RESTROOM HEATER 2B	1250	20/2	3750			2500		22
23		1250			1430	20/1	180	MAINTENANCE BLDG GFCI RECEPTACLE	24
25	EXT WALL LIGHT - RESTROOM 1	100	20/1	300		20/1	200	EXT WALL LIGHT - MAINTENANCE BLDG	26
27	EXT WALL LIGHT - RESTROOM 2	100	20/1		772	20/2	672	0.5HP PUMP	28
29	SPACE			672			672		30
31	SPACE				0			SPACE	32
33	SPACE			0				SPACE	34
35	SPACE				0			SPACE	36
37	SPACE			0				SPACE	38
39	SPACE				0			SPACE	40
41	SPACE			0				SPACE	42
				55125 VA	55051 VA	110.2 KVA		459.1 A	

BUILDING FIXTURE SCHEDULE

TYPE	QUANTITY	DESCRIPTION	MOUNTING	WATTS / VOLTS	MANUFACTURER / MODEL	REMARKS
A	4	RESTROOM INTERIOR LIGHT	WALL	54.3	LUMINAIRE LED SUPERNOVA LVP751, NODIM, 50W,40K, MVOLT, CLP, WHT, EM310, SB, WL, OCC	VANDAL-RESISTANT; 49" I X 8.56" W X 3.88" H
B	3	RESTROOM & UTILITY BLDG EXTERIOR LIGHT	WALL	10	LUMINAIRE LED BLADE BLD, 12IN,MIN1, 10W, 35K, MVOLT, DP, BRZ, EMB310, PC	VANDAL-RESISTANT; 20" I X 5.6" W X 2.4" H
C	1	UTILITY BLDG INTERIOR LIGHT	CEILING	54.3	LUMINAIRE LED SUPERNOVA LVP751, NODIM, 50W,40K, MVOLT, CLP, WHT, EM310, SB, WL, OCC	VANDAL-RESISTANT; 49" I X 8.56" W X 3.88" H

DOWL

SHEET NO.
E10

PANEL & BUILDING FIXTURE SCHEDULES

PROJECT NAME HOMESTAKE PASS PARKING AREA
COUNTY JEFFERSON COUNTY
PROJECT ID IM 90-5(96)233
UPN 10327000

DESIGNED BY	K. KING	03/2025
REVIEWED BY	S. PATTERSON	03/2025
CHECKED BY	D. OTO	03/2025

MONTANA Department of Transportation

ELECTRICAL PLANS

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