YELLOW BAY STATE PARK SITE IMPROVEMENTS

LAKE COUNTY, MONTANA

BID SET

NOT FOR CONSTRUCTION

LEGEND-EXISTING

- SUBJECT PROPERTY BOUNDARY
- PUBLIC RIGHT-OF-WAY LINE
- LOT/TRACT/PARCEL LINE
- EXTERIOR BUILDING WALL LINE
- CONCRETE SIDEWALK
- ASPHALT
- GRAVEL SURFACING
- EDGE OF ASPHALT
- PIN DOWN CURB
- EDGE OF GRAVEL
- W — WATER MAIN
- S — SEWER MAIN
- AP — AERIAL POWER LINE
- AT — AERIAL COMMUNICATIONS LINE
- T — BURIED COMMUNICATIONS LINE
- X — X — FENCE
- D — D — D — DRAIN PIPE
- HWM — HIGHWATER MARK
- SHORELINE PROTECTION ZONE
- CULVERT
- CONTOUR (1 FOOT INTERVAL)
- YARD HYDRANT
- WELL
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- ELEC — ELECTRIC PEDESTAL
- ET — ELECTRIC TRANSFORMER
- TEL — COMMUNICATIONS PEDESTAL
- IRR — IRRIGATION CONTROL VALVE
- EVERGREEN TREE (SIZE AS NOTED)
- DECIDUOUS TREE (SIZE AS NOTED)
- MB — MAIL BOX
- SIGN/"SIGN TEXT"
- SURVEY MONUMENT
- CONTROL POINT

LEGEND-PROPOSED

- CURB AND GUTTER
- EDGE OF ASPHALT
- 4" THICK CONCRETE SIDEWALK
- ASPHALT
- GRAVEL SURFACING
- W — WATER LINE
- Y — WATER HYDRANT
- WATER VALVE
- S — SANITARY SEWER LINE
- CO — SEWER CLEANOUT
- HC — HOST CONNECTION
- E — BURIED ELECTRIC LINE
- C — C — CONDUIT
- UTILITY PEDESTAL LOCATION
- GUARD RAIL
- X — X — FENCE
- CULVERT
- SIGN
- DRAINAGE SUMP
- CURB INLET MANHOLE
- D — D — D — DRAIN PIPE
- CUT OFF TRENCH
- SPEED HUMP
- PROPOSED VAULT LATRINE
- GATE
- CULVERT OUTFALL ENERGY DISSIPATION

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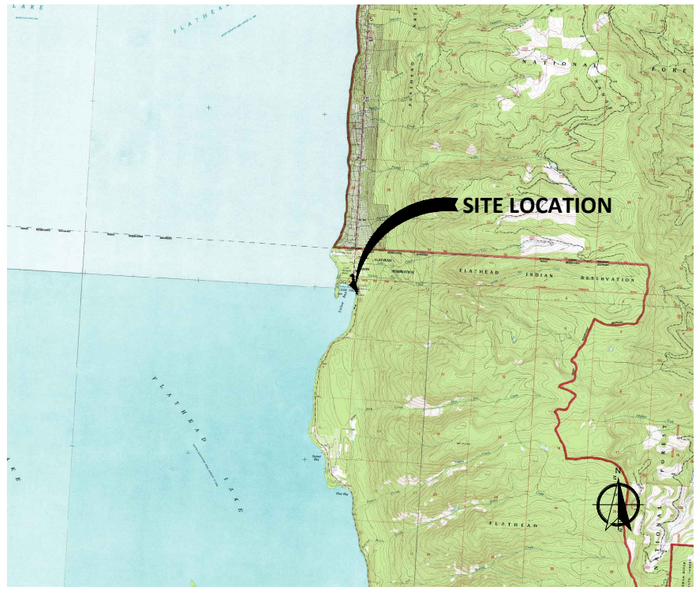
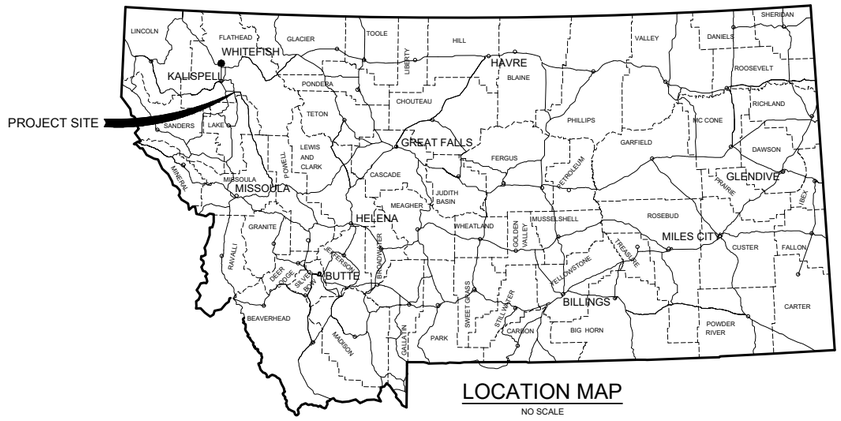


VICINITY MAP
NO SCALE

GENERAL NOTES

1) ALL WORK SHALL CONFORM TO THE MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS, SEVENTH EDITION, APRIL 2021 AS AMENDED BY THE SPECIAL PROVISIONS IN THE PROJECT MANUAL.
2) CONTRACTOR SHALL FIELD VERIFY THE LOCATION, SIZE, AND DEPTH OF ALL UTILITIES INCLUDING ALL SERVICES TO ALL PROPERTIES. THESE DRAWINGS MAY NOT SHOW ALL FACILITIES. THE DEPTHS OF ALL EXISTING UTILITIES ARE UNKNOWN. BURIED UTILITIES SHOWN ON THIS SITE ARE BASED ON AVAILABLE RECORDS AND UTILITY LOCATOR PAINT MARKS. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.
3) CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FROM LAKE COUNTY, STATE OF MONTANA, CSKT, EPA, AND UTILITY COMPANIES PRIOR TO STARTING WORK.
4) ALL MATERIALS AND WORKMANSHIP OF IMPROVEMENTS SHALL MEET OR EXCEED STATE AND LOCAL REGULATIONS. WHERE THERE IS A CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARD, THE HIGHER QUALITY STANDARD SHALL APPLY.
5) CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO BIDDING THE PROJECT AND BEGINNING CONSTRUCTION.
6) THE CONTRACTOR SHALL FILL OUT AND SUBMIT ALL THE REQUIRED PAPERWORK AND PAY FEES FOR THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO BE IN COMPLIANCE WITH THE EPA REQUIREMENTS.



LOCATION MAP
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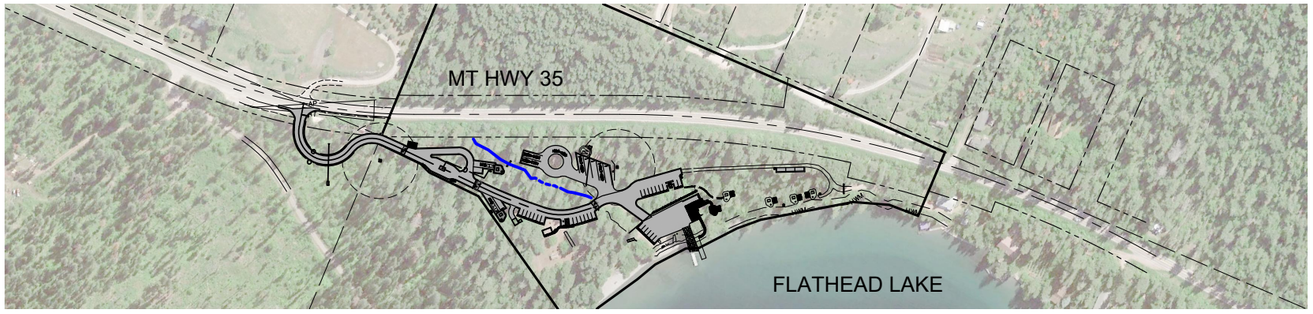

PROJECT OVERVIEW

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SCALE - FEET

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MONTANA FISH, WILDLIFE & PARKS
196

Yellow Bay State Park - FWP #7216212
Cover Sheet

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 1 of 30

GENERAL NOTES - EXISTING CONDITIONS:

1. NOT ALL EXISTING SITE CONDITIONS AND ELEMENTS ARE SHOWN ON DRAWING. CONTRACTOR TO VISIT SITE AND FAMILIARIZE THEMSELVES WITH NEW CONSTRUCTION PLANS FOR ALL REQUIRED DEMOLITION. DRAWINGS ARE DIAGRAMMATIC.
2. EXISTING UNDERGROUND INSTALLATIONS AND PRIVATE UTILITIES SHOWN ARE FROM THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN. ACCURACY OF SUCH INFORMATION IS NOT GUARANTEED AND SHALL BE VERIFIED BY THE CONTRACTOR. SERVICE LINES (i.e. WATER, POWER, SEWER, GAS, COMMUNICATIONS, DATA, IRRIGATION) MAY NOT BE BURIED AT EVEN DEPTHS OR AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL NOTIFY EACH UTILITY COMPANY PRIOR TO EXCAVATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY LOCATES.THESE DRAWINGS MAY NOT SHOW ALL FACILITIES WITHIN THE PROJECT LIMITS. PRIVATE LOCATES WERE COMPLETED BY ROCKY MOUNTAIN RADAR ON JUNE 3, 2024 AND ARE SHOWN ON THESE PLANS.
3. ALL POWER, TELEPHONE, AND OTHER UTILITIES WHICH ARE NOT PLANNED TO BE RELOCATED, WHICH INTERFERE WITH THE CONSTRUCTION, SHALL BE REMOVED OR RELOCATED BY THE UTILITY COMPANY. THE CONTRACTOR SHALL COORDINATE THE WORK WITH THE APPROPRIATE UTILITY COMPANY.
4. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.

SURFACE RESTORATION NOTES:

1. RESTORE ALL DISTURBED AREAS WITH GRASS SEED. PROVIDE NATIVE FOREST MIX: 40% MOUNTAIN BROME, 35% BLUEBUNCH WHEATGRASS, 15% WESTERN WHEATGRASS, AND 10% ROUGH FESCUE. BROADCAST SEED AT 25-30 LBS PER ACRE. SEEDING TO OCCUR BETWEEN OCTOBER 15 AND MAY 15 TO ALLOW ESTABLISHMENT FROM NATURAL PRECIPITATION. PROVIDE A MINIMUM 6" DEPTH OF TOPSOIL FOR ALL AREAS TO RECEIVE SEED. TOPSOIL TO BE GENERATED FROM ONSITE EXCESS.
2. ALL DISTURBED AND GRADED AREAS THAT DO NOT HAVE OTHER PLANNED FINISH SURFACES SHALL BE FINISHED WITH A MINIMUM OF 6" OF TOPSOIL GENERATED FROM THE SITE. TOPSOIL MAY BE THICKER, IF APPROVED BY THE ENGINEER, TO WASTE EXCESS TOPSOIL. TOPSOIL SHALL BE UNIFORMLY GRADED AND RAKED PRIOR TO SEEDING.

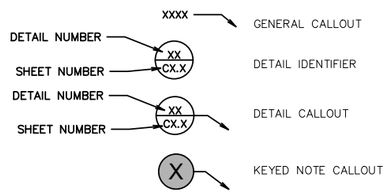
SURVEY NOTES:

1. BASIS OF BEARINGS:
   GRID NORTH OF MONTANA STATE PLANE COORDINATE SYSTEM (FIPS2500) – NAD83(2011)(EPOCH: 2010.0000)
2. VERTICAL DATUM:
   NORTH AMERICAN VERTICAL DATUM OF 1988
3. HORIZONTAL DATUM:
   MONTANA STATE PLANE COORDINATE SYSTEM (FIPS2500) – NAD83(2011)
   (EPOCH: 2010.0000) PROJECTED TO GROUND

MDT APPROACH PERMIT:

1. ALL ITEMS WITHIN THE MT-35 RIGHT OF WAY SHALL MEET MDT SPECIFICATIONS. ALL WORK WITHIN THE MT-35 RIGHT OF WAY IS SUBJECT TO THE MDT PUBLICATIONS INCLUDING MDT'S DETAILED DRAWING MANUAL AND MDT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION MANUAL.
2. OWNER HAS OBTAINED MDT APPROACH PERMIT. DESIGN REFLECTS CONDITIONS OF APPROVAL WHICH ARE INCLUDED IN THE PROJECT MANUAL.
3. CONTRACTOR MUST SUBMIT A TRAFFIC CONTROL PLAN TO MDT PRIOR TO START OF WORK ON APPROACH.

SYMBOLS



GENERAL NOTES - SITE GRADING:

1. GRADING AND SLOPE INFORMATION PRESENTED ON THESE PLANS IS BASED ON DESIGN GRADES AND BEST AVAILABLE MAPPING INFORMATION. EXISTING ELEVATIONS AT TIE IN POINTS AND AS-CONSTRUCTED FINISH FLOOR ELEVATIONS SHALL BE VERIFIED PRIOR TO INSTALLATION OF EXTERIOR IMPROVEMENTS. NOTIFY ENGINEER IF DIFFERENT CONDITIONS ARE FOUND. CONTRACTOR RESPONSIBLE FOR ENSURING POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS. CONTRACTOR ALSO RESPONSIBLE FOR ADA COMPLIANCE FOR APPLICABLE CONSTRUCTED IMPROVEMENTS.
2. WHERE NEW CURB AND GUTTER, ASPHALT OR CONCRETE SURFACE IS BEING CONSTRUCTED ADJACENT TO EXISTING ASPHALT OR CONCRETE PAVEMENT, THE FOLLOWING SHALL APPLY: PRIOR TO PLACEMENT OF ANY SURFACE IMPROVEMENTS THE CONTRACTOR SHALL HAVE ENGINEER VERIFY THE GRADE AND CROSS SLOPE OF EXISTING SURFACE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY SECTION WHICH DOES NOT CONFORM TO THE DESIGN OR TYPICAL CROSS SECTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR NEW IMPROVEMENT CONSTRUCTION WITHOUT THE APPROVAL OF THE ENGINEER.
3. THIS PLAN IS TO BE USED TO ASSIST THE CONTRACTOR IN HORIZONTAL LOCATION DURING THE STAKING AND LAYOUT. IF THE CONTRACTOR DISCOVERS ANY DISCREPANCY BETWEEN THE GIVEN DATA AND THE INTENT AS SHOWN BY THE DRAWING, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR CLARIFICATION.
4. ENSURE ALL SURFACES ADJACENT TO BUILDING ARE GRADED AND FINISHED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE BUILDING FOUNDATION AND EXTERIOR WALLS.
5. ENSURE HARDSCAPE AND/OR LANDSCAPE SURFACES SURROUNDING DRAINAGE INLETS PROVIDE POSITIVE DRAINAGE TOWARDS THE INLET.
6. ENSURE ACCESSIBLE PARKING SPACES ARE IN COMPLIANCE WITH ADA STANDARDS. ENSURE ALL SLOPES ARE LESS THAN 2% IN ALL DIRECTIONS.
7. ENSURE ACCESSIBLE ROUTE TO BUILDINGS COMPLY WITH ALL ADA REQUIREMENTS: LANDING AREAS-LESS THAN 2% SLOPE IN ALL DIRECTIONS, OTHER AREAS-LESS THAN 5% RUNNING SLOPE AND LESS THAN 2% CROSS SLOPE.

ABBREVIATIONS

ø	DIAMETER
@	AT
AB	ANCHOR BOLT, AGGREGATE BASE
AC	ASBESTOS CEMENT
AFF	ABOVE FINISHED FLOOR
AL	ALUMINUM
ANC	ANCHOR
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
APPROX	APPROXIMATELY
AWWA	AMERICAN WATER WORKS ASSOCIATION
BF	BLIND FLANGE
BFF	BELOW FINISH FLOOR
BFV	BUTTERFLY VALVE
BLDG	BUILDING
BM	BENCH MARK
BOC	BACK OF CURB
BV	BALL VALVE
BVC	BEGIN VERTICAL CURVE
C	CHANNEL, CENTER
CI	CAST IRON, CURB INLET
CIP	CAST IRON PIPE, CAST-IN-PLACE
CIPP	CURED-IN-PLACE PIPE
℄, CL	CENTERLINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
CP	CONTROL POINT
CPE	CORRUGATED POLYETHYLENE PIPE
CPLG	COUPLING
CPVC	CHLORINATED POLYVINYL CHLORIDE
CSP	CORRUGATED STEEL PIPE
CV	CHECK VALVE
CY	CUBIC YARDS
DEPT	DEPARTMENT
BLS	DRILL HOLE (SOIL BORING)
DI	DUCTILE IRON, DRAIN INLET
DIA	DIAMETER
DIMJ	DUCTILE IRON MECHANICAL JOINT
DIP	DUCTILE IRON PIPE
DR	DRAIN, DIMENSION RATIO
DWG	DRAWING
EA	EACH
EFF	EFFLUENT
ELEV	ELEVATION
EVC	END VERTICAL CURVE
EW	EACH WAY
EXT	EXTERIOR
EXIST	EXISTING
FAB	FABRICATION
FC	FLEXIBLE COUPLING
FCA	FLANGED COUPLING ADAPTER
FDN	FOUNDATION
FETS	FLARED END TERMINAL SECTION
FF	FINISHED FLOOR
FG	FINISH GRADE
FL	FLOOR, FLANGE, FLOW LINE
FM	FORCE MAIN
FO	FIBER OPTIC
FOC	FACE OF CURB, FACE OF CONCRETE
FPT	FEMALE PIPE THREAD
FTG	FOOTING
FT	FOOT, FEET
G	GAS
GA	GAUGE
GALV	GALVANIZED
GPM	GALLONS PER MINUTE
GSP	GALVANIZED STEEL PIPE
GV	GATE VALVE
HD	HEAVY DUTY; HOT-DIPPED
HDR	HEADER
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HGT	HEIGHT
HT	HEIGHT
HYD	FIRE HYDRANT
IBC	INTERNATIONAL BUILDING CODE
ID	INSIDE DIAMETER
IN	INCH
INFL	INFLUENT
INT	INTERIOR, INTERSECTION
INV	INVERT
LB(S)	POUND(S)
LF	LINEAL FOOT, LINEAR FEET
LT	LEFT
MAX	MAXIMUM
MC	MECHANICAL COUPLING
MDT	MONTANA DEPT. OF TRANSPORTATION
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM, MINUTE
MJ	MECHANICAL JOINT
MPWSS	MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS
N	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NPT	NATIONAL PIPE THREAD
NTS	NOT TO SCALE
OAL	OVERALL LENGTH
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE, OVERFLOW
OH	OVERHEAD POWER
PC	POINT OF CURVATURE
PE	PLAIN END
PH	PHONE
PL	PROPERTY LINE, PLATE
PI	POINT OF INTERSECTION
PROP	PROPERTY, PROPOSED
PSI	POUNDS PER SQUARE INCH
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE PLASTIC
PVI	POINT OF VERTICAL INTERSECTION
R	RADIUS
RCB	REINFORCED CONCRETE BOX
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT-OF-WAY
RT	RIGHT
RW	RIGHT-OF-WAY. RACEWAY
R/W	RIGHT-OF-WAY
S	SLOPE
SCH	SCHEDULE
SD	STORM DRAIN
SDR	STANDARD DIMENSION RATIO
SECT	SECTION
SF	SQUARE FOOT/FEET
SS	SANITARY SEWER, STAINLESS STEEL
STA	STATION
STD	STANDARD
STL	STEEL, STEEL PIPE
T	TELEPHONE
TBC	TOP OF BACK CURB
TBM	TEMPORARY BENCH MARK
TEMP	TEMPERATURE, TEMPORARY
TOW	TOP OF WALL
TP	TEST PIT
TV	CABLE TELEVISION
TYP	TYPICAL
UG	UNDERGROUND
UGP	UNDERGROUND POWER
UPC	UNIFORM PLUMBING CODE
V	VENT, VOLT, VALVE
VERT	VERTICAL
VLV	VALVE
W	WATER, WEST
W/	WITH
w/o	WITHOUT
WS	WATER SURFACE, WATER STOP
wv	WATER VALVE
WWF	WELDED WIRE FABRIC
X	USED AS A VARIABLE
YD	YARD

811 Know what's **below.** **Call** before you dig.

CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

WGM GROUP, INC. ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

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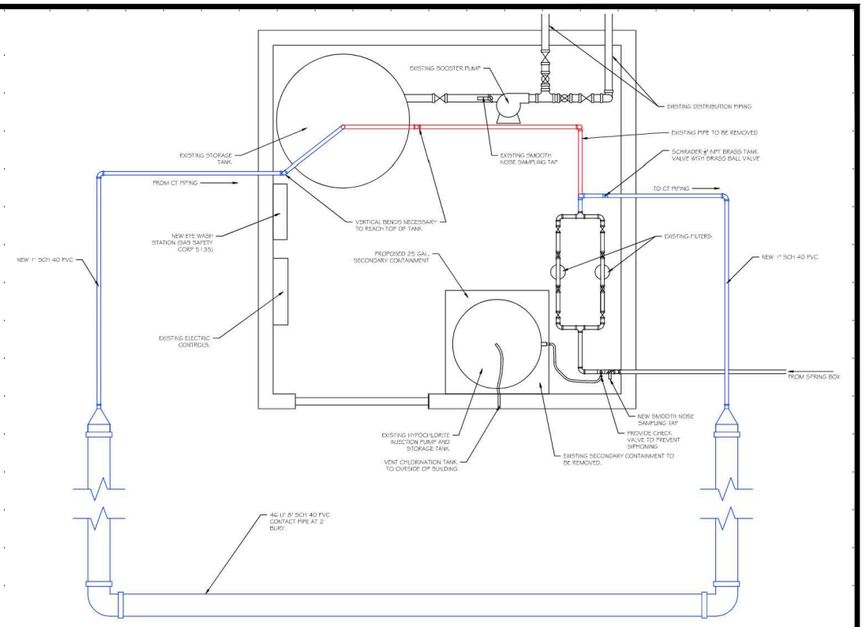
MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
General Notes and Symbols

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 2 of 30



1/3 EXISTING PUMP HOUSE PIPING DETAIL

LEGEND-EXISTING

- SUBJECT PROPERTY BOUNDARY
- PUBLIC RIGHT-OF-WAY LINE
- LOT/TRACT/PARCEL LINE
- EXTERIOR BUILDING WALL LINE
- CONCRETE SIDEWALK
- ASPHALT
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- IRRIGATION CONTROL VALVE
- EVERGREEN TREE (SIZE AS NOTED)
- DECIDUOUS TREE (SIZE AS NOTED)
- MAIL BOX
- SIGN"SIGN TEXT"
- SURVEY MONUMENT
- CONTROL POINT
- LEGAL ACCESS FOR EXISTING RESIDENCE SOUTH OF THE STATE PARK. ACCESS PASSABLE FOR PASSENGER AND EMERGENCY VEHICLES TO BE MAINTAINED DURING CONSTRUCTION.

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SCALE - FEET

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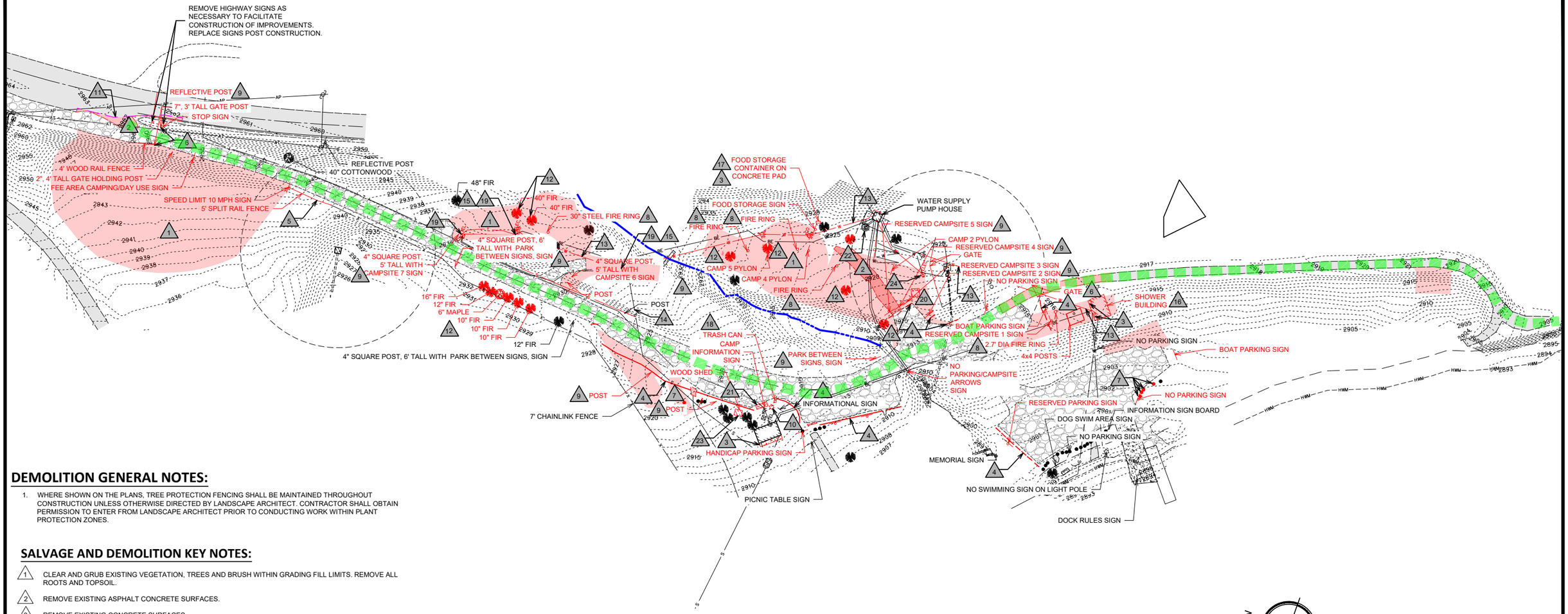
Yellow Bay State Park - FWP #7216212
Existing Conditions

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 3 of 30



DEMOLITION GENERAL NOTES:

1. WHERE SHOWN ON THE PLANS, TREE PROTECTION FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNLESS OTHERWISE DIRECTED BY LANDSCAPE ARCHITECT. CONTRACTOR SHALL OBTAIN PERMISSION TO ENTER FROM LANDSCAPE ARCHITECT PRIOR TO CONDUCTING WORK WITHIN PLANT PROTECTION ZONES.

SALVAGE AND DEMOLITION KEY NOTES:

1. CLEAR AND GRUB EXISTING VEGETATION, TREES AND BRUSH WITHIN GRADING FILL LIMITS. REMOVE ALL ROOTS AND TOPSOIL.
2. REMOVE EXISTING ASPHALT CONCRETE SURFACES.
3. REMOVE EXISTING CONCRETE SURFACES.
4. REMOVE EXISTING PIN DOWN CURBS. SALVAGE FOR OWNER REUSE.
5. REMOVE EXISTING FENCE, POSTS AND BASES.
6. REMOVE EXISTING GATE, POSTS AND BASES, SALVAGE FOR OWNER USE.
7. REMOVE BOLLARD POST.
8. REMOVE FIRE RING, SALVAGE FOR OWNER USE.
9. REMOVE EXISTING SIGN, POLE AND BASE. SALVAGE AND RESET AFTER CONSTRUCTION.
10. REMOVE EXISTING LIGHT POLE AND BASE. SALVAGE FOR OWNER REUSE.
11. ASPHALT CUT LINE.
12. REMOVE TREE AND ROOTS. REMOVAL SHALL INCLUDE COMPLETE REMOVAL OF STUMP AND ROOTS AND FILLING IN DEPRESSION WITH SUITABLE SOIL FILL.
13. ABANDON WATER SERVICE IN PLACE. EXPOSE WATER SERVICE AND CAP END WITH A RESTRAINED FITTING.
14. ABANDON SEWER SERVICE IN PLACE. EXPOSE SEWER SERVICE AND CAP END WITH SECURE FITTING COMPATIBLE WITH EXISTING PIPE MATERIAL.
15. REMOVE EXISTING UTILITY PEDESTAL. COORDINATE SHUT OFF AND REMOVAL WITH UTILITY COMPANY.
16. REMOVE CINDER BLOCK BUILDING IN ITS ENTIRETY, INCLUDING ROOF, FOUNDATION, WALLS, INTERNAL COMPONENTS AND UTILITY SERVICES. COORDINATE WITH FWP PERSONNEL FOR ALL UTILITY SHUT OFFS PRIOR TO REMOVAL.
17. REMOVE FOOD STORAGE SIGN AND CONTAINER AND SALVAGE FOR REUSE. REMOVE CONCRETE PAD AND RESTORE SURROUNDING AREA TO MATCH EXISTING.
18. REMOVE TRASH CAN AND SALVAGE FOR REUSE. RESET IN LOCATION DETERMINED BY THE OWNER.
19. ABANDON WATER, SEWER, POWER AND TV RV HOOKUPS. COORDINATE WITH FWP AND UTILITY COMPANY FOR SHUT OFF PRIOR TO ABANDONMENT. REMOVE ALL ABOVE GROUND FEATURES.
20. REMOVE EXISTING VAULT TOILET, INCLUDING BUILDING AND HOLDING VAULT. PUMP VAULT BEFORE REMOVAL AND DISPOSE OF WASTED OFFSITE. BACKFILL VOID LEFT FROM REMOVING VAULT AND COMPACT TO 98% MAXIMUM THEORETICAL DENSITY.
21. REMOVE AND SALVAGE KIOSK FOR RESETTING WHERE NOTED ON THE PLANS. REMOVE CONCRETE AND KIOSK FOOTINGS.
22. EXISTING WELL TO BE ABANDONED IN ACCORDANCE WITH MONTANA ADMINISTRATIVE RULE 36.21.670. CUT AND REMOVE CASING A MINIMUM OF 3' BELOW FINISH GRADE.COMPLETELY FILL WELL CASING WITH SEALING MATERIAL TO WITHIN 3' OF THE SURFACE.
23. REMOVE AND SALVAGE FIREWOOD SHED. REINSTALL IN LOCATION SHOWN ON THE PLANS.
24. REMOVE EXISTING ELECTRICAL LINE TO EXISTING JUNCTION BOX SERVING THE EXISTING SPRING BOX PUMP. ELECTRICAL LINE FROM JUNCTION BOX TO PUMP TO REMAIN AND BE REUSED.

LEGEND-DEMOLITION

SCHEMATIC DEMO ITEMS SHOWN IN RED

LEGAL ACCESS FOR EXISTING RESIDENCE SOUTH OF THE STATE PARK. ACCESS PASSABLE FOR PASSENGER AND EMERGENCY VEHICLES TO BE MAINTAINED DURING CONSTRUCTION.

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SCALE - FEET

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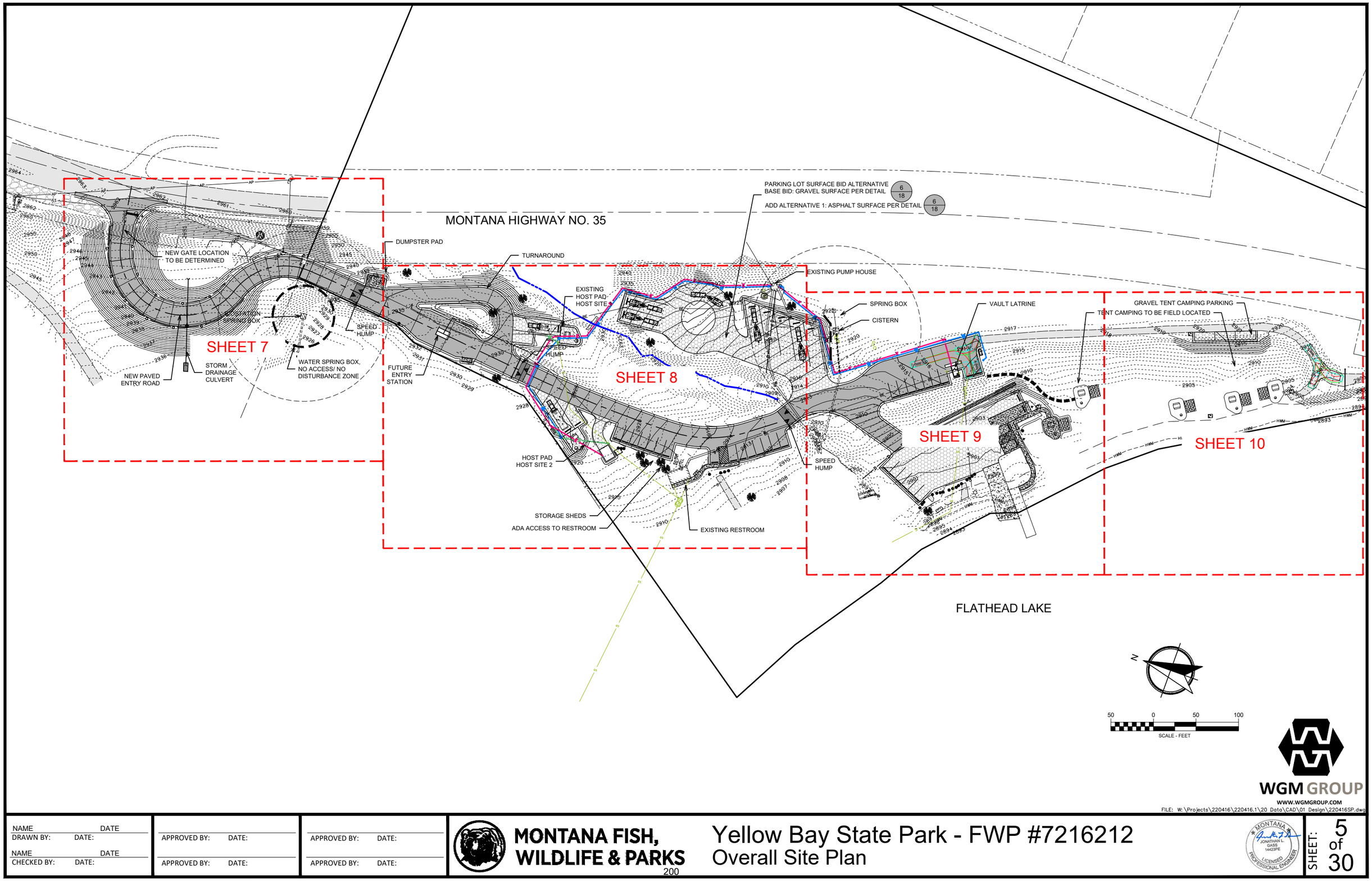
MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Demolition plan

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 4 of 30



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MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 5 of 30

SITE IMPROVEMENTS KEY NOTES:

1. MATCH EXISTING ASPHALT. PROVIDE CLEAN FACE EDGE ON EXISTING AND APPLY TACK COAT IN ACCORDANCE WITH MDT APPROACH PERMIT REQUIREMENTS.
2. APPLY WHITE PAVEMENT MARKING STOP BAR.
3. NOT USED.
4. INSTALL 4" WHITE STRIPE PAVEMENT MARKINGS (TYPICAL).
5. INSTALL PIN DOWN CURB AT LOCATIONS SHOWN ON THE PLANS. EXISTING PIN DOWN CURB TO BE REUSED AS DIRECTED BY THE OWNER.
6. CONTRACTOR TO PROVIDE SITE PREP, EXCAVATION, GRADING AND BACKFILL FOR VAULT LATRINE. VAULT LATRINE ASSEMBLY TO BE SUPPLIED, DELIVERED AND INSTALLED BY THE OWNER. CONTRACTOR TO COORDINATE WORK WITH THE OWNER.
7. INSTALL ADA PARKING SIGN.
8. INSTALL NEW STEEL GATE . PROVIDE CONCRETE BASES FOR MOUNTING POSTS. COORDINATE GATE LOCATION WITH ENGINEER PRIOR TO INSTALLATION.
9. NATURAL TRAIL ELEVATION TO BE SET TO MATCH ADJACENT EXISTING GROUND WITH A CROSS SLOPE LESS THAN 2%. FILL SLOPES TYING INTO ADJACENT GROUND SHALL BE GRADED SO DRAINAGE IS ACROSS THE TRAIL WITH NO LOW POINTS ON THE UP HILL SIDE OF THE TRAIL AND DRAINING AWAY FROM THE TRAIL ON THE DOWN HILL SIDE.
10. INSTALL 7' WIDE x 3' DEEP, THREE GARBAGE CAN CONCRETE PAD.
11. INSTALL STOP SIGN.
12. CONSTRUCT TENT CAMPSITE. SITE LOCATIONS TO BE FIELD DETERMINED BY FWP PERSONNEL.
13. CONSTRUCT NATURAL SURFACE TRAIL.
14. INSTALL 6" THICK, 5' WIDE x 4' LONG CONCRETE PAD FOR FOOD STORAGE CONTAINER. LOCATION TO BE DETERMINED BY FWP.
15. REMOVE AND RESET EXISTING FENCE AFTER CONSTRUCTION. FENCE TO BE RESET AT THE TOP OF THE GRADING LIMITS.
16. REMOVE AND RESET KIOSK TO CONCRETE PAD - DIMENSION OF KIOSK PAD IS 12' WIDE X 5' LONG, 6" THICK CONCRETE OVER 6" OF 3/4" CRUSHED BASE COURSE. KIOSK MOUNTING DETAIL TO MATCH THAT AT EXISTING KIOSK LOCATION.
17. ADA CAMPSITE PICNIC TABLE AND FIRE RING AREA TO BE CONCRETE SURFACE MEETING ADA REQUIREMENTS. INSTALL 4" CONCRETE SURFACE OVER 3/4" CRUSHED BASE COURSE.
18. REINSTALL SALVAGED WOOD SHED. COORDINATE LOCATION WITH OWNER.
19. CONTRACTOR TO PREP 12'X20' GRAVEL PAD WITH 12" THICK 3/4" MINUS CRUSHED BASE COURSE FOR FUTURE MAINTENANCE SHOP BUILDING. BUILDING SUPPLY AND INSTALLATION BY OWNER. (N.I.C)
20. INSTALL 6" THICK CONCRETE SLAB FOR DUMPSTER PAD.
21. INSTALL MASH OPTIONAL GUARDRAIL TERMINAL SECTION. CONTRACTOR TO WIDEN GRADING AS NOTED ON DETAIL.
22. INSTALL ONE-WAY DEPARTURE GUARDRAIL TERMINAL SECTION.

LEGEND-PROPOSED

- WATER MAIN TO REMAIN
- **YARD HYDRANT TO REMAIN**
- **WELL TO REMAIN**
- PROPOSED WATER LINE
- PROPOSED WATER HYDRANT
- WATER VALVE
- **SEPTIC TANK TO REMAIN**
- **SEWER CLEANOUT TO REMAIN**
- SANITARY SEWER MAIN TO REMAIN
- PROPOSED SANITARY SEWER LINE
- PROPOSED SEWER CLEANOUT
- PROPOSED HOST CONNECTION
- PROPOSED BURIED ELECTRIC LINE
- FUTURE BURIED ELECTRIC LINE IN CONDUIT
- PROPOSED UTILITY PEDESTAL LOCATION
- PROPOSED VAULT LATRINE
- GUARD RAIL

WATER UTILITY KEY NOTES:

1. INSTALL HOST SITE HYDRANT ASSEMBLY. PROVIDE REDUCING FITTINGS.
2. COORDINATE WITH FWP PERSONNEL TO LOCATE THE EXISTING WATER DISCHARGE PIPE AT THE WATER SUPPLY BUILDING. CONNECT TO THE EXISTING LINE TO ALLOW FOR NEW 2" PE WATER LINE TO BE INSTALLED TO THE NORTH SERVING THE TWO HOST SITES. PROVIDE FITTING AS NEEDED TO MAKE CONNECTION. PLUG ENDS OF ANY EXPOSED EXISTING WATER LINES THAT ARE TO BE ABANDONED.
3. AFTER SITE GRADING, CONNECT TO EXISTING WATER DRAINPIPE. VERIFY PIPE SIZE (ANTICIPATED PIPE SIZE IS 2"). EXTEND LINE TO THE WEST MAINTAINING GRADE TO FACILITATE DRAINAGE. NEW DRAINPIPE TO HAVE A MINIMUM BURY DEPTH OF 3'. INSTALL UTILITY BOX AND VALVE AND END OF EXTENDED DRAIN LINE TO MATCH CURRENT EXISTING CONFIGURATION.
4. 2" CL200 DR7 PE PIPE. MINIMUM BURY OF 3'.
5. RELOCATED EXISTING WATER HYDRANT OUTSIDE OF GRADING LIMITS.
6. BORE WATER LINE UNDER EXISTING STREAM STAYING OUTSIDE OF HIGH WATER LIMITS.
7. LOCATE EXISTING WATER LINE FEEDING THE RESTROOM BUILDING AND INSTALL A NEW YARD HYDRANT.
8. INSTALL WATER HYDRANT. LOCATION TO BE DETERMINED BY ENGINEER AND FWP PERSONNEL.
9. REINSTALL APPROXIMATELY 50 FEET OF 8-INCH SCH 40 PVC WATER CHLORINE CONTACT PIPE AFTER SITE SUBGRADE HAS BEEN ESTABLISHED. BURRY DEPTH FOR NEW WATER LINE IS 2 FEET BELOW SUBGRADE. FINAL WATER LINE LOCATION TO BE DETERMINED BY ENGINEER AND FWP PERSONNEL DURING CONSTRUCTION.

SEWER UTILITY KEY NOTES:

1. NOT USED.
2. CONTRACTOR TO VERIFY LOCATION OF EXISTING SEWER SERVICE. AFTER COMPLETING GRADING OF THE HOST CAMPSITE, EXPOSE EXISTING SERVICE LINE IN THE DOWN GRADE DIRECTION AND RELAY SERVICE LINE TO PROVIDE A NEW SEWER CONNECTION FOR THE HOST CAMPSITE. MAINTAIN A MINIMUM SEWER PIPE GRADE OF 2% FROM THE EXISTING PIPE CONNECTION POINT TO THE RV SEWER CONNECTION.
3. ABANDON EXISTING SEWER LINE TO THE NORTH. PLUG EXPOSED END OF SEWER LINE.
4. INSTALL HOST SITE SEWER CONNECTION.
5. 6" SCH 40 PVC SEWER PIPE WITH MINIMUM 1.0% GRADE.
6. CONNECT TO EXISTING SEWER PIPE AHEAD OF SEPTIC TANK WITH "Y" CONNECTION AND COUPLERS.

ELECTRICAL KEY NOTES:

1. COORDINATE WITH FWP PERSONNEL ON LOCATION OF EXISTING 200 AMP POWER PANEL FOR SERVICE TO TWO NEW HOST SITE ELECTRICAL SERVICE PEDESTALS AND THE NEW VAULT TOILET.
2. USE SLEEVES FOR ALL ASPHALT CROSSINGS.
3. INSTALL TRENCH WITH BRANCH CIRCUIT FOR TWO NEW HOST SITE RV PEDESTALS, FUTURE ENTRY STATION AND FUTURE MAINTENANCE SHED. CONDUCTOR AND WIRE SIZE TO BE DETERMINED IN THE FIELD
4. INSTALL TRENCH WITH CONDUIT FOR FUTURE ENTRY STATION LIGHTING AND ELECTRIC HEATER. CONDUCTOR AND WIRE SIZE TO BE DETERMINED IN THE FIELD
5. INSTALL TRENCH WITH BRANCH CIRCUIT FOR LIGHT FIXTURE ON OUTSIDE OF NEW VAULT TOILET.
6. INSTALL VAULT TOILET CONDUCTOR IN SCHEDULE 80 PVC CONDUIT FROM BURIAL DEPTH TO THE LIGHT FIXTURE JUNCTION BOX. SURFACE MOUNT THE CONDUIT AND LIGHT FIXTURE ON THE OUTSIDE OF THE VAULT TOILET.
7. EXISTING BUILDING IN THIS AREA TO BE REMOVED AND EXISTING BRANCH CIRCUIT FROM THE WATER SUPPLY HOUSE WILL BE PARTIALLY REMOVED. CONTRACTOR TO DETERMINE IF ROUTING OF EXISTING SERVICE LINE CAN BE REUSED FOR NEW VAULT TOILET LIGHTING. IF EXISTING SERVICE LINE CAN BE REUSED, INSTALL IN GROUND JUNCTION BOX AT CONNECTION OF NEW SERVICE LINE TO THE EXISTING. JUNCTION BOX LOCATION TO BE COORDINATED WITH FWP PERSONNEL.
8. REMOVED EXISTING BRANCH CIRCUIT SUPPLYING TWO EXISTING RV PEDESTALS AND EXISTING RV PEDESTALS.
9. USE SCHEDULE 80 SWEEP ELBOWS PLUS SCHEDULE 80 CONDUIT TO BRING DIRECT BURY CONDUCTORS UP FROM HORIZONTAL LOCATION IN THE TRENCH TO VERTICAL IN THE PEDESTAL.
10. INSTALL RV ELECTRICAL PEDESTAL.
11. BORE ELECTRICAL CONDUIT UNDER EXISTING STREAM STAYING OUTSIDE OF HIGH WATER LIMITS.
12. INSTALL 2 - 4" DIAMETER SCH 80 PVC CONDUIT. MARK END OF CONDUIT WITH 1' PIECE OF STEEL REBAR WITH TOP OF REBAR 12" BELOW FINISH GRADE.
13. LOCATE EXISTING CONDUCTOR TO EXISTING SPRING BOX PUMP. INSTALL NEW ELECTRICAL JUNCTION BOX TO CONNECT TO NEW BRANCH CIRCUIT FROM 200 AMP SERVICE PANEL IN PUMP HOUSE.

ELECTRICAL GENERAL NOTES:

1. CONTRACTOR MUST ENGAGE AN UNDERGROUND LOCATOR TO CONFIRM ACTUAL LOCATION OF UNDERGROUND CIRCUITS. UNDERGROUND UTILITY LOCATIONS SHOWN ON THIS DRAWING ARE APPROXIMATE. TESTING FOR THE SOURCE LOCATION FOR THE EXISTING UNDERGROUND ELECTRICAL CIRCUITRY IS A MUST. THE EXISTING UNDERGROUND SYSTEM SHOWN IS BASED ON BEST AVAILABLE INFORMATION WHICH MAY NOT BE ACCURATE. COORDINATE THE INSTALLATION OF ELECTRICAL MATERIAL ITEMS WITH THE PROJECT ENGINEER.
2. CONTRACTOR TO PROVIDE AS BUILT DRAWING SHOWING THE INSTALLED LOCATION FOR THE ELECTRICAL SYSTEM.
3. FIELD VERIFY DIMENSIONS AND INSTALLED INFRASTRUCTURE USING THE CIVIL ENGINEERING DRAWINGS.
4. SCHEDULE 80 PVC SLEEVES SHALL BE USED TO PROTECT THE UNDERGROUND FEEDERS AND BRANCH CIRCUITS WHEN PASSING UNDER PAVEMENT (TRAILS AND ROADWAYS) AND NON-PAVED TRAILS AND ROADWAYS.
5. SCHEDULE 80 PVC SLEEVES SHALL ALSO BE USED TO PROTECT UNDERGROUND FEEDERS AND BRANCH CIRCUITS WHEN THEY ARE INSTALLED ABOVE BURIAL DEPTH.
6. SLEEVES SHALL BE TERMINATED WITH A SWEEP ELBOW AT BURIAL DEPTH.
7. THE WORD 'CONTRACTOR' IN THE ELECTRICAL NOTES MEANS THE ENTIRE CONTRACTOR TEAM.
8. COMPLY WITH PROVISIONS OF APPLICABLE CODES AND REQUIREMENTS FROM LOCAL AUTHORITIES HAVING JURISDICTION. IN THE EVENT OF CONFLICTING GUIDELINES BETWEEN MULTIPLE DIRECTIVES, THE MOST RESTRICTIVE SHALL PREVAIL.
9. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF PROJECT REQUIREMENTS AND PROVISION OF ADEQUATE AND TIMELY INFORMATION TO ALL TRADES CONCERNED FOR MATTERS INVOLVING MULTIPLE TRADES.
10. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL UTILITY LOCATES.
11. CATALOG SHEETS ARE INCLUDED WITH THE DRAWINGS FOR CONTRACTOR UNDERSTANDING. THE CONTRACTOR SHALL OBTAIN A COMPLETE DRAWING PACKAGE INCLUDING THE CIVIL ENGINEERING DRAWINGS FOR BOTH BIDDING AND CONSTRUCTION. ANYTHING LESS WILL PROVIDE INSUFFICIENT INFORMATION FOR THE CONTRACTOR TO PROPERLY BID AND CONSTRUCT THIS PROJECT.
12. THE ELECTRICAL CONTRACTORS SHALL CAREFULLY EXAMINE THE CIVIL ENGINEERING DRAWINGS AND THE BID FORM TO DETERMINE HOW THE ELECTRICAL AND ASSOCIATED WORK AS DESCRIBED ON THESE SHEETS AND ANY OTHER DRAWINGS BY REFERENCE, MUST BE BID WITH RESPECT TO BASE BIDS AND ALTERNATIVES, IF ANY.
13. THE WORD 'COORDINATE MEANS CONTACTING THE RELEVANT PARTIES SUCH AS THE UTILITY COMPANY, THE PROJECT ENGINEER, OWNER, ETC. TO DETERMINE THE EXACT REQUIREMENTS AND/OR FURTHER REFINE THE INSTALLATION SCOPE OF WORK REQUIREMENTS AND ADJUST THE INSTALLATION ACCORDINGLY. THIS WORK SHALL BE INCLUDED IN BASIC CONSTRUCTION SERVICES.
14. COORDINATE WITH THE OWNER AND THE TELEPHONE COMPANY FOR ADDING, REMOVING, MAINTAINING, AND ADDING A NEW SERVICE TO THE FOLLOWING LOCATIONS:
    - REMOVE TELEPHONE SERVICE FROM THE EXISTING HOST RV PEDESTALS BEING DEMOLISHED.
    - MAINTAIN EXISTING TELEPHONE SERVICES NOT BEING ABANDONED.
    - ADD NEW TELEPHONE SERVICE TO EACH OF THE TWO NEW HOST RV SITES.
15. IN GROUND ELECTRICAL JUNCTION BOXES SHALL BE INSTALLED WHERE REQUIRED.

ELECTRICAL DESIGN NOTES:

1. ELECTRICAL CONTRACTOR TO CONNECT TO EXISTING 200-AMP PANEL FOR NEW ELECTRICAL BRANCH CIRCUITS.
2. INSTALL BRANCH CIRCUIT(S) TO SERVE TWO HOST RV SITES, FUTURE ENTRY STATION AND FUTURE MAINTENANCE SHED. ANTICIPATED LOADS: HOST RV SITES, 4800 W EACH; ENTRY STATION, 2000 W; MAINTENANCE SHED, 800 W.
3. INSTALL BRANCH CIRCUIT TO EXISTING SPRING BOX PUMP AND VAULT TOILET. ANTICIPATED LOAD: VAULT TOILET LIGHT, 30 W.
4. ELECTRICAL CONTRACTOR TO SUBMIT LAYOUT OF BRANCH CIRCUITS, CONDUCTOR SIZE AND JUNCTION BOXES FOR REVIEW AND APPROVAL AS A DEFERRED SUBMITTAL, PRIOR TO CONSTRUCTION.
5. ALL WORK MUST BE DONE BY A LICENSED ELECTRICIAN IN ACCORDANCE WITH PROVISIONS OF APPLICABLE CODES AND REQUIREMENTS FROM LOCAL AUTHORITIES HAVING JURISDICTION. IN THE EVENT OF CONFLICTING GUIDELINES BETWEEN MULTIPLE DIRECTIVES, THE MOST RESTRICTIVE SHALL PREVAIL.

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MONTANA FISH, WILDLIFE & PARKS
201

Yellow Bay State Park - FWP #7216212
Site and Utility Plan Key Notes

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 6 of 30

INSTALL STRAW WATTLES AND ENSURE SURFACE RUN OFF IS DIRECTED AWAY FROM THE WATER SUPPLY CISTERN AND DO NOT ENTER AREA.

EXISTING WATER SUPPLY CISTERN DO NOT ENTER AREA.

INSTALL 100 LF OF 18" DIAMETER HDPE STORM DRAIN PIPE @ 7% GRADE. INVERT IN 2943.0. INVERT OUT 2936.0.

CULVERT OUTFALL ENERGY DISSIPATION. INSTALL 5' X 10' AREA OF 12" THICKNESS OF 6"-8" RIP RAP. GRADE TO FREE DRAIN AWAY FROM CULVERT OUTLET.

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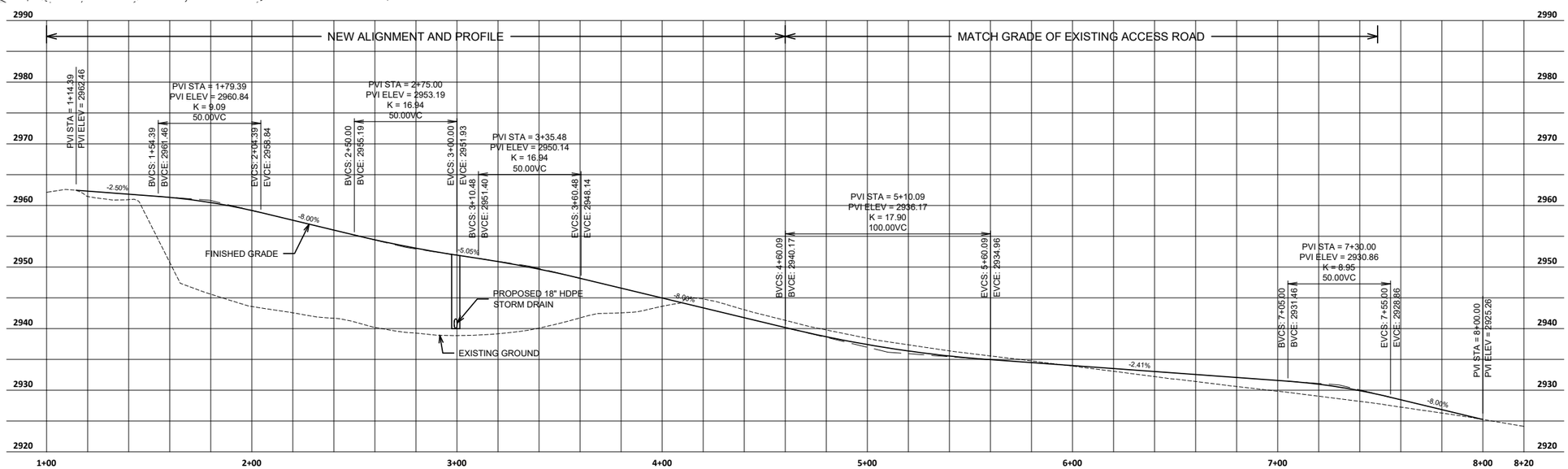

DRIVEWAY - PROFILE VIEW
(V SCALE: 1"=10', H SCALE: 1"=30')

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Yellow Bay State Park - FWP #7216212
Site and Utility Plan

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 7 of 30

MONTANA HIGHWAY NO. 35

EXISTING PUMP HOUSE.
EXISTING 200-AMP SERVICE
PANEL LOCATED INSIDE.

INSTALL STRAW WATTLES
AND ENSURE SURFACE RUN
OFF IS DIRECTED AWAY FROM
THE WATER SUPPLY CISTERN
AND DO NOT ENTER AREA.

EXISTING SPRING
BOX FOR WATER
SUPPLY HOUSE

GOVERNMENT LOT 1

LEGEND-PROPOSED

- WATER MAIN TO REMAIN
- YARD HYDRANT TO REMAIN
- WELL TO REMAIN
- PROPOSED WATER LINE
- PROPOSED WATER HYDRANT
- WATER VALVE
- SEPTIC TANK TO REMAIN
- SEWER CLEANOUT TO REMAIN
- SANITARY SEWER MAIN TO REMAIN
- PROPOSED SANITARY SEWER LINE
- PROPOSED SEWER CLEANOUT
- PROPOSED HOST CONNECTION
- PROPOSED BURIED ELECTRIC LINE
- FUTURE BURIED ELECTRIC LINE IN CONDUIT
- PROPOSED UTILITY PEDESTAL LOCATION
- PROPOSED VAULT LATRINE
- GUARD RAIL

NOTE: SEE SHEET 6 FOR KEYED NOTES.

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Yellow Bay State Park - FWP #7216212
Site and Utility Plan

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 8 of 30

EXISTING PUMP HOUSE.
EXISTING 200-AMP SERVICE
PANEL LOCATED INSIDE.

EXISTING SPRING BOX -
DO NOT DISTURB AREA

EXISTING SPRING BOX FOR
WATER SUPPLY HOUSE

GOVERNMENT LOT 1

20' SHORELINE PROTECTION ZONE

2896.23 HIGH WATER

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Site and Utility Plan

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 9 of 30

BOOK 12 MISC., PAGE 609

BOOK 43 DEEDS, PAGE 267

DURING CONSTRUCTION CONTRACTOR TO MAINTAIN PASSENGER CAR AND EMERGENCY VEHICLE ACCESS TO PRIVATE RESIDENCE THAT USES THIS ROAD FOR THEIR ONLY ACCESS

SHORELINE PROTECTION ZONE 20'

APPROXIMATE HIGH WATER MARK

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MONTANA FISH, WILDLIFE & PARKS

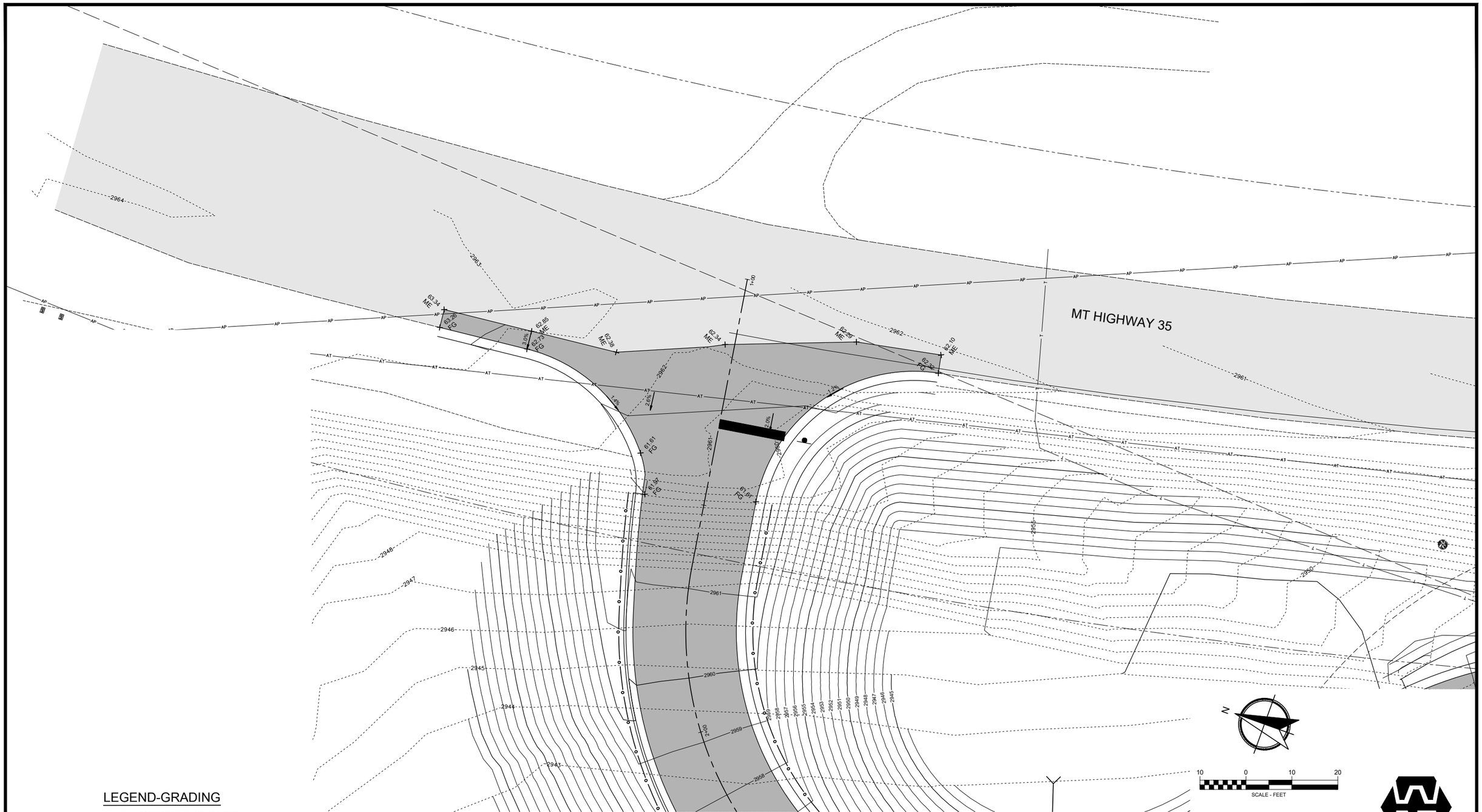
205

Yellow Bay State Park - FWP #7216212

Site and Utility Plan

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 10 of 30



LEGEND-GRADING

X 72.50	PROPOSED FINISH GRADE (+2900')
1.4%	PROPOSED SLOPE
FG	FINISHED GRADE
EG	EXISTING GRADE
ME	MATCH EXISTING

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MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Highway Approach Grading Plan

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 11 of 30

SPEED HUMP

SPEED HUMP

LEGEND-GRADING

X 72.50	PROPOSED FINISH GRADE (+2900')
1.4%	PROPOSED SLOPE
FG	FINISHED GRADE
EG	EXISTING GRADE
ME	MATCH EXISTING

SCALE - FEET

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MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Camp Host Pad Grading Plan

JONATHAN L. SASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 12 of 30

REMOVE AND RESET EXISTING FENCE AFTER CONSTRUCTION. FENCE TO BE RESET AT THE TOP OF THE GRADING LIMITS.

PARKING LOT SURFACE BID ALTERNATIVE
BASE BID: GRAVEL SURFACE PER DETAIL 6/18.

ADD ALTERNATIVE 1: ASPHALT SURFACE PER DETAIL 6/18.

LEGEND-GRADING

X 72.50	PROPOSED FINISH GRADE (+2900')
1.4%	PROPOSED SLOPE
FG	FINISHED GRADE
EG	EXISTING GRADE
ME	MATCH EXISTING

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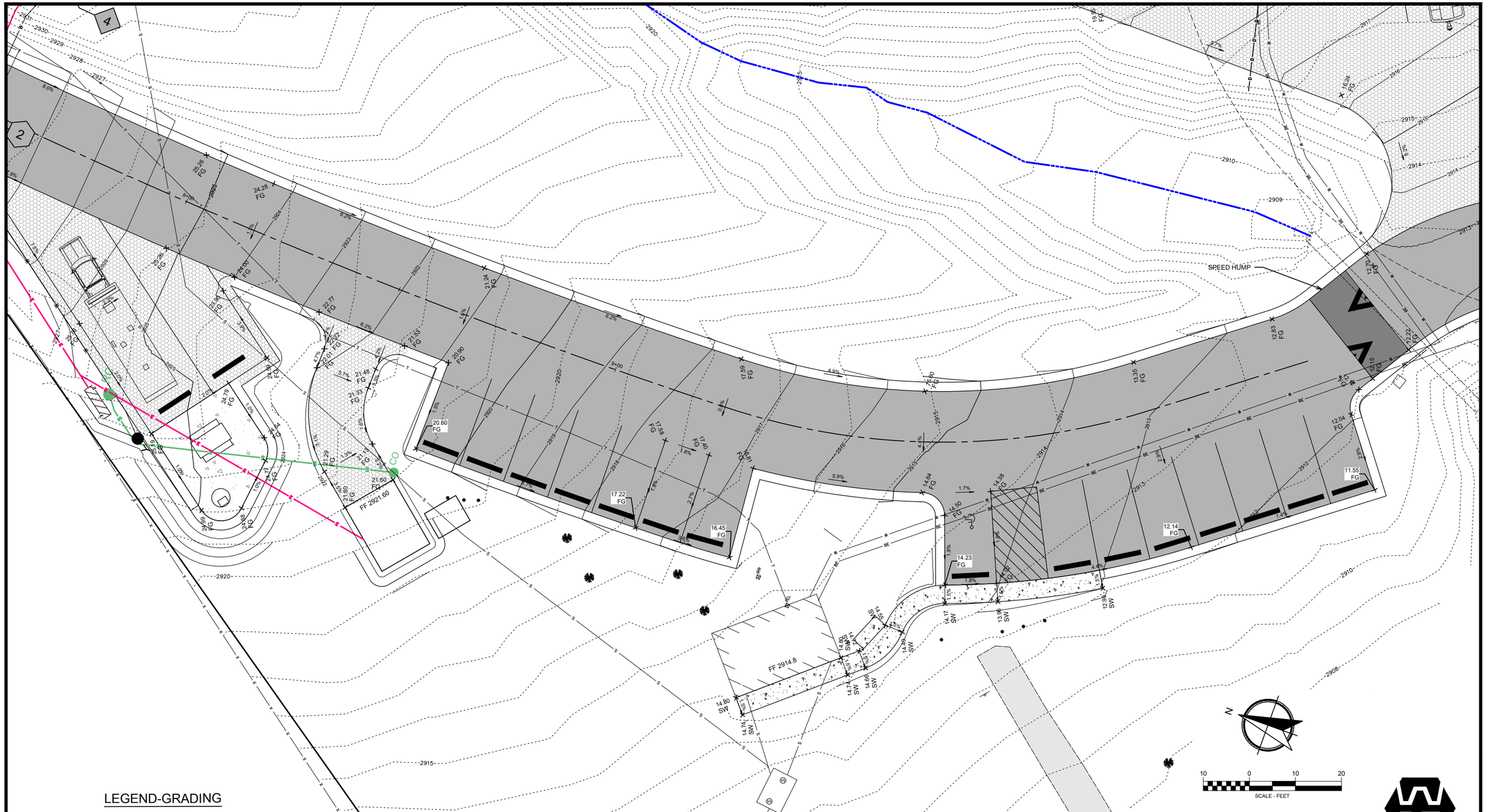
MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Boat Parking Grading Plan

JONATHAN L GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 13 of 30



LEGEND-GRADING

X 72.50	PROPOSED FINISH GRADE (+2900')
1.4%	PROPOSED SLOPE
FG	FINISHED GRADE
EG	EXISTING GRADE
ME	MATCH EXISTING

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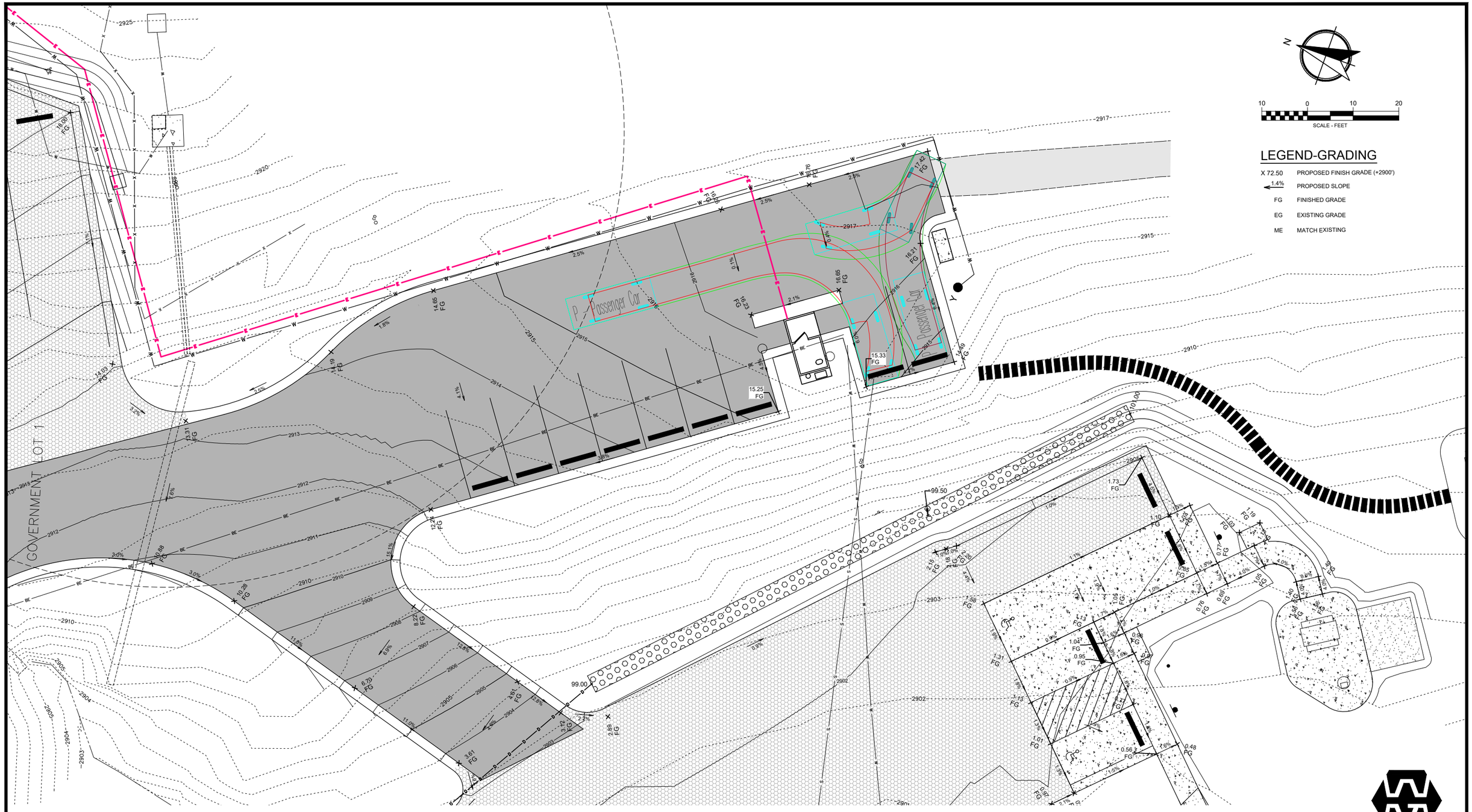
MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Parking Area Grading Plan

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 14 of 30



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MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Parking Area Grading Plan

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 15 of 30

CUTOFF TRENCH WITH DRAIN ROCK, APPROXIMATELY 4" DEEP

4
19

AN ADDITIONAL 220 SQ.FT. OF GRAVEL SURFACING TO BE PLACED.

FINAL GRADING PER OWNER DIRECTION

6" DIAMETER HDPE DRAIN PIPE

PARKING LOT LINES SHOW FOR LAYOUT ONLY. NO STRIPPING ON GRAVEL SURFACE.

DAYLIGHT HDPE PIPE WITH FLARED END SECTION AND RODENT SCREEN

LEGEND-GRADING

X 72.50	PROPOSED FINISH GRADE (+2900')
1.4% ←	PROPOSED SLOPE
FG	FINISHED GRADE
EG	EXISTING GRADE
ME	MATCH EXISTING

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SCALE - FEET

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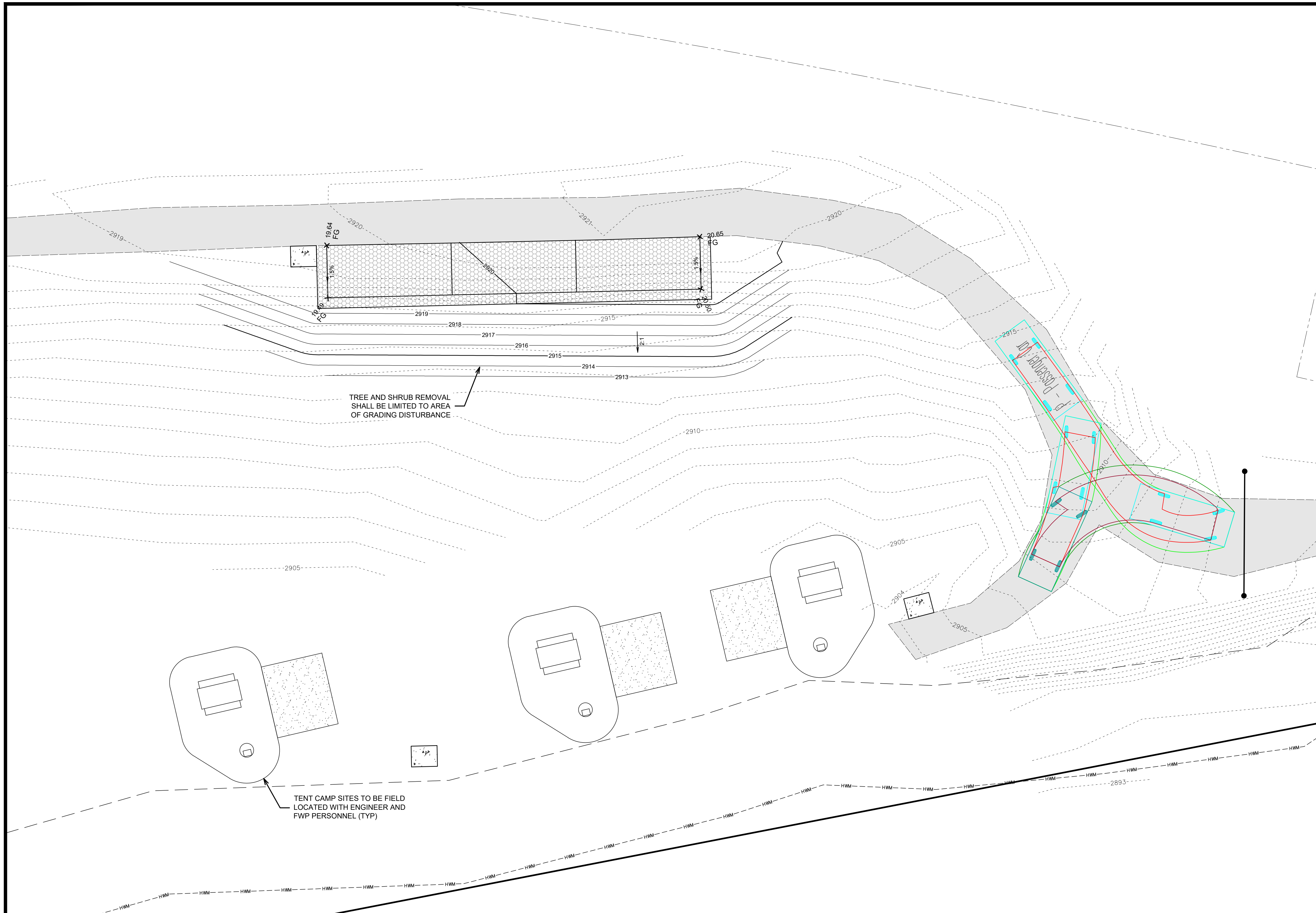
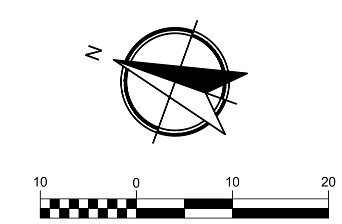
JONATHAN L. OASS 14423PE LICENSED PROFESSIONAL ENGINEER



LEGEND-GRADING

X 72.50	PROPOSED FINISH GRADE (+2900')
1.4% (arrow)	PROPOSED SLOPE
FG	FINISHED GRADE
EG	EXISTING GRADE
ME	MATCH EXISTING



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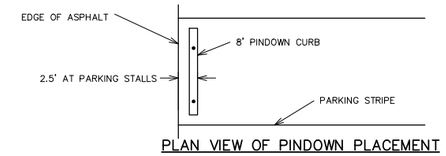
MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Tent Area Grading Plan

MONTANA * JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

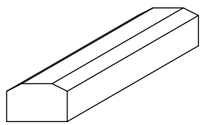
SHEET: 17 of 30



PLAN VIEW OF PINDOWN PLACEMENT

CURB SHALL BE ANCHORED TO ASPHALT WITH 2 NO. 5 X 18" REBAR

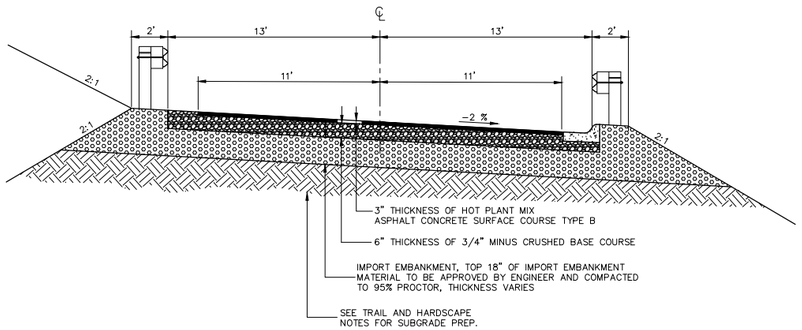
NOTE: PIN DOWN CURB TO BE SALVAGED AND RESET



ISOMETRIC VIEW

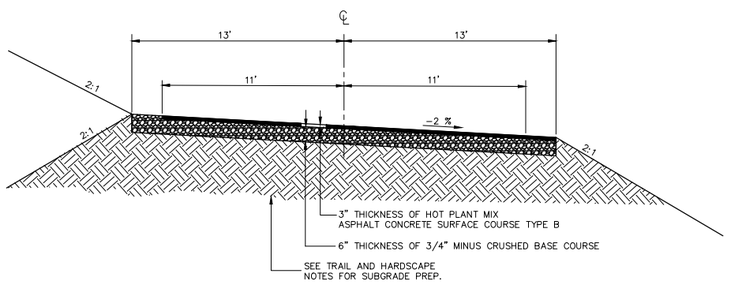
1/18 PIN DOWN CURB

NO SCALE



4/18 TYPICAL TWO-WAY TRAFFIC ROAD SECTION 1

NO SCALE

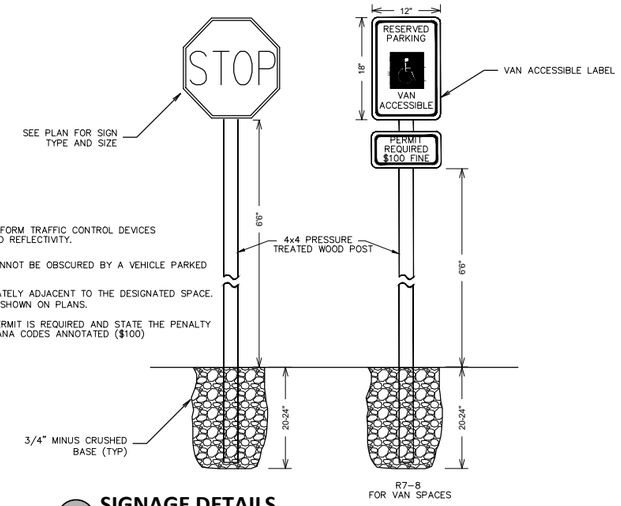


5/18 TYPICAL TWO-WAY TRAFFIC ROAD SECTION 2

NO SCALE

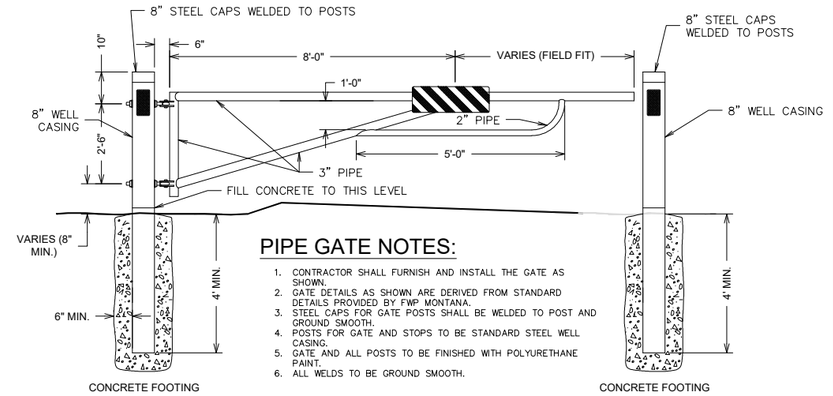
SIGN NOTES:

1. ALL SIGNS MUST MEET MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES STANDARDS FOR SIGN COLORS, SIZES, AND REFLECTIVITY.
2. SIGNS SHALL BE LOCATED SO THEY CANNOT BE OBSCURED BY A VEHICLE PARKED IN THE SPACE.
3. ADA SIGNS SHALL BE LOCATED IMMEDIATELY ADJACENT TO THE DESIGNATED SPACE. OTHER SIGNS SHALL BE MOUNTED WHERE SHOWN ON PLANS.
4. ADA SIGNS SHALL INDICATE THAT A PERMIT IS REQUIRED AND STATE THE PENALTY FOR VIOLATION AS ESTABLISHED IN MONTANA CODES ANNOTATED ($100)



2/18 SIGNAGE DETAILS

NO SCALE



PIPE GATE NOTES:

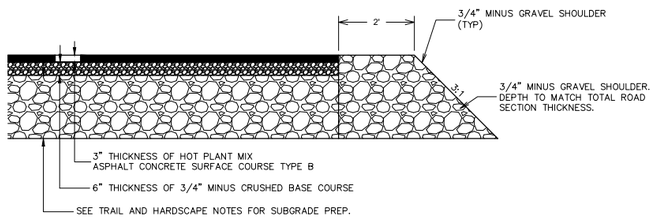
1. CONTRACTOR SHALL FURNISH AND INSTALL THE GATE AS SHOWN.
2. GATE DETAILS AS SHOWN ARE DERIVED FROM STANDARD DETAILS PROVIDED BY FWP MONTANA.
3. STEEL CAPS FOR GATE POSTS SHALL BE WELDED TO POST AND GROUND SMOOTH.
4. POSTS FOR GATE AND STOPS TO BE STANDARD STEEL WELL CASING.
5. GATE AND ALL POSTS TO BE FINISHED WITH POLYURETHANE PAINT.
6. ALL WELDS TO BE GROUND SMOOTH.

3/18 PIPE GATE POST DETAIL

NO SCALE

TRAIL AND HARDSCAPE NOTES:

1. ENSURE ALL TOPSOIL AND VEGETATION IS REMOVE AND SUBGRADE CONSISTS OF NATIVE GRAVEL.
2. SCARIFY, MOISTURE CONDITION, AND RECOMPACT TOP 12" OF SUBGRADE TO 95% ASTM D698 PROCTOR DENSITY. PROOF ROLL ALL SUBGRADE IN PRESENCE OF ENGINEER OR OWNERS REPRESENTATIVE PRIOR TO PLACING GRAVEL
3. PROOF ROLL ALL SUBGRADE AREAS. OWNER'S REPRESENTATIVE SHALL BE PRESENT TO OBSERVE PROOF ROLLING. UNSTABLE AREAS SHALL BE REPAIRED.
4. APPLY SOIL STERILANT TO ALL PREPARED HARDSCAPE BASE GRAVEL IMMEDIATELY AHEAD OF PLACING CONCRETE OR ASPHALT SURFACE.
5. ALL BASE GRAVEL SHALL BE COMPACTED TO 95% ASTM D698.



6/18 TYPICAL PARKING LOT PAVEMENT SECTION

NO SCALE

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Yellow Bay State Park - FWP #7216212
Details

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

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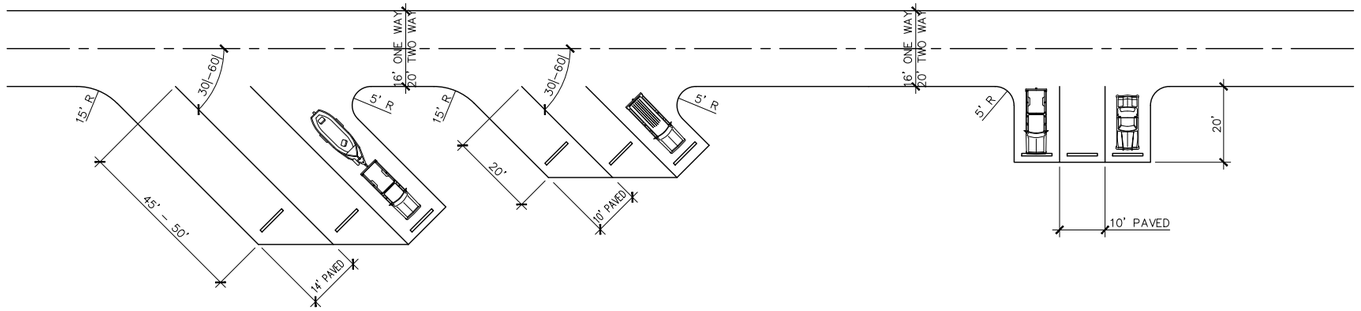
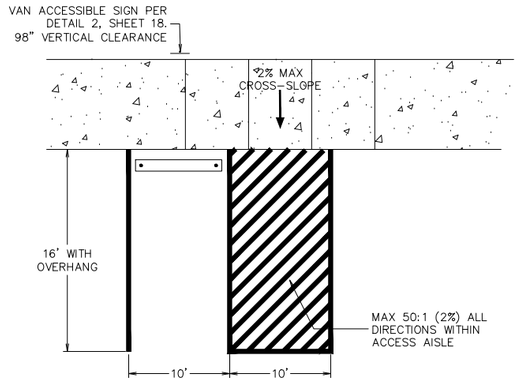


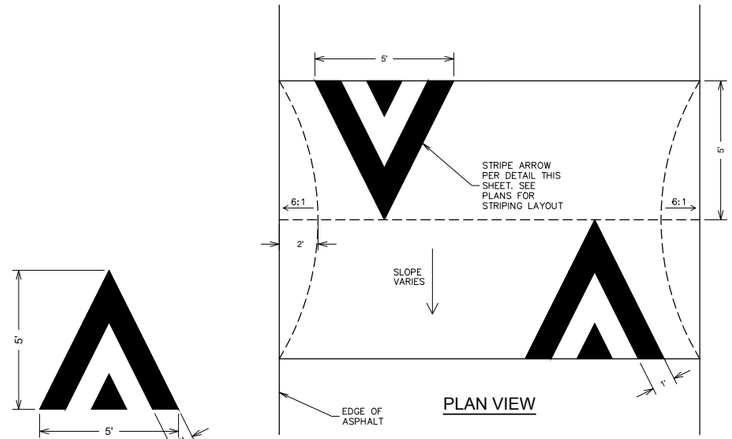
1/19 **GENERAL PARKING LAYOUT DIMENSIONS**

NO SCALE



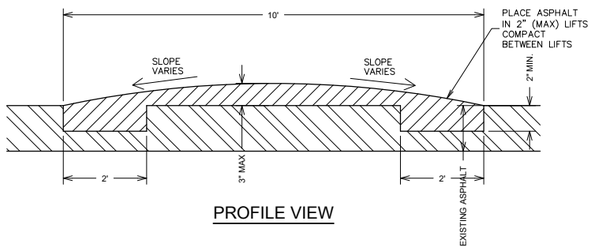
2/19 **TYPICAL VAN-ACCESSIBLE PARKING SPACE ADJACENT TO SIDEWALK**

NO SCALE



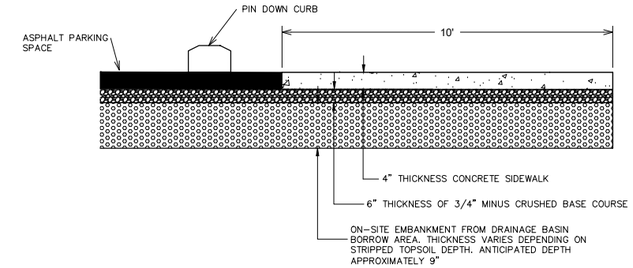
ARROW DETAIL

NO SCALE



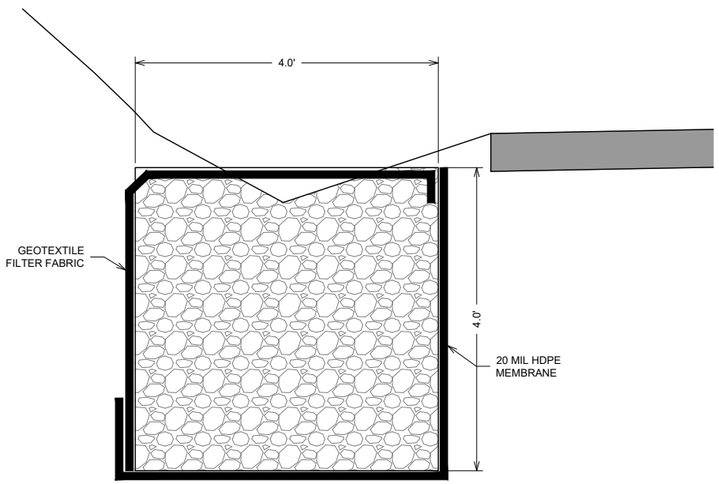
3/19 **SPEED HUMP DETAIL**

NO SCALE



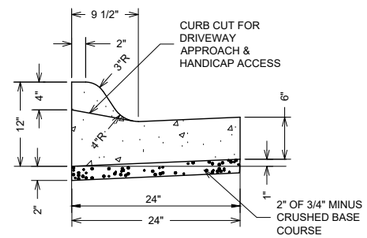
5/19 **SIDEWALK SECTION**

NOT TO SCALE



4/19 **CUT OFF TRENCH DETAIL**

NOT TO SCALE



6/19 **CURB AND GUTTER DETAIL**

NOT TO SCALE

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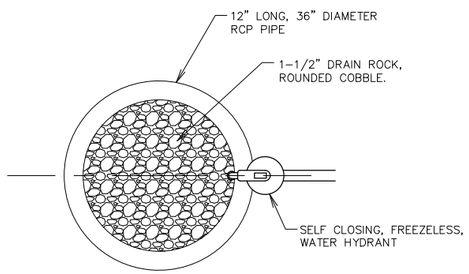
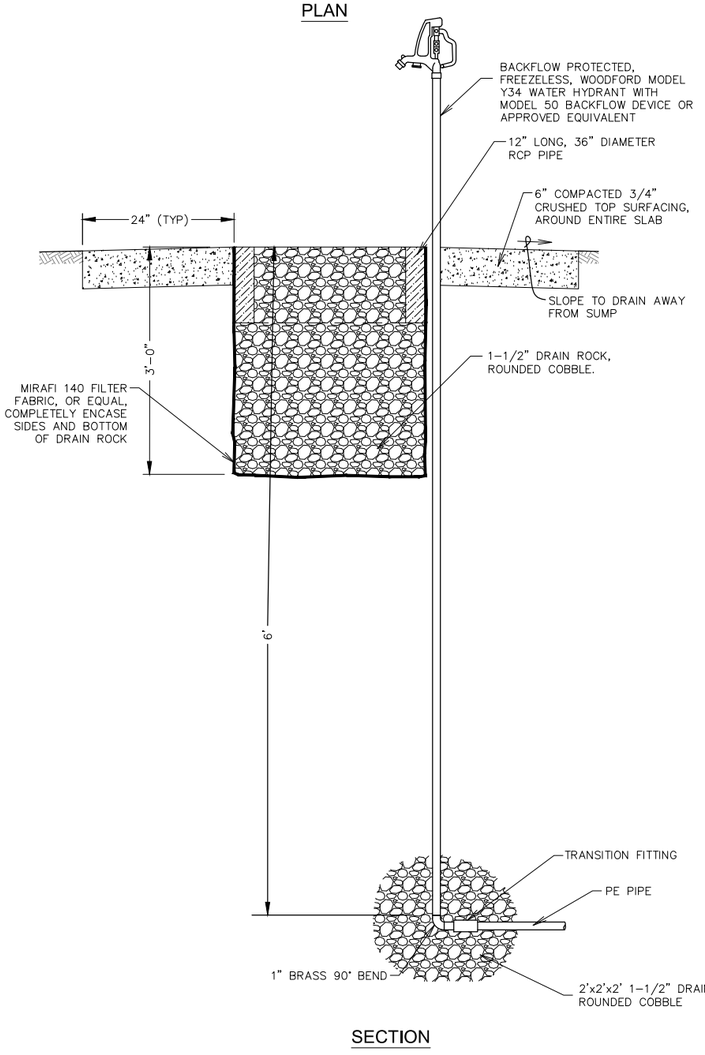
JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 19 of 30



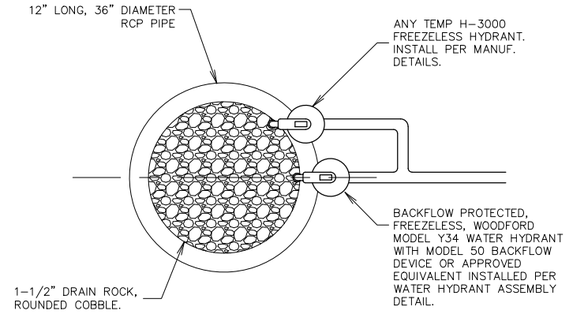
PLAN



SECTION

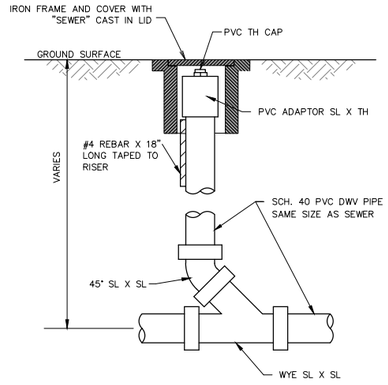
1/20 WATER HYDRANT ASSEMBLY DETAIL

NO SCALE



2/20 HOST SITE HYDRANT ASSEMBLY DETAIL

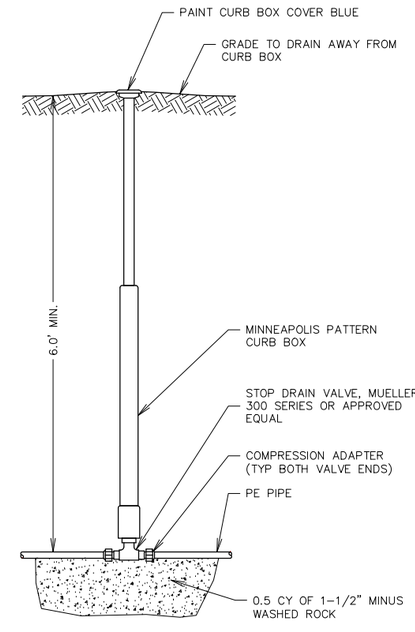
NO SCALE



NOTES:
1. CLEANOUTS SHALL BE PLACED EVERY 100 FEET OF DISTANCE OR CHANGE OF HORIZONTAL DIRECTION OF 135° OR MORE.
2. ALL CEANOUTS SHALL BE EXTENDED TO FINISHED GRADE.
3. CLEANOUT MATERIALS AND SIZE SHALL BE THE SAME AS THE SANITARY SEWER PIPE.
4. ALL WORK SHALL BE CONSTRUCTED IN CONFORMANCE WITH THE MOST RECENT UNIFORM PLUMBING CODE.

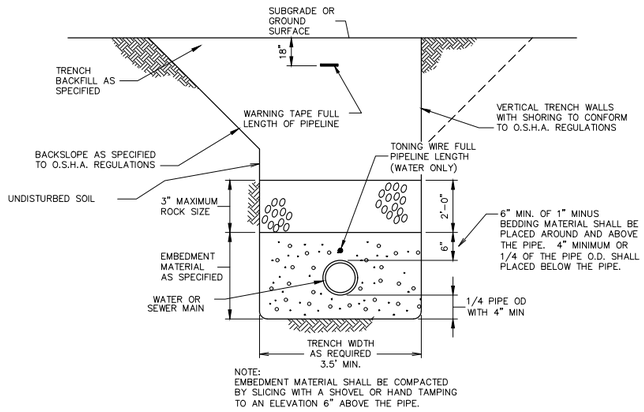
3/20 CLEANOUT DETAIL

NO SCALE



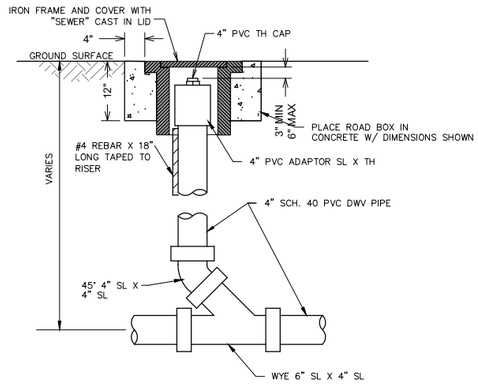
4/20 CURB STOP DETAIL

NO SCALE



5/20 TYPICAL UTILITY TRENCH DETAIL

NO SCALE



6/20 RV CONNECTION DETAIL

NO SCALE

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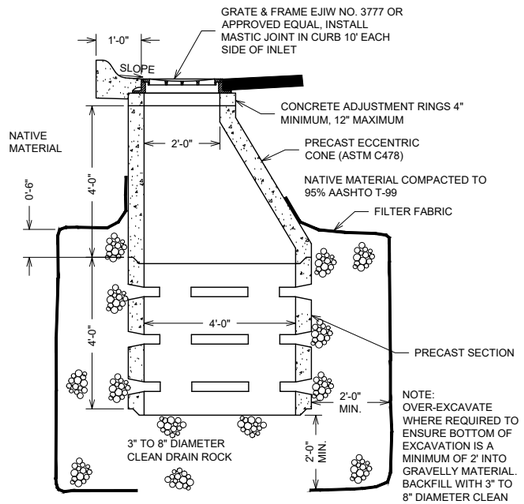
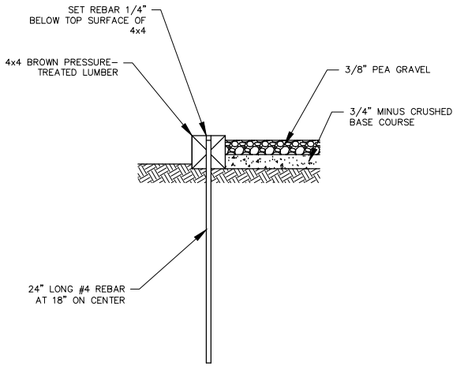
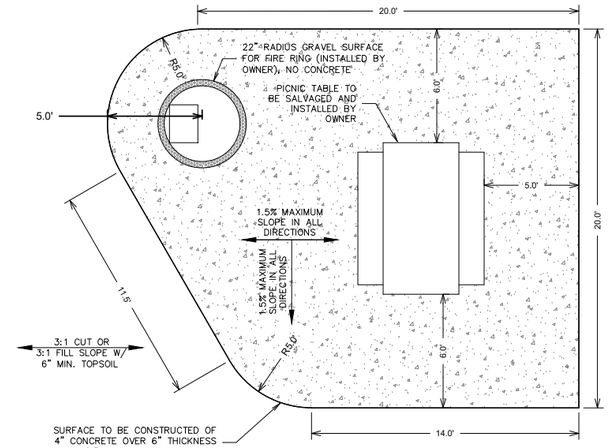


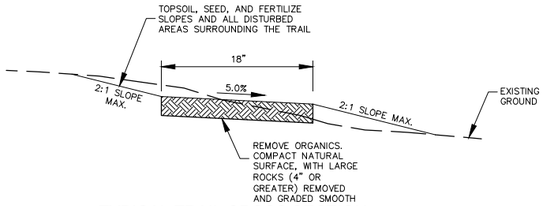
1/21 **SUMP DETAIL**
NO SCALE



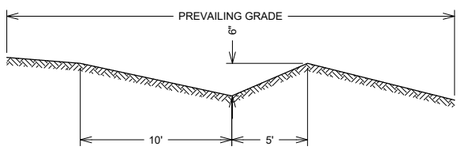
SECTION A



6/21 **TYPICAL ADA PICNIC TABLE & FIRE RING LAYOUT DETAIL**
NO SCALE



TYPICAL TRAIL CROSS SECTION

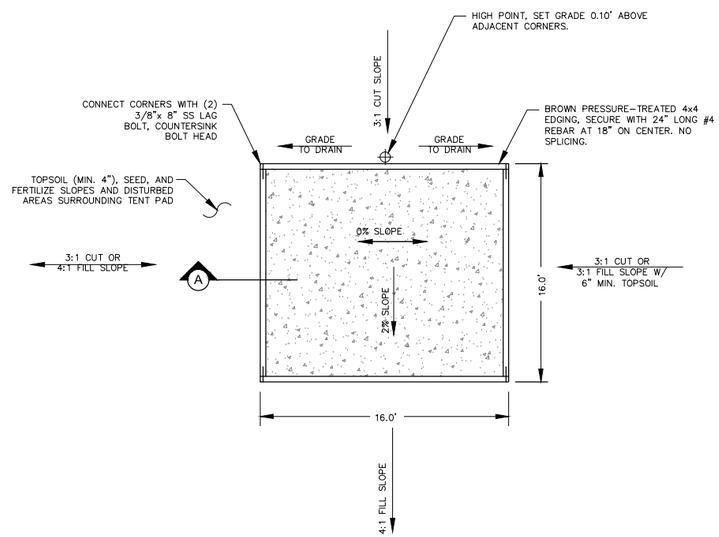


ROLLING DRAINAGE DIP

NOTES:

1. ENSURE TRAIL OUT SLOPES AT 5%.
2. ENSURE THERE IS A CLEAR DRAINAGE PATH AWAY FROM TRAIL AT LOW POINT OF ROLLING DRAINAGE DIPS.
3. WHERE THE TRAIL RUNNING SLOPE IS 7% OR GREATER, INSTALL ROLLING DRAINAGE DIP EVERY 300 FEET MIN. OR WHERE DRAINAGE WILL NATURALLY OCCUR.
4. MAXIMUM RUNNING SLOPE OF TRAIL TO BE 15%

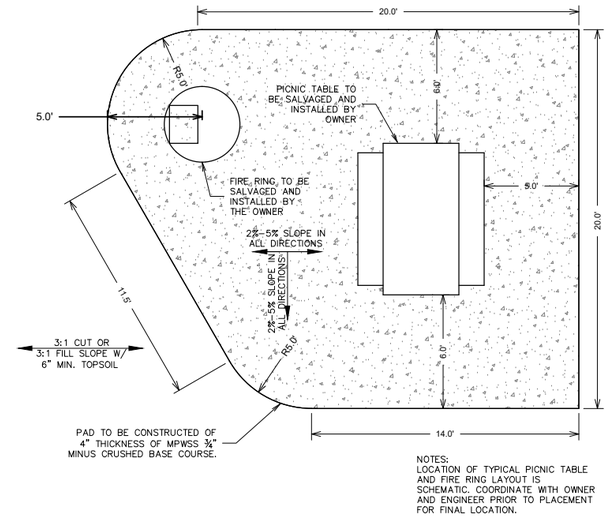
2/21 **NATURAL SURFACE TRAIL DETAIL**
NO SCALE



PLAN

3/21 **TENT PAD DETAIL**
NO SCALE

4/21 **NOT USED**
NO SCALE



5/21 **TYPICAL PICNIC TABLE & FIRE RING LAYOUT DETAIL**
NO SCALE

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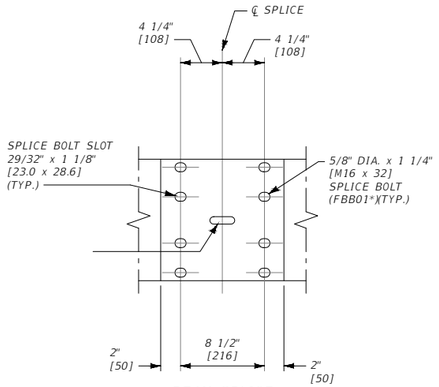
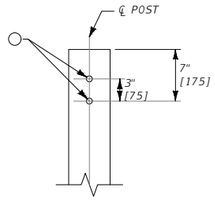
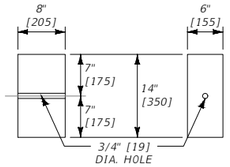


BEAM SPLICE

(LAP IN DIRECTION OF ADJACENT TRAFFIC)

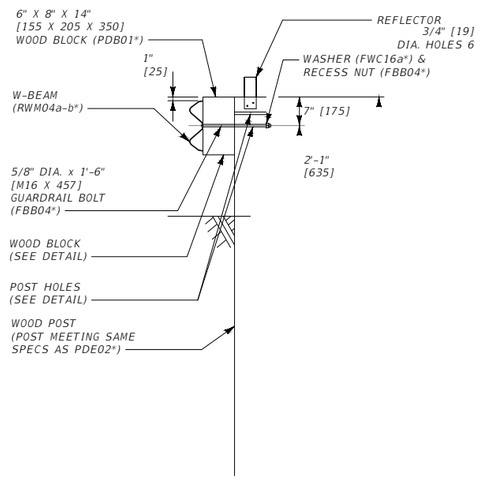


POST HOLE DETAIL

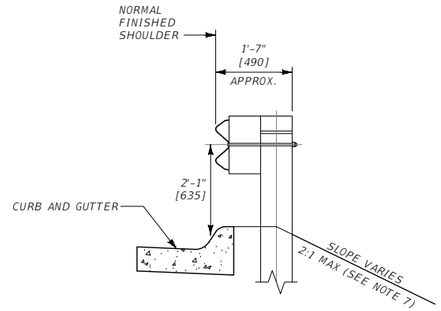


WOOD BLOCK

PDB01*

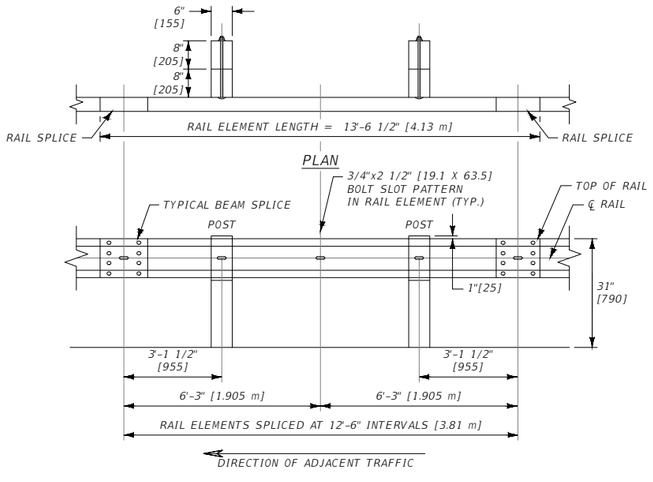


POST BOLT SLOT 3/4" x 2 1/2" [19.1 X 63.5]



NOTE:
THIS GUARDRAIL SYSTEM IS USED WHEN THE 2'-0" [610] WIDENING BEHIND THE POSTS CANNOT BE PROVIDED, AS PER DTL. DWG. NO. 606-05A & 606-05B.

PROFILE

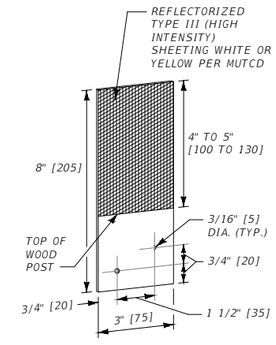


ELEVATION

NOTES:

1. INSTALL ALL BOLTS WITH HEADS ON TRAFFIC SIDE OF INSTALLATION.
2. USE WOOD BLOCKS OR OTHER "MASH" APPROVED BLOCKS. AFFIX BLOCKS TO POSTS WITH TWO 16 PENNY GALV. NAILS OR 14 GAUGE WIRE WRAP.
3. ATTACH REFLECTORS TO POSTS EVERY 25' [7.62 m], INCLUDING TERMINAL SECTIONS, WITH THE REFLECTORIZED SURFACE FACING ADJACENT TRAFFIC. FABRICATE REFLECTORS FROM 0.063" [1.6] THICK ALUMINUM ALLOY PER SECTION 704 OR PLASTIC REFLECTORS WITH A URETHANE HINGE. FASTEN REFLECTOR TO WOOD POST USING TWO 16 PENNY RING-SHANKED GALVANIZED NAILS AND TWO 3/16" [4.8] DIA. WASHERS IN PRE-DRILLED HOLES.
4. ON EXISTING GUARDRAIL INSTALLATIONS, THE MINIMUM RAIL HEIGHT IS 27 3/4" [705].
5. DO NOT INSTALL LONG POST W-BEAM GUARDRAIL FOR OBSTACLES WITHIN 5'-6" [1.65 m] OF THE FACE OF THE RAIL.
6. USE LOWER HOLE ON NEW CONSTRUCTION INSTALLATIONS.
7. BEGIN INSLOPE BREAK AT CENTER OF POST.

* SEE DTL. DWG. NO. 606-80 FOR SCHEDULE OF GUARDRAIL HARDWARE.



REFLECTOR

(SEE NOTE 3)

UNITS SHOWN IN BRACKETS [] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

1/22 GUARDRAIL DETAIL

NO SCALE

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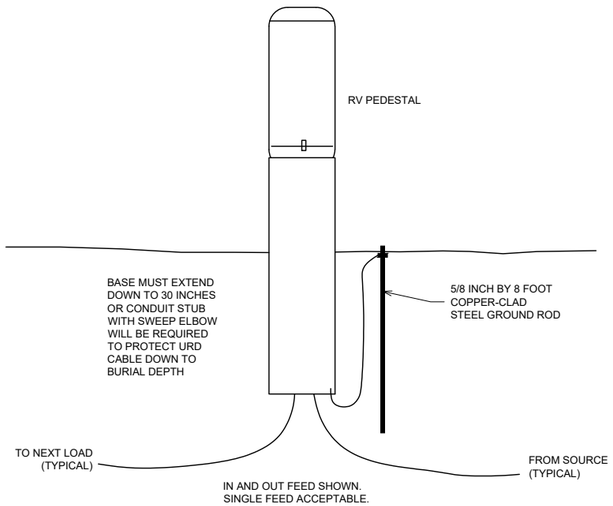
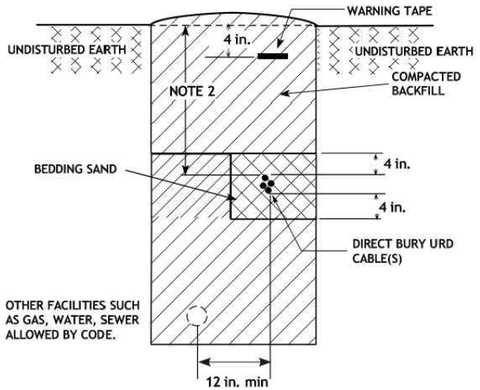


RV PEDESTAL

1/23 NO SCALE

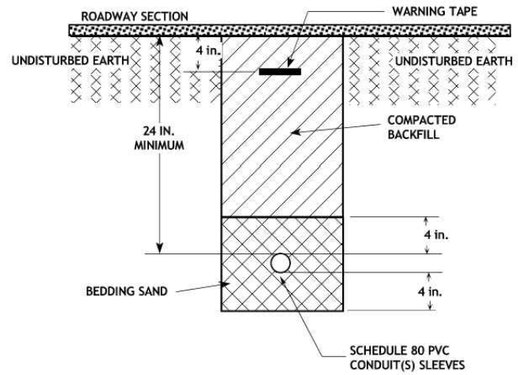


NOTES:

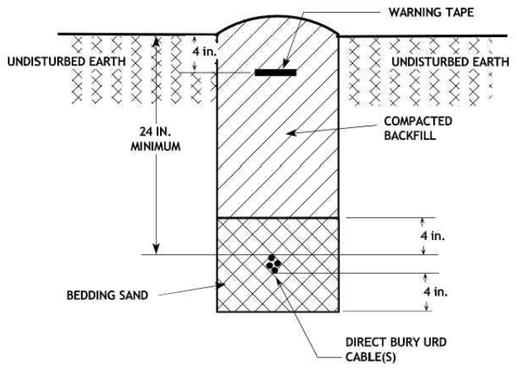
1. SINGLE CABLE SHOWN. MULTIPLE CABLES CAN BE USED.
2. BURIAL DEPTH 24 INCHES MINIMUM.
3. IF MORE THAN ONE CABLE OF THE SAME FACILITY IS INSTALLED IN A TRENCH, THE CABLES SHALL BE SEPARATED HORIZONTALLY BY 9 INCHES MINIMUM.
4. INSTALL CABLES 24 INCHES (UNLESS OTHERWISE NOTED) BELOW FOOTING FOUNDATION OR PAVEMENT BASE FILL.
5. CABLE OR CABLES SHALL NOT BE LOCATED ANY CLOSER THAN 3 INCHES FROM TRENCH SIDE WALL.
6. THE INCLUSION OF THIS DETAIL DOES NOT REQUIRE THE ELECTRICAL CONTRACTOR TO PROVIDE THE TRENCH. IT DOES REQUIRE THE ELECTRICAL CONTRACTOR TO SEE TO IT THAT THE TRENCHING, BEDDING, BACKFILL, ETC. ARE DONE IN ACCORDANCE WITH THESE REQUIREMENTS.

TRENCHING AND BEDDING DETAIL (JOINT USE)

2/23 NOT TO SCALE



SLEEVE UNDER ROADWAY



CABLE BURIAL OUTSIDE ROADWAY

NOTES:

1. SINGLE CONDUIT/SLEEVE OR CABLE SHOWN. MULTIPLE CONDUIT/SLEEVES OR DIRECT BURY URD QUADRAPLEX CABLES CAN BE USED.
2. IF MORE THAN ONE CONDUIT/SLEEVE OR QUADRAPLEX URD CABLE OF THE SAME FACILITY IS INSTALLED IN A TRENCH, THE CONDUIT/SLEEVE/ CABLE SHALL BE SEPARATED HORIZONTALLY BY 6 INCHES MINIMUM.
3. INSTALL CONDUIT/SLEEVE 24 INCHES (UNLESS OTHERWISE NOTED) BELOW PAVEMENT BASE FILL.
4. CONDUIT/SLEEVE/CABLE SHALL NOT BE LOCATED ANY CLOSER THAN 3 INCHES FROM TRENCH SIDE WALL.
5. WHERE BURIAL DEPTH CANNOT BE ACHIEVED, USE CONDUIT AND/OR CONCRETE COVER TO REDUCE BURIAL DEPTH IN ACCORDANCE WITH THE NEC.
6. FOR TRENCHES NOT UNDERNEATH ROADWAY SECTION (ASPHALT PLUS SHOULDER), USE TOP SOIL FOR THE TOP 3 INCHES.

TRENCHING AND BEDDING DETAIL

3/23 NOT TO SCALE

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MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Details

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 23 of 30

Crystal Lighting CORPORATION

DATE	
PROJECT	
TYPE	
NOTE	
PREPARED BY	

SM-CLW-307WP — Curved semi cut off LED wallpack

Small curved semi cut off LED wall pack fixture, suitable for wet locations, Perfect for lighting up residential exteriors, walkways, entry ways, perimeters, parking garages, school campuses, industrial/commercial spaces. This fixture has a wide rectangular light distribution. Comes with a 5 year/50,000 hour limited warranty.

FEATURES

- Energy Savings: Over 66% compared to HID light sources
- Improved lumen maintenance
- Utilizes high efficient Phillips Lumiled LED's
- Operating temperature: -30°C ~ 60°C
- Driver: Constant current, 120-277v, 50/60Hz, 480V (Optional)
- Suitable for wet locations
- Dimming, occupancy sensors, photo cell capable (optional)
- Operating Life: >60,000 hours

CONSTRUCTION

- Housing is heavy-duty die-cast aluminum
- 1/2" Coin plugs with O-rings for conduit, sensors or photo cell
- Powder coat **bronze finish (standard)** various colors available (custom).
- Prismatic borosilicate glass lens
- Silicone gasket to prevent leakage and provide weather-tight protection
- Mounting: Cast in Template for Mounting Directly Over a 4" Recessed Outlet Box or use ½" Surface Conduit

OPTIONS

- (OCC) Motion sensor
- (PC) Button photo cell
- (EMR) Emergency battery backup
- (WG) Wire guard stainless steel
- (WC) Wireless controls

NEMA — Wireless Controls Available — Buy American Compliant — PHILIPS LUMILEDS

Model Number	INPUT POWER	LUMEN OUTPUT	SCOPTIC	COLOR TEMP.(CCT)	CRI	RATED LIFE (L70)	INPUT VOLTAGE	INPUT FREQUENCY	HID Equivalent
SM-CLW-307WP-5CLED	7W	727	1,211	5000K	70+	>200,000	120-277V	50/60HZ	32w HPS
SM CLW 307WP 10CLED	12W	1,376	2,261	5000K	70+	>200,000	120 277V	50/60HZ	50w HPS
SM-CLW-307WP-15CLED	20W	1,918	3,668	5000K	70+	>200,000	120-277V	50/60HZ	70w HPS
SM-CLW-307WP-21CLED	25W	3,102	4,963	5000K	70+	>200,000	120-277V	50/60HZ	100w HPS
SM-CLW-307WP-40CLED	45W	5,504	8,806	5000K	70+	>200,000	120-277V	50/60HZ	150w HPS

C
B

Ordering Guide Example: (SM-CLW-307WP-40CLED-30-MV-BZ-MS)

SM-CLW-307WP					
MODEL	WATTS	COLOR TEMP	VOLTAGE	FINISH	OPTIONS
SM-CLW-307WP	5W-5CLED 10W-10CLED 15W-15CLED 21W-21CLED 40W-40CLED	27-2700K 30-3000K 35-3500K 40-4000K 50-5000K 57-5700K 65-6500K	MV=120-277V 480=480V	BZ- BRONZE GRY-GRAY BLK-BLACK WH- WHITE CUS-CUSTOM	OCC- MOTION SENSOR PC- BUTTON PHOTOCELL EMR- EMR BATTERY WG- WIRE GUARD WC- WIRELESS CONTROL

'B' ONLY

Crystal Lighting Corporation - 13182 Flores St., Santa Fe Springs, Ca. 90670
Phone: 562-944-0223 - Fax: 562-944-0225 - WEB: www.crystallighting.us
Crystal Lighting is BUY AMERICAN compliant - All products are proudly manufactured and/or assembled in the USA

FOR THE INFORMATION KIOSK, USE A SINGLE PHOTO CELL MOUNTED ON THE EXTERIOR OF THE BEAM TO CONTROL THE TWO FIXTURE 'C'.

1/24 **FIXTURE 'B' & 'C'** — OUTSIDE FIXTURE FOR VAULT TOILETS, MAINTENANCE SHED, AND INFORMATION KIOSK.

Quazite®

"PC" Style (Stackable) Service Box Assemblies

6" x 8"
11" x 18"
12" x 12"

ADJUST SIZE AS REQUIRED

For use as a **Splice Box, Pull Box, Equipment Enclosure, Meter Box, Valve Box,** or any application requiring easy access to an underground service.

BOXES ARE STACKABLE FOR EXTRA DEPTH

BOX WITH COVER

Standard color is gray-other colors available

- Lightweight, easy to handle for lower installed cost
- High strength
- Light and heavy duty designs available
- Exceptional resistance to sunlight exposure, weathering and chemicals-unaffected by freeze/thaw cycles
- Straight sides permit easy adjustment of box to grade
- Fits flush with sidewalk or grass area
- No grounding required
- Stainless steel inserts and bolts
- Skid resistant covers
- Optional colors available

Applications

Standard Cover

Design Load: **8000#** over a 10" square with a minimum test load of **12,000#**.

Design is for sidewalk applications with a safety factor for occasional non-deliberate light vehicular traffic.

Heavy Duty Covers

Design Load: **15,000#** over a 10" square with a minimum test load of **22,568#**.

Design is for driveways, parking lots and off roadway applications where subject to occasional non-deliberate heavy vehicles. (See Quazite® Instruction Sheet 102.)

Due to the variation in installations, and applications, this information should be used as a basis for recommendation and not a guarantee of performance.

Standard Cover Logos SELECT LID ID AS NECESSARY

09	Blank	26	High Voltage
10	C.A.T.V.	1Q	Irrigation
12	Communications	29	Lighting
14	Controls	32	Non-potable water
17	Electric	41	Street Lighting
21	Fiber Optics	43	Telephone
23	Gas	44	Traffic
24	Ground	46	Traffic Signal
		50	Water

2/24 **IN THE GROUND JUNCTION BOX**

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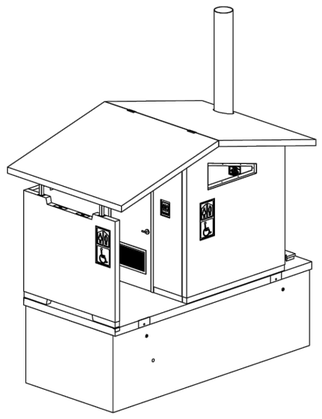
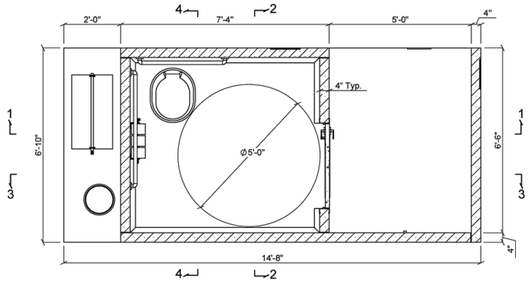
MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Details

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

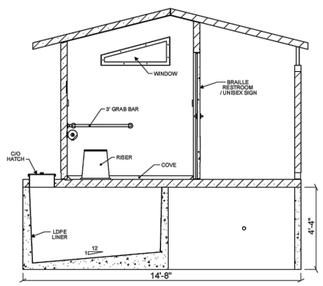
SHEET: 24 of 30



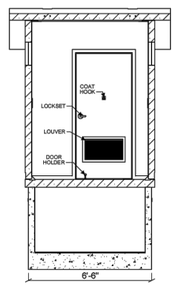


MISSOULACONCRETE construction

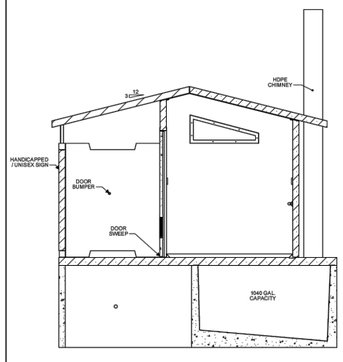
ASPEN VAULT TOILET	SHEET
LEFT HAND	1 / 4
FULL SCREEN	OF
1/2012	



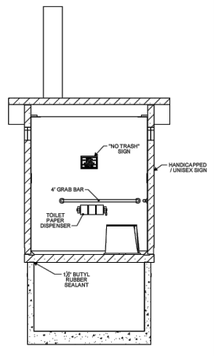
SECTION 1-1
SCALE 1 : 48



SECTION 2-2
SCALE 1 : 48



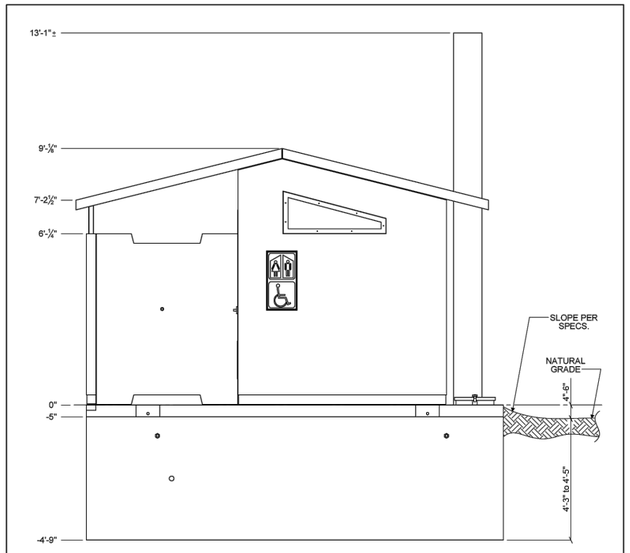
SECTION 3-3
SCALE 1 : 48



SECTION 4-4
SCALE 1 : 48

MISSOULACONCRETE construction

ASPEN VAULT TOILET	SHEET
LEFT HAND	2 / 4
FULL SCREEN	OF
1/2012	



WEIGHT:
- Building - 24,000 lbs.
- Vault - 16,000 lbs.

EXCAVATION:
- Vault Hole - 8' wide x 16' long x 4'-9" below desired finish floor elevation
- See specifications for additional requirements.

MISSOULACONCRETE construction

ASPEN VAULT TOILET	SHEET
LEFT HAND	3 / 4
FULL SCREEN	OF
1/2012	

1/25 VAULT TOILET DETAIL
NO SCALE

OWNER TO SUPPLY VAULT TOILET ASSEMBLY INCLUDING DELIVERY. CONTRACTOR TO SET THE VAULT TOILET INCLUDING SITE PREP, EXCAVATION, AND BACKFILLING PER DRAWINGS AND SPECIFICATIONS. DETAILS ON THIS SHEET PROVIDED TO SHOW THE VAULT TOILET TO BE SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.

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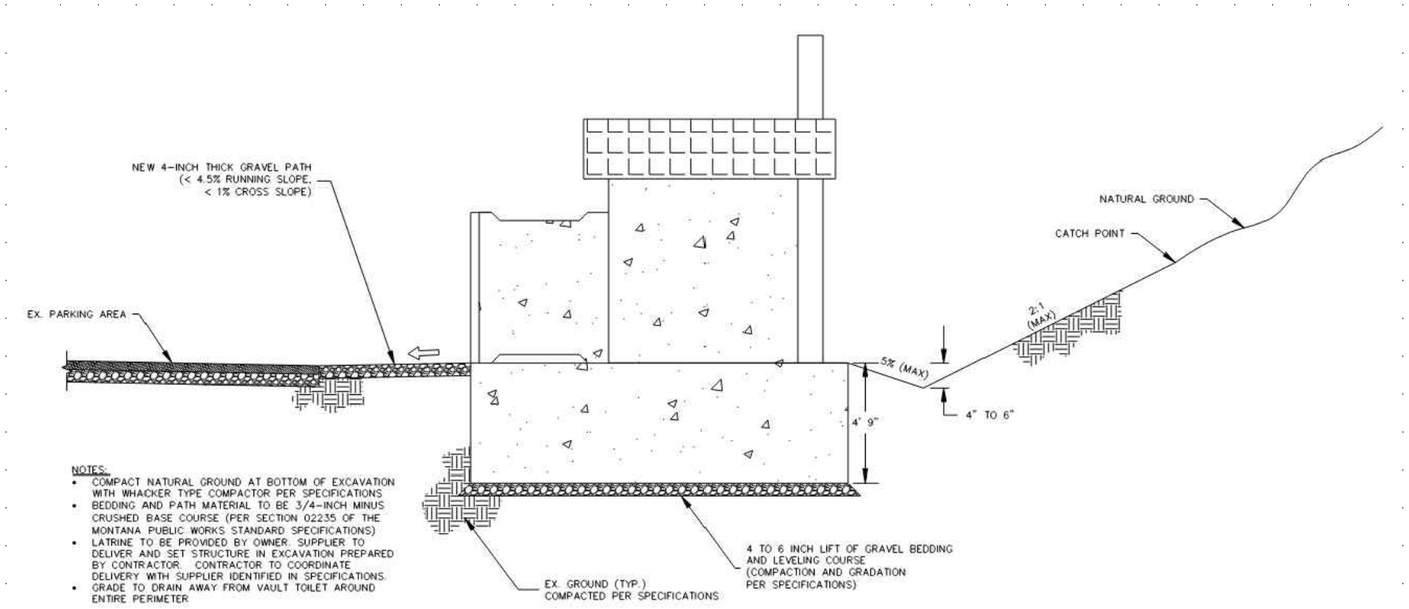
MONTANA FISH, WILDLIFE & PARKS
220

Yellow Bay State Park - FWP #7216212
Details

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 25 of 30



SEE GRADING DETAIL SHEETS FOR SPECIFIC LATRINE SITE LAYOUT AND DRAINAGE. BUILDING NOT REPRESENTATIVE OF ACTUAL

1/26 **VAULT TOILET DETAIL**
NO SCALE

OWNER TO SUPPLY VAULT TOILET ASSEMBLY INCLUDING DELIVERY. CONTRACTOR TO SET THE VAULT TOILET INCLUDING SITE PREP, EXCAVATION, AND BACKFILLING PER DRAWINGS AND SPECIFICATIONS. DETAILS ON THIS SHEET PROVIDED TO SHOW THE VAULT TOILET TO BE SUPPLIED BY OWNER AND INSTALLED BY CONTRACTOR.

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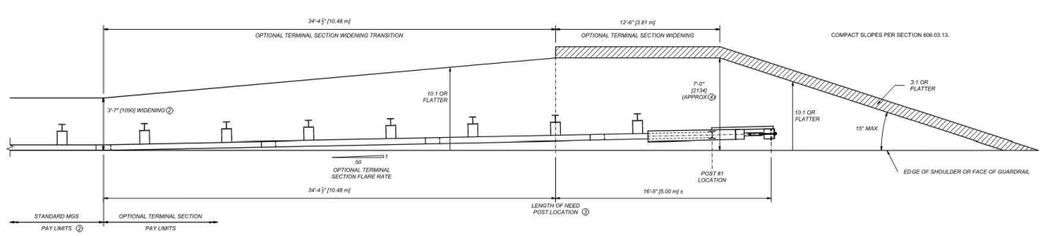
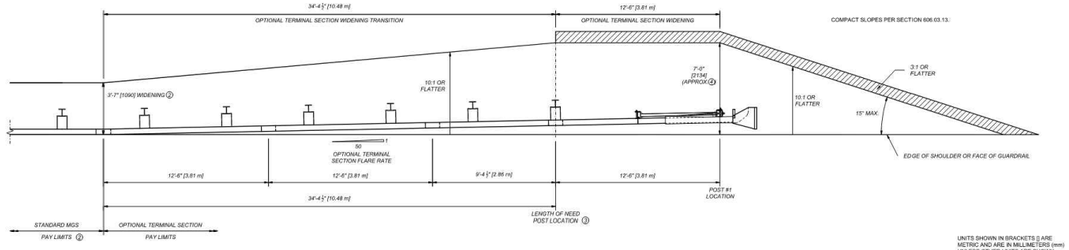
Yellow Bay State Park - FWP #7216212
Details

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 26 of 30



TRINITY SOFTSTOP ①



ROAD SYSTEMS MSKT WITH 9'-4 1/2" RAIL PANEL ①

① OPTIONAL TERMINAL SECTION SYSTEMS VARY. REFER TO MANUFACTURER'S DETAIL AND ASSEMBLY INSTRUCTIONS.

② SEE DTL. DWG. NO. 606-05A AND 606-05B FOR MGS GUARDRAIL. SEE DTL. DWG. NO. 606-20 IF CONNECTING TO EXISTING RAIL THAT IS NOT WITHIN THE MANUFACTURER'S HEIGHT TOLERANCE.

③ LENGTH OF NEED POST LOCATION EQUALS STATION LIMITS INDICATED IN THE PLANS.

④ 7'-0" [2.13m] WIDENING DIMENSION ALLOWS FOR OPTIONAL TERMINAL SECTION FLARE AND SYSTEM WIDTH. A MINIMUM WIDENING DISTANCE OF 5'-0" [1.52m] IS REQUIRED BEHIND POST LOCATION #1.

UNITS SHOWN IN BRACKETS [] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWINGS

REFERENCE STANDARD SPEC. SECTION 606 203	DWG. NO. 606-13

MASH OPTIONAL TERMINAL SECTIONS

EFFECTIVE: JAN 23, 2020

--REVISED--
JUN 27, 2024

MONTANA Department of Transportation

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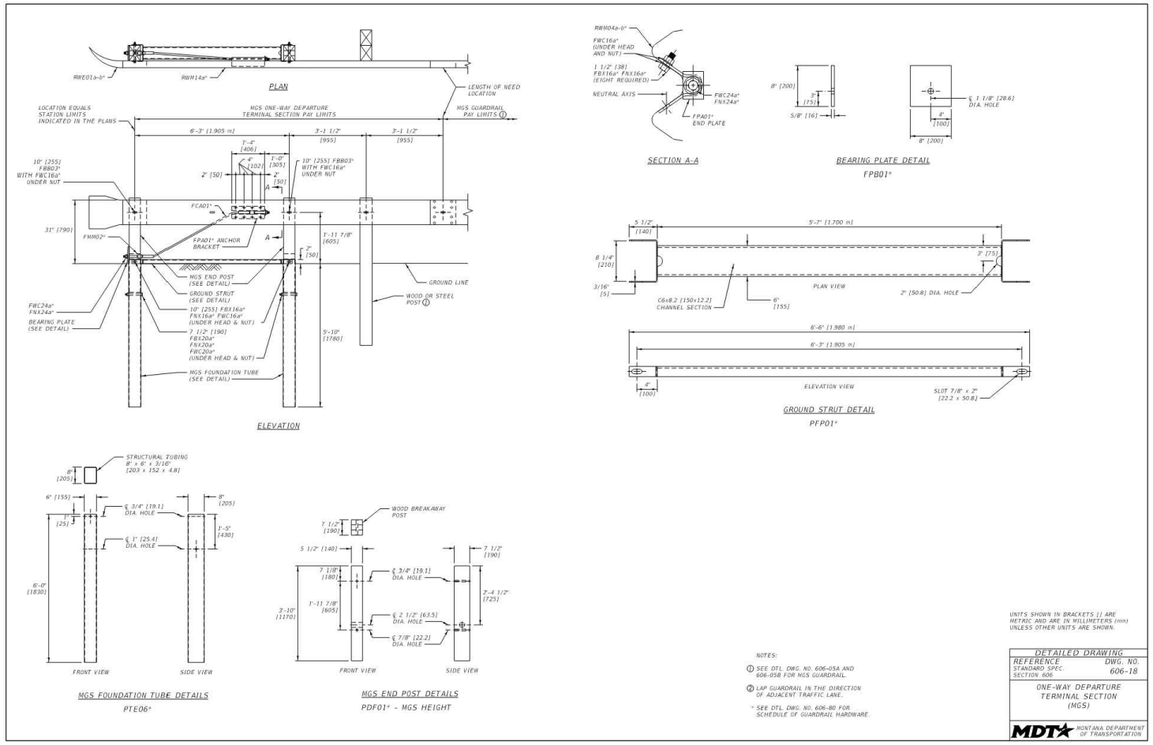
1 GUARD RAIL DETAIL
27
NO SCALE



NOTES:
① SEE DTL. DWG. NO. 606-05A AND 606-05B FOR MGS GUARDRAIL.
② LAP GUARDRAIL IN THE DIRECTION OF ADJACENT TRAFFIC LANE.
° SEE DTL. DWG. NO. 606-80 FOR SCHEDULE OF GUARDRAIL HARDWARE.

UNITS SHOWN IN BRACKETS [] ARE METRIC AND ARE IN MILLIMETERS (mm) UNLESS OTHER UNITS ARE SHOWN.

DETAILED DRAWING

REFERENCE STANDARD SPEC. SECTION 606	DWG. NO. 606-18

ONE-WAY DEPARTURE TERMINAL SECTION (MGS)

MDT MONTANA DEPARTMENT OF TRANSPORTATION

2 GUARD RAIL DETAIL
27
NO SCALE

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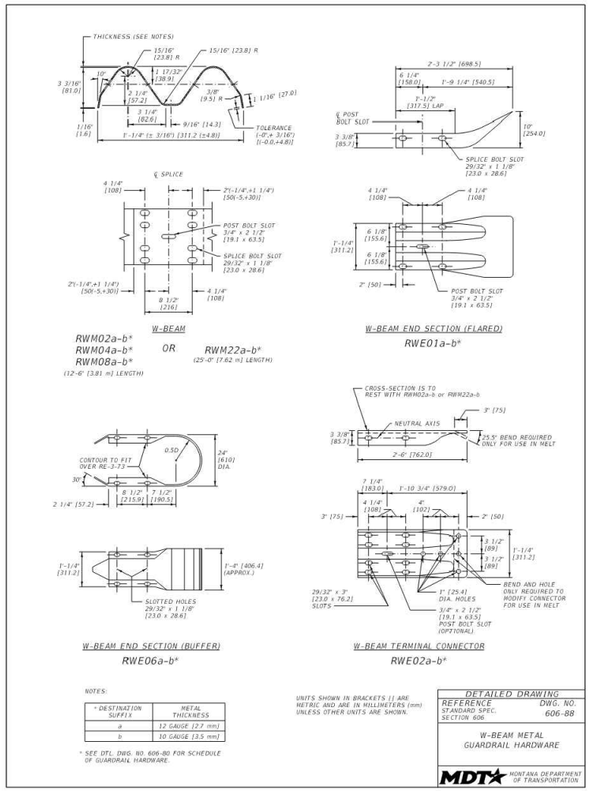
MONTANA FISH, WILDLIFE & PARKS

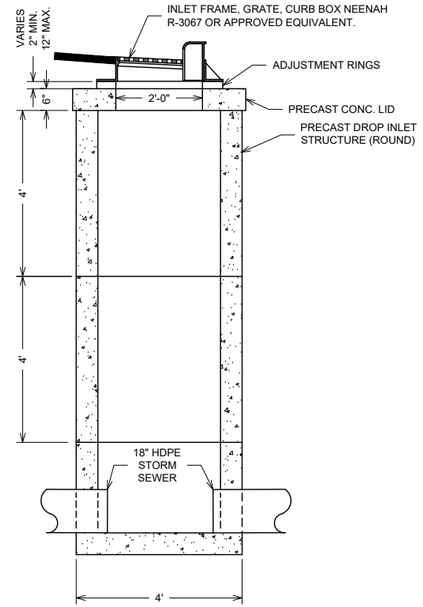
Yellow Bay State Park - FWP #7216212
Details

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 27 of 30



1/28 **GUARD RAIL DETAIL**
NO SCALE



2/28 **CURB INLET STORM DRAIN MANHOLE**
NO SCALE

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MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Details

JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 28 of 30

GENERAL NOTES:

1. THE ANTICIPATED DISTURBED AREA FOR THIS PROJECT IS GREATER THAN 1 ACRE. THEREFORE THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH ALL REQUIREMENTS OF THE 2017 "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL CONSTRUCTION PERMIT" (CGP) WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) FOR STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY.
2. THE CONTRACTOR SHALL FILL OUT AND SUBMIT ALL THE REQUIRED PAPERWORK AND PAY FEES FOR THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) TO BE IN COMPLIANCE WITH THE EPA AND THE CONFEDERATED SALISH KOOTENAI TRIBE (CSKT). THE CONTRACTOR SHALL REVIEW AND HAVE AN UNDERSTANDING OF THE PLAN'S INTENT FOR PROVIDING EROSION AND SEDIMENT CONTROL.
3. LAND DISTURBING ACTIVITY SHALL NOT COMMENCE UNTIL APPROVAL/PERMIT HAS BEEN GIVEN BY THE EPA, CSKT, AND LAKE COUNTY.
4. THIS EROSION CONTROL PLAN IS TO BE USED AS A GUIDE. IT IS THE SWPPP ADMINISTRATOR'S DUTY TO MODIFY OR UPDATE THE EROSION CONTROL PLAN TO MATCH THE SWPPP NARRATIVE AND THE ACTUAL BMPS INSTALLED ON-SITE AT ALL TIMES UNTIL THE NOTICE OF TERMINATION (NOT) FORM IS SUBMITTED TO THE EPA.
5. EVALUATE NEED FOR VEHICLE TRACKING PAD ENTRANCE PROTECTION. IF STREET SWEEPING IS NOT SUFFICIENT TO CONTROL OFF-SITE TRACKING, A VEHICLE TRACKING PAD SHALL BE UTILIZED.
6. CONTRACTOR TO PREVENT UNTREATED RUNOFF FROM LEAVING THE SITE. ADDITIONAL BMPS MAY BE NECESSARY.
7. CONTRACTOR TO PREVENT POLLUTING THE AIR WITH DUST AND PARTICULATE MATTER. PROVIDE WATER FOR DUST CONTROL AS NECESSARY.
8. THE CONTRACTOR IS TO BE RESPONSIBLE FOR INSTALLING, INSPECTING, MAINTAINING, PRESERVING AND EVALUATING THE PERFORMANCE OF ALL EROSION CONTROL MEASURES.
9. THE CONTRACTOR IS TO BE RESPONSIBLE FOR PERFORMING ALL MONITORING, REPORTING, AND RECORDS RETENTION REQUIREMENTS. THIS INCLUDES, BUT MAY NOT BE LIMITED TO, EXECUTION OF THE SWPPP REVISION OR UPDATE LOG AND SELF INSPECTION FORM. CONTRACTOR SHALL COPY ALL RECORDS, INCLUDING THE NOT AND NOT RECEIPT LETTER.
10. THE CONTRACTOR MUST HAVE ON-SITE AT ALL TIMES AND IMMEDIATELY AVAILABLE DURING CONSTRUCTION THE FOLLOWING: 1) COPY OF THE 2017 CGP, 2) A COPY OF THE COMPLETED NOTICE OF INTENT (NOI) FORM, 3) A COPY OF THE NOI RECEIPT CONFIRMATION LETTER FROM THE EPA, 4) AN UP TO DATE COPY OF THE SWPPP INCLUDING ANY FIELD CHANGES, 5) BMP INSTALLATION AND DESIGN STANDARDS FOR ALL BMPS INSTALLED AND DETAILED IN THE SWPPP, 6) SWPPP REVISION/UPDATE LOGS, 7) SELF INSPECTION RECORDS, 8) ALL REPORTS OF NON-COMPLIANCE.
11. CONTRACTOR IS SOLELY RESPONSIBLE FOR ANY AND ALL DAMAGES AND/OR FINES THAT MAY RESULT FROM RUNOFF FROM THIS SITE PRIOR TO FINAL STABILIZATION.
12. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL EROSION CONTROL MEASURES THROUGHOUT THE WARRANTY PERIOD, AND UNTIL FINAL STABILIZATION OF THE SITE IS REACHED AS DEFINED IN THE CGP. THE CONTRACTOR IS THEN RESPONSIBLE FOR REMOVING EROSION CONTROL MEASURES AND SUBMITTING THE NOT TO THE EPA AND CSKT, AND PROVIDING A COPY, ALONG WITH THE NOT RECEIPT LETTER FROM THE EPA, TO THE PROJECT ENGINEER.
13. ALL DISTURBED AREAS SHALL BE SEEDED, PAVED, OR STABILIZED IN ANOTHER MANNER WITHIN 14 DAYS OF FINAL GRADING. SHOULD CONSTRUCTION OF AN AREA STOP FOR LONGER THAN 14 DAYS, THE AREA SHOULD BE TEMPORARILY SEEDED OR STABILIZED IN ANOTHER ACCEPTABLE MANNER.
14. CONTRACTOR SHALL DESIGNATE THE LOCATION OF ALL DUMPSTERS, FUELING/MAINTENANCE AREAS, AND PORTABLE TOILETS.
15. CONSTRUCTION TRASH/LITTER MUST BE THOROUGHLY CLEANED-UP AND PROPERLY DISPOSED OF ON A DAILY BASIS.
16. CONTRACTOR TO PREVENT CONSTRUCTION SEDIMENT AND DEBRIS FROM ENTERING EXISTING STORM DRAIN INLETS AND OTHER STORM WATER FACILITIES.
17. CONTRACTOR TO PROVIDE CONCRETE WASHOUT (IF NEEDED), PROPER MATERIAL AND EQUIPMENT MANAGEMENT AND STORAGE, AND BUILDING WASTE LOCATION ONSITE OR PROVIDE OFFSITE DISPOSAL.

KEY NOTES (THIS SHEET):

1. CONTRACTOR MUST LIMIT SEDIMENT TRACKING ONTO PUBLIC AND PRIVATE STREETS. CONTRACTOR RESPONSIBLE FOR REMOVING ANY SEDIMENT TRACKED ONTO HARD SURFACES DURING CONSTRUCTION. CONTRACTOR TO STREET SWEEP AS NECESSARY. SWPPP ADMINISTRATOR TO DIRECT CONTRACTOR TO INSTALL VEHICLE TRACK PADS PER DETAIL SHEET IF STREET SWEEPING IS NOT ADEQUATELY CONTROLLING SEDIMENT TRACKING.
2. PROVIDE CONCRETE WASHOUT AREA IF NECESSARY. IF SHOWN LOCATION IS NOT SUITABLE THIS PLAN MUST BE UPDATED WITH THE NEW LOCATION(S). SEE DETAIL SHEET. CONTRACTOR TO SUBMIT UPDATED EROSION CONTROL PLAN SHOWING LOCATION.
3. PROVIDE MATERIAL STORAGE AND PORTABLE TOILET AREA. IF SHOWN LOCATIONS ARE NOT SUITABLE THIS PLAN MUST BE UPDATED WITH THE NEW LOCATIONS(S). CONTRACTOR TO SUBMIT UPDATED EROSION CONTROL PLAN SHOWING LOCATION.
4. EXAMPLE SOIL STOCKPILE LOCATIONS (ACTUAL LOCATIONS DETERMINED BY CONTRACTOR). ANY STOCKPILE THAT REMAINS UNTOUCHED FOR 14 DAYS IS TO BE TEMPORARILY STABILIZE WITH THE USE OF EROSION CONTROL BLANKET OR PLASTIC LAID OVER THE STOCKPILE OR THE INSTALLATION OF SILT FENCE AROUND THE PERIMETER OF THE STOCKPILE SET A MINIMUM OF 5 FEET FROM THE TOE OF THE PILE. UPDATED PLAN WITH STOCKPILE LOCATIONS AS THEY CHANGE. CONTRACTOR TO SUBMIT UPDATED EROSION CONTROL PLAN SHOWING LOCATION.
5. LIMIT EARTH DISTURBING ACTIVITIES NEAR THE BOUNDARY OF THE SITE TO PROTECT EXISTING VEGETATION AND PROVIDE VEGETATIVE BUFFER.
6. SURFACE ROUGHEN AND HYDROSEED ALL DISTURBED SLOPES STEEPER THAN 3:1 USING SEED MIX IN SPECIFICATIONS.
7. SWPPP ADMINISTRATOR TO MONITOR DOWNSTREAM EXTENTS OF PROJECT AND INSTALL SILT FENCE TO LIMIT SEDIMENT IN RUNOFF.

EROSION CONTROL LEGEND

- LIMITS OF CONSTRUCTION (5)
- PERIMETER CONTROL
- CONSTRUCTION ENTRANCE
- INLET PROTECTION
- SOIL STOCKPILE

N

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SCALE - FEET

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MONTANA FISH, WILDLIFE & PARKS

Yellow Bay State Park - FWP #7216212
Erosion Control Plan

MONTANA JONATHAN L. GASS 14423PE LICENSED PROFESSIONAL ENGINEER

SHEET: 29 of 30