BUSINESS ROUTE I70B & F 1/2
ROAD IMPROVEMENTS PLAN
ACCESS PERMIT #: 319166, 320001, 320002, 320003, 320004, 320005
MESA COUNTY

FINAL BID SET

IFB # 20-03145

TABULATION OF LENGTH & DESIGN DATA

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MINIMUM RADIUS OF CURVE
- 1918' 40'

MAXIMUM GRADE
- 5.0%

MINIMUM S.S.D. HORIZONTAL
- 495' 150'

MINIMUM S.S.D. VERTICAL
- 495' 150'

MAXIMUM DESIGN SPEED
- 55 MPH 25 MPH

POSTED SPEED
- 55 MPH 25 MPH

2040 DESIGN TRAFFIC
- ADT+ 37,050 ADT+ 12,100

HDV TRUCKS %
- -

CLEAR ZONE DISTANCE
- 26'-32' 10'

O MAX
- 9.0% 2.0%
1. ALL ROADWAY CONSTRUCTION WITHIN MESA COUNTY RIGHT-OF-WAY SHALL CONFORM TO THE COLORADO HIGHWAY DESIGNATION STANDARD SPECIFICATIONS BOOK, AND IN ACCORDANCE WITH THE LATEST EDITION OF THE MESA COUNTY TRANSPORTATION STANDARD SPECIFICATIONS, OR, FOR SPECIAL DETAILS, THE CONTRACTOR SHALL SUBMIT WRITTEN INSTRUCTIONS TO THE CONTRACTORS FOR CONSTRUCTION IN MESA COUNTY, COLORADO, IN CASE OF CONFLICT, MESA COUNTY SHALL TAKE PRECEDENCE.

2. ALL ROADWAY CONSTRUCTION WITHIN MESA COUNTY RIGHT-OF-WAY SHALL BE CONDUCTED IN SUCH MANNER AS TO PROTECT AND MAINTAIN THE INTEGRITY OF THE ROADWAY, ITS INFRASTRUCTURE, AND THE SURROUNDING ENVIRONMENT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF ALL MESA COUNTY HIGHWAYS DURING CONSTRUCTION, AND SHALL COMPLY WITH ALL MESA COUNTY HIGHWAY DEPARTMENT REQUIREMENTS.

3. ALL CRANES AND OTHER EQUIPMENT USED FOR CONSTRUCTION SHALL BE LOCATED AND OPERATED IN SUCH MANNER AS TO MINIMIZE INTERFERENCE WITH THROUGH TRAFFIC. THE CONTRACTOR SHALL MAINTAIN Aしっかりと TRY
clearly visible traffic control plan at all times, including appropriate signs, signals, and markings.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ALL MESA COUNTY HIGHWAY DECORATIVE ITEMS, SUCH AS MILE MARKERS, STOP SIGNS, AND OTHER SIGNAGE. THE CONTRACTOR SHALL ENSURE THAT ALL SUCH ITEMS ARE MAINTAINED IN GOOD CONDITION AND ARE PROPERLY LOCATED AND ORIENTED.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ALL MESA COUNTY HIGHWAY UTILITIES, SUCH AS DRAINAGE Ditches, SEWERS, AND OTHER INFRASTRUCTURE. THE CONTRACTOR SHALL ENSURE THAT ALL SUCH UTILITIES ARE MAINTAINED IN GOOD CONDITION AND ARE PROPERLY LOCATED AND ORIENTED.

6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ALL MESA COUNTY HIGHWAY DEVELOPMENT, SUCH AS GRADES, ALIGNMENTS, AND OTHER ENGINEERING REQUIREMENTS. THE CONTRACTOR SHALL ENSURE THAT ALL SUCH REQUIREMENTS ARE MAINTAINED IN GOOD CONDITION AND ARE PROPERLY LOCATED AND ORIENTED.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ALL MESA COUNTY HIGHWAY SAFETY REQUIREMENTS, SUCH AS GUARDRAILS, SIGNAGE, AND OTHER SAFETY FEATURES. THE CONTRACTOR SHALL ENSURE THAT ALL SUCH REQUIREMENTS ARE MAINTAINED IN GOOD CONDITION AND ARE PROPERLY LOCATED AND ORIENTED.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ALL MESA COUNTY HIGHWAY ENVIRONMENTAL REQUIREMENTS, SUCH AS ECOLOGICAL MITIGATION AND RESTORATION. THE CONTRACTOR SHALL ENSURE THAT ALL SUCH REQUIREMENTS ARE MAINTAINED IN GOOD CONDITION AND ARE PROPERLY LOCATED AND ORIENTED.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF ALL MESA COUNTY HIGHWAY COMPLIANCE REQUIREMENTS, SUCH AS PERMITS, CERTIFICATIONS, AND OTHER REGULATORY REQUIREMENTS. THE CONTRACTOR SHALL ENSURE THAT ALL SUCH REQUIREMENTS ARE MAINTAINED IN GOOD CONDITION AND ARE PROPERLY LOCATED AND ORIENTED.
MESA COUNTY GENERAL NOTES (CONTINUED):

24. After the storm sewer system has been constructed, the contractor shall place erosion control at locations needed
per NPDES requirements. The purpose of the erosion control
will be to minimize the amount of siltation that normally
would enter the storm sewer system from adjacent and/or
upstream drainage areas.

25. The trenches for pipe installation shall be kept dry at all
times during pipe placement. Appropriate facilities to
maintain the dry trench shall be provided by the contractor, and
the cost of such shall be incidental to the unit price bid for
the item. Plans for the site (dewatering, if employed) shall be
submitted to the architect/engineer for approval prior to
implementation. No additional compensation shall be made for
dewatering during construction unless approved in writing by
the owner.

26. Erosion control measures shall be installed in accordance
with NPDES standards for soil erosion and sedimentation
control and shall be maintained by the contractor and
remain in place until a suitable growth of grass, acceptable
to the engineer, has developed.

27. The contractor shall prepare record drawings and make the
necessary field data available to the engineer, indicating
the final location and layout of all improvements, including
verification of all concrete pads,invert, rim, and
spot grade elevations, and incorporate all field design
changes approved by the owner.

28. The contractor shall vadeate the work area prior to
construction for the purpose of documenting existing
conditions.

29. All testing shall be the responsibility and expense of the
contractor. Copies of all test results shall be provided to
the city for their review.

30. It shall be the responsibility of the contractor to ensure
that all items required for construction of the project, as
shown on the plans, are included in the contract, and
not specifically included in the contract, but shown on the
plans, shall be considered incidental to the contract. The
contractor shall notify the engineer immediately in the event
of a discrepancy with the plans and quantities.

31. The pavement shall be kept free of mud and debris at all
times.

GENERAL CONSTRUCTION NOTES:

1. Definitions:
   a. Owner = Property Owner
   b. Contractor = As determined by bid
   c. Engineer = Professional Engineer of Record
   d. Administrative Engineer = The MESA COUNTY
      Engineering Division and Public Works Department;
      The Agency of Jurisdiction
   e. Contractor shall have in contractor’s possession at all
      times one (1) copy of construction documents stamped
      and signed by engineer and mesa county, and one (1)
      copy of the latest edition of the mesa county standards
      and specifications. All work shall comply with the mesa
      county standards and specifications. Latest edition, the
      engineering design and concept remains the responsibility
      of the contractor. Contractor shall report any
      discrepancies to engineer and mesa county immediately.

2. Work Hours:
   a. All work on the project shall be performed during
      regular work hours, 7:00 AM until 7:00 PM, Monday
      through Friday, with conditions of the city council resolution
      approving the project, or within the work permit time
      allowed by the work permit of the project. Shall comply with
      mesa county public works department chapter 9.36.
   b. Contractor shall not perform work outside regular work
      hours or on Saturday, Sunday or any MESA COUNTY
      observed holiday without written consent of the
      Engineer. MESA COUNTY observed holidays include:
      New Year’s Day, Martin Luther King Day, Presidents
      Day, Memorial Day, Independence Day, Labor Day,
      Veterans Day, Thanksgiving, Christmas and
      Christmas Day. All work during these holidays shall
      receive two business days prior to the commencement
      of the work. Refer to section 150.03 permits and
      inspections of the mesa county standards and
      specifications.

3. Preconstruction Meetings:
   a. Owner shall conduct a preconstruction meeting with
      MESA COUNTY ENGINEERING STAFF at least 3 business
days prior to the start of construction. Those in attendance
      shall include:
      - Owner
      - Engineer
      - Mesa County
      - Contractor
      - Geotechnical Engineer
      - Surveyor
      - Any other affected agencies
   b. Construction documents with the mesa county review
      stamp and signature shall be at the preconstruction
      meeting.
   c. There shall be a separate on-site preconstruction
      conference with MESA COUNTY public works at least 46
      business days prior to the start of construction.
   d. Mesa County public works shall be notified two business
      days (48 hours) in advance to schedule an on-site
      preconstruction conference.

4. Preconstruction Meetings:
   a. Contractor shall restrict construction activity to public
      right-of-way (R.O.W.) and areas defined as permanent and/or
      temporary. All construction shall be in a manner that
      maintains ownership of owner, unless otherwise approved by
      the owner and/or their representatives. Contractor shall report
      all written agreements for ingress and egress to the
      engineer at site from adjacent private property owners, access
to any adjacent private property shall be maintained
      throughout the construction period.
   b. Contractor shall verify accuracy between the work set forth
      on these construction documents and work returned in the field.

6. Engineer shall coordinate any proposed changes with mesa
   county.

7. Contractor shall be responsible for the following:
   b. Call two days prior to the start of construction and/or
      excavating for the marking of underground member utilities.
   c. Location of existing utilities shall be verified by
      contractor prior to construction. Contractor shall provide
      signage for the location of underground service lines
      and protection of all existing utilities and appurtenances.
   d. Providing notification and receiving markings of
      underground member utilities in no way
      constitutes permission to perform construction.
   e. Mesa County at 303-436-6334 for locations of existing
      mesa county utilities, including potable and non-potable
      waterlines, sanitary sewer lines, storm sewer lines,
      public irrigation lines and traffic control devices. Call
      two business days (48 hours) prior to the start of
      construction. Location of existing utilities shall be
      verified by contractor prior to construction.
   f. Contractor shall notify the public works department of
      all work performed to avoid duplication of labor.
   g. Contractor shall coordinate with MESA COUNTY
      PUBLIC WORKS DEPARTMENT for the issuance of
      work permits. Contractor shall coordinate with
      MESA COUNTY PUBLIC WORKS DEPARTMENT for
      determination of minimum time requirement. MESA
      COUNTY public works shall be notified two business
      days (48 hours) in advance to schedule an
      on-site preconstruction conference.
   h. Contractor shall provide copies of all work performed
      minutes of meetings, correspondence, and other
      relevant information to the engineer.
   i. Contractor shall be responsible for all traffic control
      during construction.
GENERAL CONSTRUCTION NOTES (CONTINUED):

ABBREVIATIONS:

Q  BASELINE
BP  BEGIN POINT
C  CENTERLINE
CONC  CONCRETE
C & G  CURB AND GUTTER
CR  CURB RETURN
DIA.  DIAMETER
DTL  DETAIL
EG  ELEVATION
EP  END POINT
ESMT  EASEMENT
ETW  EDGE OF TRAVELED WAY
FG  FINISHED GRADE
FL  FLOW LINE
HCL  HORIZONTAL CONTROL LINE
LF  LINEAR FOOT/FEET
LND  LIMITS OF DISTURBANCE
LT  LEFT
ME  MATCH EXISTING
NO  NUMBER
NTS  NOT TO SCALE
OFF  OFFSET
PC  POINT OF CURVE
PCC  POINT OF COMPOUND CURVE
PCR  POINT OF CURB RETURN
PGL  PROFILE GRADE LINE
PPG  PROFILE GRADE POINT
PRC  POINT OF REVERSE CURVE
PROP  PROPOSED
PT  POINT OF TANGENCY
PM  POINT OF VERTICAL INTERSECTION
R  RADIAL
RD  ROAD
ROW  RIGHT
SF  SQUARE FEET
SNS  STREET NAME SIGN
SSD  STOPPING SIGHT DISTANCE
STA  STATION
STD  STANDARD
SWK  SIDEWALK
SY  SQUARE YARDS
TC  TOP OF CURB
TYP  TYPICAL
UE  UTILITY EASEMENT
UTIL  UTILITY
VAR  VARIANCES
VC  VERTICAL CURVE
VPC  VERTICAL POINT OF CURVATURE
VPT  VERTICAL POINT OF INTERSECTION
VPT  VERTICAL POINT OF TANGENCY

LEGEND:

EXISTING RIGHT OF WAY
EXISTING FENCE
EXISTING WATER LINE
EXISTING SANITARY SEWER
EXISTING STORM SEWER
EXISTING GAS
EXISTING UNDERGROUND ELECTRIC
EXISTING UNDERGROUND TELEPHONE
EXISTING POWER POLE
EXISTING FIRE HYDRANT
EXISTING WATER METER/VALVE
EXISTING WATER MANHOLE
EXISTING SANITARY MANHOLE
EXISTING STORM SEWER MANHOLE
EXISTING INLET
EXISTING PULL BOX
EXISTING STREET LIGHT
EXISTING TREE
EXISTING SIGN
PROPOSED STORM MANHOLE
PROPOSED STORM INLET
PROPOSED SIGN

Utility  Contact  Contact Info
Grand Valley Power  Perry Rupp  970-683-8571
Palisade Irrigation District  Dan Crabtree  970-650-9481
Clifton Water District  David Reinertsen  dreinertsen@cliftonwaterdistrict.org
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## SUMMARY OF EARTHWORK QUANTITIES

### UNCLASSIFIED EXCAVATION

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### EMBANKMENT (COMPLETE IN PLACE)

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### EARTHWORK QUANTITIES BALANCE - FOR INFORMATION ONLY

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*NOT A PAY ITEM*
QUALITY LEVEL  DEFINITION

D  EXISTING RECORDS: UTILITIES ARE PLOTTED FROM REVIEW OF AVAILABLE RECORDS.
C  QUALITY LEVEL 'C' INFORMATION FROM EXISTING RECORDS IS CORRELATED WITH SURVEYED SURFACE
    FEATURES.
B  DESIGNATE: TWO-DIMENSIONAL HORIZONTAL MAPPING. THIS INFORMATION IS OBTAINED THROUGH THE
    APPLICATION AND INTERPRETATION OF SURFACE GEOPHYSICAL METHODS. UTILITY INDICATIONS ARE
    REFERENCED TO APPROPRIATE SURVEY CONTROL.
A  LOCATE (TEST HOLE): THREE DIMENSIONAL MAPPING AND OTHER CHARACTERIZATION DATA. THIS
    INFORMATION IS OBTAINED THROUGH EXPOSING UTILITY FACILITIES THROUGH TEST HOLE AND MEASURING
    AND RECORDING (TO APPROPRIATE SURVEY CONTROL), UTILITY/ENVIRONMENTAL DATA, AND
    INCORPORATING QUALITY LEVELS "B", "C" AND "D" INFORMATION TO PRODUCE QUALITY LEVEL "A"

ABBREVIATIONS

UTILITY OWNER

CTP  CLIFFTON
CL  CENTURY LINK
GR  GRAND VALLEY
PL  PAULSADE
PR  PRIVATE
XO  XOEL

MATERIALS

CPP  CONCRETE CYLINDER PIPE
PLA  PLASTIC
PVC  POLY VINYL CHLORIDE PIPE
RCR  REINFORCED CONCRETE PIPE
STL  STEEL
UNK  UNKNOWN

OTHER

CIV  CABLE TV
ELE  ELECTRICAL
NAT  NATURAL GAS
INC  INCH
MSE  SANITARY SEWER MANHOLE
STO  STORM DRAIN MANHOLE
OH  OVERHEAD CABLE TV
OHE  OVERHEAD ELECTRICAL
OHT  OVERHEAD TELEPHONE
OVD  OVERHEAD
PH  PHASE
PR  # OF COPPER WIRE PAIRS
SD  STORM DRAIN
SID  STORM DRAIN INLET
SCE  SECONDARY
SGL  SINGLE
SVR  SERVICE
SS  SANITARY SEWER
LNG  UNDERGROUND
WTR  WATER

SYMBOLS

□ WATER METER
□ WATER HYDRANT
□ WATER VALVE
□ POWER POLE
□ ELECTRICAL MANHOLE
□ POWER BOX / METER
□ LIGHT POLE
□ SANITARY SEWER MANHOLE
□ TELEPHONE JUNCTION BOX
□ STORM DRAIN INLET
□ STORM DRAIN MANHOLE
□ CABLE TV JUNCTION BOX
□ POLE TAG
□ UTILITY STRUCTURES TAG

GENERAL UTILITY NOTES:

1. BEFORE DIGGINGS CALL CO 811 FOR LOCATION OF
   UNDERGROUND UTILITIES.
2. ALL EXISTING UTILITY LOCATIONS ARE FOR
   REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY
   HORIZONTAL AND VERTICAL LOCATIONS.
3. UTILITY MATERIAL SHOWN IS FOR INFORMATION ONLY.

Print Date:  
Drawing File Name:  
Horiz. Scale:  
Vert. Scale:  

Sheet Revisions

Date:  
Comments:  
Init.  

As Constructed

F0.5 & IT0B

INTERSECTION IMPROVEMENTS

No. Revisions:  
Revised:  
Designer:  
Detailer:  
Void:  
Sheet Subset:  
Sheet subset:  

Project No. Code

MESA COUNTY

Sheet Number: 13
1. See Sheets 55 – 60 for storm sewer removal and reset notes and quantities.
MATCH EXISTING FL/BEGIN C/G
STA: 9+65.13
OFF: 1.00' LT

PROPOSED EP/BEGIN CURB TERMINATION

MATCH EXISTING EP STA: 10+28.66
OFF: 48.36' RT

LIMIT OF DISTURBANCE

BORDER TO RESTRICT VEHICULAR ACCESS TO NORTH LIMITS OF BERM TO BE DETERMINED BY THE ENGINEER IN THE FIELD. APPROVAL OF BERM LIMITS TO BE COORDINATED WITH COT.
NOTES:
1. CONTRACTOR TO INSTALL CONSTRUCTION FENCE PRIOR TO ANY WORK. NO DISTURBANCE, PARKING, OR STAGING TO TAKE PLACE INSIDE LIMITS OF CONSTRUCTION FENCE.
2. CONSTRUCT INTERSECTION PER INTERSECTION DETAIL ON SHEET 68
1. CONSTRUCT HAMMERHEAD PEN
HAMMERHEAD DETAIL ON SHEET 69
MATCHLINE 170 B STA 9+50

MATCHLINE 170 B STA 14+50

NOTE:
1. EXISTING UTILITY HORIZONTAL LOCATIONS AND ELEVATIONS SHOWN ARE APPROXIMATE ONLY. CONTRACTOR TO PLOT HOLE AND VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITY CROSSINGS AND CONNECTION POINTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. Rim ELEVATIONS SHOWN AT PROPOSED CURB INLETS ARE AT THE BACK-OF-CURB ELEVATION.
NOTE:
1. EXISTING UTILITY HORIZONTAL LOCATIONS AND ELEVATIONS SHOWN ARE APPROXIMATE ONLY. CONTRACTOR TO POTHOLE AND VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITY CROSSINGS AND CONNECTION POINTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. RW ELEVATIONS SHOWN AT PROPOSED CURB INLETS ARE AT THE BACK-OF-CURB ELEVATION.
MATCHLINE I70B STA 18+00

EXISTING GRADE

PROPOSED GRADE

100-YR HGL

159 LF OF 18" CLASS V RCP @ 1.44%

5-YR HGL

EX GRADE

PROF GRADE

STORM LINE 1 PROFILE (4 OF 4)
NOTE:
1. EXISTING UTILITY HORIZONTAL LOCATIONS AND ELEVATIONS SHOWN ARE APPROXIMATE ONLY. CONTRACTOR TO POTBELLY AND VERIFY ALL HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITY CROSSINGS AND CONNECTION POINTS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
2. ELEVATIONS SHOWN AT PROPOSED CURB INLETS ARE AT BACK-OF-CURB ELEVATION.
CONSTRUCTION DETAIL 3
SE CORNER OF F ½ ROAD AND SUNKNING WAY
CONSTRUCTION DETAIL 4
NE CORNER OF F 1/2 ROAD AND SUNKING WAY

F 1/2 ROAD NORTHEAST CURB RETURN PROFILE
VERTICAL SCALE: 1"=2'
CONSTRUCTION DETAIL 7
SE CORNER OF FRONTAGE ROAD AND LOIS STREET

FRONTAGE ROAD

"F.5 ROAD Q" 22+00
FL EL: 4747.46
TC EL: 4747.96

"F.5 ROAD Q" 22+56.87, 19.72'RT
FL EL: 4747.69
TC EL: 4747.83

"F.5 ROAD Q" 22+44.25, 14.00'RT
FL EL: 4747.37
TC EL: 4747.87

"F.5 ROAD Q" 22+44.25, 14.00'RT
SWK EL: 4748.35

"F.5 ROAD Q" 22+57.09, 31.18'RT
SWK EL: 4748.36

"F.5 ROAD Q" 22+57.37, 34.00'RT
SWK EL: 4748.54

"F.5 ROAD Q" 22+62.87, 34.00'RT
FL EL: 4747.45
TC EL: 4747.95

"F.5 ROAD Q" 22+44.76, 14.38'RT
FL EL: 4747.46
TC EL: 4747.96

LOIS STREET SOUTHEAST CURB RETURN PROFILE
VERTICAL SCALE: 1"=2'

4752
HIGH POINT ELEV: 4747.83
HIGH POINT STA: 0+28.39
PM STA: 0+21.29
PM ELEV: 4747.96
AD: 2.32'
K: 8.81
20.00' VC

4748

4744

4744

0+10 0+00
0+40.51

LOIS STREET SOUTHEAST CURB RETURN PROFILE
CONSTRUCTION DETAIL 8

NE CORNER OF FRONTAGE ROAD AND LOIS STREET
GENERAL STRUCTURAL NOTES

DESIGN SPECIFICATIONS

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017.

CONSTRUCTION SPECIFICATIONS

COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 2019.

DESIGN LOADS

(CONTACTOR SHALL FIELD VERIFY DESIGN SOIL PARAMETERS AND NOTIFY ENGINEER IF CONDITIONS DIFFER).

EQUIVALENT FLUID PRESSURE FOR ACTIVE SOIL PRESSURE = 40 PCF

SOIL BEARING RESISTANCE FACTOR = 0.45

MINIMUM RESISTANCE FOR SOIL BEARING = 5500 PSF

LIVE LOAD SURCHARGE = 2'-0"

CONCRETE AND REINFORCEMENT

CAST-IN-PLACE CONCRETE SHALL BE CLASS D, f'c = 4500 PSI MIN. UNLESS NOTED OTHERWISE.

REINFORCING SHALL CONFORM TO ASTM A615, GRADE 60, fy = 60,000 PSI.

HOOKS AND BENDS FOR REINFORCING BARS SHALL CONFORM TO THE REQUIREMENTS OF ACI318-14.

ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.

ALL REINFORCING SHALL HAVE 2" CLEAR COVER UNLESS NOTED OTHERWISE.

ALL EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED 3/8".

DIMENSIONS

DIMENSIONS SHALL NOT BE SCALRED FROM DRAWINGS.
DRAINAGE NOTES:

1. PLASTIC DRAINAGE CORE.

2. GEOTEXTILE (DRAINAGE) (CLASS 2) SHALL BE ON EMBANKMENT SIDE OR ON BOTH SIDES OF CORE. THE GEOCOMPOND SHALL BE SECURED TO THE WALL TO PREVENT MOVEMENT DURING BACKFILLING.

3. 3" DRAIN HOLE, 20'-0" MAX CENTER TO CENTER, SLOPED AT 2%, LOCATE 0'-6" ABOVE FINISHED GRADE.

SECTION

SCALE: 1/8"=1'-0"

FINISHED GRADE (B.F.)

NOTE 1
NOTE 2
NOTE 3
BOND-BREAKER

LIMITS OF STRUCTURAL BACKFILL: CLASS 1

EXISTING 62" RCP

EXISTING DRAINAGE STRUCTURE

CONNECTION DETAIL

SCALE: N.T.S.

SEE SHEET 81

1" BITUMINOUS EXPANSION JOINT FILLER (TYP.)

NOTE 1
NOTE 2
NOTE 3

TITLE BLOCK

PROJECT NO./CODE
096152001

DRAWN BY: 06/16/2020

SHEET NO.: 82
<table>
<thead>
<tr>
<th>STATION</th>
<th>LOCATION</th>
<th>MODIFIED EPOXY PAVEMENT MARKING (LF)</th>
<th>PREFORMED PLASTIC PAVEMENT MARKING (TYPE III) (INLAID) (LF)</th>
<th>STATION LOCATION</th>
<th>PREFORMED THERMOPLASTIC PAVEMENT MARKING (WORD-SYMBOL) (SPECIAL) (INLAID)</th>
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**TOTAL (LINEAR FOOT):** 2719 972 0 0 3036 783

**TOTAL (SF):** 906 324 0 0 2024 457 155 110 256 169 0

**TOTAL (GAL):** 9 4 0 0 20

---

**FINAL BID SET**

**FOR AND FT/2 ROAD INTERSECTION IMPROVEMENTS 1708 TABULATION OF PAVEMENT MARKINGS**

**Project No/Code:** 096152001

**Sheet Number:** 84

**Design:** SMM

**Drawn:** JCL

**Checked:** SMK

**Modified:**

**Sheet:** 2 of 3

**Print Date:** June 16, 2020

**Design File Name:** Kimley-Horn - Mesa County - 1708 - Intersection Improvement - Tabulation of Pavement Markings
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LEGEND

1. Edge line: Solid white, 6" wide
2. Lane line: Broken white, 3" wide
3. 10' segments with 30' gaps
4. Held bar: White, 4' tall, 2'-6" wide, 3.3 SF, spacing 5' on center
5. Channelizing line: Solid white, 6" wide
6. Dotted line: Broken white, 8" wide, 2' segments with 4' gaps
7. Channelizing line: Solid white, 8" wide
8. Chevron stripe: Solid white, 8" wide
9. Crosswalk markings: 2x2'5" solid white, spacing as needed per lane width and walk path
10. Stop bar: 2' solid white
11. Curb cutout type 1 (crystal)

EDGE LINE: SOLID YELLOW, 6" WIDE
CENTER LINE: SOLID DOUBLE YELLOW, 4" WIDE, 4" SEPARATION
CROSS-HATCHING (LINE): SOLID YELLOW, 8" WIDE
TURN ARROW: WHITE, 6" TALL, 6'-1" WIDE, 15.5 SF (PER S-627-1)
THRU TURN ARROW: WHITE, 13'-2" TALL, 7'-5" WIDE, 27.5 SF (PER S-627-1)
EXISTING SIGN PANEL AND POST TO REMAIN
EXISTING SIGN PANEL TO BE RESET WITH NEW POST
EXISTING SIGN PANEL TO BE REMOVED
NEW SIGN PANEL (MOUNTED ON GATE ARM)
NEW SIGN PANEL WITH NEW POST
"ONLY" SYMBOL: WHITE, 8" TALL, 6'-6" WIDE, 22 SF (PER S-627-1)

NOTES:
1. All pavement markings shall be installed per S-627-1.
2. All locations of pavement marking removals and installations shall be verified and approved by the engineer prior to construction.
3. Removal of pavement markings shall be water blasted or sandblasted only.

Mesa County Engineering
200 Spacepark Drive
Grand Junction, CO 81501
(970) 244-7000

FINAL BID SET
978 AND FT/2 ROAD INTERSECTION IMPROVEMENTS
SIGNAGE AND STRIPING PLAN

Sheet Revisions

June 15, 2020

No. of Pages: 1
Date: June 16, 2020
Scale: 1" = 80'0"

Project No./Code: 09152001
Kimley-Horn
Sheet Number: 08
LEGEND

1. EDGE LINE: SOLID WHITE, 6" WIDE
2. LANE LINE: BROKEN WHITE, 3" WIDE
3. 10' SEGMENTS WITH 30' GAPS
4. CENTER LINE: SOLID DOUBLE YELLOW, 4" WIDE, 4" SEPARATION
5. CHANNELIZING LINE: SOLID WHITE, 6" WIDE
6. DOTTED LINE: BROKEN WHITE, 6" WIDE
7. CENTER LINE: SOLID DOUBLE YELLOW, 4" WIDE, 4" SEPARATION
8. CHANNELIZING LINE: SOLID WHITE, 8" WIDE
9. CHEVRON STRIPE: SOLID WHITE, 8" WIDE
10. CROSSWALK MARKINGS: 2' X 2' SOLID WHITE, SPACING AS NEEDED PER LANE WIDTH AND WHEEL PATH
11. STOP BAR: 2' SOLID WHITE
12. DELIMITATOR TYPE I (CRYSTAL)

EDGE LINE: SOLID YELLOW, 6" WIDE
CENTER LINE: SOLID DOUBLE YELLOW, 4" WIDE, 4" SEPARATION
CHANNELIZING LINE: SOLID YELLOW, 8" WIDE
TURN ARROW WHITE, 6' TALL, 6'-1" WIDE, 15.5 SF (PER S-627-1)
THRU TURN ARROW WHITE, 1'-3" TALL, 7'-5" WIDE, 23.5 SF (PER S-627-1)
EXISTING SIGN PANEL AND POST TO REMAIN
EXISTING SIGN PANEL TO BE RESET WITH NEW POST
EXISTING SIGN PANEL AND POST TO BE REMOVED
NEW SIGN PANEL (MOUNTED ON GATE ARM)
NEW SIGN PANEL WITH NEW POST
"ONLY" SYMBOL WHITE, 8' TALL, 6'-8" WIDE, 22 SF (PER S-627-1)

NOTES:
1. ALL PAVEMENT MARKINGS SHALL BE INSTALLED PER S-627-1.
2. ALL LOCATIONS OF PAVEMENT MARKING REMOVALS AND INSTALLATIONS SHALL BE VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION.
3. REMOVAL OF PAVEMENT MARKINGS SHALL BE WATER BLASTED OR SANDING ONLY.
NOTES:
1. SIGNAL PHASING ShOWN IS FOR REFERENCE ONLY. CONTRACTOR SHALL CONTACT THE MESA COUNTY AND COT TO COORDINATE SIGNAL TIMING.
2. REFER TO COT STANDARDS 5–614–43 FOR WIRING AND SAWCUT INFORMATION FOR LOOP DETECTORS. ADVANCED DETECTION LOOPS ARE 386’ AWAY FROM THE INTERSECTION PER COT STANDARDS 5–614–43.
3. STRIPPING IS DIAGRAMATIC ONLY. SEE FINAL SIGNING AND STRIPING PLANS FOR FINAL DESIGN.
4. EXTEND TYPE 1 DETECTION LOOPS BEYOND STOP BAR AS SHOWN ON PLANS.
5. EXTEND 2" FIBER OPTIC CONDUIT TO INTERSECTION OF F 1/2 & 1–70B.
6. LOOP DETECTORS SHALL BE LOCATED IN THE CENTER OF THE TRAVEL LANE AND ORIENTED PERPENDICULAR TO THE DIRECTION OF TRAVEL. MINIMUM SPACING OF 8’ BETWEEN TYPE 2 LOOPS.
7. CONDUIT SHALL BE TRENCHED UNLESS OTHERWISE INDICATED.
NOTES:
1. FIBER LOCATIONS ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL COORDINATE WITH CÖDÖT ON THE LOCATION OF FIBER WITHIN ROW.

FURNISH AND INSTALL FIBER TYPE 5 PULLBOX AND 2-INCH CONDUIT TO SIGNAL PULLBOX. SPLICE FIBER OPTIC BACKBONE CABLE TO NEW 12-STRAND SIGNAL-MODE LATERAL CABLE (MID-SHEATH SPLICE; LEAVE 25 FEET OF 12-STRAND FIBER CABLE COILED IN FIBER PULLBOX.)

PROPOSED FIBER PULL BOX (SEE SHEET 93)
FINISHED GRADE

APPROXIMATE CUT/FILL

EXISTING GRADE

Offset

GRAPHIC SCALE IN FEET

HORIZONTAL

VERTICAL

PROJECT No./Code

MESA COUNTY ENGINEERING DEPARTMENT
860 E. STATE STREET
COMMUNITY CENTER, ROOM 302
GRAND JUNCTION, CO 81501
(970) 244-1165

FINAL BID SET

J-70B AND F/2 ROAD INTERSECTION IMPROVEMENTS

1-70B CROSS SECTIONS

Sheet No./Code

Date

Comments

Ref.

Sheet 1 of 2

Sheet Number 99

Part Date: June 16, 2020

Drawing File Name: Cross Sections.png

Scale: 1" = 50'

Kimley-Horn

N/A
ATUM: 4730.00

FINISHED GRADE

APPROXIMATE CUT/FILL

EXISTING GRADE

Offset

ATUM: 4730.00

FINISHED GRADE

APPROXIMATE CUT/FILL

EXISTING GRADE

Offset

GRAPHIC SCALE IN FEET

0 10 20 40
HORIZONTAL

0 5 10 20
VERTICAL

Sheet Revisions

Date: Comments: Ink:

FINAL BID SET

MESA COUNTY ENGINEERING
DIVISION

100 E. MAIN STREET
GRAND JUNCTION, CO 81501
(970) 244-7100

Project No./Code: 09152001

Sheet: Sheet 1 of 2

Sheet Number: 102
<table>
<thead>
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### GRAPHIC SCALE IN FEET

**VERTICAL**

0 5 10 20

**HORIZONTAL**

0 10 20 40

---

**FINAL BID SET**

**7088 AND F1/2 ROAD INTERSECTION IMPROVEMENTS**

**F 1/2 CROSS SECTIONS**

**MESA COUNTY ENGINEERING**

**SOUTHWEST**

300 1st STREET

**GRAND JUNCTION, CO 81501**

(970) 244-1765

**Sheet: 2 of 2**

**Sheet No./Code:**

096152001

**Project No./Code:**

**Sheet Revisions:**

**Sheet No./Code:**

096152001

**Print Date:**

June 16, 2020

**Scale:**

1" = 10'
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</table>

**GRAPHIC SCALE IN FEET**

- HORIZONTAL: 0 to 40
- VERTICAL: 0 to 20
1. SITE DESCRIPTION
The Contractor shall comply with all CDOT contractual requirements and all requirements associated with the
CDOT-SCM on this project. The SWMP Administrator for Construction shall update to reflect current project site
conditions.

A. PROJECT SITE LOCATION: The proposed I-70B and FSR Intersection Improvements Project (the
"Project") is located at the intersection of Business I-70 and FSR approximately 0.5 miles south of
Interstate 70 in Clifton, Colorado.

Location or address of construction office:
229 South Sixth St., Room 100, Grand Junction, CO 81501

B. PROJECT SITE DESCRIPTION: The Project will consist of the following improvements:
- Widening and lengthening the I-70 Southbound Right Turn Lane
- Widening the I-70 Southbound for the creation of a Left Turn Lane
- Widening and lengthening the I-70 Northbound Right Turn Lane
- Widening and lengthening the I-70 Northbound Left Turn Lane
- Widening FSR Road at the intersection with I-70B west of I-70B to Sun King Way
- Widening and reconfiguring FSR Road along east frontage Road to the intersection with I-70B
- Reconfiguring Lo's Street at the intersection with FSR Road

These improvements will require realigning of portion of the roadway and surrounding landscape areas. Dry utilities and storm sewer will be installed with this project. This project will pave and landscape within the
Limits of Disturbance. Within the proposed disturbance area (LDA) the percent of existing vegetation is
63% (8 acres of vegetation and 12.8 acres of construction site).

C. PROPOSED SEQUENCING FOR MAJOR CONSTRUCTION ACTIVITIES: The Project will include
mobilation, clearing and grubbing, demolition of existing infrastructure, grading, utility infrastructure
installation, including drainage infrastructure, and pavement installation.

D. ACRES OF DISTURBANCE:
1. Total area of construction site (LOC (PERMITTED AREA)): 128 acres
2. Total area of proposed disturbance (LDA): 11.1 acres
3. Total area of seeding: 3.59 acres
4. Total area of pre-project impervious surface: 283,140 sq. ft.
5. Total area of final impervious surface: 344,124 sq. ft.

E. EXISTING SOIL DATA: The following soil types and hydrologic soil groups were listed for the Project area
on the NRCs Web Soil Survey:
- Klippan-Badan-Persawy complex, 3 to 25 percent slopes, Hydrologic Soil Group C, Wind Erodibility Group: 5; Wind Erodibility Index: 6
- Sargnic loam, 0 to 2 percent slopes, Hydrologic Soil Group B, Wind Erodibility Group: 4; Wind Erodibility Index: 8
- Turkey clay loam, 0 to 2 percent slopes, Hydrologic Soil Group C, Wind Erodibility Group: 4; Wind Erodibility Index: 8

F. EXISTING VEGETATION, INCLUDING PERCENT COVER:
During design the SWMP Administrator for Design in consultation with the Engineer will determine if the
SWMP Administrator for Design or the SWMP Administrator for Construction will conduct the Vegetation
Transcets as outlined in Chapter 4.11.2 of the CDOT's Erosion Control and Stormwater Quality Guide.

A survey including general description of existing vegetation shall be conducted by the SWMP
Administrator for Construction prior to any ground disturbance on the project. The manager shall photo-
document existing vegetation where all work will be occurring. The manager shall also perform the
vegetation survey transect(s) including photo documentation as outlined in Chapter 4.11.2 of CDOT's
Erosion Control and Stormwater Quality Guide.

Pre-Construction Date of survey: %Density:
Description of existing vegetation:
Map or table showing transect locations in SWMP tab 17:

Post-Construction Date of survey: %Density:
Description of existing vegetation:
Date of CDPS-SCP Closure:
Map or table showing transect locations in SWMP tab 17:

G. POTENTIAL POLLUTANTS SOURCES: See First Construction Activities under Potential Pollutant Sources.
The SWMP Administrator for Construction shall prepare a list of all potential pollutants and their locations in
accordance with subsection 107.25.

H. RECEIVING WATERS:
1. Outlet locations: The design points for each Major Drainage Basin are shown on the plans. Six
existing and proposed major basins are within the Project limits.
2. Names of immediate receiving water(s) on site: existing roadway swales and existing storm sewer
system.
3. Does the on-site receiving water(s) have 303(d) impaired designation: No.
4. Horizontal distance to nearest ultimate receiving water from project: 3 miles
5. Description of all stream crossings located within the Construction Site: The existing roadway crosses an aerial view on the south end of the project, No modifications or impacts to
this crossing are anticipated.

Location Stream Name Description Of Any Disturbed Upstream Areas
Design Point PR13 Ex. roadside swale Roadway widening and swale regrading
Design Point PR17/PR12 Ex. storm sewer Roadway widening and swale/landscape regrading
Design Point PR20 Ex. roadside swale Roadway regrading/paving and swale regrading
Design Point PR9 Ex. roadside swale Roadway widening and regrading
Design Point PR7 Ex. roadside swale Roadway widening and swale regrading
Design Point PR19 Ex. roadside swale Roadway widening and swale regrading

I. NON-STORMWATER DISCHARGES: The location of any anticipated sources of non-stormwater
components of the discharge, such as uncontrolled springs and landscape irrigation return flow,
SWMP Administrator for Construction shall provide a method statement of how discharge will be handled.

Discharge Description Location (Site Map #) Method Statement (Location)
Dewatering
Untreated Contaminated Spring
Concrete Wash Water (in-ground washout structures)
Landscape Irrigation Return Flows
Emergency Fire Fighting
Concrete Saw Water

ALLOWABLE: Refer to CDPE Low Risk Discharge Guidance Document of Uncontrolled
Groundwater to Land.

https://www.colorado.gov/pacific/sites/default/files/WDQG200LOWRISK%20GW.pdf

*4 ground water does not meet water quality standards for receiving water a separate CDPS
Discharge Permit shall be obtained by the Contractor from CDPE in accordance with subsections
107.02 and 107.25.

2. SITE MAP COMPONENTS:
Pre-construction
A. PROJECT CONSTRUCTION POTENTIAL SITE BOUNDARIES: See SWMP Site Map Sheet 8 - 16
B. ALL AREAS OF GROUND SURFACE DISTURBANCE: See SWMP Site Maps Sheet 8 - 16

3000 AND F1/2 ROAD INTERSECTION IMPROVEMENTS
STORMWATER MANAGEMENT REPORT
3000 COUNTY ENGINEERING
5416 Platte St.
Denver, Colorado 80214
(303) 296-1885

P.O. Box 1084
Grand Junction, CO 81528
(970) 245-6221

909152001
06152021

Sheet Revisions
Sheet Number

Project No./Code
Sheet Name
Final Bid Set

MESA COUNTY

- 128 -
4. STORMWATER MANAGEMENT CONTROLS FIRST CONSTRUCTION ACTIVITIES

THE CONTRACTOR SHALL PERFORM THE FOLLOWING:

A. POTENTIAL POLLUTANT SOURCES
   - Evaluate, identify, locate and describe all potential sources of pollutants at the site in accordance with subsection 107.25. CDPS-SCP and place it in the SWMP. All control measures related to potential pollutants shall be shown on the SWMP Site Map by the Contractor’s SWMP Administrator for Construction.

B. OFFSET DRAINAGE (RUN ON WATER)
   1. Describe and record control measures on the SWMP Site Map that have been implemented to address off site run-on water in accordance with subsection 208.03.

C. VEHICLE TRACKING PAD/VEHICLE TRACKING CONTROL
   1. Control measures shall be implemented in accordance with subsection 208.04.

D. PERIMETER CONTROL
   1. Perimeter control shall be established as the first item on the SWMP to prevent the potential for pollutants leaving the construction site boundaries, entering the stormwater drainage system, or discharging to state waters. Perimeter control shall be in accordance with subsection 208.04.
   2. Perimeter control may consist of berms, silt fence, erosion logs, existing landforms, or other control measures as approved.

5. DURING CONSTRUCTION

RESPONSIBILITIES OF THE SWMP Administrator for Construction

The SWMP is a living document “living document” that is continuously reviewed and modified throughout the construction phasing. During construction, the following items shall be added, updated, or amended as needed by the SWMP Administrator for Construction in accordance with subsection 208.03. During construction, indicate how items that have not been addressed during design are being handled in construction. If items are covered in the template or other sections of the SWMP, indicate below what section the discussion takes place.

A. STOCKPILE MANAGEMENT: Shall be done in accordance with subsection 107.25 and 208.07

B. CONCRETE WASHOUT: Concrete washout water or waste from field laboratories and paving equipment shall be contained in accordance with subsection 208.05.

C. SAW CUTTING: Shall be done in accordance with subsection 107.25, 208.04, 208.05

D. STREET SWEEPING: Shall be done in accordance with subsection 208.04

6. INSPECTIONS

A. Inspections shall be in accordance with subsection 208.03(c).

7. CONTROL MEASURE MAINTENANCE

A. Maintenance shall be in accordance with subsection 208.04.(l).

8. RECORD KEEPING

A. Records shall be kept in accordance with subsection 208.03(d).
9. INTERIM, PERMANENT STABILIZATION and LONG TERM STORMWATER MANAGEMENT

The Contractor shall comply with all interim stabilization and permanent stabilization requirements in accordance with subsection 203.04(e).

A. SEEDING PLAN

Seeding will be required for an estimated 3.59 acres of disturbed areas within the right-of-way limits which are not surfaced. The following types and rates shall be used:

<table>
<thead>
<tr>
<th>COMMON NAME</th>
<th>BOTANICAL NAME</th>
<th>LBS. XL/PER ACRE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand dropseed</td>
<td>Sporobolus cryptandrus</td>
<td>0.25</td>
</tr>
<tr>
<td>Alkali sacaton</td>
<td>Sporobolus atraries</td>
<td>0.5</td>
</tr>
<tr>
<td>Indian ricegrass</td>
<td>Arrhenatherum hemonoides</td>
<td>3.0</td>
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<tr>
<td>Small grama</td>
<td>Bouteloua curtipendula &quot;Vaughn&quot;</td>
<td>3.0</td>
</tr>
<tr>
<td>Little bluestem</td>
<td>Schizachyrium scoparium &quot;Limaron&quot;</td>
<td>3.0</td>
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<tr>
<td>Galeta grass</td>
<td>Pleuraphis jamesii &quot;Viva&quot;</td>
<td>3.0</td>
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<tr>
<td>Total</td>
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<td>14.25</td>
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</tbody>
</table>

B. SEEDING APPLICATION: Drill seed 0.25 inch to 0.5 inch into the soil. In small areas not accessible to a drill, hand broadcast or hydroseed at double the rate and rake 0.25 inch to 0.5 inch into the soil per subsection 212. Soil compaction shall be minimized for areas where permanent stabilization will be achieved through vegetative cover.

C. MULCHING APPLICATION: Apply a minimum of 2 tons of certified weed free hay or 2 1/2 tons of certified weed-free straw per acre and in accordance with Section 213, and mechanically spread it into the soil in combination with an organic mulch topdressing.

1. Prior to winter shutdown or the summer seedings window closure: Uncompleted slopes shall be mulched with 2 tons of mulching (weed free) per acre, mechanically mixed into the topsoil in combination with an organic mulch topdressing in accordance with subsections 208 and 213.

D. SPECIAL REQUIREMENTS:

1. Due to high failure rates, hydrosedding will not be allowed for permanent stabilization.

E. SOIL CONDITIONING AND FERTILIZER REQUIREMENTS: Minimum amendment material requirements for all disturbances to receive seeding (native). Elevation: 4,769 feet

<table>
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<tr>
<th>Soil conditioners paid for as Item 212- Soil Conditioning (Acre)</th>
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<tr>
<td>Biological nutrient organic based fertilizer (lbs/acre) *</td>
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<tr>
<td>Humate (lbs/acre)</td>
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<tr>
<td>Compost (yd3/acre)</td>
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<tr>
<td>All areas &lt;2:1</td>
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<td>[1/2 inch depth]</td>
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*Biological nutrient organic based fertilizer shall not exceed II B (N-P-K).

F. SOIL RETENTION COVERING: On slopes and ditches requiring a blanket or turf reinforcement mat (frm), the blanket/frm shall be placed in lieu of mulch and turf topdresser and placed after seeding (native). See SWMP Site Map for blanket/frm locations.

G. Permanent Stabilization Application Under Structures: Under structures shade patterns should be considered and the use of Median Cover Material (stone) or other stabilized options with an approved Project Special Provision should be used. See SWMP Site Map for locations.

H. RESEEDING OPERATIONS CORRECTIVE STABILIZATION:

Prior to partial acceptance.

1. All seeded areas shall be reviewed during the 7 day inspections by the SWMP Administrator for Construction and or Erosion Control Inspector for bare soils caused by surface or wind erosion, bare areas caused by surface or gully erosion, blown away mulch, etc. shall be re-graded, seeded, and have the designated mulching applied as necessary, at no additional cost to the project.

2. The Contractor shall maintain seeding/mulch/topdressing blanket/frm, move to control weeds or apply herbicide to control weeds in the seeded areas until Partial Acceptance of the stormwater construction work.

10. PRIOR TO PROJECT FINAL ACCEPTANCE

A. Partial Acceptance shall be in accordance with subsection 107.25 (d), 208.10 and 214.04. At the Partial Acceptance of the project, it shall be determined by the SWMP Administrator for Construction and the Engineer which temporary control measures shall remain until 70% revegetation is established or which shall be removed.

B. At the end of the project, all ditch checks shall either consist of temporary erosion logs (or equivalent) or permanent riprap.

C. All storm drains shall be cleaned prior to the Final Acceptance of the project. Work shall be included in 202 Clean Culvert.
11. NARRATIVES:

Control Measure Matrices During Construction:

1. Control measure narratives have been included for the CDOT Standard Specifications and Standard Plan M-208 and M-216 along with any non-standard control measures approved during the design process. If a Non-Standard Control Measure not included in the SWMP is proposed and approved by the Engineer, the SWMP Administrator for Construction shall do the following: Place an "X" in the column for non-standard and complete a Non-Standard Control Measure Specification and Narrative covering the what, when, where and why the control measure is being used. The appropriate "X" shall also be added to the implementation phase(s).
2. The SWMP Administrator for Construction shall place an "X" in the column in Use On Site when the control measure has been installed.
3. A "P" in the Initial Activities Column indicates that the control measure shall be installed before construction activity starts. Locations and quantities will be discussed during the Environmental Pre-construction Conference with the Regional Water Pollution Control Manager.

STRUCTURAL Control Measures that may be potentially used on the project for erosion and sediment control practices may include, but are not limited to:

<table>
<thead>
<tr>
<th>APPLICATION, CONTROL MEASURE</th>
<th>NARRATIVE</th>
<th>M-208 STANDARD or &quot;X&quot; for NON-STANDARD</th>
<th>IN USE ON SITE</th>
<th>CONTROL MEASURE IMPLEMENTATION PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROTECTION OF EXISTING WETLANDS Fence (plastic) and erosion logs</td>
<td>Fence (plastic) shall be placed in combination with erosion logs to prevent encroachment of construction traffic and sediment into state waters prior to start of construction disturbances. Fence (plastic) shall be placed adjacent to the wetlands; erosion logs shall be placed between the plastic fence and disturbance area. Logs shall be placed to direct flows away from or filter water running into wetlands from disturbance areas.</td>
<td>M-208</td>
<td>X</td>
<td>INITIAL ACTIVITIES</td>
</tr>
<tr>
<td>PROTECTION OF EXISTING TREES/LANDSCAPING Fence (plastic)</td>
<td>Fence (plastic) shall be used in areas indicated in the plans to prevent encroachment of construction traffic and sediment for the protection of mature trees and/or existing landscaping prior to start of construction disturbances.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CHECK DAM/DITCH CHECK Erosion log, shr &amp; brush, silt, dike, rock check dam</td>
<td>Placed in ditches immediately upon completion of ditch grading to reduce velocity of runoff in ditch. For existing ditches, place prior to start of construction disturbances. Manufactured storm drain inlet protection placed prior to construction disturbances as detailed in M-208-1 to protect existing inlets or immediately upon completion of new inlets to prevent sediment from entering the inlet throughout construction.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Storm Drain Inlet Protection In Paved Roadways (Type 1, 2 and 3 as shown on M-208-1, sheet 2 of 11)</td>
<td>Erosion logs or aggregate bags placed around inlet grate to prevent sediment from entering inlet. Place prior to construction disturbances to protect existing inlets or immediately upon completion of new inlets.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Storm Drain Inlet Protection In Native Seed Areas (M-604 Standard Inlets Type C and D)</td>
<td>Erosion logs or aggregate bags placed around inlet grate to prevent sediment from entering inlet. Place prior to construction disturbances to protect existing inlets or immediately upon completion of new inlets.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>CULVERT INLET/OUTFLOW PROTECTION Erosion logs, aggregate bags</td>
<td>Placed at mouth of culvert inlet and over top of culvert at inlet and outlet where disturbance may be occurring adjacent to pipe to prevent sediment laden water from entering pipe or drainage. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TYPE C, TYPE D AND TYPE 13 PROTECTION Erosion logs, aggregate bags, erosion boles</td>
<td>Placed around inlet grate or slope and ditch paving to prevent sediment from entering inlet. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
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<tr>
<td>STOCKPILE PROTECTION Temporary berm, erosion logs, aggregate bags*</td>
<td>Placed within specified distance, in accordance with subsection 208.06, from toe to contain sediment around stockpile. *Aggregate bags are easily moved and replaced for access during the work day. Place prior to start of stockpile, increase control as stockpile increases size.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TOE OF FILL PROTECTION Erosion logs, temporary berm, silt fence, topsoil window*</td>
<td>Placed prior to construction commencing to address potential run-on water from off site, and to divert or contain sediment. *Can be used to stockpile topsoil for stockpile protection.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>PERIMETER CONTROL Erosion logs, silt fence, temporary berm, topsoil window*</td>
<td>Placed prior to slope/embankment work to capture sediment and protect and delineate disturbed areas. *Can be used to stockpile topsoil for stockpile protection.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
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<tr>
<td>SEDIMENT CONTROL/SLOPE CONTROL Silt fence, erosion logs, aggregate bags</td>
<td>Placed on the contour of a slope to contain and slow down construction run off. Place prior to start of construction disturbances.</td>
<td>M-208</td>
<td>X</td>
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<tr>
<td>TEMPORARY SEDIMENT TRAP</td>
<td>Used to capture sediment laden runoff from disturbed areas &lt; 5 acres during construction. Place prior to start of construction disturbances. Outlets that withdraw water from or near the surface may be installed when discharging from basins and impoundments.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
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<tr>
<td>EMBANKMENT PROTECTION OR TEMPORARY SLOPE DRAIN</td>
<td>Material placed as energy dissipator to prevent erosion at outlet structure.</td>
<td>M-601-12</td>
<td>X</td>
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</table>

10700 AND F1/2 ROAD INTERSECTION IMPROVEMENTS STORMWATER MANAGEMENT REPORT

Project No./Code 096152021

Sheet Revisions

Final Bid Set

Mesa County Engineering
250 W. 1st Street
Greeley, CO 80631
Phone: (970) 351-0700

Prepared By

MESA COUNTY

TxDOT

Page 4 of 15

Sheet Number 1-31
## Riprap, or approved other

| CONCRETE WASHOUT | Construction control, used for waste management of concrete and concrete equipment cleaning. Place prior to start of concrete activities. Source control, placed to prevent tracking of sediment from disturbed area to offsite surface. Place prior to start of construction disturbances. | M-208 | X |
| VEHICLE TRACKING PAD | | M-208 | P | X |

## Engineered SEDIMENT PAD

| Constructed early in project, prior to storm sewer/ditches and in accordance with 208.05(p) to capture storm flow. Outlet structure and/or outfall shall be modified for temporary sediment control using an approved non-standard detail. Outlets that withdraw water from or near the surface shall be installed when discharging from basins and impoundments, unless inflatable | |

## DEWATERING

| (Contractor is responsible for obtaining a permit from Colorado Department of Health and Environment.) | Shall be done in such a manner to prevent potential pollutants from entering storm water. | |

## TEMPORARY STREAM CROSSING

| Constructed over stream or drainage to prevent discharge of pollutants from construction equipment into water. | |

## CLEANER WATER DIVERSION

| Placed to divert clean surface or ground water around disturbance area to prevent it from mixing with construction runoff. | |

### NON-STRUCTURAL Control Measures

<table>
<thead>
<tr>
<th>APPLICATION, CONTROL MEASURE</th>
<th>NARRATIVE</th>
<th>M-208</th>
<th>STANDARD or “For NON-STANDARD”</th>
<th>IN USE ON SITE</th>
<th>INITIAL ACTIVITY</th>
<th>INTERIM ACTIVITIES</th>
<th>PERMANENT STABILIZATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>* VEGETATIVE BUFFER STRIP</td>
<td>Finishing component for filtering sediment-laden runoff from disturbance area. Area within CDOT ROW or temporary easement to be identified on SWMP prior to construction starting.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fence (plastic)</td>
<td>Existing or created landforms may be used as a control measure if they prevent sediment from entering or leaving the disturbance area. If a landform directly flows water to a concentrated outfall point, the outfall point shall be protected to prevent erosion. Area to be identified on SWMP prior to construction starting.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRADING APPLICATIONS (LANDFORM)</td>
<td>Prior to any site disturbance work commencing, existing topsoil shall be scraped to a depth four inches or as specified, and placed in stockpiles or swales. Upon completion of final grading, topsoil shall be evenly distributed over embankment to a depth of four inches or as specified.</td>
<td>M-208</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOPOSOIL MANAGEMENT STOCKPILAGE</td>
<td>Temporary stabilization of disturbance and to minimize wind and erosion.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WINDOW or stockpile</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SURFACE ROUGHENING / GRADING TECHNIQUES</td>
<td>Temporary stabilization used for over wintering of disturbance or used to control erosion for areas scheduled for future construction.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEEDING (TEMPORARY)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BONDED FIBER MATRIX or MULCHING (HYDRAULIC)</td>
<td>Not to be used in areas of concentrated flows, i.e., ditch lines. To be either Interim or Permanent Stabilization placed as a surface cover for erosion control. May be used as surface cover when work is temporarily halted and as approved by the Engineer for stockpiles.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straw or Hay MULCH/MULCH TACKIFIER</td>
<td>Interim or Permanent Stabilization placed as a surface cover for erosion control and seedling establishment. To be installed as Interim Stabilization as a surface cover when work is temporarily halted and as approved by the Engineer.</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Term</td>
<td>Description</td>
<td>Code</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SPRAY-ON MULCH BLANKET (Not to be used in areas of concentrated flows, i.e. ditch lines.)</td>
<td>Interim or Final Stabilization placed as a surface cover for erosion control and or seeding establishment. To be installed as temporary surface cover when work is temporarily halted and as approved by the Engineer.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEEDING PERMANENT (NATIVE)</td>
<td>Final Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas.</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOIL RETENTION BLANKET (SRB)</td>
<td>Final Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas.</td>
<td>M-216</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TURF REINFORCEMENT MAT (TRM)</td>
<td>Final Stabilization of disturbance and to reduce runoff and control erosion on disturbed areas. Placed in channels or on slopes for erosion control, channel liner and seeding establishment.</td>
<td>M-216</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweeping</td>
<td>Source control, used to remove sediment tracked onto paved surfaces and to prevent sediment from entering drainage system. Sweep daily and at the end of the construction shift as needed. Kick brooms shall not be permitted.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**12. TABULATION OF STORMWATER QUANTITIES**

A. All control measure maintenance shall be included in the cost of the control measure.

B. It is estimated that at least 4 hours of blading (140-250 horsepower), dozing (130-250 horsepower) and/or combination loader (80-125 horsepower) may be required for miscellaneous erosion control work as directed by the Engineer. Work shall be paid for as: 203 Blading, 203 Dazing and/or 203 Combination Loader.

C. Establishment of seeded areas from substantial landscape completion shall be included in the price of the work. This shall include mowing, weed control, reseeding/mulch/taffkiher.

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Pay Unit</th>
<th>Initial Const.</th>
<th>Interim Const.</th>
<th>Permanent Stabilization</th>
<th>Total Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>203-0402</td>
<td>Clean Culvert</td>
<td>Each</td>
<td>2</td>
<td>2</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>203-01-200</td>
<td>Blading</td>
<td>Hour</td>
<td>2</td>
<td>2</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>203-01-550</td>
<td>Dazing</td>
<td>Hour</td>
<td>2</td>
<td>2</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>203-01-594</td>
<td>Combination Loader</td>
<td>Hour</td>
<td>2</td>
<td>2</td>
<td></td>
<td>400</td>
</tr>
<tr>
<td>207-00205</td>
<td>Topsoil</td>
<td>CY 1000</td>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>207-00210</td>
<td>Stockpile Topsoil</td>
<td>CY 1000</td>
<td>1000</td>
<td>1000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>208-00002</td>
<td>Erosion Log Type 1 (12 Inch)</td>
<td>LF 280</td>
<td>540</td>
<td></td>
<td></td>
<td>820</td>
</tr>
</tbody>
</table>

*It is anticipated that additional control measures and control measure quantities not shown on the SWMP Site Maps shall be required on the project for unforeseen conditions and replacement of items that are beyond their useful service life, see subsection 208.03 and 208.04. Quantities for all control measures shown above are estimated, and have been increased for unforeseen conditions and normal control measure life expectancy. Quantities shall be adjusted according to the conditions encountered in the field as directed and approved by the Engineer. Payment shall be for the actual work completed and material used.*** F/A refers to CDOT’s Force Account Pay Items.

**13. BIOLOGIC IMPACTS and DEWATERING**

A. ENVIRONMENTAL IMPACTS:

1. Wetland Impacts: NO
2. Stream Impacts: NO
3. Threatened and Endangered Species: No species are anticipated to be impacted by the project.

B. DEWATERING (Not Covered Under the CDPHE Low Risk Discharge Guidance Document of Uncontaminated Groundwater to Land):

1. Dewatering: Refer to other environmental permits in accordance with subsection 107.02 and the permits contained in Tab 16 of the SWMP.

**14. NOTES**

Assumptions for Quantities:

- Erosion Control Logs:
  - Total linear feet of erosion control logs used for inlet protection and culvert inlet/outlet protection: 40 LF/inlet (7 inlets) = 280
  - Total linear feet of erosion control logs used for diversion ditch/permanent swale check dams: 10 LF/check dam (54 check dams) = 540 LF

A Construction Stormwater Permit will be required to be obtained through Mesa County.

---

**FINAL BID SET 07/28 AND F1/2 ROAD INTERSECTION IMPROVEMENTS STORMWATER MANAGEMENT REPORT**
INITIAL SWMP NOTES:
1. THE INITIAL SWMP REPRESENTS BMP'S THAT SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION (ANY DISTURBANCE OF EXISTING VEGETATION).
2. ONCE DISTURBANCE OF EXISTING VEGETATION STARTS THE SWMP ADMINISTRATOR FOR CONSTRUCTION SHALL OUTLINE THE AREA WITH THE AREA OF DISTURBANCE LINE AND USE THE INTERIM SWMP TO REPRESENT CURRENT INSTALLED CONTROL MEASURES.
3. BMP'S ARE NOT DRAWN TO SCALE AND LOCATIONS ARE APPROXIMATE.
4. VEGETATIVE TRANSECTS SHALL BE DONE BY THE SWMP ADMINISTRATOR FOR CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION.
5. REFER TO SECTION 207-2055 FOR TOPSOIL SALVAGE REQUIREMENTS.
6. A CONSTRUCTION STORMWATER PERMIT WILL BE REQUIRED TO BE OBTAINED THROUGH MESA COUNTY.
7. SWMP ADMINISTRATOR OF CONSTRUCTION SHALL STABILIZE ALL PORTABLE TOILETS UPON PLACEMENT AND INCLUDE LOCATION ON THESE PLANS.

INITIAL SWMP LEGEND:
- SYMBOL: TRANSECT LOCATION
- DESCRIPTION: FENCE (PLASTIC)
- SYMBOL: LIMIT OF DISTURBANCE
- SYMBOL: CONSTRUCTION SITE BOUNDARY
- LIMITS OF CONSTRUCTION
- TOE OF CUT
- TOP OF CUT
- FLOW ARROW (DIRECTION OF FLOW)
- TEMPORARY BERM
- EROSION LOG (TYPE 2) (12 INCH)
- SILT FENCE
- REINFORCED SILT FENCE
- EXISTING WETLANDS
- VEGETATIVE BUFFER
- DELINEATED THREATENED AND ENDANGERED SPECIES AREA
INITIAL SWMP NOTES:
1. THE INITIAL SWMP REPRESENTS BMPs THAT SHALL BE INSTALLED PRIOR TO START OF CONSTRUCTION (ANY DISTURBANCE OF EXISTING VEGETATION).
2. ONCE DISTURBANCE OF EXISTING VEGETATION STARTS THE SWMP ADMINISTRATOR FOR CONSTRUCTION SHALL OUTLINE THE AREA WITH THE AREA OF DISTURBANCE LINE AND USE THE INTERIM SWMP TO REPRESENT CURRENT INSTALLED CONTROL MEASURES.
3. BMPS ARE NOT DRAWN TO SCALE AND LOCATIONS ARE APPROXIMATE.
4. VEGETATIVE TRANSECTS SHALL BE DONE BY THE SWMP ADMINISTRATOR FOR CONSTRUCTION PRIOR TO THE START OF CONSTRUCTION.
5. REFER TO SECTION 207-TOPSOIL FOR TOPSOIL SALVAGE REQUIREMENTS.
6. A CONSTRUCTION STORMWATER PERMIT WILL BE REQUIRED TO BE OBTAINED THROUGH MESA COUNTY.
7. SWMP ADMINISTRATOR OF CONSTRUCTION SHALL STABILIZE ALL PORTABLE TOILETS UPON PLACEMENT AND INCLUDE LOCATION ON THESE PLANS.

INITIAL SWMP LEGEND:

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TRANSSECT LOCATION</td>
</tr>
<tr>
<td>FENCE (PLASTIC)</td>
<td></td>
</tr>
<tr>
<td>LDA</td>
<td>LIMIT OF DISTURBANCE</td>
</tr>
<tr>
<td>EROSION LOG SITE BOUNDARY / LIMITS OF CONSTRUCTION</td>
<td></td>
</tr>
<tr>
<td>TOP OF CUT</td>
<td></td>
</tr>
<tr>
<td>FLOW ARROW (DIRECTION OF FLOW)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS</td>
<td>TEMPORARY BERM</td>
</tr>
<tr>
<td>SF</td>
<td>SILT FENCE</td>
</tr>
<tr>
<td>RSP</td>
<td>REINFORCED SILT FENCE</td>
</tr>
<tr>
<td>EXISTING WETLANDS</td>
<td></td>
</tr>
<tr>
<td>VEGETATIVE BUFFER</td>
<td></td>
</tr>
<tr>
<td>DELINEATED THREATENED AND ENDANGERED SPECIES AREA</td>
<td></td>
</tr>
</tbody>
</table>
INTERIM SWMP NOTES:
1. THE INTERIM SWMP REPRESENTS BMPS THAT SHALL BE INSTALLED AFTER GRADING ACTIVITIES START. PROPOSED BMPs ARE LABELED WITH QUANTITIES AND SHOWN GRAPHICALLY. AREAS OF INTERIM STABILIZATION SHALL BE SHOWN ON THESE SHEETS.
2. ONCE DISTURBANCE OF EXISTING VEGETATION STARTS THE SWMP ADMINISTRATOR FOR CONSTRUCTION SHALL OUTLINE THE AREA WITH THE AREA OF DISTURBANCE LINE. ALL CONTROL MEASURES USED SHALL BE SHOWN ON THE INTERIM SWMP UNTIL SALVAGED TOPSOIL IS PLACED AND PERMANENT STABILIZATION MEASURES ARE STARTED. AT THAT TIME THE REQUIREMENTS FROM THE PERMANENT STABILIZATION SITE MAPS SHALL BE USED.
3. BMPs ARE NOT DRAWN TO SCALE AND LOCATIONS ARE APPROXIMATE.
4. SELECTED BMPs FROM THE INITIAL SWMP SITE MAP ARE SHOWN ON THESE SHEETS BUT NOT LABELED WITH MATERIALS AND QUANTITIES.
5. A CONSTRUCTION STORMWATER PERMIT WILL BE REQUIRED TO BE OBTAINED THROUGH MESA COUNTY.

INTERIM SWMP LEGEND:

SYMBOL | DESCRIPTION
--- | ---
PF | FENCE (PLASTIC)
LDA | LIMIT OF DISTURBANCE
ST | CONSTRUCTION SITE BOUNDARY / LIMITS OF CONSTRUCTION
RSLF | AREA OF DISTURBANCE BY SWMP ADMINISTRATOR FOR CONSTRUCTION
TP | TIE OF PILL
TO | TOP OF CUT
FR | FLOW ARROW (DIRECTION OF FLOW)

SYMBOL | DESCRIPTION
--- | ---
TBD | TEMPORARY BERM
TF | EROSION LOG (TYPE 2) (12 INCH)
SF | SLT FENCE
RSLF | REINFORCED SLT FENCE
TE | EXISTING WETLANDS
D | Delineated threatened and endangered species area
IS | INTERIM STABILIZATION BY SWMP ADMINISTRATOR OF CONSTRUCTION
WD | CEMENT WASHOUT STRUCTURE (BELOW GRAGE)
TL | TEMPORARY SLOPE DRAIN

Final Bid Set

7000 AND F1/2 ROAD INTERSECTION UPGRADES
INTERIM STORMWATER MANAGEMENT PLANS

Project No./Code 09150201

Kimley-Horn
Final SWMP Notes:

1. The permanent SWMP site maps specify the soil conditioning, seeding, and mulch requirements for the areas once salvaged topsoil is placed and grades approved. The requirements of the plans are based on decisions through the project development process and specific site conditions identified.

2. Once an area has been permanent stabilized the SWMP administrator for construction shall identify the area on the plans and date when the work was completed.

3. No BMPs from the initial or interim SWMP sheets are shown. All BMPs that the COOT Region Water Pollution Control Manager and the Engineer determine will remain after permanent stabilization activities shall be shown on the interim SWMP site maps.

4. A construction stormwater permit will be required to be obtained through Mesa County.

Final SWMP Seeding Legend:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Soil Conditioning (Pay Item 212-00032)</th>
<th>Seed Mix (Pay Item 212-00049)</th>
<th>Mulch/Permanent Seed Cover</th>
<th>Project Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDA</td>
<td>Limit of Disturbance</td>
<td>Seed (Native, 213-00002 Mulching (Weed Free Hay) 213-00061 Mulch Tackifier</td>
<td>3.59 Acres</td>
<td></td>
</tr>
</tbody>
</table>

Project No./Code: 09152001

Final Bid Set: 0708 and F1/2 Road Intersection Improvements

Final Stormwater Management Plans

Mesa County Engineering Department
P.O. Box 6200
Scottsdale, AZ 85267-6200
(480) 312-7592

Kimley-Horn

Valid: Sheet Set 14 of 16

Sheet Number: 141
**Final Stormwater Notes:**

1. The permanent stormwater site maps specify the soil conditioning, seeding, and mulch requirements for the areas once salvaged topsoil is placed and grades approved. The requirements of the plans are based on decisions through the project development process and specific site conditions identified.

2. Once an area has been permanently stabilized, the stormwater administrator for construction shall identify the area on the plans and provide notice when the work was completed.

3. No BMPs from the initial or interim stormwater sheets are shown. All BMPs that the COT region water pollution control commissioner and the engineering determine will remain after permanent stabilization activities shall be shown on the interim stormwater site maps.

4. A construction stormwater permit will be required to be obtained through Mesa County.

**Final Stormwater Legend:**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDA</td>
<td>Limit of disturbance</td>
</tr>
<tr>
<td>TIE OF FILL</td>
<td>Limits of construction</td>
</tr>
<tr>
<td>TOG OF CUT</td>
<td>Top of cut</td>
</tr>
<tr>
<td>FLOW ARROW (DIRECTION OF FLOW)</td>
<td></td>
</tr>
</tbody>
</table>

**Stormwater Control Measures:**

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>SOIL CONDITIONING (PAY ITEM 212-00031)</th>
<th>SEED MIX (PAY ITEM 212-00002)</th>
<th>MULCH/PERMANENT SEED COVER</th>
<th>PROJECT QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORGAN C FERTILIZER, HUMATE AND COMPOST</td>
<td>SEEDING (NATIVE)</td>
<td>213-00012 MULCHING (WEED FREE HAY)</td>
<td>213-00021 MULCH TACKIFIER</td>
<td>3.59 ACRES</td>
</tr>
</tbody>
</table>
AUTOTURN DETAIL 1 - LEFT TURN 1

170B AT F ½ ROAD

DESIGN VEHICLES:
F ½ RO WEST OF 170B - AASHTO WB-67
F ½ RO EAST OF 170B - AASHTO WB-40
NOTES:
1. CONTRACTOR SHALL MAINTAIN ACCESS AT FJ ROAD AT ALL TIMES DURING CONSTRUCTION.
2. THIS PHASING PLAN PERTAINS TO CONSTRUCTION ACTIVITIES ON FJ ROAD AND THE SHOULDER OF SB I-70B ONLY. THE CONTRACTOR SHALL DEVELOP A PHASING AND TRAFFIC CONTROL PLAN FOR THE REMAINING WORK AND SUBMIT TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.

CONSTRUCT SOUTH PORTION OF FJ ROAD AND TIE-IN TO I-70B.
NOTES:
1. CONTRACTOR SHALL MAINTAIN ACCESS AT FJ ROAD AT ALL TIMES DURING CONSTRUCTION.
2. THIS PHASING PLAN PERTAINS TO CONSTRUCTION ACTIVITIES ON FJ ROAD AND THE SHOULDER OF I-70B ONLY. THE CONTRACTOR SHALL DEVELOP A PHASING AND TRAFFIC CONTROL PLAN FOR THE REMAINING WORK AND SUBMIT TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
3. THE CONTRACTOR SHALL INSTALL THE TRUCK DETOUR SHOWN ON DETOUR SHEET DURING THIS PHASE.

MAINTAIN TWO WAY TRAFFIC ON FJ ROAD AT ALL TIMES.
NOTES:
1. THE CONTRACTOR SHALL INSTALL THIS TRUCK DETOUR DURING PHASE 2.
2. CHANGEABLE MESSAGE BOARD SIGNING INFORMATION IS SHOWN FOR INFORMATION ONLY. THE CONTRACTOR SHALL SUBMIT PROPOSED MESSAGES TO THE ENGINEER FOR APPROVAL PRIOR TO IMPLEMENTATION.

NO TRUCKS AT F 1/2 ST
TRUCKS USE F ST ENTRANCE

SUGGESTED CHANGEABLE MESSAGE BOARD SIGNING.