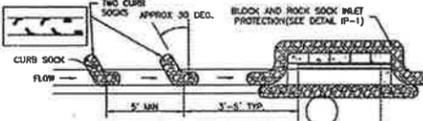


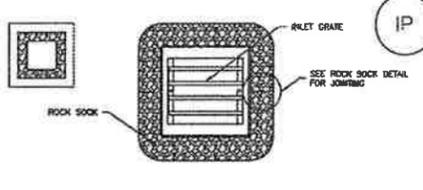
IP-1. BLOCK AND ROCK SOCK SUMP OR ON-GRADE INLET PROTECTION

- BLOCK AND ROCK SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - CONCRETE "CHOKER" BLOCKS SHALL BE LAD ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
  - GRANUL BAYS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP-2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

- CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL, INSTALLATION REQUIREMENTS.
  - PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
  - SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
  - AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON-GRADE INLETS.



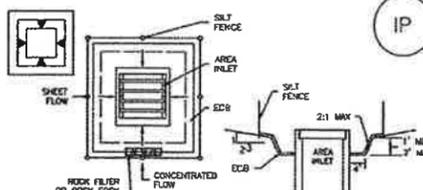
IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

- ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES**
- SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - STRAW MATS/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL FOR SEDIMENT CONTROL LOG DETAIL.



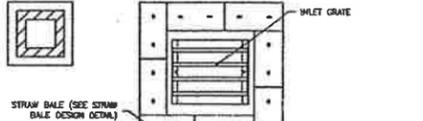
IP-4. SILT FENCE FOR SUMP INLET PROTECTION

- SILT FENCE INLET PROTECTION INSTALLATION NOTES**
- SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.
  - STRAW MATS/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL FOR SEDIMENT CONTROL LOG DETAIL.



IP-5. OVEREXCAVATION INLET PROTECTION

- OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES**
- THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.
  - WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARD DIRECTION OF FLOW.
  - SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.

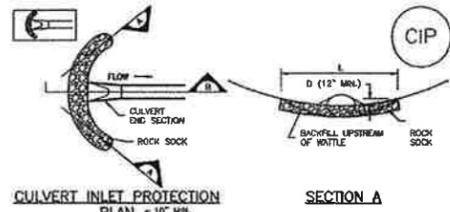


IP-6. STRAW BALE FOR SUMP INLET PROTECTION

- STRAW BALE BUMPER INLET PROTECTION INSTALLATION NOTES**
- SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
  - BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.

IP-4 Urban Drainage and Flood Control District August 2013 August 2013 Urban Drainage and Flood Control District IP-5 IP-6 Urban Drainage and Flood Control District August 2013 August 2013

**Inlet Protection (IP) SC-6 SC-6 Inlet Protection (IP)**



CIP-1. CULVERT INLET PROTECTION

- CULVERT INLET PROTECTION INSTALLATION NOTES**
- SEE PLAN VIEW FOR -LOCATION OF CULVERT INLET PROTECTION.
  - SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINING DETAIL.

- CULVERT INLET PROTECTION MAINTENANCE NOTES**
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
  - FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
  - WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
  - SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK.
  - CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

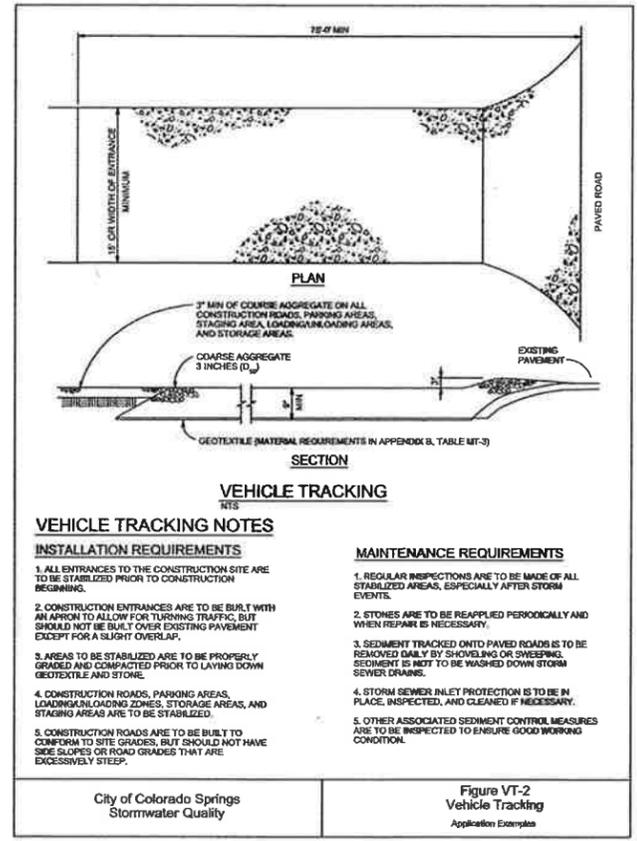
(DETAILS ADAPTED FROM BMPs, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AURORA)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

August 2013 Urban Drainage and Flood Control District IP-7 IP-8 Urban Drainage and Flood Control District August 2013 August 2013

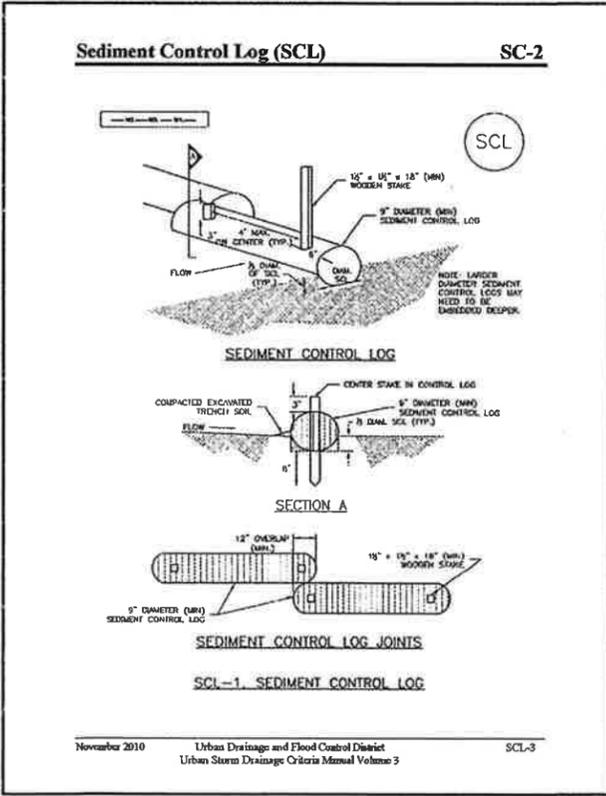
**Inlet Protection (IP) SC-6 SC-6 Inlet Protection (IP)**

**INLET PROTECTION - NOT TO SCALE**

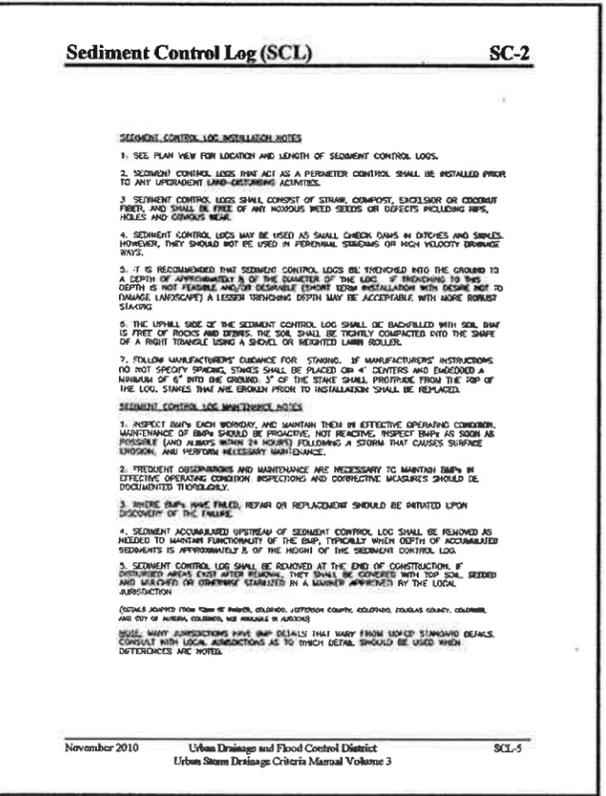


City of Colorado Springs Stormwater Quality Figure VT-2 Vehicle Tracking Application Examples

- VEHICLE TRACKING NOTES**
- INSTALLATION REQUIREMENTS**
- ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
  - CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APPROX 10' TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
  - AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
  - CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
  - CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.
- MAINTENANCE REQUIREMENTS**
- REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
  - STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
  - SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
  - STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
  - OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.



November 2010 Urban Drainage and Flood Control District SCL-3 Urban Storm Drainage Criteria Manual Volume 3



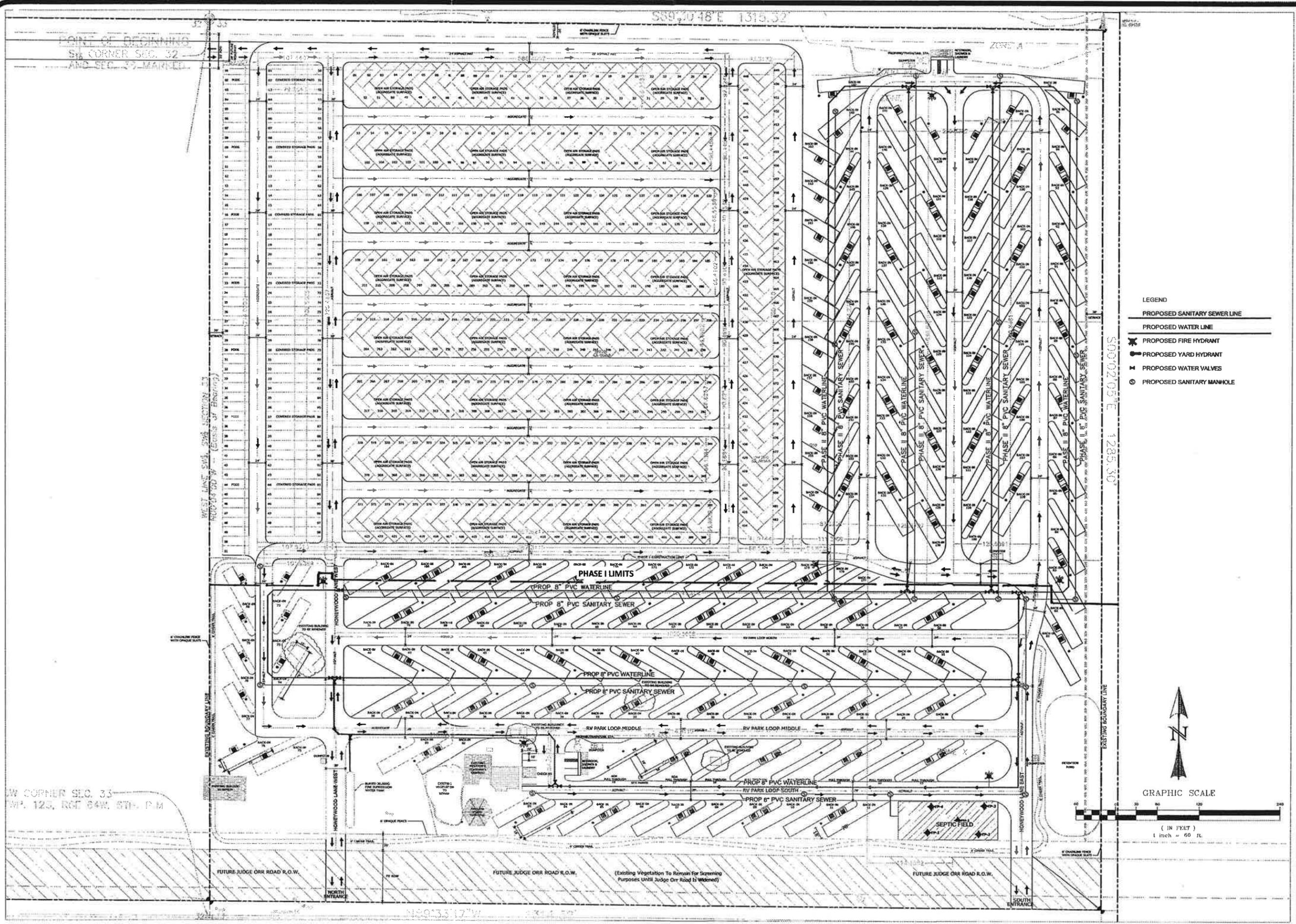
November 2010 Urban Drainage and Flood Control District SCL-5 Urban Storm Drainage Criteria Manual Volume 3

DESIGNED BY: DATE PROJECT ENGINEER: JOB NO. JOBSET: PROJECT MANAGER: CAD FILE NO. DATE: SCALE: 1" = 8'-0" HORIZ. 1" = 1'-0" VERT. PREPARED BY: ADPCIVIL 3520 Auraria Blvd., Parkway Suite 100, Colorado Springs, CO 80918 (719) 269-5112 fax (719) 269-5341

NO.	DATE	REVISION

**JUDGE ORR ROAD RV PARK & STORAGE**  
**COLORADO SPRINGS, COLORADO**  
**EROSION CONTROL DETAILS**

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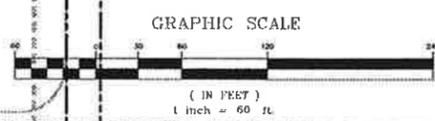


POINT OF BEGINNING  
S.E. CORNER SEC. 32  
AND SEC. 33 MARKED

S89°20'48" E 1315.32'

N.W. CORNER SEC. 33  
TWP. 12S, RGE. 64W, 5TH. P.M.

- LEGEND
- PROPOSED SANITARY SEWER LINE
  - PROPOSED WATER LINE
  - ★ PROPOSED FIRE HYDRANT
  - PROPOSED YARD HYDRANT
  - ⊕ PROPOSED WATER VALVES
  - ⊙ PROPOSED SANITARY MANHOLE



DESIGNED BY: JAG  
PROJECT ENGINEER: JAG  
PROJECT MANAGER: JAG  
DATE: 12/15/16  
JOB NO.: 160391  
CADD FILE NO.: 160391-0000  
SCALE: 1" = 60'  
HORIZ.: JAG  
VERT.: JAG

PREPARED BY:  
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NO.	DATE	REVISION	BY

**JUDGE ORR ROAD RV PARK & STORAGE**  
**COLORADO SPRINGS, COLORADO**  
**PRELIMINARY UTILITY PLAN**



(Notes Given Hereunder Apply to the Entire Project and Drawings)

GENERAL NOTES:

- 1. The Contractor shall contact all utility agencies prior to commencing construction for purposes of locating existing utilities on the project site. The Utility Notification Center of Colorado may be contacted at 1-800-922-1987 (811).
2. All materials and construction shall be in accordance with the Dept. of El Paso County Health and Environment (EPCDHE) Utility Design and Construction Specifications for Water Distribution and Wastewater Collection and the Project Manual.
3. The Contractor shall coordinate and provide for the protection of conflicting utilities and drainage structures. Utilities or other obstructions requiring relocation or utilities or other facilities damaged during the course of construction shall be relocated and/or repaired by the Contractor at no cost to the Owner.
4. Sufficient clearance shall be maintained between the excavation for the new water facilities and any power or telephone pole or guy wire. In cases where failure of a pole is possible, the Contractor shall contact the appropriate utility company for assistance to temporarily brace or support the pole as required. In the case where a guy wire or its anchor is in direct conflict with the work proposed, the Contractor shall coordinate with the appropriate utility company for the removal and reinstallation of the conflicting guy wire or anchor as required.
5. No excavated material shall be placed under overhead electric conductors or around poles or temporarily stored under lines without first consulting with the electric utility to determine if adequate clearances will be maintained. No person, tool or equipment shall operate closer than 10 feet to any energized line without first complying with the provisions of Colorado Revised Statutes 1973, Section 1, Title 9, Article 2.5, 102 and 103.
6. The Contractor shall not disturb any existing utilities unless otherwise noted on the Drawings. All utilities shall remain in service at all times during construction unless other arrangements, acceptable to the Owner, are made between the Contractor, the respective utility department and where appropriate, the private property owner(s).
7. The Contractor is responsible to insure that all work is performed in accordance with applicable standards and regulations as set forth by the Occupational Safety and Health Administration (OSHA).
8. The Contractor is responsible for construction staking of both horizontal and vertical layout. The Drawings show control points that can be used in the layout of the project. All layout shall be coordinated with the Engineer and is subject to review and approval prior to construction. The Engineer will assist the Contractor in locating existing control as necessary.

EARTHWORK

- 1. In those areas where pipeline trenching activities occur outside of existing asphalt or gravel streets, the existing topsoil shall be fully stripped, stockpiled and reinstalled upon completion of the backfill procedure. This work shall be undertaken as an incidental to the pipeline installation.
2. In those areas where construction activity alters existing drainage configurations, drainage patterns shall be restored to as good as or better conditions than those that existed prior to the construction activity. This work shall be undertaken as an incidental part of the pipeline installation.
3. Compaction shall be in compliance with El Paso County ECM. In those areas where permits are issued by an outside authority, comply with the more stringent specification.

TRAFFIC CONTROL

- 1. A portion of the pipeline components of the project lie within El Paso County (EPC) road rights-of-way. Traffic control shall be undertaken in accordance with the Manual on Uniform Traffic Control Devices. Where appropriate, the Owner's regulations and/or the EPC Department of Transportation (DOT) Utility Permit Provisions shall be taken into account within the traffic control plans.
2. The Contractor is required to obtain a Utility Cut Permit from the EPC DOT for this project.
3. The Contractor shall contact EPC DOT representatives 48 hours prior to beginning construction in county highway right-of-way.
4. The Contractor shall provide a traffic control plan in accordance with the provisions of the specifications and the EPC DOT Utility Permit where applicable. Approval of the traffic control plan for all work contained within the county highway right-of-way shall be obtained prior to the initiation of any construction within the county highway right-of-way.
5. Coordination with the EPC DOT is required in the event that any streets are desired to be temporarily closed. Provisions shall be made to accommodate local access in the event of a street and/or alley closure.

GENERAL CONSTRUCTION NOTES

- 1. Shop drawing submittals shall be made for all materials to be incorporated into this project.
2. Deflections at pipe joints shall be limited to those deflections as shown on the Construction Drawings and recommended by the pipe manufacturer, whichever is less.
3. In areas to receive hot bituminous pavement replacement, the Contractor shall set all valve boxes 1/2-inch below finish grade. In all off-road areas, the Contractor shall set the valve boxes flush with finished grade. In gravel roadways, valve boxes shall be set 4 inches below finish grade.
4. Gate valve and butterfly valve installations on the new main shall be laid out such that the gate valves are typically located three (3) feet from adjacent tees or other fittings unless otherwise shown on the Construction Drawings.
5. The Contractor shall limit his construction activity to existing rights-of-way and construction easements as noted on the Construction Drawings.
6. The Contractor shall excavate the existing water lines where crossings are shown. An Owner's representative will verify the existing pipeline location and make any adjustments to the Construction Drawings that may be necessary as a result of final location determination.
7. Pipelines shall be laid out in straight alignments between points of intersection as shown on the Construction Drawings. Deviations are subject to the Engineer's approval.
8. Pipe fittings located 5 feet or less apart shall be tied together with at least four (4) 1/4-inch anchor rods unless otherwise detailed or noted on the plans. When used, joint restraints shall be installed on plain end pipe only. Installation on plain and fittings is not acceptable.
9. Coordination by the Contractor with the Engineer and Owner for connections to existing utilities is required to insure a minimum of disruption to existing services. Off-hour construction work may be required at some locations.
10. Removal and disposal of existing pipeline materials and appurtenances required to accomplish the specified scope of work shall be incidental to the new pipeline construction bid items. No additional payment will be made for this work.
11. All pipeline work is to be undertaken utilizing embedment materials as specified in the El Paso County ECM.
12. Any signs, delineator posts, mail boxes, newspaper boxes and other appurtenances removed during construction shall be reinstalled in the same location and in an acceptable condition if no additional cost to the Owner.
13. The sequence of the installation, disinfecting, pressure testing and bacteriological testing associated with new water main installations shall be accomplished in accordance with the El Paso County ECM and shall be coordinated with the Owner and/or the Owner's representative.
14. The Contractor shall install new water main segments in such a manner that they can be filled, pressure tested, disinfected, obtain a clean bacteriological test and flushed prior to being placed into service.
15. All existing drainage structures shall remain in place unless otherwise indicated on the Construction Drawings. Any structures damaged or removed during construction, shall be reinstalled or replaced at no additional cost to the Owner.
16. The Contractor may propose alternatives to the fitting and piping configuration shown for the connection of new facilities to existing facilities. Such modifications are subject to the Engineer's review and acceptance.
17. The Contractor shall limit his general area of disruption in the water main installations to the immediate area of the actual installation.
18. Within the course of construction, any existing water system components removed by the Contractor that are deemed salvage by the Engineer/Owner shall be delivered to the Owner. All other items not deemed as salvage shall be either abandoned in place or disposed of off-site by the Contractor as part of the pipeline installation scope of work.
19. Existing property corners and section monumentation shall not be disturbed to the extent possible. In numerous locations, property corners and section corner monumentation are noted as requiring referencing and replacement. All property corner and section corner monumentation to be disturbed, as identified on the Construction Drawings, and any other monumentation located in the field, must be referenced and replaced at the Contractor's cost by a surveyor licensed in the State of Colorado.
20. All thrust blocks installed throughout this project shall have a bond breaker between the pipe and/or fitting and the thrust block.
21. Any reverse anchors, blow-off assemblies, etc., required to make connections to existing lines and provide for pressure testing and other construction activities are incidental to the pipeline construction.
22. The removal of trees shall be done only as necessary and with the direction of the Owner and/or Engineer.
23. The Contractor shall provide seeding in areas as designated on the Construction Drawings and as indicated by the Engineer. Payment will be made up to the maximum limitations set forth in the Construction Drawings. The Contractor is responsible for seeding of disrupted areas outside the maximum pay widths as a result of his construction activities as an incidental part of the work.
24. If an item is not designated in the Bid Form as a separate pay item, the Contractor shall include the cost of the incidentals that do not have separate pay items in the appropriate pipeline unit price.
25. New materials shall be used for all improvements unless otherwise noted on the Construction Drawings.
26. The Contractor shall review his sequence of construction with the Engineer and the El Paso County ECM prior to initiation of the work.
27. The Contractor shall provide temporary fencing as required to maintain the health and safety of the general public throughout construction. Open trenches are not allowed when the Contractor is not working on site or during hours of darkness.
28. The Contractor is advised that all existing conditions outside the area of work shall be protected. If damage occurs during construction, it will be replaced to the original existing condition as an incidental part of the work.
29. The Contractor shall attend a preconstruction conference hosted by the El Paso County ECM or his designated representative one (1) week prior to the start of construction for construction approval, to outline methods of construction and materials to be used, and layout of the project.
30. If field conditions are found to be different than those shown on the Construction Drawings, the Contractor shall notify the El Paso County ECM or his designated representative and the Engineer immediately so appropriate action can be taken.
31. All pipeline construction shall be as-built surveyed and as-built drawings submitted by the Contractor to the El Paso County ECM for review and acceptance at the completion of the project.

STREET SURFACE RESTORATION

- 1. All street surface restoration shall be in accordance with the project specifications and Construction Drawings and the EPC DOT Engineering Criteria Manual.
2. The maximum pay area for pavement removal and replacement is shown on the Construction Drawings. Payment will be made for actual quantities removed and replaced up to that pay area. Any pavement removed that exceeds the maximum pay area shall be removed and replaced by the Contractor as an incidental part of pipeline construction.
3. The Contractor shall diligently undertake final grading, cleanup and road restoration within 100 feet of pipeline installation. Restoration must progress with the work.
4. Work in the public right-of-way includes stripping, stockpiling and reinstallation of existing aggregate base course (ABC) to full depth. In the event the ABC is contaminated or not sufficiently stripped, the Contractor shall provide makeup ABC as required as an incidental part of the work. At a minimum, the Contractor will reestablish the existing ABC plus 2 additional inches up to a full depth of 8 inches of ABC.
5. The paved section of El Paso County roads shall be restored in accordance with the EPC DOT Engineering Criteria Manual.

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DESIGNED BY: WAA PROJECT ENGINEER DATE: 12/13/16 JOB NO.: 160301 SCALE: HORIZ. VERT. PROJECT MANAGER: WAA DRAWN BY: FGD CAD FILE NO.: 160301

PREPARED BY:



3020 Austin Blvd, Parkway Suite 102 Colorado Springs, CO 80918 (719) 266-5712 fax (719) 266-5341

Table with columns: NO., DATE, REVISION, BY

JUDGE ORR ROAD RV PARK & STORAGE COLORADO SPRINGS, COLORADO UTILITY NOTES