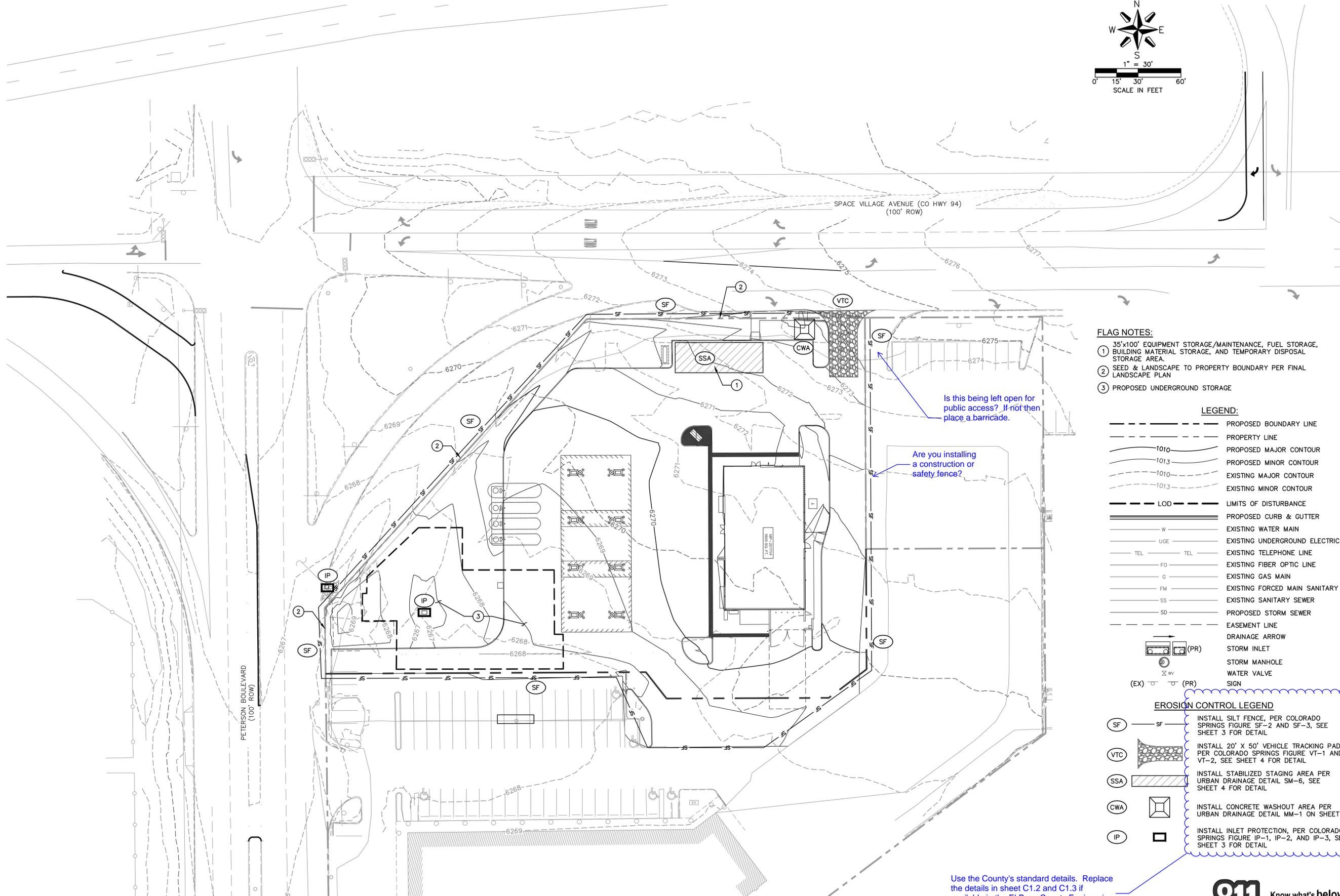
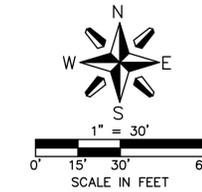


SPACE VILLAGE FILING NO. 3



FLAG NOTES:

- ① 35'x100' EQUIPMENT STORAGE/MAINTENANCE, FUEL STORAGE, BUILDING MATERIAL STORAGE, AND TEMPORARY DISPOSAL STORAGE AREA.
- ② SEED & LANDSCAPE TO PROPERTY BOUNDARY PER FINAL LANDSCAPE PLAN
- ③ PROPOSED UNDERGROUND STORAGE

LEGEND:

	PROPOSED BOUNDARY LINE
	PROPERTY LINE
	PROPOSED MAJOR CONTOUR
	PROPOSED MINOR CONTOUR
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	LOD - LIMITS OF DISTURBANCE
	PROPOSED CURB & GUTTER
	EXISTING WATER MAIN
	EXISTING UNDERGROUND ELECTRIC
	EXISTING TELEPHONE LINE
	EXISTING FIBER OPTIC LINE
	EXISTING GAS MAIN
	EXISTING FORCED MAIN SANITARY SEWER
	EXISTING SANITARY SEWER
	PROPOSED STORM SEWER
	EASEMENT LINE
	DRAINAGE ARROW
	STORM INLET
	STORM MANHOLE
	WATER VALVE
	SIGN

EROSION CONTROL LEGEND

	SF	INSTALL SILT FENCE, PER COLORADO SPRINGS FIGURE SF-2 AND SF-3, SEE SHEET 3 FOR DETAIL
	VTC	INSTALL 20' X 50' VEHICLE TRACKING PAD, PER COLORADO SPRINGS FIGURE VT-1 AND VT-2, SEE SHEET 4 FOR DETAIL
	SSA	INSTALL STABILIZED STAGING AREA PER URBAN DRAINAGE DETAIL SM-6, SEE SHEET 4 FOR DETAIL
	CWA	INSTALL CONCRETE WASHOUT AREA PER URBAN DRAINAGE DETAIL MM-1 ON SHEET 3
	IP	INSTALL INLET PROTECTION, PER COLORADO SPRINGS FIGURE IP-1, IP-2, AND IP-3, SEE SHEET 3 FOR DETAIL

Use the County's standard details. Replace the details in sheet C1.2 and C1.3 if available in the El Paso County Engineering Criteria Manual (ECM) Appendix F.



Know what's below.
Call before you dig.

MOLSSON ASSOCIATES

PRELIMINARY
NOT FOR
CONSTRUCTION



6400 Westown Parkway
West Des Moines, Iowa
50266
P: 515-226-0128
F: 515-223-9873

#0692 - EL PASO COUNTY, CO
6809 SPACE VILLAGE AVENUE
EROSION CONTROL PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

DATE	REVISION DESCRIPTION	REVISIONS

DATE: 09/08/2017

SHEET NUMBER:

C1.1
2 OF 7

CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

DWG: F:\2017\1501-2000\017-1754\40-Design\AutoCAD\Preliminary Plans\Sheets\GNCA\GR-EC SET\C.ERS_71754.dwg
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 USER: jgoetsch

Concrete Washout Area (CWA)

MM-1

MM-1

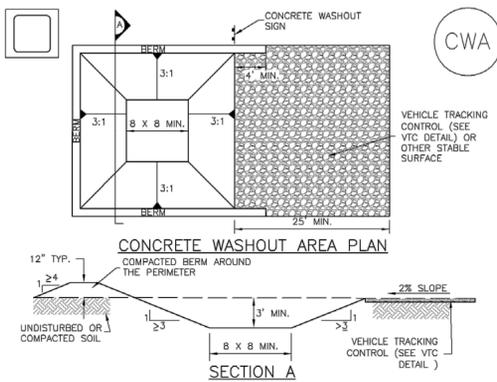
Concrete Washout Area (CWA)

Silt Fence (SF)

SC-1

SC-1

Silt Fence (SF)



CWA-1. CONCRETE WASHOUT AREA

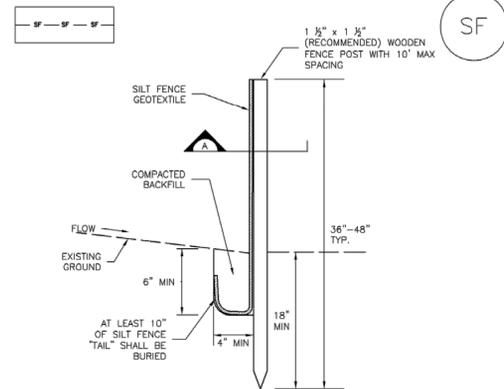
CWA INSTALLATION NOTES

- 1. SEE PLAN VIEW FOR: -CWA INSTALLATION LOCATION.
2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY...
3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER...
5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

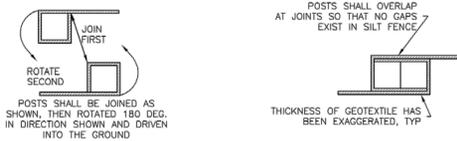
CWA MAINTENANCE NOTES

- 1. 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.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE, CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER-TIGHT CONTAINER AND DISPOSED OF PROPERLY.
6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
8. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLASS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)
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.



SILT FENCE



SECTION A

SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES

- 1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2-5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.
2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.
3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.
4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.
5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.
6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' - 20').
7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

- 1. 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.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.
6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
8. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

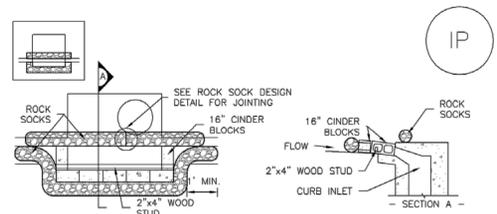
(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

SC-6 Inlet Protection (IP)

Inlet Protection (IP)

SC-6 Inlet Protection (IP)

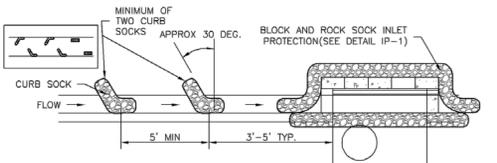
Inlet Protection (IP) SC-6



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

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

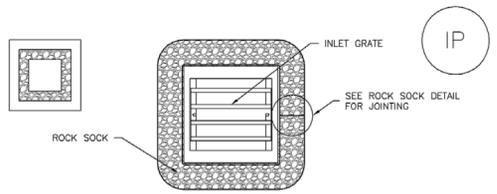
- 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.
3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER 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

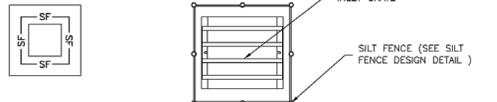
- 1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.
2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.
3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM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



IP-3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES

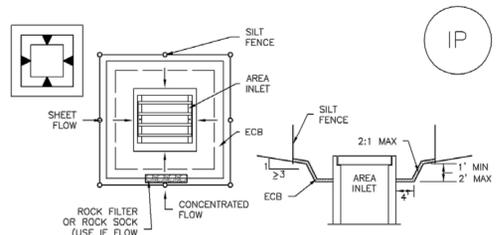
- 1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



IP-4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

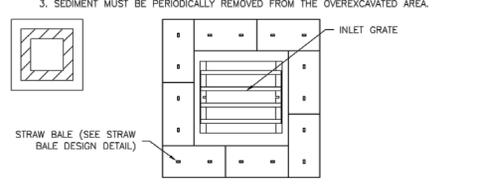
- 1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.
2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.
3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL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



IP-5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

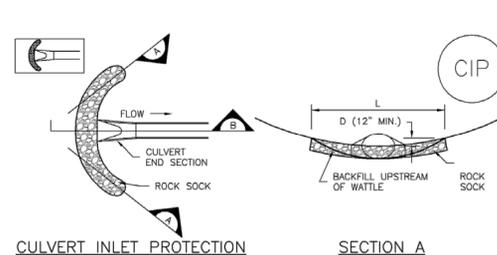
- 1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.
2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.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



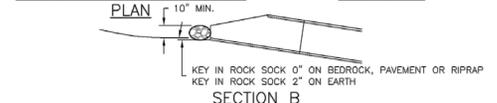
IP-6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

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



CULVERT INLET PROTECTION



CIP-1. CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

- 1. SEE PLAN VIEW FOR -LOCATION OF CULVERT INLET PROTECTION.
2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

- 1. 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.
2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK.
5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

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.



Know what's below. Call before you dig.

CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.



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6400 Westown Parkway West Des Moines, Iowa 50266 P: 515-226-0128 F: 515-223-9873

#0692 - EL PASO COUNTY, CO 6809 SPACE VILLAGE AVENUE EROSION CONTROL DETAILS

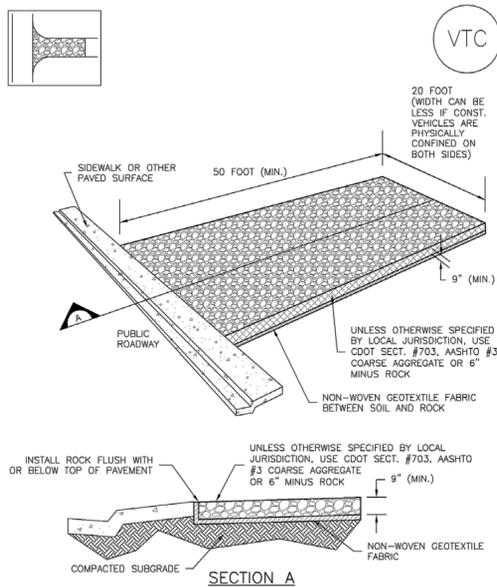
KG PROJECT TEAM: RDR: JXH SDM: RJH CPM: TLK

Table with columns for REVISIONS, DATE, and DESCRIPTION.

DATE: 09/08/2017 SHEET NUMBER: C1.2 3 OF 7

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Vehicle Tracking Control (VTC) SM-4



VTC-1. AGGREGATE VEHICLE TRACKING CONTROL

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

SM-4 Vehicle Tracking Control (VTC)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

- SEE PLAN VIEW FOR
-LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
-TYPE OF CONSTRUCTION ENTRANCE(S)/EXIT(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).
- CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.
- A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT-OF-WAYS.
- STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
- A NON-WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

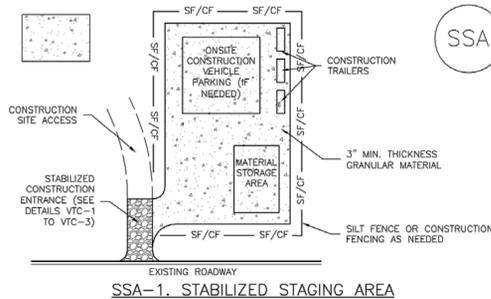
- INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.
- FREQUENT OBSERVATIONS 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.
- ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.
- SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

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.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

VTC-6 Urban Drainage and Flood Control District November 2010
Urban Storm Drainage Criteria Manual Volume 3

Stabilized Staging Area (SSA) SM-6



SSA-1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

- SEE PLAN VIEW FOR
-LOCATION OF STAGING AREA(S).
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA 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.
- ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

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

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6400 Westown Parkway
West Des Moines, Iowa 50266
P: 515-226-0128
F: 515-223-9873

#0692 - EL PASO COUNTY, CO
6809 SPACE VILLAGE AVENUE
EROSION CONTROL DETAILS

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

REVISION DESCRIPTION	DATE

DATE: 09/08/2017

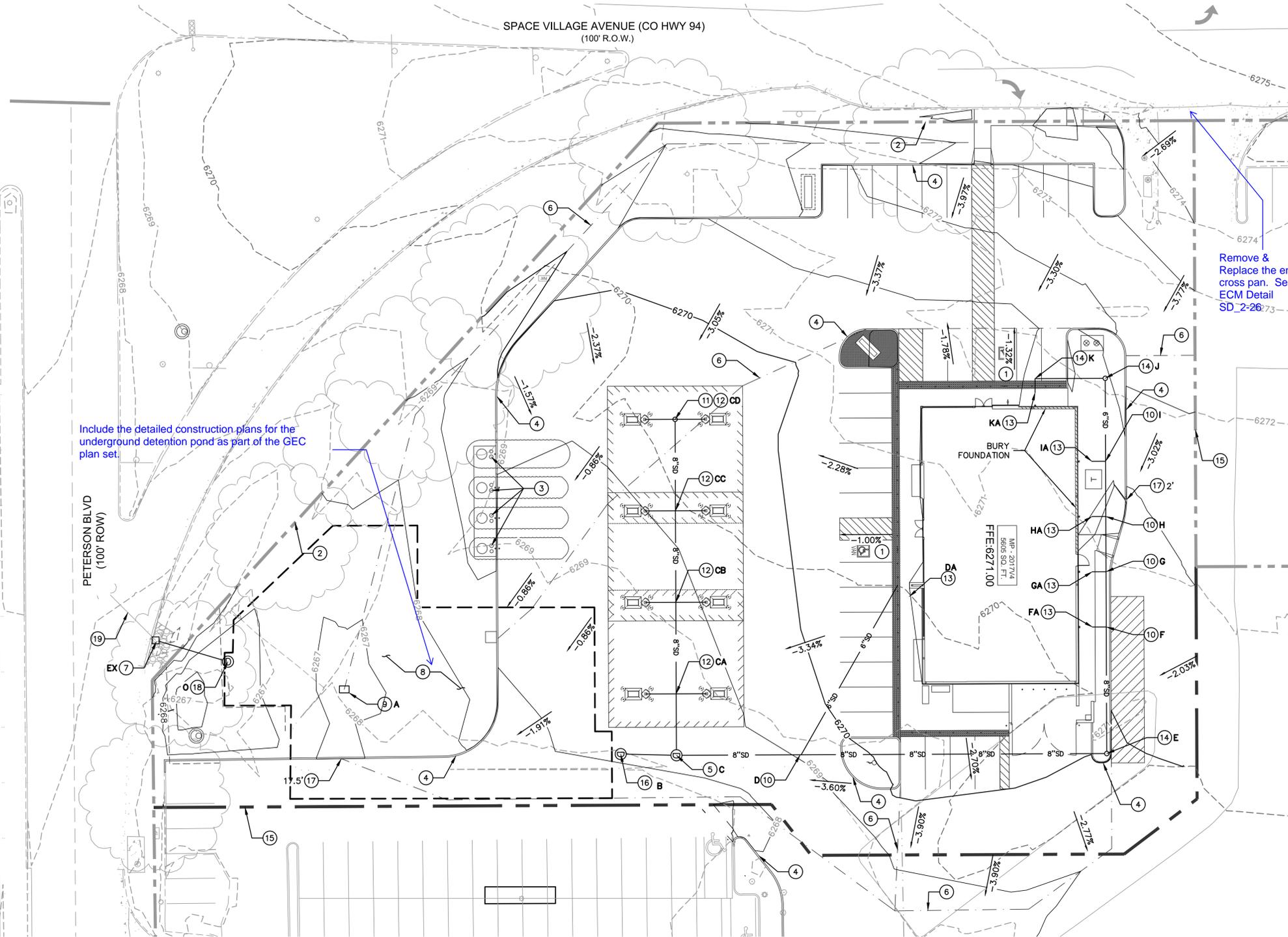
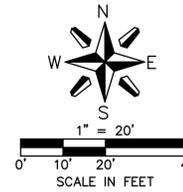
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4 OF 7



CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

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SPACE VILLAGE FILING NO. 3



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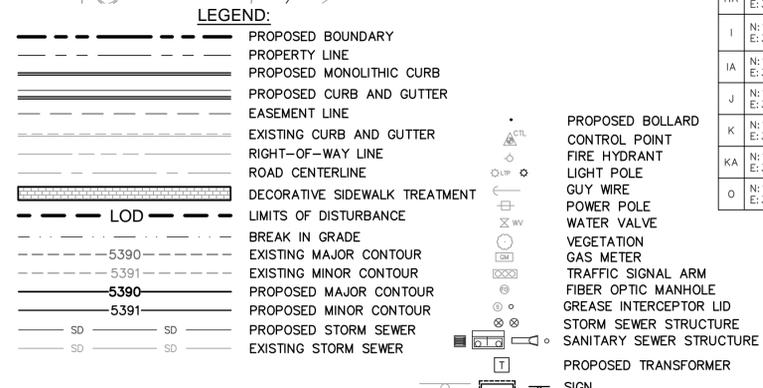
- 1 ADA ACCESSIBLE STALL (NOT TO EXCEED 2.00% GRADE IN ANY DIRECTION)
- 2 MATCH EXISTING GRADE, MAX 3:1 (CONTRACTOR TO VERIFY)
- 3 ALL LIDS FOR UNDERGROUND TANKS TO BE 1" ABOVE FINISHED GRADE
- 4 PROPOSED 6" INTEGRAL CURB
- 5 INSTALL 48" STORM SEWER MANHOLE
- 6 PROPOSED BREAK IN GRADE
- 7 PROPOSED TYPE 'C' GRATED INLET WITH STANDARD GRATE
- 8 PROPOSED UNDERGROUND STORAGE
- 9 INSTALL 2'x3' ADS AREA INLET
- 10 INSTALL STORM SEWER WYE
- 11 INSTALL STORM SEWER WYE AND CLEANOUT WITH WATERTIGHT TRAFFIC RATED LID
- 12 CONNECT TO CANOPY DOWNSPOUT
- 13 CONNECT TO BUILDING DOWNSPOUT, SEE ARCHITECTURAL PLANS FOR DOWNSPOUT LOCATIONS
- 14 INSTALL STORM SEWER BEND
- 15 SAWCUT EXISTING PAVEMENT, MATCH EXISTING
- 16 CONNECT TO UNDERGROUND DETENTION SYSTEM
- 17 CURB CUT, WIDTH PER PLAN
- 18 INSTALL FLOW CONTROL MANHOLE
- 19 EXISTING 24" RCP

Remove & Replace the entire cross pan. See ECM Detail SD 2-26

Include the detailed construction plans for the underground detention pond as part of the GEC plan set.

STORM STRUCTURE TABLE			
ID	NORTHING EASTING	RIM/GROUND/TOC ELEV.+	INVERT IN
A	N: 1366998.08 E: 3227568.08	6266.50	
B	N: 1366974.74 E: 3227668.23	6267.64	8" (E)=6264.10 8" (E)=6264.45
C	N: 1366974.30 E: 3227688.42	6268.21	8" (N)=6264.45 8" (E)=6264.45
CA	N: 1366996.46 E: 3227688.33	6268.21	8" (N)=6264.67 8" (S)=6264.67
CB	N: 1367029.46 E: 3227688.19	6268.19	8" (N)=6265.00 8" (S)=6265.00
CC	N: 1367062.46 E: 3227688.06	6268.06	8" (N)=6265.33 8" (S)=6265.33
CD	N: 1367095.46 E: 3227687.93	6269.31	8" (S)=6265.66
D	N: 1366974.48 E: 3227733.62	6268.13	8" (E)=6264.90 6" (NE)=6265.28 8" (W)=6264.90
DA	N: 1367035.57 E: 3227768.56	6268.13	6" (SW)=6266.33
E	N: 1366974.93 E: 3227844.31	6268.13	8" (N)=6266.00 8" (W)=6266.00
EX	N: 1367015.77 E: 3227499.73	6266.54	12" (E)=6263.60
F	N: 1367020.59 E: 3227844.13	6268.13	8" (N)=6266.46 6" (W)=6266.46
FA	N: 1367020.57 E: 3227839.13	6268.13	6" (E)=6266.70
G	N: 1367040.50 E: 3227844.05	6268.13	8" (N)=6266.66 6" (W)=6266.83 6" (E)=6266.90
GA	N: 1367040.48 E: 3227839.05	6268.13	6" (E)=6266.90
H	N: 1367060.42 E: 3227843.97	6268.13	8" (N)=6266.86 6" (W)=6268.03 6" (E)=6268.10
HA	N: 1367060.40 E: 3227838.97	6268.13	6" (E)=6268.10
I	N: 1367080.33 E: 3227843.89	6268.13	6" (N)=6267.23 6" (W)=6268.23 6" (S)=6267.06
IA	N: 1367080.31 E: 3227838.89	6268.13	6" (E)=6268.30
J	N: 1367110.25 E: 3227843.77	6269.61	6" (W)=6267.67 6" (S)=6267.67
K	N: 1367110.14 E: 3227818.33	6269.61	6" (S)=6268.06 6" (E)=6268.06
KA	N: 1367105.14 E: 3227818.35	6269.61	6" (N)=6268.13
O	N: 1367008.08 E: 3227525.95	6268.57	12" (W)=6263.70

STORM PIPE TABLE			
NAME	SIZE	LENGTH	SLOPE
B-C	8"	20.19'	1.71%
C-CA	8"	22.16'	1.00%
C-D	8"	45.20'	1.00%
CA-CB	8"	33.00'	1.00%
CB-CC	8"	33.00'	1.00%
CC-CD	8"	33.00'	1.00%
D-DA	6"	70.37'	1.50%
D-E	8"	110.70'	1.00%
E-F	8"	45.66'	1.00%
EX-O	12"	27.32'	0.37%
F-FA	6"	5.00'	1.50%
F-G	8"	19.92'	1.00%
G-GA	6"	5.00'	1.50%
G-H	8"	19.92'	1.00%
H-HA	6"	5.00'	1.50%
H-I	8"	19.91'	1.00%
I-IA	6"	5.00'	1.50%
I-J	6"	29.91'	1.50%
J-K	6"	25.44'	1.50%
K-KA	6"	5.00'	1.50%



NOTES:

1. REFERENCE POINTS FOR STRUCTURES ARE AS FOLLOWS:
 - CENTER OF MANHOLES/CLEANOUTS
 - CENTER OF INLET FACE AT TOP OF CURB FOR CURB INLETS
 - CENTER OF INLET FOR GRATE INLETS
 - CENTER AT END OF FLARED END SECTION
2. STORM SEWER PIPE LENGTHS ARE MEASURED AS FOLLOWS:
 - CENTER OF MANHOLES/CLEANOUTS
 - INSIDE WALL OF CURB INLET
 - CENTER OF GRATE INLET
 - LENGTHS LISTED ARE 2D MEASUREMENTS

NOTE:

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES.

BENCHMARKS:
PROJECT BENCHMARK: THE PUBLISHED VALUES OF COLORADO SPRINGS UTILITIES FIMS MONUMENT "F_81". EL=6272.26 (NGVD29)

SITE BENCHMARK: A CHISELED "X" CUT IN SOUTH EDGE OF THE CONCRETE ISLAND NORTH OF THE MALL. CONTROL POINT #100. EL=6268.47 (NGVD29)

FLOOD ZONE:
THIS PROPERTY IS IN FLOOD ZONE "X", AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN, ACCORDING TO FEMA FLOOD INSURANCE RATE MAP 08041C0754 F WITH AN EFFECTIVE DATE OF MARCH 17, 1997

MOLSSON ASSOCIATES
1838 Fall River Dr., Suite 200
Fountain, CO 80838
TEL: 970.481.7733 www.molssonassociates.com

PRELIMINARY
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CONSTRUCTION



6400 Westown Parkway
West Des Moines, Iowa
50266
P: 515-226-0128
F: 515-223-9873

#0692 - EL PASO COUNTY, CO
6809 SPACE VILLAGE AVENUE
DRAINAGE PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

REVISION DESCRIPTION	DATE

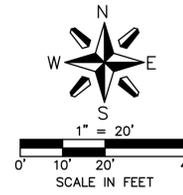
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SHEET NUMBER:
C2.1
5 OF 7



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SPACE VILLAGE FILING NO. 3

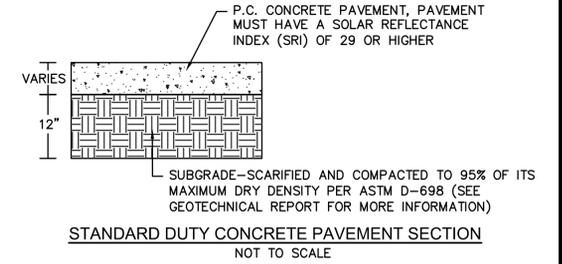


SPACE VILLAGE AVENUE (CO HWY 94)
(100' R.O.W.)

PETERSON BLVD
(100' ROW)

- NOTES:**
- ALL POINTS REFER TO TOP BACK OF CURB UNLESS OTHERWISE NOTED.
 - TOP OF ISLAND TO BE 2" ABOVE HIGHEST ELEVATION OF SURROUNDING PAVEMENT - TYP. (SEE PETROLEUM PLANS)

Move the ramp further south (See ECM Details SD_2-40 and SD_2-41 so that the ADA crossing is not located within the cross pan which has cross slopes greater than 2%



BENCHMARKS:
PROJECT BENCHMARK: PROJECT BENCHMARK: THE PUBLISHED VALUES OF COLORADO SPRINGS UTILITIES FIMS MONUMENT "F_81". EL=6272.26 (NGVD29)
SITE BENCHMARK: SITE BENCHMARK: A CHISELED "X" CUT IN SOUTH EDGE OF THE CONCRETE ISLAND NORTH OF THE MALL. CONTROL POINT #100. EL=6268.47" (NGVD29)

LEGEND:

- PROPOSED BOUNDARY
- PROPERTY LINE
- PROPOSED MONOLITHIC CURB
- PROPOSED CURB AND GUTTER
- EASEMENT LINE
- EXISTING CURB AND GUTTER
- RIGHT-OF-WAY LINE
- ROAD CENTERLINE
- DECORATIVE SIDEWALK TREATMENT
- LOD
- LIMITS OF DISTURBANCE
- BREAK IN GRADE
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED STORM SEWER
- EXISTING STORM SEWER
- GR=GRATE
- FL=FLOWLINE
- FFE=FINISHED FLOOR ELEVATION
- RIM=RIM
- PROPOSED BOLLARD
- CONTROL POINT
- FIRE HYDRANT
- LIGHT POLE
- GUY WIRE
- POWER POLE
- WATER VALVE
- VEGETATION
- GAS METER
- TRAFFIC SIGNAL ARM
- FIBER OPTIC MANHOLE
- GREASE INTERCEPTOR LID
- STORM SEWER STRUCTURE
- SANITARY SEWER STRUCTURE
- PROPOSED TRANSFORMER
- SIGN

NOTE:
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN-SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED, ALTHOUGH THE SURVEYOR DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. THIS INCLUDES PRIVATE AND PUBLIC UTILITIES.

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CONSTRUCTION



6400 Westtown Parkway
West Des Moines, Iowa
50266
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F: 515-223-9873

#0692 - EL PASO COUNTY, CO
6809 SPACE VILLAGE AVENUE
OVERALL GRADING PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

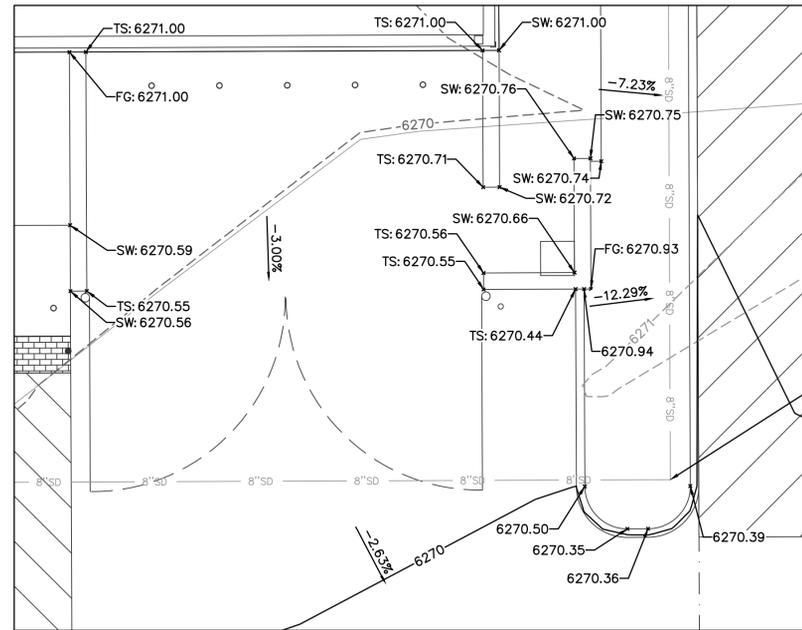
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DATE: 09/08/2017
SHEET NUMBER: C2.2
6 OF 7

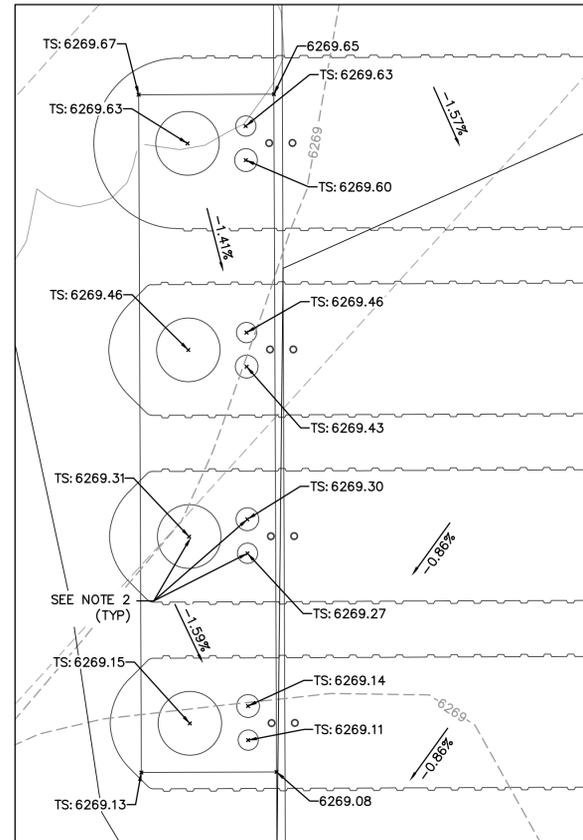


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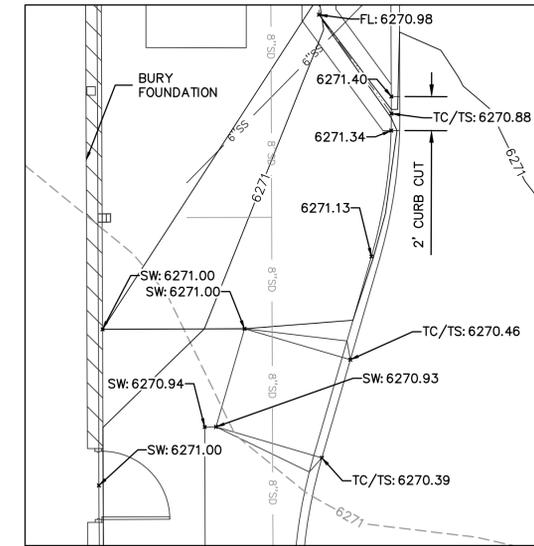
SPACE VILLAGE FILING NO. 3



DETAIL 1
SCALE: 1"=5'



DETAIL 2
SCALE: 1"=5'



DETAIL 3
SCALE: 1"=5'

NOTES:

1. ALL POINTS REFER TO TOP BACK OF CURB UNLESS OTHERWISE NOTED.
2. ALL UNDERGROUND TANK LIDS SHALL BE PLACED 1" ABOVE SURROUNDING PAVEMENT. ELEVATIONS PROVIDED AT THE UNDERGROUND TANK LIDS REFERENCE THE TOP OF PAVEMENT.

BENCHMARKS:

PROJECT BENCHMARK: PROJECT BENCHMARK: THE PUBLISHED VALUES OF COLORADO SPRINGS UTILITIES FIMS MONUMENT "F_81". EL=6272.26 (NGVD29)

SITE BENCHMARK: SITE BENCHMARK: A CHISELED "X" CUT IN SOUTH EDGE OF THE CONCRETE ISLAND NORTH OF THE MALL. CONTROL POINT #100. EL=6268.47' (NGVD29)

TS=TOP OF SLAB
SW=SIDEWALK
BW=FINISHED GRADE AT BOTTOM OF WALL
TW=FINISHED GRADE AT TOP OF WALL
ME=MATCH EXISTING
FG=FINISHED GRADE
GR=GRATE
FL=FLOWLINE
FFE=FINISHED FLOOR ELEVATION
RIM=RIM

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CONSTRUCTION



6400 Westtown Parkway
West Des Moines, Iowa
50266
P: 515-226-0128
F: 515-223-9873

#0692 - EL PASO COUNTY, CO
6809 SPACE VILLAGE AVENUE
DETAILED GRADING PLAN

KG PROJECT TEAM:
RDR: JXH
SDM: RJH
CPM: TLK

REVISION DESCRIPTION	DATE	REVISIONS

DATE: 09/08/2017

SHEET NUMBER:
C2.3
7 OF 7



CALL 811 SEVENTY-TWO HOURS PRIOR TO DIGGING, GRADING OR EXCAVATING FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

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Markup Summary

dsdlaforce (14)



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Author: dsdlaforce
Date: 10/23/2017 9:02:03 AM
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Replace with actual information:
Name, Title
Business Name
Address



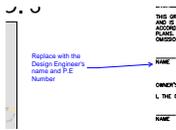
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Author: dsdlaforce
Date: 10/23/2017 9:01:57 AM
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Replace with:
Jennifer Irvine, P.E.
County Engineer/ECM Administrator



Subject: Callout
Page Label: C0.0
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Author: dsdlaforce
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Include "El Paso County, Colorado" as a subheader



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Author: dsdlaforce
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Replace with the Design Engineer's name and P.E Number



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Date: 10/23/2017 9:01:56 AM
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1. Include the construction details for the underground water quality/detention facility as part of the Grading and Erosion Control Plan set.
2. Include a sheet index
3. Include Point of Contact Information such as the Owner, Design Engineer, Contractor, EPC Planning and Community Development, Utility Companies, etc.



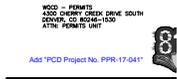
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Add as a third paragraph:
In accordance with ECM Section 1.12, these construction documents will be valid for construction for a period of 2 years from the date signed by the El Paso County Engineer. If construction has not started within those 2 years, the plans will need to be resubmitted for approval, including payment of review fees at the Planning and Community Development Directors discretion



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Add the following to the title:
 GRADING AND EROSION CONTROL PLAN



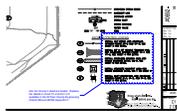
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Add "PCD Project No. PPR-17-041"



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Is this being left open for public access? If not then place a barricade.



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Use the County's standard details. Replace the details in sheet C1.2 and C1.3 if available in the El Paso County Engineering Criteria Manual (ECM) Appendix F.



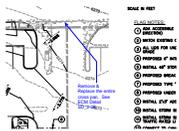
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Are you installing a construction or safety fence?



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Include the detailed construction plans for the underground detention pond as part of the GEC plan set.



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Remove & Replace the entire cross pan. See ECM Detail SD_2-26



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Page Label: C2.2
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Move the ramp further south (See ECM Details SD_2-40 and SD_2-41 so that the ADA crossing is not located within the cross pan which has cross slopes greater than 2%