ROAD & STORM DRAINAGE CONSTRUCTION PLANS
FOR

COMPARK VILLAGE SOUTH, FILING NO. 1 - BELFORD AVENUE SITE PLAN AMENDMENT

PARKER, COLORADO

THE WEST LINE OF THE SOUTHWEST QUARTER OF SECTION 6, TOWNSHIP 6 SOUTH, RANGE 66 WEST OF THE SIXTH PRINCIPAL MERIDIAN BEING MONUMENTED AS SHOWN HEREON HAVING A BEARING OF NORTH 00°29'49" WEST, AS DETERMINED BY GPS OBSERVATION FROM NGS CONTROL POINTS IN THE COLORADO CENTRAL ZONE, STATE PLANE COORDINATE SYSTEM TOWN OF PARKER, COUNTY OF DOUGLAS, STATE OF COLORADO

AGENCY CONTACT LIST

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STORM WATER - MICHAEL GRABCZYK
EROSION CONTROL - MICHAEL WALTON
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STONEGATE VILLAGE METRO DISTRICT
DISTRICT ENGINEER:
SCOTT BARNETT
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188 INVERNESS DRIVE WEST, SUITE 150
ENGLEWOOD, CO 80112 — 303-858-9909

DISTRICT MANAGER:
SARAH SJOBAKKEN
10252 STONEGATE PARKWAY
PARKER, CO 80134 — 303-858-9909

COMPARK VILLAGE CAMPUS METRO DISTRICT
C/O CLIFFTON LARSON ALLEN
8390 E. CRESCENT PARKWAY, SUITE 500
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GOLDEN, CO 80401 — 1-800-922-1987
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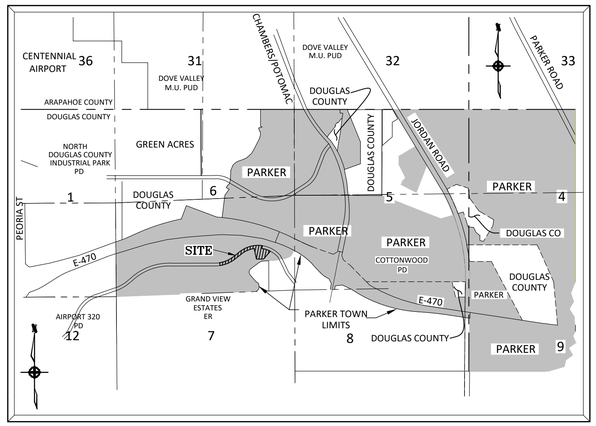
COLORADO DEPARTMENT OF HEALTH
4210 E. 11TH AVE.
DENVER, CO 80220 — 303-320-8333

INTERMOUNTAIN RURAL ELECTRIC ASSOCIATION
BROOKS KAUFMAN
5496 NORTH US HWY 85
P.O. BOX DRAWER A
SEDALIA, CO 80135 — 303-688-3100

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

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VICINITY MAP
N.T.S.

BENCHMARKS: (COMPARK SOUTH)

SOURCE BENCHMARKS:
DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD.

ELEVATION = 5752.84 (NAVD 88)

SITE BENCHMARKS:

1. A NO. 5 REBAR WITH 2" ALUMINUM CAP STAMPED "LS 28286, 2001" FOUND AT THE SOUTHWEST CORNER OF SECTION 6, T6S, R66W LOCATED ON THE WEST LINE OF FIRST STREET APPROXIMATELY 1000 FEET NORTH OF ELM AVENUE.

   ELEVATION = 5845.51

2. A 2.5" IRON PIPE WITH 3.25" ALUMINUM CAP STAMPED "PLS 12405, 1997" FOUND AT THE SOUTHEAST CORNER OF SECTION 6, T6S, R66W LOCATED APPROXIMATELY 960 FEET NORTH OF THE CENTERLINE OF AVENTERRA PARKWAY AND APPROXIMATELY 1050 FEET WEST OF THE CENTERLINE OF CHAMBERS ROAD.

   ELEVATION = 5808.06

STANDARD SYMBOLS

EXISTING		PROPOSED
	STORM SEWER	
	PVC ROOF DRAIN/FOUNDATION DRAIN	
	SANITARY SEWER	
W	WATER MAIN	W
E	ELECTRIC	E
G	GAS	G
T	TELEPHONE	T
	SANITARY MANHOLE	
	STORM MANHOLE	
	STORM INLET (CURB & GUTTER)	
	STORM INLET (LANDSCAPE)	
	CLEANOUT	
	RIP RAP	
	GATE VALVE	
	FIRE HYDRANT	
	CURB STOP	
	THRUST BLOCK & FITTING	
	FLARED END SECTION	
	STREET LIGHT	
	DIRECTION OF FLOW	
	DIRECTION OF OVERFLOW RELIEF	
764	1 FOOT CONTOURS	764
	CURB AND GUTTER (CATCH)	
	DEPRESSED CURB AND GUTTER	
	CURB AND GUTTER (SPILL)	
	SIDEWALK	
	PROPERTY LINE	
	R.O.W. LINE	
	EASEMENT LINE	
	SIGN	
	POWER POLE	
	GUY WIRE	
E	ELECTRICAL EQUIPMENT	
T	TELEPHONE EQUIPMENT	
	FENCE	
6995.05	SPOT ELEVATION	6995.05 P
	RETAINING WALL	BOTTOM SIDE

SIGHT DISTANCE CERTIFICATION:

"I, THE UNDERSIGNED, HEREBY CERTIFY THAT THE PROPOSED SUBDIVISION, COMPARK VILLAGE SOUTH, FILING NO. 1, IS DESIGNED WITH ADEQUATE CORNER SIGHT DISTANCE FOR ALL INTERSECTIONS AND PEDESTRIAN CROSSING LOCATIONS. CONSIDERATION OF LANDSCAPING IMPACTS TO THE CORNER SIGHT DISTANCE AT BOTH INITIAL AND MATURE GROWTH HAS BEEN REVIEWED. THE MINIMUM CORNER SIGHT DISTANCE IS IN COMPLIANCE WITH AASHTO 'POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS'."
I HEREBY AFFIRM THAT THESE CONSTRUCTION PLANS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION.

FOR AND ON BEHALF OF MANHARD CONSULTING

Manhard CONSULTING LTD
7600 East Orchard Road, Suite 150-N, Greenwood Village, CO 80111 ph:303.708.0500 manhard.com
Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management

PREPARED UNDER THE SUPERVISION OF:

COLORADO REGISTERED GARY T. IWATA 37642 PROFESSIONAL ENGINEER

SIGNED
GARY T. IWATA
COLORADO P.E. #37642

TOWN OF PARKER APPROVALS

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGNED, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

THIS REVIEW DOES NOT CONSTITUTE APPROVAL OF ANY PRIVATE ON-SITE IMPROVEMENTS WHICH MAY BE SHOWN. CONSTRUCTION CANNOT COMMENCE UNTIL ALL REQUIRED DRAINAGE/TRAFFIC REPORT(S), FINAL DEVELOPMENT PLAN(S), SPECIAL REVIEW(S), GRADING PERMIT, AND/OR OTHER PERMITS ARE COMPLETE, APPROVED AND ON FILE WITH THE TOWN OF PARKER.

TOWN OF PARKER, DIRECTOR OF ENGINEERING — DATE

DATE	REVISIONS	DRAWN BY
06-18-2021	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	

Manhard CONSULTING LTD
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Civil Engineering | Surveying & Geospatial Services | GIS
Water Resource Management | Construction Management

COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
COVER SHEET

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

SHEET 1 OF 33
CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

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Plotted: 6/23/2021 9:04 AM Dwg Name: P:\Cpk3\ComSouth09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\Cover.dwg Updated By: ADrucker

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE STONEGATE VILLAGE METRO DISTRICT WATER AND SANITATION SYSTEM SPECIFICATIONS, THE DOUGLAS COUNTY ROADWAY DESIGN AND CONSTRUCTION STANDARDS, THE TOWN OF PARKER ROADWAY DESIGN AND CONSTRUCTION CRITERIA, THE TOWN OF PARKER STORM DRAINAGE AND ENVIRONMENTAL CRITERIA, THE URBAN DRAINAGE AND FLOOD CONTROL DISTRICT, THE COLORADO STATE BOARD OF HEALTH, THE ENVIRONMENTAL PROTECTION AGENCY AND THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.

2. THE CONTRACTOR SHALL CONTACT ALL APPROPRIATE UTILITY COMPANIES AND THE TOWN OF PARKER PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTHS) WHICH MAY CONFLICT WITH THE PROPOSED CONSTRUCTION. ALL EXISTING UTILITIES SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. DAMAGED UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS OWN EXPENSE. ALL ITEMS SHOWN ON THE PLANS AS EXISTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE ACTUAL LOCATIONS MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, HE SHALL CONTACT THE ENGINEER IMMEDIATELY.

3. THE DISTRICT ENGINEER AND OTHER APPROVING AGENCIES ARE TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION.

4. THE CONTRACTOR SHALL OBTAIN, AT HIS EXPENSE, ALL PERMITS WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK, INCLUDING STREET CUTS, UTILITY INTERFERENCE AND TRAFFIC CONTROL.

5. ALL CONCRETE SHALL BE A MINIMUM OF CLASS B, 6-SACK, TYPE II, 3000 POUND COMPRESSION STRENGTH. ALL CONCRETE ASSOCIATED WITH ROADWAY CONSTRUCTION SHALL BE CLASS D.

6. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF ROLLED "AS-BUILT" BLUELINE PRINTS TO THE DESIGNATED TOWN AUTHORITY FOR APPROVAL PRIOR TO PRINTING MYLAR SEPIAS AND ELECTRONIC FILES FOR THE TOWN. AFTER APPROVAL HAS BEEN GRANTED BY THE DESIGNATED TOWN AUTHORITY, FULL SIZE MYLAR SEPIA PRINTS SHALL BE TRANSMITTED TO THE TOWN.

7. ALL BACKFILL MATERIAL SHALL BE COMPACTED TO ALL APPLICABLE TOWN AND DISTRICT STANDARDS. COMPACTION TESTS MUST BE SUBMITTED TO THE TOWN AND DISTRICT PRIOR TO PROBATIONARY ACCEPTANCE.

8. ALL CURBS SHALL BE CAREFULLY AND FIRMLY BACKFILLED BY THE CONTRACTOR. ANY EXCESS MATERIAL FROM SUBGRADE TRIMMING SHALL NOT BE LEFT IN THE STREET CORE, BUT SHALL BE SPREAD UNIFORMLY IN A 20-FOOT WIDE ZONE BEHIND THE WALK.

9. REFER TO OVERLOT GRADING AND EROSION CONTROL PLAN FOR GRADING NOTES.

10. EXPANSION JOINTS WILL BE PLACED IN ALL SIDEWALKS AND CURB AND GUTTER AT PCs, PTs, AND AT ANY FIXED OBJECT, BUT IN NO CASE ANY FARTHER THAN 500 FEET APART.

11. THE APPLICANT IS 470 COMPARK LLC.

12. THE UTILITY CONTRACTOR THAT INSTALLS SANITARY SEWER, STORM SEWER, AND WATER SHALL, AFTER PROPERLY COMPLETING THE WORK, WALK THE SITE WITH THE OWNER'S REPRESENTATIVE(S) TO INSPECT MANHOLES, HYDRANTS, VALVE BOXES, AND INLETS PRIOR TO THE START OF WORK BY THE CURB, GUTTER, AND WALK CONTRACTOR. A SIMILAR FIELD INSPECTION SHALL OCCUR WITH THE UTILITY CONTRACTOR AND CURB CONTRACTOR TO INSPECT THESE ITEMS PLUS CURB STOP BOXES AND CONCRETE WORK PRIOR TO THE START OF WORK BY THE PAVING CONTRACTOR. THESE FIELD INSPECTIONS ARE INTENDED TO HELP ESTABLISH RESPONSIBILITY FOR ANY NECESSARY REPAIRS, CLEANING, ETC. THAT ARE NEEDED. THESE INSPECTIONS WITH A REPRESENTATIVE OF THE OWNER ARE IN ADDITION TO ANY INSPECTIONS BY REPRESENTATIVES OF THE TOWN OF PARKER OR COTTONWOOD WATER AND SANITATION DISTRICT.

13. ALL TESTING AND INSPECTION FOR COMPLIANCE WITH TOWN OF PARKER STANDARDS SHALL BE COMPLETED PRIOR TO PROBATIONARY ACCEPTANCE.

14. THE DESIGN ENGINEER SHALL SUBMIT ONE (1) SET OF ROLLED "AS-BUILT" BLUELINE PRINTS AND ELECTRONIC FILES TO THE DISTRICT ENGINEER FOR APPROVAL PRIOR TO PRINTING MYLAR SEPIAS FOR THE DISTRICT. AFTER APPROVAL HAS BEEN GRANTED BY THE DISTRICT ENGINEER, FULL SIZE MYLAR SEPIA PRINTS SHALL BE TRANSMITTED TO THE COTTONWOOD WATER AND SANITATION DISTRICT OFFICE AND AN ADDITIONAL SET OF ROLLED BLUELINE PRINTS SHALL BE TRANSMITTED TO THE DISTRICT ENGINEER'S OFFICE PRIOR TO PROBATIONARY ACCEPTANCE.

15. TRENCHES SHALL BE EXCAVATED AND THE PIPE EXPOSED FOR THE INSPECTION AT ANY LOCATION ON THE PROJECT IF SO ORDERED BY THE INSPECTOR.

16. CONTRACTOR WILL BE HELD RESPONSIBLE FOR THE PROPER FUNCTIONING OF LINES (WATER AND SEWER) FOR UP TO TWO (2) YEARS FROM THE DATE OF PROBATIONARY ACCEPTANCE OF THE LINES BY THE DISTRICT. ANY MALFUNCTION DURING THIS PERIOD OF GUARANTEE SHALL BE REMEDIED BY THE CONTRACTOR TO THE SATISFACTION OF THE DISTRICT ENGINEER AT NO EXPENSE TO THE DISTRICT.

17. SURFACE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE FOOT OF FINISHED GRADE AND VERIFICATION OF COMPACTION RESULTS OBTAINED PRIOR TO THE INSTALLATION OF WATER AND SEWER LINES. RESULTS MUST BE SUBMITTED TO THE DISTRICT ENGINEER.

18. NO WORK SHALL BE BACKFILLED UNTIL THE CONSTRUCTION HAS BEEN INSPECTED AND APPROVED FOR BACKFILLING BY THE DISTRICT ENGINEER OR REPRESENTATIVE OF THE DISTRICT ENGINEER.

19. ALL SERVICES WILL BE PERMANENTLY MARKED ON CURB FACE AS FOLLOWS:

"X" FOR SANITARY SERVICE SEWERS
"V" FOR WATER SERVICES

20. NO TREES SHALL BE ALLOWED IN EASEMENTS OR WITHIN 8' OF ANY WATER OR SANITARY SEWER MAINS IN RIGHT-OF-WAY. NO TREES ALLOWED WITHIN 7' OF THE EDGE OF ANY STORM SEWER.

21. BENCHMARKS:

SOURCE BENCHMARKS:
DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD.
ELEVATION = 5752.84 (NAVD 88)

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ELEVATION = 5808.06

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION, PROTECTION AND REPAIR OF ALL UTILITIES ENCOUNTERED DURING CONSTRUCTION, WHETHER SHOWN ON THESE PLANS OR NOT. CONTRACTOR SHALL CONTACT REPRESENTATIVES OF THE RESPECTIVE UTILITIES AND HAVE ALL UTILITIES FIELD LOCATED PRIOR TO CONSTRUCTION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL LOCATIONS OF EXISTING STRUCTURES AND UTILITIES SHOWN ON THE DRAWINGS, TO ASCERTAIN WHETHER ANY STRUCTURES AND UTILITIES MAY EXIST, AND REPAIR AND/OR REPLACE ANY STRUCTURES AND/OR UTILITIES THAT ARE DAMAGED BY THE CONTRACTOR.

23. T.C. INDICATES TOP BACK OF WALK GRADE FOR COMBINATION CURB, GUTTER, AND SIDEWALK, OR TOP BACK OF CURB FOR OTHER CURB AND GUTTER TYPES.

24. ALL DIMENSIONS AND RADII ARE TO FLOWLINE UNLESS OTHERWISE NOTED.

25. THE CONTRACTOR SHALL FURNISH THE ENGINEER WITH A SET OF "AS-BUILT" PLANS MARKED WITH ALL DEVIATIONS FROM THE CONSTRUCTION PLANS PRIOR TO INITIAL ACCEPTANCE.

26. ALL STATIONING IS ON CENTERLINE OF RIGHT OF WAY UNLESS OTHERWISE NOTED.

SEDIMENT AND EROSION CONTROL NOTES:

1. THE OWNER/CONTRACTOR MUST OBTAIN A CDPS STORM WATER DISCHARGE PERMIT FROM THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT PRIOR TO CONSTRUCTION.

2. CONTRACTOR SHALL USE DUST CONTROL MEASURES ON THE SITE. DUST CONTROL MEASURES MAY INCLUDE SITE WATERING, USE OF SPRAY-ON SOIL BINDERS, AND/OR SEEDING AND MULCHING. CONTRACTOR SHALL WATER SOILS DURING DEMOLITION, GRADING, AND ALL OTHER STAGES PRIOR TO STABILIZATION OF SITE THROUGH PAVING AND PERMANENT SEEDING AND LANDSCAPING.

3. CONTRACTOR MAY ADJUST LOCATIONS OF CONCRETE WASH OUT AND VEHICLE TRACKING CONTROL IF DESIRED.

4. CONTRACTOR TO DETERMINE LOCATION OF STABILIZED STAGING AREA AT TIME OF CONSTRUCTION.

5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, STORM SEWERS, STORM SEWER APPURTENANCES, OTHER PROPERTIES, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.

6. ADDITIONAL EROSION AND SEDIMENT CONTROL BMPS MAY BE REQUIRED DURING AND AFTER CONSTRUCTION AND SHALL BE EXECUTED AND COMPLETED BY THE CONTRACTOR. THE CONTRACTOR SHALL PLAN, INSTALL, AND MAINTAIN ALL EROSION, AND SEDIMENT CONTROL MEASURES, INCLUDING DRAINAGE AND WATER QUALITY BMPS AS INDICATED ON THIS PLAN AND AS NECESSARY TO REDUCE THE DISCHARGE OF POLLUTANTS TO THE MAXIMUM EXTENT PRACTICABLE ADVERSE IMPACTS, EROSION AND SEDIMENT DEPOSITION ONTO PAVED SECTIONS, INTO STORM SEWERS, STORM SEWER APPURTENANCES, RECEIVING WATERS, OR OFF THE PROJECT SITE.

7. THE CONTRACTOR SHALL TAKE APPROPRIATE PREVENTIVE MEASURES TO MINIMIZE TO THE MAXIMUM EXTENT PRACTICABLE DIRT AND MUD FROM BEING TRACKED OR DEPOSITED ONTO PAVED SECTIONS VIA MULTIPLE BMPS. SEDIMENT, MUD, AND CONSTRUCTION DEBRIS THAT MAY BE TRACKED, DEPOSITED, OR ACCUMULATED ON PAVED SECTIONS, IN THE FLOW LINES, PRIVATE PROPERTY, AND/OR PUBLIC RIGHTS-OF-WAY OF THE CITY AS A RESULT OF THIS CONSTRUCTION PROJECT SHALL BE CLEANED UP.

8. AREAS REACHING SUBSTANTIAL COMPLETION OF GRADING AND TOPSOIL PLACEMENT OPERATIONS MUST BE DRILL SEEDED AND CRIMP MULCHED WITHIN 14 DAYS OF SUBSTANTIAL COMPLETION OF GRADING AND TOPSOIL OPERATIONS. IF AN INCOMPLETE AREA IS TO REMAIN INACTIVE FOR LONGER THAN 30 DAYS, IT MUST BE DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE LANDSCAPED WITHIN 14 DAYS FROM THE SUSPENSION OR COMPLETION OF LAND DISTURBANCE ACTIVITIES.

9. AN APPROVED SWMP DESIGN DRAWING AND A COPY OF THE STORMWATER QUALITY DISCHARGE PERMIT SHALL BE KEPT ON SITE AT ALL TIMES.

10. ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED FROM A BMP (MAINTENANCE) WHEN THE SEDIMENT LEVEL OR DEBRIS ADVERSELY IMPACTS THE FUNCTIONING OF THE BMP OR AS DEFINED WITHIN THE RULES AND REGULATIONS REGARDING STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES MANUAL, WHICHEVER IS MORE RESTRICTIVE. IF MAINTENANCE OF THE BMP DOES NOT RESTORE THE INTENDED FUNCTION, THEN THE BMP MUST BE REPLACED.

11. THE DISCHARGING OF CEMENT, CONCRETE, OR MORTAR FROM READY MIX DELIVERY TRUCKS, PUMP TRUCKS, BATCH PLANTS OR SMALL MECHANICAL MIXERS DIRECTLY ONTO PAVED SURFACES OR DISTURBED GROUND HAVING NO CONTAINMENT IS PROHIBITED. THE DISPOSAL OF ANY LIQUID WASTES OR WASH WATER FROM ANY OPERATIONS SUCH AS PAINTING, DRYWALL, OR TILE INSTALLATIONS DIRECTLY ONTO PAVED SURFACES OR THE GROUND WITHOUT CONTAINMENT IS PROHIBITED. THE PERMITTEE SHALL PROTECT ALL CURB FLOW LINES, ADJACENT WATERWAYS, WETLANDS, STORM SEWERS, STORM SEWER APPURTENANCES, OTHER PROPERTIES, ETC., ADJACENT TO ANY LOCATION WHERE PAVEMENT CUTTING OPERATIONS INVOLVING WHEEL CUTTING, SAW CUTTING OR ABRASIVE WATER JET CUTTING ARE TO TAKE PLACE.

12. SECONDARY CONTAINMENT FEATURES SHALL BE IN PLACE FOR ANY BULK FUEL STORAGE, MIXERS, GENERATORS, OR ANY OTHER SPILL OR LEAK SOURCE THAT REMAINS ONSITE FOR A PERIOD LONGER THAN 7 CALENDAR DAYS. A RECOVERY OR SALVAGE DRUM SHALL BE KEPT ON-SITE FOR STORAGE OF CONTAMINATED SOILS.

13.TO REDUCE THE POTENTIAL FOR CLOGGING OF DEBRIS GRATES, NO STRAW MULCH SHALL BE USED WITHIN THE EXCESS URBAN RUNOFF VOLUME OF A DETENTION BASIN. INSTEAD, EROSION CONTROL BLANKET SHALL BE INSTALLED FOR A WIDTH OF AT LEAST 6-FEET ON BOTH SIDES OF THE CONCRETE LOW FLOW CHANNELS OR UP TO A DEPTH OF 1-FOOT IN SOIL RIPRAP OR BENCHED LOW FLOW CHANNELS. ADDITIONALLY, HYDRAULICALLY-APPLIED WOOD FIBER MULCH, STABILIZED FIBER MATRIX, BONDED FIBER MATRIX, OR FLEXIBLE GROWTH MEDIUM SHALL BE USED IN ALL OTHER AREAS WITHIN THE EXCESS URBAN RUNOFF VOLUME OF THE DETENTION BASIN. THE BLANKET AND HYDRAULICALLY-APPLIED MULCH SHALL COMPLY WITH THE MATERIALS AND INSTALLATION REQUIREMENTS FOR EROSION CONTROL BLANKETS AS REQUIRED BY THE TOWN'S CBMP PROGRAM, AND WHERE APPLICABLE, THE PRODUCT MANUFACTURER.

CONSTRUCTION NOTES:

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE LATEST EDITION OF THE TOWN OF PARKER ROADWAY DESIGN AND CONSTRUCTION CRITERIA MANUAL, AND THE TOWN OF PARKER STORM DRAINAGE AND ENVIRONMENTAL CRITERIA MANUAL.

2. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE TOWN OF PARKER PUBLIC WORKS DEPARTMENT. THE TOWN RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO ITS STANDARDS AND SPECIFICATIONS.

3. A PRE-CONSTRUCTION MEETING SHALL BE SCHEDULED A MINIMUM OF 48 HOURS AND A MAXIMUM OF 96 HOURS PRIOR TO THE START OF CONSTRUCTION. A PRE-CONSTRUCTION MEETING WILL NOT BE SCHEDULED UNTIL THE GRADING PERMIT AND ALL OTHER NECESSARY PERMITS HAVE BEEN OBTAINED.

4. A DEVELOPMENT REVIEW ENGINEER SHALL BE CONTACTED A MINIMUM OF 24 HOURS PRIOR TO A NECESSARY INSPECTION. IF A DEVELOPMENT REVIEW ENGINEER IS NOT AVAILABLE AFTER PROPER NOTICE OF CONSTRUCTION ACTIVITY HAS BEEN PROVIDED, THE PERMITTEE MAY COMMENCE WORK IN THE DEVELOPMENT REVIEW ENGINEER'S ABSENCE. HOWEVER, TOWN OF PARKER RESERVES THE RIGHT TO REJECT THE IMPROVEMENT IF SUBSEQUENT TESTING REVEALS AN IMPROPER INSTALLATION.

5. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION. FOR INFORMATION, CONTACT DENVER INTER-UTILITY GROUP AT 303-534-6700, OR 1-800-922-1987. THE CONTRACTOR SHALL FIELD VERIFY SIZE AND HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING FACILITIES PRIOR TO CONSTRUCTION, AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES.

6. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THE PLANS, APPROVED BY THE TOWN OF PARKER PUBLIC WORKS DIRECTOR, AND ONE (1) COPY OF THE ROADWAY DESIGN AND CONSTRUCTION CRITERIA AT THE JOB SITE AT ALL TIMES.

7. ALL PROPOSED STREET CUTS TO EXISTING PAVEMENTS FOR UTILITIES, STORM SEWER, OR FOR OTHER PURPOSES ARE LISTED AND REFERENCED BELOW:

WATER TIE-IN	----
SANITARY SEWER CONNECTION	----
STORM SEWER CONNECTION	NONE

8. A PLAN FOR TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE SUBMITTED TO THE TOWN OF PARKER FOR ACCEPTANCE WITH THE RIGHT-OF-WAY PERMIT USE APPLICATION. A PERMIT WILL NOT BE ISSUED WITHOUT AN APPROVED TRAFFIC CONTROL PLAN FOR USE DURING CONSTRUCTION.

9. ALL TRENCHES SHALL BE ADEQUATELY SUPPORTED AND THE SAFETY OF WORKERS PROVIDED FOR AS REQUIRED BY THE MOST RECENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) "SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION."

10. COMPACTION OF ALL TRENCHES MUST BE ATTAINED AND COMPACTION TEST RESULTS SUBMITTED TO THE DEVELOPMENT REVIEW ENGINEER IN PRELIMINARY FORM PRIOR TO PAVING AND IN FINAL FORM PRIOR TO PROBATIONARY ACCEPTANCE.

11. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION. THE PLAN MAY BE MODIFIED AS FIELD CONDITIONS WARRANT WITH APPROVAL FROM THE TOWN OF PARKER PUBLIC WORKS DEPARTMENT.

12. THE CONTRACTOR SHALL PROVIDE, ERECT, AND MAINTAIN PROPER TRAFFIC CONTROL DEVICES UNTIL THE SITE IS OPEN TO TRAFFIC. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN TO THE TOWN OF PARKER PUBLIC WORKS DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION.

13. PLANS ARE APPROVED FOR A PERIOD OF ONE (1) YEAR FROM THE DATE SHOWN ON THE TOWN OF PARKER SIGNATURE BLOCK. PLANS SHALL BE RESUBMITTED TO THE TOWN FOR APPROVAL AFTER ONE (1) YEAR. THE COST OF THE PLAN RE-REVIEW AND RE-ACCEPTANCE WILL BE CHARGED BACK TO THE DEVELOPER INCLUDING ALL TIME AND EXPENSES OF THE TOWN OF PARKER PUBLIC WORKS DEPARTMENT.

14. REPAIR OF ANY DAMAGE TO EXISTING IMPROVEMENTS OR LANDSCAPING IS THE RESPONSIBILITY OF THE CONTRACTOR.

15. ALL DAMAGED EXISTING CURB, GUTTER, AND SIDEWALK SHALL BE REPAIRED PRIOR TO ACCEPTANCE OF COMPLETED IMPROVEMENTS.

16. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, PLEASE CONTACT COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, WQCD-PE-B2, 4300 CHERRY DRIVE SOUTH, DENVER, COLORADO 80222-1530. ATTENTION: PERMITS AND ENFORCEMENT SECTION. PHONE: 303-692-3500.

17. IF DEWATERING IS REQUIRED, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED FOR DISCHARGES TO A STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREET THAT IS TRIBUTARY TO THE AFOREMENTIONED FACILITIES, OR ANY WATER OF THE UNITED STATES.

18. ALL REFERENCES TO BOOKS, PAGES, MAPS, AND RECEPTION NUMBER ARE PUBLIC DOCUMENTS ON FILE WITH THE COUNTY CLERK AND RECORDER'S OFFICE.

PARKER STANDARD STORM DRAINAGE INFRASTRUCTURE NOTES

1. ALL STORM DRAINAGE IMPROVEMENTS ARE SUBJECT TO COMPLIANCE WITH THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, M & S STANDARDS, AND ALL STANDARD SPECIAL PROVISIONS CURRENTLY USED BY CDOT, WITH THE MODIFICATIONS SET FORTH IN THE TOWN OF PARKER'S STORM DRAINAGE AND ENVIRONMENTAL CRITERIA MANUAL (SDECM), AS AMENDED.

2. THE CONTRACTOR SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8 CRS) THE "PROTECTION OF FISHING STREAMS" TITLE 33, ARTICLE 5, CRS), THE "CLEAN WATER ACT" (33 USC 1344), CHERRY CREEK RESERVOIR CONTROL REGULATION NO. 72" (5 CCR 1002-72), THE REGULATION PROMULGATED, CERTIFICATION OR PERMITS ISSUES, AND THE REQUIREMENTS PRESENTED IN THE SDECM REVISION TO SECTION 107 AND THE CONSTRUCTION BMP PLAN. IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND WATER QUALITY CONTROL LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, OR STATE AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.

3. INSPECTIONS: CONSTRUCTION SHALL NOT BEGIN UNTIL A GRADING PERMIT HAS BEEN ISSUED FOR THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE TOWN OF PARKER ENGINEERING DEPARTMENT (PUBLIC WORKS) TO SCHEDULE INSPECTIONS A MINIMUM OF 48 HOURS PRIOR THE CONSTRUCTION OF ALL DRAINAGE INFRASTRUCTURE (STORM SEWERS, INLETS, MANHOLES, ENERGY DISSIPATERS, RIPRAP, GROUTED BOULDERS, DETENTION POND OUTLET STRUCTURES, FOREBAYS, TRICKLE CHANNELS, ETC). FAILURE TO NOTIFY THE ENGINEERING DEPARTMENT FOR INSPECTIONS MAY RESULT IN NON-ACCEPTANCE OF THE INFRASTRUCTURE BY THE TOWN. URBAN DRAINAGE AND FLOOD CONTROL DISTRICT MUST ALSO BE NOTIFIED IN A SIMILAR MANNER FOR ALL MAINTENANCE ELIGIBLE DRAINAGE INFRASTRUCTURES (CONSULT WITH STORMWATER ENGINEERING DIVISION).

4. STRUCTURAL BACKFILL (CDOT CLASS 1) SHALL BE COMPACTED TO CONFORM TO CDOT STANDARD SPECIFICATION 203.03. STRUCTURAL BACKFILL (CDOT CLASS 2) SHALL CONFORM TO CDOT STANDARD SPECIFICATION 203.07. AT THE CONTRACTOR'S OPTION, STRUCTURAL BACKFILL (SQUEEGEE) MEETING THE GRADATION REQUIREMENTS CONTAINED IN REVISION OF SECTION 206 OF THE CDOT STANDARD SPECIFICATIONS AS PRESENTED IN THE SDECM, MAY BE SUBSTITUTED FOR STRUCTURE BACKFILL (CLASS 1) OR CLASS 2) FOR BACKFILLING OF CULVERT PIPES, STORM SEWER PIPES, MANHOLES AND INLET STRUCTURES; HOWEVER, THE TOP 2 FEET BELOW SUBGRADE ELEVATION SHALL BE THE REQUIRED EMBANKMENT MATERIAL.

5. ALL EXCAVATIONS SHALL MEET OSHA REQUIREMENTS.

6. TESTING: PROBATIONARY ACCEPTANCE OF STORM DRAINAGE IMPROVEMENTS WILL BE CONTINGENT UPON SATISFACTORY TESTING RESULTS. IN ALL CASES WHERE TESTS INDICATE COMPACTION LESS THAN THAT REQUIRED BY TOWN SPECIFICATIONS, ADDITIONAL COMPACTION AND TESTS WILL BE REQUIRED UNTIL THE SPECIFICATIONS ARE MET. FREQUENCY OF TESTING WILL BE AS FOLLOWS:
- 1 TEST FOR SUBGRADE AND 1 TEST FOR BACKFILL AT EVERY ABOVE GROUND APPURTENANCE (MANHOLES, INLETS, ETC)
- 1 TEST EVERY 200 LF OF MAINLINE TRENCH EVERY 1 FOOT OF BACKFILL LIFT AND WITHIN 1 FOOT FROM ALL STRUCTURES.

7. ALLOWABLE STORM SEWER CONDUIT MATERIAL WITHIN THE TOWN OF PARKER SHALL BE LIMITED TO REINFORCED CONCRETE PIPE (RCP) CONFORMING TO CDOT STANDARD SPECIFICATION 706.02.

8. ALL RCP JOINTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C443. RUBBER GASKETS SHALL BE USED ON ALL PIPE JOINTS CONFORMING TO ASTM C443. ALL RCP SECTIONS SHALL BE JOINED IN SUCH A TOWN OF PARKER PAGE 2 OF 2 MANNER THAT THE ENDS ARE FULLY ENTERED AND THE INNER SURFACES ARE REASONABLE FLUSH. AVERAGE JOINT GAP THAT EXCEEDS ½ INCH SHALL BE FILLED WITH AN APPROVED FLEXIBLE PLASTIC SEALANT.

9. JOINT RESTRAINTS AND TOE-WALLS, CONFORMING TO CDOT M&S STANDARD PLAN NO. M-601-11 SHALL BE USED ON ALL RCP FLARED END SECTION OUTFALLS.

10. EPOXY COATED REBAR SHALL BE USED AS REINFORCING STEEL ON ALL STORM INLETS AND STRUCTURES. REFERENCE CDOT M&S STANDARD PLAN NO. M-604-10, 11, 12, AND 13.

11. CDOT CLASS D CONCRETE SHALL BE USED FOR ALL CONCRETE DRAINAGE STRUCTURES.

12. PRE-CAST INLETS AND MANHOLE BASES SHALL NOT BE USED WITHIN THE TOWN OF PARKER RIGHT-OF-WAY, WITH THE EXCEPTION OF CDOT TYPE C AND D INLETS.

13. TWO (2) MANHOLE ACCESS JOINTS ARE REQUIRED ON ALL TYPE "R" CURB INLETS GREATER THAN OR EQUAL TO TEN (10) FEET IN LENGTH AS PRESENTED IN CDOT M&S STANDARD PLAN NO. M-604-12.

14. ALL GROUTING (BOULDERS, RIPRAP) SHALL BE IN ACCORDANCE WITH THE REVISION OF SECTION 506 OF THE CDOT STANDARD SPECIFICATIONS AS PRESENTED IN THE SDECM.

15. ALL BOULDERS AND RIPRAP SHALL BE SELECTED AND PLACED IN ACCORDANCE WITH THE REVISION OF SECTION 506 OF THE CDOT STANDARD SPECIFICATIONS AS PRESENTED IN THE SDECM.

16. CONTRACTOR SHALL REFER TO THE TOWN OF PARKER'S CONSTRUCTION BEST MANAGEMENT PRACTICES DETAILS AND NOTES FOR ALL REQUIREMENTS RELATING TO RE-VEGETATION, SEDIMENT AND EROSION CONTROL REQUIREMENTS FOR CONSTRUCTION ACTIVITIES.

17. PIPE BELLS SHALL NOT BE CAST INTO MANHOLE BASES OR INLETS.

ROADWAY NOTES:

1. PAVING SHALL NOT COMMENCE UNTIL A SOILS REPORT AND PAVEMENT DESIGN IS APPROVED BY THE ENGINEERING DIVISION AND SUB-GRADE COMPACTION TESTS ARE SUBMITTED TO AND APPROVED BY THE DEVELOPMENT REVIEW ENGINEER.

2. STANDARD TOWN OF PARKER HANDICAP RAMPS ARE TO BE CONSTRUCTED AT ALL CURB RETURNS AND AT ALL "T" INTERSECTIONS.

3. ALL STATIONING IS BASED ON CENTERLINE OF ROADWAYS UNLESS OTHERWISE NOTED.

4. ALL ELEVATIONS ARE ON USGS DATUM WITH DATE. RANGE POINT OR MONUMENT SHALL BE SHOWN ON THE CONSTRUCTION PLANS.

5. EXCEPT WHERE OTHERWISE PROVIDED FOR IN THESE PLANS AND SPECIFICATIONS, THE COLORADO DEPARTMENT OF HIGHWAYS STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE COLORADO DEPARTMENT OF HIGHWAYS M-STANDARDS, AND THE TOWN OF PARKER ROADWAY DESIGN AND CONSTRUCTION CRITERIA MANUAL, LATEST EDITION, SHALL APPLY.

SIGNAGE AND STRIPING NOTES:

1. ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE MOST RECENT VERSION OF THE FEDERAL MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), COLORADO SUPPLEMENTAL MUTCD, AND THE TOWN OF PARKER ROADWAY DESIGN AND CONSTRUCTION CRITERIA MANUAL. FURTHER SPECIFICATIONS AND ILLUSTRATIONS ARE LOCATED IN THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) M AND S STANDARDS.

2. A FIELD INSPECTION OF LOCATION AND INSTALLATION OF ALL SIGNS AND MARKING SHALL BE PERFORMED BY THE TOWN OF PARKER.

3. THE CONTRACTOR INSTALLING SIGNS SHALL BE RESPONSIBLE FOR THE LOCATING AND PROTECTING OF ALL UNDERGROUND UTILITIES.

4. TYPE III (LIGHTED) BARRICADES SHALL BE SET AT THE ENDS OF ROADWAYS SEPARATING FINISHED (AND/OR ACCEPTED) AND UNFINISHED CONSTRUCTION AREAS AND SHALL BE MAINTAINED BY THE CONTRACTOR/DEVELOPER. A "ROAD CLOSED AHEAD" AND "TO BE EXTENDED" WARNING SIGNS SHALL BE INSTALLED APPROPRIATELY IN ADVANCE OF THE TYPE III BARRICADES.

5. SPECIAL CARE SHALL BE TAKEN IN SIGN LOCATIONS TO ENSURE AN UNOBSTRUCTED VIEW OF EACH SIGN.

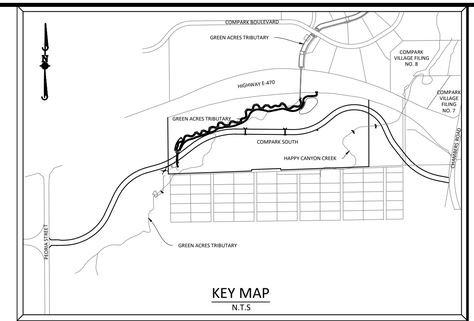
6. WHERE STOP SIGN CONTROL IS APPROPRIATE, 36-INCH STOP SIGNS SHALL BE USED FOR APPROACHES TO ANY ROADWAY THAT IS CLASSIFIED AS A COLLECTOR OR GREATER.

7. A 7-FOOT MINIMUM POST LENGTH SHALL BE MAINTAINED FROM THE BOTTOM OF THE SIGN PANEL TO THE GROUND. THIS REQUIREMENT FOR VERTICAL CLEARANCE IS FOR ALL SIGNS.

8. DELINEATION OF ROADWAYS SHALL BE AS SPECIFIED IN THE COLORADO DEPARTMENT OF TRANSPORTATION M AND S STANDARDS.

9. RAISED MEDIAN ISLAND NOSES SHALL HAVE R4-7 SIGNS AT EACH END AND A 4"X12" HIGH INTENSITY YELLOW SIGN BLANK LOCATED MIDWAY BETWEEN THE R4-7 SIGN AND FINISHED GRADE ON EACH POST.

10. SIGNAGE AND STRIPING HAVE BEEN DETERMINED BY INFORMATION AVAILABLE AT THE TIME OF RE

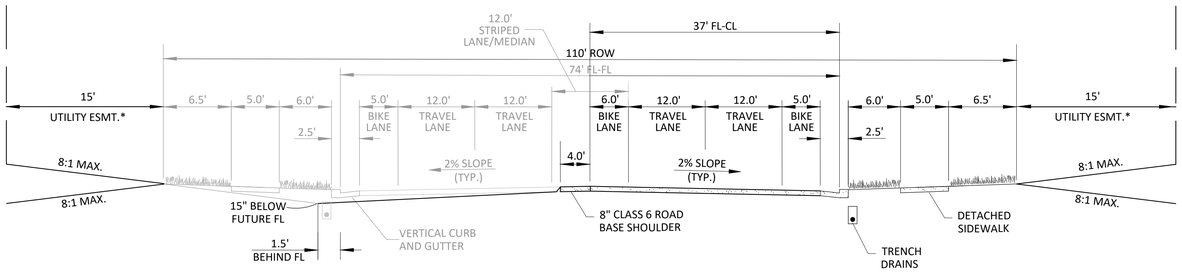


KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

BELFORD AVENUE



PARKER MAJOR COLLECTOR

PROPOSED CONDITION
STA 78+00 - 89+34.98
FUTURE IMPROVEMENTS ARE SHADED FOR REFERENCE

GENERAL NOTES:

1. TRENCH DRAINS ARE REQUIRED ON COLLECTOR STREETS, SEE STANDARD DETAIL 30.
2. ROW WIDTH SHOWN IS TYPICAL. ADDITIONAL ROW AND/OR LANES MAY BE REQUIRED BASED ON A TRAFFIC STUDY.
3. SEE STANDARD DETAIL 3 FOR TYPICAL CURB AND GUTTER INFORMATION.
4. SEE STANDARD DETAIL 4 FOR TYPICAL SIDEWALK INFORMATION.
5. *UTILITY EASEMENT WIDTH VARIES FROM TYPICAL AT CERTAIN LOCATIONS. SEE PLANS FOR LOCATION INFORMATION.

Know what's below. Call before you dig.

TOWN OF PARKER APPROVALS

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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Water Resource Management | Construction Management

COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
TYPICAL ROADWAY SECTION

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

SHEET 3 OF 33
CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

Plotted: 6/22/2021 6:43 PM Dwg Name: P:\Ctpkc3\ComSouth09 - Belford Ave East\dwg\Engr\Final Drawings\Plan Set\Typical Roadway Sections.dwg Updated By: ADucker

CD CHECK DAM
CF CONSTRUCTION FENCE
CWA CONCRETE WASHOUT AREA
DD DIVERSION DITCH
DTC DEBRIS TRASH CONTROL
ECB EROSION CONTROL BLANKET
IPAN INLET PROTECTION FOR AREA INLETS NOT IN PAVEMENT
IPAP INLET PROTECTION FOR AREA INLETS IN PAVEMENT
IPCOG INLET PROTECTION, CURB ON-GRADE, TYPE R INLET
IPCOS INLET PROTECTION, CURB ON SUMP, TYPE R INLET

LP LOT PROTECTION
LOC LIMITS OF CONSTRUCTION
PTP PORTABLE TOILET PROTECTION
RCSC ROUGH CUT STREET CONTROL
RS ROCK SOCK
RSS ROCK SOCK IN SWALE
SB STRAW BALE
SCL SEDIMENT CONTROL LOG
SF SILT FENCE
SMC SEEDING, MULCHING AND CRIMPING
SR SURFACE ROUGHING

SSA STABILIZED STAGING AREA
STP SIDEWALK TRANSITION PROTECTION
TI TEMPORARY IRRIGATION
TSB TEMPORARY SEDIMENT BASIN
VTC VEHICLE TRACKING CONTROL
DP DETENTION POND PROTECTION
BMP EXISTING BMP TO REMAIN
BMP EXISTING BMP TO BE REMOVED

NOTES

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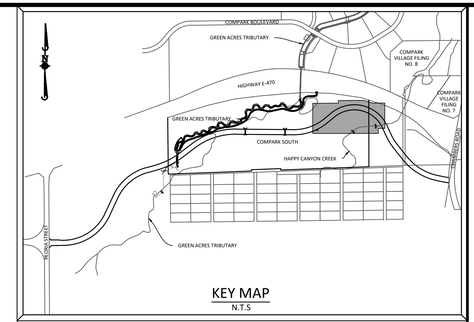
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N

0 25 50 100

SCALE: 1"=50'



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N.T.S

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TRACT B
TRACT C
TRACT D
TRACT G
TRACT F
UNPLATTED

30' S.V.M.D. EASEMENT
RECEPTION NO. 2017038679

40' S.V.M.D. EASEMENT
RECEPTION NO. 2017038351

30' S.V.M.D. EASEMENT
RECEPTION NO. 2017038679

SLOPE MAINTENANCE, DRAINAGE AND ACCESS EASEMENT
BOOK 902, PAGE 563
BOOK 926, PAGE 132
INGRESS-EGRESS EASEMENT
BOOK 936, PAGE 1125

40' S.V.M.D. EASEMENT
RECEPTION NO. 2017038350

15' IREA EASEMENT
GRANTED BY
SEPARATE DOCUMENT

UTILITY EASEMENT 15'

UTILITY EASEMENT 15'

NO WORK SHALL OCCUR IN THIS AREA

NO WORK SHALL OCCUR IN THIS AREA

NO WORK SHALL OCCUR IN THIS AREA

NO WORK SHALL OCCUR IN THIS AREA

NO WORK SHALL OCCUR IN THIS AREA

ALL WORK WITHIN PUBLIC RIGHT-OF-WAY (ROW) WILL REQUIRE A TOWN ROW PERMIT. INITIAL AND INTERIM CBMP'S FOR WORK WITHIN THE TOWN'S ROW SHALL BE COORDINATED WITH THE TOWN'S ENVIRONMENTAL INSPECTOR PRIOR TO THE BEGINNING OF ANY ROW WORK.

TSB 1
REQUIRED VOLUME = 0.37 AC-FT
BOTTOM WIDTH = 38.5'
CREST LENGTH = 8'
HOLE DIAMETER = 44"

BRIDGE DESIGN AND RELATED CBMP'S BY OTHERS REFER TO BELFORD AVENUE BRIDGE AND HAPPY CANYON CREEK CONSTRUCTION PLANS

100 YEAR FLOODPLAIN EXTENTS

HAPPY CANYON CREEK

BELFORD AVENUE

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DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP PLAN - INITIAL

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

SHEET 4 OF 33
CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

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Plotted: 6/23/2021 8:53 AM Dwn Name: P:\Clcpkc3\ComSouth09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\CBMP-A.dwg Updated By: ADrucker

CD CHECK DAM
CF CONSTRUCTION FENCE
CWA CONCRETE WASHOUT AREA
DD DIVERSION DITCH
DTC DEBRIS TRASH CONTROL
ECB EROSION CONTROL BLANKET
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IPCOG INLET PROTECTION, CURB ON-GRADE, TYPE R INLET
IPCOS INLET PROTECTION, CURB ON SUMP, TYPE R INLET

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LOC LIMITS OF CONSTRUCTION
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VTC VEHICLE TRACKING CONTROL
DP DETENTION POND PROTECTION
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NOTES

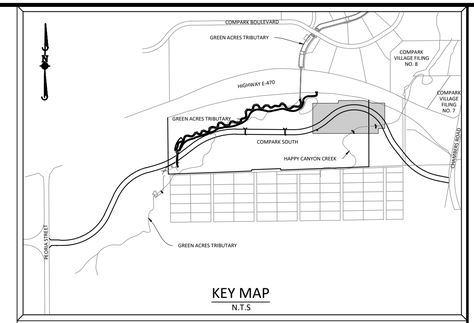
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SCALE: 1"=50'



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HAPPY CANYON CREEK
15' IREA EASEMENT GRANTED BY SEPARATE DOCUMENT
UNPLATTED
BELFORD AVENUE

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

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP PLAN - INTERIM & FINAL

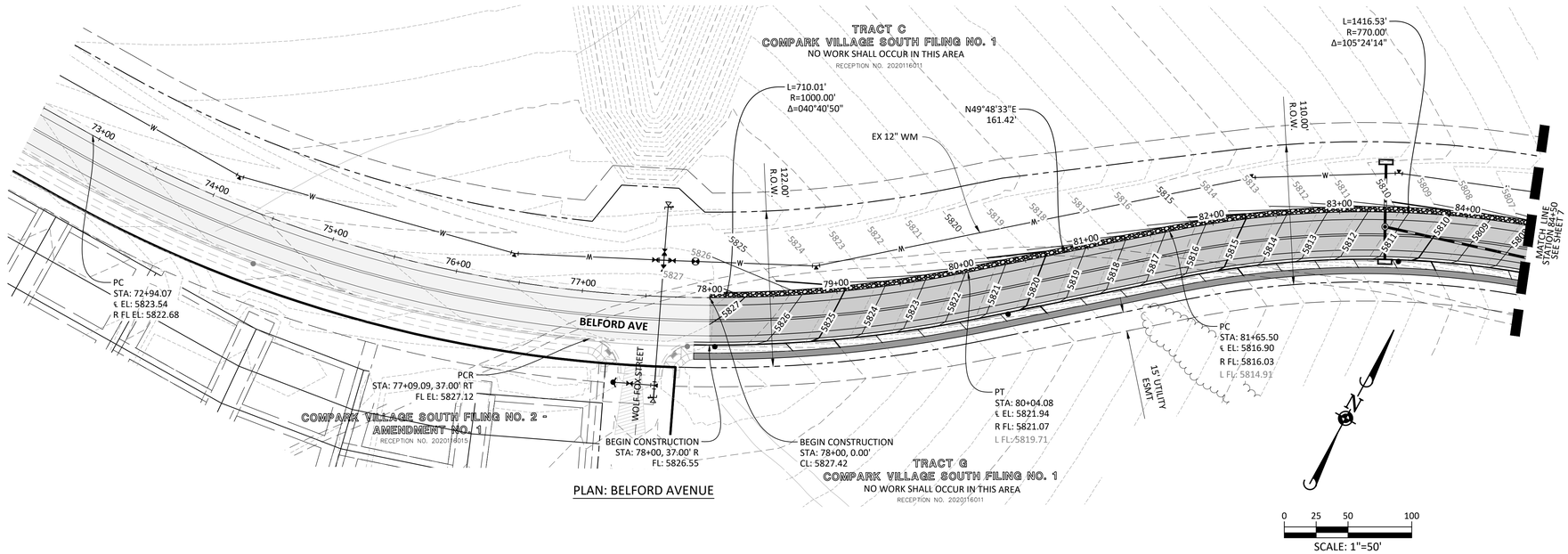
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DATE: 03/15/2021

SHEET 5 OF 33
CLCPKC3

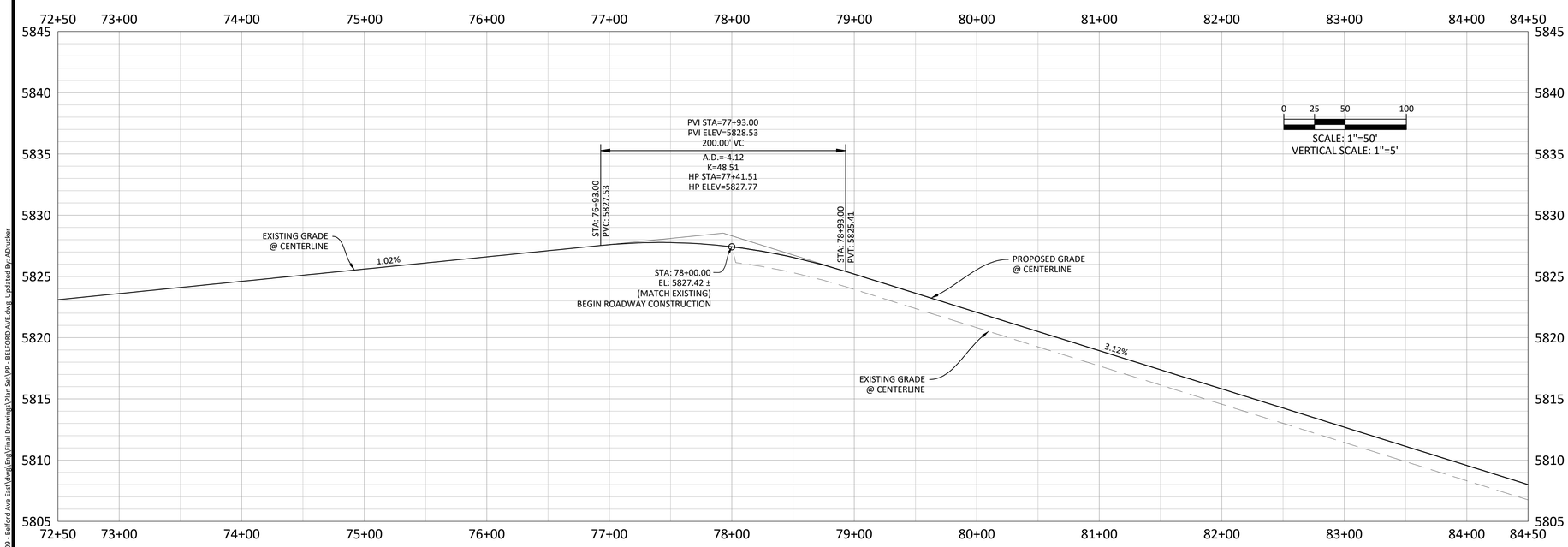
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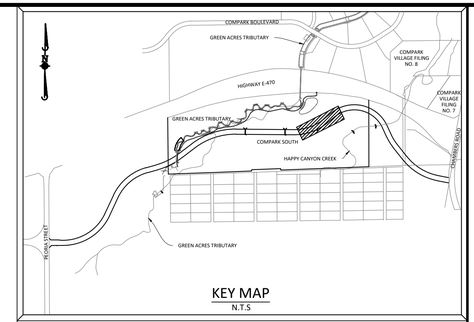
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PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE



KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
BELFORD AVENUE - PLAN & PROFILE

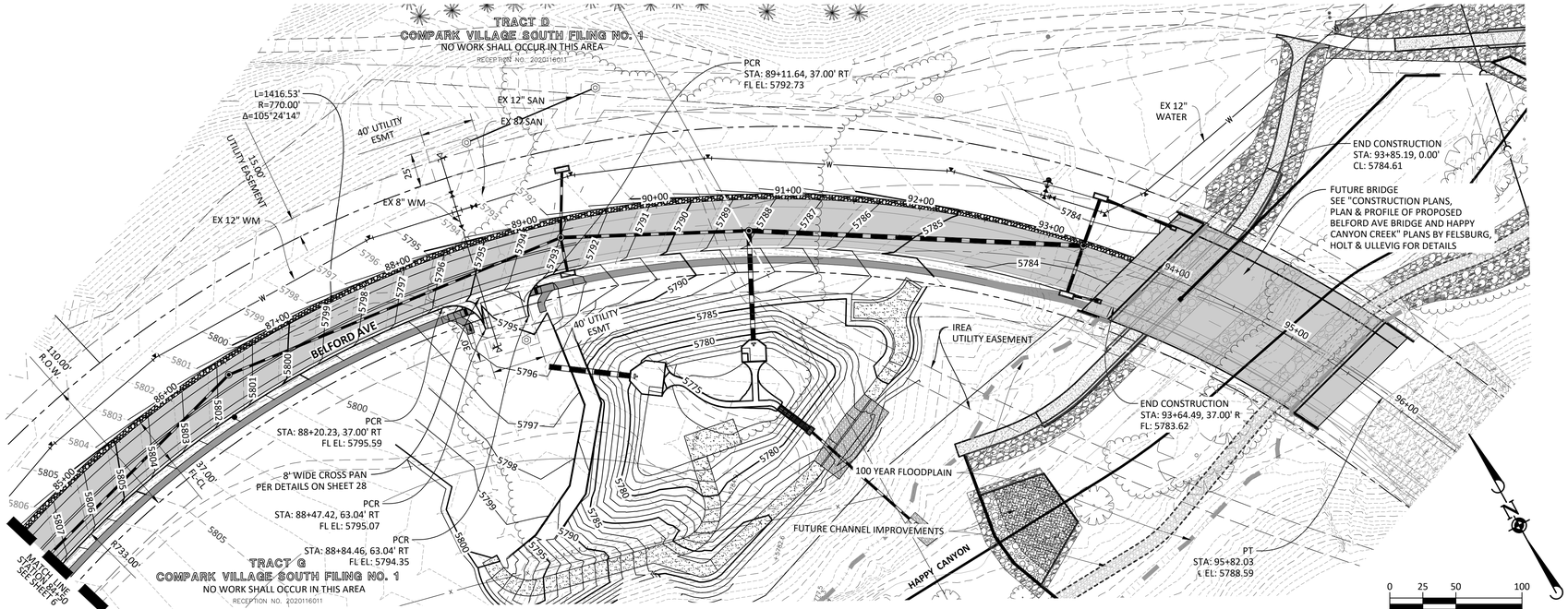
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DATE: 03/15/2021

SHEET 6 OF 33
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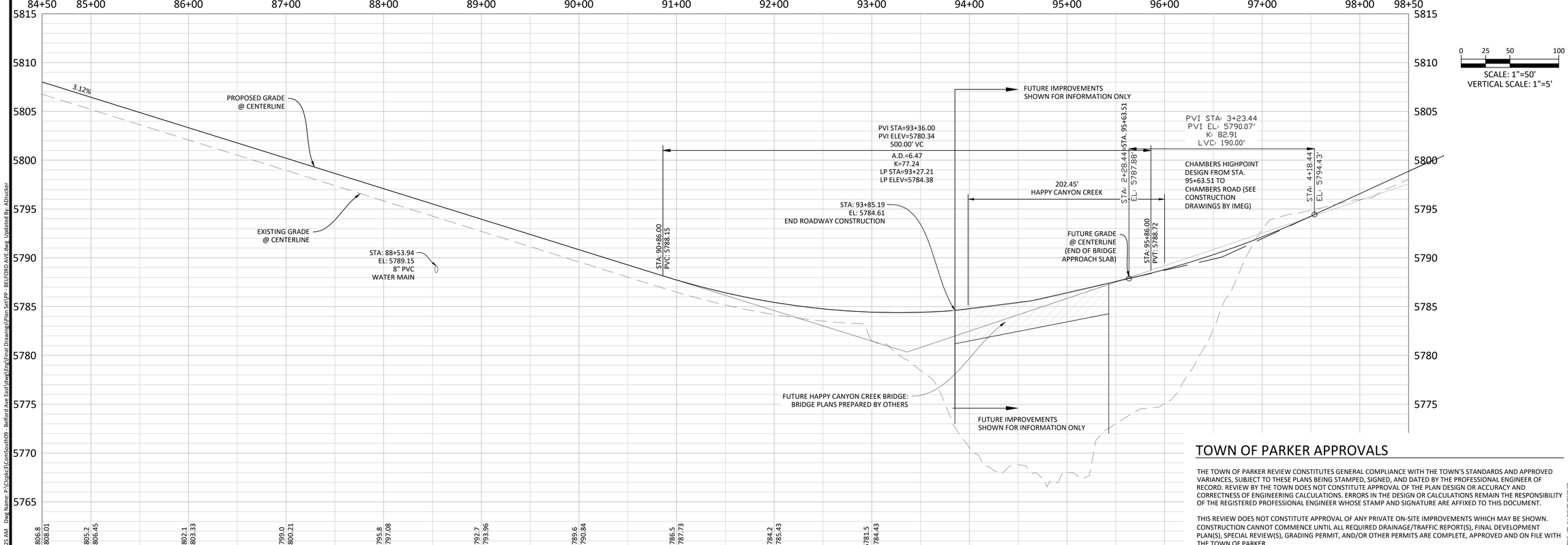
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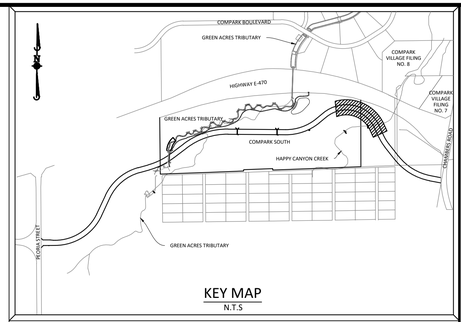
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PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE



KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

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TOWN OF PARKER, DIRECTOR OF ENGINEERING — DATE

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	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
BELFORD AVENUE - PLAN & PROFILE

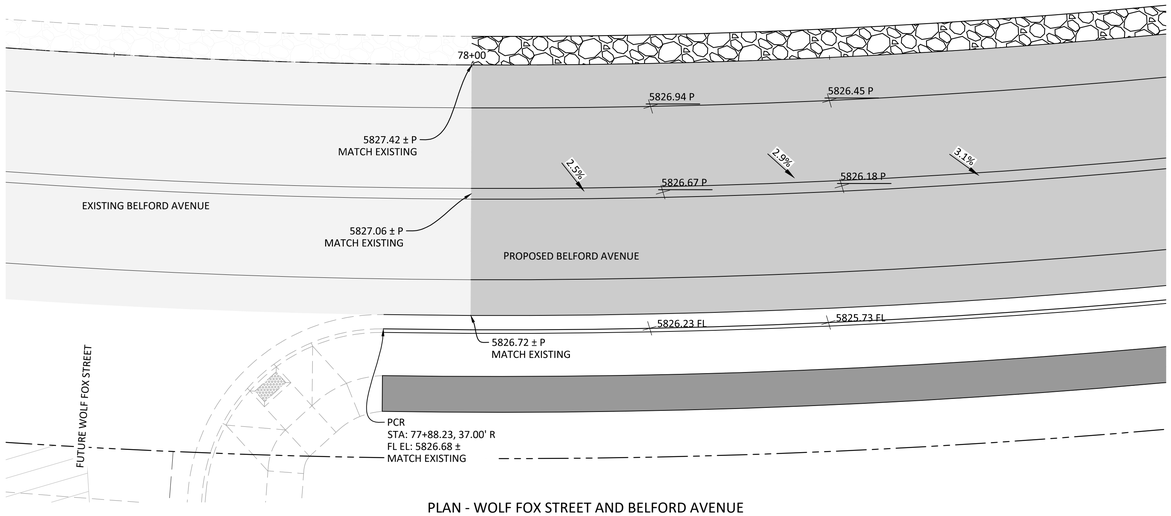
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SHEET
7 OF 33
CLCPKC3

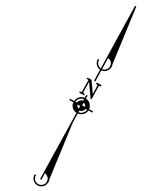
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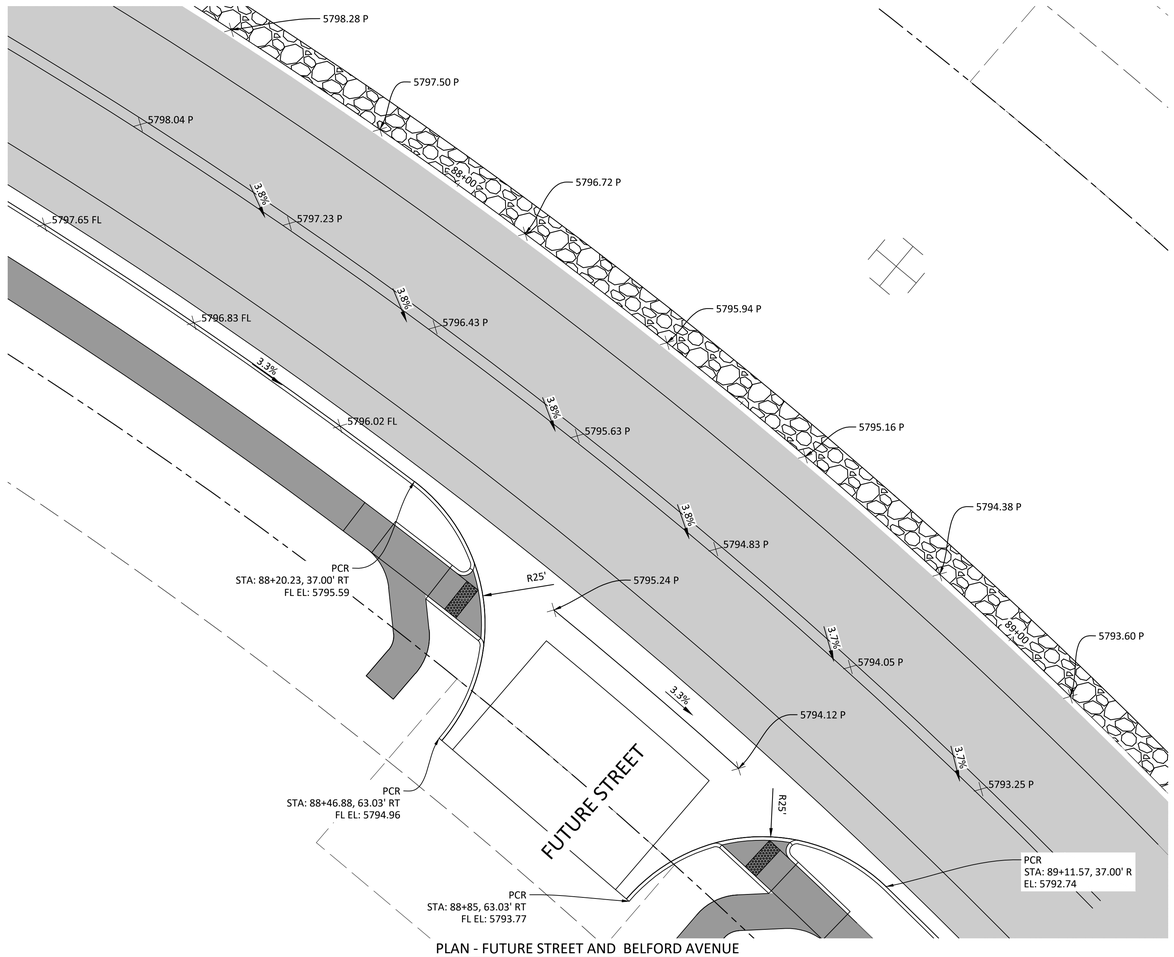
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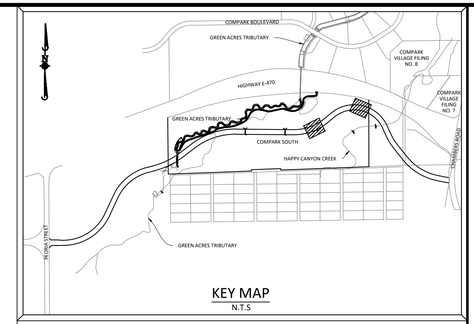


PLAN - WOLF FOX STREET AND BELFORD AVENUE





PLAN - FUTURE STREET AND BELFORD AVENUE



KEY MAP
N.T.S

SOURCE BENCHMARKS:

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TOWN OF PARKER, DIRECTOR OF ENGINEERING — DATE

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	1	06-18-2021	SECOND SUBMITTAL - RESPOND TO TOP COMMENTS

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

INTERSECTION DETAILS

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PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

SHEET
8 OF 33
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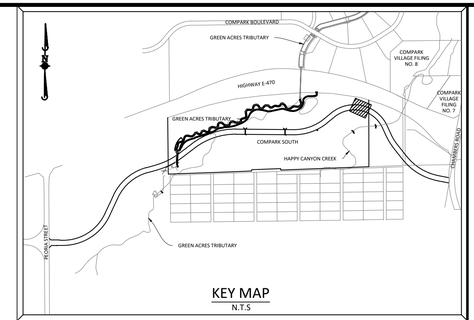
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PLAN - FUTURE STREET AND BELFORD AVENUE



KEY MAP
N.T.S

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N

0 2.5 5 10
SCALE: 1"=5'

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CURB RAMP DETAIL

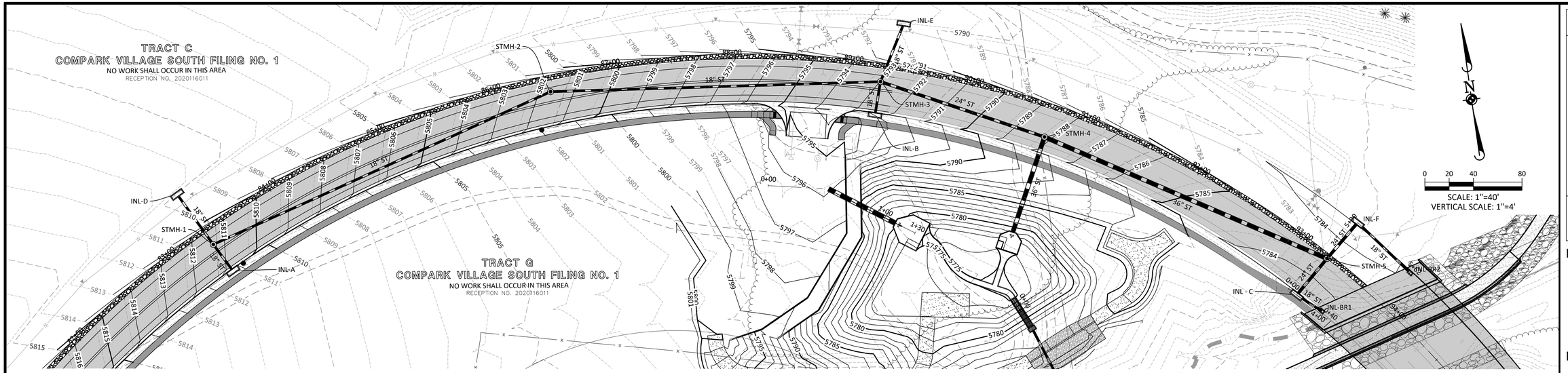
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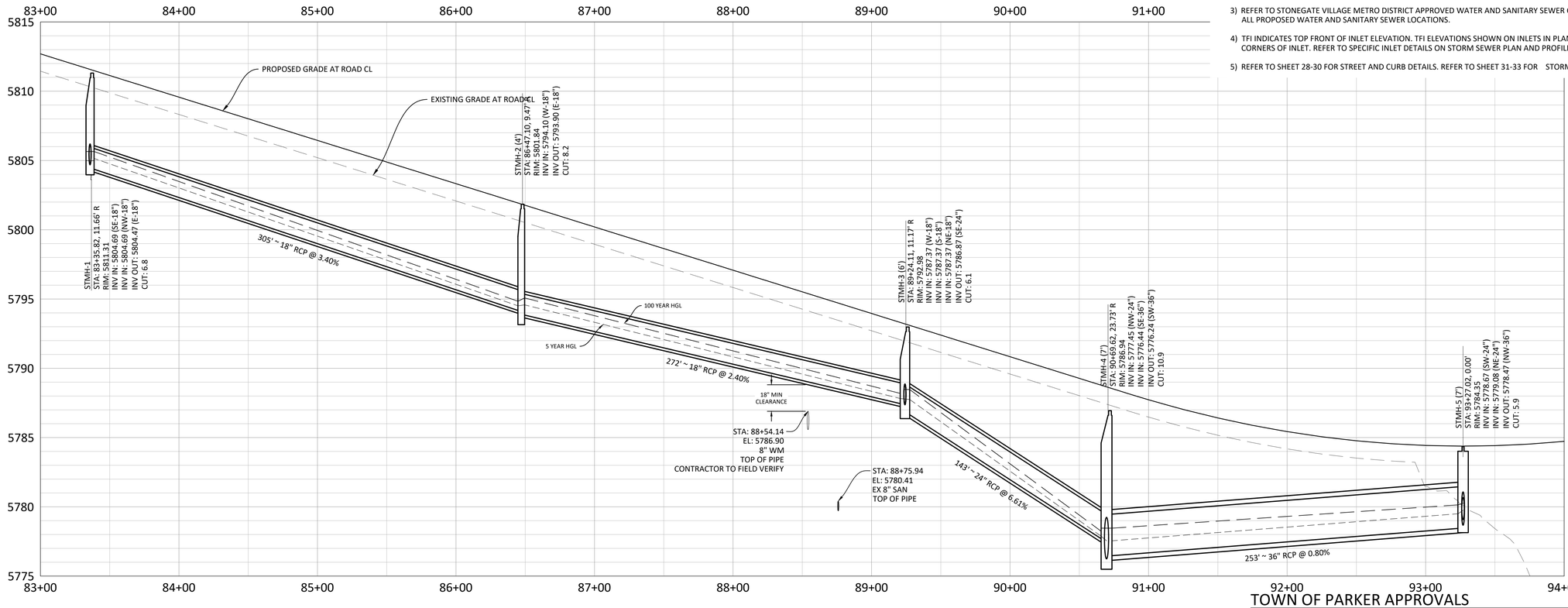
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BELFORD AVENUE STORM - PLAN



BELFORD AVENUE STORM - PROFILE
VERTICAL SCALE: 1" = 4'

NOTES:

1) REFER TO GENERAL NOTES ON SHEET 2 FOR ALL APPLICABLE CONSTRUCTION STANDARDS & MASTER LEGEND
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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

BELFORD AVENUE STORM PLAN & PROFILE

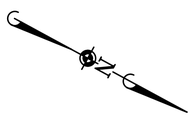
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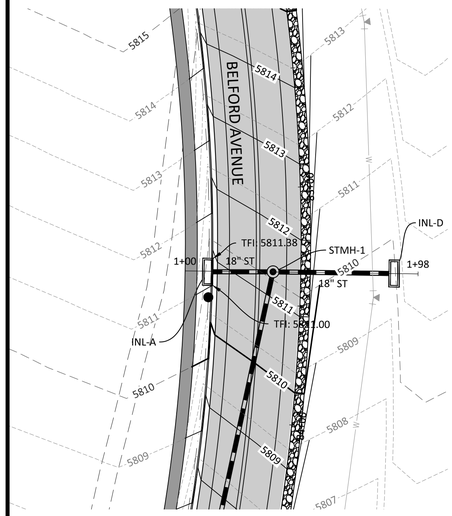
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PENDING APPROVAL - NOT FOR CONSTRUCTION

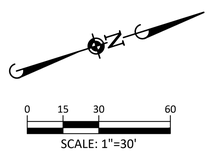
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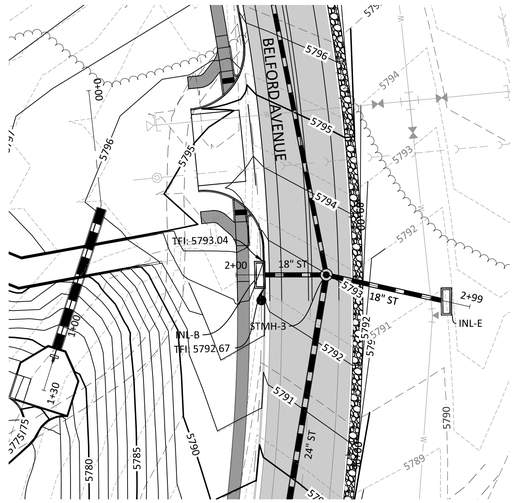
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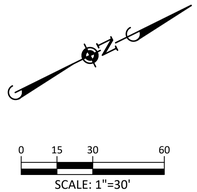


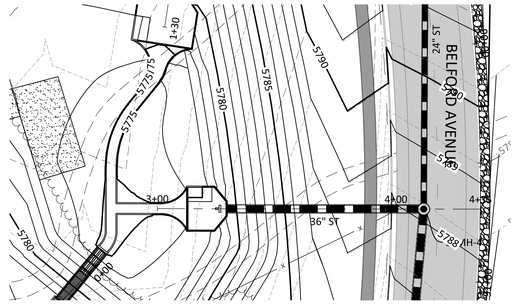
BELFORD AVENUE STORM LATERAL A - PLAN



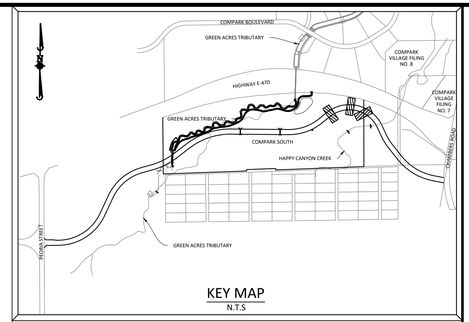


BELFORD AVENUE STORM LATERAL B - PLAN





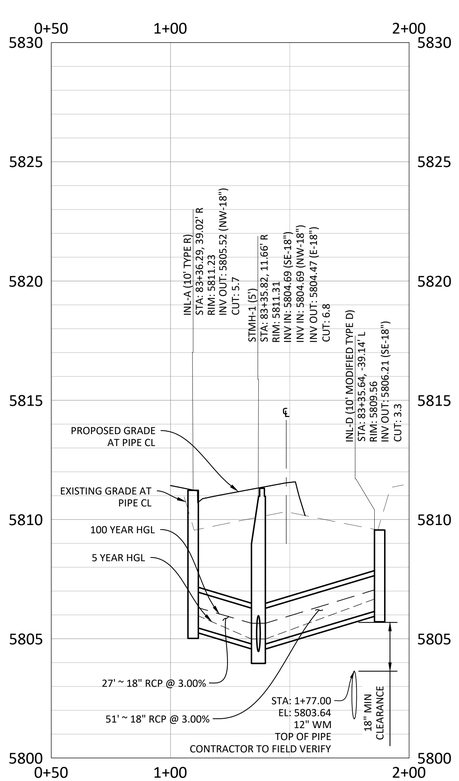
BELFORD AVENUE STORM LATERAL C - PLAN



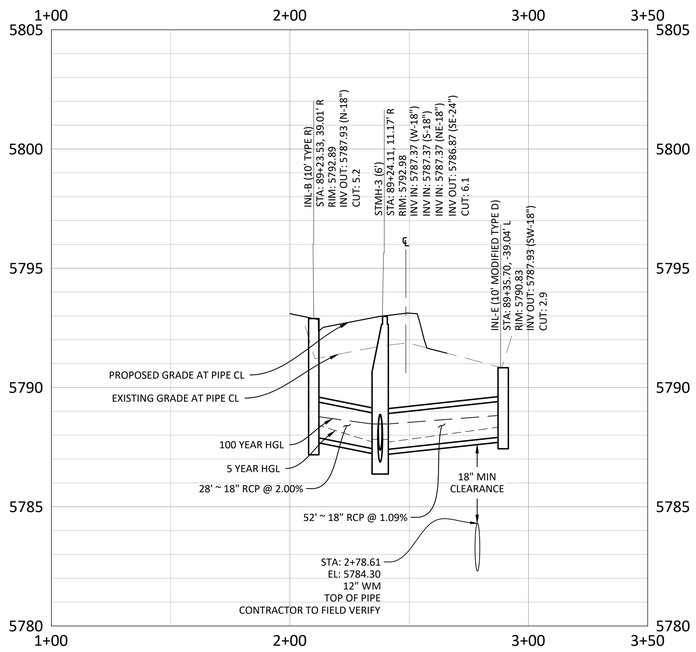
KEY MAP
N.T.S

SOURCE BENCHMARKS:

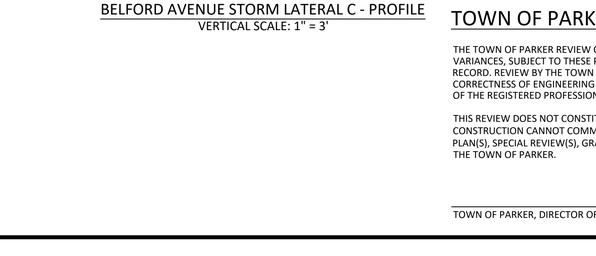
DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



BELFORD AVENUE STORM LATERAL A - PROFILE
VERTICAL SCALE: 1" = 3'



BELFORD AVENUE STORM LATERAL B - PROFILE
VERTICAL SCALE: 1" = 3'



BELFORD AVENUE STORM LATERAL C - PROFILE
VERTICAL SCALE: 1" = 3'

TOWN OF PARKER APPROVALS

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

BELFORD AVENUE STORM PLAN & PROFILE

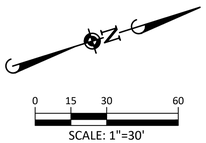
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PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

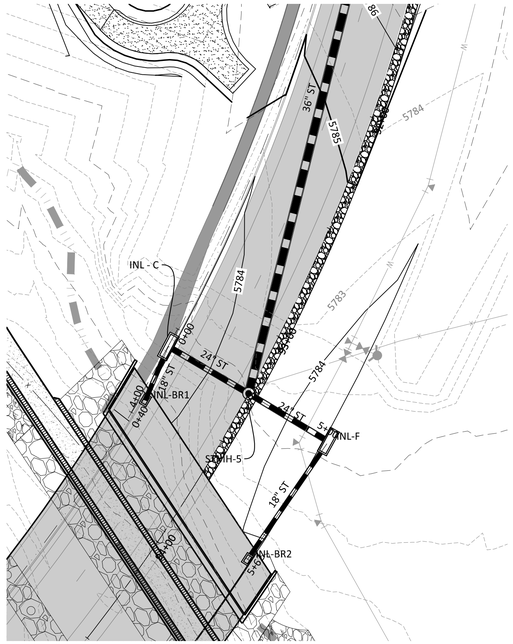
SHEET
11 OF 33
CLCPKC3

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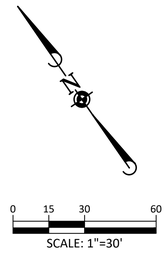
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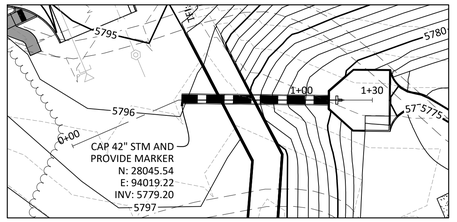
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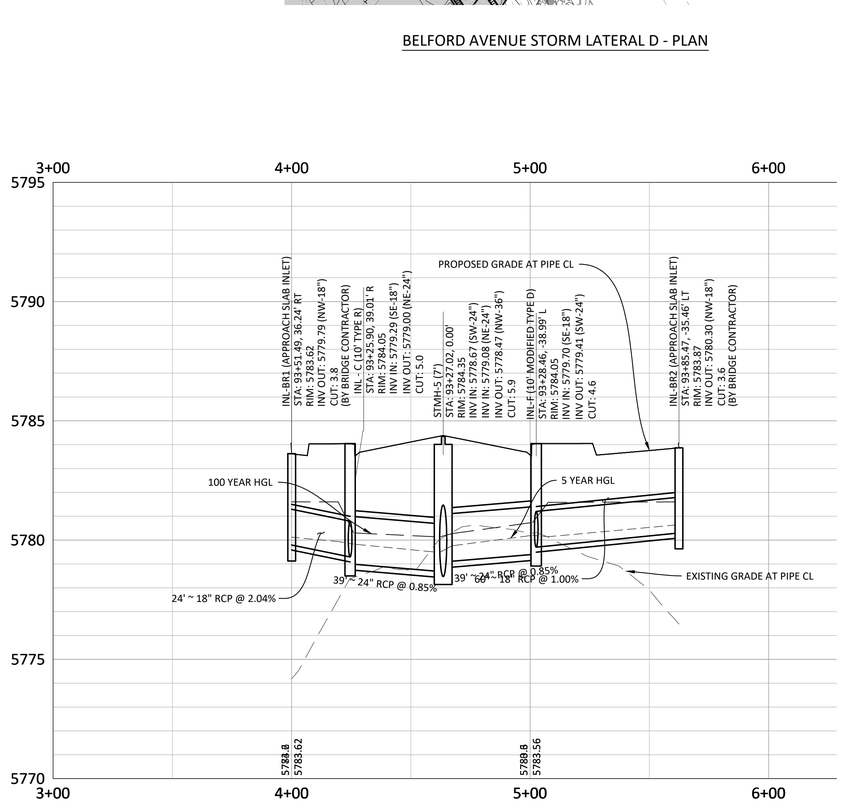


BELFORD AVENUE STORM LATERAL D - PLAN

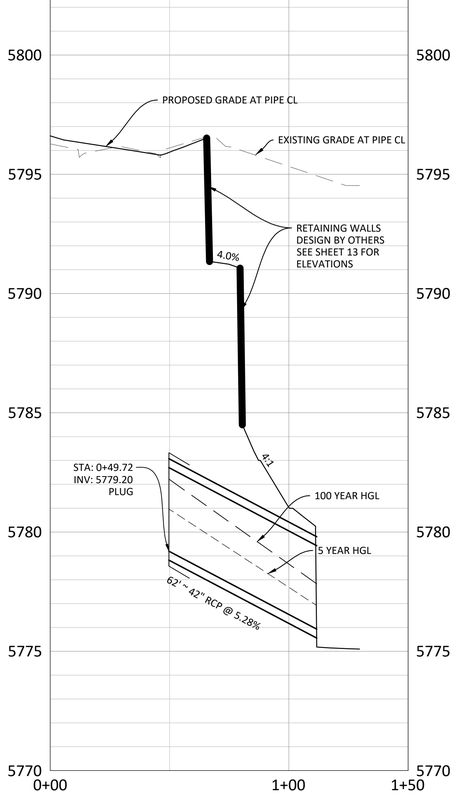




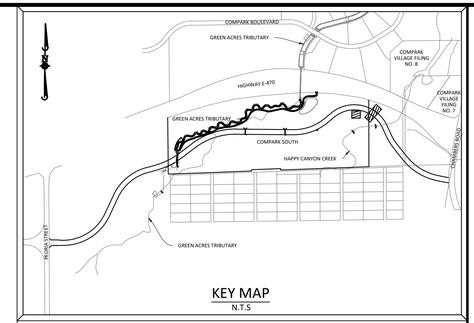
RESIDENTIAL STORM LATERAL - PLAN



BELFORD AVENUE STORM LATERAL D - PROFILE
VERTICAL SCALE: 1" = 3'



RESIDENTIAL STORM LATERAL - PROFILE
VERTICAL SCALE: 1" = 3'



KEY MAP
N.T.S

SOURCE BENCHMARKS:

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TOWN OF PARKER, DIRECTOR OF ENGINEERING — DATE

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	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
BELFORD AVENUE STORM PLAN & PROFILE

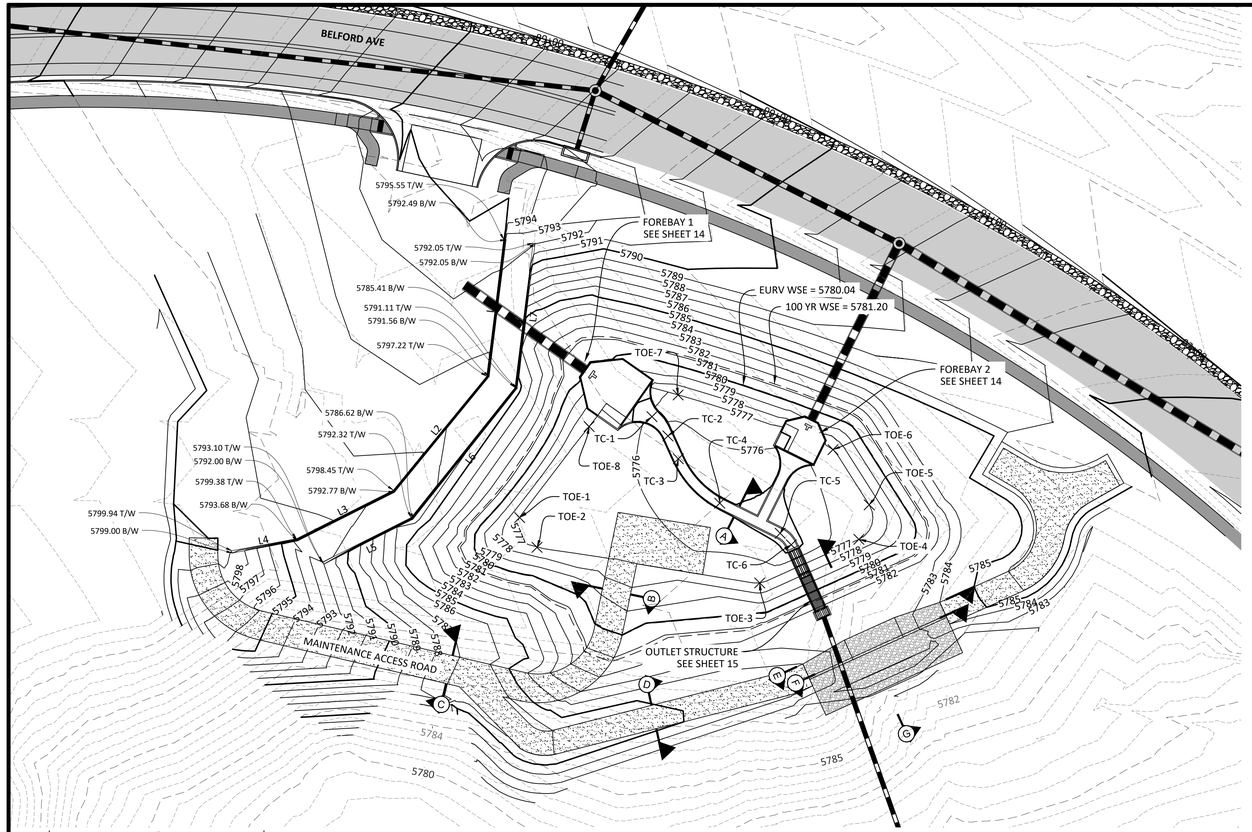
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DATE: 03/15/2021

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12 OF 33
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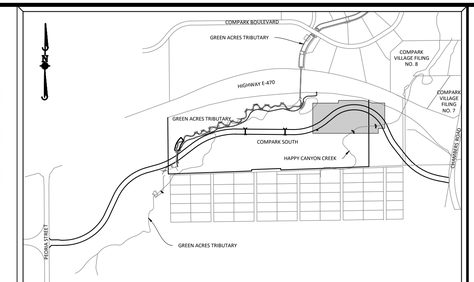


FREQUENCY STORM	REQUIRED VOLUMES (FT^3 OR AC.–FT.)	RECORD DRAWING CALCULATIONS					
		CALC. VOL.	BY:	DATE	CALC. VOL.	BY:	DATE
EURV	0.98 AC.-FT.						
100-YEAR	1.39 AC.-FT.						

N

0 15 30 60

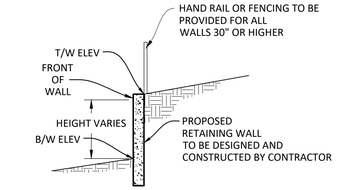
SCALE: 1"=30'



KEY MAP
N.T.S

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TYPICAL RETAINING WALL GRADING LABEL DETAIL
N.T.S
*NOTE: ANY RETAINING WALL ABOVE 4' WILL REQUIRE A BUILDING PERMIT

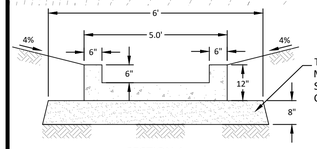
RET. WALL TABLE

TAG	LENGTH	DIRECTION
L1	57.80'	N07°04'11"E
L2	62.72'	N39°17'20"E
L3	45.40'	N63°21'16"E
L4	27.85'	N79°24'50"E
L5	41.83'	N63°13'29"E
L6	70.09'	N38°32'33"E
L7	61.31'	N07°04'11"E

LENGTH AND DIRECTION ARE AT FRONT OF WALL

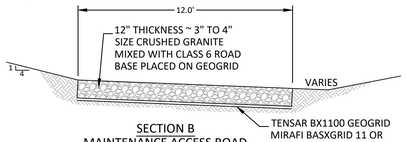
Point Table

Point	Elevation	Northing	Easting	Description
TC-1	5774.96	27990.41	94097.62	FLOWLINE
TC-2	5774.90	27982.33	94104.32	FLOWLINE
TC-3	5774.85	27972.75	94108.67	FLOWLINE
TC-4	5774.70	27954.14	94126.04	FLOWLINE
TC-5	5774.55	27941.53	94151.35	FLOWLINE
TC-6	5774.51	27936.69	94156.02	FLOWLINE
TOE-1	5777.00	27948.11	94042.14	pond toe
TOE-2	5777.00	27935.63	94049.43	pond toe
TOE-3	5777.00	27920.69	94142.80	pond toe
TOE-4	5777.00	27938.96	94184.36	pond toe
TOE-5	5777.00	27953.44	94188.69	pond toe
TOE-6	5777.00	27976.59	94173.51	pond toe
TOE-7	5777.00	27999.51	94108.58	pond toe
TOE-8	5777.00	27986.28	94071.27	pond toe

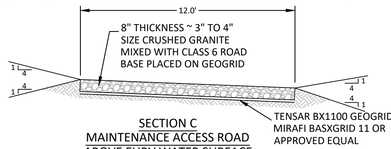


SECTION A
5.0' WIDE TRICKLE CHANNEL
½" = 1'-0"

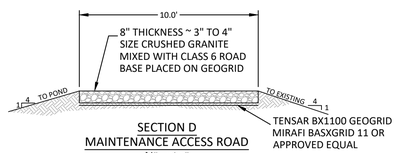
NOTE: USE 4 POUNDS PER CU. YD. OF FIBRE MESH TO REINFORCE CONCRETE



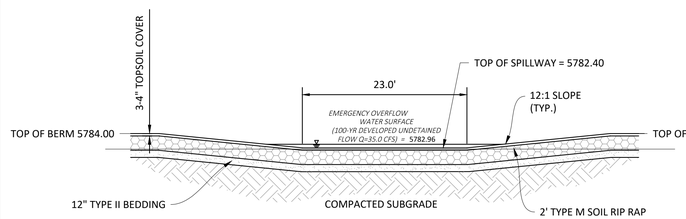
SECTION B
MAINTENANCE ACCESS ROAD
BELOW EURV WATER SURFACE
¼" = 1'-0"



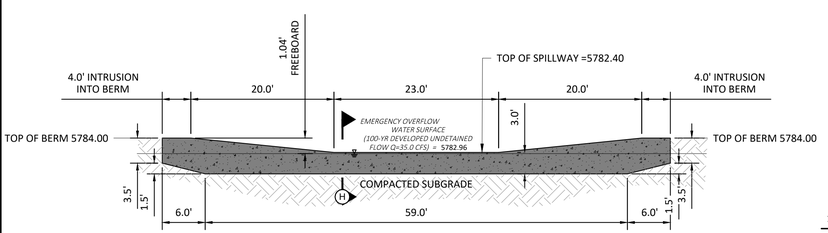
SECTION C
MAINTENANCE ACCESS ROAD
ABOVE EURV WATER SURFACE
¼" = 1'-0"



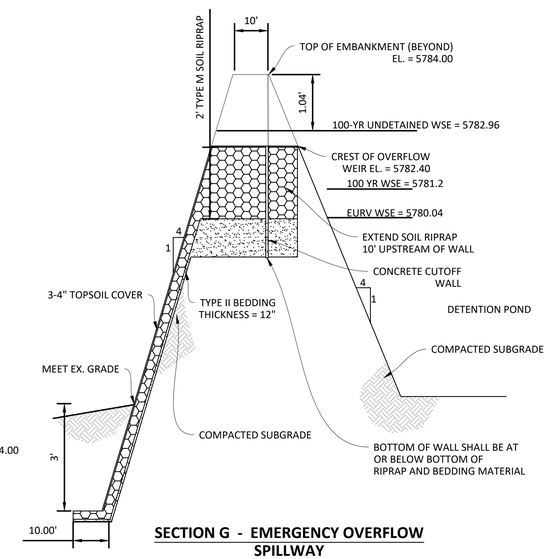
SECTION D
MAINTENANCE ACCESS ROAD
¼" = 1'-0"



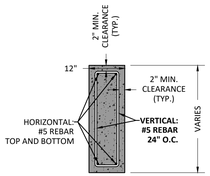
SECTION E - EMERGENCY OVERFLOW SPILLWAY
1" = 10'



SECTION F - EMERGENCY OVERFLOW SPILLWAY CUTOFF WALL
1" = 10'



SECTION G - EMERGENCY OVERFLOW SPILLWAY
1" = 20'H
1"=2'V



SECTION H - CONCRETE CUTOFF WALL
1" = 2'

NOTE:

1. PRIOR TO FINAL TOP SOILING, SEEDING AND MULCHING, CONTRACTOR SHALL OBTAIN FINAL AS-BUILT VOLUME CHECK AND CERTIFICATION FROM THE ENGINEER. FAILURE TO DO SO WILL REQUIRE THE CONTRACTOR TO REMOVE AND REPLACE TOP SOIL MATERIALS AT HIS/HER EXPENSE.
2. REFER TO GENERAL NOTES ON SHEET 2 AND DETAILS ON FOLLOWING SHEETS
3. EMBANKMENT FILL SHALL MEET THE MINIMUM REQUIREMENTS OF TOWN OF PARKER AND THE GEOTECHNICAL REPORT. SEE GENERAL NOTES ON SHEET 2.
4. THIS WATER QUALITY BASIN HAS BEEN SIZED TO SERVE AS A TEMPORARY SEDIMENT BASIN DURING CONSTRUCTION. ONCE CONSTRUCTION IS COMPLETE, THE SPILLWAY SHALL BE LOWERED TO THE EURV WATER SURFACE ELEVATION, AS SHOWN ON THE DETAIL ON THIS SHEET.

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

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

DATE	REVISIONS	DRAWN BY
06-18-2021	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
DETENTION POND PLAN

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

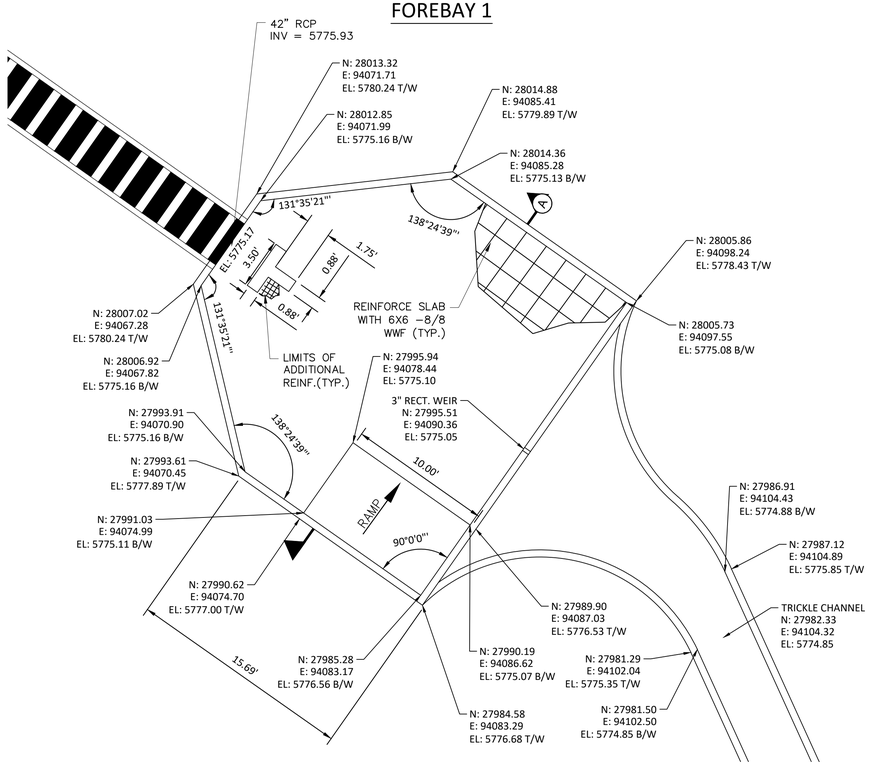
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CLCPKC3

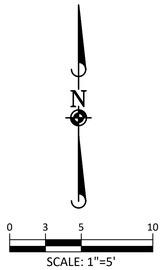
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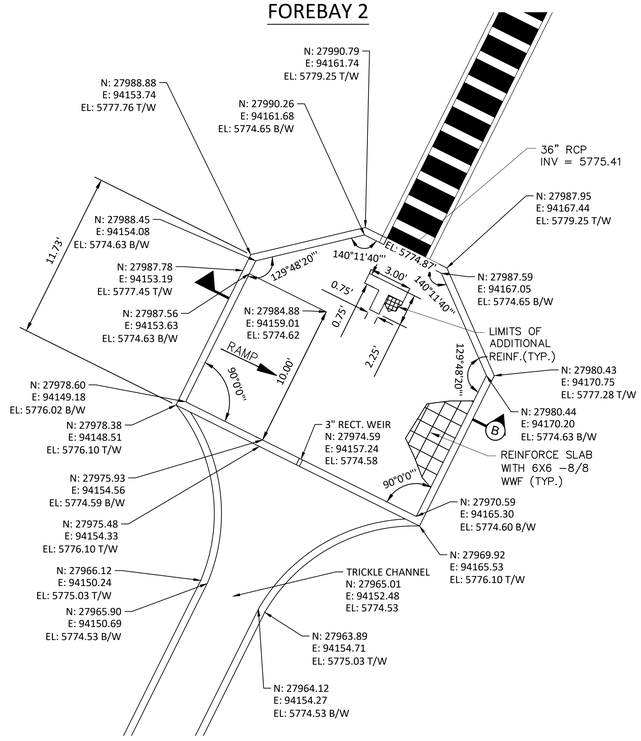
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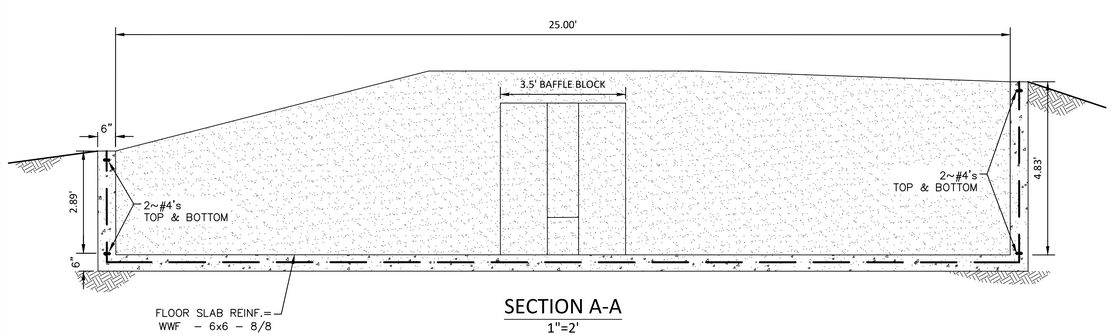
FOREBAY 1



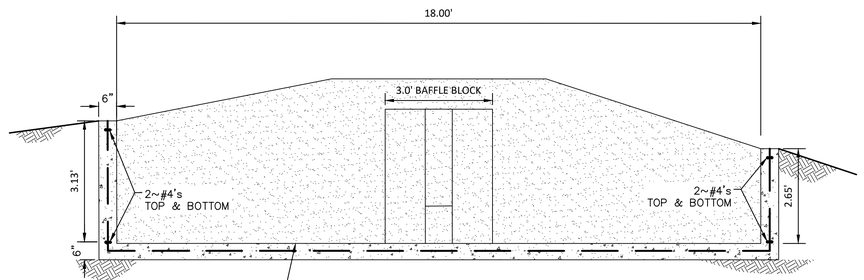


FOREBAY 2

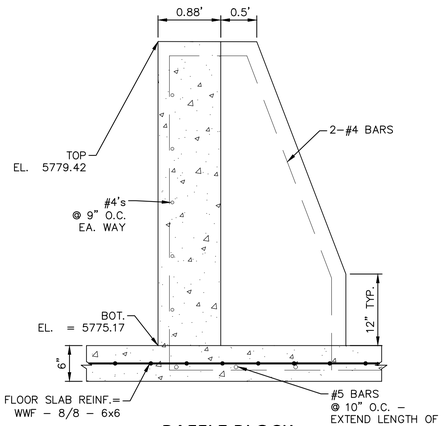




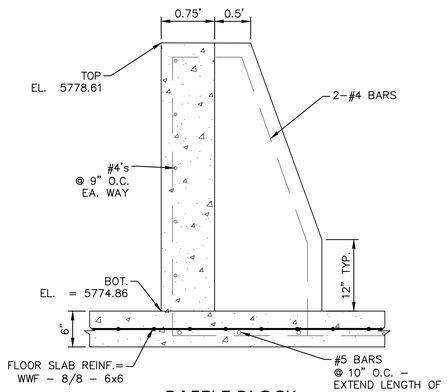
SECTION A-A
1"=2'



SECTION B-B
1"=2'



BAFFLE BLOCK REINFORCING DETAIL
1"=1'



BAFFLE BLOCK REINFORCING DETAIL
1"=1'

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

FOREBAY PLAN

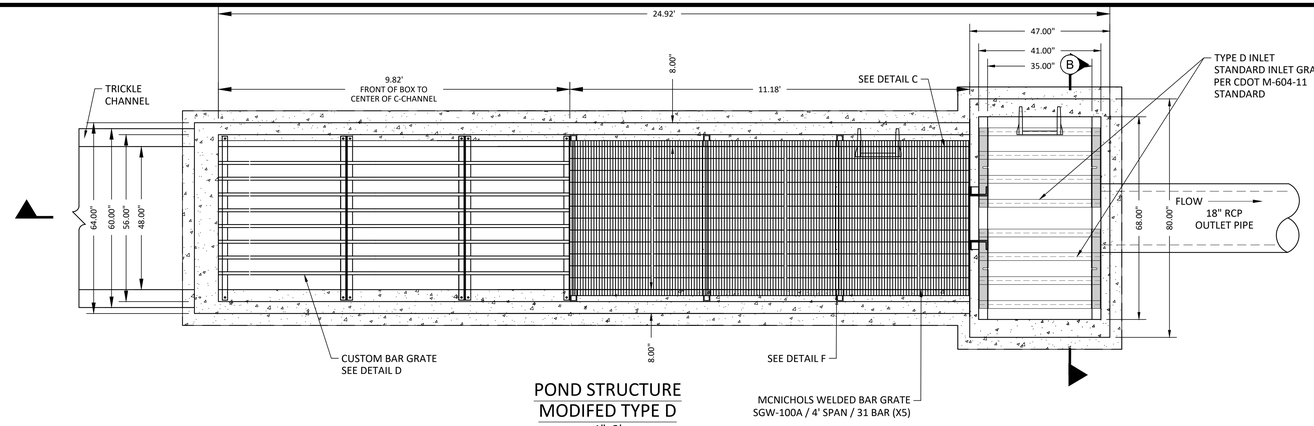
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PROJ. ASSOC.:	ASD
DRAWN BY:	JMP
DATE:	03/15/2021

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PENDING APPROVAL - NOT FOR CONSTRUCTION

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Plotted: 6/23/2021 9:08 AM Dwg Name: P:\Clpkc3\ComSouth09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\FOREBAY PLAN.dwg Updated By: ADhucker



POND STRUCTURE
MODIFED TYPE D
1"=2'

NOTES:
1. REFER TO CDOT M-604-11 STANDARD, TYPE "D" INLET FOR CONCRETE, STEEL GRATE AND STEP REQUIREMENTS. REINFORCING BARS SHALL BE PLACED IN ALL INTERIOR, EXTERIOR AND BASE WALLS.

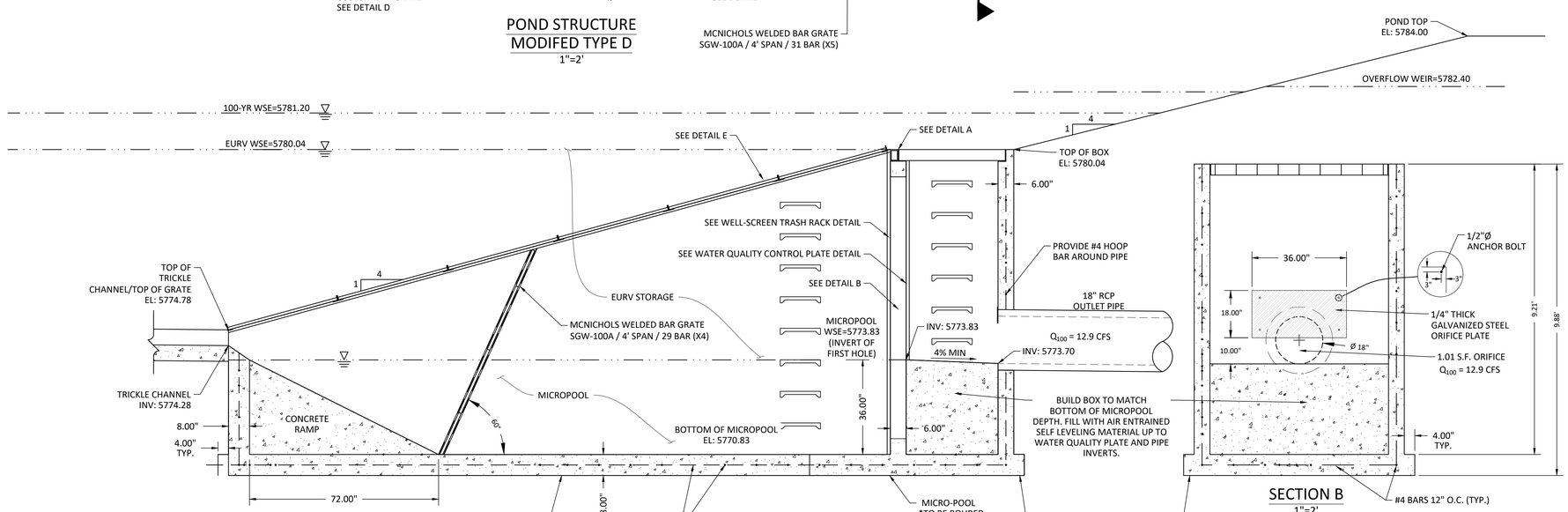
2. STEPS SHALL BE PROVIDED , AS SHOWN ON DETAIL AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.

3. GRATES SHALL BE STANDARD GRATE TYPE.

4. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS TO ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION.

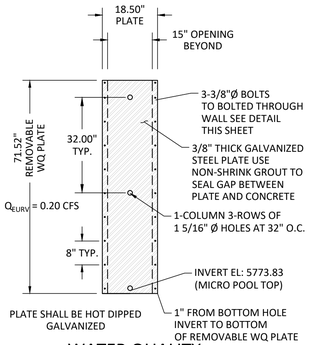
5. CONTRACTOR TO HAVE PROFESSIONAL ENGINEER DESIGN AND CERTIFY THE OUTLET STRUCTURE.

NOTE: DRAINAGE STRUCTURES REQUIRE FINAL SHOP DRAWINGS AND STRUCTURAL ENGINEERING TO BE SUBMITTED TO THE TOWN OF PARKER AND MANHARD CONSULTING FOR FINAL REVIEW AND APPROVAL. ANY CHANGE IN STRUCTURE TYPE , CONFIGURATION OR SHAPE WILL REQUIRE A "NOTICE OF CHANGE" AND WILL REQUIRE REVISIONS TO THE CIVIL DRAWINGS TO REFLECT THEIR CHANGES.

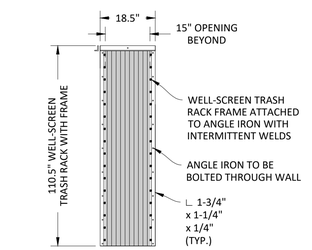


SECTION A
1"=2'

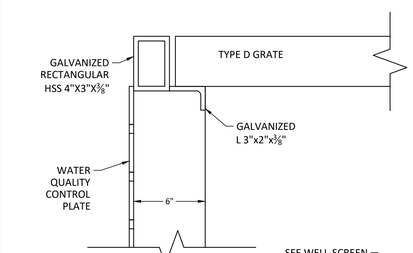
SECTION B
1"=2'



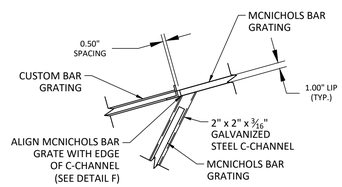
WATER QUALITY
CONTROL PLATE
1"=2'



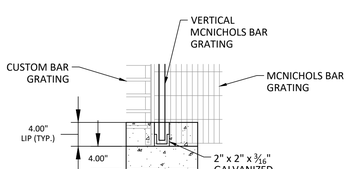
WELL-SCREEN
TRASH RACK
1"=2'



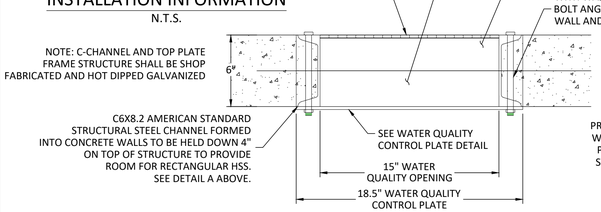
DETAIL A
INSTALLATION INFORMATION
N.T.S.



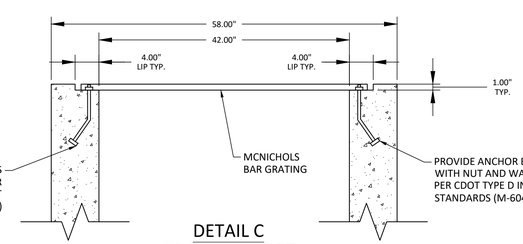
DETAIL E
GRATE JUNCTION
N.T.S.



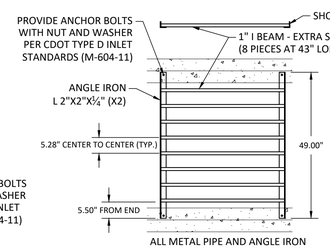
DETAIL F
C-CHANNEL
N.T.S.



DETAIL B
OPENING DETAIL
N.T.S.



DETAIL C
GRATE SUPPORT
N.T.S.



DETAIL D
CUSTOM BAR GRATE
N.T.S.

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

TOWN OF PARKER APPROVALS

THE TOWN OF PARKER REVIEW CONSTITUTES GENERAL COMPLIANCE WITH THE TOWN'S STANDARDS AND APPROVED VARIANCES, SUBJECT TO THESE PLANS BEING STAMPED, SIGNED, AND DATED BY THE PROFESSIONAL ENGINEER OF RECORD. REVIEW BY THE TOWN DOES NOT CONSTITUTE APPROVAL OF THE PLAN DESIGN OR ACCURACY AND CORRECTNESS OF ENGINEERING CALCULATIONS. ERRORS IN THE DESIGN OR CALCULATIONS REMAIN THE RESPONSIBILITY OF THE REGISTERED PROFESSIONAL ENGINEER WHOSE STAMP AND SIGNATURE ARE AFFIXED TO THIS DOCUMENT.

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TOWN OF PARKER, DIRECTOR OF ENGINEERING — DATE

DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

STORM OUTLET STRUCTURE - OUTLET STRUCTURE PLAN

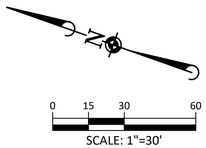
PROJ. MGR.:	GTI
PROJ. ASSOC.:	ASD
DRAWN BY:	RAK
DATE:	03/15/2021

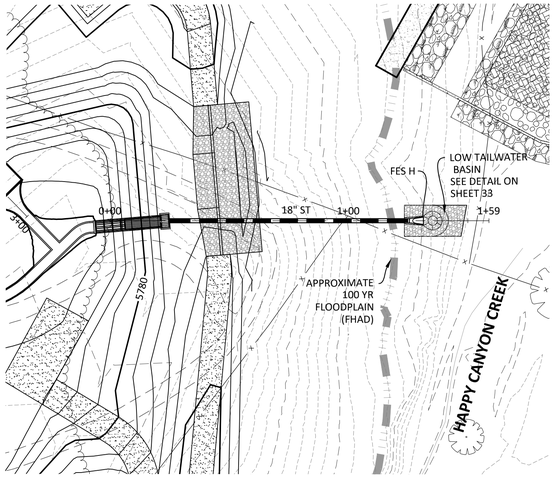
SHEET
15 OF 33
CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

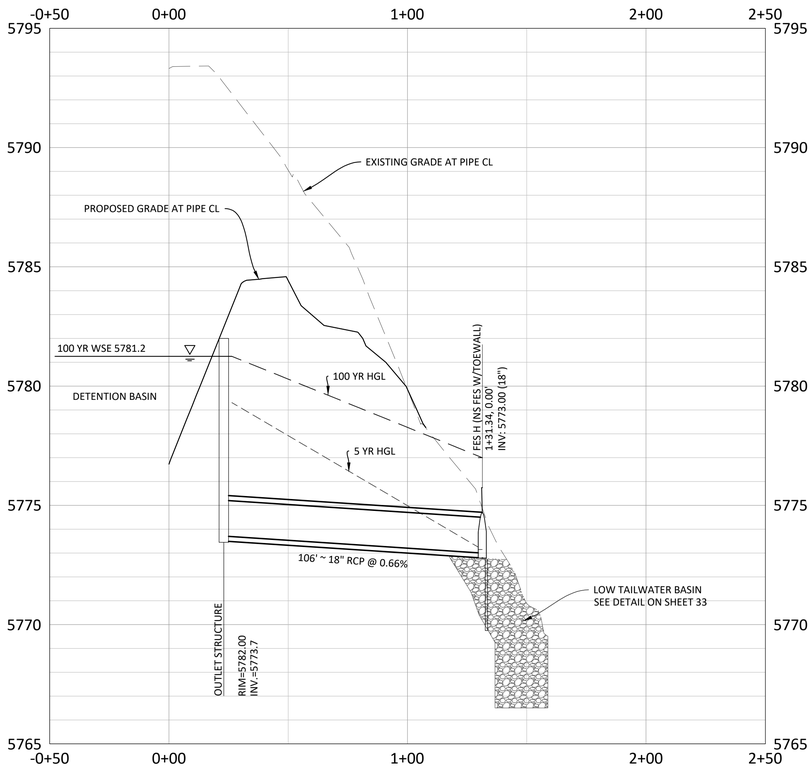
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Plotted: 6/23/2021 9:25 AM Dwg Name: P:\Cpipk3\ComSouth09 - Belford Ave East\dwg\Eng\Final Drawing\Plan Set\STORM OUTLET STRUCTURE.dwg Updated By: ADucker

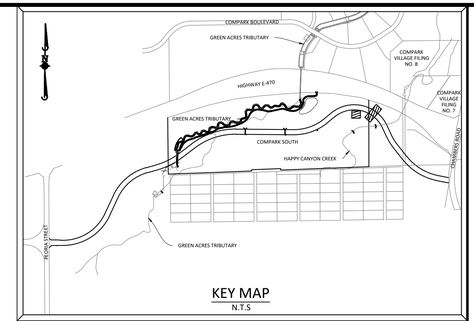




DETENTION BASIN OUTFALL - PLAN



DETENTION BASIN OUTFALL - PROFILE
VERTICAL SCALE: 1" = 3'



KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

TOWN OF PARKER APPROVALS

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

DRAWN BY	REVISIONS	DATE
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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

DETENTION BASIN OUTFALL PLAN & PROFILE

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

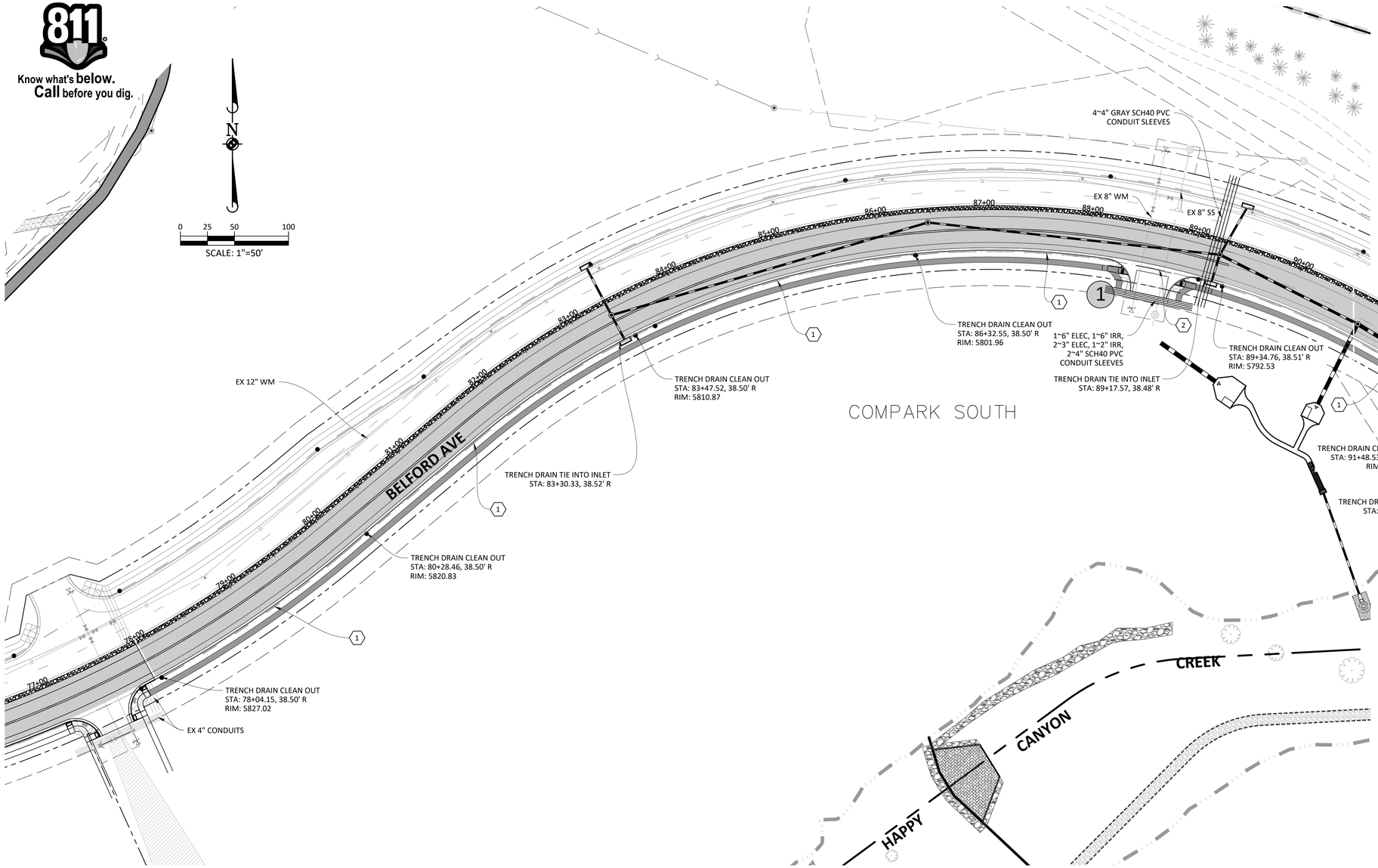
SHEET
16 OF 33
CLCPKC3

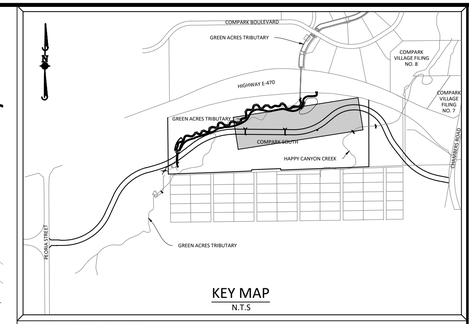
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Know what's **below.**
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KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)

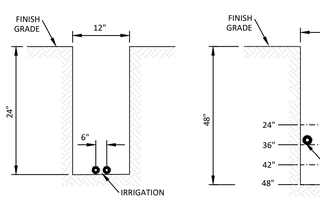
LEGEND

(#) CONSTRUCTION NOTE

(#) UTILITY SLEEVE CROSSING N0.

CONSTRUCTION NOTES

1. 4" TRENCHDRAIN (TYP.)
2. 4" SCH 80 CONDUIT SLEEVE PIPE REQUIRED UNDER ALL ROADWAY CROSSINGS FOR TRENCHDRAIN
3. BORE TRENCHDRAIN UNDER EXISTING ROADWAY
4. 2" CONDUIT W/ 14 GA. TRACER WIRE AND PULL ROPE FOR SIGNAL INTERCONNECT
5. ALL CONDUITS TO LANDSCAPED MEDIANS SHALL BE SWEPT UP AT 90° AND SHALL TERMINATE IN A PULL BOX SET TO FINISHED GRADE.
6. ALL INTERCONNECT CONDUITS SHALL BE SWEPT UP AT 90° TO 11"X17" QUASITE PULLBOXES. 400' SPACING MAXIMUM.



NOTE: MINIMUM REQUIREMENTS -

ELECTRIC - 3' HORIZONTAL AND 12" VERTICAL SEPARATION FROM GAS, 10' HORIZONTAL AND 12" VERTICAL SEPARATION FROM WATER/SEWER/STORM, AND 12" FROM ALL OTHER UTILITIES

GAS - 12" FROM ALL OTHER UTILITIES

TYPICAL CONDUIT SLEEVE SECTIONS
N.T.S.

NOTES:

1. INSTALL CROSSINGS TO EXTEND AT LEAST 6 FEET BEYOND THE ROW AND WALKS. INSTALL SLEEVES IN LINE WITH THE APPROPRIATE EASEMENTS.
2. EXTRA CROSSINGS ARE INSTALLED AT THE DISCRETION OF THE DEVELOPER.
3. THESE CROSSING LOCATIONS HAVE BEEN PROVIDED BY THE RESPECTIVE UTILITY COMPANIES AS OF THIS DATE. ANY CHANGES, ADDITIONS, OR RELOCATIONS RECEIVED BY MANHARD CONSULTING, LTD. AFTER PAVING HAS BEEN COMPLETED WILL HAVE TO BORED.
4. ALL ELECTRIC CONDUITS TO BE GRAY SCHEDULE 40 PVC OR BLACK SCHEDULE 40 PVC WITH A RED STRIPE. GAS CROSSINGS MUST BE SCHEDULE 40 GRAY PVC. PHONE AND TV ARE TO BE WHITE SCHEDULE 40 PVC. IRRIGATION TO BE CLASS 160 PVC PER IRRIGATION PLAN.
5. ALL CROSSINGS MUST BE 95% COMPACTION AND TESTED. MARK BOTH ENDS OF SLEEVE WITH 2 X 4 POST-PAINTED.
6. XCEL REQUIRES ALL CROSSINGS TO HAVE TRACER WIRE INSTALLED NEXT TO THE SLEEVE.
7. ALL TRENCH LINES MUST BE WITHIN 6" OF FINISHED GRADE PER XCEL STANDARDS.
8. GRADE AT TRANSFORMERS MUST BE 100% TO FINISHED GRADE.

CAUTION:

HAVE ALL BURIED UTILITIES LOCATED PRIOR TO TRENCHING OR BORING.

TRENCH DRAIN NOTES:

1. SEE DETAIL 29 OF STREET DETAILS FOR TRENCH DRAIN SPECIFICATIONS
2. TRENCH DRAINS SHALL TIE INTO STORM MANHOLES OR INLETS
3. CLEANOUTS SHALL BE PROVIDED AT ALL JUNCTIONS, ANGLE POINTS AND SPACED AT MAXIMUM 500' INTERVALS.

TOWN OF PARKER APPROVALS

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

TRENCH DRAIN AND SLEEVING PLAN

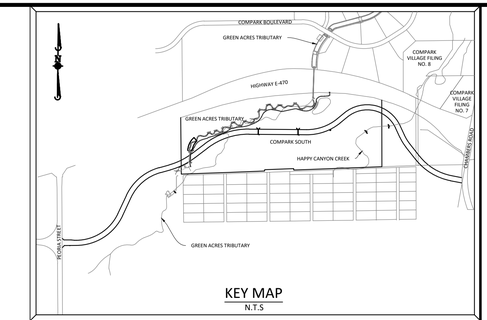
PENDING APPROVAL - NOT FOR CONSTRUCTION

PROJ. MGR.:	GTI
PROJ. ASSOC.:	ASD
DRAWN BY:	JMP
DATE:	03/15/2021

SHEET
17 OF 33
CLCPKC3 CLCPKC3

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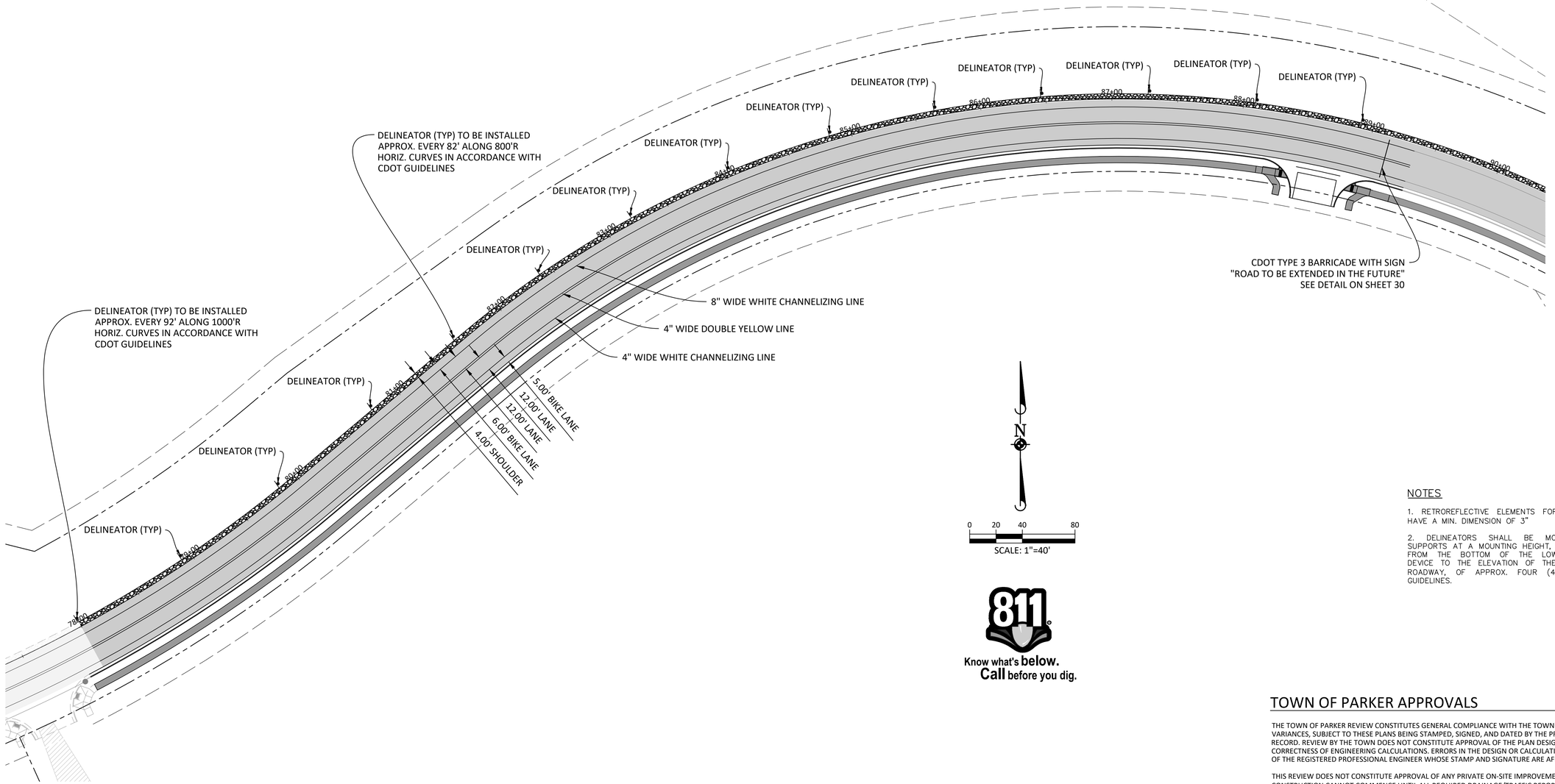
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KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
A DOUGLAS COUNTY GIS MONUMENT SET IN CONCRETE LOCATED APPROXIMATELY 130 FEET SOUTHWESTERLY OF THE CENTERLINE OF CHAMBERS ROAD AND 95 FEET NORTHWESTERLY OF THE CENTERLINE OF COMPARK BOULEVARD. ELEVATION = 5752.84 (NAVD 88)



BELFORD AVENUE

SCALE: 1"=40'

811
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NOTES

1. RETROREFLECTIVE ELEMENTS FOR DELINEATORS SHALL HAVE A MIN. DIMENSION OF 3"

2. DELINEATORS SHALL BE MOUNTED IN SUITABLE SUPPORTS AT A MOUNTING HEIGHT, MEASURED VERTICALLY FROM THE BOTTOM OF THE LOWEST RETROREFLECTIVE DEVICE TO THE ELEVATION OF THE NEAR EDGE OF THE ROADWAY, OF APPROX. FOUR (4) FEET, PER MUTCD GUIDELINES.

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TOWN OF PARKER, DIRECTOR OF ENGINEERING DATE

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	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

SIGNAGE AND STRIPING PLAN

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

SHEET
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1. GRADING, DRILLING, CLEARING, EXCAVATING, BACK-FILLING, SOIL STRIPPING, SOIL IMPORTING EXPORTING OR ANY OTHER FORM OF SOIL DISTURBANCE SHALL NOT COMMENCE UNTIL A TOWN OF PARKER GRADING/EXCAVATION PERMIT HAS BEEN ISSUED.
2. THE TOWN OF PARKER GRADING/EXCAVATION PERMIT IS VALID FOR A PERIOD OF 2 YEARS FROM THE DATE OF ISSUANCE. ANY LAPSE IN PERMIT COVERAGE MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER AND/OR FINES.
3. ALL EROSION AND SEDIMENT CONTROL BMPS SHALL BE INSTALLED ACCORDING TO THE CBMP PLAN INSTALLATION NOTES AND DETAILS AND/OR PERMITTED VARIANCES. ALL MATERIALS, WORKMANSHIP AND INSTALLATION METHODS ARE SUBJECT TO INSPECTION BY THE TOWN'S INSPECTOR. THE TOWN OF PARKER RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS, WORKMANSHIP AND/OR INSTALLATION METHODS THAT DO NOT CONFORM TO THE CBMP PLAN AND/OR PERMITTED VARIANCES.
4. THE EROSION CONTROL SUPERVISOR SHALL REVISE OR MODIFY THE EROSION AND SEDIMENT CONTROL MEASURES IF IT BECOMES APPARENT THAT THE ORIGINAL PLAN IS INADEQUATE, OR AS A RESULT OF DEFICIENCIES IDENTIFIED DURING INSPECTIONS PERFORMED BY THE TOWN'S INSPECTOR.
5. THE INSTALLATION OF ADDITIONAL EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPS) MAY BE REQUIRED OF THE EROSION CONTROL SUPERVISOR, PROPERTY OWNER, SITE DEVELOPER, CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS AT ANY TIME THROUGHOUT THE DURATION OF THE PROJECT CONSTRUCTION AND/OR SUBSEQUENT REVEGETATION PERIOD.
6. THE EROSION CONTROL SUPERVISOR SHALL BE RESPONSIBLE FOR ENSURING THAT THE SITE REMAINS IN COMPLIANCE WITH THE NOTICE OF NUISANCE REPORTS (a.k.a. CONSTRUCTION SITE RUNOFF CONTROL INSPECTION REPORTS), APPROVED CBMP PLAN(S) AND THE TOWN OF PARKER STORM DRAINAGE AND ENVIRONMENTAL CRITERIA MANUAL.
7. THE EROSION CONTROL SUPERVISOR SHALL BE READILY AVAILABLE TO DISCUSS AND CORRECT ANY PROBLEMS THAT MAY ARISE RELATING TO GRADING, EROSION AND SEDIMENT CONTROL.
8. IF IT IS ANTICIPATED THAT ALL OR A PORTION OF THE PROJECT WILL OCCUR DURING SEASONS SUSCEPTIBLE TO SNOWFALL, THE USE OF CERTAIN EROSION AND SEDIMENT CONTROL BMPS ADJACENT TO PUBLIC ROADWAYS MAY NEED TO BE RECONSIDERED DUE TO THE NATURE OF SNOW REMOVAL OPERATIONS. AN APPROVED ALTERNATIVE MAY BE NECESSARY TO MINIMIZE DAMAGE FROM THESE OPERATIONS. THE TOWN OF PARKER ASSUMES NO RESPONSIBILITY FOR DAMAGE TO ANY BMPS AS A RESULT OF SNOW PLOWING AND SNOW REMOVAL.
9. AREAS OF LAND DISTURBANCE EQUAL TO 40 ACRES OR GREATER SHALL NOT BE EXPOSED FOR MORE THAN 30 CONSECUTIVE DAYS WITHOUT TEMPORARY OR PERMANENT STABILIZATION.
10. AUTHORIZED EXEMPTIONS MAY BE ALLOWED TO THE 40-ACRE LIMIT FOR REMOVAL AND STORAGE OF CUT MATERIAL WHERE (A) GEOTECHNICAL LIMITATIONS RESTRICT THE USE OF TEMPORARY OR PERMANENT STABILIZATION OF THE STORED MATERIAL (E.G., SWELLING SOILS, ROCK) AND (B) WHEN THE OWNER CAN DEMONSTRATE THAT THE 40-ACRE LIMIT IS PHYSICALLY AND/OR FINANCIALLY IMPRACTICABLE. FOR SITES GRANTED THIS EXEMPTION, A PHASING AND EARTHWORK QUANTITIES PLAN SHALL BE SUBMITTED TO THE PUBLIC WORKS DEPARTMENT AND APPROVED PRIOR TO THE COMMENCEMENT OF LAND DISTURBANCE ACTIVITIES. SUBMITTAL REQUIREMENTS INCLUDE:
    - (I) PHASING PLAN SHOWING CUT AND FILL VOLUMES AND LOCATIONS FOR EACH PHASE AND PROJECT TOTALS.
    - (II) EARTHWORK QUANTITY PLAN SHOWING CUT AND FILL VOLUMES AND LOCATIONS FOR EACH PHASE AND PROJECT TOTALS.
    - (III) BMP PLAN SHOWING SPECIFIC EROSION AND SEDIMENT CONTROLS FOR EACH PHASE.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | GEN NOTES 1 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

11. ANY EROSION AND SEDIMENT CONTROL BMPS THAT ARE DAMAGED OR IN NEED OF MAINTENANCE OR REPLACEMENT SHALL BE CORRECTED AS SOON AS POSSIBLE, IMMEDIATELY IN MOST CASES.
12. ALL DEFICIENCIES LISTED ON THE NOTICE OF NUISANCE FORM SHALL BE COMPLETED AS SOON AS POSSIBLE, IMMEDIATELY IN MOST CASES. ALL REQUIRED ACTIONS MUST BE IN THE CORRECTED FORM DURING THE FOLLOW-UP INSPECTION.
13. THE EROSION CONTROL SUPERVISOR IS RESPONSIBLE FOR ENSURING THAT ALL STREETS, CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, PARKING LOTS, ALLEYS, TRICKLE CHANNELS, AND/OR OTHER IMPERVIOUS SURFACES IMPACTED BY CONSTRUCTION ACTIVITIES ARE THOROUGHLY CLEANED THROUGHOUT THE DAY IF THEY BECOME SOILED. THESE AREAS MUST ALSO BE THOROUGHLY CLEAN BEFORE THE END OF THE WORK DAY.
14. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTION SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS.
15. ALL TRASH RECEPTACLES ON SITE SHALL BE FREE OF HOLES, CRACKS, GAPS, AND/OR OTHER PERMEABLE AREAS THAT MAY ALLOW FOR THE DISCHARGE OF POLLUTANTS.
16. ALL TRASH RECEPTACLES ON SITE SHALL BE EMPTIED AT A FREQUENCY AS TO ENSURE THAT THE TRASH REMAINS CONFINED TO THE RECEPTACLE.
17. ALL LOOSE TRASH AND LITTER ASSOCIATED WITH THE PROJECT MUST BE REMOVED AND PROPERLY DISCARDED ON A DAILY BASIS.
18. ALL PORTABLE TOILETS SHALL BE STAKED DOWN AT ALL TIMES USING U-SHAPED REBAR STAKES. THE PORTABLE TOILETS SHALL ALSO BE PLACED A MINIMUM DISTANCE OF 10 FEET FROM ALL IMPERVIOUS SURFACES, INCLUDING, BUT NOT LIMITED TO STREETS CURBS, GUTTERS, SIDEWALKS AND PARKING LOTS.
19. THE EROSION CONTROL SUPERVISOR SHALL MAINTAIN STRICT ADHERENCE TO THE LIMITS OF CONSTRUCTION AND PROPERTY LIMITS FOR ALL MATERIALS, VEHICLES AND EQUIPMENT. FAILURE TO ABIDE BY THIS REQUIREMENT MAY RESULT IN THE ISSUANCE OF A STOP WORK ORDER.
20. ALL CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE THROUGH THE APPROVED ACCESS POINT(S). A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL APPROVED ACCESS POINTS TO THE SITE. EXCEPTIONS MAY BE CONSIDERED FOR CONSTRUCTION ACTIVITY OCCURRING IMMEDIATELY ADJACENT TO PAVED AREAS AND WHERE ALTERNATIVE BMP'S ARE IMPLEMENTED, SUCH ACTIVITY MAY INCLUDE, BUT NOT BE LIMITED TO RESIDENTIAL CONSTRUCTION, UTILITY CONSTRUCTION, ETC.
21. NO PERMANENT SLOPES GREATER THAN 3:1 ARE ALLOWED.
22. ALL PERMANENT SLOPES STEEPER THAN 4:1 (HORIZONTAL TO VERTICAL) SHALL REQUIRE EROSION CONTROL BLANKET(S). TEMPORARY SLOPES IN TEMPORARY SEDIMENT BASINS THAT ARE STEEPER THAN 4:1 MAY REQUIRE EROSION CONTROL BLANKETS.
23. THE EROSION CONTROL SUPERVISOR SHALL BE RESPONSIBLE FOR CORRECTING ANY ADVERSE IMPACTS THAT OCCUR TO NEIGHBORING PROPERTIES. THE EROSION CONTROL SUPERVISOR MUST OBTAIN PERMISSION FROM LAND OWNERS PRIOR TO ENTERING SUCH PROPERTY.
24. A WATER SOURCE SHALL BE AVAILABLE ONSITE DURING CONSTRUCTION ACTIVITIES, AND UTILIZED TO MINIMIZE FUGITIVE DUST. ALTERNATIVE BMPS MAY BE REQUIRED IF INITIAL ATTEMPTS TO SUPPRESS DUST ARE UNSUCCESSFUL.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | GEN NOTES 2 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

25. ALL CHEMICAL OR HAZARDOUS MATERIAL SPILLS, INCLUDING CONCRETE WASHOUT WATER, WHICH MAY ENTER WATERS OF THE STATE OF COLORADO, WHICH INCLUDES BUT ARE NOT LIMITED TO, SURFACE WATER, GROUND WATER, DRY GULLIES OR STORM SEWERS LEADING TO SURFACE WATER, SHALL BE IMMEDIATELY REPORTED TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE) PER 25-8-601, AND THE TOWN OF PARKER. RELEASES OF PETROLEUM PRODUCTS AND CERTAIN HAZARDOUS SUBSTANCES LISTED UNDER THE FEDERAL CLEAN WATER ACT (40 CFR PART 116) MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER AND THE CDPHE. SPILLS THAT POSE AN IMMEDIATE SAFETY HAZARD SHALL BE REPORTED TO 911.
26. THE CLEANING OF CONCRETE TRUCKS AND EQUIPMENT IS RESTRICTED TO THE APPROVED CONCRETE WASHOUT LOCATION ON THE JOB SITE. CONCRETE WASH WATER SHALL NOT BE DISCHARGED TO STATE WATERS OR STORM SEWER SYSTEMS.
27. VEHICLE AND EQUIPMENT DEGREASING IS PROHIBITED ON THE JOB SITE.
28. ALL DEWATERING ON SITE SHALL BE COORDINATED WITH THE TOWN'S INSPECTOR. A STATE PERMIT MAY BE REQUIRED FOR DEWATERING. THE EROSION CONTROL SUPERVISOR IS RESPONSIBLE FOR OBTAINING AND ADHERING TO ALL APPLICABLE PERMITS.
29. HYDRAULIC SEEDING AND/OR HYDRAULIC MULCHING ARE ONLY ALLOWED IN AREAS UNDER TEMPORARY OR PERMANENT IRRIGATION OR FOR THE PURPOSE OF TEMPORARY SOIL STABILIZATION.
30. APPLICABLE CONSTRUCTION BMPS SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL ALL LANDSCAPING HAS BEEN INSTALLED AND THE DESIRABLE VEGETATION HAS REACHED A POINT IN WHICH EROSION AND SEDIMENTATION IS NO LONGER A CONCERN AS DETERMINED BY THE TOWN'S INSPECTOR.
31. GRADING SECURITY RELEASE REQUIREMENTS:
    1) DEVELOPABLE PROPERTY: IN ORDER FOR THE GRADING SECURITY TO BE RELEASED, THE SITE MUST MEET ITEMS A-H OR ITEM I (BELOW).
        - A. ALL SOIL-DISTURBING ACTIVITIES ASSOCIATED WITH THE GRADING PERMIT HAVE PERMANENTLY CEASED.
        - B. UNIFORM PERENNIAL VEGETATION COVER HAS BEEN ESTABLISHED WITH AN INDIVIDUAL PLANT DENSITY OF AT LEAST SEVENTY PERCENT (70%) OF PRE-DISTURBANCE LEVELS.
        - C. ALL CBMPS HAVE BEEN PROPERLY REMOVED FROM THE SITE.
        - D. IF ANY EROSION IS PRESENT, IT IS INSIGNIFICANT AND IS NOT LEAVING THE SITE AND/OR LEADING INTO ANY ON-SITE DRAINAGE INFRASTRUCTURE THAT MAY CONVEY SURFACE WATER OFF SITE.
        - E. WEEDS REPRESENT NO MORE THAN FIFTY PERCENT (50%) OF THE TOTAL VEGETATION ON THE SITE.
        - F. NO WEEDS ARE PRESENT FROM LIST A OF THE COLORADO NOXIOUS WEED LIST, AS AMENDED.
        - G. THE SITE IS PREDOMINANTLY FREE OF WEEDS FROM LIST B OF THE COLORADO NOXIOUS WEED LIST, AS AMENDED.
        - H. WEEDS ARE EVENLY DISTRIBUTED THROUGHOUT THE SITE WITH NO LARGE CONCENTRATIONS PRESENT.
        - I. A NEW GRADING PERMIT AND REPLACEMENT SECURITY HAS BEEN SUBMITTED AND APPROVED

    FOR THE APPLICABLE SITE OR ASSIGNMENT AS PROVIDED BY SECTION 11.10.150 OF THE TOWN OF PARKER MUNICIPAL CODE, IT IS THE PROPERTY OWNER'S OBLIGATION AT THE TIME OF CLOSING TO ENSURE THAT THE NEW SITE OWNER HAS PROVIDED THE TOWN WITH A REPLACEMENT SECURITY.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | GEN NOTES 3 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

2) NONDEVELOPABLE PROPERTY: IN ORDER FOR THE GRADING SECURITY TO BE RELEASED, THE SITE MUST MEET ITEMS A-H AND J, OR ITEMS I AND J (BELOW).
    - A. ALL SOIL-DISTURBING ACTIVITIES ASSOCIATED WITH THE GRADING PERMIT HAVE PERMANENTLY CEASED.
    - B. ALL CBMPS HAVE BEEN PROPERLY REMOVED FROM THE SITE.
    - C. EROSION IS NEGLIGIBLE, IF EVEN PRESENT.
    - D. THE VEGETATION REPRESENTS A PERENNIAL STAND OF A DENSE, UNIFORM SURFACE OF GRASS WITH NO AREA GREATER THAN ONE (1) SQUARE FOOT THAT IS BARREN OF DESIRABLE VEGETATION. INFREQUENT, WIDELY SCATTERED AREAS WHERE NATIVE VEGETATION HAS NOT YET TAKEN HOLD MAY QUALIFY FOR ACCEPTANCE AT THE DISCRETION OF THE TOWN.
    - E. WEEDS REPRESENT NO MORE THAN TEN PERCENT (10%) OF THE TOTAL VEGETATION ON SITE.
    - F. NO WEEDS ARE PRESENT FROM LIST A OF THE COLORADO NOXIOUS WEED LIST, AS AMENDED.
    - G. THE SITE IS PREDOMINANTLY FREE OF WEEDS FROM LIST B OF THE COLORADO NOXIOUS WEED LIST, AS AMENDED.
    - H. WEEDS ARE EVENLY DISTRIBUTED THROUGHOUT THE SITE WITH NO LARGE CONCENTRATIONS PRESENT.
    - I. A NEW GRADING PERMIT AND REPLACEMENT SECURITY HAS BEEN SUBMITTED AND APPROVED FOR THE APPLICABLE SITE OR THE GRADING PERMIT HAS BEEN ASSIGNED AS PROVIDED BY SECTION 11.10.150 OF THE TOWN OF PARKER MUNICIPAL CODE. IT IS THE PROPERTY OWNER'S OBLIGATION, AT THE TIME OF CLOSING ON THE SALE OF A SITE THAT IS SUBJECT TO A GRADING PERMIT, TO ENSURE THAT THE NEW PROPERTY OWNER HAS PROVIDED THE TOWN WITH A REPLACEMENT SECURITY.
    - J. ALL KNOWN DRAINAGE ISSUES ASSOCIATED WITH THE PROJECT HAVE BEEN MITIGATED AND A SUFFICIENT AMOUNT OF TIME HAS PASSED TO ENSURE THAT SUCH ISSUES HAVE BEEN CORRECTED. THIS REQUIREMENT DOES NOT INCLUDE THOSE DRAINAGE ISSUES ORIGINATING ON RESIDENTIAL LOTS.

(D) NOXIOUS WEEDS MUST BE CONTROLLED AS PROVIDED UNDER STATE LAW AND SECTION 6.01.260 OF THE TOWN OF PARKER MUNICIPAL CODE. FAILURE TO CONTROL NOXIOUS WEEDS ON THE SITE MAY CONSTITUTE A NUISANCE, SUBJECT TO THE PENALTIES CONTAINED IN THE CODE.

DEFINITIONS:

DEVELOPABLE PROPERTY MEANS ANY LAND THAT HAS BEEN GRADED AND IS PART OF A PLATTED LOT OR PLATTED TRACT OF RECORD, THAT WAS PLATTED FOR FUTURE DEVELOPMENT, INCLUDING RESIDENTIAL HOME CONSTRUCTION OR PUBLIC IMPROVEMENTS.

NONDEVELOPABLE PROPERTY MEANS LAND THAT HAS BEEN GRADED AND WILL NOT BE FURTHER DISTURBED AS PART OF ANY FUTURE DEVELOPMENT. EXAMPLES INCLUDE, BUT ARE NOT LIMITED TO: PARKS, OPEN SPACE, HOMEOWNER ASSOCIATION OR BUSINESS ASSOCIATION PLATTED TRACTS, DETENTION PONDS AND DRAINAGEWAYS.

32. FAILURE TO COMPLY WITH ANY OF THE REQUIREMENTS DESCRIBED IN THIS SECTION MAY RESULT IN THE ISSUANCE OF: A NOTICE OF INTENT TO ISSUE A STOP WORK ORDER, A STOP WORK ORDER AND/OR THE REMEDIES/PENALTIES DESCRIBED IN CHAPTER 11.10 OF THE TOWN OF PARKER MUNICIPAL CODE.
33. ANY PERSON CONVICTED OF VIOLATING ANY PROVISION OF THE TOWN OF PARKER, GRADING & EARTH MOVEMENT SECTION OF THE MUNICIPAL CODE SHALL BE GUILTY OF A MISDEMEANOR AND, UPON CONVICTION, BE PUNISHED BY A FINE OF NOT MORE THAN FOUR HUNDRED NINETY NINE DOLLARS ($499.00) FOR EACH SEPARATE OFFENSE. EACH DAY A VIOLATION CONTINUES SHALL CONSTITUTE A SEPARATE OFFENSE. THE TOWN ALSO MAY SEEK IN MUNICIPAL COURT AN INJUNCTION, ABATEMENT, RESTITUTION OR ANY OTHER REMEDY TO PREVENT, ENJOIN, ABATE OR REMOVE THE VIOLATION. A PERSON CONVICTED OF VIOLATING CHAPTER 11.10 OF THE TOWN OF PARKER MUNICIPAL CODE SHALL BE LIABLE FOR THE ACTUAL COST OF REHABILITATING THE PROPERTY. THE COSTS MAY BE RECOVERED AS RESTITUTION IN MUNICIPAL COURT PROCEEDINGS OR IN A SEPARATE CIVIL ACTION.
34. THE TOWN OF PARKER RESERVES THE RIGHT TO ALLOW MODIFICATIONS AND SUBSTITUTIONS TO THE CBMP NOTES AND DETAILS WHEN SUCH MODIFICATIONS AND SUBSTITUTIONS OFFER THE SAME LEVEL OF PROTECTION AS THE STANDARD REQUIREMENTS BASED UPON THE SPECIFIC SITUATION, AS DETERMINED BY TOWN STAFF. DUE TO THE INSIGNIFICANCE AND REGULARITY OF SUCH MODIFICATIONS AND SUBSTITUTIONS, THE APPROVAL OF SUCH VARIATIONS MAY NOT BE DOCUMENTED BY TOWN STAFF.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | GEN NOTES 4 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

- CD — CHECK DAM
- CF — CONSTRUCTION FENCE
- CP — CULVERT PROTECTION
- CWA — CONCRETE WASHOUT AREA
- D — DEWATERING
- DD — DIVERSION DITCH
- DP — DETENTION POND PROTECTION
- DTC — DEBRIS TRASH CONTROL
- ECB — EROSION CONTROL BLANKET
- IPAN — INLET PROTECTION FOR AREA INLETS NOT IN PAVEMENT
- IPAP — INLET PROTECTION FOR AREA INLETS IN PAVEMENT
- IPCOG — INLET PROTECTION, CURB ON-GRADE, TYPE R INLET
- IPCOS — INLET PROTECTION, CURB ON SUMP, TYPE R INLET

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | LEGEND 1 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

- LP — LOT PROTECTION
- MWP — MASONRY WORK PROTECTION
- PTP — PORTABLE TOILET PROTECTION
- RCSC — ROUGH CUT STREET CONTROL
- RS — ROCK SOCK
- RSS — ROCK SOCK IN SWALE
- SB — STRAW BALE
- SCL — SEDIMENT CONTROL LOGS
- SF — SILT FENCE
- SMC — SEEDING, MULCHING AND CRIMPING
- SR — SURFACE ROUGHING
- SSA — STABILIZED STAGING AREA
- STP — SIDEWALK TRANSITION PROTECTION

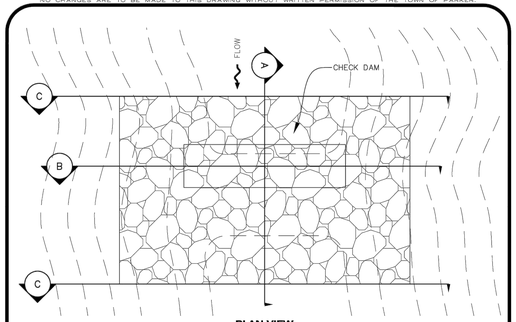
Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | LEGEND 2 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

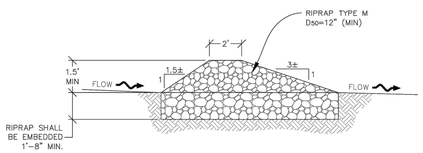
- TI — TEMPORARY IRRIGATION
- TSB — TEMPORARY SEDIMENT BASIN
- VTC — VEHICLE TRACKING CONTROL

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | LEGEND 3 OF 3 Oct. 2013

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PLAN VIEW



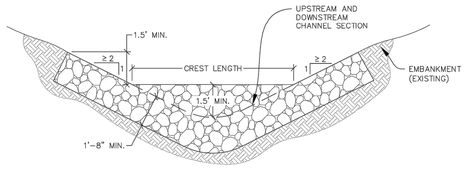
SECTION A

CD — CHECK DAM

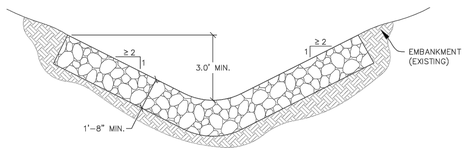
Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | CD 1 OF 3 Oct. 2013

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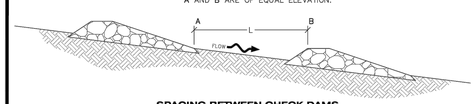
SECTION B



SECTION C

NOTE: SECTION C IS LOCATED IMMEDIATELY UPSTREAM AND DOWNSTREAM OF THE CHECK DAM, THEREFORE NO ROCK IS SHOWN WITHIN THE CHANNEL FLOW AREA.

L = THE DISTANCE SUCH THAT POINT **A** AND **B** ARE OF EQUAL ELEVATION.



SPACING BETWEEN CHECK DAMS

CD **CHECK DAM**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

CHECK DAM INSTALLATION NOTES

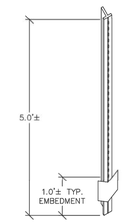
1. SEE PLAN VIEW FOR LOCATION(S) OF CHECK DAMS.
2. CHECK DAMS SHOWN ON CBMP PLAN SHALL BE INSTALLED WHEN DIRECTED BY THE TOWN'S INSPECTOR.
3. RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A D50 MEDIAN STONE SIZE OF 12".
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1'-8".
5. THE MAXIMUM SPACING BETWEEN CHECK DAMS SHOULD BE SUCH THAT THE BOTTOM OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM AS SHOWN IN THE DETAIL.

CHECK DAM INSPECTION AND MAINTENANCE NOTES

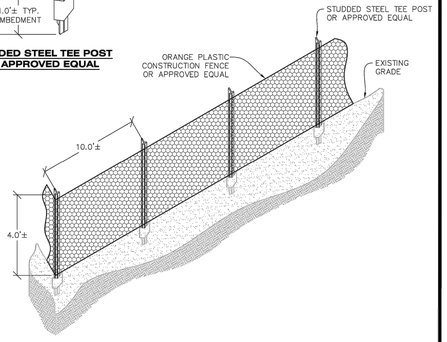
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE CHECK DAMS.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE SEDIMENT HAS REACHED A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE CREST OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
3. CHECK DAMS SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
4. WHEN CHECK DAMS ARE REMOVED, THE TOWN'S INSPECTOR MAY REQUIRE EXCAVATIONS TO BE FILLED WITH SUITABLE COMPACTED TOPSOIL AND ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE CHECK DAMS BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).
5. IN SOME INSTANCES, CHECK DAMS MAY REMAIN IN PLACE PERMANENTLY.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

NOTE:
CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO EACH TEE POST OR APPROVED EQUAL.



STUDDED STEEL TEE POST OR APPROVED EQUAL



CF **CONSTRUCTION FENCE**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

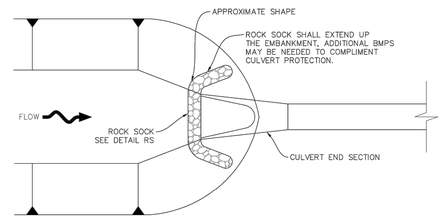
CONSTRUCTION FENCE INSTALLATION NOTES

1. THE CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO EACH POST OR APPROVED EQUAL.

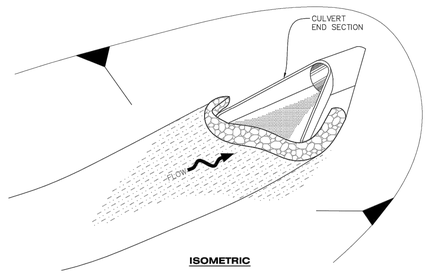
CONSTRUCTION FENCE INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE CONSTRUCTION FENCE AND MAKE ANY NECESSARY REPAIRS.
2. CONSTRUCTION FENCE SHALL BE REPAIRED WHEN THE FENCING MATERIAL FALLS OUT OF COMPLIANCE WITH THE NOTES AND DETAILS.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



PLAN



ISOMETRIC

CP **CULVERT PROTECTION (INLET)**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

CULVERT PROTECTION (INLET) INSTALLATION NOTES

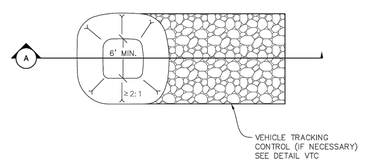
1. SEE PLAN VIEW FOR LOCATION(S) OF CULVERT PROTECTION (INLET).
2. ROCK SOCK SHALL BE CONSTRUCTED ACCORDING TO THE DETAIL (SEE DETAIL RS).
3. ROCK SOCK SHALL BE APPROXIMATELY 12" IN DIAMETER.
4. ROCK SOCK SHALL EXTEND ABOVE THE FLOW LINE ELEVATION ON BOTH SIDES OF THE CULVERT END SECTION.

CULVERT PROTECTION (INLET) INSPECTION AND MAINTENANCE NOTES

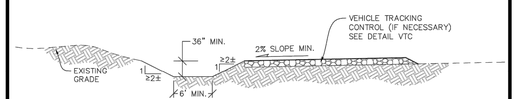
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE CULVERT PROTECTION (INLET).
2. AT A MINIMUM, ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE SEDIMENT HAS REACHED A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE ROCK SOCK.
3. CULVERT PROTECTION (INLET) IS TO REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
4. WHEN THE CULVERT INLET PROTECTION IS REMOVED, THE TOWN'S INSPECTOR MAY REQUIRE ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE CULVERT INLET PROTECTION TO BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

NOTE:
A VTC PAD IS NOT NECESSARY IF THERE IS ANOTHER VTC PAD IN BETWEEN THE CWA AND ROADWAY, PARKING LOT, DRIVE AISLES, ETC.



PLAN VIEW



SECTION A

CWA **CONCRETE WASHOUT AREA**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

CONCRETE WASHOUT AREA INSTALLATION NOTES

1. CONCRETE WASHOUT AREAS SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
2. A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT THE ACCESS POINT TO ALL CONCRETE WASHOUT AREAS WHEN NO OTHER VTC PAD EXISTS IN BETWEEN THE CWA AND THE ROADWAY.
3. IF GROUNDWATER IS ENCOUNTERED WHEN DIGGING THE PIT, A NEW LOCATION SHOULD BE SELECTED. IF NO OTHER LOCATION CAN BE FOUND, A ONE-PIECE IMPERVIOUS LINER SHALL BE REQUIRED ALONG THE BOTTOM AND SIDES OF THE SUBSURFACE PIT.

CONCRETE WASHOUT AREA INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE CONCRETE WASHOUT AREA.
2. CONCRETE WASHOUT MATERIALS SHALL BE REMOVED BEFORE ITS CAPACITY HAS BEEN REACHED.
3. CONCRETE WASHOUT AREAS SHALL BE ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE AND ASSOCIATED WASH WATER.
4. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE AS NECESSARY TO ENSURE ADEQUATE CAPACITY.
5. CONCRETE WASHOUT AREAS SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.
6. WHEN CONCRETE WASHOUT AREAS ARE REMOVED, THE TOWN'S INSPECTOR MAY REQUIRE EXCAVATIONS TO BE FILLED WITH SUITABLE COMPACTED BACKFILL AND TOPSOIL, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE CONCRETE WASHOUT AREAS SHALL BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).

DRAWN BY	REVISIONS	DATE	
		06-18-2021	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS

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TOWN OF PARKER, COLORADO

CBMP DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

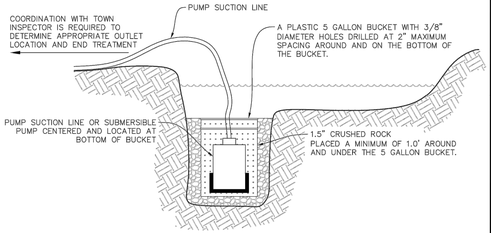
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20 OF 33
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Plotted: 6/22/2021 7:03 PM Dwg Name: P:\Cripkc3\ComSouth09 - Belford Ave East\dwg\Engr\Final Drawings\Plan Set\CBMP DETAILS.dwg Updated By: MMcGuire

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TYPICAL DEWATERING SUMP

NOTE:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE APPROPRIATE MEASURES TO PROTECT PUMPING EQUIPMENT AND MINIMIZE SEDIMENT. USE OF A PLASTIC 5 GALLON BUCKET IS SUGGESTED BUT NOT REQUIRED. THE CONTRACTOR SHALL NOT HOLD THE TOWN LIABLE FOR DAMAGE TO PUMPING EQUIPMENT REGARDLESS OF METHODS USED.

D **DEWATERING**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | D 1 OF 2 Oct. 2013

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DEWATERING INSTALLATION NOTES

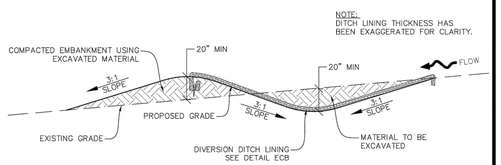
1. IT IS THE EROSION CONTROL SUPERVISOR'S RESPONSIBILITY TO ENSURE THAT ALL DEWATERING IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT (CDPHE).

DEWATERING MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL INSPECT THE DEWATERING OPERATION TO ENSURE THAT THE DISCHARGE WATER IS DRAINING TO THE PROPER LOCATION(S) AND PERFORM ANY NECESSARY REPAIRS OR MAINTENANCE ON A FREQUENT BASIS.

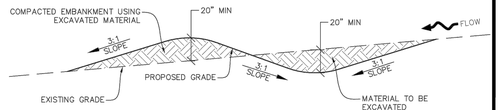
Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | D 2 OF 2 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



DIVISION DITCH GEOMETRY AND REQUIRED LINING MATERIAL SHALL BE OBTAINED FROM ASSOCIATED CBMP PLANS VIA THE DESIGN ENGINEER. IF THIS INFORMATION IS NOT PROVIDED ON THE CBMP PLANS, THE CONTRACTOR SHALL NOTIFY THE TOWN PRIOR TO CONSTRUCTION

DIVERSION DITCH SECTION LINED CHANNEL



DIVERSION DITCH SECTION UNLINED CHANNEL

DD **DIVERSION DITCH**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | DD 1 OF 2 Oct. 2013

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DIVERSION DITCH INSTALLATION NOTES

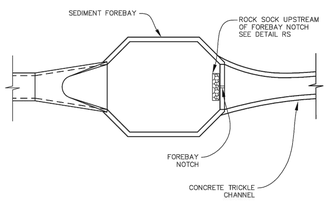
1. SEE THE PLAN VIEW FOR THE LOCATION(S) OF THE DIVERSION DITCHES.
2. A PLASTIC LINER, RIPRAP, OR EROSION CONTROL BLANKET MAY BE NECESSARY TO PROTECT THE DIVERSION DITCH. THE REQUIRED LINING MATERIAL SHALL BE OBTAINED FROM THE CBMP PLANS VIA THE DESIGN ENGINEER.
3. ALL MATERIAL EXCAVATED FROM THE DITCH MAY BE USED TO CONSTRUCT THE BERM ON THE DOWNHILL SIDE OF THE DITCH.
4. THE DIVERSION DITCH SHALL BE A MINIMUM OF 20" DEEP WITH APPROX. 3:1 SIDE SLOPES. THE ADJACENT BERM SHALL BE A MINIMUM OF 20" IN HEIGHT WITH APPROX. 3:1 SIDE SLOPES. ALL EMBANKMENTS SHALL BE FIRMLY COMPACTED.
5. THE DISCHARGE FROM THE DIVERSION DITCH SHALL BE DIRECTED TOWARDS AN APPROPRIATELY SIZED TEMPORARY SEDIMENT BASIN OR OTHER APPROVED AREA.

DIVERSION DITCH INSPECTION AND MAINTENANCE NOTES

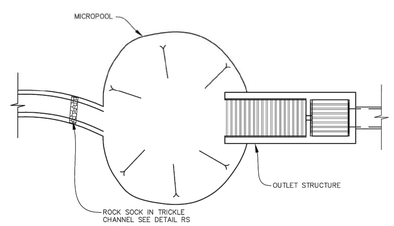
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE DIVERSION DITCH.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE THE SEDIMENT HAS REACHED A DEPTH EQUAL TO 1/2 (10") THE CREST HEIGHT.
3. DIVERSION DITCHES SHALL BE RE-GRADED FOLLOWING THE SIGNS OF MODERATE OR MORE SOIL EROSION OR ANY DAMAGE.
4. DIVERSION DITCHES ARE TO REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR. ALTERNATIVELY, THE DIVERSION DITCHES MAY BE REMOVED WHEN THE SITE'S TOPOGRAPHY CHANGES SUCH THAT SIGNIFICANT RUNOFF IS NO LONGER POSSIBLE. IN SOME INSTANCES, THE DIVERSION DITCHES MAY REMAIN IN PLACE PERMANENTLY.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | DD 2 OF 2 Oct. 2013

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FOREBAY



OUTLET / MICROPOOL

DP **DETENTION POND PROTECTION**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | DP 1 OF 2 Oct. 2013

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DETENTION POND PROTECTION INSTALLATION NOTES

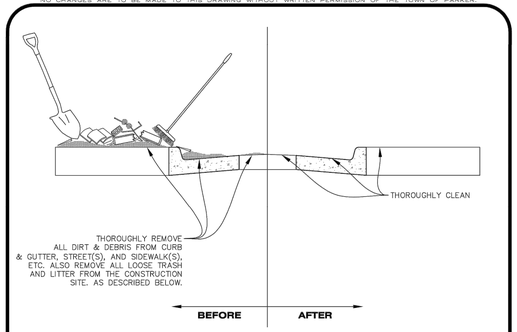
1. DETENTION POND PROTECTION SHALL BE INSTALLED IMMEDIATELY FOLLOWING THE CONSTRUCTION OF THE TRICKLE CHANNEL AND FOREBAY.
2. CRUSHED ROCK SHALL BE 2.0"–3.0" IN SIZE WITH A FRACTURED FACE (ALL SIDES).
3. ROCK SOCK FOR OUTLET STRUCTURE AND FOREBAY PROTECTION SHALL BE ONE CONTINUOUS PIECE (SEE DETAIL RS).

DETENTION POND PROTECTION INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE OUTLET STRUCTURE PROTECTION.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED IMMEDIATELY.
3. OUTLET STRUCTURE PROTECTION SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | DP 2 OF 2 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



NOTE:

1. THE EROSION CONTROL SUPERVISOR IS RESPONSIBLE FOR ENSURING THAT ALL STREETS, CURBS, GUTTERS, SIDEWALKS, DRIVEWAYS, PARKING LOTS, ALLEYS, TRICKLE CHANNELS, AND/OR OTHER IMPERVIOUS SURFACES IMPACTED BY CONSTRUCTION ACTIVITIES ARE THOROUGHLY CLEANED THROUGHOUT THE DAY IF THEY BECOME SOILED. THESE AREAS MUST ALSO BE THOROUGHLY CLEAN BEFORE THE END OF THE WORK DAY. FURTHERMORE, ALL LOOSE TRASH AND LITTER ASSOCIATED WITH THE PROJECT MUST BE REMOVED AND PROPERLY DISCARDED ON A DAILY BASIS.

DTC **DEBRIS AND TRASH CONTROL**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | DTC 1 OF 2 Oct. 2013

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DEBRIS CONTROL NOTES:

1. A COMBINATION OF SURFACE SCRAPING AND SWEEPING MAY BE NECESSARY TO PROPERLY CLEAN THESE AREAS.
2. ALL CHEMICAL SPILLS AND/OR STAINS ON THE SITE SHALL BE CLEANED TO THE MAXIMUM EXTENT PRACTICABLE. IN SOME CASES IT MAY BE NECESSARY TO USE PRESSURIZED WATER AND A VAC–TRUCK.
3. ON–SITE PERSONNEL, DELIVERY DRIVERS, ETC., SHOULD BE EDUCATED ON THE NEED FOR CONTINUAL DEBRIS AND TRASH CONTROL.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | DTC 2 OF 2 Oct. 2013

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		06/18/2021	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS

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TOWN OF PARKER, COLORADO

CBMP DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

SHEET 21 OF 33

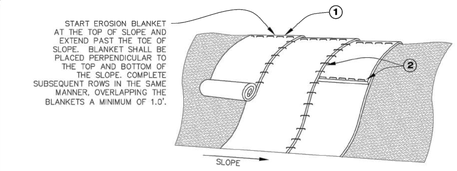
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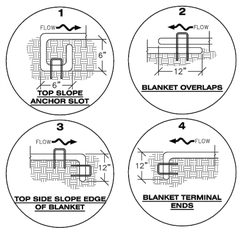
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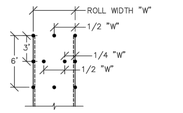
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STAPLE PATTERN

NOTE: STAPLES SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATION. IF MANUFACTURER INFO IS NOT AVAILABLE THEN ABOVE STAPLE PATTERN SHALL BE USED. WOODEN STAKES SHALL NOT BE USED FOR EROSION CONTROL BLANKET ON SLOPES.

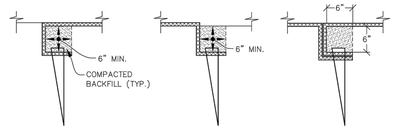
NOTE:
WHEN NECESSARY, ALL SEEDING SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF EROSION CONTROL BLANKETS. PLEASE SEE DETAIL SMC FOR SEEDING, MULCHING, AND CRIMPING REQUIREMENTS.

ECB

EROSION CONTROL BLANKET (SLOPE)

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	ECB 1 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

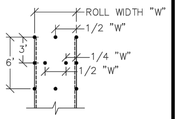


TOE OF SLOPE ANCHOR TRENCH | **TOP OF SLOPE ANCHOR TRENCH** | **JOINT ANCHOR TRENCH** USED TO JOIN BLANKETS TOGETHER (LONGITUDINAL)



SAW 2" x 4" LUMBER ON DIAGONAL

WOOD STAKE DETAIL
ALTERNATIVE WOOD STAKE PRODUCTS MAY BE USED WITH APPROVAL FROM THE TOWN.



STAKING PATTERN

NOTE: STAKES SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATION. IF MANUFACTURER INFO IS NOT AVAILABLE THEN ABOVE STAKING PATTERN SHALL BE USED. STAPLES SHALL NOT BE USED FOR EROSION CONTROL BLANKET IN CHANNELS.

NOTES:
1. WOOD STAKES SHALL BE INSTALLED SUCH THAT ONLY 1" IS EXPOSED ABOVE THE GROUND.
2. WHEN NECESSARY, ALL SEEDING SHALL BE COMPLETED PRIOR TO THE PLACEMENT OF EROSION CONTROL BLANKETS. PLEASE SEE DETAIL SMC FOR SEEDING, MULCHING, AND CRIMPING REQUIREMENTS.

ECB

EROSION CONTROL BLANKET (CHANNEL)

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	ECB 2 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE THE PLAN VIEW FOR THE LOCATION(S) OF THE EROSION CONTROL BLANKETS.
2. EROSION CONTROL BLANKETS USED FOR CHANNEL PROTECTION SHALL BE PROPERLY SELECTED BY THE DESIGN ENGINEER BASED ON CURRENT AND FUTURE FLOW RATES WITHIN THE CHANNEL. BASED ON THESE CALCULATIONS, TURF REINFORCEMENT MATTING OR RIPRAP MAY BE NECESSARY IN LIEU OF EROSION CONTROL BLANKETS.
3. IMMEDIATELY PRIOR TO BLANKET INSTALLATION, SOIL SURFACE SHALL BE SMOOTH, AND FREE OF ANY GAPS, VOIDS, WEEDS, ROCKS, STICKS, OR OTHER MISCELLANEOUS DEBRIS.
4. EROSION CONTROL BLANKET SHALL THEN BE INSTALLED ACCORDING TO THE DETAILED DRAWINGS.
5. ANY DAMAGED OR REMAINING STAPLES OR STAKES SHALL BE REMOVED FROM THE SITE.
6. ALL EROSION CONTROL BLANKETS FOR SLOPE PROTECTION INSTALLED IN THE TOWN SHALL BE DOUBLE NET, STRAW OR EXCELSIOR.

MANUFACTURER	PRODUCT NAME
NORTH AMERICAN GREEN	S150
APPROVED EQUAL	APPROVED EQUAL

7. IN MOST CASES, EROSION CONTROL BLANKETS FOR SLOPE PROTECTION ARE TO REMAIN IN PLACE PERMANENTLY.

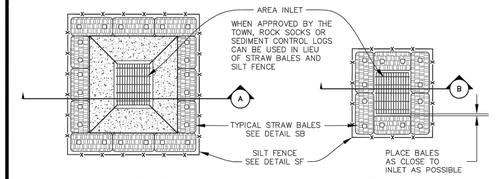
EROSION CONTROL BLANKET MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE EROSION CONTROL BLANKETS AND MAKE ANY NECESSARY REPAIRS.

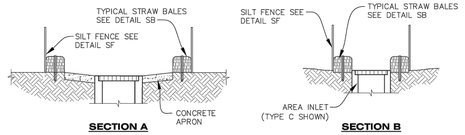
Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	ECB 3 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

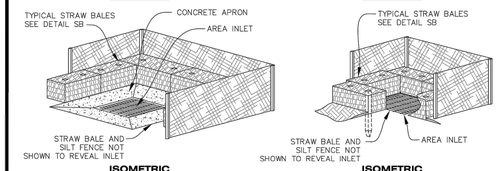
THIS METHOD OF INLET PROTECTION SHALL NOT BE USED ON INLETS RECEIVING SIGNIFICANT FLOWS, SUCH AS IN CERTAIN SWALES/CHANNELS OR HIGHWAY MEDIANS. INLET PROTECTION FOR AREA INLETS IN PAVEMENT (SEE DETAIL IPAP) SHALL BE USED IN THESE CONDITIONS.



AREA INLET WITH CONCRETE APRON PLAN VIEW | **AREA INLET PLAN VIEW**



SECTION A | **SECTION B**



ISOMETRIC | **ISOMETRIC**

IPAN

INLET PROTECTION FOR AREA INLETS NOT IN PAVEMENT

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	IPAN 1 OF 1 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

AREA INLET PROTECTION INSTALLATION NOTES

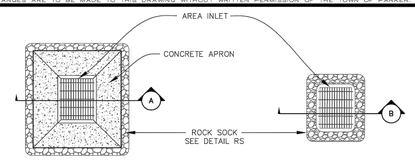
1. SEE PLAN VIEW FOR LOCATION(S) OF AREA INLET PROTECTION.
2. THE AREA INLET PROTECTION SHOWN ON CBMP PLANS SHALL BE INSTALLED ON EXISTING INLETS PRIOR TO ANY LAND DISTURBING ACTIVITIES OR IMMEDIATELY AFTER THE INSTALLATION OF NEW INLETS. AN INTERIM STYLE OF INLET PROTECTION MAY BE ALLOWED UNTIL THE INSTALLATION OF THE GUTTER AND/OR PAVEMENT.

AREA INLET PROTECTION INSPECTION AND MAINTENANCE NOTES

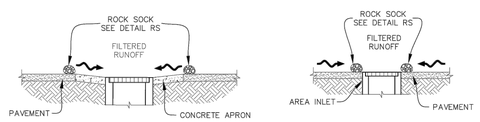
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE AREA INLET PROTECTION.
2. AREA INLET PROTECTION SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
3. WHEN THE AREA INLET PROTECTION IS REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE AREA INLET PROTECTION MAY NEED TO BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).
4. ACCUMULATED SEDIMENT SHALL BE REMOVED AS SOON AS POSSIBLE, IMMEDIATELY IN MOST CASES.

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	IPA 1 OF 1 Oct. 2013

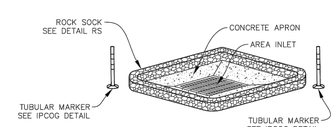
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AREA INLET WITH CONCRETE APRON PLAN VIEW | **AREA INLET PLAN VIEW**



SECTION A | **SECTION B**



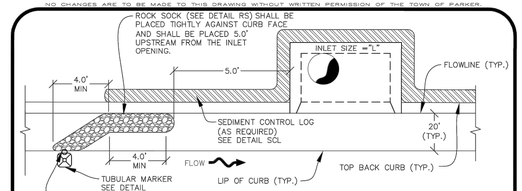
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IPAP

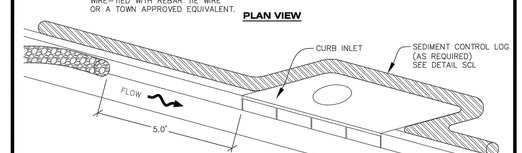
INLET PROTECTION FOR AREA INLETS IN PAVEMENT

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	IPAP 1 OF 1 Oct. 2013

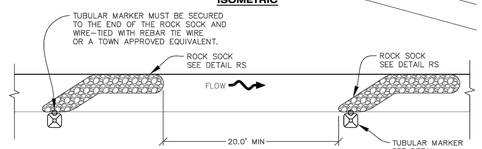
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PLAN VIEW



ISOMETRIC



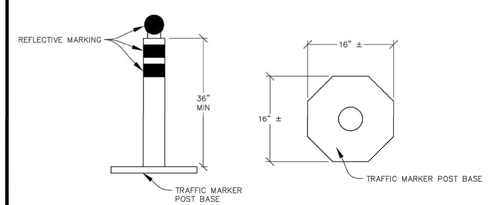
PLAN VIEW FOR MULTIPLE ROCK SOCKS

IPCOG

INLET PROTECTION, CURB ON-GRADE, TYPE R INLET

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	IPCOG 1 OF 3 Oct. 2013

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ELEVATION | **BASE**

TUBULAR TRAFFIC MARKER DETAIL

Town of Parker COLORADO	CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES	IPCOG 2 OF 3 Oct. 2013

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TOWN OF PARKER, COLORADO
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PROJ. ASSOC.: ASD
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22 OF 33
CLCPKC3

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Plotted: 6/22/2021 7:03 PM Dwg Name: P:\Cityjobs\ComSouth09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\CBMP DETAILS.dwg Updated By: MMGuire

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INLET PROTECTION, CURB ON-GRADE INSTALLATION NOTES

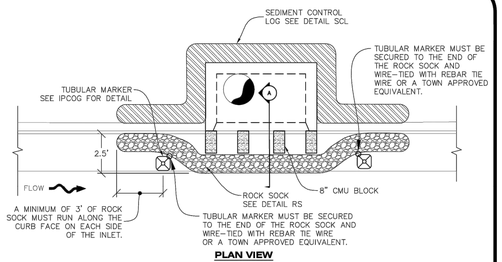
1. SEE CBMP PLAN FOR LOCATION(S) OF ON-GRADE INLET PROTECTION.
2. CRUSHED ROCK SHALL BE 2.0"-3.0" IN SIZE WITH A FRACTURED FACE (ALL SIDES).
3. ROCK SOCK FOR ON-GRADE INLET PROTECTION SHALL BE ONE CONTINUOUS PIECE.
4. ROCK SOCK SHALL BE CONSTRUCTED USING CHICKEN WIRE OR OTHER APPROVED MATERIAL, SIZED TO KEEP ROCK FROM SPILLING OUT.
5. ROCK SOCK SHALL BE PLACED 5.0' UPHILL OF THE INLET OPENING.
6. TUBULAR MARKER SHALL BE A MINIMUM OF 3.0' HIGH WITH REFLECTIVE BANDS AND OCTAGON SHAPED BASES.
7. THE CURB INLET PROTECTION SHOWN ON CBMP PLAN SHALL BE INSTALLED ON EXISTING INLETS PRIOR TO ANY LAND DISTURBING ACTIVITIES OR IMMEDIATELY AFTER THE APPLICABLE INSTALLATION OF THE FIRST LIFT OF ASPHALT ON ROADWAYS DRAINING TO THE INLET.

ON-GRADE INLET PROTECTION INSPECTION AND MAINTENANCE NOTES

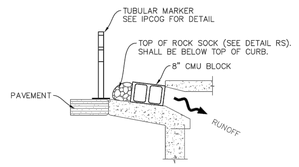
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE ON-GRADE INLET PROTECTION.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED AS SOON AS POSSIBLE, IMMEDIATELY IN MOST CASES.
3. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED OR DAMAGED.
4. ON-GRADE INLET PROTECTION SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | IPCOG 3 OF 3 Oct. 2013

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PLAN VIEW



SECTION A

IPCOS **INLET PROTECTION, CURB ON SUMP, TYPE R INLET**

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CURB INLET PROTECTION INSTALLATION NOTES

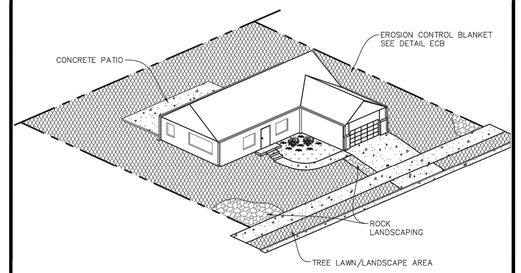
1. SEE CBMP PLAN FOR LOCATION(S) OF CURB INLET PROTECTION.
2. CRUSHED ROCK SHALL BE 2.0"-3.0" IN SIZE WITH A FRACTURED FACE (ALL SIDES).
3. ROCK SOCK SHALL BE ONE CONTINUOUS PIECE OR SHALL BE CONSTRUCTED USING WIRE WRAPPED JOINTS (SEE DETAIL RS).
4. ROCK SOCK SHALL BE CONSTRUCTED USING CHICKEN WIRE OR OTHER APPROVED MATERIAL SIZED TO KEEP ROCK FROM SPILLING OUT.
5. ROCK SOCK SHALL EXTEND 3.0' ALONG THE CURB BEYOND LOCATIONS WHERE IT RETURNS TO CONTACT CURB FACE.
6. TUBULAR TRAFFIC MARKERS SHALL BE A MINIMUM OF 36" IN HEIGHT WITH REFLECTIVE BANDS AND OCTAGON SHAPED BASES.
7. THE CURB INLET PROTECTION SHOWN ON CBMP PLAN SHALL BE INSTALLED ON EXISTING INLETS PRIOR TO ANY LAND DISTURBING ACTIVITIES OR IMMEDIATELY AFTER THE INSTALLATION OF THE FIRST LIFT OF ASPHALT ON ROADWAYS DRAINING TO THE CURB INLET. CMU BLOCKS OR THE ROCK SOCK SHALL BE USED AS INTERIM PROTECTION UNTIL THE FIRST LIFT OF ASPHALT IS INSTALLED.

CURB INLET PROTECTION INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE CURB INLET PROTECTION.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED AS SOON AS POSSIBLE, IMMEDIATELY IN MOST CASES.
3. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED OR DAMAGED.
4. CURB INLET PROTECTION SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | IPCOS 2 OF 2 Oct. 2013

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LP **LOT PROTECTION**

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EROSION CONTROL BLANKET FOR LOT PROTECTION INSTALLATION NOTES

1. ALL EROSION CONTROL BLANKETS FOR LOT PROTECTION INSTALLED IN THE TOWN SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS:

MANUFACTURER	PRODUCT NAME
NORTH AMERICAN GREEN	S150 BN
APPROVED EQUAL	APPROVED EQUAL

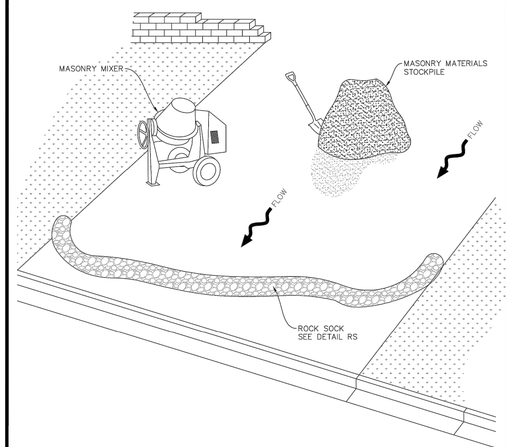
2. ALL EROSION CONTROL BLANKETS FOR LOT PROTECTION SHALL BE INSTALLED ACCORDING TO THE DETAIL DRAWINGS, WITH THE FOLLOWNG ALLOWANCES AND ADDITIONS:
   - THE TOWN WILL ALLOW THE USE OF BIODEGRADABLE, EROSION CONTROL BLANKET-SPECIFIC STAPLES, IN LIEU OF TRADITIONAL METAL STAPLES.
   - ALL EROSION CONTROL BLANKET EDGES (SIDES AND ENDS) MUST OVERLAP THE ADJACENT BLANKET BY A MINIMUM OF 6-INCHES WITH THE UP-GRADIENT EDGES BEING PLACED ON TOP OF THE DOWN-GRADIENT EDGE OF THE ADJACENT BLANKET.
   - THE EDGES (SIDES AND ENDS) OF THE EROSION CONTROL BLANKETS DO NOT NEED TO BE TRENCHED INTO THE GROUND ASSUMING THE SITE CONDITIONS WILL NOT CAUSE EROSION BENEATH THE BLANKETS. THESE ASSUMPTIONS WILL BE THE RESPONSIBILITY OF THE EROSION CONTROL SUPERVISOR. ON OCCASION, THE TOWN'S INSPECTOR MAY REQUEST TRENCHING BASED UPON SITE CONDITIONS.
   - TOPSOIL PLACEMENT, SEEDING, AND MULCHING WILL NOT BE REQUIRED ON THE LOTS PRIOR TO THE INSTALLATION OF THE EROSION CONTROL BLANKET.
3. ANY DAMAGED OR EXCESS STAPLES SHALL BE REMOVED FROM THE SITE FOLLOWING INSTALLATION.
4. THE EROSION CONTROL BLANKETING REQUIRED AS PART OF THE LOT PROTECTION (LP) REQUIREMENT MUST BE INSTALLED OVER ALL UN-LANDSCAPED AREAS WITHIN EACH RESIDENTIAL, MULTI-FAMILY, AND COMMERCIAL LOT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY / TEMPORARY CERTIFICATE OF OCCUPANCY.

EROSION CONTROL BLANKET FOR LOT PROTECTION MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE EROSION CONTROL BLANKET FOR LOT PROTECTION.
2. EROSION CONTROL BLANKETS FOR LOT PROTECTION ARE INTENDED TO REMAIN IN PLACE AND MAINTAINED UNTIL LANDSCAPING IS INSTALLED.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | LP 2 OF 2 Oct. 2013

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MWP **MASONRY WORK PROTECTION**

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MASONRY WORK PROTECTION INSTALLATION NOTES

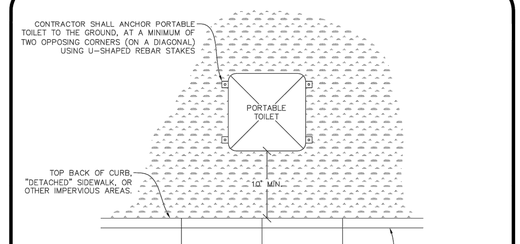
1. MASONRY WORK PROTECTION MAY NEED TO BE INSTALLED WHEN MASONRY WORK AND MIXING IS OCCURRING.
2. A ROCK SOCK SHALL BE INSTALLED IN A CRESCENT SHAPE ON THE DOWNHILL SIDE OF THE MASONRY WORK AND MIXER.
3. CRUSHED ROCK SHALL BE 2.0"-3.0" IN SIZE WITH A FRACTURED FACE (ALL SIDES).
4. ROCK SOCK SHALL BE ONE CONTINUOUS PIECE OR SHALL BE CONSTRUCTED USING WIRE WRAPPED JOINTS (SEE DETAIL RS).
5. ROCK SOCK SHALL BE CONSTRUCTED USING CHICKEN WIRE OR OTHER APPROVED MATERIAL, SIZED TO KEEP ROCK FROM SPILLING OUT.

MASONRY WORK PROTECTION INSPECTION AND MAINTENANCE NOTES

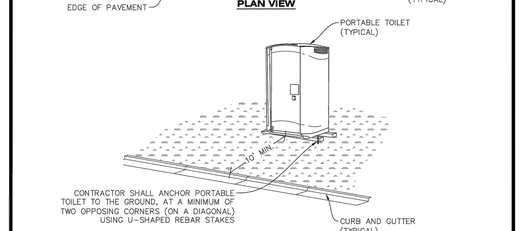
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE MASONRY WORK PROTECTION.
2. ALL CONCRETE WASTE SHALL BE REGULARLY CLEANED AND PLACED IN THE CONCRETE WASH OUT AREA.
3. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED OR DAMAGED.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | MWP 2 OF 2 Oct. 2013

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PLAN VIEW



ISOMETRIC

PTP **PORTABLE TOILET PROTECTION**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | PTP 1 OF 2 Oct. 2013

DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

SHEET 23 OF 33
CLCPKC3

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PORTABLE TOILET PROTECTION INSTALLATION NOTES

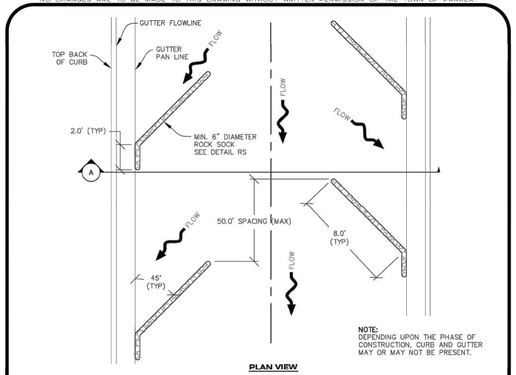
1. PORTABLE TOILETS SHALL BE PLACED A MINIMUM OF 10.0' BEHIND ALL CURBS, SIDEWALKS, AND OTHER IMPERVIOUS AREAS.
2. ALL PORTABLE TOILETS MUST BE GROUPED TOGETHER.
3. PORTABLE TOILETS SHALL BE SECURELY ANCHORED TO THE GROUND USING U-SHAPED REBAR STAKES.
4. U-SHAPED REBAR STAKES SHALL BE POSITIONED ON AT LEAST 2 OPPOSING (DIGITAL) CORNERS.

PORTABLE TOILET PROTECTION INSPECTION AND MAINTENANCE NOTES

2. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE PORTABLE TOILET PROTECTION.
3. PORTABLE TOILETS SHALL BE SERVICED AT THE NECESSARY INTERVALS TO ELIMINATE THE POSSIBILITY OF OVERFLOW.
4. WHEN THE PORTABLE TOILETS ARE REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE TOILETS MAY NEED TO BE LANDSCAPED OR ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).
5. PORTABLE TOILETS THAT ARE NOT CONSISTENTLY MAINTAINED IN ACCORDANCE WITH THESE REQUIREMENTS MAY NEED TO BE CLUSTERED TOGETHER, IN ONE CENTRALIZED LOCATION IN ORDER TO INCREASE COMPLIANCE AND REDUCE THE CHANCE OF A SPILL.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | PTP | 2 OF 2 | Oct. 2013

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PLAN VIEW



SECTION A

RCSC

ROUGH CUT STREET CONTROL

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | RCSC | 1 OF 2 | Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

ROUGH CUT STREET CONTROL INSTALLATION NOTES

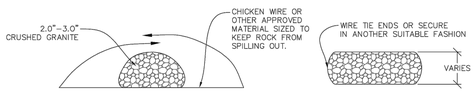
1. SEE CBMP PLAN FOR LOCATION(S) OF ROUGH CUT STREET CONTROL.
2. THE SPACING OF THE ROUGH CUT STREET CONTROL MAY BE DETERMINED BY THE DESIGN ENGINEER AND SHOWN ON THE CBMP PLAN.

ROUGH CUT STREET CONTROL INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE ROUGH CUT STREET CONTROL.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS 1/2 THE HEIGHT OF THE ROCK SOCK.
3. ROUGH CUT STREET CONTROL SHALL BE REPAIRED IMMEDIATELY FOLLOWING ANY SIGN OF WEAR OR ALTERATION OF THE ORIGINAL SHAPE AND DIMENSIONS.
4. ROUGH CUT STREET CONTROL SHALL BE KEPT IN PLACE AND MAINTAINED UNTIL SUB-GRADE PREPARATION BEGINS FOR PAVING. AT THAT POINT, THE RCSC SHOULD BE REMOVED IN INCREMENTS BASED ON SUBGRADE PREPARATION.

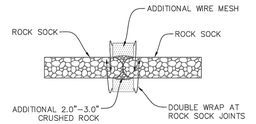
Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | RCSC | 2 OF 2 | Oct. 2013

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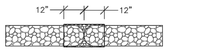


CROSS SECTION

COMPLETED ROCK SOCK



JOINT PLAN VIEW



ANY GAP AT JOINT SHALL BE FILLED WITH AN ADEQUATE AMOUNT OF 2.0"-3.0" CRUSHED ROCK AND DOUBLE WRAPPED WITH ADDITIONAL CHICKEN WIRE (OR APPROVED EQUAL) SECURED TO ENDS OF ROCK REINFORCED SOCK.

JOINT ELEVATION

RS

ROCK SOCK

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | RS | 1 OF 2 | Oct. 2013

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ROCK SOCK INSTALLATION NOTES

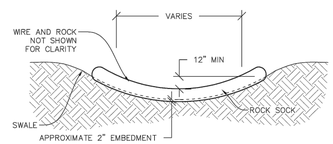
1. SEE CBMP PLAN FOR LOCATION(S) OF ROCK SOCK.
2. CRUSHED ROCK SHALL BE APPROXIMATELY 2.0"-3.0" GRANITE IN SIZE WITH A FRACTURED FACE (ALL SIDES).
3. ROCK SOCK SHALL BE APPROXIMATELY ONE CONTINUOUS PIECE OR SHALL BE CONSTRUCTED USING WIRE WRAPPED JOINTS (SEE DETAIL RS).
4. ROCK SOCK SHALL BE CONSTRUCTED USING CHICKEN WIRE OR OTHER APPROVED MATERIAL SIZED TO KEEP ROCK FROM SPILLING OUT.
5. MINIMUM ROCK SOCK DIAMETER SHALL VARY BASED ON APPLICATION (7" MIN).
6. TUBULAR MARKERS MAY NEED TO BE USED IN CONJUNCTION WITH ROCKS SOCKS ANYTIME THE ROCK SOCK IS PLACED ON A ROADWAY, SIDEWALK, PARKING LOT OR OTHER LOCATION SUSCEPTIBLE TO VEHICLE OR PEDESTRIAN TRAFFIC. TUBULAR MARKERS SHALL CONFORM TO THE TUBULAR MARKER DETAIL.

ROCK SOCK INSPECTION AND MAINTENANCE NOTES

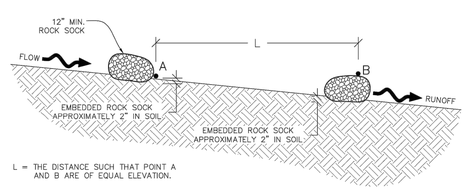
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE ROCK SOCKS.
2. ROCK SOCKS SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED OR DAMAGED.
3. ROCK SOCKS SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | RS | 2 OF 2 | Oct. 2013

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SWALE ELEVATION



L = THE DISTANCE SUCH THAT POINT A AND B ARE OF EQUAL ELEVATION.

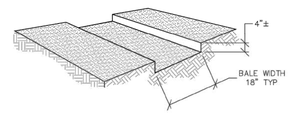
SWALE SPACING

RSS

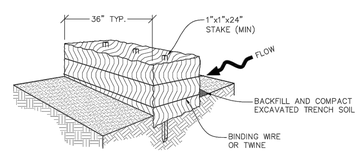
ROCK SOCK IN SWALE

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | RSS | 1 OF 1 | Oct. 2013

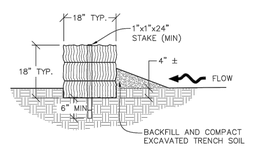
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TRENCH EXCAVATION



STRAW BALE INSTALLATION



SECTION

SB

STRAW BALE

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SB | 1 OF 2 | Oct. 2013

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STRAW BALE INSTALLATION NOTES

1. SEE CBMP PLAN FOR LOCATION(S) OF STRAW BALES.
2. TYPICAL STRAW BALES SHALL BE APPROXIMATELY 36"X18"X18".
3. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE A MINIMUM OF 1"X1"X24".
4. WOODEN STAKES SHALL BE PLACED APPROXIMATELY 6" INTO THE GROUND.
5. STRAW BALES SHALL BE SPACED AND POSITIONED ACCORDING TO DETAILS.

STRAW BALE INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE STRAW BALES.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE THE SEDIMENT HAS REACHED A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE STRAW BALE.
3. STRAW BALES MAY NEED TO BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR OTHERWISE DAMAGED.
4. STRAW BALES SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN INSPECTOR.
5. WHEN THE STRAW BALES ARE REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE STRAW BALES MAY NEED TO BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SB | 2 OF 2 | Oct. 2013

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

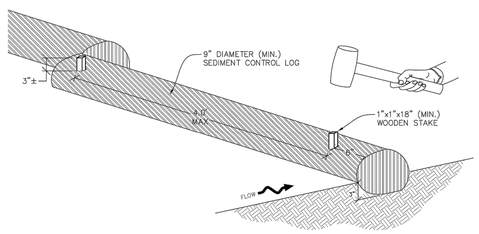
SHEET 24 OF 33
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NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

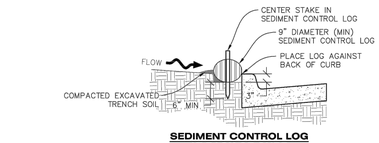


SECTION A

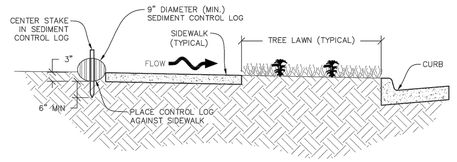
SCL **SEDIMENT CONTROL LOG**

Town of Parker COLORADO	CBMP	SCL
	CONSTRUCTION BEST MANAGEMENT PRACTICES	1 OF 3 Oct. 2013

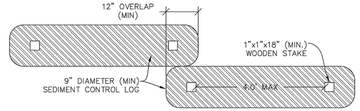
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



SEDIMENT CONTROL LOG AT BACK OF CURB



SEDIMENT CONTROL LOG AT SIDEWALK WITH TREE LAWN



SEDIMENT CONTROL LOG JOINTS

SCL **SEDIMENT CONTROL LOG**

Town of Parker COLORADO	CBMP	SCL
	CONSTRUCTION BEST MANAGEMENT PRACTICES	2 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE CBMP PLAN FOR LOCATION(S) OF SEDIMENT CONTROL LOGS.
2. ALL SEDIMENT CONTROL LOGS SHALL BE INSTALLED FREE OF DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
3. SEDIMENT CONTROL LOGS SHALL BE INSTALLED IMMEDIATELY ADJACENT TO AN IMPERVIOUS SURFACE SUCH AS A CURB HEAD, SIDEWALK, INLET LID, ETC. NO GAPS SHALL EXIST BETWEEN THE SEDIMENT CONTROL LOG AND THE IMPERVIOUS SURFACE.
4. A UNIFORM 3" DEEP ANCHOR TRENCH (APPROX.) IN THE SHAPE OF A HALF-SPHERE SHALL BE EXCAVATED USING A TRENCHER, SPADE-SHAPED SHOVEL, OR PICK. THE ANCHOR TRENCH SHALL BE SIZED TO ALLOW FOR THE SEDIMENT CONTROL LOG TO SEAT TIGHTLY AGAINST THE ANCHOR TRENCH.
5. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE ANCHOR TRENCH AND PROPERLY COMPACTED.
6. ANCHOR TRENCH SHALL BE RELATIVELY FREE OF ROCKS OR OTHER DEBRIS PRIOR TO THE PLACEMENT.
7. All SEDIMENT CONTROL LOGS SHALL BE PLACED 3" (APPROX.) BELOW THE GROUND AND PULLED TIGHT ON BOTH ENDS TO REMOVE ANY CURVES OR SNAGS.
8. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL THAT IS RELATIVELY FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED AGAINST THE GROUND AND SEDIMENT CONTROL LOG USING A SHOVEL, OR SIMILAR DEVICE.
9. SEDIMENT CONTROL LOG STAKES SHALL BE MADE OF WOOD AND SECURELY ANCHOR THE SCL IN PLACE.
10. STAKES SHALL BE PLACED ON 4.0' CENTERS AND EMBEDDED APPROXIMATELY 6" INTO THE GROUND. STAKES THAT ARE BROKEN PRIOR TO OR DURING INSTALLATION SHALL BE REPLACED.
11. SEDIMENT CONTROL LOGS SHALL OVERLAP A MINIMUM OF 12". THE OVERLAPPING SHALL OCCUR ON THE UP-GRADIENT SIDE OF THE LOGS.
12. SEDIMENT CONTROL LOGS SHALL BE STAKED WITHIN 6" FROM EACH END.
13. SEDIMENT CONTROL LOGS THAT ARE INSTALLED BEHIND CURBS AND SIDEWALKS MUST BE DONE SO THAT NO MORE THAN A 2" GAP EXISTS BETWEEN THE CONCRETE AND THE LOG. EROSION CONTROL BLANKETING (ECB) BETWEEN THE GAP MAY BE REQUIRED IN INSTANCES WHERE THIS DOES NOT OCCUR.

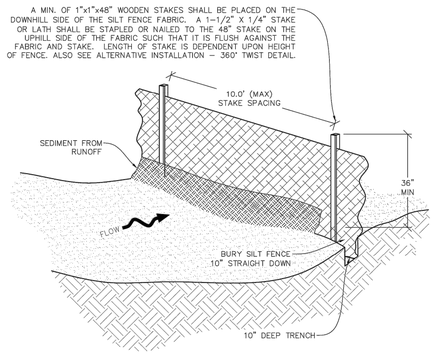
SEDIMENT CONTROL LOG INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SEDIMENT CONTROL LOGS.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE THE SEDIMENT HAS REACHED A DEPTH EQUAL TO 1/2 THE HEIGHT OF EXPOSED LOG.
3. SEDIMENT CONTROL LOGS SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
4. SEDIMENT CONTROL LOGS SHALL BE REPLACED WHEN THERE ARE ANY SIGNS OF WEAR OR DAMAGE THAT WOULD PREVENT THE SCL FROM FUNCTIONING AS DESIGNED.
5. WHEN THE SEDIMENT CONTROL LOGS ARE REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE SEDIMENT CONTROL LOGS MAY NEED TO BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).

Town of Parker COLORADO	CBMP	SCL
	CONSTRUCTION BEST MANAGEMENT PRACTICES	3 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

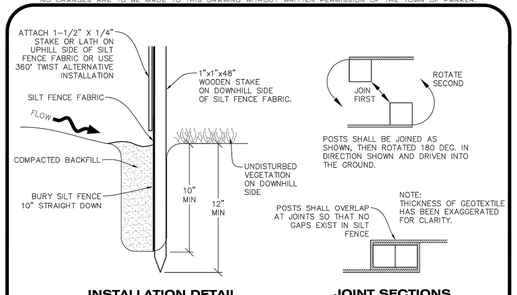
A MIN. OF 1"x1"x48" WOODEN STAKES SHALL BE PLACED ON THE DOWNHILL SIDE OF THE SILT FENCE FABRIC. A 1-1/2" X 1/4" STAKE OR LATH SHALL BE STAPLED OR NAILED TO THE 48" STAKE ON THE UPHILL SIDE OF THE FABRIC SUCH THAT IT IS FLUSH AGAINST THE FABRIC AND STAKE. LENGTH OF STAKE IS DEPENDENT UPON HEIGHT OF FENCE. ALSO SEE ALTERNATIVE INSTALLATION – 360° TWIST DETAIL.



—X—X— SF **SILT FENCE**

Town of Parker COLORADO	CBMP	SF
	CONSTRUCTION BEST MANAGEMENT PRACTICES	1 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



INSTALLATION DETAIL

JOINT SECTIONS



ALTERNATIVE INSTALLATION - 360° TWIST

—X—X— SF **SILT FENCE**

Town of Parker COLORADO	CBMP	SF
	CONSTRUCTION BEST MANAGEMENT PRACTICES	2 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SILT FENCE INSTALLATION NOTES

1. SEE CBMP PLAN FOR LOCATION(S) OF SILT FENCE.
2. ALL SILT FENCE SHALL BE INSTALLED IN GOOD CONDITION AND FREE OF ANY DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
3. A UNIFORM 10" DEEP ANCHOR TRENCH SHALL BE EXCAVATED USING A TRENCHER.
4. A 10" DEEP ANCHOR SLIT SHALL BE FORMED IF USING A STATIC SLICING METHOD.
5. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE ANCHOR TRENCH.
6. ANCHOR TRENCH SHALL BE GENERALLY FREE OF ROCKS OR OTHER DEBRIS PRIOR TO THE PLACEMENT OF THE SILT FENCE.
7. THE ANCHOR TRENCH SHALL BE THOROUGHLY BACKFILLED WITH SOIL THAT IS GENERALLY FREE OF ROCKS AND DEBRIS.
8. ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UP-GRADIENT SIDE OF THE SILT FENCE.
9. STAKES SHALL BE POSITIONED ON THE DOWNHILL SIDE OF THE SILT FENCE FABRIC AND PLACED ON 10.0' CENTERS OR LESS. STAKES SHALL BE EMBEDDED A MINIMUM OF 12" INTO THE GROUND. A WOODEN LATH SHALL BE ATTACHED TO THE OPPOSING (UPHILL) SIDE OF THE STAKE FOR ADDED STRENGTH AND SUPPORT. THE LATH SHALL HAVE THE FOLLOWING DIMENSIONS: 1"x¼"x24".
10. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD NOT BE SIGNIFICANT SAGGING ALONG ANY PORTION OF THE SILT FENCE AFTER IT HAS BEEN ANCHORED TO THE STAKES.
11. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES AND LATHS USING STAPLES OR NAILS OF AN APPROXIMATE LENGTH. ENOUGH STAPLES AND NAILS SHOULD BE PLACED ALONG THE LATH TO ENSURE PROPER ATTACHMENT.
12. SILT FENCE FABRIC SHALL MEET THE FOLLOWING MANDATORY REQUIREMENTS:

PROPERTIES	TEST METHOD	MANDATORY REQUIREMENTS
GRAB TENSILE STRENGTH	ASTM D 4632	≥ 124 LBS
MULLEN BURST STRENGTH	ASTM D 3786	≥ 300 PSI
PUNCTURE STRENGTH	ASTM D 4833	≥ 60 LBS
TRAPEZOID TEAR STRENGTH	ASTM D 4533	≥ 65 LBS
UV RESISTANCE	ASTM D 4355	≥ 80% AT 500 HOURS OF UV EXPOSURE
FLOW RATE	ASTM D 4491	≥ 10 GAL/MIN/FT2

13. AN ORIGINAL PRODUCT SPECIFICATION SHEET FROM THE SILT FENCE MANUFACTURER SHALL BE MADE AVAILABLE AT THE REQUEST OF THE TOWN'S INSPECTOR. THE PRODUCT SPECIFICATION SHEET SHALL PROVIDE THE RESULTS FOR THE TEST METHODS ABOVE.
14. SILT FENCE JOINTS SHALL BE CONNECTED ACCORDING TO THE ATTACHED DRAWING.
15. SILT FENCE THAT IS INSTALLED BEHIND CURBS AND SIDEWALKS MUST BE DONE SO THAT NO MORE THAN A 2" GAP EXISTS BETWEEN CONCRETE AND THE SILT FENCE. EROSION CONTROL BLANKETING (ECB) BETWEEN THE GAP MAY BE REQUIRED IN INSTANCES WHERE THIS DOES NOT OCCUR.

Town of Parker COLORADO	CBMP	SF
	CONSTRUCTION BEST MANAGEMENT PRACTICES	3 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SILT FENCE INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SILT FENCE.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED REGULARLY.
3. SILT FENCE SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
4. SILT FENCE SHALL BE REPLACED WHEN THERE ARE ANY SIGNS OF WEAR AND/OR DAMAGE.
5. WHEN THE SILT FENCE IS REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE SILT FENCE MAY NEED TO BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).

Town of Parker COLORADO	CBMP	SF
	CONSTRUCTION BEST MANAGEMENT PRACTICES	4 OF 4 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SEEDING AND MULCHING SHALL BE PERFORMED ACCORDING TO THE ACCOMPANYING DETAIL(S) AND TEXT. NO EXCEPTIONS SHALL BE MADE

1. SEE PLAN VIEW FOR:
   - LOCATION(S) OF SEEDING AND MULCHING
   - TYPE OF SEED MIX
2. SEED MIXES MAY CONFORM TO THE TABLE PROVIDED WITH THE SMC NOTES OR ALTERNATIVES MAY BE ALLOWED WITH PRIOR PERMISSION BY THE TOWN'S INSPECTOR.
3. SEEDING MAY BE PERFORMED YEAR ROUND ASSUMING THE SOIL IS NOT FROZEN. SEEDING DURING TIMES OF EXTREME TEMPERATURES SHOULD BE AVOIDED IF POSSIBLE.
4. AT THE BEGINNING OF THE LAND DISTURBANCE ACTIVITIES, IT IS HIGHLY RECOMMENDED THAT AN APPROPRIATE AMOUNT OF NATIVE TOPSOIL BE STRIPPED FROM THE SITE AND STOCKPILED. ALL AREAS, PRIOR TO PERMANENT SEEDING AND MULCHING, WILL LIKELY NEED TO BE COVERED WITH AN APPROPRIATE LAYER OF TOPSOIL. THIS REQUIREMENT APPLIES TO ALL AREAS WHERE NATIVE SEEDING IS SPECIFIED ON THE CBMP PLAN AND/OR LANDSCAPING PLANS.
5. IT IS STRONGLY RECOMMENDED THAT SAMPLES FROM THE STRIPPED TOPSOIL BE PROPERLY COLLECTED AND TESTED BY A QUALIFIED LABORATORY TO ENSURE ADEQUATE NUTRIENT CONTENT PRIOR TO SEEDING AND MULCHING. IF IT IS DISCOVERED THAT THE TOPSOIL IS VOID OF THE NUTRIENTS NECESSARY TO SUCCESSFULLY ESTABLISH THE REQUIRED VEGETATION, THEN THE APPROPRIATE AMENDMENTS SHALL BE ADDED.
6. ALL AREAS TO BE SEEDED AND MULCHED SHALL BE SURFACE ROUGHENED ACCORDING TO THE SURFACE ROUGHENING DETAILS AND NOTES. SURFACE ROUGHENING SHALL OCCUR AFTER PLACEMENT OF THE TOPSOIL.
7. WHEN INSTALLED WITH A DRILL SEEDER, SEED SHALL BE PLACED AT A DEPTH OF ¼ – ½ INCH. ROW SPACING SHALL BE NO MORE THAN 6-INCHES.
8. ALL AREAS INCAPABLE OF BEING DRILL SEEDED SHALL BE SURFACE ROUGHENED ACCORDING TO THE SURFACE ROUGHENING NOTES OR EFFECTIVELY ROUGHENED USING A HARROW OR OTHER SUCH IMPLEMENT. ALL AREAS SHALL BE UNIFORMLY HAND BROADCASTED WITH THE PROPER SEED MIX APPLIED AT TWO TIMES THE DRILL SEEDED RATE. BROADCASTED AREAS SHALL THEN BE RE-HARROWED OR RE-RAKED USING A HARD-TIPPED RAKE TO ENSURE THAT SEEDS ARE BURIED TO AN APPROXIMATE DEPTH OF ¼ – ½ INCH.
9. AFTER SEEDING HAS BEEN COMPLETED, MULCH SHALL BE UNIFORMLY APPLIED AT A RATE OF 2 TONS/ACRE (4,000 LBS/ACRE). MULCH SHALL BE MECHANICALLY CRIMPED TO A DEPTH OF 2 INCHES USING A CRIMPER. MULCH SHALL BE HAND CRIMPED AND COVERED WITH A TACKIFIER IN AREAS WHERE MECHANICAL CRIMPING IS NOT POSSIBLE. WHEN SOILS PERMIT, ALL MULCH SHALL BE CRIMPED SUCH THAT THE INDIVIDUAL PIECES OF STRAW OR HAY FORM EXAGGERATED V-SHAPES PROTRUDING OUT OF THE GROUND SEVERAL INCHES.
10. IN CERTAIN INSTANCES, IT MAY BE NECESSARY TO APPLY A TACKIFIER IN ORDER TO HELP WITH STRAW DISPLACEMENT. TACKIFIER SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS.

Town of Parker COLORADO	CBMP	SMC
	CONSTRUCTION BEST MANAGEMENT PRACTICES	1 OF 3 Oct. 2013

DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

Manhard CONSULTING LTD
7600 East Orchard Road, Suite 150-N, Greenwood Village, CO 80111 ph: 303.708.0500 manhard.com
Civil Engineering | Surveying | Water Resource Management | Construction Management

COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

SHEET
25 OF 33
CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

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Plotted: 6/22/2021 7:03 PM Dwg Name: P:\Cpjpkc3\Com\South\09 - Belford Ave\East\dwg\Eng\Final Drawings\Plan Set\CBMP DETAILS.dwg Updated By: MMGuire

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SEEDING AND MULCHING MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SEEDING AND MULCHING.
2. ANY SEEDED AND MULCHED AREAS THAT BECOME DAMAGED SHALL BE REPAIRED WITHIN THE TIME FRAME SPECIFIED BY THE TOWN'S INSPECTOR.

WEED MANAGEMENT

1. ALL HERBICIDES SHALL BE APPLIED BY COMMERCIAL PESTICIDE APPLICATORS LICENSED BY THE COLORADO DEPARTMENT OF AGRICULTURE AS QUALIFIED APPLICATORS. THE CONTRACTOR SHALL FURNISH DOCUMENTATION OF SUCH LICENSING PRIOR TO HERBICIDE APPLICATION.
2. HERBICIDE APPLICATION METHOD SHALL BE SUCH THAT PLANT GROWTH OUTSIDE THE DESIGNATED TREATMENT AREAS WILL NOT BE DAMAGED. ALL DAMAGE CAUSED BY IMPROPER HERBICIDE APPLICATION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
3. HERBICIDES SHALL BE APPLIED DURING THE APPROPRIATE SEASONS, WHEN TARGET PLANTS ARE ACTIVELY GROWING.
4. AFTER THE GRASS SEED IS ESTABLISHED, APPROPRIATE HERBICIDES SHALL BE APPLIED TO CONTROL THE REMAINING WEEDS TO ENSURE A TIMELY RETURN OF THE FINANCIAL SECURITY. PROPER TIMING OF HERBICIDE APPLICATIONS ARE NECESSARY TO ACHIEVE THE SUPPRESSION OF WEED SEED PRODUCTION AND DEPLETION OF WEED ROOT MASS. ULTIMATELY, THE HERBICIDES USED SHALL BE BASED UPON THE TARGET WEEDS.
5. HERBICIDE TREATMENTS SHALL CONTINUE AT AN APPROPRIATE RATE UNTIL IT IS EVIDENT THAT WEED GROWTH PRESENCE AND GROWTH IS MINIMAL AND MAY BE CONTROLLED THROUGH MOWING AND/OR ANNUAL HERBICIDE TREATMENT.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SMC 2 OF 3 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

TOWN OF PARKER, SEED MIX 1
20% CANADA WILDRYE
15% CRESTED WHEATGRASS
15% SLENDER WHEATGRASS
10% ANNUAL RYEGRASS
10% SHEEP FESCUE
10% BIG BLUESTEM
10% SIDEOATS GRAMA
5% CANADA BLUEGRASS
5% BLUE GRAMA

SEEDING RATE:
DRILLED: 25 LBS/ACRE
BROADCAST: 50 LBS/ACRE

TOWN OF PARKER, SEED MIX 2
22% SLENDER WHEATGRASS
18% SODAR STREAMBANK WHEATGRASS
13% ARIZONA FESCUE
13% BLUE GRAMA
12% BUFFALOGRASS
12% BARLEY OR OATS
5% SPIKE MUHLY
5% INDIAN RICEGRASS

SEEDING RATE:
DRILLED: 25 LBS/ACRE
BROADCAST: 50 LBS/ACRE

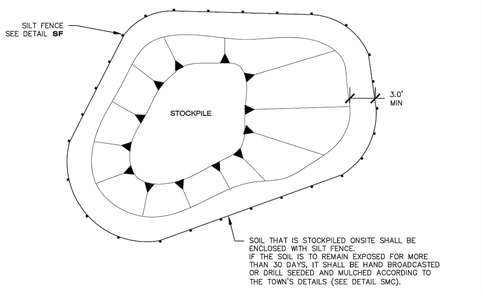
TOWN OF PARKER, SEED MIX 3 (LOW-GROWTH MIX)
25% EPHRAIM CRESTED WHEATGRASS
23% SHEEP FESCUE
18% PERENNIAL RYEGRASS
13% CANADA BLUEGRASS
12% BARLEY OR OATS
9% BLUE FESCUE

SEEDING RATE:
DRILLED: 25 LBS/ACRE
BROADCAST: 50 LBS/ACRE

SEED MIX 4:
OTHER SEED MIXES APPROVED BY THE TOWN OF PARKER

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SMC 3 OF 3 Oct. 2013

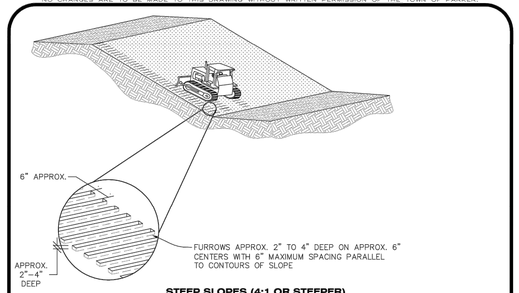
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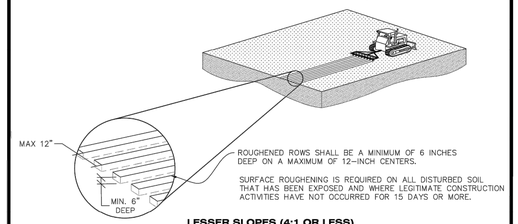
SP **STOCKPILE PROTECTION**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SP JUNE 2006

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



STEEP SLOPES (4:1 OR STEEPER)
(SLOPES STEEPER THEN 4:1 MAY BE SURFACE ROUGHENED IF THE CONTRACTOR FEELS THAT IT IS SAFE TO DO SO)



LESSER SLOPES (4:1 OR LESS)

SR **SURFACE ROUGHING**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SR 1 OF 2 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SURFACE ROUGHENING INSTALLATION NOTES

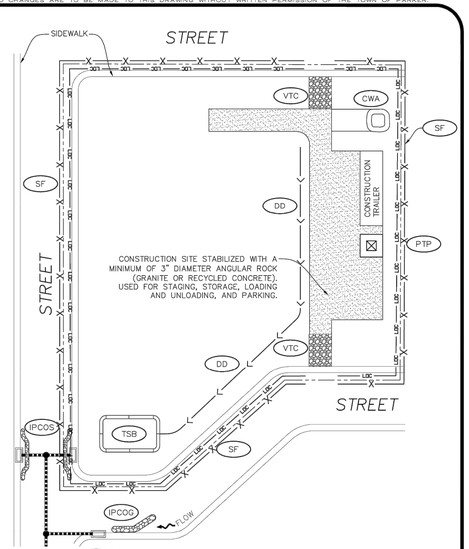
1. SEE CBMP PLAN FOR LOCATION(S) OF SURFACE ROUGHENING.
2. DISTURBED AREAS THAT REMAIN INACTIVE FOR 15 DAYS OR MORE MUST RECEIVE SURFACE ROUGHENING OR ANOTHER APPROVED BMP FROM THE SDECM. DETERMINATION OF JOB SITE INACTIVITY IS AT THE DISCRETION OF THE TOWN'S INSPECTOR.
3. FOR STEEP SLOPES (3:1 OR STEEPER), IT IS ACCEPTABLE TO "TRACK" THE SLOPES, ACCORDING TO THE CBMP DETAILS.
4. SCHEDULES FOR REQUIRING STABILIZATION MAY BE MODIFIED BY THE PERMITTEE TO ALLOW FOR SPECIAL CONSIDERATIONS SUCH AS STABILIZING ACCESS AREAS AND AREAS IN CLOSE PROXIMITY TO CONTINUING CONSTRUCTION.

SURFACE ROUGHENING INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL PROACTIVELY INSPECT THE SURFACE ROUGHENING.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SR 2 OF 2 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



SSA **STABILIZED STAGING AREA**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SSA 1 OF 2 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

STABILIZED STAGING AREA INSTALLATION NOTES

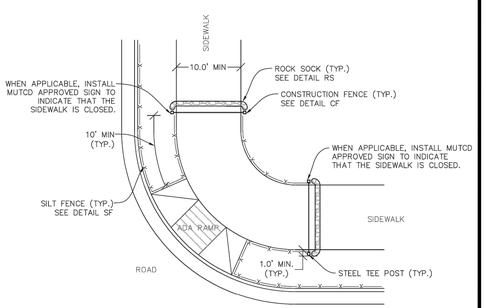
1. SEE CBMP PLAN FOR LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH TOWN APPROVAL.
2. STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND LOADING OPERATIONS.
3. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" DIAMETER OF ANGULAR ROCK (GRANITE OR RECYCLED CONCRETE).
4. SSA FOR SMALLER SITES MAY NOT BE PRACTICAL. IN THESE AND SIMILAR SITUATIONS, VARIANCES MAY BE PERMITTED BY THE TOWN.

STABILIZED STAGING AREA INSPECTION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE STAGING AREA.
2. STABILIZED STAGING AREA SHALL BE ENLARGED AS NECESSARY TO CONTAIN PARKING, STORAGE, LOADING, AND UNLOADING.

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | SSA 2 OF 2 Oct. 2013

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



NOTE:
SEDIMENT CONTROL LOGS (SCL) MAY BE USED IN LIEU OF SILT FENCE (SF) WITH PRIOR APPROVAL FROM TOWN.

STP **SIDEWALK TRANSITION PROTECTION (AT INTERSECTION)**

Town of Parker COLORADO | CBMP CONSTRUCTION BEST MANAGEMENT PRACTICES | STP 1 OF 3 Oct. 2013

DATE	REVISIONS	DRAWN BY
06-18-2021	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

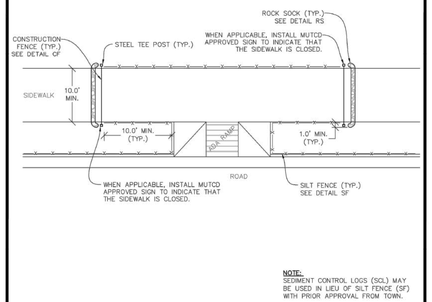
SHEET 26 OF 33
CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

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Plotted: 6/22/2021 7:03 PM Dwg Name: P:\Cpjdc3\ComSouth09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\CBMP DETAILS.dwg Updated By: MMGuire

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



NOTE:
SEDIMENT CONTROL LOGS (SCL) MAY BE USED IN LIEU OF SILT FENCE (SF) WITH PRIOR APPROVAL FROM TOWN.

STP **SIDEWALK TRANSITION PROTECTION (ALONG STRAIGHT ROADWAY)**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

SIDEWALK TRANSITION PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION(S) OF SIDEWALK TRANSITION PROTECTION.
2. ROCK SOCK SHALL BE CONSTRUCTED ACCORDING TO THE DETAIL (SEE DETAIL RS).
3. SILT FENCE SHALL BE CONSTRUCTED ACCORDING TO THE DETAIL (SEE DETAIL SF).
4. CONSTRUCTION FENCE SHALL BE CONSTRUCTED ACCORDING TO THE DETAIL (SEE DETAIL CF).
5. SEDIMENT CONTROL LOGS MAY BE USED IS LIEU OF SILT FENCE WITH PRIOR APPROVAL FROM THE TOWN.

SIDEWALK TRANSITION PROTECTION INSPECTION & MAINTENANCE NOTES

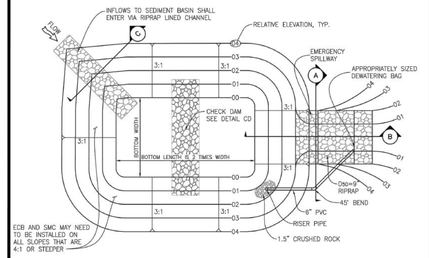
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE SIDEWALK TRANSITION INSPECTION.

To allow for a proper and timely establishment of native grasses, temporary irrigation is required over all areas where permanent native seeding is proposed. This includes, but is not limited to: detention ponds, drainageways, park and trail areas, general open space, etc. **In addition to the landscape plans, please show the temporary irrigation symbol (TI) on the CBMP Plan over all areas where permanent native seeding is proposed.** As a reminder, when working within Parker Water and Sanitation District's (PWSD) jurisdiction, the following is required:

- Temporary irrigation for native seed must be supplied by a fire hydrant hook-up. Use of proposed/existing landscape irrigation taps is not allowed. Please indicate on the irrigation plans fire hydrants that are to be used for the temporary irrigation mainline and provide a detail for the connection. This detail should show the hydrant, PRV, PWSD water meter, a 2" backflow assembly, a 2" x 2" cam lock for fire department quick disconnect and a support system for all components
- The following note must be shown on the Irrigation plan set "Temporary irrigation for establishment of native vegetation must be installed above ground, and removed immediately after establishment is complete, or in no case, any longer than one growing season." PWSD may allow temporary irrigation to continue for one additional growing season with prior approval.
- The following note must be shown on the Irrigation plan set "All temporary irrigation components including but not limited to mainlines, laterals, valves, heads and quick couplers must be installed above ground."
- All temporary irrigation components including but not limited to mainlines, laterals, valves, heads and quick couplers must be clearly labeled on the plans.
- Provide detail drawings for all above ground components including but not limited to mainlines, laterals, valves, heads and quick couplers.

If the project is outside of PWSD's jurisdiction, check with the applicable water provider regarding their specific requirements for temporary irrigation.

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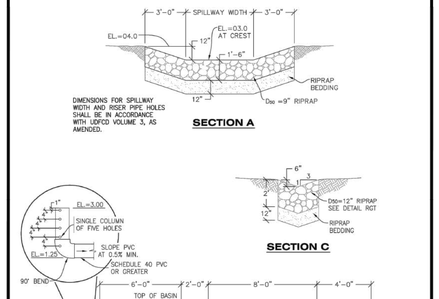


PLAN VIEW

SIZING OF TSB SHALL BE IN ACCORDANCE WITH UDFCD VOLUME 3, AS AMENDED.

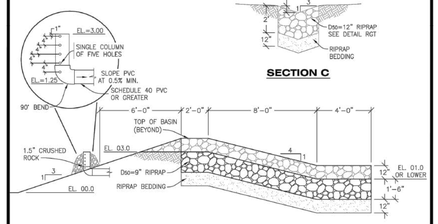
TSB **TEMPORARY SEDIMENT BASIN**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



DIMENSIONS FOR SPILLWAY WIDTH AND RISER PIPE HOLES SHALL BE IN ACCORDANCE WITH UDFCD VOLUME 3, AS AMENDED.

SECTION A



SECTION C

SECTION B

TSB **TEMPORARY SEDIMENT BASIN**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

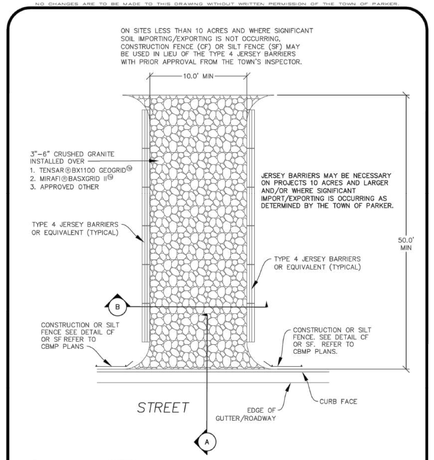
TEMPORARY SEDIMENT BASIN INSTALLATION NOTES

1. SEE CBMP PLAN FOR LOCATION(S) OF SEDIMENT BASIN(S).
2. THE TEMPORARY SEDIMENT BASIN(S) SHALL BE INSTALLED AND FUNCTIONING PRIOR TO ANY OTHER GRADING ACTIVITIES.
3. THE EXACT DIMENSIONS AND DETAILS OF THE TEMPORARY SEDIMENT BASIN SHALL BE DETERMINED BY THE DESIGN ENGINEER, IN ACCORDANCE WITH UDFCD VOLUME 3, AS AMENDED.
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3" AND SHALL HAVE A MINIMUM OF 15% BY WEIGHT PASSING THE NO. 200 SIEVE.
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% DENSITY, AND WITHIN +/– 2% OF OPTIMUM MOISTURE IN ACCORDANCE WITH ASTM D698.
6. AN APPROPRIATELY SIZED DEWATERING BAG SHALL BE SECURED TO THE END OF THE DISCHARGE PIPE. THE DEWATERING BAG SHALL BE REPLACED ONCE SEDIMENT ACCUMULATION REACHES 50%

TEMPORARY SEDIMENT BASIN INSPECTION AND MAINTENANCE NOTES

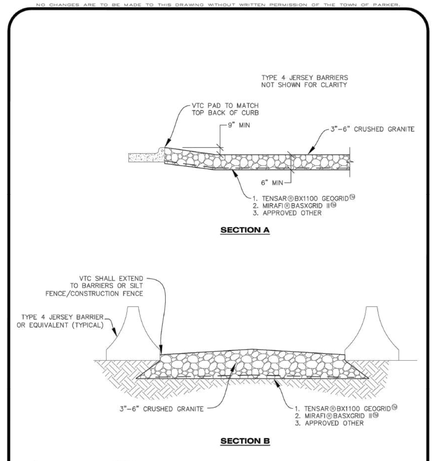
1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE TEMPORARY SEDIMENT BASIN.
2. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN THE SEDIMENT REACHES A DEPTH OF 2.0', OR WITHIN 2.0' OF THE SPILLWAY CREST, OR AS OTHERWISE DIRECTED BY THE TOWN'S INSPECTOR.
3. SEDIMENT BASINS SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL UPSTREAM VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



VTC **VEHICLE TRACKING CONTROL**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.



SECTION A

SECTION B

VTC **VEHICLE TRACKING CONTROL**

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

VEHICLE TRACKING CONTROL PAD INSTALLATION NOTES

1. SEE CBMP PLAN FOR LOCATION(S) OF VEHICLE TRACKING CONTROL PAD(S).
2. ALL CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE THROUGH THE APPROVED ACCESS POINT(S). A VEHICLE TRACKING CONTROL PAD IS REQUIRED AT ALL APPROVED ACCESS POINTS TO THE SITE. EXCEPTIONS MAY BE CONSIDERED FOR CONSTRUCTION ACTIVITY OCCURRING IMMEDIATELY ADJACENT TO PAVED AREAS AND WHERE ALTERNATIVE BMP'S ARE IMPLEMENTED. SUCH ACTIVITY MAY INCLUDE, BUT NOT BE LIMITED TO RESIDENTIAL CONSTRUCTION, UTILITY CONSTRUCTION, ETC.
3. THE VEHICLE TRACKING CONTROL PAD(S) INDICATED ON CBMP PLAN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
4. VEHICLE TRACKING CONTROL PADS SHALL BE A MINIMUM OF 50–FEET LONG AND 10–FEET WIDE, UNLESS A VARIANCE HAS BEEN GRANTED BY THE TOWN'S INSPECTOR.
5. A BIAXIAL GEO–GRID SHALL BE PLACED UNDER THE VEHICLE TRACKING CONTROL PAD PRIOR TO THE PLACEMENT OF ROCK. THE AREA SHALL BE FREE FROM ANY VOIDS, ROCKS AND DEBRIS. THE BIAXIAL GEO–GRID SHALL BE TENSAR BX1100, MIRAFI BASXGRID II, OR AN APPROVED EQUAL. GEO–GRID SHALL BE PLACED, AND APPROPRIATELY OVERLAPPED IF NECESSARY, TO COVER THE ENTIRE LENGTH AND WIDTH OF THE VEHICLE TRACKING CONTROL PAD.
6. CRUSHED ROCK SHALL BE A MINIMUM OF 3–6" GRANITE WITH A FRACTURED FACE (ALL SIDES).

VEHICLE TRACKING CONTROL PAD INSTALLATION AND MAINTENANCE NOTES

1. THE EROSION CONTROL SUPERVISOR SHALL REGULARLY INSPECT THE VEHICLE TRACKING CONTROL PAD.
2. WHEN THE VEHICLE TRACKING CONTROL PAD IS REMOVED, ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE VEHICLE TRACKING CONTROL PAD SHALL BE ROUGHENED, SEEDED, MULCHED, AND CRIMPED PER THE TOWN'S SPECIFICATIONS (SEE DETAIL SMC).
3. THE VEHICLE TRACKING CONTROL PAD SHALL BE MAINTAINED SUCH THAT THE ROCK REMAINS RELATIVELY LOOSE AND ACCUMULATED MUD AND OTHER DEBRIS IS REGULARLY REMOVED.

DRAWN BY	REVISIONS	DATE
	1 SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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Civil Engineering | Surveying | GIS
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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
CBMP DETAILS

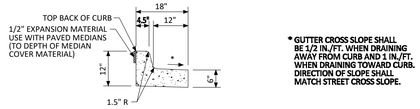
PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: RAK
DATE: 03/15/2021

SHEET
27 OF 33
CLCPKC3

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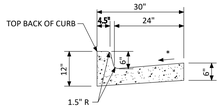
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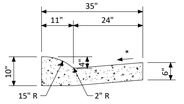


*** GUTTER CROSS SLOPE SHALL BE 1/2 IN./FT. WHEN DRAINING AWAY FROM CURB AND 1 IN./FT. WHEN DRAINING TOWARD CURB. DIRECTION OF SLOPE SHALL MATCH STREET CROSS SLOPE.**

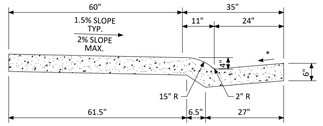
MEDIAN CURB AND GUTTER SECTION
(CDOT CURB AND GUTTER TYPE 2 (SECTION I-B))



VERTICAL CURB AND GUTTER SECTION
(CDOT CURB AND GUTTER TYPE 2 (SECTION II-B))



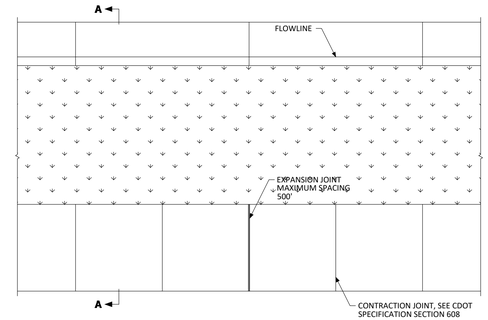
MOUNTABLE CURB AND GUTTER SECTION



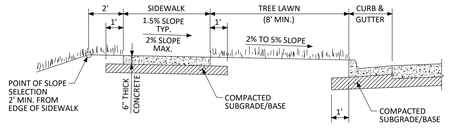
MONOLITHIC COMBINATION CURB, GUTTER AND SIDEWALK SECTION

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO	CURB, GUTTER, AND SIDEWALK SECTIONS STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 3 1 OF 1



JOINT SPACING



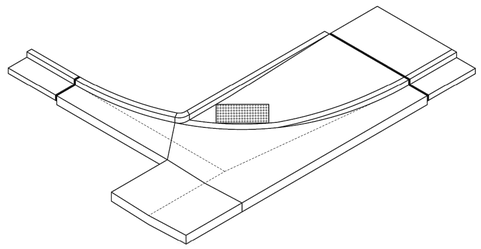
SECTION A-A

GENERAL NOTES

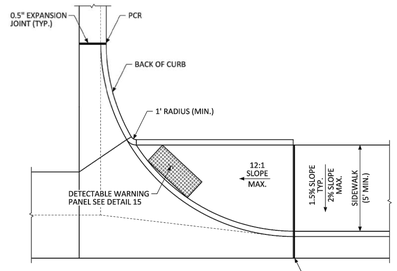
1. CONTRACTION JOINTS ON CONCRETE TRAILS SHALL BE SAWCUT.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO	DETACHED SIDEWALK STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 4 1 OF 2



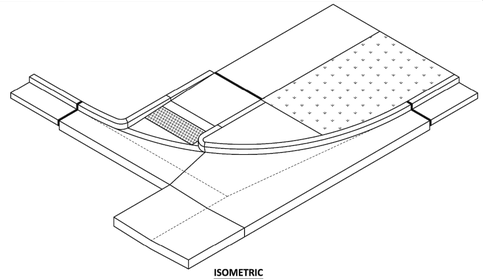
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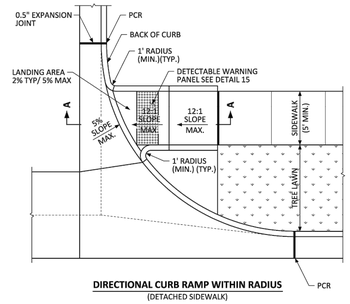
DIRECTIONAL CURB RAMP WITHIN RADIUS
(ATTACHED SIDEWALK)

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO	DIRECTIONAL CURB RAMP WITHIN RADIUS LAYOUT STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 18 1 OF 2



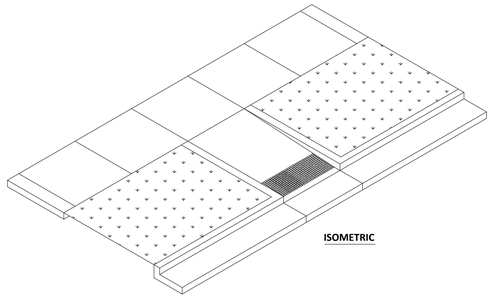
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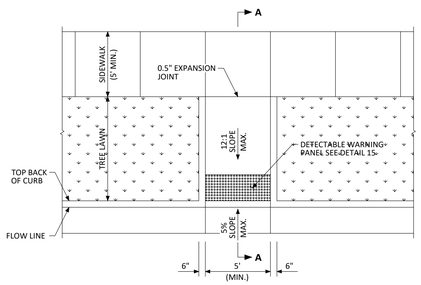
DIRECTIONAL CURB RAMP WITHIN RADIUS
(DETACHED SIDEWALK)

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO	DIRECTIONAL CURB RAMP WITHIN RADIUS LAYOUT STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 18 2 OF 2



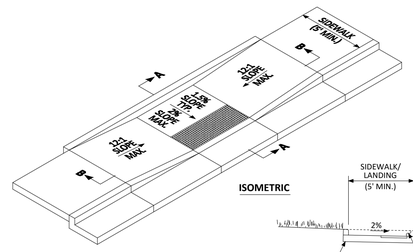
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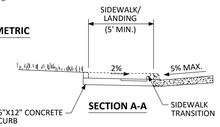
MIDBLOCK CURB RAMP

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

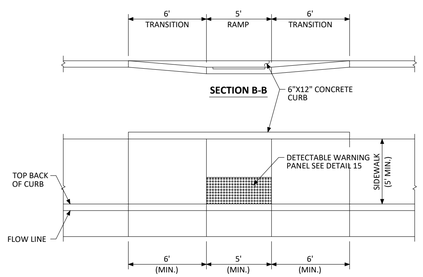
PARKER COLORADO	MIDBLOCK CURB RAMP LAYOUT STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 17 1 OF 2



ISOMETRIC



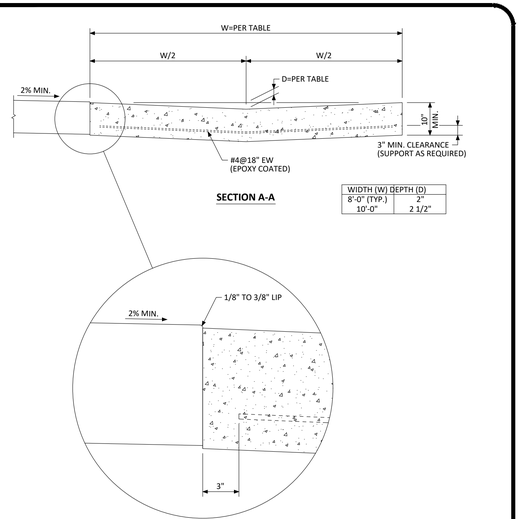
SECTION A-A



MIDBLOCK CURB RAMP

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PARKER COLORADO	MIDBLOCK CURB RAMP LAYOUT STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 17 2 OF 2



SECTION A-A

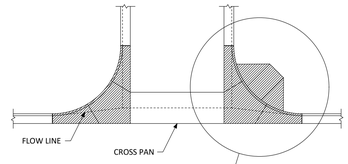
WIDTH (W)	DEPTH (D)
8'-0" (TYP.)	7"
10'-0"	2 1/2"

GENERAL NOTES

1. CONTRACTION JOINTS SHALL BE PROVIDED AT 10' MAXIMUM SPACING.

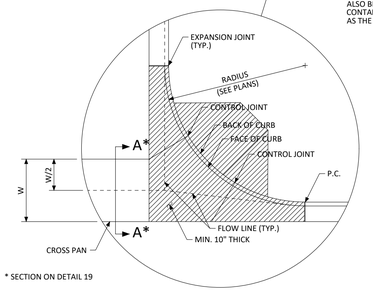
NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO	INTERSECTION CROSS PAN LAYOUT STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 19 1 OF 2



PLAN VIEW

THIS AREA SHALL BE POURED MONOLITHICALLY WITH CURB AND GUTTER. THIS AREA SHALL ALSO BE THE SAME THICKNESS AND CONTAIN THE SAME REINFORCING AS THE CROSS PAN.



* SECTION ON DETAIL 19

GENERAL NOTES

1. EXPANSION JOINTS SHALL BE SEALED IN ACCORDANCE WITH THE LATEST CDOT M&S STANDARD PLANS.
2. REINFORCING SHALL BE CONTINUOUS FROM CROSS PAN TO APRONS AND PLACED AS SHOWN IN STANDARD DETAIL 19.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO	INTERSECTION CROSS PAN LAYOUT STANDARD DETAIL	DATE NOVEMBER 2020	DETAIL 19 2 OF 2

DRAWN BY	REVISIONS	DATE
	SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	06-18-2021

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

STREET DETAILS

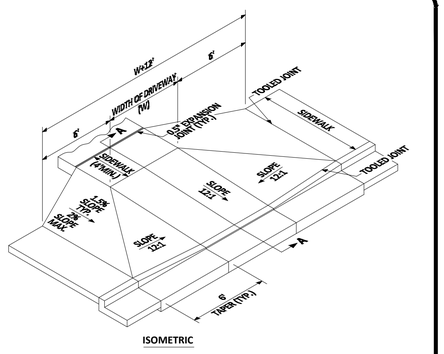
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DATE: 03/15/2021

SHEET 28 OF 33
CLCPKC3 CLCPKC3

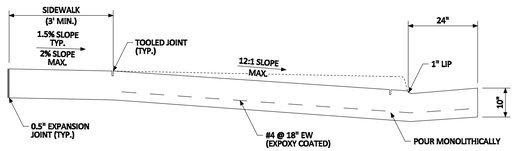
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Plotted: 6/22/2021 7:03 PM Dwg Name: P:\Clcpkc3\Com\South\09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\Street Details.dwg Updated By: MMcGuire



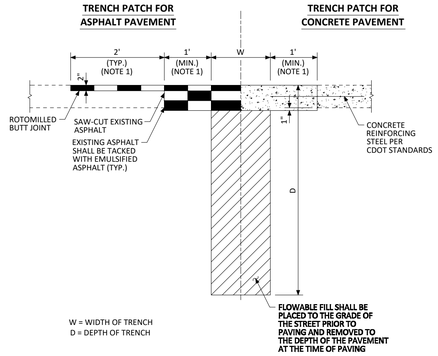
ISOMETRIC



SECTION A-A

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | COMMERCIAL DRIVEWAY WITH ATTACHED SIDEWALK STANDARD DETAIL | DATE NOVEMBER 2020 | DETAIL 20 | 1 OF 2



GENERAL NOTES

1. SEE SECTION 9 OF THE ROADWAY CRITERIA MANUAL FOR LIMITS OF PATCHING. RECOMPACTION PER TOWN STANDARDS IS REQUIRED UNDER THE LIMITS OF THE PATCHING.

ASPHALT PAVEMENT NOTES

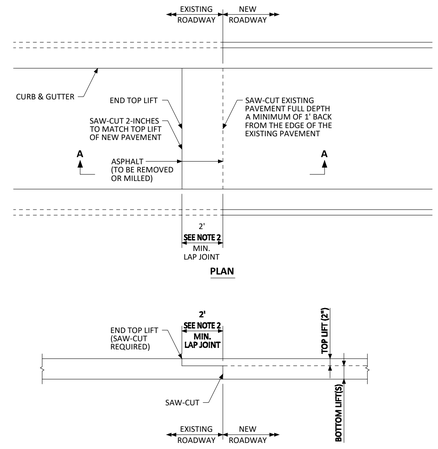
1. HOT MIX ASPHALT PATCH TO BE 6" THICK OR EXISTING PAVEMENT THICKNESS +1" (WHICHEVER IS GREATEST).
2. THE MINIMUM LIFT THICKNESS SHALL BE AT LEAST THREE TIMES (PREFERABLY FOUR TIMES) THE NOMINAL AGGREGATE SIZE. MAXIMUM LIFT THICKNESS SHALL BE FIVE TIMES THE NOMINAL AGGREGATE SIZE.
3. THE TOP LIFT OF ALL HMA PAVEMENT SECTIONS SHALL BE 2" THICK AND GRADING SX.

CONCRETE PAVEMENT NOTES

1. CONCRETE PAVEMENT THICKNESS SHALL BE 1 INCH GREATER THAN EXISTING CONCRETE PAVEMENT.
2. CONCRETE SHALL BE CDOT CLASS P.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | MINIMUM STREET PATCH DETERMINATION STANDARD DETAIL | DATE NOVEMBER 2020 | DETAIL 25 | 1 OF 2



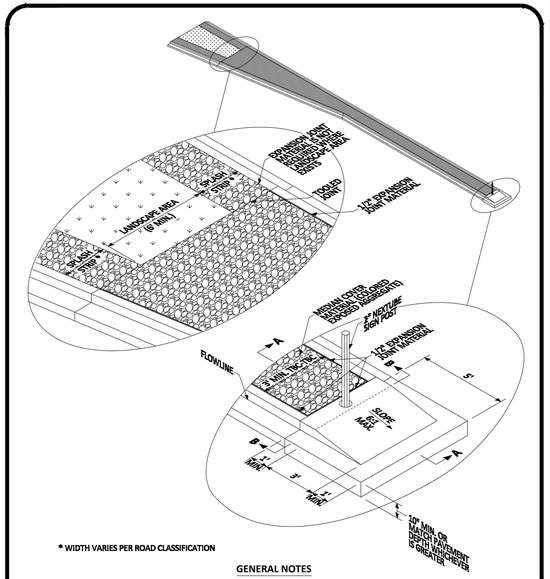
SECTION A-A

GENERAL NOTES

1. SAW-CUT EXISTING PAVEMENT FULL DEPTH TO PROVIDE A VERTICAL EDGE PRIOR TO PLACEMENT OF NEW ASPHALT AND SAW-CUT THE LAP JOINT 2-INCHES DEEP AT THE LAP JOINT DISTANCE.
2. THIS DETAIL APPLIES TO BOTH TRANSVERSE (WITH A 2-FOOT MIN. LAP JOINT) AND LONGITUDINAL (WITH A 1-FOOT MIN. LAP JOINT) ASPHALT JOINTS BETWEEN EXISTING AND NEW PAVEMENT.
3. SPECIFICATIONS AND ILLUSTRATIONS FOR CONCRETE PAVEMENT JOINTS ARE LOCATED IN CDOT'S M&S STANDARD PLANS AND CDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
4. TEMPORARY ASPHALT RAMPS PLACED AT A 20:1 MAX. SLOPE SHALL BE REMOVED OR MILLED PRIOR TO PLACING FINAL ASPHALT.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | ASPHALT CONNECTION BETWEEN EXISTING AND NEW PAVEMENT STANDARD DETAIL | DATE NOVEMBER 2020 | DETAIL 26 | 1 OF 1



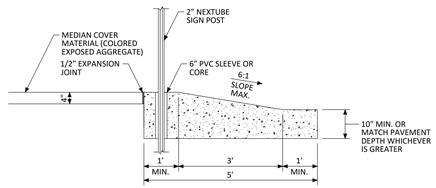
* WIDTH VARIES PER ROAD CLASSIFICATION

GENERAL NOTES

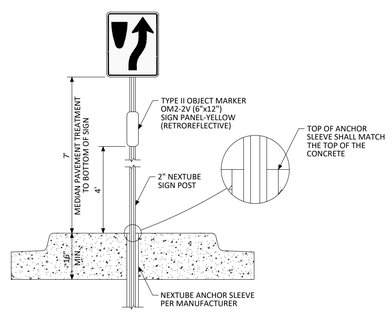
1. MEDIAN COVER MATERIAL SHALL BE DAVIS COLOR "RUSTIC BROWN" AND HAVE AN EXPOSED AGGREGATE FINISH. CONCRETE SHALL BE CDOT CLASS "B" WITH 3/8" MAXIMUM AGGREGATE SIZE.
2. TOOLED JOINTS IN THE MEDIAN COVER MATERIAL SHALL MATCH CURB AND GUTTER JOINTS.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | MEDIAN BULL NOSE ISOMETRIC STANDARD DETAIL | DATE NOVEMBER 2020 | DETAIL 27 | 1 OF 2



SECTION A-A



SECTION B-B

GENERAL NOTES

1. IF MEDIAN WIDTH IS GREATER THAN 12', ADDITIONAL DELINEATORS WILL BE REQUIRED. COORDINATE WITH DESIGNATED TOWN AUTHORITY.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | MEDIAN BULL NOSE TYPICAL SECTIONS STANDARD DETAIL | DATE NOVEMBER 2020 | DETAIL 27 | 2 OF 2

LOCAL STREETS

4" TOWN LOGO — Mainstreet — 36" — 4" 6"

4" TOWN LOGO — Motsenbocker Rd — 48" (MAXIMUM) — 4" 6"

ARTERIALS/COLLECTORS

6" TOWN LOGO — Private Road — Mainstreet — 48" — 6" 5"

PRIVATE ROADS *

6" TOWN LOGO — Motsenbocker Rd — 60" (MAXIMUM) — 6" 5"

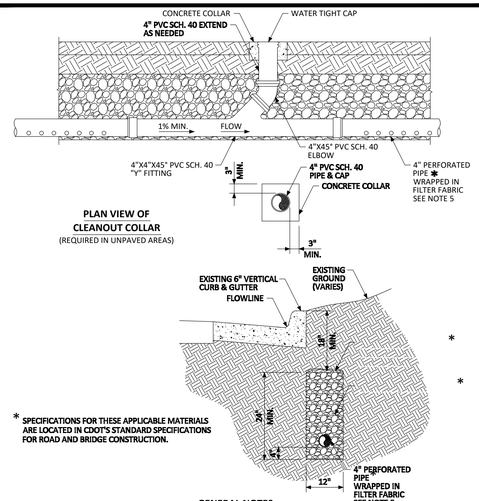
GENERAL NOTES

1. STREET NAME SIGNS SHALL BE ON EXTRUDED ALUMINUM BLANKS. ARTERIALS/COLLECTORS SHALL HAVE 9" HIGH PANELS. LOCALS MAY HAVE 6" HIGH PANELS. ARTERIAL/COLLECTOR SIZE BLANKS SHALL NOT EXCEED 60". LOCAL SIZE BLANKS SHALL NOT EXCEED 48".
2. SIGN POSTS FOR INSTALLING STREET NAME SIGNS SHALL BE 12 GAUGE Nex/S-SquareTube STEEL. FINISH TO BE HOT DIPPED GALVANIZED (ASTM A-653 G90). SIZE OF POST TO BE NOMINAL 2" x 2".
3. SIGN MOUNTING HARDWARE TO BE ZINC OR CADMIUM PLATED.
4. SIGN SHEETING SHALL BE REFLECTORIZED AND AFFIXED TO BOTH SIDES OF STREET NAME SIGN BLANK. PRIMARY SHEETING MATERIAL TO BE HIGH INTENSITY PRISMATIC WHITE WITH GREEN TRANSPARENT ELECTRO-CUT FILM. TOWN LAMP LOGO TO BE BLACK FILM ON WHITE SHEETING.
5. STREET NAME FONTS SHALL BE STANDARD HIGHWAY GOTHIC SERIES. TOTAL CHARACTERS INCLUDING SUFFIX SHALL NOT EXCEED 14.
6. MOUNTING HEIGHTS AND LOCATIONS TO BE PER MUTCD GUIDELINES OR AS DIRECTED BY THE TOWN.

* PRIVATE ROADS SHALL USE PRIVATE ROAD GRAPHIC IN PLACE OF TOWN LOGO.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | GROUND MOUNTED STREET NAME PANELS | DATE NOVEMBER 2020 | DETAIL 32 | 1 OF 1



* SPECIFICATIONS FOR THESE APPLICABLE MATERIALS ARE LOCATED IN CDOT'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

GENERAL NOTES

1. TRENCH DRAIN SHALL BE LOCATED HORIZONTALLY AT EDGE OF CONTINUOUS IMPERMEABLE SECTION.
2. TRENCH DRAINS SHALL BE TRANSITIONED TO PVC SCH. 40, NON-PERFORATED PIPE WHEN RAN UNDER ROADWAY HARDSCAPES/INTERSECTIONS.
3. CLEANOUTS SHALL BE PROVIDED AT ALL JUNCTIONS, ANGLE POINTS AND SPACED MAX. OF 500' INTERVALS.
4. TRENCH DRAINS SHALL TIE INTO STORM MANHOLE OR INLETS.
5. PERFORATED PIPE MATERIAL SHALL CONSIST OF CONTECH A-2000 PERFORATED PIPE, SDR-26 PERFORATED PRESSURE PIPE, HDPE SCH. 40 PERFORATED PIPE, N-12 ADS PIPE OR APPROVED EQUAL.
6. 3M ELECTRONIC MARKER SYSTEM (EMS) BALL MARKERS (MODEL 1408) SHALL BE INSTALLED DIRECTLY ABOVE THE 4-INCH PIPE AT A MINIMUM SPACING OF 100-FOOT INTERVALS AND ALL DIRECTION CHANGES AND CLEANOUT LOCATIONS.

NO CHANGES ARE TO BE MADE TO THIS DRAWING WITHOUT WRITTEN PERMISSION OF THE TOWN OF PARKER.

PARKER COLORADO | TRENCH DRAIN DETAIL SECTION STANDARD DETAIL | DATE NOVEMBER 2020 | DETAIL 30 | 1 OF 1

DRAWN BY	REVISIONS	DATE	
		06-18-2021	SECOND SUBMITTAL - RESPOND TO TOP COMMENTS

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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
STREET DETAILS

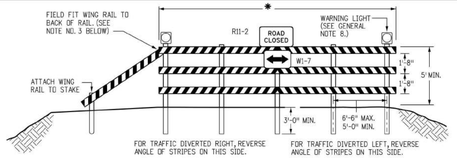
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PROJ. MGR.:	GTI
PROJ. ASSOC.:	ASD
DRAWN BY:	JMP
DATE:	03/15/2021

SHEET 29 OF 33
CLCPKC3 CLCPKC3

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Plotted: 6/22/2021 7:05 PM Dwg Name: P:\Clerk3\ComSouth09_Belford Ave East\Dwg\Eng\Final Drawings\Plan Set\Street Details.dwg Updated By: MMcGuire



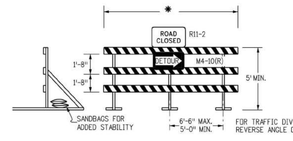
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* RAIL LENGTH TABLE

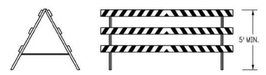
TYPE 3 BARRICADE		LENGTH
FIXED	MOVABLE	
F - A	M - A	8'- 14'
F - B	M - B	15'- 24'
F - C	M - C	25'- 35'
F - D	M - D	> 35'

NOTES

1. TYPE 3 BARRICADES HAVE 3 RETLECTORIZED RAIL FACES IF FACING TRAFFIC IN ONE DIRECTION AND 6 IF FACING TRAFFIC IN TWO DIRECTIONS.
2. THE PORTION OF THE POST ABOVE THE GROUND LINE SHALL BE PAINTED IN ACCORDANCE WITH THE APPROPRIATE GENERAL NOTE.
3. DETACHABLE EXTENSION WING RAILS FOR BYPASSING OF CONSTRUCTION EQUIPMENT ARE PERMITTED, WHEN NECESSARY, ON FIXED OR MOVABLE TYPE 3 BARRICADES. THE LENGTH SHALL BE ADEQUATE TO CLOSE THE BORROW PIT AND/OR SHOULDER AS REQUIRED.



MOVABLE-SKIDS

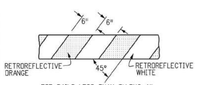


MOVABLE-HINGED

TYPICAL TYPE 3 BARRICADES

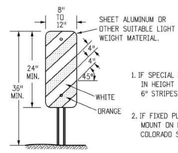
TYPICAL BARRICADE CHARACTERISTICS

	BARRICADE DESIGNATIONS
	TYPE 3
RAIL WIDTH	8" MIN.-12" MAX.
RAIL LENGTH	AS REQUIRED, SEE RAIL LENGTH TABLE
HEIGHT	5' MIN.
USE	TEMPORARY OR PERMANENT
STRIPES	SEE DETAIL OF BARRICADE STRIPING AND APPROPRIATE GENERAL NOTES.



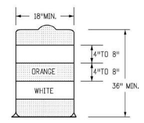
FOR RAILS LESS THAN 3' LONG, 4" WIDE STRIPES SHALL BE USED.

RAIL STRIPING DETAIL



1. IF SPECIAL PANELS 3'OR GREATER IN HEIGHT ARE REQUIRED, THEN 6" STRIPES SHALL BE USED.
2. IF FIXED PLACEMENT IS REQUIRED, MOUNT ON DELINEATOR POST. SEE COLORADO STANDARD PLAN S-612-1.

TYPICAL VERTICAL PANEL



1. THE 18" MINIMUM DIMENSION SHALL APPLY TO THE SMALLEST MEASUREMENT OF DRUMS, RECTANGULAR, OR FLATTENED SIDE DRUMS.
2. THERE SHALL BE AT LEAST TWO ORANGE AND TWO WHITE HORIZONTAL, CIRCUMFERENTIAL, RETROREFLECTIVE STRIPES ON EACH DRUM.

TYPICAL DRUM

GENERAL NOTES

1. THE VARIOUS TYPES, COMBINATIONS AND APPLICATIONS OF SIGNS AND WARNING LIGHTS FOR BARRICADES REQUIRED FOR EACH PROJECT SHALL BE:
   A. AS SPECIFIED OR DETAILED IN THE PLANS.
   B. AS SHOWN IN APPLICABLE TYPICAL ILLUSTRATIONS.
   C. AS CALLED FOR AND SUBJECT TO APPROVAL BY THE ENGINEER.
2. TEMPORARY AND PERMANENT BARRICADES TYPE 3 SHALL BE FABRICATED FROM APPROVED CRASH TESTED MATERIALS. SEE SECTION 614 AND 630 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION FOR ADDITIONAL REQUIREMENTS.
3. ALL PAINTING SHALL CONFORM WITH THE FOLLOWING:
   A. THE APPLICABLE SECTION OF 508 OF THE STANDARD SPECIFICATIONS.
   B. ALL SKIDS, BRACES AND POSTS SHALL BE PAINTED WITH 2 COATS OF EXTERIOR WHITE PAINT
   C. THE BACKSIDES OF RAILS AND VERTICAL PANEL CHANNELIZING DEVICES FACING ONE DIRECTION OF TRAFFIC ONLY SHALL BE PAINTED WITH "EXTERIOR WHITE PAINT.
   D. ALUMINUM OR GALVANIZED STEEL SKIDS, BRACES AND POSTS SHALL NOT BE PAINTED.
4. ALL STRIPED SURFACES SHALL CONFORM WITH THE FOLLOWING:
   A. THE ENTIRE AREA OF ORANGE AND WHITE STRIPES SHALL BE FABRICATED AS ONE PIECE.
   B. HORIZONTAL RAILS, WING RAILS AND VERTICAL PANEL CHANNELIZING DEVICES SHALL HAVE ORANGE AND WHITE STRIPES ON THE FACE SIDE(S) SLANTING DOWNWARD AT A 45° ANGLE TOWARD THE SIDE(S) TO WHICH TRAFFIC IS TO PASS OR TURN.
   C. PERMANENT BARRICADES SHALL HAVE RETRORFLECTIVE RED AND WHITE STRIPES. THEY MAY BE USED AT LOCATIONS TO MARK THE END OF A ROAD, STREET OR HIGHWAY THAT ENDS AT A "T" INTERSECTION, OR WHERE THERE IS NO CROSSROAD OR OUTLET.
   D. ALL RETROREFLECTIVE SHEETING SHALL CONFORM TO ASTM D4956:
      1. ORANGE AND WHITE SHALL BE TYPE II, III OR IV.
      2. RED AND WHITE SHALL BE TYPE II, III OR IV.
5. FOR ALL WOODEN BARRICADE COMPONENTS NOMINAL LUMBER DIMENSIONS ARE SATISFACTORY.
6. ALL SCREWS, BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED OR CADMIUM PLATED.
7. STABILITY OF BARRICADES AND CHANNELIZING DEVICES SHALL CONFORM WITH THE FOLLOWING:
   A. SKIDS (BASES) OF MOVABLE BARRICADES SHALL BE WEIGHTED WITH SANDBAGS ONLY WHERE NECESSARY TO PROVIDE STABILITY
   B. NO MOVABLE OR PORTABLE DEVICE SHALL BE WEIGHTED BY ANY METHOD OR WITH ANY MATERIAL THAT WOULD MAKE THEM HAZARDOUS TO MOTORISTS.
8. WARNING LIGHTS USED WITH BARRICADES, DRUMS AND VERTICAL PANELS SHALL CONFORM WITH THE FOLLOWING:
   A. USE FLASHING WARNING LIGHTS WHEN DEVICES ARE USED SINGLY, AND STEADY BURN LIGHTS WHEN THEY ARE USED IN A SERIES FOR CHANNELIZATION.
   B. THEY SHALL BE POSITIONED ABOVE THE TOP RAIL OF BARRICADES OR ON TOP OF DRUMS AND VERTICAL PANELS.
9. CONCRETE BARRIER (TEMPORARY) SHALL CONFORM WITH:
   A. PRECAST CONCRETE BARRIER AS SHOWN ON COLORADO STANDARD PLAN M-606-14.
   B. BARRIER REFLECTORS SHALL BE INSTALLED THAT MEET THE REQUIREMENTS OF STANDARD TYPICAL DELINEATOR INSTALLATIONS, EXCEPT THE MAXIMUM SPACING SHALL BE 50', AND THEY WILL NOT BE PAID FOR BUT ARE INCLUDED IN THE COST OF THE BARRIER.
   C. CONCRETE BARRIER END TREATMENT SHALL BE IN ACCORDANCE WITH CLEAR ZONE CRITERIA, AND PLACED AS SHOWN ON THE PLANS.
10. SIGN PANELS MOUNTED ON BARRICADES WILL BE PAID FOR SEPARATELY.

Computer File Information		
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Last Modification Date:	Initials:	
Full Path: www.coloradodot.info/library/traffic/traffic-s-standard-plans		
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CAD Ver.: MicroStation V8 Scales: Not to Scale Units: English		

Sheet Revisions		
	Date:	Comments:
	06/03/16	UPDATED GENERAL NOTES 4 C

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Safety & Traffic Engineering Branch KCM/MKB

BARRICADES, DRUMS, CONCRETE BARRIERS (TEMP) & VERTICAL PANELS

STANDARD PLAN NO. S-630-2

Sheet No. 1 of 1

Issued By: Safety & Traffic Engineering Branch July 4, 2012

DRAWN BY	REVISIONS	DATE
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COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD

TOWN OF PARKER, COLORADO

STREET DETAILS

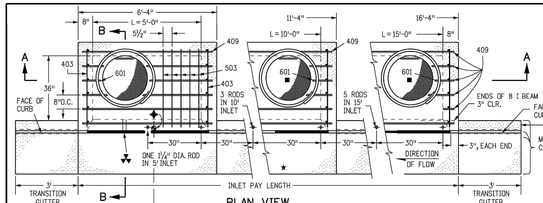
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PROJ. ASSOC.: ASD
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DATE: 03/15/2021

SHEET 30 OF 33
CLCPKC3 CLCPKC3

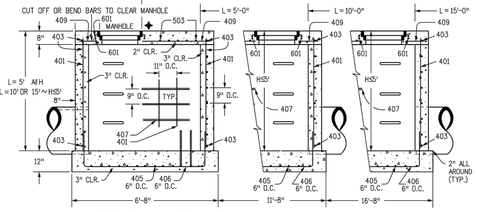
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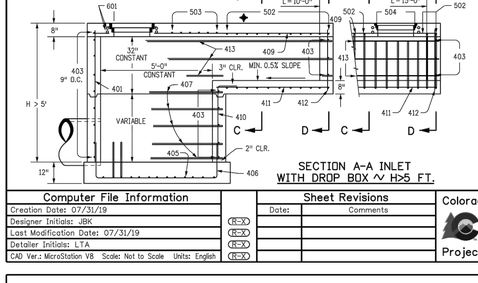
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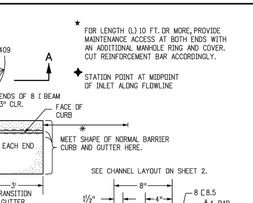
PLAN VIEW



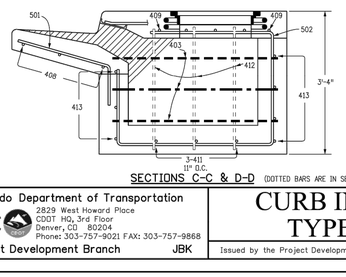
SECTION A-A REGULAR INLET



SECTION A-A INLET
WITH DROP BOX ~ H>5 FT.

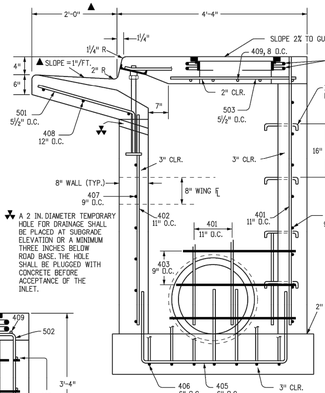


CURB FACE ASSEMBLY
◆PLACE ENTIRE ASSEMBLY BEFORE POURING CONCRETE.



SECTIONS C-C & D-D (DOTTED BARS ARE IN SECTION D-D)

TRANSITION CURB



▲ FOR A 1'-0" PAN SLOPE 2" PER FT.

▲ A 2 IN. DIAMETER TEMPORARY HOLE FOR DRAINAGE SHALL BE PLACED AT SUBGRADE ELEVATION OR A MINIMUM THREE INCHES BELOW ROAD BASE. THE HOLE SHALL BE PLUGGED WITH CONCRETE BEFORE ACCEPTANCE OF THE INLET.

SECTION B-B
END VIEW

NOTE: MANHOLE RING AND COVER, STATION POINT AND OUTFLOW PIPE SHALL BE LOCATED AT THE SAME END OF THE INLET.

GENERAL NOTES:

SEE SHEET 2.

★ FOR LENGTH (L) 10 FT. OR MORE, PROVIDE MAINTENANCE ACCESS AT BOTH ENDS WITH AN ADDITIONAL MANHOLE RING AND COVER. CUT REINFORCEMENT BAR ACCORDINGLY.

★ STATION POINT AT MIDPOINT OF INLET ALONG FLOWLINE

✱ WHEN A TYPE R INLET IS USED WITH MOUNTABLE CURB AND GUTTER, 5 FT. TRANSITION SHALL BE CONSTRUCTED. TRANSITION SHALL BE PAID FOR AS CURB AND GUTTER.

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Last Modification Date: 07/31/19	(R-X)		
Detailer Initials: LTA	(R-X)		
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

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Project Development Branch JBK

CURB INLET TYPE R

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-604-12 Standard Sheet No. 1 of 2

Project Sheet Number:

MARK	BAR # OR SIZE	O.C. SPACING	TYPE	ALL INLETS		INLETS: H ≤ 5 FT.				INLETS: H > 5 FT.			
				L = 5 FT.		L = 10 FT.		L = 15 FT.		L = 10 FT.		L = 15 FT.	
				NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH	NO. REQ'D.	LENGTH
401	4	11"	II	15	✱	21	✱	26	✱	11	✱	11	✱
402	4	11"	II	7	✱	13	✱	18	✱	7	✱	7	✱
403	4	9"	II	✱	4'-0"	✱	4'-0"	✱	4'-0"	✱	4'-0"	✱	4'-0"
405	4	6"	VI	11	6'-10"	21	6'-10"	31	6'-10"	11	6'-10"	11	6'-10"
406	4	6"	VIII	7	8'-10"	7	13'-10"	7	18'-10"	7	8'-10"	7	8'-10"
407	4	9"	II	✱	5'-10"	✱	10'-10"	✱	15'-10"	✱	5'-10"	✱	5'-10"
408	4	12"	II	3	6'-10"	3	11'-10"	3	16'-0"	3	11'-10"	3	16'-0"
409	4	8"	II	6	5'-10"	6	10'-10"	6	15'-10"	6	10'-10"	6	15'-10"
410	4	11"	VII							3	✱	3	✱
411	4	11"	II							3	5'-2"	3	10'-2"
412	4	11"	II							3	2'-9"	3	2'-9"
413	4	9"	II							7	10'-10"	7	15'-10"
501	5	5½"	IV	11	3'-4"	22	3'-4"	33	3'-4"	22	3'-4"	33	3'-4"
502	5	5½"	III							11	11'-5"	17	11'-5"
503	5	5½"	II	5	3'-6"	16	3'-6"	27	3'-6"	6	3'-6"	6	3'-6"
504	5	5½"	IX									5	8'-4"
601	6	2½"	V	2	8'-10"	2	8'-10"	2	8'-10"	2	8'-10"	4	8'-10"
■ St.B.S				1	5'-10"	1	10'-10"	1	15'-10"	1	10'-10"	1	15'-10"
				2 BARS, 1 RODS		4 BARS, 3 RODS		8 BARS, 5 RODS		4 BARS, 3 RODS		8 BARS, 5 RODS	
						REGULAR INLETS				DROP BOX INLETS			

✱ VARIABLE REFER TO TABLE TWO.

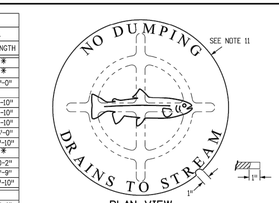
■ INCLUDE #4, 18 IN. BARS (SEE CHANNEL LAYOUT).

TABLE ONE ~ BAR LIST FOR CURB INLETS, TYPE "R"

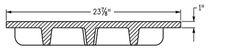
"H"	LENGTH			NO. REQ'D. REGULAR		NO. REQ'D. DROP BOX		L = 5 FT.		L = 10 FT.		L = 15 FT.	
	401	402	410	403	407	403	407	CONC. CU. YDS.	STEEL LBS.	CONC. CU. YDS.	STEEL LBS.	CONC. CU. YDS.	STEEL LBS.
3'-0"	2'-8"	1'-8"		10	7			3.2	285	5.3	497	7.4	706
3'-6"	3'-2"	2'-2"		10	7			3.4	305	5.7	528	7.9	747
4'-0"	3'-8"	2'-8"		12	9			3.7	326	6.0	559	8.4	786
4'-6"	4'-2"	3'-2"		12	9			3.9	334	6.4	571	8.8	803
5'-0"	4'-8"	3'-8"		14	11			4.1	354	6.7	602	9.3	844
5'-6"	5'-2"	4'-2"	3'-5"	16	13	15	6	4.4	375	6.0	607	7.4	850
6'-0"	5'-8"	4'-8"	3'-11"	16	13	16	6	4.6	382	6.2	616	7.6	860
6'-6"	6'-2"	5'-2"	4'-5"	18	15	18	8	4.8	402	6.4	637	7.8	880
7'-0"	6'-8"	5'-8"	4'-11"	20	17	19	10	5.0	423	6.6	654	8.0	897
7'-6"	7'-2"	6'-2"	5'-5"	20	17	20	10	5.3	430	6.9	664	8.3	907
8'-0"	7'-8"	6'-8"	5'-11"	22	19	22	12	5.5	451	7.1	684	8.5	927
8'-6"	8'-2"	7'-2"	6'-5"	24	21	23	14	5.7	471	7.3	702	8.7	944
9'-0"	8'-8"	7'-8"	6'-11"	24	21	24	14	6.0	479	7.6	711	9.0	954
9'-6"	9'-2"	8'-2"	7'-5"	26	23	26	16	6.2	499	7.8	732	9.2	974
10'-0"	9'-8"	8'-8"	7'-11"	28	25	27	18	6.4	520	8.0	749	9.4	992
10'-6"	10'-2"	9'-2"	8'-5"	28	25	28	18	6.7	527	8.3	759	9.7	1001
11'-0"	10'-8"	9'-8"	8'-11"	30	27	30	20	6.9	547	8.5	779	9.9	1022

NOTES: FOR L = 5 FT., L = 10 FT., AND L = 15 FT.
REGULAR INLETS: TOTAL QUANTITIES NEEDED ARE OUTSIDE THE HEAVY BLACK LINE.
DROP BOX INLETS: TOTAL QUANTITIES NEEDED ARE INSIDE THE HEAVY BLACK LINE.
STEEL WEIGHTS DO NOT INCLUDE STRUCTURAL STEEL CHANNEL.

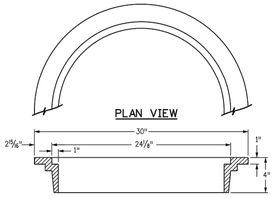
TABLE TWO ~ BARS AND QUANTITIES VARIABLE WITH "H"



PLAN VIEW



ELEVATION VIEW
MANHOLE COVER (TYP.)



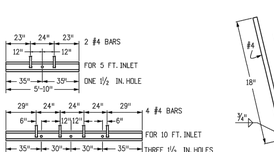
PLAN VIEW

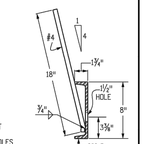
ELEVATION VIEW
MANHOLE RING (TYP.)

WEIGHTS: COVER = 125 LBS.
+ RING = 135 LBS.
TOTAL = 260 LBS.

GENERAL NOTES

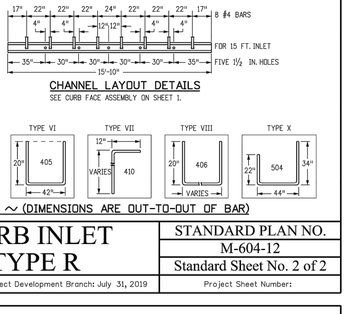
1. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
2. CONCRETE WALLS SHALL BE FORMED ON BOTH SIDES AND SHALL BE 6 INCHES THICK.
3. INLET STEPS SHALL BE IN CONFORMANCE WITH AASHTO M 199.
4. CURB FACE ASSEMBLY SHALL BE GALVANIZED AFTER WELDING.
5. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾" OF A INCH. CURB AND GUTTER CORNERS SHALL BE FINISHED TO MATCH THE EXISTING CURB AND GUTTER BEYOND THE TRANSITION GUTTER.
6. REINFORCING BARS SHALL BE DEFORMED AND SHALL HAVE A 2 INCH MINIMUM CLEARANCE. ALL REINFORCING BARS SHALL BE GRADE 60 AND EPOXY COATED.
7. DIMENSIONS AND WEIGHTS OF TYPICAL MANHOLE RING AND COVER ARE NOMINAL.
8. MATERIAL FOR MANHOLE RINGS AND COVERS SHALL BE GRAY OR DUCTILE CAST IRON IN ACCORDANCE WITH SUBSECTION 712.06.
9. SINCE PIPE ENTRIES INTO THE INLET ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK. QUANTITIES INCLUDE VOLUMES OCCUPIED BY PIPES.
10. STRUCTURAL STEEL SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
11. ALL MANHOLE COVERS SHALL BE CAST WITH A "NO DUMPING DRAINS TO STREAM" MESSAGE AND A FISH SYMBOL. THE SURFACE OF THE MANHOLE COVER SHALL HAVE A NON-SLIP PATTERN.





SECTION AT HOLE (TYP.)

CHANNEL LAYOUT DETAILS
SEE CURB FACE ASSEMBLY ON SHEET 1.



BAR BENDING DIAGRAMS ~ (DIMENSIONS ARE OUT-TO-OUT OF BAR)

TYPE II TYPE III TYPE IV TYPE V TYPE VI TYPE VII TYPE VIII TYPE X

Computer File Information		Sheet Revisions	
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CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	(R-X)		

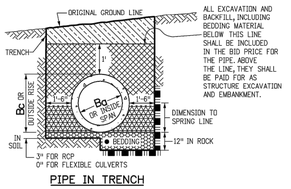
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CURB INLET TYPE R

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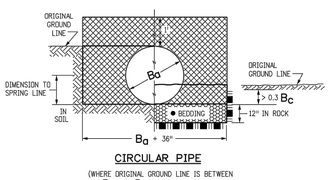
STANDARD PLAN NO. M-604-12 Standard Sheet No. 2 of 2

Project Sheet Number:



PIPE IN TRENCH

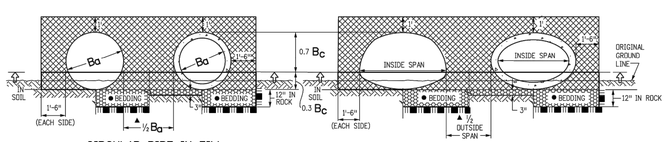
- THE BEDDING MATERIAL FOR RIGID PIPE IN SOIL SHALL BE 3 IN. OF LOOSE STRUCTURE BACKFILL (CLASS 1 OR 2). BEDDING IS NOT REQUIRED FOR FLEXIBLE PIPE IN SOIL. BEDDING MATERIAL FOR RIGID OR FLEXIBLE PIPE IN ROCK SHALL BE 12 IN. OF LOOSE STRUCTURE BACKFILL, CLASS 1.



CIRCULAR PIPE

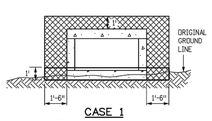
(WHERE ORIGINAL GROUND LINE IS BETWEEN 0.3 Bc AND Bc + 1 FT. ABOVE FLOWLINE)

▲ WHEN TWO OR MORE CONDUITS ARE LAID SIDE-BY-SIDE, THEY SHALL BE PLACED SO THAT THEY ARE ½ OUTSIDE DIAMETER, OR ½ OUTSIDE SPAN, OR 3 FT. APART, WHICHEVER IS LESS. HOWEVER, IF END SECTIONS ARE USED, THE MINIMUM SPACING SHALL BE 1 FT. BETWEEN END SECTIONS.



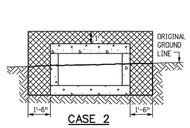
CIRCULAR PIPE IN FILL

ARCH OR ELLIPTICAL PIPE IN FILL



CASE 1

APPLIES WHEN THE ORIGINAL GROUND LINE IS LESS THEN 1 FT. ABOVE THE BOTTOM OF THE BOX CULVERT. THE EMBANKMENT SHALL BE BUILT UP TO 1 FT. ABOVE THE BOTTOM OF THE BOX CULVERT AND THEN EXCAVATED TO THE BOTTOM OF THE BOX CULVERT. THIS EMBANKMENT AND EXCAVATION WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WORK.

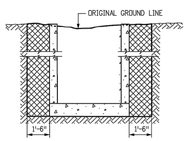


CASE 2

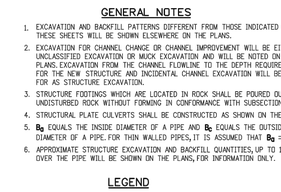
APPLIES WHEN THE ORIGINAL GROUND LINE IS MORE THAN 1 FT. ABOVE THE BOTTOM OF THE BOX CULVERT.

CONCRETE BOX CULVERT

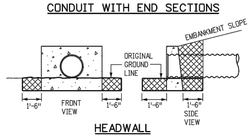
IN BOTH CASES, THE TRENCH (OUTLINED BY THE THICK SOLID LINE) SHALL THEN BE EXCAVATED TO ACCOMMODATE CONSTRUCTION OF THE BOX CULVERT.



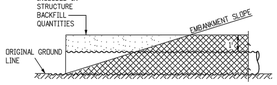
DROP INLETS AND DIVISION BOXES



CONDUIT WITH END SECTIONS



HEADWALL



END OF PIPE

GENERAL NOTES

1. EXCAVATION AND BACKFILL PATTERNS DIFFERENT FROM THOSE INDICATED ON THESE SHEETS WILL BE SHOWN ELSEWHERE ON THE PLANS.
2. EXCAVATION FOR CHANNEL CHANGE OR CHANNEL IMPROVEMENT WILL BE EITHER UNCLASSIFIED EXCAVATION OR MUCK EXCAVATION AND WILL BE NOTED ON THE PLANS. EXCAVATION FROM THE CHANNEL FLOWLINE TO THE DEPTH REQUIRED FOR THE NEW STRUCTURE AND INCIDENTAL CHANNEL EXCAVATION WILL BE PAID FOR AS STRUCTURE EXCAVATION.
3. STRUCTURE FOOTINGS WHICH ARE LOCATED IN ROCK SHALL BE POURED OUT TO UNDISTURBED ROCK WITHOUT FORMING IN CONFORMANCE WITH SUBSECTION 601.09(b).
4. STRUCTURAL PLATE CULVERTS SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS.
5. B_a EQUALS THE INSIDE DIAMETER OF A PIPE AND B_c EQUALS THE OUTSIDE DIAMETER OF A PIPE. FOR THIN WALLED PIPES, IT IS ASSUMED THAT $B_a = B_c$.
6. APPROXIMATE STRUCTURE EXCAVATION AND BACKFILL QUANTITIES, UP TO 1 FT. OVER THE PIPE WILL BE SHOWN ON THE PLANS, FOR INFORMATION ONLY.

LEGEND

- STRUCTURE EXCAVATION LIMITS
- STRUCTURE BACKFILL, CLASS I OR 2, AS SHOWN ON PLANS
- STRUCTURE BACKFILL, CLASS 1
- EMBANKMENT MATERIAL
- EARTH
- ROCK
- BEDDING
- CONCRETE
- = WHEN FLOW LINE OF CULVERT IS LESS THAN 0.3 B_c BELOW THE ORIGINAL GROUND LINE, EMBANKMENT SHALL BE BUILT UP TO 0.3 B_c ABOVE THE FLOW LINE AND TRENCH EXCAVATED TO THE BOTTOM OF PIPE OR AS SHOWN.

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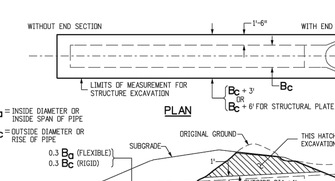
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EXCAVATION AND BACKFILL FOR STRUCTURES

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO. M-206-1 Standard Sheet No. 1 of 2

Project Sheet Number:

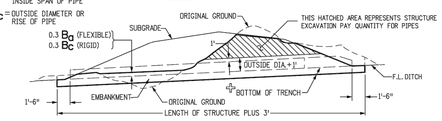


PLAN

Ba = INSIDE DIAMETER OR INSIDE SPAN OF PIPE

Bc = OUTSIDE DIAMETER OR RISE OF PIPE

0.3 Ba (FLEXIBLE)
0.3 Bc (RIGID)

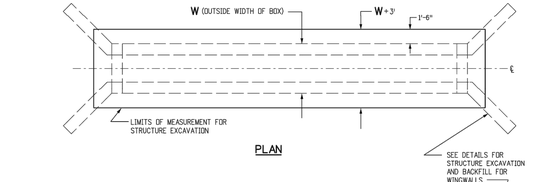


PROFILE

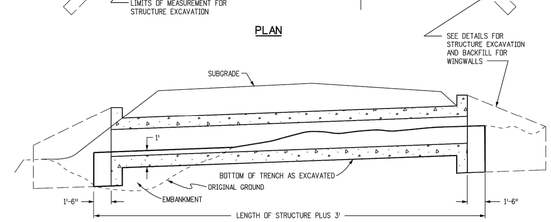
FOR APPLICABLE LIMITS OF STRUCTURE EXCAVATION, SEE BEDDING DETAILS ON SHEET 1 OF THESE DETAILS.

STRUCTURE EXCAVATION UP TO 1 FT. ABOVE THE TOP OF THE PIPE SHALL BE INCLUDED IN THE BID PRICE OF THE PIPE.

STRUCTURE EXCAVATION MEASUREMENT FOR PIPE CULVERTS

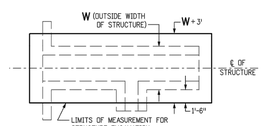


PLAN

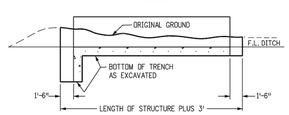


PROFILE

STRUCTURE EXCAVATION MEASUREMENT FOR CONCRETE BOX CULVERTS

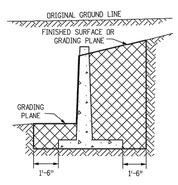


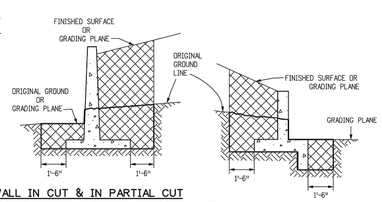
PLAN



PROFILE

STRUCTURE EXCAVATION MEASUREMENT FOR DIVISION BOXES





RETAINING WALL IN CUT & IN PARTIAL CUT

ANY ADDITIONAL EXCAVATION BEHIND THE LIMITS SHOWN SHALL BE FILLED WITH CLASS I BACKFILL MATERIAL. THE ADDITIONAL EXCAVATION AND BACKFILL WILL NOT BE MEASURED AND PAID FOR.

WINGWALL

LEGEND

- STRUCTURE EXCAVATION LIMITS
- STRUCTURE BACKFILL, CLASS I OR 2, AS SHOWN ON PLANS
- CONCRETE

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Last Modification Date: 07/31/19	(R-X)		
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EXCAVATION AND BACKFILL FOR STRUCTURES

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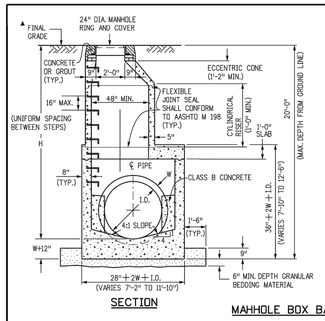
STANDARD PLAN NO. M-206-1 Standard Sheet No. 2 of 2

Project Sheet Number:

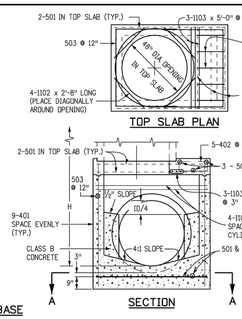
Know what's below. Call before you dig.

Plotted: 6/22/2021 7:12 PM Dwg Name: P:\Clcpkc3\Com\South\09 Belford Ave East\dwg\Eng\Final Drawings\Plan Set\STORM DETAILS.dwg Updated By: JHawthorne

DRAWN BY	DATE	REVISIONS

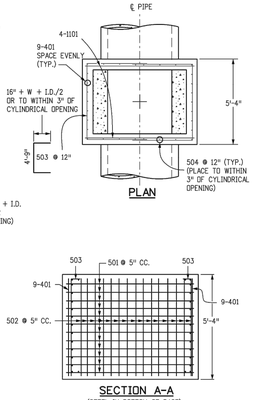


SECTION



MAHHOLE BOX BASE

SECTION



GENERAL NOTES

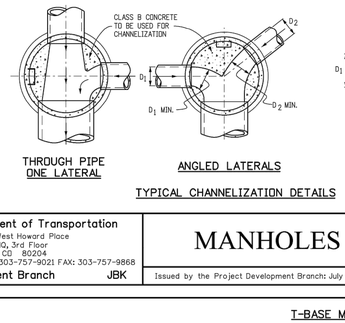
1. SINCE ALL PIPE ENTRIES INTO THE BASE ARE VARIABLE, THE DIMENSIONS SHOWN ARE TYPICAL. ACTUAL DIMENSIONS AND QUANTITIES FOR CONCRETE AND REINFORCEMENT SHALL BE AS REQUIRED IN THE WORK.
2. THE PRECAST FLAT TOP MAY BE USED ON ANY MANHOLE. THE ECCENTRIC CONE MAY BE USED WHEN THE MANHOLE "H" HEIGHT IS AT LEAST 8 FT.
3. THE MANHOLE RING FRAME SHALL BE SET IN A BED OF GROUT. THE FRAME SHALL BE SURROUNDED WITH A CEMENT GROUT IN UNPAVED AREA, OR A CONCRETE COLLAR IN PAVED AREA. SEE DETAILS ON SHEETS 2 AND 3.
4. DESIGN OF BOX BASE IS BASED ON STRAIGHT RUNS OF PIPE OR CHANGE IN DIRECTIION OF LESS THAN 45°. SPECIAL DESIGN IS REQUIRED FOR 45° OR GREATER.
5. PRECAST MANHOLES AND REINFORCEMENT SHALL CONFORM TO AASHTO M 199 (ASTM C 478).
6. CAST-IN-PLACE MANHOLES SHALL BE CLASS B CONCRETE.
7. STEPS SHALL BE REQUIRED WHEN THE MANHOLE DEPTH EXCEEDS 3 FT.-6 IN. AND SHALL CONFORM TO AASHTO M 199.
8. ALL REINFORCING STEEL SHALL BE GRADE 60 AND EPOXY COATED. VERTICAL STEEL SHALL BE PLACED AT CENTERLINE OF WALL. ALL BARS SHALL HAVE A 2 IN.MINIMUM CLEARANCE.
9. ALL PIPE ENTRIES INTO THE BASE OF MANHOLE SHALL BE CONNECTED BY OPEN CHANNELIZATION ADJUSTED FOR PIPE SIZE, SHAPE, SLOPE, AND DIRECTION OF FLOW. DETAILS SHOWN ARE TYPICAL FOR INSTALLATIONS WITH ALL INVERTS OF SAME RELATIVE ELEVATION. FOR EXCESSIVE ELEVATION DIFFERENCE BETWEEN INVERTS, SPECIAL BASE/CHANNEL DETAILS WILL BE SHOWN ON THE PLANS.
10. FLOW CHANNELS AND INVERTS SHALL BE FORMED BY SHAPING WITH CLASS B CONCRETE OR APPROVED GROUT.
11. STUB-OUTS SHALL EXTEND 2 FT. MINIMUM BEYOND OUTSIDE WALL SURFACE OF MANHOLE AND BE SATISFACTORILY PLUGGED.
12. THE SLOPE OF THE MANHOLE COVER SHALL MATCH THE ROADWAY PROFILE AND CROSS SLOPE.

▲ WHEN FINAL GRADE IS PAVEMENT SURFACE, RECESS MANHOLE RING AND COVER 1/4" MIN. TO 1/2" MAX.

MARK	SIZE	TYPE	WT./ft	BARS	I.D. 54"	60"	66"	72"	84"	96"	FORMULAS
401	4	I	0.668	(NO. REQ'D. (LENGTH WEIGHT *	18 8'-1" 97.2	18 8'-8" 104.2	18 9'-3" 111.2	18 9'-10" 118.2	18 11'-0" 132.3	18 12'-2" 146.3	401 BAR LENGTH = 32" + 2W + I.D.
402	4	III	0.668	(NO. REQ'D. (LENGTH WEIGHT *	5 5'-5" 18.1	5 6'-0" 20.0	5 6'-7" 22.0	5 7'-2" 23.9	5 8'-4" 27.8	5 9'-6" 31.7	402 BAR LENGTH = I.D. + 2W
501	5	I	1.043	(NO. REQ'D. (LENGTH WEIGHT *	17 7'-0" 131.5	17 9'-0" 141.8	17 8'-7" 152.2	17 9'-2" 162.5	17 10'-4" 183.2	17 11'-6" 203.9	501 BAR LENGTH = 24" + I.D. + 2W
502	5	I	1.043	(NO. REQ'D. (LENGTH WEIGHT *	22 5'-0" 114.7	23 5'-0" 119.9	25 5'-0" 130.4	26 5'-0" 135.6	29 5'-0" 151.2	32 5'-0" 166.9	502 NUMBER BARS REQ'D. = 3 + $\left(\frac{24+I.D.+2W}{@\ 5"}+1\right)$
503	5	II	1.043	(NO. REQ'D. (LENGTH WEIGHT *	16 12'-10" 214.2	16 13'-5" 223.9	18 14'-0" 262.8	18 14'-7" 273.8	18 14'-7" 328.5	20 16'-11" 423.5	503 NUMBER BARS REQ'D. = 2 $\left(\frac{13+I.D.+2W}{@\ 12"}+1\right)$ BAR LENGTH = 4'-9"+2(0.6+W+I.D./2)
504	5	I	1.043	(NO. REQ'D. (LENGTH WEIGHT *	12 8'-1" 101.2	14 8'-8" 126.6	14 9'-3" 135.1	14 9'-10" 164.1	16 9'-10" 206.5	18 11'-0" 253.8	504 NUMBER BARS REQ'D. = 2 $\left(\frac{2W+I.D.-4}{@\ 12"}+1\right)$ BAR LENGTH = 32"+2W+I.D.
1101	11	I	5.313	(NO. REQ'D. (LENGTH WEIGHT *	4 7'-2" 152.3	4 7'-9" 164.7	4 8'-4" 177.1	4 8'-11" 189.5	4 10'-1" 214.3	4 11'-3" 239.1	1101 BAR LENGTH = 21" + I.D. + 2W
1102	11	I	5.313	(NO. REQ'D. (LENGTH WEIGHT *	4 2'-8" 56.7	4 2'-8" 56.7	4 2'-8" 56.7	4 2'-8" 56.7	4 2'-8" 56.7	4 2'-8" 56.7	BENDING TYPE I: STRAIGHT
1103	11	I	5.313	(NO. REQ'D. (LENGTH WEIGHT *	3 5'-0" 79.7	3 5'-0" 79.7	3 5'-0" 79.7	3 5'-0" 79.7	3 5'-0" 79.7	3 5'-0" 79.7	TYPE II: 4'-9", 16"+W+I.D./2
* REINFORCING STEEL TOTAL					965.8	1,037.5	1,127.2	1,204.0	1,380.2	1,601.6	TYPE III: 12", 12", I.D.+2W-38"
CONCRETE - CUBIC YARDS - TOTAL					6.0	6.6	7.3	8.0	9.5	11.1	

NOTE: QUANTITIES ARE BASED ON SAME SIZE PIPE ENTRANCE TO AND EXIT FROM, BASE AND A 4 FT. MANHOLE ENTRANCE INTO TOP SLAB OF BASE.

QUANTITIES FOR CONCRETE MANHOLE BOX BASE



THROUGH PIPE ONE LATERAL

ANGLED LATERALS

SHARP ANGLE

TYPICAL CHANNELIZATION DETAILS

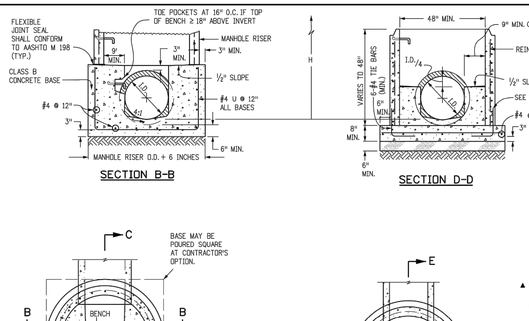
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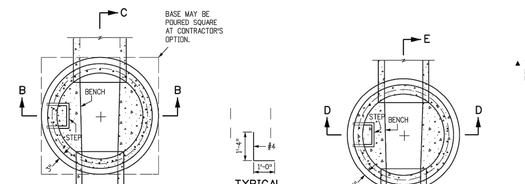
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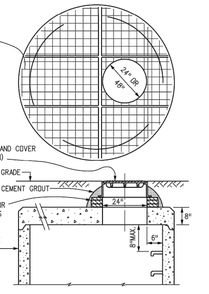
MANHOLES

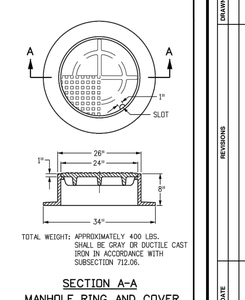
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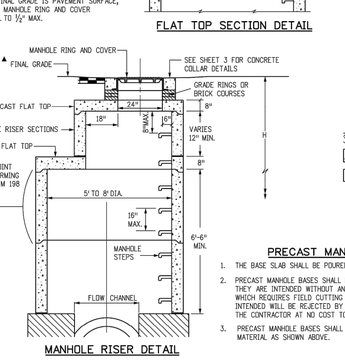
STANDARD PLAN NO.
M-604-20
Standard Sheet No. 1 of 3
Project Sheet Number:











LEGEND

SUITABLE SUBGRADE

GRANULAR BEDDING MATERIAL

CONCRETE

PRECAST MANHOLE BASES NOTES:

1. THE BASE SLAB SHALL BE POURED MONOLITHICALLY WITH BOTTOM RISER SECTION.
2. PRECAST MANHOLE BASES SHALL FIT THE CONDITIONS AND LOCATIONS FOR WHICH THEY ARE INTENDED WITHOUT ANY FIELD MODIFICATIONS. ANY MANHOLE BASE WHICH REQUIRES FIELD CUTTING OR MODIFICATION IN ORDER TO FIT THE LOCATIONS INTENDED WILL BE REJECTED BY THE ENGINEER AND REMOVED AND REPLACED BY THE CONTRACTOR AT NO COST TO THE DEPARTMENT.
3. PRECAST MANHOLE BASES SHALL BE BEDDED ON AN APPROVED GRANULAR BEDDING MATERIAL AS SHOWN ABOVE.

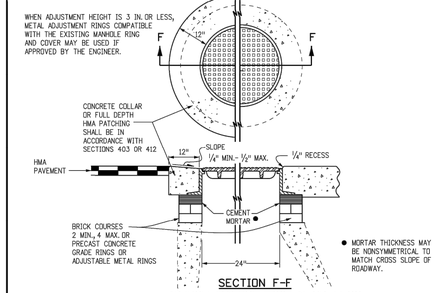
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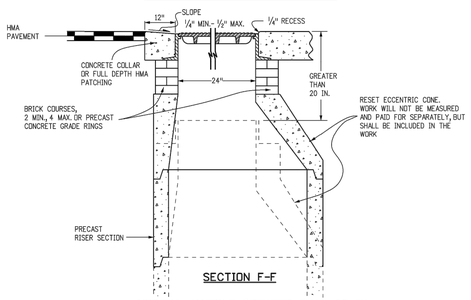
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MANHOLES

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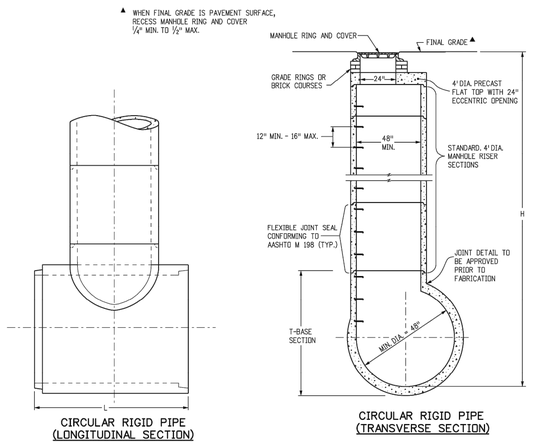
STANDARD PLAN NO.
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Project Sheet Number:





T-BASE MANHOLES NOTES

1. THE T-BASE SECTION SHALL BE SHOP-FABRICATED FOR DELIVERY TO THE CONSTRUCTION SITE AS A COMPLETE UNIT.
2. THESE DETAILS SHOW ONLY THE CONCEPTUAL AND STANDARD DIMENSIONAL REQUIREMENTS FOR TYPE T-BASE MANHOLES. THE CONTRACTOR SHALL FURNISH DETAILED SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION. THE DETAILS SHOWN HEREIN APPLY ONLY TO 48 IN. AND GREATER DIAMETER PIPES.
3. EXCEPT FOR CLASS OF PIPE, SPECIFICATIONS FOR THE MANHOLE SHALL BE THE SAME AS THOSE REQUIRED FOR THE ADJOINING PIPE.
4. THE T-BASE SECTION SHALL MAINTAIN ITS INTERNAL SHAPE AND FLOW AREA. GROUTING OR FILLING SHALL BE APPLIED SO AS TO NOT DISTURB THE NORMAL FLOW OR REDUCE THE AREA.



MANHOLE T-BASE

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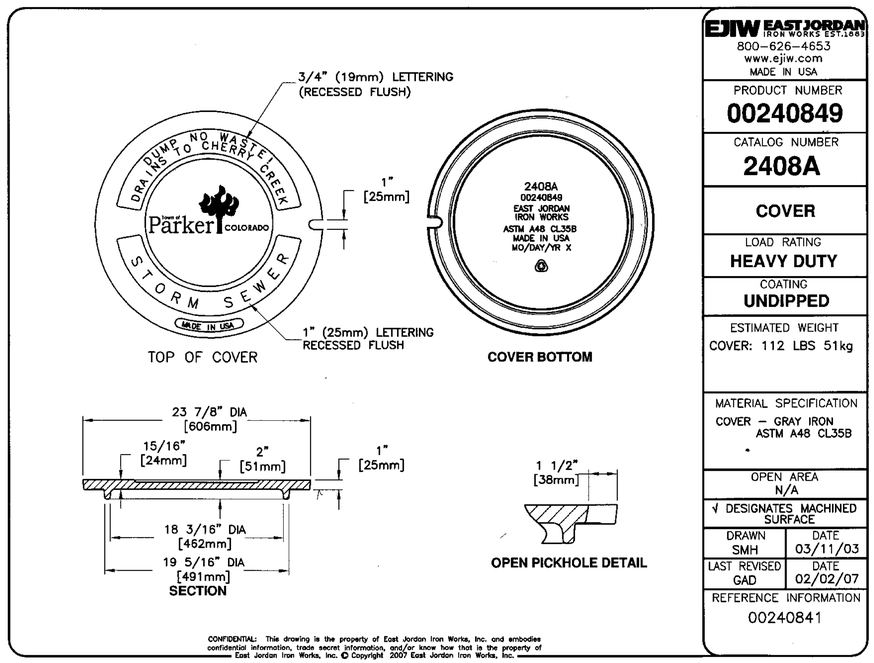
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MANHOLES

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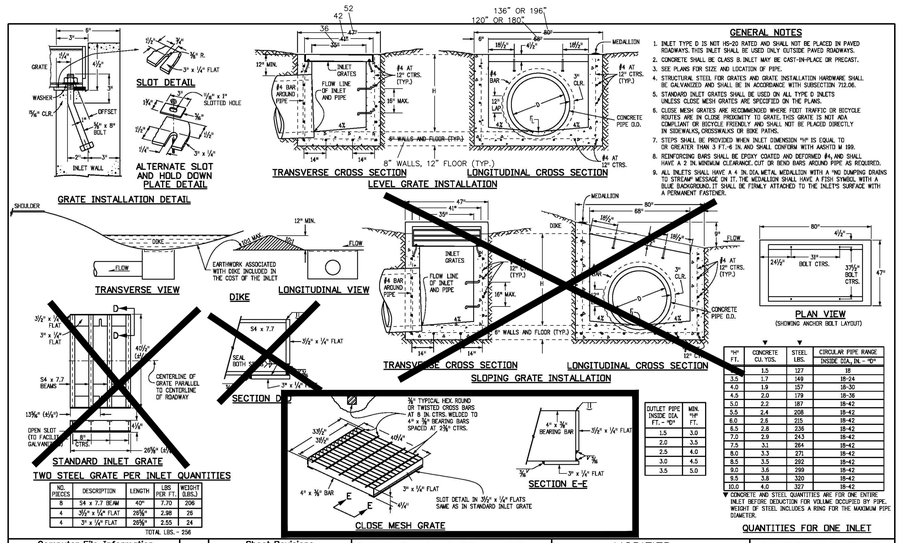
STANDARD PLAN NO.
M-604-20
Standard Sheet No. 3 of 3
Project Sheet Number:

Know what's below. Call before you dig.



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DRAWN BY	DATE	REVISIONS



GENERAL NOTES

1. INLET TYPE D IS NOT HS-20 RATED AND SHALL NOT BE PLACED IN PAVED ROADWAYS. THIS INLET SHALL BE USED ONLY OUTSIDE PAVED ROADWAYS.
2. CONCRETE SHALL BE CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
3. SEE PLANS FOR SIZE AND LOCATION OF PIPE.
4. STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH SUBSECTION 712.06.
5. STANDARD INLET GRATES SHALL BE USED ON ALL TYPE D INLETS UNLESS CLOSE MESH GRATES ARE SPECIFIED ON THE PLANS.
6. CLOSE MESH GRATES ARE RECOMMENDED WHERE FOOT TRAFFIC OR BICYCLE ROUTES ARE IN CLOSE PROXIMITY TO GRATE. THIS GRATE IS NOT ADA COMPLIANT OR BICYCLE FRIENDLY AND SHALL NOT BE PLACED DIRECTLY IN SIDEWALKS, CROSSWALKS OR BIKE PATHS.
7. STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" IS EQUAL TO OR GREATER THAN 3 FT.-6 IN. AND SHALL CONFORM WITH AASHTO M 199.
8. REINFORCING BARS SHALL BE EPOXY COATED AND DETERMINED #4, AND SHALL HAVE A 2 IN. MINIMUM CLEARANCE. CUT OR BEND BARS AROUND PIPE AS REQUIRED.
9. ALL INLETS SHALL HAVE A 4 IN. DIA. METAL MEDALLION WITH A TWO STAMPING ERASING TO STREAM MESSAGE ON IT. THE MEDALLION SHALL HAVE A FISH SYMBOL WITH A BACKGROUND. IT SHALL BE FIRMLY ATTACHED TO THE INLET'S SURFACE WITH A PERMANENT FASTENER.

"H" FT.	CONCRETE CU. YDS.	STEEL LBS.	CIRCULAR PIPE RANGE INSIDE DIA. IN. - "D"
3.0	1.5	127	18
3.5	1.7	149	18-24
4.0	1.9	157	18-30
4.5	2.0	179	18-36
5.0	2.2	187	18-42
5.5	2.4	208	18-42
6.0	2.6	215	18-42
6.5	2.8	236	18-42
7.0	2.9	243	18-42
7.5	3.1	264	18-42
8.0	3.3	271	18-42
8.5	3.5	292	18-42
9.0	3.6	299	18-42
9.5	3.8	320	18-42
10.0	4.0	327	18-42

▼ CONCRETE AND STEEL QUANTITIES ARE FOR ONE ENTIRE INLET BEFORE DEDUCTION FOR VOLUME OCCUPIED BY PIPE. WEIGHT OF STEEL INCLUDES A RING FOR THE MAXIMUM PIPE DIAMETER.

OUTLET PIPE INSIDE DIA. FT. - "D"	MIN. "HP" FT.
1.5	3.0
2.0	3.5
2.5	4.0
3.0	4.5
3.5	5.0

TWO STEEL GRATE PER INLET QUANTITIES

NO. PIECES	DESCRIPTION	LENGTH	LBS PER FT.	WEIGHT (LBS.)
8	S4 x 7.7 BEAM	40"	7.70	206
4	3½" x ¼" FLAT	29⅝"	2.88	25
4	3" x ¼" FLAT	29⅝"	2.55	24
TOTAL LBS. - 256				

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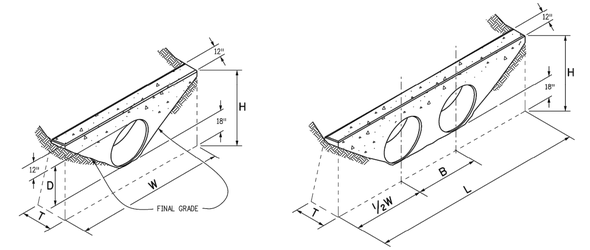
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MODIFIED
INLET, TYPE D

STANDARD PLAN NO.
M-604-11
Sheet No. 1 of 1

Issued By: Project Development Branch July 4, 2012



CONCRETE HEADWALL INSTALLATIONS

SEE STANDARD PLAN M-601-10 FOR REINFORCING DETAILS.

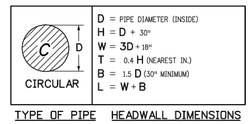
PIPE		PIPE DIAMETER (AND EQUIVALENT DIAMETER) (IN.)											
		18		24		30		36		42		48	
TYPE	MATERIAL	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE
CIRCULAR	RIGID	1.0	1.3	1.5	2.0	2.0	2.7	2.8	3.6	3.6	4.6	4.6	6.0
	FLEXIBLE	1.1	1.4	1.6	2.1	2.2	3.0	3.0	4.0	3.9	5.3	5.0	6.8
ELLIPTICAL	RIGID	23 x 14		30 x 19		38 x 24		45 x 29		53 x 34		60 x 38	
		0.9	1.2	1.3	1.6	1.7	2.2	2.3	2.9	2.9	3.7	3.5	4.4
ARCH	METAL	22 x 13		29 x 18		36 x 22		43 x 27		50 x 31		58 x 36	
		0.9	1.3	1.4	1.9	1.8	2.4	2.4	3.4	3.2	4.4	3.4	5.0

CONCRETE QUANTITIES FOR ONE CONCRETE HEADWALL (CUBIC YARDS)

THICKNESS	MATERIAL	PIPE DIAMETER (IN.)					
		18	24	30	36	42	48
4"	CONCRETE	0.4	0.8	1.2			
6"	CONCRETE				2.6	3.6	4.7
18"	RIPRAP	2.0	3.5	5.4	7.8	10.7	13.9

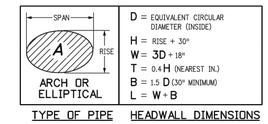
PIPE OUTLET PAVING (CUBIC YARDS)

NOTE: VOLUME OCCUPIED BY PIPE HAS BEEN DEDUCTED.



D = PIPE DIAMETER (INSIDE)
H = D + 30"
W = 3D + 18"
T = 0.4 H (NEAREST IN.)
B = 1.5 D (30" MINIMUM)
L = W + B

TYPE OF PIPE — HEADWALL DIMENSIONS



D = EQUIVALENT CIRCULAR DIAMETER (INSIDE)
H = RISE + 30"
W = 3D + 18"
T = 0.4 H (NEAREST IN.)
B = 1.5 D (30" MINIMUM)
L = W + B

TYPE OF PIPE — HEADWALL DIMENSIONS

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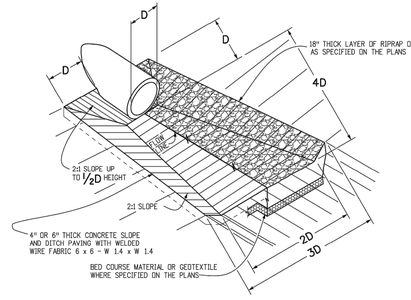
HEADWALLS AND PIPE OUTLET PAVING

STANDARD PLAN NO.
M-601-12
Standard Sheet No. 1 of 1
Project Sheet Number:

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GENERAL NOTES

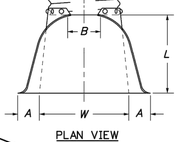
1. FOR SIZE AND LOCATION OF PIPES, SEE THE PLANS.
2. ALL CONCRETE SHALL BE CLASS B.
3. FOOTINGS IN ROCK SHALL BE POURED OUT TO ROCK AND NOT FORMED IN ACCORDANCE WITH SUBSECTION 601.09(b).
4. EXPOSED CONCRETE CORNERS SHALL BE CHAMFERED ¾ IN.
5. HEADWALL SHALL HAVE REINFORCING STEEL INSTALLED IN A PATTERN SIMILAR TO STANDARD PLAN M-601-10.
6. THE COST OF REINFORCING STEEL SHALL BE INCLUDED IN THE WORK UNLESS THE STEEL QUANTITIES ARE LISTED IN THE PLANS AND ARE PAID FOR SEPARATELY.



PIPE OUTLET PAVING
MAY BE USED WITH MULTIPLE PIPES.

PIPE DIA.	THICKNESS	DIMENSIONS					
		A	B	H	L	W	T
		IN.					
12	0.064	6	6	6	21	24	34
18	0.064	8	10	6	31	36	46
21	0.064	9	12	6	36	42	52
24	0.064	10	13	6	41	48	58
30	0.079	12	16	8	51	60	70
36	0.079	14	19	9	60	72	94
42	0.109	16	22	11	69	84	106
48	0.109	18	27	12	78	90	112
54	0.109	18	30	12	84	102	124
60	0.109	18	33	12	87	114	136
66	0.109	18	36	12	87	120	142
72	0.109	18	39	12	87	126	148
78	0.109	18	42	12	87	132	154
84	0.109	18	45	12	87	138	160

FLEXIBLE ROUND PIPE



PIPE ARCH SPAN x RISE	THICKNESS	DIMENSIONS					
		A (±1")	B (MAX.)	H (±1")	L (±1.5")	W (±2")	T
		IN.					
21 x 15	0.064	7	10	6	23	36	46
24 x 18	0.064	8	12	6	28	42	52
28 x 20	0.064	9	14	6	32	48	58
35 x 24	0.079	10	16	6	39	60	70
42 x 29	0.079	12	18	8	46	75	85
49 x 33	0.109	13	21	9	53	85	103
57 x 38	0.109	18	26	12	63	90	108
64 x 43	0.109	18	30	12	70	102	120
71 x 47	0.109	18	33	12	77	114	132

FLEXIBLE PIPE ARCH

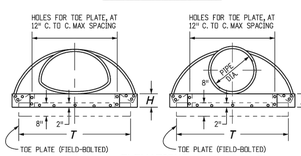


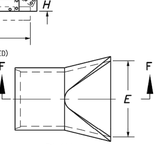
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FOR 18 IN. THRU 24 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS. NOT TO BE USED ON HELICALLY-FORMED PIPE UNLESS RECORRUGATED.

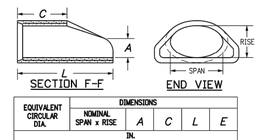
TYPE 2
FOR 30 IN. THRU 36 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS. NOT TO BE USED ON HELICALLY-FORMED PIPE UNLESS RECORRUGATED.

TYPE 3
FOR 42 IN. THRU 84 IN. ROUND PIPE WITH ANNULAR CORRUGATIONS AND ALL SIZES WITH HELICAL CORRUGATIONS AND FOR ALL METAL PIPE ARCH CULVERTS. SHOP ATTACH A 24 IN. MIN. LENGTH OF ANNULAR PIPE WITH CALV. RIVETS OR BOLTS, SPOT WELDS, OR 2 IN. LONG SKIP WELDS ON 8 IN. CTRS. REPAIR BURNT GALVANIZING IN ACCORDANCE WITH SUBSECTION 707.09.

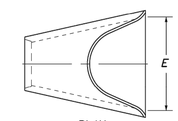
TYPICAL CONNECTIONS





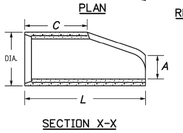


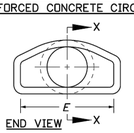
END SECTION AND CONNECTION DETAILS FOR ROUND AND ARCH METAL PIPES



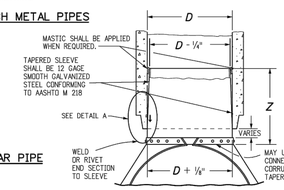
PIPE I.D.	DIMENSIONS			
	A	C	L	E
	IN.			
18	10	48	78	36
24	10	48	78	48
30	14	36	96	60
36	18	36	96	72
42	24	36	96	78
48	28	24	96	84
54	30	36	96	90
60	36	36	96	96
72	34	20	96	108

REINFORCED CONCRETE CIRCULAR PIPE





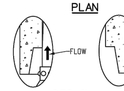
END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE



D	Z (MIN.)
IN.	
18 - 24	12
30 AND 36	16
42 AND LARGER	24

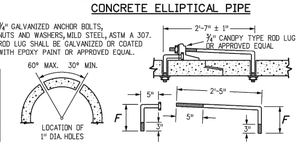
NOTE: METAL END SECTION SHALL BE FIRMLY WEDGED INTO PIPE END BEFORE BACKFILLING.

STEEL END SECTION FOR CONCRETE CIRCULAR PIPE
(ALTERNATIVE FOR CONCRETE END SECTION)



¾" GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE GALVANIZED OR COATED WITH EPOXY PAINT OR APPROVED EQUAL.

PIPE DIAMETER	F
IN.	
18 - 30	5
36 - 42	6
48 - 60	7
72 - 84	9



END SECTION FOR REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIVALENT CIRCULAR DIA.	NOMINAL SPAN x RISE	DIMENSIONS			
		A	C	L	E
		IN.			
24	30 x 19	9	33	72	48
30	38 x 24	10	18	72	60
36	45 x 29	12	24	84	72
42	53 x 34	16	36	96	78
48	60 x 38	21	36	96	84
54	68 x 43	26	36	96	90
60	76 x 48	30	36	96	96

Computer File Information	
Creation Date: 07/31/19	
Designer Initials: JBK	
Last Modification Date: 07/31/19	
Detailer Initials: LTA	
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English	

Sheet Revisions	
Date:	Comments

Colorado Department of Transportation
2829 West Howard Place
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Project Development Branch JBK

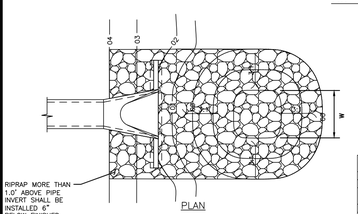
CONCRETE AND METAL END SECTIONS

STANDARD PLAN NO.
M-603-10
Standard Sheet No. 1 of 1
Project Sheet Number:

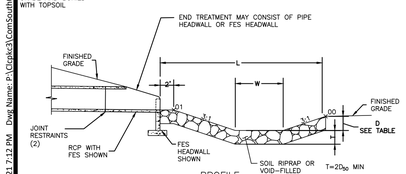
Issued by the Project Development Branch: July 31, 2019

GENERAL NOTES

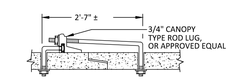
1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURERS' CONFIGURATIONS.
2. CONCRETE END SECTIONS SHALL BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF PIPE OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE PROJECT.
4. THE INSIDE CONFIGURATION AND THE JOINT OF CONCRETE END SECTION AND PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH PIPE SHALL MATCH THE DIMENSIONS OF THE PIPE SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN IS REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" IN. GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL CONFORM TO AASHTO M 111, M 218 OR M 232.
8. CONCRETE PIPE JOINT FASTENERS, WHERE SHOWN ON PLANS, SHALL BE INSTALLED SO THAT A MINIMUM OF 15 LINEAR FEET OF THE OUTLET END OF THE PIPE ARE MECHANICALLY LOCKED TOGETHER. END SECTION LENGTHS WHEN USED, SHALL BE INCLUDED IN THE 15 LF REQUIREMENT.
9. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER. PLASTIC END SECTIONS SHALL NOT BE USED.
10. THE END SECTION STYLE, EITHER REGULAR OR SAFETY, SHALL BE AS SHOWN ON THE PLANS.
11. AT THE OPTION OF THE CONTRACTOR AND APPROVAL OF THE CDOT PROJECT ENGINNER, REINFORCED CONCRETE END SECTIONS MAY BE MADE WITH SYNTHETIC FIBERS INSTEAD OF STEEL FOR PIPES 36 INCHES IN DIAMETER AND SMALLER, AND CONFORM TO AASHTO M 86 AND SUBSECTION 601.03.



PIPE DIA. (in)	do	T (ft.)	W (ft.)	R (ft.)
18	9"	1.5	5	5
24			8	8
30			10	10
36			12	12
42			14	14
48			16	16

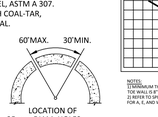


LOW TAILWATER BASIN
N.T.S.



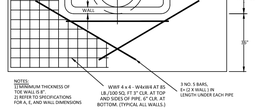
3/4" GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH COAL-TAR, EPOXY PAINT OR APPROVED EQUAL.

PIPE DIAMETER	F
18" - 30"	5"
36" - 42"	6"
48" - 60"	7"
72" - 84"	9"



CONCRETE JOINT FASTENER
(TWO PER JOINT)

PIPE DIA.	A	E
18"	9"	36"
24"	9.5"	48"
30"	12"	60"
36"	15"	72"
42"	21"	78"
48"	24"	84"



FLARED END SECTION
TOEWALL DETAIL
N.T.S.

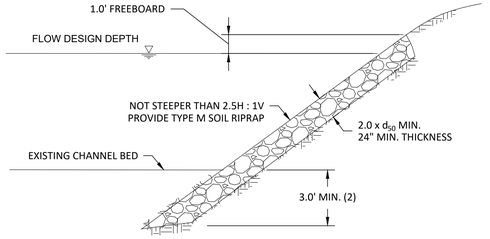
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Project Development Branch JBK

RIP-RAP TOE PROTECTION

N.T.S.



(1) USE SOIL RIPRAP WHEN d_{50} IS LESS THAN OR EQUAL TO TYPE M.
(SUGGEST USE OF SOIL RIPRAP FOR LARGER RIPRAP SIZES AS WELL)
(2) 5 - FEET MINIMUM IN SANDY OR EROSIVE SOILS
(3) ELIMINATE GRANULAR BEDDING WHEN SOIL-RIPRAP IS USED

Know what's below. Call before you dig.

DATE	REVISIONS	DRAWN BY
06-18-2021	SECOND SUBMITTAL - RESPOND TO TOP COMMENTS	GTI

Manhard CONSULTING LTD
7600 East Orchard Road, Suite 150-N, Greenwood Village, CO 80111 ph: 303.708.0500 manhard.com
Civil Engineering | Surveying | Construction Management
Water Resource Management

COMPARK VILLAGE SOUTH, F1 - BELFORD AVE SITE PLAN AMD
TOWN OF PARKER, COLORADO
STORM DETAILS

PROJ. MGR.: GTI
PROJ. ASSOC.: ASD
DRAWN BY: JMP
DATE: 03/15/2021

SHEET
33 OF 33
CLCPKC3 CLCPKC3

PENDING APPROVAL - NOT FOR CONSTRUCTION

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Plotted: 6/22/2021 7:12 PM Dwg Name: P:\Clepkc3\Comsouth09 - Belford Ave East\dwg\Eng\Final Drawings\Plan Set\STORM DETAILS.dwg Updated By: JHawthorne