FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT
DOWNSTREAM OF EAST SHERIDAN AVENUE

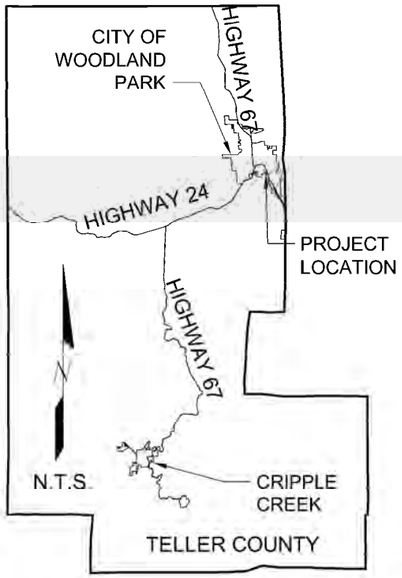
90% DESIGN - MARCH 2013

PREPARED FOR:

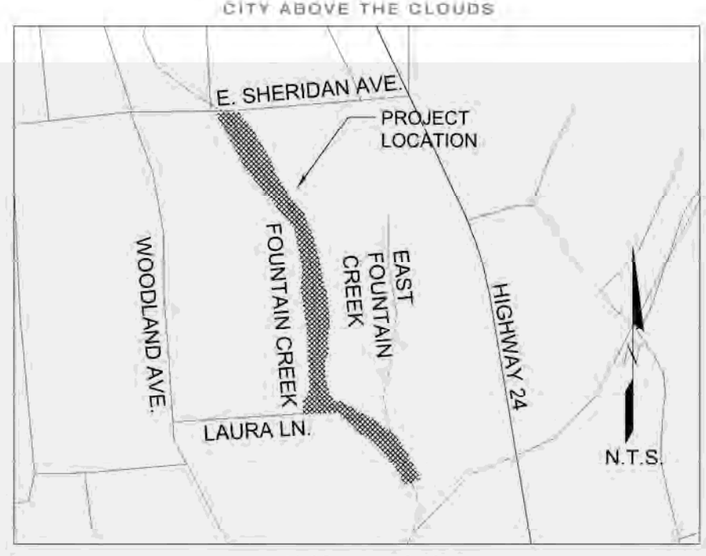
CITY OF WOODLAND PARK, COLORADO
PUBLIC WORKS DEPARTMENT

ELEVATE!

WOODLAND PARK
CITY ABOVE THE CLOUDS



LOCATION MAP



SITE MAP

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CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD.

THE INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

CALL UTILITY NOTIFICATION CENTER OF COLORADO
1-800-922-1987 OR 811
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

CIVIL ENGINEER	GEOTECHNICAL ENGINEER	LANDSCAPE ARCHITECT	SURVEYOR
AYRES ASSOCIATES 12050 N PECOS ST, SUITE 150 WESTMINSTER, CO 80234 (303) 938-8874 CONTACT: RICHARD SMITH, P.E.	TERRACON CONSULTANTS 4172 CENTER PARK DRIVE COLORADO SPRINGS, CO 80916 (719) 597-2116 CONTACT: RYAN FEIST, P.E.	DESIGNING ENVIRONMENTS 780 PINON RIDGE DRIVE WOODLAND PARK, CO 80863 (404) 403-6732 CONTACT: CATHERINE EVERETT	RAMPART SURVEYS, INC 1050 TAMARAC PARKWAY WOODLAND PARK, CO 80863 (719) 687-0920 CONTACT: KEVIN LLOYD, PLS

PREPARED FOR CONSTRUCTION UNDER MY DIRECT SUPERVISION:

(AFFIX SEAL, EXPIRATION DATE AND PE SIGNATURE) DATE

APPROVED FOR CONSTRUCTION
CITY ENGINEER OR APPOINTED REPRESENTATIVE DATE

"AS-BUILT" CERTIFIED BY:

(AFFIX SEAL, EXPIRATION DATE AND PE SIGNATURE) DATE

APPROVED FOR "AS-BUILT" RECORD
CITY ENGINEER OR APPOINTED REPRESENTATIVE DATE

90% SUBMITTAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	APP

DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

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ELEVATE! WOODLAND PARK
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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

COVER SHEET

DRAWING NO: ID-100
PROJECT NO: 35-0200.00
FILE NO: COVER SHEET.dwg
SHEET: 1 OF 31 SHEETS

3/18/2013 12:01 PM C:\USERS\HICKOXM\DESKTOP\WORKDRIVE_P:\35020016 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\SSIS\FADING\FOUNTAINCREEK\PRODUCTION DRAWINGS\COVER SHEET.DWG

GENERAL NOTES:

1. DIMENSIONS AND NOTATIONS SUPERSEDE SCALE OF THE DRAWINGS.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCEPTANCE, CONVEYANCE, AND CONTROL OF ALL SURFACE AND SUBSURFACE WATER FLOWS IN AND ENTERING FOUNTAIN CREEK DRAINAGE FACILITIES AFFECTED BY THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OPERATIONS OR ANY OTHER ACCEPTABLE MEANS TO PREVENT POLLUTION OF FOUNTAIN CREEK IN ACCORDANCE WITH THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT PERMIT REQUIREMENTS.

3. UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION HAVE BEEN LOCATED FROM FIELD INVESTIGATION AND THE AVAILABLE UTILITY RECORDS. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE LOCATION AND PROTECTION OF ANY UTILITIES AFFECTED BY THE EXECUTION OF THIS CONTRACT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES AND AGENCIES AND FOR THE COORDINATION OF ALL WORK IN THE PROXIMITY OF THE UTILITIES.

4. ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE OWNERS. THE OWNERS RESERVE THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO THE STANDARDS AND SPECIFICATIONS SHOWN IN THE CONTRACT DOCUMENTS.

5. THE CONTRACTOR SHALL HAVE ONE SIGNED COPY OF THE APPROVED PLANS, ONE COPY OF THE APPROPRIATE STANDARDS AND SPECIFICATIONS, AND A COPY OF ANY PERMITS NEEDED AT THE JOB SITE AT ALL TIMES.

6. PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL MEET WITH THE OWNER'S REPRESENTATIVE AND RECORD NOTES OF EXISTING CONDITIONS OF THE SITE AND ADJACENT PROPERTY. THE CONTRACTOR SHALL VIDEO THE ENTIRE SITE AND PROVIDE A COPY OF THE VIDEO TO THE OWNER PRIOR TO CONSTRUCTION.

7. THE CONTRACTOR SHALL NOTE THAT ALL UTILITIES MAY NOT APPEAR ON THESE PLANS AND THAT THE POTENTIAL CONFLICT WITH UTILITIES SHALL BE CONSIDERED IN THE PREPARATION OF COST ESTIMATES AND BIDS.

8. THE CONTRACTOR SHALL CONTACT ALL UTILITY OWNERS FOR INSPECTION WHEN WORK IS SCHEDULED ADJACENT TO THE UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING AFFECTED UTILITIES IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS, AND THE REQUIREMENTS OF THE UTILITY OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE AND COSTS ASSOCIATED WITH INTERRUPTED OR LOST SERVICE DUE TO DAMAGE TO THESE FACILITIES.

9. THE CONTRACTOR SHALL REFER TO THE CONTRACT SPECIFICATIONS FOR DESCRIPTION OF MATERIALS REFERRED TO BY SIZE, CLASS, TYPE, DESCRIPTION, OR OTHERWISE SPECIFIED ON THE DRAWINGS.

10. THE CONTRACTOR IS RESPONSIBLE FOR SAVING AND PROTECTING ALL EXISTING TREES AND VEGETATION WHERE REMOVAL FOR CONSTRUCTION IS NOT MANDATORY.

11. UNAUTHORIZED CHANGES AND USES: THE ENGINEER WHO PREPARED THESE PLANS WILL NOT BE RESPONSIBLE OR LIABLE FOR UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS AND SPECIFICATIONS MUST BE IN WRITING AND MUST BE APPROVED BY THE OWNER AND THE PREPARER OF THESE PLANS.

12. THE CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE IMMEDIATELY OF ANY FIELD CONDITION NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS.

13. THE CONTRACTOR SHALL PERFORM ALL WORK WITHIN THE CONSTRUCTION LIMITS AS SHOWN ON THE DRAWINGS AND DISCUSSED IN THE CONTRACT DRAWINGS. IF THE CONTRACTOR DAMAGES ANY EXISTING SITE OR PUBLIC AMENITIES (PAVEMENTS, CURBS, CURB AND GUTTER, SOD, TREES, FENCES, ETC.) OUTSIDE OR WITHIN THE EASEMENTS OR CONSTRUCTION LIMITS, HE SHALL REMOVE AND REPAIR SUCH TO THE SATISFACTION OF THE INDIVIDUAL PROPERTY OWNERS.

14. ITEMS TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR, UNLESS NOTED OTHERWISE IN THE PLANS.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY EROSION CONTROL THROUGHOUT THE CONSTRUCTION DURATION AND SHALL INSTALL EROSION CONTROL MEASURES AS REQUIRED BY THE SWMP PLAN.

16. THE EXACT LIMITS OF THE CONTRACTOR'S PARKING AND STAGING AREA FOR MATERIAL STOCKPILING, OFFICE TRAILERS, AND PARKING FOR PUBLIC SHALL BE ESTABLISHED BY THE CONTRACTOR WITH THE APPROVAL OF THE OWNER'S REPRESENTATIVE. IT IS THE CONTRACTORS RESPONSIBILITY TO SECURE WRITTEN PERMISSION FROM THE LANDOWNER FOR ANY ACCESS, STOCKPILE, OR STAGING AREAS OUTSIDE THE CONSTRUCTION LIMITS SHOW ON THE PLANS.

17. ALL REQUIRED UTILITIES FOR THE CONTRACTOR'S STAGING AREA SHALL BE ARRANGED BY THE CONTRACTOR DIRECTLY WITH THE APPROPRIATE UTILITY AGENCY. UTILITY ARRANGEMENTS SHALL BE SUBJECT TO THE APPROVAL OF THE CONTRACTOR TO ENCLOSE AND SET UP HIS OPERATIONAL AREA. ADDITIONALLY, THE CONTRACTOR SHALL RESTORE THE SITE TO ITS ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE UPON COMPLETION OF THE CONTRACT WORK.

18. WASTE MATERIAL PRODUCED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE LEGALLY DISPOSED OF OFF THE PROJECT SITE OR AS DIRECTED BY THE OWNERS REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.

19. THE CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE, AND FEDERAL LAWS AND REGULATIONS THAT ARE PERTINENT TO THIS WORK.

20. ANY CONSTRUCTION DEBRIS OR MUD TRACKING ONTO THE PUBLIC RIGHT-OF-WAY, RESULTING FROM THE PROJECT, SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR. THE CONTRACTOR SHALL IMMEDIATELY FIX ANY EXCAVATION, OR PAVEMENT FAILURE CAUSED BY THE PROJECT, AND SHALL PROPERLY BARRICADE THE SITE UNTIL CONSTRUCTION IS COMPLETE.

21. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR THE CONDITIONS AT, AND ADJACENT TO THE JOB SITE, INCLUDING BUT NOT LIMITED TO TRENCH EXCAVATIONS AND SHORING, TRAFFIC CONTROL, SECURITY, AND SAFETY OF ALL PERSONS AND PROPERTY, DURING THE PERFORMANCE OF THE WORK. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE OWNERS TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTOR'S PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN OR NEAR THE CONSTRUCTION SITE.

22. THE CONTRACTOR SHALL NOTE THAT VERTICAL ELEVATION CALLOUTS SHOWN ON THE PLANS APPEAR IN THE FOLLOWING TWO FORMATS: 83XX.XX OR XX.XX.

23. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NEEDED DEWATERING OPERATIONS.

24. UNLESS OTHERWISE NOTED, ALL GRADES SHOWN ARE FINISHED GRADES.

25. CONTRACTOR SHALL USE CLASS AA CONCRETE AS SPECIFIED IN SPECIFICATION SECTION 03 30 00 - CAST-IN-PLACE CONCRETE FOR ANY PLAN REFERENCE TO CLASS B OR CLASS D CONCRETE .

CITY OF WOODLAND PARK SANITARY SEWER GENERAL NOTES:

1. ALL MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF WOODLAND PARK ENGINEERING SPECIFICATIONS. WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY AUTHORIZED CITY OF WOODLAND PARK PERSONNEL.

2. ALL NEW SEWER MAINS SHALL BE PVC, STANDARD DIMENSION RATIO (SDR)-35 PIPE IN ACCORDANCE WITH ASTM D-3034, BELL AND SPIGOT WITH ELASTOMERIC SEAL. PVC PRESSURE PIPE C-900, DR-18/DR-24 MAY ALSO BE USED. WHEN PVC C-900 PRESSURE PIPE IS USED FOR SEWERS OR FORCE MAINS, THE CONTRACTOR SHALL REQUEST FROM THE PIPE MANUFACTURER CERTIFICATION THAT THE JOINT GASKETS ARE COMPATIBLE FOR USE WITH RAW SEWAGE.

3. THE CONTRACTOR SHALL FURNISH THE DESIGN ENGINEER "AS CONSTRUCTED" LOCATIONS OF ALL FACILITIES INSTALLED AND THIS, IN TURN, SHALL BE SUBMITTED TO THE CITY OF WOODLAND PARK ON "AS-BUILT" PLANS, PREPARED BY THE DESIGN ENGINEER.

4. RIM ELEVATIONS SHOWN ON THE PLAN AND PROFILE SHEETS ARE APPROXIMATE ONLY AND ARE NOT TO BE TAKEN AS FINAL ELEVATIONS. THE PIPELINE CONTRACTOR SHOULD ALLOW APPROXIMATELY THE TOP ONE (1') FOOT TO BE ADJUSTED EITHER UP OR DOWN IN ORDER TO MATCH FINAL PAVEMENT ELEVATION. THE MAXIMUM ADJUSTMENT TO FINAL GRADE IS12 INCHES WITH CONCRETE RINGS.

5. BEDDING AND BACKFILL MATERIALS FOR BOTH WATER AND SEWER SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF WOODLAND PARK ENGINEERING SPECIFICATIONS.

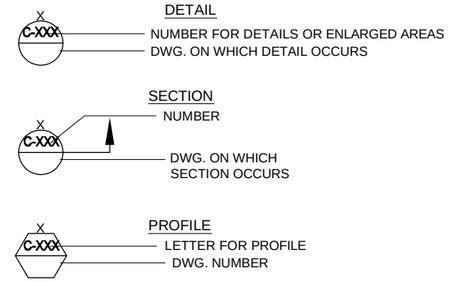
6. A PRE-CONSTRUCTION MEETING MUST BE HELD BETWEEN THE CONTRACTOR AND CITY ENGINEER OR APPOINTED REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

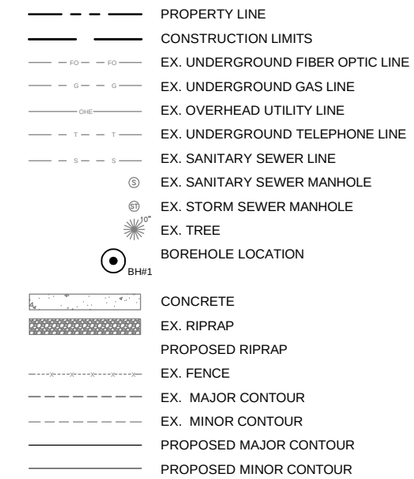
7. ALL SANITARY SEWER MANHOLE CONES SHALL BE ECCENTRIC AND THE VERTICAL PORTION SHALL BE TURNED TOWARD THE CENTER OF THE STREET IN ALL INSTANCES.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING NEARBY PUBLIC STREETS OF MUD OR DEBRIS DUE TO CONSTRUCTION ACTIVITY ON A DAILY BASIS OR AS OTHERWISE DIRECTED BY AUTHORIZED CITY PERSONNEL.

9. THE CONTRACTOR SHALL CONTROL THE SEWER INSTALLATION USING CONSTRUCTION STAKING PROVIDED BY A LICENSED SURVEYOR. SEWER LINES SHALL BE STAKED FOR LINE AND GRADE. CUT SHEETS SHALL BE PROVIDED TO THE CITY INSPECTOR PRIOR TO CONSTRUCTION OF THE SEWER.

LEGEND





ABBREVIATIONS

W/	WITH	TOG	TOP OF GROUT
MIN	MINIMUM	TOB	TOP OF BOULDER
MAX	MAXIMUM	FG	FINISHED GRADE
TYP	TYPICAL	FL	FLOW LINE
STD	STANDARD	R.O.W.	RIGHT OF WAY
EL	ELEVATION	EX.	EXISTING
ELEV	ELEVATION	RCB/RCBC	REINFORCED CONCRETE BOX CULVERT
INV	INVERT	RCP	REINFORCED CONCRETE PIPE
QTY	QUANTITY	CMP	CORRUGATED METAL PIPE
CLR	CLEARANCE	STA	STATION
CONC	CONCRETE	N.T.S.	NOT TO SCALE
BTW	BETWEEN	OHU	OVERHEAD UTILITY
APPROX	APPROXIMATE	℄	CENTERLINE
N	NORTHING/NORTH	BRG	BEARING
E	EASTING/EAST	ABUT	ABUTMENT
S	SOUTH	E.F.	EACH FACE
W	WEST	F.F.	FRONT FACE
NO.	NUMBER	B.F.	BACK FACE
DWG	DRAWING	SPA	SPACING/SPACED
GB	GRADE BREAK	HORIZ	HORIZONTAL
EOR	EDGE OF RIPRAP	VERT	VERTICAL
EOB	EDGE OF BOULDERS	DIA	DIAMETER
EOC	EDGE OF CONCRETE	LG	LONG
EOT	EDGE OF TRAIL	ID	INNER DIAMETER
PROP	PROPOSED		

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DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

RICHARD T. SMITH, PE 35409
PROJECT MANAGER PE NO.

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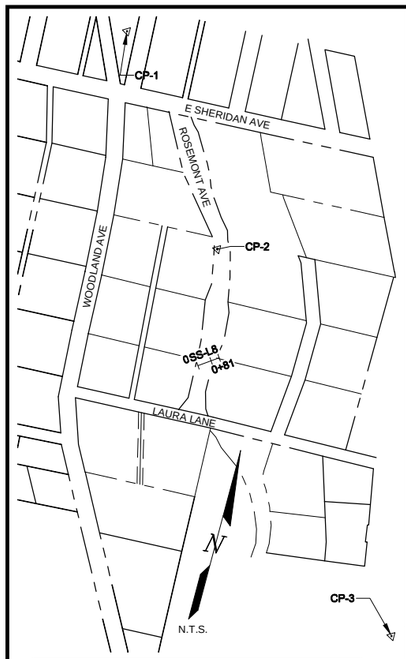
PO BOX 9007
WOODLAND PARK, CO 80866

FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

GENERAL NOTES
ABBREVIATIONS & SYMBOLS

DRAWING NO. ID-101
PROJECT NO. 35-0200.00
SHEET: 2 OF 31 SHEETS
FILE NO. COVER SHEET.dwg

3/18/2013 9:02 AM C:\USERS\HICKOXM\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\COVER SHEET.DWG



CONTROL POINT TABLE

POINT NO.	POINT NAME	NORTHING	EASTING	ELEV.
1	CP-1	7598.86	4304.35	8367.31
2	CP-2	6933.88	4814.48	8339.74
3	CP-3	5765.94	5768.38	8326.88

SURVEY CONTROL INFORMATION

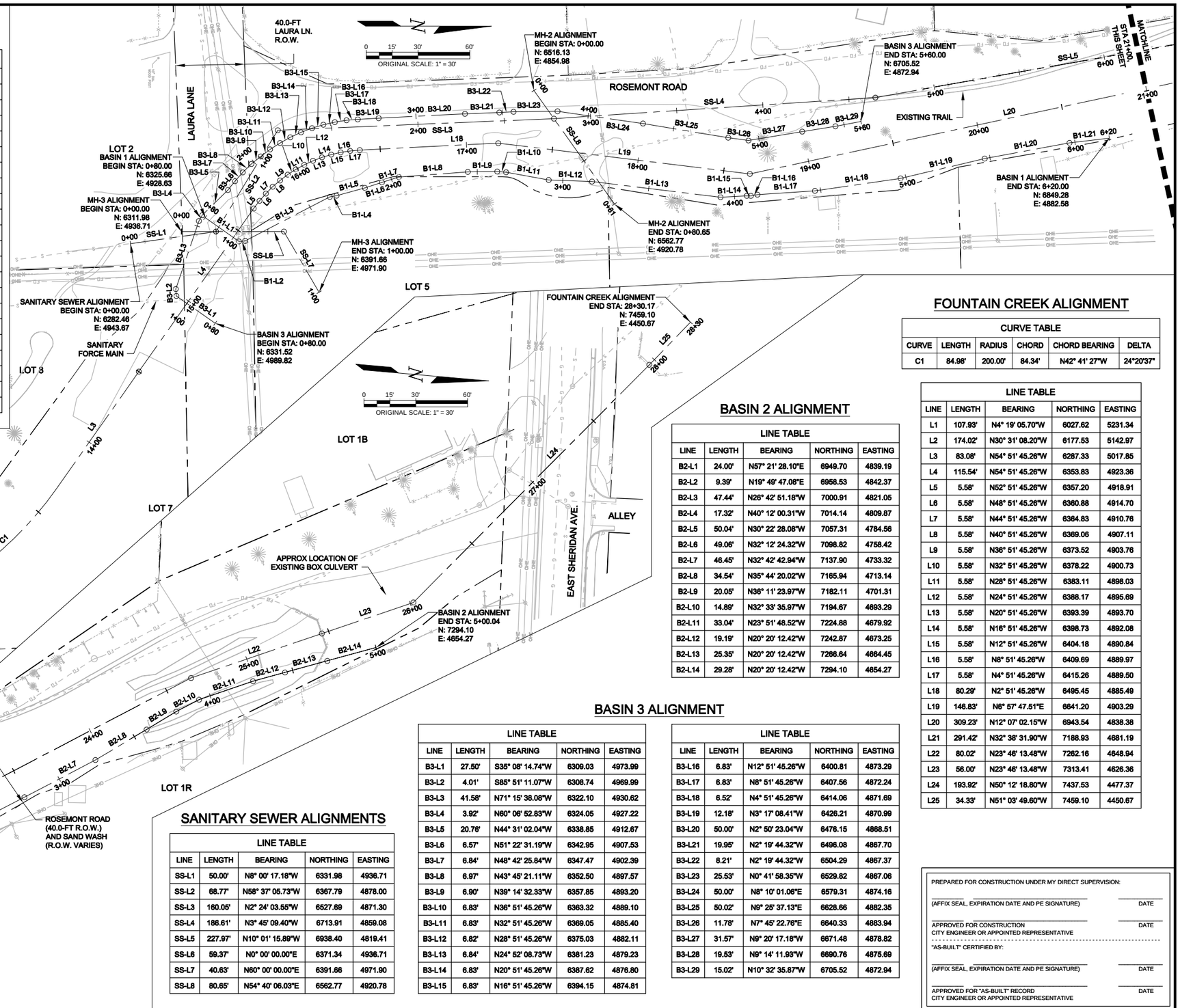
THIS SITE IS LOCATED IN THE SE1/4 SE1/4 OF SEC. 24, T. 12 S. R. 69 W. AND IN THE SW1/4 SW1/4 OF SEC. 19, T. 12 S., R. 68 W. OF THE 6th P.M. CITY OF WOODLAND PARK, TELLER COUNTY, COLORADO T. 1

THE VERTICAL DATUM IS REFERENCED OF THE NORTH AMERICAN VERTICAL DATUM OF 1988.

BASIN 1 ALIGNMENT

LINE TABLE

LINE	LENGTH	BEARING	NORTHING	EASTING
B1-L1	24.00'	N35° 08' 14.74"E	6345.29	4942.44
B1-L2	3.66'	N5° 26' 21.58"W	6348.93	4942.10
B1-L3	55.23'	N27° 28' 36.10"W	6397.93	4916.62
B1-L4	3.92'	N10° 01' 59.63"W	6401.79	4915.93
B1-L5	17.03'	N15° 11' 20.56"W	6418.23	4911.47
B1-L6	10.36'	N18° 01' 12.41"W	6428.08	4908.26
B1-L7	10.34'	N17° 39' 04.50"W	6437.93	4905.13
B1-L8	40.01'	N4° 17' 40.81"W	6477.83	4902.13
B1-L9	17.02'	N0° 32' 37.93"W	6494.86	4901.97
B1-L10	5.17'	N4° 25' 41.61"E	6500.01	4902.37
B1-L11	25.04'	N10° 21' 04.15"E	6524.65	4906.87
B1-L12	25.09'	N2° 00' 08.49"E	6549.73	4907.75
B1-L13	75.00'	N6° 56' 25.01"E	6624.18	4916.81
B1-L14	15.23'	N3° 05' 33.77"W	6639.39	4915.99
B1-L15	2.37'	N0° 48' 14.62"E	6641.76	4916.02
B1-L16	3.87'	N10° 22' 04.97"W	6645.56	4915.32
B1-L17	33.36'	N3° 44' 21.77"W	6678.85	4913.15
B1-L18	50.11'	N8° 18' 25.17"W	6728.43	4905.91
B1-L19	50.01'	N13° 15' 05.66"W	6777.11	4894.45
B1-L20	50.02'	N10° 30' 07.02"W	6826.29	4885.33
B1-L21	23.15'	N6° 49' 45.12"W	6849.28	4882.58



FOUNTAIN CREEK ALIGNMENT

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD	CHORD BEARING	DELTA
C1	84.98'	200.00'	84.34'	N42° 41' 27"W	24°20'37"

LINE TABLE

LINE	LENGTH	BEARING	NORTHING	EASTING
L1	107.93'	N4° 19' 05.70"W	6027.62	5231.34
L2	174.02'	N30° 31' 08.20"W	6177.53	5142.97
L3	83.08'	N54° 51' 45.26"W	6287.33	5017.85
L4	115.54'	N54° 51' 45.26"W	6353.83	4923.36
L5	5.58'	N52° 51' 45.26"W	6357.20	4918.91
L6	5.58'	N48° 51' 45.26"W	6360.88	4914.70
L7	5.58'	N44° 51' 45.26"W	6364.83	4910.76
L8	5.58'	N40° 51' 45.26"W	6369.06	4907.11
L9	5.58'	N36° 51' 45.26"W	6373.52	4903.76
L10	5.58'	N32° 51' 45.26"W	6378.22	4900.73
L11	5.58'	N28° 51' 45.26"W	6383.11	4898.03
L12	5.58'	N24° 51' 45.26"W	6388.17	4895.69
L13	5.58'	N20° 51' 45.26"W	6393.39	4893.70
L14	5.58'	N16° 51' 45.26"W	6398.73	4892.08
L15	5.58'	N12° 51' 45.26"W	6404.18	4890.84
L16	5.58'	N8° 51' 45.26"W	6409.69	4889.97
L17	5.58'	N4° 51' 45.26"W	6415.26	4889.50
L18	80.29'	N2° 51' 45.26"W	6495.45	4885.49
L19	146.83'	N6° 57' 47.51"E	6641.20	4903.29
L20	309.23'	N12° 07' 02.15"W	6943.54	4838.38
L21	291.42'	N32° 38' 31.90"W	7188.93	4681.19
L22	80.02'	N23° 46' 13.48"W	7262.16	4648.94
L23	56.00'	N23° 46' 13.48"W	7313.41	4626.36
L24	193.92'	N50° 12' 18.80"W	7437.53	4477.37
L25	34.33'	N51° 03' 49.60"W	7459.10	4450.67

BASIN 2 ALIGNMENT

LINE TABLE

LINE	LENGTH	BEARING	NORTHING	EASTING
B2-L1	24.00'	N57° 21' 28.10"E	6949.70	4839.19
B2-L2	9.39'	N19° 49' 47.08"E	6958.53	4842.37
B2-L3	47.44'	N26° 42' 51.18"W	7000.91	4821.05
B2-L4	17.32'	N40° 12' 00.31"W	7014.14	4809.87
B2-L5	50.04'	N30° 22' 28.08"W	7057.31	4784.56
B2-L6	49.06'	N32° 12' 24.32"W	7098.82	4758.42
B2-L7	46.45'	N32° 42' 42.94"W	7137.90	4733.32
B2-L8	34.54'	N35° 44' 20.02"W	7165.94	4713.14
B2-L9	20.05'	N36° 11' 23.97"W	7182.11	4701.31
B2-L10	14.89'	N32° 33' 35.97"W	7194.67	4693.29
B2-L11	33.04'	N23° 51' 48.52"W	7224.88	4679.92
B2-L12	19.19'	N20° 20' 12.42"W	7242.87	4673.25
B2-L13	25.35'	N20° 20' 12.42"W	7266.64	4664.45
B2-L14	29.28'	N20° 20' 12.42"W	7294.10	4654.27

BASIN 3 ALIGNMENT

LINE TABLE

LINE	LENGTH	BEARING	NORTHING	EASTING
B3-L1	27.50'	S35° 08' 14.74"W	6309.03	4973.99
B3-L2	4.01'	S85° 51' 11.07"W	6308.74	4969.99
B3-L3	41.58'	N71° 15' 38.08"W	6322.10	4930.62
B3-L4	3.92'	N60° 06' 52.83"W	6324.05	4927.22
B3-L5	20.76'	N44° 31' 02.04"W	6338.85	4912.67
B3-L6	6.57'	N51° 22' 31.19"W	6342.95	4907.53
B3-L7	6.84'	N48° 42' 25.84"W	6347.47	4902.39
B3-L8	6.97'	N43° 45' 21.11"W	6352.50	4897.57
B3-L9	6.90'	N39° 14' 32.33"W	6357.85	4893.20
B3-L10	6.83'	N36° 51' 45.26"W	6363.32	4889.10
B3-L11	6.83'	N32° 51' 45.26"W	6369.05	4885.40
B3-L12	6.82'	N28° 51' 45.26"W	6375.03	4882.11
B3-L13	6.84'	N24° 52' 08.73"W	6381.23	4879.23
B3-L14	6.83'	N20° 51' 45.26"W	6387.62	4876.80
B3-L15	6.83'	N16° 51' 45.26"W	6394.15	4874.81

LINE TABLE

LINE	LENGTH	BEARING	NORTHING	EASTING
B3-L16	6.83'	N12° 51' 45.26"W	6400.81	4873.29
B3-L17	6.83'	N8° 51' 45.26"W	6407.56	4872.24
B3-L18	6.52'	N4° 51' 45.26"W	6414.06	4871.69
B3-L19	12.18'	N3° 17' 08.41"W	6426.21	4870.99
B3-L20	50.00'	N2° 50' 23.04"W	6476.15	4868.51
B3-L21	19.95'	N2° 19' 44.32"W	6496.08	4867.70
B3-L22	8.21'	N2° 19' 44.32"W	6504.29	4867.37
B3-L23	25.53'	N0° 41' 58.35"W	6529.82	4867.06
B3-L24	50.00'	N8° 10' 01.06"E	6579.31	4874.16
B3-L25	50.02'	N9° 25' 37.13"E	6628.66	4882.35
B3-L26	11.78'	N7° 45' 22.76"E	6640.33	4883.94
B3-L27	31.57'	N9° 20' 17.18"W	6671.48	4878.82
B3-L28	19.53'	N9° 14' 11.93"W	6690.76	4875.69
B3-L29	15.02'	N10° 32' 35.87"W	6705.52	4872.94

SANITARY SEWER ALIGNMENTS

LINE TABLE

LINE	LENGTH	BEARING	NORTHING	EASTING
SS-L1	50.00'	N8° 00' 17.18"W	6331.98	4936.71
SS-L2	68.77'	N58° 37' 05.73"W	6367.79	4878.00
SS-L3	160.05'	N2° 24' 03.55"W	6527.69	4871.30
SS-L4	186.61'	N3° 45' 09.40"W	6713.91	4859.08
SS-L5	227.97'	N10° 01' 15.89"W	6938.40	4819.41
SS-L6	59.37'	N0° 00' 00.00"E	6371.34	4936.71
SS-L7	40.63'	N60° 00' 00.00"E	6391.66	4971.90
SS-L8	80.65'	N54° 40' 06.03"E	6562.77	4920.78

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REV.	DATE	DESCRIPTION	APP

DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
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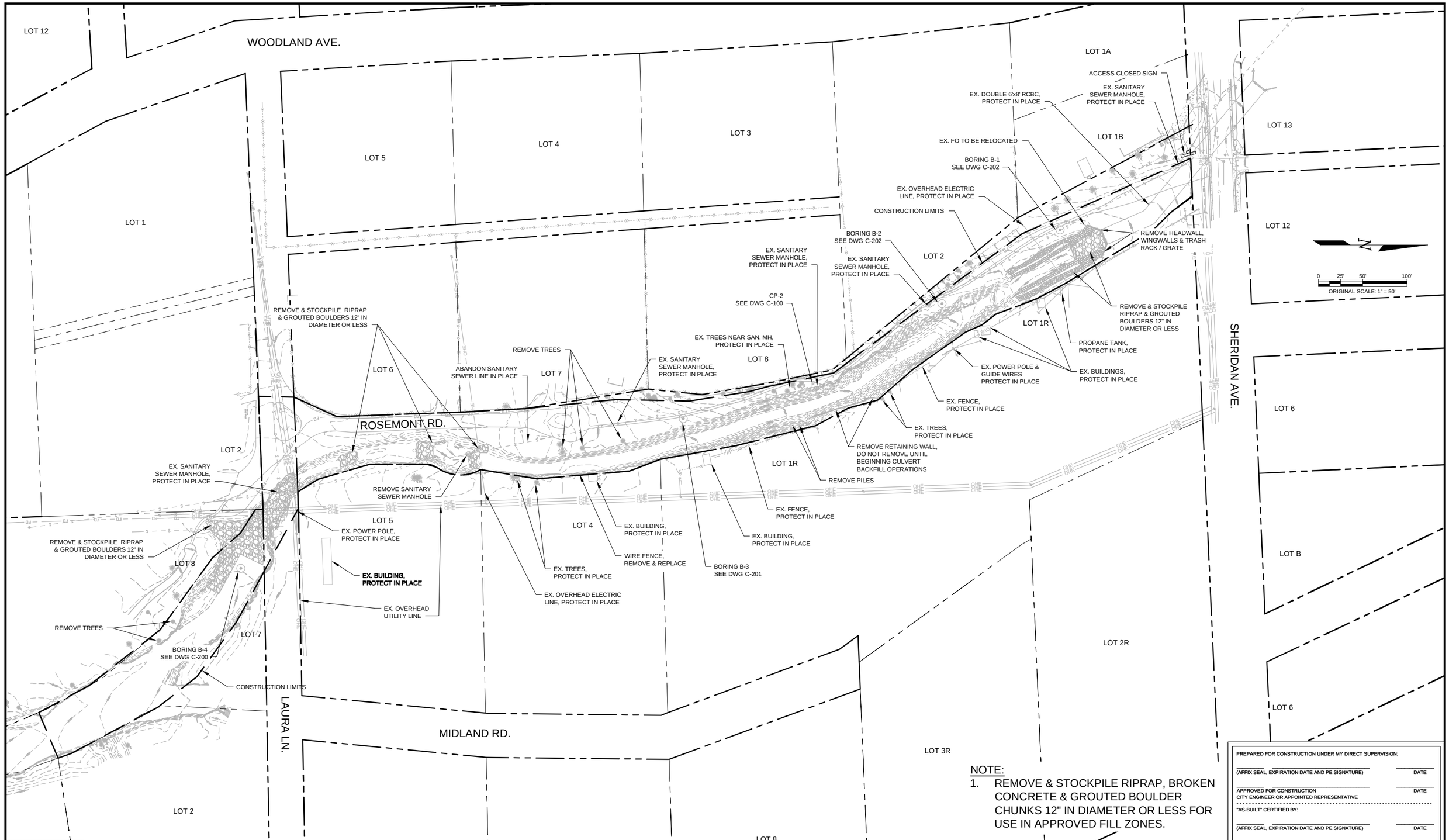
FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

OVERALL HORIZONTAL AND VERTICAL CONTROL PLAN

DRAWING NO. C-100
PROJECT NO. 35-0200.00
SHEET 3 OF 31 SHEETS
FILE NO. PROJECT CONTROL.dwg

3/18/2013 9:02 AM C:\USERS\HCKOXM\DESKTOP\WORKDRIVE_P:\35200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\PROJECT CONTROL.DWG



NOTE:

1. REMOVE & STOCKPILE RIPRAP, BROKEN CONCRETE & GROUTED BOULDER CHUNKS 12" IN DIAMETER OR LESS FOR USE IN APPROVED FILL ZONES.

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REV.	DATE	DESCRIPTION	APP

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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

DEMOLITION PLAN

DRAWING NO. C-101
SHEET: 4 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. DEMO PLAN.dwg

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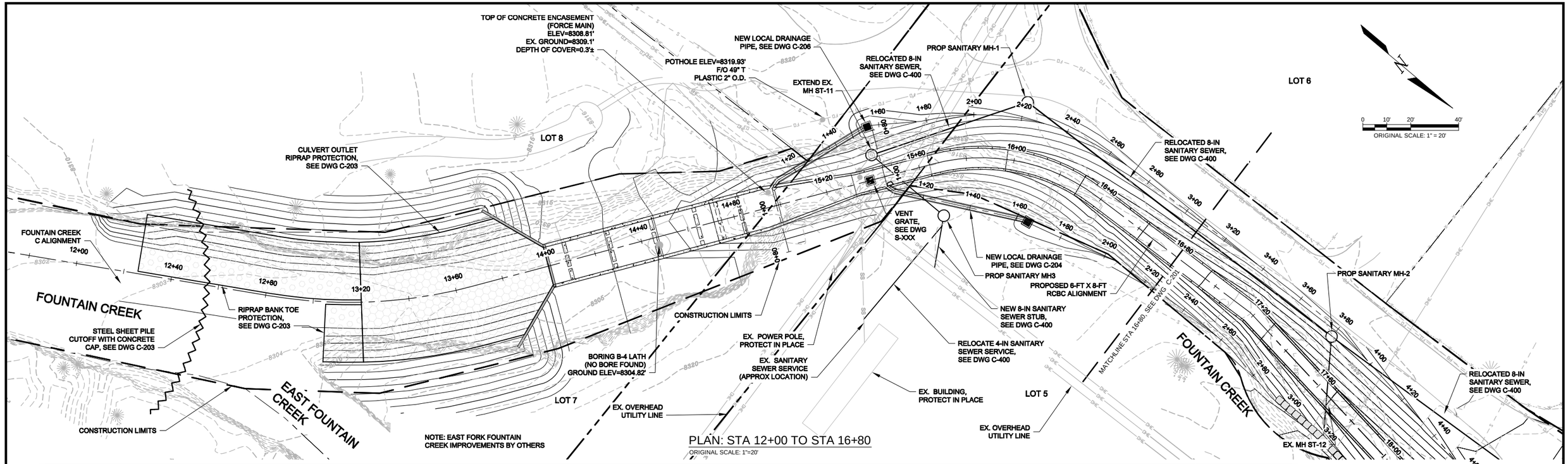
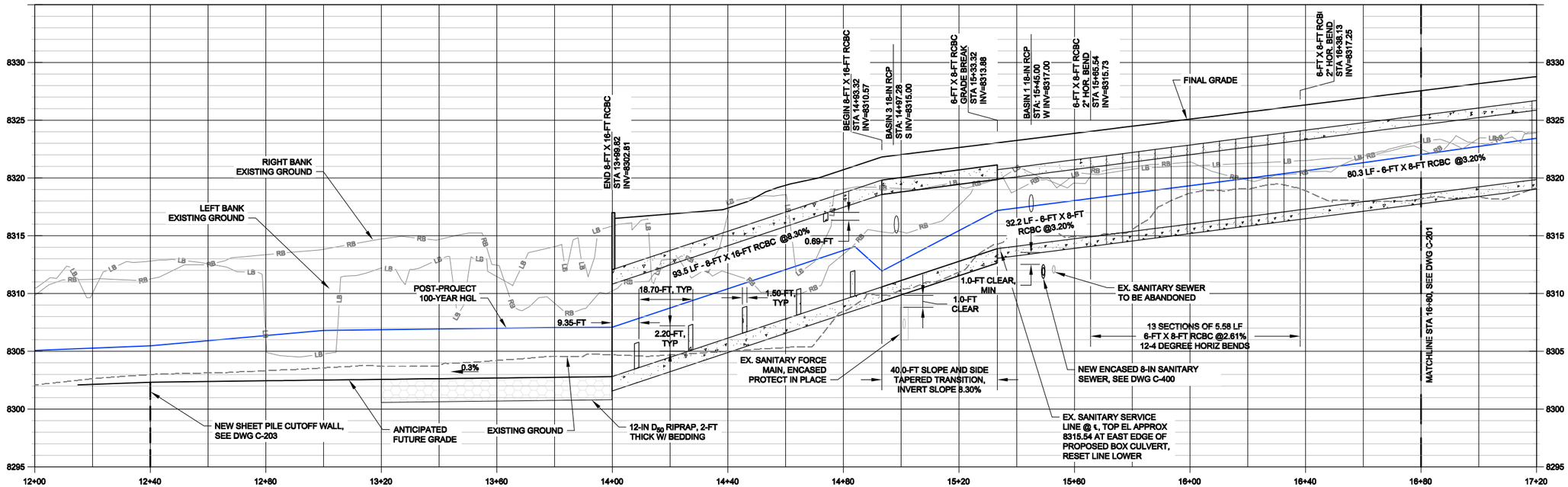


PLAN: STA 12+00 TO STA 16+80

ORIGINAL SCALE: 1"=20'



PROFILE: STA 12+00 TO STA 16+80

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

PREPARED FOR CONSTRUCTION UNDER MY DIRECT SUPERVISION:

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DESIGN BY: MDH
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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

PLAN AND PROFILE
STA 12+00 TO STA 16+80

DRAWING NO. C-200
PROJECT NO. 35-0200.00
SHEET: 5 OF 31 SHEETS
FILE NO. PLAN AND PROFILE.DWG

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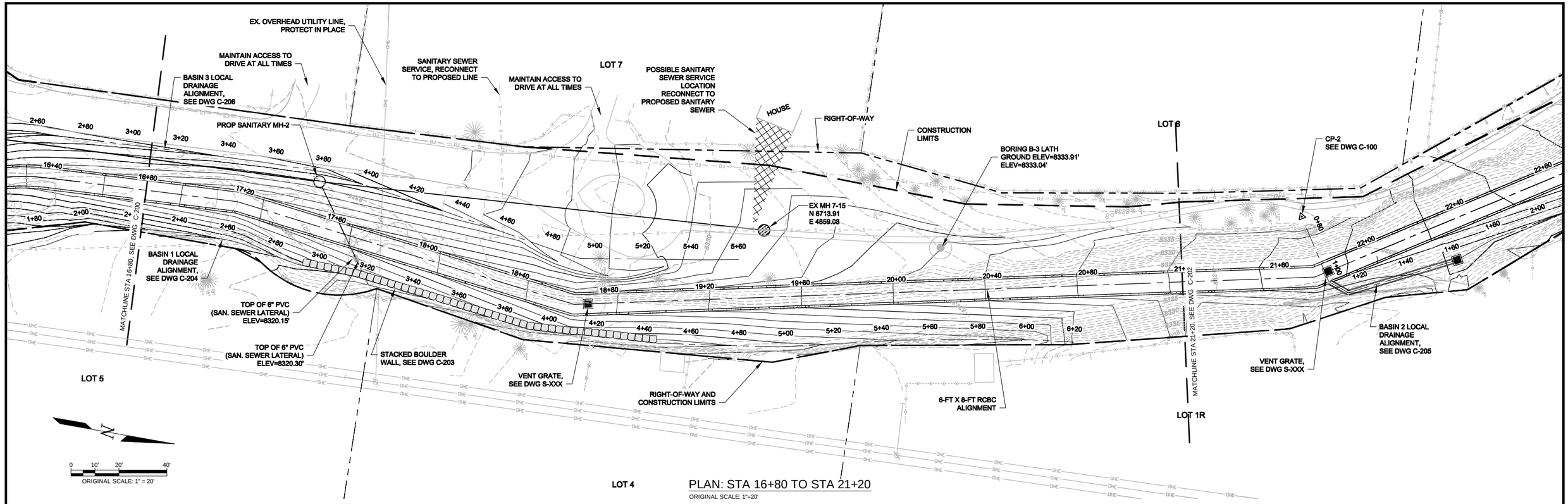
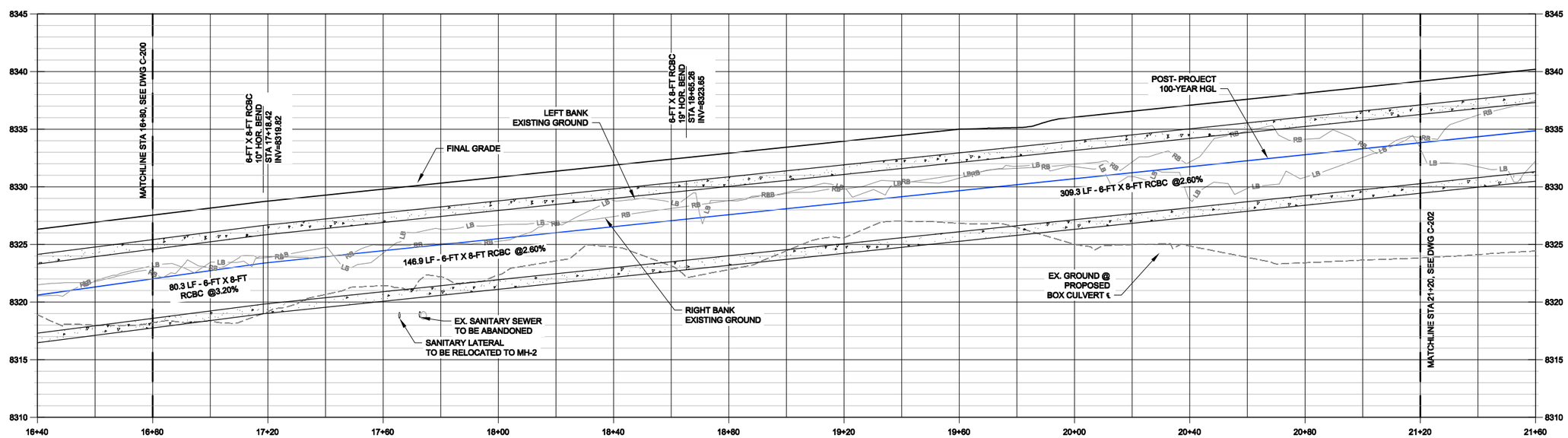


PLAN: STA 16+80 TO STA 21+20

ORIGINAL SCALE: 1"=20'



PROFILE: STA 16+80 TO STA 21+20

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

PLAN AND PROFILE
STA 16+80 TO STA 21+20

DRAWING NO. C-201
PROJECT NO. 35-0200.00
SHEET: 6 OF 31 SHEETS
FILE NO. PLAN AND PROFILE.DWG

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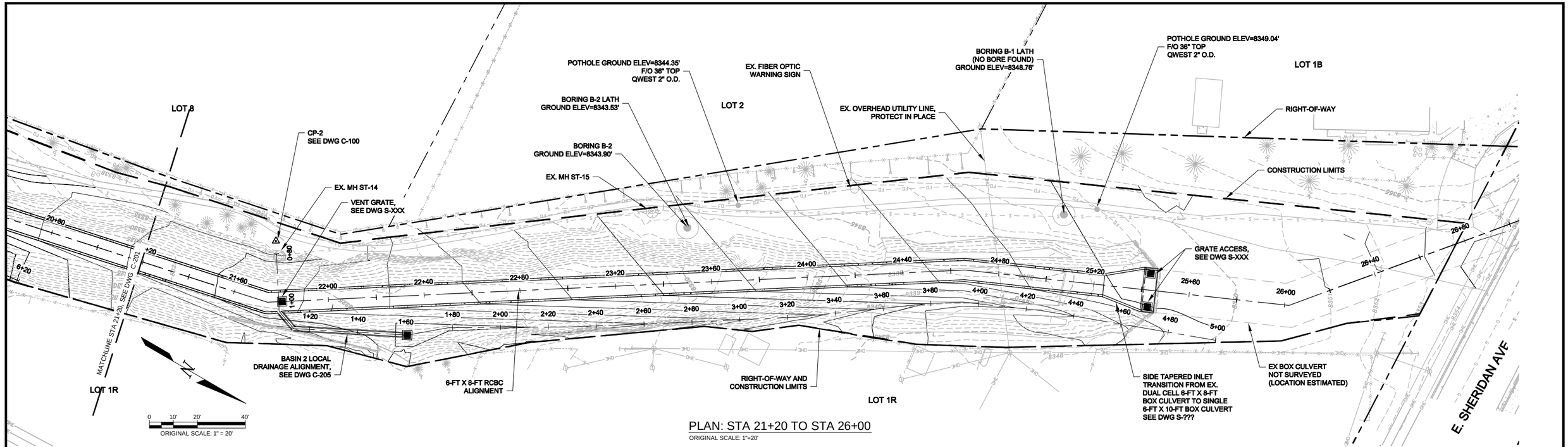
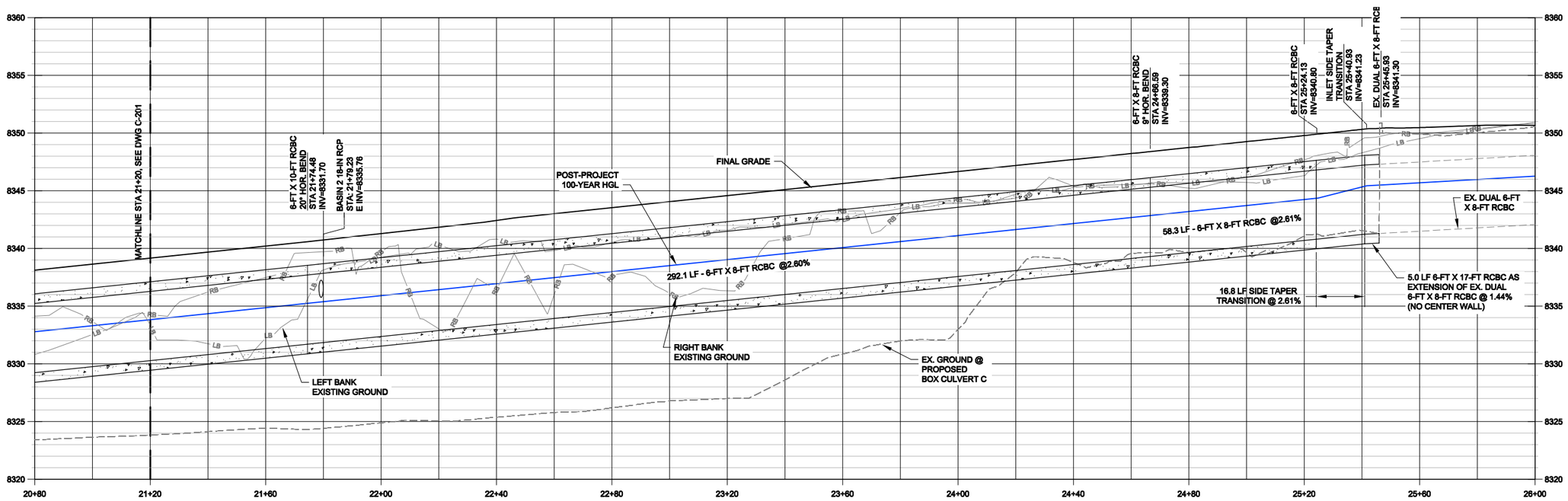


PLAN: STA 21+20 TO STA 26+00

ORIGINAL SCALE: 1"=20'



PROFILE: STA 21+20 TO STA 26+00

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

PLAN AND PROFILE
STA 21+20 TO STA 26+00

DRAWING NO. C-202
SHEET: 7 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. PLAN AND PROFILE.DWG

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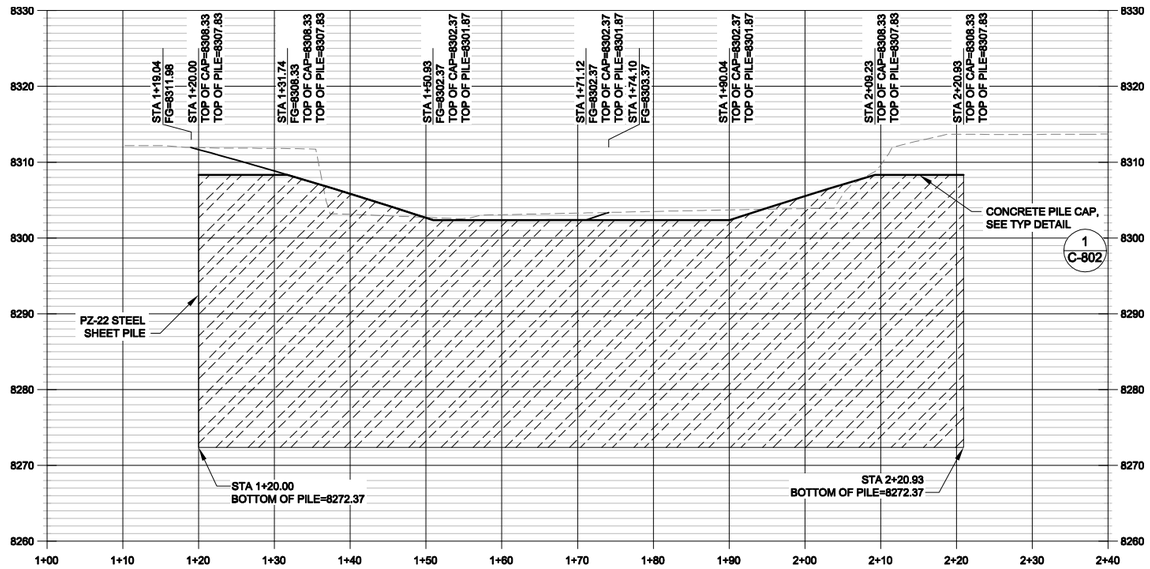
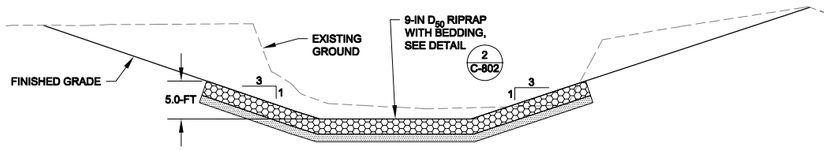


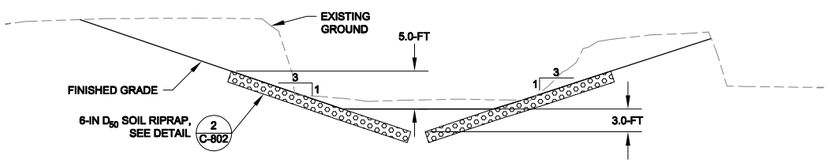
NOTE:
BEDROCK ELEVATION UNKNOWN AT THIS LOCATION, DRIVE SHEET PILE TO LIMITS SHOWN OR REFUSAL, WHICHEVER COMES FIRST.

PROFILE: STA 12+00 TO STA 14+20

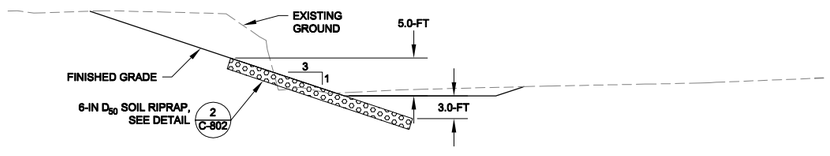
ORIGINAL SCALE: 1"=10' (HORIZ.)
1"=10' (VERT.)



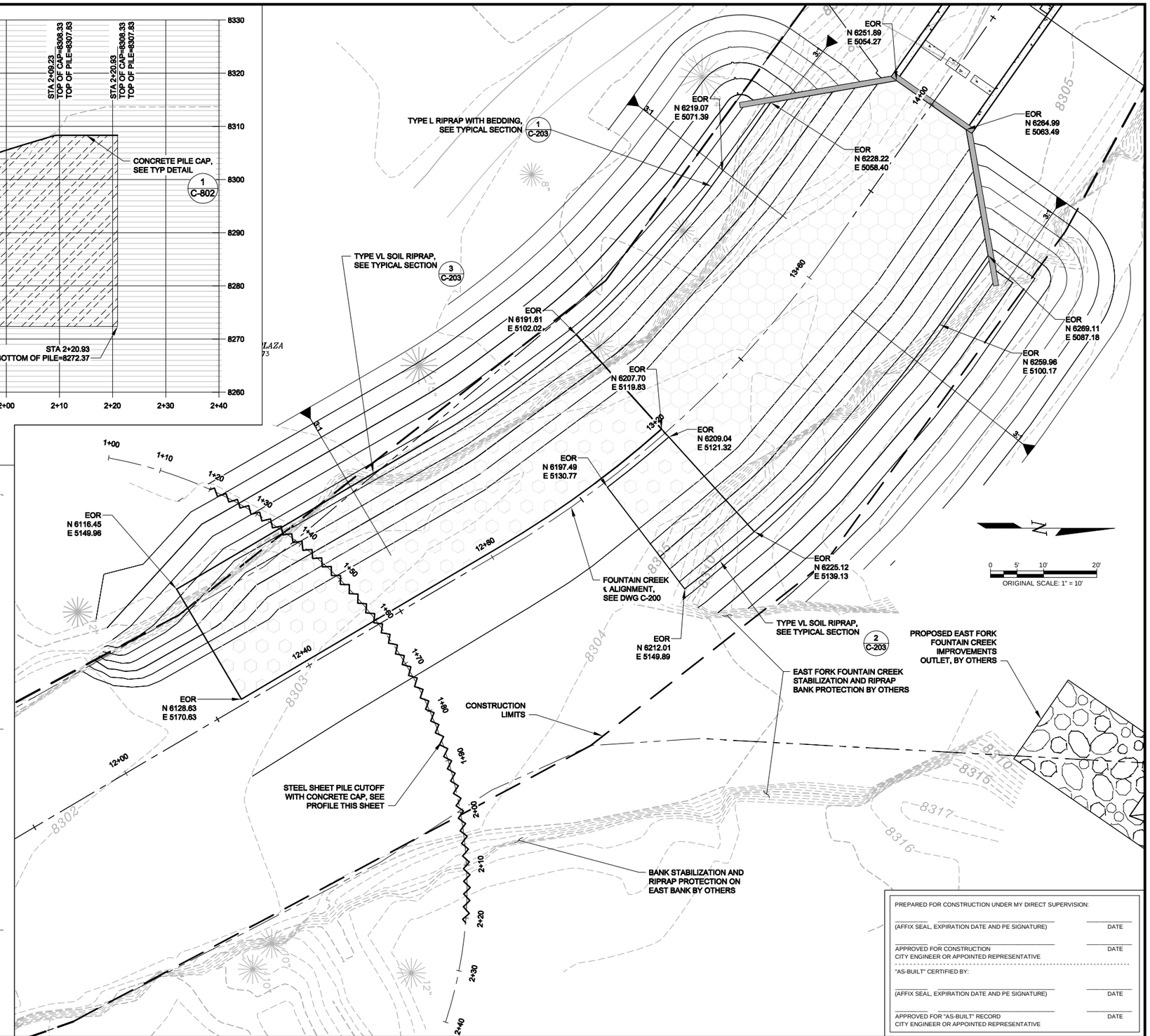
1 C-203 TYPICAL SECTION FROM STA 13+20.11 TO STA 13+99.82
N.T.S.



1 C-203 TYPICAL SECTION FROM STA 13+05.28 TO STA 13+20.11
N.T.S.



1 C-203 TYPICAL SECTION FROM STA 12+25.78 TO STA 13+05.28
N.T.S.



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DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
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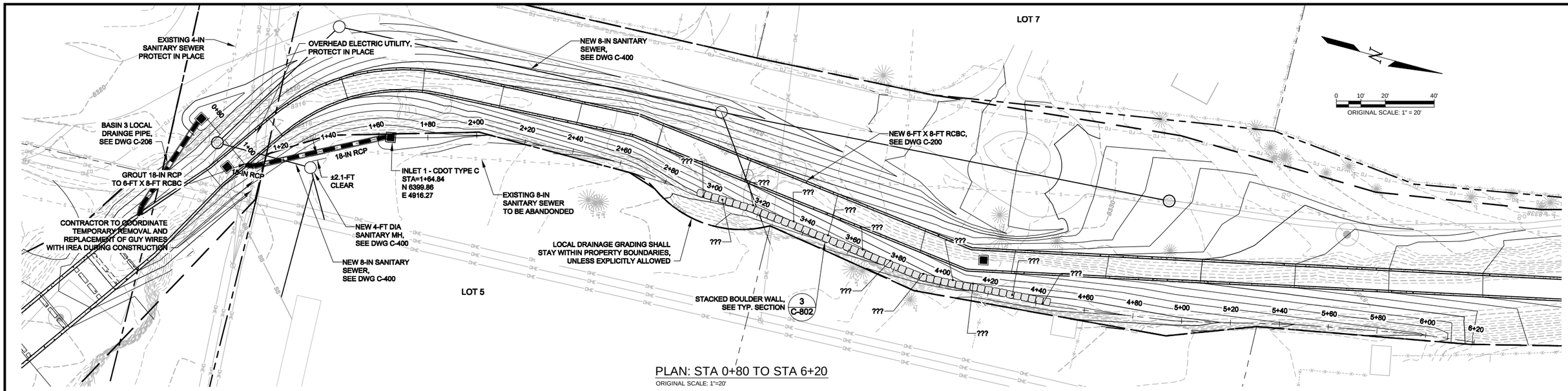
220 W. SOUTH AVENUE
PO BOX 9007
WOODLAND PARK, CO 80866

FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

RIP RAP OUTLET AND SHEET PILE
STA 12+00 TO STA 14+20

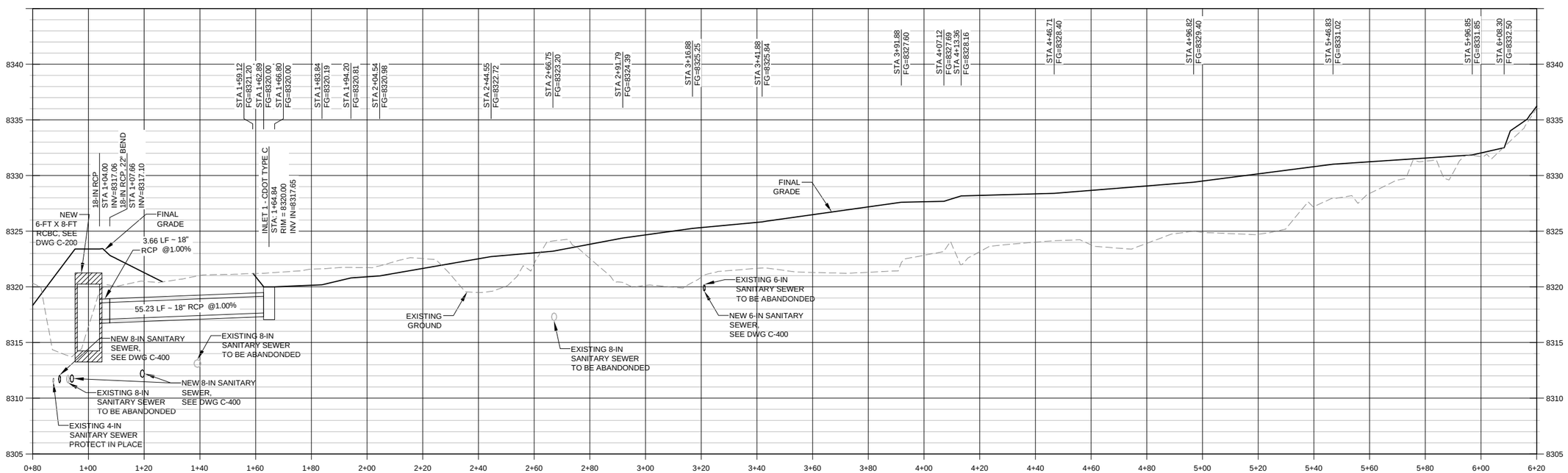
DRAWING NO. C-203
PROJECT NO. 35-0200.00
SHEET: 8 OF 31 SHEETS
FILE NO. RIP RAP.dwg

3/18/2013 9:05 AM C:\USERS\HCKOX\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\RIP RAP.DWG



PLAN: STA 0+80 TO STA 6+20

ORIGINAL SCALE: 1"=20'



PROFILE: STA 0+80 TO STA 6+20

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

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DRAWN BY: MDH
DATE: 01-11-2013

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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

BASIN 1 LOCAL DRAINAGE PLAN AND PROFILE STA 0+80 TO STA 6+20

DRAWING NO. C-204
SHEET: 9 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. LOCAL DRAINAGE PLAN AND PROFILE.DWG

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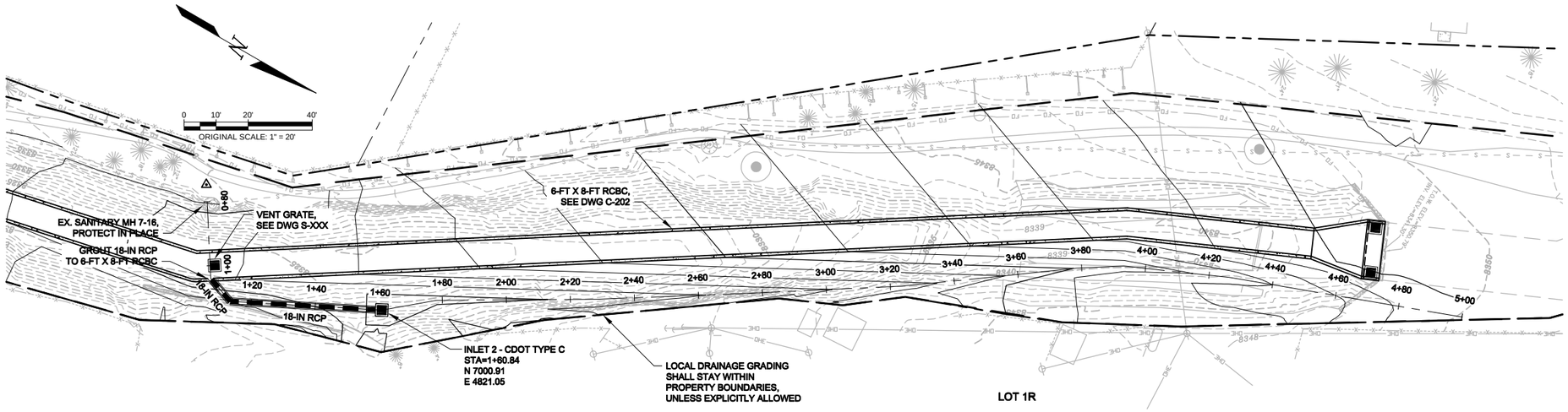
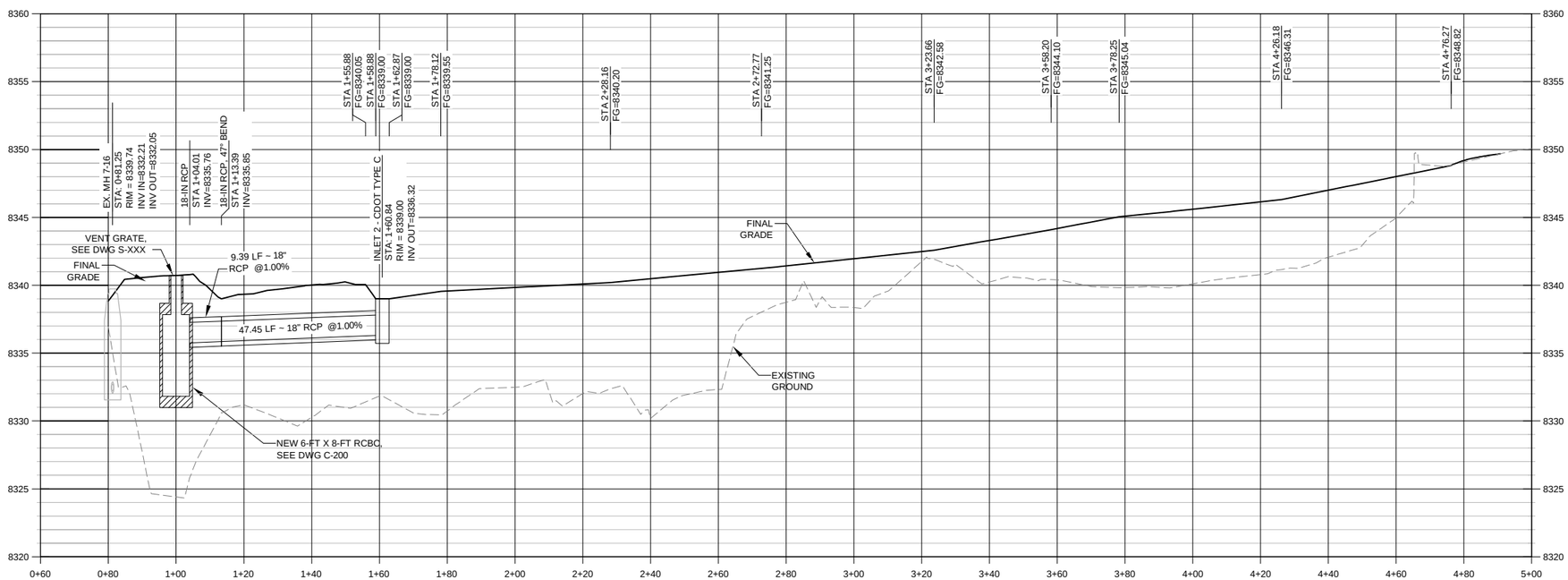


PLAN: STA 0+80 TO STA 5+00

ORIGINAL SCALE: 1"=20'



PROFILE: STA 0+80 TO STA 5+00

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

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REV.	DATE	DESCRIPTION	APP

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DRAWN BY: MDH
DATE: 01-11-2013

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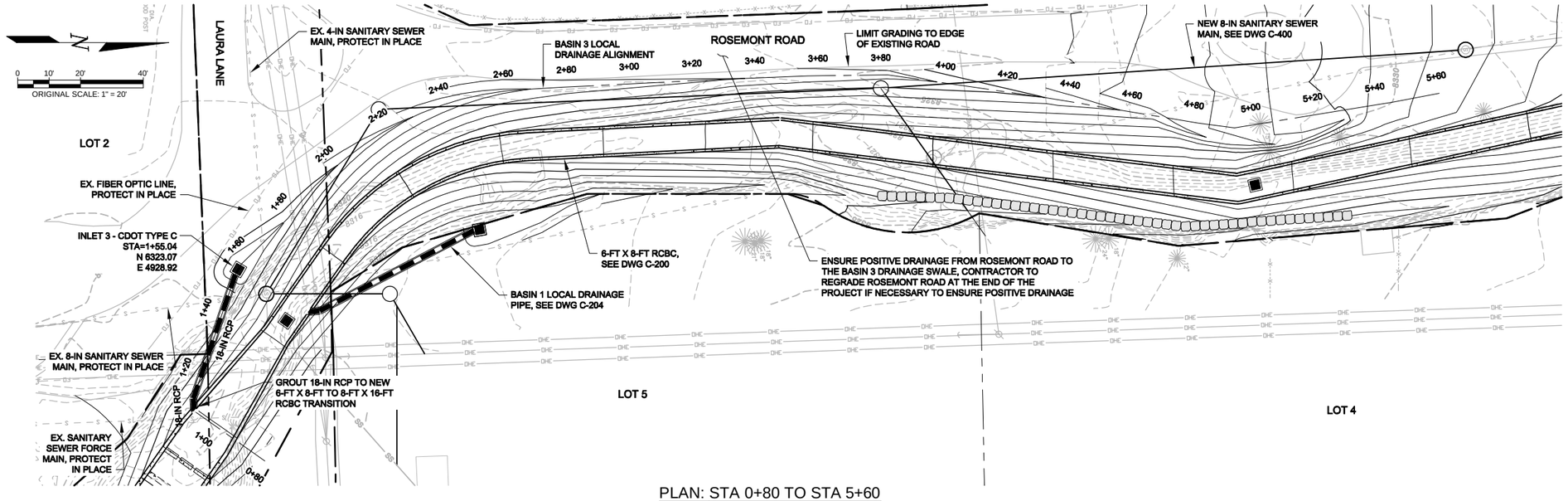
FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

BASIN 2 LOCAL DRAINAGE PLAN AND PROFILE STA 0+80 TO STA 5+00

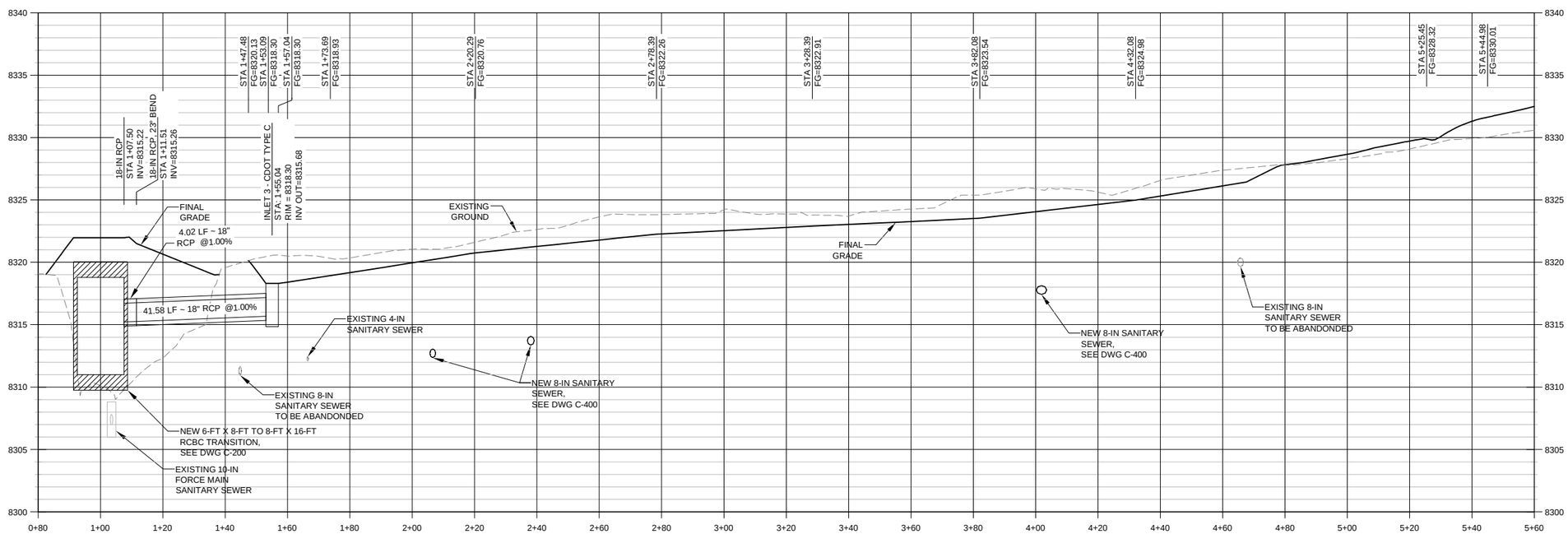
DRAWING NO. C-205
SHEET: 10 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. LOCAL DRAINAGE PLAN AND PROFILE.DWG

3/18/2013 9:06 AM C:\USERS\HICKOXMDE\DESKTOP\WORK\DRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\LOCAL DRAINAGE PLAN AND PROFILE.DWG



PLAN: STA 0+80 TO STA 5+60

ORIGINAL SCALE: 1"=20'



PROFILE: STA 0+80 TO STA 5+60

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)

PREPARED FOR CONSTRUCTION UNDER MY DIRECT SUPERVISION:

(AFFIX SEAL, EXPIRATION DATE AND PE SIGNATURE) DATE

APPROVED FOR CONSTRUCTION
CITY ENGINEER OR APPOINTED REPRESENTATIVE DATE

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APPROVED FOR "AS-BUILT" RECORD
CITY ENGINEER OR APPOINTED REPRESENTATIVE DATE

90% SUBMITTAL
NOT FOR CONSTRUCTION

REV	DATE	DESCRIPTION	APP

DESIGN BY: MDH / RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

RICHARD T. SMITH, PE 35409
PROJECT MANAGER PE NO.

AYRES ASSOCIATES
12050 N. Pecos Street, Suite 150
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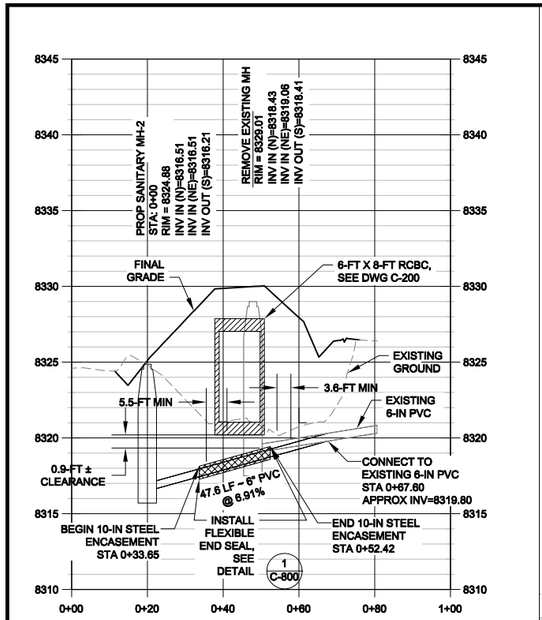
ELEVATE! WOODLAND PARK
220 W. SOUTH AVENUE
PO BOX 9007
WOODLAND PARK, CO 80866

FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

BASIN 3 LOCAL DRAINAGE PLAN AND PROFILE STA 0+80 TO STA 5+60

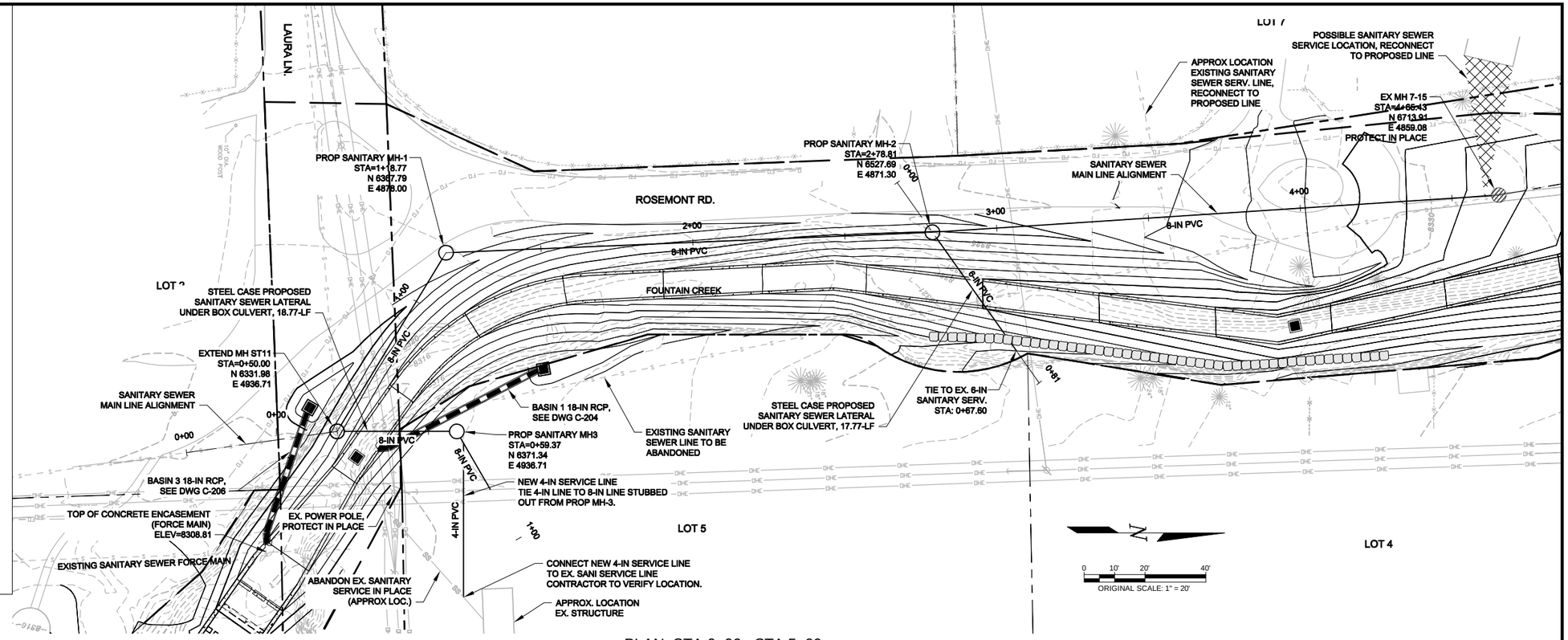
DRAWING NO. C-206
PROJECT NO. 35-0200.00
SHEET 11 OF 31 SHEETS
FILE NO. LOCAL DRAINAGE PLAN AND PROFILE.DWG

3/18/2013 9:06 AM C:\USERS\HICKOXM\DESKTOP\WORK\DRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\LOCAL DRAINAGE PLAN AND PROFILE.DWG



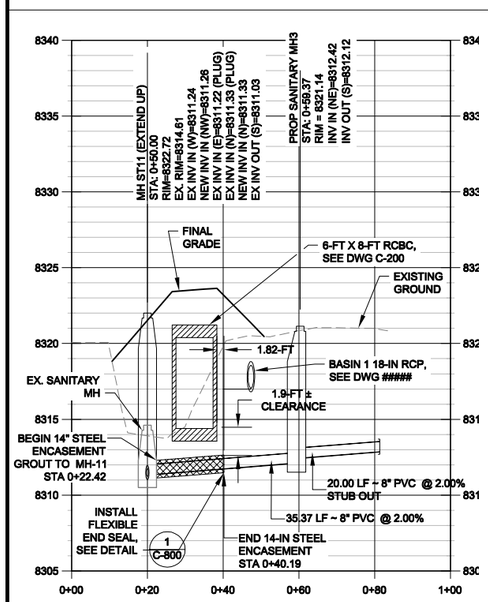
PROFILE MH-2 LATERAL: STA -0+20 - STA 0+80

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)



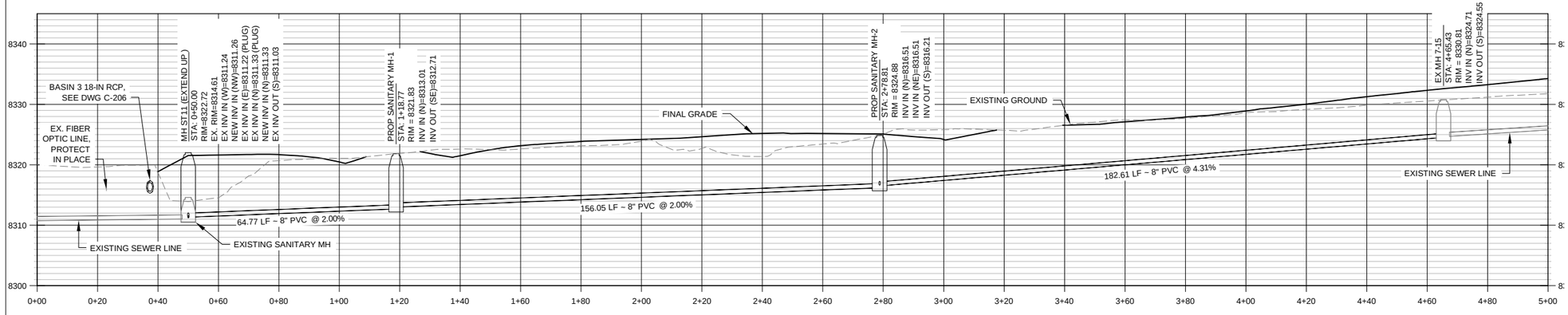
PLAN: STA 0+00 - STA 5+00

ORIGINAL SCALE: 1"=20'



PROFILE MH-3: STA 0+00 - STA 1+00

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=5' (VERT.)



PROFILE MAIN LINE: STA 0+00 - STA 5+00

ORIGINAL SCALE: 1"=20' (HORIZ.)
1"=10' (VERT.)

STEEL CASING NOTES:

WALL THICKNESS FOR STEEL CASING PIPE W/ 35,000 PSI MIN YIELD STRENGTH. FOR MATERIAL OF LOWER YIELD STRENGTH, INCREASE THICKNESS AN ADDITIONAL 1/16".

STEEL CASING PIPE FOR E72 LOADING	
MIN WALL THICKNESS (INCHES) FOR PIPE NOT CATHODICALLY PROTECTED	CASING PIPE INNER DIAMETER (INCHES)
0.250	UNDER 14
0.282	14 AND 16

PREPARED FOR CONSTRUCTION UNDER MY DIRECT SUPERVISION:

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DESIGN BY: RTS
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DATE: 01-11-2013

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220 W. SOUTH AVENUE
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WOODLAND PARK, CO 80866

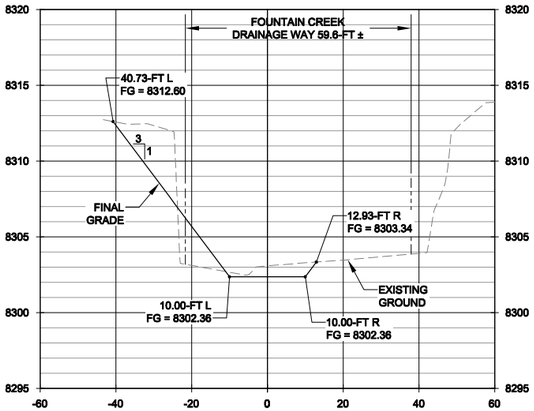
FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

PLAN AND PROFILE
SANITARY SEWER RELOCATION

DRAWING NO. C-400
SHEET: 12 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. SAN SEWER P&P.dwg

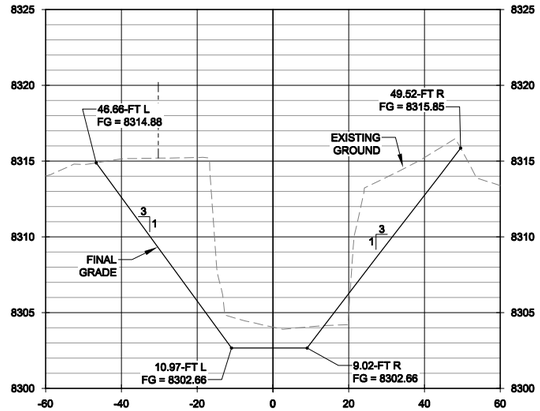
3/18/2013 9:07 AM C:\USERS\HICKOXMD\DESKTOP\WORK\DRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\SAN SEWER P&P.DWG

12+50



12+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.)
1" = 8' (VERT.)

13+50



13+50 CROSS SECTION
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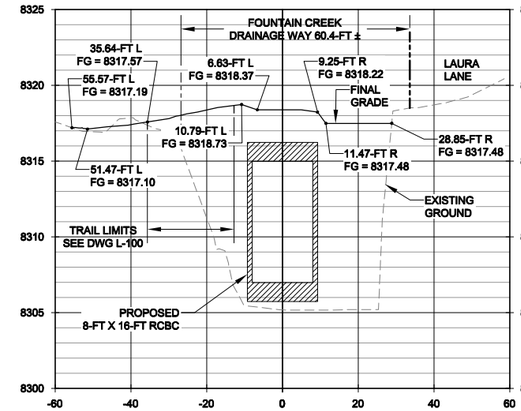
1" = 8' (VERT.)

14+50



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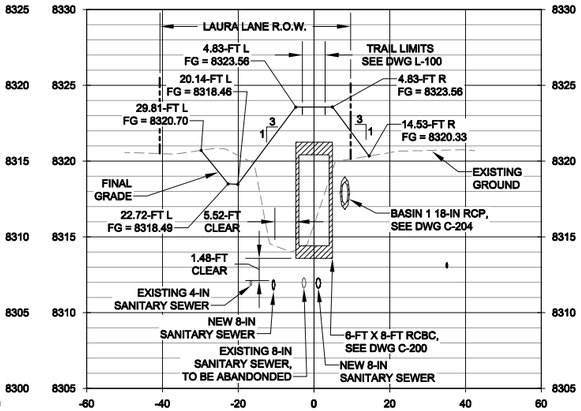
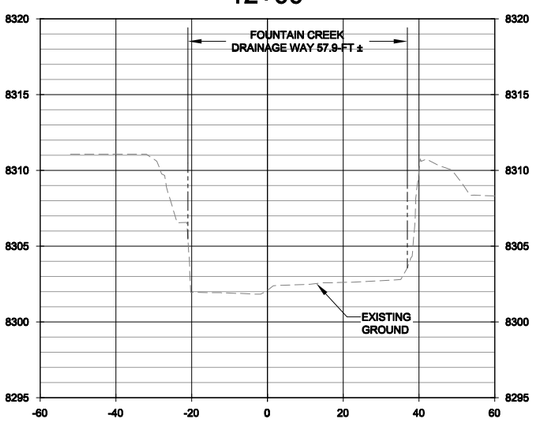
1" = 8' (VERT.)

15+50



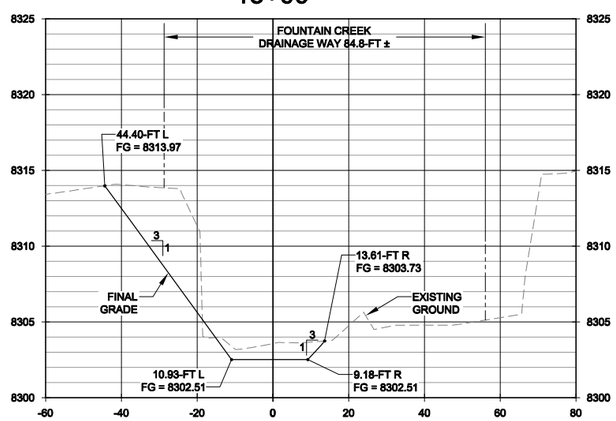
15+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.)
1" = 8' (VERT.)

12+00



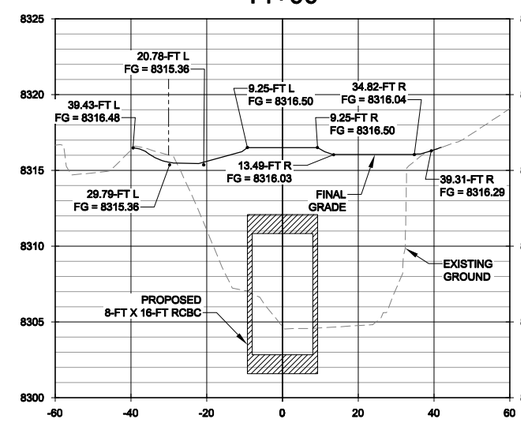
12+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.)
1" = 8' (VERT.)

13+00



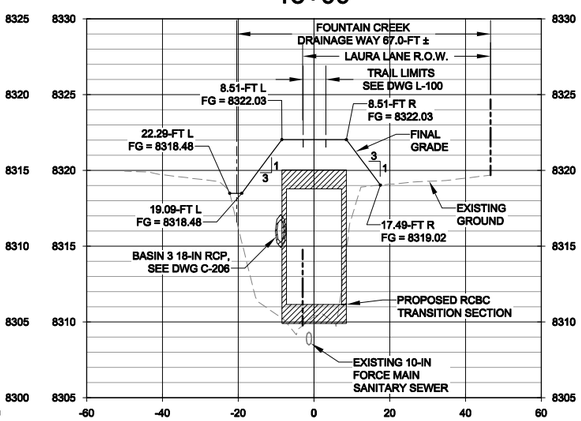
13+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.)
1" = 8' (VERT.)

14+00



14+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.)
1" = 8' (VERT.)

15+00



15+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.)
1" = 8' (VERT.)

NOTE:
CROSS SECTIONS LOOKING UP STATION.

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REV.	DATE	DESCRIPTION	APP

DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

RICHARD T. SMITH, PE 35409
PROJECT MANAGER PE NO.

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ELEVATE!
WOODLAND PARK
220 W. SOUTH AVENUE
PO BOX 9007
WOODLAND PARK, CO 80866

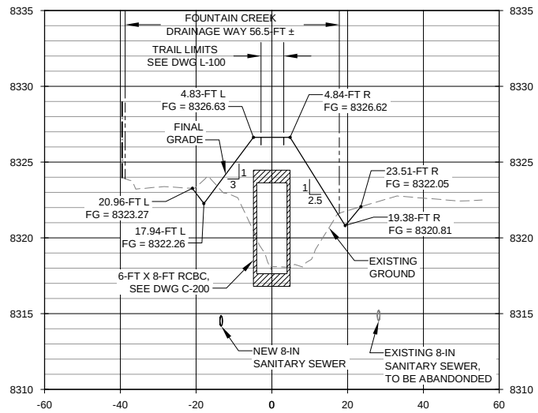
FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

CROSS SECTIONS
STA 12+00 TO 15+50

DRAWING NO. C-600
PROJECT NO. 35-0200.00
SHEET: 13 OF 31 SHEETS
FILE NO. CROSS SECTIONS.dwg

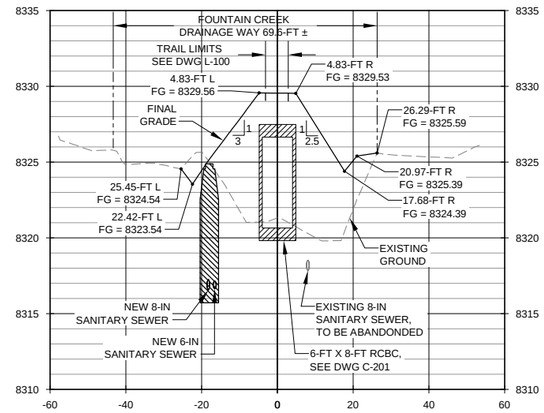
3/18/2013 9:09 AM C:\USERS\HICKOXMD\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\CROSS SECTIONS.DWG

16+50



16+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

17+50



17+50 CROSS SECTION
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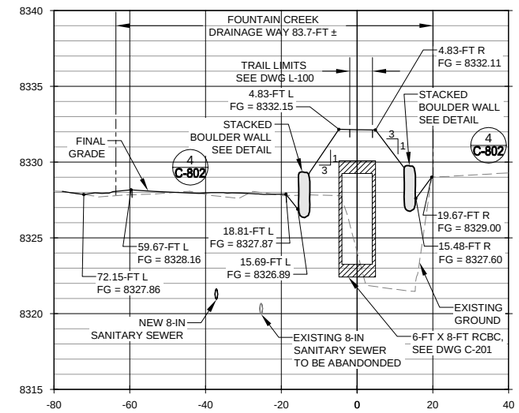
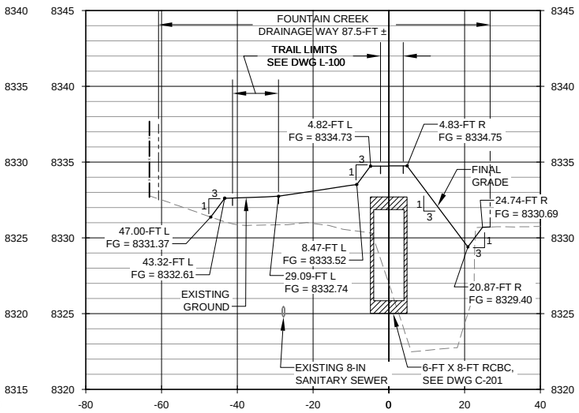
18+50



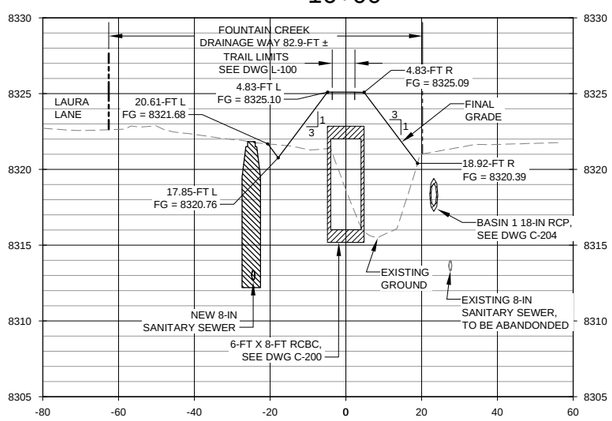
18+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

19+50



19+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

16+00



16+00 CROSS SECTION
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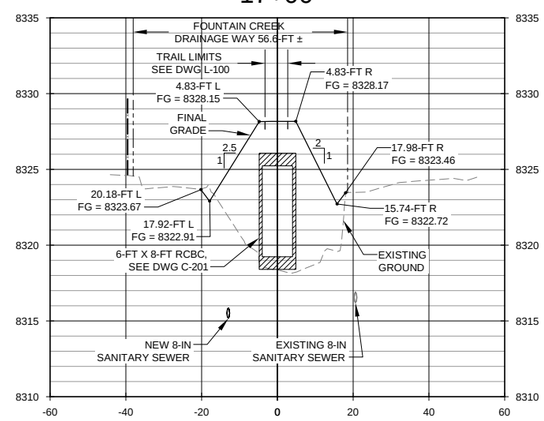
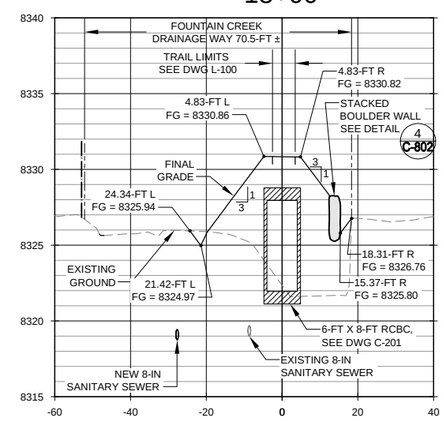
17+00



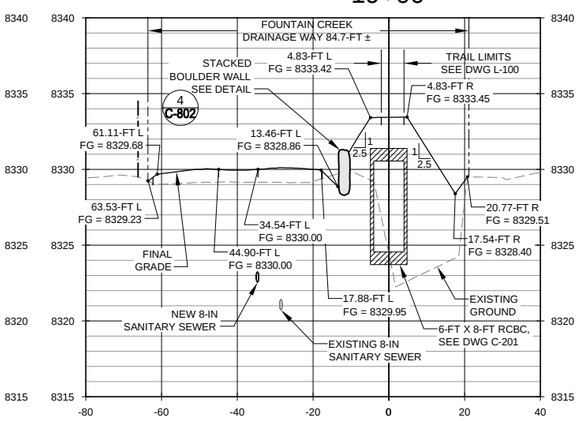
17+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

18+00



18+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

19+00



19+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

NOTE:
CROSS SECTIONS LOOKING UP STATION.

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REV.	DATE	DESCRIPTION	APP

DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

RICHARD T. SMITH, PE 35409
PROJECT MANAGER PE NO.

AYRES ASSOCIATES
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ELEVATE! WOODLAND PARK
220 W. SOUTH AVENUE
PO BOX 9007
WOODLAND PARK, CO 80866

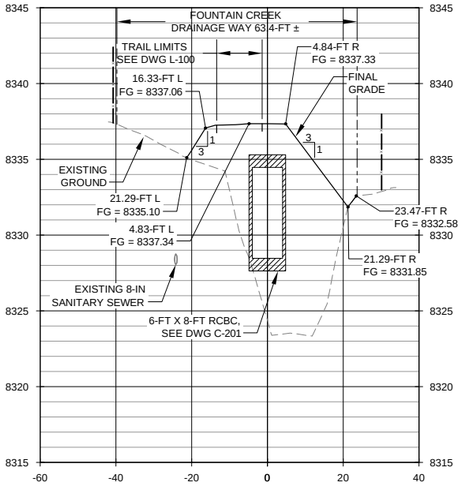
FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

CROSS SECTIONS
STA 16+00 TO STA 19+50

DRAWING NO. C-601
PROJECT NO. 35-0200.00
SHEET: 14 OF 31 SHEETS
FILE NO. CROSS SECTIONS.dwg

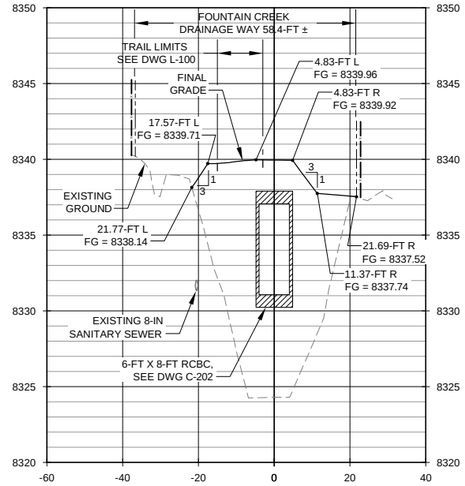
3/18/2013 9:09 AM C:\USERS\HICKOXM\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\CROSS SECTIONS.DWG

20+50



20+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

21+50



21+50 CROSS SECTION
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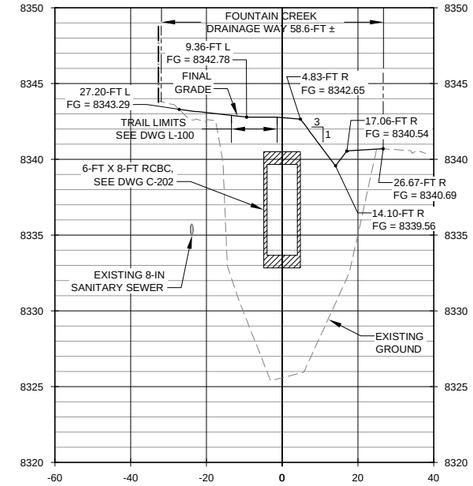
22+50



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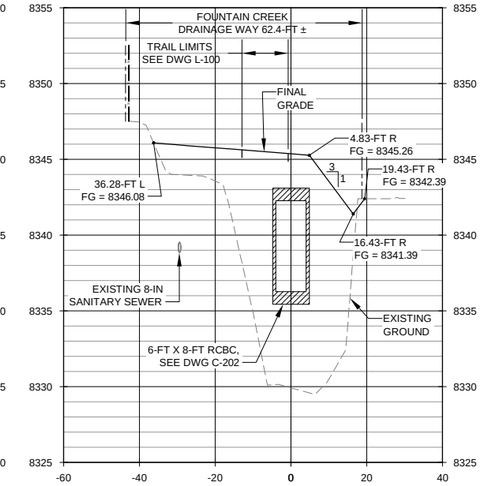
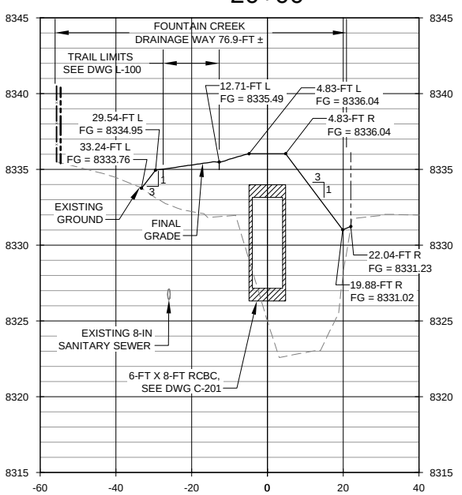
23+50



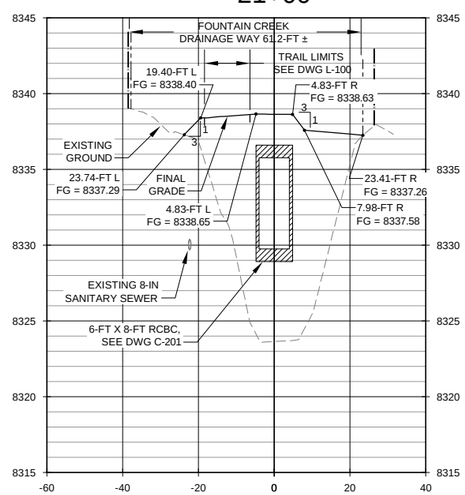
23+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

20+00



20+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

21+00



21+00 CROSS SECTION
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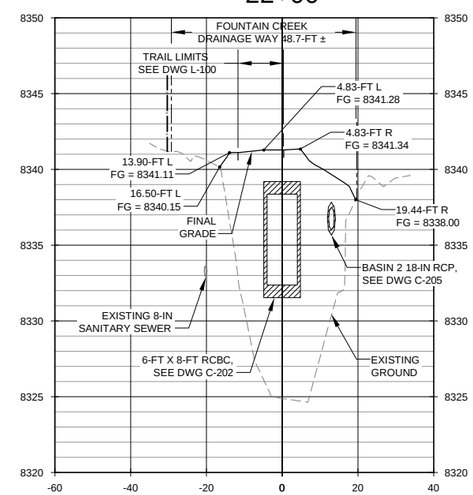
22+00



22+00 CROSS SECTION
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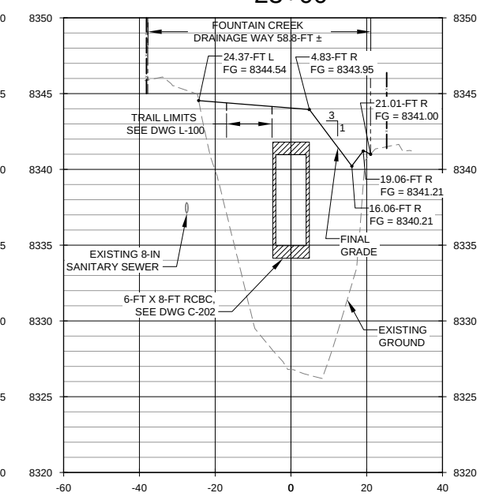
23+00



23+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 5' (VERT.)

NOTE:
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REV.	DATE	DESCRIPTION	APP

DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

RICHARD T. SMITH, PE 35409
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ELEVATE! WOODLAND PARK
220 W. SOUTH AVENUE
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WOODLAND PARK, CO 80866

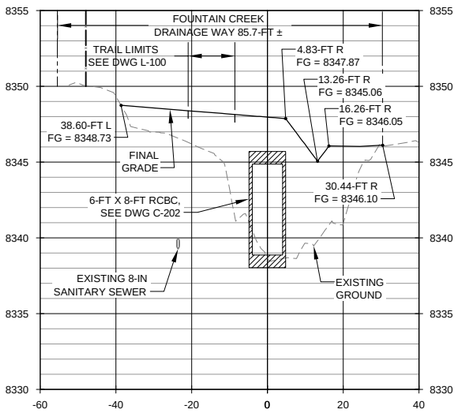
FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

CROSS SECTIONS
STA 20+00 TO STA 23+50

DRAWING NO. C-602
SHEET: 15 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. CROSS SECTIONS.dwg

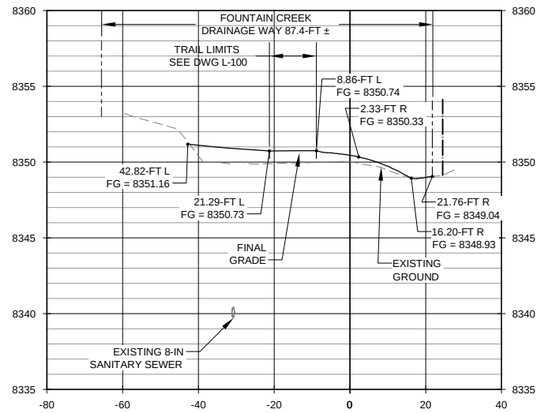
3/18/2013 9:09 AM C:\USERS\HICKOXM\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\CROSS SECTIONS.DWG

24+50



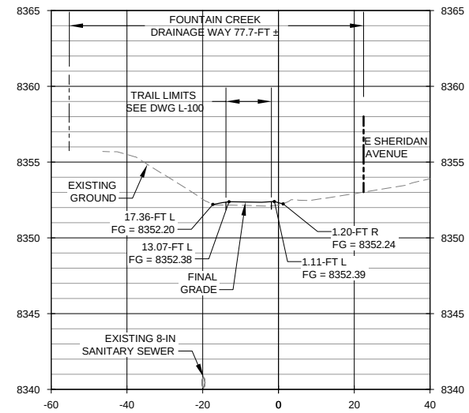
24+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 2' (VERT.)

25+50



25+50 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 2' (VERT.)

26+50



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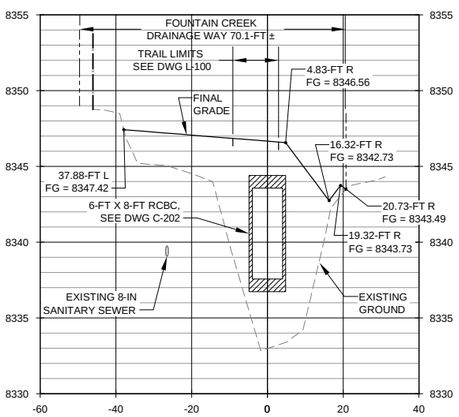
24+00



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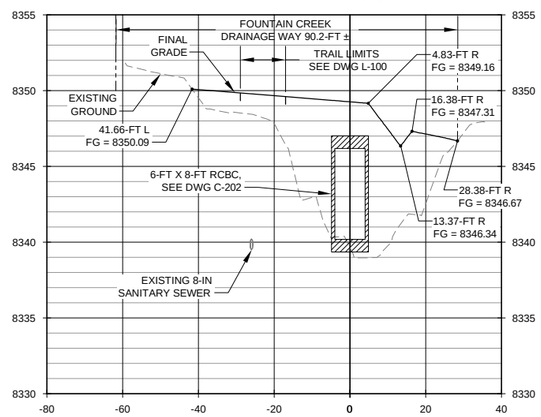

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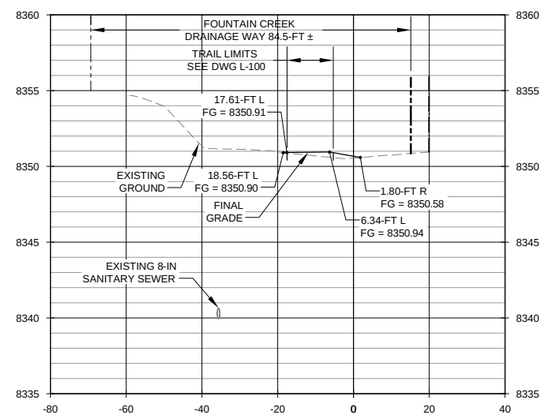

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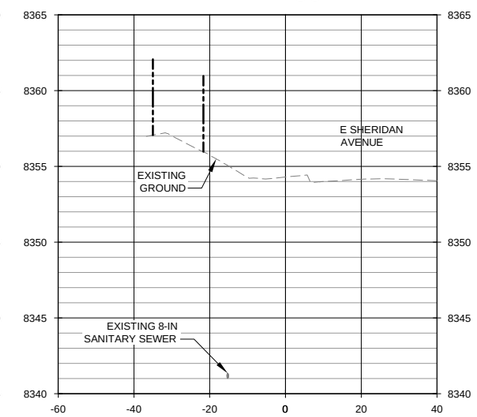

27+00 CROSS SECTION
SCALE: 1" = 20' (HORIZ.) 1" = 2' (VERT.)

NOTE:
CROSS SECTIONS LOOKING UP STATION.

PREPARED FOR CONSTRUCTION UNDER MY DIRECT SUPERVISION:

(AFFIX SEAL, EXPIRATION DATE AND PE SIGNATURE) DATE

APPROVED FOR CONSTRUCTION DATE
CITY ENGINEER OR APPOINTED REPRESENTATIVE

"AS-BUILT" CERTIFIED BY:

(AFFIX SEAL, EXPIRATION DATE AND PE SIGNATURE) DATE

APPROVED FOR "AS-BUILT" RECORD DATE
CITY ENGINEER OR APPOINTED REPRESENTATIVE

90% SUBMITTAL
NOT FOR CONSTRUCTION

REV.	DATE	DESCRIPTION	APP

DESIGN BY: RTS
DRAWN BY: MDH
DATE: 01-11-2013

MATTHEW D. HICKOX, EI
PROJECT ENGINEER

RICHARD T. SMITH, PE 35409
PROJECT MANAGER PE NO.

AYRES ASSOCIATES
12050 N. Pecos Street, Suite 150
Westminster, Colorado 80234
303.938.8874 PHONE
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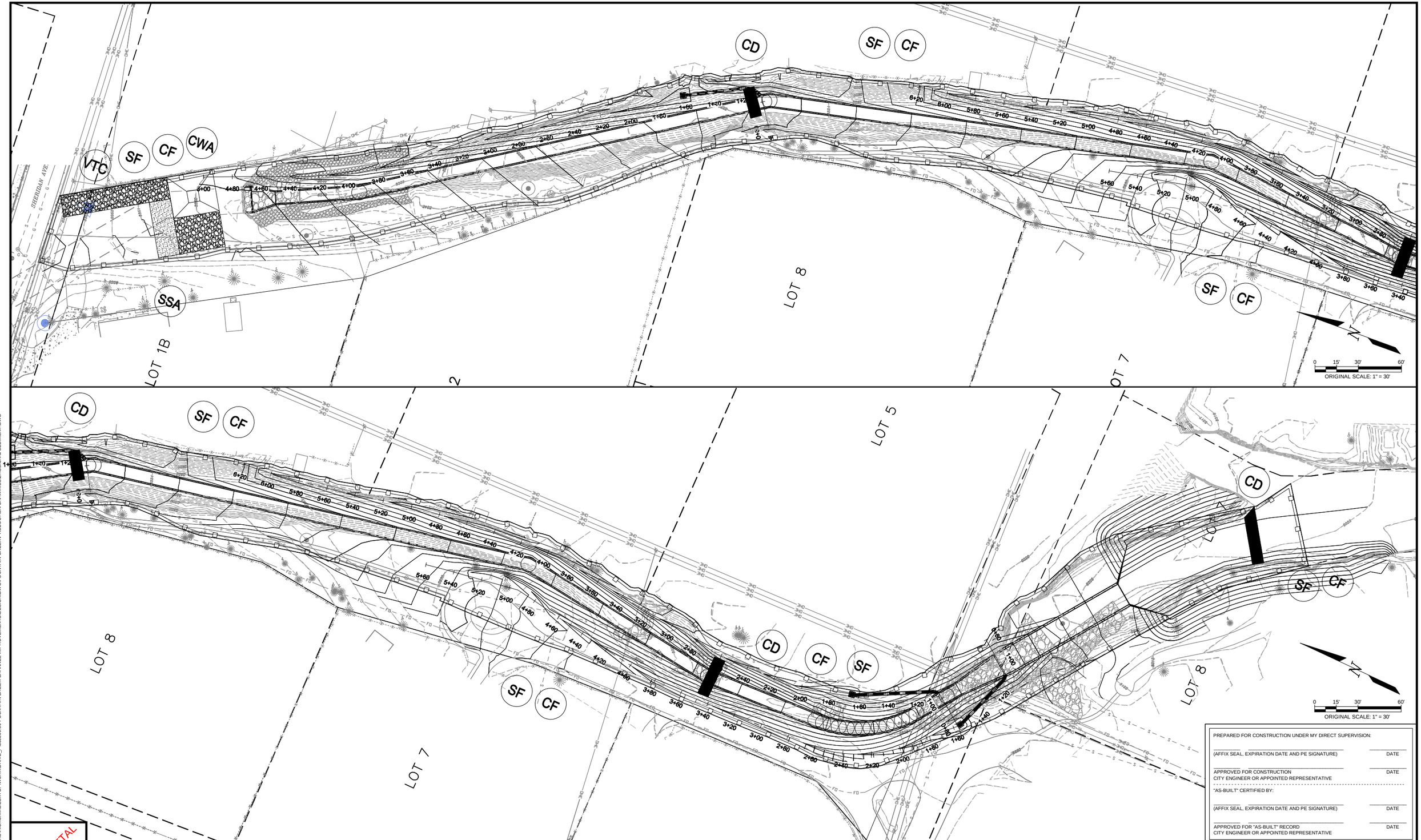
ELEVATE! WOODLAND PARK
220 W. SOUTH AVENUE
PO BOX 9007
WOODLAND PARK, CO 80866

FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

CROSS SECTIONS
STA 24+00 TO 25+50

DRAWING NO. C-603
SHEET: 16 OF 31 SHEETS
PROJECT NO. 35-0200.00
FILE NO. CROSS SECTIONS.dwg

3/18/2013 9:09 AM C:\USERS\HICKOXM\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\CROSS SECTIONS.DWG



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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

EROSION & SEDIMENT CONTROL PLAN

DRAWING NO. C-700
PROJECT NO. 35-0200.00
SHEET: 17 OF 31 SHEETS
FILE NO. EROSION & SEDIMENT.dwg

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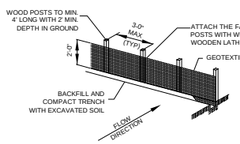
SF



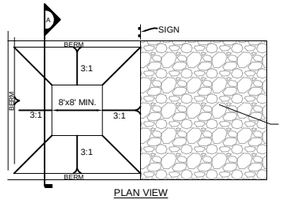
NOTE

EXCAVATE A TRENCH A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH. BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.

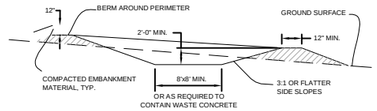
SILT FENCING TO BE USED AROUND STAGING AREA.

1 / C-700 SILT FENCE DETAIL
SCALE: NTS

CWA



PLAN VIEW



SECTION A

CONCRETE WASHOUT AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATIONS OF CONCRETE WASHOUT AREA
2. THE CONCRETE WASHOUT AREA SHALL BE INSTALLED PRIOR TO ANY CONCRETE PLACEMENT ON SITE.
3. VEHICLE TRACKING CONTROL IS REQUIRED AT THE ACCESS POINT.
4. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE WASHOUT AREA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CONCRETE WASHOUT AREA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
5. EXCAVATED MATERIAL SHALL BE UTILIZED IN PERIMETER BERM CONSTRUCTION

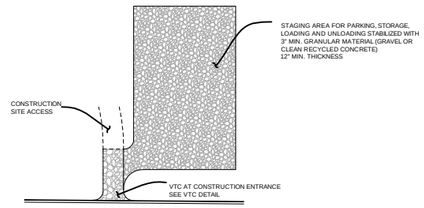
CONCRETE WASHOUT AREA MAINTENANCE NOTES

1. THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
2. AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT AN APPROVED WASTE SITE.
3. WHEN THE CONCRETE WASHOUT AREA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, DRILL SEED AND CRIMP MULCH OR OTHERWISE STABILIZE IN A MANNER APPROVED BY THE LOCAL JURISDICTION.
4. INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY
AS FOUND IN:
Urban Drainage and
Flood Control District
Drainage Criteria Manual (V.3)

2 / C-700 CONCRETE WASHOUT AREA DETAIL
SCALE: NTS

SSA



PLAN

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR GENERAL LOCATION OF STAGING AREA. CONTRACTOR MAY MODIFY LOCATION AND SIZE OF STABILIZED STAGING AREA WITH APPROVAL FROM LOCAL JURISDICTION.
2. STABILIZED STAGING AREA SHALL BE LARGE ENOUGH TO FULLY CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
3. IF REQUIRED BY THE LOCAL JURISDICTION, SITE ACCESS ROADS SHALL BE STABILIZED IN THE SAME MANNER AS THE STAGING AREA.
4. STAGING AREA SHALL BE STABILIZED PRIOR TO ANY OTHER OPERATIONS ON THE SITE.
5. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM OF 3" OF GRANULAR MATERIAL (GRAVEL OR CLEAN RECYCLED CONCRETE).

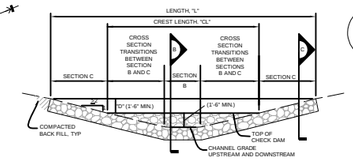
STABILIZED STAGING AREA MAINTENANCE NOTES

1. THE SWMP MANAGER SHALL INSPECT THE STABILIZED STAGING AREA WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT UPSTREAM SEDIMENT AS NECESSARY.
2. SWMP MANAGER SHALL PROVIDE ADDITIONAL THICKNESS OF GRANULAR MATERIAL IF ANY RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.
3. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING AND LOADING OPERATIONS.
4. ANY ACCUMULATED DIRT OR MUD SHALL BE REMOVED FROM THE SURFACE OF THE STABILIZED STAGING AREA.
5. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA TOPSOILED, DRILL SEEDED AND CRIMP MULCHED OR OTHERWISE STABILIZED.

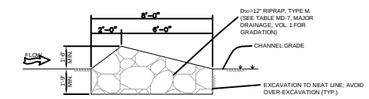
DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY
AS FOUND IN:
Urban Drainage and
Flood Control District
Drainage Criteria Manual (V.3)

3 / C-700 STABILIZED STAGING AREA DETAIL
SCALE: NTS

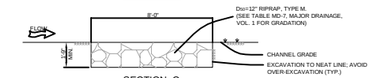
CD



ELEVATION



SECTION B



SECTION C

CHECK DAM INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   -LOCATIONS OF CHECK DAMS.
   -CHECK DAM TYPE (CHECK DAM OR REINFORCED CHECK DAM).
   -LENGTH, "L", CREST LENGTH, "CL", AND DEPTH, "D".
2. CHECK DAMS INDICATED ON INITIAL GESC PLAN SHALL BE INSTALLED AFTER CONSTRUCTION FENCE, BUT PRIOR TO ANY UPSTREAM LAND DISTURBING ACTIVITIES.
3. RIPRAP UTILIZED FOR CHECK DAMS SHALL HAVE A D 50 MEDIAN STONE SIZE OF 12".
4. RIPRAP PAD SHALL BE TRENCHED INTO THE GROUND A MINIMUM OF 1' - 8".
5. THE ENDS OF THE CHECK DAM SHALL BE A MINIMUM OF 1' - 6" HIGHER THAN THE CENTER OF THE CHECK DAM.

CHECK DAM MAINTENANCE NOTES

1. THE SWMP MANAGER SHALL INSPECT CHECK DAMS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS OR CLEAN OUT AS NECESSARY.
2. SEDIMENT ACCUMULATED UPSTREAM OF CHECK DAMS SHALL BE REMOVED WHEN THE SEDIMENT DEPTH UPSTREAM OF CHECK DAM IS WITHIN 1/2 OF THE HEIGHT OF THE CREST.
3. CHECK DAMS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS APPROVED BY THE COUNTY.
4. WHEN CHECK DAMS ARE REMOVED, EXCAVATIONS SHALL BE FILLED WITH SUITABLE COMPACTED BACK FILL. ANY DISTURBED AREA SHALL BE SEEDED AND MULCHED AND COVERED WITH EROSION CONTROL BLANKET OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

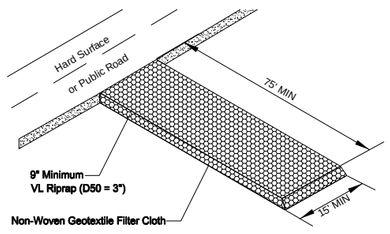
DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY, COLORADO
AS FOUND IN:
URBAN DRAINAGE AND
FLOOD CONTROL DISTRICT
DRAINAGE CRITERIA MANUAL (V.3)

4 / C-700 CHECK DAM DETAIL
SCALE: NTS

VTC

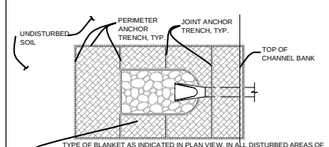
NOTES:

1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. GEOTEXTILE REQUIREMENTS FOUND IN CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL VOLUME 2, APPENDIX B, TABLE MT-3.
5. SEE COLORADO SPRINGS DCM, VOL 2 FOR ADDITIONAL INSTALLATION AND MAINTENANCE REQUIREMENTS.

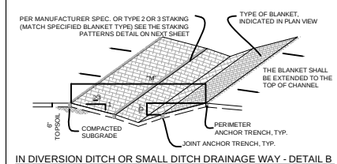


5 / C-700 VEHICLE TRACKING CONTROL DETAIL
SCALE: NTS

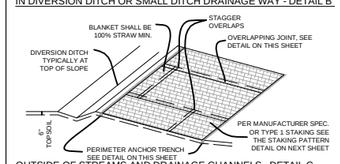
ECB



AT PIPE OUTLET AREAS OF STREAMS AND DRAINAGE CHANNELS - DETAIL A



IN DIVERSION DITCH OR SMALL DITCH DRAINAGE WAY - DETAIL B



OUTSIDE OF STREAMS AND DRAINAGE CHANNELS - DETAIL C

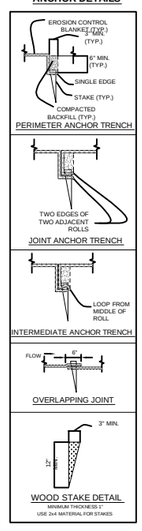
AS FOUND IN:
Urban Drainage and
Flood Control District
Drainage Criteria Manual (V.3)

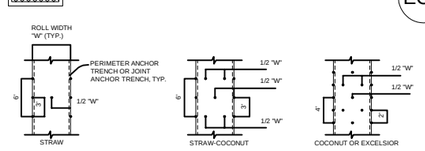
DETAIL BASED ON DETAILS PROVIDED BY DOUGLAS COUNTY

ECB

EROSION CONTROL BLANKET CONTINUED

ANCHOR DETAILS





STAKING PATTERNS

SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATION. IF NO MANUFACTURER'S SPECIFICATION IS AVAILABLE USE THE ACCEPTABLE STAKING PATTERN (AS SHOWN ABOVE)

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   - LOCATION OF PERIMETER OF EROSION CONTROL BLANKET.
   - TYPE OF BLANKET (STRAW, STRAW-COCONUT, COCONUT, OR EXCELSIOR).
   - AREA "A" IN SQUARE YARDS OF EACH TYPE OF BLANKET.
2. ALL EROSION CONTROL BLANKETS AND NETTING SHALL BE MADE OF 100% NATURAL AND BIODEGRADABLE MATERIAL; NO PLASTIC OR OTHER SYNTHETIC MATERIAL, EVEN IF PHOTO DEGRADABLE, SHALL BE ALLOWED.
3. IN AREAS WHERE EROSION CONTROL BLANKET IS SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING BELOW THE SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO BLANKET INSTALLATION AND THE BLANKET SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.
4. PERIMETER ANCHOR TRENCH SHALL BE USED AT OUTSIDE PERIMETER OF ALL BLANKET AREAS.
5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL BLANKETS EXCEPT STRAW, WHICH MAY USE AN OVERLAPPING JOINT.
6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE-HALF THE ROLL LENGTH FOR COCONUT AND EXCELSIOR BLANKETS.
7. THE OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF BLANKETS TOGETHER FOR BLANKETS ON SLOPES.
8. MATERIAL SPECIFICATIONS OF EROSION CONTROL BLANKET SHALL CONFORM TO TABLE 7.1.
9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING EROSION CONTROL BLANKET SHALL BE RESEEDED AND MULCHED.
10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM ONES SHOWN HERE

TABLE 7.1 - EROSION CONTROL BLANKET TYPE

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	NETTING MIN.
STRAW*	-	100%	-	DOUBLE/NATURAL
STRAW/COCONUT	30% MIN.	70% MAX.	-	DOUBLE/NATURAL
COCONUT	100%	-	-	DOUBLE/NATURAL
EXCELSIOR	-	-	100%	DOUBLE/NATURAL

* FOR OUTSIDE OF STREAMS AND DRAINAGE CHANNELS

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. THE SWMP MANAGER SHALL INSPECT EROSION CONTROL BLANKETS WEEKLY, DURING AND AFTER ANY STORM EVENT AND MAKE REPAIRS AS NECESSARY.
2. EROSION CONTROL BLANKET IS TO BE LEFT IN PLACE UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.
3. ANY EROSION CONTROL BLANKET PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE RE-INSTALLED. ANY SUBGRADE AREAS BELOW THE BLANKET THAT HAVE ERODED TO CREATE A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE EROSION CONTROL BLANKET REINSTALLED.

6 / C-700 EROSION CONTROL BLANKET DETAIL
SCALE: NTS

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FOUNTAIN CREEK STABILIZATION & EROSION CONTROL PROJECT

EROSION & SEDIMENT CONTROL DETAILS

DRAWING NO. C-701
PROJECT NO. 35-0200.00
SHEET: 18 OF 31 SHEETS
FILE NO. EROSION & SEDIMENT.dwg

3/18/2013 9:10 AM C:\USERS\HCKOX\DESKTOP\WORKDRIVE_P\350200.00 FOUNTAIN CREEK CHANNEL IMPROVEMENTS\DESIGN\DWG\FOUNTAIN CREEK\PRODUCTION DRAWINGS\EROSION & SEDIMENT.DWG