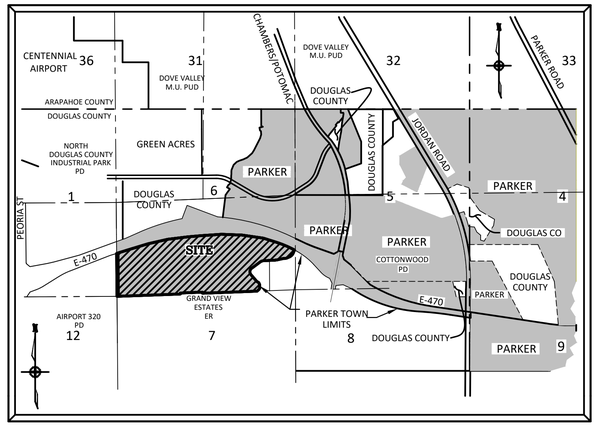
PRELIMINARY ROAD & STORM DRAINAGE CONSTRUCTION PLANS
FOR
BELFORD AVENUE
COMPARK VILLAGE SOUTH, FILING NO. 1
PARKER, COLORADO

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



VICINITY MAP

N.T.S.

AGENCY CONTACT LIST

COMPARK LAND COMPANY
MICHAEL VICKERS
1001 BANNOCK ST, SUITE 463
DENVER, CO 80204 — 303-881-6292

MANHARD CONSULTING
RICKY J. MOORE, P.E.
7600 E ORCHARD RD, SUITE 150-N
GREENWOOD VILLAGE, CO 80111 — 303-708-0500

PARKER PUBLIC WORKS
20120 E. MAINSTREET
PARKER, CO. 80138 — 303-840-9546
STREETS - ALEX MESTDAGH
STORM WATER - MICHAEL GRABCZYK
EROSION CONTROL - MICHAEL GRABCZYK
LIFE SAFETY - RANDY CAPRA

TOWN OF PARKER POLICE DEPARTMENT
19,600 E. PARKER SQUARE DR.
PARKER, CO. 80134 — 303-841-9800

STONEGATE VILLAGE METRO DISTRICT
DISTRICT ENGINEER:
SCOTT BARNETT
MULHERN MRE, INC.
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
GREENWOOD VILLAGE, CO 80111 — (303) 779-4525

SOUTH METRO FIRE RESCUE AUTHORITY
MICHELLE HERIAN
9195 E. MINERAL AVE.
CENTENNIAL, CO 80112 — 720-488-7200

UTILITY NOTIFICATION COMPANY OF COLORADO
2801 SOUTH YOUNGFIELD ST, SUITE 301
GOLDEN, CO 80401 — 1-800-922-1987
LOCAL CALLS — (811)

XCEL ENERGY
MICHELLE O'NAN
5909 E. 38TH AVE.
DENVER, CO 80207 — 303-329-1618

COMCAST
KEVIN YOUNG
6850 S. TUCSON WAY
ENGLEWOOD, CO 80112 — 720-490-3867

CENTURY LINK
WILLIAM BENSON
9750 E. COSTILLA AVE.
ENGLEWOOD, CO 80112 — 303-792-6069

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

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

Know what's below. Call before you dig.

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.

COLORADO REGISTERED — RYAN J. MOORE — 30877 — 11-17-2020 — PROFESSIONAL ENGINEER

FOR AND ON BEHALF OF MANHARD CONSULTING LTD

8008 E. Arapahoe Court, Suite 110, Centennial, CO 80112 ph:303.708.0500 fx:303.708.0400 manhard.com
Civil Engineers • Surveyors • Water Resource Engineers • Water & Wastewater Engineers
Construction Managers • Environmental Scientists • Landscape Architects • Planners

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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: 12/17/2020

DATE	REVISIONS	DRAWN BY
09/2020	APPROVED	
H 07/2020	ADDRESS PER TOWN OF PARKER REVIEW	
G 03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	RJM
F 12/21/16	FINAL SUBMITTAL	
E 11/21/16	4TH SUBMITTAL	
D 8/16/16	3RD SUBMITTAL	
C 6/16/16	2ND SUBMITTAL	
B 4/11/16	2ND SUBMITTAL	
A 11/2015	1ST SUBMITTAL	EG

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

PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
COVER SHEET

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 1 OF 30
CLCPKC3 ---

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Plotted: 11/16/2020 8:37 AM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-BelFord-CV01.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. 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.

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 ENVIRONMENT 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 TO 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 CDOT STANDARD SPECIFICATIONS 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 SUB-GRADE 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:

A) 1 TEST FOR SUB-GRADE AND 1 TEST FOR BACKFILL AT EVERY ABOVE-GROUND APPURTENANCE (MANHOLES, INLETS, ETC.)
B) 1 TEST EVERY 200 LF OF MAINLINE TRENCHES 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 JOINTED IN SUCH A MANNER THAT THE ENDS ARE FULLY ENTERED AND THE INNER SURFACES ARE REASONABLY 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. REFERENCE CDOT M&S STANDARD 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.

SIGNAGE & STRIPING NOTES

1. SEE SIGNAGE & STRIPING PLAN FOR NOTES.

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.

MASTER LEGEND

- PROPOSED SANITARY SEWER W/MANHOLE
- PROPOSED WATERLINE W/ GATE VALVE
- PROPOSED F.H. ASSEMBLY, GATE VALVE & TEE
- EXISTING SANITARY SEWER W/ MANHOLE
- EXISTING WATERLINE W/ GATE VALVE
- EXISTING FH ASSEMBLY, GATE VALVE & TEE
- EXISTING HIGH PRESSURE GAS LINE
- PROPOSED STORM SEWER W/ MANHOLE
- PROPOSED EOA, FL AND BOC
- PROPOSED SIDEWALK
- PROPOSED ROW
- PROPOSED UTILITY EASEMENT
- EXISTING TOP BACK OF CURB
- EXISTING FLOWLINE
- EXISTING LIP OF CURB/EDGE OF ASPHALT
- EXISTING STORM INLET
- PROPOSED STORM INLET
- PROPOSED WATER SERVICE W/ CURBSTOP
- PROPOSED SANITARY SERVICE
- EXISTING WATER SERVICE W/ CURBSTOP
- EXISTING SANITARY SERVICE
- CAUTION! UTILITY CROSSING
- PROPOSED CROSS PAN
- EXISTING CROSS PAN
- PROPOSED CONTOURS (5750)
- EXISTING CONTOURS (5750)
- EXISTING TELEPHONE LINE (T)
- EXISTING ELECTRIC LINE (E)
- EXISTING STORM
- EXIST. OVERHEAD UTILITY (OH)
- EXISTING POWER POLES
- HP HIGH POINT
- LP LOW POINT
- TW TOP OF WALL ELEVATION
- M.E. MATCH EXISTING
- INDICATES PROPERTY CORNER ELEV. PER GRADING TEMPLATES (26.3, FL R/W, PROPERTY LINE)
- CUT/FILL LINE
- FLOW DIRECTION ARROW
- PROPOSED ASPHALT LIMITS
- PROPOSED SIGN
- PROPOSED STREET LIGHT
- TRAIL (CRUSHED FINES)
- TRAIL (CONCRETE)

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

TOWN OF PARKER APPROVALS

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Town of Parker, Director of Engineering — Date: 12/17/2020

DATE	REVISIONS	DRAWN BY
09/2020	APPROVED	
03/2020	RESUBMITTED PER TOWN OF PARKER REVIEW	
03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
12/21/16	FINAL SUBMITTAL	
11/7/16	4TH SUBMITTAL	
7/27/16	3RD SUBMITTAL	
4/11/16	2ND SUBMITTAL	
11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
GENERAL NOTES

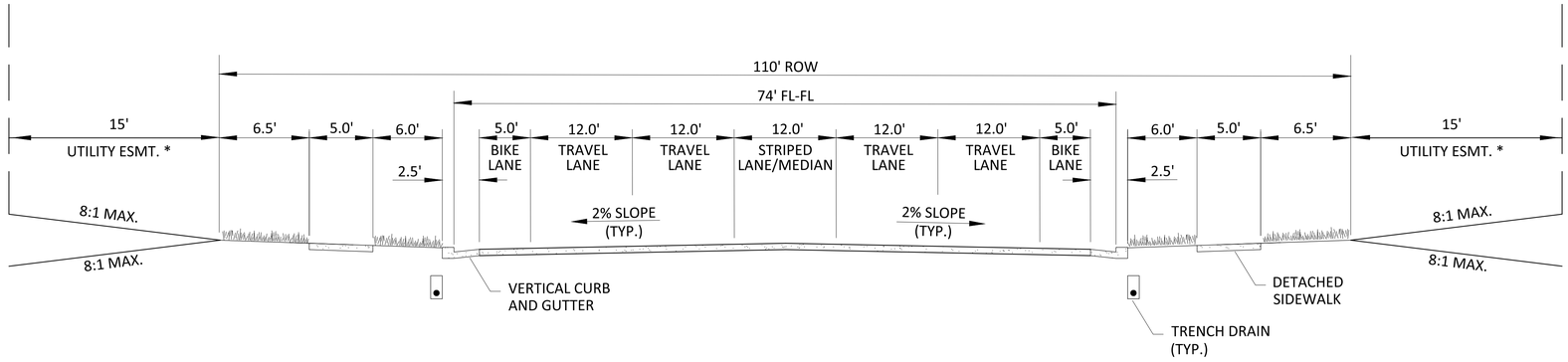
COLORADO REGISTERED PROFESSIONAL ENGINEER — RYAN I. MOOK — 38877 — 11-17-2020

PROJ. MGR.:	RIM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 2 OF 30
CLCPKC3 ---

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Plotted: 11/16/2020 8:36 AM Dwg Name: P:\Clcpkc3\ComSouth\12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Belford-GEN NOTES.dwg Updated By: ADucker

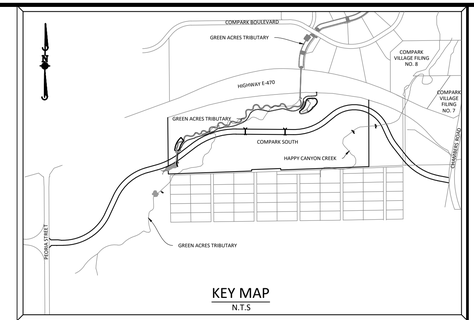


MAJOR COLLECTOR
ULTIMATE CONDITION

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.

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)

	DATE	REVISIONS	DRAWN BY
H.		APPROVED	
G.	09/2020	ROUGH SET FOR TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
C.	11/2/16	4TH SUBMITTAL	
C.	6/24/16	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

TYPICAL ROADWAY SECTION

COLORADO REGISTERED PROFESSIONAL ENGINEER
KEVIN L. MOSER
30877
11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET
3 OF 30
CLCPKC3

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.

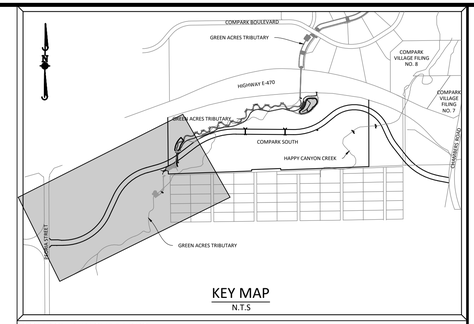
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Town of Parker, Director of Engineering — Date: 12/17/2020

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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)

Know what's **below.**
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0 100 200 400
SCALE: 1"=200'

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Town of Parker, Director of Engineering — Date 12/17/2020

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A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

OVERALL ROADWAY AND DRAINAGE PLAN

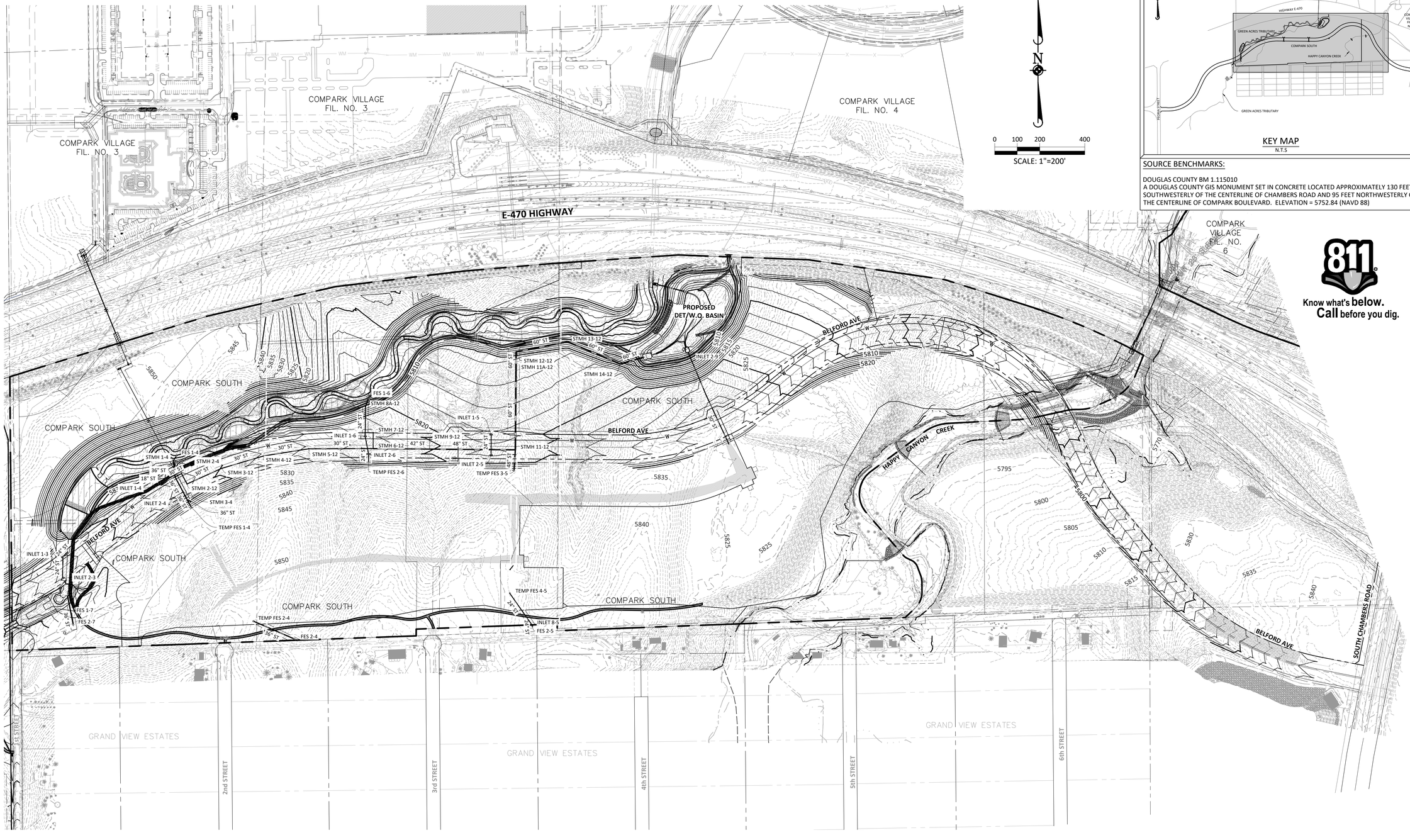
COLORADO REGISTERED PROFESSIONAL ENGINEER — RJM — 30877 — 11-17-2020

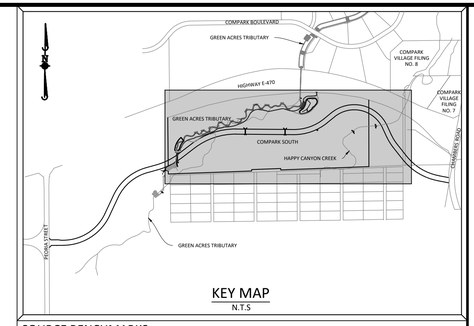
PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 4 OF 30
CLCPKC3

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KEY MAP
N.T.S

0 100 200 400
SCALE: 1"=200'

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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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

OVERALL ROADWAY AND DRAINAGE PLAN

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Town of Parker, Director of Engineering — Date: 12/17/2020

COLORADO REGISTERED PROFESSIONAL ENGINEER
KEVIN L. MUSE
30877
11-17-2020

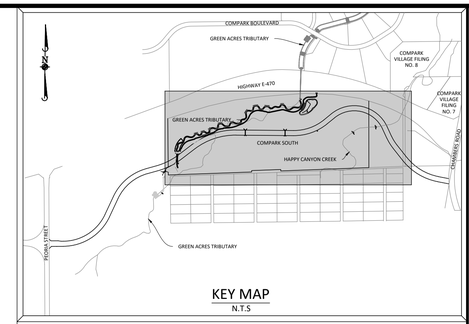
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PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 5 OF 30
CLCPKC3

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KEY MAP
N.T.S

SOURCE BENCHMARKS:

DOUGLAS COUNTY BM 1.115010
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	DATE	REVISIONS	DRAWN BY
H.	09/2020	APPROVED	
G.	06/2020	RESUBMITTAL PER TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
D.	11/1/16	4TH SUBMITTAL	
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

OVERALL UTILITY PLAN

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12/17/2020
Town of Parker, Director of Engineering — Date

TOWN OF PARKER BUILDING DEPT FIRE LIFE SAFETY APPROVAL

ALL FIRE HYDRANTS SHALL BE INSTALLED ACCORDING TO WATER UTILITY STANDARDS. THE NUMBER AND LOCATIONS OF THE FIRE HYDRANTS AS SHOWN ON THE OVERALL UTILITY PLAN ARE CORRECT AS SPECIFIED BY THE TOWN OF PARKER, COMMUNITY DEVELOPMENT DEPARTMENT.

BY:

(SIGNATURE OF FIRE CODE OFFICIAL OR DESIGNATED REPRESENTATIVE)

DATE SIGNED

NOTE: UNDERGROUND FIRE LINE (UFL) SUBMITTAL DOCUMENTS MUST MEET THE REQUIREMENTS OF NFPA 24 WHEN SUBMITTING FOR REVIEW

DISTRICT APPROVALS

THESE DESIGNS, PLANS, AND CONTRACT DOCUMENTS ARE REVIEWED FOR CONCEPT AND GENERAL CONFORMANCE TO THE DISTRICT'S MINIMUM STANDARDS ONLY, AND THE PRIMARY RESPONSIBILITY FOR DESIGN ADEQUACY IS TO REMAIN WITH THE ENGINEER OF RECORD. THIS REVIEW DOES NOT IMPLY RESPONSIBILITY BY EITHER THE STONEGATE VILLAGE METROPOLITAN DISTRICT OR THE DISTRICT ENGINEER FOR COMPLETENESS, ACCURACY OR CORRECTNESS OF CALCULATIONS. THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS INDICATED ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE STONEGATE VILLAGE METROPOLITAN DISTRICT FOR ADDITIONAL ITEMS AND ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

APPROVED FOR CONSTRUCTION WITHIN ONE YEAR OF THE EARLIEST OF THESE DATES:

BY _____ _____
STONEGATE VILLAGE METROPOLITAN DISTRICT ENGINEER — DATE

BY _____ _____
STONEGATE VILLAGE METROPOLITAN DISTRICT MANAGER — DATE

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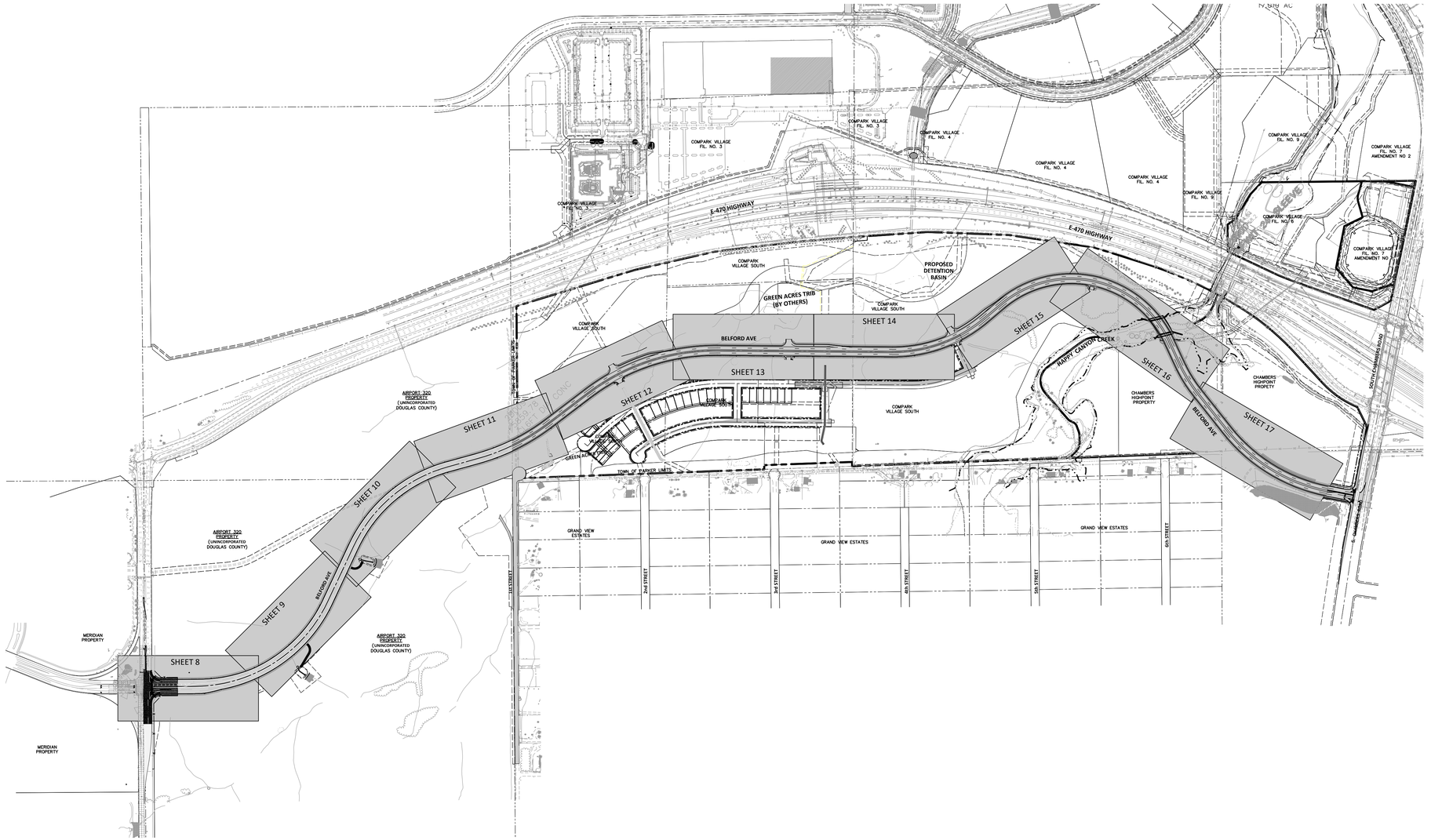
COLORADO REGISTERED R. I. MOOS 30877 11-17-2020 PROFESSIONAL ENGINEER

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 6 OF 30
CLCPKC3 ---

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0 200 400 800

SCALE: 1"=400'

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Town of Parker, Director of Engineering — Date: 12/17/2020

	DATE	REVISIONS	DRAWN BY
H	09/2020	APPROVED	
G	06/2020	REVISIONS PER TOWN OF PARKER REVIEW	
F	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E	12/21/16	FINAL SUBMITTAL	
C	11/1/16	4TH SUBMITTAL	
C	07/2016	3RD SUBMITTAL	
B	4/11/16	2ND SUBMITTAL	
A	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

STREET INDEX SHEET

COLORADO REGISTERED PROFESSIONAL ENGINEER — RYAN M. MOSER — 30877 — 11-17-2020

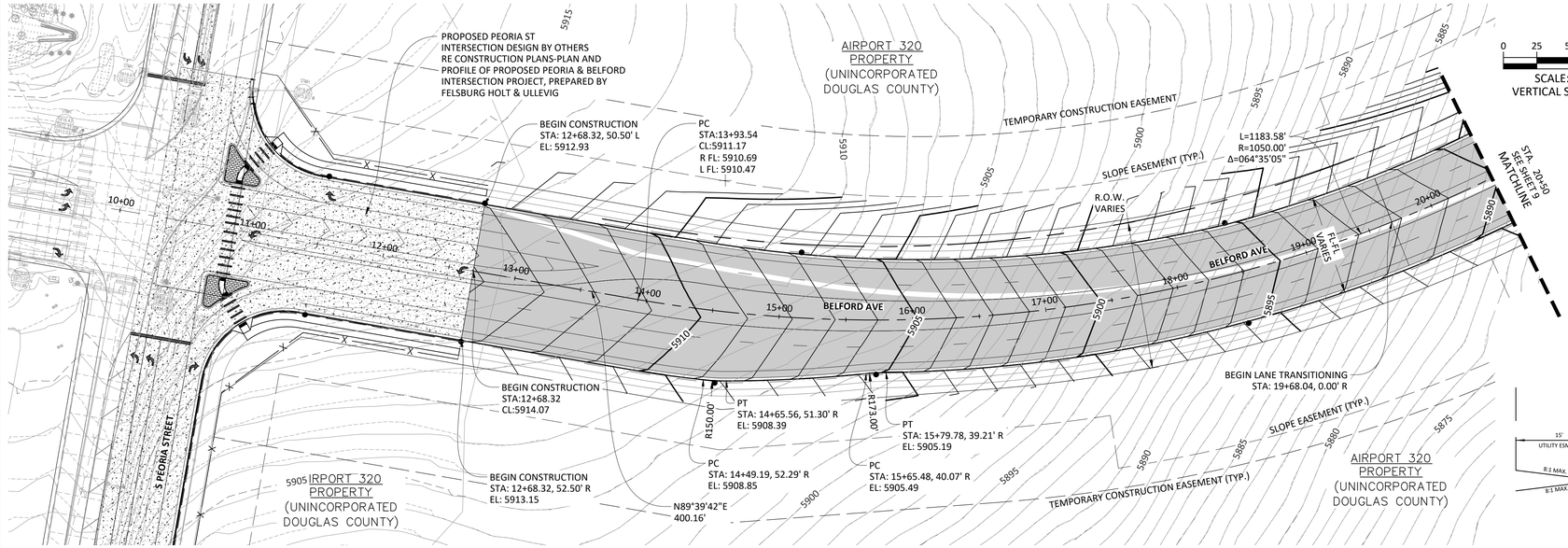
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PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 7 OF 30

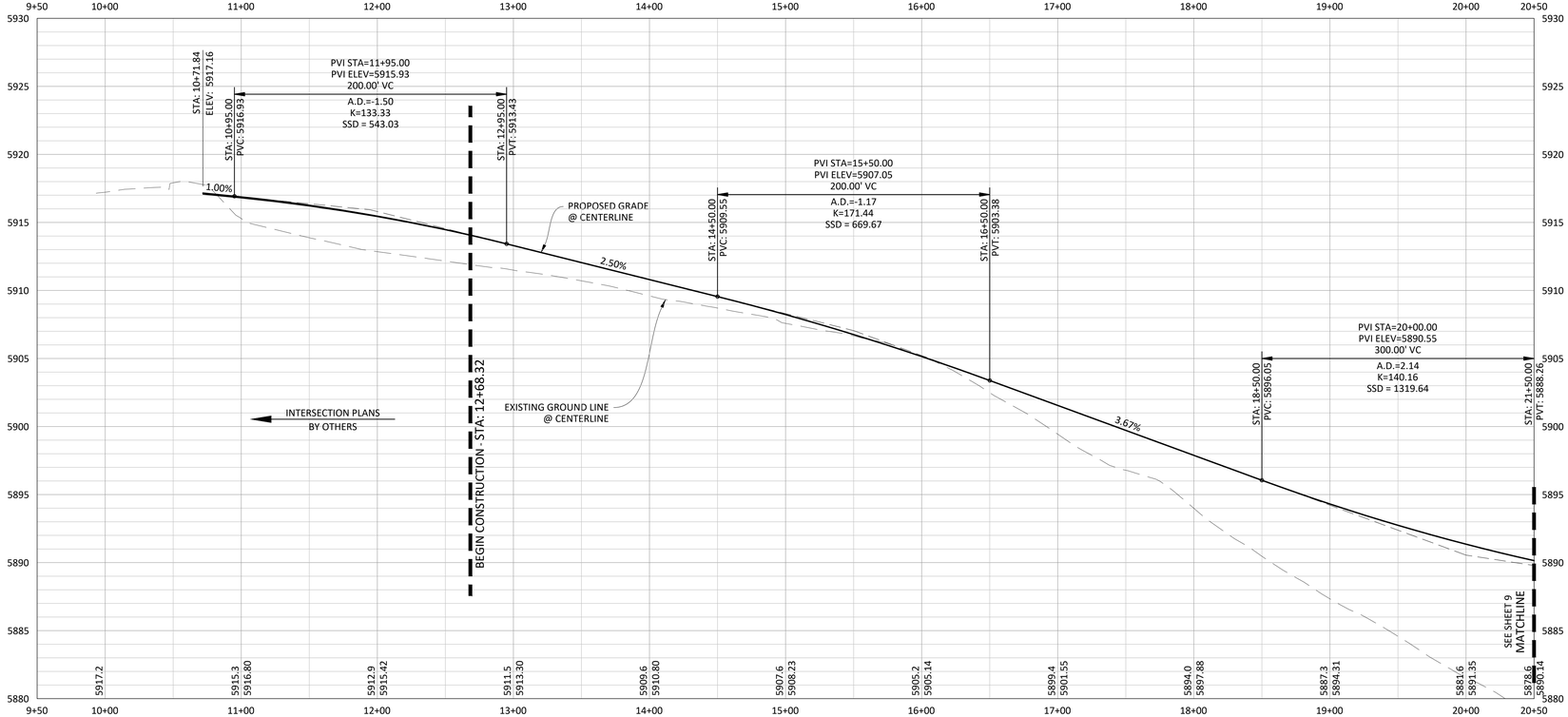
CLCPKC3

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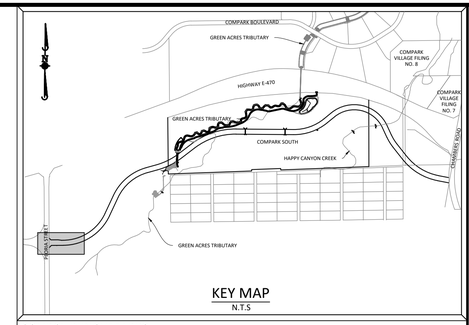
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PLAN: BELFORD AVENUE

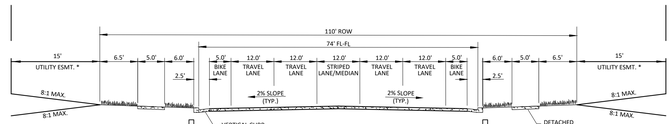


PROFILE: BELFORD AVENUE



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)



MAJOR COLLECTOR
ULTIMATE CONDITION

0
25
50
100
SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

Know what's **below.**
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NOTES:

1) REFER TO GENERAL NOTES ON SHEET 2 FOR ALL APPLICABLE CONSTRUCTION STANDARDS & MASTER LEGEND
2) ALL STATIONING IS CENTERLINE UNLESS OTHERWISE NOTED.REFER TO FINAL PLAT FOR RIGHT-OF-WAY AND CENTERLINE DIMENSIONS AND HORIZONTAL CONTROL.
3) ALL ELEVATIONS ARE FL UNLESS OTHERWISE NOTED. TC INDICATES BACK OF WALK FOR COMBINATION CURB, GUTTER, AND WALK, OR TOP OF CURB FOR CURB AND GUTTER.
4) REFER TO STONEGATE VILLAGE METRO DISTRICT APPROVED WATER AND SANITARY SEWER CONSTRUCTION PLANS FOR ALL PROPOSED WATER AND SANITARY SEWER LOCATIONS.
5) TFI INDICATES TOP FRONT OF INLET ELEVATION. TFI ELEVATIONS SHOWN ON INLETS IN PLAN VIEW ARE AT FRONT CORNERS OF INLET. REFER TO SPECIFIC INLET DETAILS ON STORM SEWER PLAN AND PROFILE.
6) *EASEMENT WIDTH VARIES. SEE PLAT FOR LOCATION AND WIDTH INFORMATION.

TOWN OF PARKER APPROVALS

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Town of Parker, Director of Engineering — Date: 12/17/2020

DRAWN BY	DATE	REVISIONS
ETG		
	09/2020	APPROVED
H	09/2020	ROUGH DRY TOWN OF PARKER REVIEW
G	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN
F	12/21/16	FINAL SUBMITTAL
E	11/2/16	4TH SUBMITTAL
D	08/19/16	3RD SUBMITTAL
C	4/11/16	2ND SUBMITTAL
B	11/2015	1ST SUBMITTAL
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

BELFORD AVENUE - PLAN & PROFILE

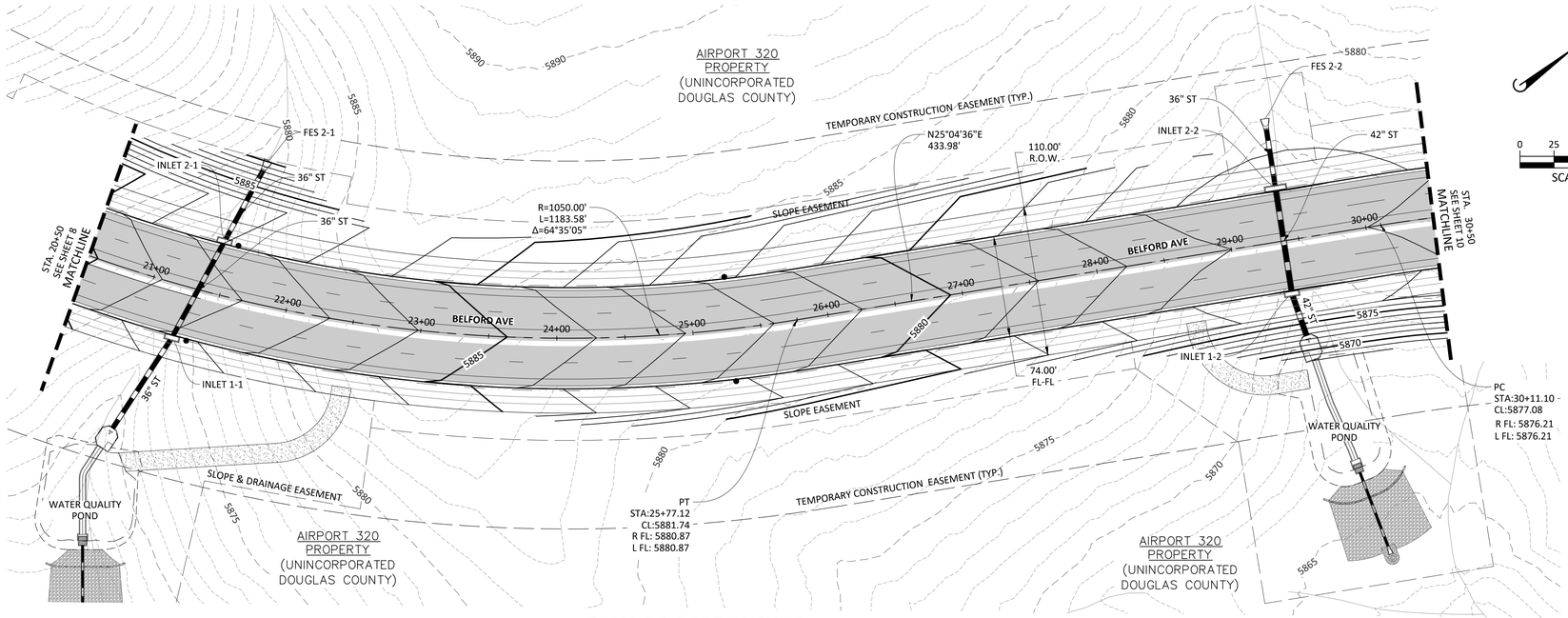
COLORADO REGISTERED PROFESSIONAL ENGINEER
30877
11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

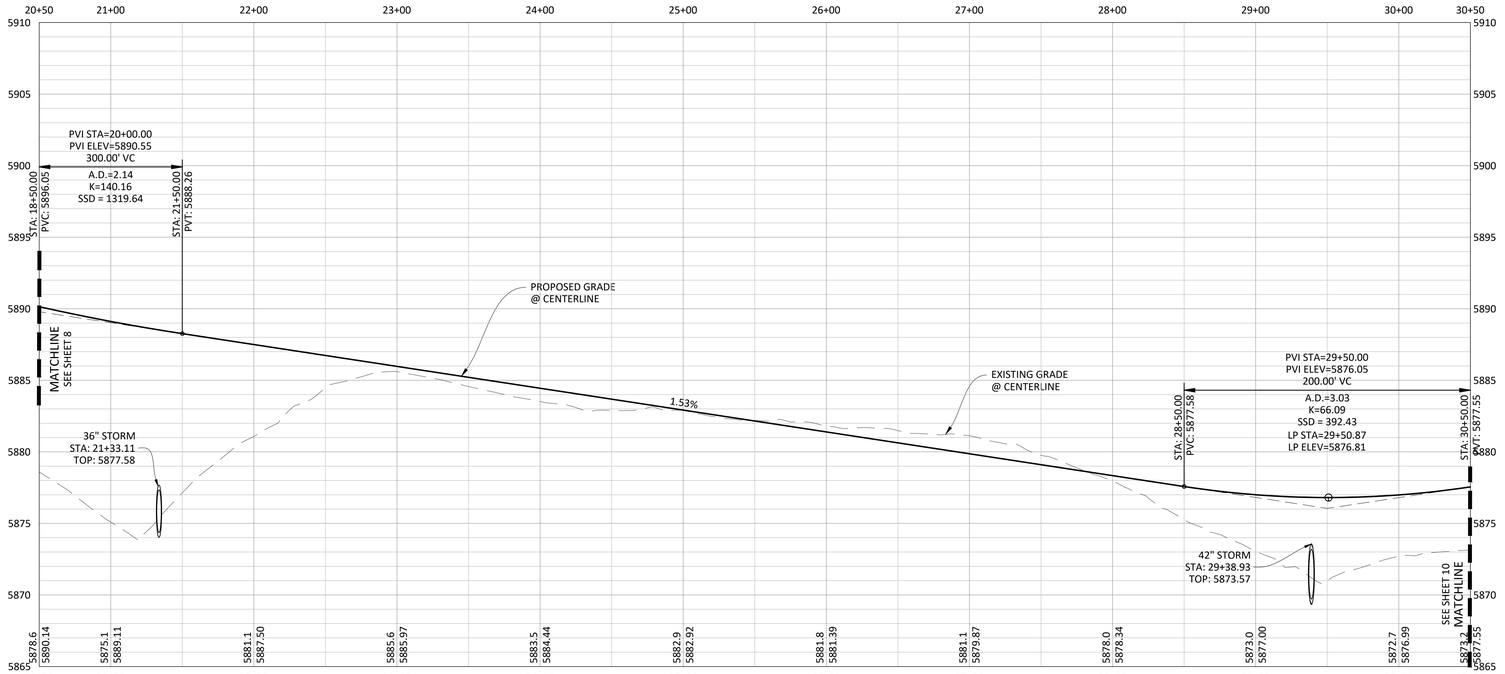
SHEET
8 OF 30
CLCPKC3 ---

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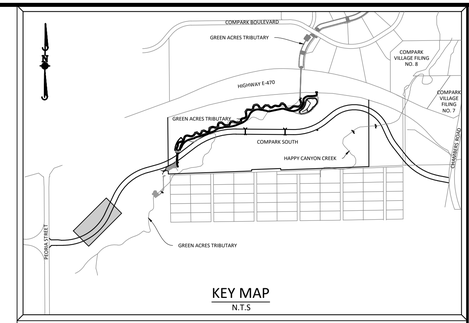
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PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE



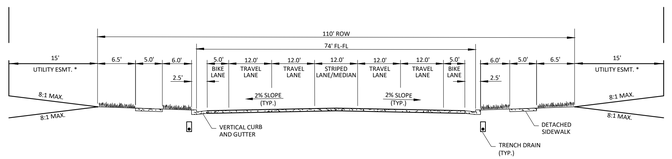
KEY MAP
N.T.S

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)

NOTES:

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MAJOR COLLECTOR
ULTIMATE CONDITION

SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

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Town of Parker, Director of Engineering — Date: 12/17/2020

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G.	06/2020	RESUBMITTAL PER TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
D.	11/2/16	4TH SUBMITTAL	
C.	6/24/16	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
BELFORD AVENUE - PLAN & PROFILE

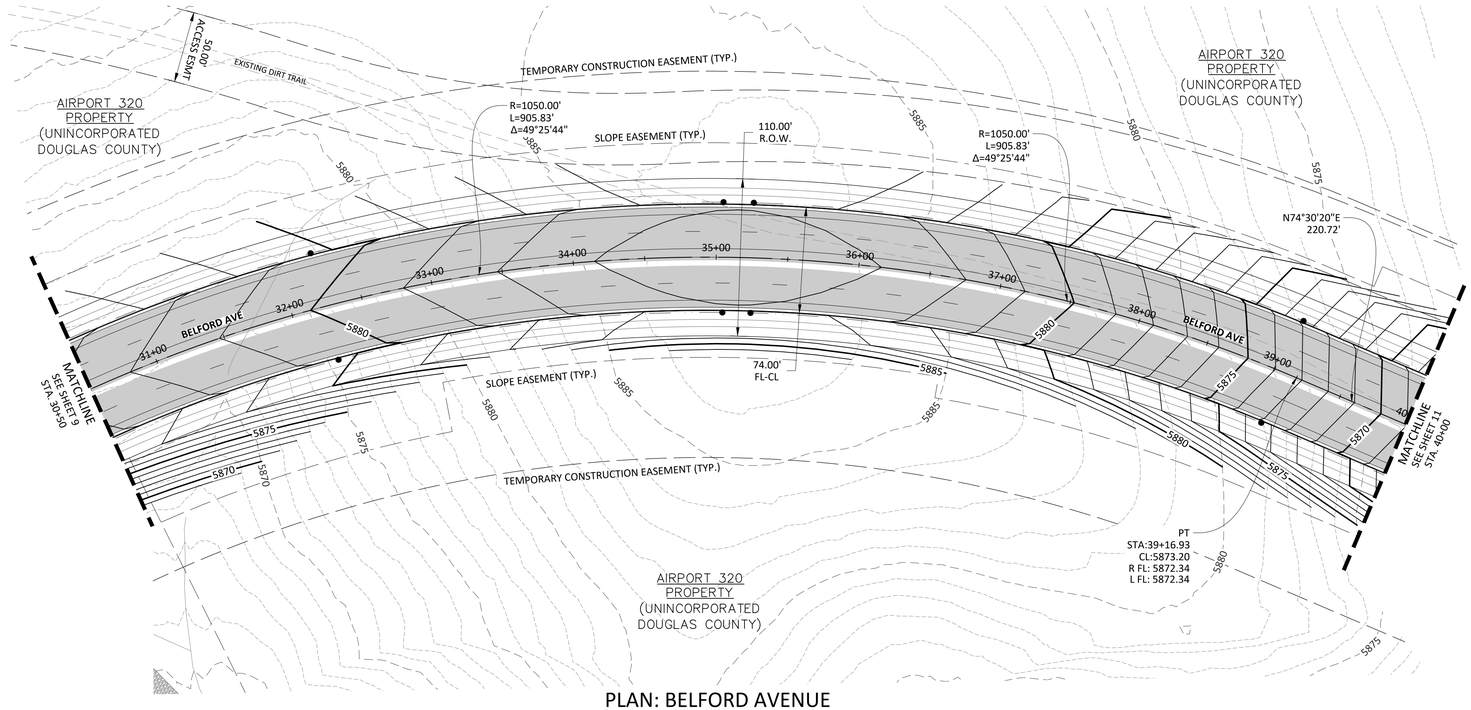
COLORADO REGISTERED PROFESSIONAL ENGINEER — RICHARD I. MORK — 30877 — 11-17-2020

PROJ. MGR.:	RJM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

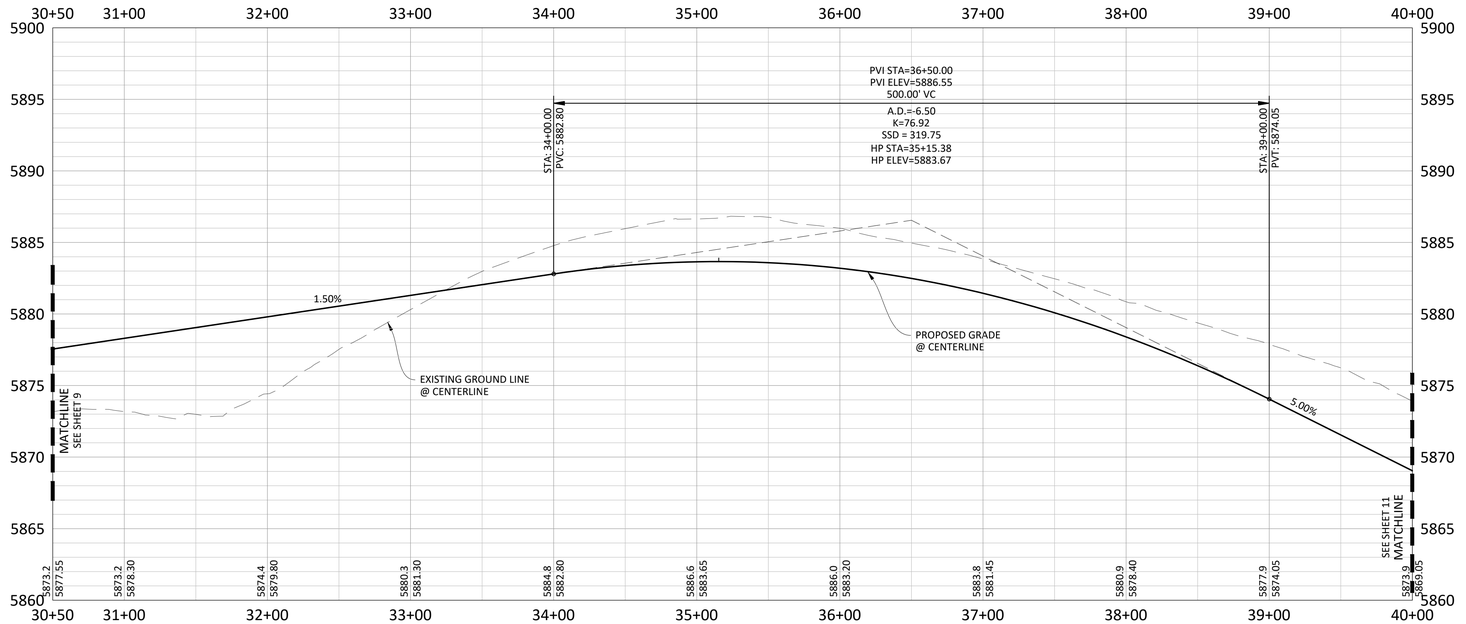
SHEET 9 OF 30
CLCPKC3

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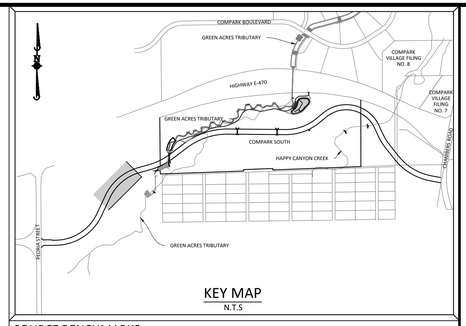
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PLAN: BELFORD AVENUE



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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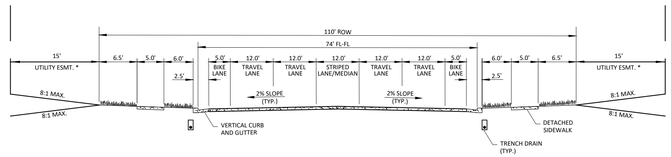
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E.	12/21/16	FINAL SUBMITTAL	
C.	11/2/16	4TH SUBMITTAL	
B.	4/25/16	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
BELFORD AVENUE - PLAN & PROFILE

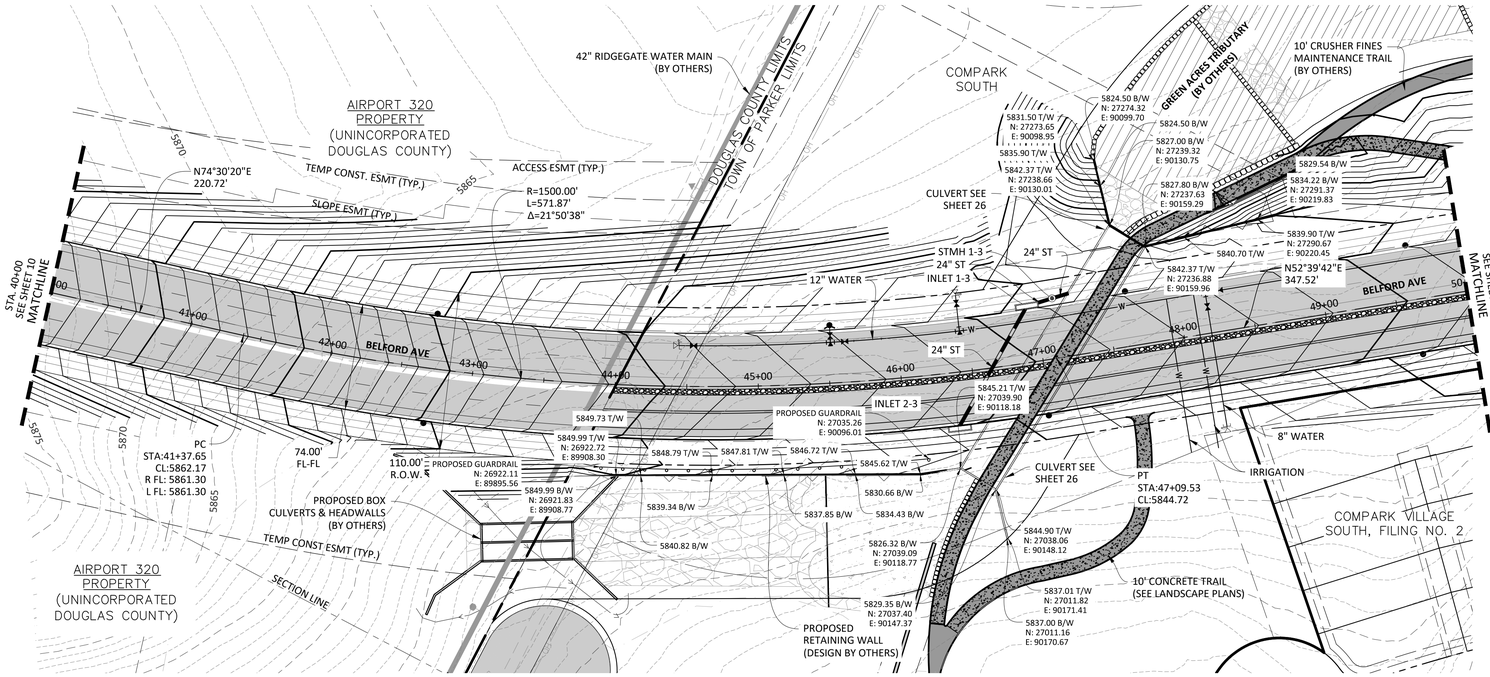
COLORADO REGISTERED PROFESSIONAL ENGINEER — KEVIN MONTY 30877 — 11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

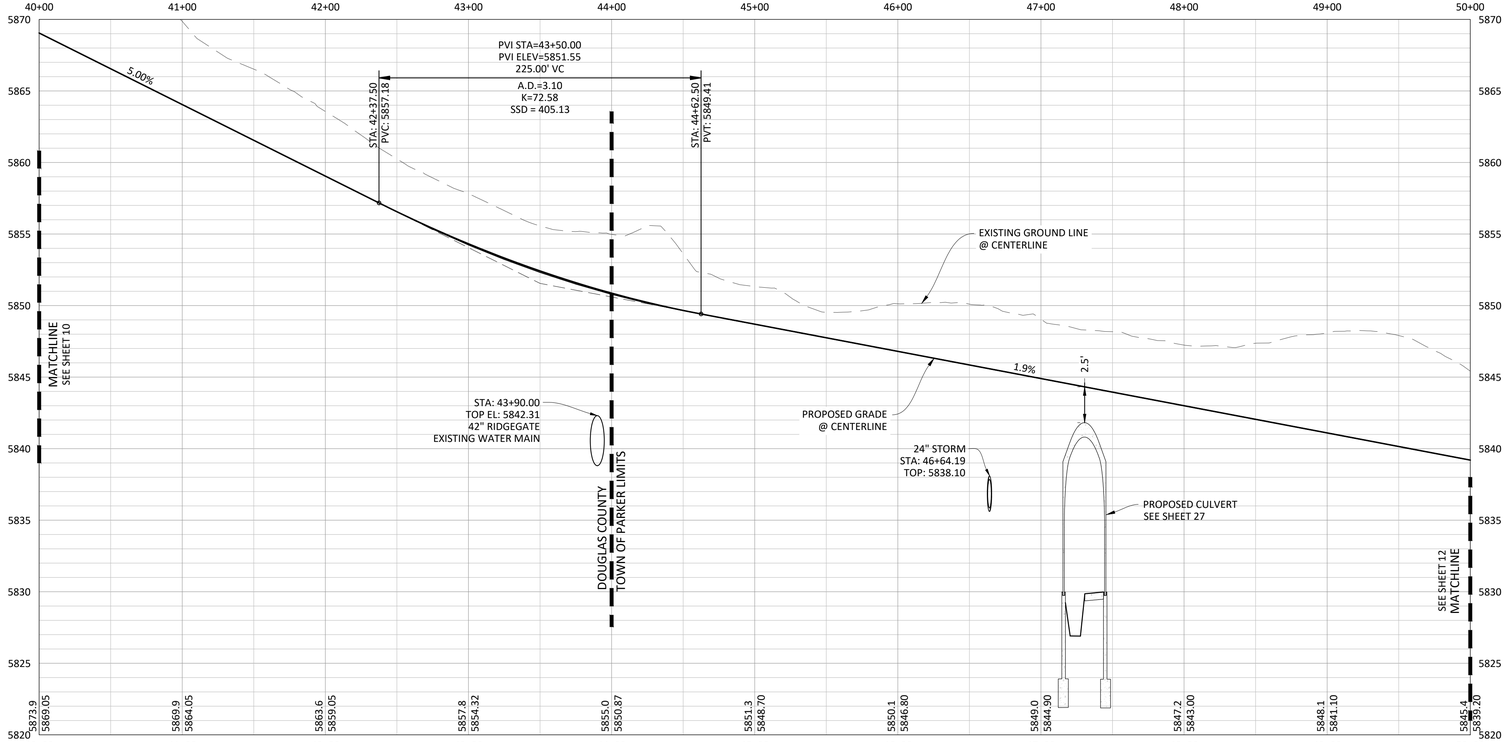
SHEET
10 OF 30
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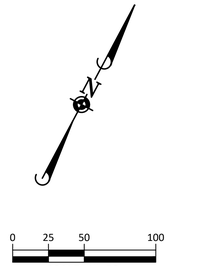
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PLAN: BELFORD AVENUE

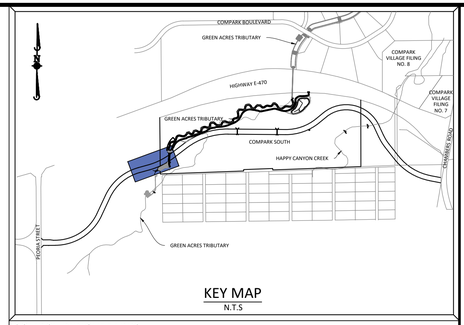


PROFILE: BELFORD AVENUE



0 25 50 100

SCALE: 1"=50'



KEY MAP
N.T.S

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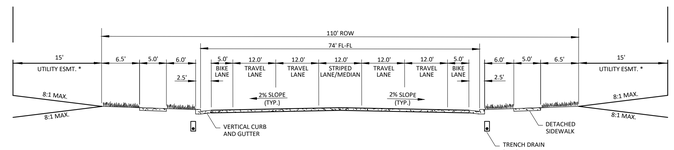
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TOWN OF PARKER, COLORADO
BELFORD AVENUE - PLAN & PROFILE

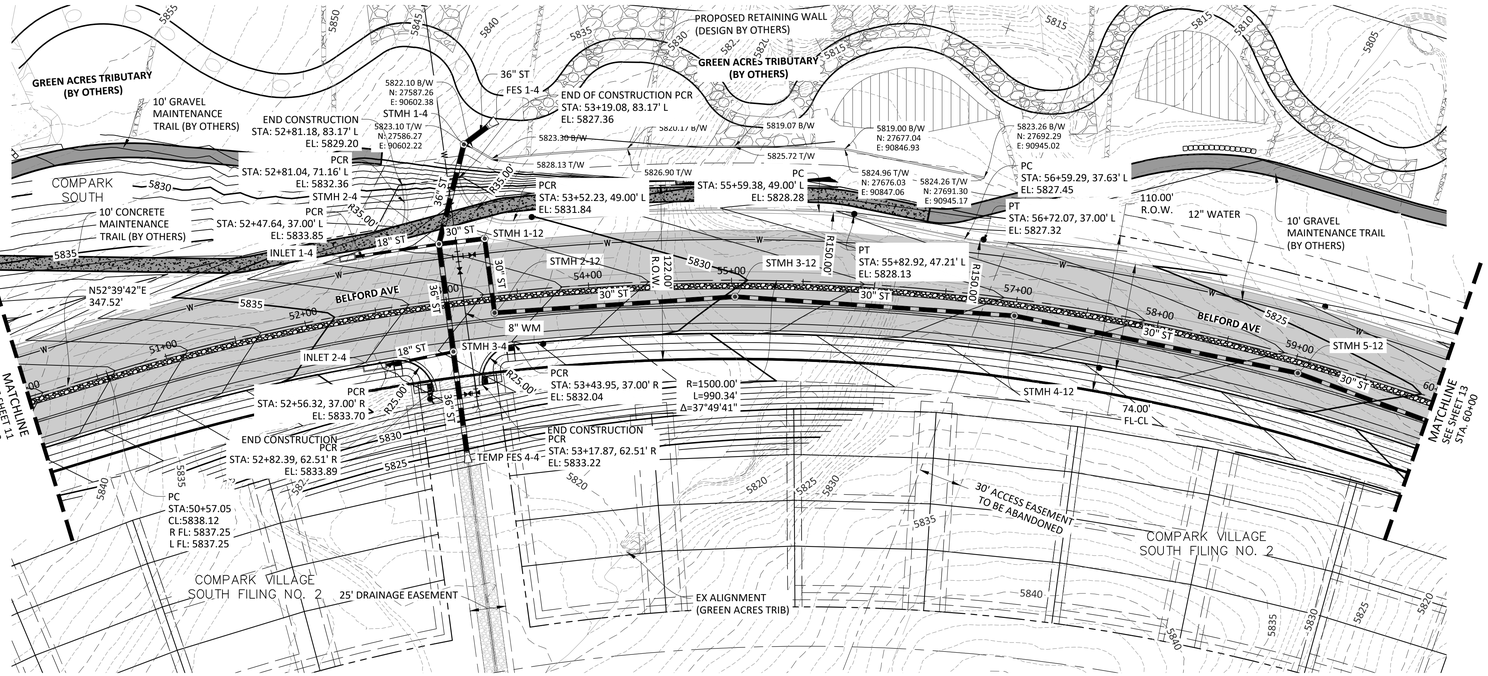
COLORADO REGISTERED PROFESSIONAL ENGINEER — ERIC T. GORY — 30877 — 11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

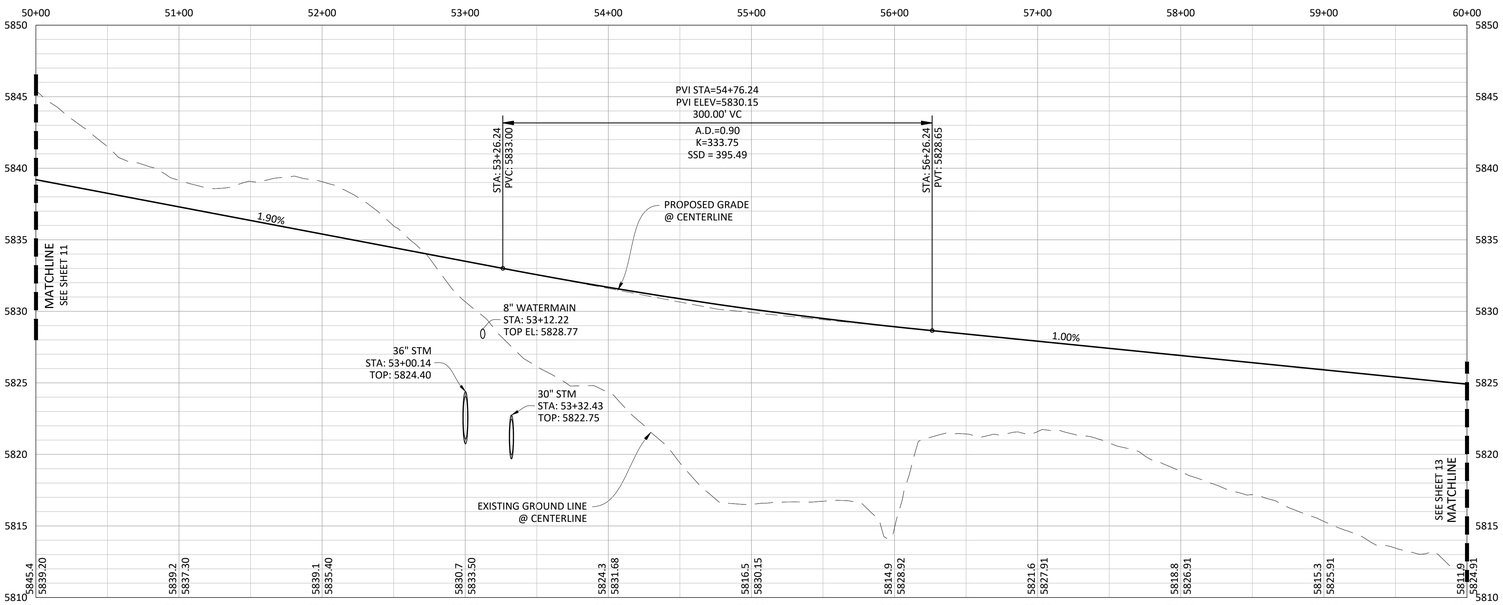
SHEET 11 OF 30
CLCPKC3 ---

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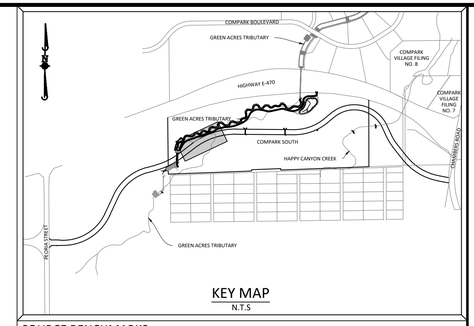
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PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE

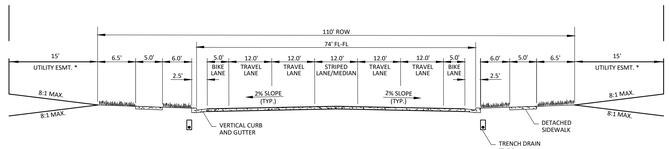


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E	11/1/16		4TH SUBMITTAL	
D	8/15/16		3RD SUBMITTAL	
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B	11/2015		1ST SUBMITTAL	EG
A	11/2015			

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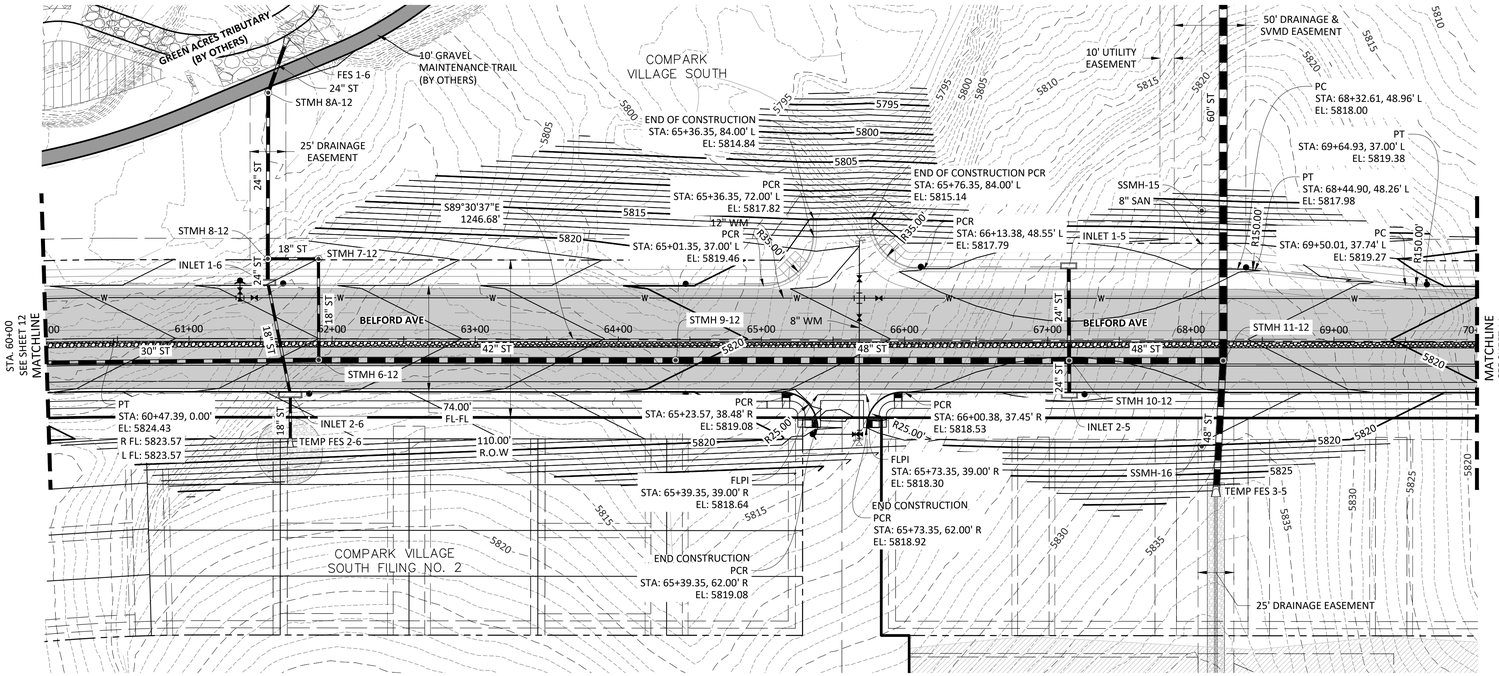
COLORADO REGISTERED PROFESSIONAL ENGINEER — KEVIN T. GRAY — 30877 — 11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

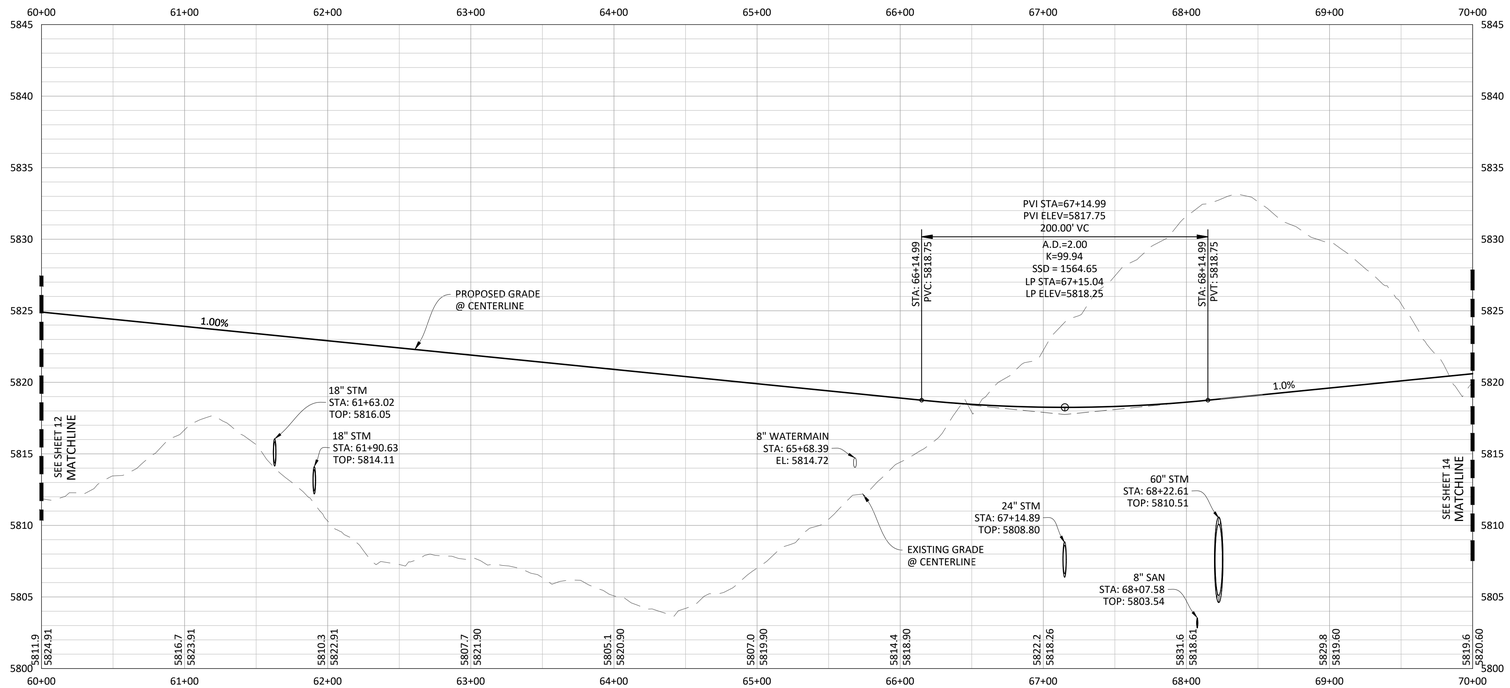
SHEET 12 OF 30
CLCPKC3

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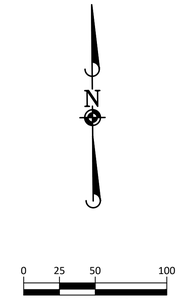
Plotted: 11/16/2020 2:41 PM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Belford Ave - ISI.dwg Updated By: ADucker

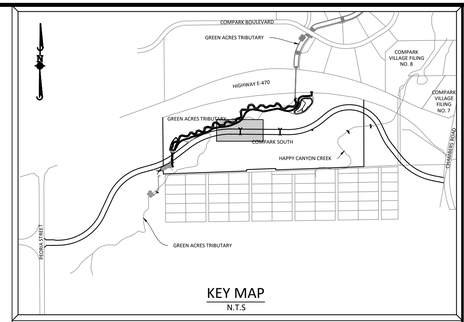


PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE





KEY MAP
N.T.S

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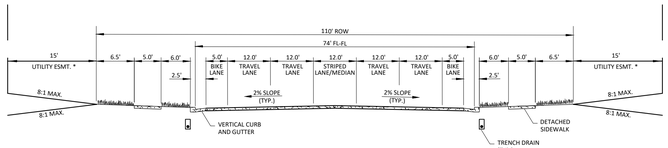
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MAJOR COLLECTOR
ULTIMATE CONDITION

0 25 50 100
SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

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Town of Parker, Director of Engineering — 12/17/2020 Date

DATE	REVISIONS	DRAWN BY
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G 08/2020	ADDRESS PER TOWN OF PARKER REVIEW	
F 03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
BELFORD AVENUE - PLAN & PROFILE

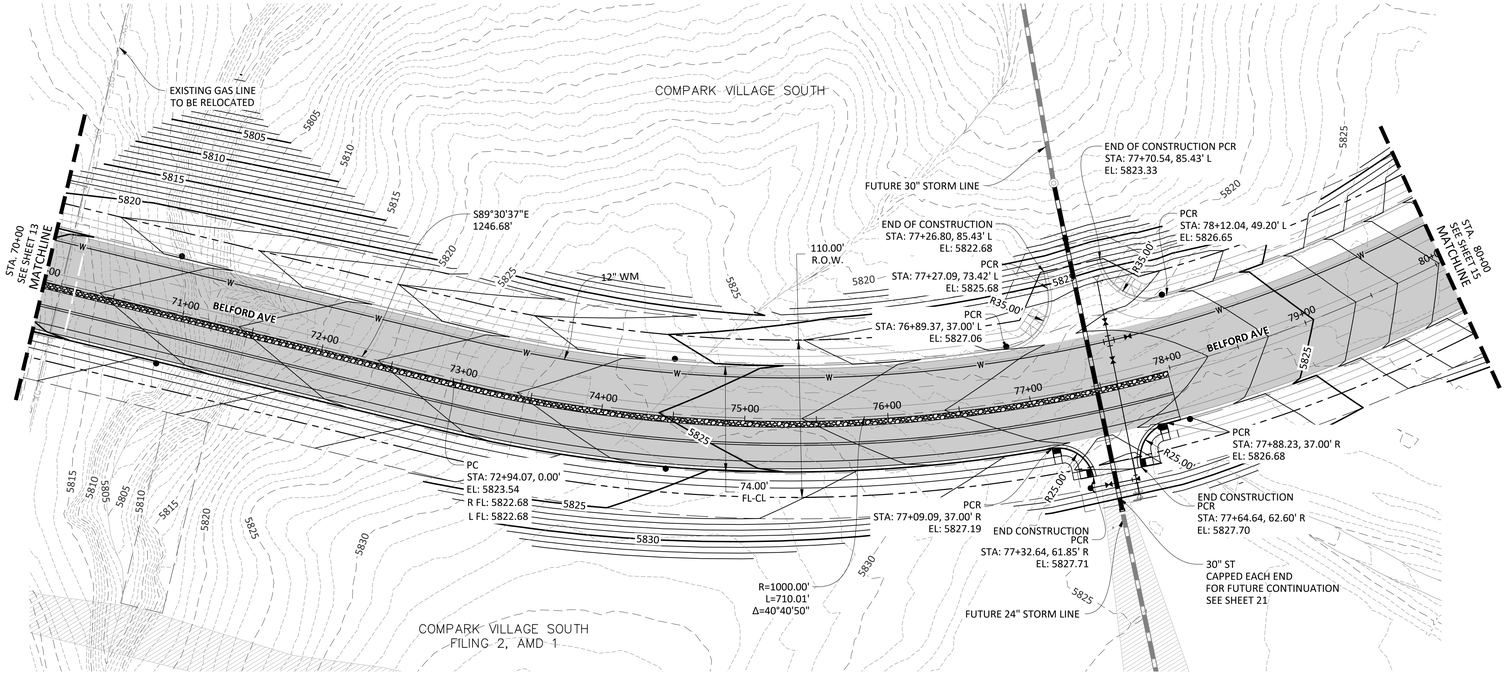
COLORADO REGISTERED PROFESSIONAL ENGINEER — RICHARD I. MOORE 30877 11-17-2020

PROJ. MGR.: RIM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

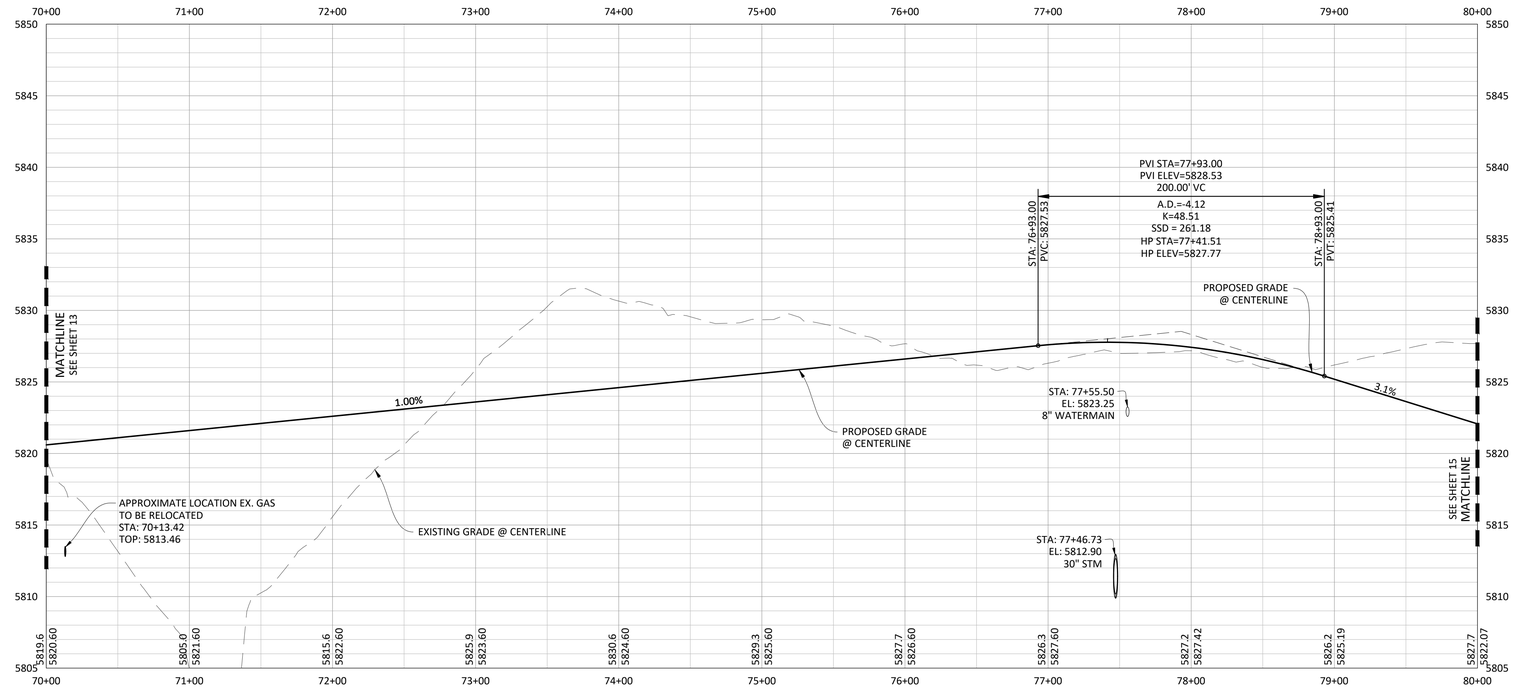
SHEET 13 OF 30
CLCPKC3 ---

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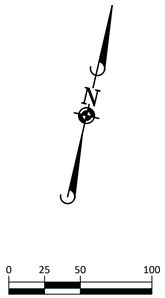
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PLAN: BELFORD AVENUE

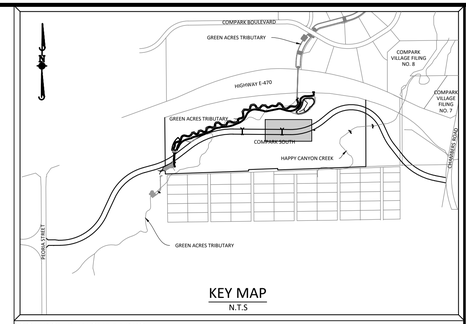


PROFILE: BELFORD AVENUE



0 25 50 100

SCALE: 1"=50'

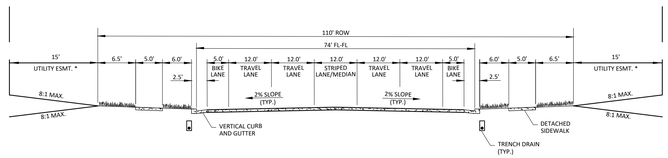


SOURCE BENCHMARKS:

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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MAJOR COLLECTOR
ULTIMATE CONDITION

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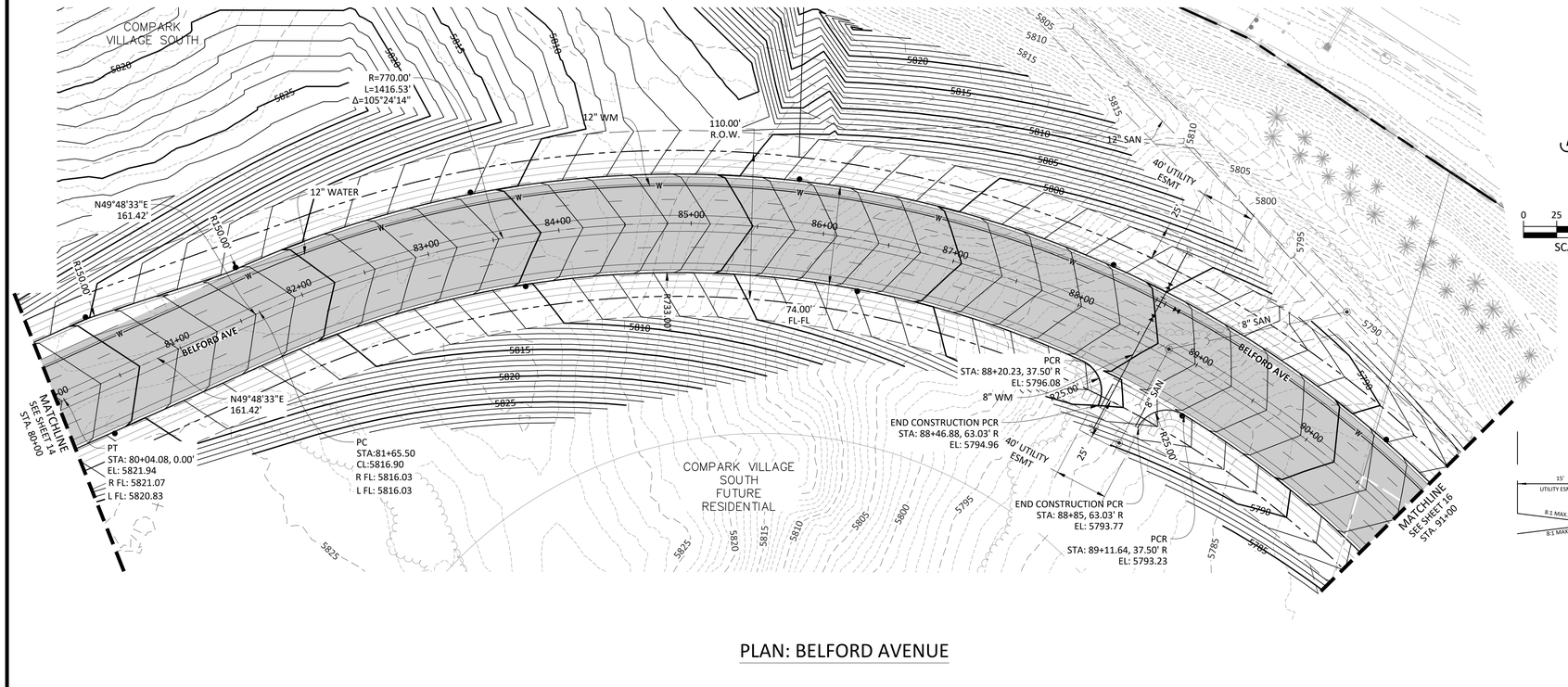
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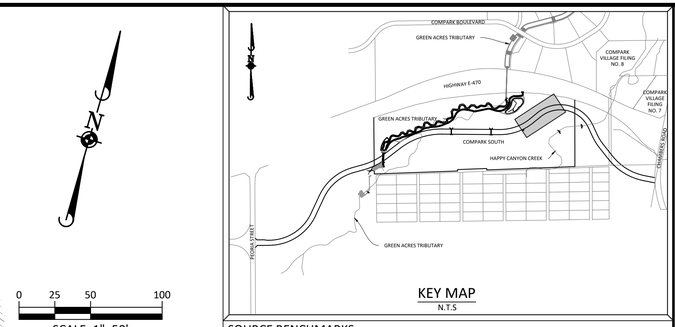
PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 14 OF 30
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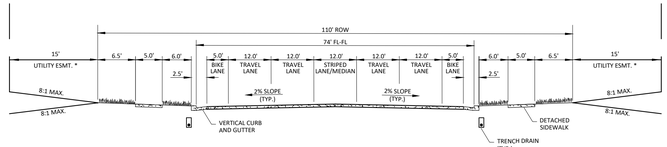
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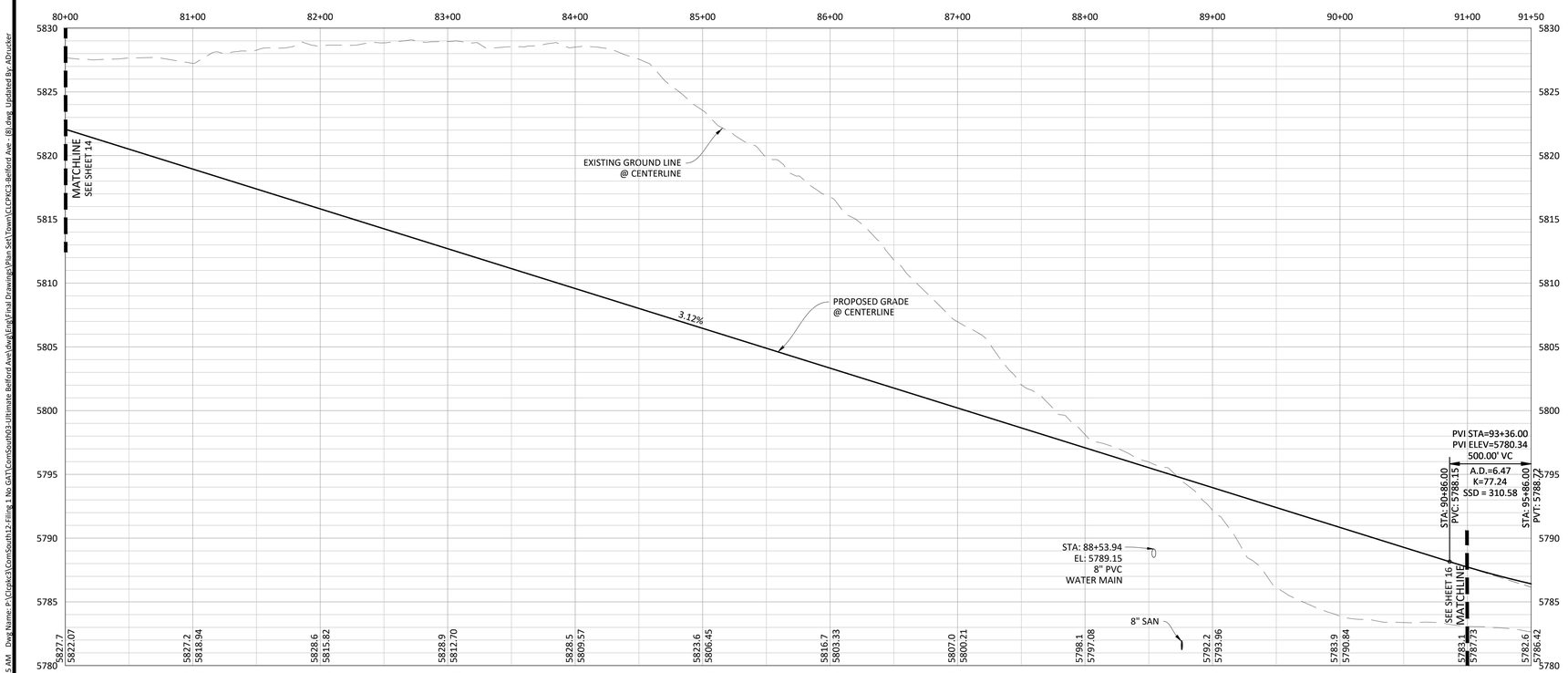
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MAJOR COLLECTOR
ULTIMATE CONDITION

PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE

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C 4/11/16	2ND SUBMITTAL	
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A		

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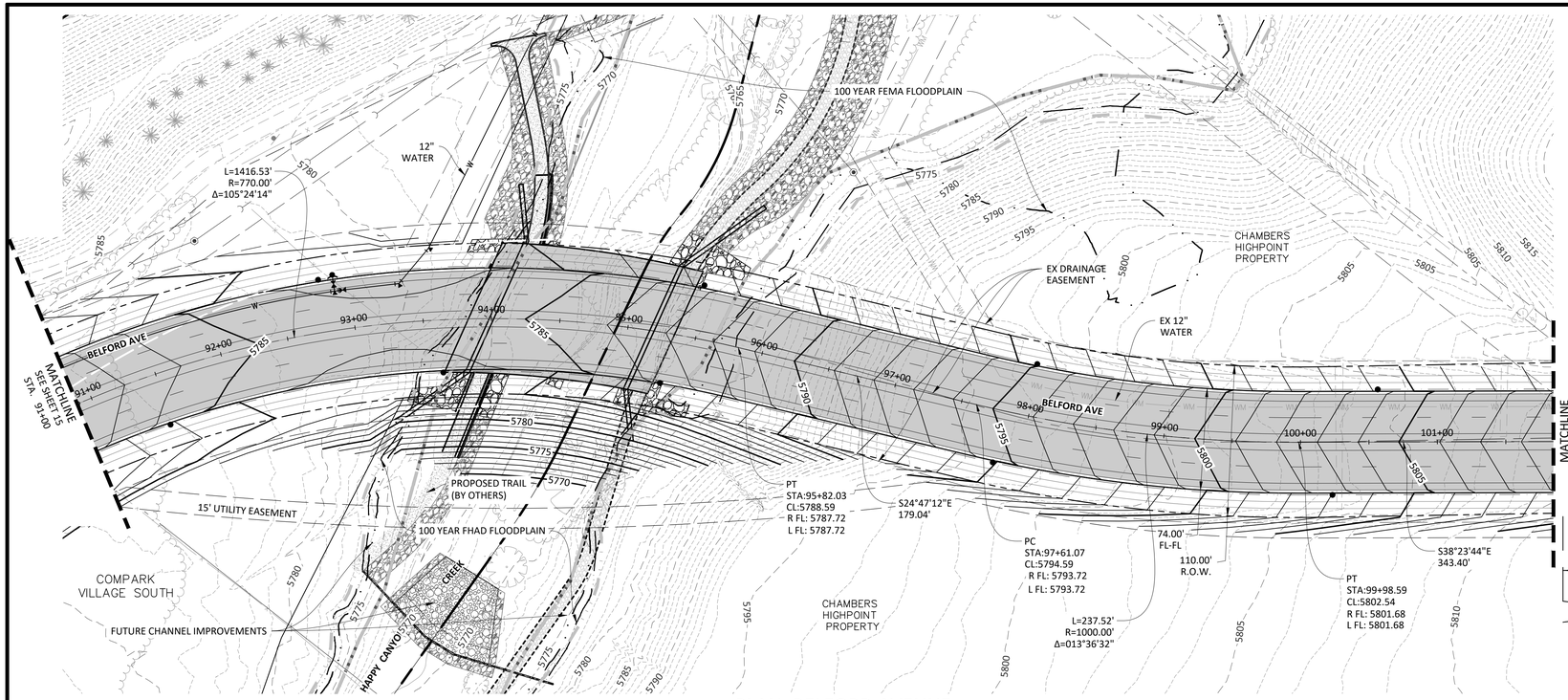
COLORADO REGISTERED PROFESSIONAL ENGINEER
30877
11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
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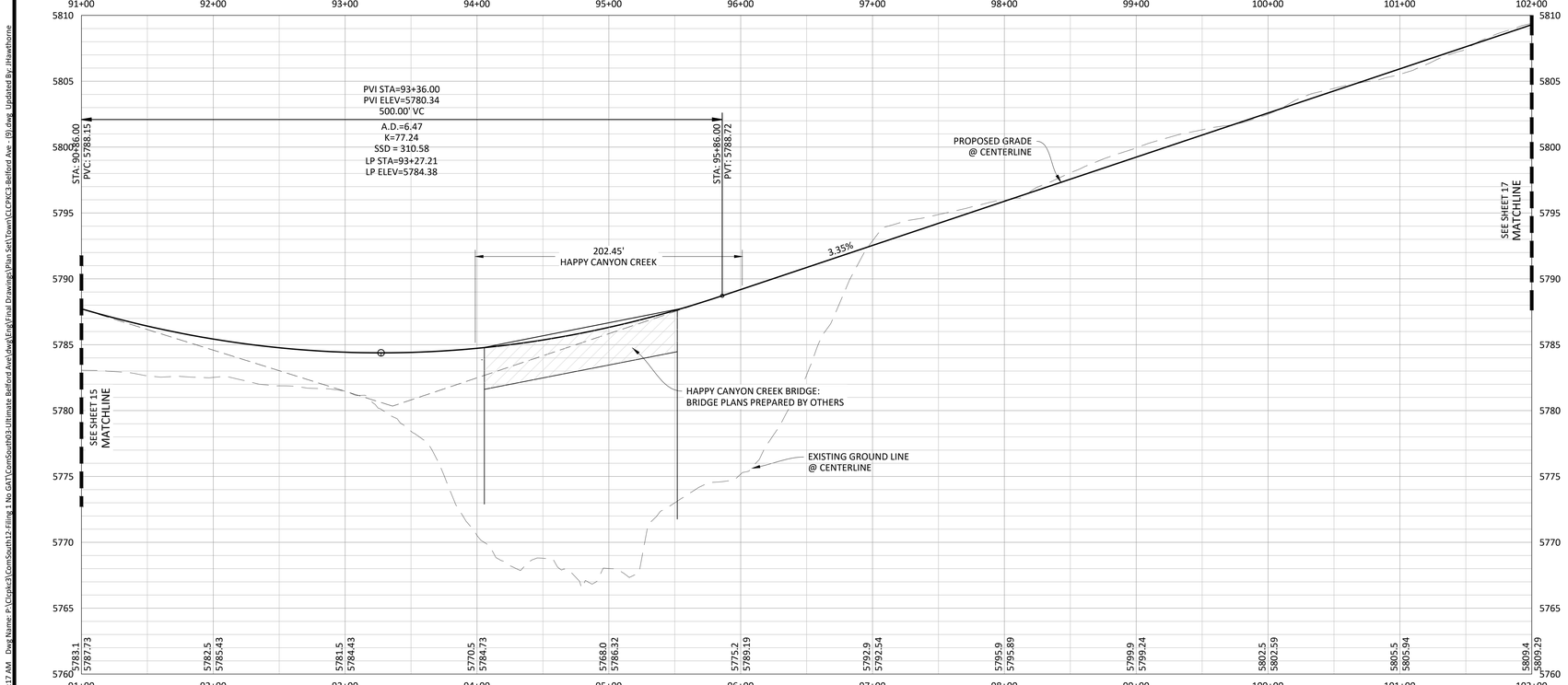
SHEET
15 OF 30
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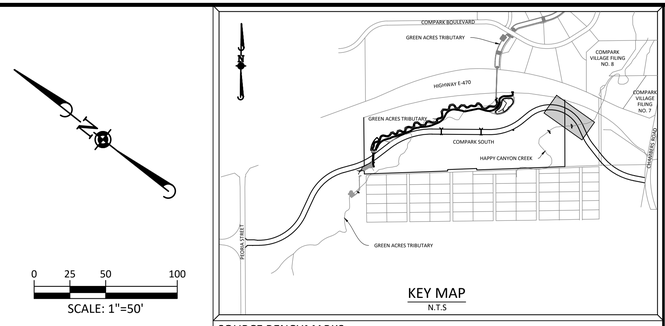
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PLAN: BELFORD AVENUE



PROFILE: BELFORD AVENUE

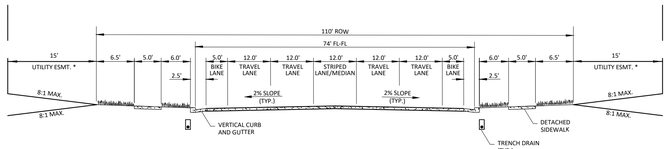


KEY MAP
N.T.S

SCALE: 1"=50'

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Town of Parker, Director of Engineering — Date: 12/17/2020

DRAWN BY														EG
REVISIONS														
DATE		09/2020	09/2020	03/02/20	12/21/16	11/2/16	6/2/16	4/11/16	11/2015					
		APPROVED	APPROVED PER TOWN OF PARKER REVIEW	REVISE GAT & ADD OFF-LINE DET BASIN	FINAL SUBMITTAL	4TH SUBMITTAL	3RD SUBMITTAL	2ND SUBMITTAL	1ST SUBMITTAL					
	H.	G.	F.	E.	D.	C.	B.	A.						

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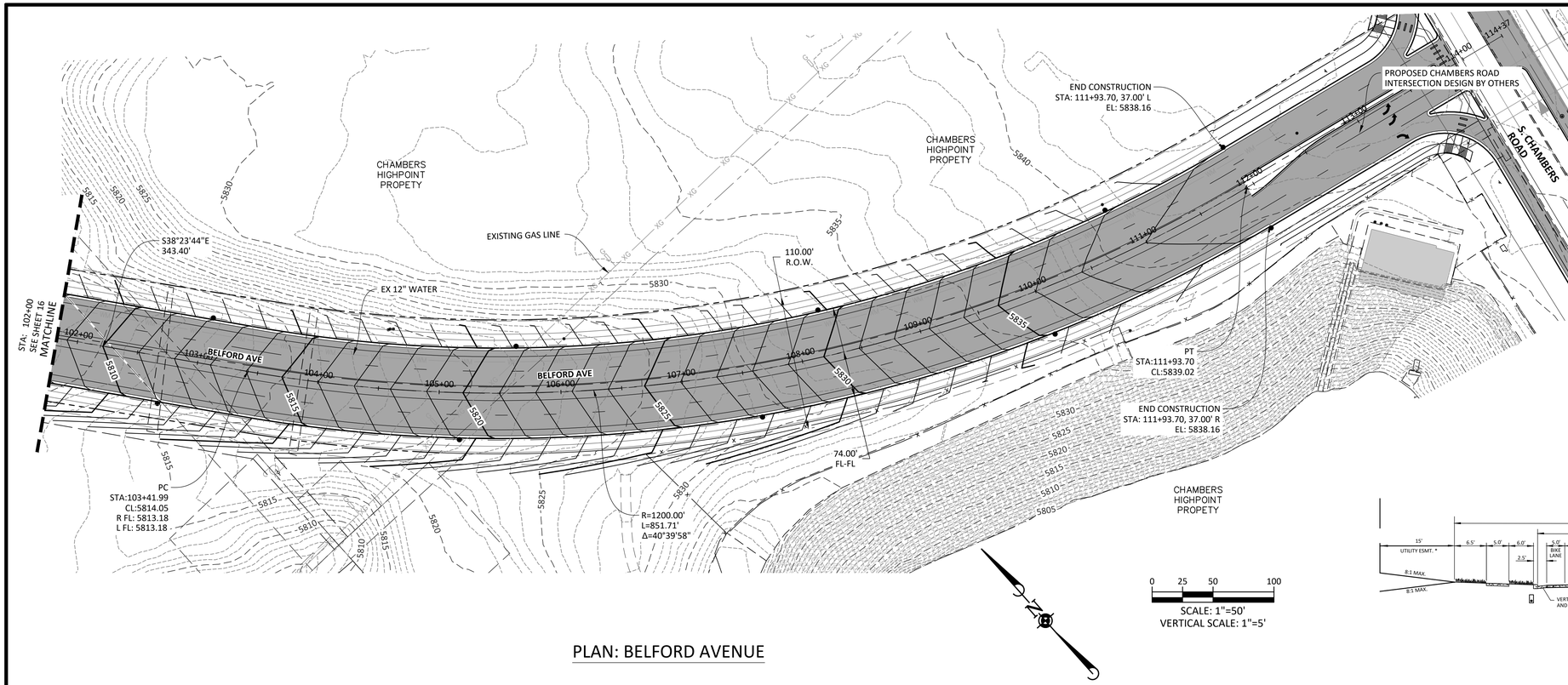
COLORADO REGISTERED PROFESSIONAL ENGINEER — ERIC T. GOOK — 30877 — 11-17-2020

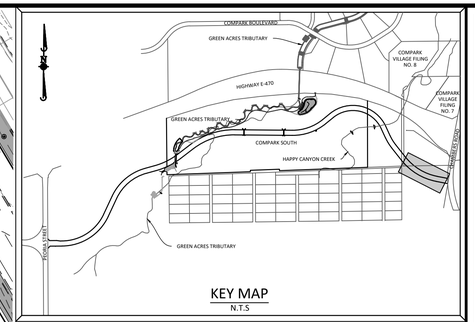
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SHEET
16 OF 30
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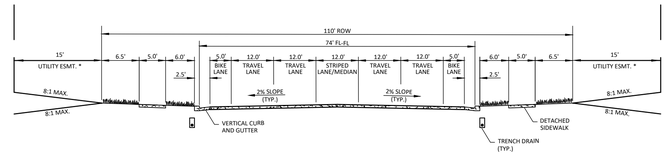
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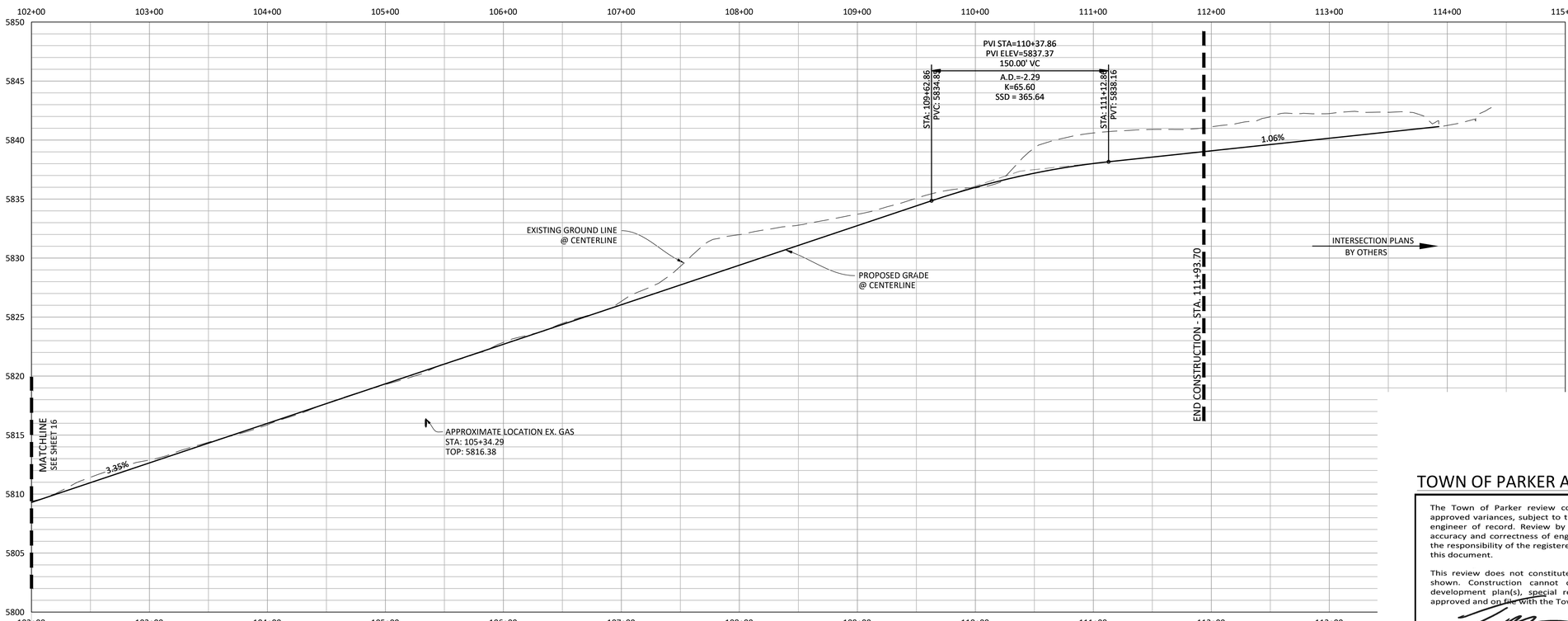
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MAJOR COLLECTOR
ULTIMATE CONDITION

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PROFILE: BELFORD AVENUE

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DRAWN BY	REVISIONS	DATE
EG		
	APPROVED	09/2020
	APPROVED PER TOWN OF PARKER REVIEW	06/2020
	REVISE GAT & ADD OFF-LINE DET BASIN	03/02/20
	FINAL SUBMITTAL	12/21/16
	4TH SUBMITTAL	11/21/16
	3RD SUBMITTAL	8/31/16
	2ND SUBMITTAL	4/11/16
	1ST SUBMITTAL	11/2015

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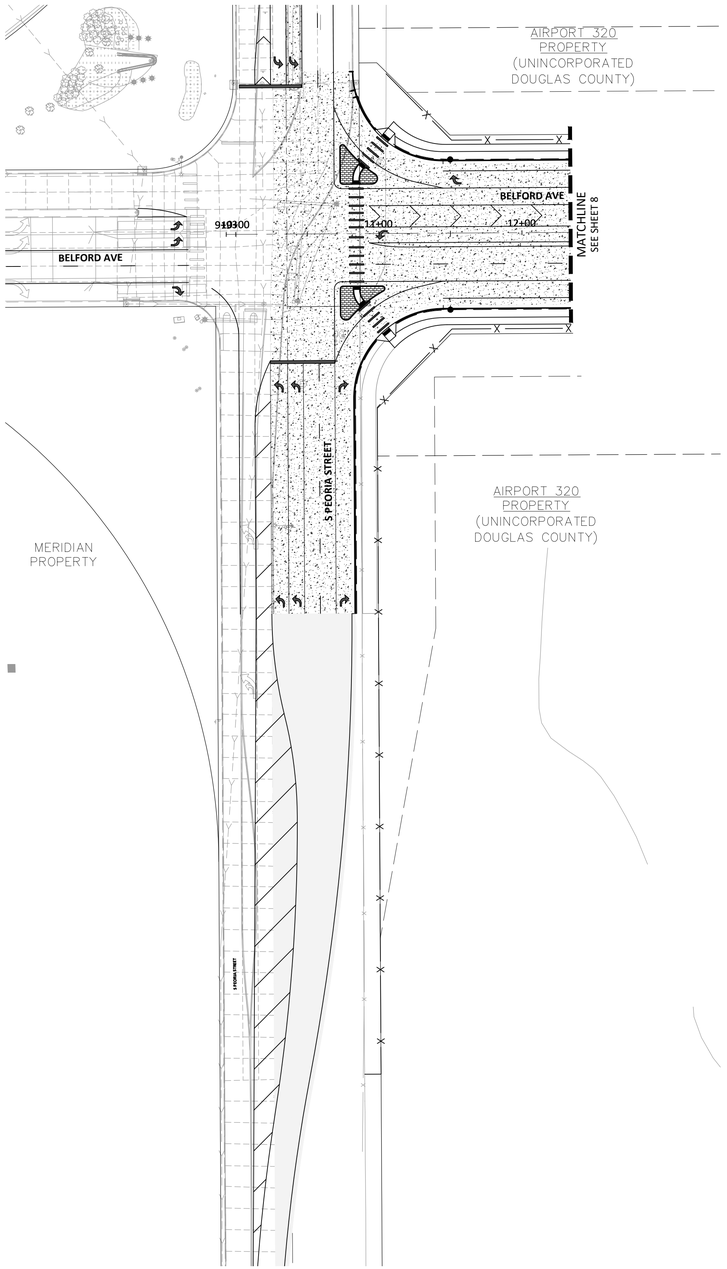
COLORADO REGISTERED PROFESSIONAL ENGINEER — KEVIN M. MCCOY — 30877 — 11-17-2020

PROJ. MGR.:	RIM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 17 OF 30
CLCPKC3 ---

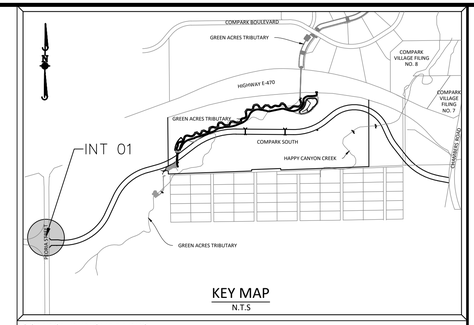
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INT01: INTERSECTION

NOTE: PROPOSED PEORIA ST INTERSECTION DESIGN BY OTHERS REFERENCE CONSTRUCTION PLANS-PLAN AND PROFILE OF PROPOSED PEORIA & BELFORD INTERSECTION PROJECT, PREPARED BY FELSBURG HOLT & ULLEVIG



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)

N

0 25 50 100
SCALE: 1"=50'

Know what's **below.**
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Town of Parker, Director of Engineering — Date 12/17/2020

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G	07/2020	REVISED PER TOWN OF PARKER REVIEW	
F	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E	12/21/16	FINAL SUBMITTAL	
D	11/2/16	4TH SUBMITTAL	
C	4/26/16	3RD SUBMITTAL	
B	4/11/16	2ND SUBMITTAL	
A	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

PEORIA ST - INTERSECTION DETAILS

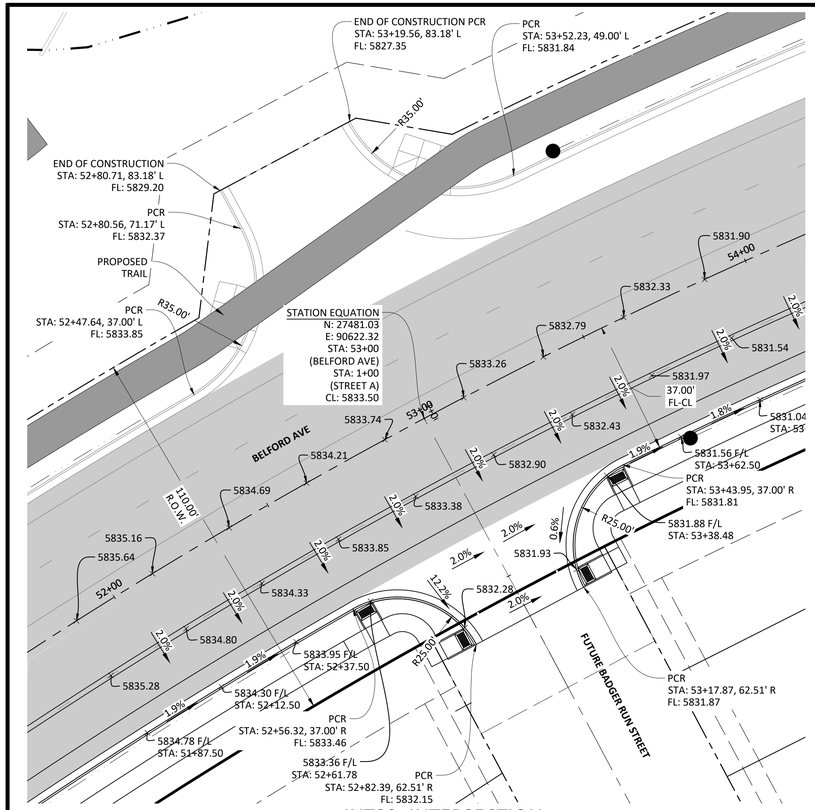
COLORADO REGISTERED PROFESSIONAL ENGINEER
KEN L. MOHR
30877
11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

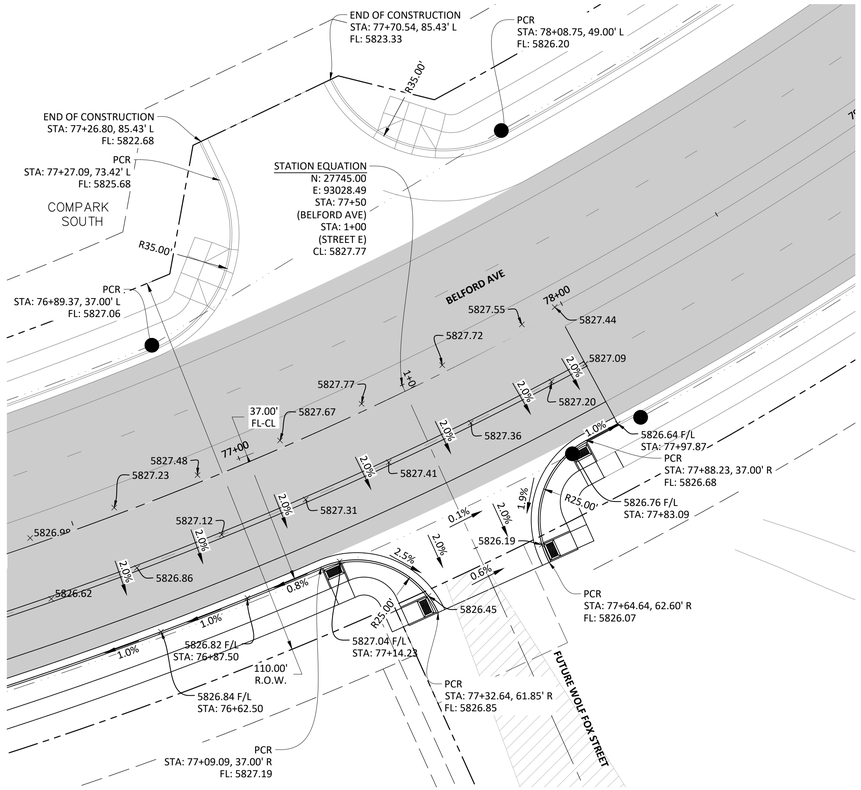
SHEET
18 OF 30
CLCPKC3 ---

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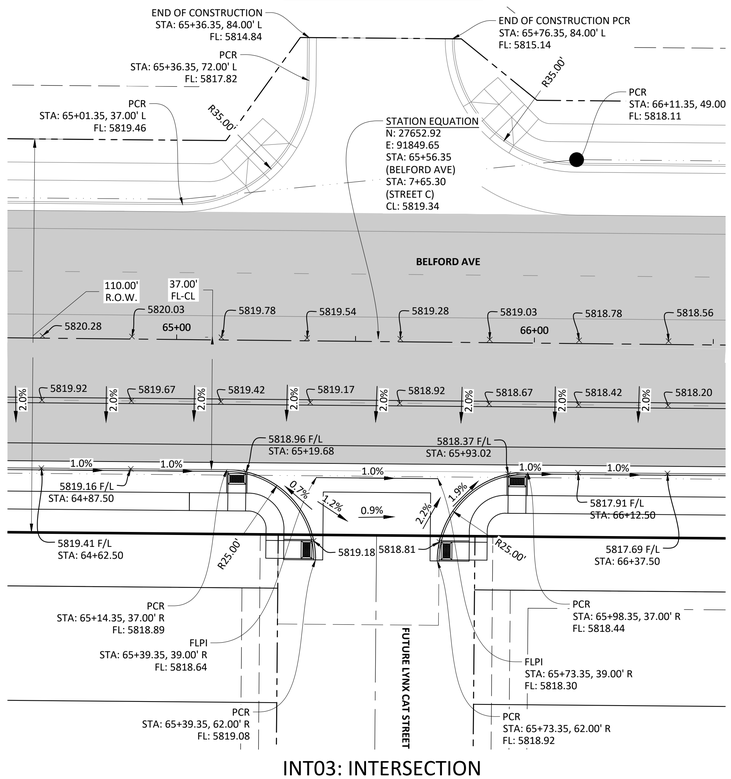
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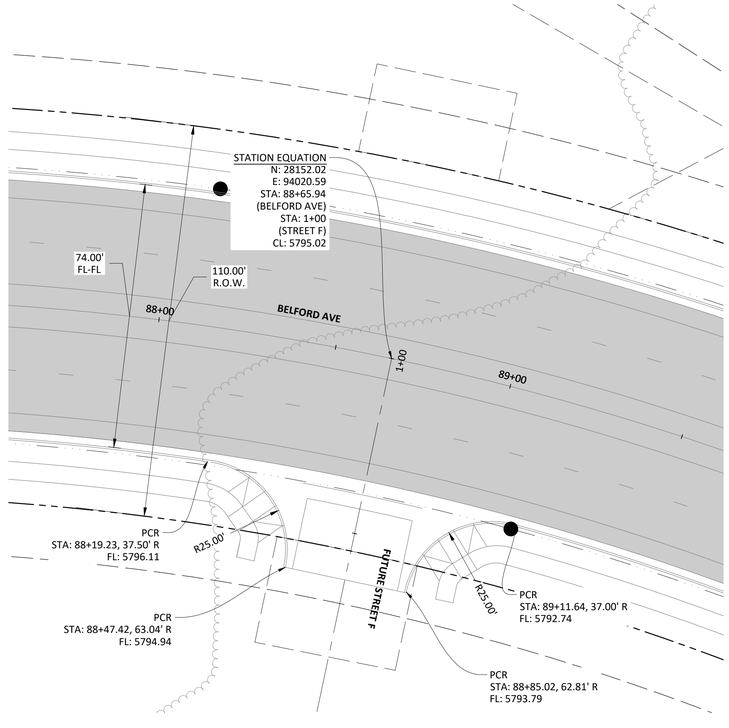
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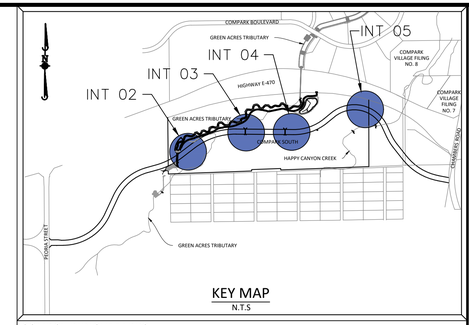
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INT03: INTERSECTION



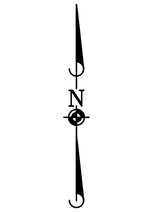
INT05: INTERSECTION



KEY MAP
N.T.S

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0 10 20 40
SCALE: 1"=20'

811
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
INTERSECTION DETAILS

COLORADO REGISTERED PROFESSIONAL ENGINEER
ERIC T. GUSTAFSON
30877
11-17-2020

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

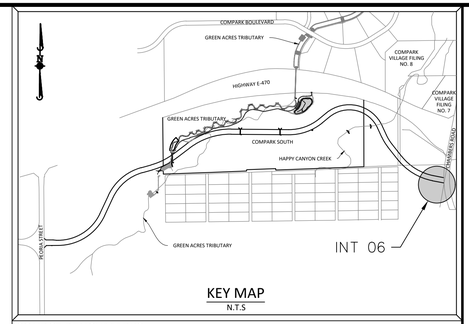
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19 OF 30
CLCPKC3 ---

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Plotted: 11/16/2020 9:23 AM Dwg Name: P:\Clcpkc3\Com\South\12-Filing 1 No GAT\Com\South03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Belford - Intersection.dwg Updated By: ADucker

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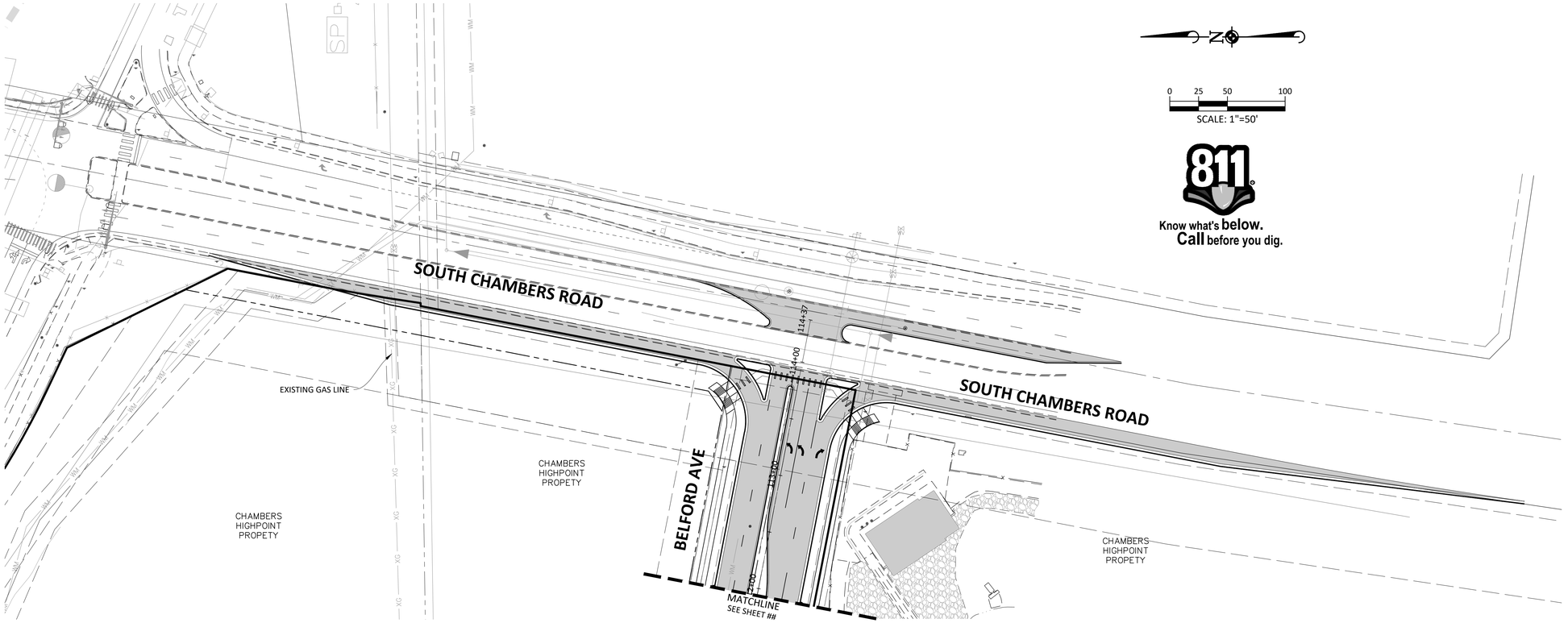
1) REFER TO GENERAL NOTES ON SHEET 2 FOR ALL APPLICABLE CONSTRUCTION STANDARDS & MASTER LEGEND
2) ALL STATIONING IS CENTERLINE UNLESS OTHERWISE NOTED.REFER TO FINAL PLAT FOR RIGHT-OF-WAY AND CENTERLINE DIMENSIONS AND HORIZONTAL CONTROL.
3) ALL ELEVATIONS ARE FL UNLESS OTHERWISE NOTED. TC INDICATES BACK OF WALK FOR COMBINATION CURB, GUTTER, AND WALK, OR TOP OF CURB FOR CURB AND GUTTER.
4) REFER TO STONEGATE VILLAGE METRO DISTRICT APPROVED WATER AND SANITARY SEWER CONSTRUCTION PLANS FOR ALL PROPOSED WATER AND SANITARY SEWER LOCATIONS.
5) TFI INDICATES TOP FRONT OF INLET ELEVATION. TFI ELEVATIONS SHOWN ON INLETS IN PLAN VIEW ARE AT FRONT CORNERS OF INLET. REFER TO SPECIFIC INLET DETAILS ON STORM SEWER PLAN AND PROFILE.
6) *EASEMENT WIDTH VARIES. SEE PLAT FOR LOCATION AND WIDTH INFORMATION.
7) REFER TO SHEET 39-45 FOR STREET AND CURB DETAILS.REFER TO SHEET 46-50 FOR STORM SEWER DETAILS.



KEY MAP
N.T.S

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PLAN: SOUTH CHAMBERS ROAD

0 25 50 100
SCALE: 1"=50'

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

NOTE: S CHAMBERS ROAD INTERSECTION. REFER TO CHAMBERS HIGHPOINT CONSTRUCTION PLANS FOR DETAILED DESIGN.

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

SOUTH CHAMBERS ROAD - INTERSECTION DETAILS

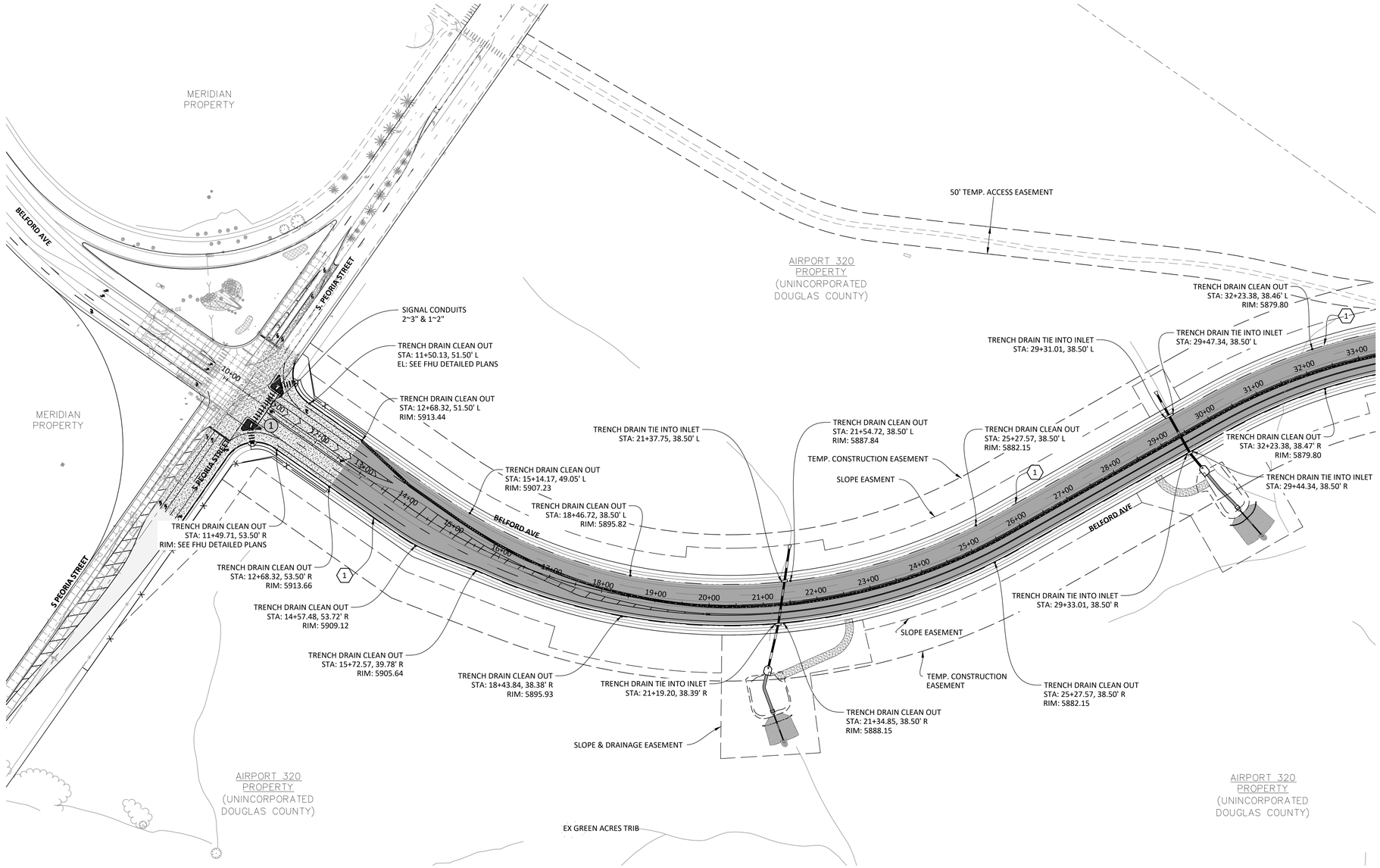
COLORADO REGISTERED PROFESSIONAL ENGINEER — KEVIN M. RIM — 30877 — 11-17-2020

PROJ. MGR.: RIM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

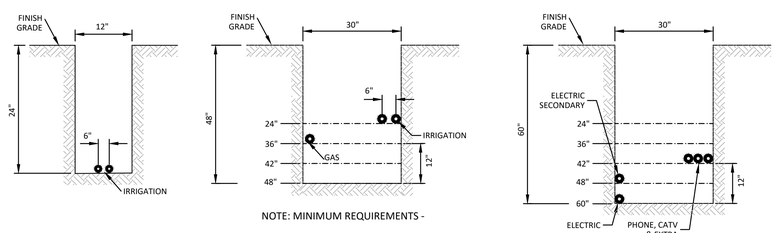
SHEET 20 OF 30
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Plotted: 11/16/2020 3:12 PM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Chamber Road.dwg Updated By: ADrucker



PLAN: BELFORD AVENUE



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.

TRENCH DRAIN NOTES:

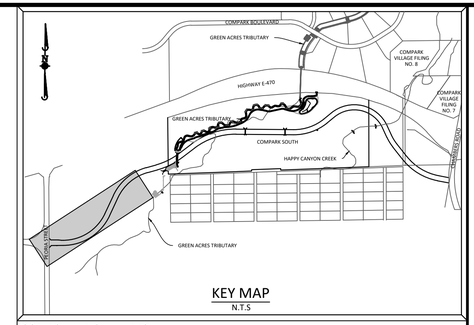
1. SEE DETAIL 31 OF STREET DETAILS FOR TRENCH DRAIN SPECIFICATIONS
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7. ALL TRENCH LINES MUST BE WITHIN 6" OF FINISHED GRADE PER XCEL STANDARDS.
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CAUTION:

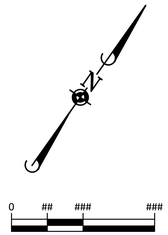
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811 Know what's below. Call before you dig.

LEGEND

(2) CONSTRUCTION NOTE

(1) UTILITY SLEEVE CROSSING NO.

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.
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
CONDUIT SLEEVING & TRENCH DRAIN 1

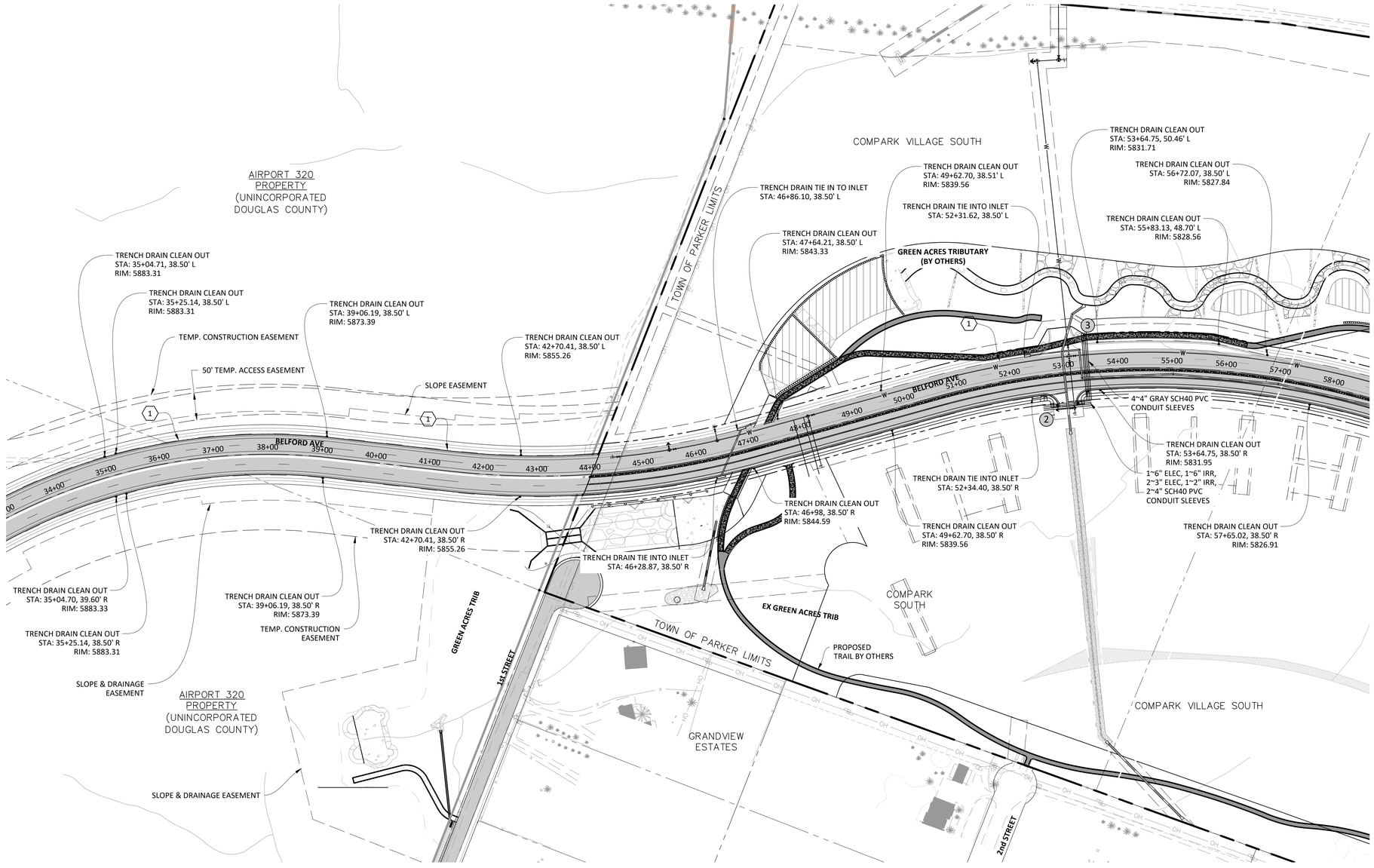
COLORADO REGISTERED PROFESSIONAL ENGINEER — KEVIN T. MARK — 30877 — 11-17-2020

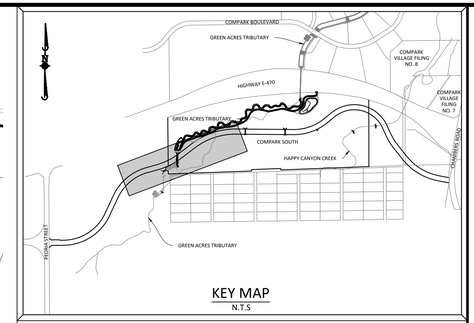
PROJ. MGR.: RIM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 21 OF 30
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Plotted: 11/16/2020 3:16 PM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Traffic Signal Interconnect (2).dwg Updated By: ADrucker





KEY MAP
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0 50 100 200
SCALE: 1"=100'

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LEGEND

(2) CONSTRUCTION NOTE

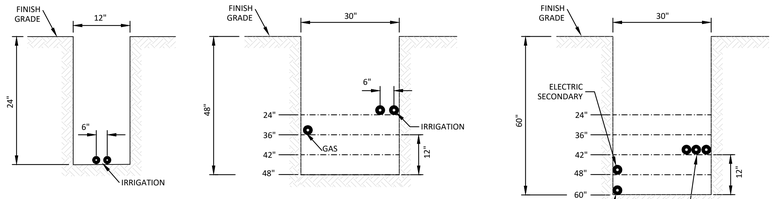
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CONDUIT SLEEVING & TRENCH DRAIN 2

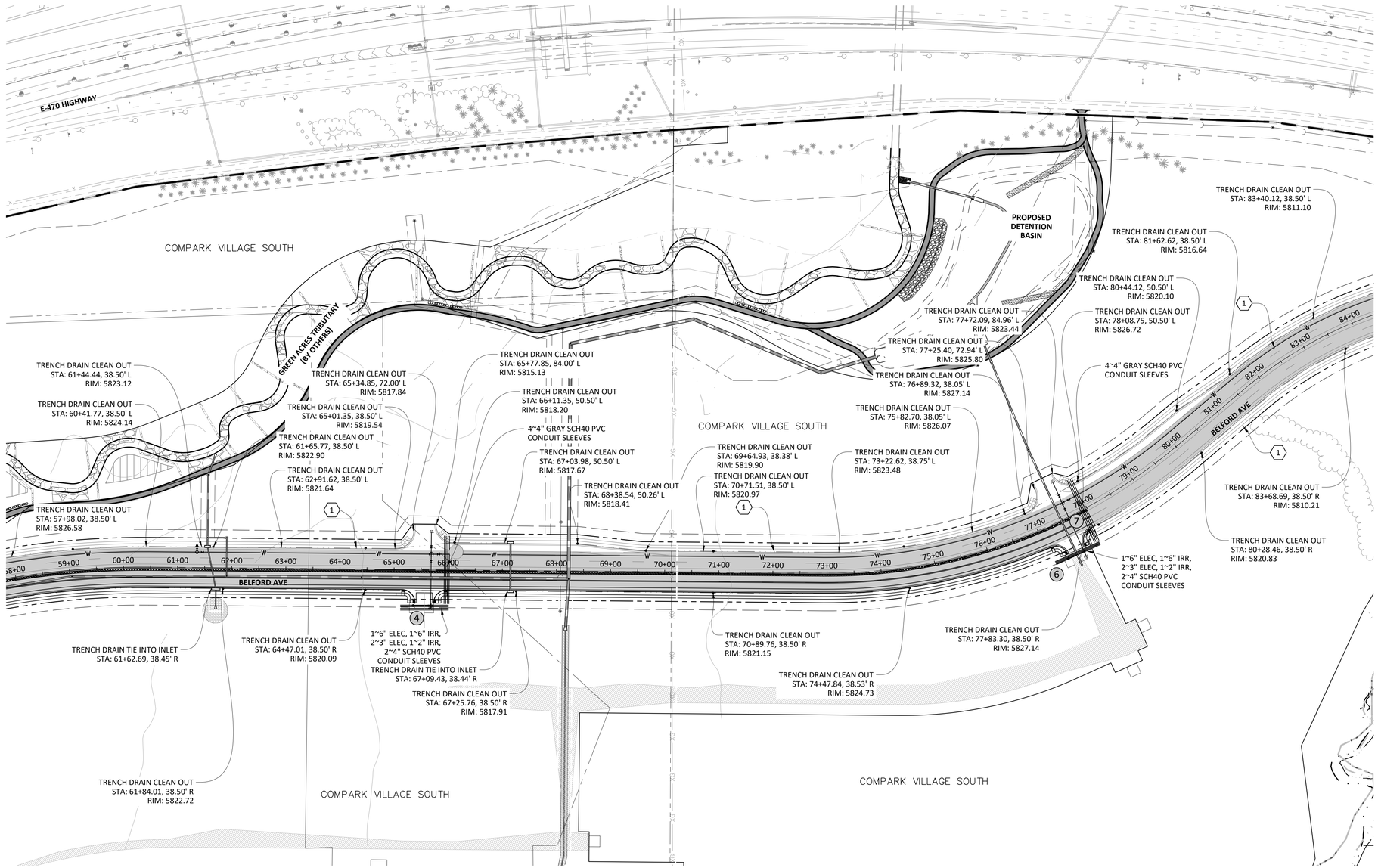
COLORADO REGISTERED PROFESSIONAL ENGINEER — KELLY M. RUBY 30877 — 11-17-2020

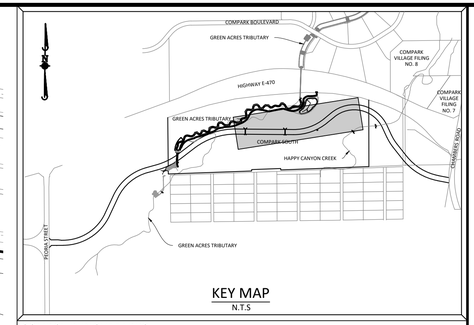
PROJ. MGR.:	RJM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 22 OF 30
CLCPKC3 ---

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Plotted: 11/16/2020 9:27 AM Dwg Name: P:\Clcpkc3\Com\South\2-Filing 1 No GAT\Com\South03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Traffic_Signal_Interconnect (3).dwg Updated By: ADrucker

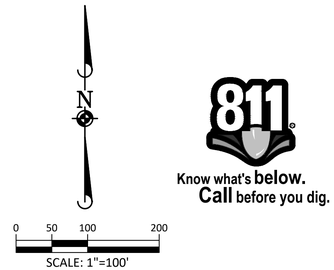




KEY MAP
N.T.S.

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)



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

LEGEND

(2) CONSTRUCTION NOTE

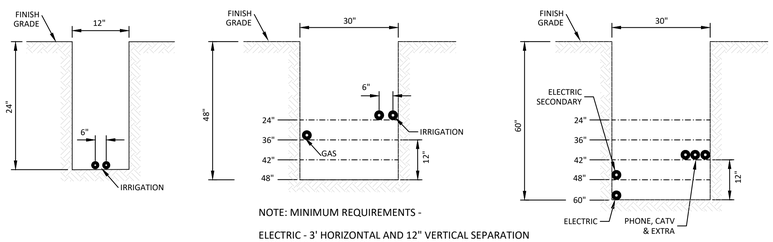
(1) UTILITY SLEEVE CROSSING N0.

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.

TRENCH DRAIN NOTES:

1. SEE DETAIL 31 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.



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.
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6. XCEL REQUIRES ALL CROSSINGS TO HAVE TRACER WIRE INSTALLED NEXT TO THE SLEEVE.
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8. GRADE AT TRANSFORMERS MUST BE 100% TO FINISHED GRADE.

CAUTION:

HAVE ALL BURIED UTILITIES LOCATED PRIOR TO TRENCHING OR BORING.

TOWN OF PARKER APPROVALS

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12/17/2020
Town of Parker, Director of Engineering — Date

	DATE	REVISIONS	DRAWN BY
H.	09/2020	APPROVED	
G.	07/2020	ADDRESS PER TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
D.	11/2/16	4TH SUBMITTAL	
C.	08/2016	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
CONDUIT SLEEVING & TRENCH DRAIN 3

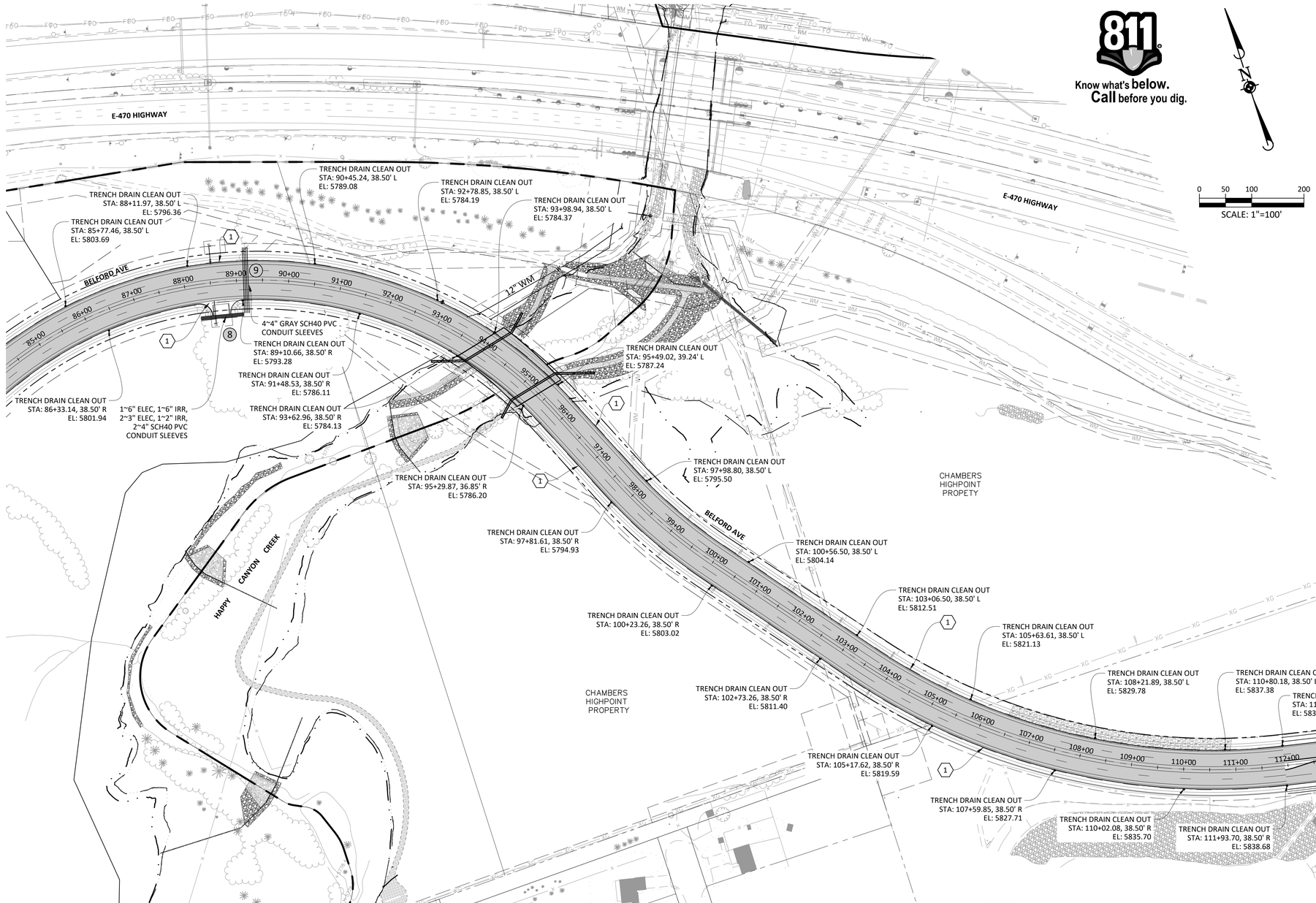
COLORADO REGISTERED PROFESSIONAL ENGINEER — 30877 — 11-17-2020

PROJ. MGR:	RJM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 23 OF 30
CLCPKC3

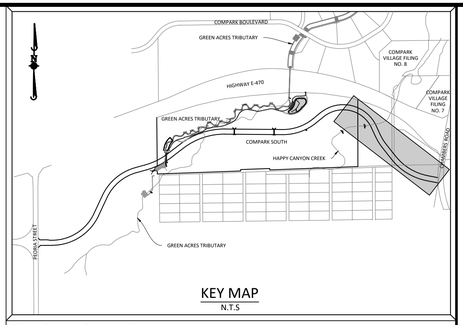
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0 50 100 200

SCALE: 1"=100'



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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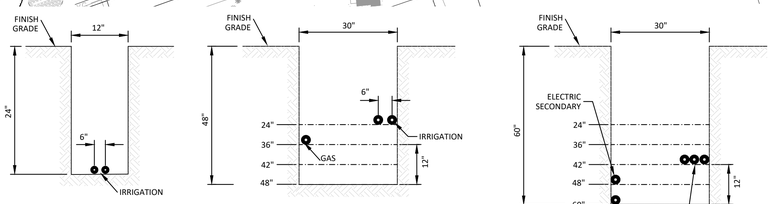
LEGEND

2 CONSTRUCTION NOTE

1 UTILITY SLEEVE CROSSING NO.

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Town of Parker, Director of Engineering — Date 12/17/2020

NO.	DATE	REVISIONS	DRAWN BY
H.	09/2020	APPROVED	
G.	08/2020	REVISED PER TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
D.	11/2/16	4TH SUBMITTAL	
C.	08/2016	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE

TOWN OF PARKER, COLORADO

CONDUIT SLEEVING & TRENCH DRAIN

COLORADO REGISTERED PROFESSIONAL ENGINEER — RICKY I. MUNK — 30877 — 11-17-2020

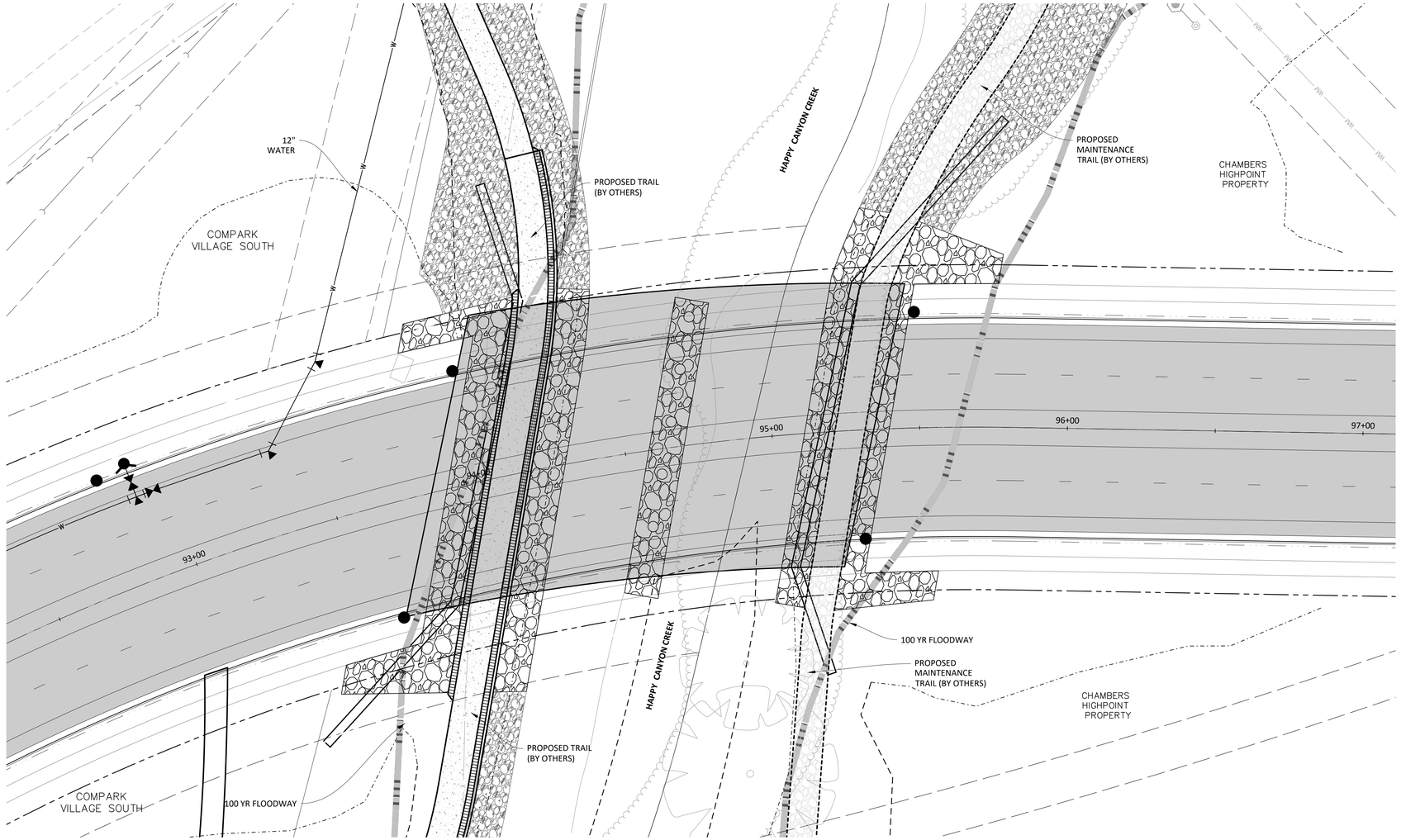
PROJ. MGR.:	RJM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 24 OF 30

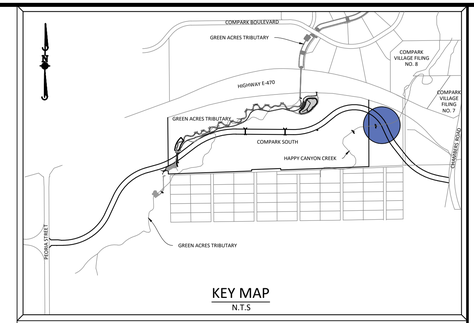
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BRIDGE CONTROL PLAN



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)

0 10 20 40
SCALE: 1"=20'

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

NOTE:
HAPPY CANYON CREEK BRIDGE PLANS
REFER TO PLANS PREPARED BY FELSBURG, HOLT & ULLEVIG
FOR DETAILED DESIGN

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12/17/2020
Town of Parker, Director of Engineering — Date

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B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
BRIDGE CONTROL PLAN

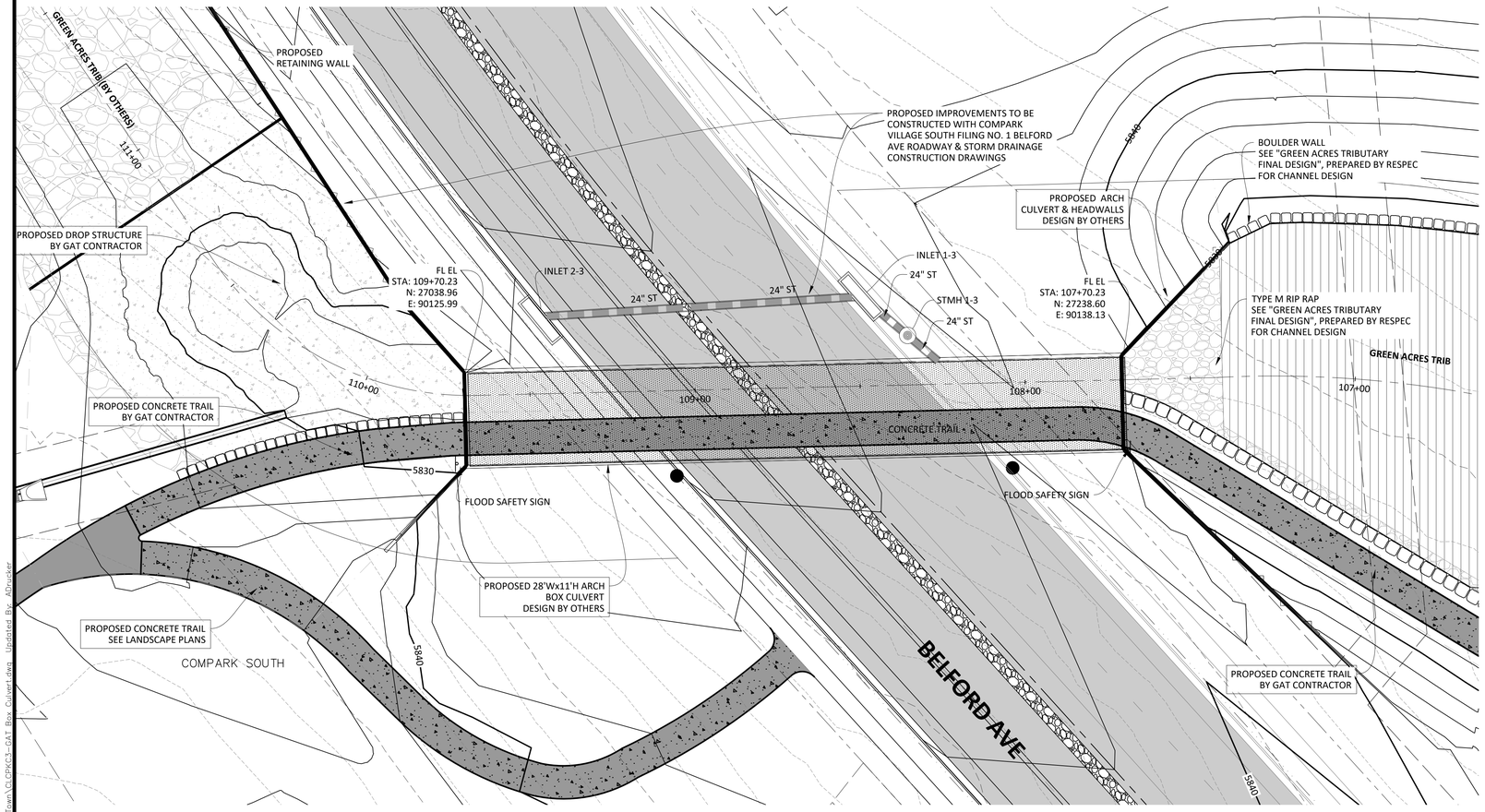
COLORADO REGISTERED
KEN L. MORT
30877
11-17-2020
PROFESSIONAL ENGINEER

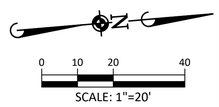
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DATE: 12/2015

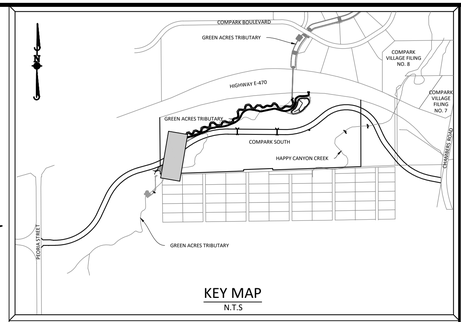
SHEET
25 OF 30
CLCPKC3

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Plotted: 11/16/2020 9:31 AM Dwg Name: J:\Clcpkc3\Com\South\03-Ultimate Belford Ave\dwg\Engl\Final Drawings\Plan Set\Town\CLCPKC3-Bridge Control Plan.dwg, Updated By: ADrucker



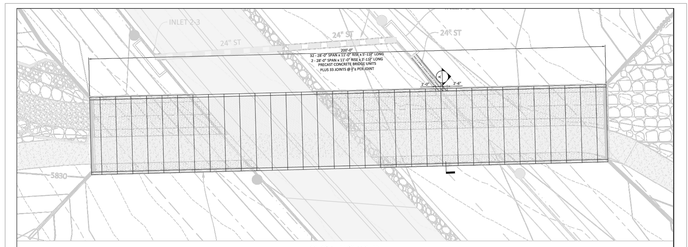




KEY MAP
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PRELIMINARY

ECO-SPAN ARCH SYSTEMS WWW.ECO-SPAN.COM

NO.	DATE	DESCRIPTION	BY
1			
2			
3			
4			
5			
6			

COMM PARK SOUTH CROSS SECTION

DESIGNED BY: Lindsay Precast, LLC, PRECAST CONCRETE BRIDGE SYSTEMS, 1700 Lindsay Blvd., Lafayette, CO 80026, 303.665.9400

DRAWN BY: PRETEK GROUP, P.O. BOX 751471, DAYTON, OH 45475, 800.241.0925

PROJECT: 217067134
SCALE: AS SHOWN
DRAWN BY: JC
CHECKED BY: TM

SK2

DRAWN BY	DATE	REVISIONS
EG	05/20/2020	APPROVED
H	05/20/2020	ADDRESS PER TOWN OF PARKER REVIEW
G	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN
F	12/21/16	FINAL SUBMITTAL
E	6/11/16	4TH SUBMITTAL
D	5/11/16	3RD SUBMITTAL
C	4/11/16	2ND SUBMITTAL
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A	11/2015	1ST SUBMITTAL

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
G.A.T. BOX CULVERT PLAN

ECO-SPAN ARCH SYSTEMS

COMM PARK SOUTH BRIDGE #1

LOCATION : AURORA CO

PREPARED FOR : Mark Wilson, THK Assoc.

PROJECT ID# : 217067134

This document has been prepared in accordance with information made available to PreTek Group at the time of its preparation. It has not been prepared for, conventional use as an engineering or construction document and should not be used or relied upon for any specific application without competent professional examination and verification of its accuracy, suitability, and applicability by a licensed engineer. PreTek Group disclaims any liability arising from information provided by others or from the unauthorized use of the information contained in this document, and does not accept any obligation to issue supplements or corrections in the event of errors being discovered or advances being made in the techniques discussed in the document.

PROJECT DATA SUMMARY:

ARCH UNITS

Shape	Arch-Box Series
Number of Cells/Barrels	1
Span	28.0 FT
Rise	Akids
Bridge Length	200.0 FT
Maxium Piece Weight	28.7 TONS
Clear Rise	11.3 FT
Effective Waterway Area	280 SF
Precast Now	11.0 FT
Number of Pieces	34
Cover Height	2.0 FT

NOTE: Effective waterway area based on span and clear rise.

SITE LAYOUT

Alignment	Ino Skew
Roadway Skew Angle	0 DEG
Skewed End Angle	0 DEG

HEADWALLS

Guardrail or Traffic Barrier	no
Upstream Headwall Ht.	2.8 FT
Downstream Headwall Ht.	2.8 FT

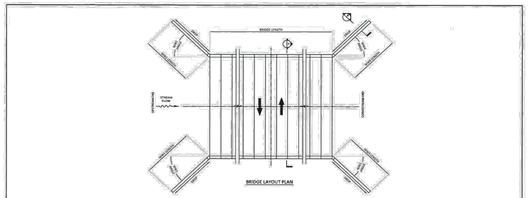
FOUNDATIONS

Foundation Type	Strip Footing
Foundation Burial Depth	4

WINGWALLS

WW1 Angle	45 DEG
WW1 Length	28.5 FT
WW1 Height	13.3 FT
WW1 Drop	7.0 FT
WW2 Angle	45 DEG
WW2 Length	28.5 FT
WW2 Height	13.3 FT
WW2 Drop	7.0 FT
WW3 Angle (deg.)	45 DEG
WW3 Length (ft.)	28.5 FT
WW3 Height	13.3 FT
WW3 Drop (ft.)	7.0 FT
WW4 Angle (deg.)	45 DEG
WW4 Length (ft.)	28.5 FT
WW4 Height (ft.)	13.3 FT
WW4 Drop (ft.)	7.0 FT

PRETEK GROUP INSTANT DESIGN



WW1 Angle	45 DEG	WW2 Angle	45 DEG	WW3 Angle	45 DEG	WW4 Angle	45 DEG	Bridge Length	200.0 FT
WW1 Length	28.5 FT	WW2 Length	28.5 FT	WW3 Length	28.5 FT	WW4 Length	28.5 FT	Number of Cells/Barrels	1
WW1 Drop	7.0 FT	WW2 Drop	7.0 FT	WW3 Drop	7.0 FT	WW4 Drop	7.0 FT	Span	28.0 FT

ECO-SPAN ARCH SYSTEMS WWW.ECO-SPAN.COM | INSTANT DESIGN | AURORA CO | COMM PARK SOUTH BRIDGE #1 | Tom Nicholson PreTek Group (937) 414-5925 | PRETEK GROUP P.O. BOX 751471 DAYTON, OH 45475 (800) 241-0925 | PROJECT ID# 217067134 | SHEET No 2 OF 6 | DATE: 10/01/2015

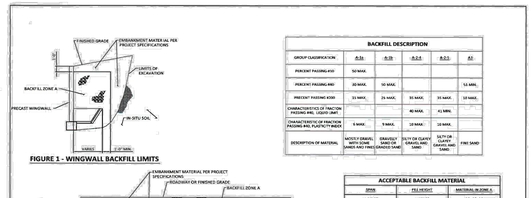


FIGURE 1 - WINGWALL BACKFILL LIMITS

BACKFILL DESCRIPTION					
GROUP CLASSIFICATION:	A-1a	A-1b	A-2-4	A-2-5	A-3
PERCENT PASSING #10	50 MAX.				
PERCENT PASSING #40	30 MAX.	50 MAX.			51 MIN.
PERCENT PASSING #200	15 MAX.	25 MAX.	35 MAX.	35 MAX.	10 MAX.
CHARACTERISTICS OF FRACTION PASSING #40: LIQUID LIMIT			40 MAX.	41 MIN.	
CHARACTERISTICS OF FRACTION PASSING #40: PLASTICITY INDEX	6 MAX.	9 MAX.	10 MAX.	10 MAX.	
DESCRIPTION OF MATERIAL	MOSTLY GRAVEL AND SAND WITH SILT AND CLAY	GRAVELLY SAND	SILTY OR CLAYEY GRAVEL AND SAND	SILTY OR CLAYEY GRAVEL AND SAND	FINE SAND

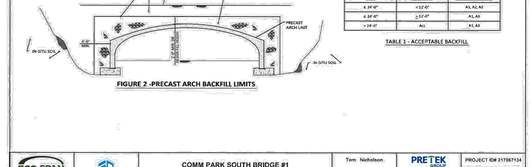


FIGURE 2 -PRECAST ARCH BACKFILL LIMITS

ACCEPTABLE BACKFILL MATERIAL		
DIN	COLORADO	MATERIAL IN ZONE A
≤ 20°-0"	< 12'-0"	A1, A2, A3
≤ 24'-0"	≤ 17'-0"	A1, A3
> 24'-0"	ALL	A1, A3

TABLE 1 - ACCEPTABLE BACKFILL

ECO-SPAN ARCH SYSTEMS WWW.ECO-SPAN.COM | INSTANT DESIGN | AURORA CO | COMM PARK SOUTH BRIDGE #1 | Tom Nicholson PreTek Group (937) 414-5925 | PRETEK GROUP P.O. BOX 751471 DAYTON, OH 45475 (800) 241-0925 | PROJECT ID# 217067134 | SHEET No 5 OF 6 | DATE: 10/01/2015



SPECIFICATIONS FOR THE MANUFACTURE AND DESIGN OF ECO-SPAN PRECAST THREE SIDED ARCH STRUCTURES, WINGWALLS AND HEADWALLS

1. DESCRIPTION

THESE SPECIFICATIONS ARE FOR A PRECAST THREE SIDED ARCH STRUCTURE, HEADWALLS AND WINGWALLS. THE PRECAST CONCRETE UNITS SHALL BE DESIGNED, MANUFACTURED AND INSTALLED BY ECO-SPAN GROUP AND MANUFACTURED AT AN APPROVED PLANT. MANUFACTURER OR PRECAST PIECES SHALL CONFORM TO THE MORE STRINGENT OF THESE SPECIFICATIONS OR ASTM C1504.

2. DESIGN

THE PRECAST UNITS ARE DESIGNED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS "LRFD BRIDGE DESIGN SPECIFICATIONS", (2012 AND ALL INTERIM SPECIFICATIONS TO DATE.

CONSTRUCTION EQUIPMENT HEAVIER THAN A 3-4-SHOOR IS NOT ALLOWED OVER THE ARCH STRUCTURE UNITS BACKFILL AT LESS 2' OVER THE TOP OF THE ARCH. EQUIPMENT WITH LESS WEIGHT OR TOTAL AXLE LOADS MAY BE ALLOWED WITH LESS COVER IF SPECIFICALLY ANALYZED, AND IS AN AUTHORIZED ALTERNATIVE THAT CONFORMS TO AASHTO RECIA.

- CONCRETE SHALL HAVE ALL PRECAST MIX.
- CONCRETE SHALL BE PROPORTIONED TO ASTM C192 TYPE I,
- ALL FILTYPE IS CEMENT.
- CEMENT AGGREGATES SHALL MEET ASTM C33 SPECIFICATIONS - END VARIES A MAXIMUM SIZE OF 1 INCH
- ALL CONCRETE MIXTURES SHALL BE DESIGNED BY A CERTIFIED CONCRETE TECHNICIAN. A COPY OF THE CONCRETE MIX IS SUBMITTED TO THE MANUFACTURER TO THE ENGINEER FOR APPROVAL.
- CALCIUM CHLORIDE OR ADMIXTURES CONTAINING IT ARE NOT ALLOWED TO BE ADDED TO THE CONCRETE MIX.
- CEMENT CONTENT SHALL BE A MINIMUM OF 564 POUNDS PER CUBIC YARD.
- MINIMUM COMPRESSIVE STRENGTH OF CONCRETE SHALL BE SPECIFIED ON SHOP DRAWINGS OF 4,000 PSI.

3. MATERIAL - STEEL REINFORCEMENT AND HARDWARE

ALL REINFORCEMENT USED IN THE PRECAST ELEMENTS SHALL CONFORM TO ASTM SPECIFICATION A 185 GA-615, DEFORMED BILLET STEEL BARS CONFORM TO ASTM A-615, GRADE 60. STEEL REINFORCEMENT SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI. STEEL REINFORCING SHALL BE PLACED ACCORDING TO THE APPROVED SHOP DRAWINGS. ALL REINFORCEMENT SHALL BE SECURELY TIED AND SUPPORTED TO ASSURE THE CONCRETE COVERINGS SHALL SHALL HAVE A MINIMUM BEARING OF 2 INCHES AND A MAXIMUM OF 3 INCHES. STEEL HARDWARE AND INSERTS USED BY MANUFACTURER SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

5. FABRICATION OF PRECAST ELEMENTS

- ALL PRECAST UNITS SHALL BE MANUFACTURED IN A STATIONARY STRUCTURE SHAPE.
- REINFORCEMENT SHALL BE HELD TO APPROXIMATELY MATCH THE CLOSED CORNER OF THE STRUCTURE. REINFORCEMENT SHALL BE HELD BY WIRE FABRIC AND SUPPLEMENTED WITH A LAYER OF WIRE FABRIC OR INDIVIDUAL BARS AS NECESSARY. CONVENTIONAL REINFORCING MUST BE WITHIN 3 INCHES FROM EDGE OF PRECAST ELEMENTS.
- STORAGE OF UNITS SHOULD BE IN A MANNER THAT PREVENTS ANY DAMAGE OR CRACKING AND AVOIDS CONTACT WITH GROUND.
- HANDLING OR HOLES SHALL BE CAST INTO PRECAST ELEMENTS TO FACILITATE HANDLING.
- CONCRETE SHALL MEET MINIMUM DESIGN STRENGTH BEFORE 28 DAYS AFTER IT

MAS CAST AND BEFORE TO ECONOMIC & GUARDS

- ANY CHANGES IN THE DESIGN OR CIRCUMFERENTIAL REINFORCING SHALL BE MADE BY LAYING AND MUST CONFORM TO AASHTO LRFD & FOR GRAVITY-WELDED WIRE FABRIC. THE GEOGRAPHICAL WELDED WIRE REINFORCEMENT SHALL CONFORM TO AASHTO M 55 AT LEAST ONE WIRE IN EACH DIRECTION SHALL BE LOCATED NOT MORE THAN 2 INCHES FROM THE END OF THE OVERLAP PANEL. ALL BENT 12 INCHES FOR WELDED WIRE FABRIC OR LAP DEFORMED BARS. OVERLAP OF WELDED WIRE FABRIC SHALL BE MEASURED FROM OUTER MOST CROSS WIRES OF EACH FABRIC SHEET. OVERLAP FOR DEFORMED BARS SHALL MEET AASHTO 5.11.5.

6. QUALITY ASSURANCE

THE PRECAST PLANT SHALL BE CERTIFIED BY THE NATIONAL PRECAST CONCRETE ASSOCIATION'S PLANT CERTIFICATION PROGRAM OR ANOTHER PRESTRESSED CONCRETE INSTITUTE PLANT CERTIFICATION DURING PRODUCTION OF ALL PRECAST ELEMENTS. ALTERNATIVELY, PRETEK GROUP MAY GRANT WRITTEN APPROVAL TO A PLANT PRIOR TO THE START OF PRODUCTION.

THE PRECAST PLANT SHALL KEEP AN ISSUE/REPORT TESTING ACCESS TO PERFORM TESTS FOR ASR AND SHALL PROVIDE ACCESS TO PERFORM TESTS FOR ASR AND SHALL PROVIDE ACCESS TO PERFORM TESTS FOR ASR AND EXPERIMENTS' AND ACTIVITIES. THESE TESTS ARE TO BE MADE AT INDIVIDUAL STATES IN SECTION 7.3 OF THIS SPECIFICATION. THE AGENCY MUST PROVIDE THE PRECAST PLANT CERTIFICATION, BY A LICENSED ENGINEER, STATING THAT THE PLANT IN IN COMPLIANCE WITH THESE TEST.

THE PRECAST PLANT SHALL PROVIDE PROOF OF COMPLIANCE OF THIS SECTION UPON REQUEST.

7. TESTING REQUIRED

COMPRESSION TESTING SHALL BE DONE ON CONCRETE CYLINDERS. A MINIMUM OF 3 CYLINDERS ARE TO BE MADE FOR EACH DAY OF CONCRETE PLACEMENT. ONE CYLINDER FROM EACH DAY'S CASTING SHARE DAY, CYLINDERS ARE TO BE TESTED IN ACCORDANCE WITH ASTM C39.

IF THE AVERAGE COMPRESSIVE STRENGTH OF ALL CYLINDERS TAKEN FROM ANY GIVEN CONCRETE MIX ON THE SHARE DAY IS EQUAL TO OR GREATER THAN THE DESIGN COMPRESSIVE STRENGTH, THE CONCRETE MIX SHALL BE CONSIDERED ACCEPTABLE. IF THE AVERAGE COMPRESSIVE STRENGTH IS LESS THAN THE DESIGN STRENGTH, THE PRECAST ELEMENTS MADE WITH THE SAME CONCRETE MIX FROM THE FAILED CYLINDER(S).

CORES SHALL BE OBTAINED AND TESTED IN ACCORDANCE WITH ASTM C42. IF THE AVERAGE COMPRESSIVE STRENGTH IS EQUAL TO OR GREATER THAN THE DESIGN COMPRESSIVE STRENGTH, THE CONCRETE MIX SHALL BE CONSIDERED ACCEPTABLE.

WHEN THE COMPRESSIVE STRENGTH OF ANY CORE IS LESS THAN THE DESIGN COMPRESSIVE STRENGTH, THE PRECAST ELEMENTS MADE WITH THE SAME CONCRETE MIX ON THE SAME DAY ARE TO BE REJECTED. THE ELEMENTS MADE FROM THE SAME CONCRETE MIX ON THE SAME DAY ARE TO BE REJECTED, UNLESS AT THE OPTION OF THE PRECAST PLANT, EACH CONFIRMED CORE AT EQUIVALENT AGE IS CONFIRMED WITH EQUIVALENT OR GREATER STRENGTH THAN THE DESIGN STRENGTH AS DEFINED IN THE SPECIFICATIONS. THE EXPENSE OF ADDITIONAL CORES SHALL BE PAID BY THE PRECAST PLANT. THE EXPENSE OF ADDITIONAL CORES SHALL BE PAID BY THE MANUFACTURER AND FINISHED PRECAST ELEMENTS AT THEIR DISCRETION.

8. PROVIDING DRAINAGE

BRIDGE SAFETY SHALL BE MANUFACTURED SO THAT ARCH AND LEG DIMENSIONS ARE NOTICEABLE THAN 1/4" DIFFERENT THAN WHAT'S SHOWN ON THE SHOP DRAWINGS. THE LAP LENGTH OF THE BRIDGE LEGS SHALL NOT VARY MORE THAN 1/2" FROM WHAT'S SHOWN ON THE SHOP DRAWINGS.

BRIDGE SHALL NOT WARP MORE THAN 1/2" OVER THE LENGTH OF THE STRUCTURE.

REINFORCEMENT PLACING SHALL NOT VARY MORE THAN 1/2" FROM THAT SHOWN IN SHOWN ON THE SHOP DRAWINGS. NUMBERSONG CONCRETE COVER SHALL NEVER BE LESS THAN 1-1/2"

9. JOINTS

BRIDGE LEGS UTILIZE BUTT ENDS AND ARE TO BE MANUFACTURED SO THAT WHEN PLACED NEXT TO EACH OTHER THE JOINT WIDTH SHALL BE NOMINAL 1" WIDE AND SHALL NOT VARY MORE THAN 3/4" OR LESS THAN 1/4" AT ANY LOCATION. THE MAXIMUM ATTAINABLE JOINT SHALL BE A MAXIMUM OF 1-1/4"

10. WATERPROOFING AND FINISH

PRECAST ELEMENTS ARE TO HAVE A SMOOTH STEEL FORM OR TROWELED SURFACE. THE ENDS OF PRECAST ELEMENTS SHALL BE SQUARE WITH THE SIDES WITHIN A TOLERANCE OF 1/4" PER 1'-0". PRECAST ELEMENTS SHALL BE FREE OF ANY SUBSTANTIAL FRACTURE OR BLEMISH.

REPAIRS TO A PRECAST ELEMENT BECAUSE OF FRACTURES OR BLEMISHES CAUSED BY HANDLING OR INSTALLING SHALL BE APPROVED, IN THE OPINION OF THE OWNER, IF THE REPAIRS ARE PROPERLY FINISHED AND CURED TO MEET THIS SPECIFICATION.

11. INJECTION

PRECAST ELEMENTS NOTE BE INJECTED FOR EXCESSIVE HONEYCOMBING, DAMAGED ONES OR FRACTURED AND ENGAGE FINISHED STRUCTURES THE WALL.

12. WARRANTY

EACH PRECAST ELEMENT IS TO BE MARKED BY PERMANENT PAINT. THE MINIMUM MARKING SHALL INCLUDE THE DATE OF MANUFACTURE, TRADENAME OR NAME OF PRECAST PLANT, AND PIECE MARK FROM SHOP DRAWINGS. BRIDGE UNITS SHALL INCLUDE SPAN AND SIDE OF THE SHARE.

13. CONSTRUCTION

THE BRIDGE UNITS AND WINGWALLS SHALL BE INSTALLED ON CAST IN PLACE FOUNDATIONS PER THE PLANS. THIS PRECAST ENGINEER SHALL VERIFY THAT THE FOUNDATION SUBGRADE IS IN COMPLIANCE WITH THE GEOTECHNICAL REPORT FOR THE PROJECT.

THE FINISHED SHALL HAVE A SMOOTH FLOAT FINISH WITH A MINIMUM COMPRESSIVE STRENGTH AS SPECIFIED ON THE SHOP DRAWINGS. THE TOP OF THE ARCH SHALL BE CROWNED WITH A 1/2" RADIUS AND LAID WITH MASONRY WITH A 1/2"KEY STRAIGHT EDGE. (THE FINISHED SHALL HAVE SUCH A MINIMUM OF 3000 PSI BEFORE INSTALLATION OF ANY PRECAST ELEMENTS. FOUNDATION DRAINAGE SHALL MATCH THOSE STAKE AND AS SHOWN ON THE PLANS.

PRECAST ELEMENTS SHALL BE INSTALLED AS SHOWN ON THE PLANS AND SPECIAL CARE SHALL BE TAKEN TO ENSURE THAT THE BRIDGE UNITS ARE NOT DAMAGED DURING INSTALLATION. THE ENDS OF THE BRIDGE STRUCTURES AND WINGWALLS ARE SET TO THE ELEVATIONS SHOWN ON THE PLANS WITH A MINIMUM OF 1/2" CLEARANCE BETWEEN BOTTOM OF PRECAST ELEMENT AND TOP OF FOOTING. MAY BE ADJUSTED WITH NON-SHRINK GROUT OR MORTAR. THE GROUT SHALL BE PLACED UNDER THE GROUT TO BE ACCOMPLISHED BY AGRICULAND CEMENT MORTAR OR GROUT MORTAR COMPOSED OF ONE PART PORTLAND CEMENT AND THREE PARTS SAND BY VOLUME).

JOINTS BETWEEN BRIDGE UNITS SHALL BE CAULKED WITH A 3/4" x 3-1/2" BUTYL ROPE AND A 6" MASS STRIP OF JOINT WRAP. A PREMIER COMPATIBLE WITH THE JOINT WRAP SHALL BE APPLIED ON THE INSIDE AND OUTSIDE OF THE JOINT BETWEEN BRIDGE UNITS. THE PREMIER SHALL BE APPLIED TO THE BOTTOM OF ONE LEG, UP OVER AND DOWN OPPOSITE THE LEG, OFF LAP SHALL HAVE 12" OF OVERLAP AND SHALL OVERLAP RUNNING DOWN WILL.

LIFT HOLES ARE TO BE FILLED, PARGED AND FINISHED WITH JOINT WRAP. EDGES ALONG THE HEADWALL COLLARS AND TOP OF BRIDGE UNIT SHALL BE CAULKED WITH JOINT WRAP AND PARGED. HEADWALLS THAT ARE CAST INTO WINGWALLS SHALL HAVE A BRIDGE SEAL BUTYL ROPE AT JOINT LOCATIONS.

JOINTS BETWEEN WINGWALL SECTIONS AND SHARTS WITHIN A WINGWALL, AND BRIDGE UNIT SHALL BE SEALED WITH A 3/4" BUTYL ROPE AND JOINT WRAP.

BACKFILL IS DEFINED AS ALL IMPORTED EXCAVATION AND SOME ENGINEERED MATERIAL THAT IS PLACED AND COMPACTED BEHIND THE ARCH STRUCTURE AND WINGWALLS. BACKFILL SHALL BE PLACED WITHIN ZONE A AS SHOT FIRST THE MATERIAL SPECIFICATIONS OF AASHTO LRFD 12.7.5 OR AS ZONE A. BACKFILL SHALL BE PLACED AS SHOWN ON THE PLANS AND AASHTO LRFD TYPE A2 OR ZONE A & SHOULD BE HORIZONTALLY FROM THE OUTSIDE OF THE STRUCTURE AND EXTEND A MINIMUM OF 3 FEET TO THE ARCH RUN (OR PROVIDED GREATER AS SHOWN ON THE PLANS).

ALL BACKFILL IN ZONE A IS TO BE COMPACTED TO A MINIMUM DENSITY OF 95% STANDARD PROCTOR PER AASHTO T-180.

SPREAD CARE IS TO BE TAKEN DURING BACKFILLING TO PROTECT THE PLACEMENT OF JOINT WRAP OR ANY WATERPROOFING MATERIAL.

MECHANICAL TAMPERS OR APPROVED COMPACTING EQUIPMENT SHALL BE USED ON ALL BACKFILL MATERIALS. HEAVY COMPACTION EQUIPMENT SHALL NOT BE USED WITHIN 3 FEET OF THE BACK OF THE STRUCTURE UNTIL THERE IS AT LEAST 2 OF COVER OVER THE TOP. BAKERS, MATERIAL PLACED 3 FEET OR PLACED IN 8" LIFTS (MAXIMUM) BEFORE BEING COMPACTED. AT NO TIME SHALL HEAVY COMPACTION EQUIPMENT BE OPERATED CLOSER THAN 3 FEET TO THE BACK OF THE ARCH STRUCTURE OR WITHIN 8' OF ANY STRUCTURAL ELEMENT WITHIN A 45 DEGREE OF ANY OTHER STATE THE STRUCTURE UNLESS THE STRUCTURE IS DESIGNED FOR LESS COVER.)

DURING BACKFILLING, AT NO TIME SHALL THERE BE MORE THANS 16" DIFFERENCE BETWEEN BACKFILL HEIGHT ON EACH SIDE OF THE CULVERT.

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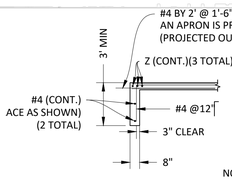
ECO-SPAN ARCH SYSTEMS WWW.ECO-SPAN.COM | INSTANT DESIGN | AURORA CO | COMM PARK SOUTH BRIDGE #1 | Tom Nicholson PreTek Group (937) 414-5925 | PRETEK GROUP P.O. BOX 751471 DAYTON, OH 45475 (800) 241-0925 | PROJECT ID# 217067134 | SHEET No 3 OF 6 | DATE: 10/01/2015

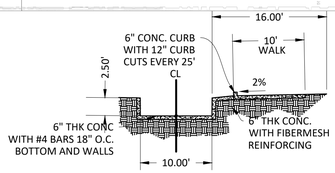
NOTE:
PRECAST ARCH CULVERT TO BE ECO-SPAN OR APPROVED EQUAL. SUPPLIER TO PROVIDE DESIGN

FOUNDATION DESIGN TO BE PROVIDED BY CONTRACTOR

CONTRACTOR TO SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO CONSTRUCTION

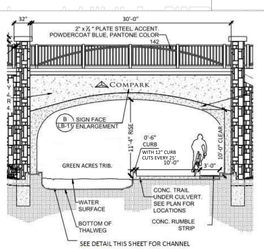
LIMIT PE CERTIFICATION TO CIVIL





NOTES:
1. CONCRETE MIX TO BE 4000 PSI MIX
2. TRANSVERSE JOINTS TO BE SAWCUT (⅛" WIDE X 1-1/4" DEEP) 10-12' ON CENTER
3. EXPANSION JOINTS WITH FILLER & SEALANT TO BE PLACED EVERY 100' AND WHERE PAVEMENT ABUTS ANOTHER STRUCTURE.
4. INSTALL 3' CONC. CUTOFF WALLS AT EACH END OF THE ARCH STRUCTURE.

GAT TYPICAL CHANNEL SECTION





GAT TYPICAL CULVERT SAFETY SIGN

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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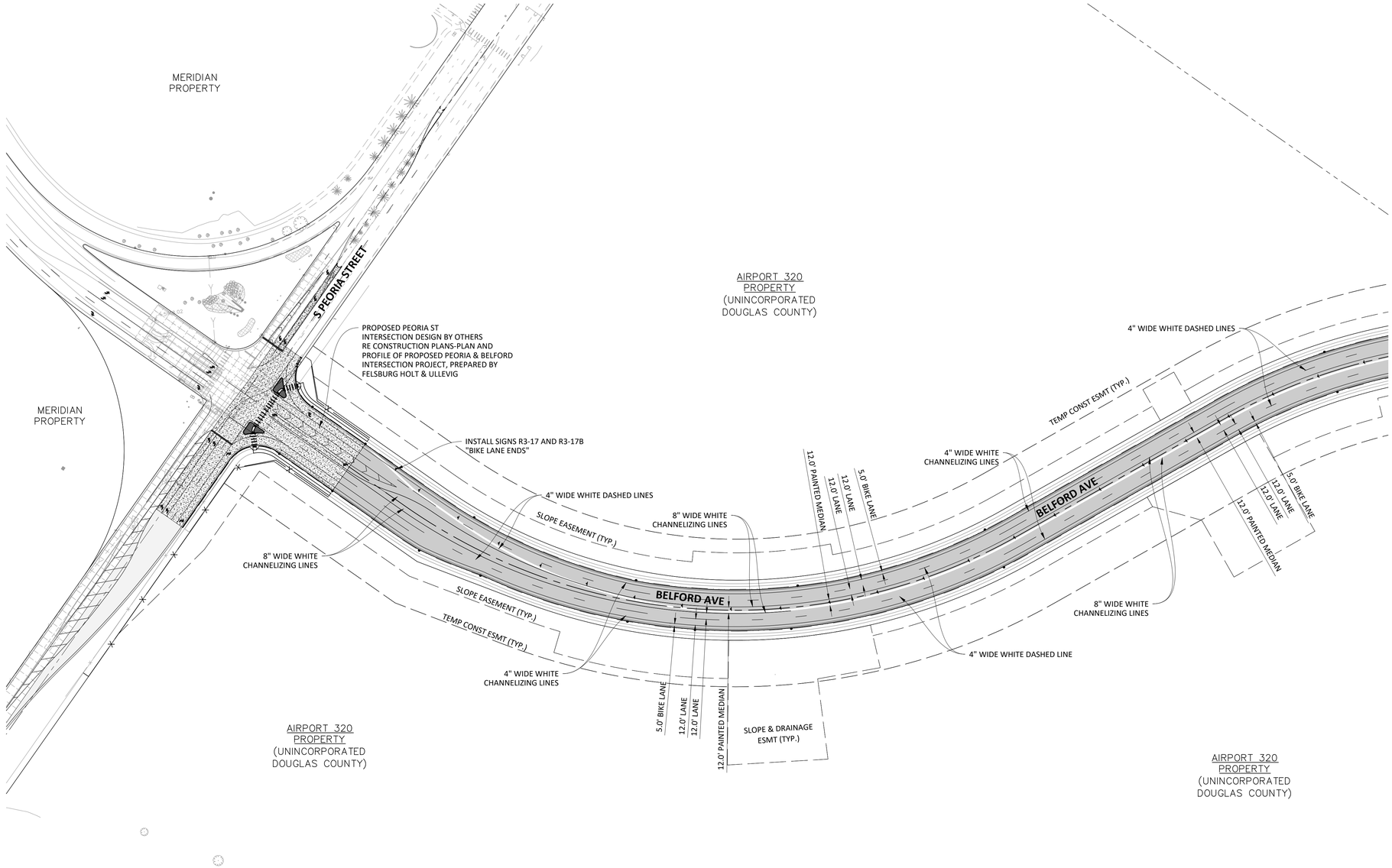
Town of Parker, Director of Engineering — 12/17/2020 Date

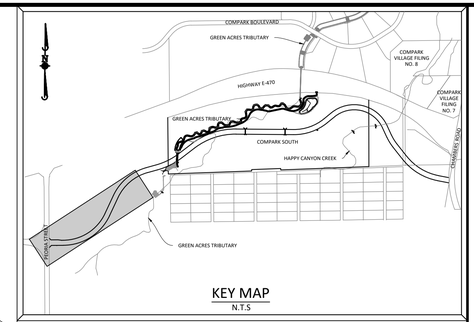
COLORADO REGISTERED KELLY R. MOORE 30877 11-17-2020 PROFESSIONAL ENGINEER

PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 26 OF 30
CLCPKC3 ---

Plotted: 11/16/2020 @ 9:34 AM Dwn Name: P:\Civil\c3\ComSouth12-Filing 1 Nic GAT\ComSouth03--Ultimate Belford Ave\Dwg\Final Drawings\Plan Set\Town\GACPKC3-GAT Box Culvert.dwg Updated By: ADrucker

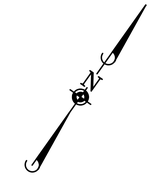




KEY MAP
N.T.S

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)



0 50 100 200
SCALE: 1"=100'

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

LEGEND

- CROSS WALK 24" X 10' WHITE EVENLY SPACED
- THROUGH LANE
- LEFT TURN ONLY
- RIGHT TURN ONLY
- LEFT OR THROUGH ONLY
- RIGHT OR THROUGH ONLY

NOTES

1. ALL LANES ARE 12' WIDE UNLESS LABELLED OTHERWISE.

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 markings 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.

SIGNAGE AND STRIPING NOTES (CONT):

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 has been determined by information available at the time of review. Prior to the initiation of any warranty period, the Town of Parker reserves the right to require modifications to existing, or installation of, additional signage and/or pavement marking if it is determined that conditions warrant such modification according to the MUTCD or the CDOT M and S Standards. All signage and striping shall fall under the requirements of the two-year warranty period for new construction. Additionally, all pavement markings shall not lift or peel during the first year after installation.

11. Diamond grade material shall be used on all stop signs and overhead signs. All other roadside traffic control devices shall use high intensity grade sheeting. No fluorescent yellow green sheeting shall be used unless specifically approved by the Town of Parker.

SIGNAGE AND STRIPING NOTES (CONT):

12. All street name signs shall be high intensity, extruded, green and white blades. Arterial and collector street name signs shall be 9 inch blades and have mixed case lettering. Local street name signs shall be 6 inches blades with mixed case lettering.

13. All layouts for internally illuminated street name signs shall be submitted to the Town for review and approval prior to fabrication.

14. All removed signs shall be returned to the Town of Parker.

15. Crosswalks: Shall be constructed using preformed thermo-plastic or an approved equal.

Shall be Longitudinal 2 feet by 10 feet (Continental) type or other approved by the Town of Parker.

Shall line up with handicap ramps.

Shall be centered within lanes and placed on lane and curb lines so as to avoid vehicle wheel paths.

SIGNAGE AND STRIPING NOTES (CONT):

16. All pavement marking material (including words and symbols) shall be as follows:

For Concrete Surface:
Long line markings (channelization lines, skips, etc.) shall be epoxy paint. Other paint may be used for temporary application only when approved by the Town of Parker.

Words, symbols, and crosswalks/stop bars shall be methyl-mythacralate, preformed thermoplastic (90 mil), preformed plastic (90 mil), inlayed tape (STAMARK), or as specified.

(Sand or water blast curing compound prior to installation of markings.)

For Asphalt Surface:
Long line markings (channelization lines, skips, etc.) shall be epoxy paint. Other paint may be used for temporary application only when approved by the Town of Parker.

Words, symbols, and crosswalks/stop bars shall be hot applied thermoplastic (90 mil), preformed plastic (90 mil), inlayed tape (STAMARK), Methyl-Mythacralate, or as specified.

17. Inspection and approval of striping and crosswalk layout to be done by Town of Parker Development Review Engineer (call 303-840-9546) prior to application of final striping.

TOWN OF PARKER APPROVALS

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12/17/2020
Town of Parker, Director of Engineering — Date

	DATE	REVISIONS	DRAWN BY
H.	09/2020	APPROVED	
G.	07/2020	REVISED PER TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
D.	11/2/16	4TH SUBMITTAL	
C.	6/24/16	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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

PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
SIGNAGE AND STRIPING 1

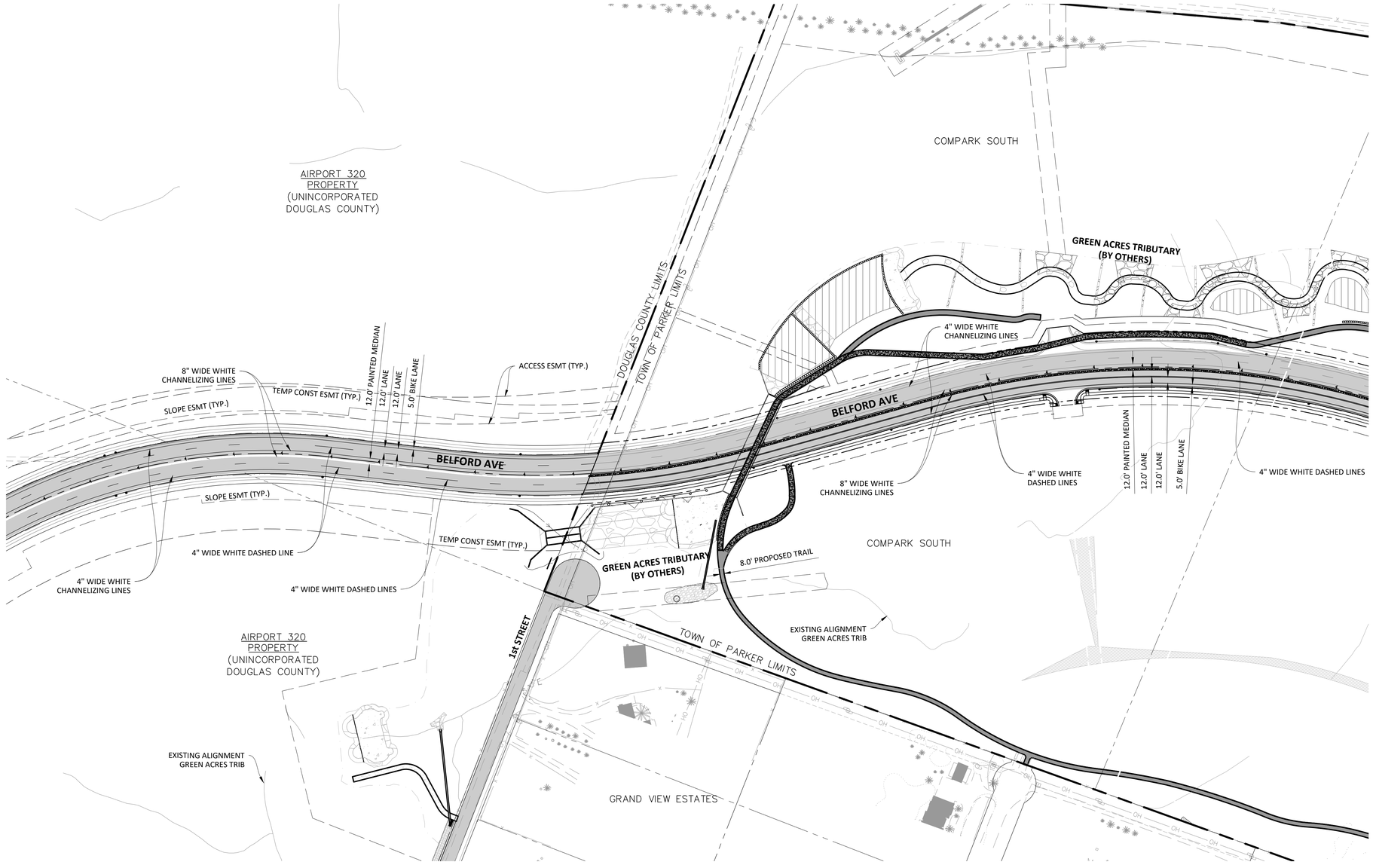
COLORADO REGISTERED PROFESSIONAL ENGINEER — KEVIN L. MARK — 30877 — 11-17-2020

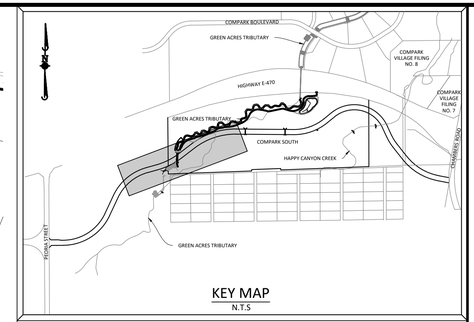
PROJ. MGR.: RIM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 27 OF 30
CLCPKC3

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Plotted: 11/16/2020 9:35 AM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Signage and Striping (1).dwg Updated By: ADrucker





KEY MAP
N.T.S

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10. Signage and striping has been determined by information available at the time of review. Prior to the initiation of any warranty period, the Town of Parker reserves the right to require modifications to existing, or installation of, additional signage and/or pavement marking if it is determined that conditions warrant such modification according to the MUTCD or the CDOT M and S Standards. All signage and striping shall fall under the requirements of the two-year warranty period for new construction. Additionally, all pavement markings shall not lift or peel during the first year after installation.

11. Diamond grade material shall be used on all stop signs and overhead signs. All other roadside traffic control devices shall use high intensity grade sheeting. No fluorescent yellow green sheeting shall be used unless specifically approved by the Town of Parker.

SIGNAGE AND STRIPING NOTES (CONT):

12. All street name signs shall be high intensity, extruded, green and white blades. Arterial and collector street name signs shall be 9 inch blades and have mixed case lettering. Local street name signs shall be 6 inches blades with mixed case lettering.

13. All layouts for internally illuminated street name signs shall be submitted to the Town for review and approval prior to fabrication.

14. All removed signs shall be returned to the Town of Parker.

15. Crosswalks: Shall be constructed using preformed thermo-plastic or an approved equal.

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Shall line up with handicap ramps.

Shall be centered within lanes and placed on lane and curb lines so as to avoid vehicle wheel paths.

SIGNAGE AND STRIPING NOTES (CONT):

16. All pavement marking material (including words and symbols) shall be as follows:

For Concrete Surface:
Long line markings (channelization lines, skips, etc.) shall be epoxy paint. Other paint may be used for temporary application only when approved by the Town of Parker.

Words, symbols, and crosswalks/stop bars shall be methyl-mythacralate, preformed thermoplastic (90 mil), preformed plastic (90 mil), inlayed tape (STAMARK), or as specified.

(Sand or water blast curing compound prior to installation of markings.)

For Asphalt Surface:
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17. Inspection and approval of striping and crosswalk layout to be done by Town of Parker Development Review Engineer (call 303-840-9546) prior to application of final striping.

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Town of Parker, Director of Engineering — Date: 12/17/2020

	DATE	REVISIONS	DRAWN BY
H.	09/2020	APPROVED	
G.	07/2020	REVISIONS PER TOWN OF PARKER REVIEW	
F.	03/02/20	REVISE GAT & ADD OFF-LINE DET BASIN	
E.	12/21/16	FINAL SUBMITTAL	
D.	11/2/16	4TH SUBMITTAL	
C.	6/24/16	3RD SUBMITTAL	
B.	4/11/16	2ND SUBMITTAL	
A.	11/2015	1ST SUBMITTAL	EG

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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
SIGNAGE AND STRIPING 2

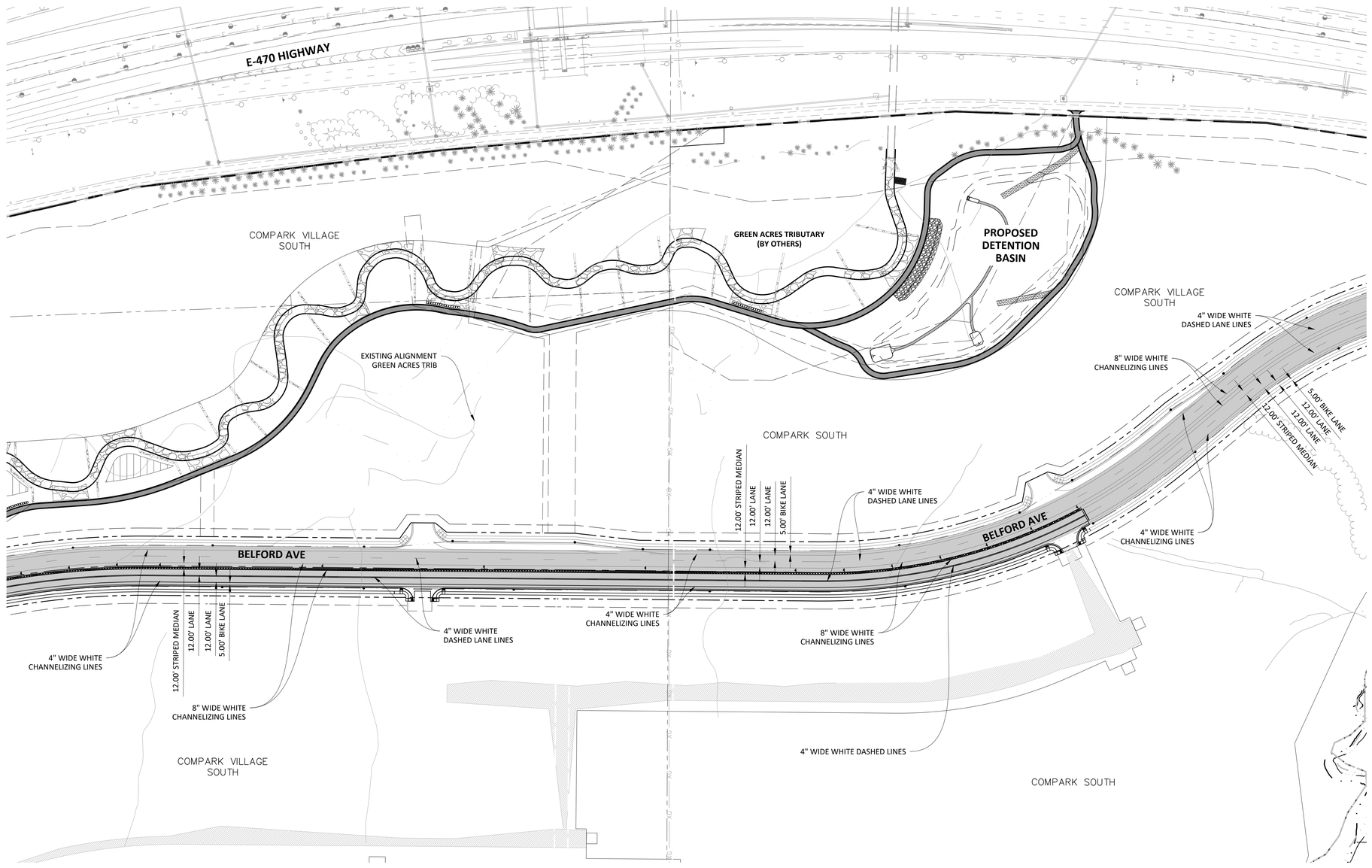
COLORADO REGISTERED PROFESSIONAL ENGINEER — RYAN J. MOE — 30877 — 11-17-2020

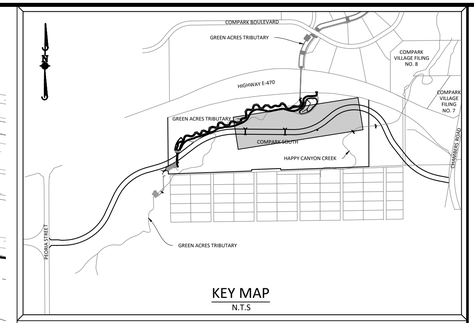
PROJ. MGR.: RJM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 28 OF 30
CLCPKC3

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Plotted: 11/16/2020 9:36 AM Dwg Name: P:\Clcpkc3\Com\South\12-Filing 1 No GAT\Com\South03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Signage and Striping (2).dwg Updated By: ADrucker





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

- CROSS WALK 24" X 10' WHITE EVENLY SPACED
- THROUGH LANE
- LEFT TURN ONLY
- RIGHT TURN ONLY
- LEFT OR THROUGH ONLY
- RIGHT OR THROUGH ONLY

NOTES

1. ALL LANES ARE 12' WIDE UNLESS LABELLED OTHERWISE.

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 markings 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.

SIGNAGE AND STRIPING NOTES (CONT):

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.

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SIGNAGE AND STRIPING NOTES (CONT):

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Town of Parker, Director of Engineering — Date 12/17/2020

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	DATE	REVISIONS	DRAWN BY
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
SIGNAGE AND STRIPING 3

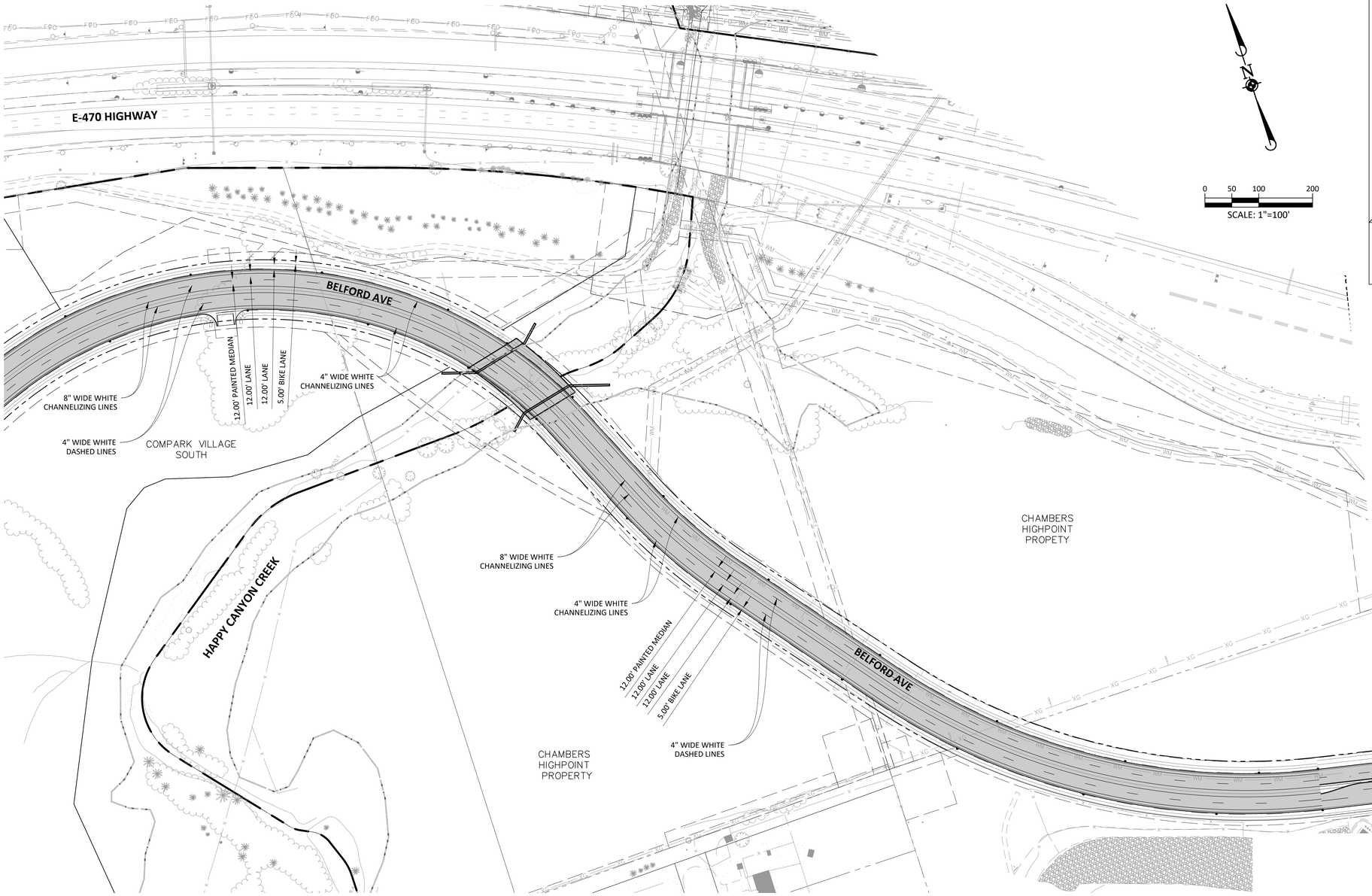
COLORADO REGISTERED PROFESSIONAL ENGINEER 30877 11-17-2020

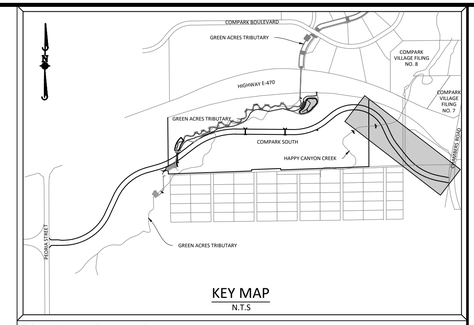
PROJ. MGR.:	RJM
PROJ. ASSOC.:	BRB
DRAWN BY:	ETG
DATE:	12/2015

SHEET 29 OF 30
CLCPKC3

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Plotted: 11/16/2020 9:37 AM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3 Signage and Striping (3).dwg Updated By: ADrucker





KEY MAP
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PRELIMINARY COMPARK VILLAGE SOUTH, F1 - BELFORD AVENUE
TOWN OF PARKER, COLORADO
SIGNAGE AND STRIPING

COLORADO REGISTERED PROFESSIONAL ENGINEER — RICHARD I. MANN — 30877 — 11-17-2020

PROJ. MGR.: RIM
PROJ. ASSOC.: BRB
DRAWN BY: ETG
DATE: 12/2015

SHEET 30 OF 30
CLCPKC3

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Plotted: 11/16/2020 9:38 AM Dwg Name: P:\Clcpkc3\ComSouth12-Filing 1 No GAT\ComSouth03-Ultimate Belford Ave\dwg\Eng\Final Drawings\Plan Set\Town\CLCPKC3-Signage and Striping (4).dwg Updated By: ADrucker