

KHA responses

AKERS DR & ACCESS RD ROUNDABOUT CONSTRUCTION DOCUMENTS

CITY OF COLORADO SPRINGS, COUNTY OF EL PASO, STATE OF COLORADO

Cursory comments have been provided.
Additional review and comments will be provided
when the roundabout analysis has been
submitted for review.

acknowledged

CONTACTS:

OWNER:
THE CITIZEN ON CONSTITUTION, LLC.
C/O THE GARRETT COMPANIES, INC.
1051 GREENWOOD SPRINGS BLVD, SUITE 101
GREENWOOD, IN 46143
TEL: (317) 497-8275
CONTACT: ANDREW WHITE

ENGINEER:
KIMLEY-HORN AND ASSOCIATES, INC.
4582 SOUTH ULSTER STREET, SUITE 1500
DENVER, CO 80237
TEL: (303) 228-2300
CONTACT: SEAN HAYS, P.E.

EL PASO COUNTY:
EL PASO COUNTY
PCD DEPARTMENT
2880 INTERNATIONAL CIRCLE, SUITE 110
COLORADO SPRINGS, CO 80910
PHONE: (719) 520-6300

SURVEYOR:
BARRON LAND, LLC
2790 N. ACADEMY BLVD. SUITE 311
COLORADO SPRINGS, CO 80917
TEL: (719) 360-6827
CONTACT: SPENCER BARRON, PLS

DEVELOPER'S SIGNATURE BLOCK

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE
REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

NAME _____ DATE _____

ENGINEER'S SIGNATURE BLOCK

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND
SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO
THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE,
GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS AND SAID PLANS AND
SPECIFICATIONS ARE IN CONFORMITY WITH THE APPLICABLE MASTER DRAINAGE PLANS
AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE
PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE
DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT
RESPONSIBILITY FOR ANY LIABILITY CAUSED BY ANY NEGLIGENT ACTS, ERRORS OR
OMISSIONS ON MY PART IN PREPARATION OF THE DETAILED PLANS AND SPECIFICATIONS

SEAN HAYS, PE - KIMLEY-HORN AND ASSOCIATES, INC. DATE _____

EL PASO COUNTY REVIEW STATEMENT

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY
DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND
ADEQUACY OF THE DESIGN DIMENSIONS AND/OR ELEVATIONS WHICH SHALL BE
CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS
DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF
THIS DOCUMENT.

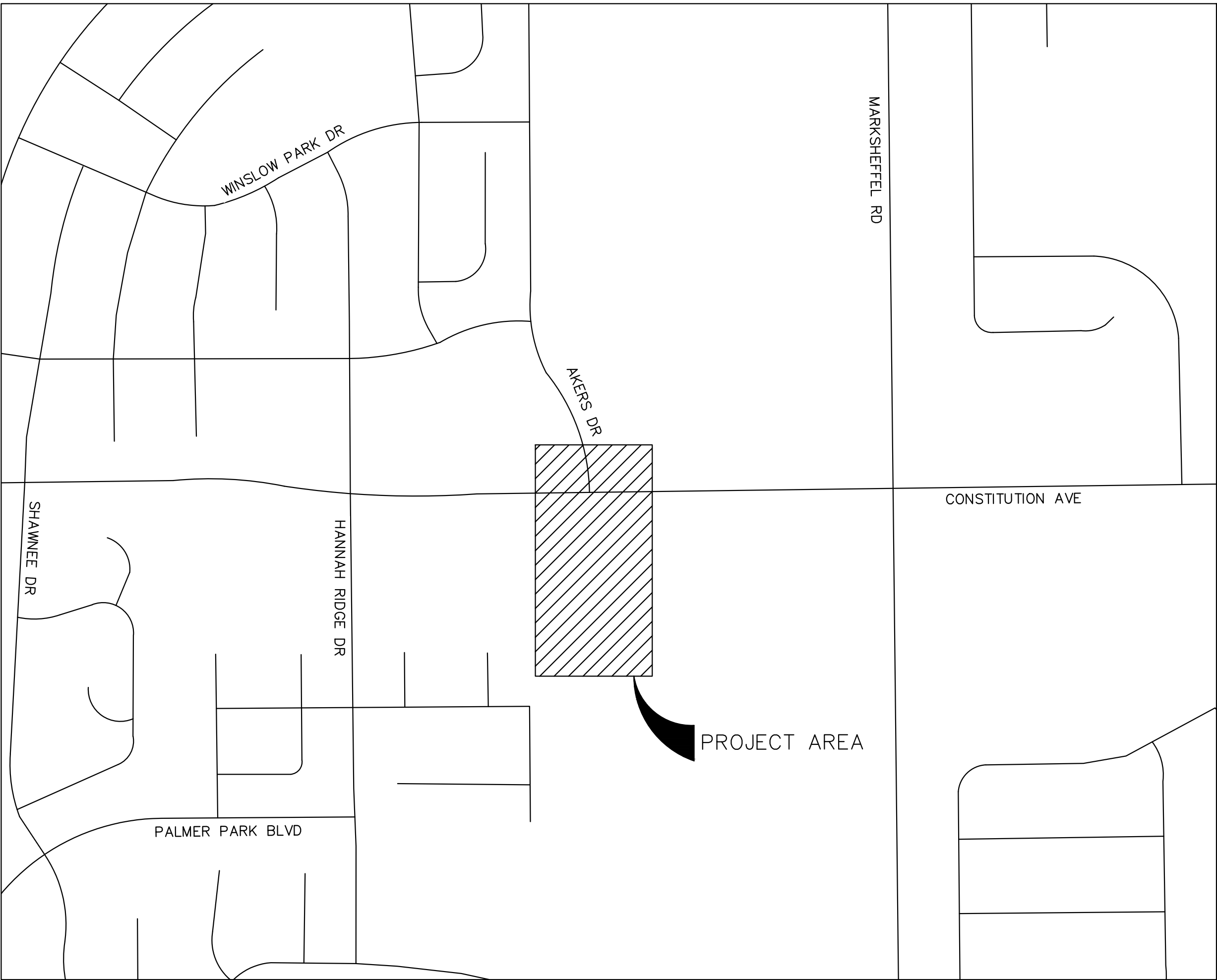
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE
VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE
EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2
YEARS, THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT
OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTORS
DISCRETION.

JENNIFER IRVINE, P.E.
COUNTY ENGINEER / ECM ADMINISTRATOR

DATE _____

Please add the following missing
statement:
Filed in accordance with the requirements
of the El Paso County Land Development
Code, Drainage Criteria Manual, Volumes
1 and 2, and Engineering Criteria Manual
as amended

Note added



VICINITY MAP
N.T.S



Provide El Paso County standard details on the plans for
the curb and gutter, PED ramps, Cross Pan, plowable
nose median (details SD2-20, SD 2-40, SD 2-41, SD
2-42, SD 2-26, SD 2-22) and any others that apply

El Paso County std details provided

SHEET INDEX:

- 1 COVER SHEET
- 2 GENERAL NOTES
- 3 HORIZONTAL CONTROL
- 4-5 TYPICAL SECTION
- 6 REMOVAL AND RESET PLAN
- 7 ROADWAY PLAN
- 8 GRADING PLAN
- 9-10 ROADWAY PROFILES
- 11 SIGNING AND STRIPING

classification revised to
urban non-residential
collector

Please revise to
Urban Non-residential
collector

speeds revised to match criteria. Note that
due to roundabout geometrics restricting the
speed along Akers, there will be areas where
the proposed roadway does not match
criteria. Design deviations will be submitted.

Please submit a
deviation request for the
design & posted speed
less than what is
indicated per criteria

DESIGN DATA	AKERS DR	ACCESS RD
ADT (2023)	1100	N/A
ADT (2045)	1700	N/A
DESIGN SPEED	35 MPH	25 MPH
POSTED SPEED	30 MPH	25 MPH
ROAD CLASSIFICATION	URBAN COLLECTOR	PRIVATE ACCESS
MINIMUM RADIUS OF CURVE	N/A	1170'
MINIMUM K-VALUE (CREST/SAG)	44'/64'	19'/37'
MINIMUM VERTICAL GRADE	0.5%	0.5%
MINIMUM SSD	305'	200'
CLEAR ZONE DISTANCE	12'-14"	N/A

SEE DESIGN DOCUMENTATION MEMORANDUM DATED 3/10/2022 FOR ADDITIONAL DETAILS
OF ROUNDABOUT GEOMETRICS.

Please submit for
review

memo submitted

The min. centerline
curve radius is 565'
for urban non
residential collector.
Please revise

Design criteria revised to
show minimum

file number added to plans

Add PCD File No. SF226

Kimley»Horn

2022 KIMLEY-HORN AND ASSOCIATES, INC.
4582 South Ulster Street, Suite 1500
Denver, CO 80237 (303) 228-2300

DESIGNED BY: SMH
DRAWN BY: TL
CHECKED BY: CEH
DATE: 4/4/2022

AKERS DR & ACCESS ROAD ROUNDABOUT
EL PASO COUNTY, COLORADO
ROADWAY CONSTRUCTION DOCUMENTS
COVER SHEET

PRELIMINARY
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Kimley»Horn
Kimley-Horn and Associates, Inc.

PROJECT NO.
096481004

SHEET

1



Know what's below.
Call before you dig.



STANDARD NOTES FOR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS

- | | |
|---|--|
| <p>STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCES SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF SITE WATERS, INCLUDING WETLANDS.</p> | <p>17. THE QUANTITY OF MATERIAL STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN A N ORDERLY SEQUENCE. ALL MATERIAL STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.</p> |
| <p>2. NOT WITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.</p> | <p>18. NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.</p> |
| <p>3. A SEPARATE STORMWATER MANAGEMENT PLAN (SWMP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED STORMWATER MANAGER, SHALL BE LOCATED ON SITE AT ALL TIMES AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.</p> | <p>19. BULK STORAGE STRUCTURES FOR PETROLEUM PRODUCTS AND OTHER CHEMICALS SHALL HAVE ADEQUATE PROTECTIONS SO AS TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.</p> |
| <p>4. ONCE THE ESQCP HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL BMPs AS INDICATED ON THE GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELP PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY DSD INSPECTIONS STAFF.</p> | <p>20. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCHLINE.</p> |
| <p>5. SOIL EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED WITHIN 21 CALENDAR DAYS AFTER FINAL GRADING, OR FINAL EARTH DISTURBANCE, HAS BEEN COMPLETED. DISTURBED AREAS AND STOCKPILES WHICH ARE NOT AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS SHALL ALSO BE MULCHED WITHIN 21 DAYS AFTER INTERIM GRADING. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE SEEDED. ALL TEMPORARY SOIL EROSION CONTROL MEASURES AND BMPs SHALL BE MAINTAINED UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND ESTABLISHED.</p> | <p>21. INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.</p> |
| <p>6. TEMPORARY SOIL EROSION CONTROL FACILITIES SHALL BE REMOVED AND EARTH DISTURBANCE AREAS GRADED AND STABILIZED WITH PERMANENT SOIL EROSION CONTROL MEASURES PURSUANT TO STANDARDS AND SPECIFICATION PRESCRIBED IN THE DCM VOLUME II AND THE ENGINEERING CRITERIA MANUAL (ECM) APPENDIX I.</p> | <p>22. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.</p> |
| <p>7. ALL PERSONS ENGAGED IN EARTH DISTURBANCE SHALL IMPLEMENT AND MAINTAIN ACCEPTABLE SOIL EROSION AND SEDIMENT CONTROL MEASURES INCLUDING BMPs IN CONFORMANCE WITH THE EROSION CONTROL TECHINICAL STANDARDS OF THE DRAINAGE CRITERIA MANUAL (DCM) VOLUME II AND IN ACCORDANCE WITH THE STORMWATER MANAGEMENT PLAN (SWMP).</p> | <p>23. PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.</p> |
| <p>8. ALL TEMPORARY EROSION CONTROL FACILITIES INCLUDING BMPs AND ALL PERMANENT FACILITIES INTENDED TO CONTROL EROSION OF ANY EARTH DISTURBANCE OPERATIONS, SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS, THE SWMP AND THE DCM VOLUME II AND MAINTAINED THROUGHOUT THE DURATION OF THE EARTH DISTURBANCE OPERATION.</p> | <p>24. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.</p> |
| <p>9. ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY REDUCE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME.</p> | <p>25. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY _____ AND SHALL BE CONSIDERED A PART OF THESE PLANS.</p> |
| <p>10. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE DESIGNED TO LIMIT THE DISCHARGE TO A NON-EROSIVE VELOCITY.</p> | <p>26. AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OF APPLICATION MATERIALS CONTACT:</p> |
| <p>11. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.</p> | <p>COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WOOD – PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT</p> |
| <p>12. EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAT 3:1.</p> | <p>Please be aware that since a GEC plan is not part of these construction documents these notes are not needed.</p> |
| <p>13. BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WATER MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMPs MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.</p> | <p>If you choose to include them then please update to the current El Paso County GEC notes as shown on the submitted GEC plan</p> |
| <p>14. VEHICLE TRACING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.</p> | <p>GEC notes removed</p> |
| <p>15. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATOR REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.</p> | |
| <p>16. THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.</p> | |

Please provide El Paso
County Standard
Construction Notes and
signing and stripping notes
on the plans



Standard notes provided

Please be aware that since a GEC plan is not part of these construction documents these notes are not needed.

If you choose to include them then please update to the current El Paso County GEC notes as shown on the submitted GEC plan

GEC notes removed

Kimley»»Horn
2022 KIMLEY-HORN AND ASSOCIATES, INC.
4582 South Ulster Street, Suite 1500
Denver, CO 80237 (303) 228-2300

DESIGNED BY: SMH
DRAWN BY: TL
CHECKED BY: CEH
DATE: 4/4/2022

AKERS DR & ACCESS ROAD ROUNDABOUT
EL PASO COUNTY, COLORADO
ROADWAY CONSTRUCTION DOCUMENTS
GENERAL NOTES

PRELIMINARY
FOR REVIEW ONLY
NOT FOR
CONSTRUCTION
Kimley»Horn
Kimley-Horn and Associates, Inc.

PROJECT NO.
096481004

SHEET

2

\\kimley-horn.com\mnt_den1\Civil\096481004 - El Paso Constitution\CADD\PlanSheets\RAB\Typical Sections.dwg Skeehan, Dan 4/4/2022 4:39 PM



Know what's below.
Call before you dig.



sidewalk provided on west side of roadway

Provide sidewalk on the west side of the roadway

PROPOSED ROW

5' BENCH

ETW

Please provide an abbreviations list or spell this out.

Abbreviations list provided

DEPARTURE LANE WIDTH VARIES 15'-18'

Provide ROW length

ROW width labeled

MAINLINE \varnothing VAR 6'-14'

SPLITTER ISLAND WIDTH VARIES 9' MIN

ETW

APPROACH LANE WIDTH VARIES 15'-18'

ETW

5'

8' SIDEWALK

PROPOSED ROW

2.0'

2:1 MAX

EL PASO COUNTY TYPE A CURB AND GUTTER

EL PASO COUNTY TYPE B CURB AND GUTTER

HARDSCAPE OR LANDSCAPE

EL PASO COUNTY TYPE B CURB AND GUTTER

ASPHALT PAVEMENT SEE GEOTECH REPORT FOR ADDITIONAL DETAILS

EL PASO COUNTY TYPE A CURB AND GUTTER

PROPOSED GUARDRAIL SEE SHEET 7 FOR EXACT LOCATIONS AND DETAILS

SOUTH LEG TYPICAL SECTION APPROACH STA 100+25 - 101+34

Median treatment revised to show patterned concrete per SD_2-21

Please delete. Median shall be patterned concrete per detail SD_2-21. Please indicate this on the cross-section

Median minimum width revised on typical

per the the plans it appears that this should be 6' min. as the curb and gutters alone account for 3'. Revise accordingly

PROPOSED ROW

0.5'

8' SIDEWALK

5'

ETW

APPROACH LANE 15'

MAINLINE \varnothing VAR 3'-10'

SPLITTER ISLAND WIDTH VARIES 3' MIN

ETW

DEPARTURE LANE 15'

ETW

5'

8' SIDEWALK

PROPOSED ROW

0.5'

4:1

4:1

EL PASO COUNTY TYPE A CURB AND GUTTER

EL PASO COUNTY TYPE B CURB AND GUTTER

HARDSCAPE OR LANDSCAPE

EL PASO COUNTY TYPE B CURB AND GUTTER

ASPHALT PAVEMENT SEE GEOTECH REPORT FOR ADDITIONAL DETAILS

EL PASO COUNTY TYPE A CURB AND GUTTER

NORTH LEG TYPICAL SECTION APPROACH STA 102+27 - 102+73

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AKERS DR & ACCESS ROAD ROUNDABOUT
EL PASO COUNTY, COLORADO
ROADWAY CONSTRUCTION DOCUMENTS
TYPICAL SECTIONS

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Kimley-Horn and Associates, Inc.

PROJECT NO.
096481004

SHEET

4

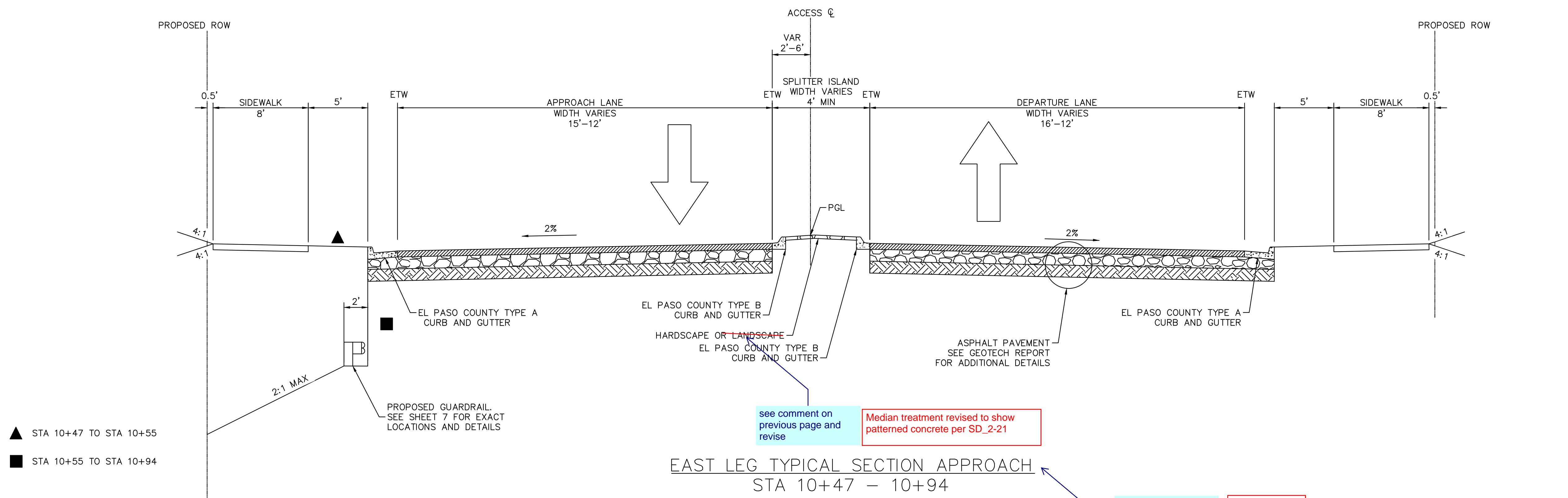
\\kimley-horn.com\mnt_den1\DEV_Civil\096481004 - El Paso Constitution\CADD\PlanSheets\RAB\Typical Sections.dwg Skeehan, Dan 4/4/2022 4:39 PM



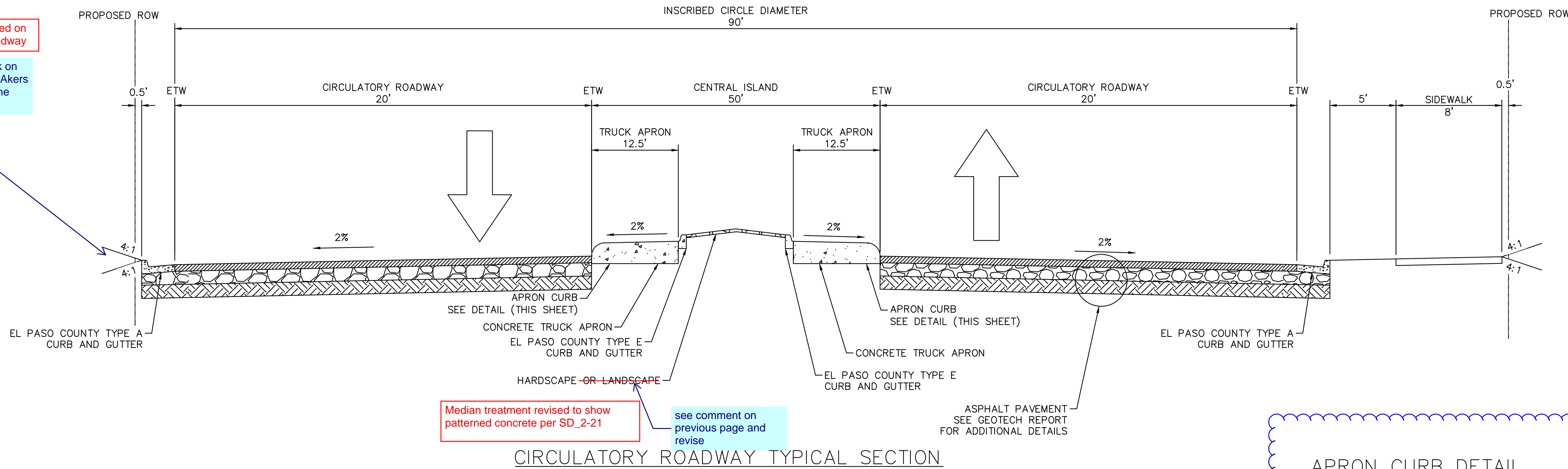
Know what's below.
Call before you dig.



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



sidewalk provided on west side of roadway
provide sidewalk on the west side of Akers Dr including at the roundabout



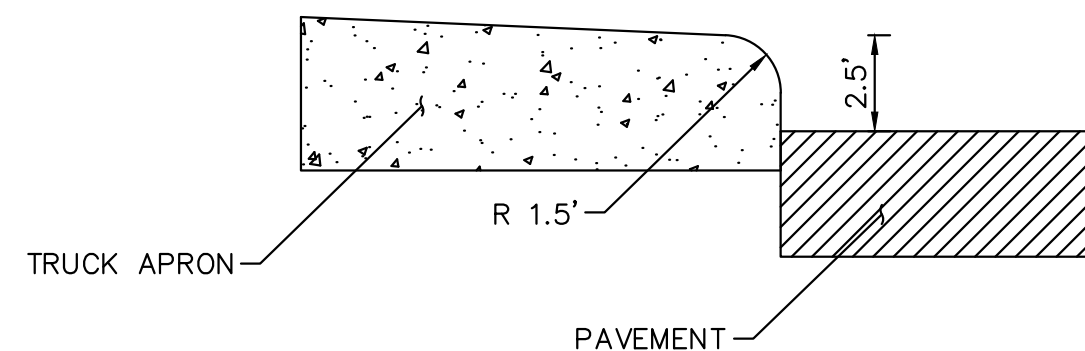
Median treatment revised to show patterned concrete per SD_2-21

see comment on previous page and revise

Apron detail revised to be consistent with the Lorson Ranch roundabout

Please revise the apron detail as a 2.5' tall curb would not be supported. Please refer to Lorson Ranch project for truck apron example and other roundabout details/examples (PCD project file no. CDR183 pg 27-29, <https://epcdevplanreview.com/Public/ProjectDetails/102862>)

APRON CURB DETAIL



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TYPICAL SECTION

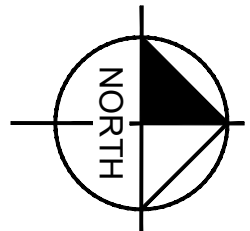
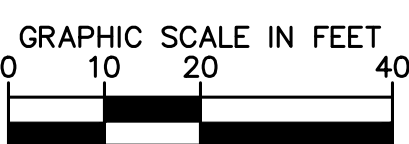
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SHEET

5

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Detectable warning surfaces provided on North and South Leg of the roundabout. No detectable warning is provided on the east leg of the roundabout, as revised direction resulted in a fully mountable splitter island.

Per ECM 6.3.5.E detectable warning surfaces are required when cut through pedestrian refuge island is 6 feet wide or greater, please provide

4	25.17	S5°36'24.44"W
5	9.13	S0°06'10.00"E
6	92.70	S0°06'10.00"E
7	63.09	S0°06'10.00"E
8	13.55	N62°29'39.15"W
9	19.02	S0°06'10.00"E
10	25.17	S5°48'44.44"E
11	24.16	N60°06'52.58"W
12	25.61	S60°06'52.58"E
13	91.60	S60°06'52.58"E
14	20.39	S16°50'08.69"W
15	53.13	S0°06'10.01"E
16	95.64	S89°57'38.64"W
17	13.90	S56°48'02.55"W
18	100.66	S0°06'10.00"E
19	174.09	N0°06'10.00"W
20	53.13	S0°06'10.01"E
21	14.71	S16°50'08.69"W
22	108.10	S0°06'10.00"E
23	28.17	S13°39'46.79"E
24	176.63	S0°06'10.00"E
25	176.63	S0°06'10.00"E
26	10.21	S5°48'44.44"E
27	11.64	S0°06'10.00"E
28	15.30	N40°39'45.73"E
29	10.03	N85°52'42.91"E
30	11.64	S0°06'10.00"E
31	10.21	S5°48'44.44"E
32	100.66	S0°06'10.00"E
33	20.39	S16°50'08.69"W
34	53.13	S0°06'10.01"E
36	95.60	S89°57'38.64"W
37	85.60	N89°57'38.64"E
38	10.44	S73°20'36.19"E
40	20.39	S16°50'08.69"W
42	9.08	S0°06'10.00"E
43	10.16	S79°52'51.51"E
44	125.21	S60°06'52.58"E
45	126.38	S60°06'52.58"E
46	10.25	S79°52'51.51"E
47	6.57	S89°55'54.53"W
48	100.66	N0°06'10.00"W

END CDOT TYPE 3K TERMINAL END SECTION STA:10+81.02 OFF:123.32"RT

W-BEAM GUARDRAIL STA:10+54.88 OFF:80.75"RT BEGIN CDOT TYPE 3K TRANSITION STA:10+48.57 OFF:69.98"RT

END CDOT TYPE 3J TRANSITION STA:10+48.79 OFF:61.55"RT BEGIN CDOT TYPE 3J TRANSITION (R = 8.5') STA:10+71.69 OFF:23.81"RT

END CDOT TYPE 3J TRANSITION STA:10+80.67 OFF:19.15"RT W-BEAM GUARDRAIL STA:11+14.80 OFF:14.39"RT

185 LF OF W-BEAM GUARDRAIL SEE NOTE 2&3 FOR ADDITIONAL DETAILS BEGIN CDOT TYPE 3D TERMINAL END SECTION STA:11+27.30 OFF:14.41"RT

END CDOT TYPE 3D TERMINAL END SECTION END W-BEAM GUARDRAIL STA:11+39.80 OFF:14.44"RT

316 LF EL PASO COUNTY TYPE A CURB AND GUTTER

61 SY SOD

12+00

11+00

10+00

9+00

8+00

7+00

6+00

5+00

4+00

3+00

2+00

1+00

0+00

100+00

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WEST FLOWLINE POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
100	100+25.03	-26.00'	6431.33'	PI
101	100+36.66	-26.00'	6431.57'	PT
102	100+66.66	-23.00'	6432.15'	PT
103	101+28.36	-31.61'	6433.61'	PC
104	101+62.50	-43.80'	6434.47'	PT
105	101+69.32	-45.56'	6434.55'	PC
106	102+06.04	-40.29'	6434.84'	PT
107	102+14.41	-36.08'	6434.90'	PC
108	102+46.93	-23.34'	6435.15'	RMP
109	102+56.07	-21.44'	6435.21'	RMP
110	102+80.83	-19.86'	6435.62'	PT
111	104+57.12	-20.00'	6440.31'	PC
112	104+67.24	-22.14'	6440.30'	RMP
113	104+73.95	-26.51'	6440.29'	RMP
114	104+82.12	-45.00'	6440.26'	PT
115	104+82.12	-54.23'	6440.24'	ME/PI
116	104+79.79	-18.00'	6440.31'	CROSS PAN FL

SOUTH SPLITTER ISLAND POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
200	100+25.00	-5.00'	6431.89'	PI
201	101+15.95	-9.06'	6433.69'	PC
202	101+37.02	-14.12'	6434.22'	PCC
203	101+38.06	-12.75'	6434.28'	PCC
204	101+34.39	7.91'	6434.21'	PCC
205	101+33.09	8.92'	6434.13'	PCC
206	100+88.30	4.87'	6433.05'	PT
207	100+25.00	5.00'	6431.89'	PI

SOUTH EAST FLOWLINE POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
300	100+25.03	26.00'	6431.33'	PI
301	100+34.08	26.00'	6431.99'	PC
302	100+46.60	25.00'	6431.76'	PT
303	100+56.76	23.98'	6431.95'	PC
304	100+76.45	23.00'	6432.33'	PT
305	100+89.19	22.85'	6432.67'	PC
306	101+45.79	47.36'	6434.12'	PCC
307	101+50.54	58.65'	6434.11'	RMP
308	101+54.44	67.45'	6434.06'	RMP
309	101+69.66	137.61'	6433.71'	PI

SE SIDEWALK POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
400	101+37.95	48.70'	6434.72'	SWK
401	101+26.21	50.15'	6434.88'	SWK
402	101+40.66	56.86'	6434.69'	RMP
403	101+26.92	53.53'	6434.87'	RMP
404	101+28.71	62.71'	6434.74'	RMP
405	101+43.67	65.83'	6434.58'	RMP

EAST SPLITTER ISLAND POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
500	101+70.81	46.37'	6434.51'	PC
501	101+74.65	62.29'	6434.45'	RMP
502	101+76.36	70.70'	6434.42'	RMP
503	101+82.79	93.20'	6434.34'	PCC
504	101+84.78	92.99'	6434.35'	PT
505	101+83.75	71.54'	6434.51'	RMP
506	101+83.46	63.42'	6434.57'	RMP/PC
507	101+85.14	47.09'	6434.69'	PCC
508	101+84.09	45.89'	6434.67'	PCC
509	101+71.97	45.13'	6434.57'	PCC

CENTER ISLAND FL POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
600	101+57.04	-2.28'	6434.52'	PCC
601	101+78.70	23.90'	6434.63'	PCC
602	102+04.78	1.44'	6435.12'	PCC
603	101+82.27	-23.96'	6434.89'	PCC

NORTH SPLITTER ISLAND POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
800	102+27.15	-8.78'	6435.37'	PC
801	102+23.86	12.44'	6435.35'	PCC
802	102+24.59	13.92'	6435.36'	PCC
803	102+41.73	12.52'	6435.57'	RMP
804	102+41.46	6.24'	6435.68'	RMP
805	102+49.14	6.95'	6435.76'	RMP
806	102+49.12	12.36'	6435.65'	RMP
807	102+73.18	12.67'	6435.94'	PCC
808	103+08.43	10.03'	6436.81'	PCC
809	103+35.81	3.42'	6437.83'	PCC
810	103+47.77	2.00'	6438.25'	PT
811	104+55.87	2.00'	6440.81'	PC
812	104+55.85	-2.00'	6440.81'	PT
813	102+92.08	-2.00'	6436.49'	PT
814	102+81.68	-1.88'	6436.20'	PC
815	102+51.13	-3.98'	6435.73'	RMP
816	102+49.70	1.99'	6435.86'	RMP
817	102+41.78	1.25'	6435.78'	RMP
818	102+43.04	-5.65'	6435.60'	RMP
819	102+28.57	-9.78'	6435.39'	PCC

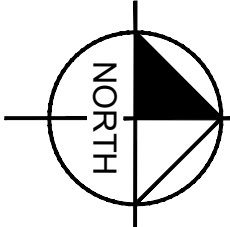
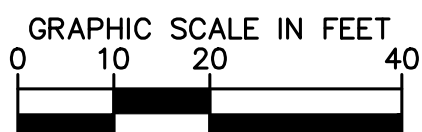
NW SIDEWALK POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
700	102+48.35	-28.73'	6435.61'	SWK
701	102+50.65	-36.56'	6435.77'	SWK
703	102+57.86	-26.75'	6435.82'	SWK
704	102+60.69	-34.25'	6435.83'	SWK
705	102+80.52	-25.35'	6436.22'	SWK
706	102+80.02	-33.34'	6436.38'	SWK
707	104+57.12	-25.50'	6440.88'	SWK
708	104+57.12	-33.50'	6441.02'	SWK
709	104+64.19	-26.83'	6440.76'	SWK
710	104+59.66	-33.78'	6440.93'	SWK
711	104+70.89	-31.20'	6440.75'	SWK
712	104+66.36	-38.15'	6440.92'	SWK

NORTH EAST FLOWLINE POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
900	102+02.57	160.68'	6433.58'	PI
901	101+98.87	73.67'	6434.20'	RMP
902	101+98.65	65.56'	6434.33'	RMP/PC
903	102+22.03	32.40'	6434.96'	PCC
904	102+42.40	30.51'	6435.14'	RMP
905	102+49.05	30.36'	6435.20'	RMP
906	103+03.28	32.00'	6436.05'	PT
907	104+57.07	32.00'	6440.11'	PC
908	104+67.49	34.28'	6440.21'	RMP
909	104+74.14	38.73'	6440.29'	RMP
910	104+82.07	57.00'	6440.47'	PT
911	104+81.97	152.64'	6441.33'	PI/ME
912	104+79.97	29.99'	6440.41'	CROSS PAN FL

NE SIDEWALK POINT TABLE				
POINT #	MAINLINE CL STATION	OFFSET	ELEVATION	DESCRIPTION
1000	102+04.04	90.98'	6434.54'	SWK
1001	102+09.02	90.83'	6434.70'	SWK
1002	102+03.65	74.47'	6434.67'	RMP
1003	102+03.51	66.34'	6434.79'	RMP
1004	102+09.00	75.83'	6434.83'	RMP
1005	102+09.01	67.69'	6434.95'	RMP
1006	102+13.15	53.17'	6435.46'	SWK
1007	102+08.58	47.99'	6435.30'	SWK
1008	102+23.51	45.77'	6435.72'	SWK
1009	102+22.66	37.85'	6435.56'	SWK
1010	102+42.58	36.00'	6435.60'	RMP
1011	102+42.82	44.03'	6435.76'	RMP
1012	102+49.03	35.86'	6435.65'	RMP
1013	102+49.01	43.89'	6435.82'	RMP
1014	102+56.74	43.82'	6436.02'	SWK
1015	102+57.10	35.82'	6435.86'	SWK
1016	104+57.07	37.50'	6440.70'	SWK
1017	104+57.07	45.50'	6440.86'	SWK
1018	104+64.38	38.92'	6440.68'	RMP
1019	104+71.02	43.38'	6440.76'	RMP
1020	104+59.75	45.82'	6440.84'	RMP
1021	104+66.40	50.27'	6440.92'	RMP
1022	104+76.57	57.00'	6441.07'	SWK
1023	104+68.57	56.99'	6441.23'	SWK

NOTES:
1. ALL STATIONING IS FROM AKERS CL UNLESS OTHERWISE STATED.

LEGEND:
- - - - - TOP OF SLOPE
- . - . - . TOE OF SLOPE



callout is not a cross slope, and includes some longitudinal slope. Label revised to clarify cross slope percentage.

Provide reason why these cross slopes are greater than 2%

Provide reason why these cross slopes are greater than 2%

callout is not a cross slope, and includes some longitudinal slope. Label revised to clarify cross slope percentage.

Provide slopes at ramps and landings and cross slopes at ADA path to ensure compliance with ECM Ch6 criteria, typical at all ramps

ADA slopes provided at ramps

SEE ON-SITE PLANS



Know what's below.
Call before you dig.



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

Kimley»Horn

2022 KIMLEY-HORN AND ASSOCIATES, INC.
4582 South Ulster Street, Suite 1500
Denver, CO 80237 (303) 228-2300

DESIGNED BY: SMH
DRAWN BY: TL
CHECKED BY: CEH
DATE: 4/4/2022

AKERS DR & ACCESS ROAD ROUNDABOUT
EL PASO COUNTY, COLORADO
ROADWAY CONSTRUCTION DOCUMENTS
GRADING PLAN

PRELIMINARY
FOR REVIEW ONLY
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Kimley»Horn
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PROJECT NO.
096481004

SHEET

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BY: DATE: APPR:

REVISION

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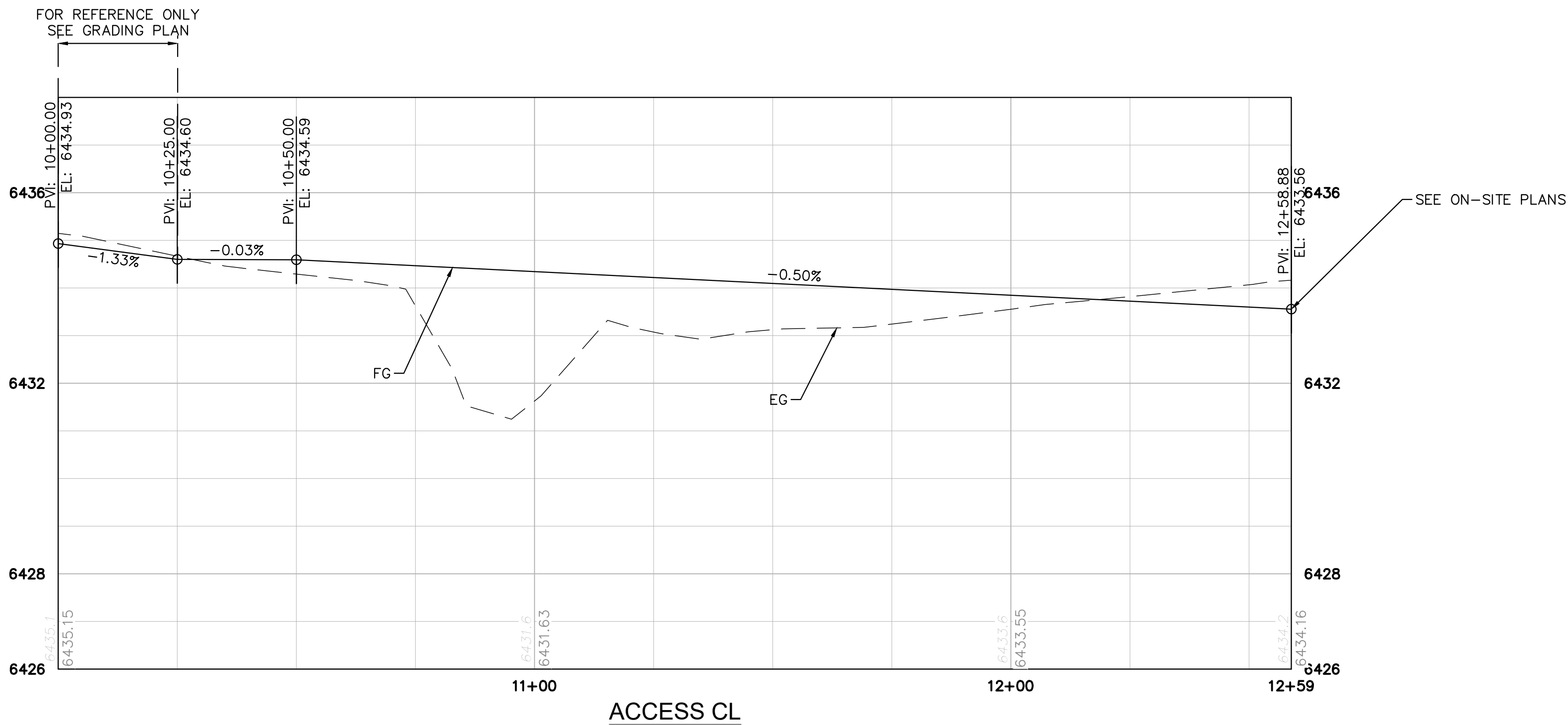
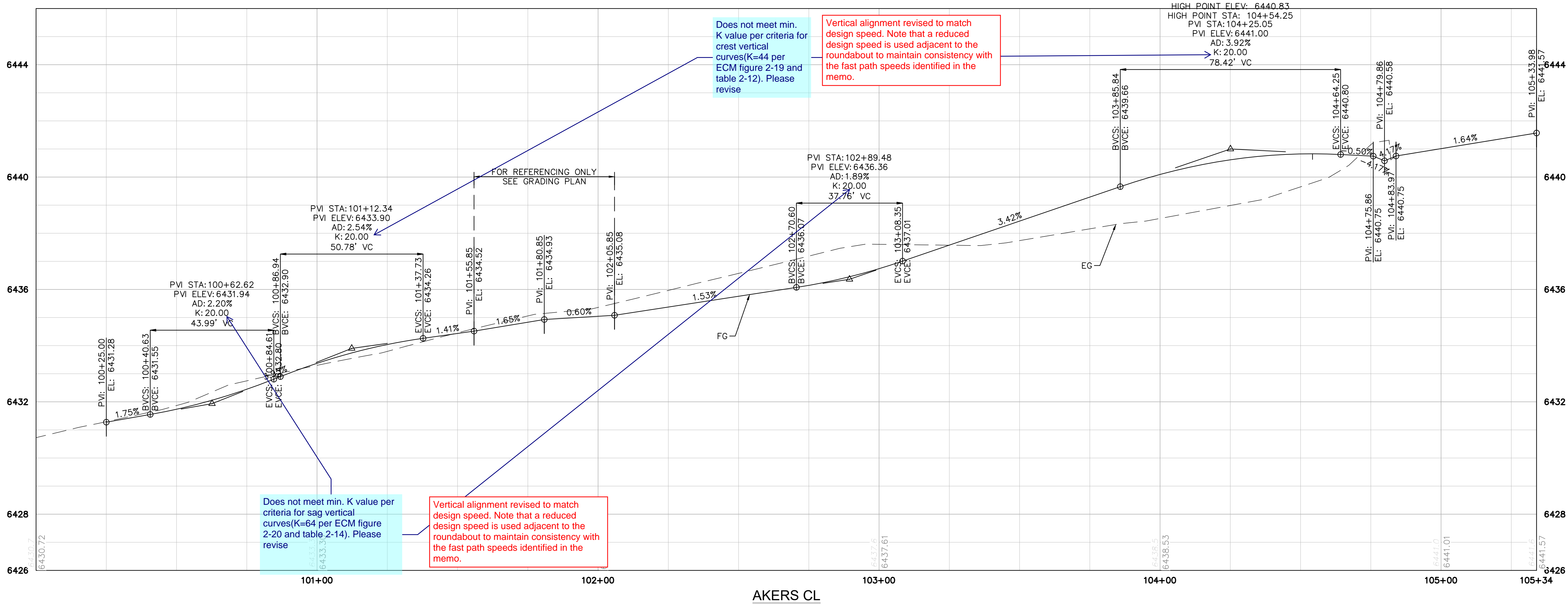
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AKERS DR & ACCESS ROAD ROUNDABOUT
EL PASO COUNTY, COLORADO
ROADWAY CONSTRUCTION DOCUMENTS
ROADWAY PROFILES



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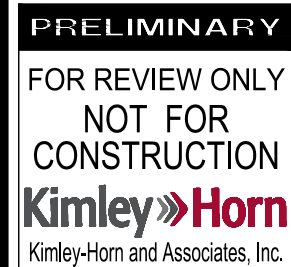
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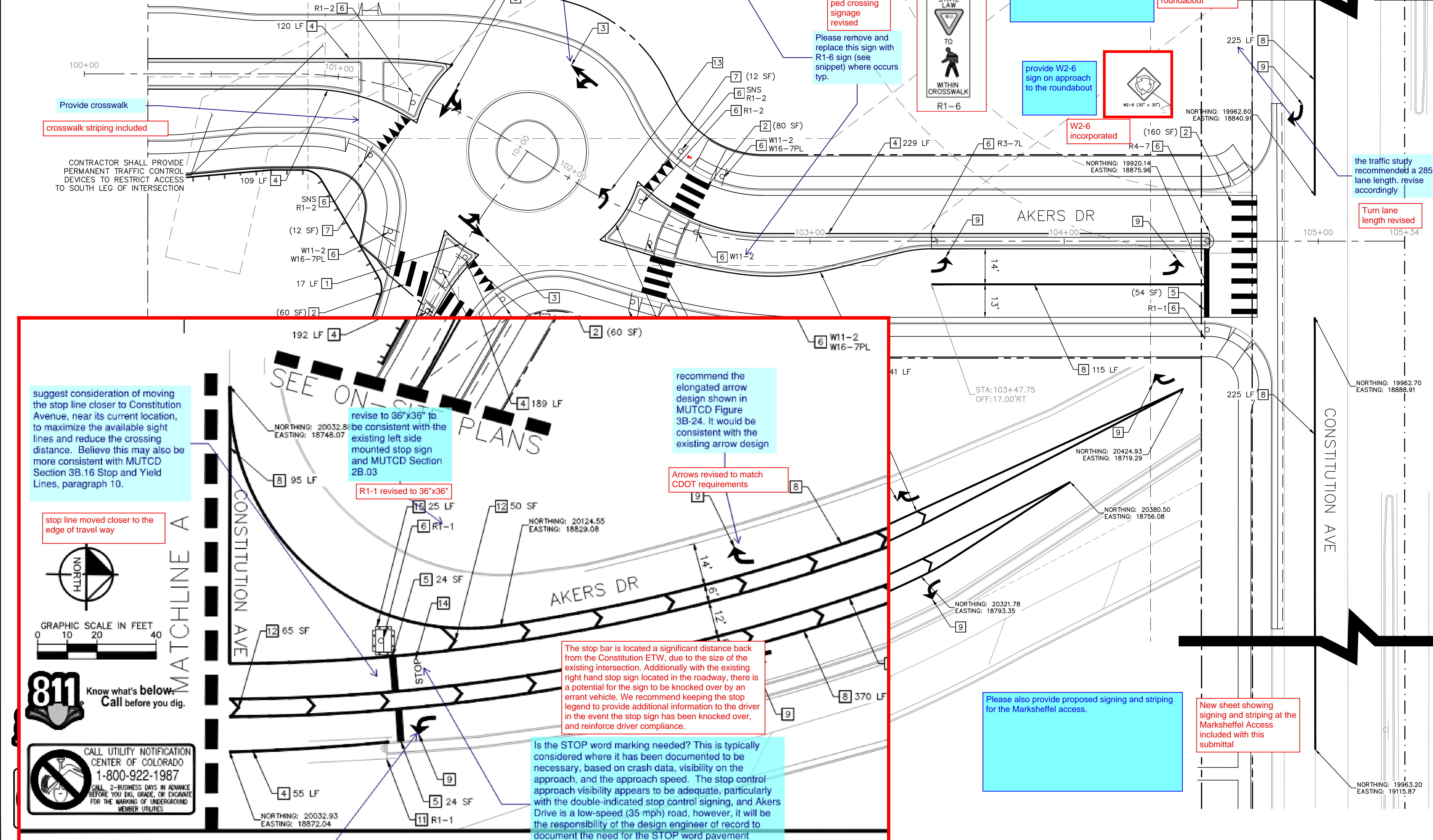
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**CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987**
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES



SHEET

1	EDGE LINE: SOLID WHITE, 4" WIDE (EPOXY)	8	CHANNELIZING LINE: SOLID WHITE, 8" WIDE (EPOXY)
2	CROSSWALK MARKING: 20 SF, 2"x10" SOLID WHITE, SPACING AS NEEDED PER AND WHEEL PATH (THERMOPLASTIC)	9	TURN ARROW: WHITE, 16.1 SF (PER CDOT S-627-1) (THERMOPLASTIC)
3	THRU-TURN ARROW: WHITE, 27.5 SF (PER CDOT S-627-1) (THERMOPLASTIC)	10	RESET SIGN ON NEW POST
4	EDGE LINE: SOLID YELLOW, 4" WIDE (EPOXY)	11	EXISTING SIGN AND POST TO REMAIN
5	STOP BAR: WHITE, 2' WIDE (THERMOPLASTIC)	12	CHEVRON: WHITE, 8" WIDE, 5 SF, 25' SPACING (THERMOPLASTIC)
6	NEW SIGN PANEL WITH NEW POST	13	TURN ARROW: WHITE, 16.1 SF (PER CDOT S-627-1) (THERMOPLASTIC)
7	YIELD TEETH: WHITE TRIANGLES, 2' WIDE AND 3' TALL, 3 SF (THERMOPLASTIC)	14	STOP MARKING: WHITE, 8' TALL, 7'-4" WIDE (PER CDOT S-627-1) (THERMOPLASTIC)
		15	RUBBER CURB: 1' WIDE



MATCHLINE A

Kimley»Horn

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4582 South Ulster Street, Suite 1500
Denver, CO 80237 (303) 228-2300

DESIGNED BY: SMH
DRAWN BY: TL
CHECKED BY: CEH
DATE: 4/4/2022

**SDR & ACCESS ROAD ROUNDABOUT
EL PASO COUNTY, COLORADO
DWAY CONSTRUCTION DOCUMENTS
SIGNING AND STRIPING**

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SHEET

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