



LSC TRANSPORTATION CONSULTANTS, INC.
2504 East Pikes Peak Avenue, Suite 304
Colorado Springs, CO 80909
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

MEMORANDUM

DATE: April 16, 2021

TO: Arthur Gonzales – Access Manager – CDOT R2

CC: John Green, Planner – EPC Planning & Community Development

FROM: Jeffrey C. Hodsdon, P.E. - LSC Transportation Consultants, Inc.

SUBJECT: Waterview North Sketch Plan Amendment
RE: Responses to CDOT Comments
PCD File No. SKP202.
LSC #204210

LSC Transportation Consultants, Inc. has prepared this memo in response to the February 5, 2021 Comment Letter prepared by CDOT – Region 2 – Permits.

The following summarizes LSC reports and responses to CDOT comments for this project:

LSC Reports Dates for this Project:

- May 29, 2020
- SEPTEMBER 25, 2020
- NOVEMBER 17, 2020 MINOR REVISION to the SEPTEMBER 25, 2020 Report

ALL PREVIOUS COMMENTS LISTED BELOW ARE FROM PAST SUBMITTALS AND HAVE NOT BEEN ADDRESSED WITH THE NEW AND LATEST SUBMITTAL. PLEASE ADDRESS WITH THE DEVELOPER.

LSC Response: This memo addresses the comments from these CDOT letters.

NOTE: LSC had prepared responses (9/27/2020) to CDOT's August 3, 2020 comment letter. A PDF file was included with the other documents for resubmittal at the end of September 2020. We will investigate the process to understand why this document did not reach your office. The November resubmittal of the November 17, 2020 report was a very minor update to the September 25th version of the report to address some El Paso County comments.

Planning Comments below from August 3, 2020 and November 2, 2020 and are still valid and apply.

- *CDOT Access Dept. comments are as follows:*

- Previous comments from Trails at Aspen Ridge (Springs East at Waterview) dated June 4, 2020 still has open comments that would apply to this development.

LSC Response: See attachment with LSC responses to these comments from the June 4, 2020 Trails at Aspen Ridge comment letter. As the comment indicates these are "open comments that would apply to this development [Waterview North], responses provided herein are intended for this Waterview North project and are in the context of the current Waterview North application with El Paso County).

- **A State Highway Access Permit will be required for the connection of Bradley Road east to SH21A between the development, El Paso County and CDOT. El Paso County or the Developer will be the Permittee/Applicant. This need is to evaluate the traffic impacts and record any further roadway improvements or escrows needed at this location.**

LSC Response: Comment Noted. This project is currently only at the Sketch Plan stage, and as with other development projects in El Paso County at the Sketch Plan stage, the submittal of an access permit application would be premature at this point. An access permit will be submitted at the Preliminary Plan/Plat stage of the process.

- It is recommended that no traffic signal be allowed at Bradley Rd./Legacy Hill Dr. Full movement is discouraged. **A possible roundabout circle may work at this location.**

LSC Response: Analysis of long-term volumes indicate a roundabout would operate over-capacity in the long term. See attached Synchro report.

- Escrow funds will be required as a term and condition of Access Permit for a portion of the future SH21A(Powers Blvd.) / Bradley Rd. interchange based on a pro-rata share determined by the traffic impact study. **Please add graph or chart.**

LSC Response: This requirement was added to the "Improvements Table" of the report beginning with the September 2020 version (it is the second item under "Other Improvements (CDOT)") which reads: "Per CDOT comments dated 8/3/2020, escrow funds will be required as a term and condition of Access Permit for a portion of the future SH21A(Powers Blvd.) / Bradley

Rd. interchange based on a pro-rata share determined by the traffic impact study."

This project is at the Sketch Plan stage and as with other development projects in El Paso County at the Sketch Plan stage, the submittal of an access permit application would be premature at this point. LSC suggests this graph/chart be provided at the Preliminary Plan/Plat stage of the process with the Preliminary Plan/Plat traffic study (which will be required) as part of the access permit process at that time.

o There will not be any allowance of direct access along the CDOT easterly right of way boundary and the westerly boundary of the development. The only access points will be from local roadways from Bradley Rd. and proposed Legacy Hill Drive.

LSC Response: Comment Noted.

- CDOT Traffic Operations Engineer has reviewed the Traffic Impact Study dated May 29, 2020 by LSC Transportation Consultant, Inc. Their comments are as follows:

o The report states that queuing reports are attached; however, the queuing reports were not found still. Please provide.

LSC Response: A copy of these queuing reports is attached to this memo. Note: the queuing reports were included in both the September 25, 2020 and November 2020 (minor county update) TIS report versions (on page 154 of the 160 page PDF).

o The northbound Powers Blvd right turn to Bradley Rd acceleration lane shall be removed or reconfigured to provide necessary sight distance decisions for traffic bound for the proposed access point across from Legacy Hill Drive.

LSC Response: Comment Noted. This requirement was added to the "Improvements Table" of the report beginning with the September 2020 version (it is the first item under "Other Improvements (CDOT)" which reads: "Per CDOT comments dated 8/3/2020, the northbound Powers Blvd right turn onto Bradley Rd. acceleration lane shall be reconfigured to provide necessary sight distance decisions for left turning traffic northbound onto proposed Legacy Hill Drive. (LSC suggests this be addressed with the Preliminary Plan/Plat and/or through the access permit process - no access permit will be submitted at the Sketch Plan stage of the process)."

HCM 6th Roundabout
2: Legacy Dr & Bradley Rd

2040 Total Traffic
PM Peak Hour

Intersection												
Intersection Delay, s/veh	33.1											
Intersection LOS	D											
Approach	EB			WB			NB			SB		
Entry Lanes	2			2			2			2		
Conflicting Circle Lanes	2			2			2			2		
Adj Approach Flow, veh/h	1865			1359			553			773		
Demand Flow Rate, veh/h	1902			1386			565			788		
Vehicles Circulating, veh/h	637			942			1766			1528		
Vehicles Exiting, veh/h	1252			1184			308			611		
Ped Vol Crossing Leg, #/h	0			0			0			0		
Ped Cap Adj	1.000			1.000			1.000			1.000		
Approach Delay, s/veh	28.1			53.3			30.9			10.9		
Approach LOS	D			F			D			B		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Designated Moves	LT	TR	R	LT	TR	R	L	LTR	R	L	LTR	R
Assumed Moves	LT	TR	R	LT	TR	R	L	LTR	R	L	LTR	R
RT Channelized			Free			Free			Yield			Free
Lane Util	0.470	0.530		0.470	0.530		0.529	0.471		0.529	0.471	
Follow-Up Headway, s	2.667	2.535		2.667	2.535		2.667	2.535		2.667	2.535	
Critical Headway, s	4.645	4.328	465	4.645	4.328	189	4.645	4.328	204	4.645	4.328	427
Entry Flow, veh/h	675	762	1938	563	634	1938	191	170	412	191	170	1938
Cap Entry Lane, veh/h	751	826	0.980	567	638	0.980	266	316	0.980	331	387	0.980
Entry HV Adj Factor	0.981	0.980	456	0.980	0.981	185	0.981	0.977	200	0.983	0.980	419
Flow Entry, veh/h	662	747	1900	552	622	1900	187	166	404	188	167	1900
Cap Entry, veh/h	737	810	0.240	556	626	0.097	261	309	0.495	326	380	0.221
V/C Ratio	0.898	0.922	0.0	0.992	0.994	0.0	0.718	0.537	19.8	0.577	0.439	0.0
Control Delay, s/veh	36.5	37.9	A	63.4	60.2	A	46.1	27.1	C	28.0	18.9	A
LOS	E	E	1	F	F	0	E	D	3	D	C	1
95th %tile Queue, veh	12	13		14	15		5	3		3	2	

Queuing Reports



Queuing and Blocking Report

Intersection: 1: Powers & Bradley Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	NB
Directions Served	L	T	T	L	L	T	T	L	L	T	T	R
Maximum Queue (ft)	65	165	145	508	531	234	225	101	390	755	759	272
Average Queue (ft)	19	98	53	357	369	108	125	28	156	537	549	15
95th Queue (ft)	51	153	118	513	531	184	190	69	574	917	924	186
Link Distance (ft)		969	969			921	921			4071	4071	4071
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			625	625			750	750			
Storage Blk Time (%)				0	0					10		
Queuing Penalty (veh)				0	0					10		

Intersection: 1: Powers & Bradley Rd

Movement	SB	SB	SB	SB
Directions Served	L	L	T	T
Maximum Queue (ft)	600	618	639	582
Average Queue (ft)	380	399	290	278
95th Queue (ft)	649	666	980	917
Link Distance (ft)			2274	2274
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	670	670		
Storage Blk Time (%)	2	8	0	
Queuing Penalty (veh)	7	28	2	

Queuing and Blocking Report

Intersection: 2: Legacy Dr & Bradley Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	142	147	158	147	51	275	810	855	225	187	246	59
Average Queue (ft)	64	81	42	56	5	112	452	568	118	74	130	20
95th Queue (ft)	123	135	108	110	31	277	826	936	277	151	207	53
Link Distance (ft)		921	921	921	921		1235	1235				442
Upstream Blk Time (%)							0	1				
Queuing Penalty (veh)							2	9				
Storage Bay Dist (ft)	250					250			200	300	300	
Storage Blk Time (%)						0	20	35	0		0	
Queuing Penalty (veh)						0	19	54	0		0	

Intersection: 2: Legacy Dr & Bradley Rd

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R
Maximum Queue (ft)	33	187	144	52	207
Average Queue (ft)	2	101	29	18	109
95th Queue (ft)	21	169	100	46	184
Link Distance (ft)		269	269	269	269
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	300				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Blackmer St/Waterview North RIRO Access & Bradley Rd

Movement	WB	WB	NB	SB
Directions Served	T	T	R	R
Maximum Queue (ft)	73	75	55	348
Average Queue (ft)	7	12	18	165
95th Queue (ft)	82	112	44	340
Link Distance (ft)	894	894	236	347
Upstream Blk Time (%)				11
Queuing Penalty (veh)				0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 1: Powers & Bradley Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB
Directions Served	L	T	T	L	L	T	T	L	L	T	T	L
Maximum Queue (ft)	109	220	213	264	261	152	171	127	133	303	324	388
Average Queue (ft)	46	141	114	173	185	76	84	58	73	192	211	240
95th Queue (ft)	88	206	186	252	255	126	133	108	117	261	280	362
Link Distance (ft)		968	968			921	921			4063	4063	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	500			625	625			750	750			670
Storage Blk Time (%)												
Queuing Penalty (veh)												

Intersection: 1: Powers & Bradley Rd

Movement	SB	SB	SB
Directions Served	L	T	T
Maximum Queue (ft)	412	412	418
Average Queue (ft)	259	280	289
95th Queue (ft)	377	412	416
Link Distance (ft)		2266	2266
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	670		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 2: Legacy Dr & Bradley Rd

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	275	388	409	402	416	274	320	332	225	312	324	446
Average Queue (ft)	229	256	248	263	123	160	180	205	85	110	172	40
95th Queue (ft)	303	364	391	397	355	266	271	269	207	247	294	174
Link Distance (ft)		921	921	921	921		1235	1235				592
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	250					250			200	300	300	
Storage Blk Time (%)	1	4				1	2	8	0	0	2	0
Queuing Penalty (veh)	4	11				3	5	15	0	0	5	0

Intersection: 2: Legacy Dr & Bradley Rd

Movement	NB	SB	SB	SB	SB
Directions Served	R	L	L	T	R
Maximum Queue (ft)	56	283	282	117	320
Average Queue (ft)	8	144	103	37	260
95th Queue (ft)	40	240	217	85	357
Link Distance (ft)		268	268	268	268
Upstream Blk Time (%)		1	0		67
Queuing Penalty (veh)		0	0		0
Storage Bay Dist (ft)	300				
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 3: Blackmer St/Waterview North RIRO Access & Bradley Rd

Movement	NB	SB
Directions Served	R	R
Maximum Queue (ft)	64	94
Average Queue (ft)	17	41
95th Queue (ft)	41	78
Link Distance (ft)	236	347
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		



Waterview North Sketch Plan Resubmittal (April 2021)
LSC Responses to these CDOT comments.

1

June 4, 2020

Access Dept. Comment No. 1 of the comment letters for Waterview North reads: "Previous comments from Trails at Aspen Ridge (Springs East at Waterview) dated June 4, 2020 still has open comments that would apply to this development."

Nina Ruiz
El Paso County
2880 International
Colorado Springs, CO 80910-5127

LSC Responses to these comments are provided within this PDF as required. As the CDOT comment indicates these are "open comments that would apply to this development [Waterview North], responses provided herein are intended for this Waterview North project and resubmittal of the Waterview North Sketch Plan application (April 2021). These responses are in the context of the current Waterview North application with El Paso County).

RE: Trails at Aspen Ridge Filing #2 (Springs East at Waterview) - EA-SF1927

Dear Nina,

I am in receipt of a referral request for comment of the subject planned development. I understand that the Trails at Aspen Ridge Filing No. 2 is part of a previously submitted development formerly known as Springs East at Waterview and is located to the east of the development of Waterview East Preliminary Plan, but still within the existing boundary of that development now known as Trails at Aspen Ridge.

Filing No. 2 is a mixed use development on 175-acres with 98 single-family residential lots on with 24.03-acres of open spaces. This filing No. 2 is located within the existing filing of Trails at Aspen Ridge Filing No.1 which is east of the Powers Blvd between Bradley Rd and Fontaine Blvd. on the southeast portion of the Waterview East Preliminary Plan area in El Paso County. Comments are as follows;

Traffic Operations comments:

- a. Review of the updated Traffic Impact Analysis dated February 24, 2020 for filing no. 2 has been reviewed and the reviewers have no comments.
- b. Previous comments from dated 03/31/20, 10/01/19 and 03/12/19 are still valid and were not addressed by the developer in this Traffic Impact Analysis or Drainage Report for Filing No.2. However, the previous comments still require updating and need to be addressed as a whole (please see the following).**
- c. Table 4 states that the south and left turn lane on Powers Blvd can be restriped as dual left turn lanes, however there is no road surface for such restripe; a 150-ft long raised median exists at that location. How is this to be corrected, this will be required as part of terms and conditions of the Access Permit. Please provide update in recommended improvements.
- d. The existing mast arm will need to be lengthened for the second left turn lane.
- e. Bradley Road has been restriped for dual westbound to southbound left turn lanes when the signal was installed; This will be required as part of the Access Permit, please update table 4.
- f. Table 4 does not include the necessary lengthening of northbound right turn deceleration lane from Power Blvd to Bradley Rd. This will be required as part of the Access Permit, please update in recommended improvements.
- g. The 2040 Synchro reports for Powers Blvd. Interchange Northbound Ramp at Bradley Rd is missing the existing left turn traffic in both time periods from Figure 13. Please update Figure 13.



LSC RESPONSES TO COMMENTS

Page: 1

☰ Number: 1 Author: jchodsdon Subject: Text Box Date: 4/17/2021 11:08:27

Waterview North Sketch Plan Resubmittal (April 2021)

LSC Responses to **these** CDOT comments.

Access Dept. Comment No. 1 of the comment letters for Waterview North reads: *"Previous comments from Trails at Aspen Ridge (Springs East at Waterview) dated June 4, 2020 still has open comments that would apply to this development."*

LSC Responses to these comments are provided within this PDF as required. As the CDOT comment indicates these are "open comments that would apply to this development [Waterview North], responses provided herein are intended for this Waterview North project and resubmittal of the Waterview North Sketch Plan application (April 2021). These responses are in the context of the current Waterview North application with El Paso County).

💬 Number: 2 Author: jchodsdon Subject: Sticky Note Date: 4/17/2021 11:12:22

Prior response memos were prepared by LSC to address these comments. **Regardless, to move this Sketch Plan application forward, this document provides responses to the comments in this letter**, even if addressed previously in prior LSC response memos.

💬 Number: 3 Author: Kirstin Subject: Sticky Note Date: 4/15/2021 20:34:49

A recommendation to reconstruct the Powers Median north of Bradley Road was included in the initial traffic study for Waterview North TIS dated May 29, 2020. This recommendation was carried forward with the more recent report versions, including the most recent version of the TIS dated November 2020.

💬 Number: 4 Author: Kirstin Subject: Sticky Note Date: 4/16/2021 20:04:49

The Improvement Table was updated in the November 2020 Waterview North TIS to include this requirement. It is located near the bottom of the table as shown in the attached file (click on paperclip).

🔍 Author: jchodsdon Subject: Sticky Note Date: 4/16/2021 19:59:57

📎 Number: 5 Author: jchodsdon Subject: File Attachment Date: 4/16/2021 20:02:52

Improvements Table Addition.png

💬 Number: 6 Author: Kirstin Subject: Sticky Note Date: 4/15/2021 20:34:59



This is an older comment that is not applicable to the Waterview North TIS. This comment applied to the TIS report for the Trails at Aspen Ridge (Springs East at Waterview) - PUDSP-191. See attached LSC response to comments memo dated October 15, 2019 for that project. A copy is attached for reference.

💬 Number: 7 Author: Kirstin Subject: Sticky Note Date: 4/15/2021 20:36:47

A detailed recommendation for the northbound right turn deceleration lane from Powers Blvd Bradley Rd. were included in the initial Waterview North TIS dated May 29, 2020. This recommendation was carried forward to the most recent version of the TIS dated November 2020.

💬 Number: 8 Author: Kirstin Subject: Sticky Note Date: 4/17/2021 11:14:56






This is an older comment that is not applicable to the Waterview North TIS. This comment applied to the TIS report for the Trails at Aspen Ridge (Springs East at Waterview) - PUDSP-191.

- h. The 2040 assumption of a six-lane Powers Blvd at Bradley overlooks the cost comparison of an interchange versus widening three miles of highway particularly with ADTs only at 40,000. The study should include an interchange alternative of 2040 traffic. Please update.  ¹
- i. Figure 19 depicts the long-term Bradley Road lane configuration east of Powers Blvd. It is clear from the drawing that the future eastbound left turn lanes for the future north side access will conflict with the future northbound ramp intersection. Please update.  ³

Hydraulics comments:

- a. Review of the Master Drainage Study dated June 2019.
- b. Please provide calculations that show the capacity of the culvert crossing Powers, and how the Pond outfall and basin that don't drain to the pond affect the capacity of this culvert.
- c. It looks like the southern portion of the Big Johnson Basin is draining south to the existing 48" culvert in the existing condition. Please verify that changing the drainage patterns by capturing and conveying runoff from this area to the detention pond and then to the 60" culvert doesn't cause issues downstream.
- d. Also, the 60" culvert needs to be checked that minor storm event flows will produce velocities high enough to provide self cleaning velocity, per CDOT requirements.
- e. Conversely, please check that the existing 48" culvert, south of the project will have sufficient cleansing velocity flows in the minor storm even after reducing flows at this culvert.
- f. Previous comments on the Powers culvert capacities and minor flow cleansing velocity have not been addressed underlined above. Please provide calculations showing that the CDOT drainage infrastructure is not affected by this development. Include hydrology showing existing vs. proposed overall basin area tributary to culverts crossing under Powers as well as hydraulic analysis of each culvert.

Access comments:

- a. A State Highway Access Permit will be required for the connection of Bradley Road east to SH21A between El Paso County and CDOT. El Paso County will be the Permittee and the Development will be the Applicant. This need is to evaluate the traffic impacts and record any further roadway improvements or escrow needed at this location.  ⁴
- b. State Highway Access Code, Vol 2, March 2002, Sec 2.13, Interchange Management Plan states; *any access in proximity to the interchange or potential interchange Access Rights should be obtained for a distance of 550-feet along the lesser street or crossroad measured from the radius point of the ramp touchdown curve.* It appears that the PUD Site Plan took this measurement from the centerline of existing SH21 to allow for the Legacy Hill Drive to obtain access from Bradley Rd. This does not comply with the State Highway Access Code and Will need to be revised.  ⁵
- c. There will not be any allowance of direct access from the north/south traveling roadways section of SH21 to the westerly boundary of the subdivision. The only access points will be from local roadways on Bradley Rd. and possibly Fontaine Blvd. and by following the State Highway Access Code.  ⁶
- d. Legacy  Drive access may be converted to RI/RO in the future if traffic issues arise or future traffic warrants are met to close this proposed full movement access crossing. A roudabout circle should be pursued at this location.  ⁷



Number: 1 Author: Kirstin Subject: Sticky Note Date: 4/16/2021 20:07:49

An interchange alternative of 2040 traffic was included in the September 2020 and November 2020 versions of the Waterview North TIS Report.

Number: 2 Author: Kirstin Subject: Highlight Date: 11/5/2020 10:28:37 -07'00'

Number: 3 Author: jchodsdon Subject: Sticky Note Date: 4/15/2021 21:21:47

These are design details that can be addressed with the Preliminary Plan and/or when plans for the interchange are more developed. The partial side-by-side left turn lane configuration shown in this exhibit would not likely be needed with a diamond interchange configuration, therefore, the dual eastbound lefts into the site could likely be extended longer than shown in this exhibit, replacing the split single/dual configuration. This would likely shorten the length of the overall lane combination. Also, the northbound ramp could potentially be configured, if necessary, with two right turn lanes - one "free right" and one right turn with a tighter radius for traffic intending to turn left into Waterview North after turning right on Bradley.

Number: 4 Author: Kirstin Subject: Sticky Note Date: 4/15/2021 21:23:14

An access permit will be submitted at the Preliminary Plan/Plat stage of the process. This project is currently only at the Sketch Plan stage.

Number: 5 Author: jchodsdon Subject: Sticky Note Date: 4/17/2021 11:19:05

This criteria was used to locate the access where it has been designed and approved by El Paso County. The location was confirmed in a County/CDOT meeting. The Legacy Hill Drive access location was adjusted from the originally-requested location specifically meet this 550-foot criteria. See attached excerpts from the March 28, 2017 ***Waterview Sketch Plan Updated Master TIS Springs at Waterview East Preliminary Plan TIS report and*** deviation request. The exhibits show measurement not from the centerline of existing SH 21, but from the end of the radius/radius point of the ramp touchdown curve. The access was placed specifically at this location east of the "A Line."

Number: 6 Author: Kirstin Subject: Sticky Note Date: 4/15/2021 21:23:58

Comment Noted.

Number: 7 Author: jchodsdon Subject: Sticky Note Date: 4/17/2021 11:21:43

Comment Noted. A similar version of this comment was addressed with the TIS report for the Trails at Aspen Ridge (Springs East at Waterview) - PUDSP-191.


The response indicated: "CDOT's recommendation is noted. However, the access has already been approved by El Paso County and is outside the "A Line." CDOT staff indicated at a prior joint meeting with EPC and the applicant that they would uphold the EPC approval."

Regarding the roundabout comment, analysis of long term volumes indicate a roundabout would operate over-capacity in the long term. The HCM report is attached.

June 04, 2020

Trails at Aspen Ridge **Filing #2** (Springs East at Waterview) – EA-SF1927

SH21A
El Paso County

- e. Escrow funds will be required as a term and condition of Access Permit for a portion of the future SH21A(Powers Blvd.) / Bradley Rd. interchange based on a pro-rata share determined by the traffic impact study. Please add graph or chart.  1

Additionally,

- a. On-premise and off-premise signing shall comply with the current Colorado Outdoor Advertising Act, sections 43-1-401 to 421, C.R.S., and all rules and regulations pertaining to outdoor advertising. Please contact Mr. Todd Ausbun at (719) 696-1403 for any questions regarding advertising devices.
- b. Any utility work within the state highway right of way will require a utility permit from the CDOT. Information for obtaining a utility permit can also be obtained by contacting Mr. Ausbun.

Please contact me in Pueblo at (719) 248-0905 with any questions.

Sincerely,

Arthur Gonzales
R2 - Access Manager

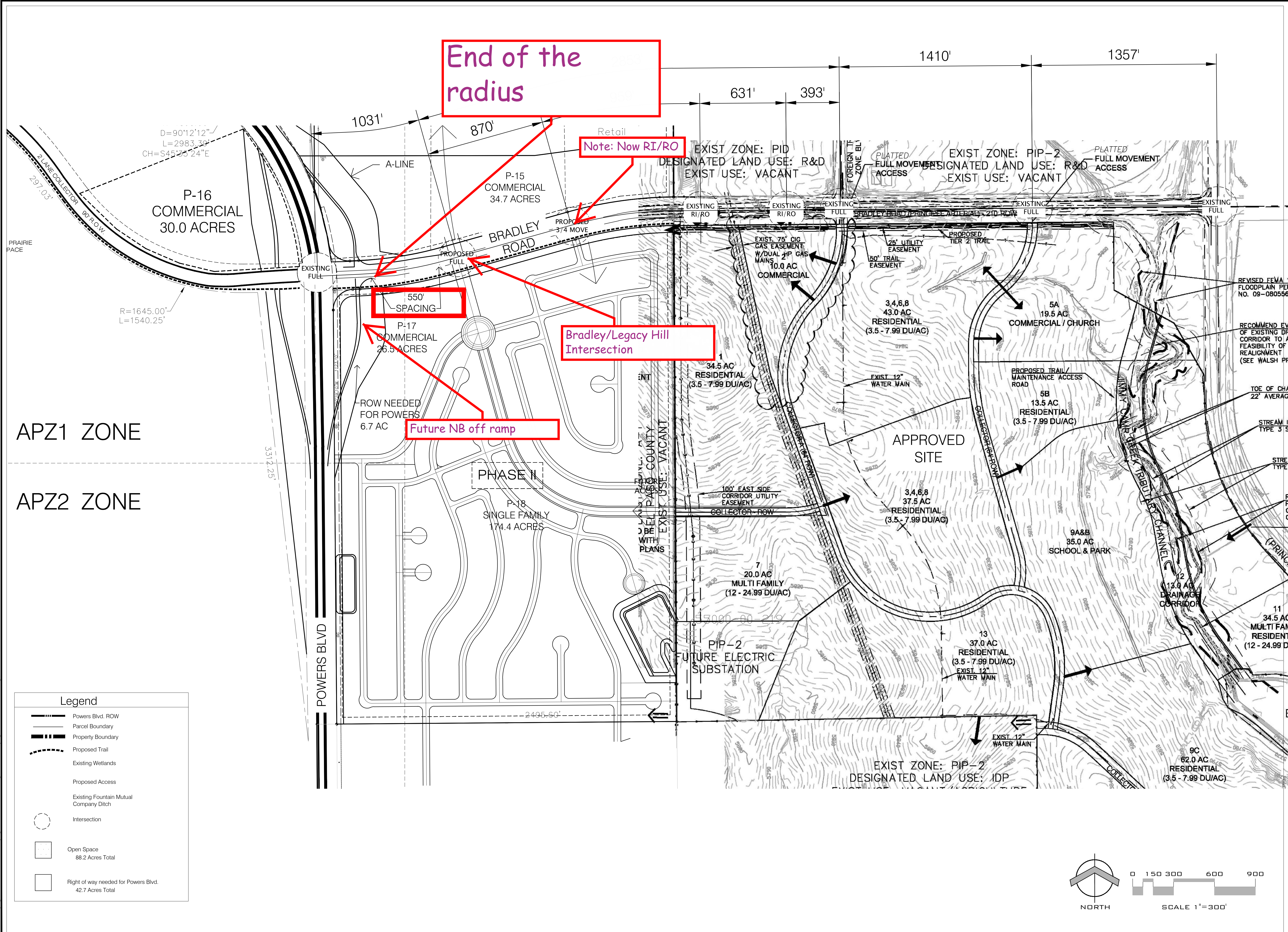
Xc: Irvine/Rice
Ferguson
Stecklein/Lyons
Whittle/Biren
Sword/Regalado/file



Number: 1 Author: Kirstin Subject: Sticky Note Date: 4/15/2021 21:29:40

This requirement was added to the "Improvements Table" of the report (see the second item under "Other Improvements (CDOT)").

LSC suggests this the graph/chart will be provided with the traffic study and access permit application form submitted at the Preliminary Plan/Plat stage of the process. This project is only at the Sketch Plan stage.



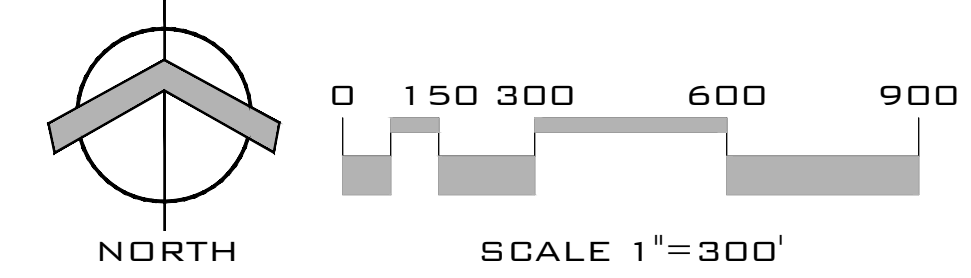
WATERVIEW
 PROPOSED & EXISTING ACCESS EXHIBIT

DATE: 11-02-16
 DRAWN: J. MEHLHOP
 APPROVED: C.K. GOTHERN

REVISIONS:	DATE:	BY:	COMMENTS:

PLAN SHEET

SHEET NO
1
 OF 1 SHEETS



© 2001 Dakota Springs Engineering, Inc. All Rights Reserved. This drawing is the property of Dakota Springs Engineering, Inc. and is not to be reproduced or used in any manner without the written consent of Dakota Springs Engineering, Inc.



LSC TRANSPORTATION CONSULTANTS, INC.
545 East Pikes Peak Ave., Suite 210
Colorado Springs, CO 80903
(719) 633-2868
FAX (719) 633-5430
E-mail: lsc@lsctrans.com
Website: <http://www.lsctrans.com>

Waterview Sketch Plan
Updated Master TIS
Springs at Waterview East Preliminary Plan
(LSC #164691)

March 28, 2017

Traffic Engineer's Statement

This traffic report and supporting information were prepared under my responsible charge and they comport with the standard of care. So far as is consistent with the standard of care, said report was prepared in general conformance with the criteria established by the County for traffic reports.

Jeffrey C. Hodsdon, P.E. #31684



Date

3-28-17

Developer's Statement

I, the Developer, have read and will comply with all commitments made on my behalf within this report.

Date

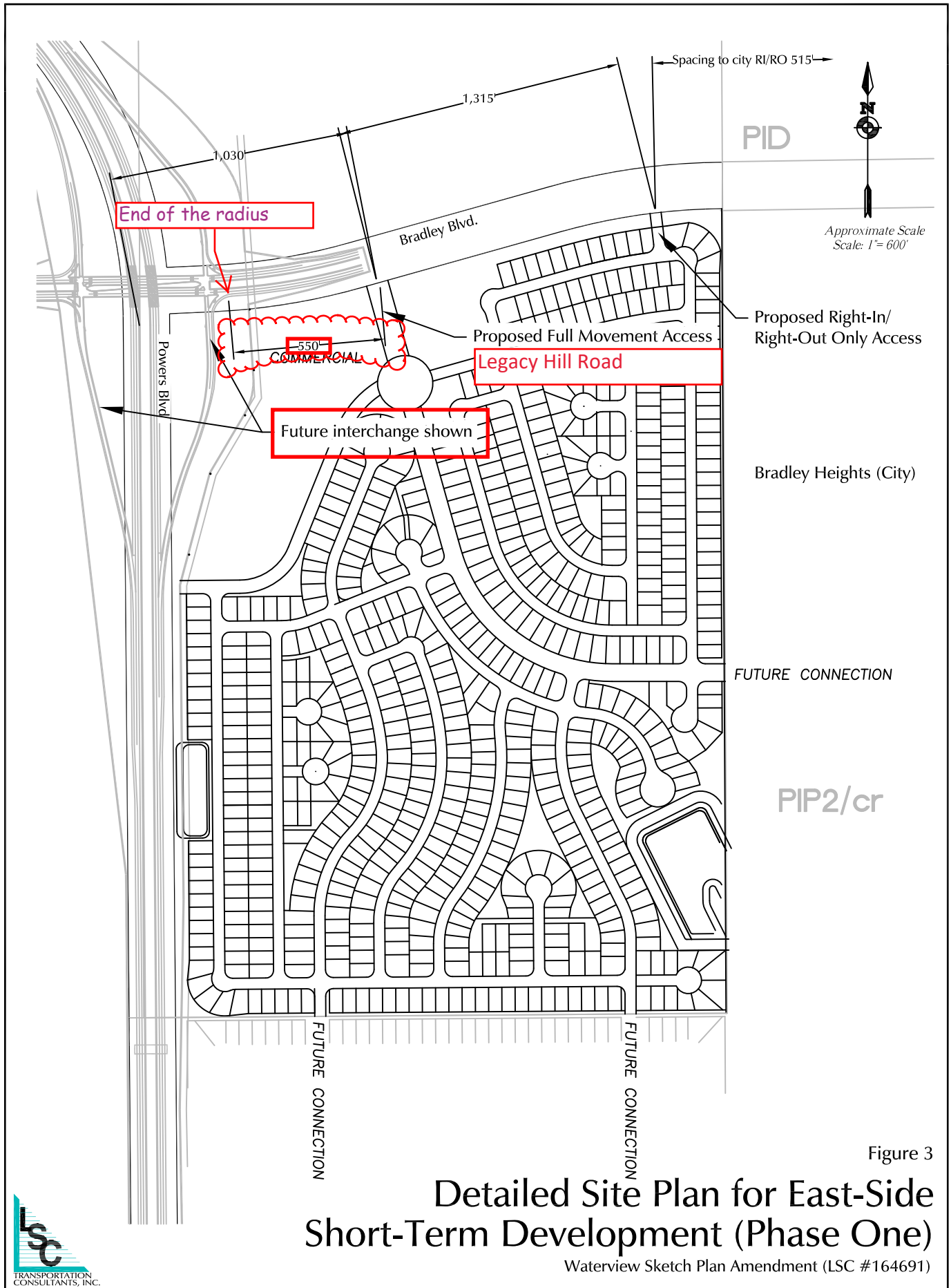


Figure 3

Detailed Site Plan for East-Side Short-Term Development (Phase One)

Waterview Sketch Plan Amendment (LSC #164691)



Also, a full-movement access to Bradley Road was shown on the older approved Sketch Plan.

Comparison of Proposed Deviation to ECM Standard: The requested access would be approximately 2,870 feet west of Foreign Trade Zone Boulevard (exceeds 1/2-mile spacing) and approximately 1,030 feet east of Powers Boulevard, whereas 2,640 feet is the ECM standard.

Applicable Regional or National Standards used as Basis: _____

Application Consideration:

CHECK IF APPLICATION MEETS CRITERIA FOR CONSIDERATION

JUSTIFICATION

The ECM standard is inapplicable to a particular situation.

Topography, right-of-way, or other geographical conditions or impediments impose an undue hardship on the applicant, and an equivalent alternative that can accomplish the same design objective is available and does not compromise public safety or accessibility.

The parcels northeast and northwest of Powers Boulevard have no access without the proposed access. A future minor connection is planned between Waterview and Bradley Heights to the east; however, this has been planned for connectivity between developments and would not be sufficient access. Also, given the master-planned uses and size of the land area to be served by the access to Bradley, a right-in/right-out access would not suffice. A full-movement access is necessary. A full-movement access between Powers and Foreign Trade Zone Boulevard has been shown on the Waterview Sketch Plan for a number of years. The currently proposed location would be superior to that location previously shown 2,000 feet east of Powers.

A change to a standard is required to address a specific design or construction problem, and if not modified, the standard will impose an undue hardship on the applicant with little or no material benefit to the public.

If at least one of the criteria listed above is not met, this application for deviation cannot be considered.

Criteria for Approval:

PLEASE EXPLAIN HOW EACH OF THE FOLLOWING CRITERIA HAVE BEEN SATISFIED BY THIS REQUEST

The request for a deviation is not based exclusively on financial considerations.

The request is not based on financial considerations. The request is based on the need to provide a future public street intersection on Bradley Road to serve the parcels northeast and northwest of Powers Boulevard that would have no access without access to Bradley Road. See the above justification paragraph under "Application Consideration" for additional detail.

The deviation will achieve the intended result with a comparable or superior design and quality of improvement.

The intersection spacing would be sufficient to achieve auxiliary left-turn lanes on Bradley Road. The spacing to Powers (west) and Foreign Trade Zone Boulevard (east) will be sufficient to allow this intersection to be signalized. Given the location of land uses to be served in relation to the Powers/Bradley intersection the proposed intersection location would be optimal. Also, the proposed intersection location would be near the north/south dividing line between the proposed commercial and residential development (established as a result of the airport APZ line). This would result in a north/south public street which would serve both the commercial and residential development well. It would provide a buffer between the commercial and residential areas and it would much better serve the

commercial site and make it more viable by moving the full-movement, future signalized intersection to the adjacent northeast corner of the commercial area. The proposed location would be far superior from this perspective. The previous plan showed the first full-movement east of Powers located nearly a quarter-mile to the east of the commercial development area. This, arguably, would not work for commercial development. Commercial/retail development would be most viable when located adjacent to the intersection of Powers and Bradley with a pre-established full-movement, future signalized intersection on Bradley Road at the proposed location. The intersection should be shown at the best location outside the CDOT A-line now.

The deviation will not adversely affect safety or operations.

The intersection would operate at a satisfactory level of service based on short-term and long-term traffic volume projections. The intersection spacing would be sufficient to achieve auxiliary turn lanes and these lanes would accommodate the projected vehicle queues. Good Bradley Road corridor traffic signal progression could be achieved with a future traffic signal at this intersection. The intersection at the proposed location would also provide the option for coordinating the signal at this intersection with the future signal at the Powers/Bradley intersection. Please refer to the attached LSC Traffic Technical Memorandum for additional technical detail and analysis results. The memorandum also addresses the turning movements from Powers onto eastbound Bradley with the relatively short distances to the entry points to the eastbound auxiliary turn lanes at the proposed Waterview intersection.

The deviation will not adversely affect maintenance and its associated cost.

N/A

The deviation will not adversely affect aesthetic appearance.

N/A

Owner, Applicant and Engineer Declaration:

To the best of my knowledge, the information on this application and all additional or supplemental documentation is true, factual and complete. I am fully aware that any misrepresentation of any information on this application may be grounds for denial. I have familiarized myself with the rules, regulations and procedures with respect to preparing and filing this application. I also understand that an incorrect submittal will be cause to have the project removed from the agenda of the Planning Commission, Board of County Commissioners and/or Board of Adjustment or delay review, and that any approval of this application is based on the representations made in the application and may be revoked on any breach of representation of condition(s) of approval.

Signature of owner (or authorized representative)

Date

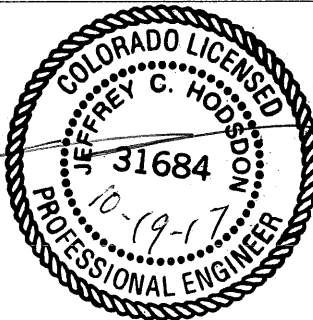
Signature of applicant (if different from owner)

Date

Signature of Engineer

Date

Engineer's Seal



Review and Recommendation:
APPROVED by the ECM Administrator



This request has been determined to have met the criteria for approval. A deviation from Section 2.2.5.B.1 of ECM is hereby granted based on the justification provided. Comments:

____ Additional comments or information are attached.

DENIED by the ECM Administrator

____ Date _____

This request has been determined not to have met criteria for approval. A deviation from Section _____ of ECM is hereby denied. Comments:

____ Additional comments or information are attached.