

MEMORANDUM



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TO: Lauren Simcic
City of New Braunfels
550 Landa Street
New Braunfels, Texas 78130

CC: Garry Ford, PE
Edmund Haas, AICP

FROM: Ellen Emeric

SUBJECT: Comal County "West Connector" Segment 2

DATE: 10/24/2022

PROJECT: City of New Braunfels Thoroughfare Amendment Design Review

Freese and Nichols, Inc. ("FNI") has reviewed the request submitted to the City of New Braunfels on September 30, 2022 by Comal County to modify the parkway segment between FM 1863 and SH 46 ("West Connector") that is proposed in the Regional Thoroughfare Plan (RTP). In response to this request, FNI has confirmed that the proposed realignment meets the appropriate specifications, as outlined in the County's memorandum. We offer the following additional comments (please see attachments for details):

Environmental Constraints

- FNI has confirmed that the proposed realignment is situated to avoid the steeper grades located in the area, particularly compared to the alignment of the City's existing Thoroughfare Plan.
- The alignment crosses the Dry Comal Creek tributary flowlines at angles of 19° (south crossing) and 36° (north crossing). It is likely that these will eventually each require a bridge class structure. Ideally, the structure should also cross the Creek flowline as perpendicularly as possible. Additional ROW or drainage easements may be required on either (or both) sides of the bridge for servicing and maintenance. Finished grade elevations of the parkway and collector will be evaluated as part of the roadway design at a later time.

Geometric Constraints

- The City of New Braunfels UDC does not currently specify a minimum radius for a Parkway class facility. FNI has confirmed that the proposed realignment meets the minimum horizontal curve requirements for a Principal Arterial (1,200'). Please see the attached schematic document (Attachment 1) for curve data details.

- The angle of intersection with both SH46 and CR1863 is within 5° of perpendicular, as stated in the County's documentation.

ROW Footprint

- The proposed realignment affects fewer parcels but more acreage (13 additional acres). Most changes to impacts on individual properties are marginal, aside from the parcel at *370 Rock Hill Trail* (owners Dietz Betty J & Clifford H). This impact is increasing from approximately 2 to 25 acres affected. FNI recommends that the City and/or applicant reach out to adjacent property owners and residents to discuss this change at the appropriate time. Early engagement is in the best interest of all parties. Please see Attachment 2 for affected parcel data details.

- The City's Draft Street Design Guide (8/2021) provides the following guidance on Parkways:

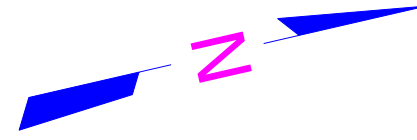
"Parkways provide high level mobility through sensitive areas with limited access. The intent of the parkway is to provide environmental features including vegetated buffers and stormwater management and separated bicycle paths. The parkway is located on the perimeter of New Braunfels connecting major roadways and providing crossings over the Guadalupe River"

A typical section of 200'-250' of ROW would provide adequate space for the elements visualized in the County memo (shared-use trails along both sides of the roadway, illumination, and a vegetated median), which also meets the intent of the City's Design Guide above. A potential expansion of this design could designate utility corridors for various types of utilities (overhead and underground). These should be strategically located along the parkway to accommodate future roadway expansion with minimal conflicts to utilities, which would likely involve expanding lanes *inward* rather than outward within the ROW footprint.

Based on FNI's understanding of the City's planning- and engineering-related priorities, it is our recommendation that the City accept the County's request to revise the RTP for the County West Connector segment between FM 1863 and SH 46 to align with Pape Dawson's supporting documentation.

Please contact us with any questions or clarifications related to this review.

[End of memo]



PLAN LEGEND	
PROPOSED CENTERLINE	---
FLOOD PLAIN	---
EXISTING CENTERLINE	---
FLOOD LINE	---
PROPOSED ALIGNMENT	---
PROPOSED ALIGNMENT	---
PROPOSED ALIGNMENT	---
PROPOSED ALIGNMENT	---

Attachment 1

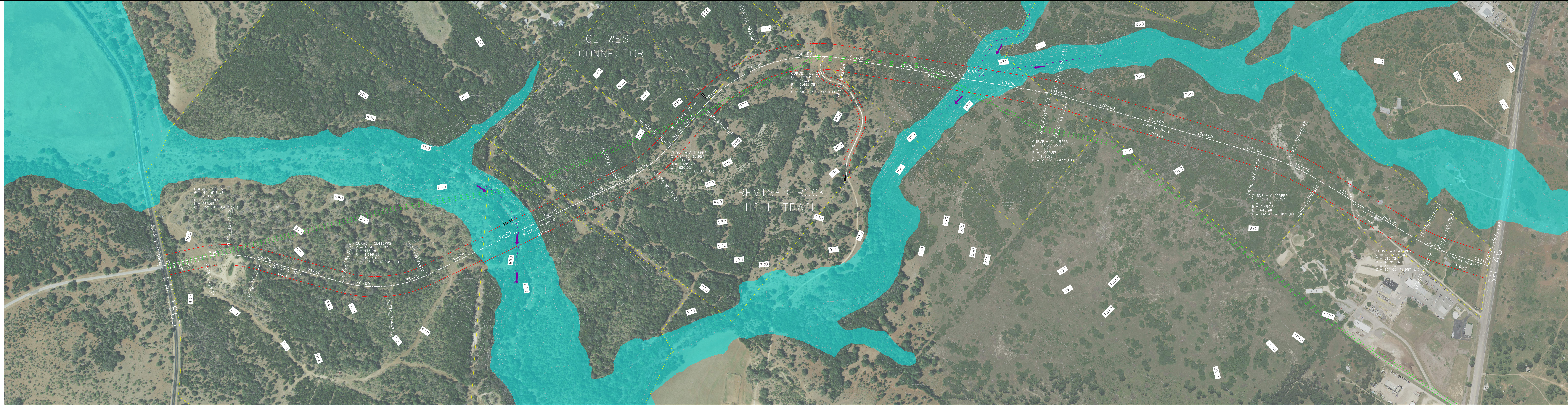
[NEB22415] CoNB
Thoroughfare Amendment
Design Review

Comal County "West
Connector" Segment 2

OCTOBER, 2022

CITY OF NEW BRAUNFELS
THOROUGHFARE DESIGN REVIEW
WEST CONNECTOR
DESIGN SCHEMATIC
LIMITS FROM FM1863 TO SH46
PROJECT LENGTH = 2.665 MILES
HORIZONTAL SCALE: 1" = 120'

DATE	BY	FOR	NEW BRAUNFELS
10/10/2022	10/10/2022	10/10/2022	10/10/2022
10/10/2022	10/10/2022	10/10/2022	10/10/2022
10/10/2022	10/10/2022	10/10/2022	10/10/2022



HORIZONTAL ALIGNMENT DATA	
Chain CL415PR contains 1 CUR CL415PR2 CUR CL415PR3 CUR CL415PR4 CUR CL415PR5 CUR -	
CL415PR6 CUR CL415PR7 CL415002	
Beginning chain CL415PR description	
=====	
Point CL415001	N 683.594.8984 E 2,243.065.3987 Sta 10+00.00
Course from CL415001 to PC CL415PR1 N 0° 10' 21.87" E Dist 398.3734	
Curve Data	
Curve CL415PR1	
Delta	25° 16' 71.42" (RT)
Station	684.266.0443 E 2,243.078.8148
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	683.993.2700 E 2,243.065.2897
P.C. Station	19+98.37 N
P.T. Station	30+05.16 N
Back	N 71° 33' 50.56" E 683.993.5945 E 2,244.265.2238
Ahead	N 15° 23' 04.79" E
Chord Bear	N 15° 23' 04.79" E
Course from PT CL415PR1 to PC CL415PR2 N 28° 12' 19.01" E Dist 866.7467	
Curve Data	
Curve CL415PR2	
Delta	40° 32' 17.15" (LT)
Station	685.662.7313 E 2,243.827.8776
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	685.270.8994 E 2,243.917.3182
P.C. Station	30+05.16 N
P.T. Station	38+04.47 N
Back	N 28° 12' 19.01" E
Ahead	N 7° 51' 09.91" E
Chord Bear	N 7° 51' 09.91" E
Course from PT CL415PR2 to PC CL415PR3 N 12° 29' 59.19" W Dist 2,097.8791	
Curve Data	
Curve CL415PR3	
Delta	60° 10' 03.41" (LT)
Station	688.455.7691 E 2,243.208.6876
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	688.145.4150 E 2,243.277.4901
P.C. Station	38+04.47 N
P.T. Station	63+78.86 N
Back	N 12° 29' 59.19" W
Ahead	N 24° 28' 00.70" W
Chord Bear	N 24° 28' 00.70" W
Course from PT CL415PR3 to PC CL415PR4 N 36° 26' 02.22" W Dist 443.7780	
Curve Data	
Curve CL415PR4	
Delta	58° 56' 59.13" (RT)
Station	689.749.6012 E 2,242.253.6084
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	689.068.5622 E 2,242.756.3368
P.C. Station	63+78.86 N
P.T. Station	83+63.93 N
Back	N 36° 26' 02.22" W
Ahead	N 72° 59' 35.39" E
Chord Bear	N 72° 59' 35.39" E
Course from PT CL415PR4 to PC CL415PR5 N 22° 26' 51.50" E Dist 2,034.1535	
Curve Data	
Curve CL415PR5	
Delta	104° 07' 41.11" (RT)
Station	692.493.4996 E 2,243.390.0653
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	692.411.9776 E 2,243.353.5513
P.C. Station	83+63.93 N
P.T. Station	103+09.09 N
Back	N 22° 26' 51.50" E
Ahead	N 29° 14' 36.38" E
Chord Bear	N 29° 14' 36.38" E
Course from PT CL415PR5 to PC CL415PR6 N 29° 14' 36.38" E Dist 1,974.2822	
Curve Data	
Curve CL415PR6	
Delta	14° 12' 11.09" (RT)
Station	694.576.6235 E 2,244.556.3574
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	694.284.1047 E 2,244.398.1818
P.C. Station	103+09.09 N
P.T. Station	117+20.18 N
Back	N 29° 14' 36.38" E
Ahead	N 36° 07' 16.41" E
Chord Bear	N 36° 07' 16.41" E
Course from PT CL415PR6 to PC CL415PR7 N 44° 00' 16.44" E Dist 1,173.1468	
Curve Data	
Curve CL415PR7	
Delta	11° 14' 04.75" (LT)
Station	695.740.3174 E 2,245.674.1348
Length	1,106.8269
Radius	1,106.8269
External	1,106.8269
Mid Ord	695.653.3429 E 2,245.596.2991
P.C. Station	117+20.18 N
P.T. Station	128+24.93 N
Back	N 44° 00' 16.44" E
Ahead	N 36° 16' 12.31" E
Chord Bear	N 36° 16' 12.31" E
Course from PT CL415PR7 to CL415002 N 30° 42' 50.32" E Dist 470.6604	
Point CL415002	N 696.245.3023 E 2,245.974.1396 Sta 150+71.39
Ending chain CL415PR description	
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Attachment 2

Affected Parcels									
Sr. No.	Parcel Owner Name	Parcel Address	Owner Mailing Address	Parcle Acre	New Braunfels Regional Transportation Plan		West Connector		Difference in Estimated ROW Acres
					Estimated ROW Acre	Remaining Parcel Acre	Estimated ROW Acre	Remaining Parcel Acre	
1	Polk Jacquelyn	200 Rock Hill Trl, New Braunfels, TX 78132	200 Rock Hill Trl, New Braunfels, TX 78132-3777	10.85	-	-	4.68	6.17	4.68
2	Woods Casey James	4733 State Hwy 46 W, New Braunfels, TX 78132	4733 State Hwy 46 W, New Braunfels, TX 78132	2.00	0.20	1.80	-	-	-0.20
3	All Gen Owens LLC	4741 State Hwy 46 W, New Braunfels, TX 78132	4741 State Hwy 46 W, New Braunfels, TX 78132	5.66	0.55	5.11	-	-	-0.55
4	Adams Corrinne E	4671 State Hwy 46 W, New Braunfels, TX 78132	4671 State Hwy 46 W, New Braunfels, TX 78132	8.09	1.20	6.89	-	-	-1.20
5A	Comal County Office	145 David Jonas Dr, New Braunfels, TX 78133	150 N Seguin Ave Ste 201, New Braunfels, TX 78130-5122	14.06	4.08	9.98	-	-	-4.08
5B		0 TBD	150 N Seguin Ave Ste 201, New Braunfels, TX 78130-5122	1.47	1.47	0.00	-	-	-1.47
5C		0 State Hwy 46 W, New Braunfels, TX 78132	150 N Seguin Ave Ste 201, New Braunfels, TX 78130-5122	1.38	0.34	1.04	-	-	-0.34
5D		281 Resource Dr, New Braunfels, TX 78132	150 N Seguin Ave Ste 201, New Braunfels, TX 78130-5122	3.05	0.65	2.40	-	-	-0.65
5E		325 Resource Dr, New Braunfels, TX 78132	150 N Seguin Ave Ste 201, New Braunfels, TX 78130-5122	20.00	1.94	18.06	-	-	-1.94
6	New Braunfels ISD	-	1000 N Walnut Ave, New Braunfels, TX 78130	100.00	11.90	188.10	-	-	-11.90
7	Dietz Betty J & Clifford H	370 Rock Hill Trl, New Braunfels, TX 78132-3777	370 Rock Hill Trl, New Braunfels, TX 78132	124.56	2.59	121.97	25.41	99.15	22.82
8	Chesmar Homes LLC	28564 Oak Creek Dr, New Braunfels, TX 78132	211 N Loop 1604 E Sta 175, San Antonio, TX 78232	568.35	15.89	552.46	15.57	552.78	-0.32
9	Bueche Chester K & Bueche Credit Trust	Countryside Dr, New Braunfels, TX 78132	744 FM 1863, New Braunfels, TX 78132-4645	47.14	2.64	44.50	2.81	44.33	0.17
10A	Tri City Distributors Inc	0 FM 1863, New Braunfels, TX 78132	523 FM 306, New Braunfels, TX 78130-2685	116.37	13.56	102.81	14.49	101.88	0.93
10B		Null		4.78	1.02	3.76	0.79	3.99	-0.23
10C		Null		140.50	1.76	138.74	5.68	134.82	3.92
11	Vollbrecht Rhonda & Michael Porter	0 FM 1863, New Braunfels, TX 78132	26407 Fairway Springs, San Antonio, TX 78260	349.70	15.39	334.31	19.28	330.42	3.89
Total ROW Acres					75.18		88.71		13.53

[NEB22415] CoNB Thoroughfare Amendment Design Review
Comal County "West Connector" Segment 2