



**New Braunfels Economic Development Corporation
Board of Directors Special Called Meeting**

To participate, use the link below:
<https://us02web.zoom.us/j/85398592733>

or call (833) 926-2300 and enter webinar ID: 853 9859 2733

Tuesday, February 23, 2021 at 5 P.M.

AGENDA

Call to Order: February 23, 5:00 p.m.

Call of Roll

INDIVIDUAL ITEMS FOR CONSIDERATION:

1. Call to order
2. Approval of the minutes from the January 21, 2021 Regular Meeting
3. Presentation and discussion of Treasurer's Report (Werner)
4. Presentation and discussion of the Advisory Team Report (Meek)
5. Public hearing, discussion and possible action to approve a proposed project expenditure of up to \$58,000 to the City of New Braunfels for a professional services agreement with Vickrey and Associates, Inc. for preliminary design of the Alligator Creek Trail, an eligible project expenditure related to recreational or community facilities in accordance with Local Government Code Section 505.152 (Jewell)
6. Presentation, discussion and update on strategic initiatives progress and capital financing strategy (Jewell)
7. Discussion and possible action rescheduling the regular March 2021 EDC board meeting
8. Committee updates from board members
9. Executive Session:
In accordance with the Texas Government Code, Section 551.071, the Board reserves the right to retire into executive session concerning the items listed on this agenda to consult with its attorney. In addition, the Board may convene in executive session on any of the following items, with any final action being taken in open session:
 - A. Deliberate Issues Regarding Economic Development Negotiations in accordance with Section 551.087 of the Texas Government Code.
 - Project Broadband
 - Project Locked
 - CGT

B. Deliberate the purchase, exchange, lease or value of real estate in accordance with Section 551.072 of the Texas Government Code.

- Union Pacific Railroad

10. Adjournment

CERTIFICATION

I hereby certify the above Notice of Meeting was posted on the Bulletin Board at the New Braunfels Municipal Building on February 19, 2021 at _____pm.

Caitlin Krobot, City Secretary



**Agenda Item Memorandum
February 23, 2021**

TO: NBEDC Board

FROM: Jeff Jewell, Economic and Community Development Director

RE: Approval of the minutes from the January 21, 2021 Called Meeting.

Background:

Minutes from the January 21, 2021 meeting are included for approval.

Attachments:

January 21, 2021 meeting minutes

**New Braunfels Economic Development Corporation
Board of Directors Regular Meeting
Thursday, January 21, 2021**

Minutes

The New Braunfels Economic Development Corporation January Regular Meeting was called to order on Thursday, January 21, 2021, at 5:01 p.m. via Zoom Virtual Meeting.

Present: President Kathy Meurin, Vice President Don Austin, Secretary Jim Poage, Treasurer Brian Cox, Director Kristin Carden, Director Neal Linnartz, and Director Stuart Hansmann.

Absent: none

Chamber Staff: Michael Meek and Chester Jenke

City Staff: Assistant City Manager Jordan Matney, City Attorney Val Acevedo, Asst. City Attorney Nathan Brown, City of New Braunfels Community and Economic Development Director Jeff Jewell, City of New Braunfels Finance Director Jared Werner, City of New Braunfels Parks Development Manager Ylida Capriccioso, and City of New Braunfels Downtown Development Coordinator Amy McWhorter.

Also present was Mayor Rusty Brockman.

1. The meeting was called to order at 5:01 p.m. by President Meurin.
2. Linnartz provided a motion to accept the minutes from the November 30, 2020 Regular Meeting minutes, second was Poage – motion approved 7-0.

President Meurin, FOR
Vice President Cox, FOR
Secretary Poage, FOR
Treasurer Austin, FOR
Director Linnartz, FOR
Director Hansmann, FOR
Director Carden, FOR

3. A presentation of January Treasurer's Report was provided by Werner. Werner indicated that the sales tax collections for November increases by 9.6% and with the various adjustments removed the collections increased by 7.9%. Werner presented the current commitment projections that included projects such as Elizabeth Street, VT-AA Flight School, and Continental Automotive. Werner also presented an overview of the revenue, expenditures, and ending fund balance for FY 2020 through FY2024.

4. There was no presentation of the Advisory Team Report by Meek since there was not Advisory Team Briefing for January. The next Advisory Team Briefing is February 5th.
5. A presentation for possible action approving a partial release of lien for the loan between the NBEDC and Veramendi PE-Darwin LLC was provided by Jewell. Director Hansmann recused himself from the discussion and vote due to a conflict of interest. The lien release requested is from a 2017 Veramendi developers loan of \$1.6M for construction of a road within the development – the loan was secured by a 43 +/- acre deed of trust. The need to convey approximately 5.3 acres to New Braunfels Utilities (NBU) from within the deeded land is required for NBU to construct an electrical substation – the board action would release the lien so construction could progress. The discussion was opened for public comment – there was none. Linnartz provided a motion to accept the release of lien on the 5.3 acres of property for NBU to construct the electrical substation, a motion second was provided by Poage. The motion passes 6-0.

President Meurin, FOR
Vice President Cox, FOR
Secretary Poage, FOR
Treasurer Austin, FOR
Director Linnartz, FOR
Director Hansmann, ABSTAIN
Director Carden, FOR

6. A presentation was provided by City of New Braunfels Parks Development Manager Ylida Capriccioso for a proposed project expenditure of up to \$58,000 to the City of New Braunfels for a professional services agreement with Vickrey and Associates, Inc. for preliminary design of the Alligator Creek Trail. The project is classified as an eligible project expenditure related to recreational or community facilities in accordance with Local Government Code Section 505.152. Discussion of the project occurred with board members discussing how the project complimented the NBEDC Strategic Plan and agreed that the project was a project to support. Some board members were concerned that they had not had the needed time to research and discuss the project with staff and thought that postponing the project until this time was allotted was needed. Poage ask Capriccioso if the delay of the project would interrupt and critical plans, Capriccioso indicated that an immediate decision was not critical. Am motion was made by Linnartz to table the item until the February meeting for further discussion, so board members had the opportunity to conduct their research as needed, motion was second by Poage. Motion passes 5-2.

President Meurin, FOR
Vice President Cox, AGAINST
Secretary Poage, FOR
Treasurer Austin, FOR
Director Linnartz, FOR

Director Hansmann, FOR
Director Carden, AGAINST

7. Jewell provided an update on strategic initiatives progress. Items discussed were:
Union Pacific Railroad land acquisition - Jewell
Workforce Housing progress – Cox
Sports Complex – Jewell, Matney; Sports Complex construction dates will be sent to the board.
8. Committee updates from board members:
Workforce Housing – Cox; previously discussed
Veramendi – Linnartz
NBU Downtown – Linnartz
CTTC – Meurin
9. President Meurin convened Executive Session at 5:50 p.m.

In accordance with the Texas Government Code, Section 551.071, the Board reserves the right to retire into executive session concerning the items listed on this agenda to consult with its attorney. In addition, the Board may convene in executive session on any of the following items, with any final action being taken in open session:

- a. Deliberate Issues Regarding Economic Development Negotiations in accordance with Section 551.087 of the Texas Government Code.
 - Project Academy
 - CGT

The board returned to open session at 6:04 p.m. There were no actions or motions made after Executive Session.

The January meeting of the New Braunfels Economic Development Corporation Board of Directors was adjourned at 6:05 p.m.

CERTIFICATION

Kathy Meurin
President

Attest:

Jim Poage
Secretary

February NBEDC Treasurer's Report

February 23rd, 2021

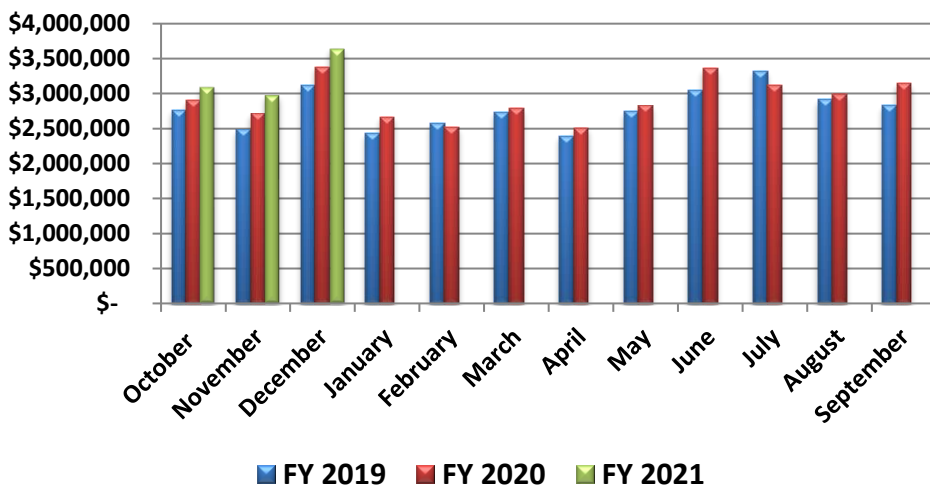
Overview

The Monthly treasurer's report provides updates on sales tax performance, projected revenue streams and projected commitments and timing of expenditures. The financial commitments of the NBEDC typically span multiple fiscal years; therefore, the report is formatted to project the financial position of the NBEDC over the next five years.

Sales Tax

Sales tax collections for the month of December increased by 7.6%. When the various adjustments are removed, current to current collections increased by 8.4%. December sales tax activity is typically impacted significantly by holiday sales. Overall, retail sales were up over 9% when comparing December activity. However, continued trends (growth in building materials stores, online sales, motor and vehicle equipment sales and service) that we have continued to observe during the pandemic are mainly driving that increase. December also so growth in the areas of wholesale markets, manufacturing, and limited service restaurants. Full-service restaurants and professional services were the two areas that experienced a significant decline, when comparing the December activity.

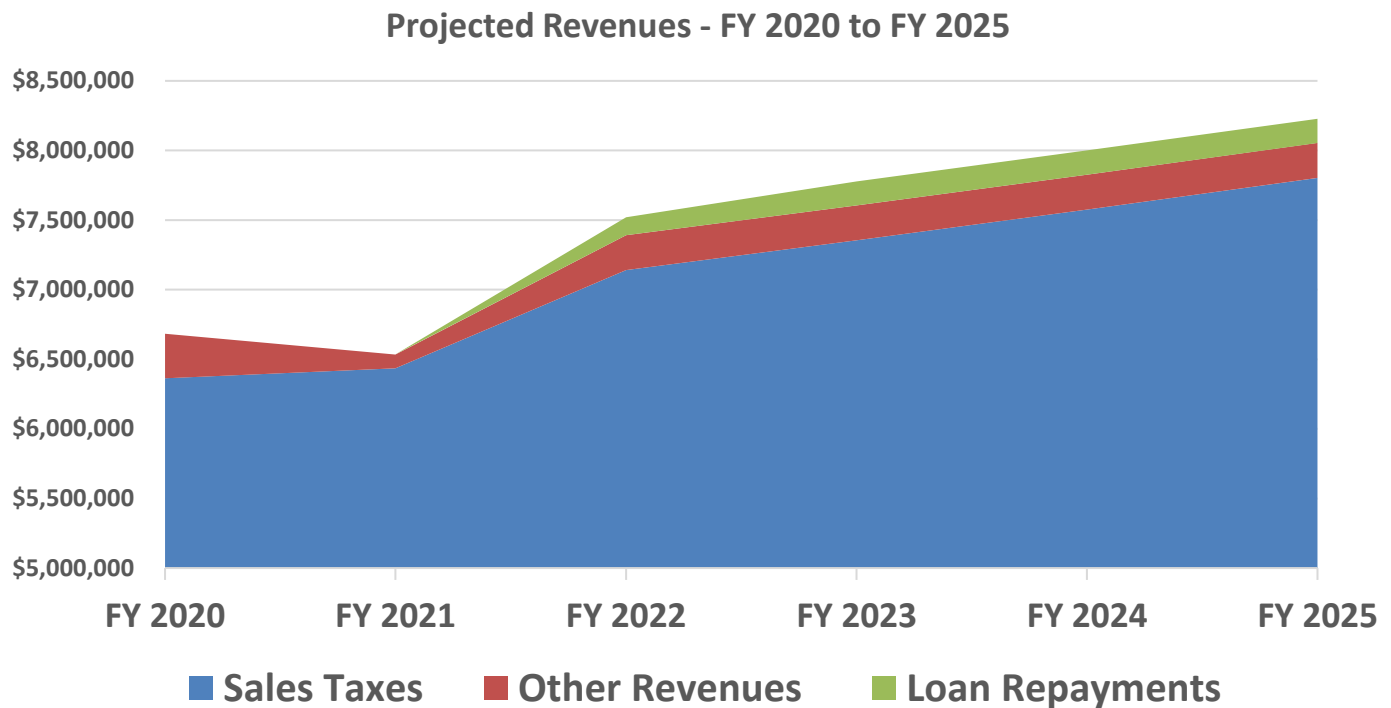
Gross Sales Tax Collections



For more information contact:

Jared Werner
Chief Financial Officer
jwerner@nbtexas.org
830-221-4385

Revenues



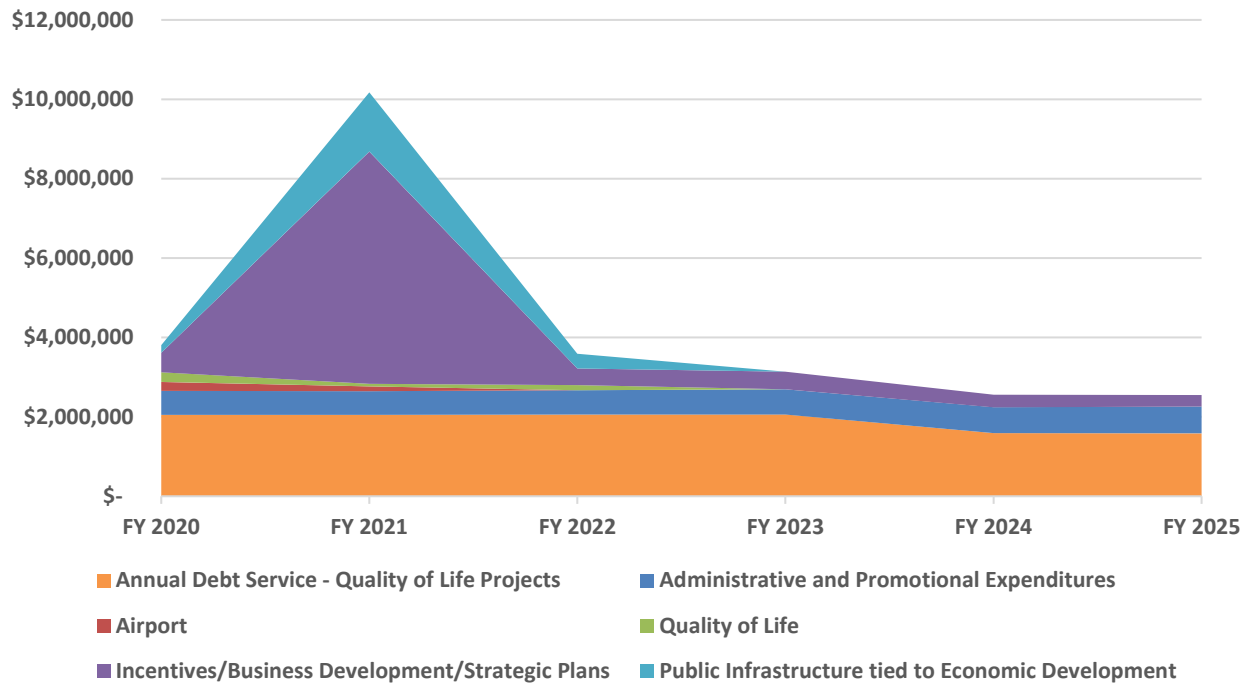
Revenue Projections	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Sales Taxes	\$6,363,136	\$6,435,038	\$7,140,564	\$7,354,780	\$7,575,424	\$7,802,687
Interest Earnings	\$139,342	\$110,978	\$250,000	\$250,625	\$251,252	\$251,880
Loan repayments/reimbursements	\$180,510	\$123,478	\$128,954	\$172,954	\$172,954	\$172,954
Total Revenues	\$6,682,988	\$6,646,016	\$7,519,518	\$7,778,359	\$7,999,629	\$8,227,520

Small Business Grant and Recovery Efforts – A modification to the funding arrangements of an economic incentive contract is necessary to provide the funding for the small business grant (FY 20) and recovery (FY 21) programs. The result of the modification will result in a reduction in net sales taxes for FY 2020 and FY 2021. That adjustment is modeled into the graph and table above.

Loan Repayments – The NBEDC is scheduled to begin receiving loan repayments from the New Braunfels Regional Airport in FY 2022 (ten year) and ASA properties in FY 2023 (five years with a balloon payment in year six).

Total NBEDC Expenditures – Current Commitments

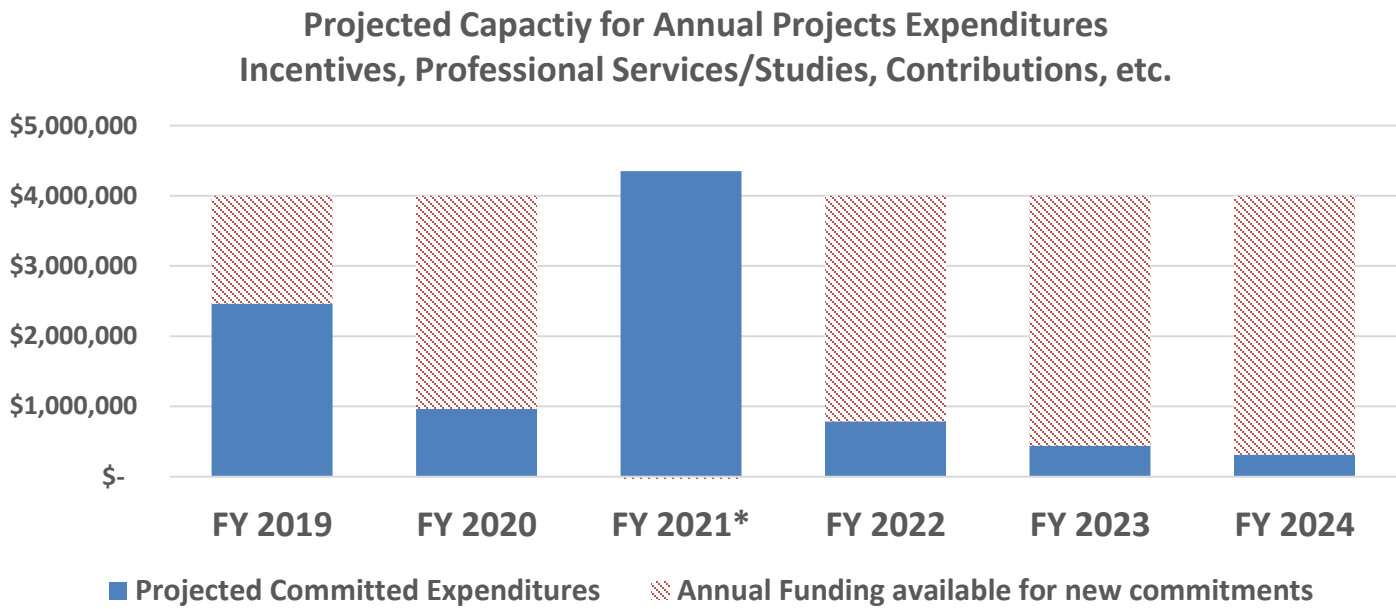
Current Commitment Projections - FY 2020 to FY 2025



Current Commitments	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Admin/Promotional Expenditures	\$605,550	\$597,500	\$615,425	\$633,888	\$652,904	\$672,492
Airport	\$221,839	\$124,884	\$0	\$0	\$0	\$0
Quality of Life	\$63,908	\$125,381	\$0	\$0	\$0	\$0
Incentive/Business Development/Strategic Plans	\$488,600	\$5,847,642	\$353,909	\$378,910	\$250,576	\$225,576
Public Infrastructure tied to Economic Development	\$191,307	\$1,492,947	\$370,006	\$0	\$0	\$0
Annual Debt Service	\$2,051,490	\$2,047,719	\$2,057,494	\$2,060,919	\$1,587,044	\$1,586,294
Total Expenditures	\$3,622,693	\$10,236,073	\$3,396,834	\$3,073,717	\$2,490,524	\$2,484,362

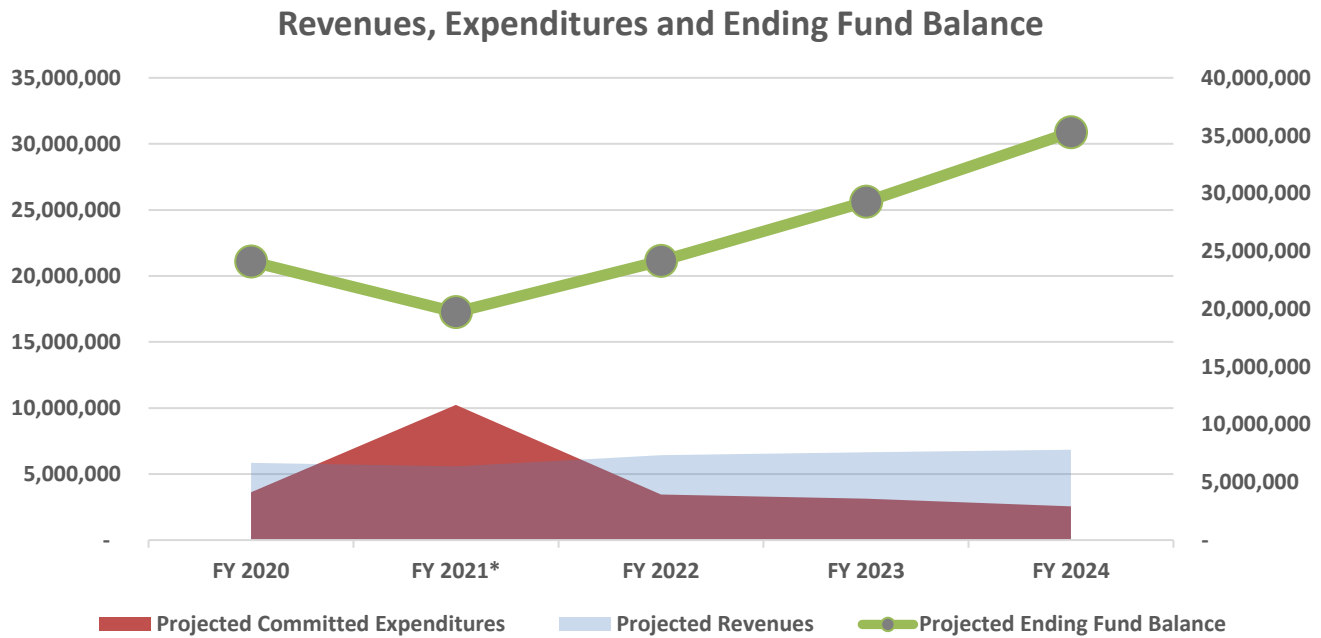
Projections above include all current commitments of the NBEDC – including those most recently approved (Elizabeth Street Construction, VT-AAA flight School). These projections also include the incentive for Continental Automotive, which is projected to be outlaid in FY 2021.

Annual Capacity for New Commitments



*The graph above assumes that the land grant associated with Continental Automotive is supported by available reserves (FY 2021).

Financial Summary – Revenues, Committed Expenditures and projected Fund Balance (reserves)



*The graph above does not include current non-cash assets such as land and equipment

*The summary above also does not reflect the outstanding \$10 million commitment to the Sports Complex project. The NBEDC has yet to finalize its funding strategy regarding this project.

The graph above summarizes estimated revenues, committed expenditures and changes to fund balance/Reserves (only based on current commitments).



Agenda Item Memorandum

February 23, 2021

TO: NBEDC Board

FROM: Jeff Jewell, Economic and Community Development Director

RE: Agenda Item #5: Public hearing, discussion and possible action to approve a proposed project expenditure of up to \$58,000 to the City of New Braunfels for a professional services agreement with Vickrey and Associates, Inc. for preliminary design of the Alligator Creek Trail, an eligible project expenditure related to recreational or community facilities in accordance with Local Government Code Section 505.152

Background:

On January 11, 2021, the City Council adopted the first update to the Hike/Bike Trail Plan since 2010. The plan identifies on and off-street trail connections to neighborhoods, parks, schools and commerce throughout the City and ETJ. Given the City's significant growth since 2010, the City needed to re-evaluate its completed trail inventory, adopt standards for trails, identify new and expanded opportunities to implement the trail vision, and incorporate newly adopted planning studies. The plan provides staff, elected and appointed officials, the development community and citizens a more accurate picture of current trails and future corridor planning and implementation efforts.

The Alligator Creek Trail opportunity area identified in the update to the Hike and Bike Trail Plan spans west and east of IH-35. The west trail section starts approximately at the intersection of Union Pacific Railroad and Conrads Lane, proceeds south along Alligator Creek thru a 15-acre area located behind Arroyo Verde subdivision (currently owned by Arroyo Goodwin LP), 46-acre parcel of land (currently owned by Continental Homes of Texas LP that will be conveyed to the City of New Braunfels) and terminate at a proposed pedestrian underpass at IH 35 or feasible location. The east trail section begins approximately near the IH 35 underpass and will proceed south along Alligator Creek, continue along at Highway 1101, making off-street or on-street connections to the following locations Town Center at Creekside, Timmerman Park, Comal ISD schools, and Solms Landing. (Refer to attached site plan for graphic description).

Significant housing development in this area of the community continues to strengthen the need for parks facilities and a greenway trail connecting these subdivisions under IH 35 and into the Creekside development. Staff presented the Alligator Creek concept throughout the strategic planning process and included some specific detail as to the funding amounts and timelines at the last meeting in November 2020:

Alligator Creek Trail:			
	West side 30% design	\$26,000	Jan. 2021 (City)
	East side 30% design (3-6 months)	\$75,000	Jan. – Apr. 2021 (EDC)
	100% design	\$200,000	Summer 2021
	Construction	TBD	Early 2022 (TBD)
Dry Comal Creek Greenway:			
	Segment 1 100% design	\$250,000	Jan. – Apr. 2021 (EDC)
	Construction match*	\$350,000	Oct. 2022 (EDC)
	Construction	\$1,350,000*	Jan. 2023 (MPO)
	Segments 2-3 30% design	\$100,000	Oct. 2021 (EDC)
Gruene Loop & River Trails:			
	30% design (12 months)	\$100,000	Oct. 2021-2022

The proposed project expenditure would fund the schematic design (approximately 30%) of the entire trail, which would provide high level cost estimates, possible route alignments, and determine overall project feasibility and timelines. The City is applying for a grant with Texas Parks and Wildlife (due February 1) that, if awarded, would provide a portion of funds needed for construction of the trail. The grant will be scored on a variety of measures that also include a consideration of whether the project is feasible as determined through preliminary design.

Fiscal Impact:

If approved, the \$58,000 would be coupled with the City's contribution of \$26,000 to fund the schematic design of the entire Alligator Creek trail. The entire services agreement with Vickery and Associates is estimated to cost \$83,340.78. If not approved, the City would proceed with only the schematic design of the proposed trail west of IH 35. Staff recommends the EDC utilize available recurring revenues or reserves to fund the project. Therefore, sufficient funds are available to support the project.

Attachments:

Resolution

Contract

Professional Services Agreement with Vickery and Associates

2020 Hike Bike Trail Update



General Site Project Site Plan

RESOLUTION NO. 2020-R _____

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE CITY OF NEW BRAUNFELS ECONOMIC DEVELOPMENT CORPORATION APPROVING A PROJECT EXPENDITURE OF UP TO \$58,000 TO THE CITY OF NEW BRAUNFELS FOR A PROJECT TO PROVIDE PRELIMINARY SCHEMATIC DESIGN OF THE ALLIGATOR CREEK TRAIL, AN ELIGIBLE PROJECT EXPENDITURE; AND DECLARING AN EFFECTIVE DATE.

WHEREAS, the City of New Braunfels Economic Development Corporation (“EDC”) Board of Directors met on January 21, 2021 to consider a request from the City of New Braunfels to provide funds for preliminary design for the proposed Alligator Creek Trail; and

WHEREAS, the City of New Braunfels Hike and Bike Trail Plan includes a plan for the construction of a multi-use recreation trail along Alligator Creek; and

WHEREAS, the City of New Braunfels intends to undertake preliminary design on the western portion of the proposed trail and the funds provided by the EDC will allow it to undertake preliminary design of the entire proposed trail; and

WHEREAS, the EDC Board of Directors held public meeting public meeting on November 30, 2020, to set strategic priorities and directed staff to investigate projects to further the implementation of the City of New Braunfels Hike and Bike Trail Plan; and

WHEREAS, the EDC Board of Directors held a public hearing on January 21, 2021, to solicit public comment with regard to the City’s funding request; and

WHEREAS, the EDC Board of Directors, after holding a public hearing and discussing the request, recommended that the project expenditure be approved; and

WHEREAS, Section 505.152 of the Texas Local Government Code authorizes the EDC to make the expenditure on behalf of the City of New Braunfels;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE CITY OF NEW BRAUNFELS ECONOMIC DEVELOPMENT CORPORATION:

SECTION 1: That the City Council approves and authorizes up to \$58,000 be delivered to the City of New Braunfels for a project to provide preliminary design for the eastern section of the Alligator Creek Trail; and That the recommendation of the New Braunfels Economic Development Corporation to provide a grant to the City of New Braunfels in an amount up to \$58,000.00 for funding the project design for the east section of the Alligator Creek Trail is hereby approved.

SECTION 2: That a contract between the EDC and City will be executed to fulfill the terms and conditions of the grant and the President is authorized to execute the Agreement on behalf of the EDC.

SECTION 3: That this Resolution shall become effective from and after the date of its passage.

PASSED, ADOPTED AND APPROVED this 21st day of January 2021.

CITY OF NEW BRAUNFELS ECONOMIC
DEVELOPMENT CORPORATION

By: _____
Kathy Meurin, President

ATTEST:

James Poage, Secretary

**CONTRACT BETWEEN THE NEW BRAUNFELS ECONOMIC DEVELOPMENT
CORPORATION AND THE CITY OF NEW BRAUNFELS, TEXAS**

THE STATE OF TEXAS §
 § KNOW ALL MEN BY THESE PRESENTS:
COUNTY OF COMAL §

THIS CONTRACTUAL AGREEMENT (the "Agreement") is made and entered into by and between the New Braunfels Economic Development Corporation, a Non-Profit Corporation of the State of Texas, hereinafter called "EDC", acting by and through its duly authorized officers, and the City of New Braunfels, Texas, a Texas municipal corporation, hereinafter called "CITY," acting by and through its officers:

W I T N E S S E T H:

I.

WHEREAS, Texas Local Government Code §501.054 provides the EDC with the powers of non-profit corporations incorporated under the Texas Non-Profit Corporation Act, as amended, and Section Seven of the Bylaws of the EDC allows for the President and Secretary of the EDC to execute any contract which the Board has approved and authorized to be executed; and

II.

NOW THEREFORE, under the authority granted to the EDC by §501.101 of the Texas Local Government Code and upon the recommendation of the EDC which occurred on January 21, 2021, the City Council of New Braunfels, Texas on February 8, 2021, approved the EDC's determination that an amount up to \$58,000 be allocated to the CITY for costs associated with a project to prepare schematic design documents for the Alligator Creek Trail. Said funds shall be provided by EDC to the

City under the following conditions:

- (1) Up to \$58,000 of the funds shall be allocated from sales tax funds by the EDC to CITY to pay a portion of the costs associated with the schematic design of the Alligator Creek Hike and Bike Trail;
- (2) The CITY shall provide up to \$26,000 from park development fees as a contribution to the project to prepare the schematic designs;
- (3) The total of \$58,000 of EDC funds, or parts thereof, shall be distributed to CITY within thirty (30) days after receiving an invoice;
- (4) CITY shall at all times comply with the ordinances of City of New Braunfels and the laws of the State of Texas; and
- (5) All funds received by CITY from EDC as herein provided shall be expended solely for the purposes stated herein.

III.

In the performance of this contract, CITY shall not discriminate against any person because of his/her race, color, religion, national origin, sex, disability or ancestry. Breach of this covenant may be regarded as a material breach of the contract causing its termination.

IV.

It is expressed and understood and agreed by both parties hereto that each acts independently of each other, and neither has the authority to bind the other or to hold out to a third party that it is the authority for the other. The parties hereto understand and agree that the City shall not be liable for any claims, which may be asserted by any third party occurring in connection with the performance of the EDC.

Nothing contained herein shall be deemed or construed by the parties hereto or by any third party as creating the relationship of employer-employee, principal agent, joint ventures or any other similar such relationships, between the parties hereto.

V.

Employment of Undocumented Workers. During the term of this Agreement, CITY agrees not to knowingly employ an undocumented worker and if convicted of a violation of 8 U.S.C. Sec. 1324a(f), the CITY shall repay the amount of the Grant and any other funds received by the CITY from the EDC as of the date of such violation within sixty (60) days after the date the CITY is notified by the EDC of such violation, plus interest at the rate periodically announced by the Wall Street Journal as the prime or base commercial rate, or if the Wall Street Journal shall ever cease to exist or cease to announce a prime or base lending rate, then at the annual rate of interest from time to time announced by Citibank, N.A. (or by any other New York money center bank selected by the EDC) as its prime or base commercial lending rate, from the date of such notice until paid.

VI.

All communications between EDC and CITY shall be addressed to the President of the New Braunfels Economic Development Corporation, c/o City of New Braunfels, 550 Landa Street, New Braunfels, Texas 78130 with a copy being sent to the President of the EDC at his/her residential or business address. Any communication to the CITY shall be addressed to the City Manager, 550 Landa Street, New Braunfels, Texas 78130.

VII.

It is understood and agreed that in the event any provision of this contract is inconsistent with requirements of law, the requirements of law will control and the parties shall revert to their respective positions, which would otherwise be enjoyed or occupied by the respective parties for the terms of this contract.

VIII.

The foregoing instrument in writing between the parties herein, constitutes the entire agreement between the parties relative to the funds made the basis hereof, and any other written or oral agreement with the EDC being expressly waived by CITY.

IN WITNESS WHEREOF, the parties hereto execute this agreement in duplicate originals on this ____ day of _____, 2021.

CITY OF NEW BRAUNFELS
ECONOMIC DEVELOPMENT
CORPORATION

By: _____

Kathy Meurin, *President*

550 Landa Street

New Braunfels, Texas 78130

James Poage, *Corporate Secretary*

CITY OF NEW BRAUNFELS, TEXAS

By: _____

Robert Camareno, *City Manager*

ATTEST:

Caitlin Krobot, *City Secretary*

APPROVED AS TO FORM:

Valeria Acevedo, *City Attorney*

STATE OF TEXAS §

COUNTY OF COMAL §

Before me, _____, on this day personally

appeared Kathy Meurin, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that Kathy Meuring executed the same as the act of the New Braunfels Economic Development Corporation as its President, for the purposes and consideration therein expressed.

Subscribed and sworn to before me this _____ day of _____, 2021.

Notary Public, State of Texas

My commission expires:

STATE OF TEXAS §

COUNTY OF COMAL §

Before me, _____, on this day personally appeared James Poage, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that Jim Poage executed the same as the act of the New Braunfels Economic Development Corporation as its Secretary, for the purposes and consideration therein expressed.

Subscribed and sworn to before me this _____ day of _____, 2021.

Notary Public, State of Texas

My commission expires:

STATE OF TEXAS §

COUNTY OF COMAL §

Before me _____, on this day, appeared ROBERT CAMARENO, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person

whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity as City Manager of the CITY OF NEW BRAUNFELS, TEXAS.

Subscribed and sworn to before me this _____ day of _____, 2021.

Notary Public, State of Texas

My commission expires:

PROFESSIONAL SERVICES AGREEMENT

January 11, 2021

City of New Braunfels
Attn.: Ms. Ylida Capricciso, AICP, MPA
110 Golf Course Drive
New Braunfels, Texas 78130

EMAIL: ycapricciso@nbtexas.org

Dear Ms. Capricciso :

Thank you for your request for Professional Services. The following information is presented to confirm our assignment and provide information that you may find helpful.

Our Project Number:

Project Name: Alligator Creek Trail Preliminary Design

Assigned Project Manager: Cullen Coltrane, ASLA, LEED® GA

Type Billing: Hourly

Fee:	Task 1 Site Inventory and Site Analysis	\$27,690.76
	Task 2 Schematic Design	\$43,373.10
	Task 3 Public Outreach	\$ 6,131.40
	Task 4 Final Coordination & Report	\$ 4,645.52
	Reimbursable Expenses	\$ 2,500.00
	TOTAL	\$83,340.78

SERVICES TO BE PERFORMED

PROJECT AND PROPERTY DESCRIPTION

Vickrey & Associates, LLC recently completed an update to the City of New Braunfels' 2010 Hike and Bike Trail Plan. It recommended several "areas of opportunity" for trail implementation. The plan recommends implementation of Alligator Creek based on gaps on existing trails, residential growth, and future city park land properties. This project will conceptualize a linear trail park along segments of Alligator Creek and consist of roadway and pedestrian improvements as well as passive trail park improvements and water's edge activities.



Initial Here

The Alligator Creek Trail opportunity area identified in the update to the hike and bike trail plan spans west and east of IH-35. The west trail section starts approximately at the intersection of Union Pacific Railroad and Conrads Lane, proceeds south along Alligator Creek thru a 15-acre area located behind Arroyo Verde subdivision (currently owned by Arroyo Goodwin LP), a 46-acre parcel of land (currently) owned by Continental Homes of Texas LP that will be conveyed to the City of New Braunfels) and terminate at a proposed pedestrian underpass at IH-35 or feasible location. The east trail section begins approximately near the IH-35 underpass and will proceed south along Alligator Creek, continue along at Highway 1101, making off-street or on-street connections to the following locations Town Center at Creekside, Timmerman Park, Comal ISD schools, and Solms Landing. (Refer to attached site plan for graphic description).

Vickrey & Associates, LLC (the Consultant) will perform professional design services for the City of New Braunfels (City) for developing schematic design documents for the linear park plans for the Alligator Creek Trail. The Consultant will prepare a summary of needs assessment, conceptual design alternatives, a final schematic design based on proposed improvements, and phasing and cost estimates based on schematic design.

SERVICES TO BE PROVIDED

Task 1 – SUMMARY OF NEEDS ASSESSMENT

1. Project Management/Coordination/Communication

- a. Kick-off meeting with City and stakeholders to review project scope, schedule, deliverables, and expectations.
- b. Communication regularly by phone and email.
- c. Participate in planned meeting and/or phone conference with the City on as needed and to include (1) conference call per month.
- d. Provide City with a project status report and current project schedule on the last business day of each month, throughout the project.

2. Site Inventory and Site Analysis:

- a. Gather and review available relevant project data provided by the City and other sources including subdivision plans, flood studies, and other relevant information.
- b. On-site observation to visually inventory and document the project site's existing conditions, cultural and environmental opportunities and constraints.
- c. Develop a base map based on existing conditions, on-site observations, and GIS information. Information shall include line work for existing infrastructures such as roadways, buildings, parking lots parcel boundaries and proposed development site plans under construction or in the planning phase.
- d. Facilitate and attend a pre-planning review meeting with City to present the Task 1 findings with the intent to gain direction from City staff regarding trail alignment, trail head locations/amenities, site amenities and project schedule.



Initial Here

3. Concept Recommendations

- a. Rough diagrammatic drawing of potential site concepts using photos of architectural/program precedents and other supporting materials to suggest various methods of approaching the design while meeting project requirements.

Deliverables:

Base maps

- Concept design recommendations
- One (1) illustrative plan view
- Draft summary of initial findings

Task 2 – SCHEMATIC DESIGN: Primary goal is to define the site area, neighborhood relationships, character, and layout.

Using the information gathered from Task 1, the Consultant will prepare a conceptual sketch to identify basic trail alignment and project elements. The Consultant will develop a schematic site plan using the approved concepts.

1. Participate in two (2) a planning review meeting with City to present schematic site plan and preliminary construction cost estimate for comment and direction. Make plan changes based on comments and submit preferred trail plan to City of New Braunfels for final approval.
2. The Consultant will assist the City in prioritizing the development of the project elements to which will be phased for future construction.
3. The Consultant will prepare a materials and specifications summary for the project elements depicted in the schematic design plan and shall delineate:
 - a. The location and general character of the trail alignment, street/pedestrian crossings, trail heads and site furnishings.
 - b. Connection points between existing trails and proposed trail alignment.
 - c. Location and general character of wayfinding and general signage.
 - d. Trail access points from adjacent developments and infrastructure.
 - e. Identify access easement locations to connect propose trail alignment to future development
 - f. Plant material recommendations.
 - g. Project phasing plan.
4. The Consultant will prepare a schematic level opinion of probable costs.



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Deliverables:

- Prepare a composite schematic plan to include:
 - One (1) schematic trail plan view alignment, general detailing, and typical cross sections.
 - Trail site amenity locations, elevations, and material descriptions.
 - Section view trail head.
 - One (1) trailhead locations and enlarged plan to describe typical trailhead's site amenities, vehicular /pedestrian access, and parking.
- Project phasing plan
- Opinion of probable costs

TASK 3 - PUBLIC OUTREACH

1. Public engagement and outreach will span the entire process. The City will be responsible for identifying stakeholders, organizing a stakeholder committee, securing venues (in-person or virtual), and send meeting notifications and invitations.
2. The Consultant participation will be to attend stakeholder and public meetings, present schematic plans, graphics, materials for public input involving community members, adjacent landowners, governmental agencies, and potential trail users to express their opinions relating to trail connectivity and alignment.

Deliverables:

- Attend one (1) stakeholder meeting.
- Attend one (1) public meeting.
- Prepare meeting minutes and agendas.

TASK 4 – FINAL COORDINATION & REPORT

1. Consultant will produce a final report document of all tasks completed to be available in both electronic version and one hard copy format.
 - a. Design plans shall include:
 - i. Site inventory, site analysis plans and recommendations
 - ii. Final schematic trail plans.



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iii. Final details and sections to describe all trail elements' general character and material.

b. Report shall include:

- i. Narrative of the design plans.
- ii. Public Outreach meeting minutes.
- iii. Final probable construction cost estimate.
- iv. Construction phasing plan and probable construction cost estimate per phase.
- v. Potential estimated construction schedule to complete each phase.
- vi. List potential permitting requirements.
- vii. List additional design expertise required to prepare final construction documents as required for bidding and construction.

Deliverables:

- Final schematic design plans (24"x 36" format) and electronic version.
- Final report shall be produced on an 8 ½ x 11" format. Consultant shall provide deliverable in both electronic version and one hard copy format.

Estimated Project Timeline: 3 months.

Time by task are as follows:

Task 1 – Analysis, Design & Development

- | | |
|--|--------|
| • On-site observation | 1 day |
| • Prepare On-site observation report | 3 days |
| • Develop a base map information | 3 days |
| • Prepare a composite illustrative plan of Site Analysis | 5 days |
| • Facilitate a pre-planning review meeting with City staff | 1 day |
| • City staff review and comment | 5 days |

Task 2 – Schematic Design

- | | |
|--|---------|
| • Schematic design plans (as defined in Task 2 scope) | 30 days |
| • Facilitate a planning review meeting with City staff | 1 day |
| • City staff review and comment | 5 days |



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- Consultant plan changes based on City comments 3 days

Task 3 – Public Outreach: (2) in-person or virtual meetings

- Prepare graphics for public input meetings 5 days
- Facilitate public input meeting 1 day (per meeting)
- Prepare Public Outreach Meeting minutes & agendas. 1 day (per meeting)
- City staff review and comment 5 days
- Consultant plan changes based on City comments 3 days

Task 4 – Final Coordination & Report Preparation

- Prepare final schematic design plans 14 days
- Prepare final schematic design report 7 days

ASSUMPTIONS AND EXCLUDED SERVICES

- Excludes attending meetings beyond the allocated meetings described in this proposal.
- Excludes site surveying.
- Excludes construction documentation, bidding & permitting assistance, and construction administration.
- Excludes environmental testing soils.
- This proposal only includes those items specifically identified in the scope of services above. Items not specifically identified will be performed as a supplemental service if requested by Client.

ITEMS TO BE PERFORMED BY OR PROVIDED BY CLIENT

- Assist in securing GIS information to created planning base map.
- Contacting developers to provide site plan information (in AutoCAD format) to assist design team in providing in-fill information (infrastructure under construction or in planning phase) within the project site.
- Contact community members, adjacent landowners, governmental agencies, and potential trail users to attend Public Outreach Meeting.
- Provide wayfinding, site furnishings, and signage city standards (if available).

Please complete the following information and return one executed agreement by email within ten (10) days and one executed original within thirty (30) days. Receipt of properly executed agreement will constitute your authorization for V&A to commence work on these Professional Services. This agreement is void if not signed and returned within thirty (30) days.

Should you need further information, please do not hesitate to call. We look forward to your reply and authorization to proceed.




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Ylda Capricciso,
January 11, 2021

Sincerely yours,

VICKREY & ASSOCIATES, INC.
TBPE Registration #159 / TBPLS Registration #10004100


Cullen Coltrane
Director of Landscape Architecture

Reviewed and Approved by:


Jeffrey S. Tondre
Vice President

CC/mc

TO BE COMPLETED BY CLIENT: (Please Type or Print Below)

CLIENT:

This agreement is between Vickrey & Associates, Inc. and CLIENT. The CLIENT is identified as follows and is to be completed by the CLIENT:

_____ is the responsible party for
(Printed Name of Company Representative) (Client Company Name) (Tax ID No.)
all fees incurred under this Agreement and I am authorized to sign this Agreement on _____'s
behalf. (Company's)

Address: _____

Email: _____ Phone: _____

CLIENT'S SIGNATURE _____ (ALSO INITIAL AT BOTTOM OF PAGE)

PRINTED NAME: _____

TITLE: _____

DATE: _____

AUTHORIZED CLIENT CONTACT:

If different from above, designate the person to act with authority on Client's behalf regarding all matters in the performance of this contract:

Company Name: _____

Authorized Contact Name: _____

Address: _____

Email: _____ Phone: _____

AUTHORIZED PARTY'S SIGNATURE _____ DATE _____

PRINTED NAME: _____

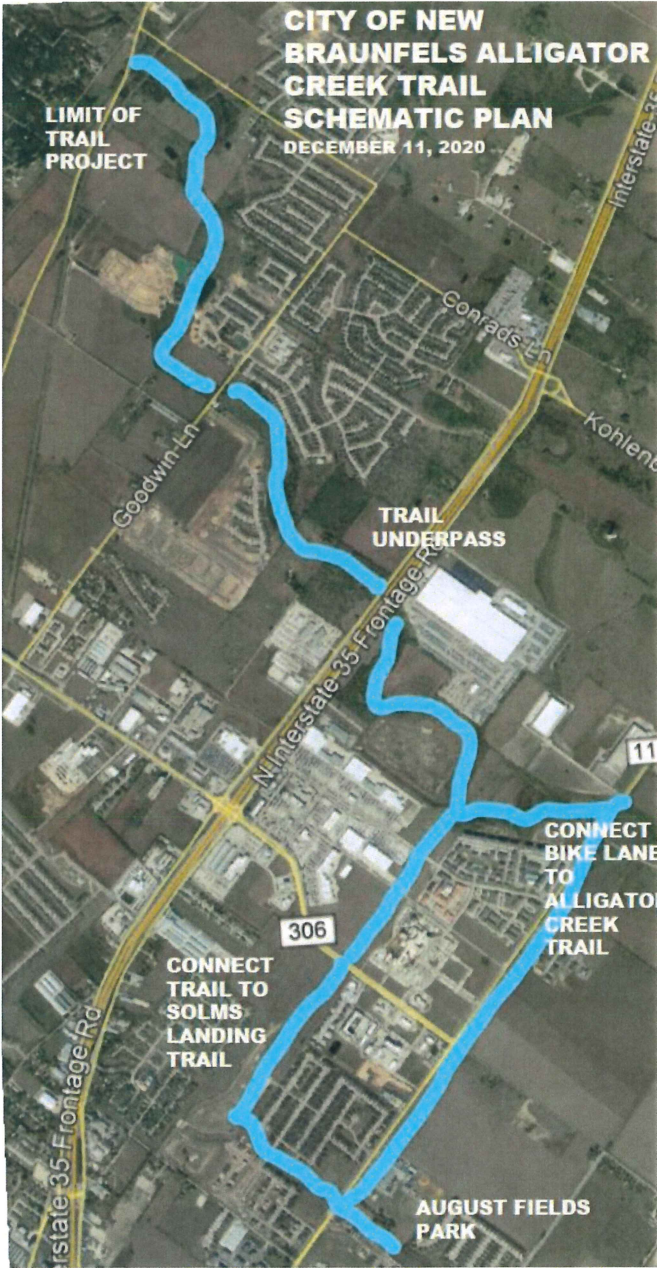
TITLE: _____



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VICKREY & ASSOCIATES, INC.
PROFESSIONAL SERVICE AGREEMENT
STANDARD TERMS & CONDITIONS
ATTACHMENT I

General Site Project Site Plan



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PROFESSIONAL SERVICES AGREEMENT

December 11, 2020

City of New Braunfels
Attn.: Ms. Ylida Capriccioso, AICP, MPA
Park Development Manager
110 Golf Course Drive
New Braunfels, Tx 78130

EMAIL: ycapriccioso@nbtexas.org

Dear Ms. Capriccioso:

Thank you for your request for Professional Services. The following information is presented to confirm our assignment and provide information that you may find helpful.

Our Project Number:

Project Name: Alligator Creek Trail Preliminary Design

Assigned Project Manager: Cullen Coltrane, ASLA, LEED® GA

Type Billing: Hourly not to exceed

Fee:	Task 1 Site Inventory and Site Analysis	\$27,690.76
	Task 2 Schematic Design	\$43,373.10
	Task 3 Public Outreach	\$ 6,131.40
	Task 4 Final Coordination & Report	\$ 4,645.52
	Reimbursable Expenses	\$ 2,500.00
	TOTAL	\$83,340.78

SERVICES TO BE PERFORMED**PROJECT DESCRIPTION AND SCOPE****Project Background and Description:**

Vickrey & Associates recently completed an update to the City of New Braunfels' 2010 Hike and Bike Trail Plan. It recommended several "areas of opportunity" for trail implementation. The Plan recommends implementation of Alligator Creek based on gaps on existing trails, residential growth, and future city park land properties. This project will conceptualize a linear trail park along segments of Alligator Creek and consist of roadway and pedestrian improvements as well as passive trail park improvements and water's edge activities.

The Alligator Creek Trail opportunity area identified in the update to the Hike and Bike Trail Plan spans west and east of IH-35. The west trail section starts approximately at the intersection of Union Pacific Railroad and Conrads Lane, proceeds south along Alligator



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Creek thru a 15-acre area located behind Arroyo Verde subdivision (currently owned by Arroyo Goodwin LP), 46-acre parcel of land (currently owned by Continental Homes of Texas LP that will be conveyed to the City of New Braunfels) and terminate at a proposed pedestrian underpass at IH 35 or feasible location. The east trail section begins approximately near the IH 35 underpass and will proceed south along Alligator Creek, continue along at Highway 1101, making off-street or on-street connections to the following locations Town Center at Creekside, Timmerman Park, Comal ISD schools, and Solms Landing. (Refer to attached site plan for graphic description).

Vickrey & Associates (the consultant) will perform professional design services for the City of New Braunfels (City) for developing schematic design documents for the linear park plans for the Alligator Creek Trail. The consultant will prepare a summary of needs assessment, conceptual design alternatives, a final schematic design based on proposed improvements, and phasing and cost estimates based on schematic design.

SERVICES TO BE PROVIDED

Task 1 – SUMMARY OF NEEDS ASSESSMENT

1. Project Management/Coordination/Communication

- a. Kick-off meeting with City and stakeholders to review project scope, schedule, deliverables, and expectations.
- b. Communication regularly by phone and email.
- c. Participate in planned meeting and/or phone conference with the City on as needed and to include (1) conference call per month.
- d. Provide City with a project status report and current project schedule on the last business day of each month, throughout the project.

2. Site Inventory and Site Analysis:

- a. Gather and review available relevant project data provided by the City and other sources including subdivision plans, flood studies, and other relevant information.
- b. On-site observation to visually inventory and document the project site's existing conditions, cultural and environmental opportunities and constraints.
- c. Develop a base map based on existing conditions, on-site observations, and GIS information. Information shall include line work for existing infrastructures such as roadways, buildings, parking lots parcel boundaries and proposed development site plans under construction or in the planning phase.
- d. Facilitate and attend a pre-planning review meeting with City to present the Task 1 findings with the intent to gain direction from City staff regarding trail alignment, trail head locations/amenities, site amenities and project schedule.

3. Concept Recommendations

- a) Rough diagrammatic drawing of potential site concepts using photos of architectural/program precedents and other supporting materials to suggest various methods of approaching the design while meeting project requirements.

Deliverables:

- Base maps
- Concept design recommendations



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- One (1) illustrative plan view
- Draft summary of initial findings

Task 2 – SCHEMATIC DESIGN: Primary goal is to define the site area, neighborhood relationships, character, and layout.

1. Using the information gathered from Task 1, the consultant will prepare a conceptual sketch to identify basic trail alignment and project elements. The consultant will develop a schematic site plan using the approved concepts.
2. Participate in two (2) a planning review meeting with City to present schematic site plan and preliminary construction cost estimate for comment and direction. Make plan changes based on comments and submit preferred trail plan to City of New Braunfels for final approval.
3. The consultant will assist the City in prioritizing the development of the project elements to which will be phased for future construction.
4. The consultant will prepare a materials and specifications summary for the project elements depicted in the schematic design plan and shall delineate:
 - a. The location and general character of the trail alignment, street/pedestrian crossings, trail heads and site furnishings.
 - b. Connection points between existing trails and proposed trail alignment.
 - c. Location and general character of wayfinding and general signage.
 - d. Trail access points from adjacent developments and infrastructure.
 - e. Identify access easement locations to connect propose trail alignment to future development
 - f. Plant material recommendations
 - g. Project phasing plan
5. The consultant will prepare a schematic level opinion of probable costs.

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- Prepare a composite schematic plan to include:
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Deliverables:



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- Attend one (1) stakeholder meeting
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- Prepare meeting minutes and agendas

TASK 4 – FINAL COORDINATION & REPORT

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Estimated Project Timeline: SHOULD WE STATE HOW LONG WE ANTICIPATE THIS TO TAKE APPROXIMATELY 3-MONTHS

Task 1 – Analysis, Design & Development

- | | |
|--|--------|
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- | | |
|--|---------------------|
| • Prepare graphics for public input meetings | 5 days |
| • Facilitate public input meeting | 1 day (per meeting) |



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VICKREY & ASSOCIATES, INC.
TBPE Registration #159 / TBPLS Registration #10004100

Cullen Coltrane
Director of Landscape Architecture

CC/mc

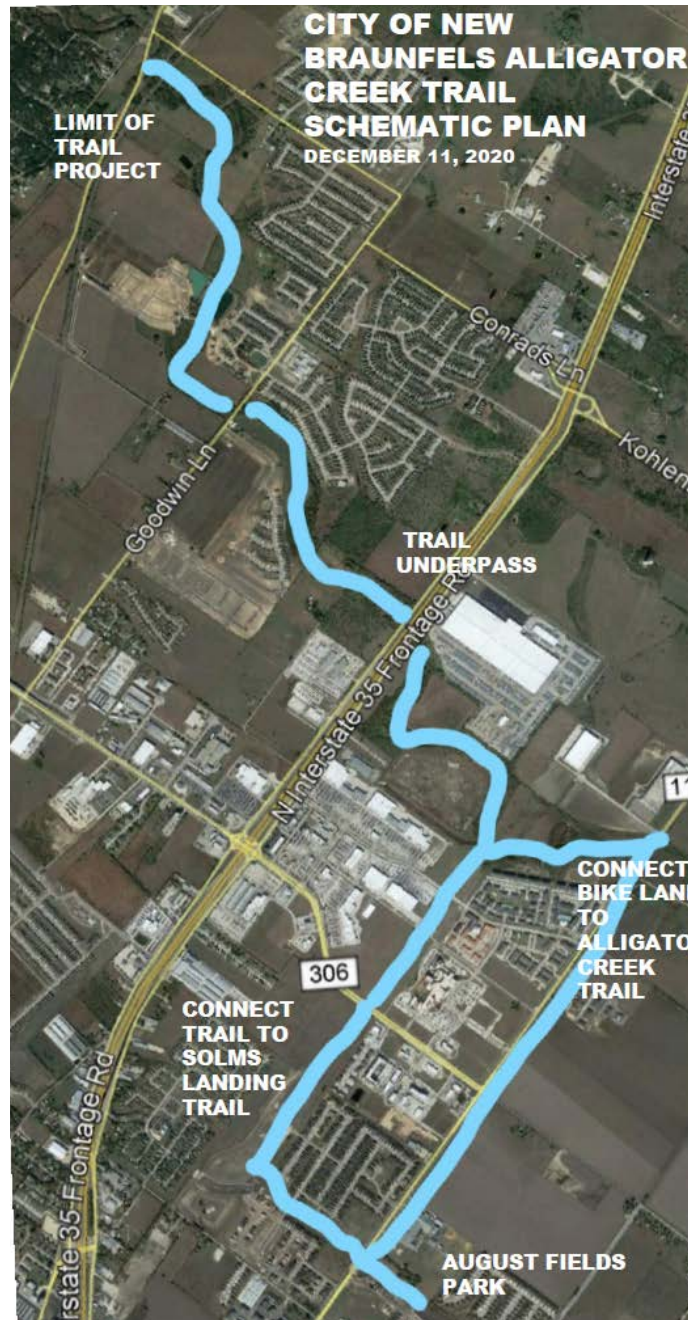
Reviewed and Approved by:

Jeffrey S. Tondre
Vice President



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General Site Project Site Plan



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PARKS AND RECREATION DEPARTMENT

HIKE AND BIKE TRAIL PLAN

2020



Prepared by



VICKREY & ASSOCIATES, INC.
CIVIL • ENVIRONMENTAL • SURVEY
LANDSCAPE ARCHITECTURE

ACKNOWLEDGEMENTS

The following individuals are recognized for their significant contributions to the preparation of the Hike and Bike Trail Plan – Interim Update 2019:

City Council

Barron Casteel, Mayor

Shane Hines, District 1

Justin Meadows, District 2

Harry Bowers, District 3

Matthew E. Hoyt, District 4

Wayne Peters, District 5

Leah A. Garcia, District 6

City Staff

Robert Camareno, City Manager

Kristi Aday, Assistant City Manager

Jordan Matney, Assistant City Manager

Garry Ford, City Engineer

Mary Hamann, Engineer, Public Works

Stacy Snell, Assistant Director Planning and Community Development

Matthew Simmont, Planner, Planning and Community Development

Parks and Recreation Department Staff

Stacey Dicke, Director of Parks and Recreation

Ken Wilson, Assistant Director of Parks and Recreation

Ylida Capriccioso, Park Development Manager



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INTRODUCTION

In 2010 the City of New Braunfels adopted a Parks Master Plan that included a chapter regarding trails. This Chapter has been used as the City's Hike and Bike Trail (HBT) Plan for the last decade. It is being used as a trail and greenway planning tool to enhance the City's transportation and park network. That Plan identified trail types and standards and most importantly, it identified on- and off-street trail connections to neighborhood/community parks, schools, and commerce throughout the City and its extra-territorial



jurisdiction (ETJ). The proposed trails were later incorporated in the 2012 Regional Transportation Plan to identify transit and bike/pedestrian needs, alternative transportation networks and connections. The HBT Plan has provided the City with new trails such as the Countyline Memorial Trail, Oak Run bike lanes and other trail connections that have enhanced the City's non-motorized transportation network. However, rapid growth in both land use, roadways, and population leaves the 2010 HBT Plan outdated.

Since the adoption of the HBT Plan nearly 10 years ago, the City's population has grown exponentially which has led the City to re-evaluate its parks and recreation inventory and land use requirements to meet the community's ongoing park and recreational needs. In 2017, The City's Parks Strategic Master Plan was adopted to address such issues by updating the City's parkland goals, identifying unmet recreational needs, and establishing future land acquisition and development strategies. The facilities most desired by residents which are currently not provided included, "walking and biking trails" and "paved/unpaved trails."

The 2017 Parks Strategic Master Plan included projects from the HBT Plan, but it did not reexamine the trail recommendations. It was determined that a future effort would reexamine trail plans for future efforts, thus the minor plan update.

The Parks Strategic Master Plan was adopted and used to inform the Parks section of Envision New Braunfels. This is the City's newly adopted comprehensive land use plan. It touched on a variety of topics that impact land use, future development, and the economic viability of the community. It acknowledged parks as a benefit and trails as a multipurpose strategy for linking neighborhoods, increasing mobility, and maintain a high quality of life.

While each of the aforementioned plans identified trails and greenways as strategies to reaching specific goals, the plans did not provide a review of existing efforts, revised trail standards based on best management practices, or give recommendations for trail priorities to address the public desire for more walking and biking trails.

To tackle this and the growing interest in hike and bike trails, this report provides an update to the 10-year old plan. This Plan includes updating the City's inventory of completed trail projects, codifies trail classification and types, as well as standards for trails, incorporates newly adopted planning studies, and revisits the trail opportunities highlighted in the 2010 HBT Plan. The 2020 Plan reflects existing and maintain proposed on- and off-street citywide non-vehicular bike/ped network. The Plan is not intended to add new trails, instead it used existing land use knowledge, GIS data, current conditions, to provide a more accurate look at the City's proposed network. The HBT Plan gives City staff, elected officials, development, and

CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN – 2020

citizens a more accurate glimpse on current trails and future corridor planning and implementation efforts. This will provide a better map to localized priorities and planning efforts.

There are numerous benefits to developing hike and bike trails, such as offering low-cost recreational opportunities, safe, alternative forms of transportation, substantial health benefits, habitat enhancements for plants and wildlife, and unique opportunities for outdoor education and cultural interpretation. The key benefits identified in this plan are taken from various planning documents (2017 Envision New Braunfels Comprehensive Plan; Strategic Parks and Recreation Master Plan, Trail Component, 2010; Downtown Implementation Plan, 2010; Regional Transportation Plan, 2012; Mobility 2040; Regional Bicycle & Pedestrian Planning Study) and are supported by public input.

WALNUT AVENUE POCKET PARK AND TRAIL



TRAIL USERS, TYPOLOGY & AMENITIES

TRAIL USERS

There are several different types of trails and trail users. Depending on the trail type the users may vary. The variety can include walkers, joggers, runners, bird watchers, and cyclists and offer alternative means of travel, provide recreation opportunities, and improve quality of life. Cities and trail providers should consider the ability and age, level of comfort and ease for each potential user to determine the best trail type.



[This Photo](#) by Unknown Author is licensed under [CC BY-SA-NC](#)



To accommodate the variety of user types, this plan uses the American Association of State Highway and Transportation (AASHTO) trail design guidelines.

Trail Typology

For the purposes of this report and plan, the trail typology provides an overview of the wide range of trail types. Not all of these are available in New Braunfels or required in the plan. Each potential trail developed will depend on the user type, costs and maintenance. This section provides a brief description of the off-street trails and on-street bike facilities.

Off-Street Trails

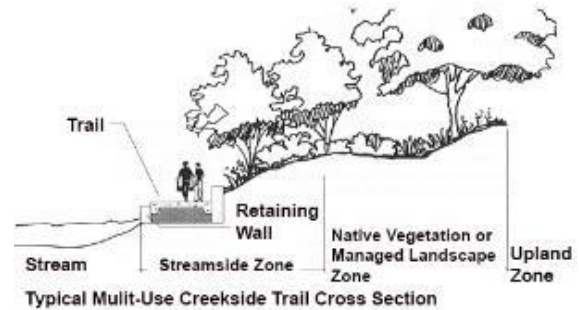
Regional or arterial trails are defined as “community wide trail systems” which travel long distances to link different parts of the city together and to other city trail facilities. These trails are typically are ten feet wide with concrete or asphalt paving. Trail access points should be located every half mile. Facilities include trailheads with amenities.

Neighborhood trails provide access between neighborhoods and connect to regional or arterial trails. These trails are six feet in width and constructed of concrete or asphalt.

Natural trails typically have a compacted earth surface with a minimum of six feet in width but can be as wide as ten to twelve feet for greater visibility. An additional two- to four-foot shoulder is recommended as a “Safe Zone” to provide visibility to obstructions and hazards such as animals, roots, rocks, and understory vegetation. It is recommended to use trail surfaces that create an atmosphere compatible with the natural beauty of the corridor.

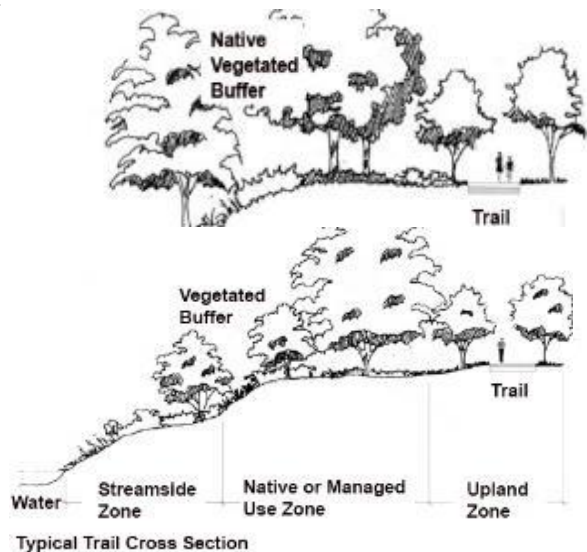
CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN – 2020

Multi-Use Paths are physically separated from motorized vehicular traffic by an open space or barrier. They can be located within road right of ways, parks, and trail corridors and are shared by multiple users including, but not limited to, pedestrians, joggers, runners, and bicyclists. Generally, two types of surface treatments are used: crushed granite or hard surface pavement. Anticipated use and location should be considered when selecting surface treatment, which should also meet the City of New Braunfels' Park Standards.



Stream Corridor and Drainage Way Multi-Use Trails are located within waterways and designed to protect water quality and wildlife habitats, mitigate damaging effects of flooding from storms, and filter pollutants from overland flow. It is recommended to provide an undisturbed vegetated buffer within waterway corridor floodplains and floodways. Prescriptive buffer widths will be site specific, depending on stream, riparian buffer, and watershed; water quality; impervious surfaces; slope; soil hydrology; and vegetation. Stream corridor trail categories include the following multi-use trails:

- **Creekside and Drainage Way Multi-Use Trails** are located only in urban areas, where right-of-way constraints and channelized streams restrict trail development within floodways. Creekside trails are designed to be 10 feet wide to accommodate walkers, bicyclists, and joggers. These multi-use trails are typically positioned directly adjacent to the stream channel and are therefore subject to frequent flooding. Creekside trails require hard-paved surfaces of concrete to withstand high-velocity stream flows. Retaining walls or other structural elements may also be required for stable construction and to protect the trail from erosion and flood damage. Installation of railings, benches, signage, and trash receptacles that could obstruct flow during storm events should be carefully considered and located to minimize their effect on flood waters and protect the amenities from flood damage. The use of retaining walls as seat walls is one way in which non-obtrusive amenities can be included on this type of trail facility. Special consideration should be paid to mitigating the impacts of trail construction on the natural environment.
- **Floodway and Floodplain Multi-Use Trails** are designed to be 10 feet wide to accommodate a variety of users and are

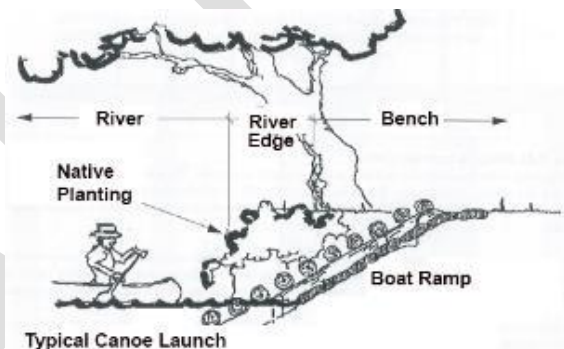


typically positioned within the floodway but not directly adjacent to streams. Some vegetative buffer between the stream and trail should be left intact. Like the creekside trails, floodways are subject to periodic flooding, but not as frequently. These trails require paved surfaces of either asphalt or concrete, depending on frequency of flooding and expected velocity of flow. A proper trail foundation is important and will increase the longevity of the trail. Soft shoulders should not be constructed due to flood considerations, and special attention should be given to mitigating negative impacts from trail development on the natural stream environment. All elements of the trail including the trail tread, railings, benches, and trash receptacles will be periodically flooded. The design and materials for these trails should be carefully selected accordingly.

- **Upland Multi-Use Trails** are designed to accommodate a variety of users. They are positioned completely outside designated floodplains, with an undisturbed vegetative buffer between any streams and the trail. It is recommended that these trails be built with paved asphalt or aggregate stone, depending on the preference of local user groups. Upland multi-use trails should be built to a minimum of 10 feet wide.

Water Based Trails are adjacent to rivers and streams that are designated to support canoeing, kayaking, and boating. Water based trails can be designed with features and facilities such as signage systems, improved rapids, safety systems, and access points.

On Street or Striped Bicycle Lanes can be used to link off-street trails and provide seamless connection and transitions. Striped bicycle lanes should be a minimum of four to five feet in width from the street edge of the gutter pan; a width of five feet is preferred.



Bicycle Facilities (On-Street)

The Hike and Bike Trail (HBT) Plan is a high-level on- and off-street plan. It is intended to show trails for non-vehicular transportation users. These trails include on-street facilities in order to accommodate potential constraints, such as right-of-way limitations, property ownerships, topography, and access. Including on-street bike facilities to offer seamless connection opportunities is important and practical for the implementation of a comprehensive HBT Plan.

Bicycle facilities are pathways designed for bicyclists' travel and should comply with AAMPO New Braunfels Bicycle & Pedestrian Planning Study and the latest American Association of State Highway and Transportation Officials (AASHTO) standards. Types of bicycle facilities include the following:

Bicycle Lanes are designated by a lane stripe, pavement markings, and signage. Striped bicycle lanes promote areas reserved for bicyclists. Typically, the solid stripe of the bicycle lane is either dropped or dashed prior to and through intersections, to allow for both cyclists' and motorists' turning movements.

Green Bike Lanes feature contrasting green color pavement marks that define the bike lanes and extend them through intersections and other traffic conflict areas, such as merge areas where turning vehicles must cross a through bike lane.

Sidewalks: When bicycle volumes and/or pedestrian volumes are expected to be low, or if a street right-of-way is constrained, sidewalks may be used as bicycle facilities. However, bicyclists' travel speed should not be faster than approximately 5-10 mph.

Bicycle Boulevards give preference to bicyclists over cars by diverting motorized traffic. Design elements may include diverters, reconfiguration of stop signs to favor the bicycle boulevard, traffic calming devices, shared lane markings, and crossing improvements at high traffic crossings.

Bikeways are roads or pathways specifically designated for the exclusive use of bicycles and do not necessarily have to be within the roadway.

Protected Bike Lanes separate bikes from motorized vehicle traffic by a row of parked cars, a curb, or some other physical separation.

Bicycle/Bus/Taxi Shared Lanes are restricted travel lanes for bicycles, buses, and/or taxis.

Climbing Bicycle Lanes are marked land on one side of the road to benefit cyclists going up steep hills at slower speeds.

Shoulders are a continuous portion of the roadway which can accommodate stopped vehicles, emergency vehicles, and bicyclists. A shoulder can accommodate bicyclists if it is adequate in width and pavement surface and has few crossings or driveways. Texas legal code allows continuous use of the shoulder by bicycles, emergency vehicles, and maintenance crews.

Shared Lanes (with markings) are the right-most through-traffic lanes that are 14 feet wide or less, measured from the lane stripe to the edge of the gutter pan. The lanes are used by both bicyclists and motorized vehicle traffic and have pavement markings which indicate they are shared.

Wide Curb Lanes are the right most through-traffic lanes that are greater than 14 feet wide, measured from the lane stripe to the edge of the gutter pan. These lanes are used by both bicyclists and motorized vehicle traffic; however, they do not always have pavement markings.

Shared Roadways are any roadways upon which a bicycle lane is not designated, are not bicycle boulevards, and that may be legally used by bicyclists regardless of whether the roadway is specifically designated as a bicycle route. Shared roadways can be described in three ways: as shared lanes, wide curb lanes, or paved shoulders.

Rail-Trails are shared use paths, either paved or unpaved, built within the right-of-way of a former railroad.

Rail-with-Trails are shared use paths, either paved or unpaved, built within the right-of-way of an active railroad.

These facilities shall comply with the latest AASHTO guidelines at the time of design and construction.

Trail Accessibility

Cities and trail providers should consider the ability and age, level of comfort and ease for each potential user to determine the best trail type. Trails should comply with the most current Accessibility Guidelines for Outdoor Areas, under the supervision of the United States Architectural and Transportation Barriers Compliance Board and Texas Accessibility Standards (TAS) guidelines for design and construction of multi-use trails.

Trailheads and Access Points

Trailheads are primary means of accessing a trail, typically at the terminus points of each trail. They may include parking lots, restrooms, picnic facilities, and other recreational amenities. Access points, on the other hand, refer to minor connections between the trail and nearby residential communities, recreational parks, and roadways. When developing both trailheads and access points, designers should consider people with disabilities and users with a wide range of skill levels. Accessible pathways should be developed that

connect the public right-of-way and the public transit system to trailheads and access points. It is also crucial that all built facilities—such as parking lots, restrooms, picnic facilities and drinking fountains at trailheads and along the trails—comply with Texas Accessibility Standards (TAS). Although each project must be evaluated on an individual basis, the following general guidelines should be considered in the development and placement of trailheads and access points:

- Trailheads should be placed at each terminus of a trail corridor, and any place where a large concentration of trail users is expected, such as major parks along the trail.
- An accessible pathway should be developed that connects parking and other accessible elements to the trailhead.
- Trailheads should at least include parking, emergency phone service, benches, drinking fountains, animal waste bag dispensers, bike racks and repair area, native landscaping, and trail maps, and may also include restrooms, site lighting, trash receptacles, and picnic facilities.
- Trailhead facilities located adjacent to or within residential neighborhoods should be designed to ensure compatibility with the surrounding neighborhood.
- Trail access points should be placed wherever trail access is expected, such as at adjacent communities, schools, commercial areas, and parks.
- Trail access points should include signage identifying the trail and may include a map and drinking fountain. Limited parking may also be included, but because trail access points are designed to give access from local amenities to the trail, it may be unnecessary.

Design Standards at Crossings

An important issue when designing a crossing, whether it is off-street or on-street, is to ensure that drivers and trail users are aware of the presence of each other. Signage, pavement treatments, and other permanent traffic-calming measures should be implemented on both the road and the trail to warn users of an upcoming crossing. Traffic calming devices on trails may include rumble strips to alert cyclists to slow down or stop. Likewise, the road pavement treatments should include coloring or special materials to alert drivers. Roadway speed bumps near trail crossings may be required if drastic change is necessary. Using a median crossing on both the trail and intersecting roadway is another option to reduce speed. The design of low medians on a trail can narrow the trail as it approaches a crossing, directing the trail user to slow down. This treatment also allows trail access for emergency vehicles. Roadway medians may be installed to provide additional visual cues to reduce vehicle speeds. Medians can also provide refuge for trail users when crossing high-volume streets.

Designers should consult the “Guide for the Development of Bicycle Facilities,” produced by AASHTO, and the MUTCD, and seek approval from the City of New Braunfels Public Works Department.

At Grade Crossings: Road Crossing Trail intersections with roads present the greatest safety concerns due to traffic volume and speeds. The following standards need to be considered for all road crossings. All intersections should be in accordance with AASHTO.

- The trail should intersect at 90 degrees, or as closely to this as possible.
- The trail width may need to be increased near the intersection to reduce conflicts among the users, such as stopping and grouping of cyclists.
- The trail should meet the road at the same elevation, with enough landing areas for the user.
- Good sight distance needs to be assured for both motorists and trail users.

- Signage is to be provided to warn road and trail users of the intersection.
- A visible crosswalk should be delineated at the intersection in accordance with the Manual of Uniform Traffic Control Devices, produced by the Federal Highway Administration.
- Curb ramps and detectable warnings may be necessary in certain situations.
- Intersection lighting may be needed to add to the safety of the crossing.
- Higher volume streets, such as arterials and collectors, may warrant a grade separated crossing.

Midblock Crossings are used when a trail crosses a roadway or railroad where other intersections do not exist. Typical midblock crossings include perpendicular crossings where trails intersect a roadway at right angles, and skewed crossings where trails intersect a roadway at an angle.

Pedestrian Bridges are required in locations where typical drainage channel crossings span anywhere from 50 to 200 feet. These bridges may be typical prefabricated designs but should always strive to be a step above the customary steel bridge design. Bridges should be at least one to two feet wider on each side of a bridge so pedestrians can stop and view the adjacent scenery without obstructing the trail. Any bridge that is specifically designated for bicycle traffic must have appropriate railings for bicyclists and pedestrians as per AASHTO Bridge Design Specification requirements for bridge railing. Bridge approaches and span should not exceed 5% slope for ADA access. Safe and easily accessed crossings at major highways, drainage channels, or the Guadalupe and Comal Rivers should be included in the plan for New Braunfels. All major crossings will require partnerships and coordination with TxDOT or property owners.

Railroad Crossings pose unique hazards, particularly for the wheeled trail user. The wheel of the train requires a 2-inch-wide gap (flangeway gap) parallel to each rail. This gap is a potential hazard for cyclists, in-line skaters, and wheelchair users. The following recommendations should be considered in designing the railroad crossing:

- The trail approach and crossing should be as nearly 90 degrees as possible.
- The trail crossing should be raised to the same level as the top of the rails. A surface material such as textured rubber railroad crossing pads provides a stable surface with good traction.
- The crossing approach should be ramped with minimal grades. Provide a flat area for 5 feet on either side of the track, free of obstacles, with a firm, stable surface.
- The trail should be hardened or stabilized for enough distance so that debris is not carried onto the track. A specific distance has not been established for this stabilized surface; however, 20 feet from each rail is a recommended minimum.
- Signs and warning devices should be used to alert the train and trail user of the crossing.
- These devices should accommodate users with various types of impairment. Warning gates may be necessary in some situations.

Other Trail Crossings: Intersections of two trails present situations that can be alleviated by the following means:

- Crossings should be offset to create three-way intersections instead of four-way.
- The trails should intersect at 90-degree angles.
- The trails should have minimum grade approaches with stable, smooth surfaces.
- Signs should be provided to indicate direction, distance, and user right of way.
- Signage needs to be in a format applicable to the impairment of the potential user.

- The intersection should provide good sight distance and visibility for safety and security.

Bridge Crossings: Pedestrian bridges can be used to facilitate crossing the Comal and Guadalupe Rivers, as well as major arterials and creeks when necessary. Although bridges are designed to fulfill a practical role, with safety as the ultimate purpose, designers are encouraged to incorporate bridge solutions that reflect the unique character of each trail and its surroundings, with minimal environmental impact. It is recommended to use engineered, prefabricated, clear span bridges of welded steel construction for all required bridge structures, including roadways. These bridge solutions are widely recognized in the bridge industry and have been used successfully on trail projects throughout the country. They are safe, durable, economically priced, and come in a variety of designs and spanning capabilities. The following specifications should be considered as minimum standards for the design and construction of each bridge:

- Bridges must be designed by a licensed and registered engineer in the State of Texas.
- Bridges for pedestrians and/or bicycle traffic shall be designed for a live load to meet local codes. Where bicycle or pedestrian bridges are expected to be used by maintenance vehicles, special design consideration should be made for these loads.
- Bridges should be designed to withstand wind loads.
- Bridges should be designed to accommodate temperature differentials and maximum deflection allowances.
- Bridge materials should be of unpainted weathering steel, or painted steel with either wood decking or a poured concrete floor.
- All structural members should have a minimum thickness of material of at least 3/16".
- Bridge fabricators must be certified by the American Institute of Steel Construction and have the personnel, organization, experience, capability, and commitment to produce a safe and quality product.
- Workmanship, fabrication, and shop connections should be in accordance with AASHTO specifications.

Underpasses are common solutions to avoid at grade road crossings, bridges, and railroad tracks.

Underpasses should be designed by a registered Texas engineer and must comply with AASHTO specifications. Generally, an eight-foot vertical clearance is recommended. Trail surfaces should be striped with site lighting within the underpass to prevent collisions and for added security. Signage is recommended at both sides of the underpass entrance to indicate slopes. Warning information, such as clearance height, above street names, directional signs to alternate routes, and a swinging bar before the underpass to indicate the low height, should be considered.

Trail Amenities

Trail amenities will depend on the trail type, trail identity, and location. The follow is a general list of potential trail amenities for trail projects in New Braunfels. These amenities provide wayfinding, refuge, education, water quality, recreation and exercise, and safety.

Resting Areas: Rest areas are generally small, level places located along a trail that provide users the opportunity to move off the main traveled path to stop to rest from demanding grades and slope conditions. Periodic rest areas are beneficial to all trail users but are particularly crucial for people with mobility impairments. Rest areas are most effective when placed at points of interest or scenic lookouts. The design

and placement of rest areas will vary for each trail, depending on the terrain and intended use, so the specific design of each rest area should be considered individually. The following guidelines provide general recommendations:

- Trail rest areas should at least include a seating area and a place to park a trail vehicle (bicycle, etc.). They may also include a drinking fountain, restroom facilities, and signage when deemed necessary.
- Trail rest areas should be located approximately every half-hour of travel time. The distance between rest areas is dictated by the use modes on the trail.
- Trail rest areas should be located after any prolonged uphill slope, especially for bicycle and walking trails.
- The surface of rest areas should be firm and stable. Grades should not exceed 5%, and cross slopes should not exceed 2%.

Connection to Public Transit: In order to promote the principles of the Envision New Braunfels Comprehensive Plan of reducing auto dependency, maximizing community cohesion, and making the most effective use of community resources and infrastructure, every effort should be made to develop intermodal connections throughout the City and surrounding region, including bikeways and trails. The development of bikeways and trails for recreational and transportation uses is most effective when connected to existing regional public transit systems, such as buses, bike share, scooters, and/or park-and-ride lots. This allows people to take advantage of a wider range of transportation options, including walking and bicycling, and provides them with a potentially seamless transfer between travel modes. As future bikeways and trails are developed throughout the City and County, trail planners and designers are strongly encouraged to contact the appropriate governing agencies to work toward greater connectivity. Each trail must be evaluated on an individual basis and consider the following recommendations:

- Provide locations of connection that are safe, obvious, and convenient.
- Provide locations that are readily accessible by pedestrians.
- Provide secure bicycle parking at each location.

Signage and Markings: Adequate signage and markings are essential to trails to increase the safety and comfort of trail users. Signs communicate important information about the trail to the user, such as navigational and educational information, warnings of potential trail hazards, and regulatory uses. The Texas Manual on Traffic Control Device (TMUTCD) and Federal Highway Administration's Manual on Uniform Traffic Control Devices are valuable resources that regulate standard signage and pavement markings. Types of trail signs include the following:

- **Informational Signs** direct and guide users along trails in the most simple and direct manner possible. Signs may include identification of trailheads and access points, identification of cross streets, trail maps, descriptions of surface type, grade, and cross-slope, and other trail features.
- **Directional Signs** inform trail users of their location along the trail and the distance to destinations and points of interest. They may include street names, trail names, direction arrows, mile markers, and mileage to points of interest.
- **Interpretive Facilities** allow trail users to gain an understanding of the unique environment through which they travel. Each trail's interpretive program will be different, based on its location, potential interpretive resources along the trail, and the use of the trail. Interpretive facilities throughout the trail system may highlight various aspects of the landscape, native plants and

animals, geologic history, and cultural history. As trail planners and designers incorporate these unique environmental resources into the trail experience, consideration should be given to providing interpretive information in a format that is accessible to people with vision impairments and people with limited English skills.

- **Warning Signs** alert trail users to potentially hazardous or unexpected conditions. These signs should be posted in advance of any condition such as upcoming roadway, railroad, or trail intersections; blind curves; steep grade, height, or width constraints; and emergency access coordinated with mile markers with GPS coordinates.
- **Regulatory Signs** inform trail users of the “rules of the trail” as well as selected traffic laws and regulations. They include, but are not limited to, the following: appropriate user modes for each trail, yield signs for multi-use trails, bike speeds, controlling direction of travel, stop and yield signs. Trail STOP signs should be installed on shared-use paths at points where bicyclists and other users are required to stop. YIELD signs should be installed on shared-use paths at points where bicyclists and other users have an adequate view of conflicting traffic as they approach the sign, and where trail users are required to yield the right-of-way to the conflicting traffic.

Site Lighting improves visibility and safety at trailheads, access points, and intersections for night use when nighttime security could be an issue. AASHTO recommends using average maintained horizontal illumination levels of 5 lux (0.5-foot candles) to 22 lux (2-foot candles), depending on the location. Where special security problems exist, higher illumination levels may be considered. Lighting poles should meet the recommended horizontal and vertical clearances for each trail type and luminaires and poles selection should be at a scale appropriate for trail users.

Fencing: Appropriate fencing should be incorporated into each trail design, as necessary, to deter trespassing onto adjoining properties and to provide a safety buffer at dangerous locations along a trail. The following are minimum standards:

- Material of fencing to be dictated by surrounding neighborhood and site-specific needs.
- Fences and railings shall be a minimum height of 42 inches.

Landscaping can be designed to provide numerous benefits for the trail environment, such as water quality, buffers, soil erosion, protection of wildlife habitat, and pollution prevention. It is recommended that trail designers preserve and incorporate the natural landscaping as much as possible. Other landscape design considerations include selecting plant materials that maintain appropriate safe sight distance, provide enough visibility to maintain security, and provide visual barriers along steep slope edges.

Yearly landscape maintenance is recommended to protect the safety of trail users and the general integrity of trail facilities. Maintenance recommendations include mowing native grasses twice a year to promote water filtration and water quality and to increase plant material flower and seed production that is beneficial to insects, birds, and wildlife. Trees and shrubs should be selectively pruned or thinned to obtain trail clearances, and trees in poor health that may fall and create pathway hazards should be removed.

Bollards, Gates, and Medians: Certain road crossings or intersections may create a need to limit vehicular access to the trail. Removal bollards and gates are possible solutions to restrict motor vehicles. Removal bollards can effectively restrict motorized vehicles from the trail and still allow pedestrians, bicyclists, emergency responders, and maintenance personnel access to pass through. It is important to design highly visible bollards, so they do not present a collision hazard to bicyclists. Low level landscaping, 6" to 12" in height, can enhance visibility and create a low buffer around the bollard.

Gates will completely restrict trail access because they stop vehicular, pedestrian, and bicycle traffic. Another method to limit trail use is to divide the trail entrance into two sections with a median or small island. The median should be wide enough to plant low shrubs to discourage vehicle traffic and to provide visibility for bicyclists. The landscaping creates a “soft” barrier should the cyclist inadvertently enter the median; it also allows maintenance vehicles to straddle the median for trail access.

Art Installations: Local artists can be commissioned to provide art for the trail system, making it uniquely distinct by providing trail and community identity. Many trail art installations are functional as well as aesthetic, as they may provide places for people to sit and engage their senses.

Maintenance

Regular maintenance protects the investment of public funds, while enhancing user safety, protecting resources, and providing continued access to the public. A maintenance program developed by the City of New Braunfels Department of Parks and Recreation should be established and adopted by the operating agencies responsible for trail maintenance in order to preserve the trails and facilities, insure the safety and comfort of trail users, and maintain a harmonious relationship with adjacent property owners. Every trail should be inspected and evaluated on a regular basis to identify the need for minor or major maintenance repairs. Different types of trails will differ greatly in their maintenance requirements; however, all trails will require a variety of preventative and corrective activities to insure longevity, safety, and accessibility. Although not adopted by the City, the following maintenance is recommended:

- Sign replacement.
- Map or signage updates.
- Sweeping and brush removal.
- Trash removal and litter clean-up.
- Repair or replacement of trail support amenities such as parking lots, benches, restrooms, etc.
- Clearing of vegetation for adequate sight distances.
- Repair of flood damage, such as silt clean-up, culvert clean out, etc.
- Minor re-grading.
- Repainting or repair of trash receptacles, benches, signs, and other trail amenities.
- Seasonal mowing, leaf-blowing, grooming, planting, pruning, and beautification.

NEW BRAUNFELS HIKE & BIKE TRAIL STANDARDS

The HBT Plan is a high level on- and off-street plan which is intended to show trails for non-vehicular transportation users. These trails include on-street facilities in order to accommodate potential off-street constraints, such as right-of-way limitations, property ownerships, topography, and access. Any proposed trail will require a more in-depth analysis for feasibility and construction. The City's HBT Plan, with some deviations, is based on existing locations of trail, site topography, or other constraints, and is determined by Parks staff in coordination with other departments. Only when the route has final approval from the Parks and Recreation Department should design and/or trail construction begin. Projects, public or private, requiring construction of hike and bike trail facilities must provide seamless connection to ensure trail continuity and accessibility for HBT users and maintenance—similarly required for street stubs, roadway and sidewalk connections. When new developments, road projects, or parks projects link to existing trail it delivers an instant connection and provide immediate usage.

Criteria Off-Street		Multi-Use (M)	Nature (n)	Neighborhood (N)
Easement Width	Desirable	25'	25'	10'
	Minimum	20'	20'	
Trail Width	Desirable	12'	10'	6'-8'
	Minimum	10'	6-8'	6'
Shoulder Width	Desirable	5 ½'	5'	5'
	Minimum	2'	2'	2'
Surface Type	Desirable	Permeable concrete	Permeable	Permeable concrete
	Acceptable	Concrete	Crushed stone	Concrete
Trail Grade	Desirable	1%-3%	1%-3%	1%-3%
	Maximum	5%	5%	5%
Surface Grade	Desirable	1%	1%	1%
	Maximum	2%	2%	2%
Vertical Clearance	Desirable	10'	10'	10'
	Minimum	8'	8'	8'
Horizontal Clearance (edge of trail)	Desirable	4-5'	4-5'	4-5'
	Minimum	2'	2'	2'
Viewshed (line of sight within corridor)	Desirable	200'	200'	200'
	Minimum	150'	150'	150'
Signage	Desirable	Trailhead/access mile markers	Trailhead/access mile markers	Trailhead/access mile markers
	Minimum	Entry sign	Entry sign	Entry sign

Trails construction standards are based on maintenance, cost, and capacity of the Parks Department, unless otherwise approved by the Department Director. Trails should be designed to conform to both standards

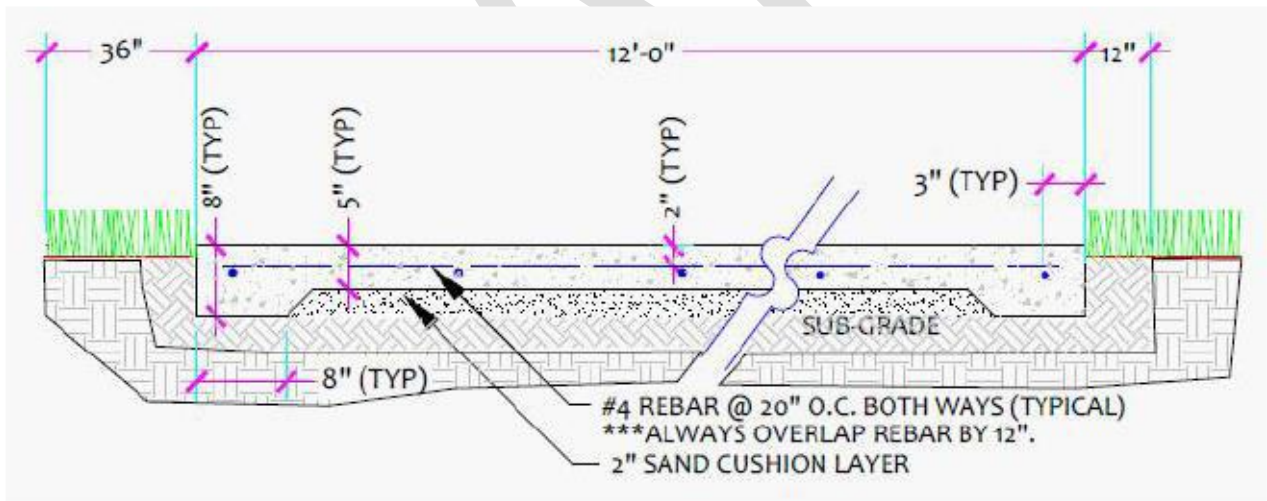
CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN – 2020

recommended by AASHTO and newer recommendations developed by National Association of City Transportation Officials (NACTO).

These guidelines specify high-quality, common elements for use along all trail systems. The design of new trails should make use of these elements in a manner that enhances the trail experience. The hike and bike trail network can meet both recreational and non-motorized daily commuting objects, and simplify maintenance by achieving the following objectives:

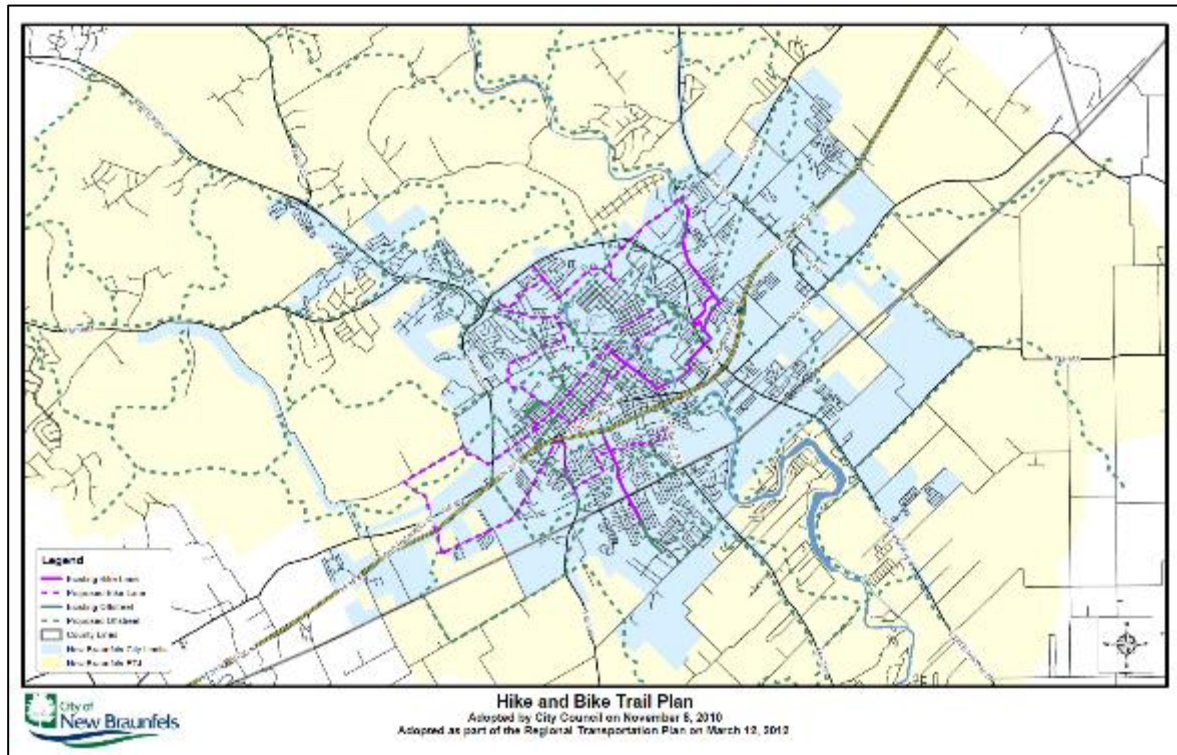
- Trails should be gently curvilinear and may include a combination of radii and straight segments.
- The recommended width for two-way, shared use paths is 10- to 12-feet of concrete walking and biking trail to accommodate multiple uses by walkers, bicyclists, parents with strollers, people in assisted devices, or people walking their dogs, etc.
- Slopes should be no greater than 5%, and cross slopes no greater than 2%.
- A minimum of five feet of right-of-way is required on either side of the trail for access.
- Trails near homes should be at least ten feet from residential property lines.

Refer to City of New Braunfels' Thoroughfare Plan cross section updates for minor and major collectors and minor and principal arterials for appropriate off-street width requirements.



EXISTING HIKE & BIKE TRAILS

TRAILS IN NEW BRAUNFELS TODAY



Hike and bike trail system planning in New Braunfels began in the late 1990's and continues today. The existing Hike and Bike Trails in New Braunfels today has seen most recent development over the last decade. The City's most popular trails is the Panther Canyon Nature Trail and the Arboretum Trail in Landa Park. Other trails like Dry Comal Nature Trail and Countyline Memorial Trail see more and more users as demand for trails grows. Several new segments of trail have been installed by development under platting code requirements and contain gaps due to right-of-way or undeveloped land parcels. As land develops and HBT planning continues, these gaps will be connected. This Plan provides hike and bike trail alignments, minor additions and removals. It uses existing parks, streets, and land development projects for the adjustments and recommendations.

The standards from NRPA, AASHTO and NACTO were used as guidelines to classify the appropriate trail typology for the City's existing trails and determine appropriate future trail typology. The City's existing hike and bike network has been classified in the following ways. Hike and bike trails in the City are grouped by location type, as either on-street or off-street, then further classified depending on location, facility, size and use.

On-street refer to bike facilities. These facilities may include designated bike routes (D), striped bike lanes (L), and protected bike lanes (P). Currently, the City has one designated bike route and does not have any protected bike lanes. Striped bike lanes are located along various collectors and arterials throughout the city.

CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN – 2020

Off-street refers to trails. These are classified into three types: nature (n), neighborhood (N), and multi-use (M). Nature trails have natural or crushed granite surfacing. Neighborhood trails are 6-foot concrete walking paths located in a neighborhood or community park. Multi-use trails and greenways are range from eight to 12-foot wide concrete trails installed off-road or alongside a road. Currently, there are approximately 13 or more miles of existing trails (not including the bike facilities), most of these are neighborhood park trails. here are approximately 13 miles of on-street trail, or bike facilities, in New Braunfels, with all but one being a striped bike lane. In terms of off-street trails, there are about 13.5 miles. The HBT Inventory Table provides more detail about the length, location, and type of trails.



Torrey Park Neighborhood Trail (N)



Mill Street Designated Bike Route (D)



Panther Canyon Nature Trail (n)



Oak Run Bike Lane (L)



Countyline Memorial Trail Multi-use



Veramendi Bike Lane (L)



CITY OF NEW BRAUNFELS

HIKE AND BIKE TRAIL PLAN – 2020

HIKE AND BIKE TRAIL INVENTORY TABLE				
ON-STREET				
	Type	Limits	Distance (miles)	Districts
Comal Ave.	L	E. San Antonio St. to Faust Bridge	~1.33	CC5; PD1
Churchill Dr. & Post Rd.	L	Porter St. to Gruene Rd.	~1.57	CC4, 5; PD1
FM 306	L	IH-35 to city limits	2.00	CC4; PD1
Gruene Rd.	L	Post St. to Sunnybrook Dr.	~1.62	CC4; PD1
Industrial St.*	L	Gruene Rd. to Loop 337	~0.50	CC4; PD1
Landa St.	L	Landa Park Dr. to Walnut Ave.	~0.60	CC1, 3; PD1
Mill St.	D	Comal River to Hidalgo Ave.	1.90	CC1; PD4
Oak Run Parkway*	L	Hwy 46 to Geneva St.	~0.70	CC3; PD4
Pahmeyer Dr.		Anna Lee to Voss Farms Elementary	~1.90	CC2; PD3
S. Walnut Ave.	L	Camellia Ln. to Jerad St.	~1.17	CC2; PD3
OFF-STREET				
	Type	Limits	Distance (miles)	Districts
August Fields**	M	FM 1101 to Alves Lane	0.60	CC5; PD2
County Line Memorial Trail	M	S. Seguin Ave to Countyline Rd.	2.00	CC6; PD3
Dry Comal Nature Trail	n		2.50	CC1; PD1, 4
Ernest Eikel Park	N		~0.25	CC1; PD4
Fischer Park	N		2.00	CC6; PD3
FM 1101	M	Luxe Apt to Creekside Way	~0.15	CC4; PD2
FM 1101	M	Springs at Creekside	~0.15	CC4; PD2
FM 1101	M	West Village Creekside to S. Kowald Ln.	~0.50	CC5; PD2
Haymarket Park	N		0.15	CC5; PD1
HEB Soccer Complex	N		~0.50	CC1; PD4
Kraft Park	N		~0.75	CC6; PD3
Landa Park	N		1.00	CC5; PD1
Panther Canyon	n		~0.75	CC5; PD1
Solms Park	N		0.35	CC1; PD4
Torrey Park	N		0.25	CC5; PD1
Morningside Park	N		0.25	CC1; PD3
Walnut Ave. Pocket Parks*	M	Elliot Knox to Landa St.	1.10	CC1, 6; PD1
S. Walnut Ave.*	M	Jerad St. to W. Klein Rd.	~1.00	CC2; PD3

*(One side only) **Not yet under City ownership



PROPOSED TRAILS IN NEW BRAUNFELS TODAY



The image above shows a proposed bike route along Branch Lane and an off-street trail connection along existing City drainage to create a connection between existing bike lanes on Gruene Road and FM 306. This route proposes a safer and separate route compared to Common Street where no multi-use facilities are planned however there is a wide shoulder.

The HBT Plan is a high-level view of trails and potential opportunities. It codifies the various areas related to trail development from user types, trail types, and standards. It then applies this to what exists in New Braunfels. Additionally, it provides and maps the inventory of hike and bike trails in the community, to give planner, the public and City leaders a better idea of where gaps remain in the citywide network. All this information allows staff to make more informed recommendations to City leaders, stakeholders and the public about future trail studies and trail priorities. It also provides New Braunfels citizens an online interactive web map to see improvements and opportunities. This plan will serve a primer for future trail planning and public outreach efforts. Detailed planning and design are still needed to identify final trail alignments, but do not preclude any requirements by the City Code for HBT. These requirements should be conducted in coordination with City Departments, specifically Parks and Recreation, Planning, and the City Engineer.

The following list provides an overview of eight (8) “opportunity area” trails, previously enumerated in the 2010 Hike and Bike Plan, that still present good opportunities for planning and construction. The alignments are approximate and with the intention to show general geographic locations. These opportunity areas were reviewed using new information about updated planning documents, completed City and development projects, general geographic information to determine relevance for the trail recommendations. Many of these recommendations from 2010 are still relevant projects that are ready to move into a preliminary design phase or construction. Some of the opportunity areas overlap and could be collapsed for better planning and coordination. Each will require additional community input and partnership, and funding for trail construction. The eight (8) different trail opportunity areas are recommended as a high priority for planning or construction. This prioritization helps transition efforts from a high-level conceptual plan, to a detailed planning process and ultimately to construction. The maps at the end of the report show the approximate geography of the area for trail connections and access.

Alligator Creek Trail

Type	Multiuse, neighborhood
Distance	8 miles +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short, mid-, and long
Plan	2010 Parks Master Plan
Park District	1, 2
Council District	2, 4, 6

Status/Relevance

Alligator Creek, a major creek corridor in the northern and eastern portion of the City, is a tributary of Geronimo Creek watershed. It is an impaired stream and is a part of the Geronimo and Alligator Creeks Watershed Protection Plan (WPP). In 2010, much of this creek corridor was still undeveloped; however, nearly ten years later, the area has grown rapidly. Both east and west of IH-35 areas, the land use includes new multi-family, single-family, large attraction retail, schools, and a hospital campus. As areas around the creek continue to develop, the creek and floodplain should be preserved for open space, provide flood control and water quality measures, and provide trail and recreational opportunities. Some commercial and residential development in the area have complied platting code requirements for the HBT and other areas have provided sidewalk connections. Opportunities for connections, trailhead/park, and continuity are appropriate to pursue. This trail has strong opportunities to develop as envisioned.

Implementation Needs:

- Acceptance of land in and around Alligator Creek that would be suited for multi-purpose trail connection.
- Identification one to two acres of park land for trailheads.
- Coordination with DOTs on IH-35 improvements at underpass for safe connection opportunities.
- Coordination with the Creekside development to identify new trail connections.
- Identification of regional connections to Hays County and San Marcos trail network.
- Development of a funding plan for design and construction of the trail to connect to the August Fields and Wasser Ranch HBT segments.
- Develop a master plan and preliminary engineering study.

Dry Comal Creek Greenway Trail

Type	Multiuse, neighborhood
Distance	6 miles +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short-term
Plan	Envision New Braunfels, 2017 Parks Strategic Master Plan, 2010 Parks Master Plan
Park District	3
Council District	1, 3, 5

Status/Relevance

The Dry Comal Creek Trail continues to inspire the community and remains a priority for trail advocates in and around New Braunfels. The Dry Comal Nature Trail, located off Loop 337 and the Little League Ballfields, is envisioned to be a linear park and trail that extends north toward downtown and south toward Solms Park. The greenway extension outside the Loop would serve as three-mile trail connecting the southwest side of the City to parks, new neighborhoods, and other desirable areas closer to the central business district. The lower segment of this trail is undeveloped and would provide opportunities for community renewal. The development of the southern portion of the trail may provide opportunities for regional trail connection to San Antonio Greenway System.

In 2006, the Town Creek Plan Development was approved for the dedication of nine acres for the creek park. This park land dedication for the creek trail would connect older and new development to Landa Park. Additional connections to a developed trail would provide access from the sidewalk and bike lane connections which have been installed along Landa Street and Walnut Avenue. In 2018, the City conducted a preliminary design with estimated project costs for a segment of the trail between Landa Street and Walnut Avenue. A master plan for the greenway is in progress and is expected to be approved in 2020. As a part of the master plan, the trail has been split into four segments to help phase the project.

Implementation Needs:

- Initiate park land dedication from Town Creek Development Agreement.
- Coordinate easements with Columbus Club and Union Pacific Railroad for northern segment.
- Complete design for Town Creek segment, including coordination with the railroad and property owners.
- Study feasibility for southern segment, near Sunbelt Park.
- Coordinate with property owners in Segments 1 and 2 for input on trail alignment.
- Identify funding opportunities for ready segments.

Camp Comal Trail

Type	Park, neighborhood
Distance	1 mile +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short, mid-, and long
Plan	2010 Parks Master Plan
Park District	1, 2, 3
Council District	4, 5, 6

Status/Relevance

This trail would provide another potential river access focal point in the City. The trail is proposed to be developed around Camp Comal, which is adjacent to the river. Currently Camp Comal serves as a sports field primarily for girls' softball. Improvements to the fields are planned in conjunction with the new city sports complex. Any future improvements to the park will be comprehensive and consider trail development.

Off-street trail connections from Seguin Street, Guadalupe River, IH-35 Guadalupe Turnaround, and the Texas Department of Transportation boat access could open up opportunities for trail development and connection.

Implementation Needs:

- Monitor any major highway improvements in the area near the TXDOT boat launch.
- Coordinate future Camp Comal plans and improvements with citywide HBT Plan.
- Coordinate with NBU on area site plans near Camp Comal.



County Line Memorial Trail

Type	Multiuse, neighborhood
Distance	3 miles +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short-term
Plan	2010 Parks Master Plan
Park District	3
Council District	2, 6

Status/Relevance

This trail remains an important trail within the citywide HBT network, as it is the City's first multi-purpose trail. The development of this trail has provided and will continue to provide connections to many neighborhoods and schools. Since 2010, a good portion of this trail concept has been completed as a part of the Countyline Memorial Trail from Seguin Street to Countyline Road. In 2020, a six-foot sidewalk connection along McQueeney Road will be installed, serving as a connection to the trail. This was a part of the Citywide Sidewalk Projects funded through the Transportation Alternatives funding. Additional trail connections may include links to Callen's Castle, Guadalupe River, and Morningside Park.

Implementation Needs:

- Planning efforts to extend trail connection to future site of Callen's Castle and link to Sports Complex.
- Planning and coordination with traffic and engineering for thoroughfare updates to Countyline Memorial Road.
- Planning and coordination efforts with NBISD school expansion plans.
- Planning and coordination efforts with future residential master plans.

Gruene Loop Trail

Type	Park, neighborhood
Distance	1 mile +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short, mid-, and long
Plan	2010 Parks Master Plan
Park District	3
Council District	4, 5

Status/Relevance

The Gruene Loop Trail is an existing bike lane and routes that incorporates potential off-street connections. It will provide a safe, scenic route by connecting existing and new infrastructure from Gruene and mid-town New Braunfels. Building off the existing bike lanes on Gruene Road, this trail connects the historic Faust Street Bridge to Gruene, and Gruene to FM 306. This proposed trail can serve as a beneficial link from the rapidly growing areas off FM 306 and neighborhoods in and around Gruene to downtown New Braunfels. These connections build off existing investments like bike lanes, city-owned property (drainage), and development code requirements. There are no public parks in the area, so a linear park trail could fill that gap and connect to natural amenities and existing parks such as Faust Street Bridge, Haymarket and Torrey parks, and ultimately downtown. Future connections could include access to Guadalupe River, Cypress Bend, and River Acres Park.

Implementation Needs:

- Monitor any major highway projects on IH-35.
- Coordinate with Public Works for ROW access for off-street connection.
- Coordinate with railroad and other nearby property owners for stakeholder input on planning efforts.
- Conduct a master plan.
- Conduct feasibility study and plan to determine costs and timeline.

Morningside Trail

Type	Multiuse, neighborhood
Distance	3 miles +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short-term
Plan	2010 Parks Master Plan
Park District	3
Council District	1

Status/Relevance

This trail opportunity connects existing multi-use paths along Morningside, Solms, and Rueckle and Morningside Park trails to future off-street trails in undeveloped areas of the City edge. It is located on the southeastern edge of the city. Overtime this area will begin to see fast residential development and opportunity for neighborhood connections.

Implementation Needs:

- Coordinate with new development in and around the Morningside Park to make appropriate connections to the existing trails or bike facilities.
- Monitor future road improvements along Green Valley Road, FM 1044, and Ron Road.

River Trail (Cypress Bend Park to County Fairgrounds)

Type	Multiuse, neighborhood, and bike facilities
Distance	3 miles +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short-term
Plan	2017 Parks Strategic Master Plan, 2010 Parks Master Plan
Park District	1
Council District	4, 5

Status/Relevance

This trail concept may require further development based on other projects and plans at the City. The River Trail was originally introduced in the 2010 Parks Master Plan. Since 2010, Guadalupe River Acres Vision and Master Plan was approved, and this trail concept is a feature of that plan. Currently, that plan has no associated funding with it, but is identified as a priority project in the 2017 Parks Strategic Master Plan. Additionally, roadway improvements along Common Street, a future master plan for Cypress Bend Park, and a master plan for Comal County Fairgrounds may offer more in-depth discussion about off-street hike and bike trails connecting various civic locations, i.e., Comal Cemetery, Library, and Cypress Bend Park. Further evaluation of this trail opportunity may rely more on downtown/central bike network.

Implementation Needs:

- Monitor any bike or street improvements (Mather or Common) for opportunities to connect to city assets.
- Monitor funding for park plans such as the Guadalupe River Acres and Cypress Bend Park.

Solms Loop Trail

Type	Multipurpose, bike, and neighborhood
Distance	4 miles +/-
Cost Range	Varies
Funding	Alamo Area MPO, park development funds (connection to parks), bond funds, impact fees, private development
Timeframe	Short, mid-, and long
Plan	2003 Park Master Plan
Park District	P3
Council District	CC 1, 2, 6

Status/Relevance

The Solms Loop Trail located on the south east section of New Braunfels, is a network of existing multi-use and on-street bike facilities. It will link existing bike lanes and future off-street trail to Voss Farms Elementary School, Klein Road, Sports Complex, and New Braunfels Middle School (future high school). The trail will provide a safe and recreational multi-purpose and bike route for neighborhood residents as well as a safe route to schools and parks. Additional HBT connections will be made via a 10-foot trail within the Laubach subdivision and bike lane connections along Rising Sun Boulevard.

Implementation Needs:

- City departmental coordination for road projects and HBT requirements.
- Develop a master plan to engage the community, development and NBISD.
- Partner with the MPO on safe routes to school opportunities.

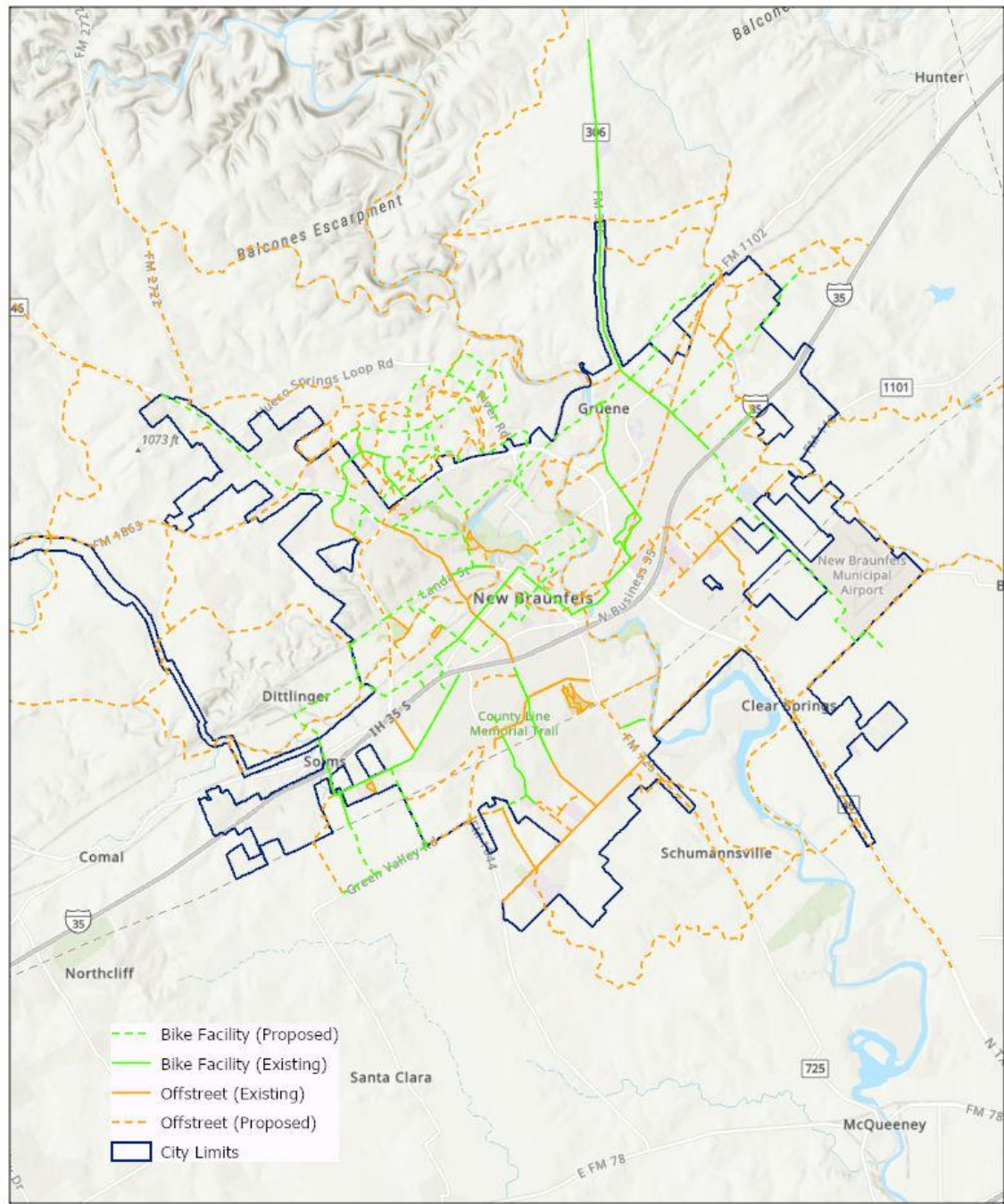


CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020

HIKE & BIKE TRAIL MAPS

The following set of maps are a representation of the online interactive maps available on the City's website. For more detail and reference please visit:

<https://newbraunfels.maps.arcgis.com/apps/webappviewer/index.html?id=428bbabd2bd14f4c8fd3337395d9b890>

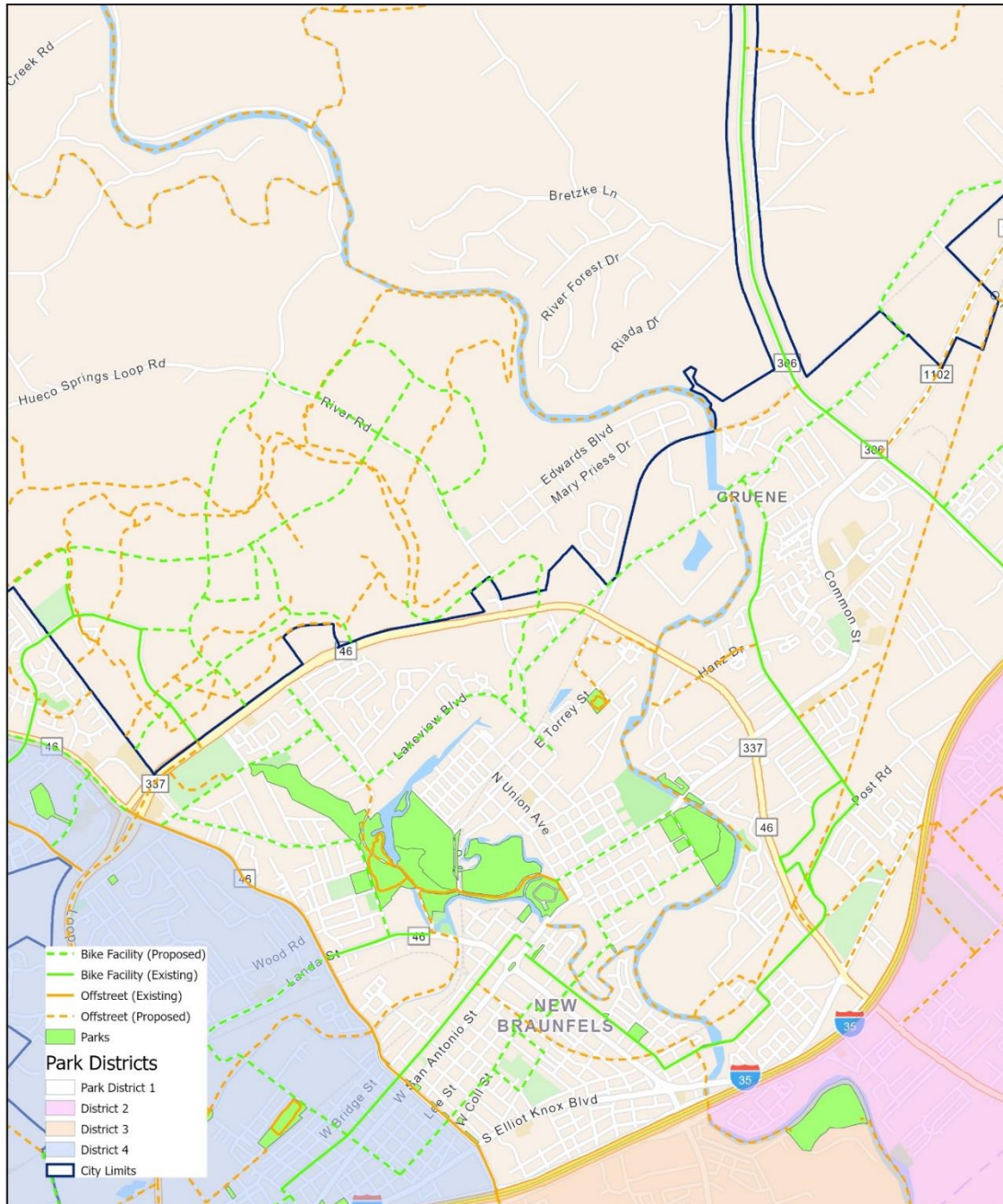


Hike and Bike Trail Plan



CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020

Maps: Park District



Park District 1

0 1,000 2,000 Feet
1:46,943



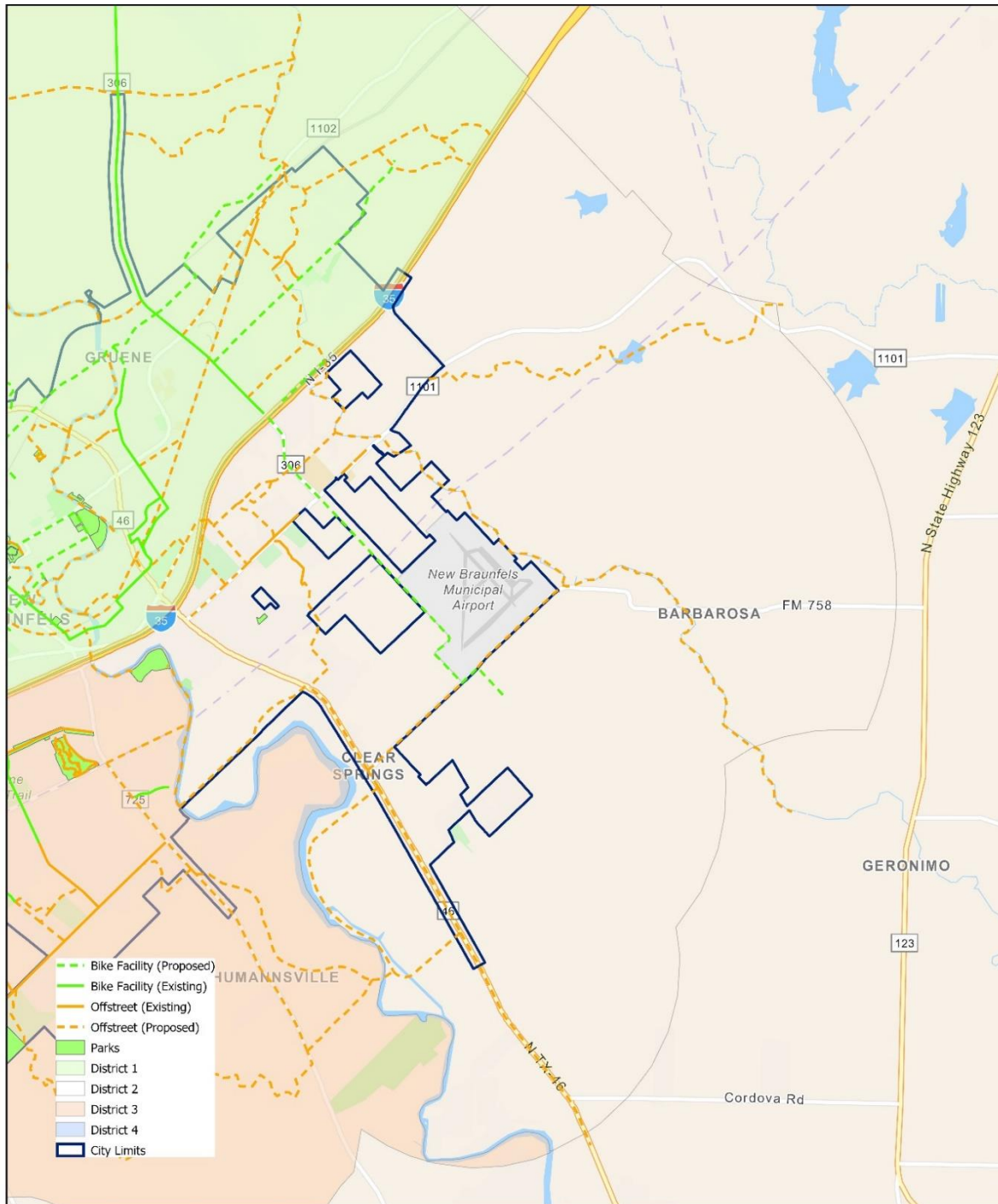
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Date: 7/20/2020

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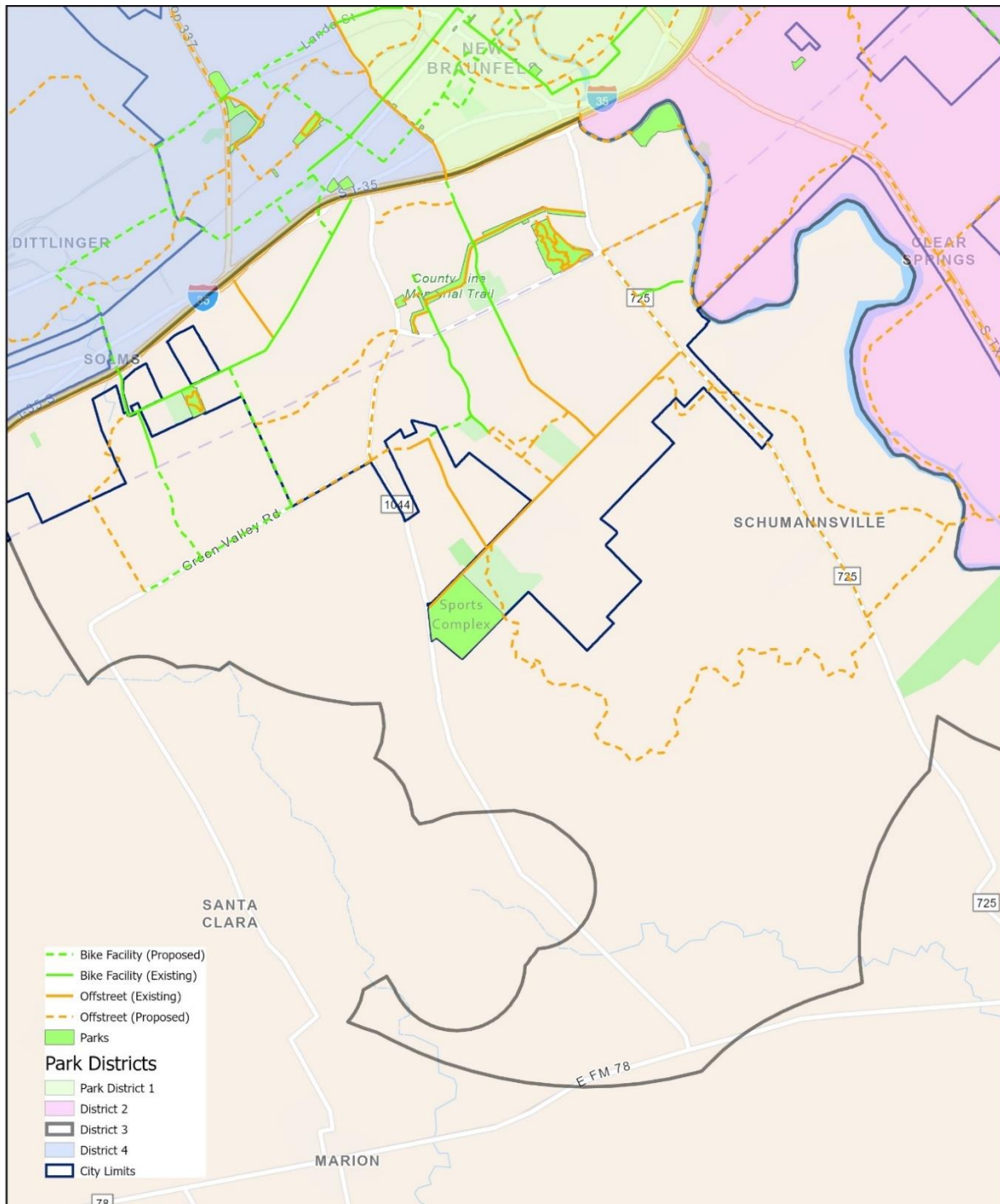
Park District 2



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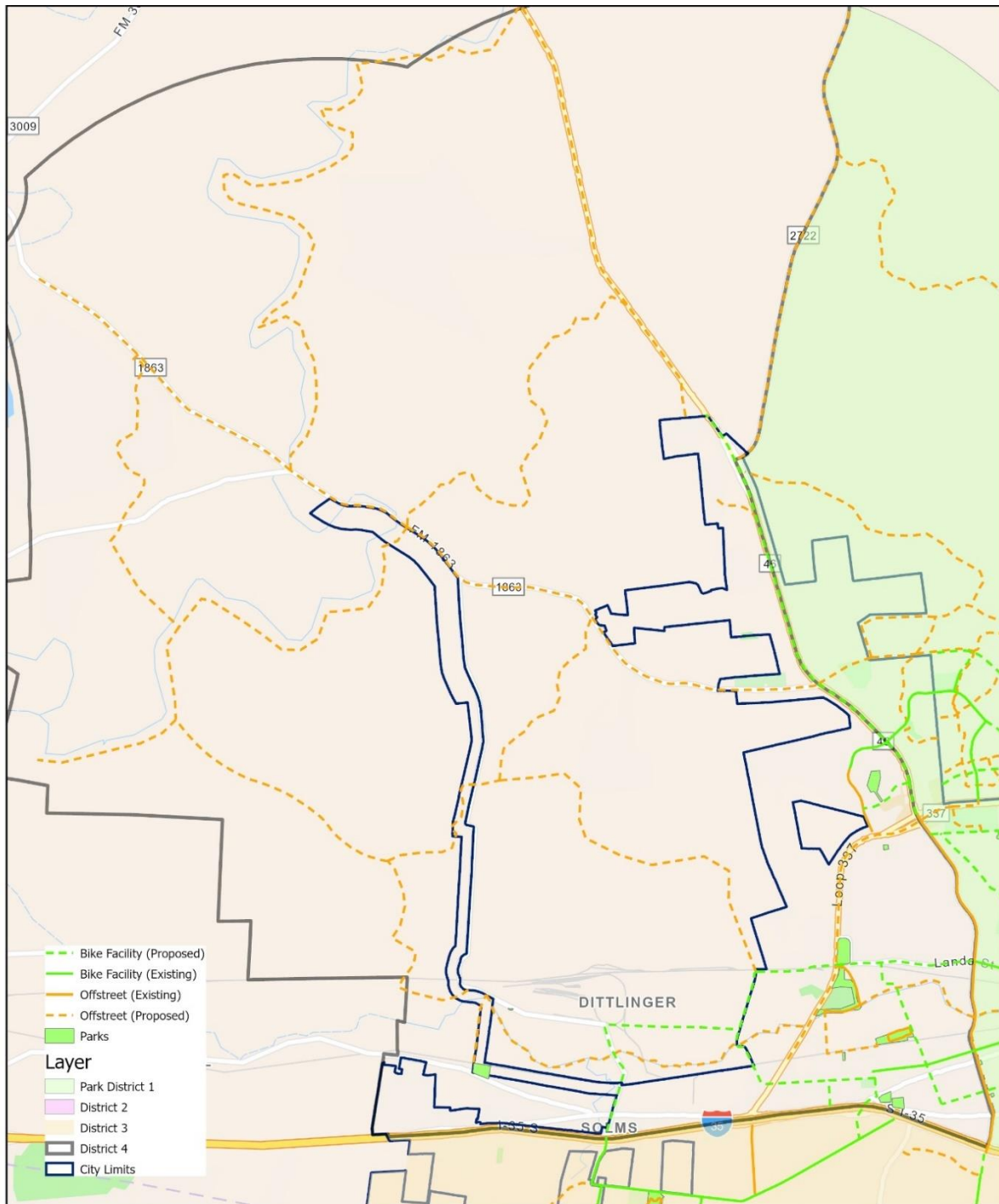
Park District 3



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Park District 4

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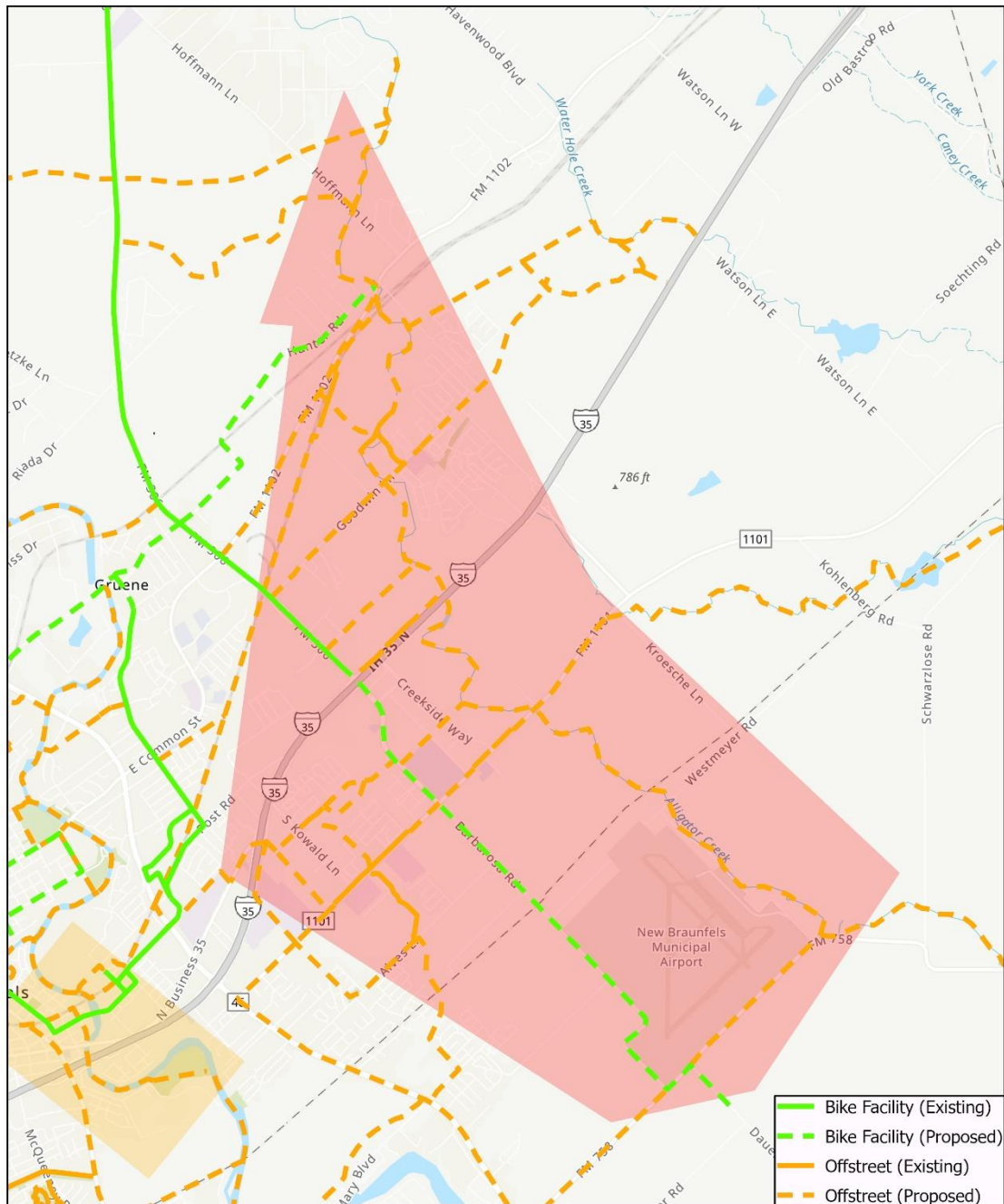
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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020

Maps: Trail Opportunity Areas



Alligator Creek Trail

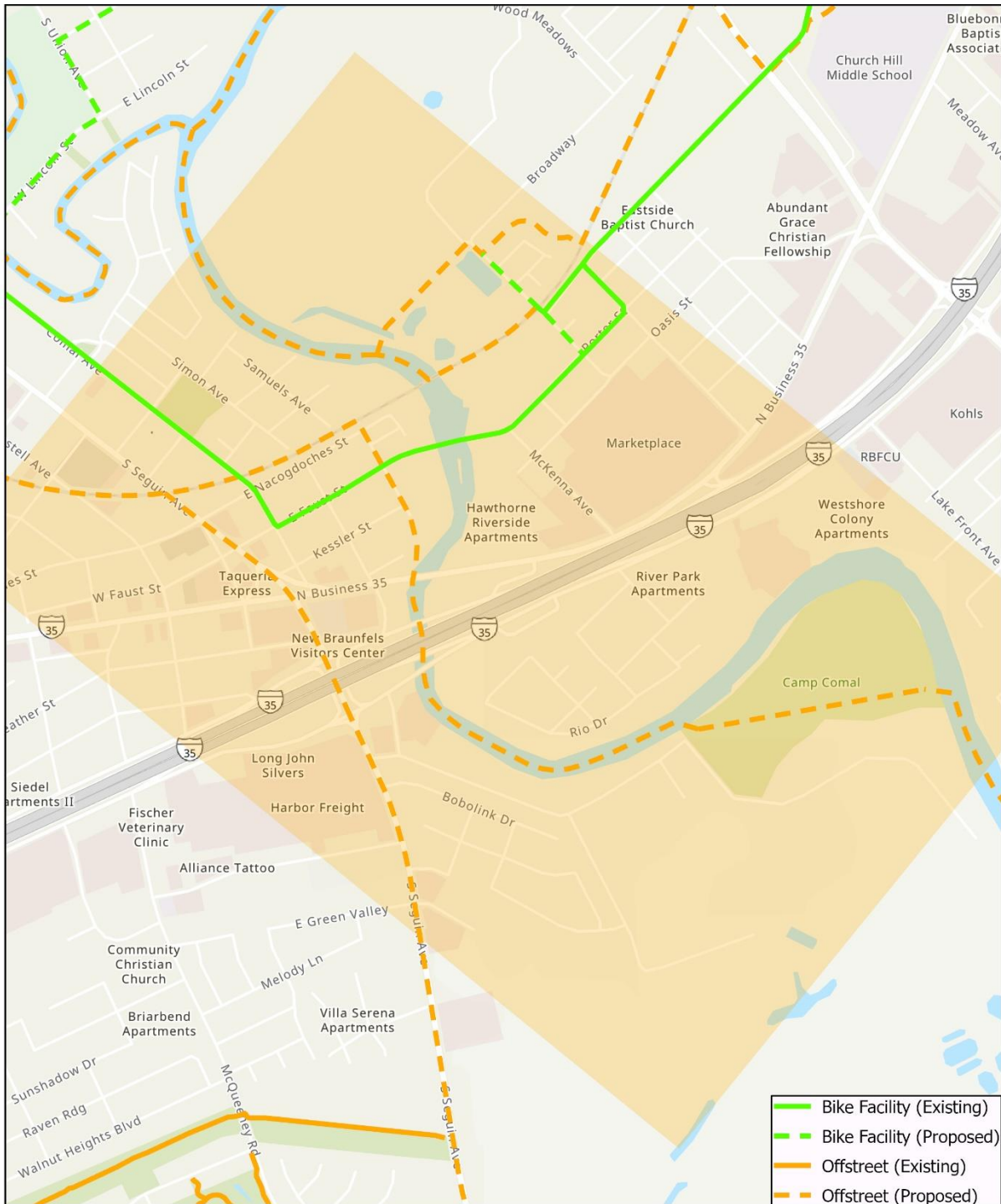


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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020



Camp Comal Trail



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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020



Countyline Memorial Trail

0 1,000 2,000 Feet
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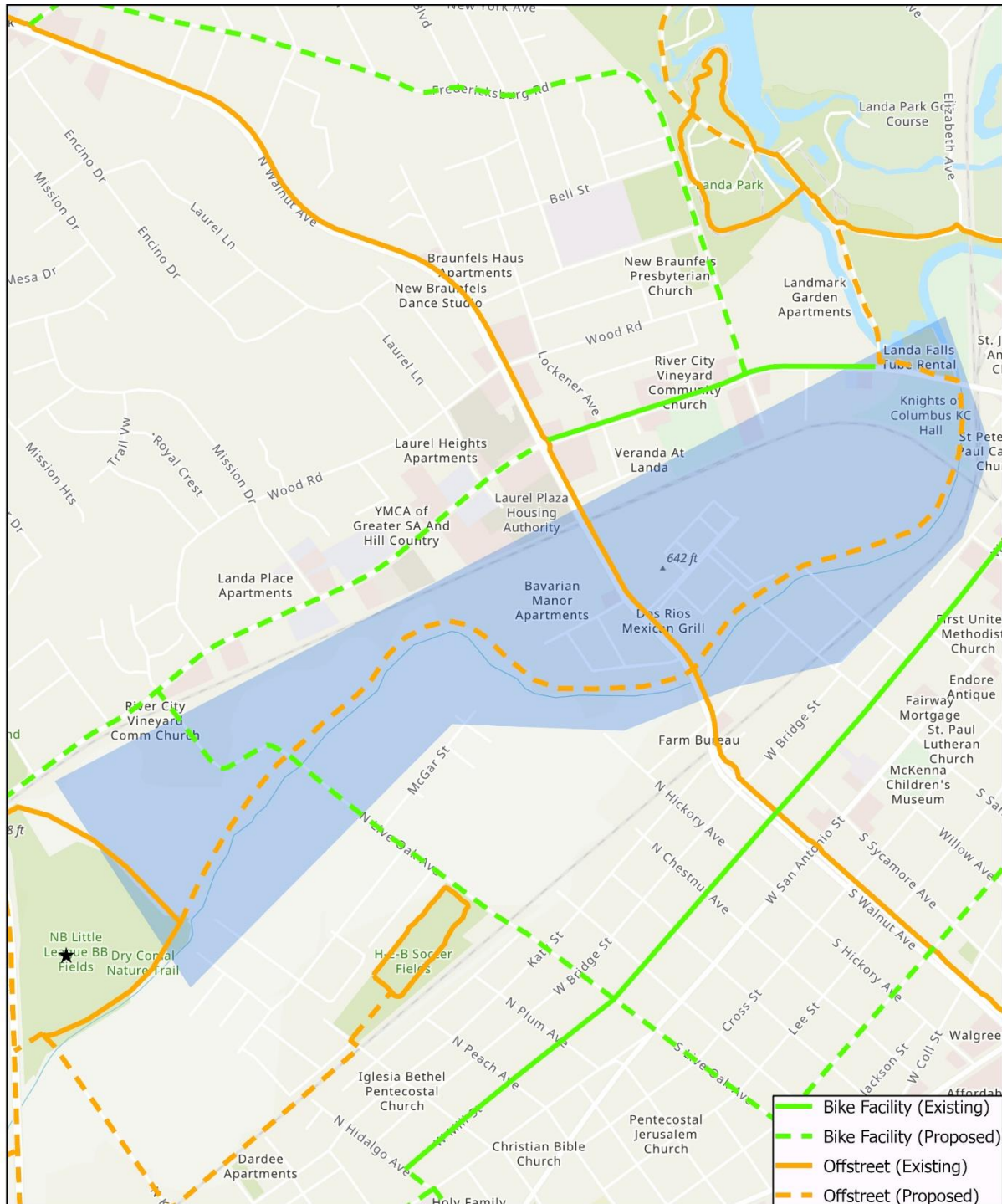


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**CITY OF NEW BRAUNFELS
HIKE AND BIKE TRAIL PLAN – 2020**



Dry Comal Greenway Trail

Segments 1 & 2



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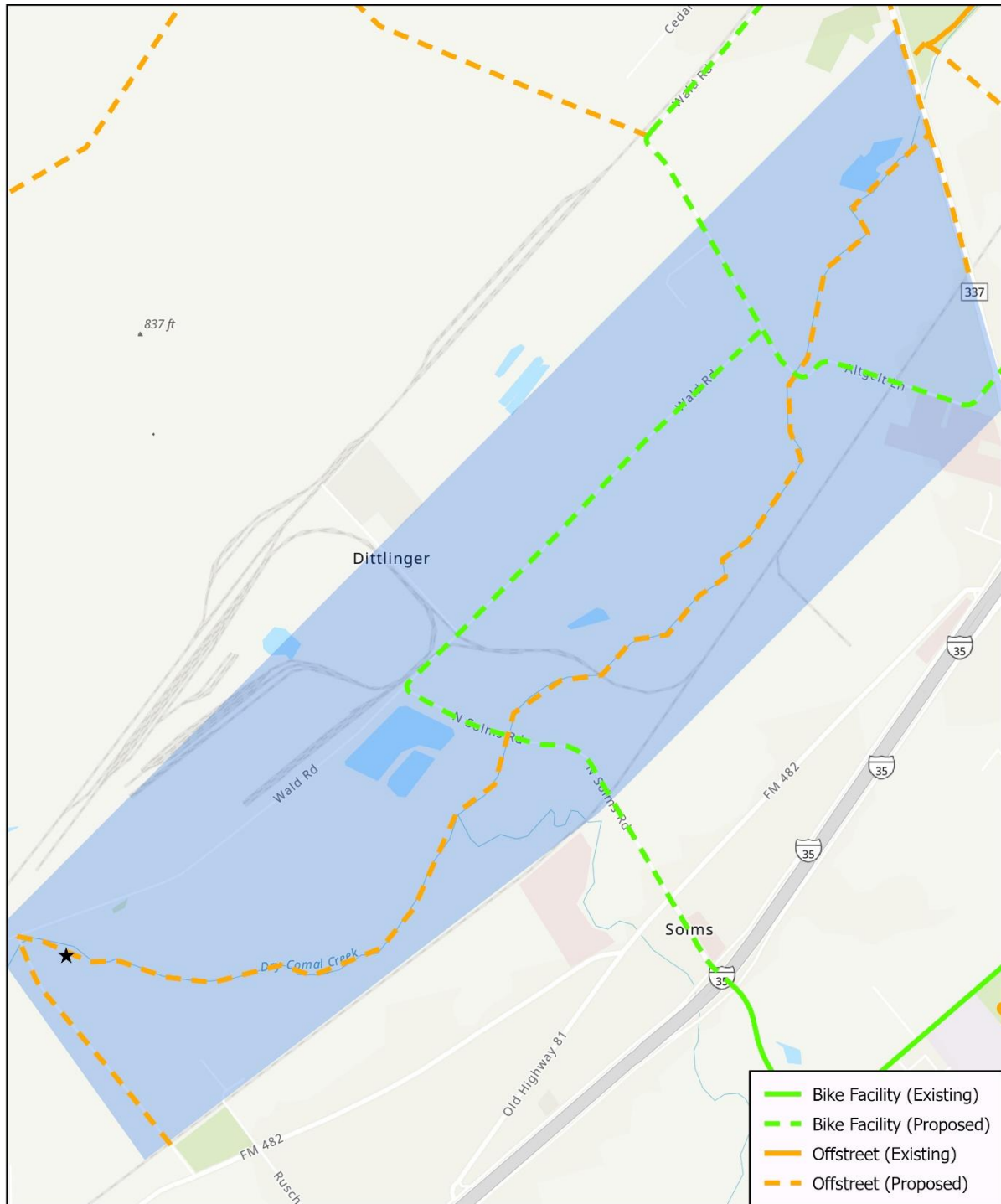
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Dry Comal Greenway Trail Segment 3 & 4

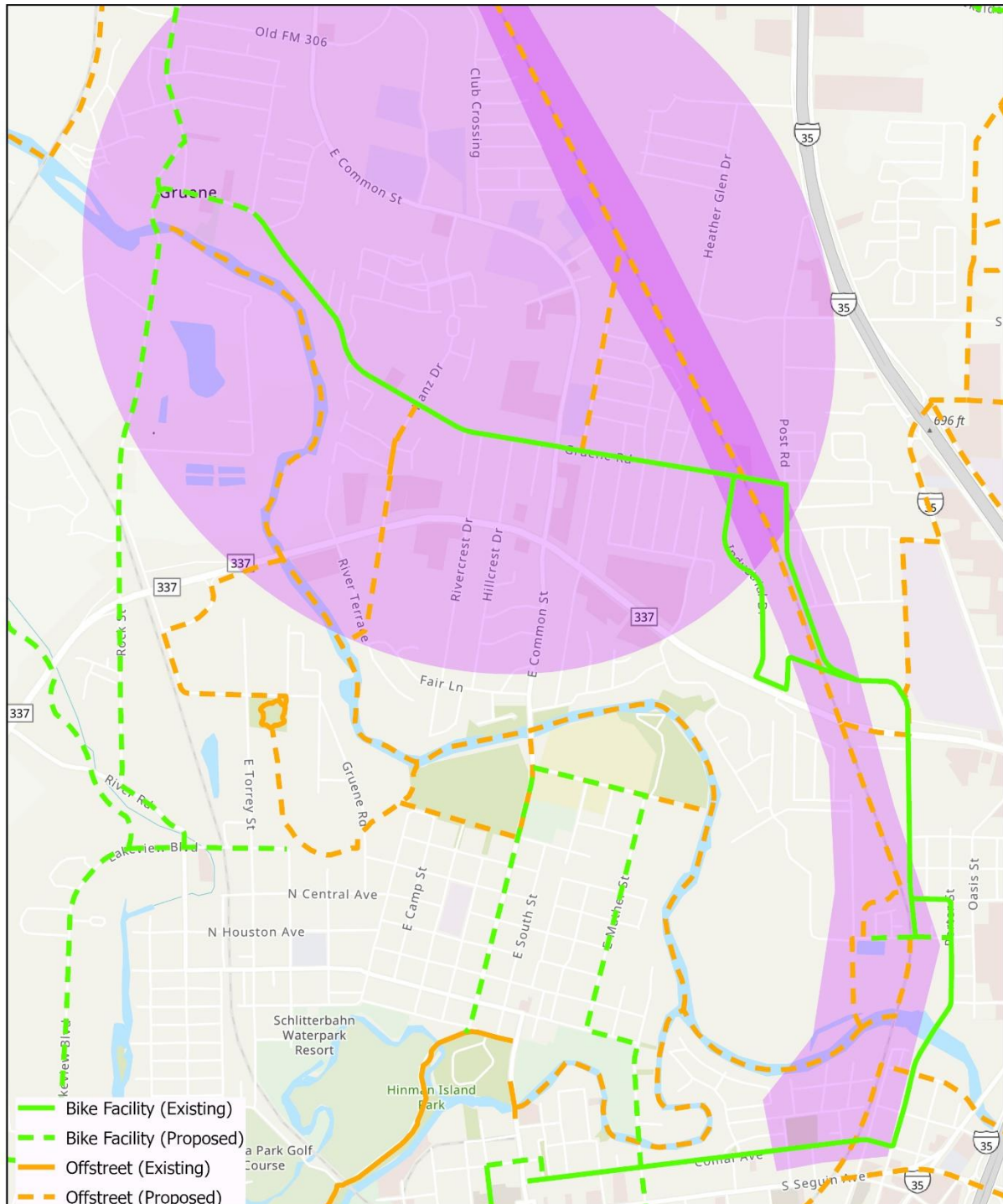


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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020



Gruene Loop Trail

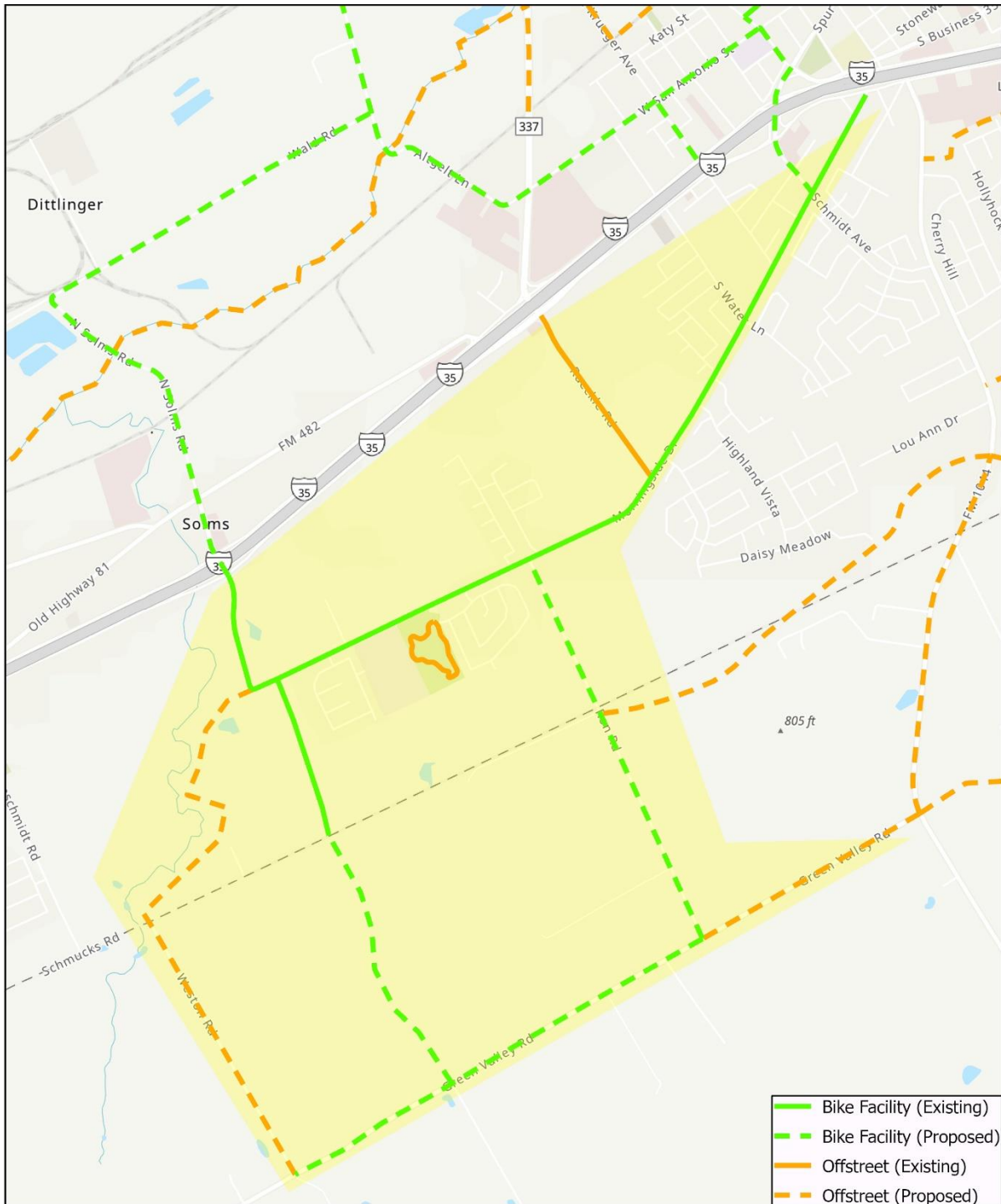


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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020



Morningside Trail

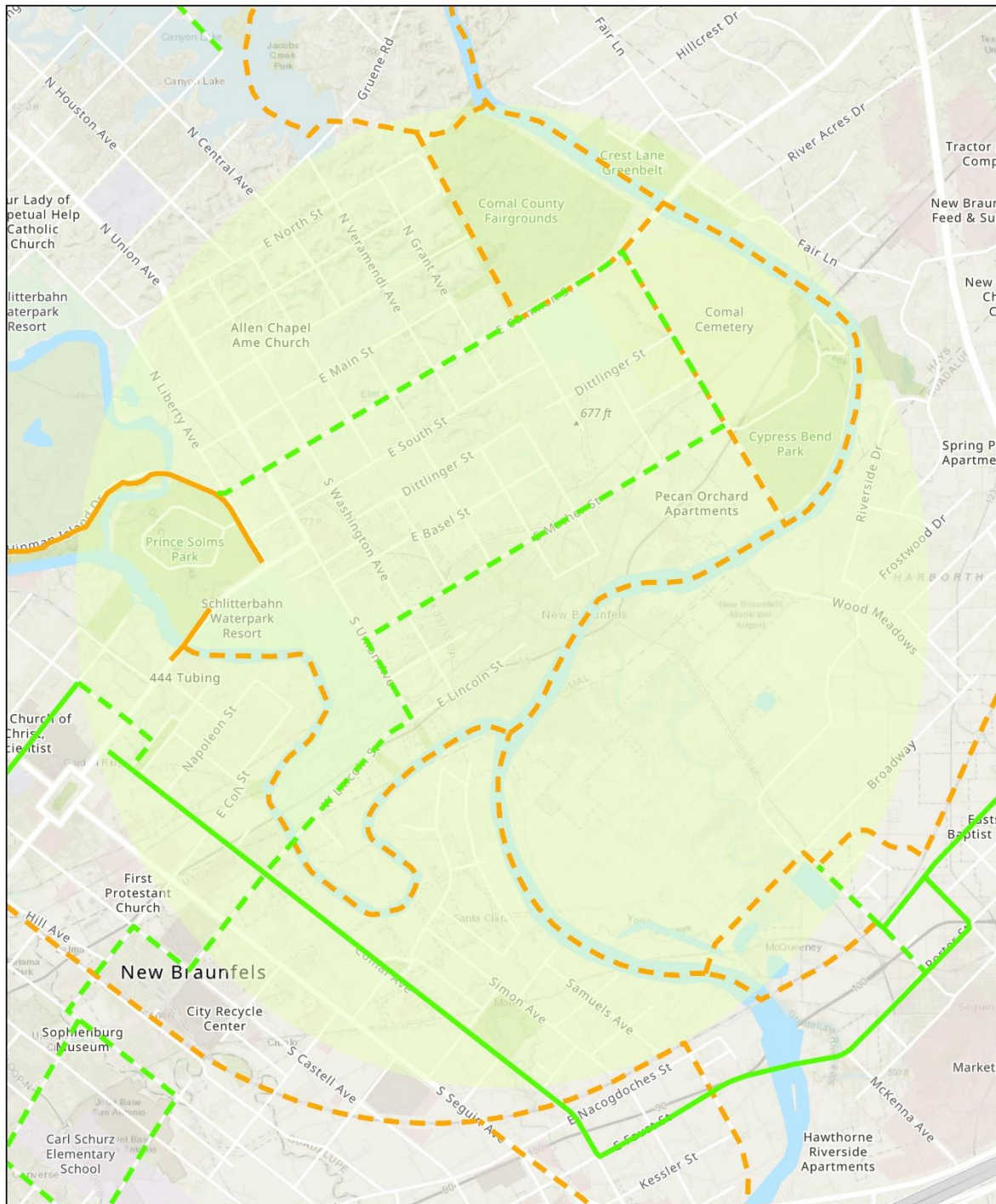


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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020



River Trail

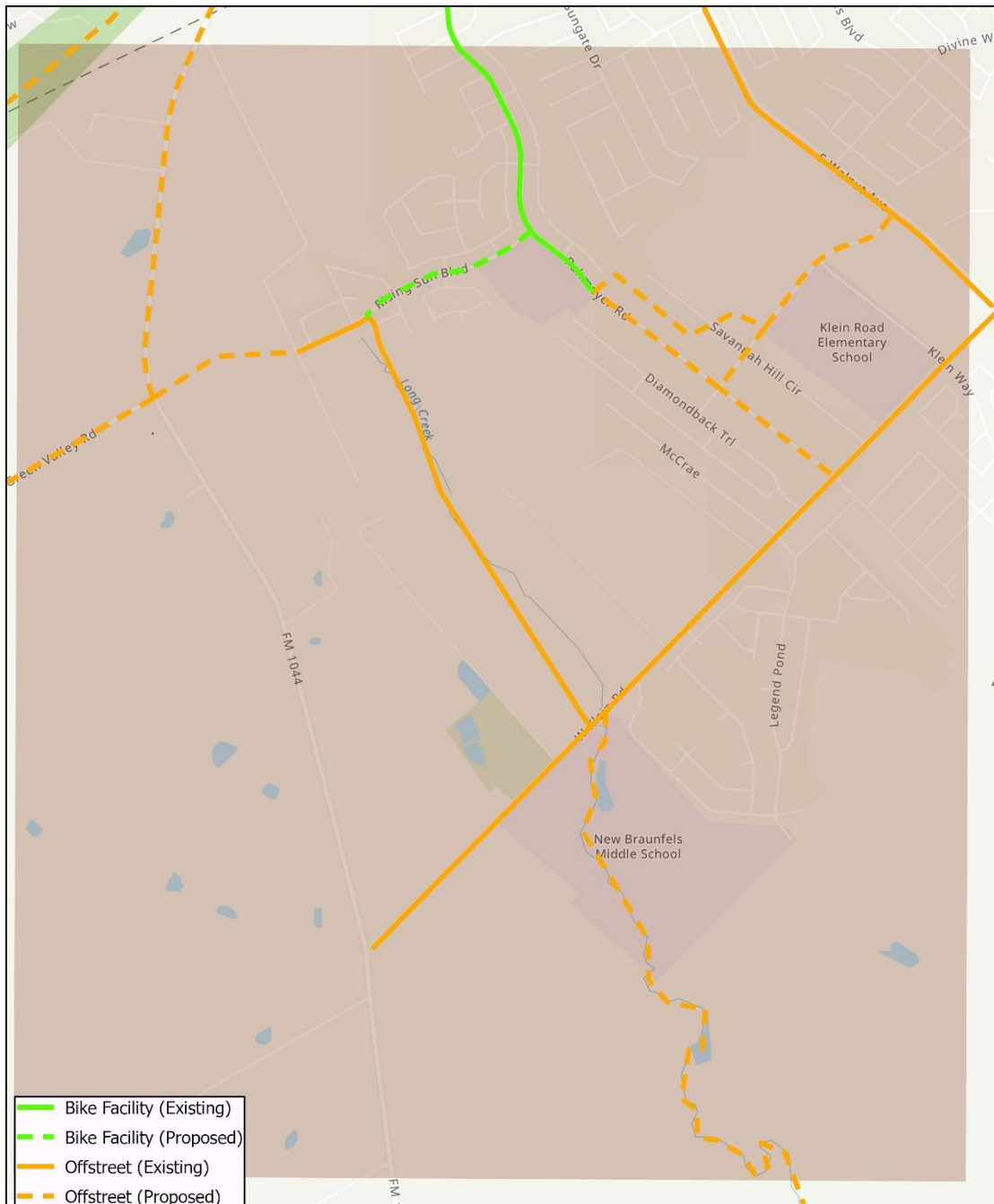


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CITY OF NEW BRAUNFELS HIKE AND BIKE TRAIL PLAN - 2020



Solms Loop Trail



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Agenda Item Memorandum

February 23, 2021

TO: NBEDC Board

FROM: Jeff Jewell, Economic and Community Development Director

RE: Presentation, discussion and update on strategic initiatives progress and capital financing strategy

Background:

The attached memorandum provides the outline for a possible funding strategy the EDC can utilize to finalize remaining contributions to previously committed projects (Zipp Family Sports Complex) and undertake the completion of significant strategic initiatives.

Strategic Initiatives Financing Strategy

The strategy below allows the EDC to undertake the completion of highest ranked priorities, which are also some of the most capital intensive. It also accounts for existing commitments to other projects.

1. Short Term utilization of existing capacity to progress various strategic Initiatives

- Projected Annual Project/Incentive Expenditures – For continued planning purposes, \$4 million allocated annually to support ongoing/one-time job grants, professional studies, and preliminary engineering reports and design costs for the strategic priorities. Specific to the strategic initiatives, staff is confident that the following items could be absorbed by this allocation while still providing ample capacity to take on new projects annually.
 - o Many projects are currently in a conceptual phase and need to advance to preliminary engineering and design to determine a more reliable magnitude of costs
 - Preliminary engineering - South Castell improvements
 - engineering and design for Union Pacific facility
 - Professional services associated with the Rivermill improvements
 - Hike and bike trail infrastructure support

2. Long term financial strategy to support strategic initiatives that require significant capital investment

- Debt Issuance A: FY 2021 (First Payment in FY 2022) - \$15,000,000
- Utilization of Excess Fund Balance (FY 2022 & FY 2023) - \$7,000,000
- Debt Issuance B: FY 2022 (First Payment in FY 2023) - \$5,000,000
- Debt Issuance C: FY 2023 (First payment in FY 2024) - \$8,000,000
 - o Remaining contribution to the Zipp Family Sports Complex
 - o Contribution for offsite infrastructure improvements within the Rivermill TIRZ
 - o Acquisition of existing downtown Union Pacific property and construction of new facility
 - o Augmenting downtown parking infrastructure
 - o South Castell improvements

3. Maintain fund balance of approximately 100% of annual expenditures

- Financing strategy reflected above results in an average FB of 106% from FY 2022-2027

4. Potential Revenue Opportunities/Offsets During Investment Timeframe (not factored into attached financial projections)

- Sale/lease of sports complex adjacent properties
- Sale/lease of downtown properties, including UP
- Sale/lease of property surrounding HD Supply
- Balloon payment from Veramendi developer due early 2027

5. Proposed Next Steps: consensus on strategy, presentation to city council and adoption of Resolution

Project	Total Score	Rank
Union Pacific Property Acquisition and Construction	89	1
Castell Avenue Right-of-Way Improvements	82	2
Rivermill Infrastructure Support	80	3
Annual allotment for Downtown programming and planning	71	4
Downtown Parking Support	69	5
Dry Comal Creek Trail	64	6
Sports Field Renovations	62	7
Hike and Bike Trail Master Plan	57	8
Downtown Vacancy Reduction Incentive Program	55	9
Small Area Plans-Rivermill Area, West Side & others	52	10
Dedicated Funding Source for Workforce Housing	49	11
Comal River improvements	46	12
Entrepreneurship Facility and Ecosystem Support	46	12
Downtown Performing Arts Theater Rehabilitation	43	14
FM 1101 Expansion	41	15
Comal County Fair Grounds Master Planning	38	16

Strategic Initiatives Financing Strategy	FY 2021 Projected	FY 2022 Projected	FY 2023 Projected	FY 2024 Projected	FY 2025 Projected	FY 2026 Projected	FY 2027 Projected*
Projected beginning fund balance	\$ 21,065,616	\$ 17,071,606	\$ 11,698,739	\$ 9,207,742	\$ 8,827,636	\$ 8,670,778	\$ 8,740,525
Projected Annual Revenues	\$ 6,391,534	\$ 7,350,052	\$ 7,603,810	\$ 7,819,843	\$ 8,042,340	\$ 8,271,495	\$ 10,107,507
Recurring Commitments							
Administrative and Promotional Expenditures	597,500	615,425	633,888	652,904	652,904	652,904	652,904
Current Debt Service Contributions	2,047,719	2,057,494	2,060,919	1,587,044	1,586,294	1,588,844	1,582,069
Projected annual project/incentive expenditures	4,500,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000	4,000,000
Land Acquisition - Continental	\$ 3,240,325						
Future Debt Service Capacity							
Debt Issuance A - \$15 Million		1,050,000	1,050,000	1,050,000	1,050,000	1,050,000	1,050,000
Debt Issuance B - \$5 Million			350,000	350,000	350,000	350,000	350,000
Debt Issuance C - \$8 Million				560,000	560,000	560,000	560,000
Future Utilization of Fund Balance		5,000,000	2,000,000				
Projected Annual Expenditures	\$ 10,385,544	\$ 12,722,919	\$ 10,094,807	\$ 8,199,948	\$ 8,199,198	\$ 8,201,748	\$ 8,194,973
Projected Ending Fund Balance (Reserves)	\$ 17,071,606	\$ 11,698,739	\$ 9,207,742	\$ 8,827,636	\$ 8,670,778	\$ 8,740,525	\$ 10,653,059
Fund Balance Percentage	164%	92%	91%	108%	106%	107%	130%
Debt Service as a percentage of total revenues	32%	42%	46%	38%	37%	36%	30%

*Projected annual project/incentive expenditures assumes an annual expenditure of \$4.5M in 2021 and \$4M every year thereafter for incentives, studies, and other expenditures not accounted for in the capital budget.

South Castell and Union Pacific Timeline