



Indirect Impacts Technical Report

Kenney Fort Boulevard Segments 2 & 3

From Forest Creek Drive

To State Highway 45

CSJ: 0914-05-195

Williamson County, Texas

August 2020; Revised September 2020

The environmental review, consultation, and other actions required by applicable Federal environmental laws for this project are being, or have been, carried-out by TxDOT pursuant to 23 U.S.C. 327 and a Memorandum of Understanding dated December 9, 2019, and executed by FHWA and TxDOT.

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1.0 Introduction

Kenney Fort Boulevard (Blvd) is a major arterial roadway in the City of Round Rock's Transportation Master Plan. It was included in the City's first Transportation Master Plan, published in 1994, but has been part of the planning process since 1988. The roadway is being constructed in phases. The City of Round Rock proposes to construct phases 2 and 3 that would extend Kenney Fort Boulevard south from its current terminus at Forest Creek Drive to State Highway (SH) 45 in Round Rock, Williamson County, Texas. Phase 1, which extends Kenney Fort Boulevard between Joe DiMaggio Boulevard and Forest Creek Drive, was completed during the summer of 2013. The proposed improvements would include constructing the extension of Kenney Fort Boulevard on new location. The project length is approximately 1.5 miles long.

The proposed improvements to Kenney Fort Boulevard would extend the existing limits from Forest Creek Drive to Gattis School Road (Segment 2) and from Gattis School Road to SH 45 (Segment 3). Kenney Fort Boulevard will be a 6-lane arterial roadway with sidewalks that will ultimately connect SH 45 to United States Highway (US) 79 and further to the north with the completion of additional segments. Work along Gattis School Road will also be included with this project to widen the existing roadway to the ultimate width near the intersection with Kenney Fort Boulevard. The improvements to Gattis School Road would extend from Meister Lane to Rusk Road. The proposed project also includes improvements at the existing SH 45 grade-separation. The project area covers a total area of 35.9 acres, consisting of 12.6 acres of state-owned ROW and 23.3 acres of private lands. In addition, a 0.02-acre permanent drainage easement would be required.

Due to the growth and development of Round Rock in the vicinity of the proposed project, the project is needed to add a necessary north/south corridor by connecting Kenney Fort Boulevard to SH 45. The purpose of the proposed project is to enhance mobility in the project area, facilitate north/south movement of traffic, and consistent with the City of Round Rock's Transportation Master Plan, and eliminate a gap between existing Kenney Fort Boulevard and SH 45 North.

This technical report was developed using TxDOT's Guidance: Indirect Impacts Analysis (TxDOT 2019) and the 2002 National Cooperative Highway Research Program (NCHRP) Report 466 Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects (NCHRP 2002). This analysis was also developed using the American Association of State Highway and Transportation Officials' (AASHTO) Practitioner's Handbook 12: Assessing Indirect Effects and Cumulative Impacts under NEPA (AASHTO 2011).

The National Environmental Policy Act (NEPA) of 1969 established the requirements for indirect and cumulative impact analysis and is administered by the Council on Environmental Quality (CEQ). NEPA defines indirect effects as those that are ". . . caused by an action and occur later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include

growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water, and other natural systems, including ecosystems” (40 CFR §1508.8).

In accordance with TxDOT guidance, the current analysis is focused on project-induced development effects, which are also called induced growth or land-use effects (NCHRP 2002 and TxDOT 2019). Induced growth effects are most often related to changes in accessibility to an area, which in turn affects the area’s attractiveness for development. Transportation projects may provide new or improved access to adjacent land or may induce development on surrounding land by causing a reduction in the time-cost of travel (NCHRP 2002). Transportation projects may also affect the rate at which planned development is implemented.

NCHRP Report 466 identifies three categories of induced growth effects:

1. Effects of projects planned to serve specific land development.
2. Effects of projects likely to stimulate complementary development.
3. Effects of projects likely to influence interregional locational decisions.

2.0 Induced Growth Effects

The need for an induced growth analysis was originally determined based on the results from TxDOT’s Scope Development Tool Plan (TxDOT 2015) and later TxDOT’s Work Development Plan (TxDOT 2019), Risk Assessment for Indirect Impacts (TxDOT 2014a) and the parameters outlined by the Induced Growth Indirect Impacts Decision Tree (TxDOT 2014b). The findings from the Risk Assessment are as follows: The purpose and need for the project does not include economic development. The proposed project would not serve a specific development, nor are economic development or new opportunities for growth and development cited as benefits of the project. The project area does, however, have land available for development or redevelopment, is experiencing population growth, and would experience increased access and mobility due to the proposed project; therefore, an indirect impacts analysis is required.

2.1 Step 1 – Define Methodology

A planning judgment approach was the primary form of analysis used to identify development trends and the potential impact of the proposed project on regional land use patterns. The data collection techniques utilized were the administering of questionnaires (see **Appendix A** and **Appendix B**) and follow up communication with planning professionals and elected officials in the project vicinity. Collaborative judgment was utilized to the extent that several professionals were contacted as part of this analysis, including representatives from agencies such as municipal planning departments. Geographic Information Systems (GIS)-based cartographic techniques were utilized to quantify the amounts of developed land, developable land, and undevelopable land.

Section 2.3.1 includes a discussion of currently developed land within the Area of Influence (AOI) versus land available for development or redevelopment within the AOI. A summary of the questionnaire responses received is included in **Section 2.3.2**. The cartographic technique exercise utilized GIS software to analyze data collected remotely and in the field, combined with various constraints layers and the proposed alignment outline. In addition, the results of questionnaires sent to planning experts were incorporated to the extent the information could be mapped.

Land that is already planned or platted for development was not included in the total amount of developable land as it is assumed that this land will be developed (see **Table 1**). The land available for development was identified through cartographic analysis and questionnaires, and its development is considered possible but not necessarily probable (as opposed to land that is already planned or platted, which is considered probable and reasonably foreseeable, regardless of whether the proposed project is constructed). A few areas that are currently developed have been designated for potential redevelopment (mostly large lot residential properties). The purpose of this indirect effects analysis is to determine if future development could be causally linked to the proposed Kenney Fort Boulevard project.

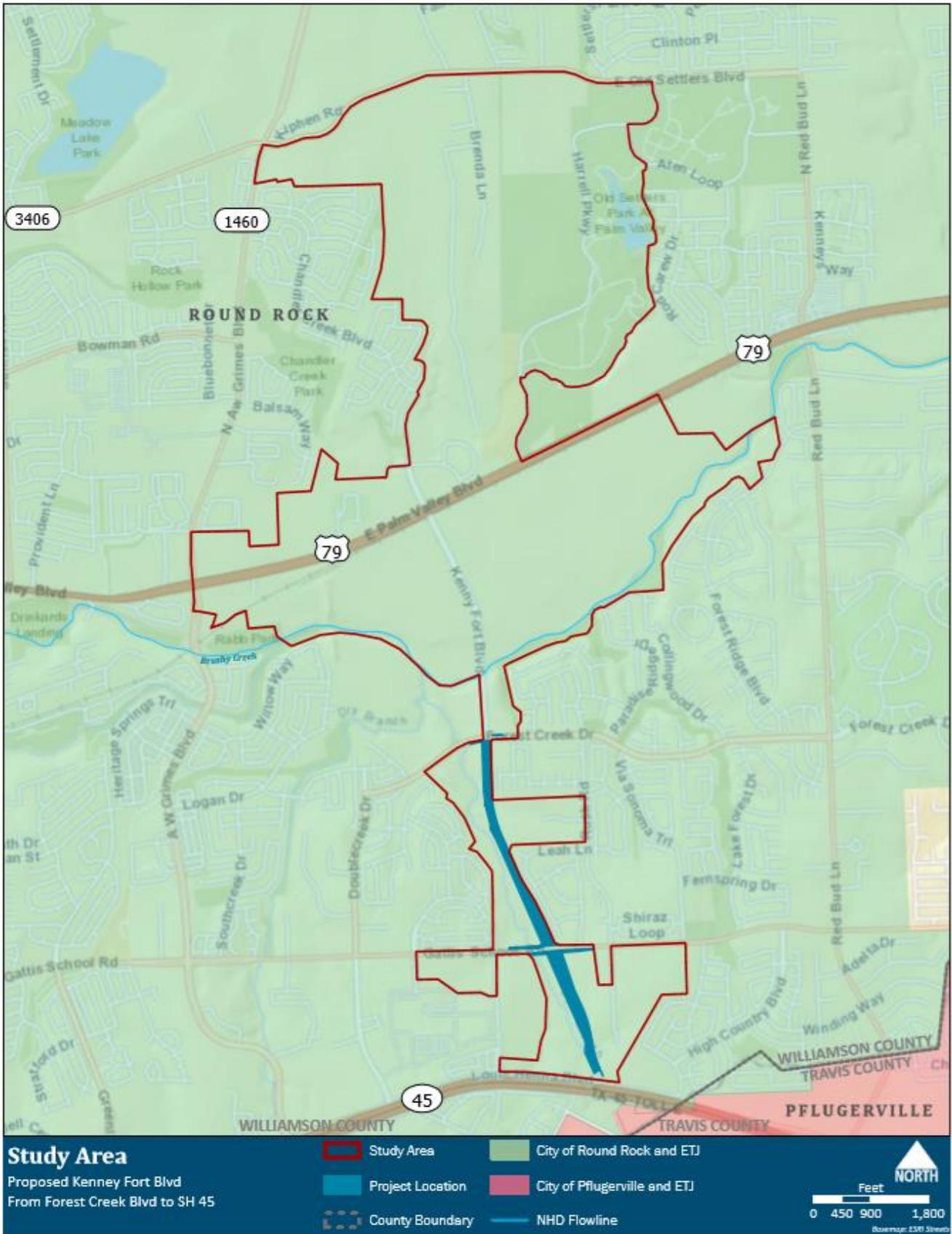
2.2 Step 2 – Define Area of Influence and Study Timeframe

Indirect effects associated with a project can occur at a distance in time or space from the project itself (NCHRP 2002). The area studied for indirect effects will be referred to as the Area of Influence (AOI) in order to distinguish it from the study areas used to assess the direct effects of the proposed project. An AOI is developed by looking at the geographic area in which the proposed project could have the potential to increase mobility or accessibility and the areas in which development patterns could change as a result of the improved mobility or accessibility. The AOI for Kenney Fort Boulevard encompasses approximately 3.4 square miles (2,145.2 acres) in Williamson County. The AOI was delineated based on the presence of developable land or land subject to redevelopment and major roadways or water features running adjacent to the project area. The original boundaries recommended US 79 as the northern boundary; however, Bradley Dushkin, Assistant Director of Planning & Development Services for the City of Round Rock requested that the AOI be extended north toward E Old Settlers Boulevard. The southern boundary is SH 45. The eastern boundary is created by roadways, water features, and various well-established residential subdivisions including Bradford Park Subdivision, Rolling Ridge Subdivision, Rusk Road, The Preserve at Dyer Creek Subdivision, Sonoma Subdivision, Brushy Creek and Chandler Creek. The northern boundary is generally created by E Old Settlers Boulevard. The western boundary is created by roadways, water features, and well-established residential subdivisions including Brushy Creek, Kenney Fort Boulevard, Forest Creek Drive, Round Rock Ranch Subdivision, Gattis School Road, Northfields Subdivision, Legends Village Subdivision, and Chandler Creek Subdivision. See **Figure 1** for a map of the AOI.

The temporal boundary for induced growth effects analysis begins in 1990, a decade that saw increases in land development in the area and ends in 2050, five years later than the planning

horizon for the Capital Area Metropolitan Planning Organization (CAMPO) Regional Transportation Plan (RTP) – CAMPO 2045 RTP. A base year of 1990 was also used to assess demographic trends.

Figure 1: Area of Influence



2.3 Step 3 – Identify Areas Subject to Induced Growth in the AOI

2.3.1 Quantification of Developable Land

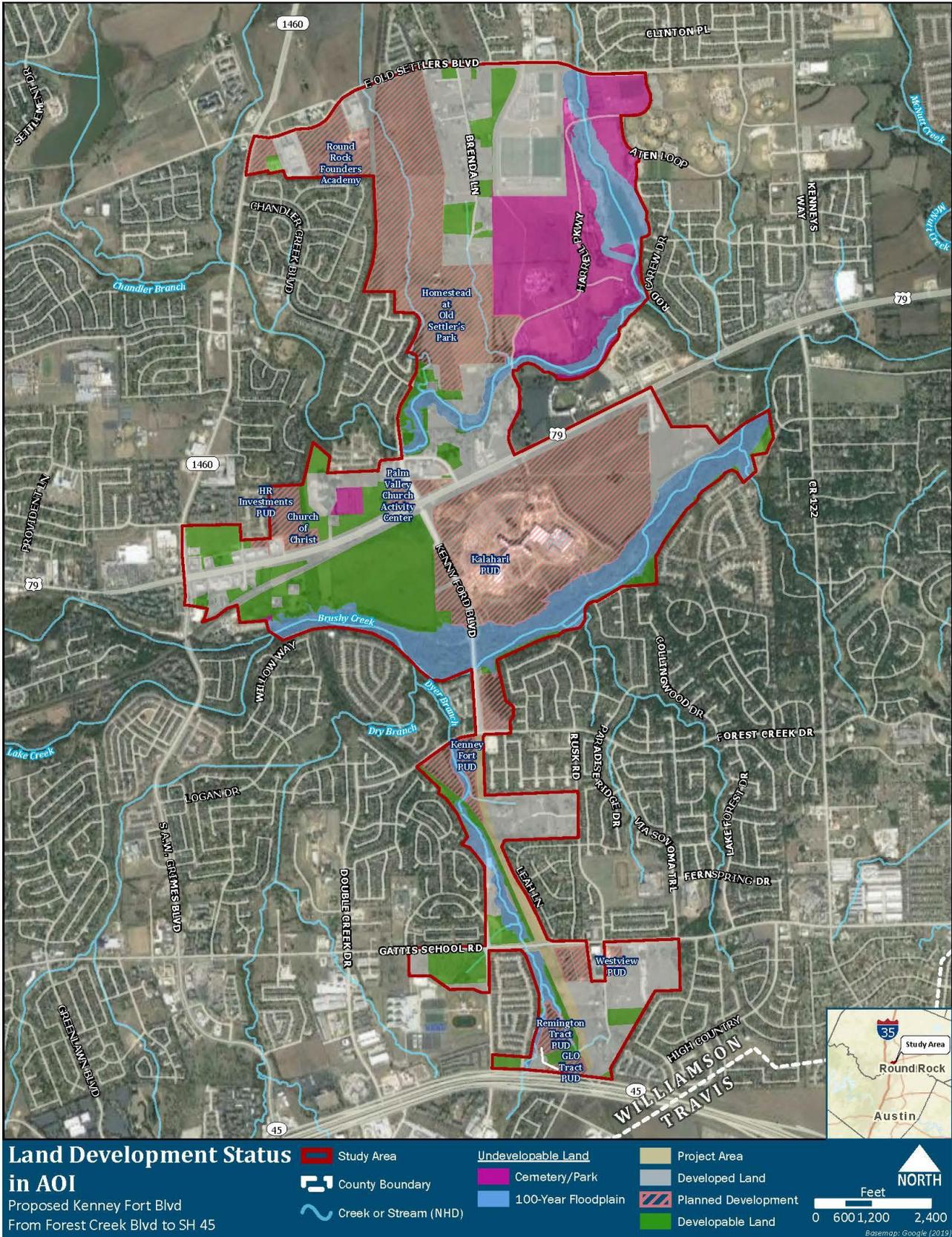
Changes in land use could occur within the AOI if undeveloped areas are developed or if developed areas are redeveloped as a result of enhanced access to this land. To identify areas where project-influenced development or redevelopment might occur in the AOI, data on existing and planned developments were analyzed to determine areas of vacant land that could be developed in the future. Land within the AOI was classified as developed or undeveloped based on existing land use data and tax code information. Developed land includes land that is used for residential, mixed-use, and roads/infrastructure and land subject to redevelopment (large lot residential or mixed-use commercial). Undeveloped land was then broken into undevelopable land (such as floodplains, water bodies, parklands/recreation, and cemeteries), planned development (land on which projects are planned/platted or under construction), and developable land (land that is available for development). **Figure 2** shows planned developments, developable land, and developed land within the AOI. It should be noted that a large property on the southeast corner of US 79 and Kenney Fort Boulevard, Kalahari Resorts Texas, is currently under construction; however, it should be noted that the proposed project was not planned or developed in response to the resort and the two projects are unrelated.

Within the approximately 2,145.4 total acres of land within the AOI, approximately 589.5 acres (27.5 percent) are already developed (see **Table 1**). Approximately 563.8 acres (26.3 percent) are undevelopable, including floodplains, water bodies, parks, and cemeteries. Based on information provided by the City of Round Rock, several projects are in various stages of development, ranging from under review to under construction. Additional areas that are anticipated to be redeveloped were acknowledged by the City of Round Rock; however, have not been submitted for review and are included in developed land calculations. These planned developments total approximately 659.4 acres, which makes up 30.7 percent of the AOI. Removing these projects yields approximately 296.6 acres of developable land within the AOI (13.8 percent of the AOI). **Table 1** shows these land use categories and the amount of land available for development (mapped in **Figure 2**).

Table 1: Acres of Land Available for Development within the AOI

Existing Land Use	Acres	Percentage of Total
Developed Land	589.5	27.5%
Undevelopable Land (100-year Floodplains, Water Bodies, Parks, Cemeteries)	563.8	26.3%
Planned Development	659.4	30.7%
Developable (including areas of potential project-induced development)	296.6	13.8%
Project Area	36.0	1.7%
Total AOI	2,145.4	100.0%

Figure 2: Land Development Status in the AOI



2.3.2 Planning Expert Questionnaire and Responses

Questionnaires were sent to planning and engineering professionals within the project’s AOI (see **Table 2**). The questionnaire and AOI map (**Appendix A**) were e-mailed to each organization listed in **Table 2** on June 26, 2020.

The questions were designed to identify planned developments and available resources within the AOI. See **Appendix A** for the contact e-mail correspondence form.

Table 2: Indirect Effects Questionnaire Recipients

Organization	Primary Point of Contact	Response Received
City of Round Rock	Brad Wiseman, Director of Planning and Development Services	No response
City of Round Rock	Bradley Dushkin, Assistant Director of Planning and Development Services	July 1, 2020
City of Round Rock	Susan Brennan, Planning Manager	No response
City of Round Rock	Ed Polasek, Transportation Planner	No response
Williamson County	J. Terron Evertson, P.E., Williamson County Engineer	No response
Williamson County	Russell Fishbeck, Senior Director - Williamson County Parks & Recreation	No response
CAMPO	Kelly Porter, Regional Planning Manager	No response

Only one questionnaire recipient, Bradley Dushkin, Assistant Director of Planning & Development Services for the City of Round Rock, responded via email answering the questions (see **Appendix B**). Mr. Dushkin stated that all undeveloped areas in the AOI are going to be developed at some point regardless of the construction of Kenney Fort Boulevard. Dushkin added that the proposed roadway improvements and the presence of Kalahari are the largest influences on the rate of development. He provided a list of planned developments and requested the AOI be extended further to the north to E Old Settlers Boulevard to encompass a future residential subdivision and Old Settlers Park. Based on comments received from the City of Round Rock, the AOI boundary was revised to include areas between US 79 and E Old Settlers Road.

2.4 Step 4 – Determine if Growth is Likely to Occur in the Induced Growth Areas

2.4.1 Population Trends

This section includes information about trends that characterize the AOI over time. In general, the area encompassed by the AOI has grown considerably over the past decades as shown in terms of population change, housing starts, and predominant construction periods.

As shown in **Table 3**, the City of Round Rock, Williamson County, and the census block groups that encompass the AOI have grown since the 1990s with a marked increase in land development between 2000 and 2009. Home construction during this period accounts for over 45 percent of the total housing stock within the AOI, with nearly 35 percent in both Round Rock and Williamson County. Home construction slowed between 2010 and 2018, with the percentage of housing stock from this time accounting for under 10 percent in the AOI. The housing stock from this period accounts for just over 11 percent in Round Rock and 16.4 percent in Williamson County.

Table 3: Year Structure Built/Percent Built by Decade for Jurisdictions in the AOI, 1990–2018

Geography	Total Homes	Year Structure Built/Percent Built within Decade					
		1990–1999		2000–2009		2010–2018	
		#	%	#	%	#	%
AOI*	11,264	3,420	30.4%	5,103	45.3%	1,089	9.7%
Round Rock	40,806	10,112	24.8	14,228	34.9%	4,556	11.2%
Williamson County	186,735	41,500	22.2%	64,474	34.5%	30,657	16.4%

*Includes census block groups encompassing the AOI

Source: American Community Survey, Five-Year Estimates, 2018, Table B25034 (“Year Structure Built”).

As shown in **Table 4**, the population in the AOI grew by nearly 95 percent over the period of 2000 to 2018. Round Rock and Williamson County grew by approximately 96 percent and 110 percent respectively from 1990 to 2018.

Table 4: Current and Historic Population Growth in the AOI, 1990–2017

Geography	Total Population by Year					
	1990	2000	2010	2015	2018	% Change from 1990–2017
AOI*	N/A**	17,302	19,805	32,352	33,664	94.6%
Round Rock	30,923	61,136	99,887	109,690	120,157	96.5%
Williamson County	139,551	249,967	422,679	473,592	527,057	110.9%

*Includes census block groups encompassing the AOI in the respective year

**Data for AOI block groups not available for 1990; therefore, the % population change shown for the AOI is for 2000–2018

Source: U.S. Census Bureau, Decennial Census Total Population, 2000 (Table P001), 2010 (Table P1); American Community Survey 5-year estimates 2011-2015 (Table B01003), 2014-2018 (Table B01003); 1990 Census data sourced from Texas State Library and Archives Commission <https://www.tsl.texas.gov/ref/abouttx/popcity1.html> and <https://www.tsl.texas.gov/ref/abouttx/popcnty1.html>.

The jurisdictions that intersect the AOI are expected to continue to grow into 2050 (see **Table 5**). This trend is seen at the city and county level: The City of Round Rock and Williamson County are expected to grow by 139.8 percent and 141.0 percent, respectively. CAMPO has forecasted population and jobs in the region through 2045. The region (made up of Bastrop, Burnet, Caldwell,

Hays, Travis, and Williamson counties) is expected to experience a population growth of 146 percent and employment is expected to increase by 140 percent.

Table 5: Projected Population Growth in the AOI, 2010–2050

Geography*	Total Population by Year (Projected 2020-2050)					
	2010 Census	2020	2030	2040	2050	% Change from 2010–2050
Round Rock	99,887	123,598	154,326	193,827	239,565	139.8%
Williamson County	473,592	631,097	771,834	941,827	1,141,301	141.0%

Source: Texas Water Development Board, 2021 Regional Water Plan Population Projections 2020-2070, March 2019.

*Data not available for census blocks/tracts that encompass the AOI

2.4.2 Likelihood of Induced Growth on Developable Land

In general, Round Rock and Williamson County are currently experiencing a high degree of development and are expecting more in the future. The City of Round Rock Transportation Master Plan (2017) lists the top 25 intersections needed for improvement and the extension of Kenney Fort Boulevard is anticipated to reduce demand and improve congestion at three of those intersections. Planned developments and projects currently under construction that are listed in the city’s ArcGIS online Current Development map include the GLO Tract, SE PID: Remington Tract, Westview, Kenney Fort, HR 79 Investments, and the Kalahari Planned Use Development (PUD), Homestead at Old Settlers Park, Round Rock Founders Academy, various commercial development and the Palm Valley Church Activity Center along E. Palm Valley Boulevard, and the Church of Christ of Round Rock.

The construction of Kenney Fort Boulevard would increase access and mobility by connecting SH 45 and US 79. New location infrastructure projects typically induce growth and development, but the parcels adjacent to the proposed project are almost entirely developed. Undeveloped parcels have planned developments or are accessible from other roadways. Based on comments from the City of Round Rock these improvements and associated benefits would not induce development; however, the improvements would accelerate already planned developments. There are residential and commercial developments that are planned or currently under development in the AOI (see **Figure 2**); these would be aided by the addition of a new roadway between SH 45 and US 79.

In addition to the questionnaire responses, comprehensive plans and city ordinances indicated that growth is expected. The Round Rock 2030 Comprehensive Plan lists the area around the intersection with US 79 as a region of interest. The area contains several hundred acres, of which much of is already being developed as Kalahari Resorts. There are an additional 150 acres to the east of the resort and 100 acres west of Kenney Fort which have the potential for mixed-use development. The plan also states that the rapid growth experienced between the 2010 and 2020 Plan period is expected to continue through the Round Rock 2030 Plan period. The future land use strategy is aided by the Future Land Use Map, which shows the area in and around the AOI to be

primarily single-family with mixed-use and the Kalahari Resorts regional attraction around the intersection with US 79. Employment centers and commercial uses are located at the intersections with US 79, SH 45, and Old Settlers Boulevard. Large areas within the AOI are or have recently been rezoned to allow for PUDs, which account for much of the planned development along the proposed project.

2.5 Step 5 – Identify Resources Subject to Induced Growth Impacts

The proposed project is not anticipated to induce growth in the AOI; however, the proposed project may influence the rate of growth of the planned developments. The following paragraphs describes the resources in the AOI that could be impacted by the currently planned developments.

Segment 1244 of the Brushy Creek, a Section 303(d) impaired water is located within the AOI. Additionally, there are 9.9 mapped stream miles within the AOI. Direct impacts to water resources in these tracts associated with development may include the placement of fill material in waters of the U.S., including wetlands. The resulting fill may increase the potential for erosion and sedimentation within waterways during future construction activities. However, impacts to water resources would be considered unsubstantial as impacts to any waters of the U.S., including wetlands, would follow environmental sequencing (avoidance, minimization, or mitigation) in coordination with the U.S. Army Corps of Engineers (USACE) Clean Water Act Section 404 permitting process. Additionally, Section 401 Water Quality Certification would be required by the Texas Commission on Environmental Quality (TCEQ) for permitted impacts to waters or the U.S., including wetlands, associated with future construction activities.

According to Texas Parks and Wildlife Department (TPWD) Ecological Mapping System of Texas (EMST), undeveloped areas in the AOI are comprised primarily of open prairie lands/savannah (1,214.7 acres), woodland/shrubland, or disturbed prairie (249.2 acres), agriculture fields (194.8 acres), or dense riparian/floodplain forests (294.6 acres) with a mixture of understory shrubs, grasses, forbs, and woody vines. Currently, 192.1 acres of land are classified as developed/urban land use within the AOI. EMST data is a tool, so vegetation should be field verified to ensure accuracy; however, it would not be feasible to field verify all vegetation within the AOI. As such, actual vegetation types may vary from the EMST data. **Table 6** depicts the mapped EMST Memorandum of Understanding (MOU) vegetation types located within the AOI.

Table 6: EMST Vegetation Type within the AOI

MOU Vegetation Type	Acreage
Agriculture	194.8
Tallgrass Prairie, Grassland	825.7
Riparian	86.5
Floodplain	208.1
Edwards Plateau Savannah, Woodland, and Shrubland	445.3
Disturbed Prairie	192.9

MOU Vegetation Type	Acreage
Urban	192.1
Total AOI	2,145.4

Source: TPWD EMST, 2019.

Potential indirect impacts to vegetation and wildlife habitat within the undeveloped areas could occur as a result of planned development throughout the AOI. These impacts would include removal of vegetation and conversion of vegetated areas into developed/urban land uses. Such future conversion of vegetated areas would have direct impacts on wildlife habitat; however, based on the results of the TPWD Natural Diversity Database, no threatened or endangered species are known to inhabit undeveloped areas in those tracts. Therefore, impacts on vegetation and/or wildlife habitat would be considered unsubstantial.

2.6 Step 6 - Identify Mitigation

Induced growth impacts on vegetation/wildlife habitat and water resources in the AOI are not anticipated. The proposed project may influence the rate of growth of the planned developments within the AOI which may result in indirect impacts to vegetation/wildlife habitat, water resources, and land use. Such indirect impacts would be addressed by the entity impacting the resource. Private, government, and/or municipal actions that may result in property acquisition and/or impacts to waters of the U.S. would be mitigated, for example, by that entity in accordance with their own policies and procedures plus any federal, state, or local laws, statutes, guidelines, etc.

Impacts to waters of the U.S., including wetlands, would be documented, coordinated, and permitted through the USACE as needed. The USACE would require consideration of compensatory mitigation in some instances. Additionally, the conversion of undeveloped land to residential, commercial, or industrial uses may require vegetation removal and result in increased erosion and water quality issues. Private, government, and/or municipal entities may be required to coordinate with the TCEQ for impacts associated with water quality (i.e., construction general permit, storm water pollution prevention plans, etc.). Best Management Practices (BMPs) to be implemented for the proposed project would be described in the Storm Water Pollution Prevention Plan.

Impacts to vegetation and wildlife habitat would consist of converting undeveloped areas into developed land uses including commercial and residential development. Impacts to vegetation and wildlife habitat for federally and state listed threatened and endangered species would be assessed and addressed for each individual public project within the AOI. Privately funded land development projects would not be expected to prepare publicly available environmental documentation. The only exception would be developments that were obligated to meet federal requirements such as Section 404 permitting through the USACE and adherence to the Endangered Species Act. Continued development is expected and would likely result in the conversion of undeveloped land to residential, commercial, and light industrial uses with or without the construction of the proposed project.

3.0 Encroachment-Alteration Impacts

Encroachment-Alteration Impacts are impacts that are caused by the project but separated from it by time and/or space. In addition to indirect effects from project induced development, indirect effects may occur to water resources as a result of encroachment-alteration effects. During construction, degradation of water quality could occur due to sedimentation of both surface water and groundwater. Construction has the highest likelihood of creating pollutants and sediment that could impact waters if storm water runoff enters surface water features prior to being treated. The potential for project-related encroachment-alteration effects on wetlands and waters of the U.S. would be mitigated through permanent (post-construction) BMPs as described above. Wetlands and waters of the U.S. could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. To minimize the potential for adverse impacts, BMPs would be regularly inspected, and proactively maintained.

The potential for project-related encroachment-alteration effects on floodplains would be mitigated through temporary (construction phase) and permanent (post-construction) BMPs. Floodplains could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. Build-up of sediment, in turn, could reduce the water storage capacity of the floodplain. To minimize the potential for adverse impacts, erosion and sedimentation BMPs would be effectively installed, regularly inspected, and proactively maintained.

Surface water segments within five miles downstream of the project area are not impaired by Total Suspended Solid (TSS) or dissolved oxygen, the main potential effects of additional sediment load in surface water; however, the impaired segment (Segment 1244 of Brushy Creek) could receive an increased amount of sediment if storm water were released from the project area despite the use of BMPs. To minimize the potential for adverse impacts, BMPs would be regularly inspected and proactively maintained.

Encroachment-alteration effects may occur to groundwater resources as a result of the proposed project. During construction, degradation of groundwater quality could occur due to fugitive sedimentation from the construction site entering area streams, creeks, and other recharge features. Temporary, construction phase water quality BMPs would be in place, regularly inspected and proactively maintained throughout the duration of construction to minimize the potential for water quality impacts. Post-construction operation of the proposed project has the potential to result in encroachment-alteration effects to groundwater quality if roadway contaminants or increased sediments in runoff were to enter recharge features. The potential for these impacts (both construction phase and post-construction) would be minimized by the development and implementation of water quality BMPs. The utilization of temporary and permanent BMPs would serve to minimize sediments and roadway pollutants arising from normal roadway usage and from accidental spills.

Encroachment impacts may include visual barriers due to proposed noise barriers used to mitigate the effects of roadway noise on the Preserve at Dyer Creek and Rolling Ridge residential subdivisions located on the east side of the proposed Kenney Fort Boulevard. The proposed noise barriers would reduce noise levels by at least five to seven dB(A) for first row receivers within the residential subdivisions. However, if the barrier is constructed (pending a noise workshop and property owner approval), the visual field would be reduced at these locations.

4.0 Conclusion

The AOI for the proposed project encompasses approximately 3.4 square miles (2,145.4 acres) in Williamson County and located entirely within the City of Round Rock. Based on the preceding analysis of existing and future land use, historic and projected population, and access, the proposed project would not induce growth in the AOI. Roughly 13.8 percent of the AOI is developable (**Table 1** and **Figure 2**), and it is anticipated that future development will be driven primarily by increased population growth in the region. The questionnaire respondent stated all undeveloped areas are going to be developed regardless of the construction of the proposed Kenney Fort Boulevard

The questionnaire respondent stated roadway improvements and the presence of the future Kalahari Resort are the largest influences on the rate of development. The proposed extension of Kenney Fort Boulevard would enhance mobility and provide an additional route for north/south traffic in this rapidly developing quadrant of the City of Round Rock. Connecting SH 45 and US 79 with Kenney Fort Boulevard would allow for access to planned development and may increase the rate of that development, particularly mixed-use development, would occur along the corridor. Induced growth impacts to vegetation/wildlife habitat and water resources are not anticipated from the proposed project.

Encroachment-alteration effects may occur to vegetation/wildlife habitat and water resources, including floodplains, Section 303(d) impaired waters, and waters of the U.S. as a result of the proposed project. The potential for project-related encroachment-alteration effects on waters of the U.S. and water quality could occur during construction, which has the highest likelihood of creating pollutants and sediment if storm water runoff enters surface water features prior to being treated. Build-up of sediment could also reduce the water storage capacity of the floodplain. Temporary (construction phase) and permanent (post-construction) BMPs would minimize the potential for encroachment-alteration effects to vegetation/wildlife habitat and water resources.

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Williamson County

- 2009. 2035 Network
- 2009. Long Range Transportation Plan.
- 2017. Conceptual Map of Proposed Controlled Access Facilities.

Appendix A: Indirect Effects Questionnaire

Bradley Dushkin
City of Round Rock Assistant Director of Planning and Development Services

Body of E-mail to Recipients of Kenney Fort Boulevard Indirect Impacts Questionnaire

Kenney Fort Boulevard is a major arterial roadway in the City of Round Rock's Transportation Master Plan. It was included in the City's first Transportation Master Plan, published in 1994, but has been part of the planning process since 1988. The roadway is being constructed in phases. Phase 1, which extends between Joe DiMaggio Boulevard and Forest Creek Drive, was completed during the summer of 2013. The Texas Department of Transportation (TxDOT) now plans to construct phases 2 and 3 that serve to extend Kenney Fort Boulevard south approximately 1.5 miles from its current terminus at Forest Creek Drive to State Highway (SH) 45 ("the project area").

Kenney Fort Boulevard Segments 2 and 3 will extend the existing limits from Forest Creek Drive to Gattis School Road (Segment 2) and from Gattis School Road to SH 45 (Segment 3). Kenney Fort Boulevard will be a 6-lane arterial roadway that will ultimately connect SH 45 to United States Highway (US) 79 and further to the north with the completion of additional segments. Work along Gattis School Road will also be included with this project to widen the existing roadway to the ultimate width near the intersection with Kenney Fort Boulevard. The purpose of this project is to enhance mobility and provide an additional route for north/south traffic in this rapidly developing quadrant of the City of Round Rock.

The project area covers a total area of 41.77 acres, consisting of 19.64 acres of state-owned ROW and 21.53 acres of private lands. A temporary easement is expected to occur on 0.598 acres of private land.

As part of the environmental process, CP&Y, the environmental consultant on the project, is analyzing the indirect impacts that would occur as a result of the proposed project. We have attached a map showing the proposed project area along with the indirect impacts Area of Influence (AOI). The AOI includes all parcels immediately adjacent to the project area since those would be the locations most likely to experience development as a result of the proposed project. We are seeking to identify any areas where potential development could occur (whether or not it is currently planned) that could be attributed to the proposed project.

We recognize that those who are most knowledgeable about how a project might affect a community are the local experts. With that in mind, we appreciate your time and input in this process. Please complete the following questionnaire to the best of your knowledge; if you are not the best person to answer the questions, please forward this to the appropriate person or persons within your organization. **Please submit your answers to the address below (electronic responses are welcomed with legible marked up maps) by July 31, 2019. If you have any questions, you may call Joshua Geyer at 713.579.7411.**

CP&Y, Inc.
Attn: Joshua Geyer
11757 Katy Freeway, Suite 1540
Houston, TX 77079
jgeyer@cpyi.com

Sincerely,

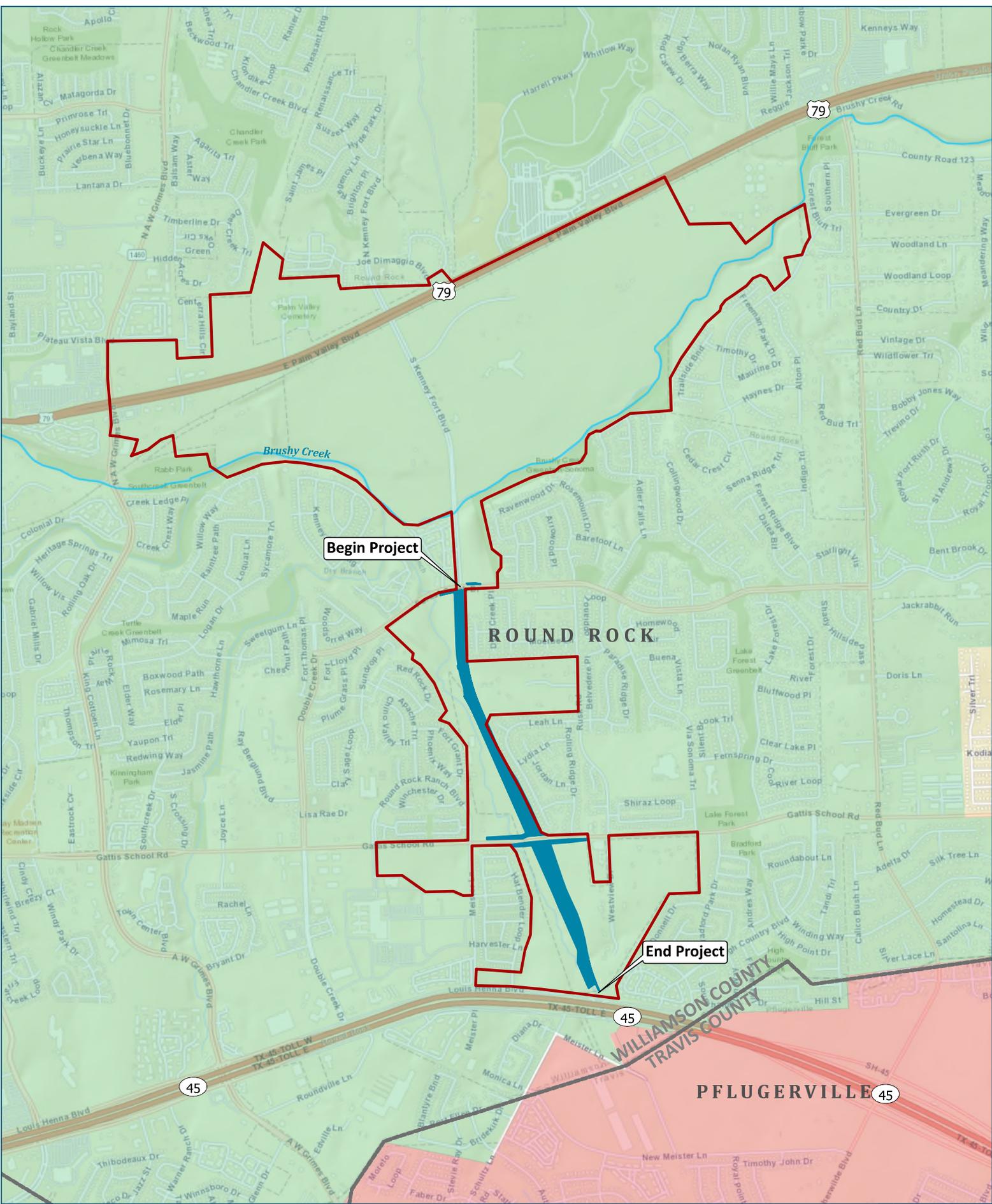
Joshua Geyer
Environmental Planner



Preferred Bank Building
11757 Katy Freeway, Suite 1540
Houston, TX 77079
P: 713.579.7411 | F: 713.532.1734
jgeyer@cpyi.com | www.cpyi.com

Kenney Fort Boulevard Roadway Improvements Project Indirect Impacts Questionnaire

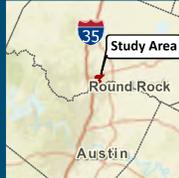
1. Are you aware of any substantial proposed land developments within your jurisdiction or area? If so, please mark the general areas on the provided (or equivalent) map and provide the location, type, and size (e.g., acres, density, number of units) of any planned developments.
2. On the map provided, please identify areas (if any) that you think would likely be developed as a result of the construction of the proposed project that would not otherwise be developed (please distinguish from developments identified in question 1).
3. Would the proposed project affect the rate or intensity of land development in your jurisdiction? If so, please describe.
4. Are there other capital improvement projects – such as water or sewer infrastructure, school or hospital construction, or roadway improvements – that are planned for the area which might affect development in the project vicinity?
5. Are there any factors that could limit growth in the area, such as floodplains, current development, conservation easements, protected lands, etc.?
6. In your opinion, are there areas not encompassed by the Area of Influence shown on the map that would be indirectly impacted by the project and should be included in the Area of Influence?



Study Area

Proposed Kenney Fort Blvd
From Forest Creek Blvd to SH 45

- Study Area
- Project Location
- County Boundary
- City of Round Rock and ETJ
- City of Pflugerville and ETJ
- NHD Flowline



Basemap: ESRI Streets

Appendix B: Indirect Effects Questionnaire Responses

Bradley Dushkin
City of Round Rock Assistant Director of Planning and Development Services

Joshua Geyer

From: Bradley Dushkin <bdushkin@roundrocktexas.gov>
Sent: Wednesday, July 01, 2020 8:33 AM
To: Joshua Geyer
Cc: Susan Brennan; Brad Wiseman; Gary Hudder; Gerald Pohlmeier; Ed Polasek; Brian Kuhn
Subject: RE: Kenney Fort Boulevard Indirect Impacts Questionnaire
Attachments: Kenney Fort Blvd Indirect Impacts Questionnaire.pdf; KFB IIQ Map.pdf

Hi Joshua,

Attached please find answers to questions 1 through 6, plus a marked-up map referenced in the answers. In short, a lot is already going on, and the extension of Kenney Fort could very well accelerate the remainder. Please let me know if you have any questions.

Regards,

Bradley Dushkin, AICP

Assistant Director of Planning & Development Services

City of Round Rock

301 W Bagdad, Suite 210

Round Rock, Texas 78664

O: 512-671-2728

C: 512-529-0905

Please check our website regularly to stay up to date with changes to procedures as we do our part to prevent the spread of Coronavirus: <https://www.roundrocktexas.gov/departments/fire/emergency-management/coronavirus-covid-19-information/#planning>

Round Rock 2030 – provide input and stay updated on the progress of Round Rock’s next Comprehensive Plan
eTRAKiT – check the status of your application or permit
CityView – online GIS portal where you can view zoning, utility, floodplain, and more info for every property in the City
What’s going on downtown?

Please take 5 minutes to complete our survey and give us your positive and critical assessments. Responses are made public on our website. However, individual names, project names, and contact info will not be posted. [How are we doing?](#)

From: Joshua Geyer <jgeyer@cpyi.com>
Sent: Friday, June 26, 2020 3:45 PM
To: Bradley Dushkin <bdushkin@roundrocktexas.gov>
Subject: Kenney Fort Boulevard Indirect Impacts Questionnaire

External Email - Please verify sender authenticity

Dear Mr. Dushkin,

Kenney Fort Boulevard is a major arterial roadway in the City of Round Rock's Transportation Master Plan. It was included in the City's first Transportation Master Plan, published in 1994, but has been part of the planning process since 1988. The roadway is being constructed in phases. Phase 1, which extends between Joe DiMaggio Boulevard and Forest Creek Drive, was completed during the summer of 2013. The City of Round Rock in collaboration with Williamson County now plans to construct phases 2 and 3 that serve to extend Kenney Fort Boulevard south approximately 1.5 miles from its current terminus at Forest Creek Drive to State Highway (SH) 45 ("the project area").

Upon completion, Kenney Fort Boulevard (Segments 2 and 3) would be a 6-lane arterial roadway that will ultimately connect SH 45 to United States Highway (US) 79 and further to the north with the completion of additional segments. Work along Gattis School Road, in the vicinity of the Kenney Fort Boulevard intersection, would also occur as part of the Kenney Fort Boulevard (Segments 2 and 3) project. The purpose of the proposed Kenney Fort Boulevard (Segments 2 and 3) project is to enhance mobility and provide an additional route for north/south traffic in this rapidly developing quadrant of the City of Round Rock.

As part of the environmental process, we are analyzing the indirect impacts that would occur as a result of the proposed project. We have attached a map showing the Area of Influence (AOI), a study area that is most likely to experience indirect impacts as a result of the proposed project. The AOI includes all parcels immediately adjacent to the project area since those would be the locations most likely to experience development as a result of the proposed project. We are seeking to identify any areas where potential development could occur (whether or not it is currently planned) that could be attributed to the proposed project.

We recognize that those who are most knowledgeable about how a project might affect a community are the local experts. With that in mind, we appreciate your time and input in this process. Please answer the following questions to the best of your knowledge. If you are not the best person to answer the questions, please forward this email to the appropriate person or persons within your organization.

1. Are you aware of any substantial proposed land developments within your jurisdiction or area? If so, please mark the general areas on the provided (or equivalent) map and provide the location, type, and size (e.g., acres, density, number of units) of any planned developments.
2. On the map provided, please identify areas (if any) that you think would likely be developed as a result of the construction of the proposed project that would not otherwise be developed (please distinguish from developments identified in question 1).
3. Would the proposed project affect the rate or intensity of land development in your jurisdiction? If so, please describe.
4. What would affect the rate of development intensity of the planned developments (identified in response to Question 1), such as water or sewer infrastructure, school or hospital construction, or roadway improvements?
5. Are there any factors that could limit growth in the area, such as floodplains, current development, conservation easements, protected lands, etc.?
6. In your opinion, are there areas not encompassed by the Area of Influence shown on the map that would be indirectly impacted by the project and should be included in the Area of Influence?

Please submit your answers to the address below (electronic responses are welcomed with legible marked up maps) by July 10, 2020. If you have any questions, you may call Josh Geyer at 713.579.7411.

**CP&Y, Inc.
Attn: Joshua Geyer**

11757 Katy Freeway, Suite 1540
Houston, TX 77079
jgeyer@cpyi.com

Sincerely,

Joshua Geyer
Environmental Planner



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11757 Katy Freeway, Suite 1540
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1. Are you aware of any substantial proposed land developments within your jurisdiction or area? If so, please mark the general areas on the provided (or equivalent) map and provide the location, type, and size (e.g., acres, density, number of units) of any planned developments.

Kalahari Resorts and Conventions is under construction at the southeast corner of Kenney Fort Blvd and E Palm Valley Blvd (AKA US 79). It is noted on the map. It occupies about 190 acres, has 975 hotel rooms, a 223,000 square foot indoor water park, a 200,000 square foot convention center, 80,000 square foot indoor entertainment center, and several on-site restaurants.

At #1 on the map is a proposed 20-acre, 200,000 square foot light industrial development. It has not yet begun the development process in earnest but should be coming in soon.

#2 on the map are two townhome projects making their way through our review process, totaling somewhere in the neighborhood of 120 units.

#3 is a large parking lot and small building addition which are under construction for an existing church.

#6 is an 89-unit townhome development currently under construction.

#7 is a QuikTrip gas station under construction and a 20,000 square foot retail/restaurant strip which is nearing permit approval.

#8 is currently outside city limits but the city is aware of commercial/hotel development interest.

#9 is a Culver's and Firestone which have recently opened and a Chick-fil-A that is nearing completion.

#10 has had significant attention for years and we have been in touch with a movie theater developer who is interested, although it remains to be seen if/when that might be submitted. The land labeled Harris-Hickox will likely be developed in the next decade as some sort of mixed-use destination.

A good way to track most of these projects (once submitted for review) is on our [Current Development Map](#).
2. On the map provided, please identify areas (if any) that you think would likely be developed as a result of the construction of the proposed project that would not otherwise be developed (please distinguish from developments identified in question 1).

It's all going to be developed at some point regardless of the construction of KFB.
3. Would the proposed project affect the rate or intensity of land development in your jurisdiction? If so, please describe.

#4 on the map is several unzoned properties that are currently aging large-lot single family homes served by a private road. Construction of Kenney Fort adjacent to the western edge of these lots will likely spur development interest. The properties are designated residential on the Future Land Use Map.

#5 is land owned by the Round Rock Independent School District and part of the Cedar Ridge High School campus. Some of this land is used for drainage but other parts of it may be developed.

#11 is similar to #4 but is not yet in city limits. Large single family lots that will likely be developed in part thanks to the proximity of KFB.

#12 is entitled for a mixture of residential uses and commercial uses and is split by floodplain. Approximately 15-20 acres is developable.

4. What would affect the rate of development intensity of the planned developments (identified in response to Question 1), such as water or sewer infrastructure, school or hospital construction, or roadway improvements?

Roadway improvements and the presence of Kalahari are the largest influences on the rate of development.

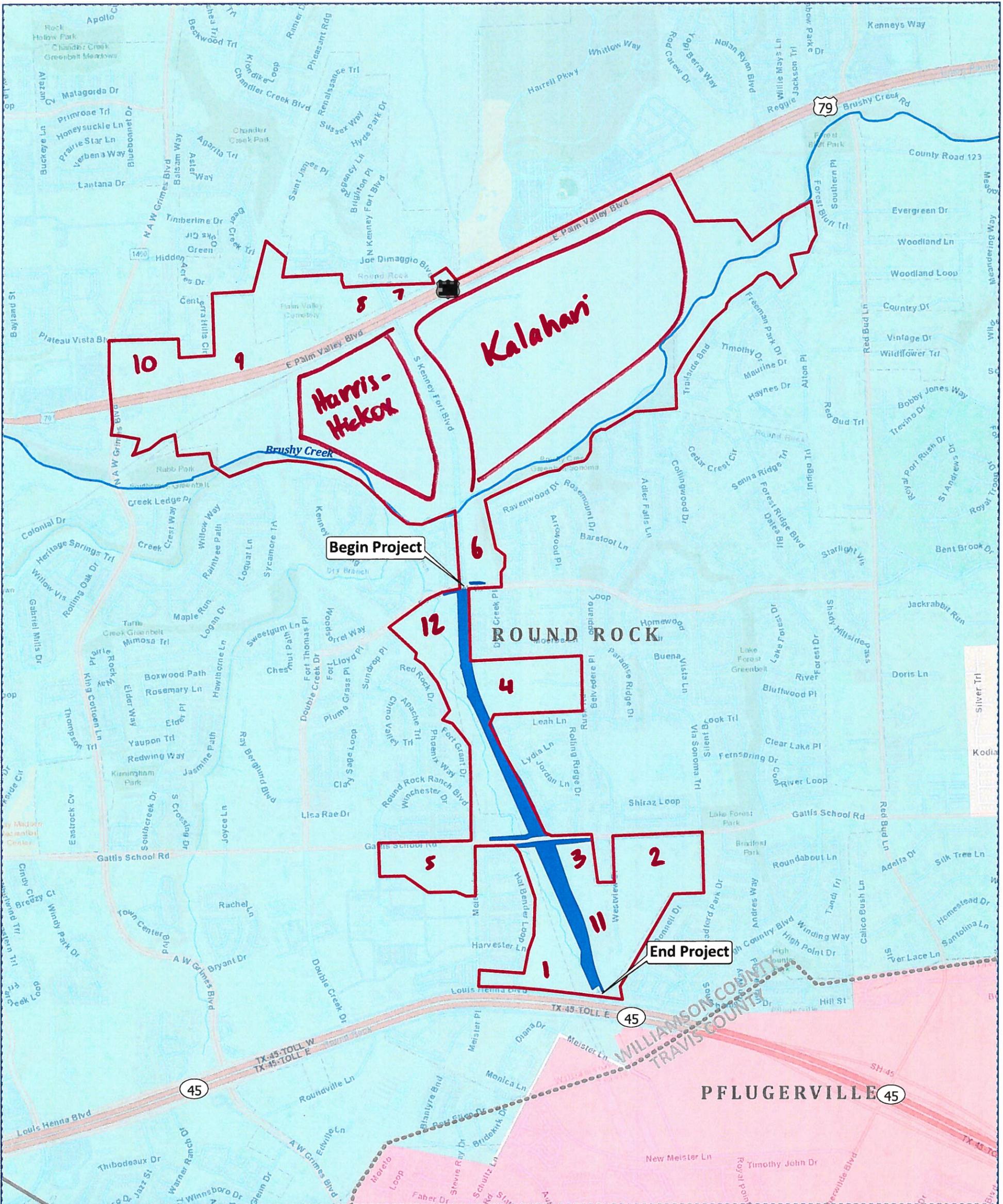
5. Are there any factors that could limit growth in the area, such as floodplains, current development, conservation easements, protected lands, etc.?

There is significant floodplain along the west side of KFB between Gattis School Road and Forest Creek, and some south of GSR as well, that will prevent any sizeable development.

6. In your opinion, are there areas not encompassed by the Area of Influence shown on the map that would be indirectly impacted by the project and should be included in the Area of Influence?

The AOI could be extended north to reflect the next phase of KFB expansion, because it will pass through a proposed 450-home single family subdivision and Old Settlers Park.

Travelers going to/from these locations are probably very interested in KFB phases 2-3.



Study Area

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From Forest Creek Blvd to SH 45

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