

NOLANVILLE ROAD MAINTENANCE PLAN 2024

Department of Public Works



Abstract

This document provides a guide for assessing and prioritizing road maintenance activities in the City of Nolanville for the purpose of budgeting and ensuring equitable improvement of infrastructure.

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Background

The Nolanville Comprehensive Plan 2015-2030, Action 1.2.2, calls for a prioritized list of Nolanville roads and a schedule for their maintenance and improvement. This task was initially performed by TRC Engineering in August 2013, as an update to their August 2007 draft plan. An enhanced list was completed in 2017 to include Active Daily Travel classification and Surface Conditions, and updated again in June 2020. This current version was updated October 2023 for calendar year 2024 decisions.

Comprehensive Road List (Alphabetical)

Name	Area	Street Classification	Curb & Gutter	Length (ft.)	Constructed or Last Treatment
1st Street	RDT	Good Poor elevation transition	No	3,240	Chip/Seal 2015
2 nd Street	RDT	Fair	No	264	UNK
3rd Street	RDT	Good	No	2,100	Chip/Seal 2015
4th Street	RDT	Good	No	2,050	Chip/Seal 2015
5th Street	RDT	Good / Excellent	North No/ South Yes	700 640	Chip/Seal 2015; Recon 2023
6th Street	RDT	Good	No	964	Chip/Seal 2015
8th Street	RDT	Good	No	1,005	Chip/Seal 2015 235' Overlay 2014 750'
10th Street	Collector	Excellent	Yes	4,080	Recon 2009
Ash Street	Wood	Excellent	Ribbon	841	Recon 2022
Ashley Drive	RDT	Good	Yes	510	Micro 2019
Avenue G	RDT	Excellent	Ribbon/ Mountable	1130	2023
Avenue H	Collector	Excellent / Good	Yes	4,129	Recon 2015- Main to 10 th Recon 8th to Jackrabbit '21-'22
Avenue I	RDT	Fair	No	825	Milled 400ft
Avenue J	RDT	Fair	No	1,585	Chip/Seal 2015
Avenue K	RDT	Fair	No	1,905	Chip/Seal 2015
Bald Eagle Drive	BC	Excellent	Yes	1557	Seal Coat 2021
Barberry Drive	WW IV	Excellent	Yes	140	2022
Bella Charca Parkway	BC WL II	Excellent	Yes	2640 3150	2013 2021-2022
Bent Tree Drive	BC	Excellent	Yes	774	Seal Coat 2021

Name	Area	Street Classification	Curb & Gutter	Length (ft.)	Constructed or Last Treatment
Bella Vita Dr	BC	Excellent	Yes	2100 2535	2018 2021-2022
Birch Street	Wood	Excellent	Ribbon	844	Recon 2022
Black Gum Ct	WW I	Good	Yes	370	~2006
Black Walnut Ct	WW I	Good & Fair	Yes	G-930 F-280	~2006
Bluebonnet	PV	Fair	Yes	862	UNK
Bluff Drive	BX X	Excellent	Yes	1016	2022
Bobcat Circle	BC IX	Excellent	Yes	345	2021
Box Canyon	BC VII	Excellent	Yes	1150	2018
Boxer Street	CH	Excellent/Good	Yes	Excellent - 900 Good - 900	Phase I 2003-2007; II 2016
Brandy Drive	BC VII	Excellent	Yes	3,303	2018
Button Bush	WW II	Excellent	Yes	320	2018
Bristlecone Drive	WW IV	Excellent	Yes	520	2022
Caponier Drive	WL II	Excellent	Yes	1225	2022
Cedar Ridge Drive	R	Good	Yes	3,264	Seal Coat 2020
Cedar Street	Wood	Excellent	Yes	850	Recon 2022
Chimney Hill	BC I	Excellent	Yes	3068	Seal Coat 2021 Mill/Overlay 2019 (600 ft)
Cindy Lane	RDT	Good	Yes	755	Micro 2019
Coffee Tree Ct	WW I	Good & Poor	Yes	Good – 333 Poor – 37	2006
Dale Avenue	RDT	Excellent & Fair	45% Y / 55% N	Excellent - 495 Fair - 605	~2006
Dober Street	CH	Excellent & Good	Yes	Excellent - 900 Good - 900	Phase I 2003; II 2016
Dogwood Street	P	Excellent	Yes	851	Recon 2022
Elm Street	P	Excellent	Yes	856	Recon 2018
Fawn Trail	BC IV	Excellent	Yes	317	2013
Fence Line	BC X	Excellent	Yes	1860	2021
Fieldwood	BC I	Excellent	Yes	753	~2004
Fir Street	P	Fair	No	843	Chip Seal 2022
Freedom Circle	LS	Excellent	Yes	1948	2022
Fossil Ridge	BC VII	Excellent	Yes	2020	2018
Gehler Circle	RDT	Excellent	Yes	1,500	~2003

Name	Area	Street Classification	Curb & Gutter	Length (ft.)	Constructed or Last Treatment
Gray Fox Drive	BC X	Excellent	Yes	1280	2022
Garman Street	BC XII	Excellent	Yes	140	2022
Green Street	WL I	Excellent	Yes	925	2020
Harvest Street	BC	Excellent	Yes	4,256	~2004 & 2012 Seal Coat 2021
Heritage Loop	BC V	Excellent	Edging	1056	2018
Hickory Ridge	R	Excellent	Yes	1,500	Seal Coat 2020
High Plains Drive	BC X	Excellent	Yes	1225	2022
Hines Street	WL II	Excellent	Yes	565	2022
Horatio Street	WL I WL II	Excellent	Yes	1880 3000	2020 2022
Hunters Quail Court	BC XI	Excellent	Yes	280	2022
Jack Rabbit Road	Collector	Fair	No	5439	Point Repairs 2020
Jordan Loop	RDT	Fair	Yes	1,491	~1983 Micro 2019
Lazy Brook	BC	Excellent	Yes	808	~2004
Levy Crossing Road	Myers	Excellent	Yes	2334	County Road for now
Live Oak Street	P	Fair	No	847	Chip Seal 2022
Lonesome Oak	WW I	Good & Fair	Yes	G – 1072 F – 460 E- 500	~2006-Present
Lonita Avenue	RDT	Fair	No	1100	Point Repairs 2020
Lorrie Avenue	RDT	Fair	No	1,300	50% 1.5” Overlay 2017 325’ 50%Chip Seal 2015 975’
Manhattan Drive	RDT	Excellent	Yes	581	~2006
Main Street	RDT	Good & Fair	No	Good - 1,363 Fair - 1,363	Chip/Seal 2015
Mac Dougal Street	WL I	Excellent	Yes	620	2020
Meadow Oaks	BC I	Excellent	Yes	800	~2004
Mercer Street	WL I WL II	Excellent	Yes	1020 2740	2020 2022
Mesquite Boulevard	P	Excellent	No	2152	Edge Mill and Overlay 2022
Morningside	PV	Fair	Yes	2,200	UNK
Moss Road	RDT	Fair	Yes	488	>1970 Micro 2019

Name	Area	Street Classification	Curb & Gutter	Length (ft.)	Constructed or Last Treatment
Mountain Ridge	BC I	Excellent	Yes	189	Seal Coat 2021
Nolan Ridge Drive	R	Excellent	Yes	3,300	Seal Coat 2020
North Drive	RDT	Good & Poor	Yes	563	UNK
Oak Ridge Drive	R	Excellent	Yes	2,083	Seal Coat 2020
Old Glory Road	LS	Excellent	Yes	998	2022
Old Nolanville Road	Collector	Excellent, Good & Fair *Edging Poor	60% Y / 40% N	Excellent - 5,852 Good - 1,950 Fair - 1,951	Bridge to East of School- Recon 2018 PV to State Maint. Chip Seal 2015
Overland Trail	BC XII	Excellent	Yes	530	2022
Parkridge Road	BC	Good Excellent	Yes	350 350	2021 Chip Seal 2021 Recon
Pheasant Drive	BC X	Excellent	Yes	1075	2021
Pine Street	P	Fair	No	868	Chip Seal 2022
Pleasant Hill Cemetery	Collector	Good & Fair *Edging Poor after tracks	No	3,000	UNK Mill/Overlay RR to Access Road 2019
Pointer	P	Excellent & Fair	Yes	Excellent – 1848	I 2007; II2016 Point Repair 2018
Prairie Drive	BC IX	Excellent	Yes	1325	2020
Quail Drive	BC VIII	Excellent	Yes	568	2020
Red Bud	PV	Good	Yes	937	Unk
Red Fox	BC	Excellent	Yes	419	Seal Coat 2021
Red Leaf	BC I-II	Excellent *300 ft damage from constant drainage	Yes	2150	04-08
Riata Drive	BC IX	Excellent	Yes	1806	2021
Ridgeback Street	CH	Good	Yes	634	2004
Ridgeway Court	BC	Excellent	Yes	317	2004
Rocky Creek Drive	BC VIII	Excellent	Yes	1135	2020
Rosson St	WL II	Excellent	Yes	1790	2022
Ryan Circle	RDT	Good	Yes	581	2006
Setter Street	CH	Good	Yes	634	~2007
Shadbush Drive	WW IV	Excellent	Yes	968	2022
Shady Hollow	BC II	Excellent	Yes	457	Seal Coat 2021
Sims Ridge Drive	R	Excellent	Yes	2,303	Seal Coat 2020
Slippery Elm	WW II	Excellent	Yes	1685	2018
South Drive	RDT	Fair	Conc. Edging	563	UNK

Name	Area	Street Classification	Curb & Gutter	Length (ft.)	Constructed or Last Treatment
St. John Avenue	RDT	Good & Fair	40% Y / 60% N	Good - 400 Fair - 600	~2006 Point Repairs 2020
Stillwell Drive	WL II	Excellent	Yes	1400	2022
Stonecrest	BC I	Excellent	Yes	700	~2004
Sugar Maple Court	WW I	Good & Poor	Yes	Good – 523 Poor – 60	2006
Sunset	PV	Good	Yes	443	UNK
Sweet Gum Court	WW I	Good	Yes	106	2006
Tanglewood Court	BC I	Excellent	Yes	108	Seal Coat 2021
Timber Ridge Drive	R	Excellent	Yes	2,057	Seal Coat 2020
Topeka Court	RDT	Excellent	Yes	475	2006
Truscott Pkwy	WL II	Excellent	Yes	2300	2022
Turning Leaf Drive	BC VIII	Excellent	Yes	3232	2020
Via Toscana	WW II	Excellent	Yes	285	2018
Walking Stick Drive	WW IV	Excellent	Yes	510	2022
Wayne Drive	PH	Good	Edging	1268	Micro 2019
Weeping Willow	WW I	Good	Yes	390	2006
Wilderness Basin	BC I	Excellent	Yes	1,268	2004
Willow Street	P	Fair	No	843	Chip Seal 2022
Winchester Drive	BC IX	Excellent	Yes	1425	2021
Whitetail Trail	BC II BC VIII	Excellent	Yes	317 660	2013 2020
Wilderness Court	BC I	Excellent	Yes	317	2004
Woodhaven Drive	BC III?	Excellent	Yes	650	~2008
Wooster Street	WL WL II	Excellent	Yes	2700 1400	2020 2022
Wyman Street	WL II	Excellent	Yes	240	2022
			Total:	~186,625 Ft	

Area Abbreviations

BC Bella Charca
 CH Cedar Heights
 Wood Woodlands
 WL Warriors Legacy

PV Pecan Village
 R Ridges
 RDT Residential Downtown
 WW Wildwood Estates

Ends with Bella Charca XII, Warriors Legacy II, and Wildwood IV

Road Repair Evaluation

Road repairs are prioritized when there is evidence of base failure or public safety is an issue. Cracks that compromise the base, and especially wet cracks, accelerate base failures. Repairs are evaluated by Active Daily Travel (ADT), Surface Condition and Square Feet of Area Affected and given a score. The score determines the priority for repair and helps decide whether Nolanville Public Works will service the road or hire a contractor.

Road ID	ADT	Surface	Area	Score
Old Nolanville Road (ONR) (State Maint. to Pecan Village)	5	4	5	14
Woodland Side Streets (Fir, Live Oak, Pine, Willow)	1	5	5	11
Jackrabbit Road	4	4	5	13
Residential- RDT	3	4	5	12
North/South Str	4	3	5	12

Score 1-5 = Low priority, city crew doing work

Score 6-9 = Medium priority with city crew doing work or contractor doing specialty type work

Score 10 or above = High priority, possibly hiring contractor

ADT - <20 = 1, 20-50 = 2, 51-100 = 3, 101-500 = 4, >500 = 5

Surface - Good = 0, Cracking <20 = 1, Cracking 20-50% = 2, Cracking >50% = 3

Loose cracking, failing base = 4, Wet, open cracking, failing base = 5

Problem area observed < 400 sf = 0,

area observed > 400 sf = 5

Preventive Maintenance

In contrast to repair activities, preventive maintenance reduces the amount spent in the long run, if performed prior to base failures. The price rate for base failure repairs is nearly five times the cost of a seal coat — a commonly used process that lays a thin, new surface on roads in moderate condition.

Seal Coat, sometimes referred to as Chip Seal or Aggregate Sealing, is Nolanville's primary street maintenance activity for residential streets. This preventive maintenance activity is necessary to prolong the life of an asphalt street. Without a seal coat every 8-10 years, the asphalt would oxidize, dry out and lose flexibility. Loss of asphalt flexibility leads to cracking, water infiltration, potholes and failure of the structural components of the roadbed. Seal coating may consist of several different types of material applicators, all designed to be quick and economical and rejuvenating to the existing asphaltic wearing surface. Seal coating can be used to rejuvenate asphalt surfaces that are severely oxidized and dry, but still have structurally sound base courses. Grade 5 or Grade 6 aggregate with AC-5 or RC-2 is generally used in the warm summer months to seal coat suitable surfaces. Cracks up to ¼" width can be covered, but any base failures and potholes should be repaired prior to seal coating.

Hot Mix Overlays may also be considered as maintenance, even though they are more expensive. An overlay can be used over any existing asphaltic surface to fill shrinkage cracks and level up small depressions and irregularities. An overlay will not bridge over any base failure.

Scarifying and Reconstruction of existing pavement may be used as a repair or maintenance procedure if sufficient base material exists. The subgrade should be determined satisfactory before consideration of this procedure. Scarifying and reconstruction involves scarifying the asphaltic wearing surface and the full depth of the base course, mixing the pulverized asphalt with the base material, re-compacting the combined material into a "new" base course, and coating with asphaltic prime coat and a new asphaltic wearing course.

Road preventive maintenance activities are prioritized based on the last known treatment and current condition. Consideration is also given to grouping roads that require similar surface treatment to reduce mobilization and bid costs.

Street Condition Classification System

Condition	Description
Excellent	New.
Good	Small amounts of oxidation, cracking, raveling, and no base failures; good maintenance has been practiced.
Fair	Oxidized and inactive; moderate surface cracking and scattered failures.
Poor	Numerous base failures, cross-hatched cracking; unpaved streets, very narrow driving surfaces, bad drainage problems.



Total City Road Lengths within the City Limits is ~186,600 linear feet of City Road Treatment recommended every 7-8 years, approximately 5 miles per year. Collector streets identified in the chart and the Thoroughfare Plan, included in this document, will require a different treatment application and additional budget considerations.

Budget Note: the city added 56,000 of linear feet since 2020, the cost of construction is nearly 30% more since 2020.

Tentative Schedule of Preventive Maintenance

Goal is to improve **5 miles** of road per Fiscal Year.

Year 1

- Ridges - Seal Coat 2020
- Cedar Heights I & II

Year 2

- Wayne Drive - Seal Coat 2021
- Bella Charca Phases I-II - 50% Seal Coat 2020
- Warriors Legacy Phase I

Year 3

- Cindy / Moss - Microsurfacing 2019
- Jordan- Gehler- Ashly- Microsurfacing 2019
- Woodlands Mesquite - Edgemill 2022, Ash, Birch, Cedar, Dogwood, Elm 2022 -Recon
- Warriors Legacy I

Year 4

- R-DT
- Dale / Topeka / Manhattan / St. John / Ryan's

Year 5

- Avenue H - Recon 2022, 8th St to Jackrabbit, 8th to Main -2014
- Pleasant Hill - Mill overlay access to rail 20??
- 10th Street-Recon 2010
- Jackrabbit
- Old Nolanville Road
- Ave G/5th Street - Recon 2023

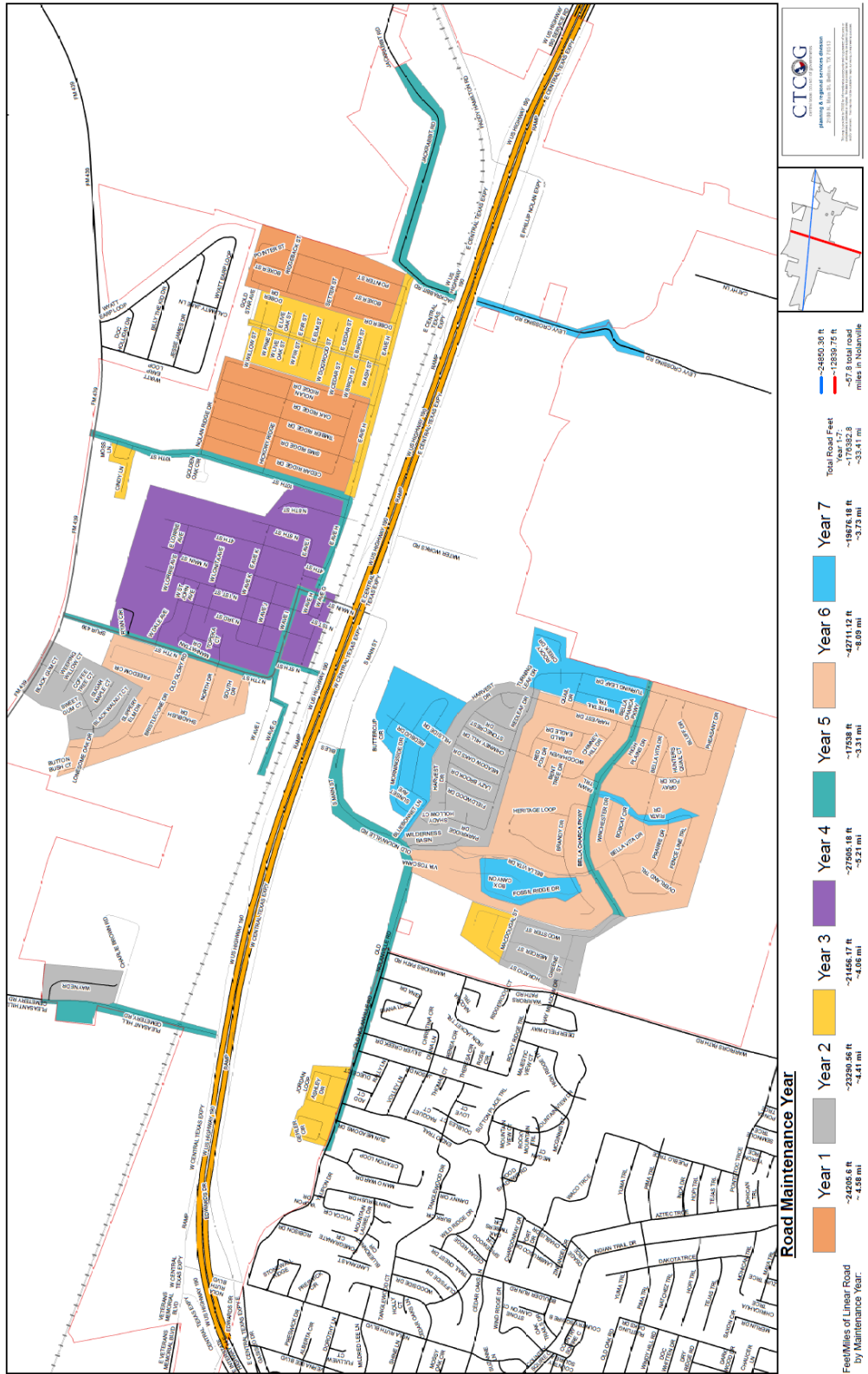
Year 6

- Bella Charcha IV - VI & X -XII
- Wildwood II-IV
- North & South

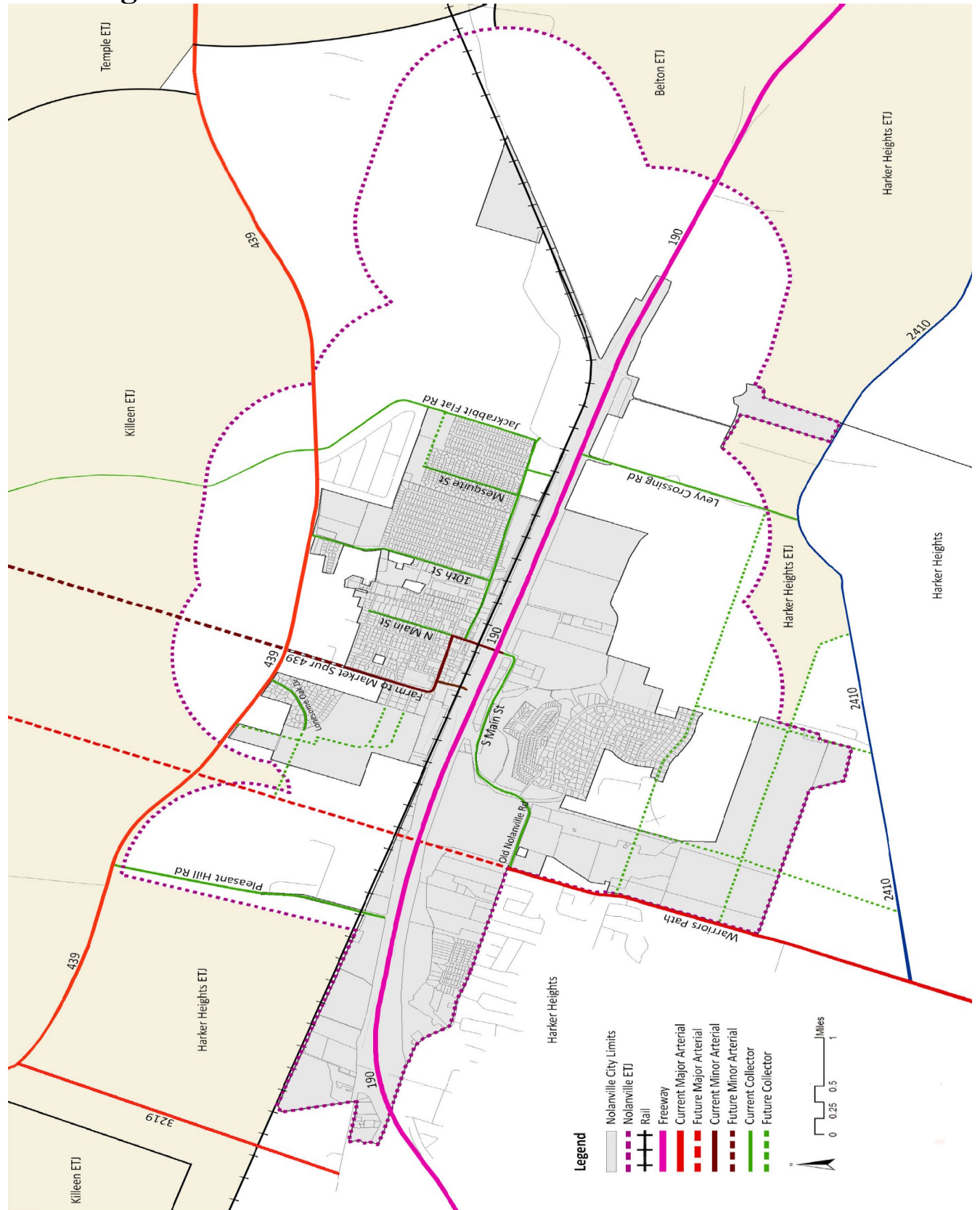
Year 7

- Bella Charca VII - IX
- Pecan Village (TBD Ownership)
- Levy Crossing (Pending Ownership)
- *Warriors Legacy II New 2023

*Warriors Legacy II was not added in total or color coated onto Road Maintenance Map.



Thoroughfare Plan



History of Capital Improvements

Old Nolanville Road Bridge, TxDOT Grant, \$2,500,000, starts April 2024 - 10 ft. Shared use path, reconstruction of bridge, addition of pedestrian bridge and road reconstruction from Bluebonnet to State Maintenance. TBD

439 Spur Connectivity, TxDOT Grant, \$1,000,000, completed January 2024 – Connects sidewalk from Liberty Springs to Main Street, overlay for 5th Street and reconstruct Avenue G. Involves acquisition of Railroad Property.

Certificate of Obligation, June 4, 2020 \$1,500,000, Issued for the Following Projects:

PROJECT INFORMATION: Bond was issued in July 2020 and initial payments are planned into Interest & Sinking (I&S) for FY 20-21.

Item	Description	Cost	Status
Avenue H & Mesquite Street	20% Local Match for Park Connectivity Project	\$300,000	Complete
Avenue H (Mesquite to Jackrabbit)	Re-Construction & add Bike Lanes (Including ONR Bridge Rehabilitation)	\$392,184	Complete
Woodland Roads	French Drain or Low Water Crossing	\$738,130	Complete
Channel Improvements (Engineering Only)	East & West Tributaries to include surveys and easements	\$20,000	Complete

Main Street Livability, TxDOT Grant \$1,500,00 completed 2019 - 10 ft Shared use path on both sides of the Street, Street Lights, Bus Stops and Curbing.

Old Nolanville Road Safe Routes to School, \$500,000 TxDOT Grant completed 2018 – 10 ft. Shared use path, 3” overlay and point repairs.

Tax Note March 31, 2017 \$500,000, Issued for the Following Projects:

PROJECT INFORMATION: Project was awarded in September 2017 and added reconstruction of West Dogwood to enhance drainage improvements along the west side of the Plaza.

Item	Description	Cost	Status
Elm Street	Drainage and Road Reconstruction	\$250,000	Complete
Park Road Extension	New Construction, Secondary Exit	\$150,000	Complete
Red Leaf Drainage	French Drain or Low Water Crossing	\$80,000	Complete