



APPENDIX E

ELLIS SPECIFIC PLAN CROSS SECTIONS

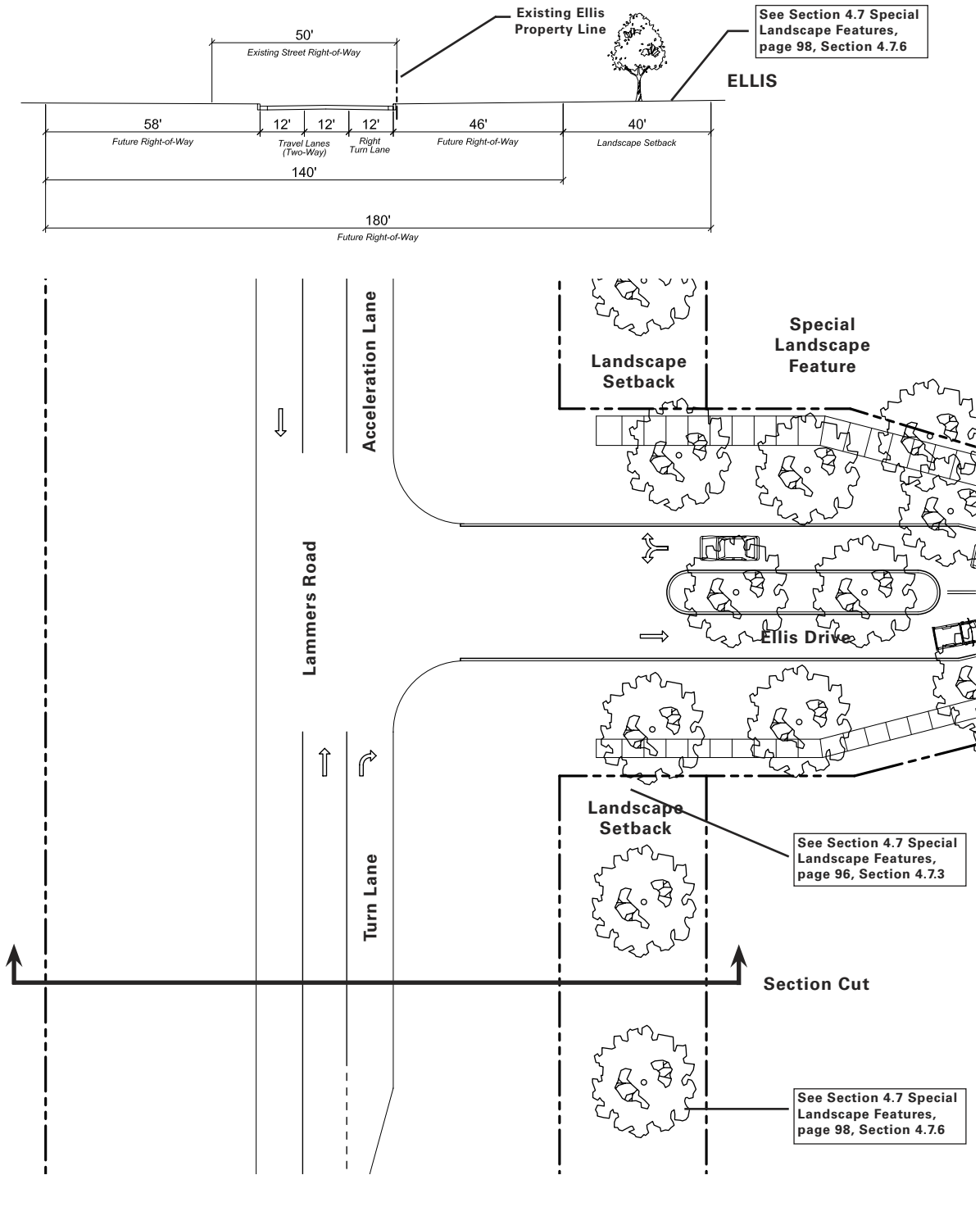


FIGURE 4.15 Existing Section and Plan: Regional Arterial – Lammers Road, Designation A (Cross-section at the time of connection of Ellis Drive to Lammers Road)

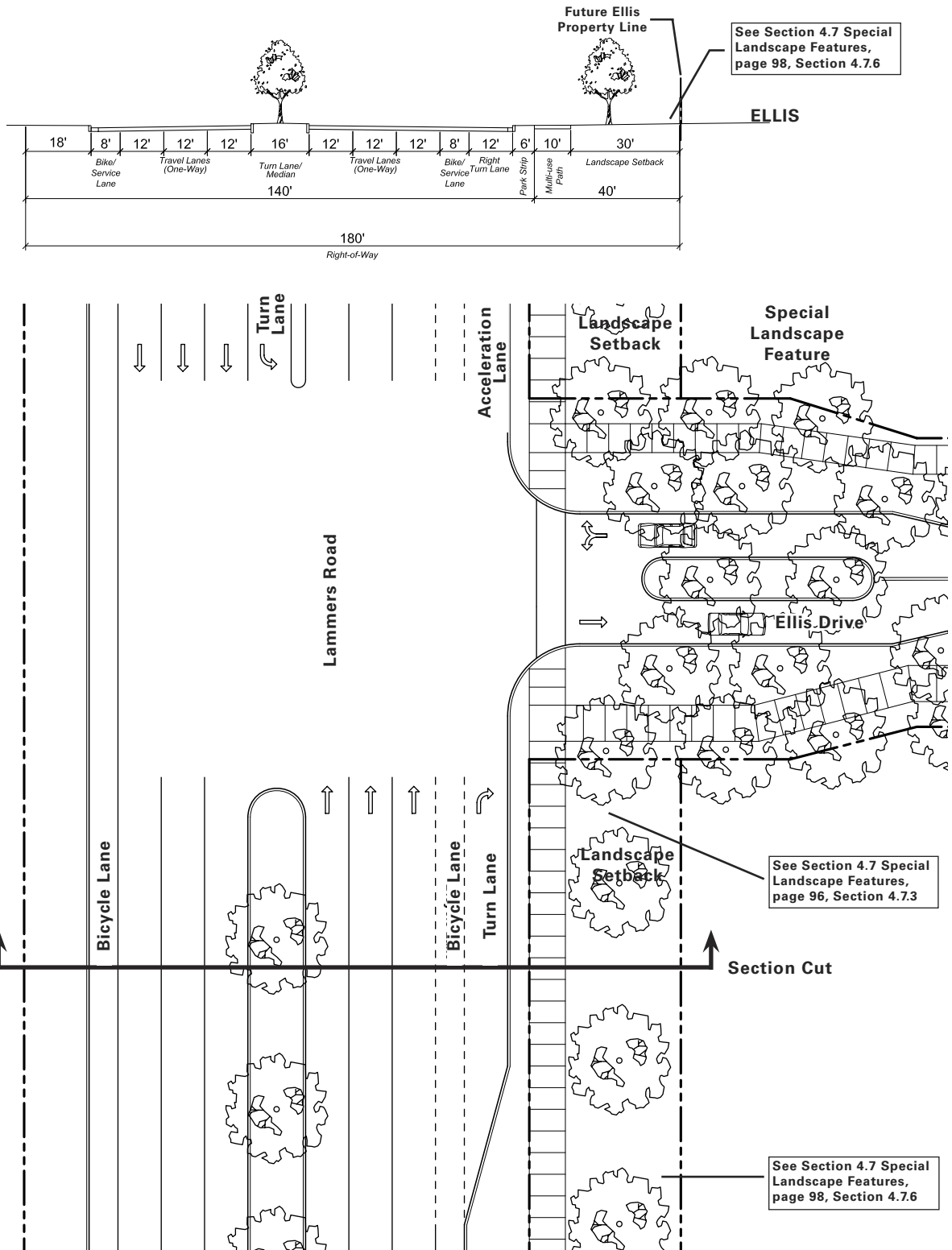


FIGURE 4.17 Build-out Section and Plan: Regional Arterial – Lammers Road, Designation A (Final Build-out)

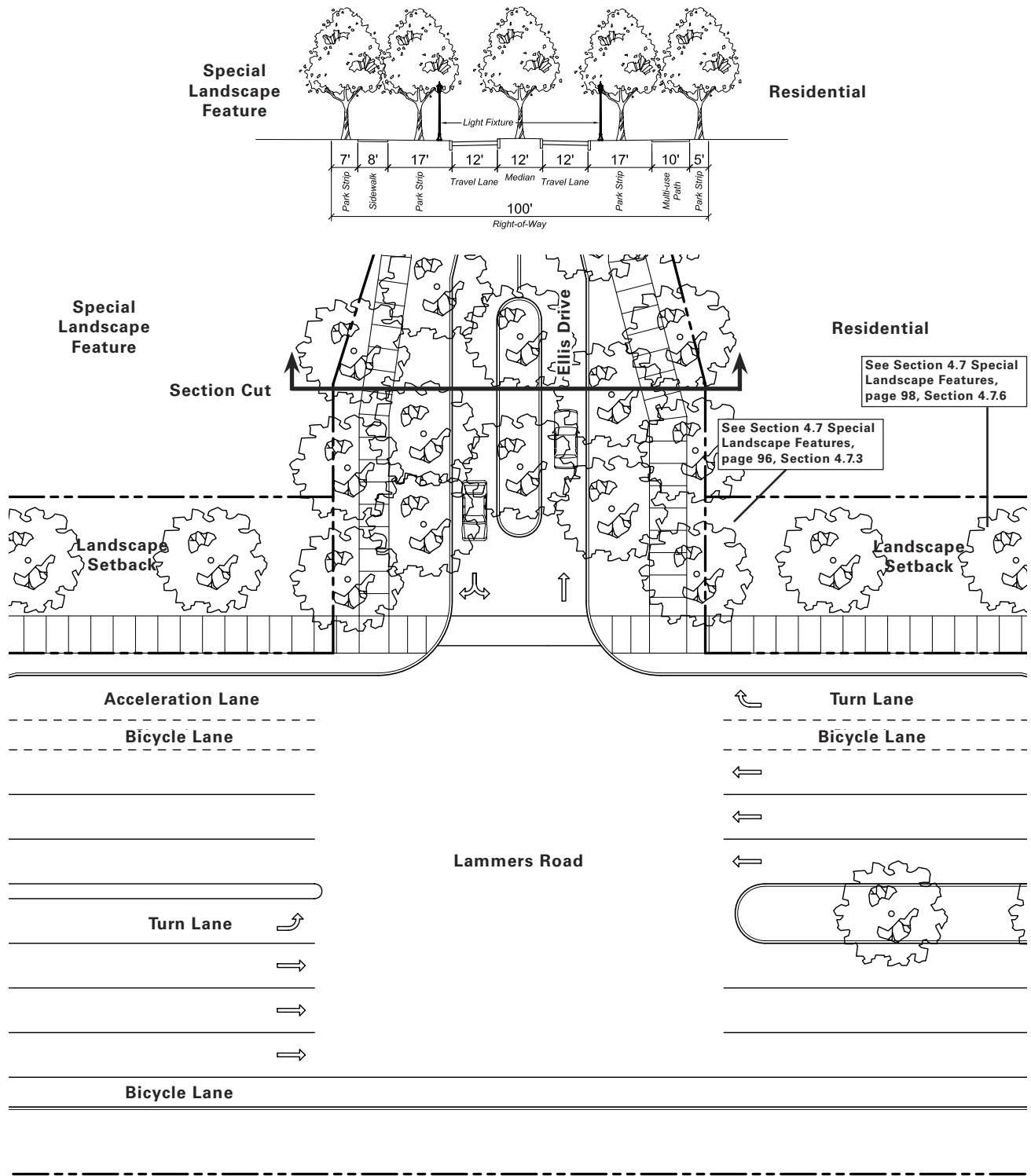


FIGURE 4.19 Proposed Section and Plan: Entry Street A



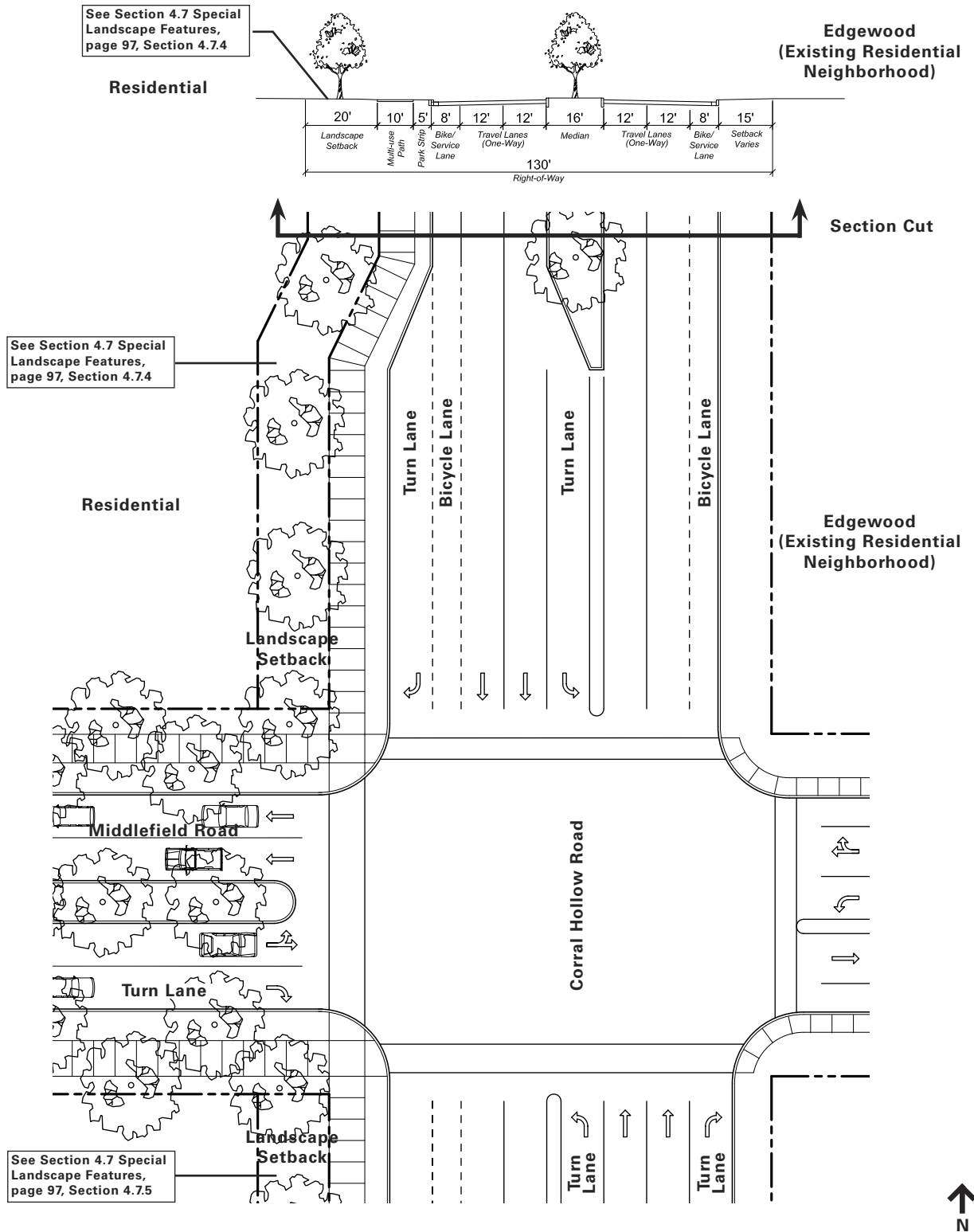


FIGURE 4.21 Interim Section and Plan: Regional Arterial – Corral Hollow Road, Designation B (Interim Condition)

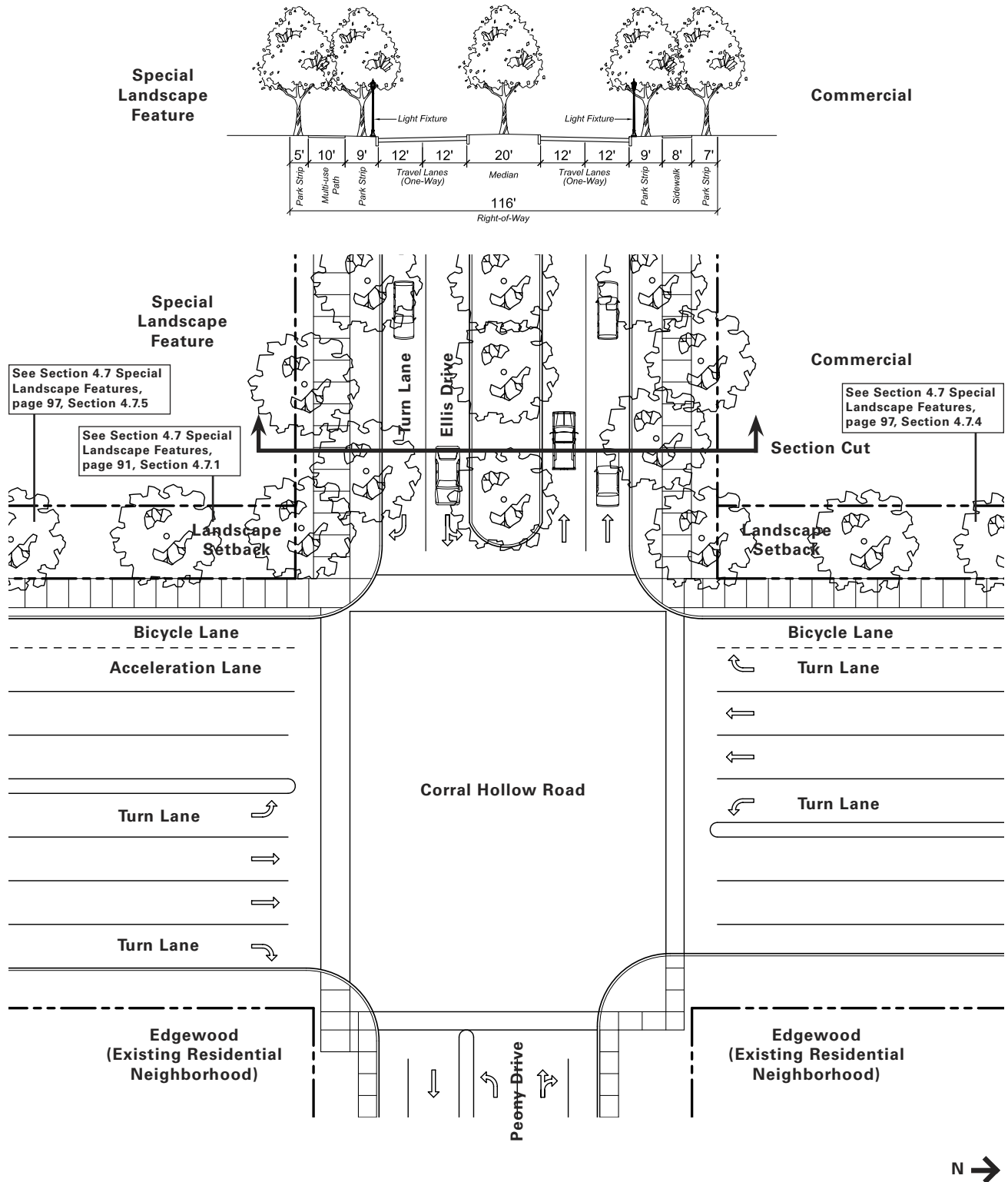


FIGURE 4.27 Proposed Section and Plan: Entry Street C (Ellis Drive)

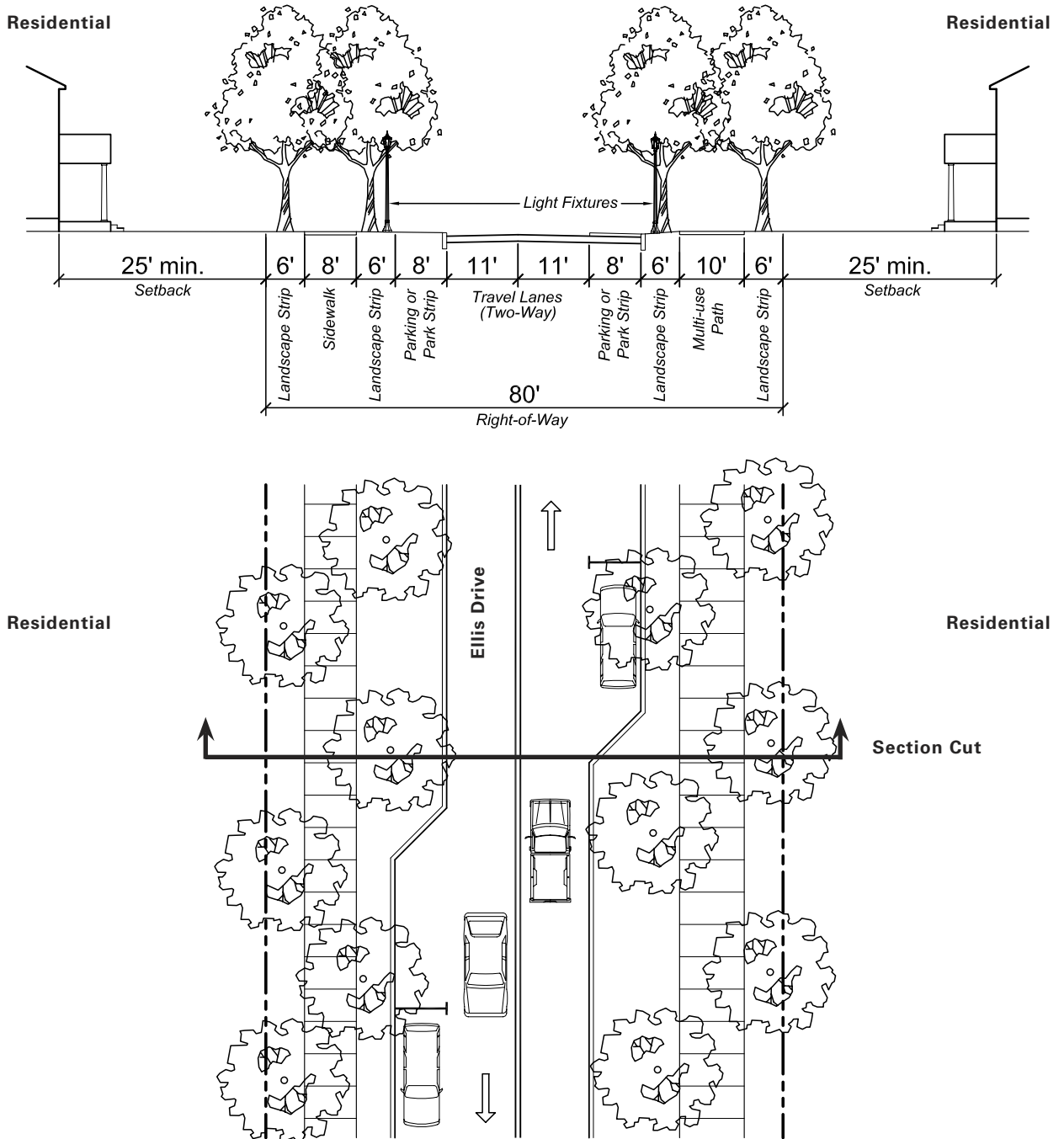


FIGURE 4.29 Proposed Section and Plan: Community Street A

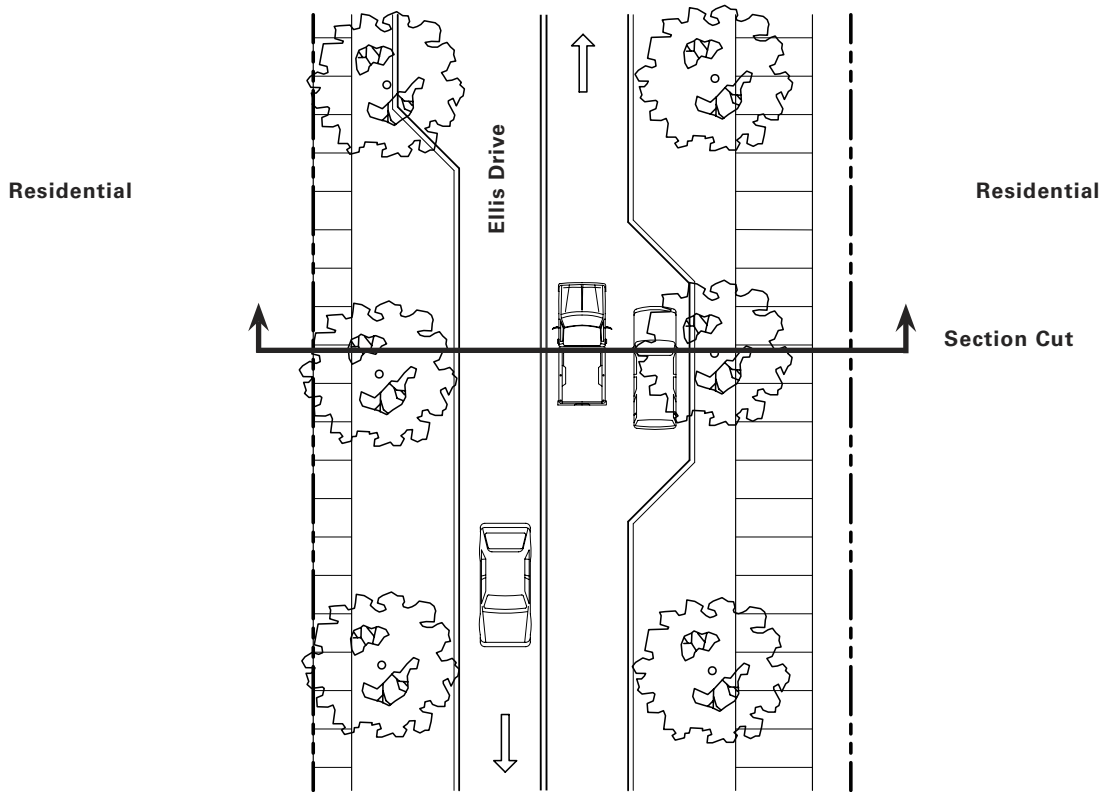
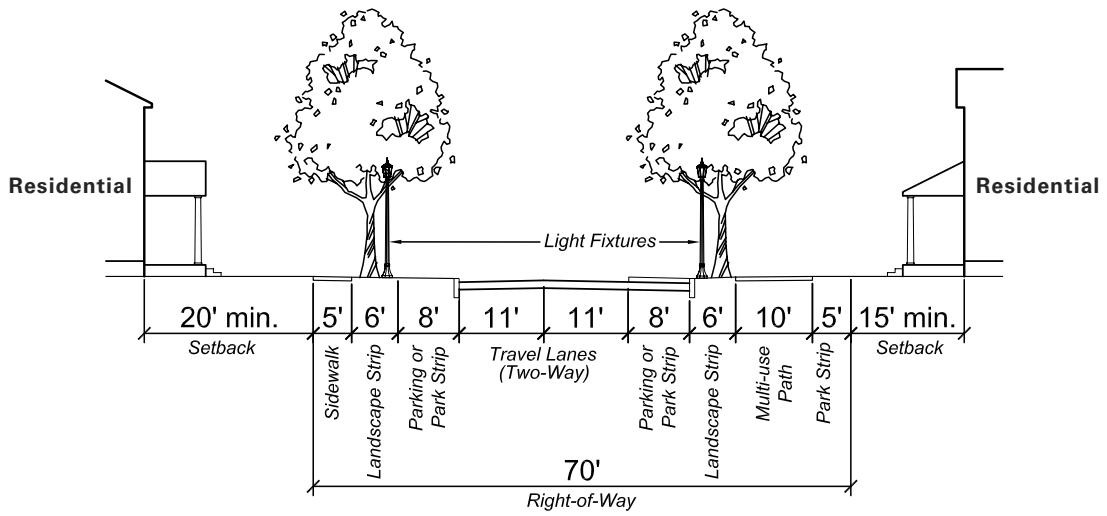


FIGURE 4.31 Proposed Section and Plan: Community Street B

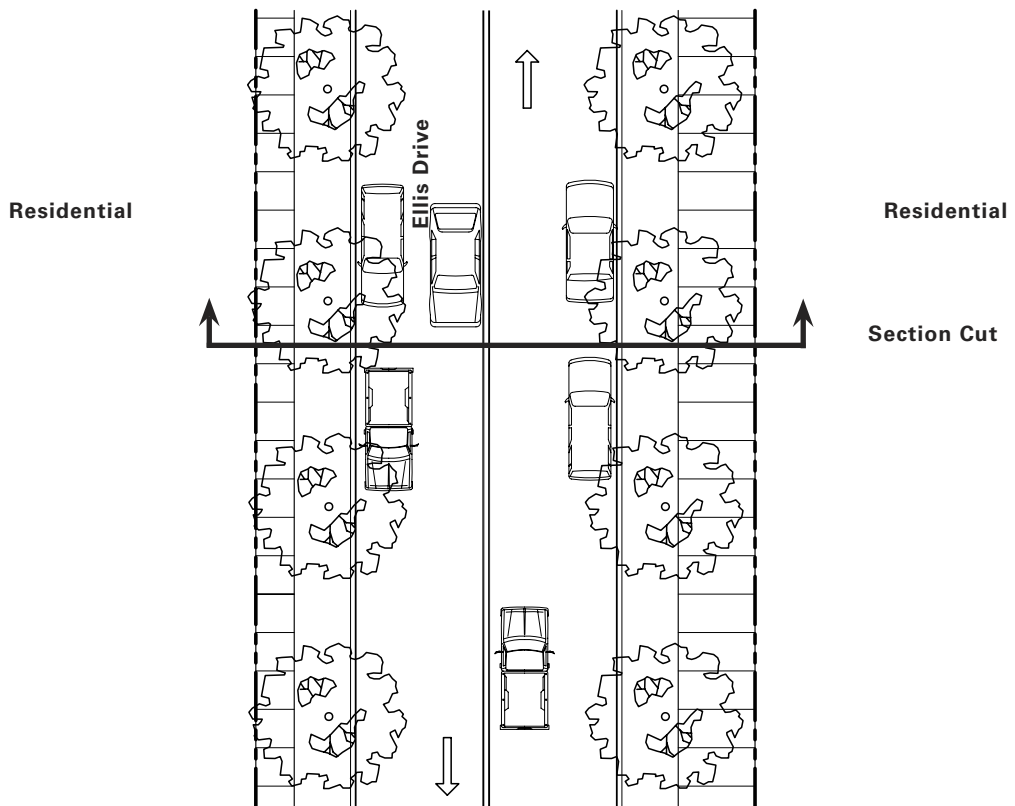
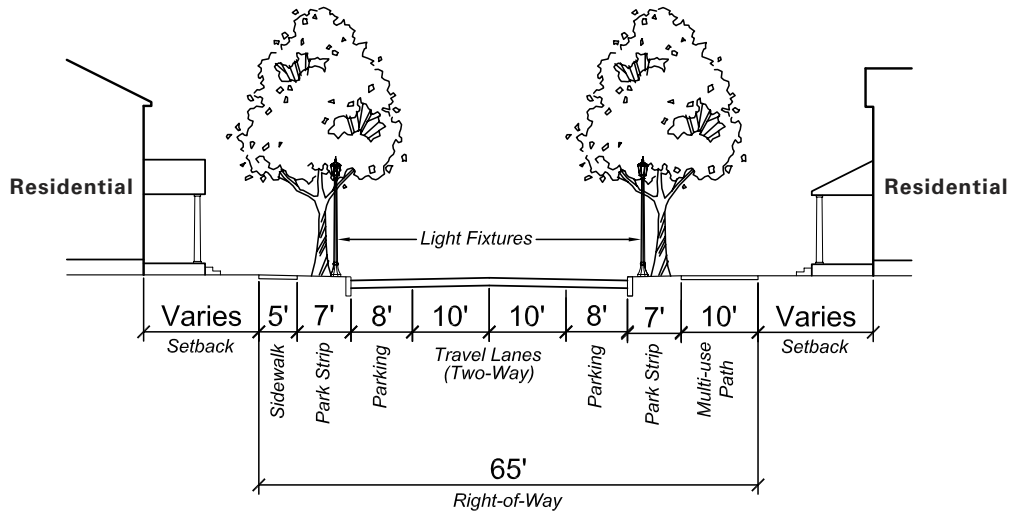


FIGURE 4.33 Proposed Section and Plan: Community Street C

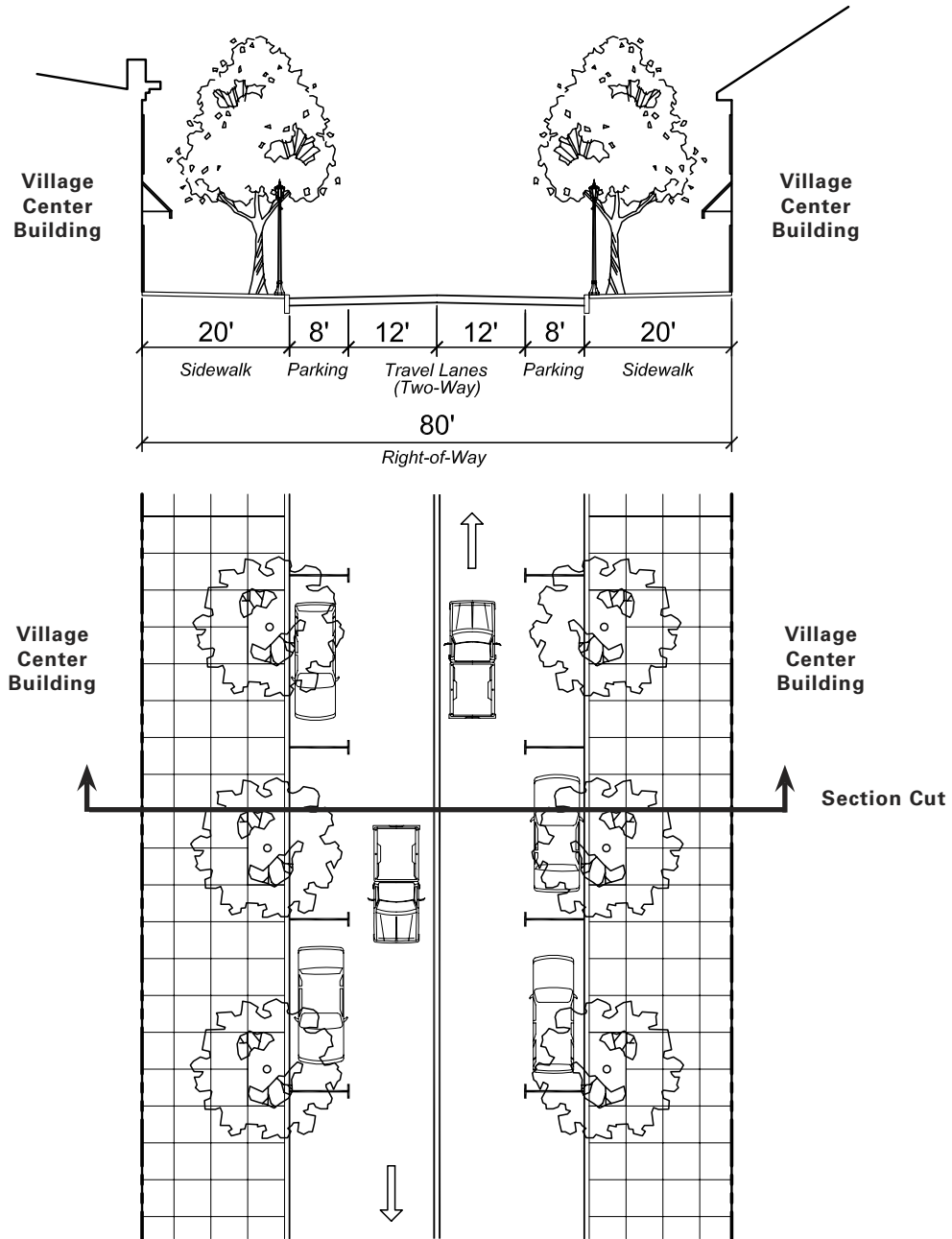


FIGURE 4.35 Proposed Section and Plan: Village Center Street A

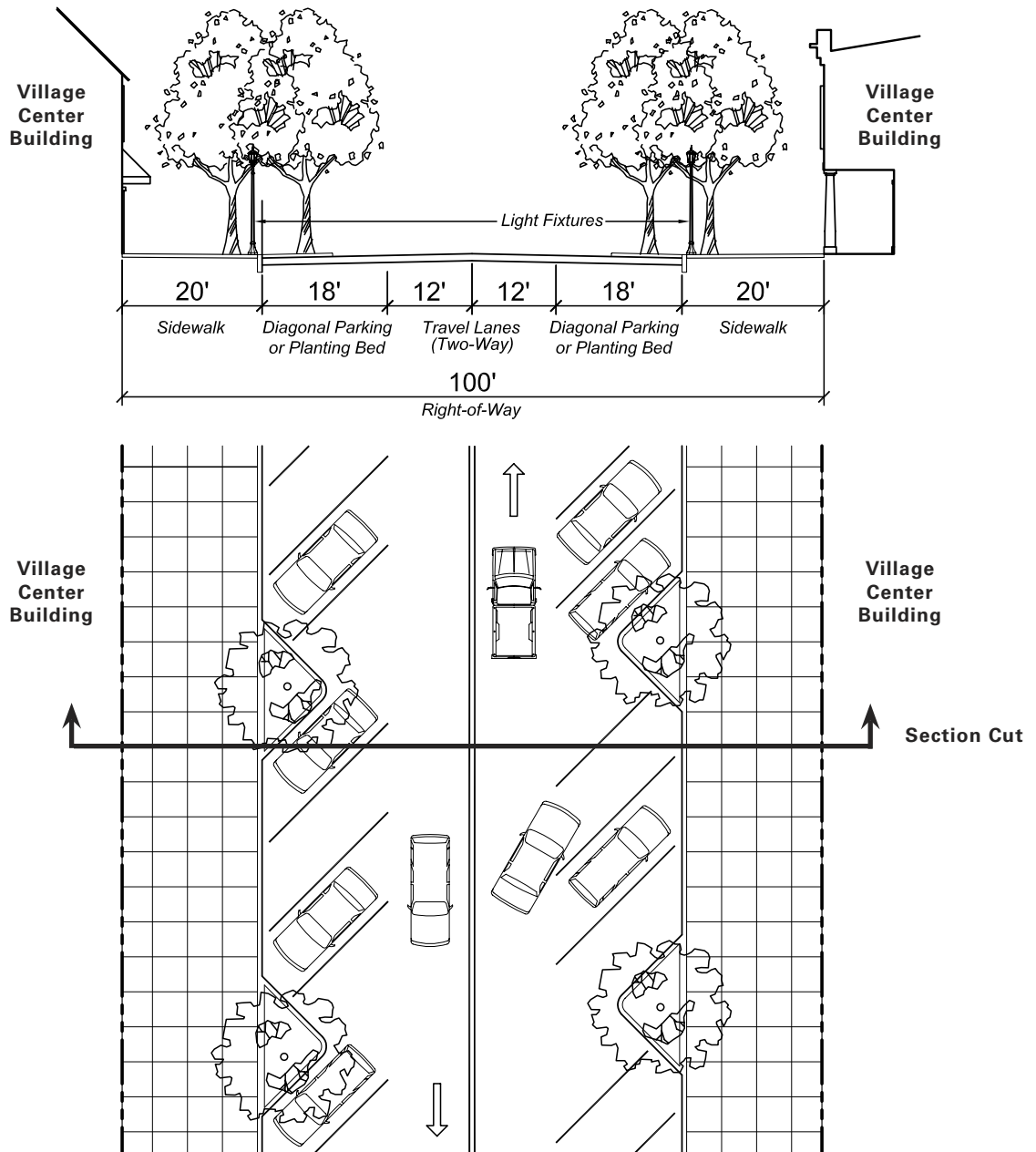


FIGURE 4.37 Proposed Section and Plan: Village Center Street A (Alternate)

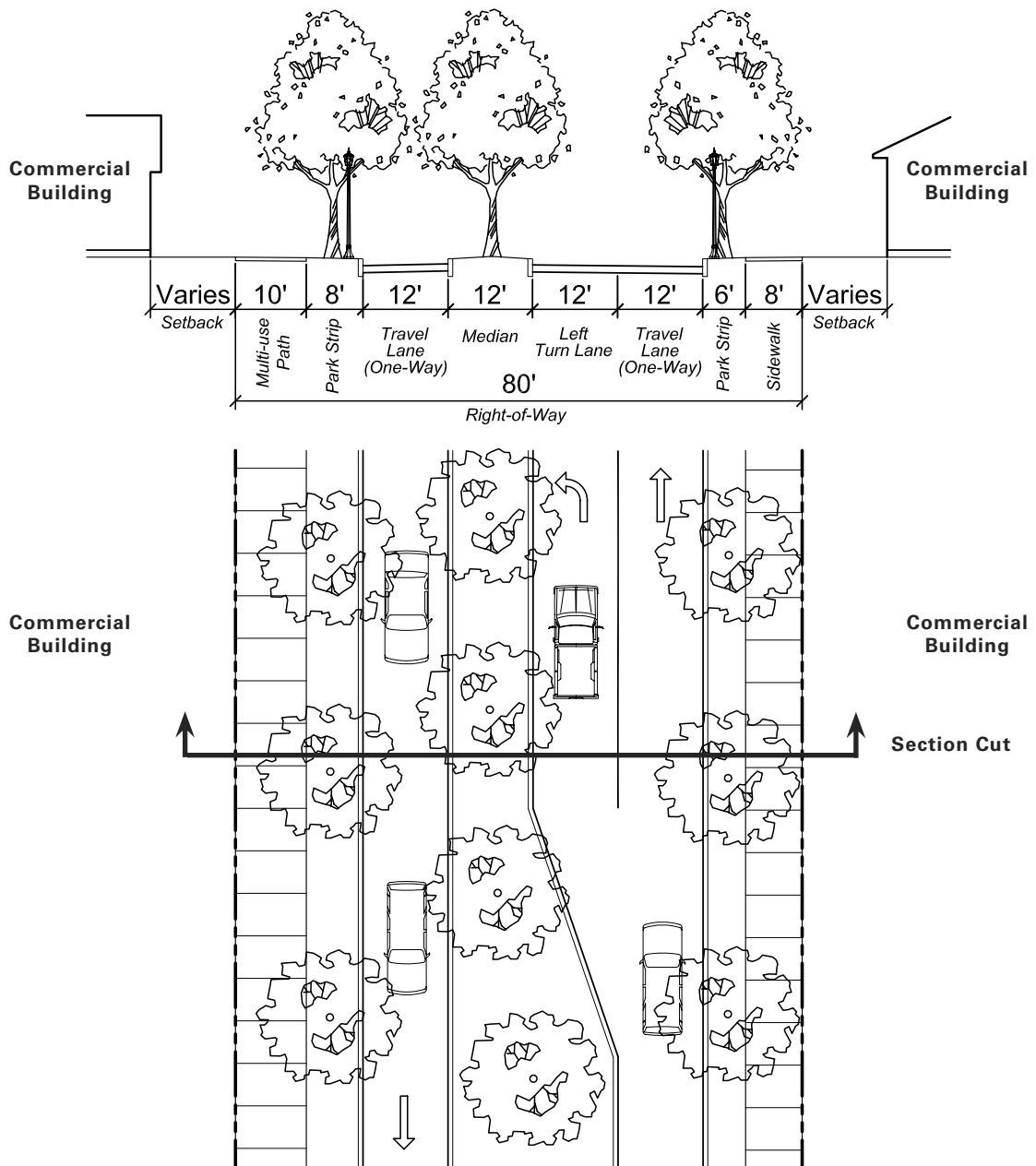


FIGURE 4.39 Proposed Section and Plan: Village Center Street B

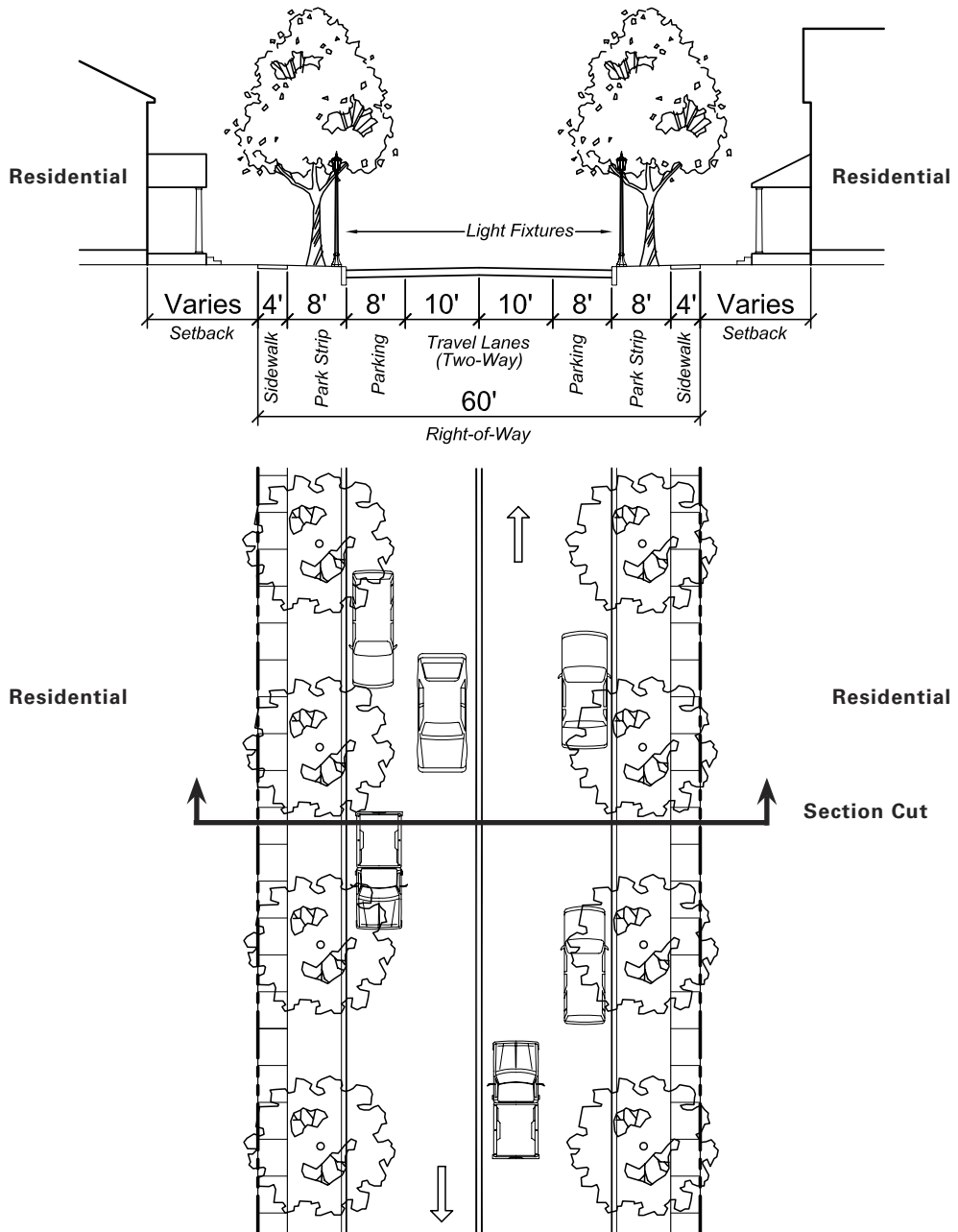


FIGURE 4.41 Proposed Section and Plan: Neighborhood Street A

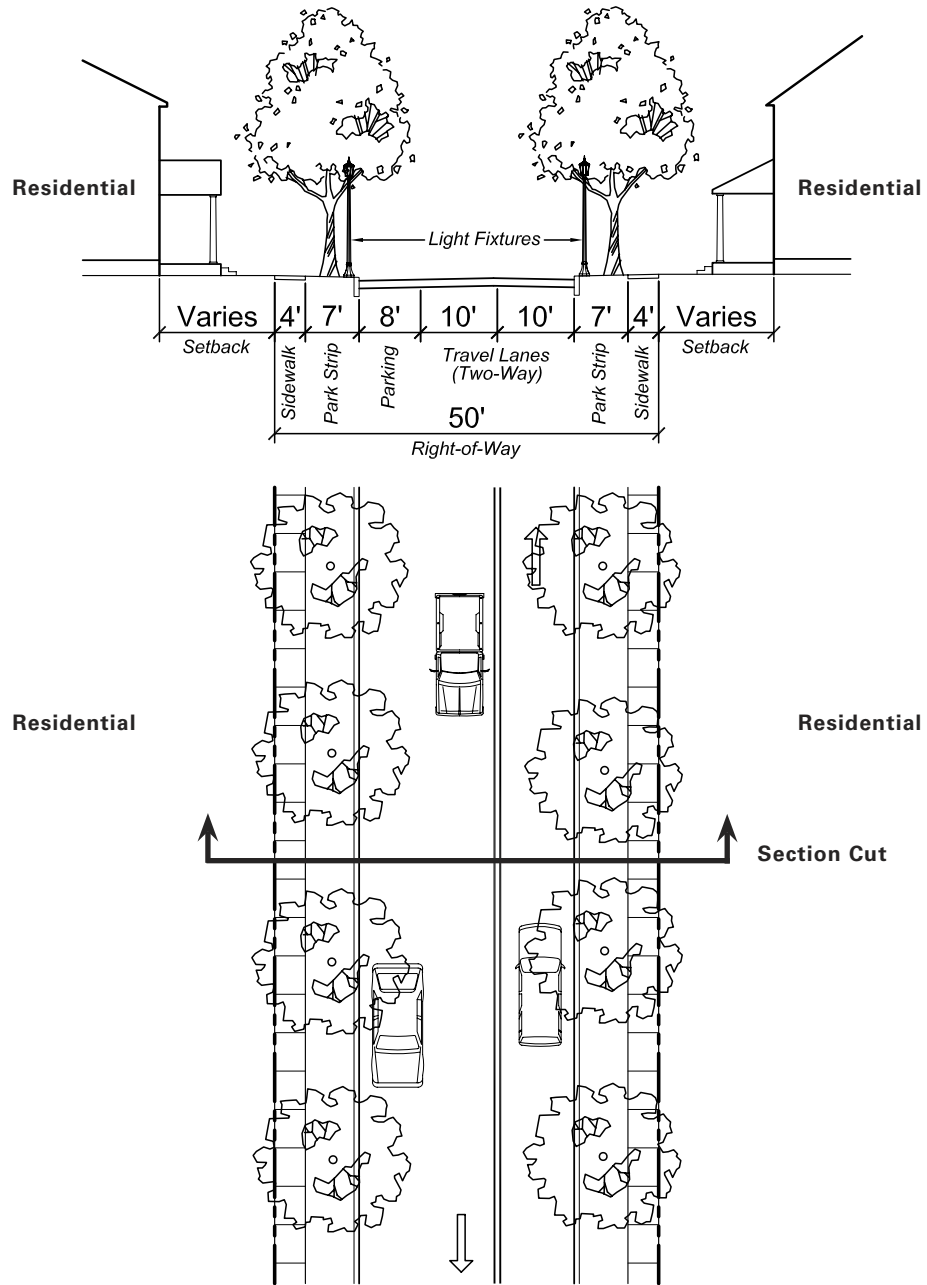


FIGURE 4.43 Proposed Section and Plan: Neighborhood Street B

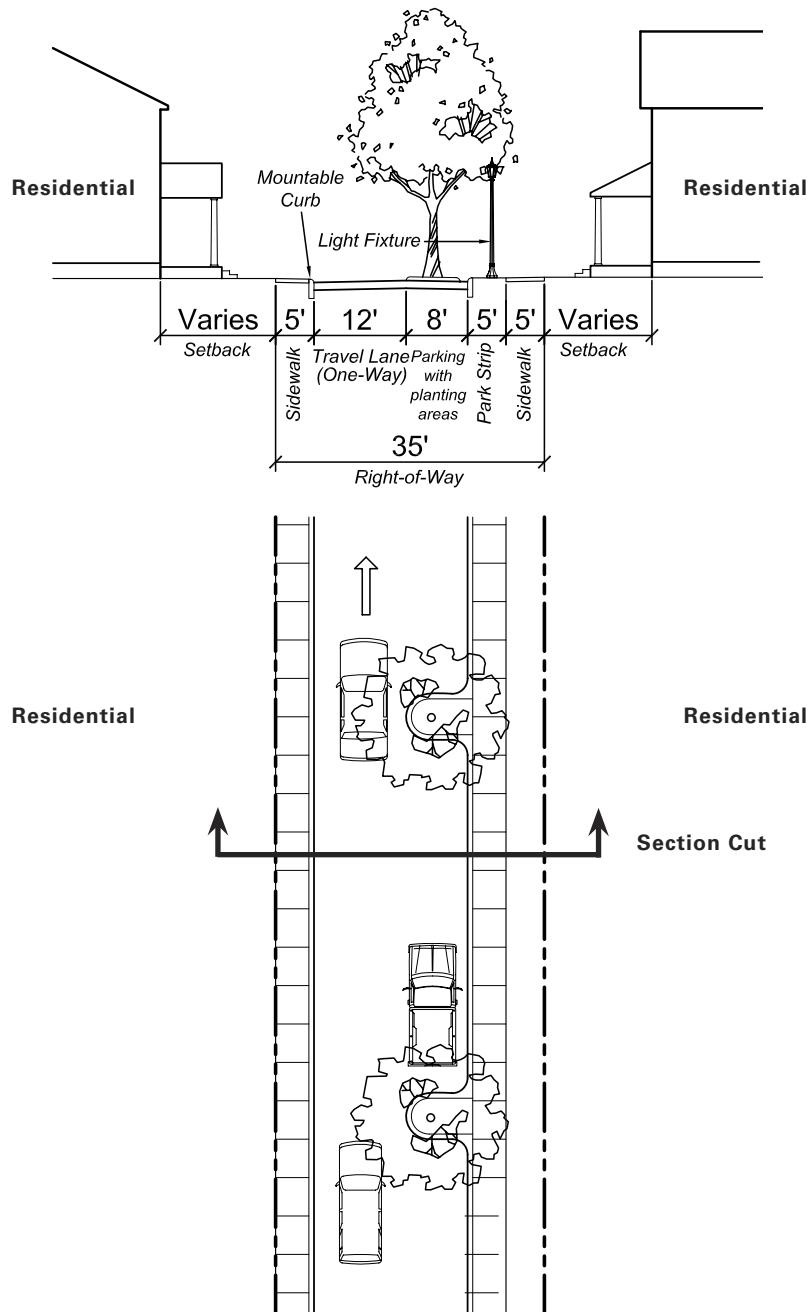


FIGURE 4.45 Proposed Section and Plan: Neighborhood Street C

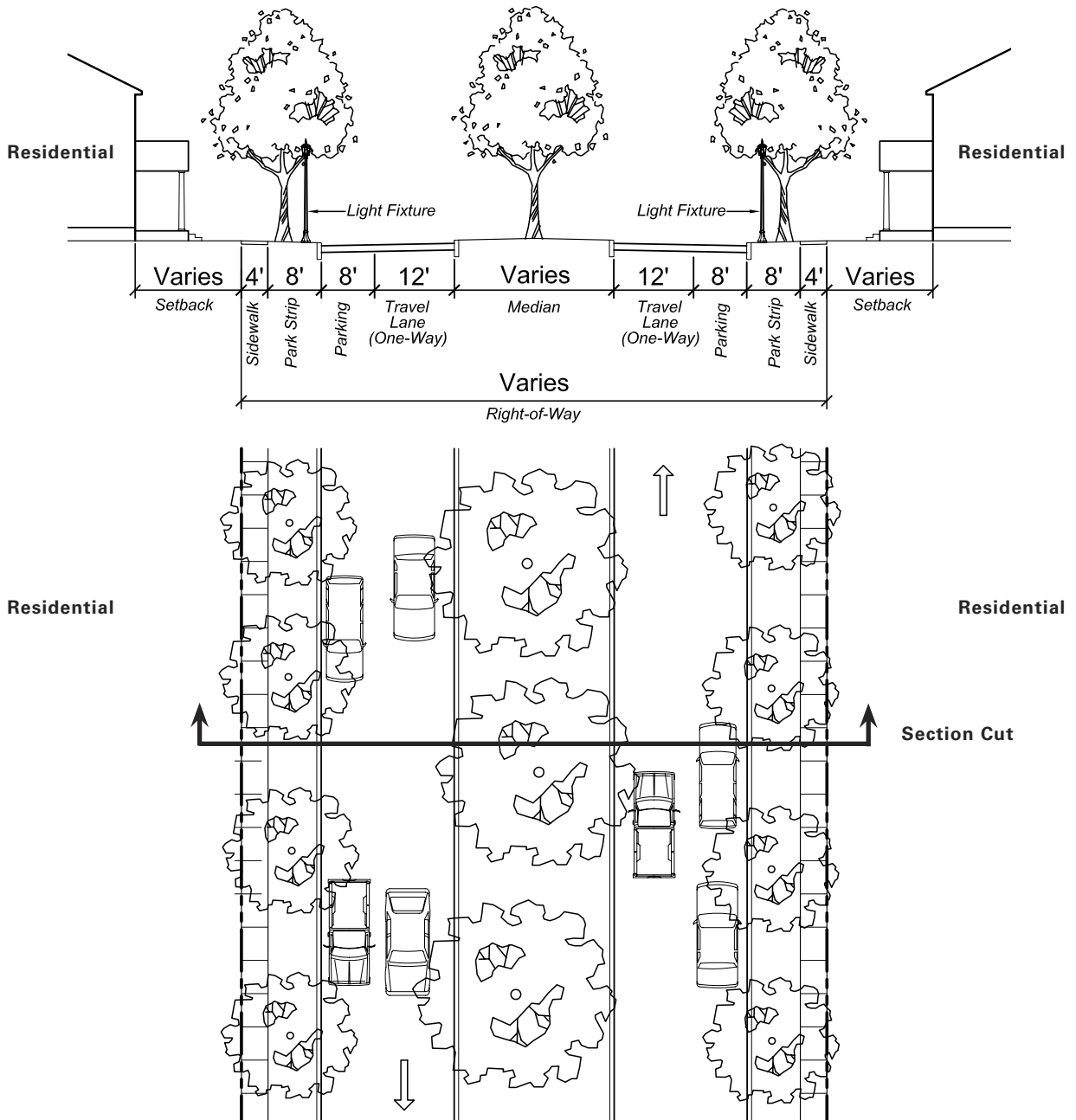


FIGURE 4.47 Proposed Section and Plan: Neighborhood Street D

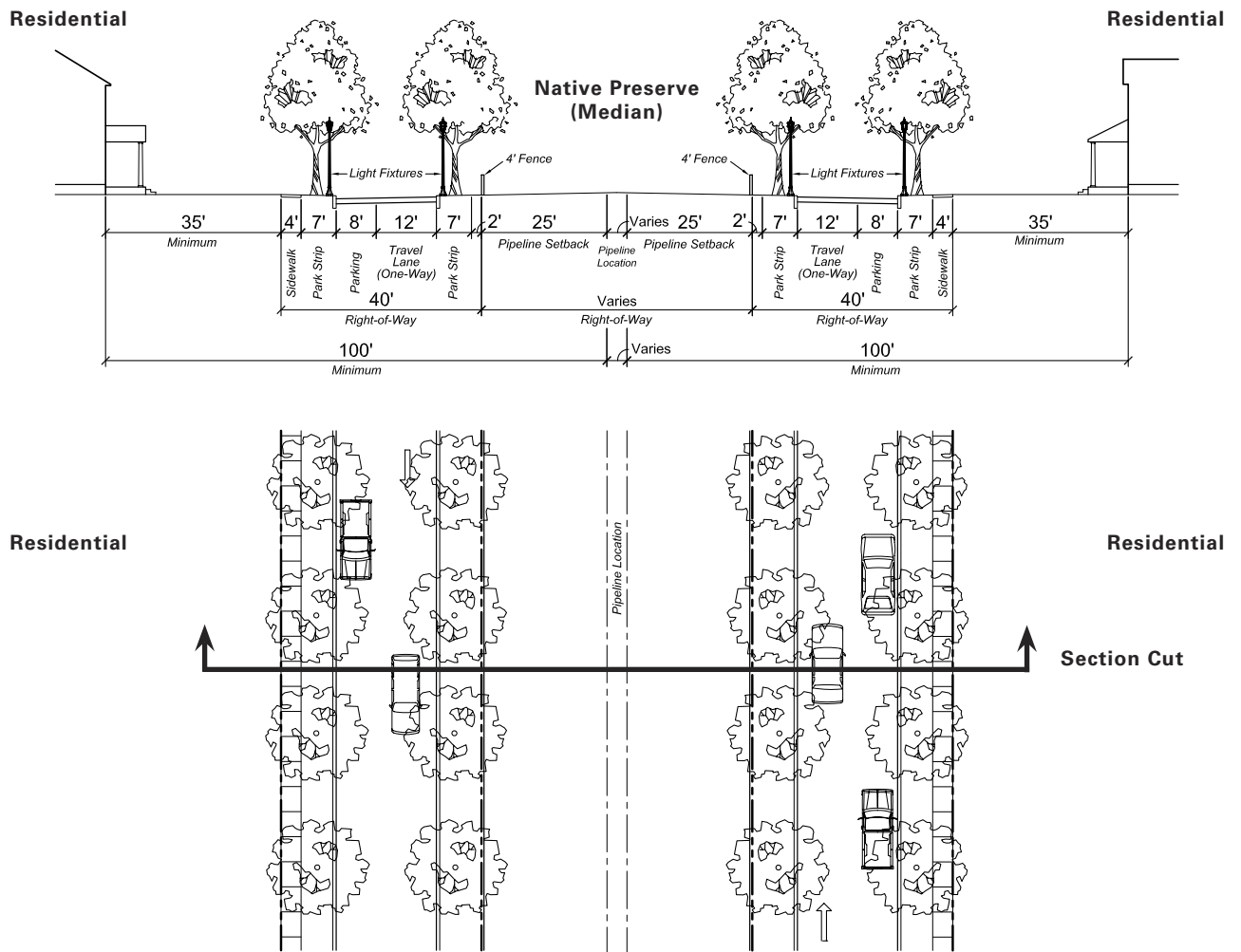


FIGURE 4.49 Proposed Section and Plan: Neighborhood Street E

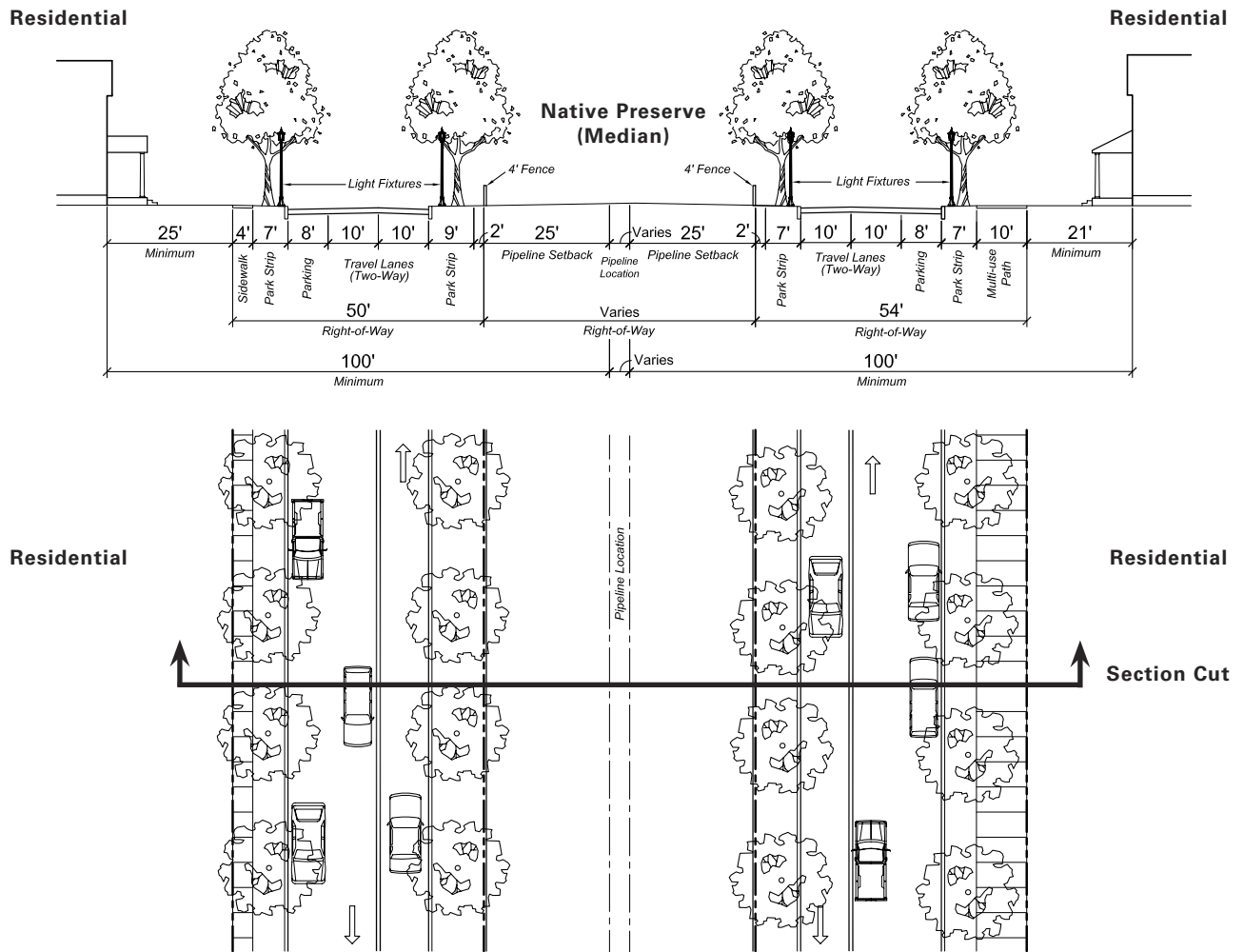


FIGURE 4.51 Proposed Section and Plan: Neighborhood Street F

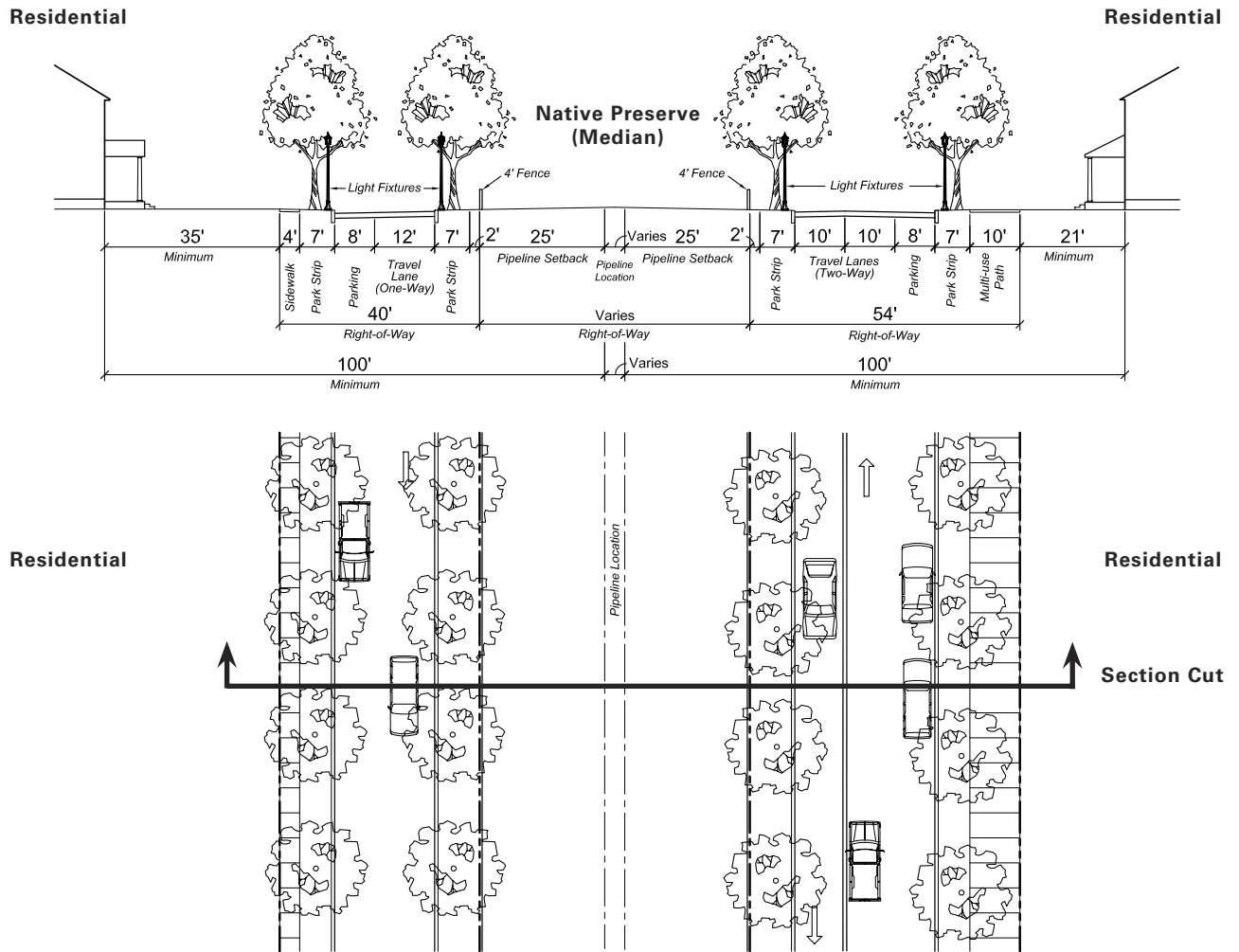


FIGURE 4.53 Proposed Section and Plan: Neighborhood Street G

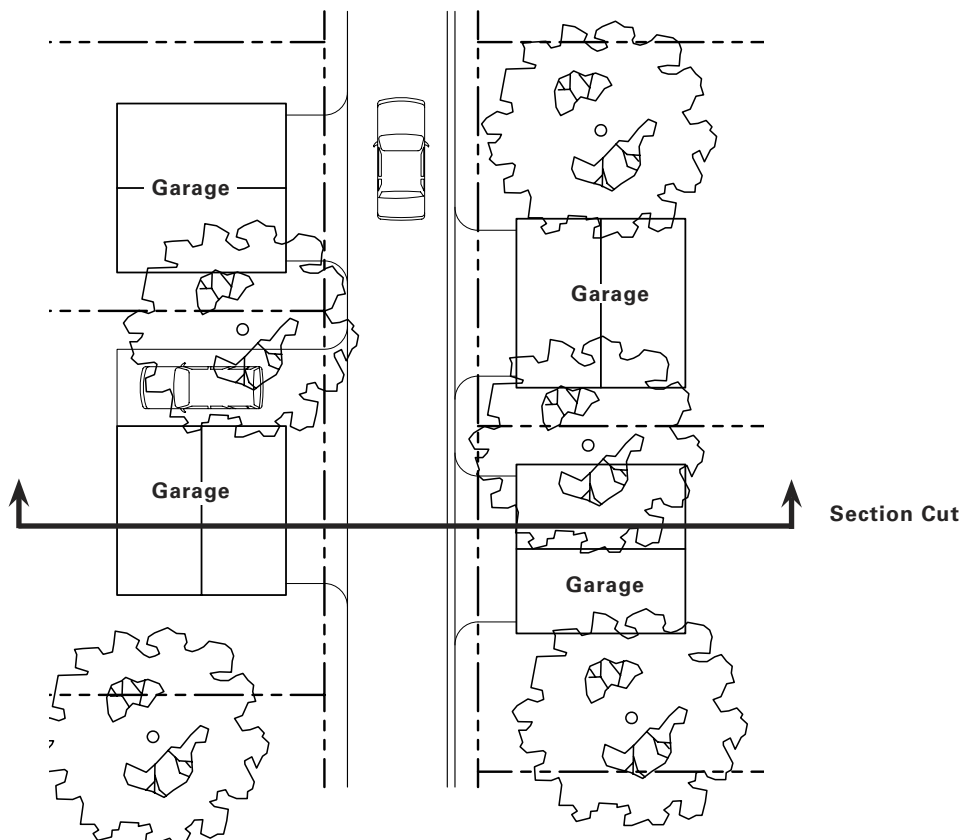
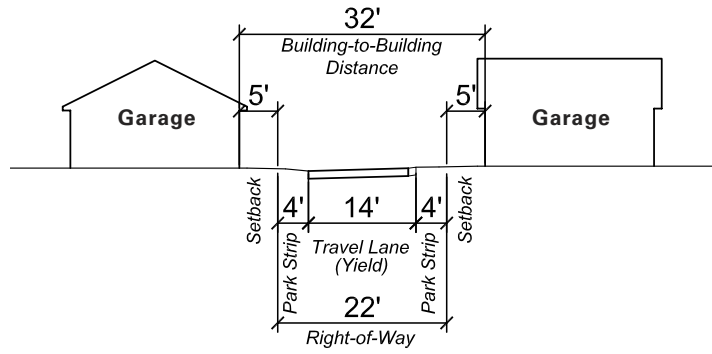


FIGURE 4.55 Proposed Section and Plan: Lane A



APPENDIX F

ILLUSTRATIONS OF TYPICAL TRAFFIC CIRCLES (MINI- ROUNDBABOUTS) AND ROUNDBABOUTS

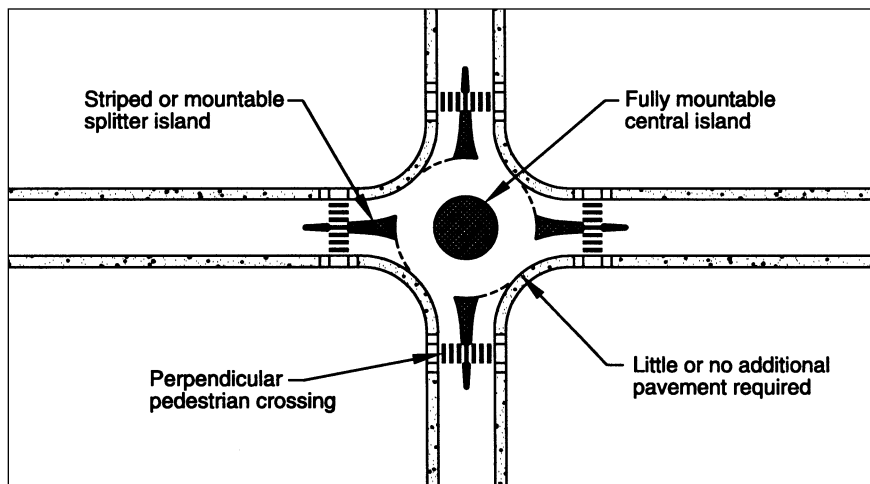
**SOURCE: ROUNDBABOUTS: AN INFORMATIONAL GUIDE
(FEDERAL HIGHWAY ADMINISTRATION)**

Mini-roundabouts can be useful in low-speed urban environments with right-of-way constraints.

1.6.2 Mini-roundabouts

Mini-roundabouts are small roundabouts used in low-speed urban environments, with average operating speeds of 60km/h (35mph) or less. Exhibit 1-8 provides an example of a typical mini-roundabout. They can be useful in low-speed urban environments in cases where conventional roundabout design is precluded by right-of-way constraints. In retrofit applications, mini-roundabouts are relatively inexpensive because they typically require minimal additional pavement at the intersecting roads—for example, minor widening at the corner curbs. They are mostly recommended when there is insufficient right-of-way for an urban compact roundabout. Because they are small, mini-roundabouts are perceived as pedestrian-friendly with short crossing distances and very low vehicle speeds on approaches and exits. The mini-roundabout is designed to accommodate passenger cars without requiring them to drive over the central island. To maintain its perceived compactness and low speed characteristics, the yield lines are positioned just outside of the swept path of the largest expected vehicle. However, the central island is mountable, and larger vehicles may cross over the central island, but not to the left of it. Speed control around the mountable central island should be provided in the design by requiring horizontal deflection. Capacity for this type of roundabout is expected to be similar to that of the compact urban roundabout. The recommended design of these roundabouts is based on the German method, with some influence from the United Kingdom.

Exhibit 1-8. Typical mini-roundabout.



1.6.3 Urban compact roundabouts

Like mini-roundabouts, urban compact roundabouts are intended to be pedestrian- and bicyclist-friendly because their perpendicular approach legs require very low vehicle speeds to make a distinct right turn into and out of the circulatory roadway. All legs have single-lane entries. However, the urban compact treatment meets all the design requirements of effective roundabouts. The principal objective of this design is to enable pedestrians to have safe and effective use of the intersection. Capacity should not be a critical issue for this type of roundabout to be considered. The geometric design includes raised splitter islands that incorporate at-grade pedestrian storage areas, and a nonmountable central island. There is usually an apron surrounding the nonmountable part of the compact central island to accommodate large vehicles. The recommended design of these roundabouts is similar to those in Germany and other northern European countries. Exhibit 1-9 provides an example of a typical urban compact roundabout.

Urban compact roundabouts are intended to be pedestrian-friendly; capacity should not be a critical issue when considering this type.

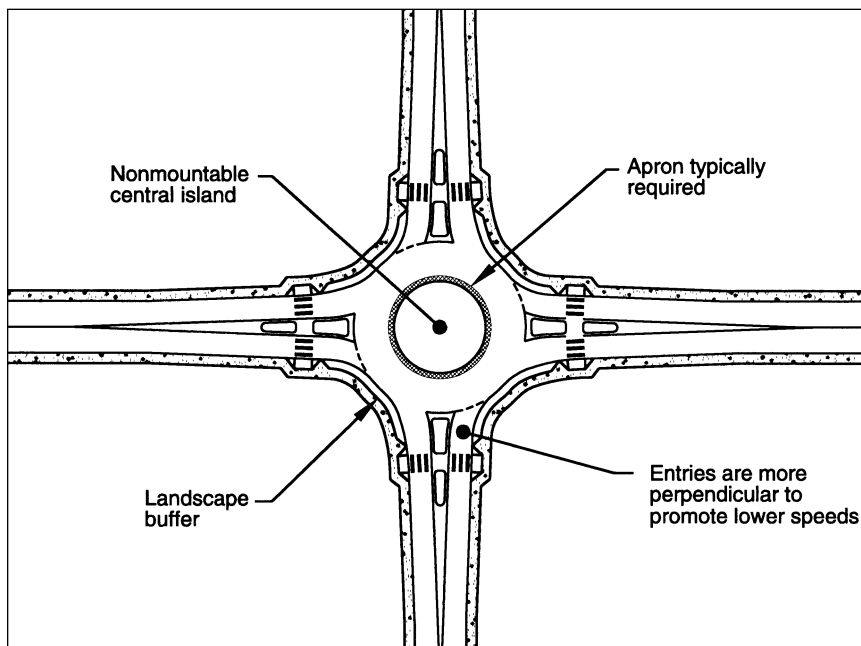


Exhibit 1-9. Typical urban compact roundabout.

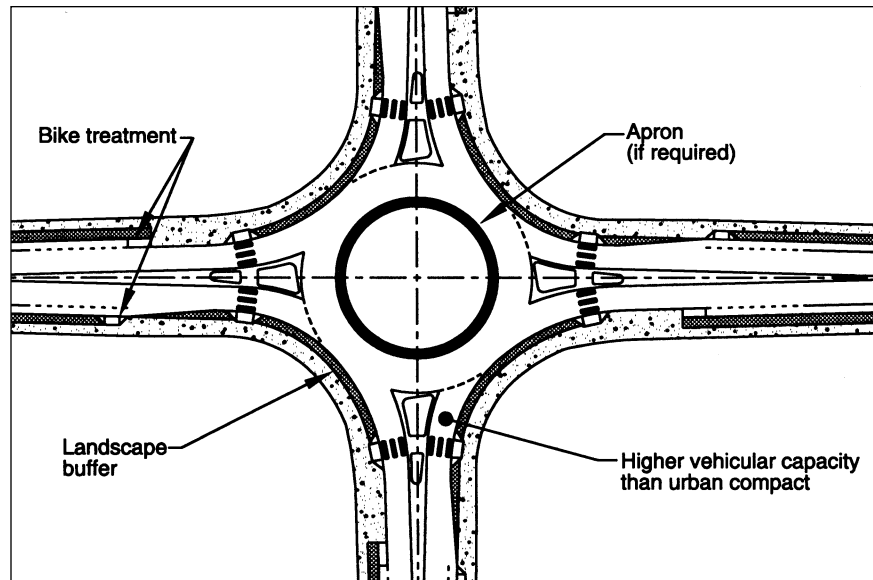
1.6.4 Urban single-lane roundabouts

Urban single-lane roundabouts have slightly higher speeds and capacities than urban compact roundabouts.

The design focuses on consistent entering and exiting speeds.

This type of roundabout is characterized as having a single lane entry at all legs and one circulatory lane. Exhibit 1-10 provides an example of a typical urban single-lane roundabout. They are distinguished from urban compact roundabouts by their larger inscribed circle diameters and more tangential entries and exits, resulting in higher capacities. Their design allows slightly higher speeds at the entry, on the circulatory roadway, and at the exit. Notwithstanding the larger inscribed circle diameters than compact roundabouts, the speed ranges recommended in this guide are somewhat lower than those used in other countries, in order to enhance safety for bicycles and pedestrians. The roundabout design is focused on achieving consistent entering and circulating vehicle speeds. The geometric design includes raised splitter islands, a nonmountable central island, and preferably, no apron. The design of these roundabouts is similar to those in Australia, France, and the United Kingdom.

Exhibit 1-10. Typical urban single-lane roundabout.



1.6.5 Urban double-lane roundabouts

Urban double-lane roundabouts include all roundabouts in urban areas that have at least one entry with two lanes. They include roundabouts with entries on one or more approaches that flare from one to two lanes. These require wider circulatory roadways to accommodate more than one vehicle traveling side by side. Exhibit 1-11 provides an example of a typical urban multilane roundabout. The speeds at the entry, on the circulatory roadway, and at the exit are similar to those for the urban single-lane roundabouts. Again, it is important that the vehicular speeds be consistent throughout the roundabout. The geometric design will include raised splitter islands, no truck apron, a nonmountable central island, and appropriate horizontal deflection.

Alternate routes may be provided for bicyclists who choose to bypass the roundabout. Bicycle and pedestrian pathways must be clearly delineated with sidewalk construction and landscaping to direct users to the appropriate crossing locations and alignment. Urban double-lane roundabouts located in areas with high pedestrian or bicycle volumes may have special design recommendations such as those provided in Chapters 6 and 7. The design of these roundabouts is based on the methods used in the United Kingdom, with influences from Australia and France.

The urban double-lane roundabout category includes roundabouts with one or more entries that flare from one to two lanes.

See Chapters 6 and 7 for special design considerations for pedestrians and bicycles.

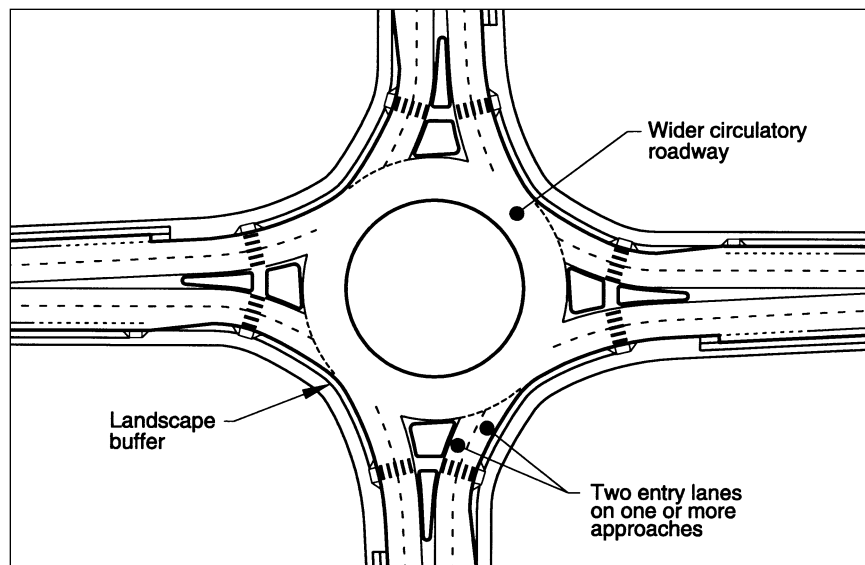


Exhibit 1-11. Typical urban double-lane roundabout.

1.6.6 Rural single-lane roundabouts

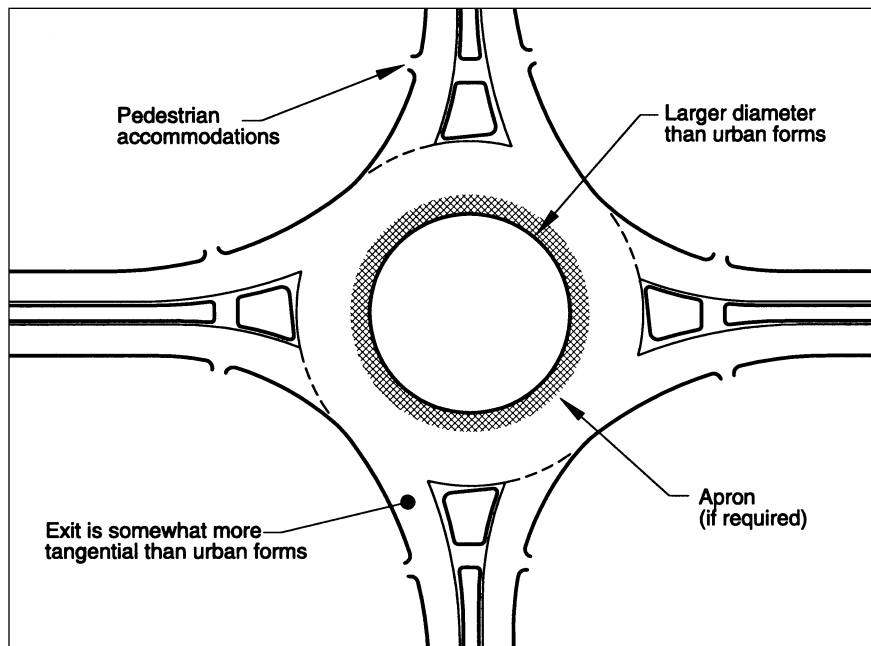
Because of their higher approach speeds, rural single-lane roundabouts require supplementary geometric and traffic control device treatments on the approaches.

Rural single-lane roundabouts generally have high average approach speeds in the range of 80 to 100 km/h (50 to 60 mph). They require supplementary geometric and traffic control device treatments on approaches to encourage drivers to slow to an appropriate speed before entering the roundabout. Rural roundabouts may have larger diameters than urban roundabouts to allow slightly higher speeds at the entries, on the circulatory roadway, and at the exits. This is possible if few pedestrians are expected at these intersections, currently and in future. There is preferably no apron because their larger diameters should accommodate larger vehicles. Supplemental geometric design elements include extended and raised splitter islands, a nonmountable central island, and adequate horizontal deflection. The design of these roundabouts is based primarily on the methods used by Australia, France, and the United Kingdom. Exhibit 1-12 provides an example of a typical rural single-lane roundabout.

Rural roundabouts that may become part of an urbanized area should include urban roundabout design features.

Rural roundabouts that may one day become part of an urbanized area should be designed as urban roundabouts, with slower speeds and pedestrian treatments. However, in the interim, they should be designed with supplementary approach and entry features to achieve safe speed reduction.

Exhibit 1-12. Typical rural single-lane roundabout.



1.6.7 Rural double-lane roundabouts

Rural double-lane roundabouts have speed characteristics similar to rural single-lane roundabouts with average approach speeds in the range of 80 to 100 km/h (50 to 60 mph). They differ in having two entry lanes, or entries flared from one to two lanes, on one or more approaches. Consequently, many of the characteristics and design features of rural double-lane roundabouts mirror those of their urban counterparts. The main design differences are designs with higher entry speeds and larger diameters, and recommended supplementary approach treatments. The design of these roundabouts is based on the methods used by the United Kingdom, Australia, and France. Exhibit 1-13 provides an example of a typical rural double-lane roundabout. Rural roundabouts that may one day become part of an urbanized area should be designed for slower speeds, with design details that fully accommodate pedestrians and bicyclists. However, in the interim they should be designed with approach and entry features to achieve safe speed reduction.

Rural double-lane roundabouts have higher entry speeds and larger diameters than their urban counterparts.

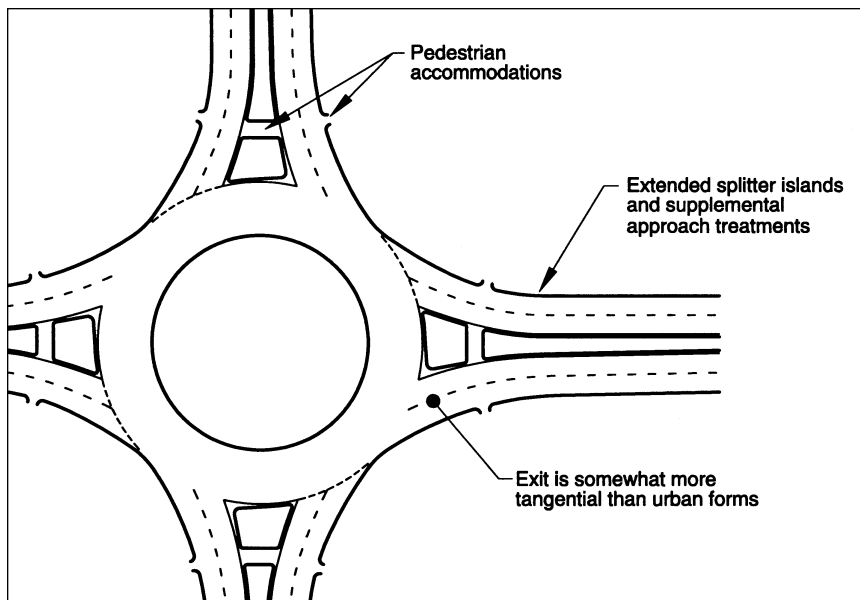


Exhibit 1-13. Typical rural double-lane roundabout.



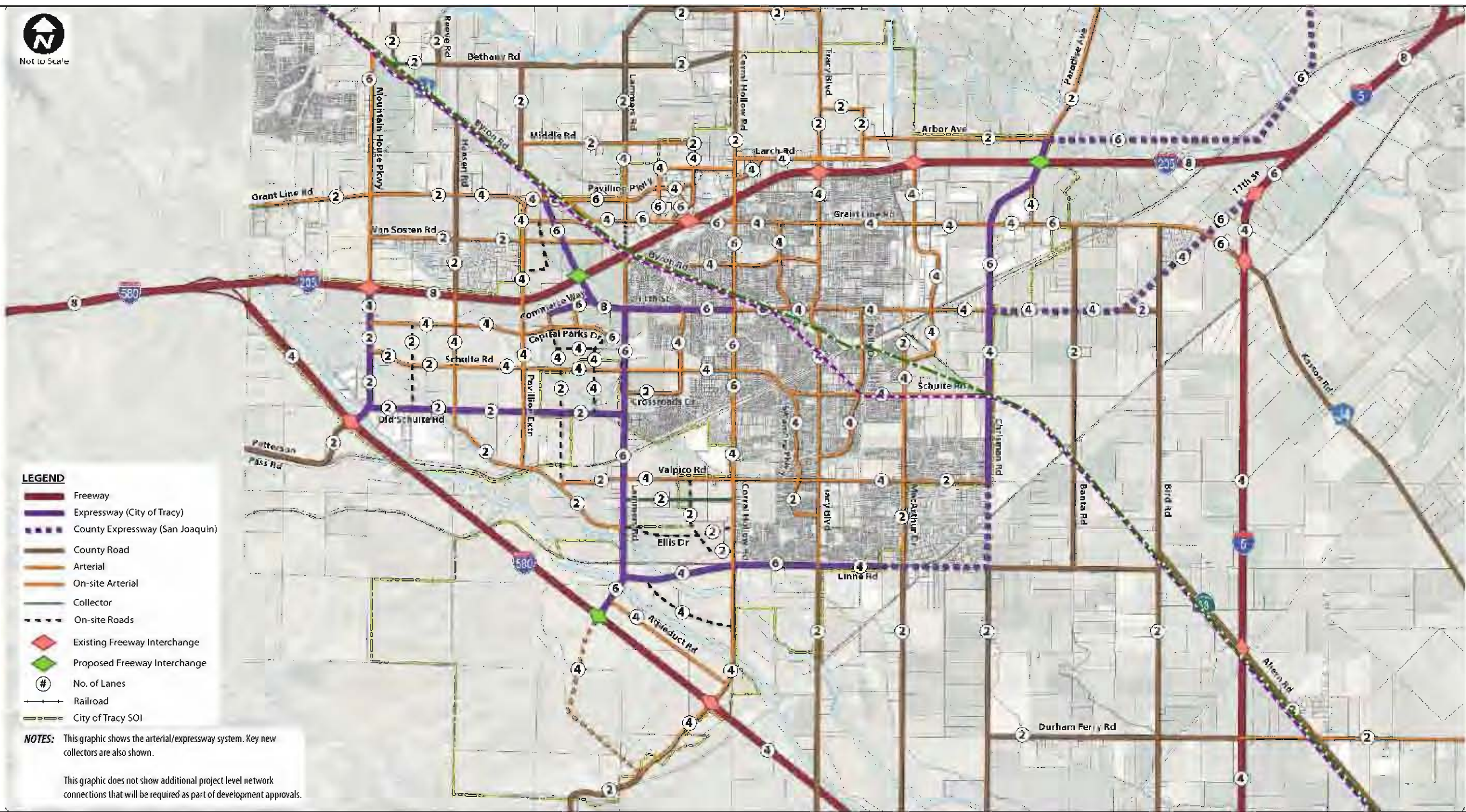
APPENDIX G

PIPELINES LOCATION MAPS

FILE: NSACGIS\CAD\HPP\BTR\MANAGEMENTS\TRA\EGYSTAKEHOLDER CONTACT\PROJECTS\SAN JOAQUIN\2010\HPP\MS FIG1 TRACY\TRANSPORT.MP 2010_12.MXD



Not to Scale



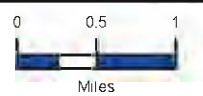
LEGEND

- Freeway
- Expressway (City of Tracy)
- County Expressway (San Joaquin)
- County Road
- Arterial
- On-site Arterial
- Collector
- On-site Roads
- Existing Freeway Interchange
- Proposed Freeway Interchange
- No. of Lanes
- Railroad
- City of Tracy SOI

NOTES: This graphic shows the arterial/expressway system. Key new collectors are also shown.

This graphic does not show additional project level network connections that will be required as part of development approvals.

Source: City of Tracy, "City of Tracy Citywide Roadway & Transportation Master Plan," September 2010.



CALIFORNIA LOCATION MAP

- Historical Old Valley Pipeline (OVP)
- Historical Tidewater Associated Oil Company (TAOC) Pipeline

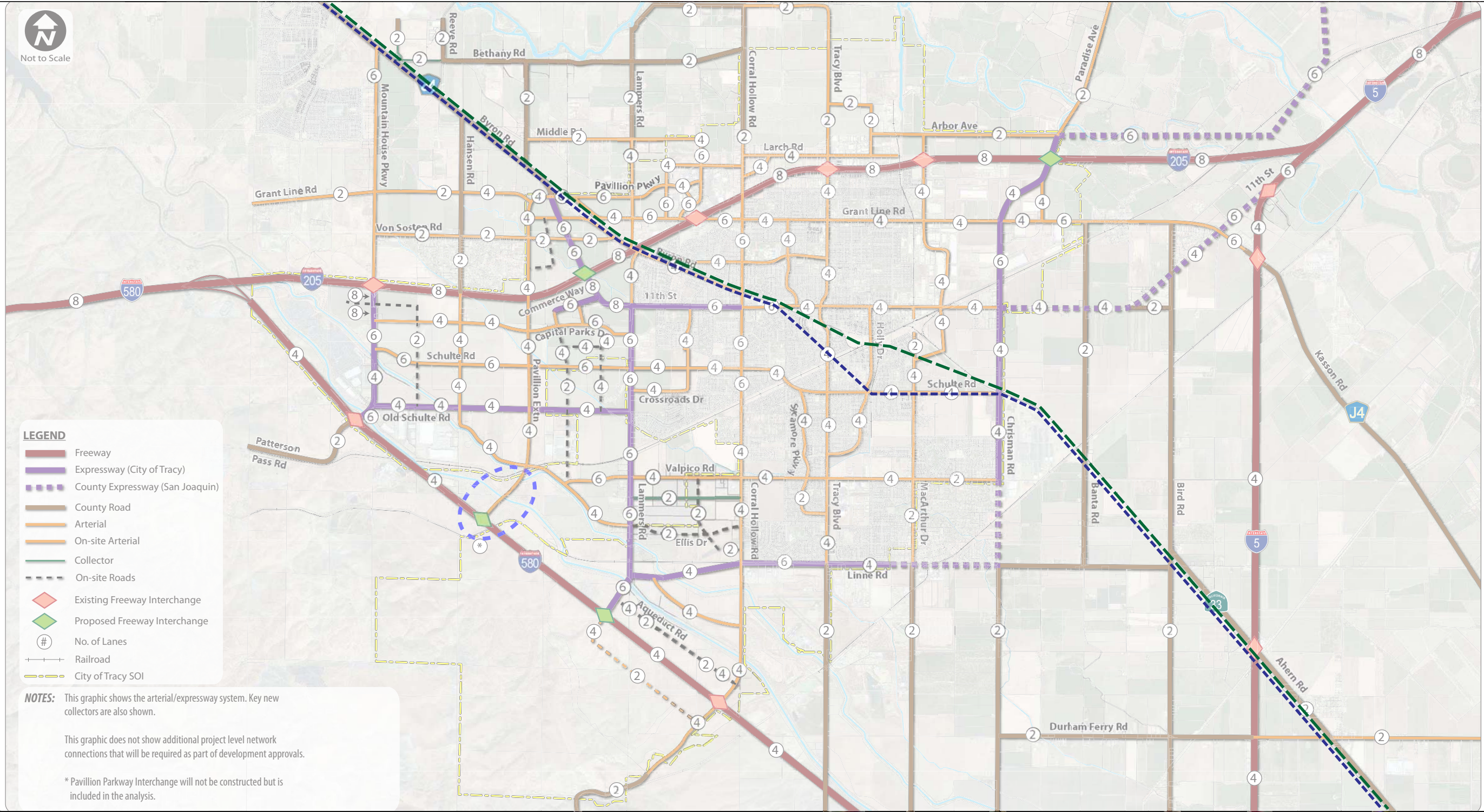
HISTORICAL PIPELINE RIGHTS OF WAYS

2035 ROADWAY NETWORK
Tracy, California

DATE 12/17/2010 ANALYST HOANGTA FIGURE



FILE: NSACGIS\CAD\HPPB\TRM\MANAGEMENTS\TRA\TEG\YSTAKEHOLDER CONTACT\PROJECTS\SAN JOAQUIN\2010\HPPMS_FIG2_TRACY\TRANSPORTMP_2010_12.MXD



LEGEND

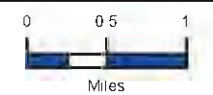
- Freeway
- Expressway (City of Tracy)
- - - County Expressway (San Joaquin)
- County Road
- Arterial
- - - On-site Arterial
- Collector
- - - On-site Roads
- ◆ Existing Freeway Interchange
- ◆ Proposed Freeway Interchange
- # No. of Lanes
- + + + Railroad
- - - City of Tracy SOI

NOTES: This graphic shows the arterial/expressway system. Key new collectors are also shown.

This graphic does not show additional project level network connections that will be required as part of development approvals.

* Pavillion Parkway Interchange will not be constructed but is included in the analysis.

Source: City of Tracy, "City of Tracy Citywide Roadway & Transportation Master Plan," September 2010.



- - - Historical Old Valley Pipeline (OVP)
- - - Historical Tidewater Associated Oil Company (TAOC) Pipeline

HISTORICAL PIPELINE RIGHTS OF WAYS		
BUILDOUT ROADWAY NETWORK Tracy, California		
DATE 12/17/2010	ANALYST HOANGTA	FIGURE
The Benham Companies, LLC <small>A Wholly Owned Subsidiary</small>		2

FILE: \\SAC\GIS\CAD\HPP\BTR\MANAGEMENTS\TRA\TEG\SYSTEMSTAKEHOLDER CONTACT\PROJECTS\SANJOAQUIN\2010\HPP\MS - FIG3 - TRACY\TRANSPORTMP - 2010 - 12.MXD



#	Existing Locations	Existing Crossing Type	Future Crossing Type	Existing Lanes	2035 Lanes
1	Lammers Road north of Valpico Road	At-Grade	At-Grade	2	4
2	Lammers Road north of Linne Road	At-Grade	Grade Separated	2	4
5	Corral Hollow Road north of Linne Road	At-Grade	At-Grade	2	4
8	Tracy Boulevard north of Linne Road	At-Grade	At-Grade	2	4
15	MacArthur Dr south of 6th Street	At-Grade	Close	2	Maintain Ped & Bike Access Only
16	Chrisman Road at Schulte Road	At-Grade	At-Grade	2	4
25	Grant Line Rd at Byron Road	At-Grade	Relocate to 26	2	No Crossing
Future Locations		Existing Crossing Type	Future Crossing Type	Existing Lanes	2035 Lanes
9	North MacArthur Drive at 11th Street (N-S)	Grade Separated	Grade Separated	4	4
21	MacArthur Drive Extension	No Crossing	At-Grade	0	4
22	Chrisman Road north of 11th Street	No Crossing	Grade Separated	0	4
23	Hansen Road east of Pavillion Parkway Ext.	No Crossing	Grade Separated	0	4
24	Pavillion Parkway east of Lammers Road	No Crossing	Grade Separated	0	8
26	Lammers Road at Byron Road	No Crossing	Relocate from 25	0	2

Source: City of Tracy, "City of Tracy Citywide Roadway & Transportation Master Plan," September 2010.



- - - - - Historical Old Valley Pipeline (OVP)
- - - - - Historical Tidewater Associated Oil Company (TAOC) Pipeline

HISTORICAL PIPELINE RIGHTS OF WAYS

RAILROAD CROSSINGS - IMPROVEMENTS AND FUTURE LOCATIONS
Tracy, California

DATE: 12/17/2010 | ANALYST: HOANGTA | FIGURE

3

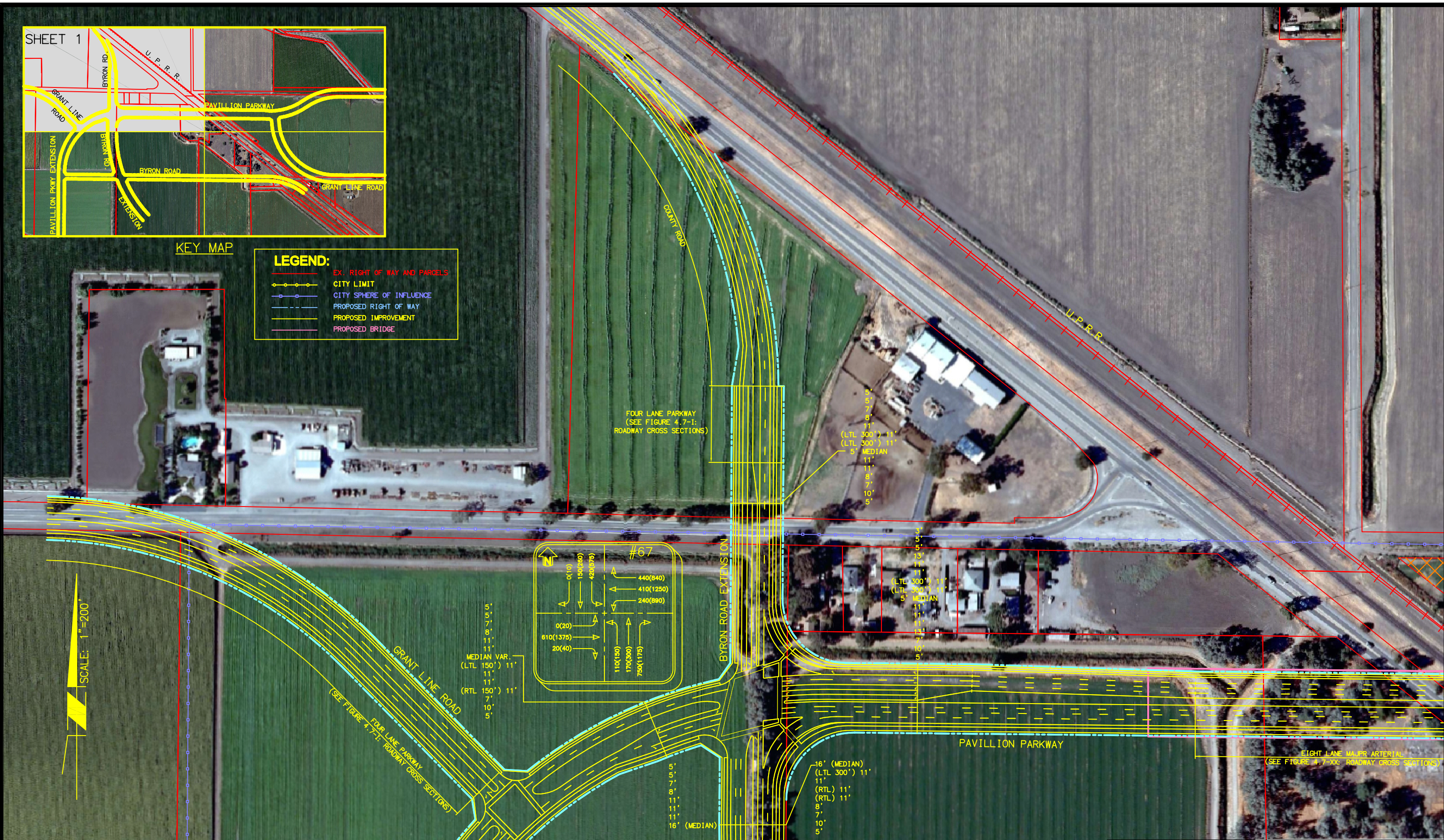
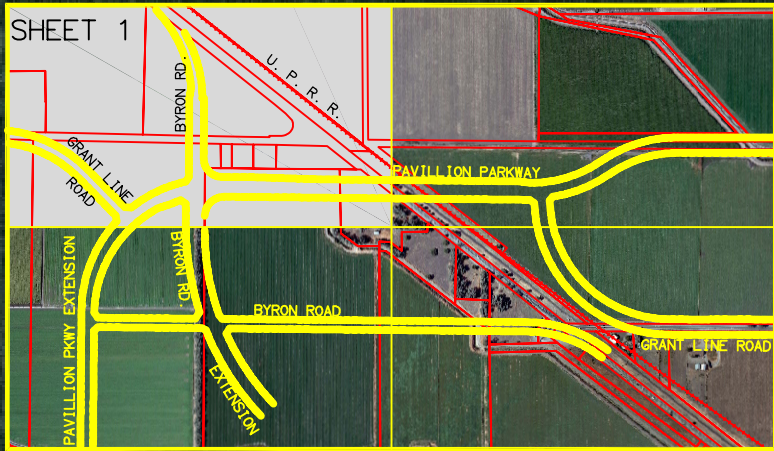
The Benham Companies, LLC
 A Wholly Owned Subsidiary



APPENDIX H

CONCEPTUAL LAYOUTS OF INTERSECTION IMPROVEMENTS

SHEET 1



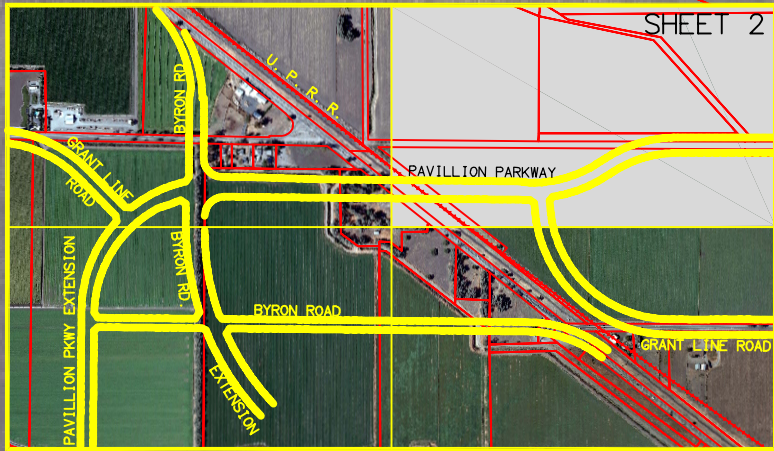
CONCEPT PLANS FOR INTERSECTION
 #67 PAVILLION PARKWAY & BYRON ROAD (SHT 1 OF 4)
 UPDATED 11-05-2010

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

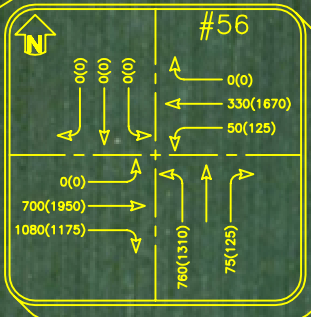
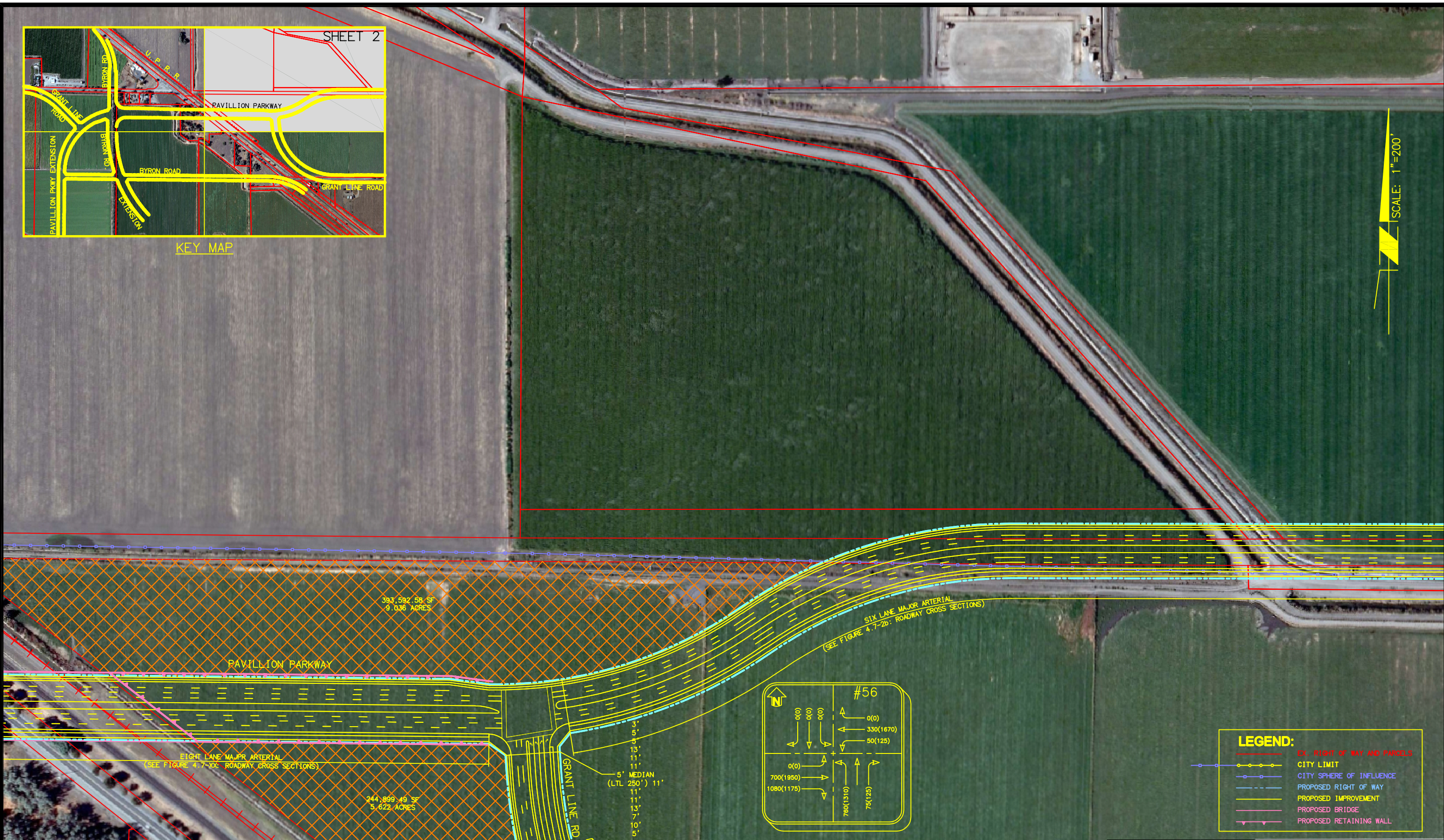
3180 MAJIN ROAD, SUITE 110
 MARINA, CA 93933-5111
 PH 831.883.8187 • FAX 831.883.9967 • www.RBF.com

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SHEET 2

SCALE: 1" = 200'



- LEGEND:**
- EX. RIGHT OF WAY AND PARCELS
 - CITY LIMIT
 - CITY SPHERE OF INFLUENCE
 - PROPOSED RIGHT OF WAY
 - PROPOSED IMPROVEMENT
 - PROPOSED BRIDGE
 - PROPOSED RETAINING WALL

CONCEPT PLANS FOR INTERSECTION
 #56 PAVILLION PARKWAY & GRANT LINE ROAD (SHT 2 OF 4)
 UPDATED 11-05-2010

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

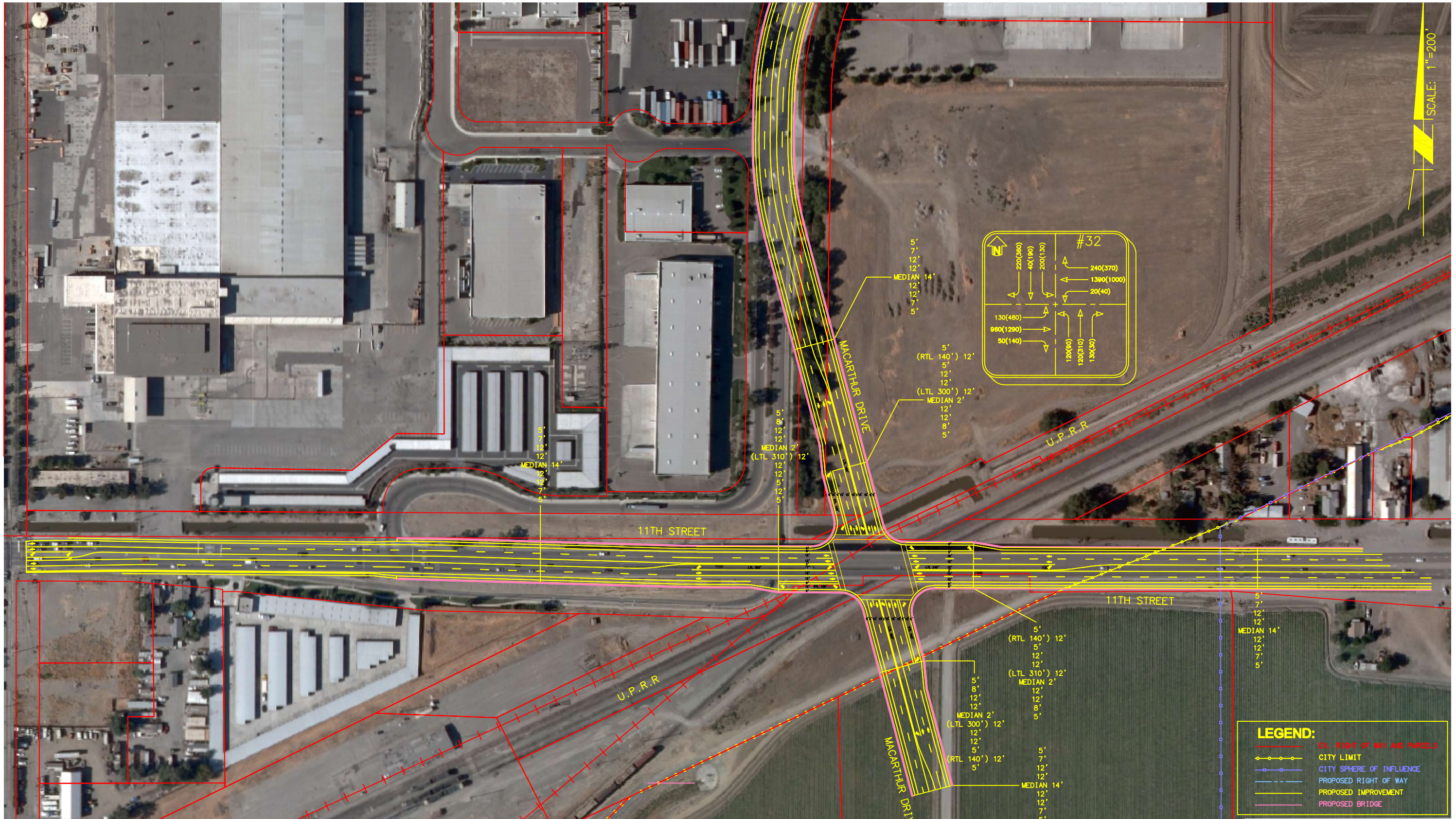
3180 MIJIN ROAD, SUITE 110
 MARINA, CA 93933-5111
 PH 831.883.8187 • FAX 831.883.9967 • www.RBF.com



CONCEPT PLANS FOR INTERSECTIONS
 BYRON ROAD & PAVILLION PARKWAY EXTENSION AND BYRON ROAD & BYRON ROAD EXTENSION (SHT 4 OF 4)
 UPDATED 11-05-2010

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 PLANNING ■ DESIGN ■ CONSTRUCTION
 3180 MIJIN ROAD, SUITE 110
 MARINA, CA 93933-5111
 PH 831.883.8187 • FAX 831.883.9967 • www.RBF.com

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CONCEPT PLANS FOR INTERSECTION
 #32 MACARTHUR DRIVE & 11TH STREET
 UPDATED 11-05-2010

RBF CONSULTING

PLANNING ■ DESIGN ■ CONSTRUCTION

3180 MAJIN ROAD, SUITE 110
 MARINA, CA 93933-5111
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APPENDIX I

COST ESTIMATE WORKSHEETS



OVERPASS/UNDERPASS/BRIDGES/CULVERTS/

Overpass/Underpass/Bridges/Culvert/Railroad Cost Estimates

Type/Location	Replace or Widen	Length (ft)	Existing Width (ft)	Water Channel/ Freeway Length (ft)	Future (BUILDOUT)							BO/Horizon Year	Future Area (ft ²)	Structure and Earthwork Cost	ROW Area (ft ²)	ROW/Easement Cost	CIP Funding		Total Cost	CIP Funding				
					Travel Width	# Lanes	Sidewalks	Bike Facility	Bike Width	K rail & Sep	Total Width						Project #	Amount (c)		Project #	Amount (c)			
Overpass/Underpass																								
1580/Corral Hollow Road	Replace Bridge	350	34	155	52	4	5	lines	10	4	80	28,000	\$ 12,600,000	8,970	\$ 31,000			\$ 12,631,000						
580/Lammers Road	New Overcrossing	350	0	0	86	6	5	path	10	6	107	37,450	\$ 16,853,000	37,450	\$ 129,000			\$ 16,982,000						
205 Pavilion Parkway overcrossing	New Overcrossing	350	0	155	52	4	5	path	10	6	80	28,000	\$ 12,600,000	15,600	\$ 54,000			\$ 12,654,000						
580/Mountain House overcrossing	New Overcrossing	350	0	155	52	4	5	path	10	6	80	28,000	\$ 12,600,000	15,600	\$ 54,000			\$ 12,654,000						
205/Paradise Road	Replace Bridge	290	34	155	52	4	5	path	10	6	80	23,200	\$ 10,440,000	6,210	\$ 21,000			\$ 10,461,000						
Railroad Crossings																								
Lammers Road Railroad Crossing #2	New Bridge	100	0	100	86	6	5	path	10	6	107	10,700	\$ 6,420,000	10,700	\$ 37,000			\$ 6,457,000						
11th Street/MacArthur Drive #9	New Bridge	100	0	100	86	6	5	path	10	6	107	10,700	\$ 6,420,000	10,700	\$ 37,000			\$ 6,457,000		\$ 20,000,000				
Chinaman Road Railroad Crossing at #22	New Bridge	100	0	100	86	6	5	path	10	6	107	10,700	\$ 6,420,000	10,700	\$ 37,000			\$ 6,457,000						
Hansen Road Railroad Crossing #23	New Bridge	100	0	100	86	6	5	path	10	6	107	10,700	\$ 6,420,000	10,700	\$ 37,000			\$ 6,457,000						
Lammers Road at Valpico Road #1	Widen from 2-4 lanes																	\$ 300,000						
Corral Hollow Road north of Linne Road # 5	Widen from 2-4 lanes																	\$ 300,000						
Tracy Boulevard north of Linne Road #8	Widen from 2-4 lanes																	\$ 300,000						
MacArthur Drive south of 6th Street #15	Close, keep bike, ped																	\$ 150,000						
Chinaman Road at Schulte Road #16	Widen from 2-4 lanes																	\$ 300,000						
MacArthur Drive Extension #21	New 4 lane crossing																	\$ 500,000						
Lammers Road at Byron Road #26 relocate: Grant Line	Relocate 2 Lane Crossing																	\$ 300,000						
Bridges																								
Delta Mendota Canal/Mountain House Parkway	Widen	335	36	115	64	4	0	path	10	4	78	14,070	\$ 4,925,000	14,070	\$ 16,000			\$ 4,941,000						
California Aqueduct/Mountain House Parkway	Widen	350	72	115	86	6	0	path	10	4	100	9,800	\$ 2,940,000	6,580	\$ 23,000			\$ 2,963,000						
Delta Mendota Canal/Old Schulte Road	Widen	325	49	110	71	4	0	path	10	4	85	11,700	\$ 4,095,000	11,700	\$ 13,000			\$ 4,108,000						
Delta Mendota Aqueduct/Lammers Road	Replace	130	26	105	86	6	0	path	10	4	100	13,000	\$ 3,900,000	9,620	\$ 11,000			\$ 3,911,000						
California Aqueduct/Lammers Road	Replace	170	24	130	86	6	0	path	10	4	100	17,000	\$ 5,100,000	12,920	\$ 15,000			\$ 5,115,000						
Delta Mendota Canal/Corral Hollow Road	Replace	130	29	105	52	4	0	path	10	4	66	8,580	\$ 2,574,000	4,810	\$ 6,000			\$ 2,580,000	73PP-054	\$ 446,000				
California Aqueduct/Corral Hollow Road	Replace	220	35	150	52	4	0	path	10	4	66	14,520	\$ 4,356,000	6,820	\$ 8,000			\$ 4,364,000						
Culvert																								
Upper Main Canal/Lammers Road	Widen	65	93	30	86	4	0	path	10	4	100	455	\$ 239,000	455	\$ 1,000			\$ 240,000						
Upper Main Canal/Corral Hollow Road	none	60	0	0	0	4	0	path	0	0	0	-	\$ -	0	\$ -			\$ -						
Subtotal												\$ 112,482,000		\$ 493,000		\$ 144,125,000		\$ 20,446,000						
Contingencies (20%)																		\$ 28,825,000						
Engineering Design and Planning (10%)																		\$ 14,413,000						
Construction Management (10%)																		\$ 14,413,000						
Program Administration (5%)																		\$ 7,206,000						
Grand Total												\$ 208,982,000												
Grand Total (With CIP Funding)																	\$ 188,536,000							
Notes:																								
RR Bridge crossing : include 100% of bridge cost for earthwork estimate.																								
RR Crossing #24, Pavilion Parkway east of Lammers cost included in intersection improvements.																								
RR Crossing #9, MacArthur Drive at 11th RR crossing included in Overpass.																								
Freeway overpasses and Lammers canal widening include 50% cost for earthwork/approaches																								
Length includes tapers/transition to main roadway																								
ROW cost of \$150,000/acre assumed for overpass/underpass. Construction easement cost of \$50,000/acre assumed for bridges and culverts.																								
New structure cost of \$300/s.f. includes both the superstructure and substructure and assumes low structure height, no environmental constraints or aesthetic issues, dry conditions, no bridge skew, spread footings, and no stage construction.																								
Widening structure cost of \$350/s.f.																								



INTERSECTIONS



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: AT

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	AC		\$ 10,000.00	\$0.00
1.2	Excavation & Compaction	CY		\$ 20.00	\$0.00
	SUBTOTAL				\$0.00
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON		\$ 80.00	\$0.00
2.2	Aggregate Base, Class 2 (18")	CY		\$ 60.00	\$0.00
2.3	Miscellaneous Curbs	LF		\$ 16.00	\$0.00
2.4	PCC Sidewalk	SF		\$ 5.00	\$0.00
2.5	Soil Stabilization (50% of roadways at \$1 per SF)	SF		\$ 0.50	\$0.00
	SUBTOTAL				\$0.00
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF		\$ 12.00	\$0.00
3.2	Utility Coordination	LS		\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)	LS		\$ 200,000.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	18" RCP, Class III	LF		\$ 120.00	\$0.00
4.2	48" RCP, Class III	LF		\$ 200.00	\$0.00
4.3	Catch Basin	EA		\$ 4,000.00	\$0.00
4.4	Storm Drain MH	EA		\$ 5,000.00	\$0.00
	SUBTOTAL				\$0.00
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LS		\$ 1.00	\$0.00
5.2	Roadway Striping	LS		\$ 4.00	\$0.00
5.3	Traffic Signal & Lighting	LS		\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements	EA		\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS		\$ 25,000.00	\$0.00
	SUBTOTAL				\$0.00
	SUBTOTAL (ITEMS 1-5)				\$0.00
6	MISCELLANEOUS				
6.1	Traffic Control System	LS		\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$0.00	\$0.00
	SUBTOTAL				\$0.00
	SUBTOTAL (ITEMS 1-6)				\$0.00
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$0.00	\$0.00
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$0.00	\$0.00
7.3	Construction Management (10% ITEMS 1-6)		10%	\$0.00	\$0.00
7.4	Program Administration (5% ITEMS 1-6)		5%	\$0.00	\$0.00
	SUBTOTAL				\$0.00
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	AC		\$ 150,000.00	\$0.00
8.2	Construction Easement	AC		\$ 50,000.00	\$0.00
	SUBTOTAL				\$0.00
	GRAND TOTAL (ITEMS 1-8)				\$0.00



ENGINEER'S ESTIMATE

City of Tracy

City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	AC	0	\$ 10,000.00	\$0.00
1.2	Excavation & Compaction	CY	0	\$ 20.00	\$0.00
	SUBTOTAL				\$0.00
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0	\$ 80.00	\$0.00
2.2	Aggregate Base, Class 2 (18")	CY	0	\$ 50.00	\$0.00
2.3	Miscellaneous Curbs	LF	0	\$ 16.00	\$0.00
2.4	PCC Sidewalk	SF	0	\$ 5.00	\$0.00
	SUBTOTAL				\$0.00
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0	\$ 12.00	\$0.00
3.2	Utility Coordination	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	18" RCP, Class III	LF	0	\$ 120.00	\$0.00
4.2	48" RCP, Class III	LF	0	\$ 200.00	\$0.00
4.3	Catch Basin	EA	0	\$ 4,000.00	\$0.00
4.4	Storm Drain MH	EA	0	\$ 5,000.00	\$0.00
	SUBTOTAL				\$0.00
5	TRAFFIC ITEMS				
5.1	Roadway Signs	EA	1.0	\$ 250.00	\$250.00
5.2	Roadway Striping	LS	250.0	\$ 4.00	\$1,000.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	1	\$ 25,000.00	\$25,000.00
	SUBTOTAL				\$26,250.00
	SUBTOTAL (ITEMS 1-5)				\$26,250.00
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$2,625.00	\$2,625.00
	SUBTOTAL				\$2,625.00
	SUBTOTAL (ITEMS 1-6)				\$28,875.00
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$5,775.00	\$5,775.00
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$2,887.50	\$2,887.50
7.3	Construction Management (10% ITEMS 1-6)		10%	\$2,887.50	\$2,887.50
7.4	Program Administration (5% ITEMS 1-6)		5%	\$1,443.75	\$1,443.75
	SUBTOTAL				\$12,993.75
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	AC	0.0	\$ 150,000.00	\$0.00
8.2	Construction Easement	AC	0.0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$0.00
	GRAND TOTAL (ITEMS 1-8)				\$41,868.75

Use \$45,000

Typical Lane Add with Restriping - No ROW take or widening required
Assume 250' of striping required and minor signal modification

Typical Cost for RBF Restripe only-No ROW



ENGINEER'S ESTIMATE

City of Tracy

City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	AC	0.07	\$ 10,000.00	\$688.71
1.2	Excavation & Compaction	CY	444.4	\$ 20.00	\$8,888.89
	SUBTOTAL				\$9,577.59
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	116.3	\$ 80.00	\$9,300.00
2.2	Aggregate Base, Class 2 (18")	CY	166.7	\$ 30.00	\$5,000.00
2.3	Miscellaneous Curbs	LF	250.0	\$ 16.00	\$4,000.00
2.4	PCC Sidewalk	SF	0	\$ 5.00	\$0.00
	SUBTOTAL				\$18,300.00
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0	\$ 12.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE (costs under ITEM 6.3)				
4.1	18" RCP, Class III	LF	0	\$ 120.00	\$0.00
4.2	48" RCP, Class III	LF	0	\$ 200.00	\$0.00
4.3	Catch Basin	EA	0	\$ 4,000.00	\$0.00
4.4	Storm Drain MH	EA	0	\$ 5,000.00	\$0.00
	SUBTOTAL				\$0.00
5	TRAFFIC ITEMS				
5.1	Roadway Signs	EA	2.0	\$ 250.00	\$500.00
5.2	Roadway Striping	LS	250.0	\$ 4.00	\$1,000.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	1	\$ 50,000.00	\$50,000.00
	SUBTOTAL				\$51,500.00
	SUBTOTAL (ITEMS 1-5)				\$79,377.59
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$7,937.76	\$7,937.76
6.3	Utility and drainage	LS	20%	\$15,875.52	\$15,875.52
	SUBTOTAL				\$23,813.28
	SUBTOTAL (ITEMS 1-6)				\$103,190.87
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$20,638.17	\$20,638.17
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$10,319.09	\$10,319.09
7.3	Construction Management (10% ITEMS 1-6)		10%	\$10,319.09	\$10,319.09
7.4	Program Administration (5% ITEMS 1-6)		5%	\$5,159.54	\$5,159.54
	SUBTOTAL				\$46,435.89
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	AC	0.07	\$ 150,000.00	\$10,330.58
8.2	Construction Easement	AC	0.1	\$ 50,000.00	\$3,443.53
	SUBTOTAL				\$13,774.10
	GRAND TOTAL (ITEMS 1-8)				\$163,400.87

Use \$205,000

Typical Lane Add - ROW take or widening required (assume 12' width)
 Assume 250' of striping required and moderate signal modification

Typical Cost for RBF Lane Add w ROW



ENGINEER'S ESTIMATE

City of Tracy

City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	AC	0.005	\$ 10,000.00	\$45.91
1.2	Excavation & Compaction	CY	14.8	\$ 20.00	\$296.30
	SUBTOTAL				\$342.21
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	7.8	\$ 80.00	\$620.00
2.2	Aggregate Base, Class 2 (18")	CY	11.1	\$ 30.00	\$333.33
2.3	Miscellaneous Curbs	LF	68.0	\$ 16.00	\$1,088.00
2.4	PCC Sidewalk	SF	0	\$ 5.00	\$0.00
	SUBTOTAL				\$2,041.33
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	200.0	\$ 12.00	\$2,400.00
	SUBTOTAL				\$2,400.00
4	DRAINAGE				
4.1	18" RCP, Class III	LF	0	\$ 120.00	\$0.00
4.2	48" RCP, Class III	LF	0	\$ 200.00	\$0.00
4.3	Catch Basin	EA	0	\$ 4,000.00	\$0.00
4.4	Storm Drain MH	EA	0	\$ 5,000.00	\$0.00
	SUBTOTAL				\$0.00
5	TRAFFIC ITEMS				
5.1	Roadway Signs	EA	1.0	\$ 250.00	\$250.00
5.2	Roadway Striping	LS	250.0	\$ 4.00	\$1,000.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	1	\$ 25,000.00	\$25,000.00
	SUBTOTAL				\$26,250.00
	SUBTOTAL (ITEMS 1-5)				\$31,033.54
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$3,103.35	\$3,103.35
	SUBTOTAL				\$3,103.35
	SUBTOTAL (ITEMS 1-6)				\$34,136.90
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$6,827.38	\$6,827.38
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$3,413.69	\$3,413.69
7.3	Construction Management (10% ITEMS 1-6)		10%	\$3,413.69	\$3,413.69
7.4	Program Administration (5% ITEMS 1-6)		5%	\$1,706.84	\$1,706.84
	SUBTOTAL				\$15,361.60
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	AC	0	\$ 150,000.00	\$0.00
8.2	Construction Easement	AC	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$0.00
	GRAND TOTAL (ITEMS 1-8)				\$49,498.50

Use \$52,000

Add Free RT island - assume triangle (20' base, ht)
Assume 250' of striping required and minor signal modification

Typical Cost for RBF Add Free RT island



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	AC	0	\$ 10,000.00	\$0.00
1.2	Excavation & Compaction	CY	0	\$ 40.00	\$0.00
	SUBTOTAL				\$0.00
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0	\$ 100.00	\$0.00
2.2	Aggregate Base, Class 2 (18")	CY	0	\$ 80.00	\$0.00
2.3	Miscellaneous Curbs	LF	0	\$ 25.00	\$0.00
2.4	PCC Sidewalk	SF	0	\$ 6.00	\$0.00
	SUBTOTAL				\$0.00
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0	\$ 20.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	18" RCP, Class III	LF	0	\$ 120.00	\$0.00
4.2	48" RCP, Class III	LF	0	\$ 200.00	\$0.00
4.3	Catch Basin	EA	0	\$ 4,000.00	\$0.00
4.4	Storm Drain MH	EA	0	\$ 5,000.00	\$0.00
	SUBTOTAL				\$0.00
5	TRAFFIC ITEMS				
5.1	Roadway Signs	EA	0	\$ 250.00	\$0.00
5.2	Roadway Striping	LS	0	\$ 4.00	\$0.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements	EA	0	\$ 5,000.00	\$0.00
	Roundabout	LS	1	\$ 300,000.00	\$300,000.00
	SUBTOTAL				\$300,000.00
	SUBTOTAL (ITEMS 1-5)				\$300,000.00
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$30,000.00	\$30,000.00
	SUBTOTAL				\$30,000.00
	SUBTOTAL (ITEMS 1-6)				\$330,000.00
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$66,000.00	\$66,000.00
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$33,000.00	\$33,000.00
7.3	Construction Management (10% ITEMS 1-6)		10%	\$33,000.00	\$33,000.00
7.4	Program Administration (5% ITEMS 1-6)		5%	\$16,500.00	\$16,500.00
	SUBTOTAL				\$148,500.00
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition (10% ITEMS 1-6)	AC	10%	\$33,000.00	\$33,000.00
8.2	Construction Easement	AC	0.0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$33,000.00
	GRAND TOTAL (ITEMS 1-8)				\$511,500.00

Cost to construct roundabout obtained from other studies
 Assume ROW costs are 10% of costs before contingencies

Use \$515,000

Typical Cost for Roundabout



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	AC	0	\$ 10,000.00	\$0.00
1.2	Excavation & Compaction	CY	0	\$ 40.00	\$0.00
	SUBTOTAL				\$0.00
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0	\$ 100.00	\$0.00
2.2	Aggregate Base, Class 2 (18")	CY	0	\$ 80.00	\$0.00
2.3	Miscellaneous Curbs	LF	0	\$ 25.00	\$0.00
2.4	PCC Sidewalk	SF	0	\$ 6.00	\$0.00
	SUBTOTAL				\$0.00
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0	\$ 20.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	18" RCP, Class III	LF	0	\$ 120.00	\$0.00
4.2	48" RCP, Class III	LF	0	\$ 200.00	\$0.00
4.3	Catch Basin	EA	0	\$ 4,000.00	\$0.00
4.4	Storm Drain MH	EA	0	\$ 5,000.00	\$0.00
	SUBTOTAL				\$0.00
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LS	0	\$ 1.00	\$0.00
5.2	Roadway Striping	LS	0	\$ 4.00	\$0.00
5.3	Traffic Signal & Lighting	LS	1	\$ 250,000.00	\$250,000.00
5.4	Street Lighting Improvements	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 25,000.00	\$0.00
	SUBTOTAL				\$250,000.00
	SUBTOTAL (ITEMS 1-5)				\$250,000.00
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$25,000.00	\$25,000.00
	SUBTOTAL				\$25,000.00
	SUBTOTAL (ITEMS 1-6)				\$275,000.00
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$55,000.00	\$55,000.00
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$27,500.00	\$27,500.00
7.3	Construction Management (10% ITEMS 1-6)		10%	\$27,500.00	\$27,500.00
7.4	Program Administration (5% ITEMS 1-6)		5%	\$13,750.00	\$13,750.00
	SUBTOTAL				\$123,750.00
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	AC	0	\$ 150,000.00	\$0.00
8.2	Construction Easement	AC	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$0.00
	GRAND TOTAL (ITEMS 1-8)				\$398,750.00

Cost to construct signal obtained from other studies

Use \$400,000

Typical Cost for Signal



ROADWAY SEGMENTS



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0022	\$ 10,000.00	\$22.50
1.2	Excavation & Compaction	CY	5.4	\$ 20.00	\$108.89
	SUBTOTAL				\$131.39
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	2.6	\$ 80.00	\$204.60
2.2	Aggregate Base, Class 2 (18")	CY	4.6	\$ 60.00	\$273.33
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12") (Assume 50% of roads will require)	SF	120.0	\$ 0.50	\$60.00
	SUBTOTAL				\$569.93
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 333.33	\$333.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$333.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	6.0	\$ 1.00	\$6.00
5.2	Roadway Striping	LF	6.0	\$ 4.00	\$24.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$30.00
	SUBTOTAL (ITEMS 1-5)				\$1,256.65
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$125.66	\$125.66
	SUBTOTAL				\$125.66
	SUBTOTAL (ITEMS 1-6)				\$1,382.31
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$276.46	\$276.46
7.2	Engineering Design and Planing (10% ITEMS 1-6)		10%	\$138.23	\$138.23
7.3	Construction Management (10% ITEMS 1-6)		10%	\$138.23	\$138.23
7.4	Program Administration (5% ITEMS 1-6)		5%	\$69.12	\$69.12
	SUBTOTAL				\$622.04
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.0037	\$ 150,000.00	\$547.52
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$570.48
	GRAND TOTAL (ITEMS 1-8)				\$2,574.83

TIF Costs

new 8L Parkway per LF

Utility & streetlight costs calculated separately

Assumptions:

clear/grub - 3 travel lanes plus median - 82' + two 8' shoulders	AC	0.0022	
excavate/compact - 82' at 18" + two 8' shoulders	CY	5.44	
66' travel lanes			
Hot Mix Asphalt Concrete Pavement (6")	TON	2.6	
Aggregate Base, Class 2 (18") + two 8' unpaved shoulders	CY	4.6	
Miscellaneous Curbs x 2 (incl median)	LF	2.0	
PCC Sidewalk -	SF	0.0	
Median/Parkway Landscaping - median only	SF	16.0	
drainage based on Linne costs	LF	1.0	
signs and striping x 6 lines (4 travel lane, 2 median stripes)	LF	30	
Right-of-Way Acquisition (159' ROW line to ROW line)	Ac	0.0037	*Updated 1.26.
construction easement - 10' each side outside of ROW	Ac	0.0005	



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1 EARTHWORK					
1.1	Clearing & Grubbing	Ac	0.0017	\$ 10,000.00	\$17.45
1.2	Excavation & Compaction	CY	4.2	\$ 40.00	\$168.89
SUBTOTAL					\$186.34
2 STRUCTURAL SECTION					
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	1.7	\$ 60.00	\$102.30
2.2	Aggregate Base, Class 2 (18")	CY	3.3	\$ 60.00	\$200.00
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12") (Assume 50% of roads will require)	SF	120.0	\$ 0.50	\$60.00
SUBTOTAL					\$394.30
3 SPECIALTY ITEMS					
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Untilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
SUBTOTAL					\$192.00
4 DRAINAGE					
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 303.33	\$303.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
SUBTOTAL					\$303.33
5 TRAFFIC ITEMS					
5.1	Roadway Signs	LF	4.0	\$ 1.00	\$4.00
5.2	Roadway Striping	LF	4.0	\$ 4.00	\$16.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
SUBTOTAL					\$20.00
SUBTOTAL (ITEMS 1-5)					\$1,095.97
6 MISCELLANEOUS					
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$109.60	\$109.60
SUBTOTAL					\$109.60
SUBTOTAL (ITEMS 1-6)					\$1,205.56
7 FEES					
7.1	Contingencies (20% ITEMS 1-6)		20%	\$241.11	\$241.11
7.2	Engineering Design and Planing (10% ITEMS 1-6)		10%	\$120.56	\$120.56
7.3	Construction Management (10% ITEMS 1-6)		10%	\$120.56	\$120.56
7.4	Program Administration (5% ITEMS 1-6)		5%	\$60.28	\$60.28
SUBTOTAL					\$542.50
8 RIGHT-OF-WAY					
8.1	Right-of-Way Acquisition	Ac	0.0031	\$ 150,000.00	\$471.76
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
SUBTOTAL					\$494.72
GRAND TOTAL (ITEMS 1-8)					\$2,242.79

TIF Costs

new 6L Parkway per LF

Utility & streetlight costs calculated separately

Assumptions:

clear/grub - 2 travel lanes plus median - 60' + two 8' shoulders	AC	0.0017
excavate/compact - 60" at 18" + two 8' shoulders	CY	4.22
44' travel lanes		
Hot Mix Asphalt Concrete Pavement (6")	TON	1.7
Aggregate Base, Class 2 (18") + two 8' shoulders	CY	3.3
Miscellaneous Curbs x 2 (incl median)	LF	2.0
PCC Sidewalk -	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x 4 lines (2 travel lane, 2 median stripes)	LF	20
Right-of-Way Acquisition (137' ROW line to ROW line)	Ac	0.0031 *Updated 1.21



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0012	\$ 10,000.00	\$12.40
1.2	Excavation & Compaction	CY	3.0	\$ 20.00	\$60.00
	SUBTOTAL				\$72.40
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	1.0	\$ 80.00	\$80.60
2.2	Aggregate Base, Class 2 (18")	CY	2.3	\$ 60.00	\$140.00
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	76.0	\$ 0.50	\$38.00
	SUBTOTAL				\$290.60
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 259.33	\$259.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$259.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	4.0	\$ 1.00	\$4.00
5.2	Roadway Striping	LF	4.0	\$ 4.00	\$16.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$20.00
	SUBTOTAL (ITEMS 1-5)				\$834.33
6	MISCALLENEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$83.43	\$83.43
	SUBTOTAL				\$83.43
	SUBTOTAL (ITEMS 1-6)				\$917.76
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$183.55	\$183.55
7.2	Engineering Design and Planing (10% ITEMS 1-6)		10%	\$91.78	\$91.78
7.3	Construction Management (10% ITEMS 1-6)		10%	\$91.78	\$91.78
7.4	Program Administration (5% ITEMS 1-6)		5%	\$45.89	\$45.89
	SUBTOTAL				\$412.99
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.0026	\$ 150,000.00	\$396.01
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$418.96
	GRAND TOTAL (ITEMS 1-8)				\$1,749.71

TIF Costs

new 4L Parkway per LF

Assumptions:

clear/grub - travel lanes plus median - 38' + two 8' shoulders

excavate/compact - 38' at 18"+ two 8' shoulders

Hot Mix Asphalt Concrete Pavement (6") 2 x13' Travel Lanes
Aggregate Base, Class 2 (18")+ two 8' shoulders

Miscellaneous Curbs x 2 (incl median)
PCC Sidewalk - none

Median/Parkway Landscaping - median only

drainage based on Linne costs

signs and striping x 4 lines (2 travel lane, 2 median stripes)

Right-of-Way Acquisition (115' total width)

AC 0.0012
CY 3.00

TON 1.0
CY 2.3

LF 2.0
SF 0.0

SF 16.0

LF 1.0

LF 20

Ac 0.0026 *Updated 1.21

Utility & streetlight costs calculated separately



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
	GENERAL				
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0013	\$ 10,000.00	\$13.31
1.2	Excavation & Compaction	CY	3.2	\$ 20.00	\$64.44
	SUBTOTAL				\$77.76
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	1.0	\$ 80.00	\$80.60
2.2	Aggregate Base, Class 2 (18")	CY	2.3	\$ 60.00	\$140.00
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	42.0	\$ 0.50	\$21.00
	SUBTOTAL				\$273.60
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination- calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 259.33	\$259.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$259.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	2.0	\$ 1.00	\$2.00
5.2	Roadway Striping	LF	2.0	\$ 4.00	\$8.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$10.00
	SUBTOTAL (ITEMS 1-5)				\$812.69
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$81.27	\$81.27
	SUBTOTAL				\$81.27
	SUBTOTAL (ITEMS 1-6)				\$893.96
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$178.79	\$178.79
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$89.40	\$89.40
7.3	Construction Management (10% ITEMS 1-6)		10%	\$89.40	\$89.40
7.4	Program Administration (5% ITEMS 1-6)		5%	\$44.70	\$44.70
	SUBTOTAL				\$402.28
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.0017	\$ 150,000.00	\$254.82
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$277.78
	GRAND TOTAL (ITEMS 1-8)				\$1,574.02

2L Arterial per LF

Utility & streetlight costs calculated separately

Assumptions

clear/grub - median 16'	AC	0.0013
excavate/compact - 16' at 18"	CY	3.22
26' travel lanes		
Hot Mix Asphalt Concrete Pavement (6")	TON	1.0
Aggregate Base, Class 2 (18")	CY	2.3
Miscellaneous Curbs x 2 (incl median)	LF	2.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x2 median stripes	LF	2
Right-of-Way Acquisition (74' ROW to ROW line)	Ac	0.0017 *Updated 1.21



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0012	\$ 10,000.00	\$11.94
1.2	Excavation & Compaction	CY	3.0	\$ 20.00	\$60.00
	SUBTOTAL				\$71.94
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	\$ 80.00	\$68.20
2.2	Aggregate Base, Class 2 (18")	CY	2.1	\$ 60.00	\$126.67
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	64.0	\$ 0.50	\$32.00
	SUBTOTAL				\$258.87
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 259.33	\$259.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$259.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	2.0	\$ 1.00	\$2.00
5.2	Roadway Striping	LF	2.0	\$ 4.00	\$8.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$10.00
	SUBTOTAL (ITEMS 1-5)				\$792.13
6	MISCALLENEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$79.21	\$79.21
	SUBTOTAL				\$79.21
	SUBTOTAL (ITEMS 1-6)				\$871.35
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$174.27	\$174.27
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$87.13	\$87.13
7.3	Construction Management (10% ITEMS 1-6)		10%	\$87.13	\$87.13
7.4	Program Administration (5% ITEMS 1-6)		5%	\$43.57	\$43.57
	SUBTOTAL				\$392.11
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.00227	\$ 150,000.00	\$340.91
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$363.87
	GRAND TOTAL (ITEMS 1-8)				\$1,627.32

TIF Costs

4L Major Arterial with Median per LF

Utility & streetlight costs calculated separately

Assumptions:

clear/grub - travel lanes plus median - 38'+ two 8' shoulders	AC	0.0012	
excavate/compact - 38' at 18"+ two 8' shoulders	CY	3.00	
22' travel lanes			
Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	2.1	
Miscellaneous Curbs x 2 (incl median)	LF	2.0	
PCC Sidewalk - none	SF	0.0	
Median/Parkway Landscaping - median only	SF	16.0	
drainage based on Linne costs	LF	1.0	
signs and striping x2 lanes stripes	LF	10	
Right-of-Way Acquisition (99' ROW line to ROW line)	Ac	0.0023	*Updated 1.2f
construction easement - 10' each side outside of ROW	Ac	0.0005	

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ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0009	\$ 10,000.00	\$8.72
1.2	Excavation & Compaction	CY	2.1	\$ 20.00	\$42.22
	SUBTOTAL				\$50.95
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	\$ 80.00	\$68.20
2.2	Aggregate Base, Class 2 (18")	CY	2.1	\$ 60.00	\$126.67
2.3	Miscellaneous Curbs	LF	0.0	\$ 16.00	\$0.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	48.0	\$ 0.50	\$24.00
	SUBTOTAL				\$218.87
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0.0	\$ 12.00	\$0.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Untilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 227.33	\$227.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$227.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	3.0	\$ 1.00	\$3.00
5.2	Roadway Striping	LF	3.0	\$ 4.00	\$12.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$15.00
	SUBTOTAL (ITEMS 1-5)				\$512.14
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$51.21	\$51.21
	SUBTOTAL				\$51.21
	SUBTOTAL (ITEMS 1-6)				\$563.36
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$112.67	\$112.67
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$56.34	\$56.34
7.3	Construction Management (10% ITEMS 1-6)		10%	\$56.34	\$56.34
7.4	Program Administration (5% ITEMS 1-6)		5%	\$28.17	\$28.17
	SUBTOTAL				\$253.51
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.00191	\$ 150,000.00	\$285.81
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$308.77
	GRAND TOTAL (ITEMS 1-8)				\$1,125.64

TIF Costs

4L undivided Arterial per LF

Assumptions:

clear/grub - travel lanes plus median - 22'+ two 8' shoulders
 excavate/compact - 22' at 18"+ two 8' shoulders
 22' travel lanes
 Hot Mix Asphalt Concrete Pavement (6")
 Aggregate Base, Class 2 (18")+ two 8' shoulders

Miscellaneous Curbs x 0
 PCC Sidewalk - none

Median/Parkway Landscaping - none

drainage based on Linne costs

signs and striping x3 lanes stripes

Right-of-Way Acquisition (83' ROW line to ROW line)

Utility & streetlight costs calculated separately

AC 0.0009

CY 2.11

TON 0.9

CY 2.1

LF 0.0

SF 0.0

SF 0.0

LF 1.0

LF 15

Ac 0.0019 *Updated 1.26.12



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0017	\$ 10,000.00	\$17.45
1.2	Excavation & Compaction	CY	4.2	\$ 20.00	\$84.44
	SUBTOTAL				\$101.89
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	1.7	\$ 80.00	\$136.40
2.2	Aggregate Base, Class 2 (18")	CY	3.3	\$ 60.00	\$200.00
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	86.0	\$ 0.50	\$43.00
	SUBTOTAL				\$411.40
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$303.33	\$303.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$303.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	4.0	\$ 1.00	\$4.00
5.2	Roadway Striping	LF	4.0	\$ 4.00	\$16.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$20.00
	SUBTOTAL (ITEMS 1-5)				\$1,028.62
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$102.86	\$102.86
	SUBTOTAL				\$102.86
	SUBTOTAL (ITEMS 1-6)				\$1,131.49
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$226.30	\$226.30
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$113.15	\$113.15
7.3	Construction Management (10% ITEMS 1-6)		10%	\$113.15	\$113.15
7.4	Program Administration (5% ITEMS 1-6)		5%	\$56.57	\$56.57
	SUBTOTAL				\$509.17
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.003	\$ 150,000.00	\$416.67
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$439.62
	GRAND TOTAL (ITEMS 1-8)				\$2,080.28

TIF Costs

6L Arterial per LF

Assumptions:

clear/grub - travel lanes plus median - 60'+ two 8' shoulders

excavate/compact - 60' at 18"+ two 8' shoulders

44' travel lanes

Hot Mix Asphalt Concrete Pavement (6")

Aggregate Base, Class 2 (18")+ two 8' shoulders

Miscellaneous Curbs x 2 (incl median)

PCC Sidewalk - none

Median/Parkway Landscaping - median only

drainage based on Linne costs

signs and striping x4 lanes stripes (2 travel lanes and 2 median)

Right-of-Way Acquisition (121' ROW line to ROW line)

construction easement - 10' each side outside of ROW

Utility & streetlight costs calculated separately

AC 0.0017

CY 4.22

TON 1.7

CY 3.3

LF 2.0

SF 0.0

SF 16.0

LF 1.0

LF 20

Ac 0.0028 *Updated 1.2t

Ac 0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0000	\$ 10,000.00	\$0.00
1.2	Excavation & Compaction	CY	0.0	\$ 20.00	\$0.00
	SUBTOTAL				\$0.00
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.0	\$ 80.00	\$0.00
2.2	Aggregate Base, Class 2 (18")	CY	0.0	\$ 60.00	\$0.00
2.3	Miscellaneous Curbs	LF	0.0	\$ 16.00	\$0.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	30.0	\$ 0.50	\$15.00
	SUBTOTAL				\$0.00
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0.0	\$ 10.00	\$0.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance) - calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$259.33	\$259.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$259.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	1.0	\$ 1.00	\$1.00
5.2	Roadway Striping	LF	1.0	\$ 4.00	\$4.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements - calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$5.00
	SUBTOTAL (ITEMS 1-5)				\$264.33
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$26.43	\$26.43
	SUBTOTAL				\$26.43
	SUBTOTAL (ITEMS 1-6)				\$290.77
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$58.15	\$58.15
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$29.08	\$29.08
7.3	Construction Management (10% ITEMS 1-6)		10%	\$29.08	\$29.08
7.4	Program Administration (5% ITEMS 1-6)		5%	\$14.54	\$14.54
	SUBTOTAL				\$130.85
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.0000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$22.96
	GRAND TOTAL (ITEMS 1-8)				\$444.57

use \$500 per LF

2L collector <2k vehicles per day per LF (construct median only)

Utility & streetlight costs calculated separately

Assumptions

clear/grub - median 0'	AC	0.0000
excavate/compact - 0' at 18"	CY	0.00
32' travel lanes		
Hot Mix Asphalt Concrete Pavement (6")	TON	0.0
Aggregate Base, Class 2 (18")	CY	0.0
Miscellaneous Curbs x 2	LF	0.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - none	SF	0.0
drainage based on Linne costs	LF	1.0
signs and striping x3 (2 bike, one centerline)	LF	5
Right-of-Way Acquisition (curb to curb)	Ac	0.0000
construction easement - 10' each side outside of ROW	Ac	0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

Program Costs (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1 EARTHWORK					
1.1	Clearing & Grubbing	Ac	0.0017	\$ 10,000.00	\$17.45
1.2	Excavation & Compaction	CY	4.2	\$ 20.00	\$84.44
SUBTOTAL					\$101.89
2 STRUCTURAL SECTION					
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	2.6	\$ 80.00	\$204.60
2.2	Aggregate Base, Class 2 (18")	CY	4.6	\$ 60.00	\$273.33
2.3	Miscellaneous Curbs	LF	4.0	\$ 16.00	\$64.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	120.0	\$ 0.50	\$60.00
SUBTOTAL					\$601.93
3 SPECIALTY ITEMS					
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
SUBTOTAL					\$192.00
4 DRAINAGE					
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 333.33	\$333.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
SUBTOTAL					\$333.33
5 TRAFFIC ITEMS					
5.1	Roadway Signs	LF	6.0	\$ 1.00	\$6.00
5.2	Roadway Striping	LF	6.0	\$ 4.00	\$24.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
SUBTOTAL					\$30.00
SUBTOTAL (ITEMS 1-5)					\$1,259.15
6 MISCELLANEOUS					
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$125.92	\$125.92
SUBTOTAL					\$125.92
SUBTOTAL (ITEMS 1-6)					\$1,385.07
7 FEES					
7.1	Contingencies (20% ITEMS 1-6)		20%	\$277.01	\$277.01
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$138.51	\$138.51
7.3	Construction Management (10% ITEMS 1-6)		10%	\$138.51	\$138.51
7.4	Program Administration (5% ITEMS 1-6)		5%	\$69.25	\$69.25
SUBTOTAL					\$623.28
8 RIGHT-OF-WAY					
8.1	Right-of-Way Acquisition	Ac	0.00000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
SUBTOTAL					\$22.96
GRAND TOTAL (ITEMS 1-8)					\$2,031.31

TIF Costs

use \$2,000 per LF

Utility & streetlight calculated separately

Widen 2L (for 20-25 travel width - no sidewalks) to 6L Parkway

Assumptions

clear/grub - future travel/median 60'+ two 8' shoulders	AC	0.0017
excavate/compact - future travel/median 60' + two 8' shoulders	CY	4.22
66' travel lanes - 20' existing = 46' new travel		
Hot Mix Asphalt Concrete Pavement (6")	TON	2.6
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	4.6
Miscellaneous Curbs x 2	LF	4.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x 6 lines (2 travel, 2 median stripes)	LF	30
Right-of-Way Acquisition (with Existing 60' ROW) - no add'l req (only need 60')	Ac	0.0000
construction easement - 10' each side outside of ROW	Ac	0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

Program Costs (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1 EARTHWORK					
1.1	Clearing & Grubbing	Ac	0.0013	\$ 10,000.00	\$12.86
1.2	Excavation & Compaction	CY	3.1	\$ 20.00	\$62.22
SUBTOTAL					\$75.08
2 STRUCTURAL SECTION					
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	\$ 80.00	\$68.20
2.2	Aggregate Base, Class 2 (18")	CY	2.1	\$ 60.00	\$126.67
2.3	Miscellaneous Curbs	LF	4.0	\$ 16.00	\$64.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	98.0	\$ 0.50	\$49.00
SUBTOTAL					\$307.87
3 SPECIALTY ITEMS					
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
SUBTOTAL					\$192.00
4 DRAINAGE					
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 303.33	\$303.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
SUBTOTAL					\$303.33
5 TRAFFIC ITEMS					
5.1	Roadway Signs	LF	6.0	\$ 1.00	\$6.00
5.2	Roadway Striping	LF	6.0	\$ 4.00	\$24.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
SUBTOTAL					\$30.00
SUBTOTAL (ITEMS 1-5)					\$908.27
6 MISCELLANEOUS					
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$90.83	\$90.83
SUBTOTAL					\$90.83
SUBTOTAL (ITEMS 1-6)					\$999.10
7 FEES					
7.1	Contingencies (20% ITEMS 1-6)		20%	\$199.82	\$199.82
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$99.91	\$99.91
7.3	Construction Management (10% ITEMS 1-6)		10%	\$99.91	\$99.91
7.4	Program Administration (5% ITEMS 1-6)		5%	\$49.96	\$49.96
SUBTOTAL					\$449.60
8 RIGHT-OF-WAY					
8.1	Right-of-Way Acquisition	Ac	0.00000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
SUBTOTAL					\$22.96
GRAND TOTAL (ITEMS 1-8)					\$1,471.66

\$1,448.70

TIF Costs

use \$2,000 per LF

Utility & streetlight calculated separately

Widen 4L (for 20-25 travel width - no sidewalks) to 6L Parkway

Assumptions

clear/grub - future travel/median 60'+ two 8' shoulders	AC	0.0013
excavate/compact - future travel/median 60' + two 8' shoulders	CY	3.11
44' travel lanes - 20' existing = 24' new travel		
Hot Mix Asphalt Concrete Pavement (6")	TON	0.9
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	2.1
Miscellaneous Curbs x 2	LF	4.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x 6 lines (2 travel, 2 median stripes)	LF	30
Right-of-Way Acquisition (with Existing 60' ROW) - no add'l req (only need 60')	Ac	0.0000
construction easement - 10' each side outside of ROW	Ac	0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0000	\$ 10,000.00	\$0.00
1.2	Excavation & Compaction	CY	3.0	\$ 20.00	\$60.00
SUBTOTAL					\$60.00
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	\$ 80.00	\$68.20
2.2	Aggregate Base, Class 2 (18")	CY	2.1	\$ 60.00	\$126.67
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	98.0	\$ 0.50	\$49.00
SUBTOTAL					\$275.87
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
SUBTOTAL					\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 259.33	\$259.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
SUBTOTAL					\$259.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	4.0	\$ 1.00	\$4.00
5.2	Roadway Striping	LF	4.0	\$ 4.00	\$16.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
SUBTOTAL					\$20.00
SUBTOTAL (ITEMS 1-5)					\$807.20
6	MISCALLENEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$80.72	\$80.72
SUBTOTAL					\$80.72
SUBTOTAL (ITEMS 1-6)					\$887.92
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$177.58	\$177.58
7.2	Engineering Design and Planing (10% ITEMS 1-6)		10%	\$88.79	\$88.79
7.3	Construction Management (10% ITEMS 1-6)		10%	\$88.79	\$88.79
7.4	Program Administration (5% ITEMS 1-6)		5%	\$44.40	\$44.40
SUBTOTAL					\$399.56
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.0000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
SUBTOTAL					\$22.96
GRAND TOTAL (ITEMS 1-8)					\$1,310.44

TIF Costs

use \$1,500 per LF

Utility & streetlight calculated separately

new 4L Parkway per LF

Assumptions

clear/grub - future travel/median 38' + two 8' shoulders	AC	0.0012
excavate/compact - future travel/median 38' + two 8' shoulders	CY	3.00
22' travel lanes - 25' exist = no add'l needed		
Hot Mix Asphalt Concrete Pavement (6")	TON	0.9
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	2.1
Miscellaneous Curbs x 2 (incl median)	LF	2.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x 4 lines (2 travel, 2 median stripes)	LF	20
Right-of-Way Acquisition (with Existing 60' ROW) - no add'l req (only need 38')	Ac	0.0000
construction easement - 10' each side outside of ROW	Ac	0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0012	\$ 10,000.00	\$12.40
1.2	Excavation & Compaction	CY	3.0	\$ 20.00	\$60.00
SUBTOTAL					\$72.40
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	\$ 80.00	\$68.20
2.2	Aggregate Base, Class 2 (18")	CY	2.1	\$ 60.00	\$126.67
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	98.0	\$ 0.50	\$49.00
SUBTOTAL					\$275.87
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
SUBTOTAL					\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 259.33	\$259.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
SUBTOTAL					\$259.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	4.0	\$ 1.00	\$4.00
5.2	Roadway Striping	LF	4.0	\$ 4.00	\$16.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
SUBTOTAL					\$20.00
SUBTOTAL (ITEMS 1-5)					\$819.59
6	MISCALLENEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$81.96	\$81.96
SUBTOTAL					\$81.96
SUBTOTAL (ITEMS 1-6)					\$901.55
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$180.31	\$180.31
7.2	Engineering Design and Planing (10% ITEMS 1-6)		10%	\$90.16	\$90.16
7.3	Construction Management (10% ITEMS 1-6)		10%	\$90.16	\$90.16
7.4	Program Administration (5% ITEMS 1-6)		5%	\$45.08	\$45.08
SUBTOTAL					\$405.70
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.00000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
SUBTOTAL					\$22.96
GRAND TOTAL (ITEMS 1-8)					\$1,330.21

Widen 2L (for 20-25 travel width - no sidewalks) to 4L Art

Utility & streetlight calculated separately

Assumptions

clear/grub - future travel/median 38' + two 8' shoulders	AC	0.0012
excavate/compact - future travel/median 38' + two 8' shoulders	CY	3.00
22' travel lanes - 25' exist = no add'l needed		
Hot Mix Asphalt Concrete Pavement (6")	TON	0.9
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	2.1
Miscellaneous Curbs x 2 (incl median)	LF	2.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x 4 lines (2 travel, 2 median stripes)	LF	20
Right-of-Way Acquisition (with Existing 60' ROW) - no add'l req (only need 38')	Ac	0.0000
construction easement - 10' each side outside of ROW	Ac	0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0009	\$ 10,000.00	\$8.72
1.2	Excavation & Compaction	CY	2.1	\$ 20.00	\$42.22
	SUBTOTAL				\$50.95
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	0.9	\$ 80.00	\$68.20
2.2	Aggregate Base, Class 2 (18")	CY	2.1	\$ 60.00	\$126.67
2.3	Miscellaneous Curbs	LF	0.0	\$ 16.00	\$0.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	98.0	\$ 0.50	\$49.00
	SUBTOTAL				\$243.87
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	0.0	\$ 12.00	\$0.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Untilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$0.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 227.33	\$227.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$227.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	5.0	\$ 1.00	\$5.00
5.2	Roadway Striping	LF	5.0	\$ 4.00	\$20.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$25.00
	SUBTOTAL (ITEMS 1-5)				\$547.14
6	MISCELLANEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$54.71	\$54.71
	SUBTOTAL				\$54.71
	SUBTOTAL (ITEMS 1-6)				\$601.86
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$120.37	\$120.37
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$60.19	\$60.19
7.3	Construction Management (10% ITEMS 1-6)		10%	\$60.19	\$60.19
7.4	Program Administration (5% ITEMS 1-6)		5%	\$30.09	\$30.09
	SUBTOTAL				\$270.84
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.00000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$22.96
	GRAND TOTAL (ITEMS 1-8)				\$895.65

TIF Costs

Widen 2L (for 20-25 travel width - no sidewalks) to 4L undiv Art Assumptions

clear/grub - future travel/median 22' + two 8' shoulders	AC	0.0009
excavate/compact - future travel/median 22' + two 8' shoulders	CY	2.11
22' Travel - 20' existing = 2 new travel		
Hot Mix Asphalt Concrete Pavement (6")	TON	0.9
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	2.1
Miscellaneous Curbs x 0	LF	0.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - none	SF	0.0
drainage based on Linne costs	LF	1.0
signs and striping x5 lanes stripes (4 travel, 1 med)	LF	25
Right-of-Way Acquisition (with Existing 40' ROW) - no add'l req (only need 22')	Ac	0.0000

use \$1,100 per LF
Utility & streetlight calculated separately



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0017	\$ 10,000.00	\$17.45
1.2	Excavation & Compaction	CY	4.2	\$ 20.00	\$84.44
	SUBTOTAL				\$101.89
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	1.7	\$ 80.00	\$136.40
2.2	Aggregate Base, Class 2 (18")	CY	3.3	\$ 60.00	\$200.00
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	98.0	\$ 0.50	\$49.00
	SUBTOTAL				\$417.40
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Utilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 303.33	\$303.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$303.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	6.0	\$ 1.00	\$6.00
5.2	Roadway Striping	LF	6.0	\$ 4.00	\$24.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$30.00
	SUBTOTAL (ITEMS 1-5)				\$1,044.62
6	MISCALLENEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$104.46	\$104.46
	SUBTOTAL				\$104.46
	SUBTOTAL (ITEMS 1-6)				\$1,149.08
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$229.82	\$229.82
7.2	Engineering Design and Planing (10% ITEMS 1-6)		10%	\$114.91	\$114.91
7.3	Construction Management (10% ITEMS 1-6)		10%	\$114.91	\$114.91
7.4	Program Administration (5% ITEMS 1-6)		5%	\$57.45	\$57.45
	SUBTOTAL				\$517.09
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$22.96
	GRAND TOTAL (ITEMS 1-8)				\$1,689.13

TIF Costs

use \$1950 per LF

Utility & streetlight calculated separately

Widen 2L to 6L Arterial per LF (existing 60' ROW)

Assumptions

clear/grub - future travel/median 60' + two 8' shoulders	AC	0.0017
excavate/compact - future travel/median 60' + two 8' shoulders	CY	4.22
44' travel - 20' existing = 24 new travel		
Hot Mix Asphalt Concrete Pavement (6")	TON	1.7
Aggregate Base, Class 2 (18")+ two 8' shoulders	CY	3.3
Miscellaneous Curbs x 2 (incl median)	LF	2.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x6 lanes stripes (4 travel lanes and 2 median)	LF	30
Right-of-Way Acquisition (with Existing 60' ROW) - no add'l req (only need 60')	Ac	0.0000
construction easement - 10' each side outside of ROW	Ac	0.0005



ENGINEER'S ESTIMATE

City of Tracy
City of Tracy Citywide Roadway & Transportation Master Plan

PRELIMINARY COST ESTIMATE 20%

Prepared By: NW

PROGRAM COSTS (Inside Travel lanes + median + shoulders; Outside curb lanes, landscape, sidewalk, lighting = developer)

ITEM	DESCRIPTION	UNIT	QUANTITY	UNIT COST	COST
GENERAL					
1	EARTHWORK				
1.1	Clearing & Grubbing	Ac	0.0017	\$ 10,000.00	\$17.45
1.2	Excavation & Compaction	CY	4.2	\$ 20.00	\$84.44
	SUBTOTAL				\$101.89
2	STRUCTURAL SECTION				
2.1	Hot Mix Asphalt Concrete Pavement (6")	TON	1.7	\$ 80.00	\$136.40
2.2	Aggregate Base, Class 2 (18")	CY	3.3	\$ 60.00	\$200.00
2.3	Miscellaneous Curbs	LF	2.0	\$ 16.00	\$32.00
2.4	PCC Sidewalk	SF	0.0	\$ 5.00	\$0.00
2.5	Soil Stabilization - Lime Treatment (12")	SF	98.0	\$ 0.50	\$49.00
	SUBTOTAL				\$417.40
3	SPECIALTY ITEMS				
3.1	Median/Parkway Landscaping/Irrigation	SF	16.0	\$ 12.00	\$192.00
3.2	Utility Coordination - calculated separately	LS	0	\$ 25,000.00	\$0.00
4.5	Untilities- SS, DW, etc. (Budget Allowance)- calculated separately	LS	0	\$ 200,000.00	\$0.00
	SUBTOTAL				\$192.00
4	DRAINAGE				
4.1	Total drainage (18", 48", manholes) based on Linne cost	LF	1.0	\$ 303.33	\$303.33
4.2					\$0.00
4.3					\$0.00
4.4					\$0.00
	SUBTOTAL				\$303.33
5	TRAFFIC ITEMS				
5.1	Roadway Signs	LF	6.0	\$ 1.00	\$6.00
5.2	Roadway Striping	LF	6.0	\$ 4.00	\$24.00
5.3	Traffic Signal & Lighting	LS	0	\$ 250,000.00	\$0.00
5.4	Street Lighting Improvements- calculated separately	EA	0	\$ 5,000.00	\$0.00
	Traffic Signal Modification	LS	0	\$ 50,000.00	\$0.00
	SUBTOTAL				\$30.00
	SUBTOTAL (ITEMS 1-5)				\$1,044.62
6	MISCALLENEOUS				
6.1	Traffic Control System	LS	0	\$ 250,000.00	\$0.00
6.2	Mobilization (10% ITEMS 1-5)	LS	10%	\$104.46	\$104.46
	SUBTOTAL				\$104.46
	SUBTOTAL (ITEMS 1-6)				\$1,149.08
7	FEES				
7.1	Contingencies (20% ITEMS 1-6)		20%	\$229.82	\$229.82
7.2	Engineering Design and Planning (10% ITEMS 1-6)		10%	\$114.91	\$114.91
7.3	Construction Management (10% ITEMS 1-6)		10%	\$114.91	\$114.91
7.4	Program Administration (5% ITEMS 1-6)		5%	\$57.45	\$57.45
	SUBTOTAL				\$517.09
8	RIGHT-OF-WAY				
8.1	Right-of-Way Acquisition	Ac	0.000	\$ 150,000.00	\$0.00
8.2	Construction Easement	Ac	0.0005	\$ 50,000.00	\$22.96
	SUBTOTAL				\$22.96
	GRAND TOTAL (ITEMS 1-8)				\$1,689.13

TIF Costs

Widen 4L to 6L Arterial per LF (existing 100' ROW)

Assumptions

clear/grub - future travel/median 60' + two 8' shoulders	AC	0.0017
excavate/compact - future travel/median 60'+ two 8' shoulders	CY	4.22
70' Curb-Curb - (existing travel lane > future curb so no new pavement)		
Hot Mix Asphalt Concrete Pavement (6")	TON	1.7
Aggregate Base, Class 2 (18")	CY	3.3
Miscellaneous Curbs x 2 (incl median)	LF	2.0
PCC Sidewalk - none	SF	0.0
Median/Parkway Landscaping - median only	SF	16.0
drainage based on Linne costs	LF	1.0
signs and striping x6 lanes stripes (4 travel lanes and 2 median)	LF	30
Right-of-Way Acquisition (with Existing 100' ROW) - no add'l req (only need 60')	Ac	0.0000

use \$1950 per LF
Utility & streetlight calculated separately