

WORKSHOP ITEM SUMMARY SHEET
VILLAGE COUNCIL MEETING
December 5, 2018

Agenda Item:

US-41 Median Landscaping

Description:

Since the last presentation to Council, Village Staff and the project consultant, Kimley Horn have been working closely with FDOT to determine the types of plant material FDOT will allow us to install in the medians.

Many of the existing trees do not meet FDOT's current setback requirements due to the roadway's design speed and lack of Type F curbing along the medians.

Kimley Horn will provide a summary of FDOT's decision at the impacts on the design. Kimley Horn will also provide a summary of the project status, schedule and costs estimate

Financial Impacts:

No financial decisions will be made on this workshop item.

Preliminary costs will be presented. These costs have been included in the FY 2018-2019 budget

Attachments:

1. Presentation



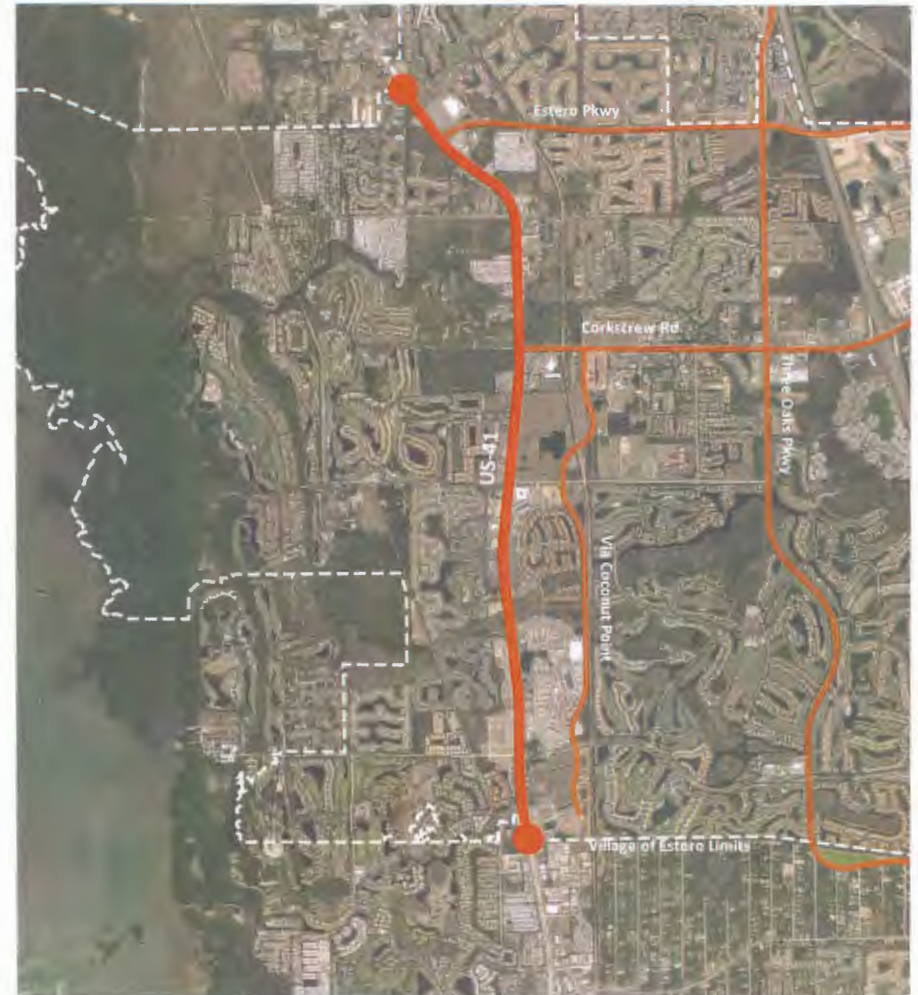
US 41 LANDSCAPE DESIGN

The Village of Estero

CN 2017-02

Agenda

- Recap of Previous Council Presentation
- Progress Update
 - Design Variation
 - Plans Development
- Current Project Status / Schedule





Recap of Previous Council Presentation

Recap of Previous Council Presentation

- Site Observations & Arborist Recommendations
- Project Goals & Design Concept
- FDOT Restrictions and Potential Options



FDOT Criteria

Restrictions / Considerations

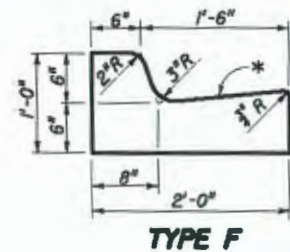
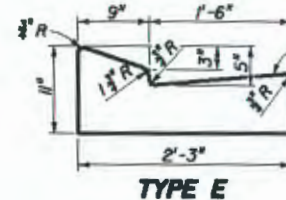
- Posted speed limit: 50 mph
- Type F curb (most of roadway). *Typically on lower speed roadways (45 mph or lower)*
- Type E curb (northern three medians)

What does this mean?



Restrictions / Considerations

- Type E curb
 - Tree setback – 24 ft from travel lane
- Type F curb
 - Where speed limit is below 45 MPH
 - Tree setback – 4 ft from curb
- Existing speed limit 50 mph
 - No trees in median without design variation

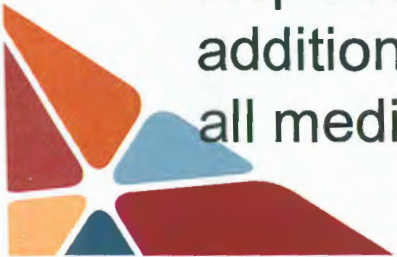


Design Concept

Restrictions / Considerations

Options

- Plant only shrubs, groundcover and small trees (under 4" mature DBH) in the medians
- Apply for FDOT Design Variation to plant trees in median of high speed roadway (50+ mph). *Only applicable for medians with Type F curb*
- Replace Type E curb (+/- 3,725 LF) with Type F curb in addition to option above to allow for trees to be planted in all medians





**Progress Since our
Last Presentation**

Coordination and Plan Development

- Existing landscaping design using old criteria
- 2014/2015 FDOT completed a speed study which raised the speed limit to 50 mph
- 45 MPH vs 50 MPH (Curbed Facility)
 - 45 mph – 4' Lateral Offset (No trees within 4' of face of curb)
 - 50 mph – 24' Clear Zone (No trees within 24' of travel lane)



FDOT Design Variation

- Multiple coordination meetings with FDOT
- Design Variation requested trees 4' off curb
- Design Variation revised per FDOT coordination
- FDOT denied the proposed Design Variation (11/6)
 - Result: No new trees within 24' of Travel Lane (no trees in Median)
 - Existing trees violate current FDOT criteria
 - Field Review (11/27) with FDOT District Landscape Architect
 - FDOT not requiring the removal of existing trees



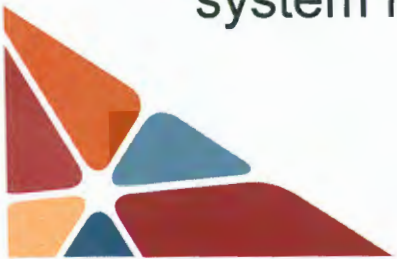
Plans Development

- Continued working on plans through Design Variation.
- Refined plant palette and design concept.
 - Low growing color at median tips
 - Native plants between median tip plantings
 - Larger growing shrub in wider medians
 - Help offset inability to plant new trees



Plans Development






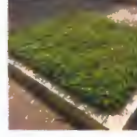
- 60% plans completed:
 - Landscape Removal / Tree Preservation Plans
 - Planting Plans
 - Irrigation Plans
- Majority of existing trees to remain.
- Groundcover, shrubs and ornamental grasses only (No turf or trees).
- New understory plantings will have significant impact on overall aesthetic and help to unify planting within corridor
- Irrigation plans re-use existing mainline and separate irrigation system from existing Lee County system to the north.

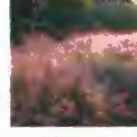


Plans Development

ACCENT PLANT	GROUNDCOVER
	
Agave	Purple Heart
	
Bromeliad	Jasmine
	
Crinum Lily	Juniper

UNDERSTORY TREE / SHRUB	SHRUB	GROUNDCOVER
		
Oleander	Green Island Ficus	Flax Lily
		
Croton	Coontie	Purple Heart
		
Copperleaf	Silver Buttonwood	Dwarf Natal Plum

ACCENT PLANT	GROUNDCOVER
	
Crinum Lily	Horizontal Cocoplum
	
Ti Plant	Flax Lily
	
Bromeliad	Jasmine

SHRUB	GROUNDCOVER
	
Bougainvillea	Juniper
	
Muhly Grass	Dwarf Natal Plum
	
Duranta	Horizontal Cocoplum

GROUP A
PLANTING
MEDIAN END

GROUP B
PLANTING
EXISTING TREE / PALM & SHRUBS

GROUP C
PLANTING
GROUNDCOVER & ACCENT PLANT


GROUP D
PLANTING
EXISTING TREE / PALM & SHRUBS



Exploring Other Opportunities

- Plant trees along the roadside.
 - Very limited opportunities
 - 24' Clear Zone setback.
 - Existing drainage swales, sidewalks, overhead utilities, and underground utilities.
 - Lack of consistent planting areas
 - Limit ability to create continuity or gateway experiences.





Current Project Status / Schedule

Current Status / Project Schedule

- FDOT Currently Reviewing Phase II (60%) Plans
- Schedule works with FDOT schedule and funding

	Activity	Date
✓	Phase II (60%) Plans Submitted	November 13, 2018
	Phase II FDOT Review (30 Days)	December 13, 2018
	Phase III (90%) Plans Submittal	January 22, 2019
	Phase III FDOT Review (30 Days)	February 21, 2019
	Phase IV (100%) Plans Submittal	April 2, 2019
	Phase IV FDOT Review (30 Days)	May 2, 2019
	Final Deliverable to FDOT	May 17, 2019



Current Project Estimate – +699K +/-

ENGINEER'S ESTIMATE FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 1		
PROJECT DESCRIPTION:		LANDSCAPE BEAUTIFICATION WITHIN THE MEDIANS OF US-41 THROUGH THE LIMITS OF THE VILLAGE OF ESTERO FROM APPROXIMATELY 0.5 MILES NORTH OF ESTERO PARKWAY TO APPROXIMATELY 0.5 MILES SOUTH OF COCONUT RD APPROXIMATELY 4.4 MILES TOTAL
FINANCIAL PROJECT ID #:		442085-1-58-01
PAY ITEM SPEC YEAR:		
SUBMITTAL TYPE:		Phase II Estimate
COUNTY:		Lee
DATE:		11/13/2018
ENGINEERING CONSULTANT FIRM:		Kimley-Horn
CONTACT NAME:		James Pankonin
PHONE NUMBER:		(941) 379-7600
PAGE NUMBER:		1 of 2
COMPONENT GROUPS		
100 - STRUCTURES	NOT USED	\$0.00
200 - ROADWAY	NOT USED	\$0.00
300 - SIGNING & PAVEMENT MARKINGS	NOT USED	\$0.00
400 - LIGHTING	NOT USED	\$0.00
500 - SIGNALIZATION	NOT USED	\$0.00
550 - ITS	NOT USED	\$0.00
600 - LANDSCAPE / PERIPHERALS		\$646,134.50
700 - UTILITIES	NOT USED	\$0.00
800 - ARCHITECTURAL	NOT USED	\$0.00
900 - MASS TRANSIT	NOT USED	\$0.00
1000 - INVALID & OTHER ITEMS	NOT USED	\$0.00
COMPONENT SUB-TOTAL		\$646,134.50
(102-1) MOT (Maintenance of Traffic)	4%	\$25,845.38
SUB-TOTAL		\$671,979.88
(101-) MOB (Mobilization)	4%	\$26,879.20
SUB-TOTAL		\$698,859.08
PROJECT GRAND TOTAL		\$698,859.08
NOTES:		

ENGINEER'S ESTIMATE FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 1						
FINANCIAL PROJECT ID #:					442085-1-58-01	
PAGE NUMBER:					2 of 2	
600-Landscape & Peripherals						
PAY ITEM #	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST	
0110 2 2	STUMP GRINDING	EA	42	\$200.00	\$8,400.00	
0110 2 2	SHRUB/UNDERSTORY REMOVAL	SF	172000	\$0.50	\$86,000.00	
0590 1	IRRIGATION COMPLETE	LS	1	\$114,000.00	\$114,000.00	
0580 1 1	LANDSCAPE- SHRUBS, DWARF BOUGAINVILLEA, BOUGAINVILLEA X 'HELEN JOHNSON', 3 GAL	EA	805	\$18.00	\$14,490.00	
0580 1 1	LANDSCAPE- SHRUBS, SILVER BUTTWOOD, CONOCARPUS ERECTUS 'SERICEUS', 3 GAL	EA	79	\$12.00	\$948.00	
0580 1 1	LANDSCAPE- SHRUBS, HORIZONTAL COCOPLUM, CHRYSOBALANUS ICACO 'HORIZONTALIS', 3 GAL	EA	4153	\$24.00	\$99,672.00	
0580 1 1	LANDSCAPE- SHRUBS, EMERALD BLANKET DWARF NATAL PLUM, CARISSA MACROCARPA 'EMERALD BLANKET', 3 GAL	EA	1753	\$12.00	\$21,036.00	
0580 1 1	LANDSCAPE- SHRUBS, GOLD MOUND DURANTA, DURANTA ERECTA 'GOLD MOUND', 3 GAL	EA	737	\$13.00	\$9,581.00	
0580 1 1	LANDSCAPE- SHRUBS, FLAX LILY, DIANELLA TASMANICA 'VARIEGATA', 1 GAL	EA	5447	\$5.50	\$29,958.50	
0580 1 1	LANDSCAPE- GROUNDCOVER, PARSON'S JUNIPER, JUNIPERUS CHINENSIS 'PARSONII', 3 GAL	EA	3630	\$12.00	\$43,560.00	
0580 1 1	LANDSCAPE- SHRUBS, FIREBALL BROMELIAD, NEOREGELIA 'FIREBALL', 1 GAL	EA	1680	\$24.00	\$40,320.00	
0580 1 1	LANDSCAPE- SHRUBS, GREEN ISLAND FIGUS, FIGUS MICROCARPA 'GREEN ISLAND', 3 GAL	EA	1168	\$12.00	\$14,016.00	
0580 1 1	LANDSCAPE- GRASSES, PINK MUHLY, MUHLENBERGIA CAPILLARIS, 1 GAL	EA	1120	\$8.00	\$9,120.00	
0580 1 1	LANDSCAPE- SHRUBS, PETITE PINK OLEANDER, NERIUM OLEANDER 'PETITE PINK', 3 GAL	EA	577	\$15.00	\$8,655.00	
0580 1 1	LANDSCAPE- GRASSES, PURPLE FOUNTAIN GRASS, PENNISETUM SETACEUM 'FURNUM', 1 GAL	EA	708	\$7.50	\$5,310.00	
0580 1 1	LANDSCAPE- GROUNDCOVER, ASIATIC JASMINE, TRACHELOSPERMUM ASIATICUM 'MINIMA', 1 GAL	EA	4128	\$5.00	\$20,640.00	
0580 1 1	LANDSCAPE- GRASSES, DWARF FAKAHATCHEE GRASS, TRIPSACUM FLORIDANA, 1 GAL	EA	569	\$8.00	\$4,552.00	
0580 1 1	LANDSCAPE- GROUNDCOVER, PURPLE QUEEN, TRADESCANTIA PALLIDA, 1 GAL	EA	819	\$6.00	\$4,914.00	
0580 1 1	LANDSCAPE- SHRUBS, COONTIE, ZAMIA PUMILA, 3 GAL	EA	983	\$30.00	\$29,490.00	
0580 1 2	LANDSCAPE- SHRUBS, BLUE AGAVE, AGAVE TEQUILIANA, 25 GAL	EA	20	\$400.00	\$8,000.00	
0580 1 1	LANDSCAPE- SHRUBS, QUEEN CRINUM LILY, CRINUM AUGUSTUM 'QUEEN EMMA', 15 GAL	EA	20	\$120.00	\$2,400.00	
0580 1 2	LANDSCAPE- SHRUBS, PITCH APPLE, CLUSIA ROSEA, 7 GAL	EA	380	\$55.00	\$20,900.00	
0580 1 2	LANDSCAPE- SHRUBS, PETRA CROTON, CODIAEUM VARIEGATUM, 7 GAL	EA	453	\$30.00	\$13,590.00	
0580 1 2	LANDSCAPE- SHRUBS, FIRE BUSH, HAMELIA PATENS, 7 GAL	EA	75	\$45.00	\$3,375.00	
0580 1 2	LANDSCAPE- SHRUBS, CALYPSO OLEANDER, NERIUM OLEANDER 'CALYPSO', 7 GAL	EA	251	\$45.00	\$11,295.00	
0580 1 2	LANDSCAPE- SHRUBS, SILVER SAW PALMETTO, SERENOA REPENS 'CINEREA', 7 GAL	EA	362	\$60.00	\$21,720.00	
600-Landscape & Peripherals					COMPONENT TOTAL	\$646,134.50

Questions?

