TYPICAL SECTION PACKAGE
FOR
State Road 400
I-4 Beyond the Ultimate Project

From West of US 27/SR 25 to West of SR 535 (Kirkman Road) and
from 1 Mile East of SR 434 to ½ Mile East of SR 472
(Polk, Osceola, Orange, Seminole & Volusia Counties)

PD&E Financial Project ID 201210-2-22-01 (District 1)
PD&E Financial Project ID 432100-1-22-01 (District 5)

Design Financial Project ID 201210-3 (Polk County) (Segment 5)
Design Financial Project ID 431456-1 (Osceola County) (Segment 1A)
Design Financial Project ID 242484-8 (Orange County) (Segment 1B)
Design Financial Project ID 242484-7 (Orange County) (Segment 2)
Design Financial Project ID 242592-4 (Seminole County) (Segment 3)
Design Financial Project ID 408464-2 (Volusia County) (Segment 4)

Prepared for:
Florida Department of Transportation,
District 1 & District 5

February 09, 2017

Prepared by:
HNTB Corporation
610 Crescent Executive Ct., Suite 400
Lake Mary, FL 32746
# I-4 Beyond the Ultimate

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PD&E FPID: 201210-2 (Segment 5)  
PD&E FPID: 432100-1 (Segment 1A, 1B, 2, 3 & 4)

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**I-4 Beyond the Ultimate**

Typical Sections Depicting Typical Mainline Cross Slopes

PD&E FPID: 201210-2 (Segment 5)
PD&E FPID: 432100-1 (Segment 1A, 1B, 2, 3 & 4)

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PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  201210-2-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME  POLK

SECTION NO.  16320  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 27.145 - 32.022
PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH RAIL CORRIDOR
6+4 LANES

LENGTH OF 6+4 CONFIGURATION:
EB: 2.65 LANE MILES
WB: 3.42 LANE MILES

NOTE: TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%.
THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME POLK

SECTION NO. 16320  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 27.145 - 32.022

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH RAIL CORRIDOR
8+4 Lanes

LENGTH OF 8+4 CONFIGURATION:
EB: 1.02 LANE MILES
WB: 0.71 LANE MILES

NOTE: TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%.
THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.

FDOT CONCURRENCE

FHWA CONCURRENCE

STATE OF FLORIDA

ROBERT M. DENNEY
Engineer Record SB603

HRTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO. 6500

BERNIE MASIING, P.E.
FDOT District Design Engineer

FHWA TRANSPORTATION ENGINEER

mbacal 2/20/09 5:30:00 PM  D:\KwC\C09\Job\50219 - 14 SAM\TECHPRD\Typical Section Package\YP00001-J-4 TYPICALS.DGN
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME POLK

SECTION NO. 16320 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 27.145 - 32.022

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

LENGTH OF 10+4 CONFIGURATION:
EB: 0.40 LANE MILES
WB: 0.34 LANE MILES

NOTE: TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%.
THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH RAIL CORRIDOR
10+4 LANES

FDOT CONCURRENCE

BERNIE MASING, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

T-3
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME

SECTON NO. 92130, 75280, 77160, 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

- LA R/W LINE
- R/W VARIES (150' MIN)
- R/W VARIES (150' MIN)
- CONCRETE BARRIER (TYP.)
- CROWN POINT

LENGTH OF 6+4 CONFIGURATION:

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<tr>
<th>EB</th>
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<tr>
<td>18.07</td>
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LANES: 6+4

NOTE: TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%

THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.
PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH

LENGTH OF 8+4 CONFIGURATION:
EB: 12.18 LANE MILES
WB: 13.12 LANE MILES

NOTE: TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%.
THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

A.K. Brennan, P.E.
FDOT District Design Engineer

Annette K. Brennan, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

T-5
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01  
**FEDERAL AID PROJECT NO.** N/A  
**COUNTY NAME** 

**SECTION NO.** 92120, 75280, 77160, 79110  
**ROAD DESIGNATION** SR 400 (1-4)  
**LIMITS/MILEPOST**

MP 0.000 - 7.885 (OSCEOLA)  
MP 0.000 - 9.528 (ORANGE)  
MP 4.050 - 14.135 (SEMINOLE)  
MP 0.000 - 10.227 (VOLUSIA)

**PROJECT DESCRIPTION** WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

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**PROPOSED ROADWAY TYPICAL SECTION**

**DESIGN SPEED = 70 MPH**

**LENGTH OF 10+4 CONFIGURATION:**  
**SR 400 (1-4)**  
**10+4 LANES**

**NOTE:** TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%.  
THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.

**APPROVED BY**  
ROBERT M. DENNEY, P.E.  
State of Florida  
PEL 0561120  
2/10/17

**FDOT CONCURRENCE**  
AK BRENNAN  
3/15/17

**FHWA CONCURRENCE**  
FHWA TRANSPORTATION ENGINEER  
11/7/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME
OSCEOLA
ORANGE
SEMINOLE
VOLUSIA

SECTION NO. 92130, 75280, 77160, 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST
MP 0.000 - 7.885 (OSCEOLA)
MP 0.000 - 9.528 (ORANGE)
MP 4.050 - 14.135 (SEMINOLE)
MP 0.000 - 10.227 (VOLUSIA)

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

LENGTH OF 12+4
CONFIGURATION:
EB: 0.46 LANE MILES
WB: 1.44 LANE MILES

NOTE: TYPICAL SECTION CROSS SLOPES APPLY TO 0% TO 3%.
THIS TYPICAL USED TO ONLY REPRESENT CROSS SLOPES AND CROWN POINT.
I-4 Beyond the Ultimate
Orange County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 2)
Design FPID: 242484-7

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2-4  I-4 Typical Section without Rail Corridor (DS = 70 mph)
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Turkey Lake Road
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Universal Boulevard
2-22 I-4 Under Universal Boulevard
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01  **COUNTY (SECTION) ORANGE (75280)**

**PROJECT DESCRIPTION**
WIDENING SR 400 (I-4) FROM WEST OF CR 522 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (SR 400/I-4)**

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<tr>
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<td>( ) MINOR ART.</td>
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**ACCESS CLASSIFICATION**

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<tr>
<td>( ) 2 - RESTRICTIVE w/Service Roads</td>
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<tr>
<td>( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing</td>
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<tr>
<td>( ) 4 - NON-RESTRICTIVE w/2645 ft. Signal Spacing</td>
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<td>( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing</td>
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<td>( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing</td>
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<td>( ) 7 - BOTH MEDIAN TYPES</td>
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**TRAFFIC**

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**DISTRIBUTION**

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**CRITERIA**

| (X) NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) RRR INTERSTATE / FREEWAY |
| ( ) RRR NON-INTERSTATE / FREEWAY |
| ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) TDLC / RRR |
| ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

BORDER WIDTH (VARIATION) - FOR THE BORDER WIDTHS LESS THAN 94-FT (94-FT REQUIRED)
SHOULDER WIDTH (VARIATION) - FOR THE 10-FT MEDIAN GUL SHOULDER (12-FT REQUIRED)
SHOULDER WIDTH (VARIATION) - FOR THE 4-FT MEDIAN EXPRESS LANE SHOULDER (6-FT REQUIRED)

**LIST MAJOR STYLES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

| SR 528 | 750087, 750180 |
| WEST ENTRANCE DRIVE | 754128 |
| SAND LAKE ROAD | 750335, 750336 |
| UNIVERSAL BLVD. | 750485 |

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
# Project Identification

**Financial Project ID:** 432100-1-22-01  
**County (Section):** ORANGE (75280)  
**Project Description:** WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

## Functional Classification

- ( ) RURAL  
- ( ) URBAN  
- (x) FREEWAY/EXPWY. ( ) MAJOR COLL.  
- ( ) PRINCIPAL ART. ( ) MINOR COLL.  
- ( ) MINOR ART. ( ) LOCAL

## Project Controls (SR 400/1-4)

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## Access Classification

- (x) 1 - FREEWAY  
- ( ) 2 - RESTRICTIVE w/Service Roads  
- ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing  
- ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing  
- ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing  
- ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing  
- ( ) 7 - BOTH MEDIAN TYPES

## Traffic

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## Criteria

- (x) NEW CONSTRUCTION / RECONSTRUCTION  
- (x) RR INTERSTATE / FREEWAY  
- (x) RR NON-INTERSTATE / FREEWAY  
- (x) TDLC / NEW CONSTRUCTION / RECONSTRUCTION  
- (x) TDLC / RRR  
- ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

## Design Speed Approvals

- Design Speed: 60 MPH  
- DISTRICT DESIGN ENGINEER: [Signature]  
- DATE: 12/17/17  
- DISTRICT TRAFFIC OPERATIONS ENGINEER: [Signature]  
- DATE: [ ]

## List Any Potential Exceptions and Variations Related to Typical Section Elements:

- BORDER WIDTH (VARIATION) - FOR THE BORDER WIDTHS LESS THAN 94-FT (94-FT REQUIRED)  
- SHOULDER WIDTH (VARIATION) - FOR THE 10-FT MEDIAN GUL SHOULDER (12-FT REQUIRED)  
- SHOULDER WIDTH (VARIATION) - FOR THE 4-FT MEDIAN EXPRESS LANE SHOULDER (6-FT REQUIRED)

## List Major Structures Location/Description - Requiring Independent Structure Design:

- SR 528 WEST ENTRANCE DRIVE (750087, 750180)  
- SAND LAKE ROAD (750335, 750336)  
- UNIVERSAL BLVD. (750485)

## List Major Utilities Within Project Corridor:

- GAS (CENTRAL FLORIDA GAS)  
- WATER (ORANGE COUNTY UTILITIES)  
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)  
- WASTEWATER (ORANGE COUNTY UTILITIES)  
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

## List Other Information Pertinent to Design of Project:

- N/A

 SHEET 2-2A

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PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01   FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280    ROAD DESIGNATION  SR 400 (I-4)   LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH RAIL CORRIDOR STA 1345+48.48 TO 1365+00.00

HNTB CORPORATION
310 CRESCENT EXEC. CT
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 65900

FDOT CONCURRENCE

ANNETTE K. BRENNAK, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITHOUT RAIL CORRIDOR
STA 1365+00.00 TO 1488+80.00

Sheet 2-4

SHEET 2-4

MARIO BIZZIO, P.E. FDOT District Design Engineer Date

FHWA TRANSPORTATION ENGINEER Date

FHWA CONCURRENCE

ROBERT M. DENNEY ENGINEER No. 58593

APPROVED

STATE OF FLORIDA

FORT LAUDERDALE

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FHWA CONCURRENCE
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 9.528
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 60 MPH
SR 400 (1-4) WITHOUT RAIL CORRIDOR
STA 1488+80.00 TO 1550+23.13

FHWA CONCURRENCE Date

FHWA Transportation Engineer Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME  ORANGE

SECTION NO. 75280  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 0.000 - 9.528

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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<tr>
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<tr>
<td>SR 528 WB EXPRESS TO I-4 EB AND WB EXPRESS</td>
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<tr>
<td>I-4 WB GUL TO SAND LAKE RD</td>
<td>50</td>
</tr>
<tr>
<td>I-4 WB GUL TO SAND LAKE RD</td>
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<tr>
<td>SAND LAKE RD TO I-4 EB GUL</td>
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<tr>
<td>SAND LAKE RD TO I-4 WB GUL</td>
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PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

<table>
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<tr>
<th>Ramp</th>
<th>Design Speed</th>
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<tbody>
<tr>
<td>SEGMENT 2</td>
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<tr>
<td>SR 528 WB GUL TO I-4 EB AND WB GUL</td>
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<tr>
<td>SAND LAKE RD TO I-4 EB GUL</td>
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<tr>
<td>SAND LAKE RD TO I-4 WB GUL</td>
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SR 400 (I-4)
THREE LANE RAMP
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME  ORANGE

SECTION NO. 75280  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 0.000 - 9.528

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

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<td>SEGMENT 2</td>
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<tr>
<td>1-4 WB EXPRESS LANE TO SR 528 EB</td>
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<tr>
<td>1-4 EB EXPRESS LANE TO SR 528 EB</td>
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</tbody>
</table>

SR 400 (I-4)
ONE LANE BRIDGE RAMP
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID 201210-2-22-01
(FEDERAL FUNDS)

POLK COUNTY (16320)

STATE ROAD NO. 400 (1-4)
1-4 BEYOND THE ULTIMATE
TYPICAL SECTION PACKAGE

PROJECT LOCATION

END SEGMENT 5
EXIST. SR 400
STA. 604+50.00
MP 31.607 (POLK CO.)

BEGIN PROJECT
BEGIN SEGMENT 5
EXIST. SR 400
STA. 368+58.00
MP 27.145 (POLK CO.)

PROJECT LENGTH IS BASED ON Q. OF CONSTRUCTION

<table>
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<tr>
<th>LENGTH OF PROJECT</th>
<th>LINEAR FEET</th>
<th>MILES</th>
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<tr>
<td>BRIDGES</td>
<td>0.000</td>
<td>0.000</td>
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<tr>
<td>NET LENGTH OF PROJECT</td>
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<td>4.468</td>
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<td>EXCEPTIONS</td>
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<tr>
<td>GROSS LENGTH OF PROJECT</td>
<td>23591.04</td>
<td>4.468</td>
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</table>

FDOT PROJECT MANAGER: BEATA STYS-PALASZ, PE

SHEET 5-1
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01
COUNTY (SECTION) POLK (16320)

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF US 27/SR 25 TO WEST OF CR 532

PROJECT CONTROLS (SR 400/I-4)

FUNCTIONAL CLASSIFICATION

( ) RURAL
(X) URBAN

( ) FREeway/EXPWY. ( ) MAJOR COLL.
(X) PRINCIPAL ART. ( ) MINOR COLL.
( ) MINOR ART. ( ) LOCAL

HIGHWAY SYSTEM

Yes No
(X) ( ) NATIONAL HIGHWAY SYSTEM
( ) (X) FLORIDA INTRASTATE HIGHWAY SYSTEM
(X) ( ) STRATEGIC INTERMODAL SYSTEM
(X) ( ) STATE HIGHWAY SYSTEM
( ) (X) OFF STATE HIGHWAY SYSTEM

ACCESS CLASSIFICATION

(X) 1 - FREEWAY
( ) 2 - RESTRICTIVE w/Service Roads
( ) 3 - RESTRICTIVE w/560 ft. Connection Spacing
( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing
( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
( ) 7 - BOTH MEDIAN TYPES

TRAFFIC

YEAR AADT
OPENING 2020 140,000
INTERIM 2030 170,000
DESIGN 2040 190,000

DISTRIBUTION

DESIGN SPEED 70 MPH
POSTED SPEED 70 MPH

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

BORDER WIDTH (VARIATION) - FOR THE BORDER WIDTHS LESS THAN 94-FT (94-FT REQUIRED)

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

US 27/SR 25 (160320)
GRANDVIEW PARKWAY (924179) (BY OTHERS)
CR 54 (160331, 160332)

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

GAS (CENTRAL FLORIDA GAS)
WATER (POLK COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (POLK COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

THE PROJECT IS BEING DESIGNED UNDER CONTRACT WITH DISTRICT 5

SHEET 5-2
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME POLK

SECTION NO. 16320  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 27.145 - 32.022

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

SR 400 (I-4) WITH RAIL CORRIDOR
STA 368+58.00 TO STA 627+20.00

SHEET 5-3

FDOT CONCURRENCE

BERNIE MAYSING, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME POLK

SECTION NO. 16320 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 27.145 - 32.022
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

SR 400 (I-4) UNDER US 27/SR 25

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER.
*** SINGLE PIER OR DOUBLE PIER CONFIGURATION MAY BE USED.
**** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

ROBERT M. DENNEY
LICENSE No. 58593
STATE OF FLORIDA

HNTB CORPORATION
610 CRESCENT EXEC. CT, SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE
BERNIE MASING, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

Date

8/18/17

FHWA Transportation Engineer

Date

4/17/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME POLK

SECTION NO. 16320 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 27.145 - 32.022
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

EXISTING BRIDGE STRUCTURE

SR 400 (1-4) UNDER CR 54

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

ADD 8-18-17

SHEET 5-13
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 201210-2-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME POLK

SECTION NO. 16320 ROAD DESIGNATION SR 400 (I-4)
LIMITS/MILEPOST MP 27.145 - 32.022
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF SR 25/US 27 TO WEST OF CR 532

PROPOSED ROADWAY TYPICAL SECTION

PROPOSED BRIDGE STRUCTURE

****3'-6" MAX PIER WIDTH

23'-6" MIN. VERTICAL CLEARANCE*

107'-3"

12'

2'-0"

12'

12'

12'

10'

22'

10'

12'

22'

CONCRETE BARRIER (TYP.)

133'-5"

12'

2'-0"

12'

12'

12'

12'

3'-6" MAX PIER WIDTH

3'-6" MAX PIER WIDTH ****

SR 400 (I-4) UNDER GRANDVIEW PARKWAY

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER.
*** SINGLE PIER OR DOUBLE PIER CONFIGURATION MAY BE USED.
**** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

FHWA CONCURRENCE

8-18-17

8-18-17

FHWA Transportation Engineer

Date

Date

FDOT CONCURRENCE

BERTIE MAYSING, P.E.
FDOT District Design Engineer
I-4 Beyond the Ultimate
Orange County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 1B)
Design FPID: 242484-8

I-4 Mainline
1B-1  Key Sheet
1B-2  I-4 Project Controls
1B-3  I-4 Typical Section with Rail Corridor (Orange County)
1B-4  I-4 Typical Section Bridge Viaduct Between SR 536 and SR 535 (Orange County)
1B-5  I-4 Typical Section Bridge Viaduct Between SR 535 and Daryl Carter Parkway (Orange County)
1B-6  I-4 Bridge Over SR 535 (Replace)
1B-7  I-4 Bridge Over Central Florida Parkway (Replace)

Ramps
1B-8  One Lane Ramp
1B-9  Two Lane Ramp
1B-10 Three Lane Ramp
1B-11 One Lane Bridge Ramp
1B-12 Two Lane Bridge Ramp
1B-13 Three Lane Bridge Ramp

SR 536
1B-14 SR 536 Project Controls
1B-15 SR 536 Bridge Section (Replace)
1B-16 I-4 Under SR 536 Eastbound Ramp
1B-17 I-4 Under SR 536 Mainline

SR 535
1B-18 SR 535/Apopka Vineland Rd. Project Controls
1B-19 Hotel Plaza Blvd. Project Controls
1B-20 Vineland Ave. Project Controls
1B-21 Palm Parkway Project Controls
1B-22 Winter Garden Vineland Rd. Project Controls
1B-23 Grand Cypress Boulevard Project Controls
1B-24 SR 535 Roadway Section Under I-4
1B-25 SR 535 Roadway Section with Elevated SB
1B-26 Apopka Vineland Rd. Roadway Section with Elevated NB
1B-27 Apopka Vineland Rd. NB Bridge Section Over Hotel Plaza
1B-28 SR 535 SB Bridge Section Over Vineland Avenue
1B-29 Hotel Plaza Loop Ramp Under Apopka Vineland Rd. NB
1B-30 SR 400 (I-4) EB Off Ramp Under SR 535 SB
I-4 Beyond the Ultimate
Orange County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 1B)
Design FPID: 242484-8

<table>
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<tr>
<th>1B-31</th>
<th>Hotel Plaza Boulevard – Elevated Left Turns</th>
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<tbody>
<tr>
<td>1B-32</td>
<td>Vineland Avenue Roadway Section</td>
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<tr>
<td>1B-33</td>
<td>Hotel Plaza Boulevard Left Turn Flyover Over Apopka Vineland Rd. SB</td>
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<tr>
<td>1B-34</td>
<td>Vineland Avenue Left Turn Flyover Over SR 535 NB</td>
</tr>
<tr>
<td>1B-35</td>
<td>Apopka Vineland Rd. SB Roadway Section Under Hotel Plaza Boulevard Bridge</td>
</tr>
<tr>
<td>1B-36</td>
<td>SR 535 NB Roadway Section Under Vineland Avenue Bridge</td>
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<tr>
<td>1B-37</td>
<td>Palm Parkway Roadway Section</td>
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<tr>
<td>1B-38</td>
<td>Winter Garden Vineland Rd. Roadway Section</td>
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<td>1B-39</td>
<td>Grand Cypress Parkway Roadway Section</td>
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<td>1B-40</td>
<td>Vinings Way Boulevard Roadway Section</td>
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<tr>
<td>1B-41</td>
<td>Apopka Vineland Rd./CR 435 Roadway Section</td>
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**Daryl Carter Parkway**

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<thead>
<tr>
<th>1B-42</th>
<th>Daryl Carter Parkway Project Controls</th>
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<tbody>
<tr>
<td>1B-43</td>
<td>I-4 Under Daryl Carter Parkway</td>
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<td>1B-44</td>
<td>Daryl Carter Parkway Bridge Section</td>
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**Central Florida Parkway**

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<th>1B-45</th>
<th>Central Florida Parkway Project Controls</th>
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<td>1B-46</td>
<td>I-4 Under Westbound Central Florida Parkway Ramp</td>
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<td>1B-47</td>
<td>Central Florida Parkway Under I-4</td>
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**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01  **COUNTY (SECTION)** ORANGE (75280)

**PROJECT DESCRIPTION** WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

### PROJECT CONTROLS (SR 400/1-4)

<table>
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<tr>
<th>FUNCTIONAL CLASSIFICATION</th>
<th>HIGHWAY SYSTEM</th>
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<tbody>
<tr>
<td>( ) RURAL</td>
<td>Yes No</td>
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<tr>
<td>( ) URBAN</td>
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<td>(X) FREEWAY/EXPWY</td>
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<td>( ) MAJOR COLL.</td>
<td>(X) FLORIDA INTRASTATE HIGHWAY SYSTEM</td>
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<td>( ) PRINCIPAL ART.</td>
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<td>( ) MINOR COLL.</td>
<td>(X) STATE HIGHWAY SYSTEM</td>
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<td>( ) LOCAL</td>
<td>(X) OFF STATE HIGHWAY SYSTEM</td>
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### ACCESS CLASSIFICATION

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### CRITERIA

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<th>DISTRIBUTION</th>
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<tbody>
<tr>
<td>DESIGN SPEED</td>
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### DESIGN SPEED APPROVALS

- **DISTRICT DESIGN ENGINEER**
  
  **DATE**: 3/17/17

- **DISTRICT TRAFFIC OPERATIONS ENGINEER**
  
  **DATE**: 9/10/17

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

- BORDER WIDTH (VARIATION) - FOR THE BORDER WIDTHS LESS THAN 94-FT (94-FT REQUIRED)
- SHOULDER WIDTH (VARIATION) - FOR THE 10-FT MEDIAN GUL SHOULDER (12-FT REQUIRED)
- SHOULDER WIDTH (VARIATION) - FOR THE 4-FT MEDIAN EXPRESS LANE SHOULDER (6-FT REQUIRED)

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

- SR 536 (750324, 750323, 750322)
- SR 535 (750367, 750368)
- DARYL CARTER PARKWAY (754112)
- CENTRAL FLORIDA PARKWAY (750142, 750200, 750402)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

- N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH RAIL CORRIDOR
STA 1042+95.00 TO STA 1121+50.00
STA 1288+00.00 TO STA 1345+48.48

SHEET 1B-3

APPROVED BY

FDOT CONCURRENCE

FHWA CONCURRENCE

ROBERT R. DOLL, P.E.
FDOT District Design Engineer

ANNETTE K. BRENNAN, P.E.
FHWA Transportation Engineer

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 0.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE VIADUCT BETWEEN SR 536 AND SR 535
STA 1121+50 TO STA 1168+50

FHWA CONCURRENCE

FHWA Transportation Engineer  Date

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.  Date

HNTB CORPORATION 610 CRESCENT EXEC. CT SUITE 400 LAKE MARY, FL 32746 (407) 865-0355 CERT OF AUTH NO 6500
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 0.000 - 9.528

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND

FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH

SR 400 (I-4) BRIDGE VIADUCT BETWEEN SR 535 AND DARYL CARTER PARKWAY

STA 1168+50 TO STA 1288+00

FDOT CONCURRENCE

AK Brennan  3/17/17

FHWA CONCURRENCE

FHWA Transportation Engineer  1/17/18
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01   FEDERAL AID PROJECT NO.  N/A   COUNTY NAME  ORANGE

SECTION NO. 75280       ROAD DESIGNATION  SR 400 (I-4)   LIMITS/MILEPOST  MP 0.000 - 9.528

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE OVER SR 535

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE HAVasu CITY, AZ 86401
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE
ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE
FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH

SR 400 (I-4) BRIDGE OVER CENTRAL FLORIDA PKWY

* 25-FT REQUIRED FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER (HIGH SPEED RAIL ELEVATED IN THIS AREA).
** 10-FT WIDE SHOULDER USED IN LIEU OF 4-FT SHOULDER TO MEET STOPPING SIGHT DISTANCE.

Sheet 1B-7

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
# PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01
FEDERAL AID PROJECT NO: N/A
COUNTY NAME: ORANGE

SECTION NO: 75280
ROAD DESIGNATION: SR 400 (1-4)
LIMITS/MILEPOST: MP 0.000 - 9.528

PROJECT DESCRIPTION: WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

<table>
<thead>
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<th>Ramp</th>
<th>Design Speed</th>
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<th>Ramp</th>
<th>Design Speed</th>
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</thead>
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<td>SEGMENT 1B</td>
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<tr>
<td>WORLD DR EB TO I-4 GUL WB</td>
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<td>I-4 EB TO SR 536 WB</td>
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<td>I-4 WB GUL TO SR 535 SB</td>
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<td>I-4 EB TO WORLD DR EB</td>
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<td>SR 536 WB TO I-4 WB CD ROAD</td>
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<td>I-4 WB CD RAMP TO SR 535 NB</td>
<td>50</td>
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<tr>
<td>I-4 WB RAMP TO WORLD DR EB</td>
<td>30</td>
<td>I-4 WB EXPRESS LANES RAMP TO I-4 WB CD ROAD</td>
<td>50</td>
<td>I-4 WB CD RAMP TO SR 535 SB</td>
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<tr>
<td>I-4 EB GUL TO WORLD DR WB</td>
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<td>DARYL CARTER PKWY RAMP TO I-4 WB</td>
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<td>I-4 EB RAMP TO DARYL CARTER PKWY</td>
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<td>SR 417 SB TO I-4 EXPRESS LANES WB</td>
<td>30</td>
<td>SR 535 NB TO HOTEL PLAZA BLVD</td>
<td>30</td>
<td>CENTRAL FL PKWY EB TO 1-4 WB</td>
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<tr>
<td>I-4 EB RAMP TO SR 530 WB</td>
<td>30</td>
<td>I-4 EB GUL TO SR 535 SB</td>
<td>30</td>
<td>CENTRAL FL PKWY EB TO 1-4 WB</td>
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<td>I-4 EB GUL TO SR 535 NB</td>
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<tr>
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<tr>
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## PROPOSED ROADWAY TYPICAL SECTION

[Diagram of proposed roadway typical section]

**FDOT CONCURRENCE**

<table>
<thead>
<tr>
<th>O. K. Brennan</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/17/17</td>
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**FHWA CONCURRENCE**

<table>
<thead>
<tr>
<th>FHWA Transportation Engineer</th>
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<td>1/17/18</td>
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# Project Identification

**Financial Project ID**: 432100-1-22-01  
**Federal Aid Project No.**: N/A  
**County Name**: Orange  

**Section No.**: 75280  
**Road Designation**: SR 400 (I-4)  
**Limits/Milepost**: MP 0.000 - 9.528  

**Project Description**: Widening SR 400 (I-4) from West of CR 532 to West of SR 435 Kirkman Road and from 1 mile East of SR 434 to 1/2 mile East of SR 472.

<table>
<thead>
<tr>
<th>Ramp Description</th>
<th>Design Speed</th>
<th>Ramp Description</th>
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<tr>
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<td>I-4 WB Ramp to Daryl Carter Pkwy</td>
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<td>I-4 WB GUL to SR 530</td>
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<td>I-4 EB GUL to Central FL Pkwy</td>
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<td>SR 536 to SR 535</td>
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<td>SR 536 to I-4 EB GUL</td>
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<td>I-4 WB GUL to SR 535 NB</td>
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## Proposed Roadway Typical Section

**SR 400 (I-4)**  
**Two Lane Ramp**

---

**Approved By**:  
**HNTB Corporation**:  
**610 Crescent Exec. Ct., Suite 400, Lake Mary, FL 32746**  
**Annette K. Brennan, P.E.**, FDOT District Design Engineer  
**Date**: 3/17/17

**FDOT Concurrence**  
**Date**: 3/17/17

**FHWA Concurrence**  
**FHWA Transportation Engineer**:  
**Date**: 1/17/18
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  ORANGE

SECTION NO. 75280  ROAD DESIGNATION  SR 400 (1-4)  LIMITS/MILEPOST  MP 0.000 - 9.528
PROJECT DESCRIPTION  WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

SR 400 (1-4)
THREE LANE RAMP
PROJECT IDENTIFICATION

SECTION NO. 75280      ROAD DESIGNATION   SR 400 (I-4)        LIMITS/MILEPOST MP 0.000 - 9.528
PROJECT DESCRIPTION   WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

SR 400 (I-4)
ONE LANE BRIDGE RAMP

FDOT CONCURRENCE

FHWA CONCURRENCE

3/17/17

4/17/18

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA Transportation Engineer

ROBERT M. DENNEY, P.E.

3/19/17

2:38:45 PM

\LXW\60\smwork3\Jobs\59219 - 14 SAMR\TECHPROD\Typical Section Package\Typ001-Ramps.dgn
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

Ramp Design Speed
SEGMENT 1B
SR 417 TO I-4 WB 50
I-4 EB TO SR 536/SR 535 50
SR 536 TO I-4 EB EXPRESS LANES 50
SR 536 TO I-4 EB GUL 50
DARYL CARTER PKWY RAMP TO I-4 EB 50
HOTEL PLAZA BLVD TO SR 535 NB 30
I-4 WB TO CENTRAL FL PKWY 50

PROPOSED STRUCTURE TYPICAL SECTION

SR 400 (I-4)
TWO LANE BRIDGE RAMP

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH N0 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

Date

11/17/18
**PROJECT IDENTIFICATION**

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<td>ORANGE (75280)</td>
<td>WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.</td>
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**FUNCTIONAL CLASSIFICATION**

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**ACCESS CLASSIFICATION**

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<td>NON-RESTRICTIVE w/2640 ft. Signal Spacing</td>
<td>RESTRICTIVE w/440 ft. Connection Spacing</td>
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**TRAFFIC**

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<td>MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)</td>
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**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

SR 536 (750324, 750323, 750322)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A

**SHEET 1B-14**
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

R/W LINE

58'-8"
1'-4"
10'
12'
12'
12'
10'
1'-4"

SHLDR
0.02 0.02 0.02 0.02

SHLDR
0.02 0.02 0.02 0.02

CONCRETE BARRIER (TYP.)

R/W LINE

DESIGN SPEED = 60 MPH
SR 536 BRIDGE SECTION

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

3/17/17

1/17/18
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER SR 536 EASTBOUND RAMP

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44" REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

FOOT CONCURRENCE  FHWA CONCURRENCE

AK Brennan 3/11/17  Scalzi 10/18
ANNETTE K. BRENNAN, P.E.  FDOT District Design Engineer
FHWA Transportation Engineer

HNTB CORPORATION  610 CRESCENT EXEC. CT.  LAKE MARY, FL 32746  (407) 805-0355  CERT OF AUTH NO 6500

ROBERT M. DENNEY, P.E.  Date
Engineer of Record 1998

STATE OF FL
LICENSE No 5688
APPROVED:

\LKM\engineer\Jobs\59219 - 14 SANRI\TECHPROD\Typical Section Package\TYPOR001-SEG-1.DGN
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

PROPOSED BRIDGE STRUCTURE

Q CONST.

23'-6" MIN. VERTICAL CLEARANCE*

CONCRETE BARRIER (TYP.)

SINGLE FACED GUARDRAIL (TYP.)

*** 3'-6" MAX PIER WIDTH

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER SR 536 MAINLINE

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

SHEET 1B-17

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT., SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

AK Brennan  3/17/17
ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer  4/17/17
**PROJECT IDENTIFICATION**

- **FINANCIAL PROJECT ID**: 432100-1-22-01
- **COUNTY (SECTION)**: ORANGE (75280)
- **PROJECT DESCRIPTION**: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (SR 535/APOPKA VINELAND ROAD)**

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<th>HIGHWAY SYSTEM</th>
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<td>( ) MAJOR COLL.</td>
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<td>( ) PRINCIPAL ART.</td>
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**ACCESS CLASSIFICATION**

- ( ) 1 - FREEWAY
- ( ) 2 - RESTRICTIVE w/Service Roads
- (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing
- (X) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing
- (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing
- (X) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing
- ( ) 7 - BOTH MEDIAN TYPES

**TRAFFIC**

- OPENING: 2020, 79,000
- INTERIM: 2030, 85,283
- DESIGN: 2040, 96,000

**CRITERIA**

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RRR INTERSTATE / FREEWAY
- ( ) RRR NON-INTERSTATE / FREEWAY
- ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION
- ( ) TDLC / RRR
- ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

**DISTRIBUTION**

- DESIGN SPEED: 45 MPH
- POSTED SPEED: 40 MPH
- DISTRIBUTION: K 7.4, T 24 5.0%

**DESIGN SPEED APPROVALS**

- **DISTRICT DESIGN ENGINEER**: 3/17/17
- **DISTRICT TRAFFIC OPERATIONS ENGINEER**: 4/10/17

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

SR 535 (750367, 750368)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
### Project Identification

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<td>WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.</td>
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</table>

### Project Controls (Hotel Plaza Boulevard)

#### Functional Classification

|  | RURAL | URBAN |
|  | FREEWAY/EXPWY | MAJOR COLL |
|  | PRINCIPAL ART | MINOR COLL |
|  | MINOR ART | LOCAL |

#### Highway System

|  | Yes | No |
|  | NATIONAL HIGHWAY SYSTEM | |
|  | FLORIDA INTRASTATE HIGHWAY SYSTEM | |
|  | STRATEGIC INTERMODAL SYSTEM | |
|  | STATE HIGHWAY SYSTEM | |
|  | OFF STATE HIGHWAY SYSTEM | |

### Access Classification

|  | 1 - FREEWAY |
|  | 2 - RESTRICTIVE w/Service Roads |
|  | 3 - RESTRICTIVE w/660 ft. Connection Spacing |
|  | 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing |
|  | 5 - RESTRICTIVE w/440 ft. Connection Spacing |
|  | 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing |
|  | 7 - BOTH MEDIAN TYPES |

### Traffic

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#### Design Speed Approvals

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### Criteria

|  | NEW CONSTRUCTION / RECONSTRUCTION |
|  | RRR INTERSTATE / FREEWAY |
|  | RRR NON-INTERSTATE / FREEWAY |
|  | TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
|  | TDLC / RRR |
|  | MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

### List Any Potential Exceptions and Variations Related to Typical Section Elements:

N/A

### List Major Structures Location/Description - Requiring Independent Structure Design:

HOTEL PLAZA BOULEVARD (PROPOSED)

### List Major Utilities Within Project Corridor:

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

### List Other Information Pertinent to Design of Project:

N/A
**PROJECT IDENTIFICATION**

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<th>FINANCIAL PROJECT ID</th>
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<td>COUNTY (SECTION)</td>
<td>ORANGE (75280)</td>
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<tr>
<td>PROJECT DESCRIPTION</td>
<td>WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.</td>
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**PROJECT CONTROLS (VINELAND AVENUE)**

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<tr>
<th>FUNCTIONAL CLASSIFICATION</th>
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<tbody>
<tr>
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<tr>
<td>(X) URBAN</td>
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<td>( ) FREEWAY/EXPWY.</td>
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<td>( ) MAJOR COLL.</td>
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<td>( ) PRINCIPAL ART.</td>
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<td>( ) MINOR COLL.</td>
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<td>(X) MINOR ART.</td>
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**ACCESS CLASSIFICATION**

<table>
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<td>( ) 2 - RESTRICTIVE w/Service Roads</td>
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<td>( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing</td>
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<tr>
<td>( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing</td>
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<td>( ) 7 - BOTH MEDIAN TYPES</td>
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</table>

**CRITERIA**

| (X) NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) RRR INTERSTATE / FREEWAY |
| ( ) RRR NON-INTERSTATE / FREEWAY |
| ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) TDLC / RRR |
| ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

**TRAFFIC**

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**DESIGN SPEED APPROVALS**

- **DISTRICT DESIGN ENGINEER**
  - Signature: AK Brennan
  - Date: 3/17/17

- **DISTRICT TRAFFIC OPERATIONS ENGINEER**
  - Signature: [Signature]
  - Date: 4/10/17

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

VINELAND AVENUE (PROPOSED)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTMOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01  
**COUNTY (SECTION)** ORANGE (75280)  
**PROJECT DESCRIPTION** WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**FUNCTIONAL CLASSIFICATION**

| ( ) RURAL | ( ) URBAN |
| ( ) FREEWAY/EXPWY. | ( ) MAJOR COLL. |
| ( ) PRINCIPAL ART. | ( ) MINOR COLL. |
| (X) MINOR ART. | ( ) LOCAL |

**HIGHWAY SYSTEM**

| Yes | No |
| ( ) | (X) NATIONAL HIGHWAY SYSTEM |
| ( ) | (X) FLORIDA INTRASTATE HIGHWAY SYSTEM |
| ( ) | (X) STRATEGIC INTERMODAL SYSTEM |
| ( ) | (X) STATE HIGHWAY SYSTEM |
| (X) | ( ) OFF STATE HIGHWAY SYSTEM |

**ACCESS CLASSIFICATION**

| ( ) 1 - FREEWAY |
| ( ) 2 - RESTRICTIVE w/Service Roads |
| ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing |
| ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing |
| (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing |
| ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing |
| ( ) 7 - BOTH MEDIAN TYPES |

**TRAFFIC**

| YEAR | AAADT |
| OPENING | 2020 | 32,000 |
| INTERIM | 2030 | 42,000 |
| DESIGN | 2040 | 52,000 |

**CRITERIA**

| (X) NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) RRR INTERSTATE / FREEWAY |
| ( ) RRR NON-INTERSTATE / FREEWAY |
| ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) TDLC / RRR |
| ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

N/A

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (ORANGE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (ORANGE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A

**SHEET 1B-21**
### Project Identification

**Financial Project ID:** 432100-1-22-01  
**County (Section):** ORANGE (75280)  
**Project Description:** WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

### Project Controls (Winter Garden Vineland Road)

#### Functional Classification

<table>
<thead>
<tr>
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<tr>
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#### Highway System

Yes | No
--- | ---
National Highway System |   |
Florida Intrastate Highway System |   |
Strategic Intermodal System |   |
State Highway System |   |
Off State Highway System |   |

### Access Classification

<table>
<thead>
<tr>
<th></th>
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<th>2 - Restrictive w/Service Roads</th>
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<th>7 - Both Median Types</th>
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### Traffic

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### Design Speed Approvals

- **District Design Engineer:** [Signature]  
  **Date:** 3/17/17
- **District Traffic Operations Engineer:** [Signature]  
  **Date:** 4/10/17

### List Any Potential Exceptions and Variations Related to Typical Section Elements:

N/A

### List Major Structures Location/Description - Requiring Independent Structure Design:

N/A

### List Major Utilities Within Project Corridor:

- Gas (Central Florida Gas)
- Water (Orange County Utilities)
- Communications (BrightHouse Networks, Comcast, Level 3, Verizon)
- Wastewater (Orange County Utilities)
- Electric (Duke Energy Distribution, Duke Energy Transmission)

### List Other Information Pertinent to Design of Project:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01
COUNTY (SECTION) ORANGE (75280)
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROJECT CONTROLS (GRAND CYPRESS BOULEVARD)

<table>
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<tr>
<th>FUNCTIONAL CLASSIFICATION</th>
<th>Yes</th>
<th>No</th>
<th>HIGHWAY SYSTEM</th>
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<td>(X) OFF STATE HIGHWAY SYSTEM</td>
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LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

N/A

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:
GAS (CENTRAL FLORIDA GAS)
WATER (ORANGE COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (ORANGE COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 9.528
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
SR 535 ROADWAY SECTION UNDER SR 400 (I-4)

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 1B-24
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

DESIGN SPEED = 45 MPH
SR 535 ROADWAY SECTION WITH ELEVATED SB

HNTB CORPORATION
610 CRESCENT EXEC CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE
ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE
FHWA Transportation Engineer

Sheet 18-25

3/17/17
1/17/18
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 45 MPH

APOPKA VINELAND ROAD NB BRIDGE SECTION OVER HOTEL PLAZA

Sheet 1B-27

[Signatures and dates for approval]
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 92130 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 45 MPH
SR 535 SB BRIDGE SECTION OVER VINELAND AVENUE

SHEET 1B-28
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
HOTEL PLAZA LOOP RAMP UNDER APOPKA VINELAND ROAD NB
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

PROPOSED BRIDGE STRUCTURE

16'-6" MIN. VERTICAL CLEARANCE

16 MIN. Q CONST. 12' BORDER 5' 5.5 12' LAYER 12' GORE 12' LAYER 5' 5.5 12' LAYER

CURB & GUTTER TYPE F VARES 0.03 0.02 0.02 0.02 0.02 VARES

CURB & GUTTER TYPE F

DESIGN SPEED = 45 MPH
SR 400 (1-4) EB OFF RAMP UNDER SR 535 SB

SHEET 1B-30

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

DATE

ROBERT M. DENNEY, P.E.
Engineer of Record 58593
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 35 MPH
HOTEL PLAZA BOULEVARD - ELEVATED LEFT TURNS

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 18-31
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  ORANGE

SECTION NO.  75280  ROAD DESIGNATION  SR 400 (1-4)  LIMITS/MILEPOST  MP 0.000 - 9.528
PROJECT DESCRIPTION  WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
                     FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 35 MPH
VINELAND AVENUE ROADWAY SECTION

SHEET 1B-32

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA Transportation Engineer

COUNTY ENGINEER

Date

Date

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 35 MPH
HOTEL PLAZA BOULEVARD LEFT TURN
FLYOVER OVER APOPKA VINELAND ROAD SB

FHWA CONCURRENCE
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 422100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 92130 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 7.885
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 35 MPH
VINELAND AVENUE LEFT TURN FLYOVER OVER SR 535 NB

CONCRETE BARRIER (TYP.)
PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH

PROPOSED BRIDGE STRUCTURE

CURB & GUTTER TYPE E

CURB & GUTTER TYPE F

BIKE LANE

16-0' MIN. VERTICAL CLEARANCE

16 MIN. G. CONST. BRIDGE VARIOUS

VARIARS

11' 11' 11' 11'

ROADWAY 24' 24' 24' 24'

WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 412.

DATE 1/2/18

COUNTY CONCURRENCE

FHWA CONCURRENCE

DESIGNER

DATE 1/2/18

SHEET 1B-35
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
SR 535 NB ROADWAY UNDER VINELAND AVENUE BRIDGE

SHEET 1B-36

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.   N/A  COUNTY NAME  ORANGE

SECTION NO.  75280  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 0.000 - 9.528

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

R/W LINE

R/W LINE

Q. CONST.

R/W VARIES (79' MIN.)

R/W VARIES (56' MIN.)

10' BORDER

10' BORDER

2'

2'

S/M

S/M

CURB & GUTTER

CURB & GUTTER TYPE F

CURB & GUTTER

CURB & GUTTER TYPE E

CURB & GUTTER

CURB & GUTTER TYPE E

CURB & GUTTER

CURB & GUTTER TYPE F

DESIGN SPEED = 30 MPH
PALM PARKWAY ROADWAY SECTION

HNTB CORPORATION
610 CRESCENT EXEC CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

EDOT CONCURRENCE

MARIO BIZZIO, P.E.
EDOT District
Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

COUNTY ENGINEER

11/14/17  Date

11/14/17  Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

R/W LINE  Q. CONST.  R/W LINE

R/W VARIES (60 MIN.)  12'  36'

R/W VARIES (80 MIN.)

12'  12'  12'  12'  12'  12'  12'  12'  12'  3 5

5"M  5 2

CURB & GUTTER TYPE F  CURB & GUTTER TYPE E  CURB & GUTTER TYPE E

EXISTING SIDEWALK  CURB & GUTTER TYPE F

DESIGN SPEED = 35 MPH

WINTER GARDEN VINELAND ROAD ROADWAY SECTION

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0155
CERT OF AUTH NO 6500

FDOT CONCURRENCE

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

County Engineer

SHEET 1B-38
PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 35 MPH

WINTER GARDEN VINELAND ROAD ROADWAY SECTION
(WEST OF GRAND CYPRESS BOULEVARD)
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME ORANGE

SECTION NO. 75280 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 9.528
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 30 MPH
GRAND CYPRESS BOULEVARD ROADWAY SECTION

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 30 MPH
VININGS WAY BOULEVARD ROADWAY SECTION
(EAST OF APOPKA VINELAND ROAD/CR 435)

FHWA CONCURRENCE
Date

COUNTY CONCURRENCE
Date

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 30 MPH
VININGS WAY BOULEVARD ROADWAY SECTION
(WEST OF APOPKA VINELAND ROAD/CR 435)

SHEET 1B-40A

STATE OF FLORIDA

HITA CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0255
CERT. OF AUTH NO 6500

FOOT-CONCURRENCE

MARIO BIZZIO, P.E.
FDOT District Design Engineer
1/2/17

FHWA CONCURRENCE

FHWA Transportation Engineer
1/2/17

COUNTY CONCURRENCE

COUNTY ENGINEER

(1-14-7)

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
APOPKA VINELAND ROAD/CR 435 ROADWAY SECTION

FHWA CONCURRENCE

FHWA Transportation Engineer Date

COUNTY CONCURRENCE

County Engineer Date
**PROJECT IDENTIFICATION**

FINANCIAL PROJECT ID: 432100-1-22-01  
COUNTY (SECTION): ORANGE (75280)

PROJECT DESCRIPTION: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**FUNCTIONAL CLASSIFICATION**

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| Restrictive w/660 ft. Connection Spacing | 2020 | 27,000 |

| Non-Restrictive w/2640 ft. Signal Spacing | 2030 | 30,000 |

| Restrictive w/440 ft. Connection Spacing | 2040 | 34,000 |

| Non-Restrictive w/1320 ft. Signal Spacing | DESIGN |

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| TDLC / RRR | Design Speed Approvals |

| Manual of Uniform Minimum Standards (Florida Greenbook) (Off-State Highway System Only) | Date |

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

**DARYL CARTER PARKWAY (754115)**

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- Gas (Central Florida Gas)
- Water (Orange County Utilities)
- Communications (Bright House Networks, Comcast, Level 3, Verizon)
- Wastewater (Orange County Utilities)
- Electric (Duke Energy Distribution, Duke Energy Transmission)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A

**SHEET 1B-42**
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44" REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER DARYL CARTER PARKWAY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNEKE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

DATE 3/17/17

DATE 4/17/17
PROJECT IDENTIFICATION

FEDERAL AID PROJECT NO. N/A  COUNTY NAME ORANGE

SECTION NO. 75280  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 9.528

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DARYL CARTER PARKWAY STRUCTURE SECTION
DIVERGING DIAMOND INTERCHANGE

SHEET 18-44

FDOT CONCURRENCE

FHWA CONCURRENCE

COUNTY CONCURRENCE

DECLARATION OF INTEREST

APPROVED

ROBERT M. DENNE

LICENSE NO. 58593

REPRESENTATIVE OF THE ENGINEER 08-05-11

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

AK BRENNAN
ANNETTE K. BRENNAN, P.E.
FHWA Transportation Engineer
FHWA District Engineer

Date

Date

COUNTY ENGINEER

Joe C. McEldowney

8-14-7

Date

Date
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID**
432100-1-22-01

**COUNTY (SECTION)**
ORANGE (75280)

**PROJECT DESCRIPTION**
WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (CENTRAL FLORIDA PARKWAY)**

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<tr>
<th>FUNCTIONAL CLASSIFICATION</th>
<th>HIGHWAY SYSTEM</th>
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<tr>
<td>( ) RURAL</td>
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<td>( ) PRINCIPAL ART.</td>
<td>( ) STRATEGIC INTERMODAL SYSTEM</td>
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<td>( ) MINOR COLL.</td>
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**ACCESS CLASSIFICATION**

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**TRAFFIC**

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<td>T 24 3.8%</td>
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**CRITERIA**

| NEW CONSTRUCTION / RECONSTRUCTION |
| RRR INTERSTATE / FREEWAY |
| RRR NON-INTERSTATE / FREEWAY |
| TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| TDLC / RRR |
| MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

CENTRAL FLORIDA PARKWAY (750142, 750200, 750402)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

GAS (CENTRAL FLORIDA GAS)
WATER (ORANGE COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (ORANGE COUNTY UTILITIES)
ELECTRIC (Duke Energy DISTRIBUTION, Duke Energy TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A

SHEET 1B-45
**PROJECT IDENTIFICATION**

FINANCIAL PROJECT ID: 432100-1-22-01  
FEDERAL AID PROJECT NO.: N/A  
COUNTY NAME: ORANGE

SECTION NO: 75280  
ROAD DESIGNATION: SR 400 (1-4)  
LIMITS/MILEPOST: MP 0.000 – 9.528

PROJECT DESCRIPTION: WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

---

**PROPOSED ROADWAY TYPICAL SECTION**

**CONCRETE BARRIER (TYP.)***

**PROPOSED BRIDGE STRUCTURE**

**DESIGN SPEED = 70 MPH**

**SR 400 (1-4) UNDER WESTBOUND CENTRAL FLORIDA PARKWAY RAMP**

* 25-FT REQUIRED FROM INSIDE FACE OF BARRIER TO INSIDE FACE OF BARRIER (HIGH SPEED RAIL ELEVATED IN THIS AREA).

** 10-FT WIDE SHOULDER USED IN LIEU OF 4-FT SHOULDER TO MEET STOPPING SIGHT DISTANCE.**

**SHEET 1B-46**

---

**FDOT CONCURRENCE**

ANNE AT K. BRENNAN, P.E.

FHWA TRANSPORTATION ENGINEER

**FHWA CONCURRENCE**

Date: 3/17/17

Date: 11/7/18
I-4 Beyond the Ultimate
Osceola County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 1A)
Design FPID: 431456-1

I-4 Mainline
1A-1 Key Sheet
1A-2 I-4 Project Controls
1A-3 I-4 Typical Section with Rail Corridor (Osceola County)
1A-4 I-4 Typical Section Bridge Viaduct Between SR 429 and World Drive (Orange County)
1A-5 I-4 Bridge Over CR 532 (Replace)
1A-6 I-4 Bridge Over Reedy Creek (Replace)
1A-7 I-4 Bridge Over Bonnet Creek (Replace)

Ramps
1A-8 One Lane Ramp
1A-9 Two Lane Ramp
1A-10 Three Lane Ramp
1A-11 One Lane Bridge Ramp

CR 532
1A-12 CR 532 Project Controls
1A-13 CR 532 Roadway Section Under I-4
1A-14 CR 532 Roadway Section

Tradition Boulevard
1A-15 I-4 Under Tradition Blvd

SR 429
1A-16 I-4 Under SR 429 Northbound Ramp
1A-17 I-4 Under SR 429 Southbound to Eastbound I-4

Old Lake Wilson Road
1A-18 Old Lake Wilson Project Controls
1A-19 I-4 Under Old Lake Wilson Road
1A-20 Old Lake Wilson Road Bridge Section (Replace)
1A-21 Old Lake Wilson Road Section
I-4 Beyond the Ultimate
Osceola County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 1A)
Design FPID: 431456-1

**World Drive**
1A-22  World Drive Project Controls
1A-23  World Drive Bridge Section (Replace)
1A-24  I-4 Under Eastbound and Westbound World Drive
1A-25  World Drive Roadway Section

**SR 417**
1A-26  SR 417 Project Controls
1A-27  SR 417 Bridge Section (Southbound) (Replace)
1A-28  I-4 Under SR 417 (Southbound)
1A-29  SR 417 Bridge Section (Northbound)

**US 192 / SR 530**
1A-30  US 192 Project Controls
1A-31  US 192 Bridge Section (Replace)
1A-32  I-4 Under US 192 Eastbound Ramp
1A-33  US 192 Bridge Section (Replace)
1A-34  I-4 Under US 192
1A-35  I-4 Under Westbound Ramp to Westbound I-4
1A-36  US 192 Bridge Section (Eastbound I-4 to Westbound US 192)
1A-37  I-4 Under Westbound Ramp

**Osceola Parkway**
1A-38  Osceola Parkway Project Controls
1A-39  Osceola Parkway Bridge Section (Replace)
1A-40  Osceola Parkway Roadway Section (West of SR 400)
1A-41  Osceola Parkway Roadway Section (East of SR 400)
1A-42  I-4 Under Osceola Parkway
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID 432100-1-22-01
(FEDERAL FUNDS)

OSCEOLA COUNTY (92130)

STATE ROAD NO. 400 (I-4)
I-4 BEYOND THE ULTIMATE
TYPICAL SECTION PACKAGE

PROJECT LOCATION

END SEGMENT 1A
@ EXIST. SR 400
STA. 1042+95.00
MP 7.885 (OSCEOLA CO.)

W. OSCEOLA PKWY.
SR 530
WORLD DR.
SR 429
CR 532
BEGIN SEGMENT 1A
@ EXIST. SR 400
STA. 604+50.00
MP 31.607 (POLK CO.)

OSCEOLA / ORANGE CO. DIVIDE
MP 7.885 / 0.000
SR 417

POLK / OSCEOLA CO. DIVIDE
MP 32.022 / 0.000

PROJECT LENGTH IS BASED ON Q. OF CONSTRUCTION

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FDOT PROJECT MANAGER: BEATA STYS-PALASZ, PE

SHEET 1A-1
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 COUNTY (SECTION) OSCEOLA (92130)

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROJECT CONTROLS (SR 400/1-4)

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ACCESS CLASSIFICATION

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| OPENING | 2020 | 202,000 |
| INTERIM | 2030 | 237,000 |
| DESIGN  | 2040 | 269,000 |

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CRITERIA

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LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

BORDER WIDTH (VARIATION) - FOR THE BORDER WIDTHS LESS THAN 94-FT (94-FT REQUIRED)
SHOULDER WIDTH (VARIATION) - FOR THE 10-FT MEDIAN GUL SHOULDER (12-FT REQUIRED)
SHOULDER WIDTH (VARIATION) - FOR THE 4-FT MEDIAN EXPRESS LANE SHOULDER (6-FT REQUIRED)

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

| CR 532 | (920094, 920095) |
| DAVENPORT CREEK | (920097) |
| REUNION ACCESS RD | (925500) |
| DITCH CULVERT | (920203) |
| SR 429 | (920601, 920602) |
| CR 545 | (924179) |
| REEDY CREEK | (920098, 920099) |
| WORLD DRIVE | (920176, 920170) |
| SR 417 | (920169) |
| US 192 | (920083, 920193, 920192, 920195, 920194) |
| BONNET CREEK | (920100, 920101) |
| OSCEOLA PARKWAY | (920180) |

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

GAS (CENTRAL FLORIDA GAS)
WATER (OSCEOLA COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (OSCEOLA COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A

DISTRICT DESIGN ENGINEER

DATE

DISTRICT TRAFFIC OPERATIONS ENGINEER

DATE

SHEET 1A-2
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  OSCEOLA

SECTION NO.  92130  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 0.000 - 7.885

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH RAIL CORRIDOR
STA 627+20.00 TO STA 759+00.00
STA 828+00.00 TO STA 1042+95.00

CHANGES REVIEWED AND ACCURATE:

ROBERT M. DENNEY, P.E.
Project Engineer

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

Date

7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE VIADUCT BETWEEN SR 429 AND WORLD DRIVE
STA 759+00 TO STA 828+00

SHEET 1A-4

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 836-7820
CERT OF AUTH NO 6500

ANNETTE K. BRENNA, P.E.
FDOT District Design Engineer

FHWA TRANSPORTATION ENGINEER

Date

FHWA CONCURRENCE

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID       432100-1-22-01   FEDERAL AID PROJECT NO.    N/A     COUNTY NAME    OSCEOLA

SECTION NO. 92130                        ROAD DESIGNATION    SR 400 (I-4)                        LIMITS/MILEPOST    MP 0.000 - 7.885

PROJECT DESCRIPTION    WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE OVER CR 532

SHEETS 1A-5

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

ROBERT M. DENNEY, P.E.
Engineer of Record 5933

HIDT CORPORATION
610 CRESCENT EXEC. CT
SUITE 409
LAKE MARY, FL 32746
(407) 805-9355
CERT. OF AUTH. NO. 6500
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE OVER REEDY CREEK

FHWA CONCURRENCE

FHWA Transportation Engineer
Date 7/27/17

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer
Date 3/17/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME OSCEOLA

SECTION NO. 92130 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) BRIDGE OVER BONNET CREEK

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E. FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 1A-7
**PROJECT IDENTIFICATION**

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

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<tbody>
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<td>CR 532 TO I-4 WB GUL</td>
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<tr>
<td>CR 532 TO I-4 EB GUL</td>
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</tr>
<tr>
<td>I-4 EB GUL TO SR 429</td>
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</tr>
<tr>
<td>I-4 EB EXPRESS LANE TO SR 429</td>
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<tr>
<td>SR 429 TO I-4 WB EXPRESS LANE</td>
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<td>I-4 WB EXPRESS LANE TO SR 429</td>
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<td>I-4 WB GUL TO SR 429</td>
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<td>I-4 EB RAMP TO OSCEOLA PKWY</td>
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<tr>
<td>OSCEOLA PKWY TO I-4 WB GUL</td>
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<td>I-4 EB GUL TO OSCEOLA PKWY WB</td>
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<tr>
<td>I-4 EB GUL TO OSCEOLA PKWY WB</td>
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<tr>
<td>I-4 EB RAMP TO TB OSCEOLA PKWY</td>
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<tr>
<td>I-4 EB RAMP TO WB OSCEOLA PKWY</td>
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**PROPOSED ROADWAY TYPICAL SECTION**

![Proposed Roadway Typical Section Diagram]

**SR 400 (I-4)**
ONE LANE RAMP

**SHEET 1A-8**

**FDOT CONCURRENCE**

**AL Brennan**

**FHWA CONCURRENCE**

**FHWA Transportation Engineer**

**Date**

**Date**
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME OSCEOLA

SECTION NO. 92130 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 7.885
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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<tr>
<td>I-4 WB GUL TO CR 532</td>
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<tr>
<td>I-4 EB RAMP TO SR 429 WB</td>
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<tr>
<td>SR 429 TO I-4 WB GUL</td>
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<tr>
<td>SR 429 TO I-4 EB GUL</td>
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<tr>
<td>I-4 WB RAMP TO OSCEOLA PKWY WB</td>
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</tr>
<tr>
<td>OSCEOLA PKWY TO I-4 EB GUL</td>
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SR 400 (I-4) TWO LANE RAMP

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

ROBERT M. DENNIS, P.E.
Engineer of Record 58503

APPROVED BY

Date

7/15/17

7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME: OSCEOLA

SECTION NO. 92130
ROAD DESIGNATION: SR 400 (1-4)
LIMITS/MILEPOST: MP 0.000 - 7.885

PROJECT DESCRIPTION: WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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<tbody>
<tr>
<td>SEGMENT 1A</td>
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<tr>
<td>1-4 TO SR 429</td>
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</table>

SR 400 (1-4)
THREE LANE RAMP

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 1A-10
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

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<tr>
<td>I-4 EB EXPRESS LANE TO SR 429</td>
<td>50</td>
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<tr>
<td>SR 429 TO I-4 WB EXPRESS LANE</td>
<td>50</td>
</tr>
<tr>
<td>I-4 WB EXPRESS LANE TO SR 429</td>
<td>50</td>
</tr>
<tr>
<td>I-4 EB EXPRESS LANE TO OSCEOLA PKWY EB</td>
<td>50</td>
</tr>
<tr>
<td>OSCEOLA PKWY EB RAMP TO I-4 EXPRESS LANES EB</td>
<td>50</td>
</tr>
<tr>
<td>I-4 EB RAMP TO WB OSCEOLA PKWY</td>
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</tbody>
</table>

SR 400 (I-4)
ONE LANE BRIDGE RAMP

CONCRETE BARRIER (TYP.)

HNTB CORPORATION
610 CRESCENT EXEC. CT.
suite 400
LAKE MARY, FL 32746
(407) 805-0355
CBRT OF AUTH NO 6500

AK Brennan  3/17/17
ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer  7/17/17

SHEET 1A-11
**PROJECT IDENTIFICATION**

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<td>WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.</td>
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**PROJECT CONTROLS (CR 532)**

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<th>FUNCTIONAL CLASSIFICATION</th>
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<td>(X) URBAN</td>
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<td>( ) FREEWAY/EXPWY.</td>
<td>(X) FLORIDA INTRASTATE HIGHWAY SYSTEM</td>
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<td>( ) PRINCIPAL ART.</td>
<td>(X) STRATEGIC INTERMODAL SYSTEM</td>
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<td>( ) MINOR ART.</td>
<td>( ) STATE HIGHWAY SYSTEM</td>
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<td>(X) LOCAL</td>
<td>(X) OFF STATE HIGHWAY SYSTEM</td>
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**ACCESS CLASSIFICATION**

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**CRITERIA**

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<td>DISTRICT DESIGN ENGINEER</td>
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**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIREING INDEPENDENT STRUCTURE DESIGN:**

| CR 532 | (920094, 920095) |

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

| GAS (CENTRAL FLORIDA GAS) |
| WATER (OSCEOLA COUNTY UTILITIES) |
| COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON) |
| WASTEWATER (OSCEOLA COUNTY UTILITIES) |
| ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION) |

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A

mbacal 2/9/2017 2:38:17 PM
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID   432100-1-22-01          FEDERAL AID PROJECT NO. N/A          COUNTY NAME   OSCEOLA

SECTION NO. 92130          ROAD DESIGNATION SR 400 (1-4)          LIMITS/MILEPOST   MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

CR 532 ROADWAY SECTION UNDER SR 400 (1-4)
DIVERGING DIAMOND INTERCHANGE
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH  
CR 532 ROADWAY SECTION  
STA 53+00 TO STA 78+00
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID       432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

EXISTING BRIDGE STRUCTURE  Q. CONST.

EXISTING PIER

23'-6" MIN. VERTICAL CLEARANCE*

2" MISCELLANEOUS PAVEMENT

SINGLE FACED GUARDRAIL (TYP.)

DESIGN SPEED = 70 MPH
SR 400 (I-4) UNDER TRADITION BOULEVARD

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

CONCRETE BARRIER (TYP.)  SINGLE FACED GUARDDRAIL (TYP.)

EXISTING PIER  EXISTING PIER

99'-3"  23'-6" MIN. VERTICAL CLEARANCE*

DESIGN SPEED = 70 MPH  SR 400 (I-4) UNDER SR 429 NORTHBOUND RAMP

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 803-0355
CERT. OF AUTH NO 6550

FDOT CONCURRENCE  FHWA CONCURRENCE

ANNETTE K. BRENNAN, P.E.  FHWA Transportation Engineer
FOOT District Design Engineer  Date

Robert M. Denney, P.E., Date

WILLIAM T. HARRIS, P.E., Date

STATE OF FL

ROBERT M. DENNEY  LICENSE NO. 5859

11/25/17  2:38:20 PM  "KMw00\pmwork3\jappl\59219 - 14 SAM\TECHM00\Typical Section Package\TYPDOD01-SEG-1.000"
**PROJECT IDENTIFICATION**

| FINANCIAL PROJECT ID | 432100-1-22-01 |
| COUNTY (SECTION)     | OSCEOLA (92130) |
| PROJECT DESCRIPTION  | WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472. |

**PROJECT CONTROLS (OLD LAKE WILSON ROAD)**

<table>
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<tr>
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<td>( ) FREEWAY/EXPWY.</td>
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<td>( ) MINOR ART.</td>
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<td>(X) MINOR ART.</td>
<td>( ) STATE HIGHWAY SYSTEM</td>
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<td>( ) LOCAL</td>
<td>(X) OFF STATE HIGHWAY SYSTEM</td>
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<td>( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)</td>
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**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

OLD LAKE WILSON ROAD (924179)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

GAS (CENTRAL FLORIDA GAS)
WATER (OSCEOLA COUNTY UTILITIES)
COMMUNICATIONS (LIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (OSCEOLA COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

23'-6" MIN. VERTICAL CLEARANCE*

2'-0"  98'-0"

1'3"  140'-0"

1'3"  22'

1'3"  22'

CONCRETE BARRIER (TYP.)

SINGLE FACED GUARDRAIL (TYP.)

0.06  0.03  0.02  0.02  0.02  0.02  0.02  0.02  0.02  0.02  0.02  0.02  0.02eness

2" MISC. ASPHALT

DESIGN SPEED = 70 MPH

SR 400 (1-4) UNDER OLD LAKE WILSON ROAD

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44" REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

SHEET 1A-19

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

A.L. Brennan  3/17/17

FHWA CONCURRENCE

FHWA Transportation Engineer  7/25/17

Date

Annette K. Brennan, P.E.
FDOT District Design Engineer

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 45 MPH

OLD LAKE WILSON ROAD BRIDGE OVER SR 400 (I-4)

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

County Engineer
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01  
**COUNTY (SECTION)** OSCEOLA (92130)

**PROJECT DESCRIPTION**
WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (WORLD DRIVE)**

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**ACCESS CLASSIFICATION**

| ( ) 1 - FREEWAY | ( ) 2 - RESTRICTIVE w/Service Roads |
| ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing |
| ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing |
| ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing |
| ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing |
| ( ) 7 - BOTH MEDIAN TYPES |

**CRITERIA**

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RRR INTERSTATE / FREEWAY
- ( ) RRR NON-INTERSTATE / FREEWAY
- ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION
- ( ) TDLC / RRR
- ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

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**CRITERIA**

- (X) NEW CONSTRUCTION / RECONSTRUCTION
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- ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION
- ( ) TDLC / RRR
- ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

WORLD DRIVE (920176, 920170)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**
- GAS (CENTRAL FLORIDA GAS)
- WATER (OSCEOLA COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (OSCEOLA COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 40 MPH
WORLD DRIVE BRIDGE OVER SR 400 (1-4)
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01  FEDERAL AID PROJECT NO.: N/A  COUNTY NAME: OSCEOLA

SECTION NO.: 92130  ROAD DESIGNATION: SR 400 (1-4)  LIMITS/MILEPOST: MP 0.000 - 7.885

PROJECT DESCRIPTION: WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER EASTBOUND AND WESTBOUND WORLD DRIVE

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44" REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

SHEET 1A-24

APPROVED BY:
HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE:
ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE:

Date

FHWA Transportation Engineer

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885
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PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
WORLD DRIVE ROADWAY SECTION

Sheet 1A-25

HNTB CORPORATION
610 CRESNENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 15500

FDOT CONCURRENCE
AK Ibrahim
3/17/17

FHWA CONCURRENCE
ANNETTE K. BRENNAN, P.E.
FHWA Transportation Engineer
3/17/17

COUNTY CONCURRENCE
County Engineer
7/25/17

DRAWN
ROBERT M. DENNEY
6/17/19
ENGINEER OF RECORD
58593

CHECKED
ROBERT M. DENNEY
6/17/19
ENGINEER OF RECORD
58593
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LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

SR 417 (920169)

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:
GAS (CENTRAL FLORIDA GAS)
WATER (OSCEOLA COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (OSCEOLA COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 55 MPH
SR 417 SOUTHBOUND BRIDGE SECTION

Sheet 1A-27

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME OSCEOLA

SECTION NO. 92130 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

\[\epsilon_{\text{CONST.}}\]

PROPOSED BRIDGE STRUCTURE

23'-6" MIN. VERTICAL CLEARANCE*

\[\text{CONCRETE BARRIER (TYP.)}\]

DOUBLE FACED GUARDRAIL

2" MISC. ASPHALT PAVT.

DESIGN SPEED = 70 MPH

SR 400 (1-4) UNDER SR 417 SOUTHBOUND

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.

** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

HNTB CORPORATION
610 CRESSENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 65000

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 1A-28

ROBERT M. DENNEY, P.E.
Engineer of Record 2016

APPROVED BY

AK BRENNAN
3/17/17

Date

Date

mbacal 3/17/17 3:28:29 PM
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 50 MPH
SR 417 NORTHBOUND BRIDGE SECTION
## PROJECT IDENTIFICATION

**FINANCIAL PROJECT ID** 432100-1-22-01  
**COUNTY (SECTION)** OSCEOLA (92130)  
**PROJECT DESCRIPTION** WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1/2 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

### PROJECT CONTROLS (US 192/SR 530)

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### DESIGN SPEED APPROVALS

- **DISTRICT DESIGN ENGINEER**: A.K. Brennan  
  Date: 3/17/17
- **DISTRICT TRAFFIC OPERATIONS ENGINEER**: J. Maddox  
  Date: 4/10/17

### LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

### LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

- **US 192** (920083, 920193, 920192, 920195, 920194)

### LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

- GAS (CENTRAL FLORIDA GAS)
- WATER (OSCEOLA COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (OSCEOLA COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

### LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

CONCRETE BARRIER (TYP.)

R/W LINE  R/W LINE

1'4"  1'4"

6"  12"  12"  10"

SHAIR  SHLDR  0.059  0.059  0.059

42'-8"

DESIGN SPEED = 50 MPH

US 192/SR 530 EASTBOUND RAMP BRIDGE SECTION

SHEET 1A-31

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

State of Florida

Robert M. Denney, P.E.
State of Florida

Approved by

No. 58593

Engineering Services

HNTB CORPORATION
610 CRESCEAT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

Date

3/17/17

Date

7/25/17

mbacr
2:39:32 PM
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PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

PROPOSED BRIDGE STRUCTURE

23'-6" MIN. VERTICAL CLEARANCE*

DESIGN SPEED = 70 MPH

SR 400 (I-4) UNDER US 192/SR 530 EASTBOUND RAMP

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.

** 44" REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

SHEET 1A-32

APPROVED BY

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

DATE 7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

R/W LINE

R/W VARIES (116' MIN.)  Q CONST.  R/W VARIES (116' MIN.)  R/W LINE

230'-5"

55'-8"

108'-1"

1'-4"

10' SHLDR  11'  11'  11'  10' SHLDR

0.02  0.02  0.02  0.02  0.02

CONCRETE BARRIER (TYP.)

DESIGN SPEED = 50 MPH
US 192/SR 530 BRIDGE SECTION

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

AK BRENNAN 3/17/17

FHWA CONCURRENCE

FHWA Transportation Engineer 7/15/17

SHEET 1A-33
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME OSCEOLA

SECTION NO. 92130 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

Q CONST.

PROPOSED BRIDGE STRUCTURE

23'-6" MIN. VERTICAL CLEARANCE*

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER US 192/SR 530

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.

** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

SHEET 1A-34

FDOT CONCURRENCE

FHWA CONCURRENCE

ROBERT M. DENNEY, P.E.
ENGINEER OF RECORD 58553

ANNETTE K. BRENNAN, P.E.
FDOT DISTRICT DESIGN ENGINEER

FHWA TRANSPORTATION ENGINEER 7/25/17

CERT OF AUTH NO 65000
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME OSCEOLA

SECTION NO. 92130 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

EXISTING BRIDGE STRUCTURE

CONCRETE BARRIER (TYP.)

SINGLE FACED GUARDRAIL (TYP.)

2" MISC. ASPHALT PAVT.

EXISTING PIER

DESIGN SPEED = 70 MPH
SR 400 (I-4) UNDER US 192/SR 530 WESTBOUND RAMP TO WESTBOUND SR 400 (I-4)

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44" REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

SHEET 1A-35

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAO, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01    FEDERAL AID PROJECT NO. N/A    COUNTY NAME OSCEOLA

SECTION NO. 92130    ROAD DESIGNATION SR 400 (I-4)    LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 50 MPH
SR US 192/SR 530 BRIDGE SECTION
EASTBOUND SR 400 (I-4) TO WESTBOUND SR US 192/SR 530 RAMP

FHWA CONCURRENCE

FHWA Transportation Engineer

Date

Approved By

HNTB CORPORATION
100 CRESCENT EXEC. CT.
SUITE 400
LAKE HAVEN, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

Date

2/17/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME OSCEOLA

SECTION NO. 92130 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 7.885
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER EASTBOUND SR 400 (1-4) RAMP TO US 192/SR 530 WESTBOUND

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

SHEET 1A-37

ROBERT M. DENNEY, P.E.
Engineer Of Record 58593

FHWA CONCURRENCE

FHWA Transportation Engineer

DATE
# Project Identification

**Financial Project ID**: 432100-1-22-01  
**County (Section)**: Osceola (92130)  
**Project Description**: Widening SR 400 (I-4) from West of CR 532 to West of SR 435 (Kirkman Rd.) and from 1/2 mile East of SR 434 to 1/2 mile East of SR 472.

## Project Controls (Osceola Parkway)

### Functional Classification

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### Highway System

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<td>Florida Intrastate Highway System</td>
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<td>Strategic Intermodal System</td>
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<td>State Highway System</td>
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## Access Classification

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<tr>
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<th>Description</th>
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<tr>
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<td>1 - Freeway</td>
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<tr>
<td>✔</td>
<td>2 - Restrictive w/Service Roads</td>
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<tr>
<td>✔</td>
<td>3 - Restrictive w/660 ft. Connection Spacing</td>
</tr>
<tr>
<td>✔</td>
<td>4 - Non-Restrictive w/2640 ft. Signal Spacing</td>
</tr>
<tr>
<td>✔</td>
<td>5 - Restrictive w/440 ft. Connection Spacing</td>
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<tr>
<td>✔</td>
<td>6 - Non-Restrictive w/1320 ft. Signal Spacing</td>
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<td>7 - Both Median Types</td>
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## Traffic

### Year / AADT

<table>
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<th>Year</th>
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### Distribution

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**Design Speed Approvals**

- **District Design Engineer**: 3/17/17
- **District Traffic Operations Engineer**: 4/10/17

## List Any Potential Exceptions and Variations Related to Typical Section Elements:

N/A

## List Major Structures Location/Description - Requiring Independent Structure Design:

### Osceola Parkway (920180)

## List Major Utilities Within Project Corridor:

- Gas (Central Florida Gas)
- Water (Osceola County Utilities)
- Communications (Brighthouse Networks, Comcast, Level 3, Verizon)
- Wastewater (Osceola County Utilities)
- Electric (Duke Energy Distribution, Duke Energy Transmission)

## List Other Information Pertinent to Design of Project:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 45 MPH
OSCEOLA PARKWAY BRIDGE OVER SR 400 (1-4)

SHEET 1A-39

APPROVED BY

HITB CORPORATION 610 CRESCENT EXEC. CT. SUITE 400 LAKE MARY, FL 32746 (407) 805-0355 CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E., FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

County Engineer

Date

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
OSCEOLA PARKWAY ROADWAY SECTION (WEST OF SR 400)

APPROVED BY
HNTB CORPORATION
610 CRESCENT EXEC. CT.
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE
AK Breazzano  Date

FHWA CONCURRENCE
FHWA Transportation Engineer  Date

COUNTY CONCURRENCE
County Engineer  Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME OSCEOLA

SECTION NO. 92130  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 7.885

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
OSCEOLA PARKWAY ROADWAY SECTION (EAST OF SR 400)
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID        432100-1-22-01    FEDERAL AID PROJECT NO. N/A    COUNTY NAME        OSCEOLA

SECTION NO.       92130    ROAD DESIGNATION       SR 400 (1-4)    LIMITS/MILEPOST       MP 0.000 - 7.885

PROJECT DESCRIPTION: WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

CONCRETE BARRIER (TYP.)

PROPOSED BRIDGE STRUCTURE

Q CONST.

30'-0" MIN. VERTICAL CLEARANCE

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER OSCEOLA PARKWAY

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER (SPECIAL VERTICAL CLEARANCE REQUIRED FOR THE CONSTRUCTION OF THE 1-4 BRIDGES UNDER OSCEOLA PARKWAY).
** 44' REQUIRED FOR FUTURE RAIL CORRIDOR. FUTURE RAIL CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FOOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

Page 1A-42
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Seminole County Typical Section Package Index
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Design FPID: 242592-4

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3-1 Key Sheet
3-2 I-4 Project Controls
3-3 I-4 Typical Section Without Transit Corridor & 3 General Use Lanes
3-4 I-4 Typical Section Without Transit Corridor & 4 General Use Lanes
3-5 I-4 Bridge Over Wekiva Parkway
3-6 I-4 Bridge Over SR 46 (Widen)
3-7 I-4 Bridge Over CR 431 (Orange Boulevard) And Sunrail Corridor (Widen)

Ramps
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3-9 Two Lane Ramp
3-10 Three Lane Ramp
3-11 One Lane Bridge Ramp
3-12 Two Lane Bridge Ramp
3-13 Three Lane Bridge Ramp

EE Williamson Road
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3-15 EE Williamson Road Bridge Section (Replace)
3-16 EE Williamson Road Roadway Section
3-17 I-4 Under EE Williamson Road

Lake Mary Boulevard
3-18 Lake Mary Boulevard Project Controls
3-19 Lake Mary Boulevard Bridge Section (Replace)
3-20 Lake Mary Boulevard Roadway Section
3-21 I-4 Under Lake Mary Boulevard

Lake Emma Road
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Rinehart Road
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3-25 Rinehart Road Roadway Section
I-4 Beyond the Ultimate
Seminole County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 3)
Design FPID: 242592-4

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3-26  I-4 Under Cross Seminole Trail

CR 46A
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3-28  CR 46A Bridge Section (Replace)
3-29  CR 46A Roadway Section
3-30  I-4 Under CR 46A

SR 46
3-31  SR 46 Project Controls
3-32  SR 46 under I-4

CR 431 (Orange Blvd)
3-33  CR 431 (Orange Blvd) Roadway Section

US 17/92
3-34  US 17/92 Project Controls
3-35  US 17/92 Bridge Section (New Bridge)
3-36  US 17/92 (CR 15, Monroe Rd.) Roadway Section
3-37  US 17/92 Bridge Section (Tie-To Existing Bridge Over St. Johns River)
3-38  I-4 Under US 17/92
3-39  Old US 17/92 Roadway Section Under I-4
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

FINANCIAL PROJECT ID 432100-1-22-01
(FEDERAL FUNDS)

SEMINOLE COUNTY (77160)

STATE ROAD NO. 400 (I-4)
1-4 BEYOND THE ULTIMATE
TYPICAL SECTION PACKAGE

PROJECT LOCATION

END SEGMENT 3
& EXIST. SR 400
STA. 2583+00.00
MP 0.086 (VOLUSIA CO.)

US 17-92

SR 46

SR 417

CR 46A

LAKE MARY BLVD

BEGIN SEGMENT 3
& EXIST. SR 400
STA. 2043+71.32
MP 4.050 (SEMINOLE CO.)

SEMINOLE / VOLUSIA CO. DIVIDE
MP 14.135 / 0.000

PROJECT LENGTH IS BASED ON SQ. OF CONSTRUCTION

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<td>GROSS LENGTH OF PROJECT</td>
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FDOT PROJECT MANAGER: BEATA STYS-PALASZ, PE

SHEET 3-1
### Project Identification

**Financial Project ID:** 432100-1-22-01  
**County (Section):** Seminole (77160)

**Project Description:** Widening SR 400 (I-4) from west of CR 532 to west of SR 435 (Kirkman Rd.) and from 1 mile east of SR 434 to 1/2 mile east of SR 472.

### Project Controls (SR 400/I-4)

<table>
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<tbody>
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<td>(X) National Highway System</td>
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<td>(X) Principal Art.</td>
<td>(X) Florida Intrastate Highway System</td>
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<td>( ) Minor Art.</td>
<td>(X) Strategic Intermodal System</td>
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<tr>
<td>( ) Local</td>
<td>( ) State Highway System</td>
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<td>( ) Off State Highway System</td>
<td></td>
</tr>
</tbody>
</table>

### Access Classification

- (X) 1 - Freeway
- ( ) 2 - Restrictive w/Service Roads
- ( ) 3 - Restrictive w/600 ft. Connection Spacing
- ( ) 4 - Non-Restrictive w/2640 ft. Signal Spacing
- ( ) 5 - Restrictive w/440 ft. Connection Spacing
- ( ) 6 - Non-Restrictive w/1320 ft. Signal Spacing
- ( ) 7 - Both Median Types

### Traffic

- **Year:**
  - Opening: 2020 159,000
  - Interim: 2030 183,000
  - Design: 2040 207,000

- **Determination:**
  - Design Speed: 70 MPH
  - K 9.0
  - D 54.30
  - T 24 9.0%

### Design Speed Approvals

- **District Design Engineer:** 3/17/17
- **District Traffic Operations Engineer:** 4/10/17

### List Any Potential Exceptions and Variations Related to Typical Section Elements:

- **BORDER WIDTH (VARIATION)** - For the border widths less than 94-ft (94-ft required)
- **SHOULDER WIDTH (VARIATION)** - For the 10-ft median gul shoulder (12-ft required)
- **SHOULDER WIDTH (VARIATION)** - For the 4-ft median express lane shoulder (6-ft required)

### List Major Structures Location/Description - Requiring Independent Structure Design:

- **EE Williamson Rd.** (770018)
- **Pedestrian Bridge** (774051)
- **Lake Mary Blvd.** (770040, 770039)
- **Pedestrian Bridge** (774049)
- **CR 46A** (770077)
- **SR 417** (770008, 770910)
- **SR 46** (77084, 770085)
- **Outfall Ditch** (770029)
- **Orange Blvd & CSX RR** (770086, 770087)
- **US 17-92** (Proposed)

### List Major Utilities within Project Corridor:

- **Gas** (Central Florida Gas)
- **Communications** (BrightHouse Networks, Comcast, Level 3, Verizon)
- **Wastewater** (Seminole County Utilities, Volusia County Utilities)
- **Electric** (Duke Energy Distribution, Duke Energy Transmission)

### Other Information Pertinent to Design of Project:

- N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

Design Speed = 70 MPH
SR 400 (1-4) WITHOUT TRANSIT CORRIDOR
STA 2244+00.00 TO 2578+48.33

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE BAY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

ROBERT M. DENNE
58592

APPROVED BY

FDOT CONCURRENCE

FHWA CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

Kels 08
FHWA Transportation Engineer

Date

Date

mbace
2:39:33 PM
\\\&_\Affiliation\_Project\_Jobs\_59219 - 14 SAMP\_TECHPRODTypical Section Package\_TYPORD01-1-4 TYPICALS.DGN
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME SEMINOLE

SECTION NO. 77160
ROAD DESIGNATION SR 400 (I-4)
LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

[Diagram of proposed roadway typical section]

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITHOUT TRANSIT CORRIDOR
STA 2079+37.95 TO 2244+00.00

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 3-4

APPROVED BY

ROBERT M. DENNEY, P.E.
Engineer of Record 98593

CERT OF AUTH NO 6500

DATE

3/17/17

7/27/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

Q CONST.  80'-8'

CONSTRUCTED UNDER FPID 431081-3-52-01 & 431081-4-52-01

VARIES 1/4'-6'

VARS

CONSTRUCTED UNDER FPID 431081-3-52-01 & 431081-4-52-01

DESIGN SPEED = 70 MPH

SR 400 (I-4) BRIDGE OVER WEKIVA PARKWAY

SHEET 3-5

FDOT CONCURRENCE  FDOT District Design Engineer

FHWA CONCURRENCE  FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 4.050 - 14.135

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH  
SR 400 (I-4) BRIDGE OVER SR 46
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE OVER CR 431 (ORANGE BLVD.) AND SUNRAIL CORRIDOR

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

SR 400 (I-4)
ONE LANE RAMP

HNTB CORPORATION
610 CRESCEAT EXEC. CT. SUITE 400
LAKE MARY, FL 32746
(407) 805-0555
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
# PROJECT IDENTIFICATION

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**PROJECT DESCRIPTION**

WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

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---

**PROPOSED ROADWAY TYPICAL SECTION**

![Typical Section](image-url)

**SR 400 (I-4)**

TWO LANE RAMP

---

**FDOT CONCURRENCE**

**FHWA CONCURRENCE**

AK Brennan 3/17/17

S.F. 7/25/17

FHWA Transportation Engineer

---

*Note: The image contains diagrams and text related to a transportation project, including road design and sections.*
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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<td>SR 417 GUL RAMP TO 1-4 EB GUL</td>
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SR 400 (I-4)
THREE LANE RAMP

FHWA CONCURRENCE

Date

FHWA Transportation Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME SEMINOLE

SECTION NO. 77160
ROAD DESIGNATION SR 400 (1-4)
LIMITS/MILEPOST MP 4.050 - 14.135
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

SEGMENT 3
LAKE EMMA RD TO 1-4 WB GUL
LAKE EMMA RD TO 1-4 EB GUL
CR 46A RAMP TO 1-4 EB GUL
SR 429 NB RAMP TO 1-4 EB
1-4 EB GUL TO SR 429

Design Speed
50
50
50
50
30

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

AL BRENNAN
3/17/17
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

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<td>US 17/92 GUL RAMP TO 1-4 WB GUL</td>
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<tr>
<td>MONROE RD GUL RAMP TO 1-4 EB GUL</td>
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SR 400 (1-4)
TWO LANE BRIDGE RAMP

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

Sheet 3-12

ROBERT M. DENNEY, P.E.
Engineer of Record

APPROVED BY

ROBERT M. DENNEY, P.E.
Engineer of Record

MNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

3/17/17

7/25/17

Date
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01  **COUNTY (SECTION)** SEMINOLE (77160)

**PROJECT DESCRIPTION** WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (EE WILLIAMSON ROAD)**

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<td>DISTRICT TRAFFIC OPERATIONS ENGINEER</td>
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**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

EE WILLIAMSON ROAD (770018)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

GAS (CENTRAL FLORIDA GAS)
WATER (SEMINOLE COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (SEMINOLE COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 40 MPH
EE WILLIAMSON BRIDGE SECTION

SHEET 3-15
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
EE WILLIAMSON ROADWAY SECTION

SHEET 3-16

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

State Engineer

Date

Date

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) UNDER EE WILLIAMSON ROAD

FHWA CONCURRENCE

FHWA Transportation Engineer

DATE: 7/25/17

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

DATE: 3/17/17
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID:** 432100-1-22-01  
**COUNTY (SECTION):** SEMINOLE (77160)  
**PROJECT DESCRIPTION:** WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (LAKE MARY BOULEVARD)**

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**DESIGN SPEED APPROVALS**

**DISTRICT DESIGN ENGINEER**  
3/17/17  
**DISTRICT TRAFFIC OPERATIONS ENGINEER**  
4/10/17

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

LAKE MARY BOULEVARD (770040, 770039)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

GAS (CENTRAL FLORIDA GAS)  
WATER (SEMINOLE COUNTY UTILITIES)  
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)  
WASTEWATER (SEMINOLE COUNTY UTILITIES)  
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

LAKE MARY BOULEVARD BRIDGE SECTION

DIVERGING DIAMOND INTERCHANGE

RAMP FROM LAKE EMMA ROAD

CONCRETE PARAPET (TYP.)

CONCRETE BARRIER (TYP.)

SHEET 3-19

COUNTY CONCURRENCE

FRANK A. COX
County Engineer
06-05-17 Date

FHWA CONCURRENCE

FHWA Transportation Engineer
12/5/17 Date

FDOT CONCURRENCE

AK Bremm
3/17/17 Date

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ROBERT N. DENNEY, P.E.
Engineer, Record #3350

STATE OF FLORIDA
LICENSE
No. 58593

APPROVED BY

7-22-40 PM \ZK\MDO\2013\Jobs\59219 - 14 SAMKTECH\PROD\Typical Section Package\YTPNMD01-SEG-3.DGN
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  SEMINOLE

SECTION NO.  77160  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 4.050 - 14.135

PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 30 MPH
LAKE MARY BOULEVARD ROADWAY SECTION
(EAST OF SR 400)

SHEET 3-20
# PROJECT IDENTIFICATION

**FINANCIAL PROJECT ID**: 432100-1-22-01  
**COUNTY (SECTION)**: SEMINOLE (77)60  
**PROJECT DESCRIPTION**: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

## PROJECT CONTROLS (LAKE EMMA ROAD)

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<td>( ) MINOR COLL.</td>
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**CRITERIA**

- (X) NEW CONSTRUCTION / RECONSTRUCTION
- ( ) RRR INTERSTATE / FREEWAY
- ( ) RRR NON-INTERSTATE / FREEWAY
- ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION
- ( ) TDLC / RRR
- ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

N/A

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**
- GAS (CENTRAL FLORIDA GAS)
- WATER (SEMINOLE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (SEMINOLE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
LAKE EMMA ROAD ROADWAY SECTION

FHWA CONCURRENCE

FHWA Transportation Engineer 7/05/17

DATE 3/17/17

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

ROBERT M. DENNEY, P.E.
Engineer of Record 58595

Sheq 3-23
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01
COUNTY (SECTION): SEMINOLE (77160)

PROJECT DESCRIPTION: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 1/2 MILE EAST OF SR 434 TO 1 1/2 MILE EAST OF SR 472.

FUNCTIONAL CLASSIFICATION

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ACCESS CLASSIFICATION

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LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

N/A

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

GAS (CENTRAL FLORIDA GAS)
WATER (SEMINOLE COUNTY UTILITIES)
COMMUNICATIONS (BRIGHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (SEMINOLE COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A

Sheets: 3-24
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME SEMINOLE

SECTION NO. 77160
ROAD DESIGNATION SR 400 (1-4)
LIMITS/MILEPOST MP 4.050 - 14.135
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
RINEHART ROAD ROADWAY SECTION

FHWA CONCURRENCE

COUNTY CONCURRENCE
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID ______432100-1-22-01______ FEDERAL AID PROJECT NO. ______N/A______ COUNTY NAME ______SEMINOLE______

SECTION NO. 77160 ___________ ROAD DESIGNATION ________SR 400 (1-4)____________ LIMITS/MILEPOST ___MP 4.050 - 14.135____

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER CROSS SEMINOLE TRAIL

SHEET 3-26

HITB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA TRANSPORTATION ENGINEER

FHWA CONCURRENCE

DATE 7/25/17

FLORIDA STATE ENGINEER

ROBERT M. DENNEY
LICENSE NO. 58593

APPROVED

6/11/17
**PROJECT IDENTIFICATION**

FINANCIAL PROJECT ID: 432100-1-22-01  
COUNTY (SECTION): SEMINOLE (77160)  
PROJECT DESCRIPTION: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (CR 46A)**

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| CRITERIA                   | POSTED SPEED 30 MPH D 53.10 |
|----------------------------| T24 12.2% |

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**CRITERIA**

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| DISTRICT TRAFFIC OPERATIONS ENGINEER |
| 4/10/17 |

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

CR 46A  (770077)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (SEMINOLE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (SEMINOLE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 30 MPH
CR 46A BRIDGE SECTION
DIVERGING DIAMOND INTERCHANGE

STATE OF FLORIDA

PROJECT MANAGER

ROBERT M. DENNEY

APPROVED BY

ROBERT M. DENNEY

SHEETS 3-28

FDOT CONCURRENCE

ANNETTE K. BRENCHEN, P.E.

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

COUNTY ENGINEER

DATE

DATE

DATE
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 30 MPH
CR 46A ROADWAY SECTION

ROBERT M. DENNEY
Licensed Professional Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer
Signature
Date

COUNTY CONCURRENCE

County Engineer
Signature
Date

FDOT CONCURRENCE

AK BRENNAN
FDOT District Design Engineer
Signature
Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER CR 46A

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ROBERT M. DENNEY
PA
Engineer, Office Records 5688

FDOT CONCURRENCE

AL BRENNAN
P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

STATE OF FLORIDA

ROBERT M. DENNEY
PA
Engineer, Office Records 5688

A. L. BRENNAN
P.E.
FDOT District Design Engineer

FHWA TRANSPORTATION ENGINEER

2/17/17

FHWA CONCURRENCE

FHWA Transportation Engineer

7/25/17

3-30 SHEET
### PROJECT IDENTIFICATION

**FINANCIAL PROJECT ID:** 432100-1-22-01  
**COUNTY (SECTION):** SEMINOLE (77160)  
**PROJECT DESCRIPTION:** WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

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### ACCESS CLASSIFICATION

| TRAFFIC |
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| ( ) 1 - FREEWAY | |
| ( ) 2 - RESTRICTIVE w/Service Roads | |
| (X) 3 - RESTRICTIVE w/660 ft. Connection Spacing | |
| ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing | |
| ( ) 5 - RESTRICTIVE w/440 ft. Connection Spacing | |
| ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing | |
| ( ) 7 - BOTH MEDIAN TYPES | |

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### LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

### LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

SR 46  
(770084, 770085)

### LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

- GAS (CENTRAL FLORIDA GAS)
- WATER (SEMINOLE COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (SEMINOLE COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

### LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 35 MPH
CR 431 (ORANGE BOULEVARD) ROADWAY SECTION (WEST OF MONROE RD.)

SHEET 3-33A

FHWA TRANSPORTATION ENGINEER:

FEDOT CONCURRENCE:

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE:

Date

COUNTY CONCURRENCE:

Date

ROBERT M. DENNEY

LICENSE No. 58593

STATE OF

AMENDMENT

12/17/2012

1/25/12

7/5/17

1/25/12

ROBERT M. DENNEY

Engineer of Record 58593

FDOT CORPORATION

110 CRESCENT EXEC CT.

SUITE 400

LAKE HAVEN, FL 32746

(407) 803-3335

CERT OF AUTH NO 6500
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 35 MPH
CR 431 (ORANGE BOULEVARD) ROADWAY SECTION (EAST OF MONROE RD.)

SHEET 3-33B
**PROJECT IDENTIFICATION**

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**FUNCTIONAL CLASSIFICATION**

| () RURAL | (X) URBAN |
| ( ) FREWAY/EXPWY. | ( ) MAJOR COLL. |
| (X) PRINCIPAL ART. | ( ) MINOR COLL. |
| ( ) MINOR ART. | ( ) LOCAL |

**PROJECT CONTROLS (US 17/92)**

**HIGHWAY SYSTEM**

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**ACCESS CLASSIFICATION**

| ()  | 1 - FREWAY |
| ()  | 2 - RESTRICTIVE w/Service Roads |
| (X) | 3 - RESTRICTIVE w/660 ft. Connection Spacing |
| ()  | 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing |
| ()  | 5 - RESTRICTIVE w/440 ft. Connection Spacing |
| ()  | 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing |
| ( ) | 7 - BOTH MEDIAN TYPES |

**TRAFFIC**

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**CRITERIA**

| (X) | NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) | RRR INTERSTATE / FREWAY |
| ( ) | RRR NON-INTERSTATE / FREWAY |
| ( ) | TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) | TDLC / RRR |
| ( ) | MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

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<td>JONATHAN RYAN</td>
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**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

US 17-92 (PROPOSED)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (SEMINOLE COUNTY UTILITIES, VOLUSIA COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (SEMINOLE COUNTY UTILITIES, VOLUSIA COUNTYUTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

CONCRETE BARRIER (TYP.)

CONCRETE TRAFFIC SEPARATOR

DESIGN SPEED = 45 MPH
US 17/92 BRIDGE SECTION

FDOT CONCURRENCE

ANETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 3-35

ROBERT M. DENNEY, P.E.
Engineer, Record 98508

HNTB CORPORATION
510 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ROBERT M. DENNEY, P.E.
State of Florida

REPROVED BY

AL BRENNAN  3/17/17

FHWA Transportation Engineer

Date

7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME SEMINOLE

SECTION NO. 77160 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 35 MPH
US 17/92 (CR 15, MONROE ROAD) ROADWAY SECTION

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNOT BOTTEN 3/17/17
ANNEBTA K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 3-36
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

CONCRETE BARRIER (TYP.)

DESIGN SPEED = 45 MPH
US 17/92 BRIDGE SECTION
(TIE-TO EXISTING BRIDGE OVER ST. JOHNS RIVER)

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

Sheet 3-37

DATE 3/17/17

DATE 7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

CONCRETE BARRIER (TYP.)

Q CONST.

PROPOSED BRIDGE STRUCTURE

16'-6" MIN. VERTICAL CLEARANCE

1'-3"

12" SHLD

12" SHLD

0.06 0.02 0.02 0.02 0.02

0.02 0.02 0.02 0.02 0.02

10'-6"

10'-6"

1'-3"

12" SHLD

12" SHLD

0.03 0.02 0.02 0.02 0.03

0.02 0.02 0.02 0.02 0.02

12" SHLD

12" SHLD

0.02 0.02 0.02 0.02 0.06

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER US 17/92

SHEET 3-38

FDOT CONCURRENCE  FHWA CONCURRENCE

A.K. BRENNAN  Date  ANNETTE K. BRENNAN, P.E.  Date

FHWA Transportation Engineer  Date

HNTB CORPORATION  3/17/17  (407) 805-0355  7/25/17

630 CRESCENT EXEC. CT.  CERT OF AUTH NO 6500

SUITE 400  (407) 805-0355

LAKE MARY, FL 32746  CERT OF AUTH NO 6500

ROBERT M. DENNEY, P.E.  Date

Engineer, OAC 3-38

ROBERT M. DENNEY, P.E.  Date

State of Florida

FDOE

Val Engineer

3:35:51 PM
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME SEMINOLE

SECTION NO. 77160  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 4.050 - 14.135

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 30 MPH
OLD US 17/92 ROADWAY SECTION UNDER SR 400 (1-4)

SHEET 3-39

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

Date

Date
I-4 Beyond the Ultimate
Volusia County Typical Section Package Index
PD&E FPID: 432100-1 (Segment 4)
Design FPID: 408464-2

I-4 Mainline
4-1  Key Sheet
4-2  I-4 Project Controls
4-3  I-4 typical Section with Transit Corridor & 2 Express Lanes
4-4  I-4 typical Section with Transit Corridor & 1 Express Lane
4-5  I-4 typical Section with Transit Corridor & No Express Lane
4-6  I-4 Bridge Over St. Johns River (Widen)
4-7  I-4 Bridge on the Debary Causeway (New Bridge)
4-8  I-4 Bridge Over Padgett Creek (Replace)
4-9  I-4 Bridge Over Dirksen Drive/Debary Avenue (Replace)

Ramps
4-10 One Lane Ramp
4-11 One Lane Express Lane Ramp
4-12 Two Lane Ramp
4-13 Three Lane Ramp

Dirksen Drive
4-14 Dirksen Drive Project Controls
4-15 Dirksen Drive Under I-4 Roadway Section
4-16 Dirksen Drive Roadway Section (West of I-4)
4-17 Dirksen Drive Roadway Section (East of I-4)

Enterprise Road
4-18 Enterprise Road Project Controls
4-19 Enterprise Road Bridge Section
4-20 Enterprise Road Roadway Section
4-21 I-4 Under Enterprise Road

Saxon Boulevard
4-22 Saxon Blvd Project Controls (West of I-4)
4-23 Saxon Blvd Project Controls (East of I-4)
4-24 Saxon Blvd Bridge Section (Replace)
4-25 Saxon Blvd Roadway Section (West of I-4)
4-26 Saxon Blvd Roadway Section (East of I-4)
4-27 Saxon Blvd Roadway Section (East of Normandy Blvd)
4-28 I-4 Under Saxon Boulevard
Rhode Island Avenue
4-29 Rhode Island Avenue Project Controls
4-30 Rhode Island Bridge Section (New Bridge)
4-31 Rhode Island Roadway Section
4-32 I-4 Under Rhode Island Avenue

Graves Avenue
4-33 I-4 Under Graves Avenue

SR 472
4-34 SR 472 Project Controls (West of I-4)
4-35 SR 472 Project Controls (East of I-4)
4-36 Howland Boulevard Project Controls (East of I-4)
4-37 SR 472 Bridge Section (Replace)
4-38 SR 472 Roadway Section (West of I-4)
4-39 SR 472 Roadway Section (East of I-4)
4-40 Howland Boulevard Roadway Section (East of Graves Ave)
4-41 I-4 Under SR 472
**PROJECT IDENTIFICATION**

FINANCIAL PROJECT ID: 432100-1-22-01  
COUNTY (SECTION): VOLUSIA (79110)  
PROJECT DESCRIPTION: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (SR 400/I-4)**

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<td>(X) NATIONAL HIGHWAY SYSTEM</td>
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<td>( ) MAJOR COLL.</td>
<td>( ) FLORIDA INTRASTATE HIGHWAY SYSTEM</td>
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<td>(X) PRINCIPAL ART.</td>
<td>( ) STRATEGIC INTERMODAL SYSTEM</td>
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<td>( ) MINOR COLL.</td>
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<td>( ) LOCAL</td>
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<td>( ) 7 - BOTH MEDIAN TYPES</td>
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**DESIGN SPEED APPROVALS**

DISTRICT DESIGN ENGINEER: 3/17/17

DISTRICT TRAFFIC OPERATIONS ENGINEER: 4/10/17

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

BORDER WIDTH (VARIATION) - FOR THE BORDER WIDTHS LESS THAN 94-FT (94-FT REQUIRED)
SHOULDER WIDTH (VARIATION) - FOR THE 10-FT MEDIAN GUL SHOULDER (12-FT REQUIRED)
SHOULDER WIDTH (VARIATION) - FOR THE 4-FT MEDIAN EXPRESS LANE SHOULDER (6-FT REQUIRED)

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

ST. JOHNS RIVER  
DEBARY CAUSEWAY (PROPOSED)  
PADDINGTON CREEK (7900196, 7900197)  
DIRKSEN DRIVE (7900043, 7900100)  
ENTERPRISE RD. (790191)  
SAXON BLVD. (7900167)  
GRAVES AVE. (790210)  
RHOE ISLAND AVE. (PROPOSED)  
SR 472 (7900190)  
SR 472 (790053, 790190)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

GAS (CENTRAL FLORIDA GAS)  
WATER (VOLUSIA COUNTY UTILITIES)  
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)  
WASTEWATER (VOLUSIA COUNTY UTILITIES)  
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID   432100-1-22-01    FEDERAL AID PROJECT NO.    N/A    COUNTY NAME   VOLUSIA

SECTION NO. 79110    ROAD DESIGNATION    SR 400 (I-4)    LIMITS/MILEPOST    MP 0.000 - 10.227

PROJECT DESCRIPTION   WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) WITH TRANSIT CORRIDOR & 2 EXPRESS LANES
STA 2578+48.33 TO 3118+46.00

FHWA CONCURRENCE

FHWA Transportation Engineer

Date

ROBERT M. DENNEY, P.E.
State of Florida

FHWA CONCURRENCE

FHWA Transportation Engineer

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) WITH TRANSIT CORRIDOR & 1 EXPRESS LANE
STA 2578+48.33 TO 3090+91.24

FDOT CONCURRENCE  FHWA CONCURRENCE

ANNETTE K. BRENNAN, P.E.  Date
FDOT District Design Engineer

FHWA Transportation Engineer  Date

SHEET 4-4

HNTB CORPORATION
610 CRESCENT EXEC. CT.
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH: 6500

Robert M. Denney, P.E.
State of Florida

Engineer of Record

58593

(Approved by)

7/25/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) WITH TRANSIT CORRIDOR & NO EXPRESS LANES
STA 3090+91.24 TO 3118+46.00

FHWA CONCURRENCE

FHWA Transportation Engineer

ROBERT M. DENNEY, P.E.
Engineer 

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE HARBOR, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

A K Brennan 3/17/17

Date

 approve By

2:39:56 PM  \\/K\n59219 - 14 SAMPH\TECPROD\Typical Section Package\YRD_01-4 TYPICALS.DGN

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION  SR 400 (1-4)  LIMITS/MILEPOST  MP 0.000 - 10.227

PROJECT DESCRIPTION  WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) BRIDGE OVER ST. JOHNS RIVER

SHEET 4-6
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE ON THE DEBARY CAUSEWAY
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) BRIDGE OVER PADGETT CREEK
+ 7-FT WIDE SHOULDER USED IN LIEU OF 4-FT SHOULDER TO MEET STOPPING SIGHT DISTANCE.

STATE OF

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

SHEET 4-8
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME VOLUSIA

SECTION NO. 79110 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) BRIDGE OVER DIRKSEN DRIVE/DEBARY AVENUE

* 7-FT WIDE SHOULDER USED IN LIEU OF 4-FT SHOULDER TO MEET STOPPING SIGHT DISTANCE.

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

ROBERT M. DENNET
NO. 58582
STATE OF FLORIDA
DEPARTMENT OF HIGHWAYS
LICENSEE NO. 729050
LICENSED TO PRACTICE IN THE STATE OF FLORIDA

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

AL BRENNAN 3/17/17
Date

Date

2:39:50 PM \LKRw00\anwork\4\Job\59219 - 14 SAM\TECHPROD\Typical Section Package\YPDSS01-1-4 TYPICALS.COM
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME VOLUSIA

SECTION NO. 79110
ROAD DESIGNATION SR 400 (I-4)
LIMITS/MILEPOST MP 0.000 - 10.227
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

<table>
<thead>
<tr>
<th>Ramp</th>
<th>Design Speed</th>
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<tbody>
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<td>SEGMENT 4</td>
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<tr>
<td>I-4 EB GUL RAMP TO DIRKSEN EB</td>
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<td>I-4 WB GUL RAMP TO DIRKSEN</td>
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SR 400 (I-4)
ONE LANE RAMP

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0555
CERT OF AUTH NO 6500

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

3/17/17

7/25/17
PROJECT IDENTIFICATION

SECTION NO. 79110 ROAD DESIGNATION SR 400 (I-4) LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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SR 400 (I-4)
ONE LANE EXPRESS LANE RAMP

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
Date

FHWA CONCURRENCE

FHWA Transportation Engineer
Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  VOLUSIA

SECTION NO.  79110  ROAD DESIGNATION  SR 400 (I-4)  LIMITS/MILEPOST  MP 0.000 - 10.227
PROJECT DESCRIPTION  WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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<td>SR 472 WB RAMP TO I-4 EB GUL</td>
<td>25-50</td>
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SR 400 (I-4) TWO LANE RAMP

FDOT CONCURRENCE

AK Brennan 3/17/17  Date
ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer  7/25/17  Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

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<tr>
<th>Ramp</th>
<th>Design Speed</th>
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<tbody>
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<td>SR 472 WB RAMP TO I-4 WB GUL</td>
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<tr>
<td>SR 472 EB RAMP TO I-4 EB GUL</td>
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SR 400 (I-4)
THREE LANE RAMP
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  COUNTY (SECTION) VOLUSIA (79110)

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROJECT CONTROLS (DIRKSEN DRIVE)

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<td>( ) MAJOR COLL.</td>
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<td>( ) PRINCIPAL ART.</td>
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<td>( ) MINOR COLL.</td>
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ACCESS CLASSIFICATION

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<td>( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing</td>
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<td>( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing</td>
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<td>(X) 5 - RESTRICTIVE w/440 ft. Connection Spacing</td>
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CRITERIA

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</tr>
</tbody>
</table>

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

DIRKSEN DRIVE (790042, 790100)

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:
GAS (CENTRAL FLORIDA GAS)
WATER (VOLUSIA COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (VOLUSIA COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A
PROPOSED ROADWAY TYPICAL SECTION

Q. Const.

PROPOSED BRIDGE STRUCTURE

16'-6" MIN. VERTICAL CLEARANCE

52'-0"

108'-0"

56'-0"

22 MIN.

RELOCATED TRAIL

CURB & GUTTER TYPE F

CURB & GUTTER TYPE E

CURB & GUTTER TYPE E

CURB & GUTTER TYPE F

0.02

0.02

0.02

0.02

DESIGN SPEED = 40 MPH

DIRKSEN DRIVE UNDER SR 400 (I-4) ROADWAY SECTION

STATE OF

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 865-0355

CERT OF AUTH NO 6500

FDOT CONCURRENCE

ANNETTE K. BRENNAN, P.E.
FDOT District
Design Engineer

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

County Engineer

APPROVED BY

ROBERT M. DENNEY

LICENSE NO 56593

7/02/11 PM
mbacal
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME VOLUSIA

SECTION NO. 79110 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 10.227
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
DIRKSEN DRIVE ROADWAY SECTION (WEST OF I-4)

FDOT CONCURRENCE

FHWA CONCURRENCE

COUNTY CONCURRENCE

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 803-6350
CERT OF AUTH NO 6500

ANETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA Transportation Engineer

County Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
DIRKSEN DRIVE ROADWAY SECTION (EAST OF 1-4)
## PROJECT IDENTIFICATION

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<th>PROJECT DESCRIPTION</th>
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<td>WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.</td>
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## PROJECT CONTROLS (ENTERPRISE ROAD)

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<td>4/10/17</td>
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<tr>
<td>( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)</td>
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LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

ENTERPRISE ROAD (790191)

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

GAS (CENTRAL FLORIDA GAS)
WATER (VOLUSIA COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (VOLUSIA COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A

 SHEET 4-18
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
ENTERPRISE RD. ROADWAY SECTION

SHEET 4-20
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME VOLUSIA

SECTION NO. 79110 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH SR 400 (1-4) UNDER ENTERPRISE RD.

+ VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
+ 44" REQUIRED FOR FUTURE TRANSIT CORRIDOR. FUTURE TRANSIT CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
+ 3'-6" MAXIMUM PIER WIDTH ALLOWED.
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID:  432100-1-22-01  COUNTY (SECTION): VOLUSIA (79110)

PROJECT DESCRIPTION: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROJECT CONTROLS (SAXON BOULEVARD WEST OF SR 400)

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ACCESS CLASSIFICATION

| ( ) 1 - FREEWAY |
| ( ) 2 - RESTRICTIVE w/Service Roads |
| ( ) 3 - RESTRICTIVE w/660 ft. Connection Spacing |
| ( ) 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing |
| (X) 5 - RESTRICTIVE w/440 ft. Connection Spacing |
| ( ) 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing |
| ( ) 7 - BOTH MEDIAN TYPES |

TRAFFIC

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DISTRIBUTION

| DESIGN SPEED | 45 MPH |
| DIRECTION | K 9.0 |
| POSTED SPEED | 45 MPH |
| T 24 | 10.2% |

CRITERIA

| (X) NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) RRR INTERSTATE / FREEWAY |
| ( ) RRR NON-INTERSTATE / FREEWAY |
| ( ) TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) TDLC / RRR |
| ( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |

DESIGN SPEED APPROVALS

| DISTRICT DESIGN ENGINEER | 3/17/17 |
| DISTRICT TRAFFIC OPERATIONS ENGINEER | 4/10/17 |

LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:

N/A

LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:

SAXON BOULEVARD  (790167, 790166)

LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:

GAS (CENTRAL FLORIDA GAS)
WATER (VOLUSIA COUNTY UTILITIES)
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
WASTEWATER (VOLUSIA COUNTY UTILITIES)
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:

N/A
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<td>POSTED SPEED 40 MPH D 62.50</td>
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<td>T 24 10.2%</td>
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**Design Speed Approvals**

District Design Engineer: [Signature] 3/17/17

District Traffic Operations Engineer: [Signature] 4/1/17

List any potential exceptions and variations related to typical section elements:

N/A

List major structures location/description - requiring independent structure design:

Saxon Boulevard (790167, 790166)

List major utilities within project corridor:

- Gas (Central Florida Gas)
- Water (Volusia County Utilities)
- Communications (BrightHouse Networks, Comcast, Level 3, Verizon)
- Wastewater (Volusia County Utilities)
- Electric (Duke Energy Distribution, Duke Energy Transmission)

List other information pertinent to design of project:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 45 MPH
SAXON BOULEVARD BRIDGE SECTION

ROBERT M. DENNEY
P.E.

STATE OF FL

LICENSE NO. 56955

APPROVED BY

58593

MTO CORPORATION
610 CRESCENT EXEC. CT
SUITE 400
LAKE MARY, FL 32746
(407) 605-0355
CERT OF AUTH NO 6500

MARIO BIZZIO, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE

COUNTY CONCURRENCE

FHWA Transportation Engineer

Date

Date

Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01
FEDERAL AID PROJECT NO. N/A
COUNTY NAME VOLUSIA

SECTION NO. 79110
ROAD DESIGNATION SR 400 (I-4)
LIMITS/MILEPOST MP 0.000 - 10.227
PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
SAXON BOULEVARD ROADWAY SECTION (WEST OF SR 400)

FHWA CONCURRENCE
FHWA Transportation Engineer
Date

COUNTY CONCURRENCE
County Engineer
Date

SIGNATURES

ROBERT M. DENNEY
P.E.
Engineer, Ordinance
County Engineer

MARIO BIZZIO, P.E.
FDT District Design Engineer

APPROVED BY

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE HAVEN, FL 32746
(407) 805-0355
CERT. OF AUTH NO 6500

SHEET 4-25
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION  SR 400 (1-4)  LIMITS/MILEPOST  MP 0.000 - 10.227

PROJECT DESCRIPTION  WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND
                          FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
SAXON BOULEVARD ROADWAY SECTION (EAST OF SR 400)

SHEET 4-26

MARIO BIZZIO, P.E.  FHWA Transportation Engineer  7/25/17

COUNTY CONCURRENCE  County Engineer  6/17

FHWA CONCURRENCE  Date

FOOT CONCURRENCE  Date

MARIO BIZZIO, P.E.  FHWA Transportation Engineer  7/25/17

COUNTY CONCURRENCE  County Engineer  6/17
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION  SR 400 (1-4)  LIMITS/MILEPOST  MP 0.000 - 10.227
PROJECT DESCRIPTION  WIDENING SR 400 (1-4) FROM WEST OF CR 522 TO WEST OF SR 435 KIRKMAN ROAD AND  
FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
SAXON BOULEVARD ROADWAY SECTION (EAST OF NORMANDY BOULEVARD)
# Project Identification

**Financial Project ID:** 432100-1-22-01  
**County (Section):** Volusia (79110)  
**Project Description:** Widening SR 400 (I-4) from west of CR 532 to west of SR 435 (Kirkman RD.) and from 1 mile east of SR 434 to 1/2 mile east of SR 472.

## Project Controls (Rhode Island Avenue)

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<thead>
<tr>
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<th>( ) Rural</th>
<th>( ) Urban</th>
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<tr>
<td>Freeway/EXPWY.</td>
<td>(X) Major Coll.</td>
<td>( ) Principal Art.</td>
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<th>( ) National Highway System</th>
<th>( ) Florida Intrastate Highway System</th>
<th>( ) Strategic Intermodal System</th>
<th>( ) State Highway System</th>
<th>( ) Off State Highway System</th>
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## Access Classification

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<th>3 - Restrictive w/660 ft. Connection Spacing</th>
<th>4 - Non-Restrictive w/2640 ft. Signal Spacing</th>
<th>5 - Restrictive w/440 ft. Connection Spacing</th>
<th>6 - Non-Restrictive w/1320 ft. Signal Spacing</th>
<th>7 - Both Median Types</th>
</tr>
</thead>
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## Criteria

| (X) | New Construction / Reconstruction | ( ) | RRR Interstate / Freeway | ( ) | RRR Non-Interstate / Freeway | ( ) | TDLC / New Construction / Reconstruction | ( ) | TDLC / RRR | ( ) | Manual of Uniform Minimum Standards (Florida Greenbook) (Off-State Highway System Only) |

## Traffic

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<th>2040</th>
<th>Design Speed</th>
<th>Posted Speed</th>
<th>K</th>
<th>D</th>
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## Design Speed Approvals

- **District Design Engineer:** 
  - **Date:** 3/17/17

- **District Traffic Operations Engineer:** 
  - **Date:** 4/10/17

## List Any Potential Exceptions and Variations Related to Typical Section Elements:

N/A

## List Major Structures Location/Description - Requiring Independent Structure Design:

**Rhode Island Avenue** (Proposed)

## List Major Utilities Within Project Corridor:

- Gas (Central Florida Gas)
- Water (Volusia County Utilities)
- Communications (BrightHouse Networks, Comcast, Level 3, Verizon)
- Wastewater (Volusia County Utilities)
- Electric (Duke Energy Distribution, Duke Energy Transmission)

## List Other Information Pertinent to Design of Project:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01  FEDERAL AID PROJECT NO.: N/A  COUNTY NAME: VOLUSIA

SECTION NO.: 79110  ROAD DESIGNATION: SR 400 (1-4)  LIMITS/MILEPOST: MP 0.000 - 10.227

PROJECT DESCRIPTION: WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

DESIGN SPEED = 40 MPH
RHODE ISLAND AVENUE BRIDGE SECTION

FHWA CONCURRENCE

FHWA Transportation Engineer
Date

COUNTY CONCURRENCE

County Engineer
Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 40 MPH
RHODE ISLAND AVENUE ROADWAY SECTION

SHEET 4-31
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01 FEDERAL AID PROJECT NO. N/A COUNTY NAME VOLUSIA

SECTION NO. 79110 ROAD DESIGNATION SR 400 (1-4) LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER RHODE ISLAND AVENUE

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE TRANSIT CORRIDOR. FUTURE TRANSIT CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3-6' MAXIMUM PIER WIDTH ALLOWED.

FHWA CONCURRENCE
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01   FEDERAL AID PROJECT NO. N/A   COUNTY NAME VOLUSIA

SECTION NO. 79110   ROAD DESIGNATION SR 400 (1-4)   LIMITS/MILEPOST MP 0.000 - 10.227
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (1-4) UNDER GRAVES AVENUE

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44" REQUIRED FOR FUTURE TRANSIT CORRIDOR. FUTURE TRANSIT CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.

HNTB CORPORATION
610 CRESCENT EXEC. CT.
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

FDOT CONCURRENCE

AK Brennan 3/17/17

FHWA CONCURRENCE

FHWA Transportation Engineer 7/25/17
**PROJECT IDENTIFICATION**

**FINANCIAL PROJECT ID** 432100-1-22-01

**COUNTY (SECTION)** VOLUSIA (79110)

**PROJECT DESCRIPTION** WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

**PROJECT CONTROLS (SR 472 WEST OF SR 400)**

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<tr>
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| FREEWAY/EXPY. | MAJOR COLL. |
| ( )           | ( )         |

| PRINCIPAL ART. | MINOR COLL. |
| (X)            | ( )         |

| MINOR ART. | LOCAL |
| ( )        |       |

**HIGHWAY SYSTEM**

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| NATIONAL HIGHWAY SYSTEM |
| ( ) |

| FLORIDA INTRASTATE HIGHWAY SYSTEM |
| (X) |

| STRATEGIC INTERMODAL SYSTEM |
| (X) |

| STATE HIGHWAY SYSTEM |
| (X) |

| OFF STATE HIGHWAY SYSTEM |
| (X) |

**ACCESS CLASSIFICATION**

| 1 - FREEWAY |
| ( ) |

| 2 - RESTRICTIVE w/Service Roads |
| ( ) |

| 3 - RESTRICTIVE w/660 ft. Connection Spacing |
| (X) |

| 4 - NON-RESTRICTIVE w/2640 ft. Signal Spacing |
| ( ) |

| 5 - RESTRICTIVE w/440 ft. Connection Spacing |
| ( ) |

| 6 - NON-RESTRICTIVE w/1320 ft. Signal Spacing |
| ( ) |

| 7 - BOTH MEDIAN TYPES |
| ( ) |

**TRAFFIC**

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**CRITERIA**

| NEW CONSTRUCTION / RECONSTRUCTION |
| (X) |

| RRR INTERSTATE / FREEWAY |
| ( ) |

| RRR NON-INTERSTATE / FREEWAY |
| ( ) |

| TDLC / NEW CONSTRUCTION / RECONSTRUCTION |
| ( ) |

| TDLC / RRR |
| ( ) |

| MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY) |
| ( ) |

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

SR 472 (790053, 790190)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

- GAS (CENTRAL FLORIDA GAS)
- WATER (VOLUSIA COUNTY UTILITIES)
- COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)
- WASTEWATER (VOLUSIA COUNTY UTILITIES)
- ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A

**SHEET 4-34**
**PROJECT IDENTIFICATION**

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<td>WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 (KIRKMAN RD.) AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.</td>
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**PROJECT CONTROLS (SR 472 EAST OF SR 400)**

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<th>FUNCTIONAL CLASSIFICATION</th>
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<td>(X) MAJOR COLL.</td>
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<td>( ) PRINCIPAL ART.</td>
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<td>( ) MINOR COLL.</td>
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**ACCESS CLASSIFICATION**

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**CRITERIA**

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<td>( ) TDLC / RRR</td>
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<tr>
<td>( ) MANUAL OF UNIFORM MINIMUM STANDARDS (FLORIDA GREENBOOK) (OFF-STATE HIGHWAY SYSTEM ONLY)</td>
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</table>

**LIST ANY POTENTIAL EXCEPTIONS AND VARIATIONS RELATED TO TYPICAL SECTION ELEMENTS:**

N/A

**LIST MAJOR STRUCTURES LOCATION/DESCRIPTION - REQUIRING INDEPENDENT STRUCTURE DESIGN:**

SR 472  
(790053, 790190)

**LIST MAJOR UTILITIES WITHIN PROJECT CORRIDOR:**

GAS (CENTRAL FLORIDA GAS)  
WATER (VOLUSIA COUNTY UTILITIES)  
COMMUNICATIONS (BRIGHTHOUSE NETWORKS, COMCAST, LEVEL 3, VERIZON)  
WASTEWATER (VOLUSIA COUNTY UTILITIES)  
ELECTRIC (DUKE ENERGY DISTRIBUTION, DUKE ENERGY TRANSMISSION)

**LIST OTHER INFORMATION PERTINENT TO DESIGN OF PROJECT:**

N/A
### Project Identification

**Financial Project ID:** 432100-1-22-01  
**County (Section):** Volusia (79110)  
**Project Description:** Widening SR 400 (I-4) from west of CR 532 to west of SR 435 (Kirkman Rd.) and from 1 mile east of SR 434 to 1/2 mile east of SR 472.

### Project Controls (Howland Boulevard)

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<td>( ) Major Coll.</td>
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<td>( ) Principal Art.</td>
<td>(x) Strategic Intermodal System</td>
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<td>( ) Minor Coll.</td>
<td>(x) State Highway System</td>
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### Access Classification

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<td>( ) 2 - Restrictive w/Service Roads</td>
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<td>( ) 3 - Restrictive w/660 ft. Connection Spacing</td>
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<td>( ) 4 - Non-Restrictive w/2640 ft. Signal Spacing</td>
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<td>(x) 5 - Restrictive w/440 ft. Connection Spacing</td>
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<td>( ) 6 - Non-Restrictive w/1320 ft. Signal Spacing</td>
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<tr>
<td>( ) 7 - Both Median Types</td>
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### Criteria

- (x) New Construction / Reconstruction
- ( ) RRR Interstate / Freeway
- ( ) RRR Non-Interstate / Freeway
- ( ) TDLC / New Construction / Reconstruction
- ( ) TDLC / RRR
- ( ) Manual of Uniform Minimum Standards (Florida Greenbook) (Off-State Highway System Only)

### Design Speed Approvals

- **Design Speed:** 45 MPH  
- **Distribution:**
  - Design Speed Approvals  
  - K 10.34  
  - D 62.50  
  - T24 6.4%

**District Design Engineer:** A.K. Brennan  
**Date:** 3/17/17

**District Traffic Operations Engineer:**  
**Date:** 4/1/17

### List Any Potential Exceptions and Variations Related to Typical Section Elements:

N/A

### List Major Structures Location/Description - Requiring Independent Structure Design:

SR 472 (790053, 790190)

### List Major Utilities Within Project Corridor:

- Gas (Central Florida Gas)
- Water (Volusia County Utilities)
- Communications (BrightHouse Networks, Comcast, Level 3, Verizon)
- Wastewater (Volusia County Utilities)
- Electric (Duke Energy Distribution, Duke Energy Transmission)

### List Other Information Pertinent to Design of Project:

N/A
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (1-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND

FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED STRUCTURE TYPICAL SECTION

SR 472 BRIDGE SECTION
DIVERGING DIAMOND INTERCHANGE

FHWA CONCURRENCE

FHWA Transportation Engineer 7/25/17

A. K. Brennan 3/17/17

ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FDOT CONCURRENCE

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

Approved by

STATE OF

ROBERT M. DENNEY
State Engineering Director

No. 58593

Date 7/22/11

Project 38219 - 14 SAM/TECH/PROD/Typical Section Package/TYPORD01-566-4.DGN
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 432100-1-22-01  FEDERAL AID PROJECT NO.: N/A  COUNTY NAME: VOLUSIA

SECTION NO.: 79110  ROAD DESIGNATION: SR 400 (I-4)  LIMITS/MILEPOST: MP 0.000 - 10.227

PROJECT DESCRIPTION: WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 55 MPH
SR 472 ROADWAY SECTION (WEST OF SR 400)

APPROVED BY:

HNTB CORPORATION
610 CRESCENT EXEC. CT.
LAKE MARY, FL 32746
(407) 805-0355
CERT. OF AUTH. NO. 6500

FDOT CONCURRENCE: ANNETTE K. BRENNAN, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE: Date
FHWA Transportation Engineer

ROBERT M. DENNE
ENGINEER OF RECORD, 56593

Date
Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID  432100-1-22-01  FEDERAL AID PROJECT NO.  N/A  COUNTY NAME  VOLUSIA

SECTION NO.  79110  ROAD DESIGNATION  SR 400 (1-4)  LIMITS/MILEPOST  MP 0.000 - 10.227

PROJECT DESCRIPTION  WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
SR 472 ROADWAY SECTION (EAST OF SR 400)

FDOT CONCURRENCE  ANNETTE K. BRENNAN, P.E.  Date
FHWA CONCURRENCE  Date
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01    FEDERAL AID PROJECT NO. N/A    COUNTY NAME VOLUSIA

SECTION NO. 79110    ROAD DESIGNATION SR 400 (1-4)    LIMITS/MILEPOST MP 0.000 - 10.227
PROJECT DESCRIPTION WIDENING SR 400 (1-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 45 MPH
HOWLAND BOULEVARD ROADWAY SECTION (EAST OF GRAVES AVENUE)

SHEET 4-40

HNTB CORPORATION

610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0355
CERT OF AUTH NO 6500

MARIO BIZZIO, P.E.

FHWA CONCURRENCE

FHWA Transportation Engineer

COUNTY CONCURRENCE

County Engineer
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID 432100-1-22-01  FEDERAL AID PROJECT NO. N/A  COUNTY NAME VOLUSIA

SECTION NO. 79110  ROAD DESIGNATION SR 400 (I-4)  LIMITS/MILEPOST MP 0.000 - 10.227

PROJECT DESCRIPTION WIDENING SR 400 (I-4) FROM WEST OF CR 532 TO WEST OF SR 435 KIRKMAN ROAD AND FROM 1 MILE EAST OF SR 434 TO 1/2 MILE EAST OF SR 472.

PROPOSED ROADWAY TYPICAL SECTION

DESIGN SPEED = 70 MPH
SR 400 (I-4) UNDER SR 472 EB & WB

* VERTICAL CLEARANCE MEASURED FROM EXPRESS LANE INSIDE EDGE OF TRAVEL TO LOW MEMBER.
** 44' REQUIRED FOR FUTURE TRANSIT CORRIDOR. FUTURE TRANSIT CORRIDOR IS MEASURED FROM FACE OF FUTURE INSIDE BARRIER TO FACE OF FUTURE INSIDE BARRIER.
*** 3'-6" MAXIMUM PIER WIDTH ALLOWED.

HNTB CORPORATION
610 CRESCENT EXEC. CT.
SUITE 400
LAKE MARY, FL 32746
(407) 805-0855
CERT OF AUTH NO 6500

FDOT CONCURRENCE
ANNETTE K. BRENNA, P.E.
FDOT District Design Engineer

FHWA CONCURRENCE
FHWA Transportation Engineer

APPROVE BY

ROBERT M. DENNEY, P.E.
Chief of Design

Date

7/25/17