

# Appendix A

## Figures

## Part 1

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# Carolina Bays

## Parkway Extension

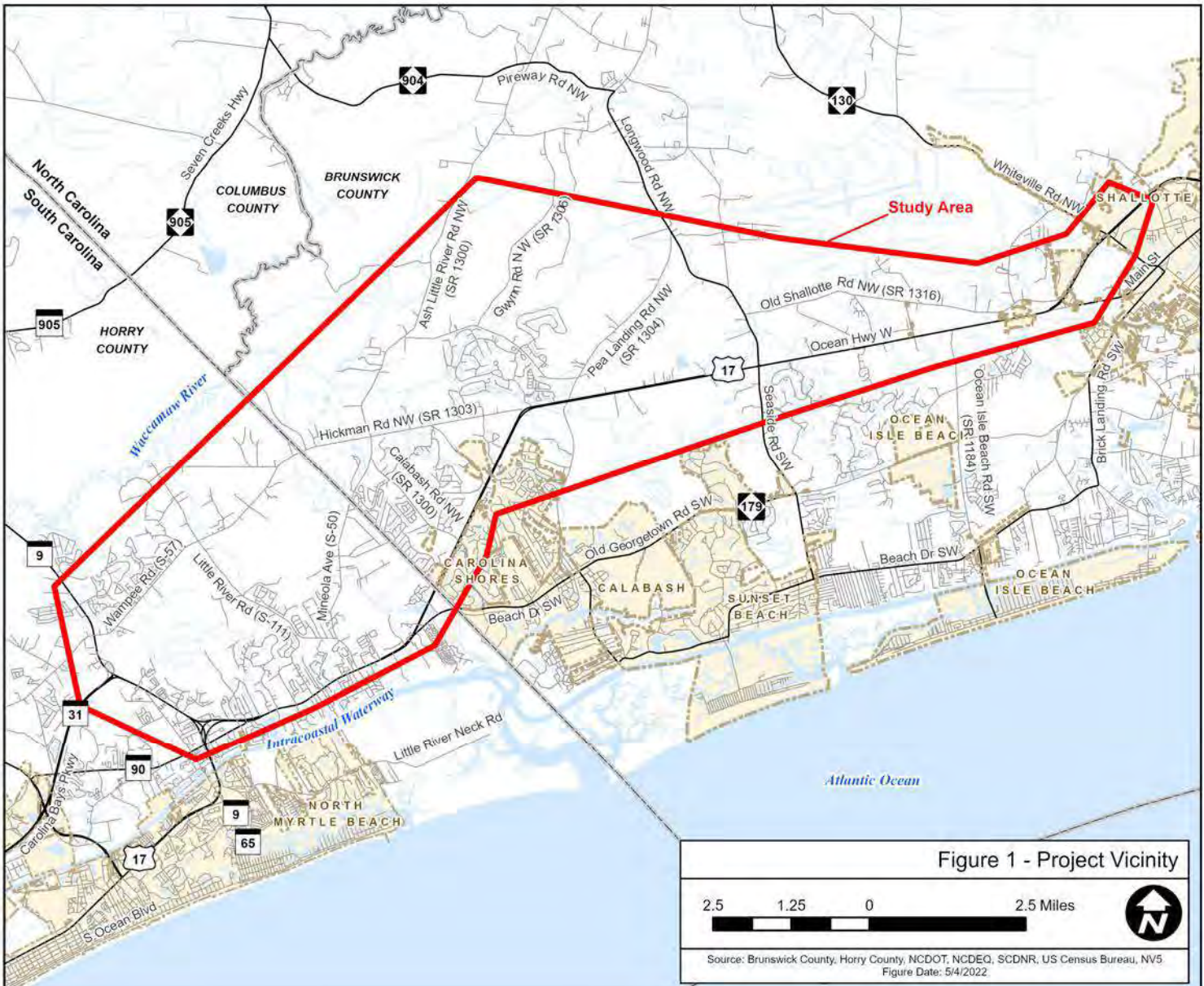
North Carolina + South Carolina

NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County



SCDOT

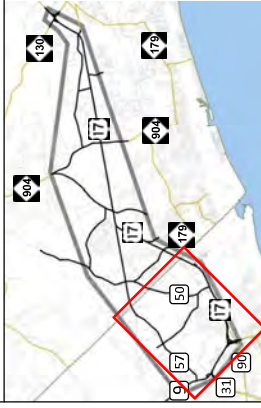


**Figure 2A**  
 2019 Average Annual Daily Traffic  
 Base Year No Build



**LEGEND**

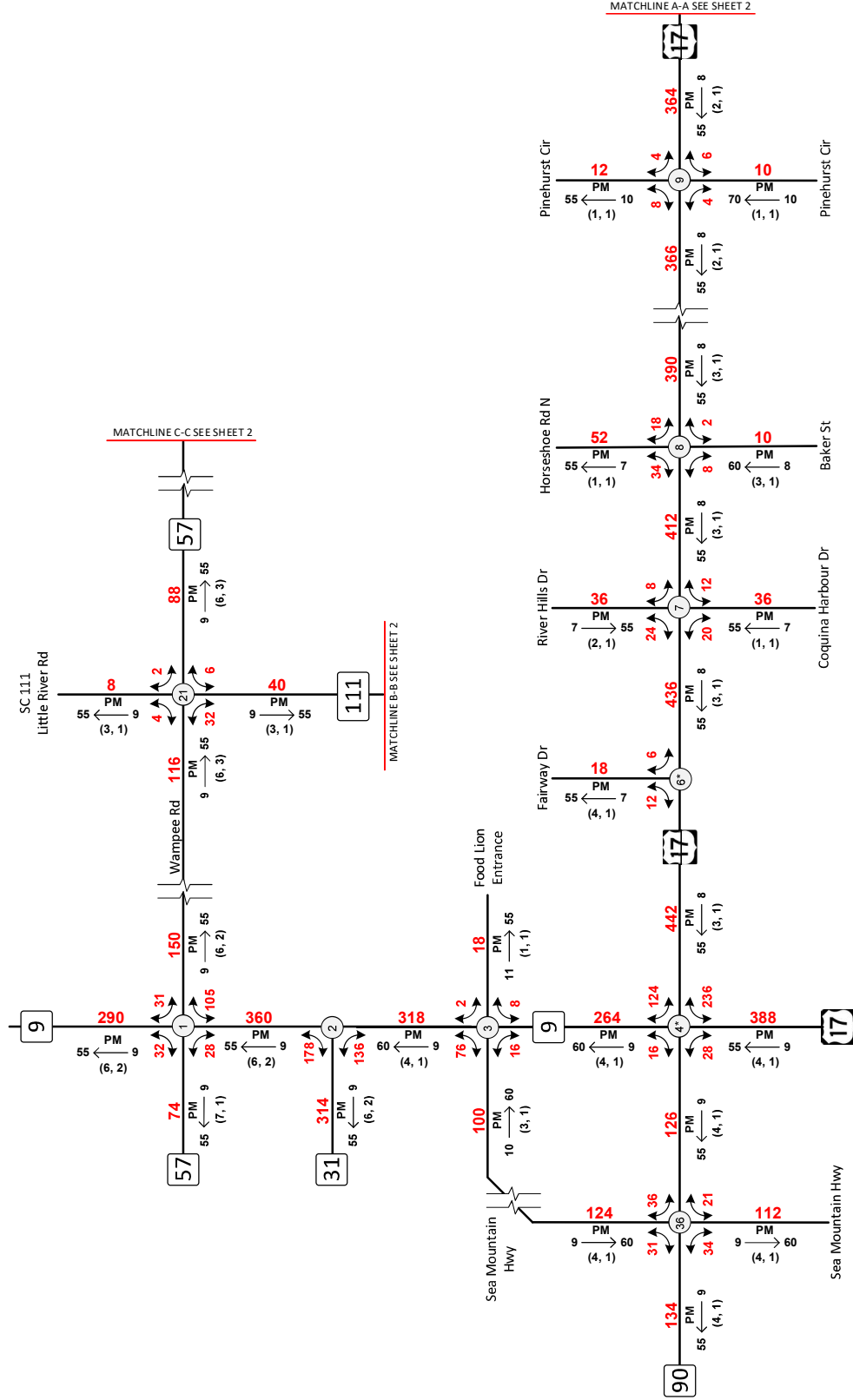
- #### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K  $\frac{PM}{(d, t)} \rightarrow D$  Design Hour Factor (%)
- PM PM Peak Period
- D Indicates Directional Split (%)
- $\rightarrow$  Indicates Direction of D
- (d, t) Duals, TT-STs (%)



**2019** AVERAGE ANNUAL DAILY TRAFFIC

**BASE YEAR NO BUILD**  
**SHEET 1 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



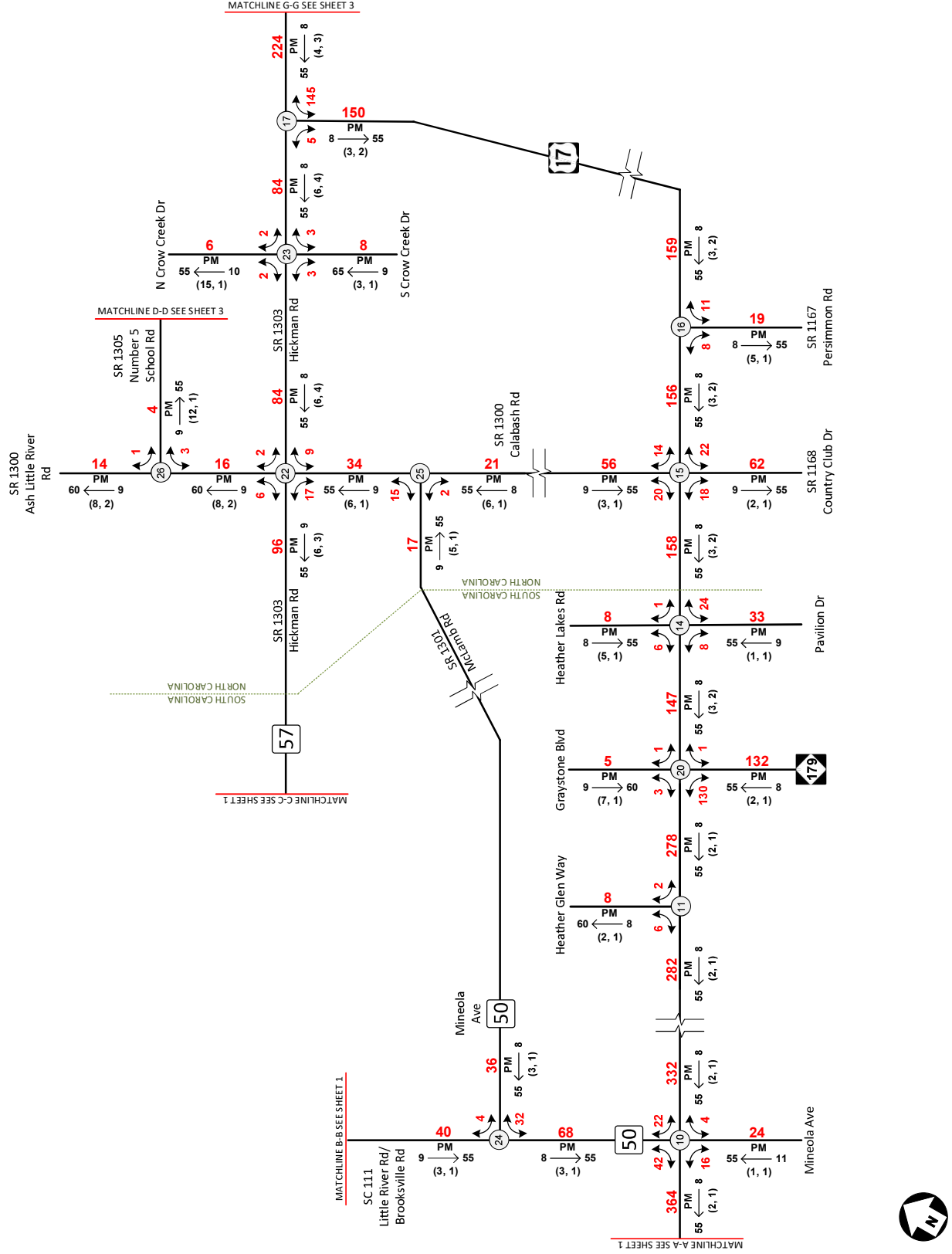
\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





**Carolina Bays**  
Parkway Extension  
North Carolina - South Carolina

|                                              |                        |
|----------------------------------------------|------------------------|
| <b>NC TIP: R-5876</b>                        | <b>SC PN: P029554</b>  |
| <b>COUNTY: Brunswick/Horry</b>               | <b>DIVISION: 3/5/5</b> |
| <b>DATE: October 2020</b>                    | <b>WBS: 44604</b>      |
| <b>PREPARED BY: Clearbox Forecast Group/</b> |                        |
| <b>LOCATION: SC 9 to NC 130</b>              |                        |
| <b>PROJECT: Carolina Bays Parkway Ext.</b>   |                        |



**Figure 2C**  
**2019 Average Annual Daily Traffic**  
 Base Year No Build

NCDOT Project R-5876  
 Brunswick County

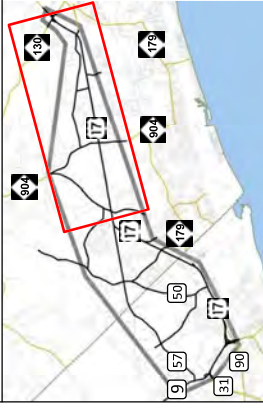
SCDOT Project P029554  
 Horry County



**LEGEND**

**###** No. of Vehicles Per Day in 100s  
**1-** Less than 50 vpd  
**X** Movement Prohibited

**K** Design Hour Factor (%)  
**PM** PM Peak Period  
**D** Peak Hour Directional Split (%)  
**→** Indicates Direction of D  
**(d, t)** Duals, TT-STs (%)



**2019** AVERAGE ANNUAL  
 DAILY TRAFFIC

**BASE YEAR NO BUILD**  
**SHEET 3 OF 3**

**NC TIP: R-5876** **SC PN: P029554**

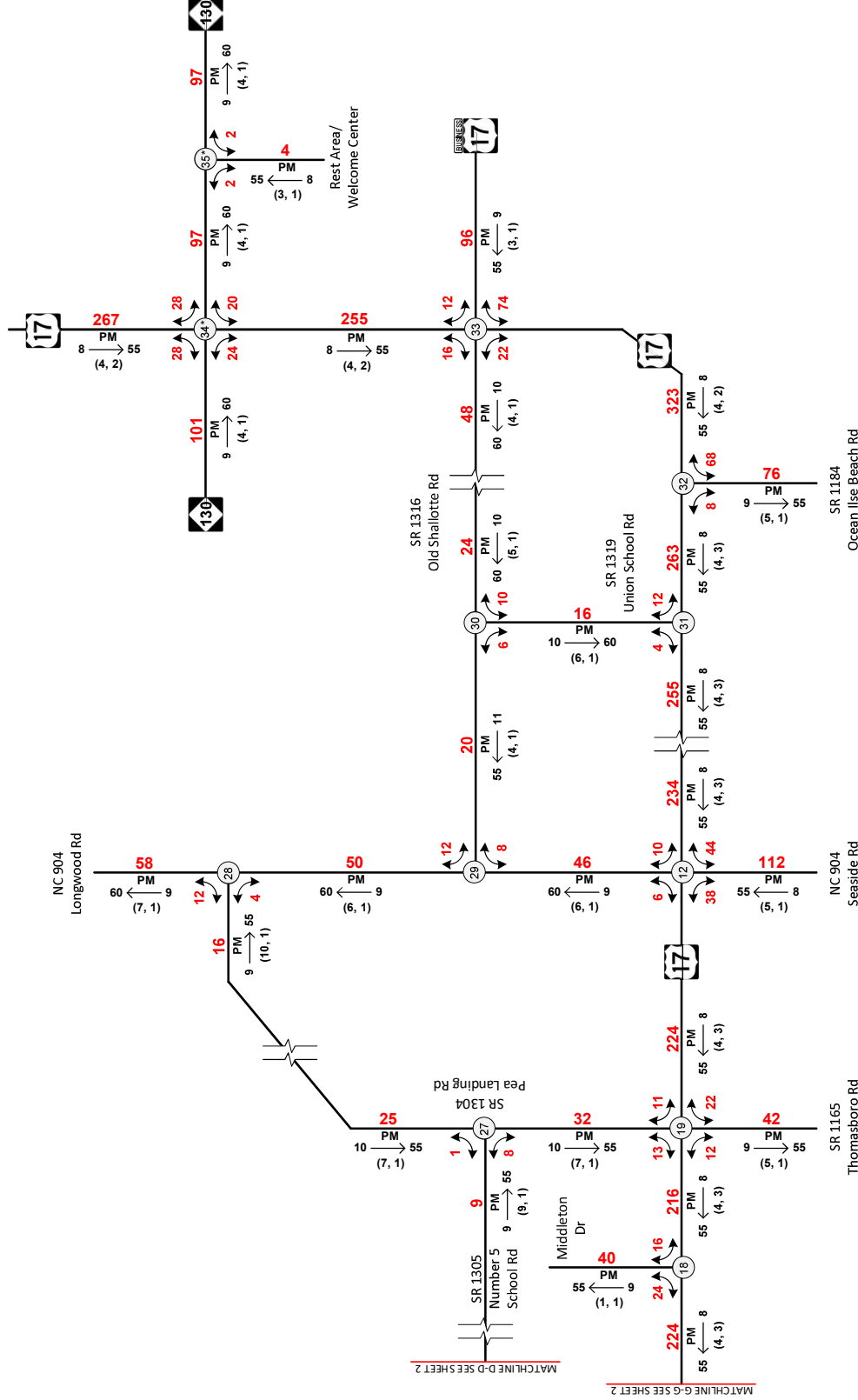
**COUNTY:** Brunswick/Horry **DIVISION:** 3/5

**DATE:** October 2020 **WBS:** 44604

**PREPARED BY:** Clearbox Forecast Group

**LOCATION:** SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.



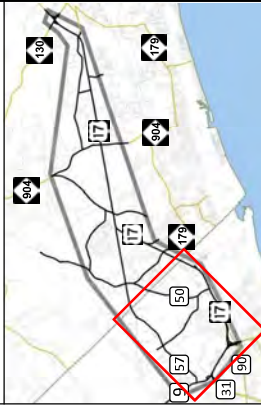
**Figure 3A**  
**2019 Average Summer Weekday Traffic**  
 Base Year No Build



Carolina Bays Parkway Extension

**LEGEND**

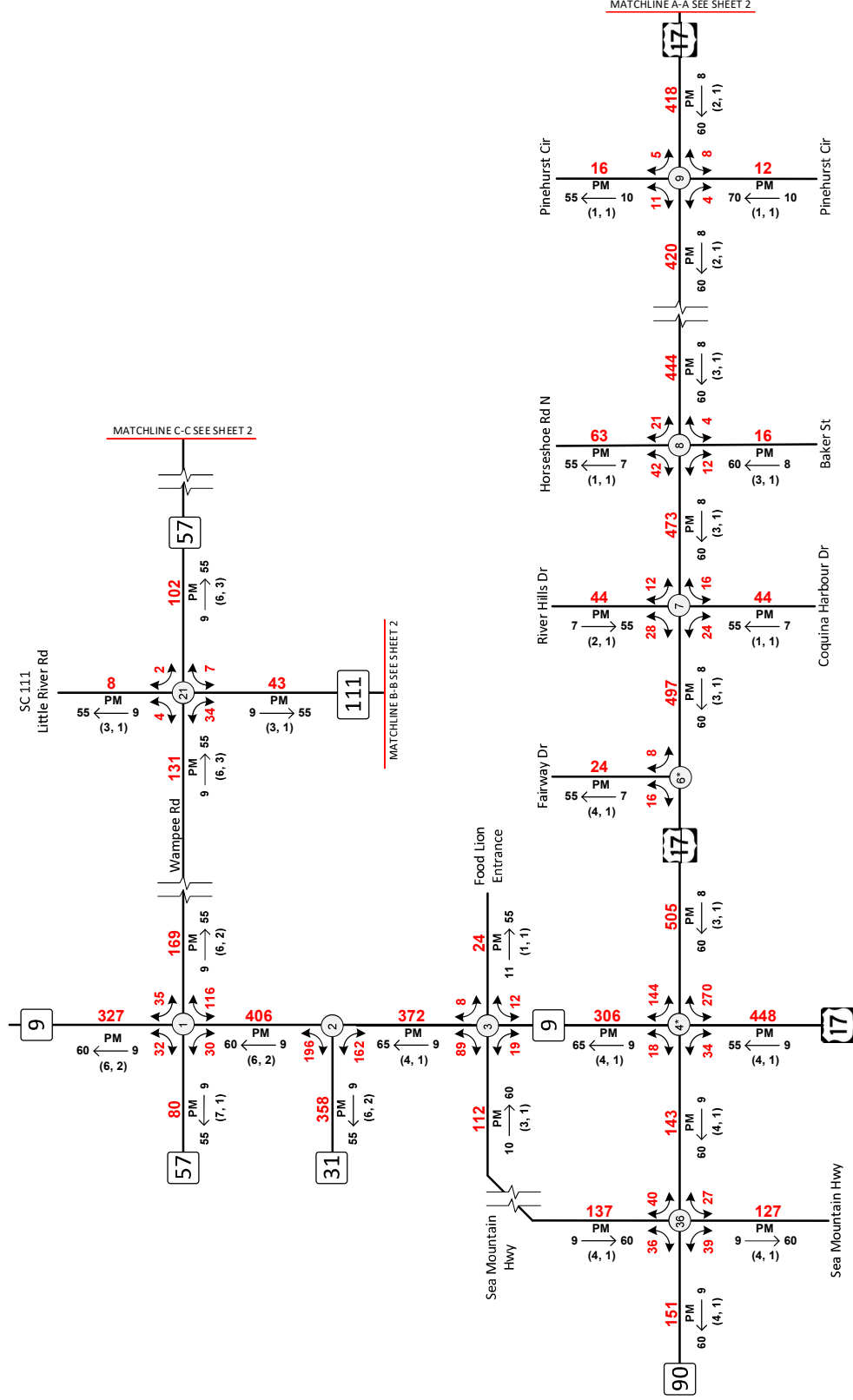
- #### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K  $\frac{PM}{(d, t)} \rightarrow D$  Design Hour Factor (%)
- PM PM Peak Period
- D Indicates Directional Split (%)
- $\rightarrow$  (d, t) Duals, TT-STs (%)



**2019** AVERAGE SUMMER WEEKDAY TRAFFIC

**BASE YEAR NO BUILD**  
**SHEET 1 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area







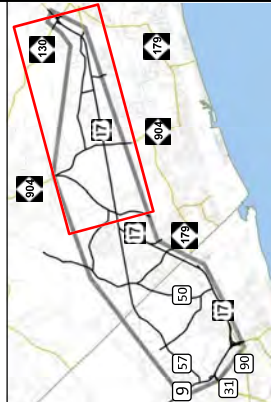
**Figure 3C**  
**2019** Average Summer Weekday Traffic  
 Base Year No Build

NC DOT Project R-5876  
 Brunswick County

SCDOT Project P029554  
 Horry County



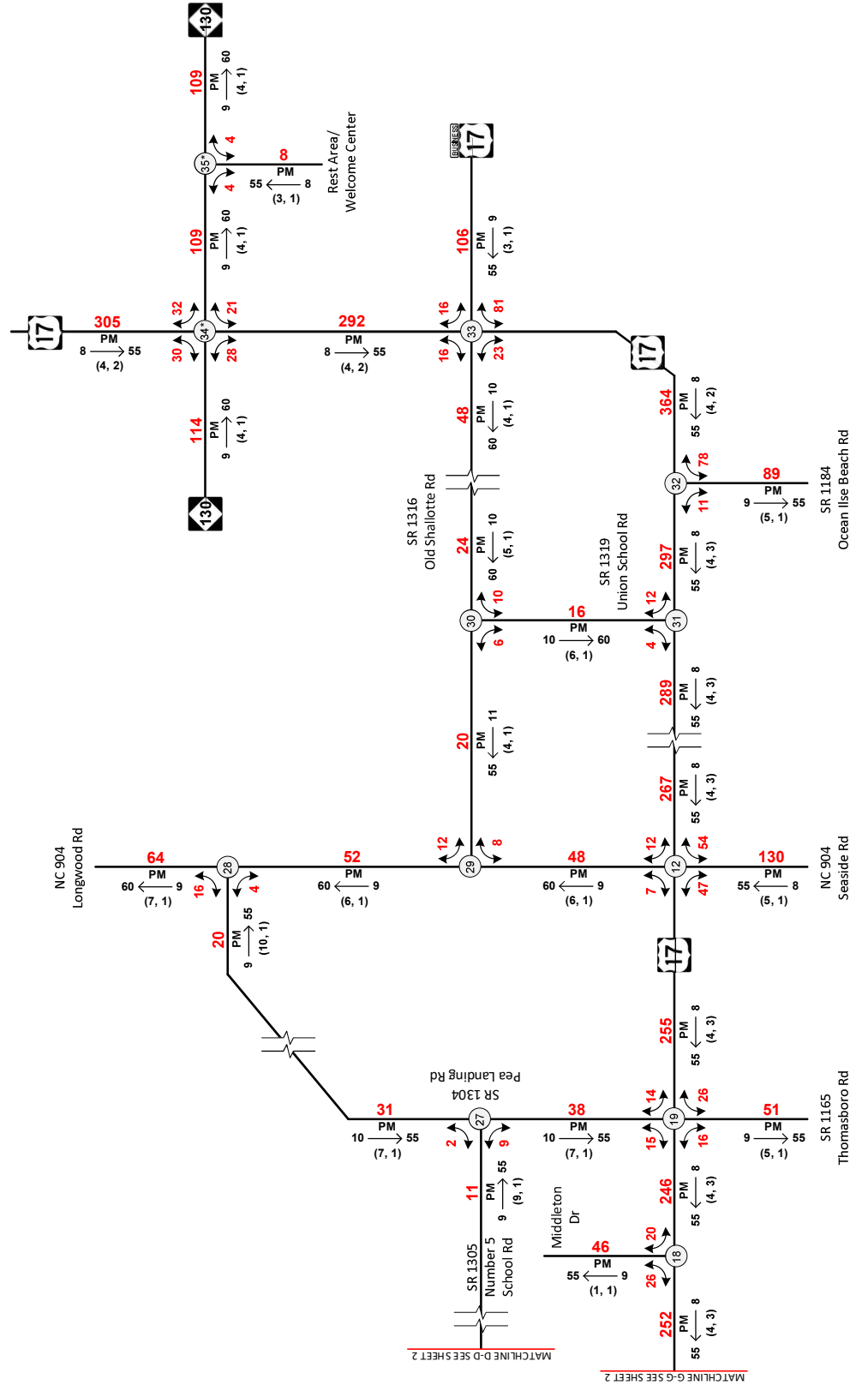
**LEGEND**  
 No. of Vehicles Per Day in 100s  
 ###  
 1-  
 X Movement Prohibited  
 K PM → D  
 (d, t)  
 K Design Hour Factor (%)  
 PM Peak Period  
 D Peak Hour Directional Split (%)  
 → Indicates Direction of D  
 (d, t) Duals, TT-STs (%)



**2019** AVERAGE SUMMER WEEKDAY TRAFFIC

**BASE YEAR NO BUILD**  
**SHEET 3 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.



MATCHLINE D-D SEE SHEET 2  
 MATCHLINE G-G SEE SHEET 2

**Figure 4A**  
2045 Average Annual Daily Traffic  
Future Year No Build

NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County

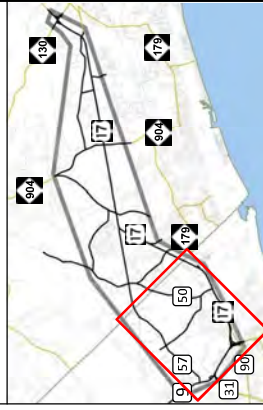


**LEGEND**

No. of Vehicles Per Day in 1000s  
###  
1- Movement Prohibited  
X

$$K \frac{PM}{(d, t)} \rightarrow D$$

K Design Hour Factor (%)  
PM PM Peak Period  
D Peak Hour Directional Split (%)  
→ Indicates Direction of D  
(d, t) Duals, TT-STs (%)



**2045** AVERAGE ANNUAL  
DAILY TRAFFIC

**FUTURE YEAR NO BUILD**  
**SHEET 1 OF 3**

NC TIP: R-5876 SC PN: P029554

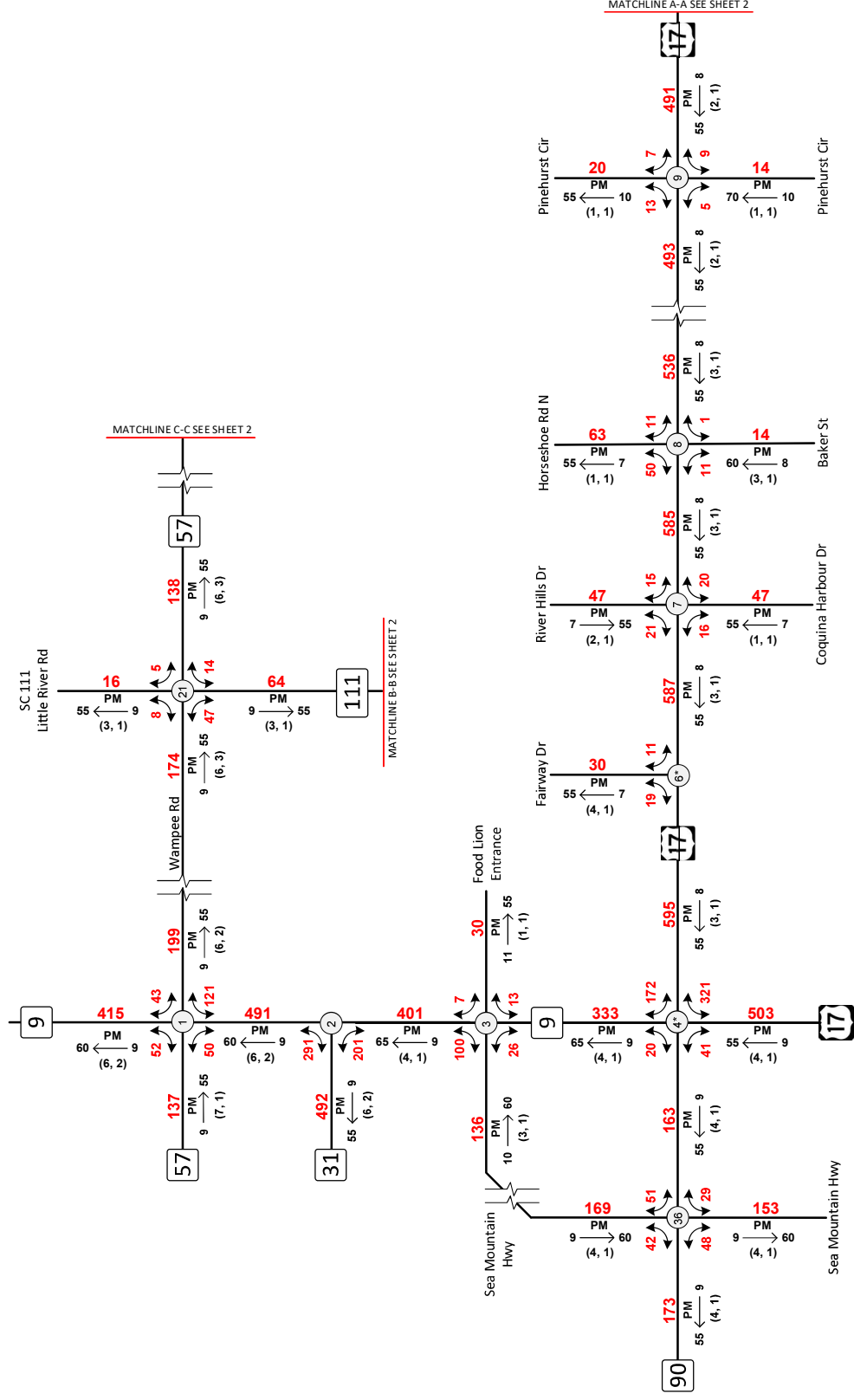
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





**Figure 4C**  
 2045 Average Annual Daily Traffic  
 Future Year No Build

NC DOT Project R-5876  
 Brunswick County

SCDOT Project P029554  
 Horry County

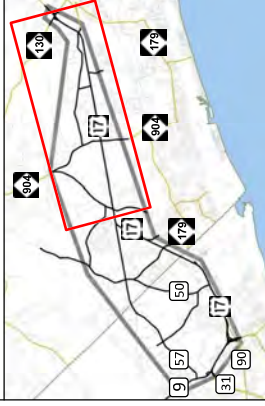


**LEGEND**

### No. of Vehicles Per Day in 100s  
 1- Less than 50 vpd  
 X Movement Prohibited

K PM → D  
 (d, t)

K Design Hour Factor (%)  
 PM Peak Period  
 D Peak Hour Directional Split (%)  
 → Indicates Direction of D  
 (d, t) Duals, TT-STs (%)



**2045**  
 AVERAGE ANNUAL  
 DAILY TRAFFIC

**FUTURE YEAR NO BUILD**  
**SHEET 3 OF 3**

NC TIP: R-5876 SC PN: P029554

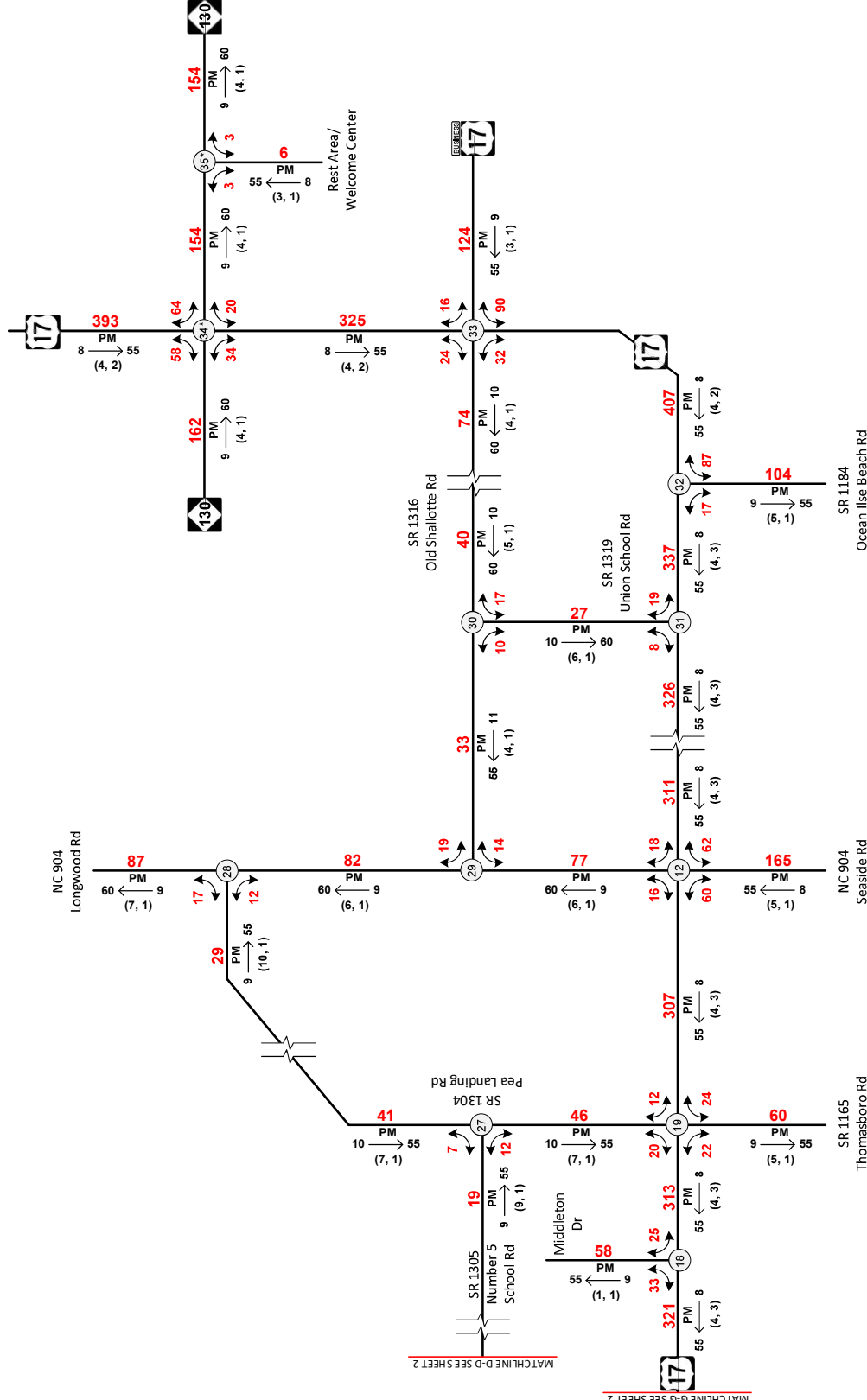
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

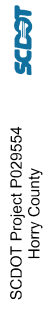
PROJECT: Carolina Bays Parkway Ext.



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.



**Figure 5A**  
2045 Average Summer Weekday Traffic  
Future Year No Build



**LEGEND**

No. of Vehicles Per Day in 100s  
###  
1-  
X Movement Prohibited

$K \frac{PM}{(d, t)} \rightarrow D$

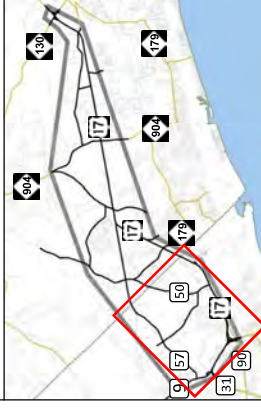
K Design Hour Factor (%)

PM Peak Period

D Peak Hour Directional Split (%)

→ Indicates Direction of D

(d, t) Duals, TT-STs (%)



**2045** AVERAGE SUMMER WEEKDAY TRAFFIC

**FUTURE YEAR NO BUILD**  
**SHEET 1 OF 3**

NC TIP: R-5876 SC PN: P029554

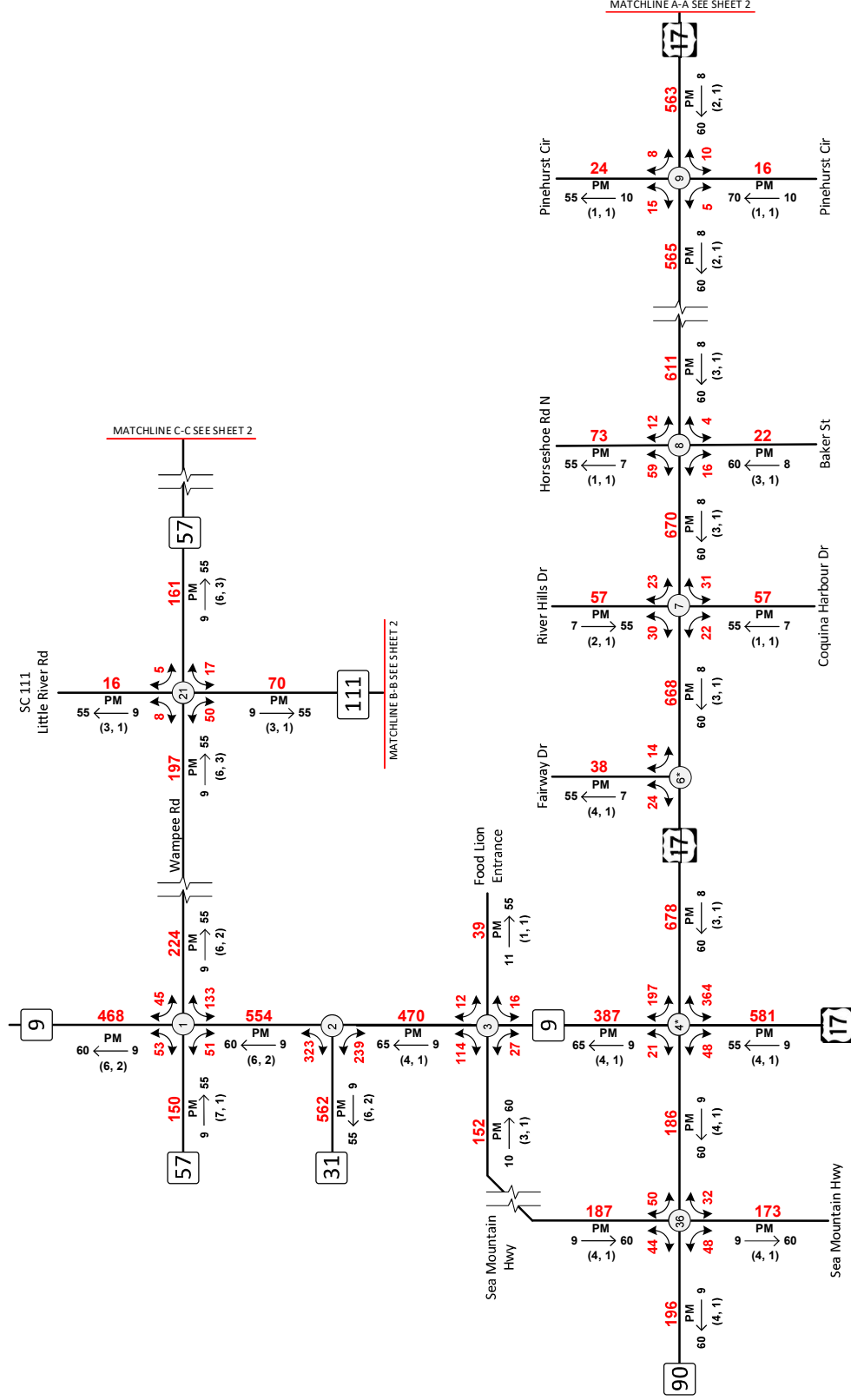
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.

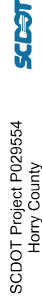


\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





**Figure 5B**  
2045 Average Summer Weekday Traffic  
Future Year No Build



## LEGEND

### ### No. of Vehicles Per Day in 100s

1- Less than 50 vpd

**X** Movement Prohibited

$$K \xrightarrow{PM} D$$
$$\kappa_{(d,t)}^{\mathcal{D}}$$

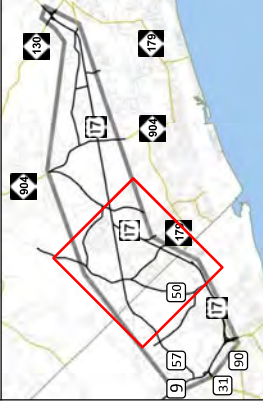
**K** Design Hour Factor (%)

**PM** PM Peak Period

**D** Peak Hour Directional Split (%)

↑ Indicates Direction of D

(d, t) Duals, TT-STs (%)



# 2045

**FUTURE YEAR NO BUILD  
SHEET 2 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

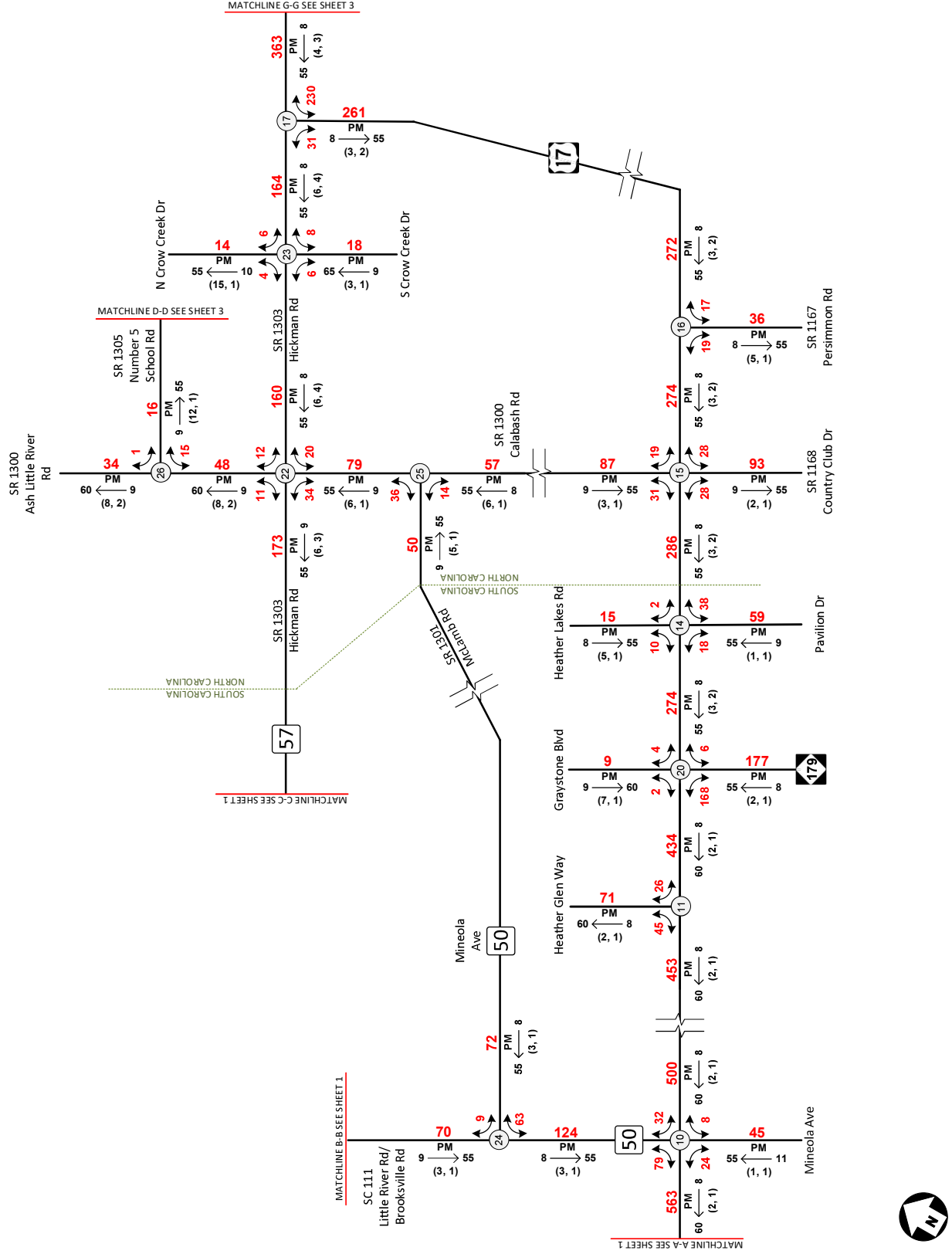
COUNTY: Brunswick/Horry

**DATE:** October 2020

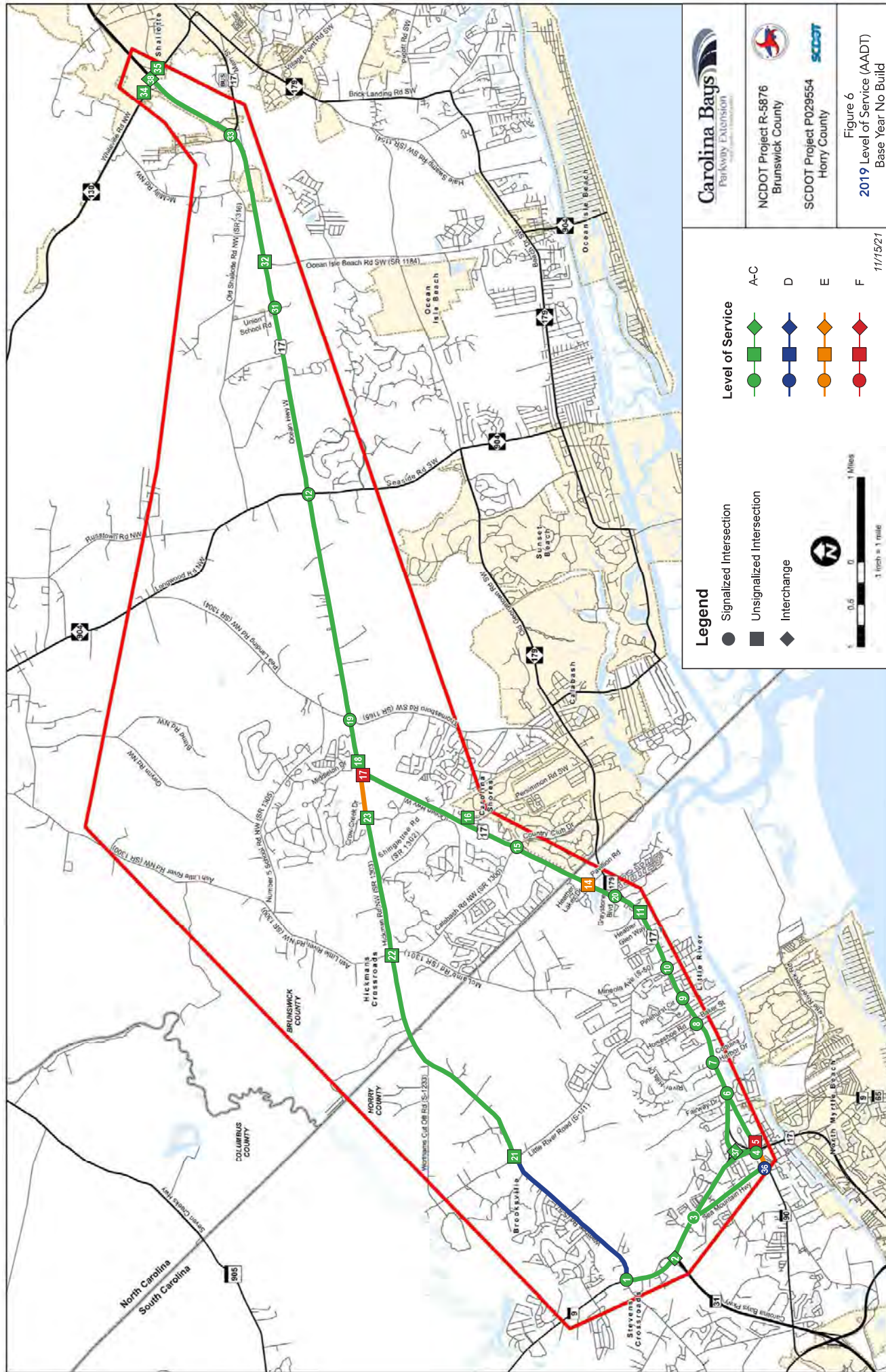
**PREPARED BY: Clearbox Forecast Group**

LOCATION: SC 9 to NC 130

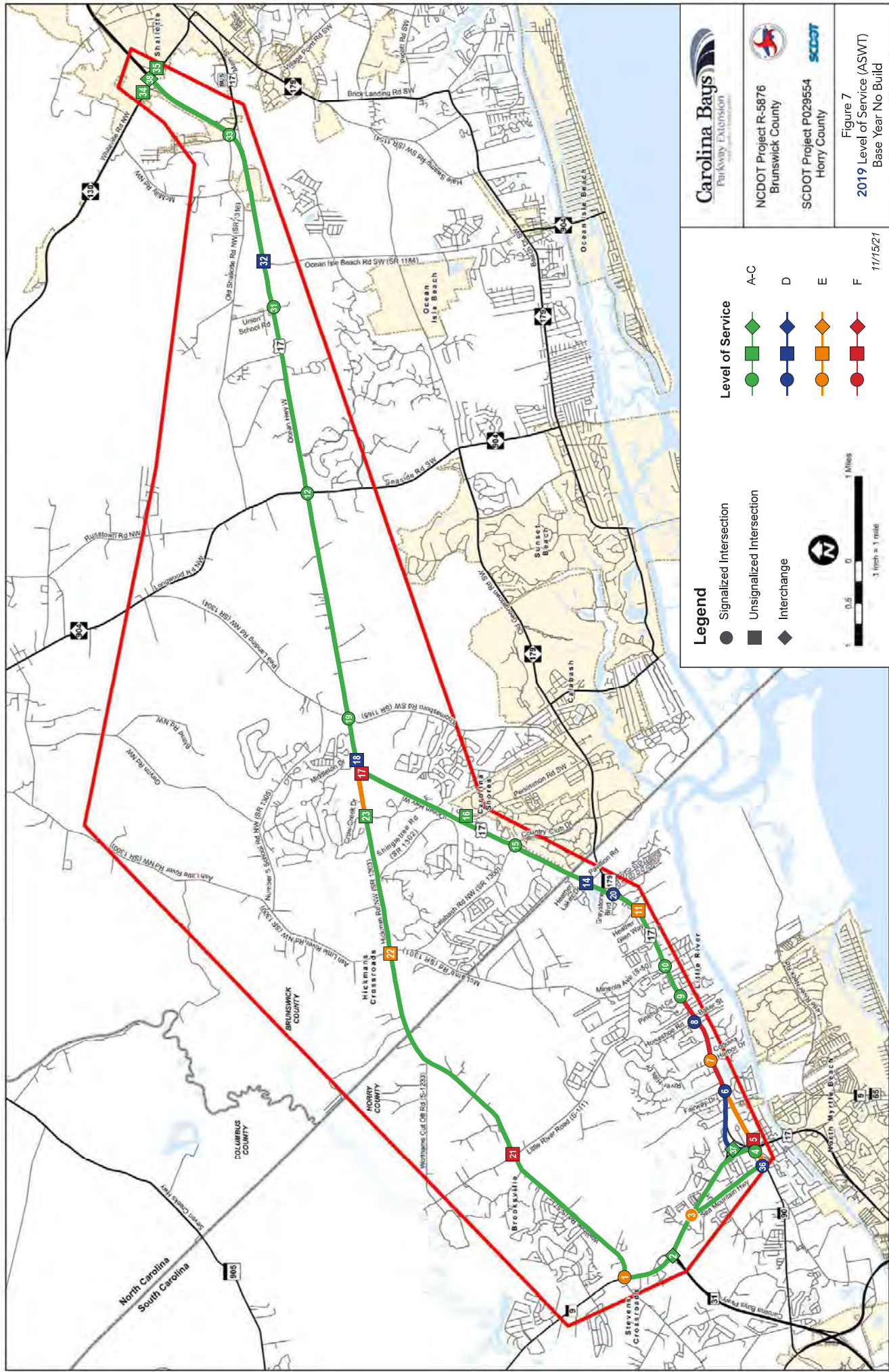
**PROJECT:** Carolina Bays Parkway Ext.













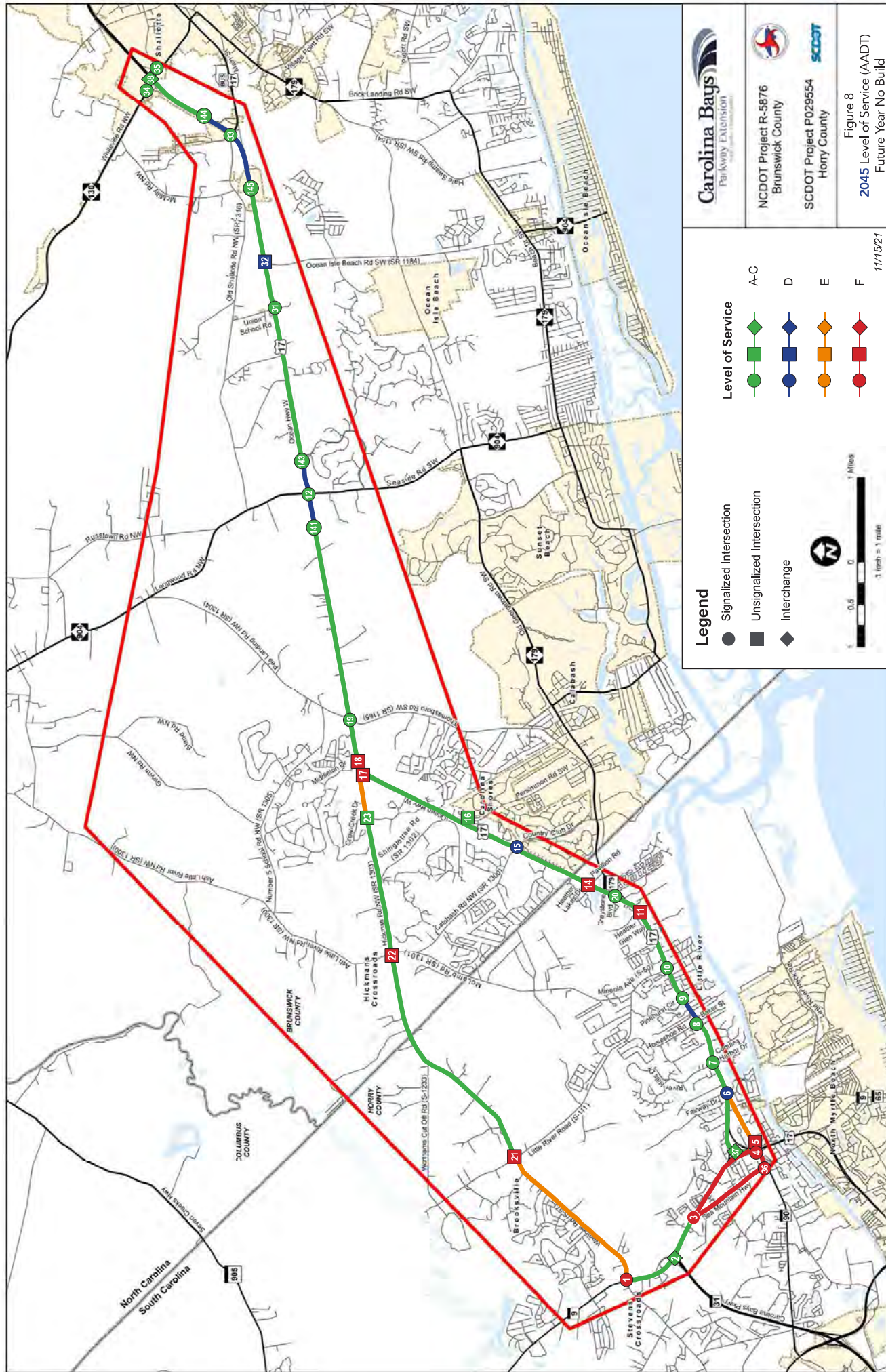


Figure 8

2045 Level of Service (AADT)

Future Year No Build

**Legend**

- Signalized Intersection
- Unsignalized Intersection
- Interchange

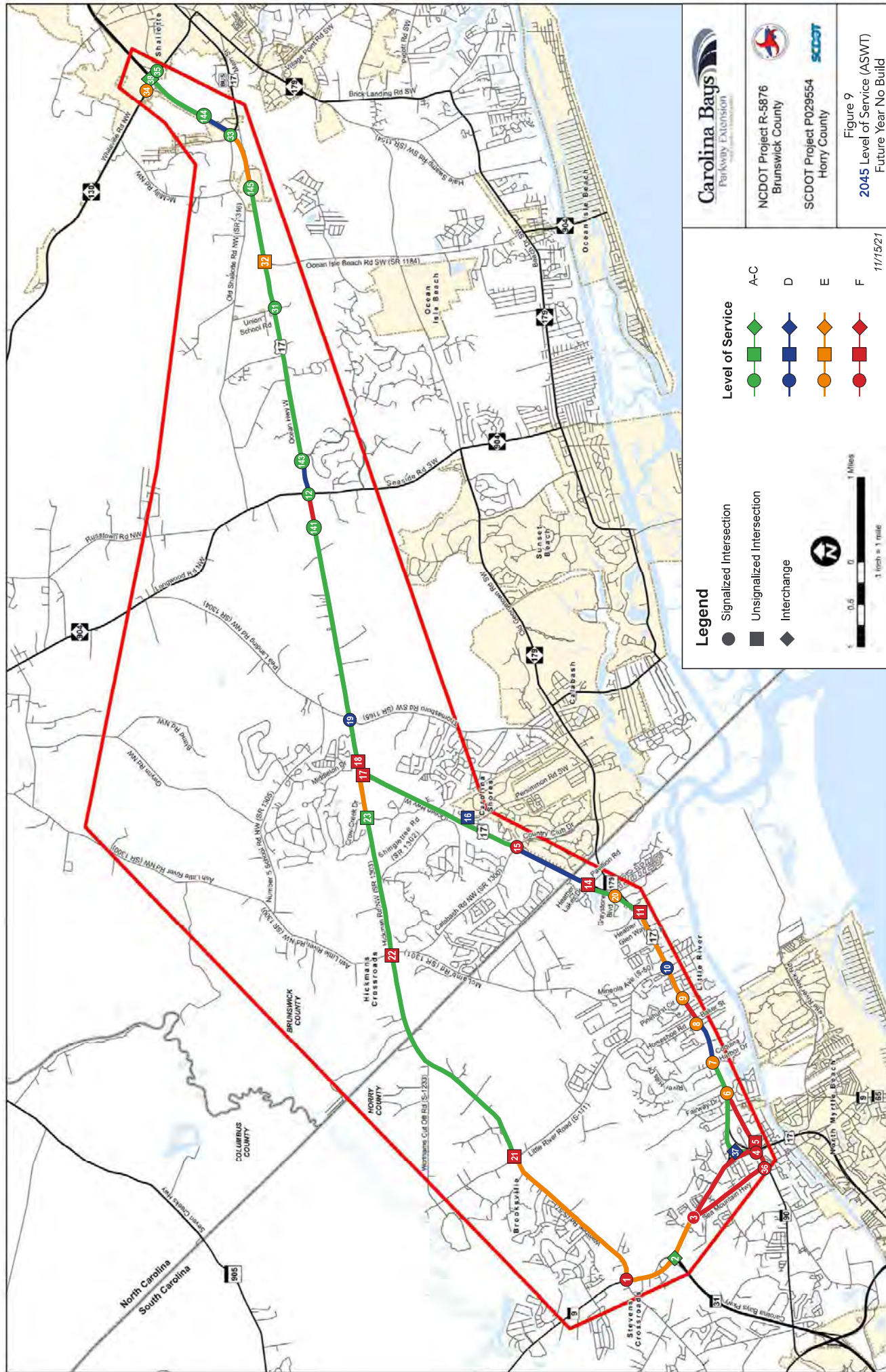
**Level of Service**

- A-C
- D
- E
- F

1 inch = 1 mile

0 0.5 1 Miles



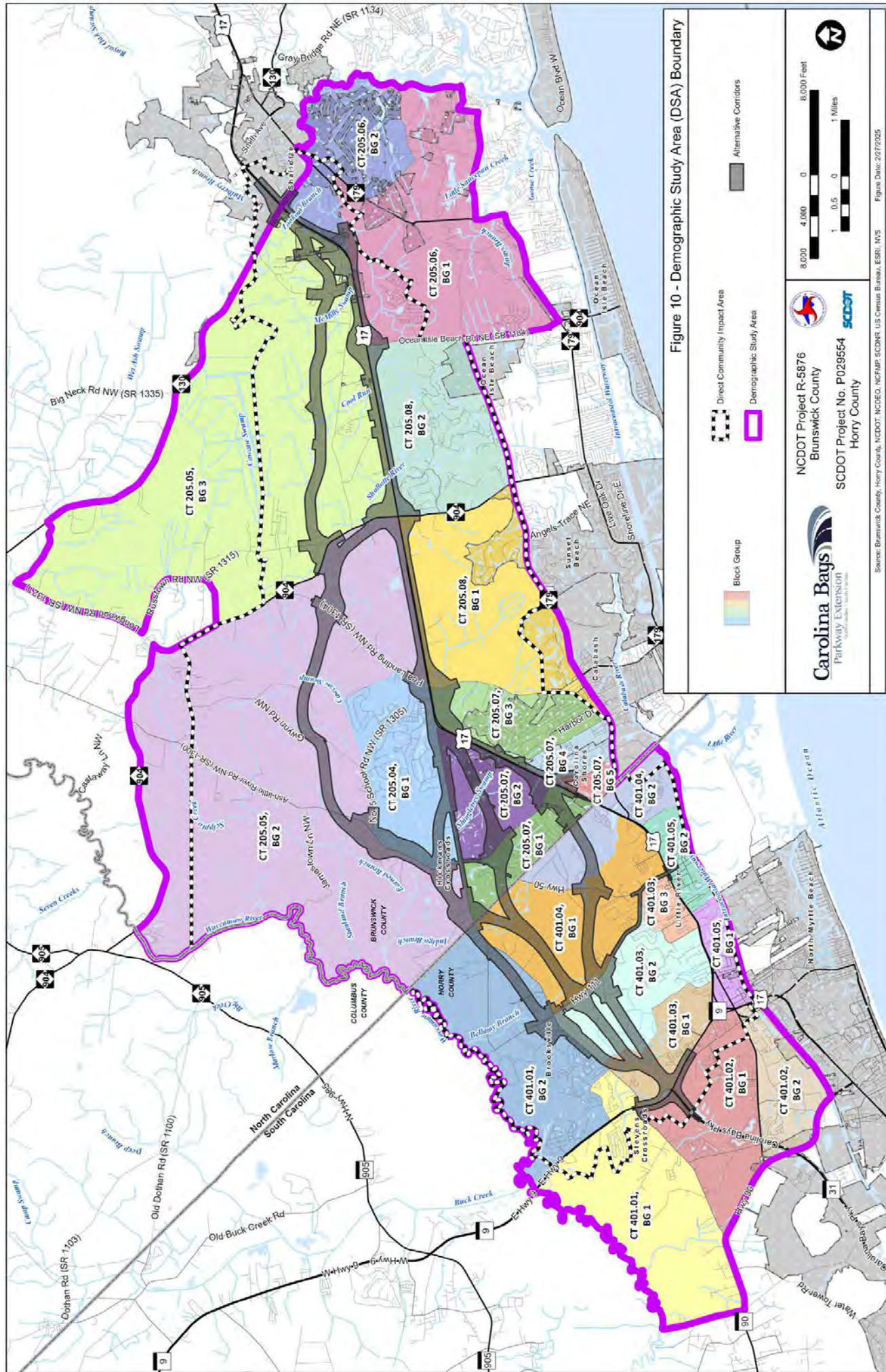


NCDOT Project R-5876  
Brunswick County

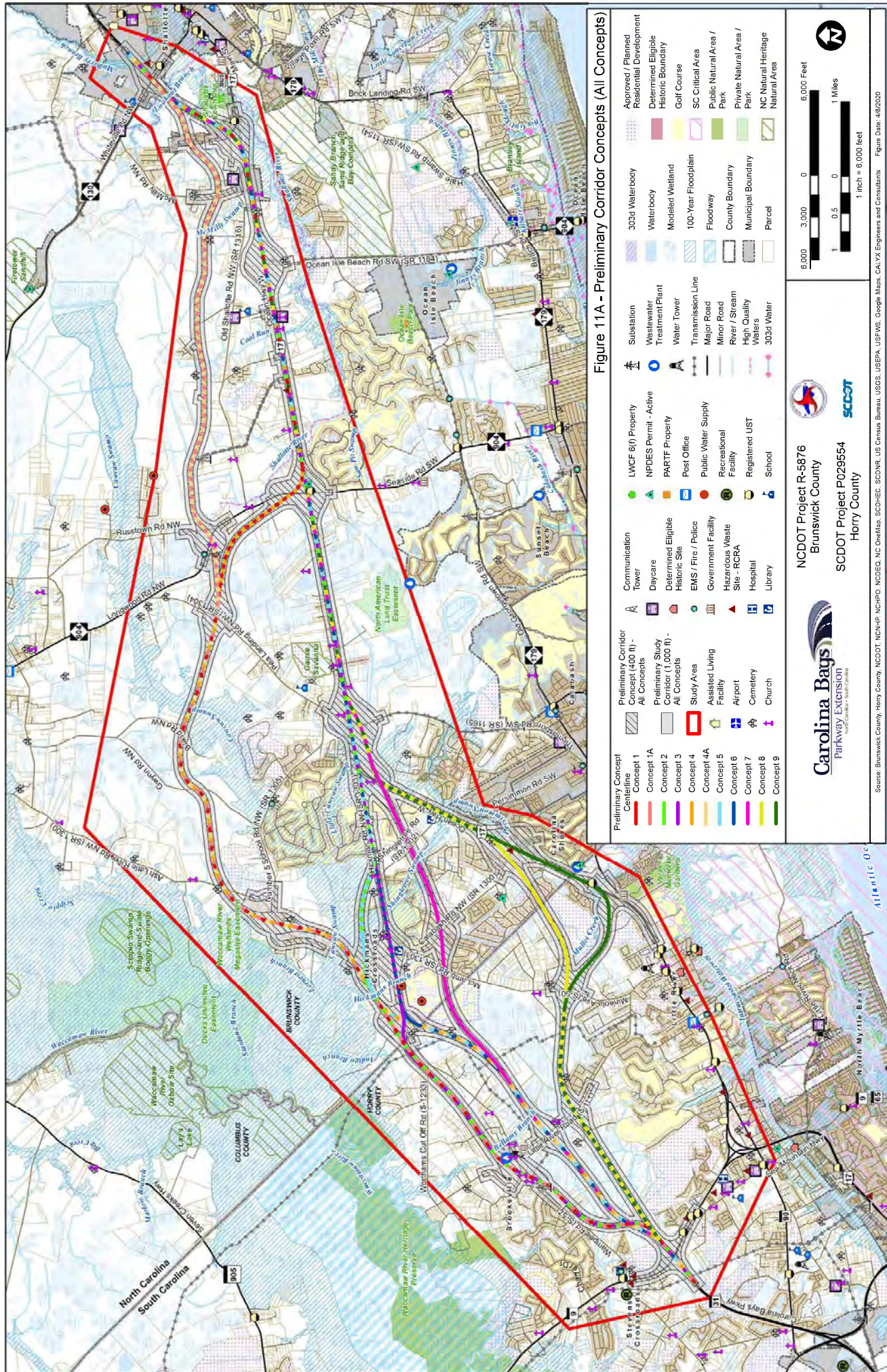
SCDOT Project P029554  
Horry County

Figure 9  
2045 Level of Service (ASWT)  
Future Year No Build





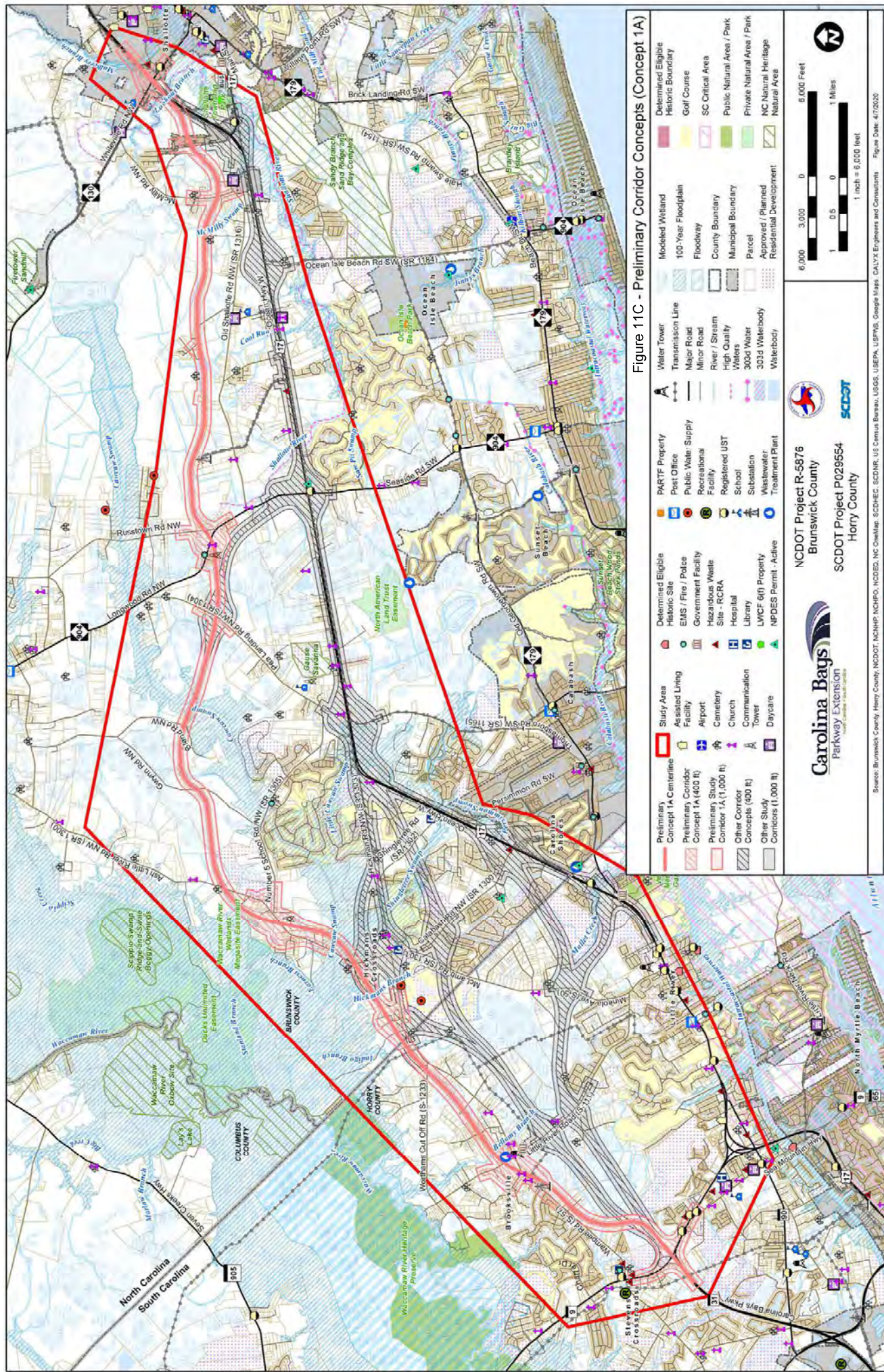




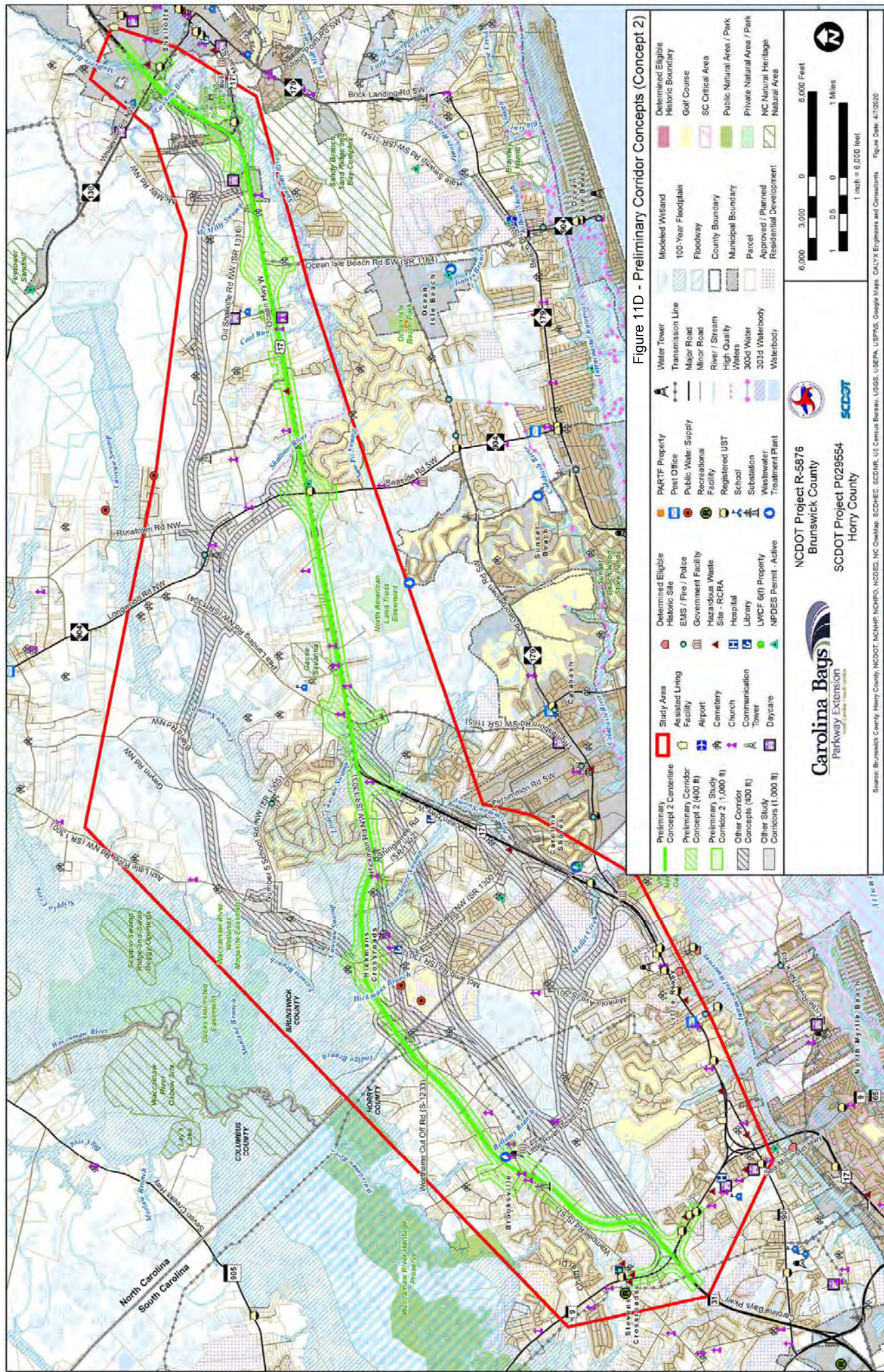




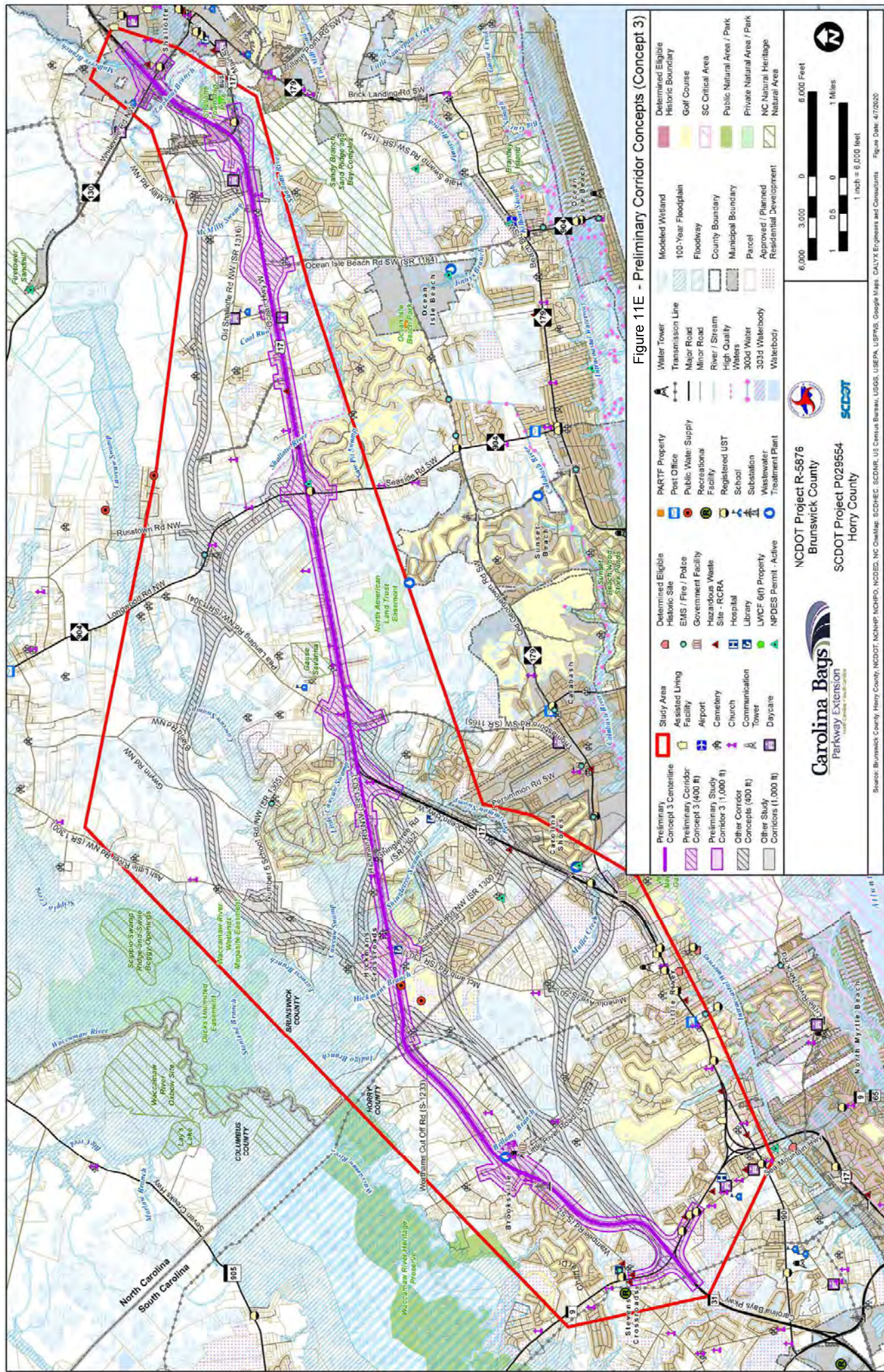




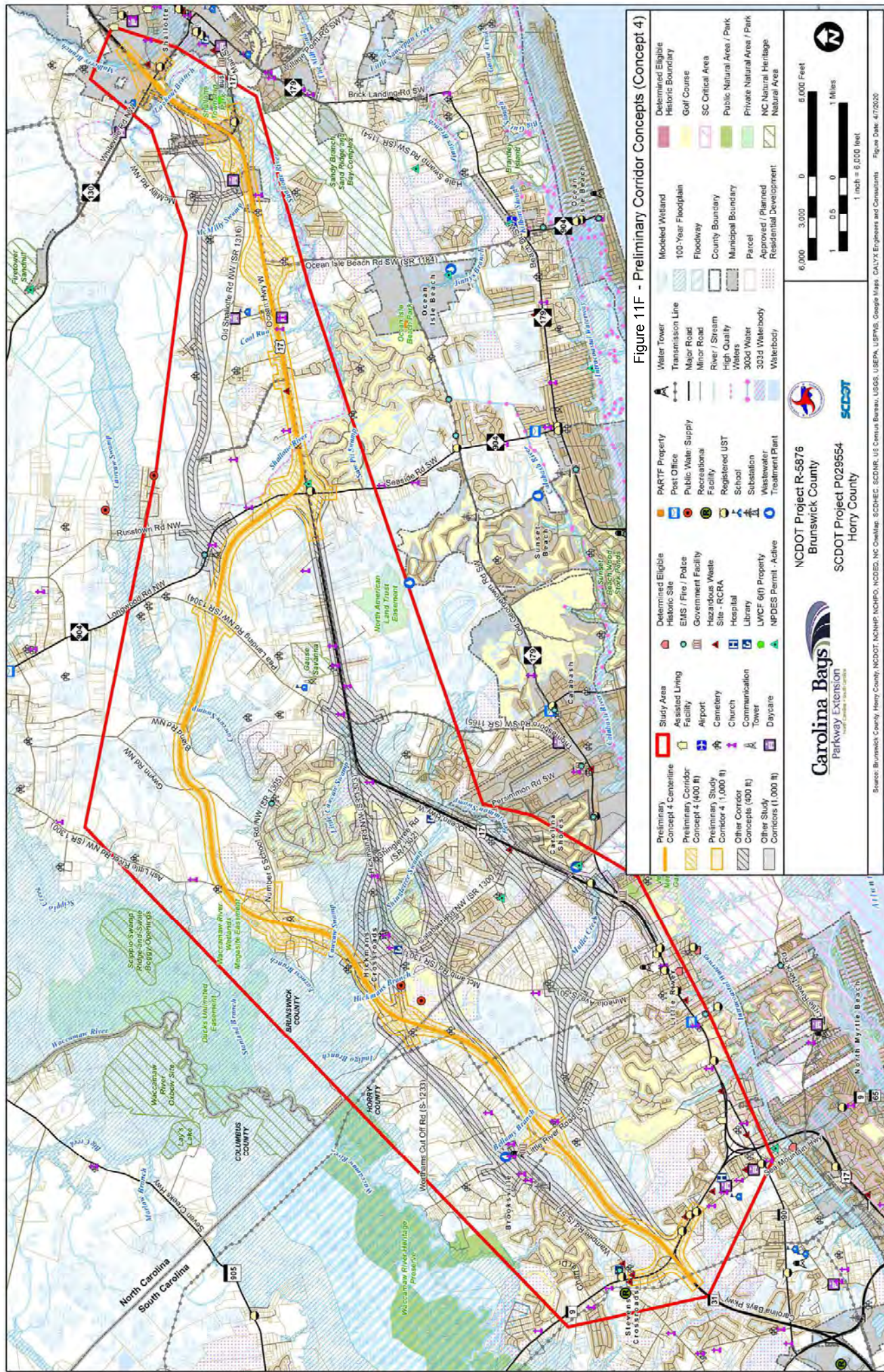




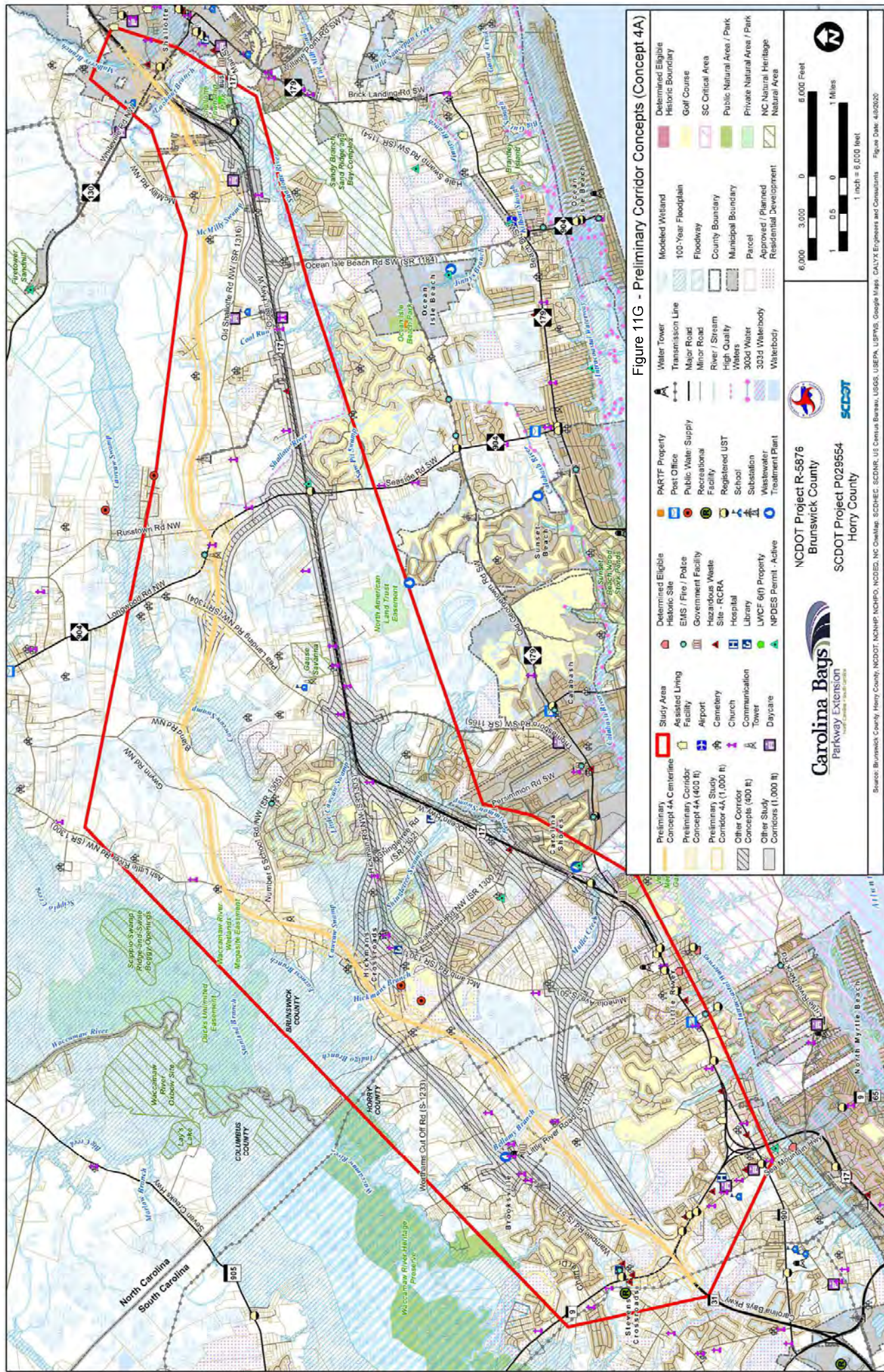




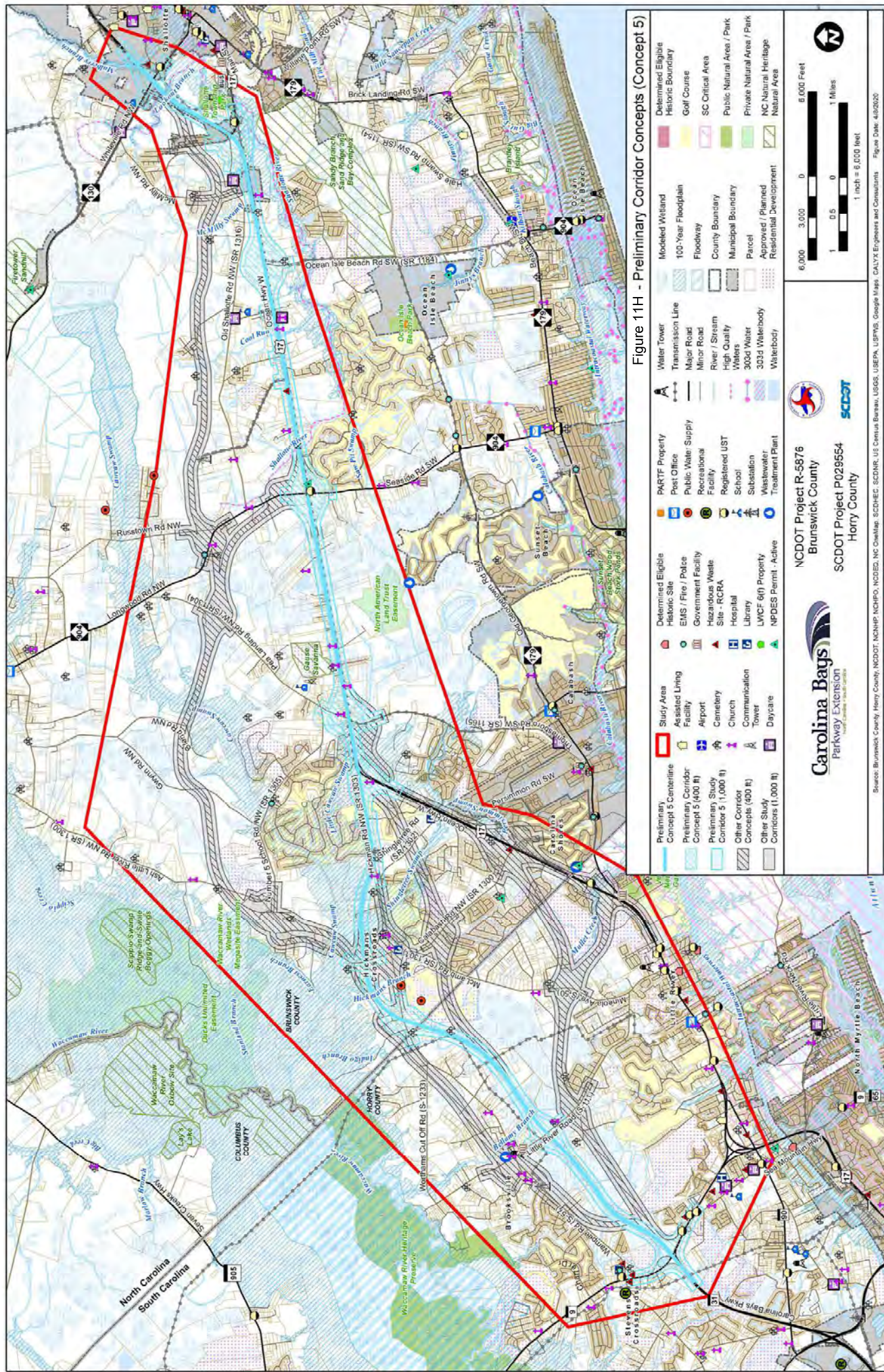




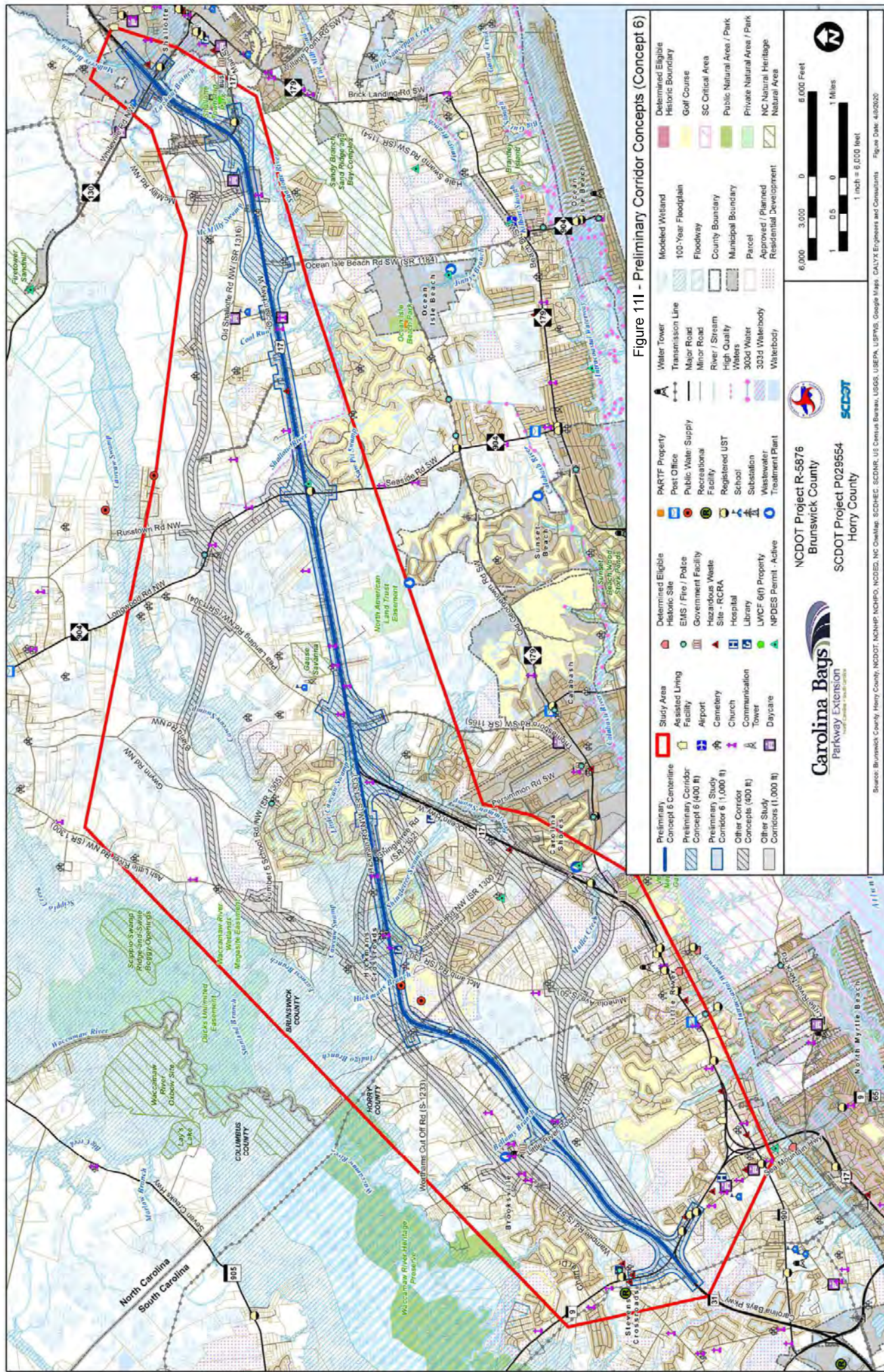




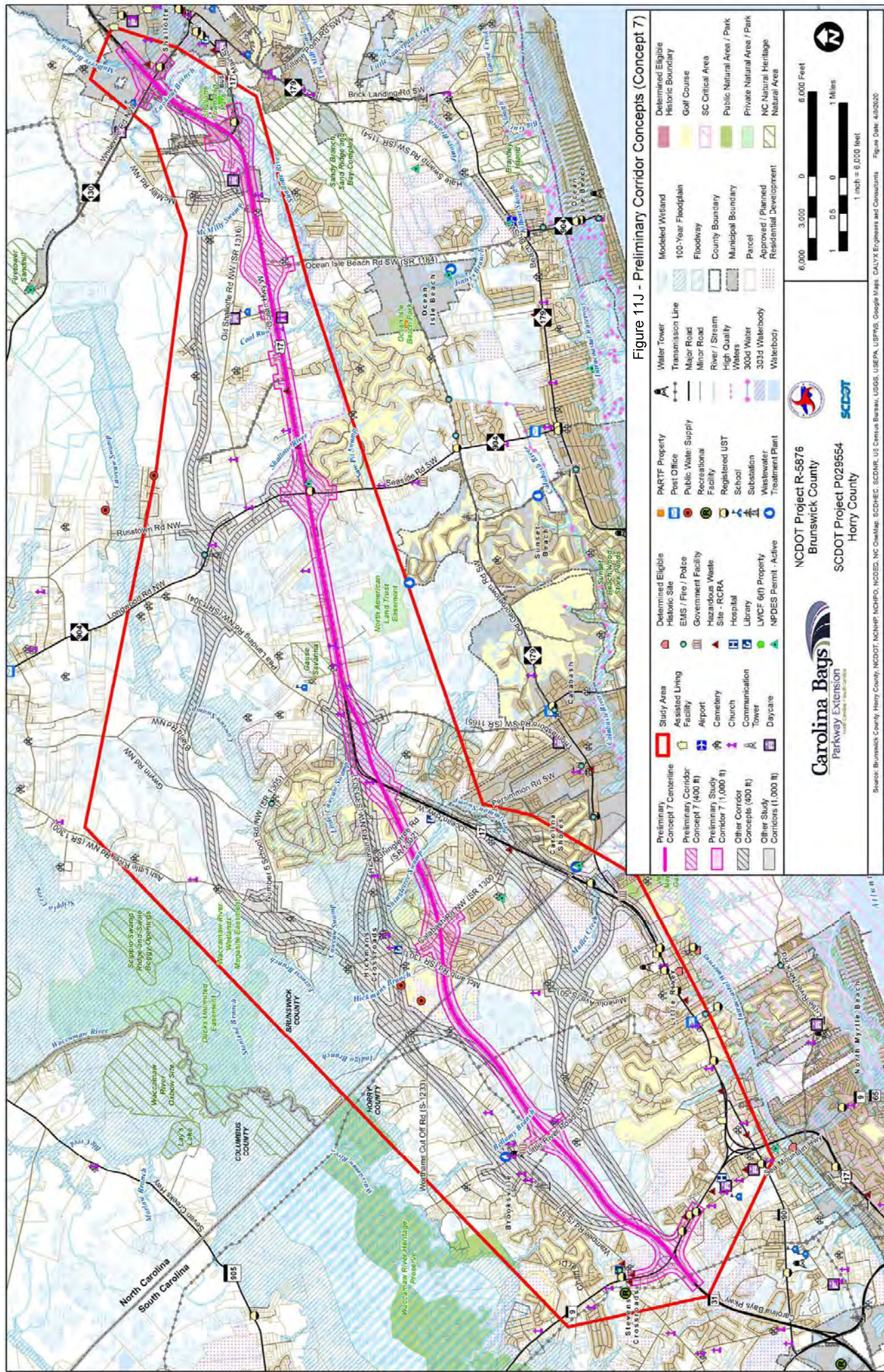




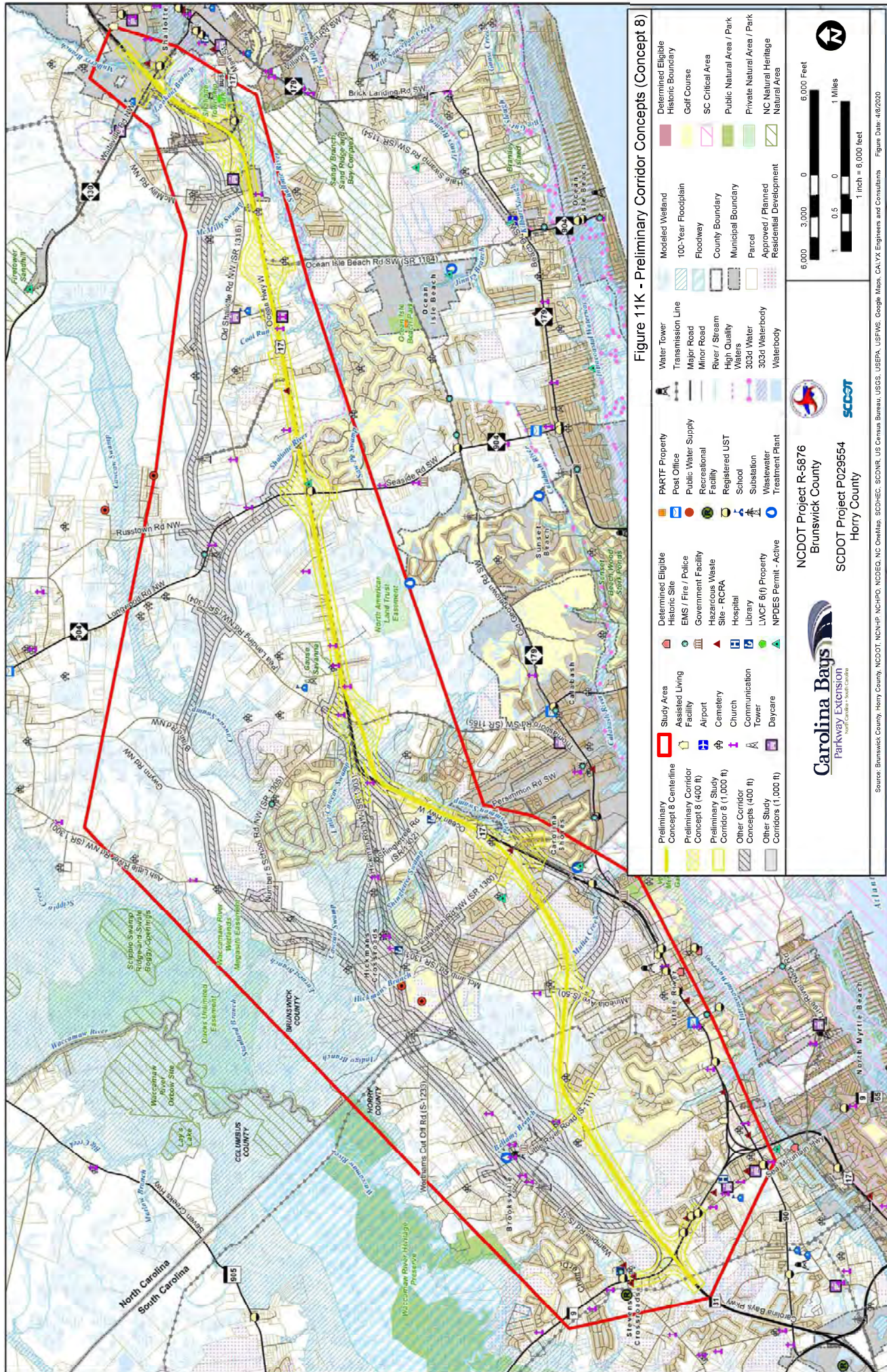




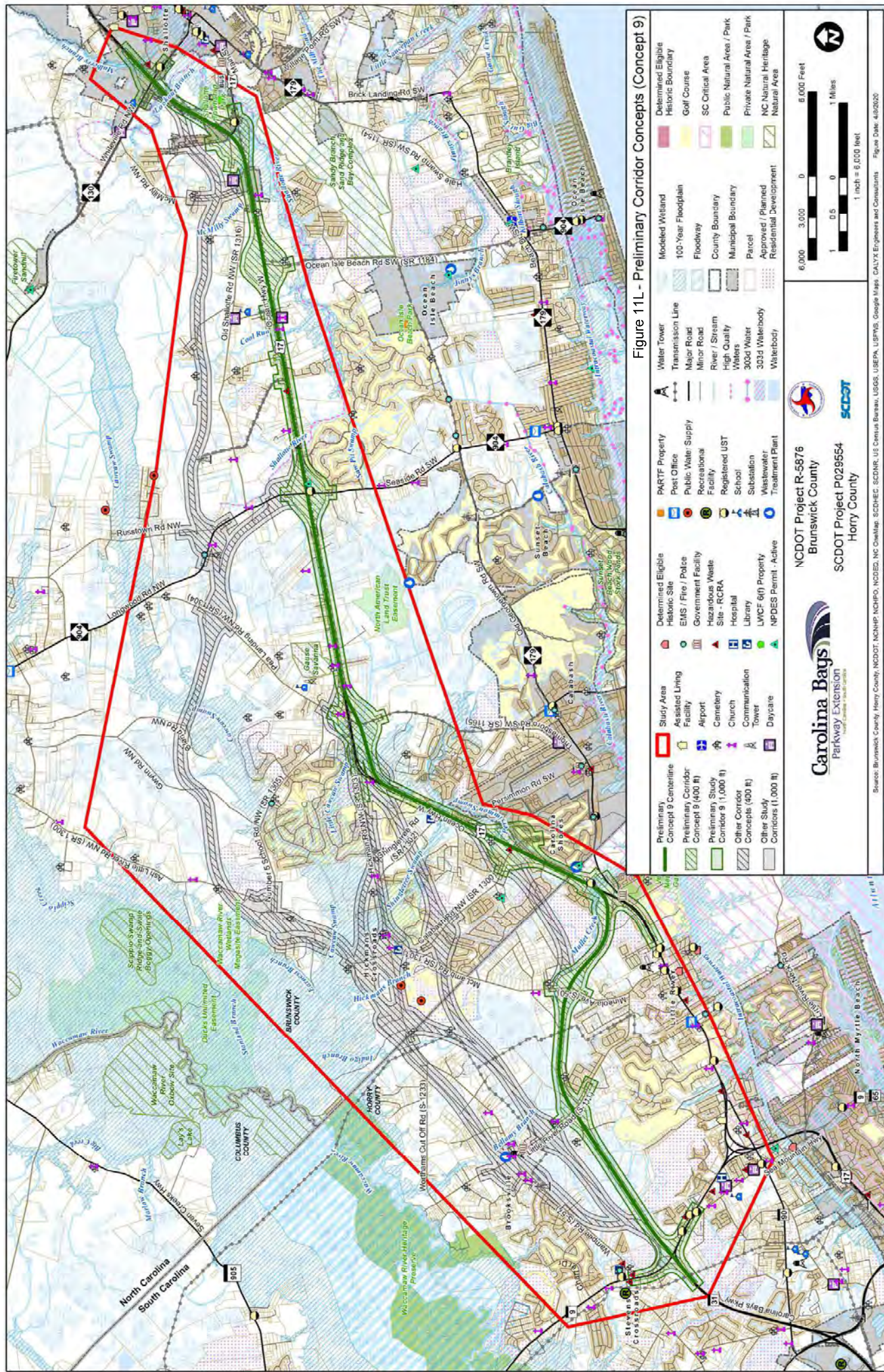




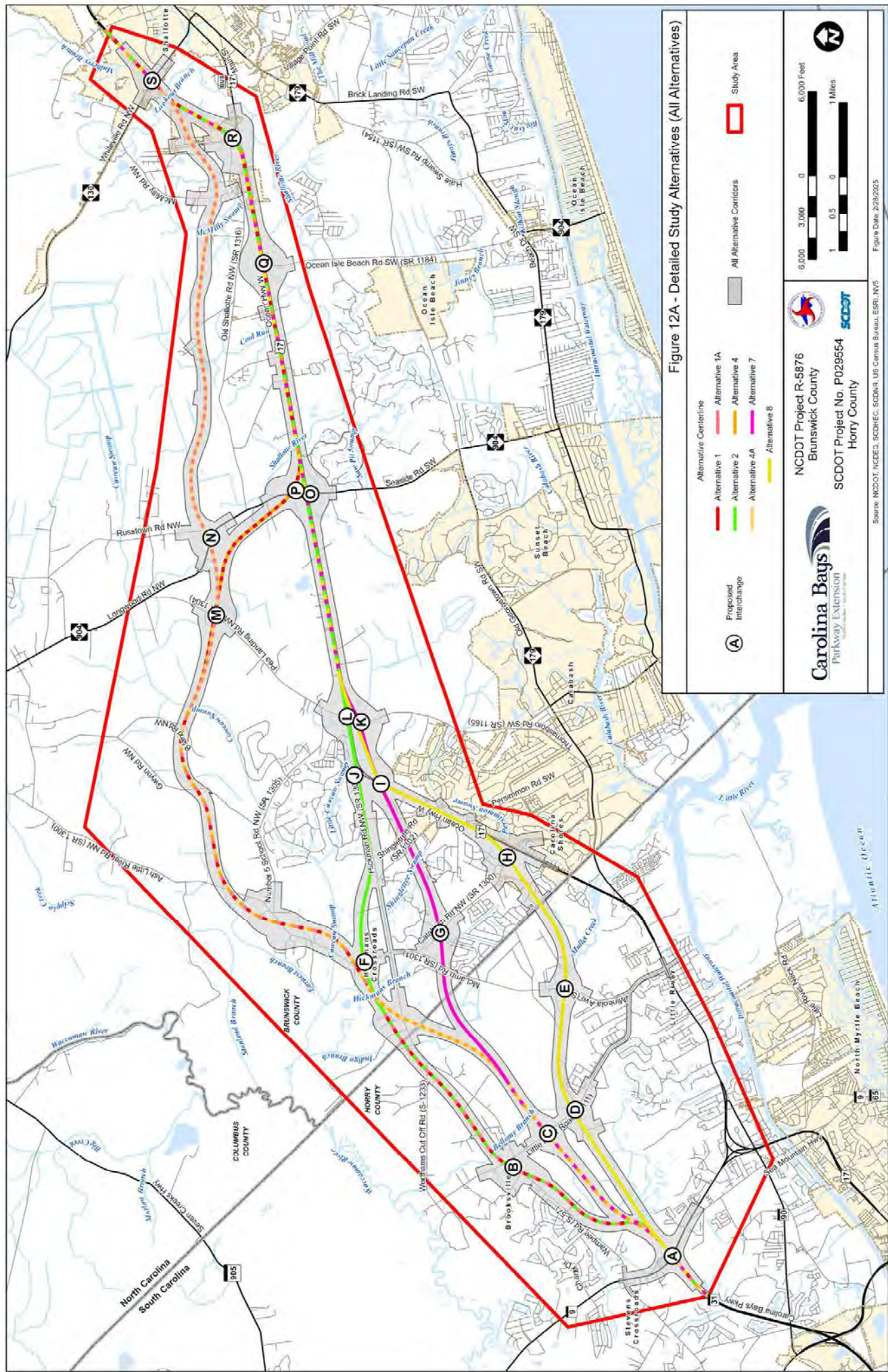




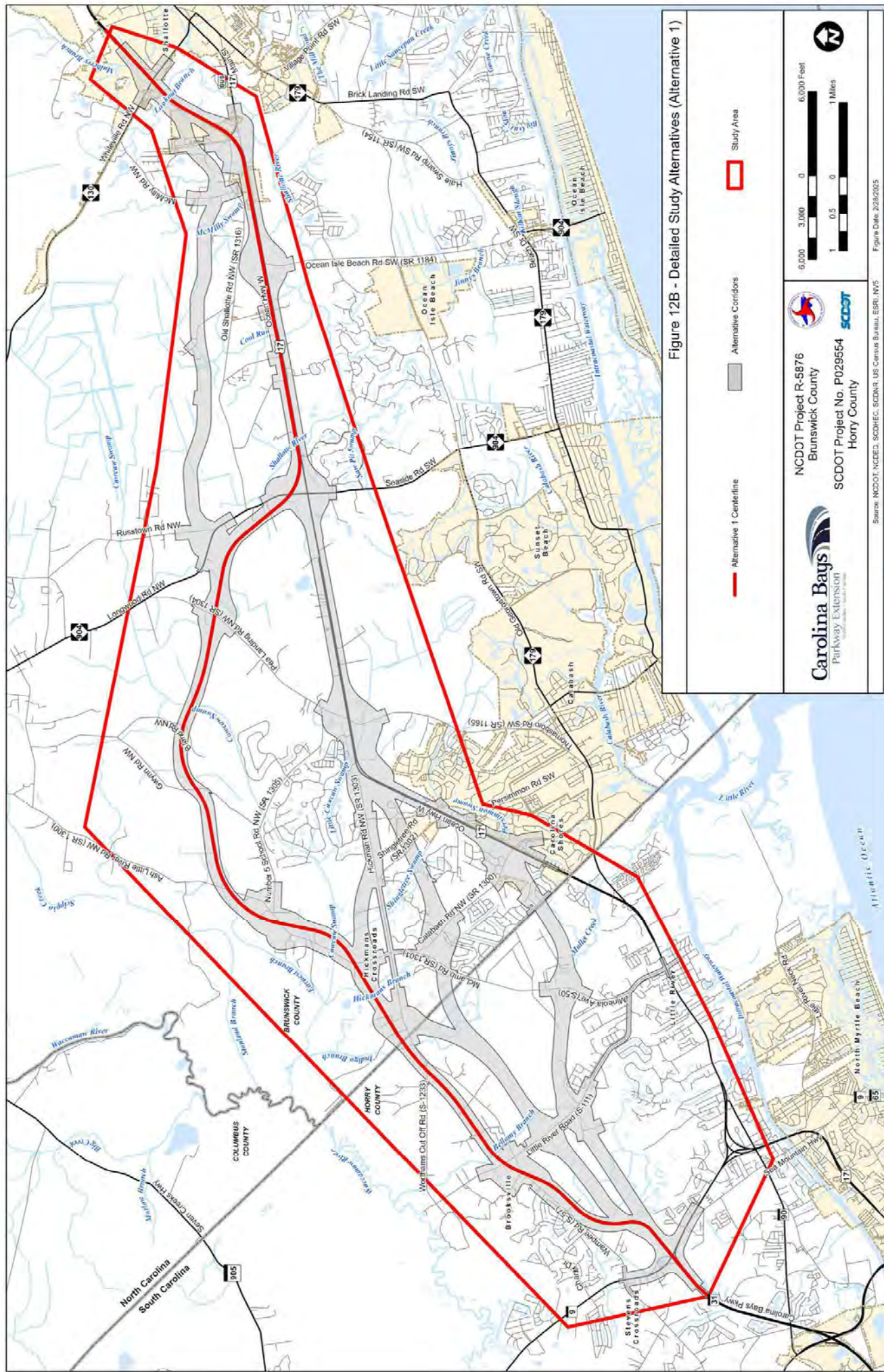




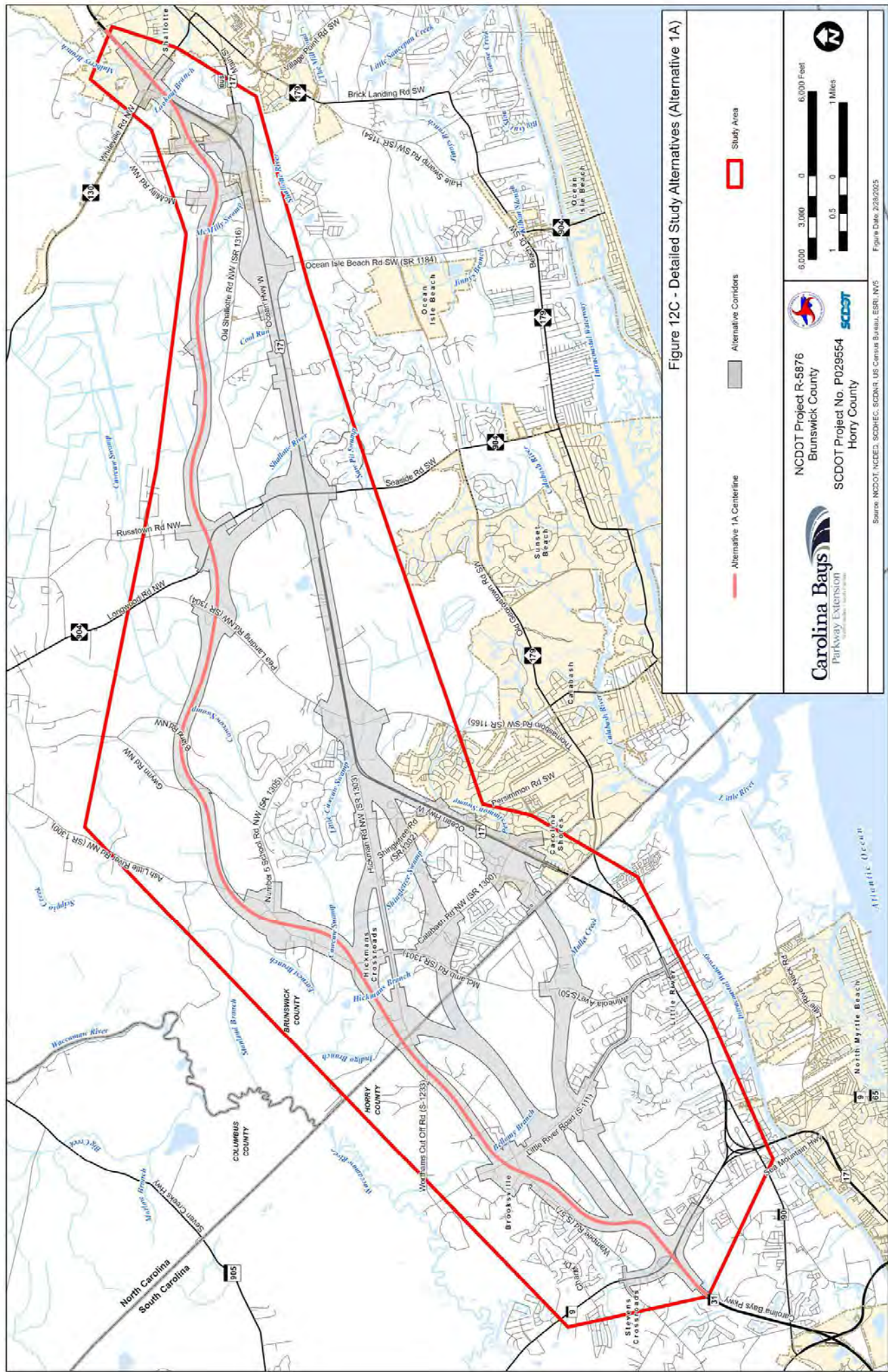




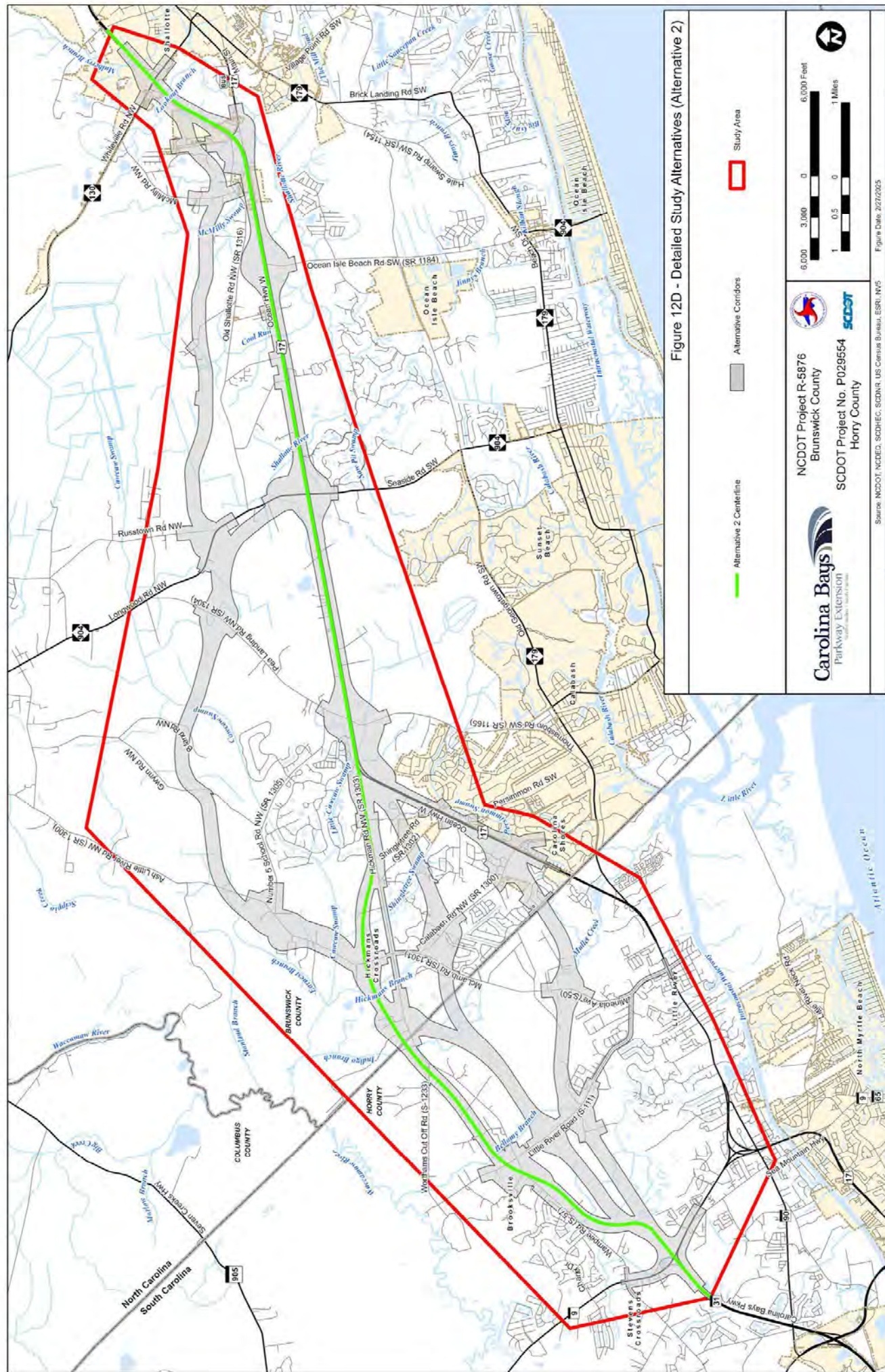




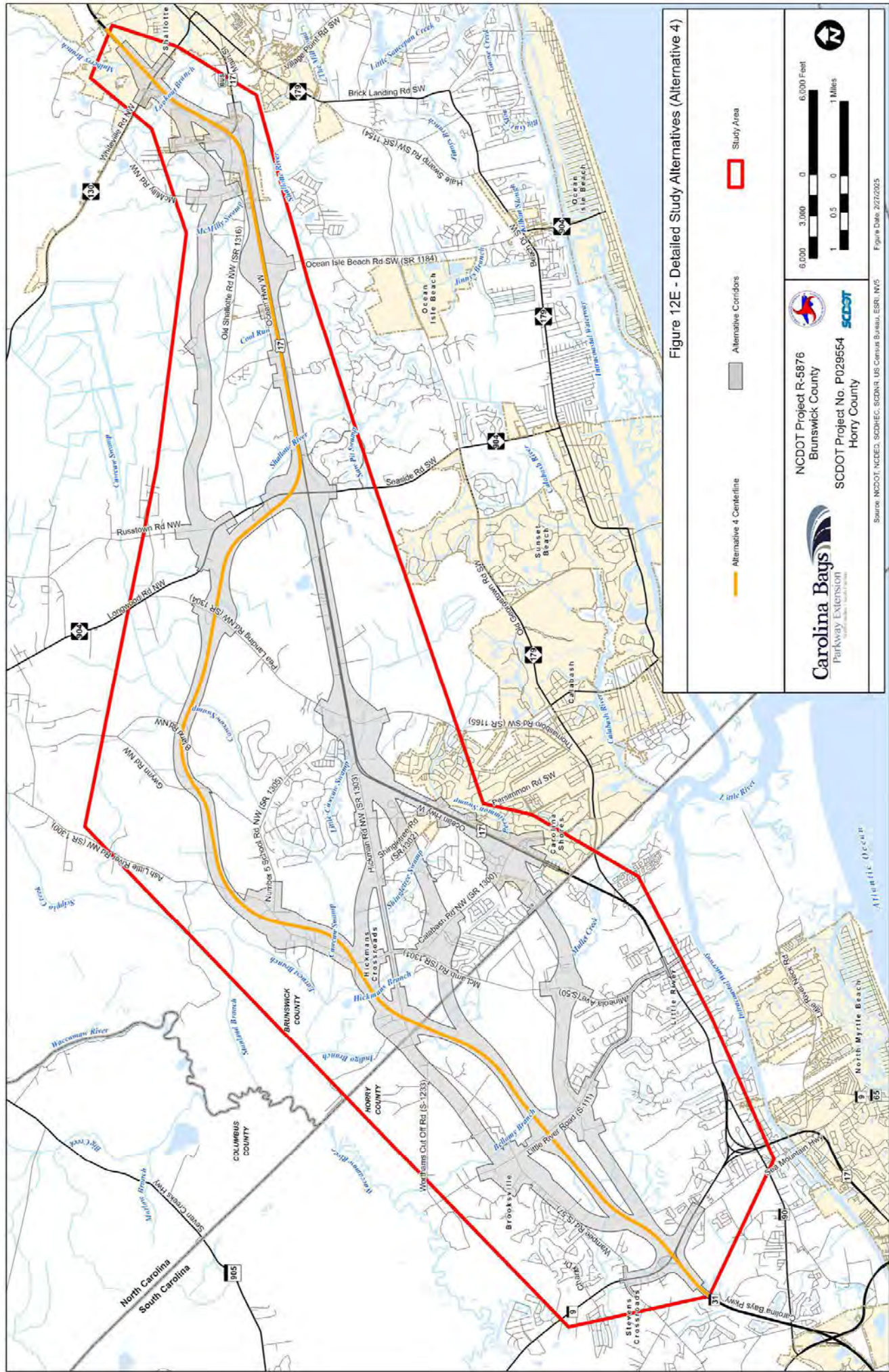














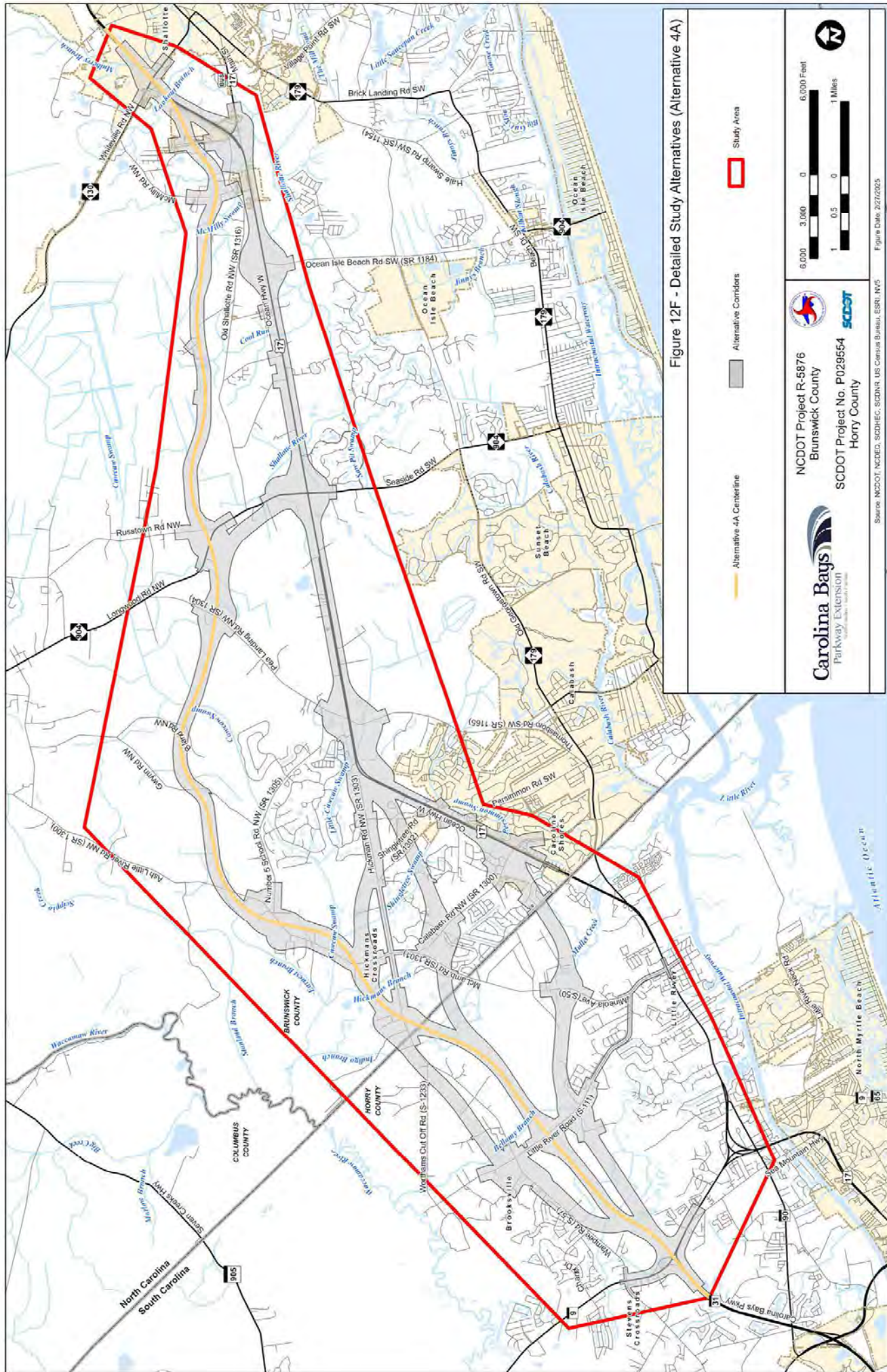


Figure 12F - Detailed Study Alternatives (Alternative 4A)

Alternative 4A Centerline

Alternative Corridors

Study Area

Carolina Bays  
Parkway Extension

NCDOT Project R-5876  
Brunswick County

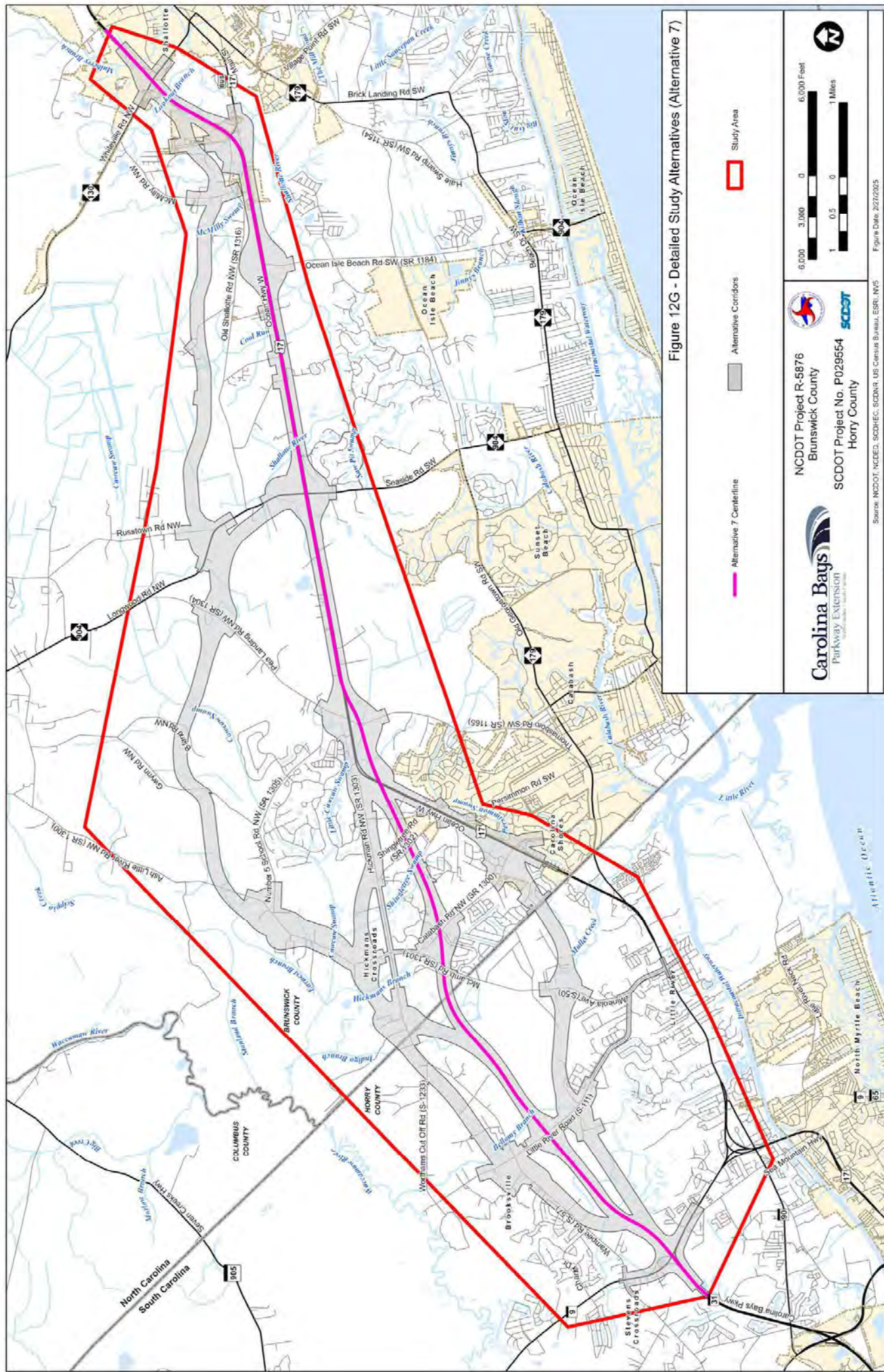
SCDOT Project No. P029554  
Horry County

6,000 Feet  
0 3,000 6,000  
1 0.5 1 Miles

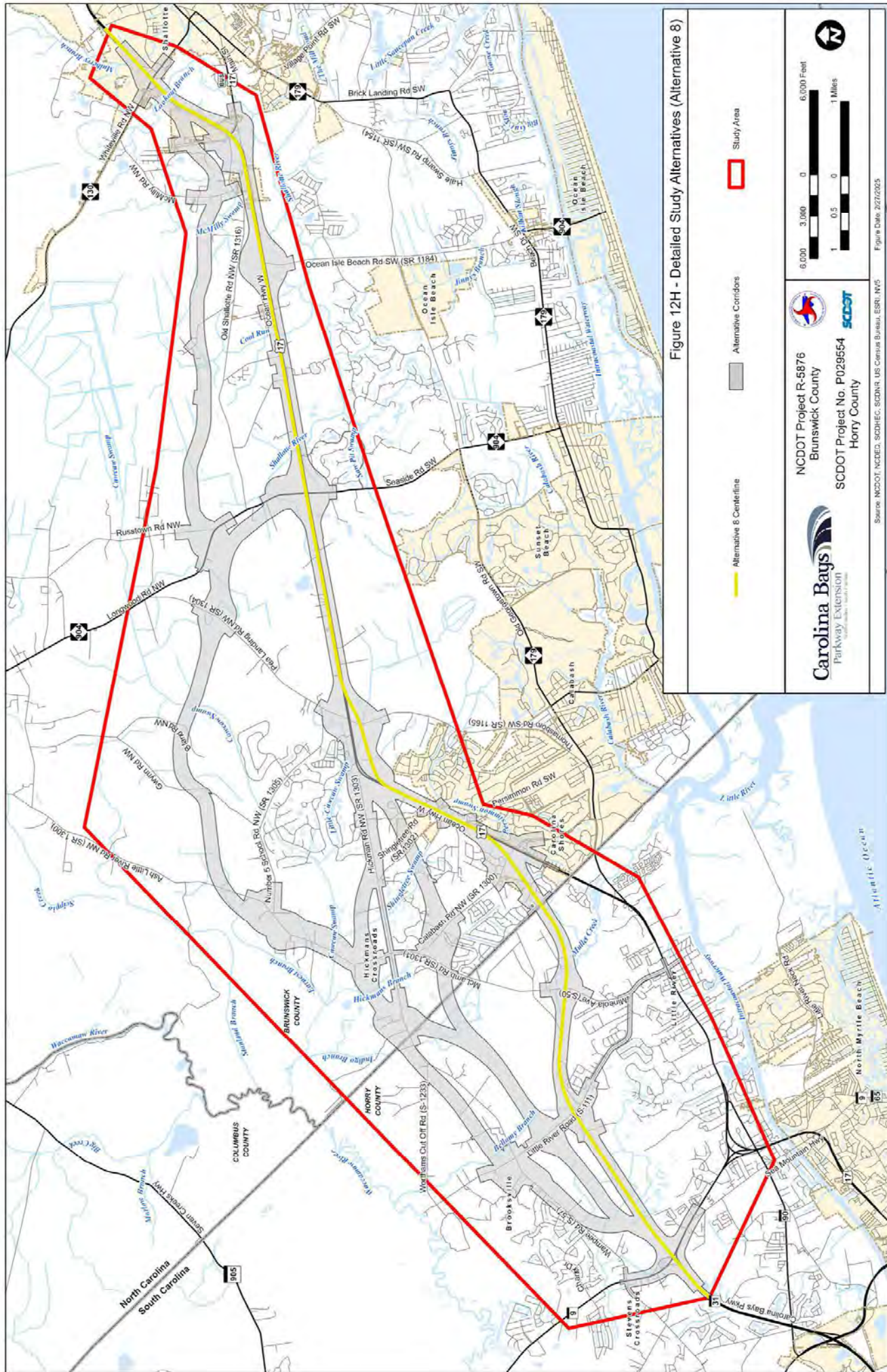
Source: NCDOT, NCEC, SCDHEC, SCDNR, US Census Bureau, ESRI, INVS

Figure Date: 2/27/2025

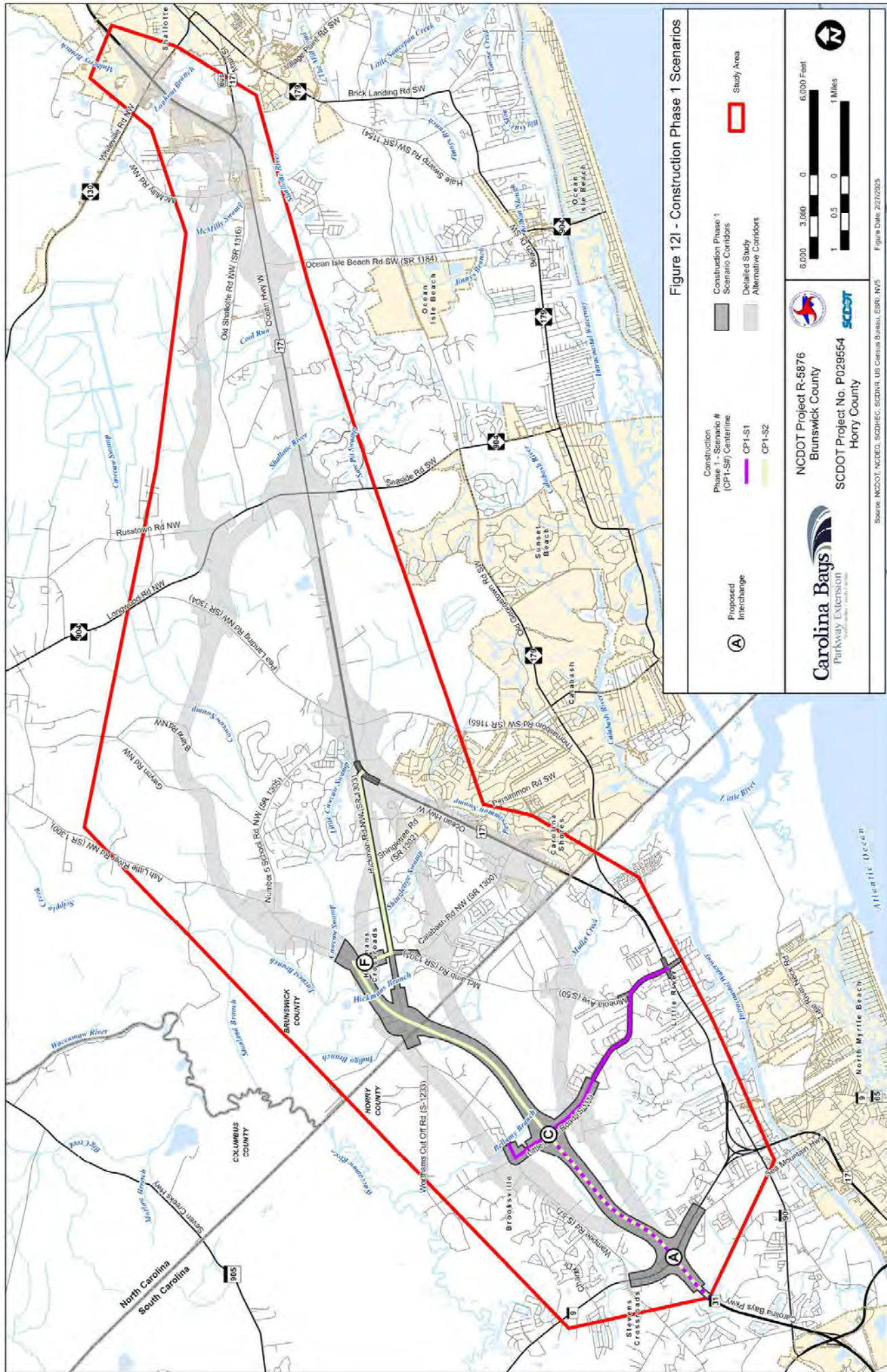




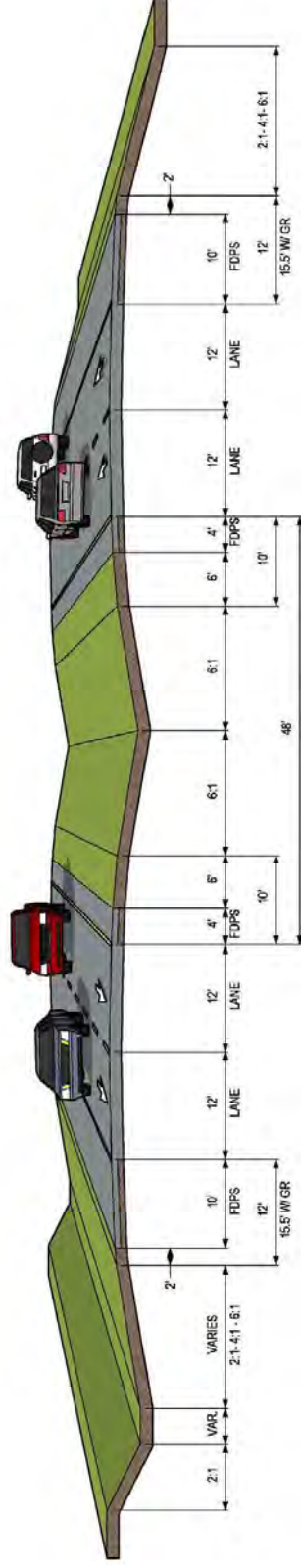




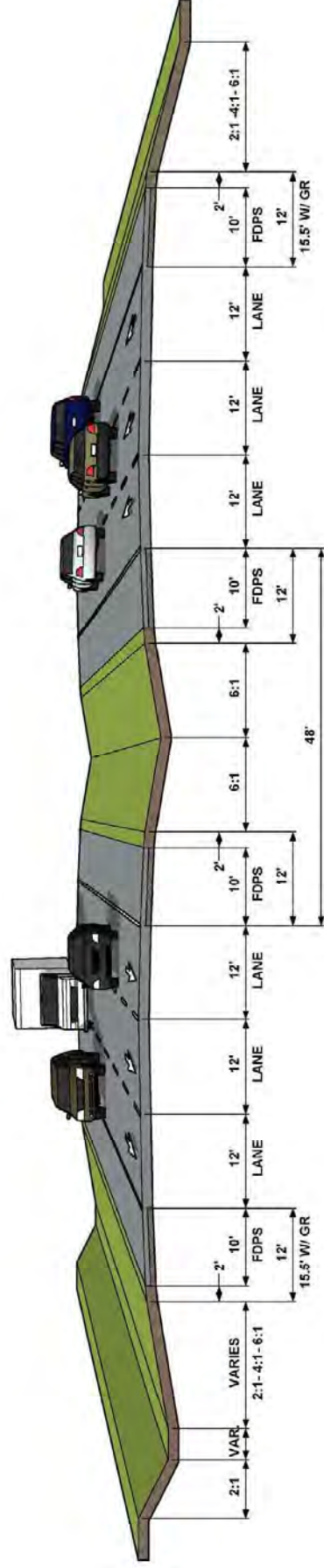






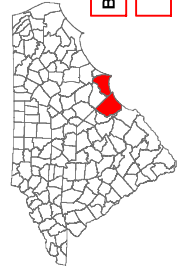


**SCDOT Typical Section 1**  
**Four-Lane Median-Divided Freeway**



**SCDOT Typical Section 2**  
**Six-Lane Median-Divided Freeway**

Note: Not to Scale



Brunswick County  
Horry County



NCDOT Project R-5876  
Brunswick County

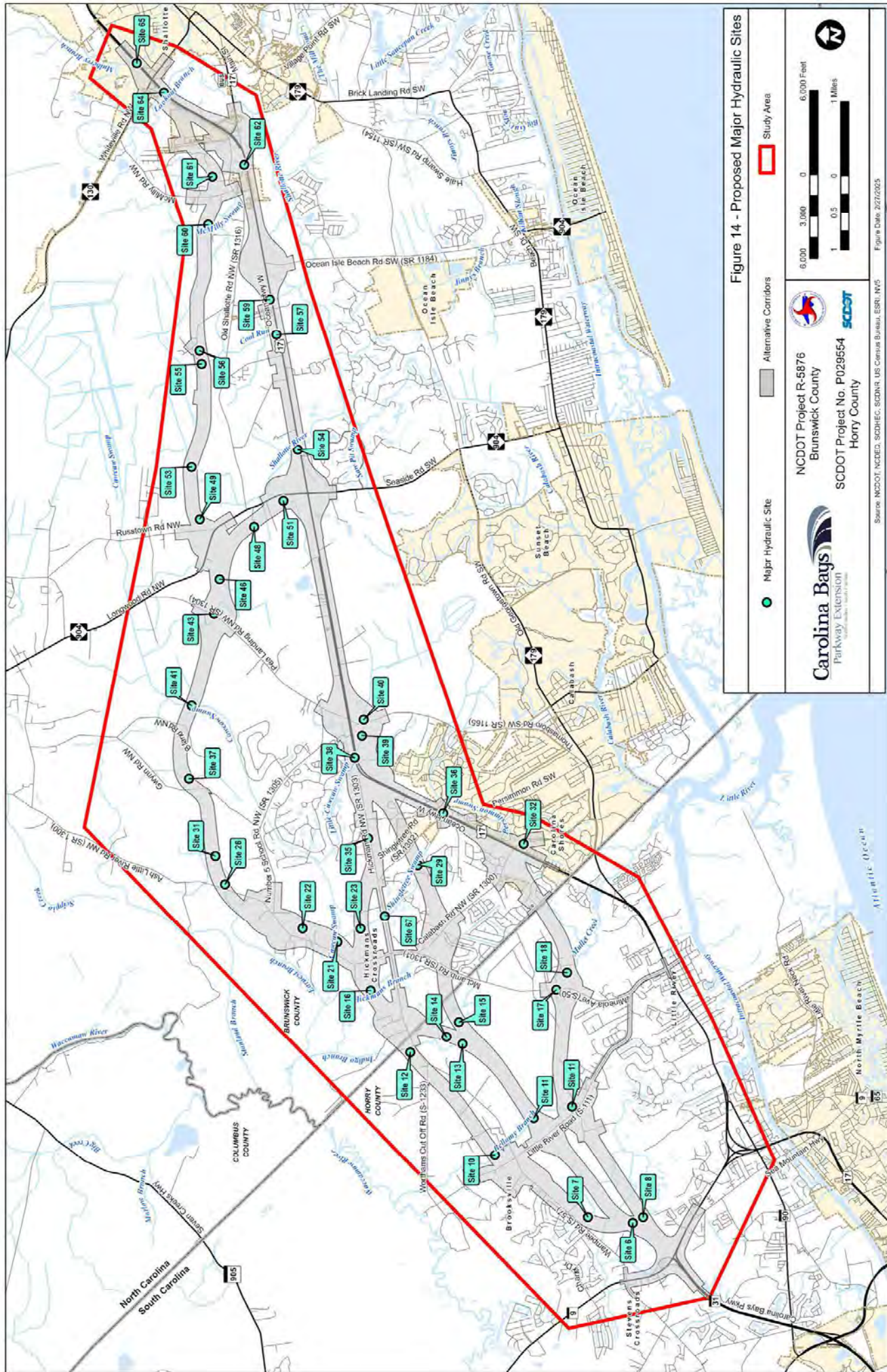
SCDOT Project P029554  
Horry County

**Figure 13A**  
**SCDOT Proposed**  
**Typical Sections**









**Carolina Bays**  
Parkway Extension

NCDOT Project R-5876  
Brunswick County

SCDOT Project No. P029554  
Horry County

Source: NCDOT, NCEC, SCDHEC, SCDNR, US Census Bureau, ESRI, INVS  
Figure Date: 2/27/2025



Figure 15A

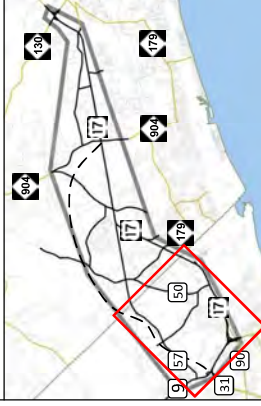
2045 Average Annual Daily Traffic  
Future Year - Alternative 1



LEGEND

No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited  
K PM → D  
(d, t) → D

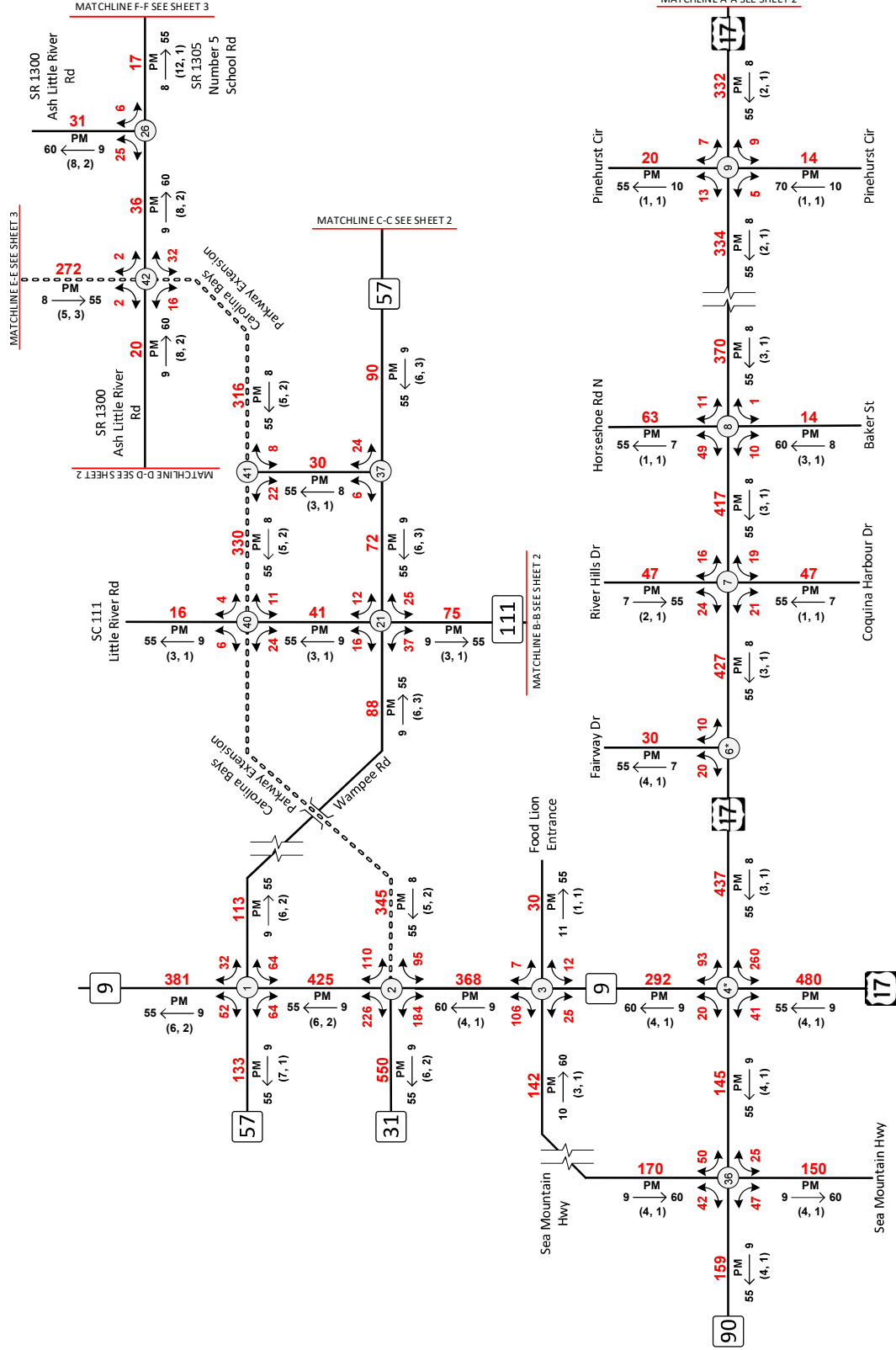
K Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
→ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045  
AVERAGE ANNUAL  
DAILY TRAFFIC

FUTURE YEAR BUILD 1  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





**2045 Average Annual Daily Traffic**  
**Future Year - Alternative 1**

|                                          |                                                                                   |
|------------------------------------------|-----------------------------------------------------------------------------------|
| NCDOT Project R-5876<br>Brunswick County |  |
| SCDOT Project P029554<br>Horry County    |  |



## LEGEND

| ### | No. of Vehicles Per Day in 100s |
|-----|---------------------------------|
| -   | Less than 50 vpd                |
| X   | Movement Prohibited             |

$$K \xrightarrow[\text{(d, t)}]{PM} D$$

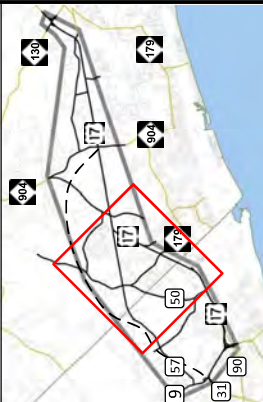
Design Hour Factor (%)

Peak Hour Directional Split (%)

↑ Indicates Direction of D  
d, t) Duals, TT-STs (%)

Build Alternative  
(New Location)Build Alternative  
(New Location)

(Improve Existing US 17)



# 2045

**FUTURE YEAR BUILD 1**  
**SHEET 2 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

COUNTY: Brunswick/Horry

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY:** Clearbox Forecast Group

\_LOCATION: SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.

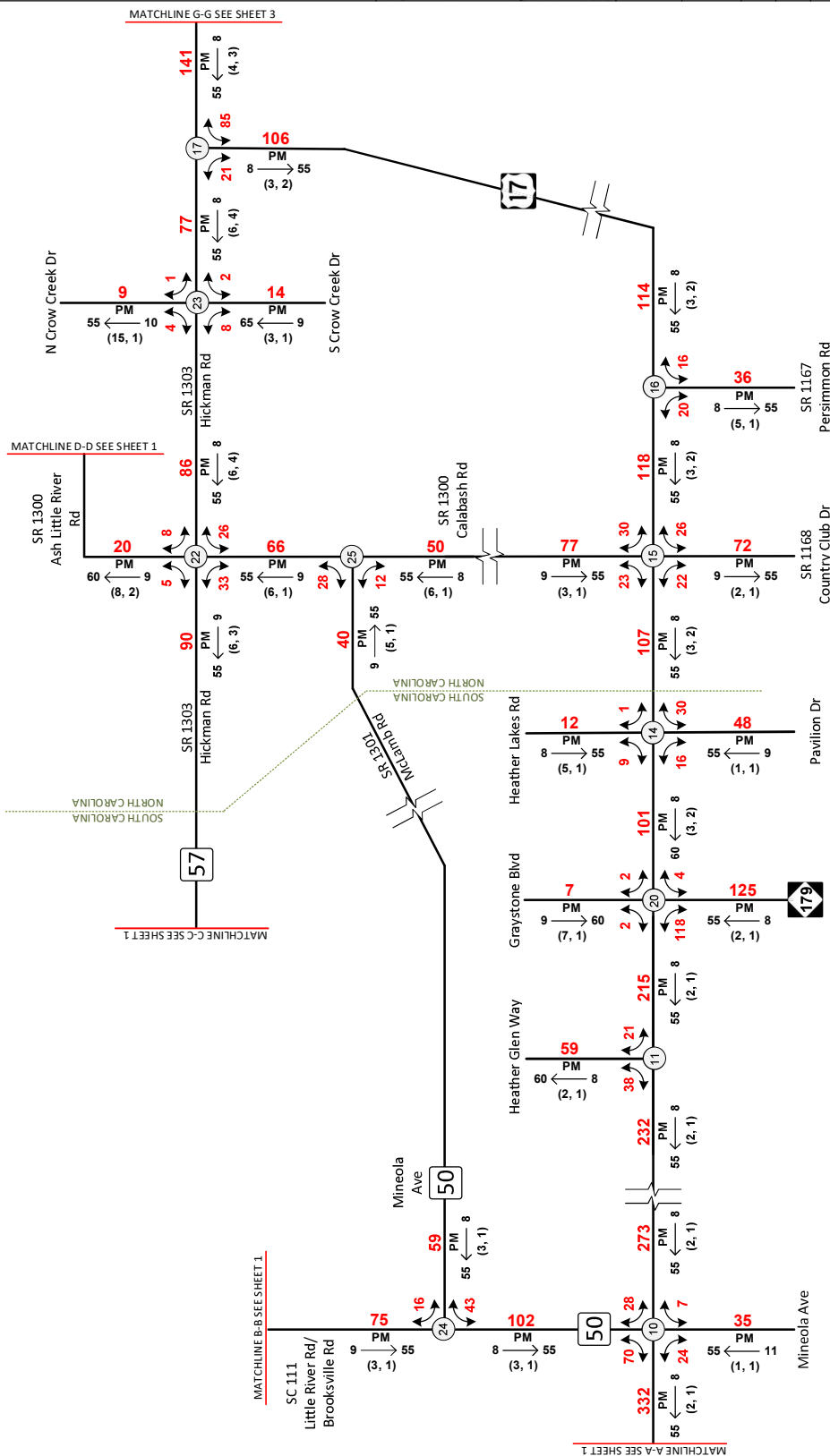




Figure 15C

2045 Average Annual Daily Traffic  
Future Year - Alternative 1



### LEGEND

No. of Vehicles Per Day in 100s

### Less than 50 vpd

1- Movement Prohibited

X

K PM → D  
(d, t)

Design Hour Factor (%)

PM Peak Period

D Indicates Direction of D

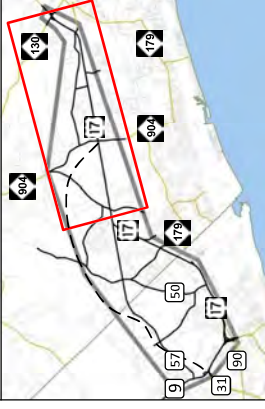
(d, t) TT-STs (%)

Build Alternative

(New Location)

Build Alternative

(Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 1  
SHEET 3 OF 3

NC TIP: R-5876 SC PN: P029554

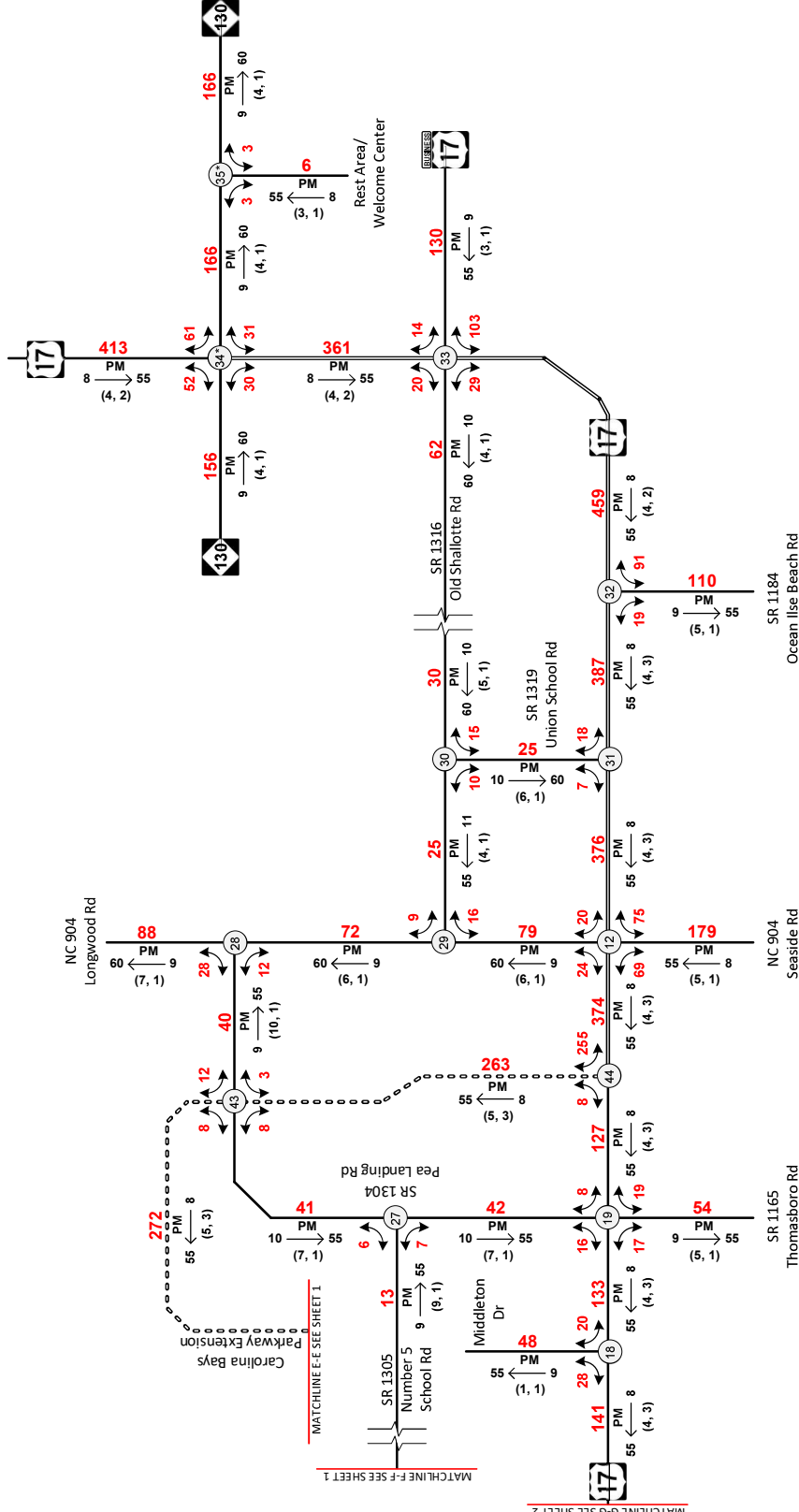
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.



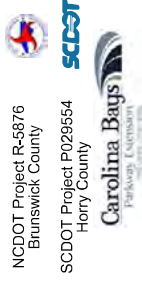
\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





Figure 15D

2045 Average Annual Daily Traffic  
Future Year - Alternative 1A

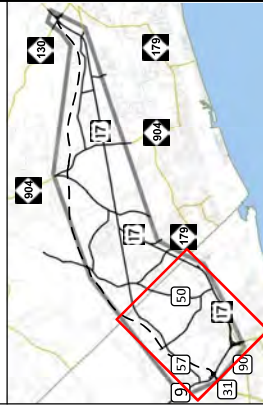


# LEGEND

No. of Vehicles Per Day in 100s  
###  
1-  
X  
Movement Prohibited

K  
PM  
D  
→  
(d, t)  
.....  
———  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)

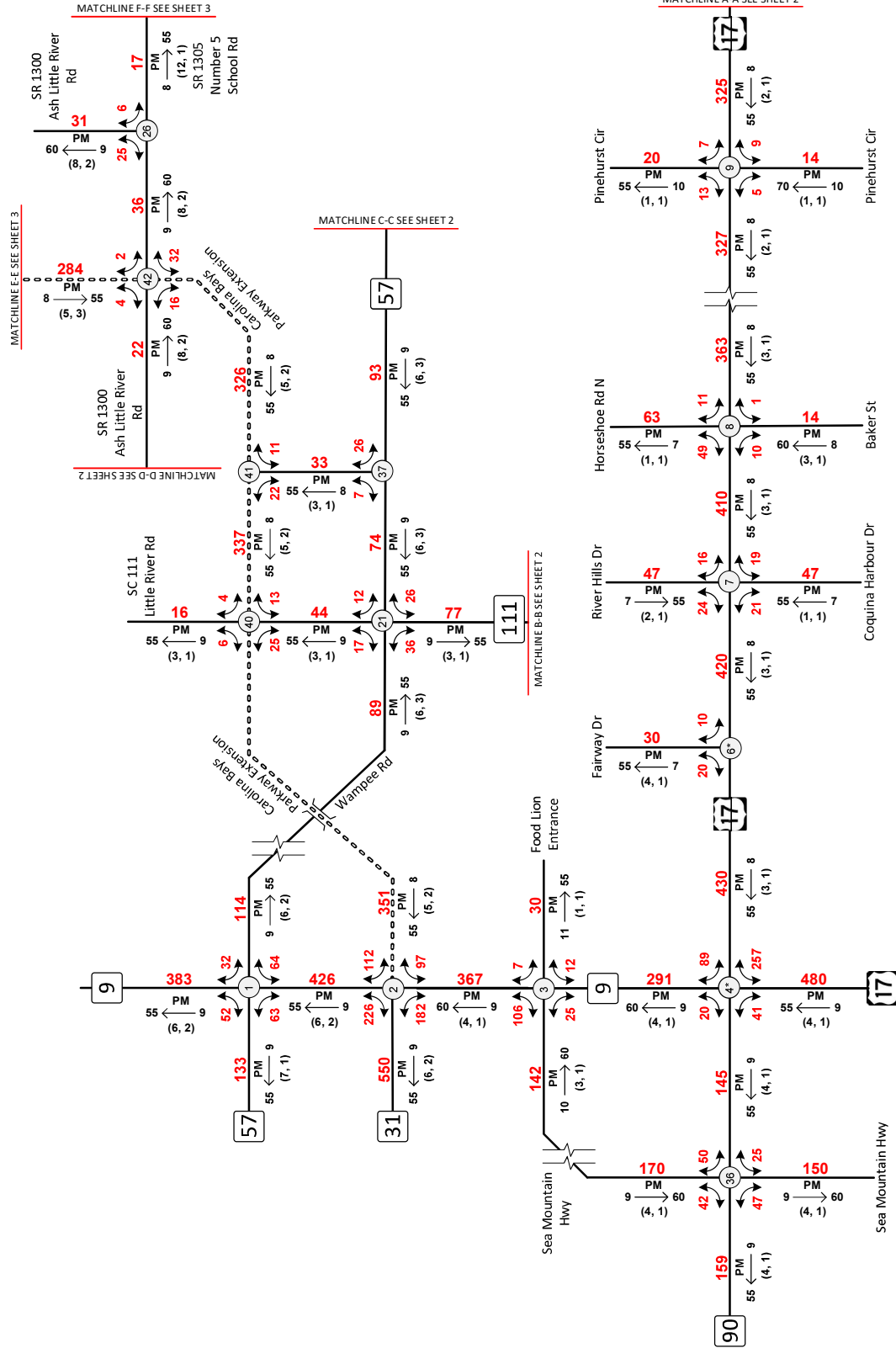
Design Hour Factor (%)  
PM Peak Period  
Peak Hour Directional Split (%)  
Indicates Direction of D  
Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045  
AVERAGE ANNUAL  
DAILY TRAFFIC

FUTURE YEAR BUILD 1A  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





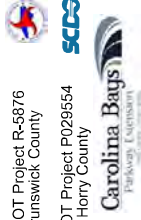




**Figure 15F**  
2045 Average Annual Daily Traffic  
Future Year - Alternative 1A

NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County



## LEGEND

### No. of Vehicles Per Day in 100s

1- Less than 50 vpd

**X** Movement Prohibited

$$K \xrightarrow[\text{(d.t.)}]{PM} D$$

Design Hour Factor (%)

PM Peak Period

**D** Peak Hour Directional Split (%)

↑ Indicates Direction of Data Flow

(d.t) Duals,  $\Pi$ -STs (%)

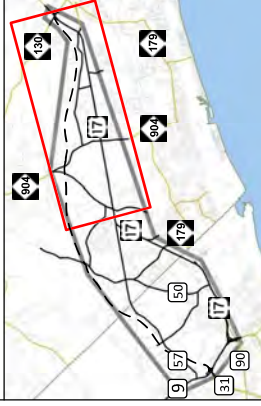
| (a,c) | Duals, 11-013 (%) | Build Alternative |
|-------|-------------------|-------------------|
| 1     | 100               | 1                 |
| 2     | 100               | 2                 |
| 3     | 100               | 3                 |
| 4     | 100               | 4                 |
| 5     | 100               | 5                 |
| 6     | 100               | 6                 |
| 7     | 100               | 7                 |
| 8     | 100               | 8                 |
| 9     | 100               | 9                 |
| 10    | 100               | 10                |
| 11    | 100               | 11                |
| 12    | 100               | 12                |
| 13    | 100               | 13                |
| 14    | 100               | 14                |
| 15    | 100               | 15                |
| 16    | 100               | 16                |
| 17    | 100               | 17                |
| 18    | 100               | 18                |
| 19    | 100               | 19                |
| 20    | 100               | 20                |
| 21    | 100               | 21                |
| 22    | 100               | 22                |
| 23    | 100               | 23                |
| 24    | 100               | 24                |
| 25    | 100               | 25                |
| 26    | 100               | 26                |
| 27    | 100               | 27                |
| 28    | 100               | 28                |
| 29    | 100               | 29                |
| 30    | 100               | 30                |
| 31    | 100               | 31                |
| 32    | 100               | 32                |
| 33    | 100               | 33                |
| 34    | 100               | 34                |
| 35    | 100               | 35                |
| 36    | 100               | 36                |
| 37    | 100               | 37                |
| 38    | 100               | 38                |
| 39    | 100               | 39                |
| 40    | 100               | 40                |
| 41    | 100               | 41                |
| 42    | 100               | 42                |
| 43    | 100               | 43                |
| 44    | 100               | 44                |
| 45    | 100               | 45                |
| 46    | 100               | 46                |
| 47    | 100               | 47                |
| 48    | 100               | 48                |
| 49    | 100               | 49                |
| 50    | 100               | 50                |
| 51    | 100               | 51                |
| 52    | 100               | 52                |
| 53    | 100               | 53                |
| 54    | 100               | 54                |
| 55    | 100               | 55                |
| 56    | 100               | 56                |
| 57    | 100               | 57                |
| 58    | 100               | 58                |
| 59    | 100               | 59                |
| 60    | 100               | 60                |
| 61    | 100               | 61                |
| 62    | 100               | 62                |
| 63    | 100               | 63                |
| 64    | 100               | 64                |
| 65    | 100               | 65                |
| 66    | 100               | 66                |
| 67    | 100               | 67                |
| 68    | 100               | 68                |
| 69    | 100               | 69                |
| 70    | 100               | 70                |
| 71    | 100               | 71                |
| 72    | 100               | 72                |
| 73    | 100               | 73                |
| 74    | 100               | 74                |
| 75    | 100               | 75                |
| 76    | 100               | 76                |
| 77    | 100               | 77                |
| 78    | 100               | 78                |
| 79    | 100               | 79                |
| 80    | 100               | 80                |
| 81    | 100               | 81                |
| 82    | 100               | 82                |
| 83    | 100               | 83                |
| 84    | 100               | 84                |
| 85    | 100               | 85                |
| 86    | 100               | 86                |
| 87    | 100               | 87                |
| 88    | 100               | 88                |
| 89    | 100               | 89                |
| 90    | 100               | 90                |
| 91    | 100               | 91                |
| 92    | 100               | 92                |
| 93    | 100               | 93                |
| 94    | 100               | 94                |
| 95    | 100               | 95                |
| 96    | 100               | 96                |
| 97    | 100               | 97                |
| 98    | 100               | 98                |
| 99    | 100               | 99                |
| 100   | 100               | 100               |

Build Alternative  
(New Location)

**Build Alternative**  
**(New Location)**

---

**Build Alternative**  
(Improve Existing IIS 17)



# 2045

**FUTURE YEAR BUILD 1A**  
**SHEET 3 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

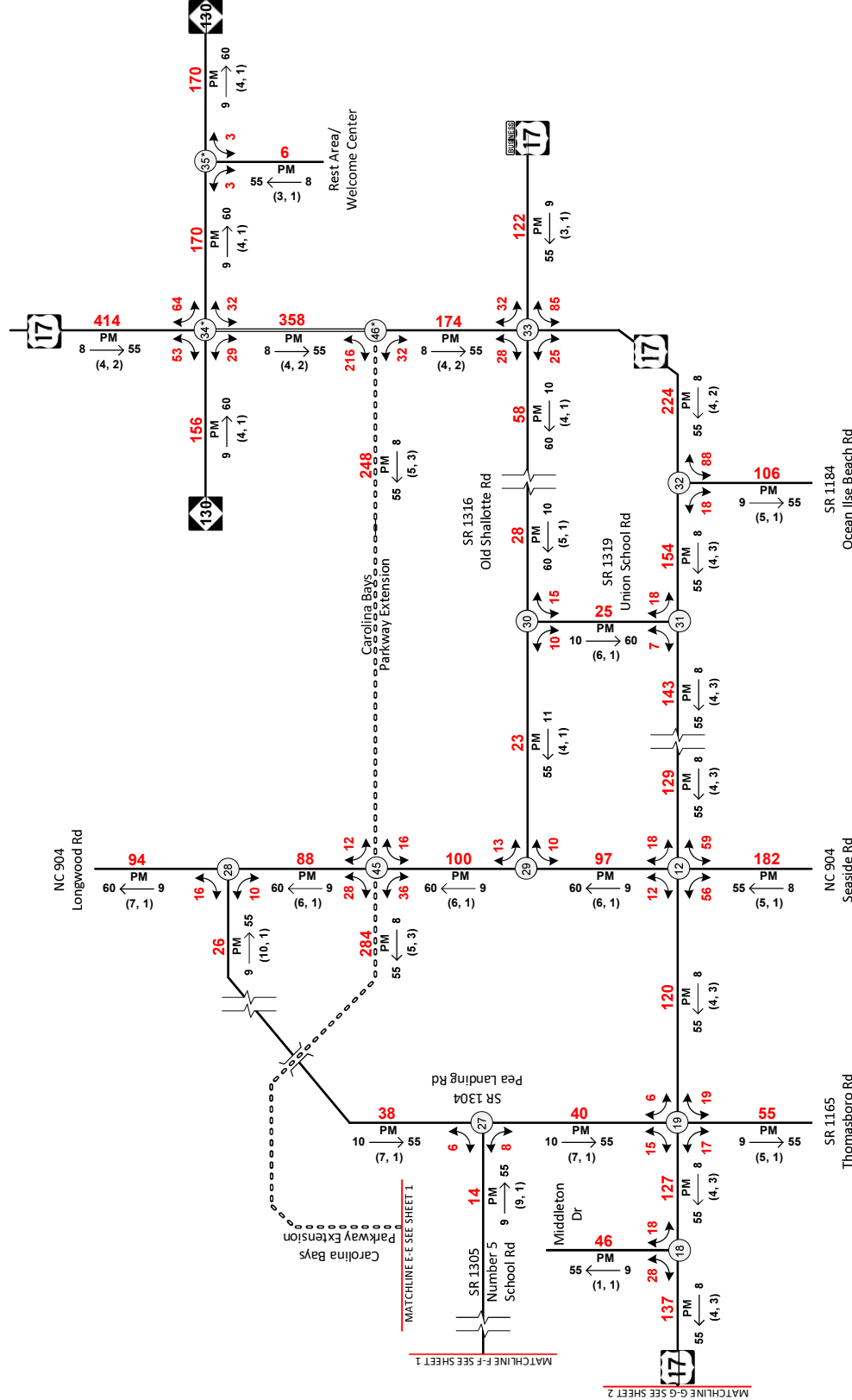
COUNTY: Brunswick/Horry

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY: Clearbox Forecast Group**

**LOCATION:** SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TLU compatibility.





Figure 15G

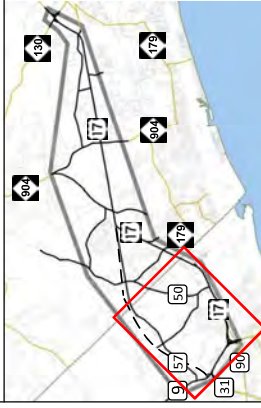
2045 Average Annual Daily Traffic  
Future Year - Alternative 2



LEGEND

### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited

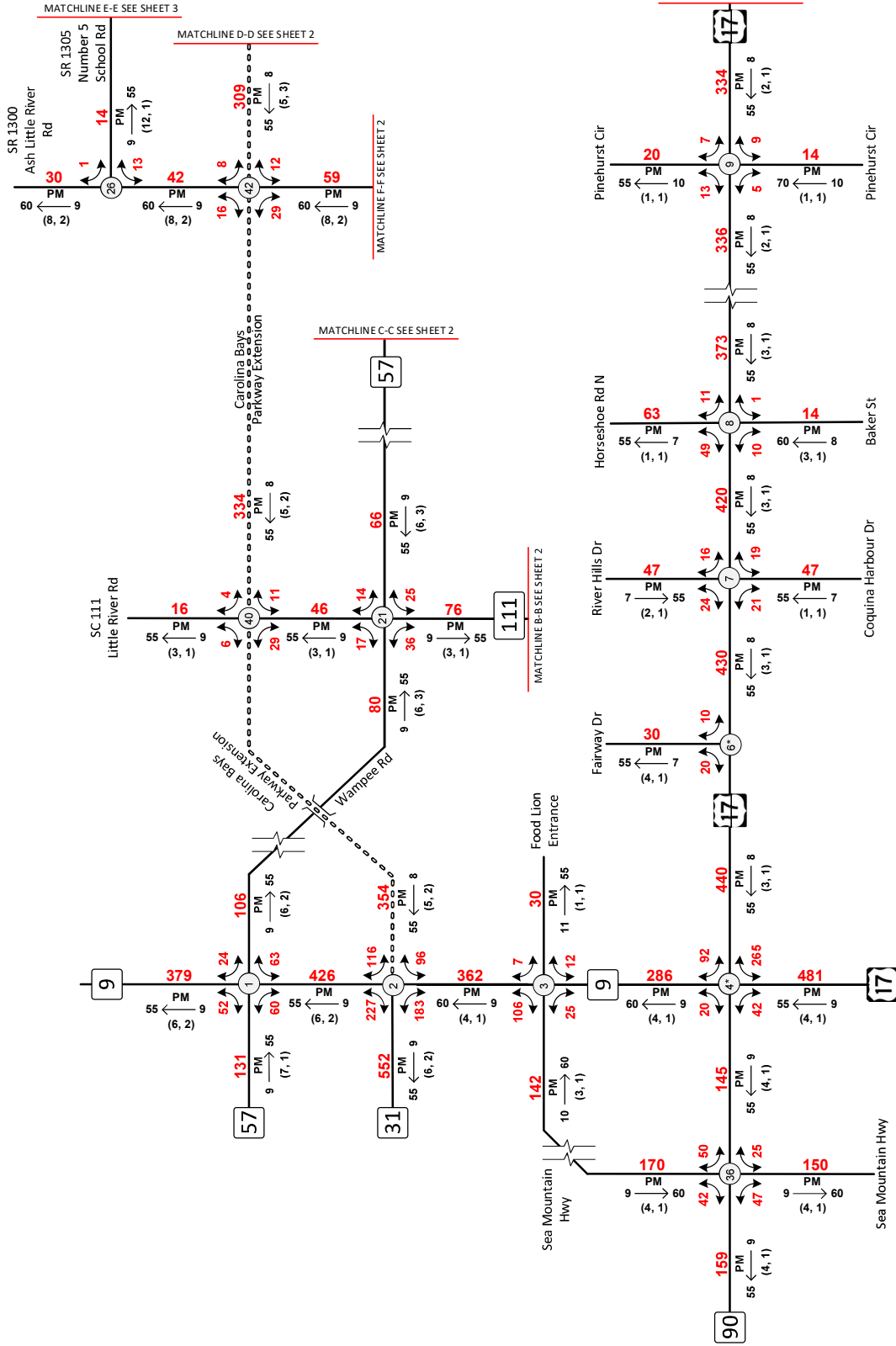
K Design Hour Factor (%)  
PM PM Peak Period  
D Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
----- Build Alternative  
----- (New Location)  
----- Build Alternative  
----- (Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 2  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





Figure 15H

2045 Average Annual Daily Traffic  
Future Year - Alternative 2



LEGEND

No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited

1- Movement Prohibited

X Movement Prohibited

K Design Hour Factor (%)

PM Peak Hour Period

D Peak Hour Directional Split (%)

Indicates Direction of D

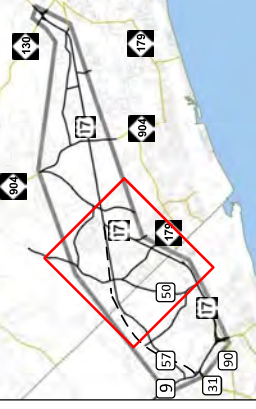
(d, t) Duals, TT-STs (%)

Build Alternative

(New Location)

Build Alternative

(Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 2  
SHEET 2 OF 3

NC TIP: R-5876 SC PN: P029554

COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.

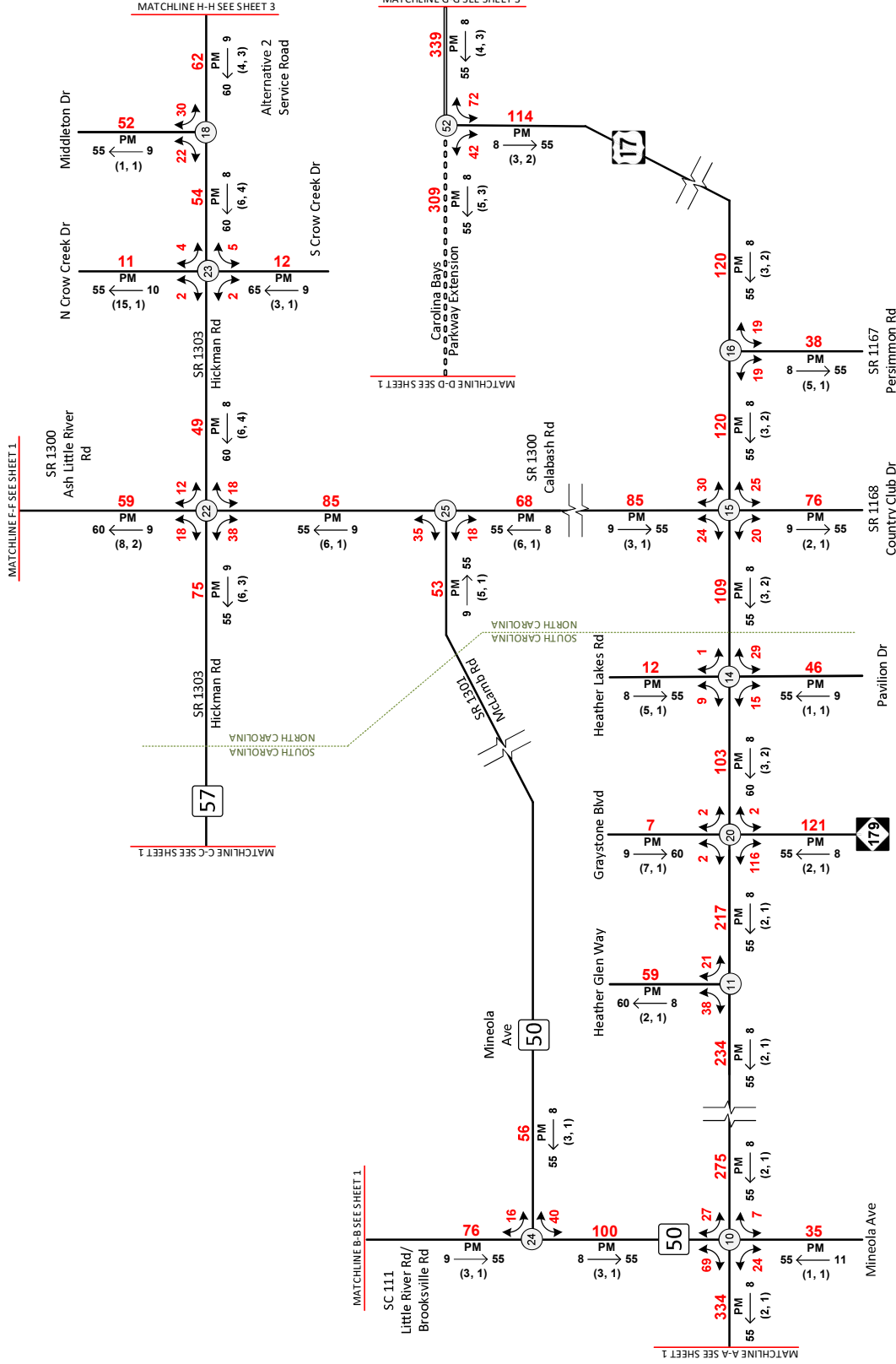
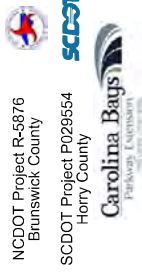




Figure 151

2045 Average Annual Daily Traffic  
Future Year - Alternative 2



LEGEND

No. of Vehicles Per Day in 100s  
###  
1- Movement Prohibited  
X

K PM → D  
(d, t)

Design Hour Factor (%)

PM Peak Period

D Peak Hour Directional Split (%)

Indicates Direction of D

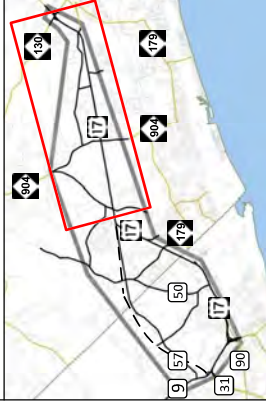
Duals, TT-STs (%)

Build Alternative

(New Location)

Build Alternative

(Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 2  
SHEET 3 OF 3

NC TIP: R-5876 SC PN: P029554

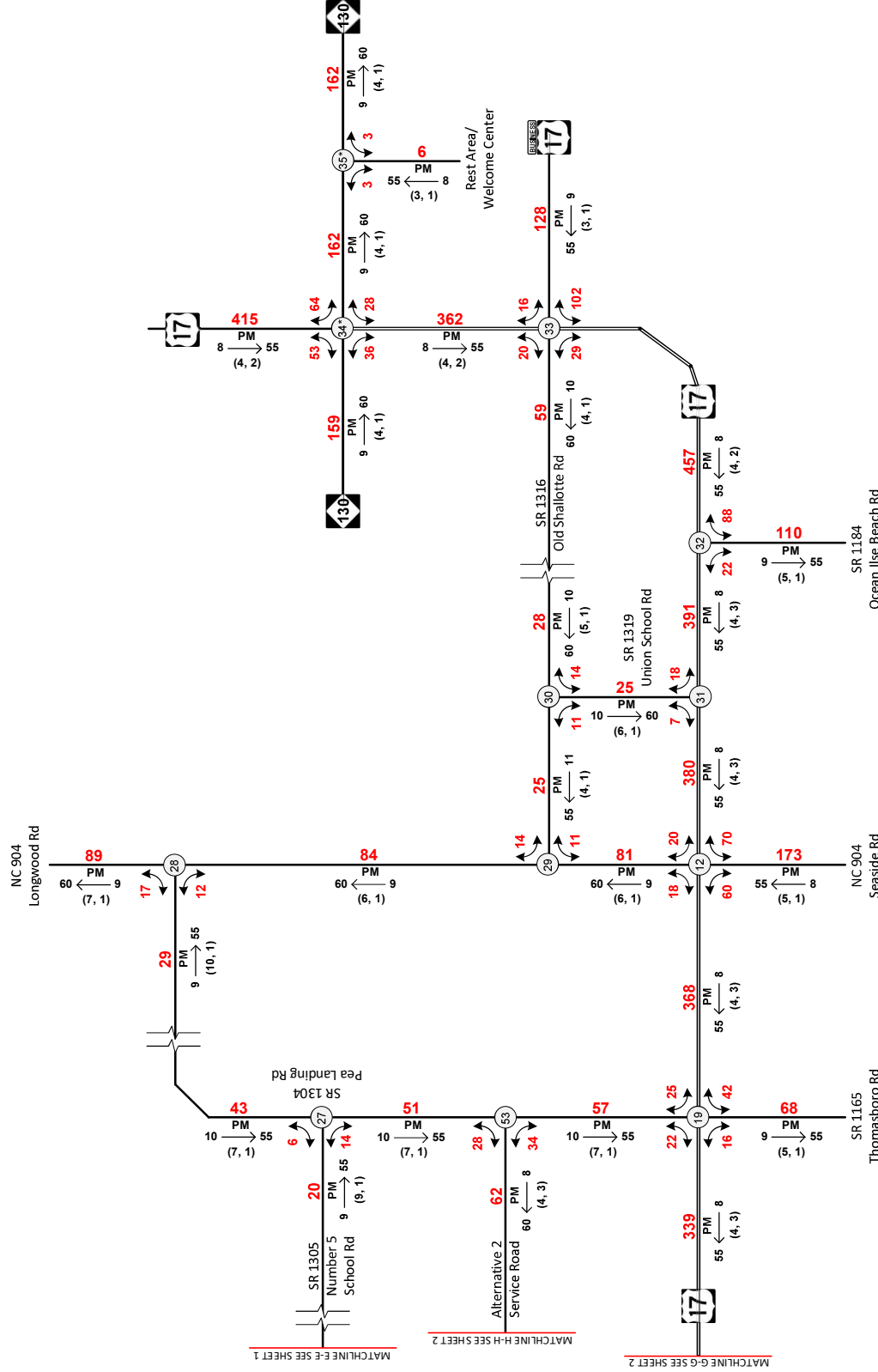
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





**2045 Average Annual Daily Traffic**  
**Future Year - Alternative 4**





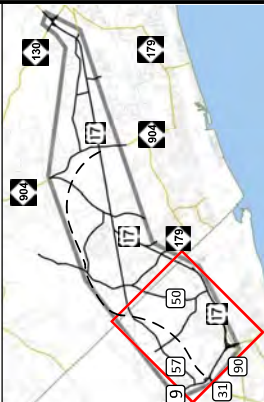
NCDOT Project R-5876  
 Brunswick County

SCDOT Project P029554  
 Horry County

Carolina Bays  
 Parkway, Lenoir County

| ### | No. of Vehicles Per Day in 100s |
|-----|---------------------------------|
| 1-  | Less than 50 vpd                |
| X   | Movement Prohibited             |

|         |                                               |
|---------|-----------------------------------------------|
| K       | Design Hour Factor (%)                        |
| PM      | PM Peak Period                                |
| D       | Peak Hour Directional Split (%)               |
|         | Indicates Direction of D                      |
| (d, t)  | Duals, TT-STs (%)                             |
| o o o o | Build Alternative<br>(New Location)           |
|         | Build Alternative<br>(Improve Existing US 17) |



# 2045

**FUTURE YEAR BUILD 4**  
**SHEET 1 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

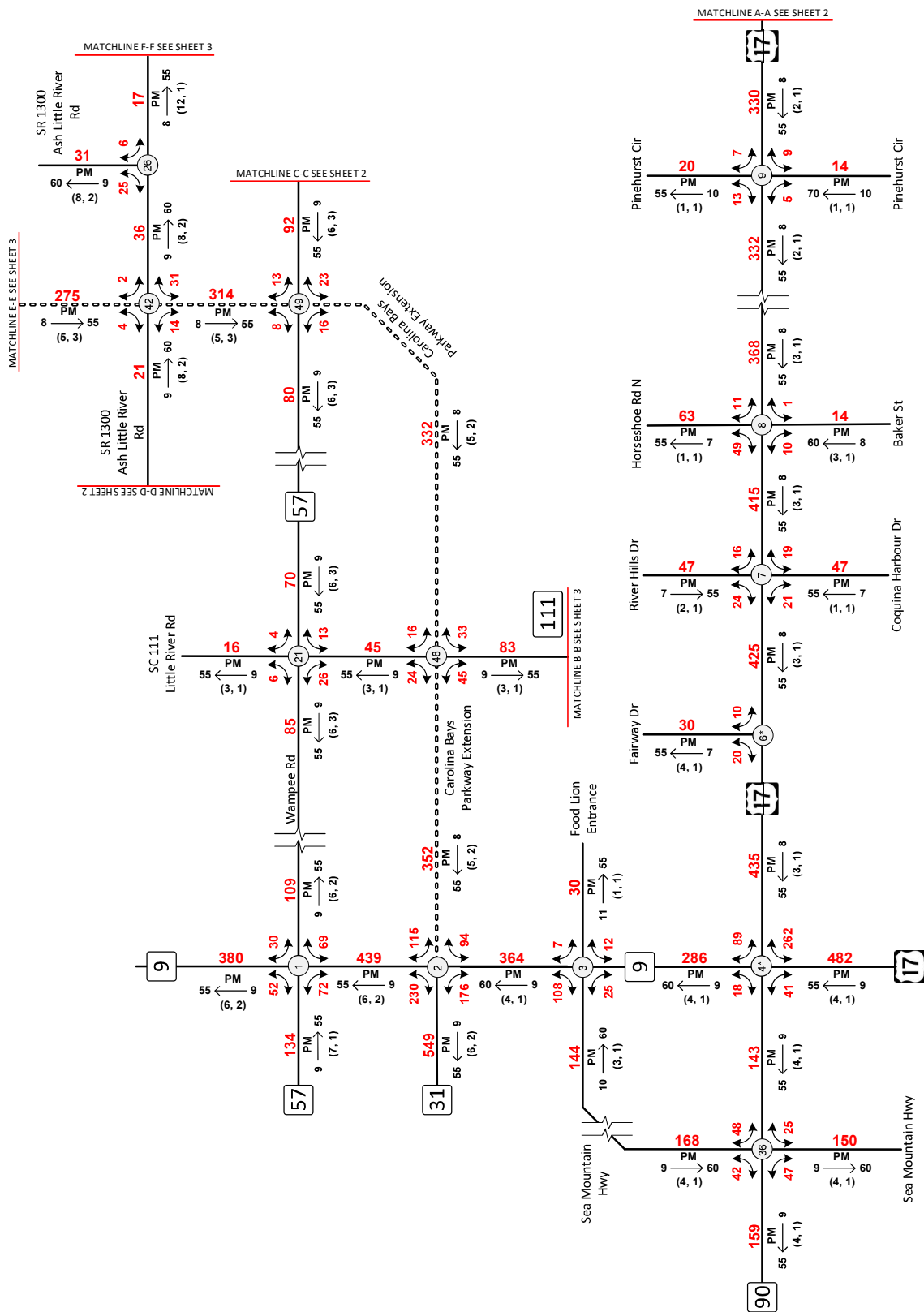
COUNTY: Brunswick/Horry

|                           |                   |
|---------------------------|-------------------|
| <b>DATE:</b> October 2020 | <b>WBS:</b> 44604 |
|---------------------------|-------------------|

**PREPARED BY: Clearbox Forecast Group**

LOCATION: SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





**Figure 15K**  
**2045 Average Annual Daily Traffic**  
**Future Year - Alternative 4**

NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County



## LEGEND

No. of Vehicles Per Day in 100s

Less than 50 vpd

**Movement Prohibited**

$$K \xrightarrow{PM} D$$

Design Hour Factor (%)

PM Peak Period

Peak Hour Directional Split (%)

Indicates Direction of D

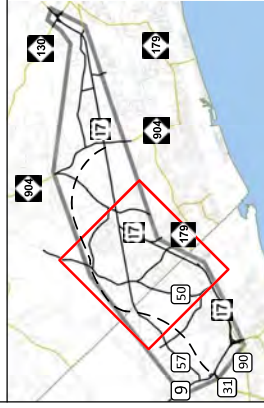
) Duals, TT-STs (%)

## Build Alternative

**Build Alternative  
(New Location)**

Build Alternative

(Improve Existing US 17)



# 2045

**FUTURE YEAR BUILD 4**  
**SHEET 2 OF 3**

|                |                 |
|----------------|-----------------|
| NC TIP: R-5876 | SC PN: P0295554 |
|----------------|-----------------|

COUNTY: Brunswick/Horry DIVISION: 3/5

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY: Clearbox Forecast Group**

LOCATION: SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.

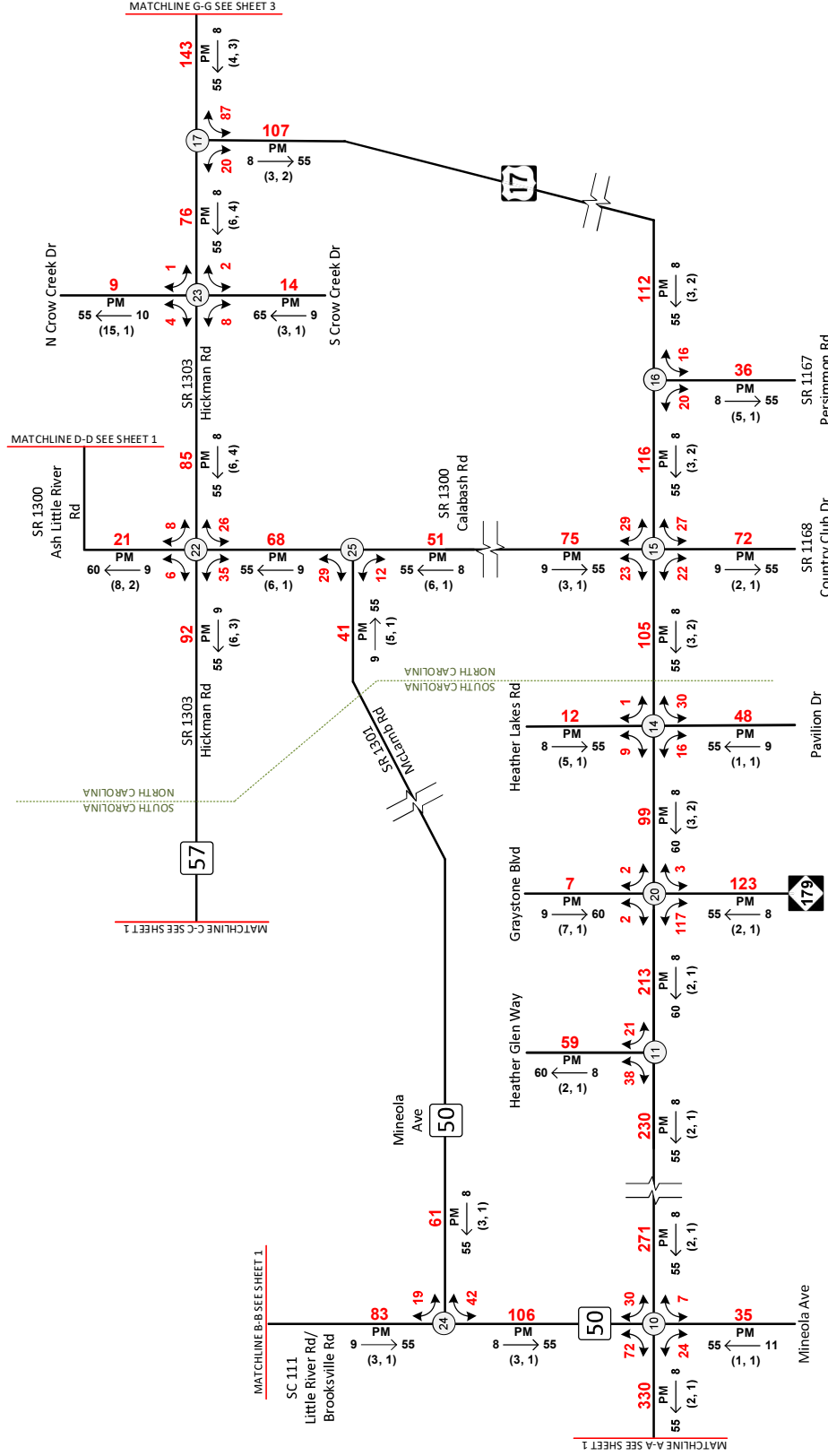




Figure 15L  
2045 Average Annual Daily Traffic  
Future Year - Alternative 4



LEGEND

No. of Vehicles Per Day in 100s

Less than 50 vpd

Movement Prohibited

K PM → D  
(d, t)

Design Hour Factor (%)

PM Peak Period

Peak Hour Directional Split (%)

Indicates Direction of D

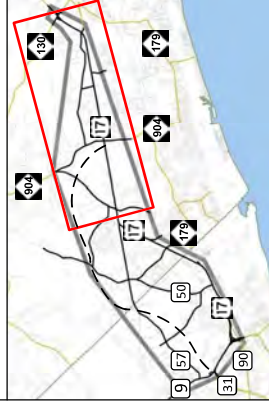
Duals, TT-STs (%)

Build Alternative

(New Location)

Build Alternative

(Improve Existing US 17)



2045  
AVERAGE ANNUAL  
DAILY TRAFFIC

FUTURE YEAR BUILD 4  
SHEET 3 OF 3

NC TIP: R-5876 SC PN: P029554

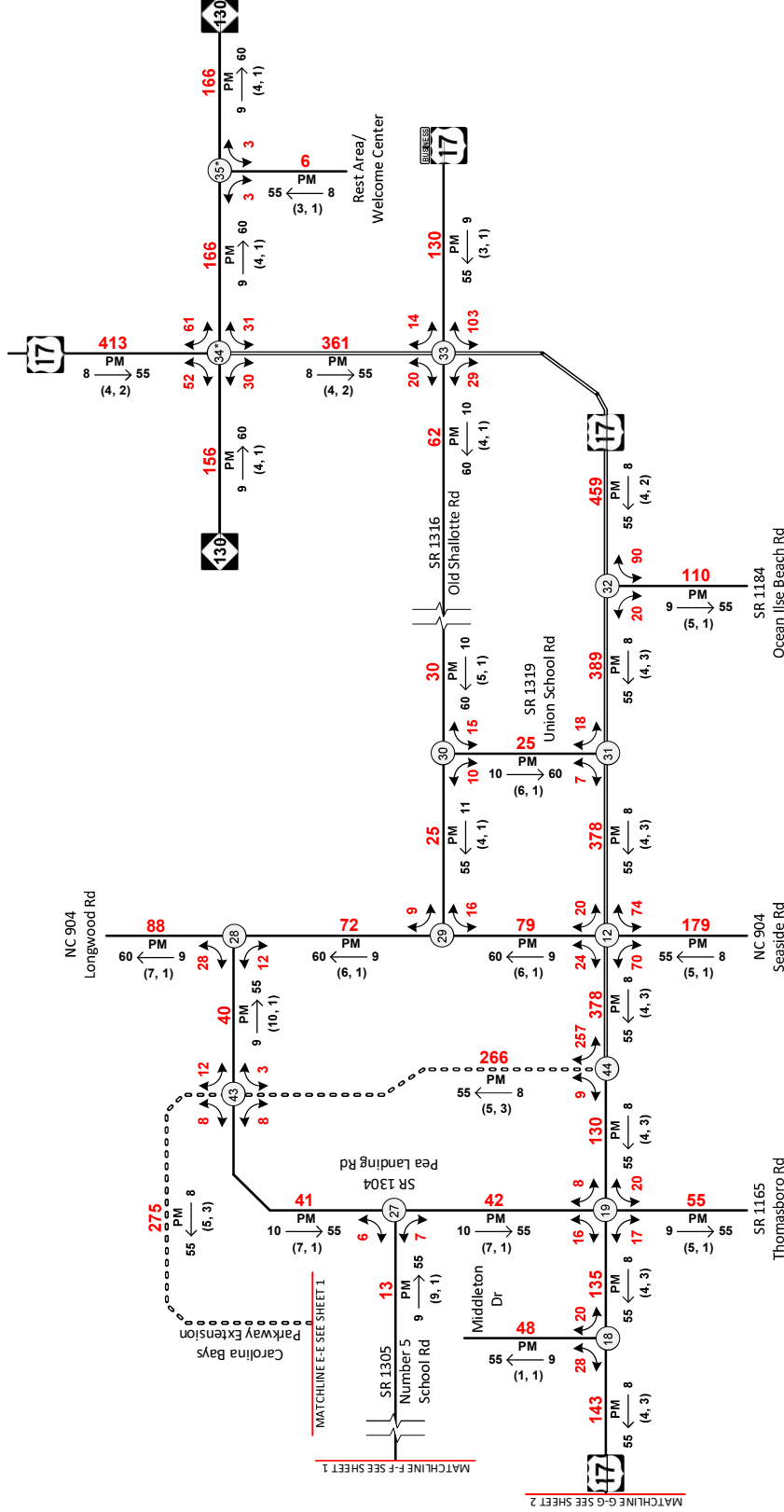
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.



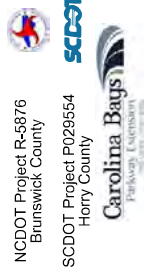
\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





Figure 15M

2045 Average Annual Daily Traffic  
Future Year - Alternative 4A



LEGEND

No. of Vehicles Per Day in 100s

### Less than 50 vpd

1- Movement Prohibited

X

K  $\frac{PM}{(d, t)} \rightarrow D$

Design Hour Factor (%)

PM Peak Period

D Peak Hour Directional Split (%)

$\rightarrow$  Indicates Direction of D

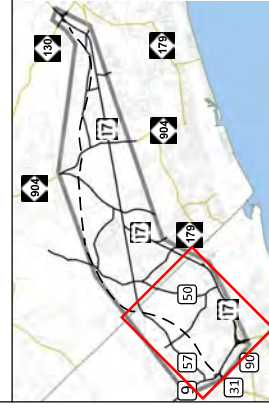
(d, t) Duals, TT-STs (%)

Build Alternative

(New Location)

Build Alternative

(Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 4A  
SHEET 1 OF 3

NC TIP: R-5876 SC PN: P029554

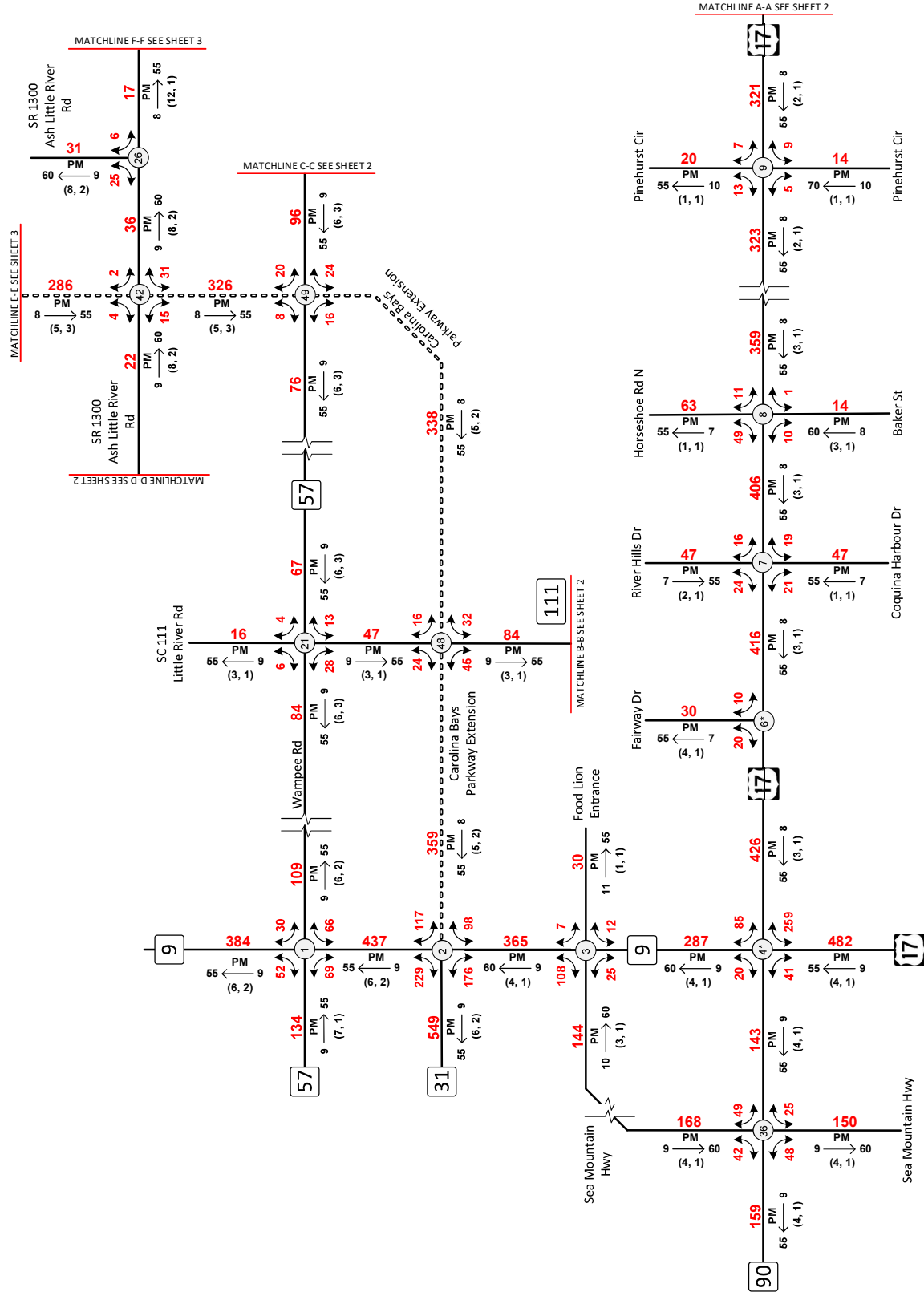
COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





2045 Average Annual Daily Traffic  
Future Year - Alternative 4A

NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County



## LEGEND

### ### No. of Vehides Per Day in 100s

1- Less than 50 vpd

**X** Movement Prohibited

$$K \xrightarrow{PM} D$$
$$K \xrightarrow{(d, t)} D$$

**K** Design Hour Factor (%)

PM Peak Period

### D Peak Hour Directional Split (%)

↑ Indicates Direction of D

(d, t) Duals, TT-STs (%)

### Build Alternative

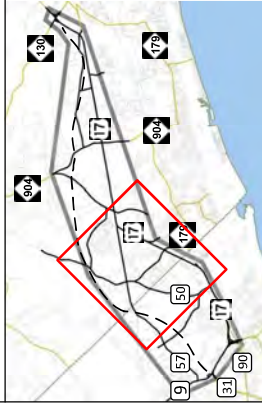
Build Alternative  
(New Location)

**Build Alternative  
(New Location)**

---

**Build Alternative**  
(Improve Existing IIS 17)

(Improve Existing 03 17)



# 2045

**FUTURE YEAR BUILD 4A**  
**SHEET 2 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

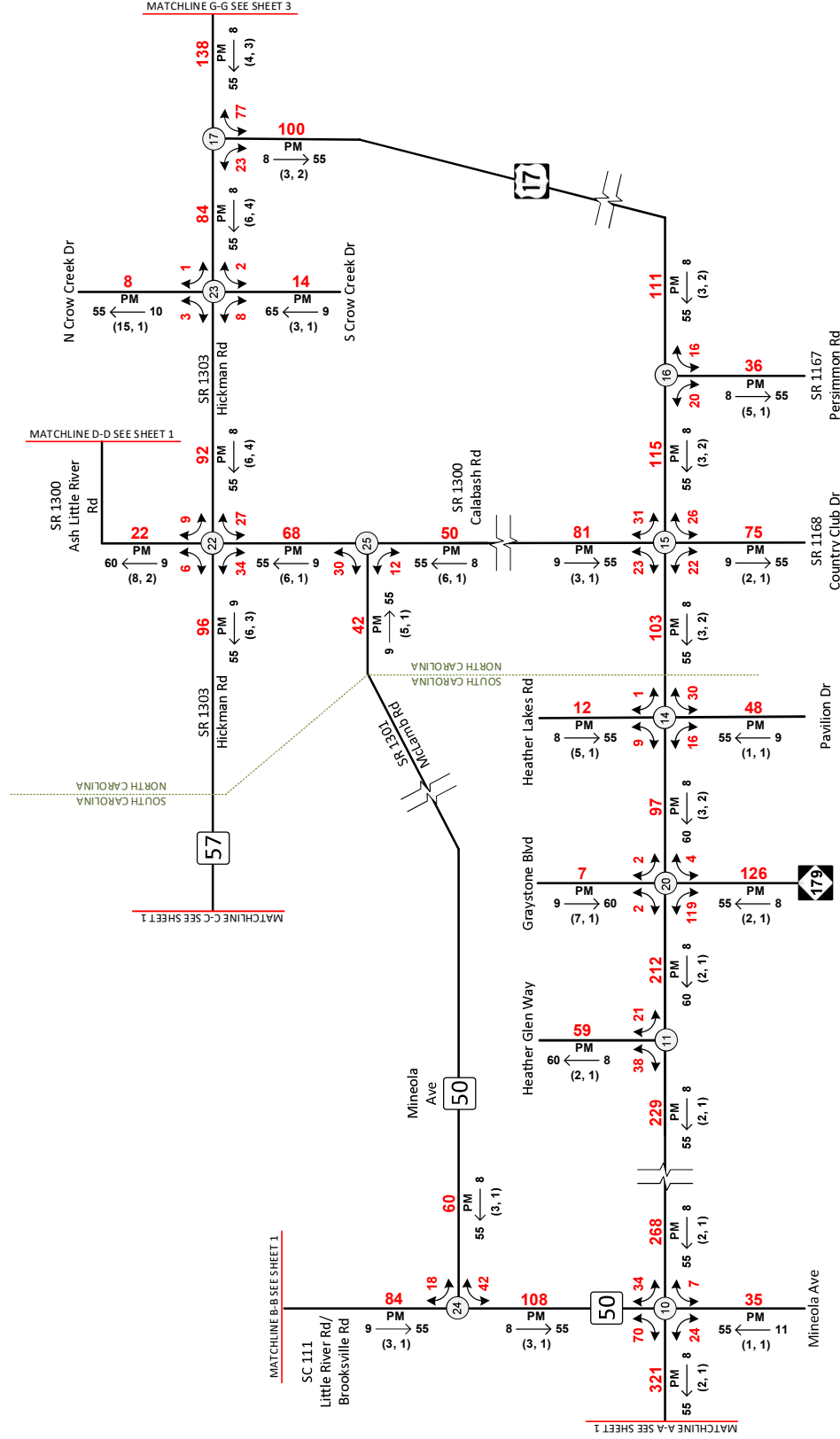
COUNTY: Brunswick/Horry

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY: Clearbox Forecast Group**

LOCATION: SC 9 to NC 130

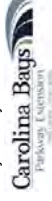
**PROJECT:** Carolina Bays Parkway Ext.





**Figure 150**  
2045 Average Annual Daily Traffic  
Future Year - Alternative 4A

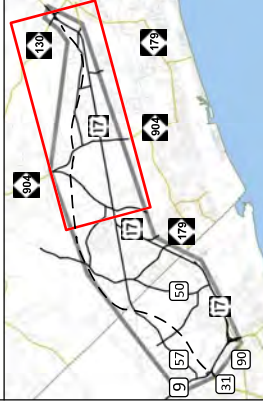
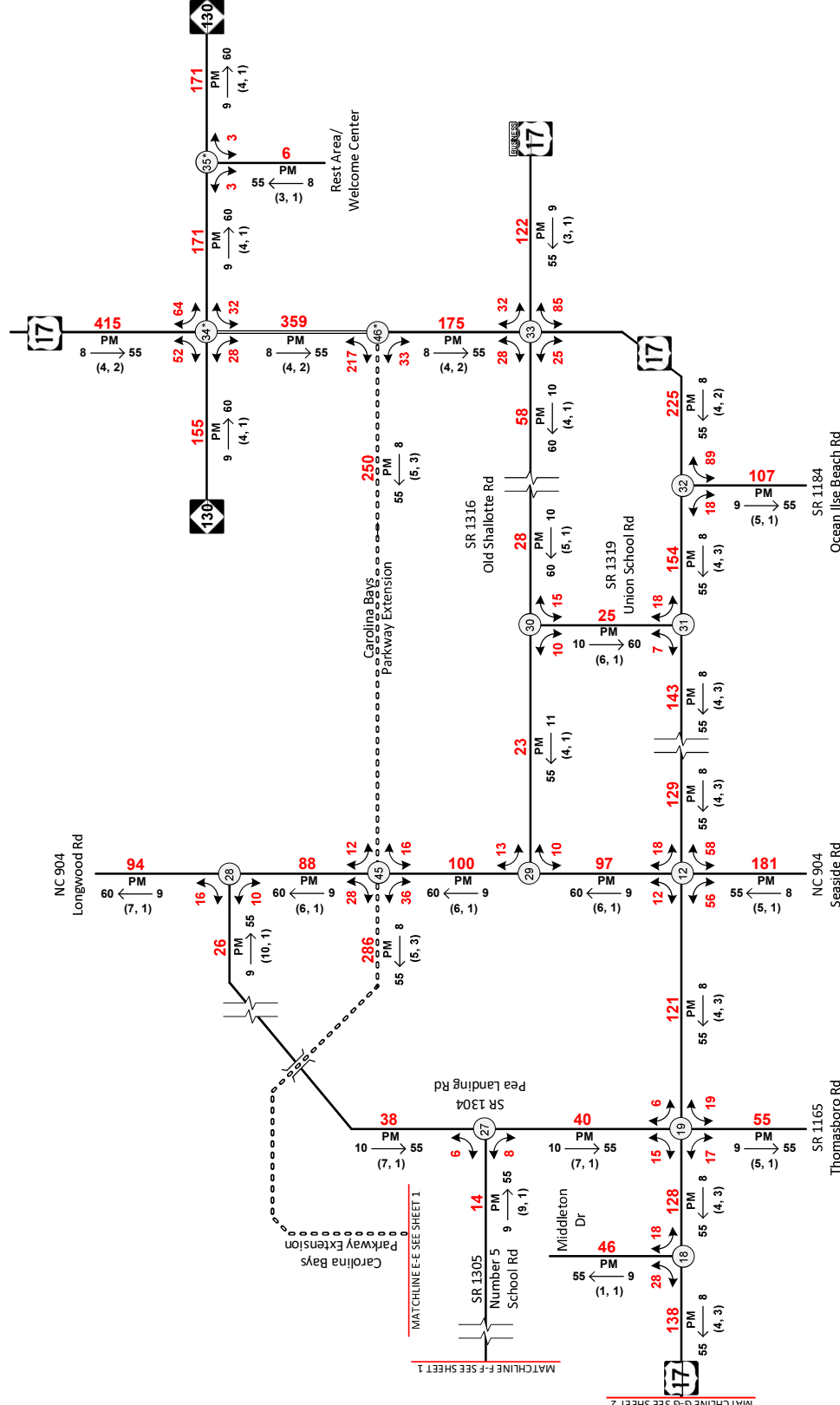
NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County

## LEGEND

####  
1- No. of Vehicles Per Day in 100s  
Less than 50 vpd

**X**      Movement Prohibited

$$K \xrightarrow{PM} D$$


# 2045

**FUTURE YEAR BUILD 4A**  
**SHEET 3 OF 3**

|                |                 |
|----------------|-----------------|
| NC TIP: R-5876 | SC PN: P0295554 |
|----------------|-----------------|

COUNTY: Brunswick/Horry DIVISION: 3/5

|                           |                   |
|---------------------------|-------------------|
| <b>DATE:</b> October 2020 | <b>WBS:</b> 44604 |
|---------------------------|-------------------|

**PREPARED BY:** Clearbox Forecast Group

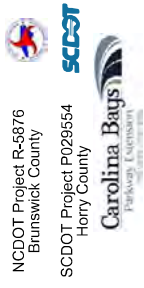
LOCATION: SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.

\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFU compatibility.

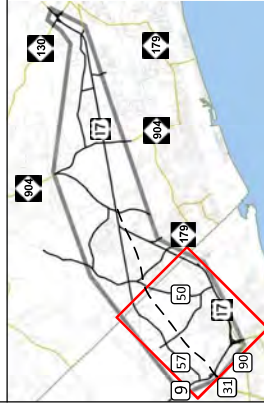


**Figure 15P**  
**2045 Average Annual Daily Traffic**  
**Future Year - Alternative 7**



**LEGEND**

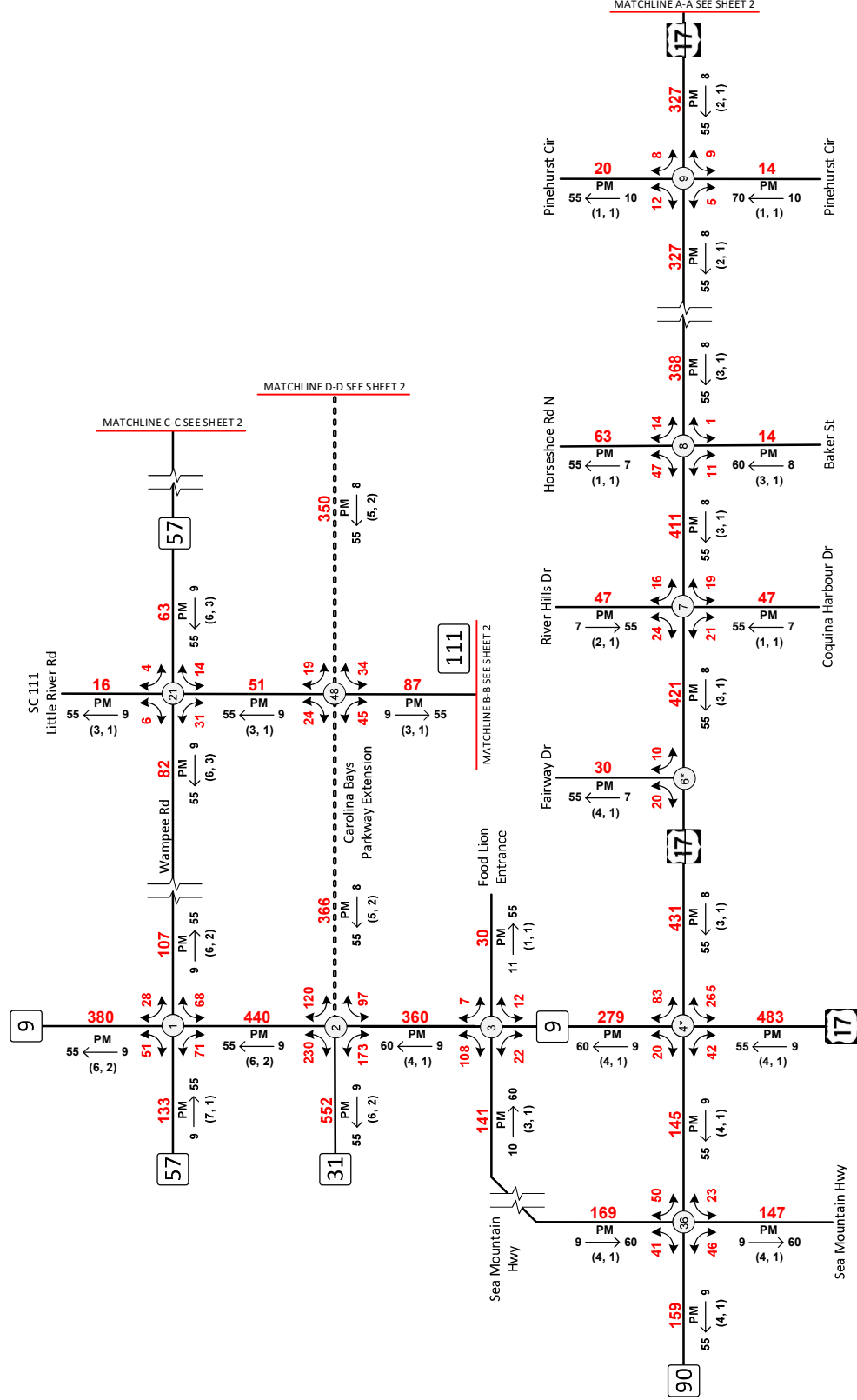
- ###** No. of Vehicles Per Day in 100s
- 1-** Less than 50 vpd
- x** Movement Prohibited
- $K \xrightarrow{PM} D$   
(d, t)
- K** Design Hour Factor (%)
- PM** PM Peak Period
- D** Peak Hour Directional Split (%)
- $\rightarrow$  Indicates Direction of D
- (d, t)** Duals, TT-STs (%)
- Build Alternative
- (New Location)
- Build Alternative
- (Improve Existing US 17)



**2045** AVERAGE ANNUAL  
DAILY TRAFFIC

**FUTURE YEAR BUILD 7**  
**SHEET 1 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





Figure 15Q

2045 Average Annual Daily Traffic  
Future Year - Alternative 7



LEGEND

### No. of Vehicles Per Day in 100s

1- Less than 50 vpd

X Movement Prohibited

K PM → D  
(d, t)

K Design Hour Factor (%)

PM PM Peak Period

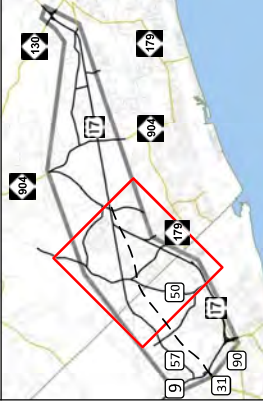
D Peak Hour Directional Split (%)

(d, t) Indicates Direction of D

Duals, TT-STs (%)

Build Alternative  
(New Location)

Build Alternative  
(Improve Existing US 17)



2045 AVERAGE ANNUAL  
DAILY TRAFFIC

FUTURE YEAR BUILD 7  
SHEET 2 OF 3

NC TIP: R-5876 SC PN: P029554

COUNTY: Brunswick/Horry DIVISION: 3/5

DATE: October 2020 WBS: 44604

PREPARED BY: Clearbox Forecast Group

LOCATION: SC 9 to NC 130

PROJECT: Carolina Bays Parkway Ext.

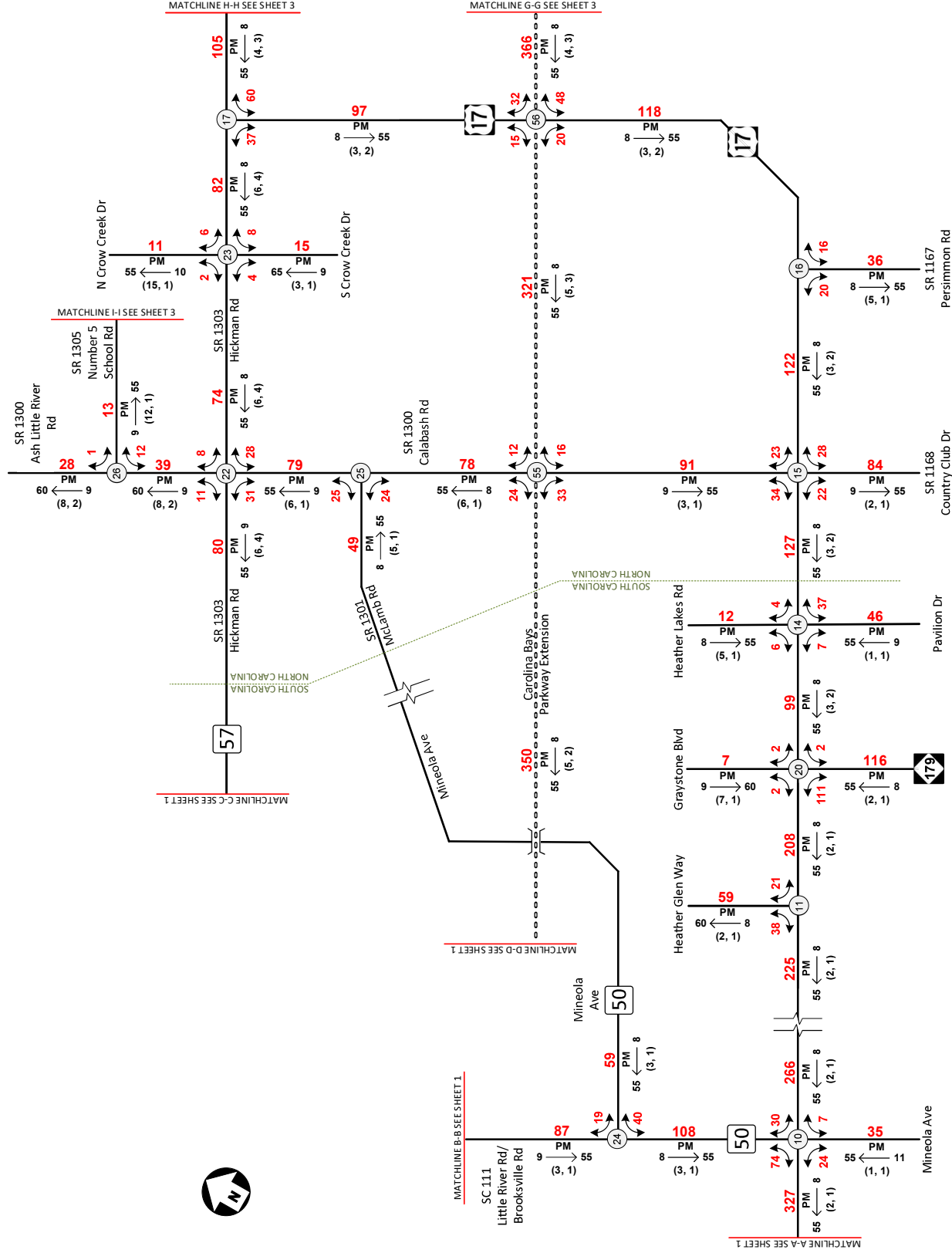
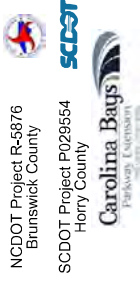




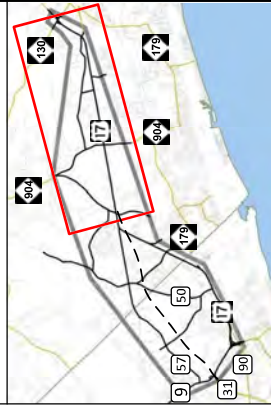
Figure 15R

2045 Average Annual Daily Traffic  
Future Year - Alternative 7



LEGEND

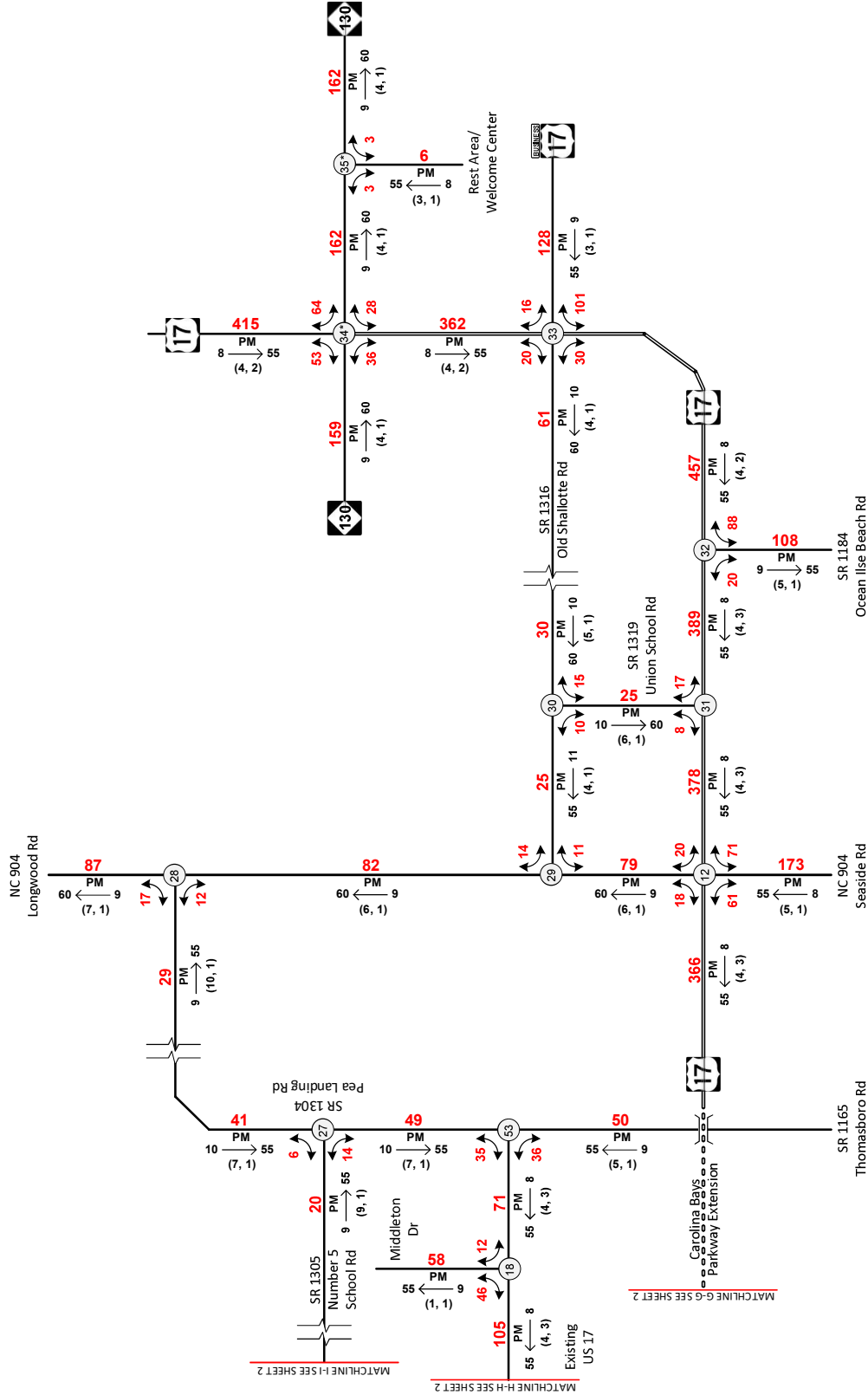
- No. of Vehicles Per Day in 100s
- Less than 50 vpd
- Movement Prohibited
- $K \xrightarrow{PM} D$   
(d, t)
- Design Hour Factor (%)
- PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D
- Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 7  
SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



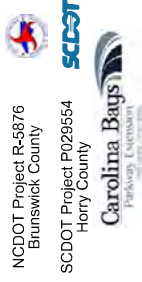
\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFU compatibility.





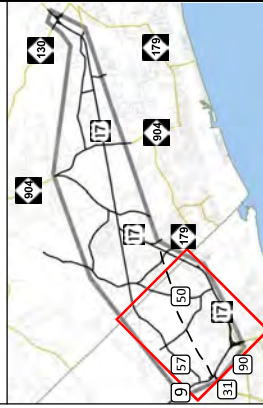
Figure 158

2045 Average Annual Daily Traffic  
Future Year - Alternative 8



LEGEND

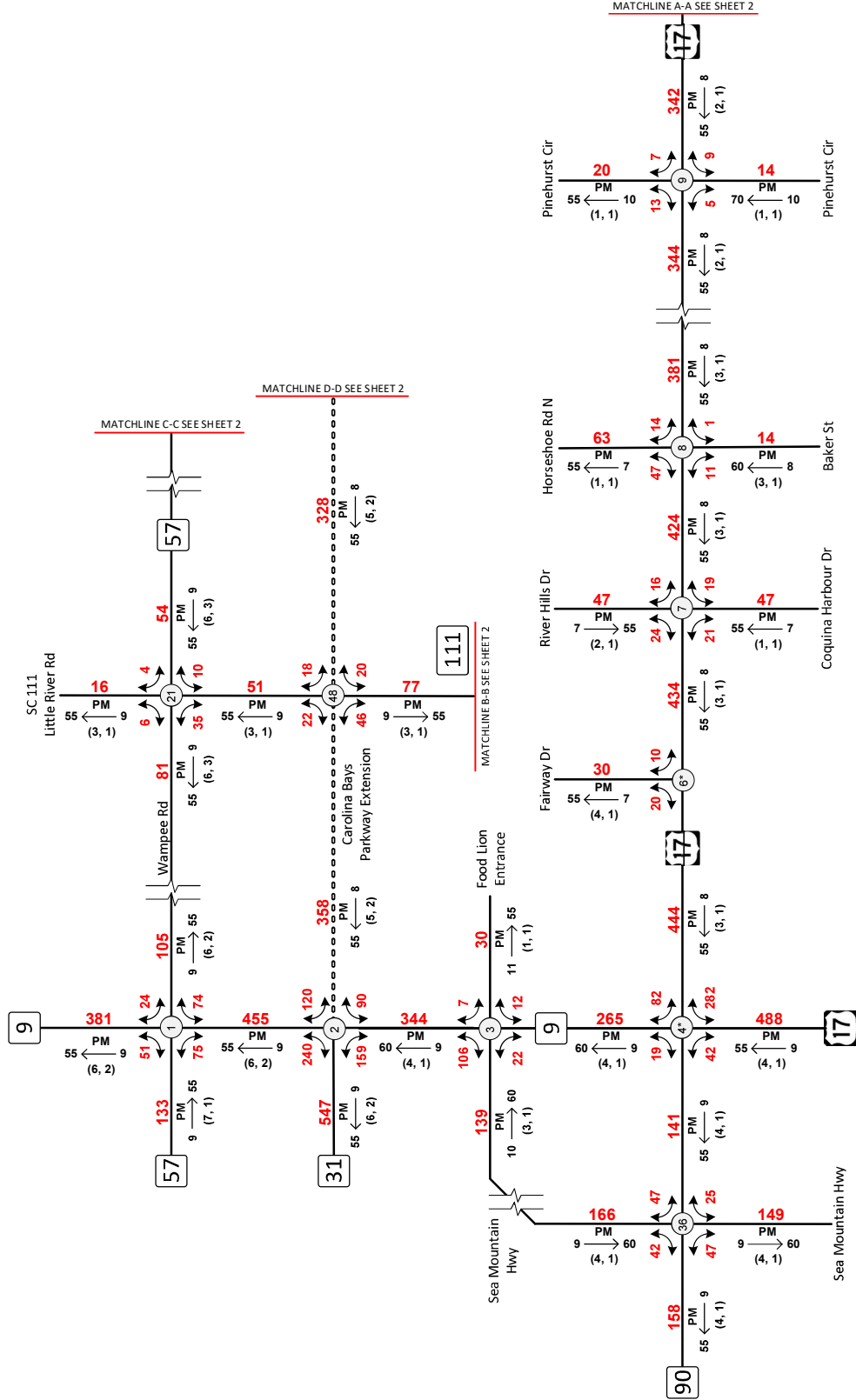
- No. of Vehicles Per Day in 100s
- Less than 50 vpd
- Movement Prohibited
- K PM → D (d, t)
- Design Hour Factor (%)
- PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D (d, t)
- Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 8  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

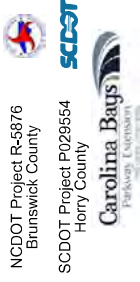


\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area



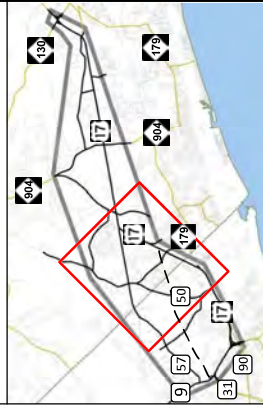
Figure 15T

2045 Average Annual Daily Traffic  
Future Year - Alternative 8



LEGEND

- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K Design Hour Factor (%)
- PM Peak Period
- D Peak Hour Directional Split (%)
- (d, t) Indicates Direction of D
- Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE ANNUAL DAILY TRAFFIC

FUTURE YEAR BUILD 8  
SHEET 2 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

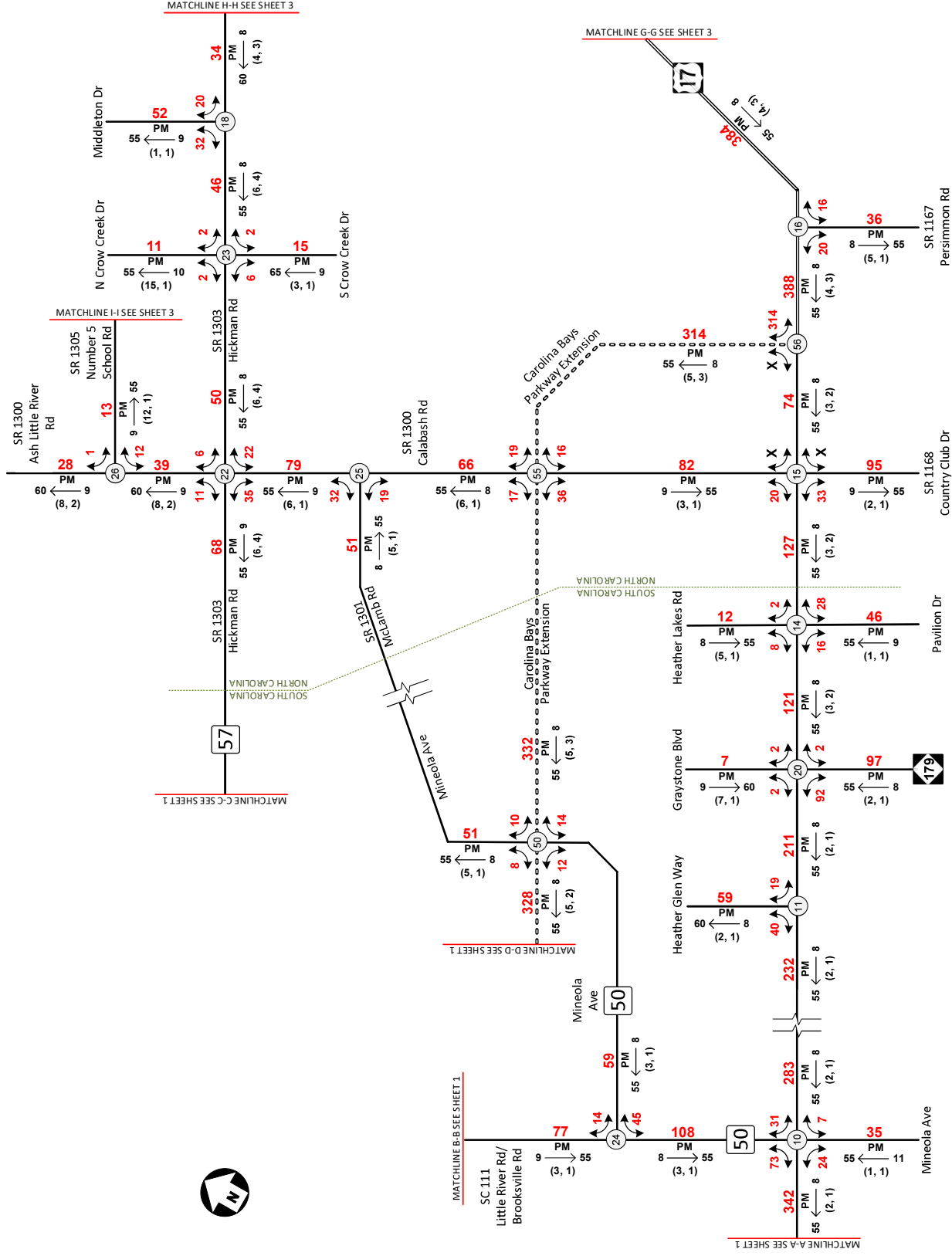




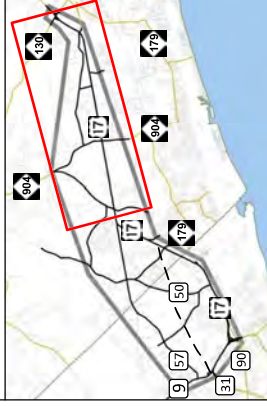
Figure 15U

2045 Average Annual Daily Traffic  
Future Year - Alternative 8



LEGEND

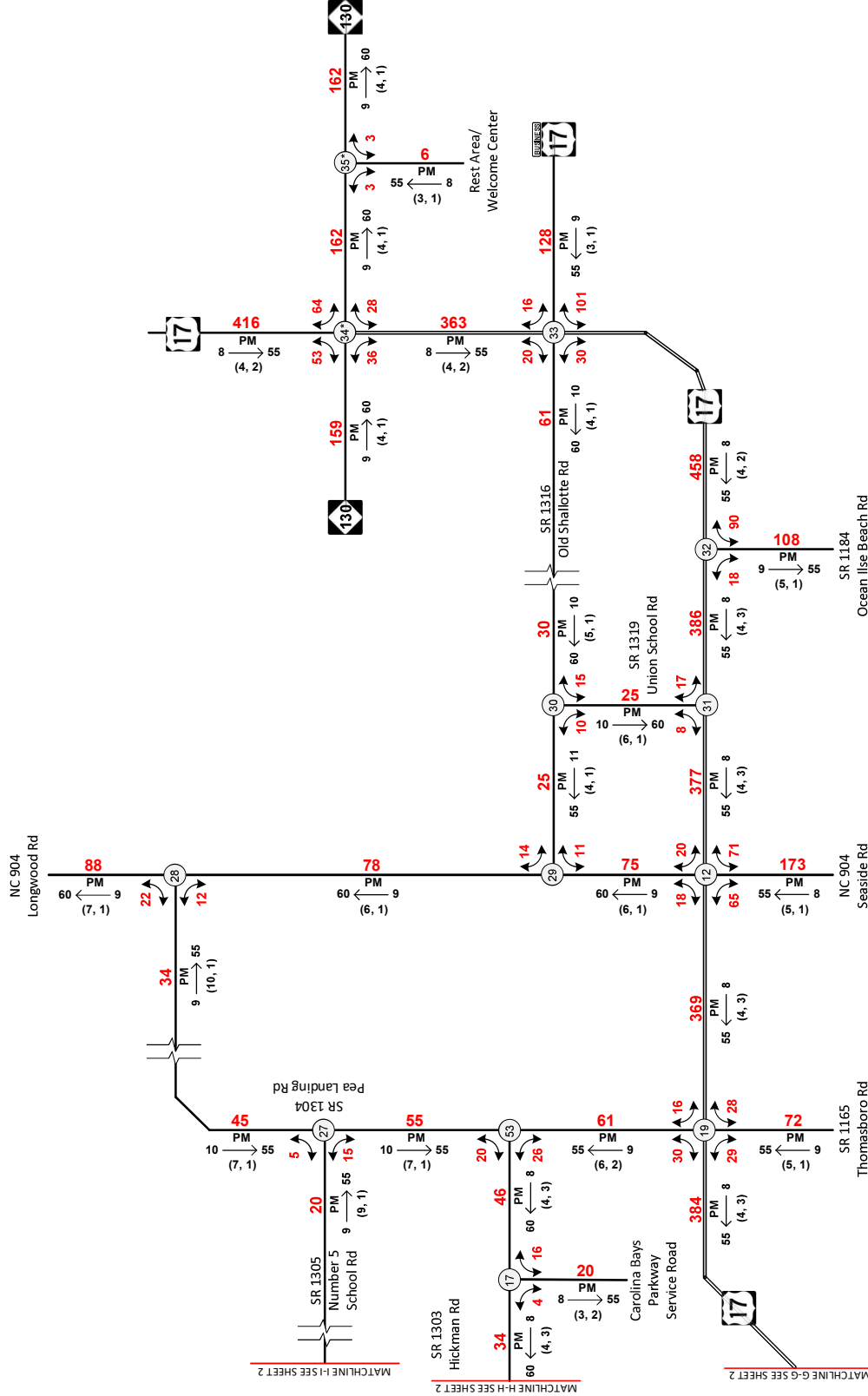
- No. of Vehicles Per Day in 100s  
###  
1- Movement Prohibited  
X  
K Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
→ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045 AVERAGE ANNUAL  
DAILY TRAFFIC

FUTURE YEAR BUILD 8  
SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFU compatibility.







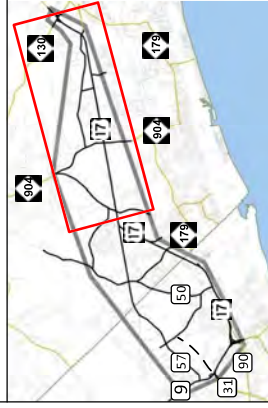


**Figure 15X**  
**2045 Average Annual Daily Traffic**  
 Future Year - CP1-S1



**LEGEND**

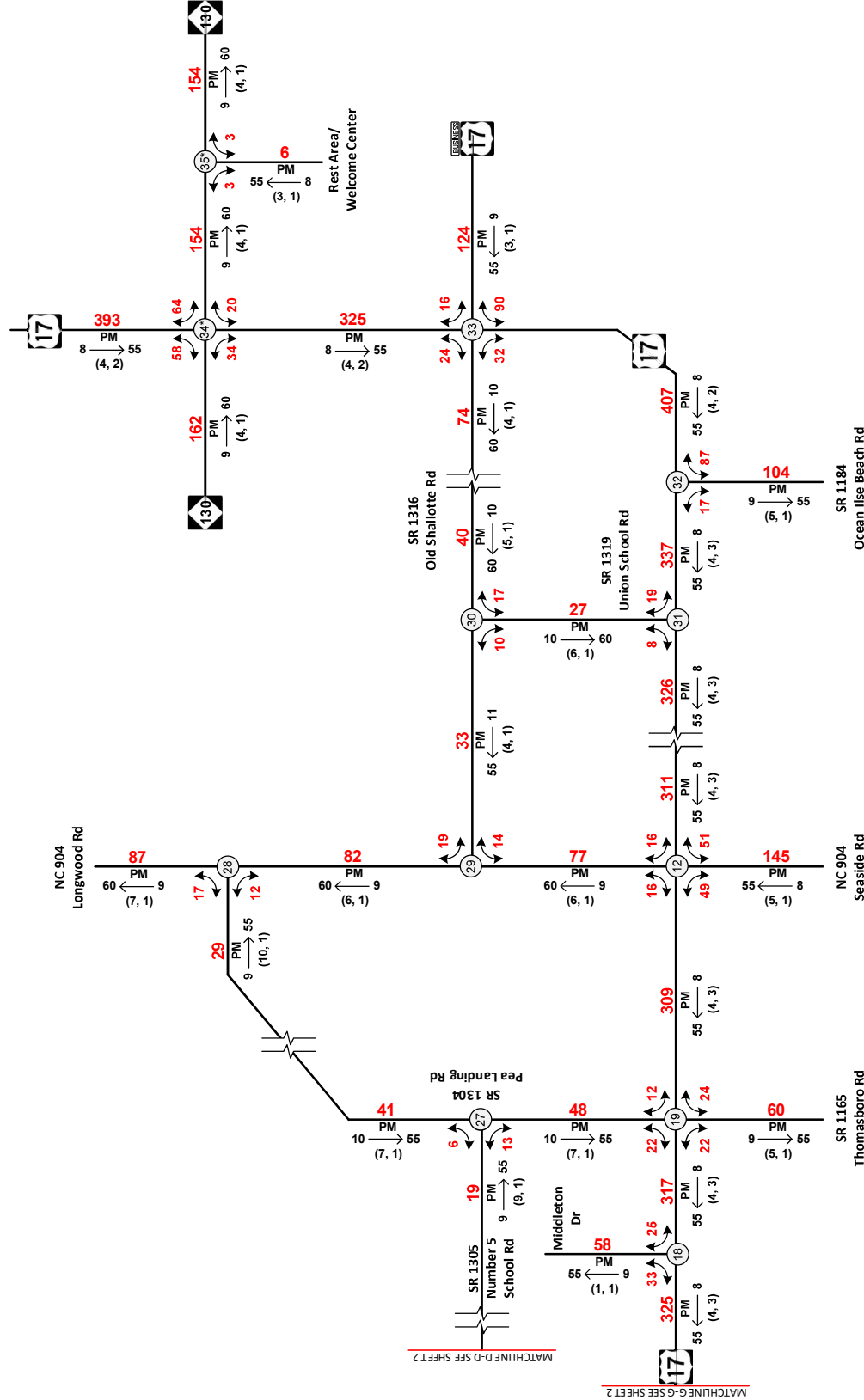
- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- x Movement Prohibited
- K  $\frac{K}{(d, t)} \rightarrow D$  Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D
- (d, t) Duals, TT-STs (%)
- ..... Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



**2045** AVERAGE ANNUAL DAILY TRAFFIC

**FUTURE YEAR BUILD CP1-S1**  
**SHEET 3 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: March 2023                     | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFO compatibility.



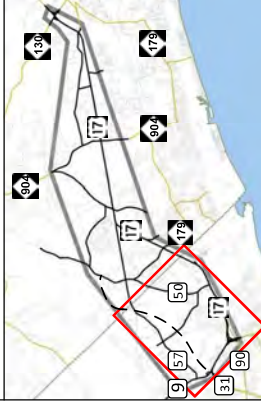


Figure 15Y  
2045 Average Annual Daily Traffic  
Future Year - CP1-S2



# LEGEND

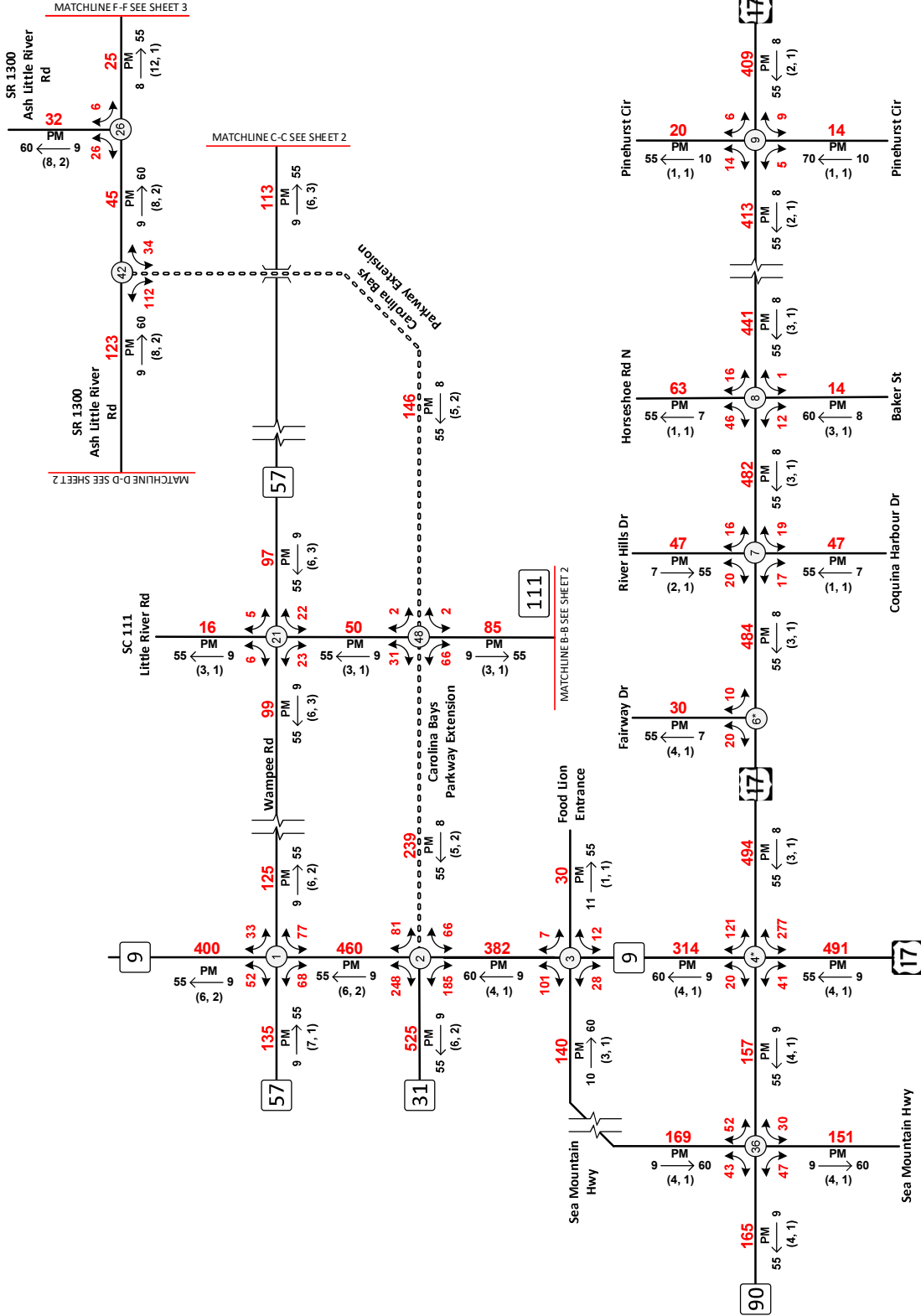
- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- x Movement Prohibited
- $K \frac{PM}{(d, t)} \rightarrow D$
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split (%)
- $\rightarrow$  Indicates Direction of D (d, t)
- ..... Build Alternative
- (New Location)
- Build Alternative (Improve Existing US 17)



2045  
AVERAGE ANNUAL  
DAILY TRAFFIC

FUTURE YEAR BUILD CP1-S2  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: December 2022                  | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9 interchange area

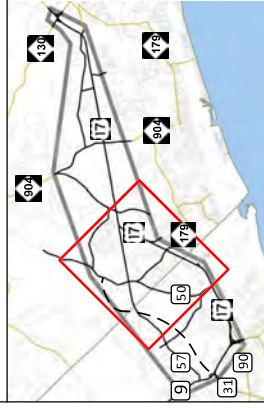
NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County

Carolina Bays  
Parkway Extension

| No. of Vehicles Per Day in 100s |                     |
|---------------------------------|---------------------|
| ####                            |                     |
| 1-                              | Less than 50 vpd    |
| X                               | Movement Prohibited |

|                  |                                               |
|------------------|-----------------------------------------------|
| <b>K</b>         | Design Hour Factor (%)                        |
| <b>PM</b>        | PM Peak Period                                |
| <b>D</b>         | Peak Hour Directional Split (%)               |
| <b>→</b>         | Indicates Direction of D                      |
| <b>(d, t)</b>    | Duals, TT-STs (%)                             |
| <b>o o o o o</b> | Build Alternative<br>(New Location)           |
| <b>  </b>        | Build Alternative<br>(Improve Existing US 17) |



**2045**  
AVERAGE ANNUAL  
DAILY TRAFFIC

**FUTURE YEAR BUILD CP1-S2**  
**SHEET 2 OF 3**

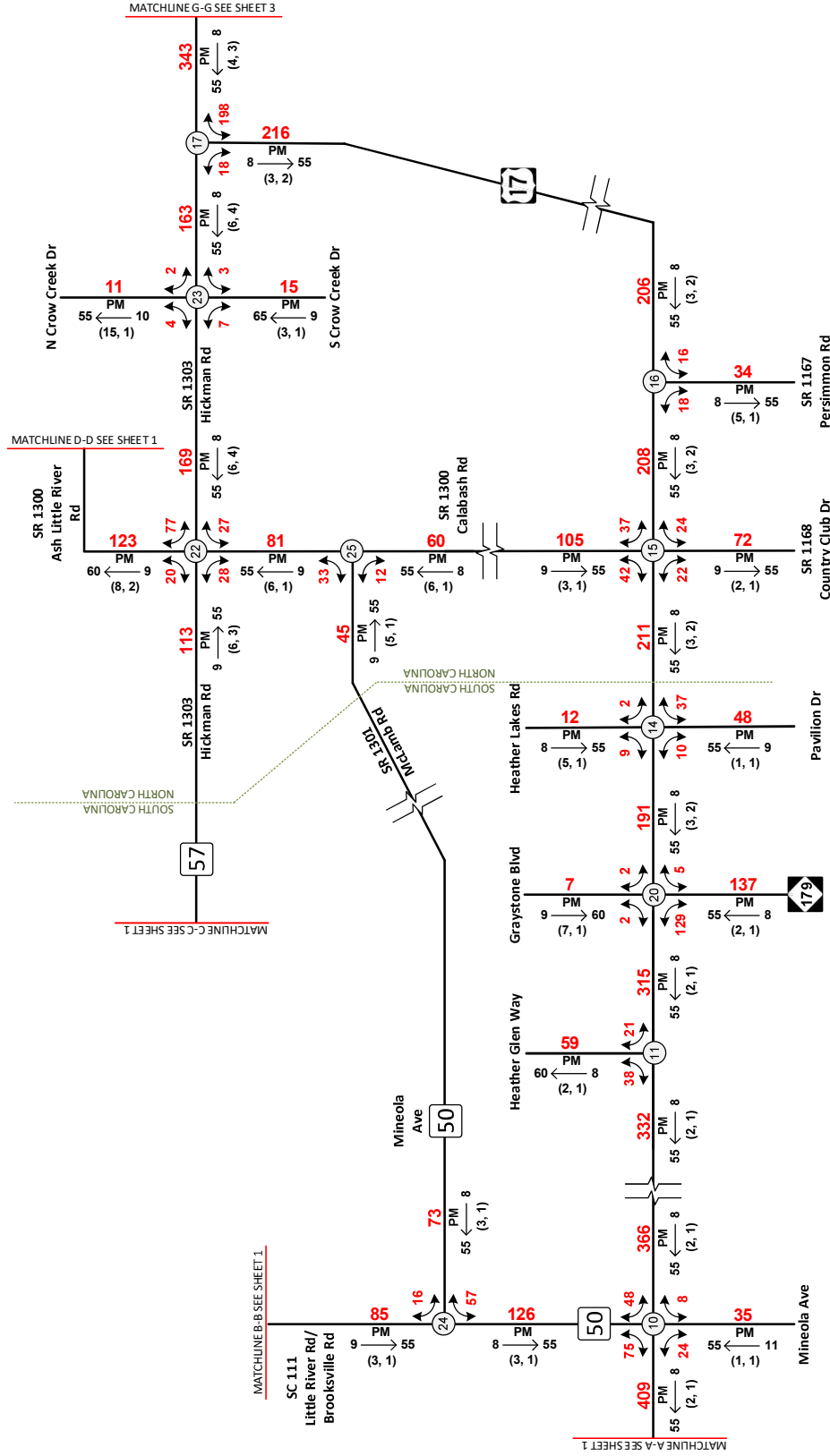
|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

COUNTY: Brunswick/Horry

|                     |            |
|---------------------|------------|
| DATE: December 2022 | WBS: 44604 |
|---------------------|------------|

LOCATION: SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.



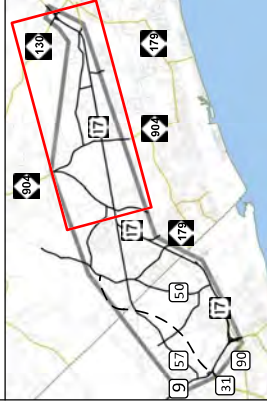


**Figure 15AA**  
 2045 Average Annual Daily Traffic  
 Future Year - CP1-S2



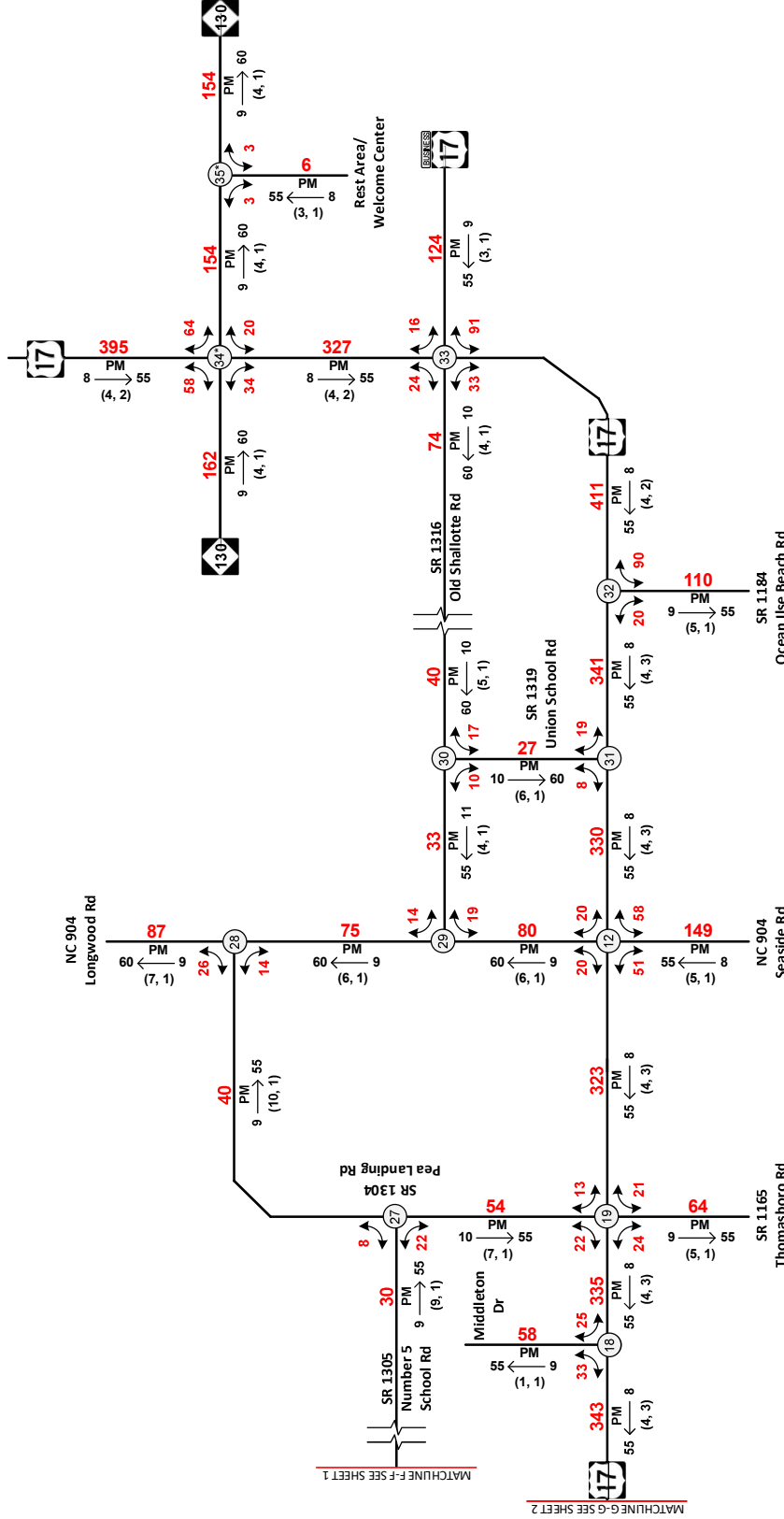
**LEGEND**

- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K  $\begin{matrix} \text{K} & \text{PM} & \rightarrow & \text{D} \\ & & & (\text{d}, \text{t}) \end{matrix}$
- D Design Hour Factor (%)
- PM Peak Period
- D Peak Hour Directional Split (%)
- $\rightarrow$  Indicates Direction of D
- (d, t) Duals, TT-STs (%)
- Build Alternative
- (New Location)
- Build Alternative
- (Improve Existing US 17)



**2045**  
 AVERAGE ANNUAL  
 DAILY TRAFFIC  
**FUTURE YEAR BUILD CP1-S2**  
 SHEET 3 OF 3

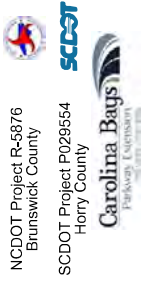
|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: December 2022                  | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFO compatibility.

Figure 16A

2045 Average Summer Weekday Traffic  
Future Year - Alternative 1



**LEGEND**

No. of Vehicles Per Day in 100s  
###  
1- Movement Prohibited  
X

K Design Hour Factor (%)

PM Peak Period

D Peak Hour Directional Split (%)

Indicates Direction of D

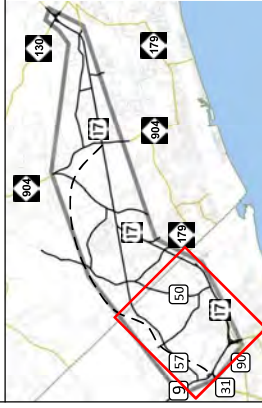
Duals, TT-STs (%)

Build Alternative

(New Location)

Build Alternative

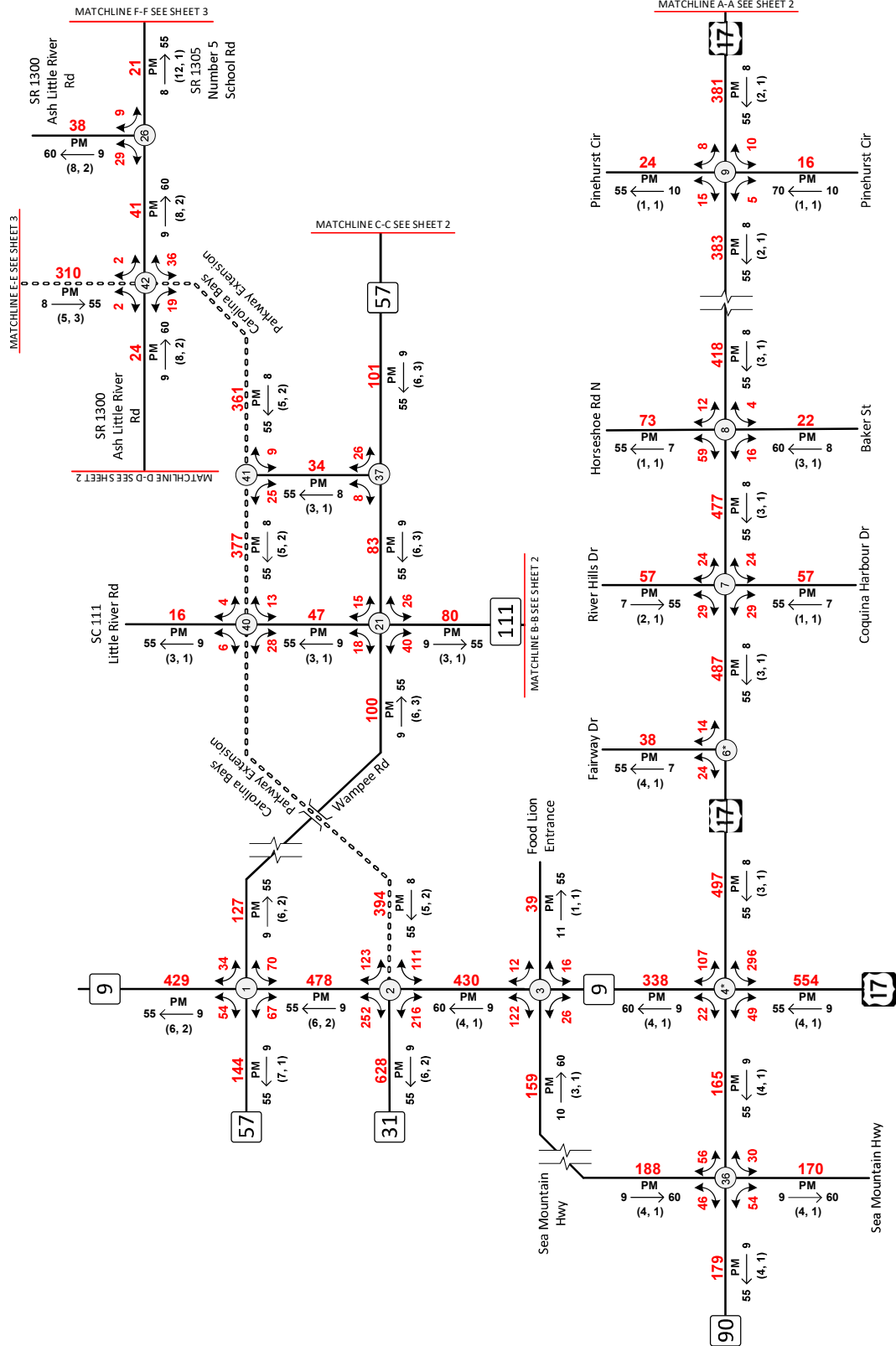
(Improve Existing US 17)



**2045** AVERAGE SUMMER WEEKDAY TRAFFIC

**FUTURE YEAR BUILD 1**  
**SHEET 1 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



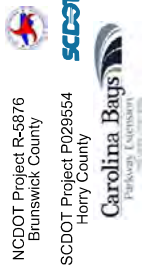
\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





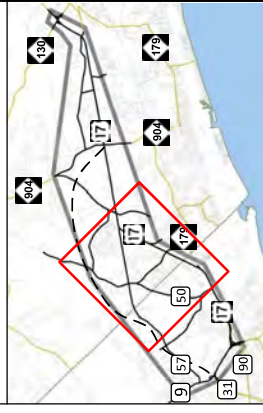
Figure 16B

2045 Average Summer Weekday Traffic  
Future Year - Alternative 1



LEGEND

- No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited
- K PM Design Hour Factor (%)  
D Peak Hour Directional Split (%)  
Indicates Direction of D  
(d, t)  
Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045 AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD 1  
SHEET 2 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

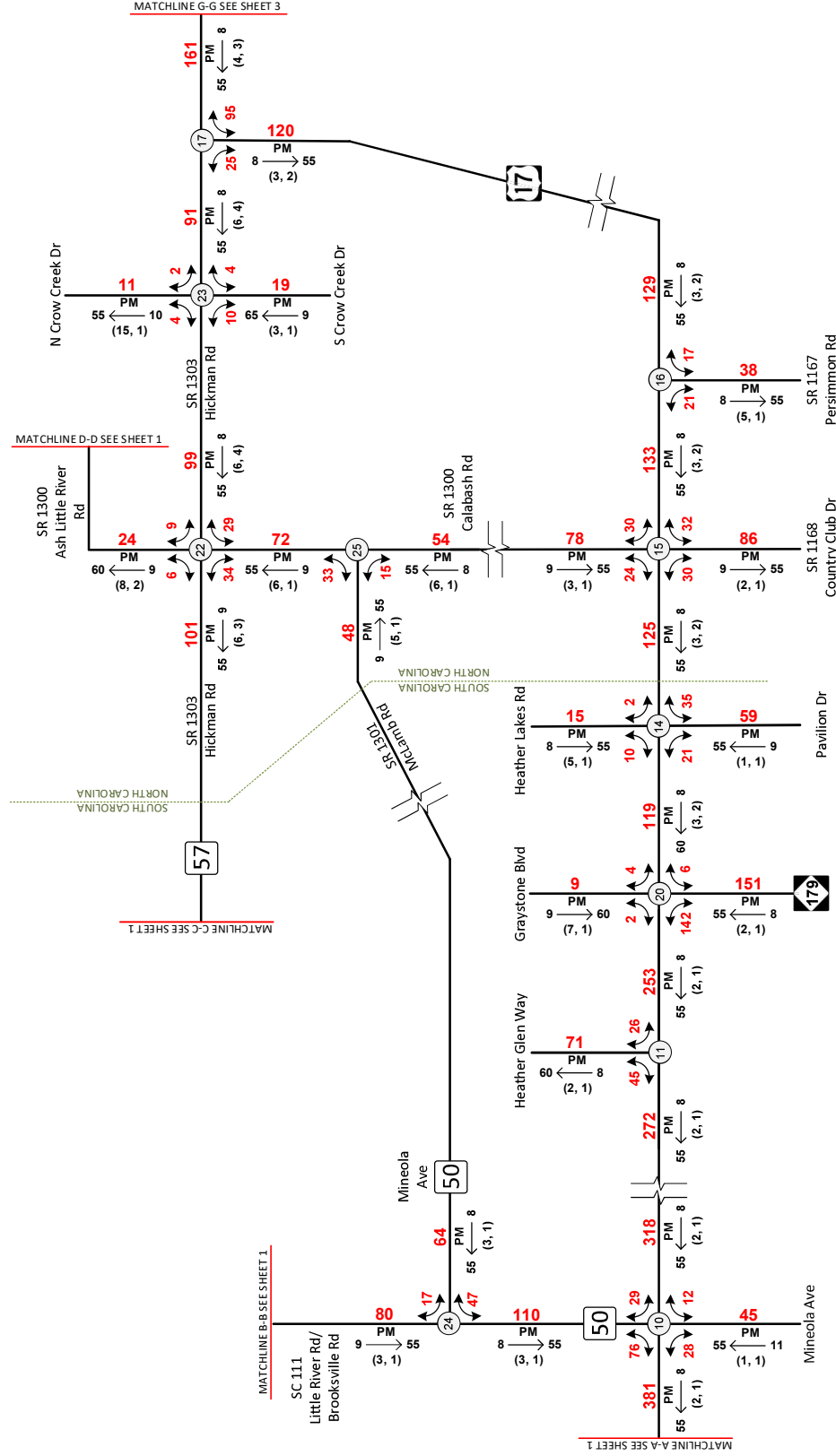


Figure 16C

2045 Average Summer Weekday Traffic  
Future Year - Alternative 1

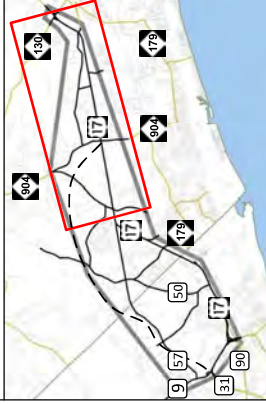


LEGEND

No. of Vehicles Per Day in 100s  
###  
1- Movement Prohibited  
X

K PM → D  
(d, t)

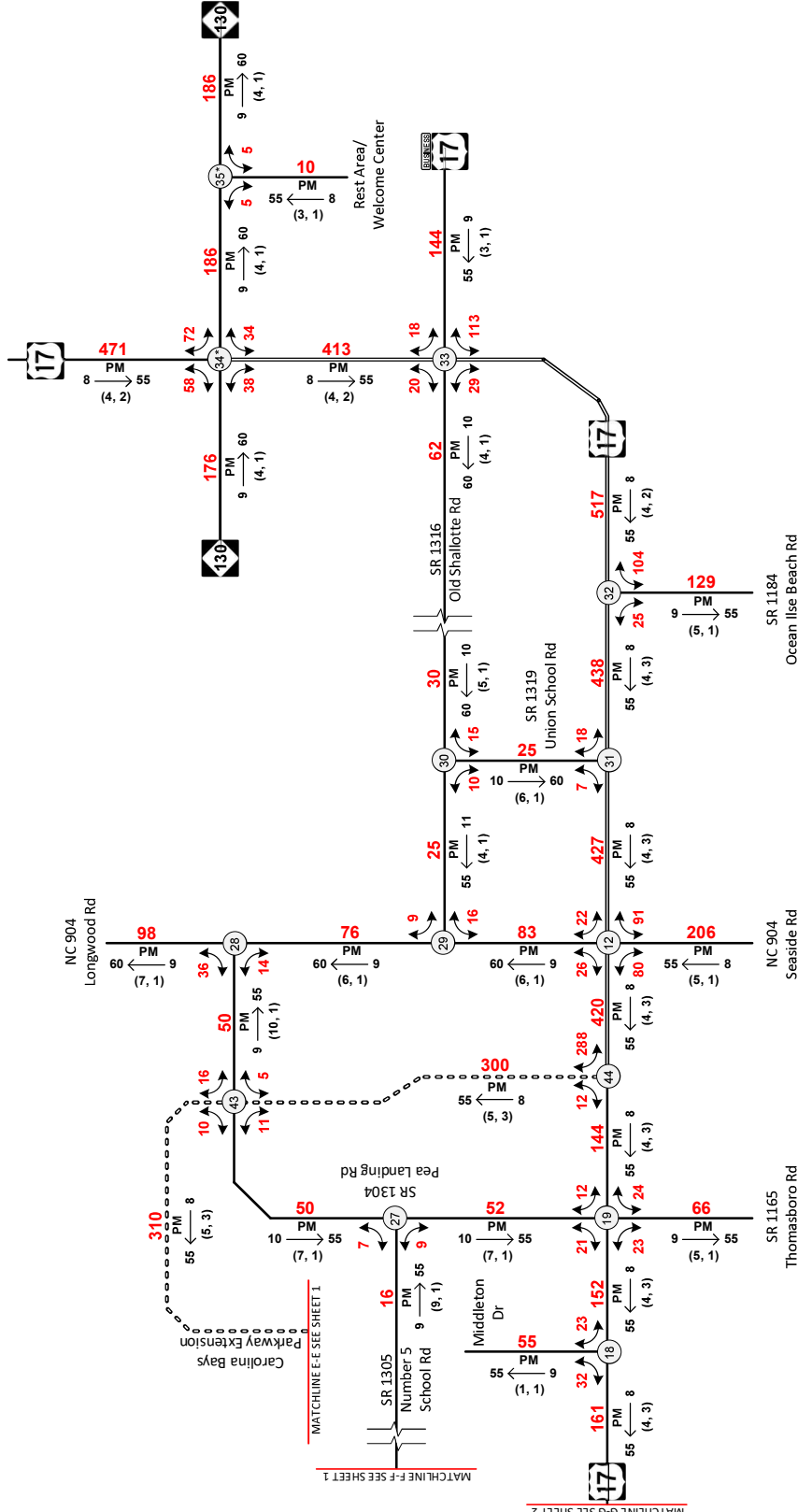
Design Hour Factor (%)  
PM Peak Period  
Peak Hour Directional Split (%)  
D → Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045 AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD 1  
SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





Figure 16D

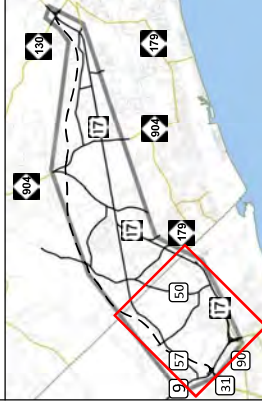
2045 Average Summer Weekday Traffic  
Future Year - Alternative 1A



LEGEND

No. of Vehicles Per Day in 100s  
###  
1- Movement Prohibited  
X

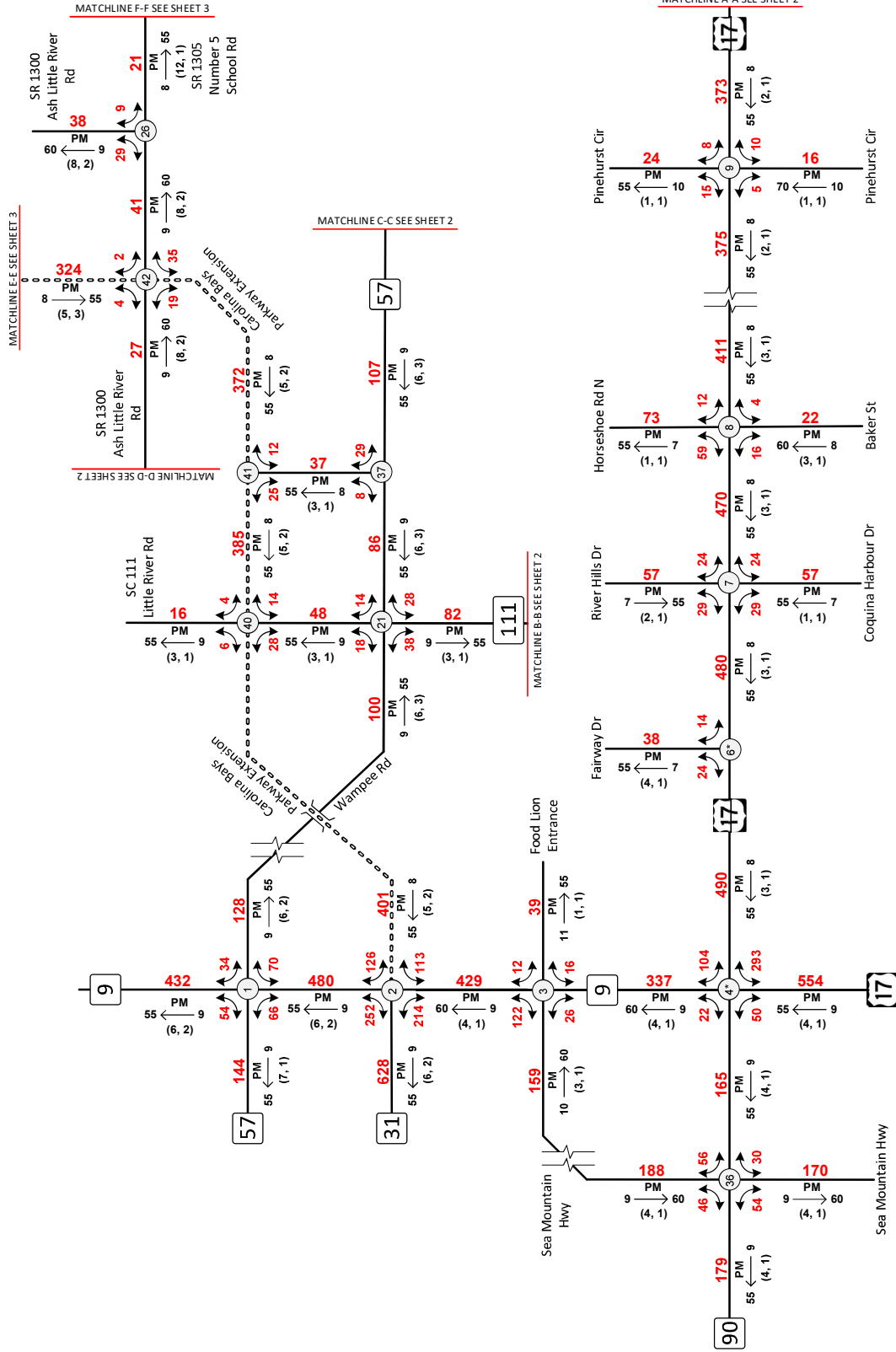
K Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
..... Build Alternative  
(New Location)  
—— Build Alternative  
(Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

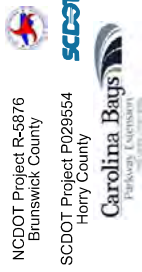
FUTURE YEAR BUILD 1A  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area



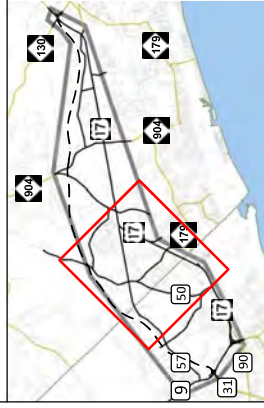


## LEGEND

| No. of Vehicles Per Day in 100s |                     |
|---------------------------------|---------------------|
| ####                            |                     |
| 1-                              | Less than 50 vpd    |
| X                               | Movement Prohibited |

$$K \xrightarrow[\text{(d,t)}]{\text{PM}} D$$

| K         | Design Hour Factor (%)                        |
|-----------|-----------------------------------------------|
| PM        | PM Peak Period                                |
| D         | Peak Hour Directional Split (%)               |
| ↑         | Indicates Direction of D                      |
| (d, t)    | Duals, TT-STs (%)                             |
| o o o o o | Build Alternative<br>(New Location)           |
|           | Build Alternative<br>(Improve Existing US 17) |



# 2045

**FUTURE YEAR BUILD 1A**  
**SHEET 2 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

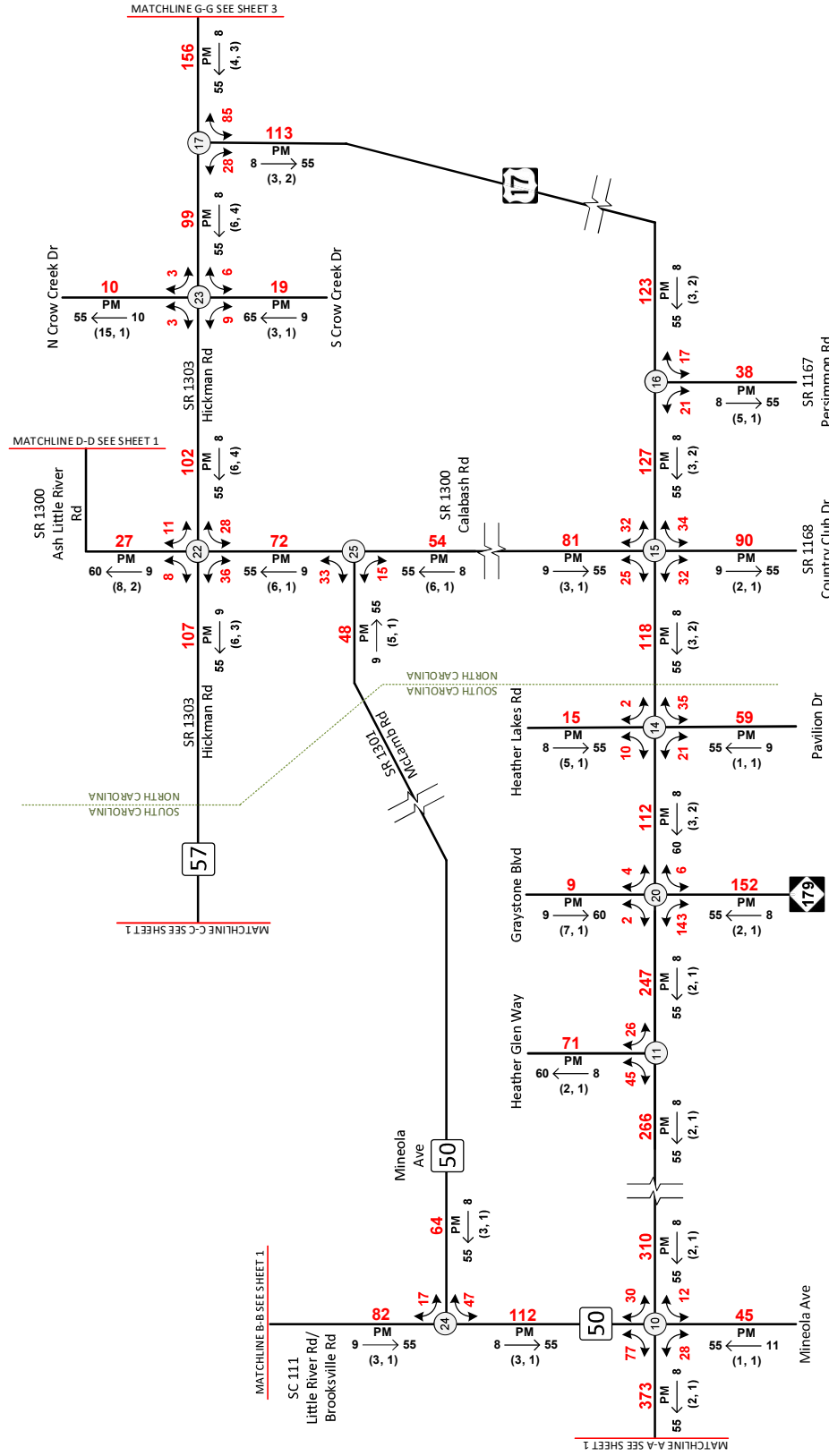
**COUNTY:** Brunswick/Horry **DIVISION:** 3/5

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY: Clearbox Forecast Group**

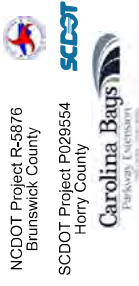
LOCATION: SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.



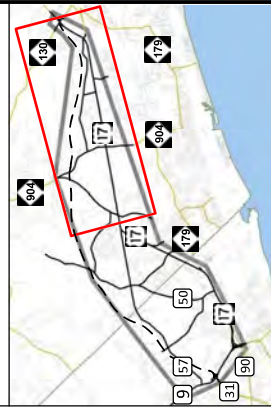


**Figure 16F**  
**2045 Average Summer Weekday Traffic**  
**Future Year - Alternative 1A**



**LEGEND**

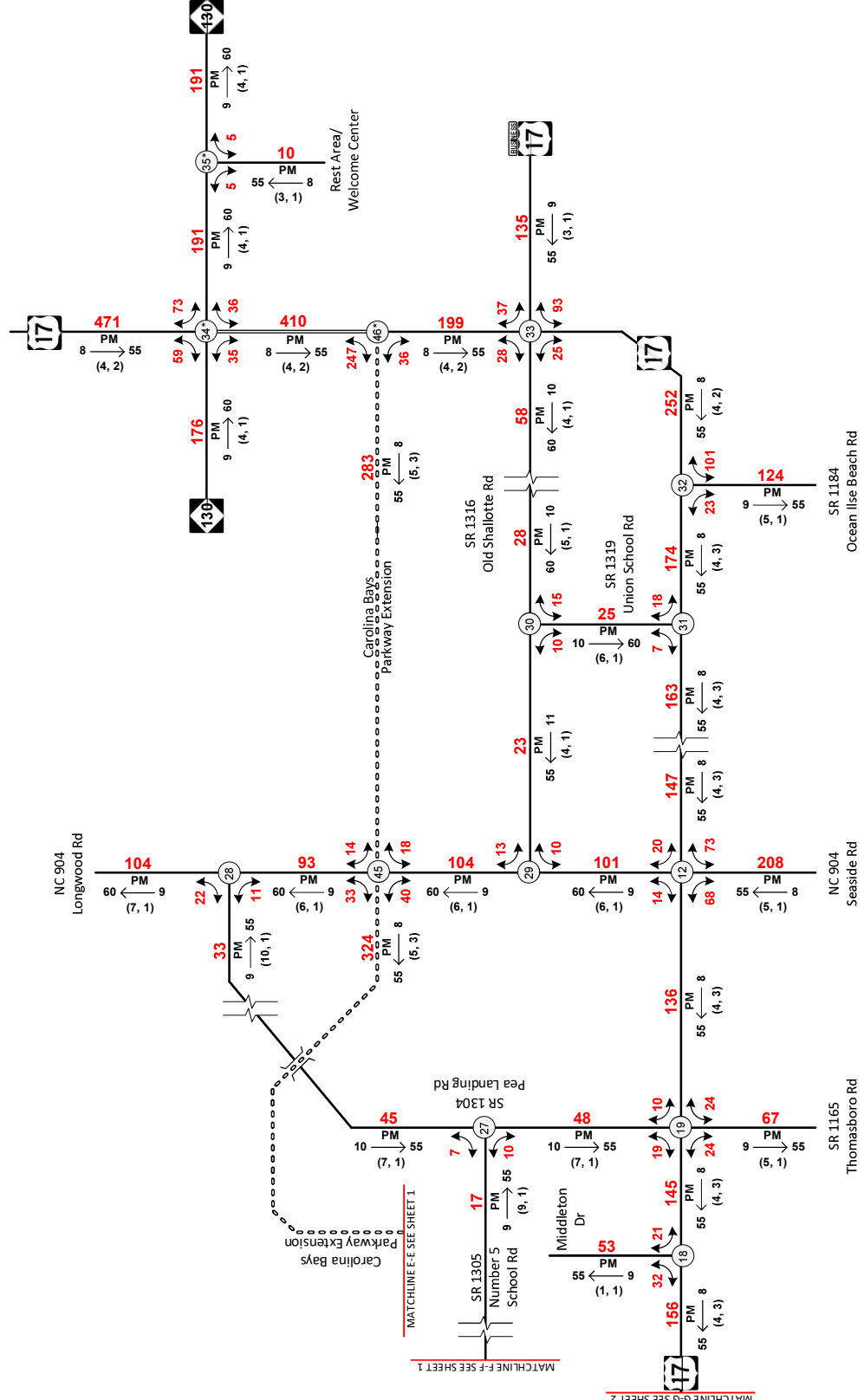
- No. of Vehicles Per Day in 100s
- ###
- 1- Movement Prohibited
- X
- K Design Hour Factor (%)
- PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D (d, t)
- ..... Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



**2045** AVERAGE SUMMER WEEKDAY TRAFFIC

**FUTURE YEAR BUILD 1A**  
**SHEET 3 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

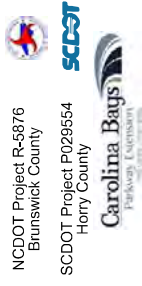


\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFU compatibility.



Figure 16G

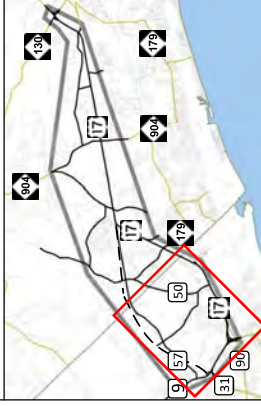
2045 Average Summer Weekday Traffic  
Future Year - Alternative 2



# LEGEND

### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited

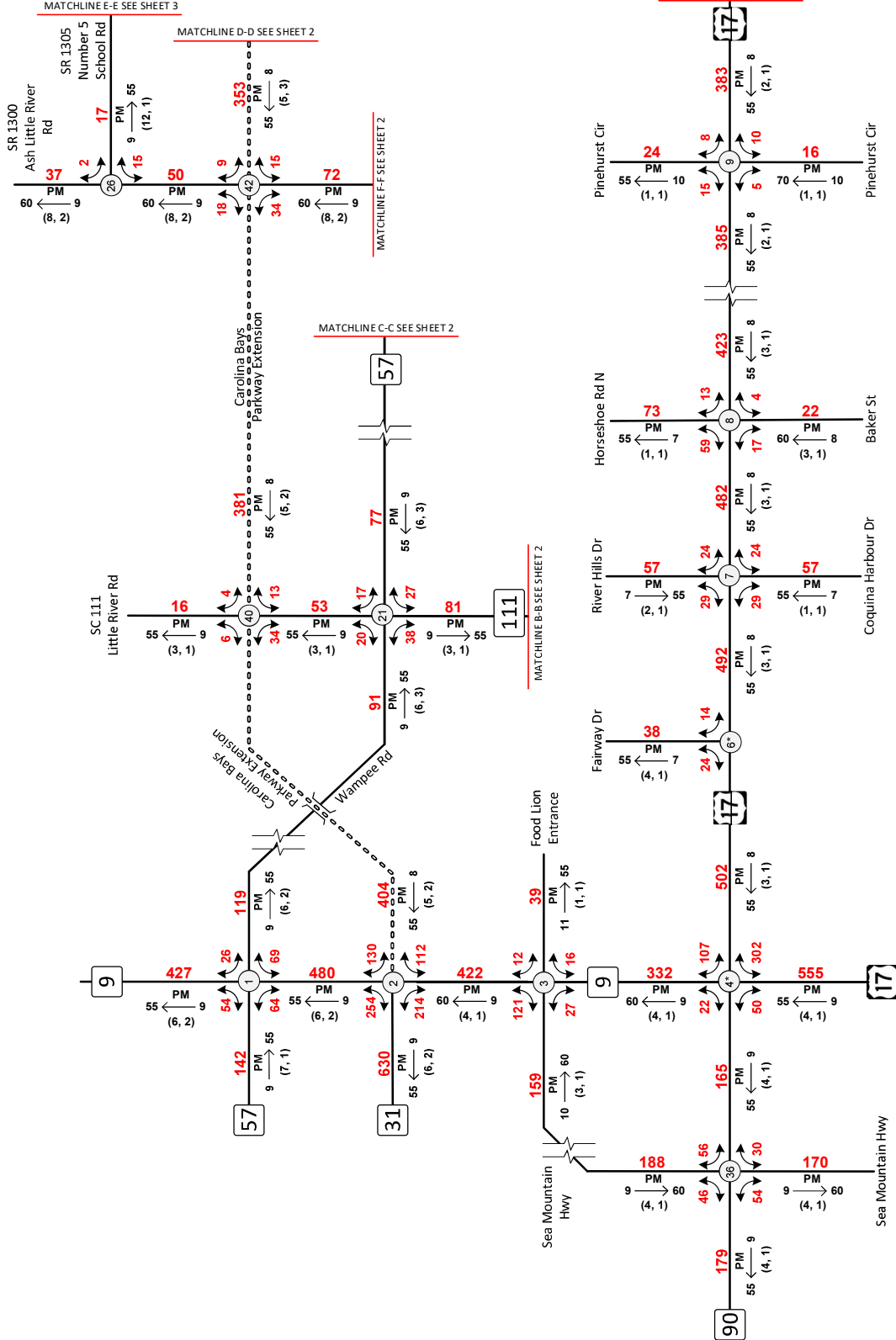
K Design Hour Factor (%)  
PM PM Peak Period  
D Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
----- Build Alternative  
(New Location)  
----- Build Alternative  
(Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD 2  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





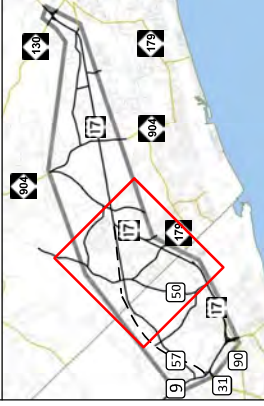
Figure 16H

2045 Average Summer Weekday Traffic  
Future Year - Alternative 2



LEGEND

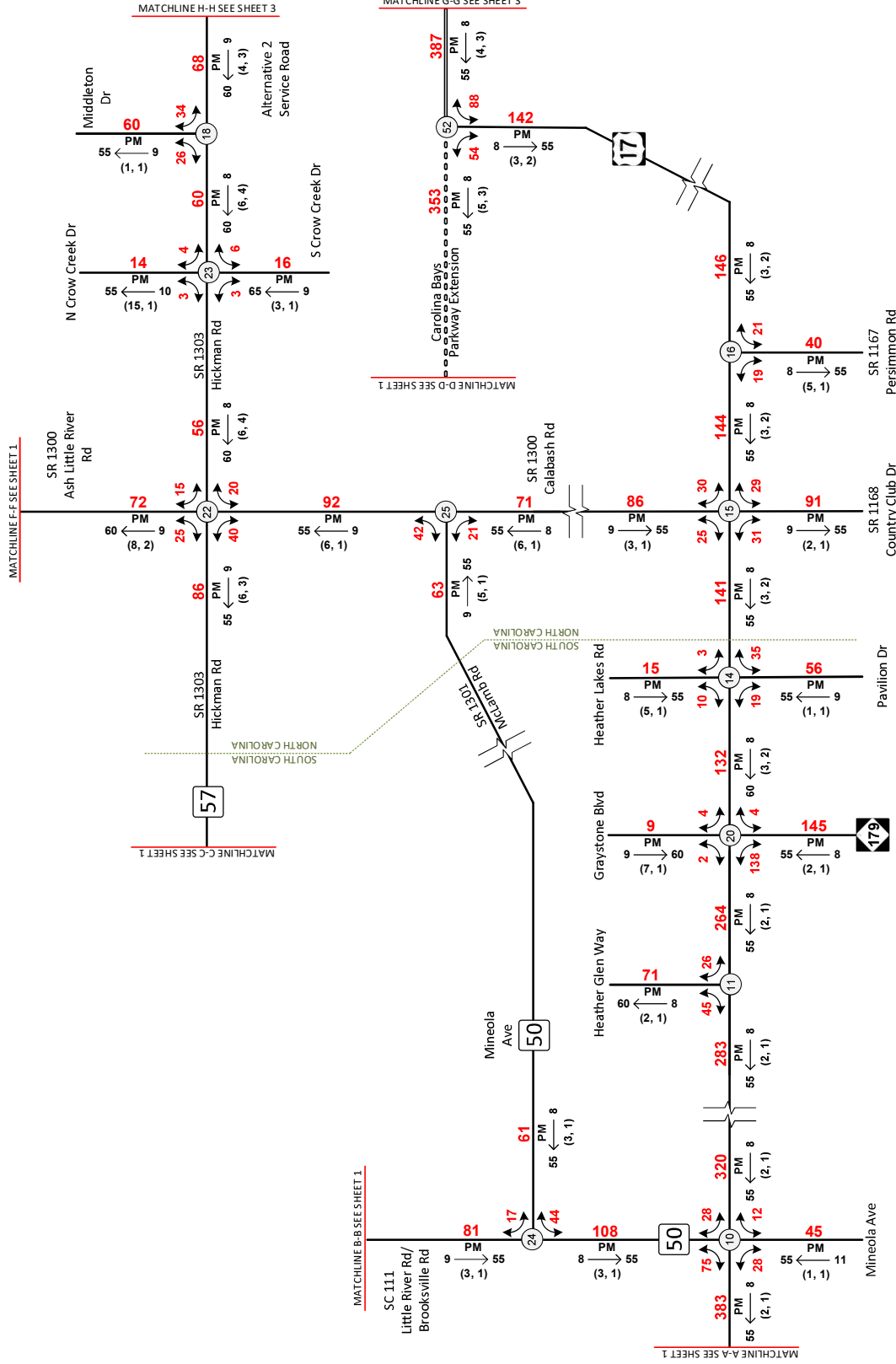
- No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited  
K  $\frac{PM}{(d, t)}$   $\rightarrow$  D  
Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
 $\rightarrow$  Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



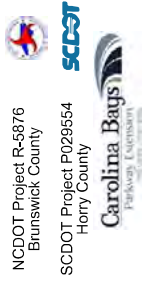
2045 AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD 2  
SHEET 2 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



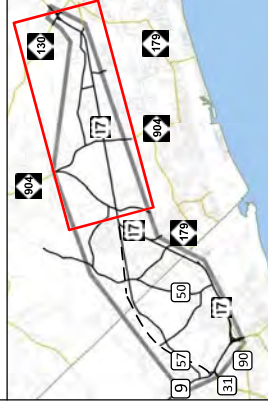
**Figure 161**  
2045 Average Summer Weekday Traffic  
Future Year - Alternative 2



**LEGEND**

### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited

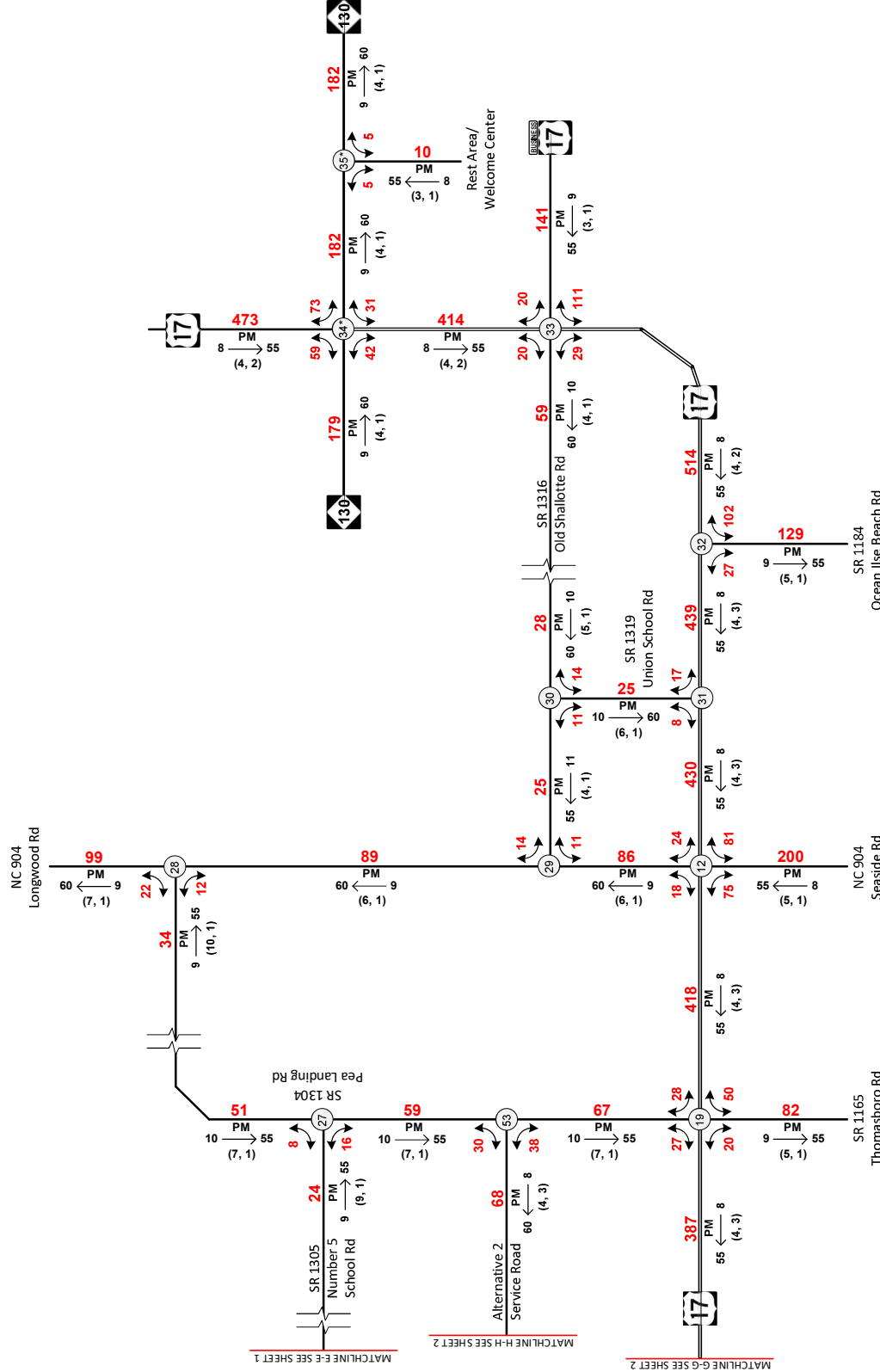
K Design Hour Factor (%)  
PM PM Peak Period  
D Peak Hour Directional Split (%)  
→ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
----- Build Alternative  
----- (New Location)  
----- Build Alternative  
(Improve Existing US 17)



**2045** AVERAGE SUMMER  
WEEKDAY TRAFFIC

**FUTURE YEAR BUILD 2  
SHEET 3 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



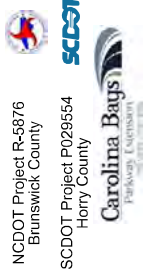
\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





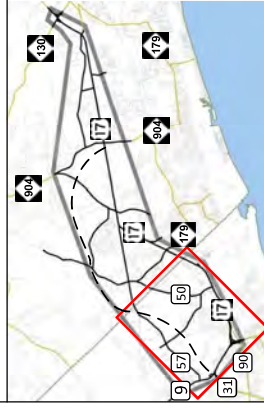
Figure 16j

2045 Average Summer Weekday Traffic  
Future Year - Alternative 4



LEGEND

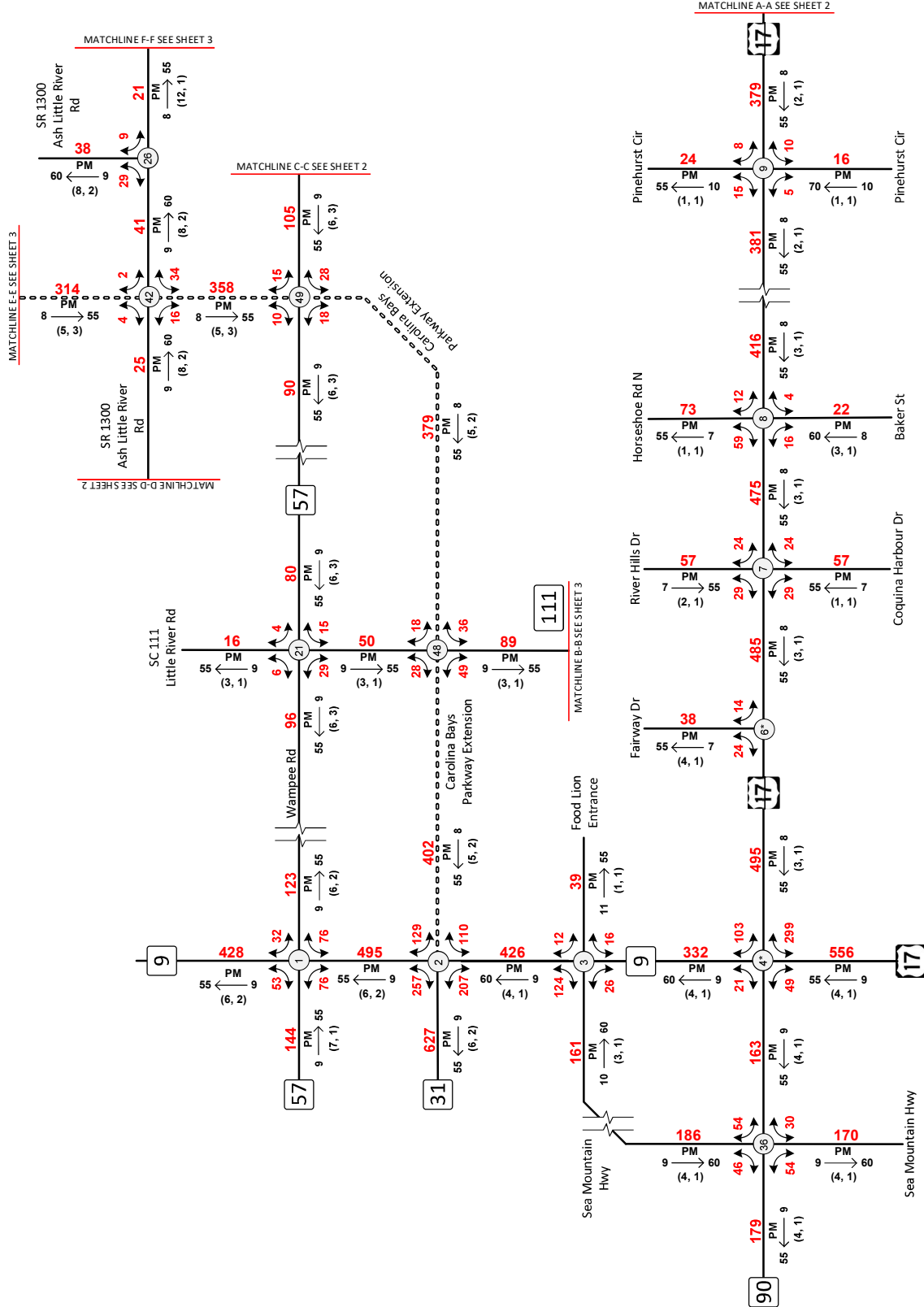
- ### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited
- K Design Hour Factor (%)  
PM PM Peak Period  
D Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
----- Build Alternative  
————— Build Alternative  
————— (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD 4  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

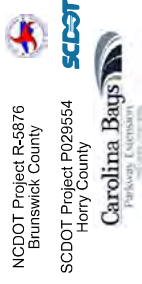


\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area



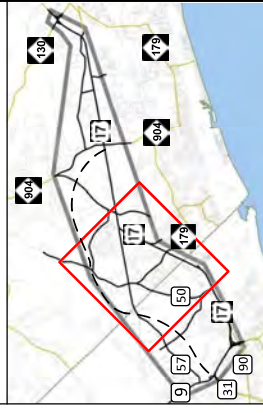
Figure 16K

2045 Average Summer Weekday Traffic  
Future Year - Alternative 4



# LEGEND

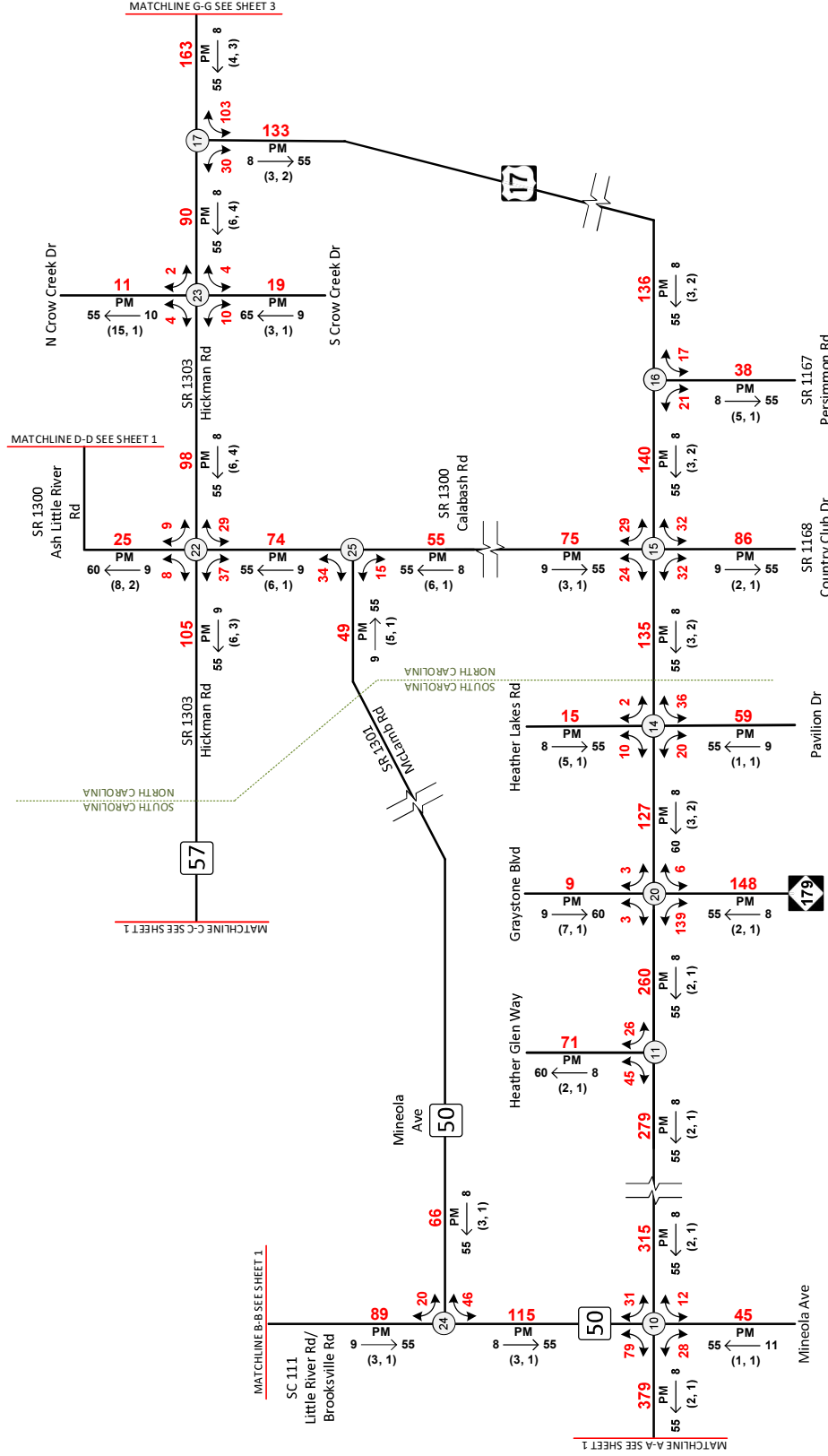
- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split (%)
- ↑ Indicates Direction of D
- (d, t) Duals, TT-STs (%)
- Build Alternative (New Location)
- ===== Build Alternative (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

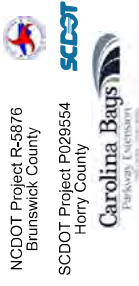
## FUTURE YEAR BUILD 4 SHEET 2 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



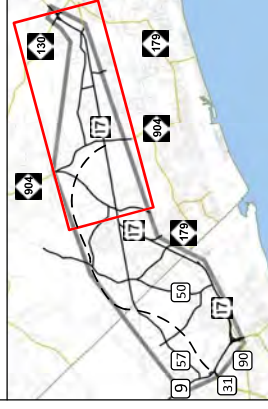


**Figure 16L**  
**2045 Average Summer Weekday Traffic**  
**Future Year - Alternative 4**



**LEGEND**

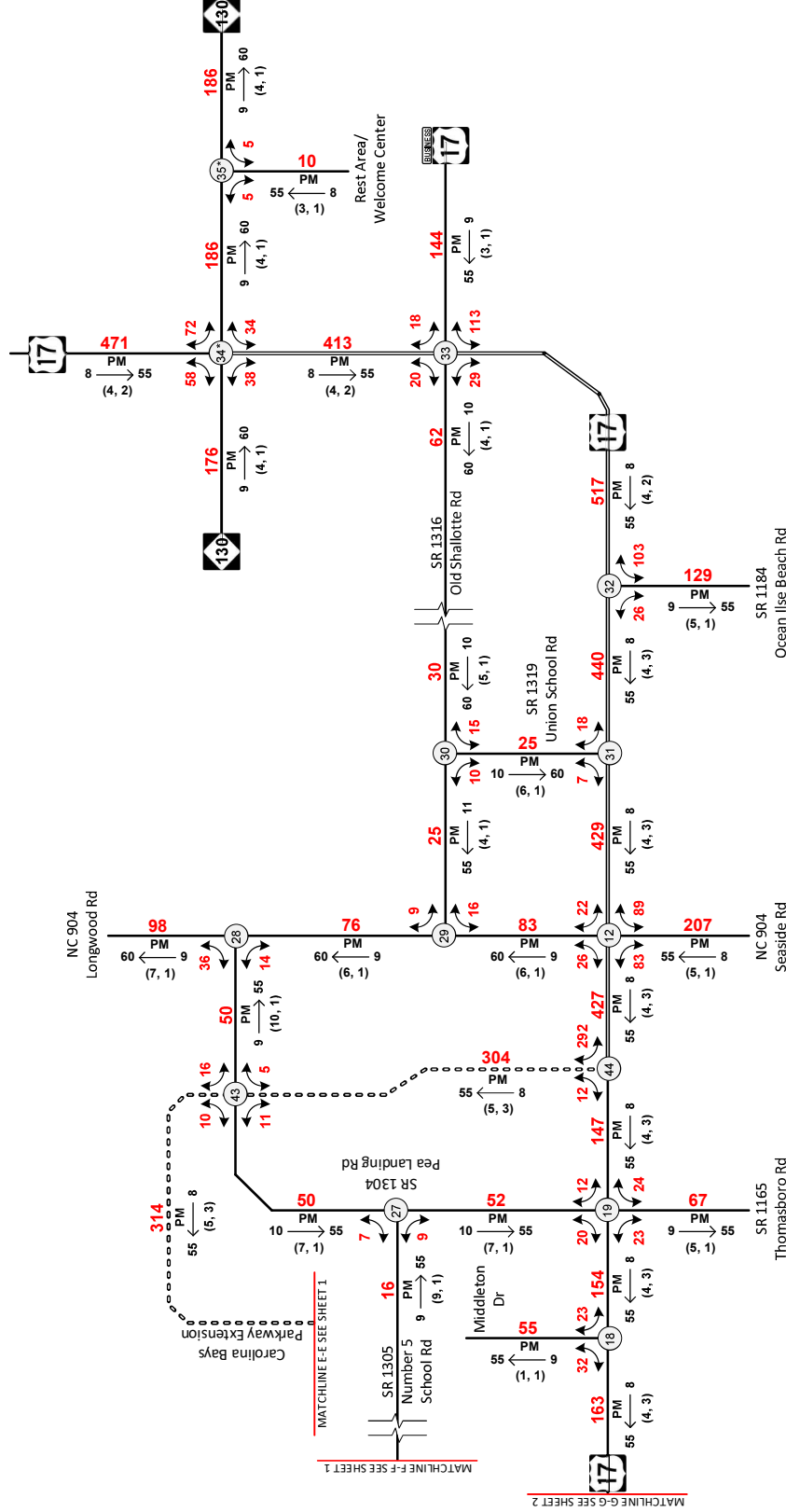
- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K  $\frac{PM}{(d, t)} \rightarrow D$  Design Hour Factor (%)
- PM PM Peak Period
- D  $\rightarrow$  Peak Hour Directional Split (%)
- $\rightarrow$  Indicates Direction of D (d, t)
- ..... Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



**2045** AVERAGE SUMMER WEEKDAY TRAFFIC

**FUTURE YEAR BUILD 4**  
**SHEET 3 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

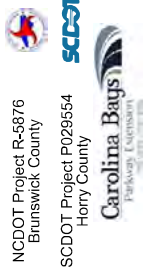


\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.



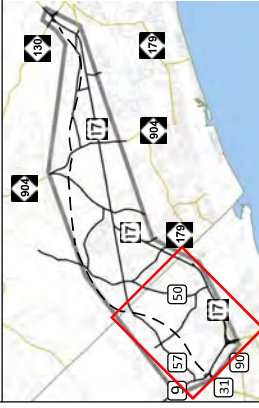
Figure 16M

2045 Average Summer Weekday Traffic  
Future Year - Alternative 4A



LEGEND

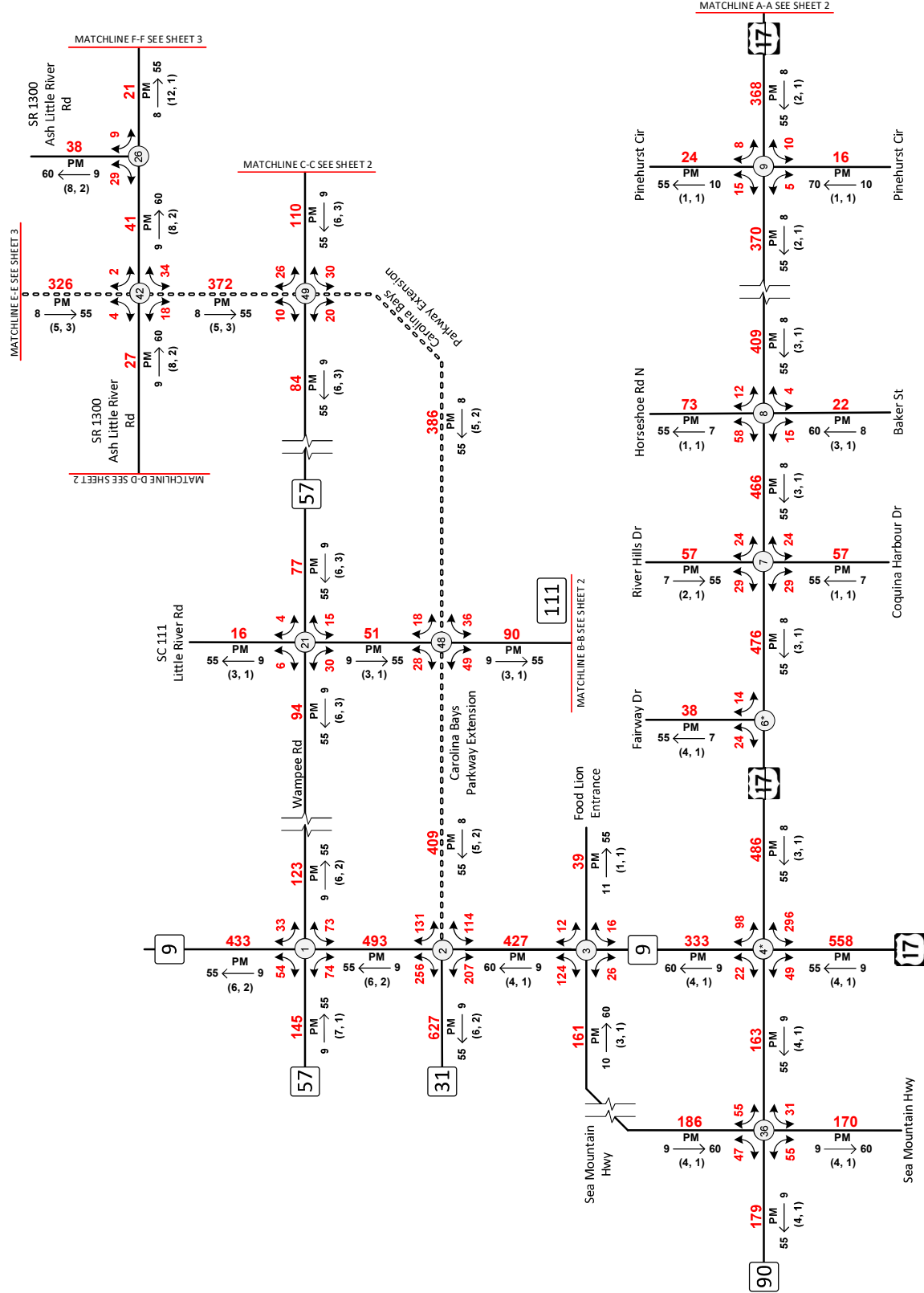
- ### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited
- K Design Hour Factor (%)  
PM PM Peak Period  
D Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t) Duals, TT-STs (%)
- Build Alternative  
----- (New Location)  
----- Build Alternative  
----- (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD 4A  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area



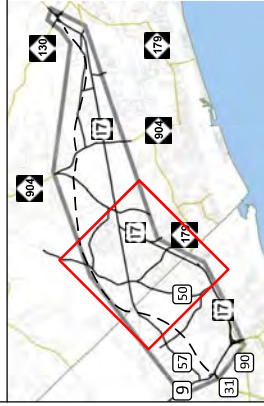


NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County

|               |                                               |
|---------------|-----------------------------------------------|
| <b>K</b>      | Design Hour Factor (%)                        |
| <b>PM</b>     | PM Peak Period                                |
| <b>D</b>      | Peak Hour Directional Split (%)               |
| <b>→</b>      | Indicates Direction of D                      |
| <b>(d, t)</b> | Duals, TT-STs (%)                             |
| <b>•••••</b>  | Build Alternative<br>(New Location)           |
| <b>=====</b>  | Build Alternative<br>(Improve Existing US 17) |



# 2045

**FUTURE YEAR BUILD 4A**  
**SHEET 2 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

COUNTY: Brunswick/Horry

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY: Clearbox Forecast Group**

**LOCATION:** SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.

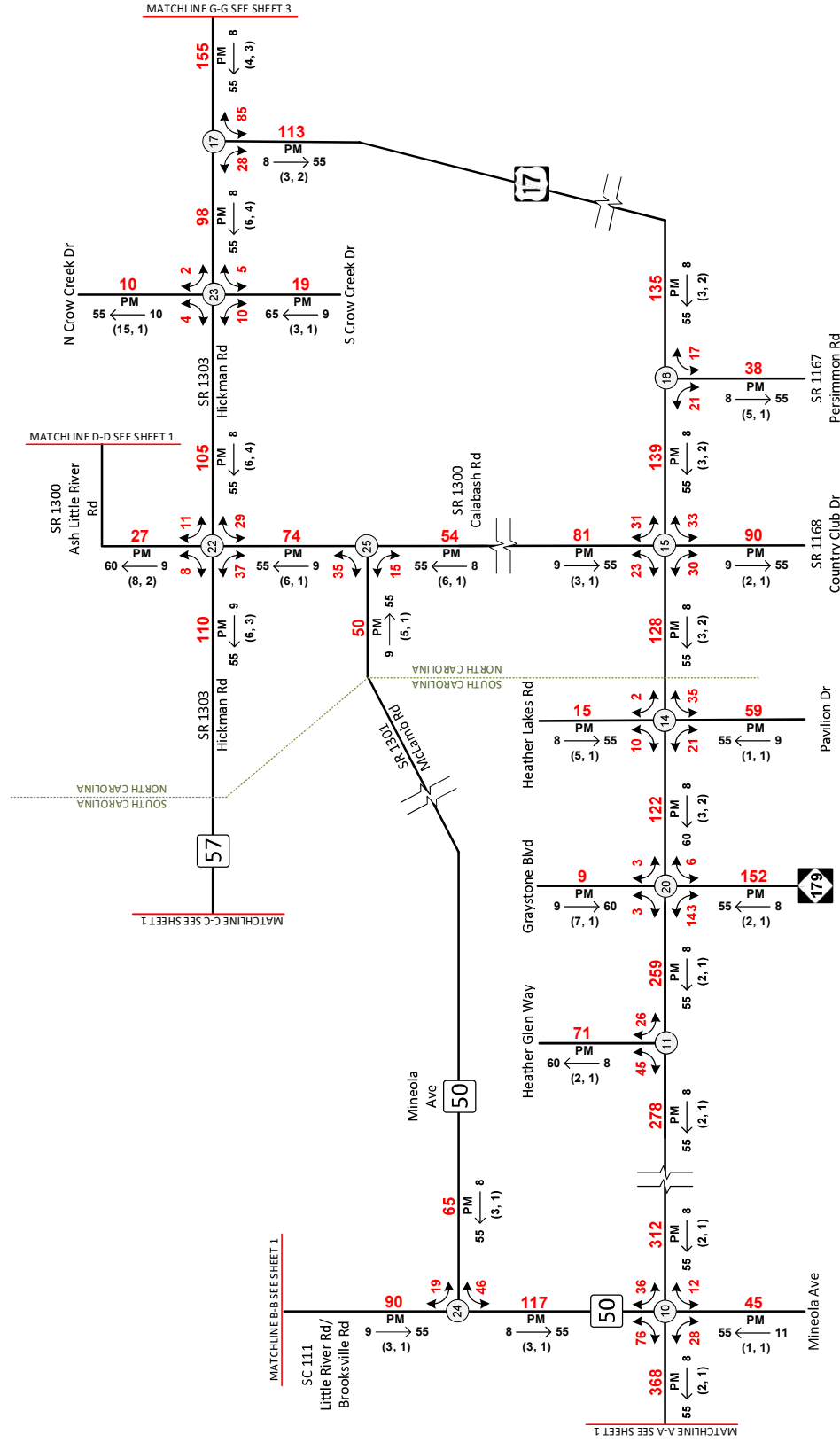
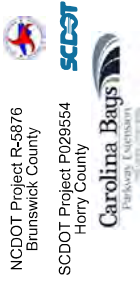


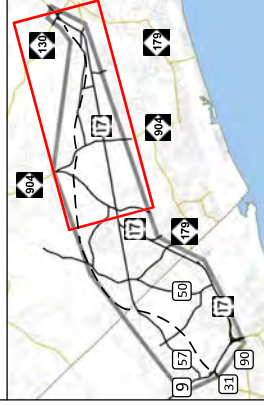
Figure 160

2045 Average Summer Weekday Traffic  
Future Year - Alternative 4A



LEGEND

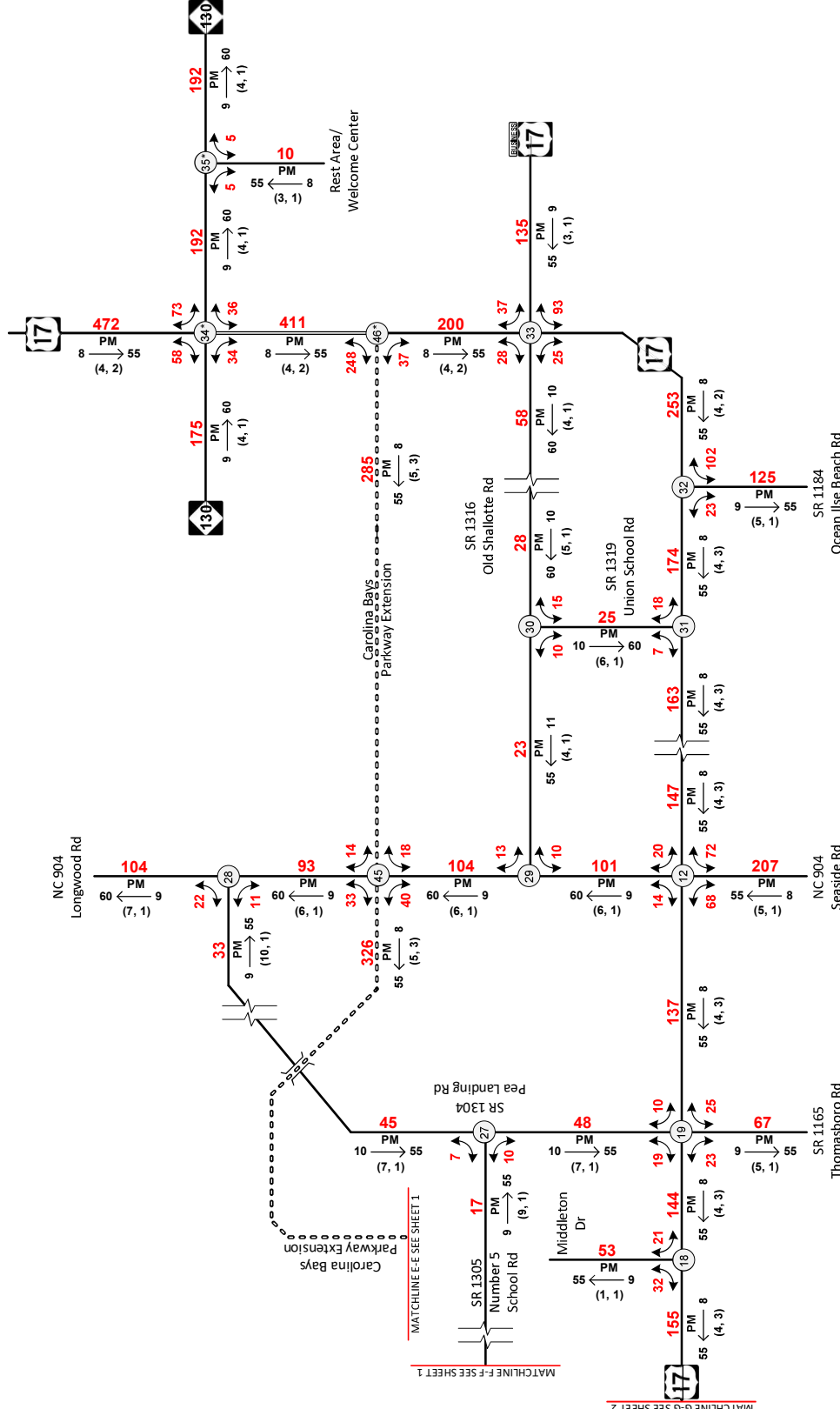
- ### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited
- K Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
----- Build Alternative  
----- (New Location)  
----- Build Alternative  
----- (Improve Existing US 17)



2045 AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD 4A  
SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



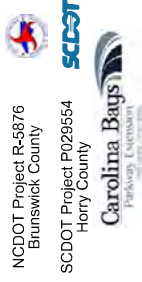
\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





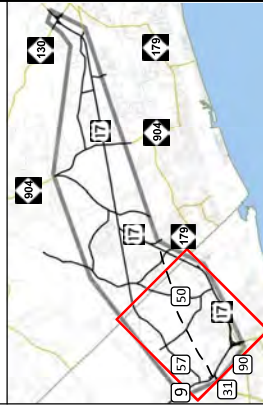
Figure 16P

2045 Average Summer Weekday Traffic  
Future Year - Alternative 7



LEGEND

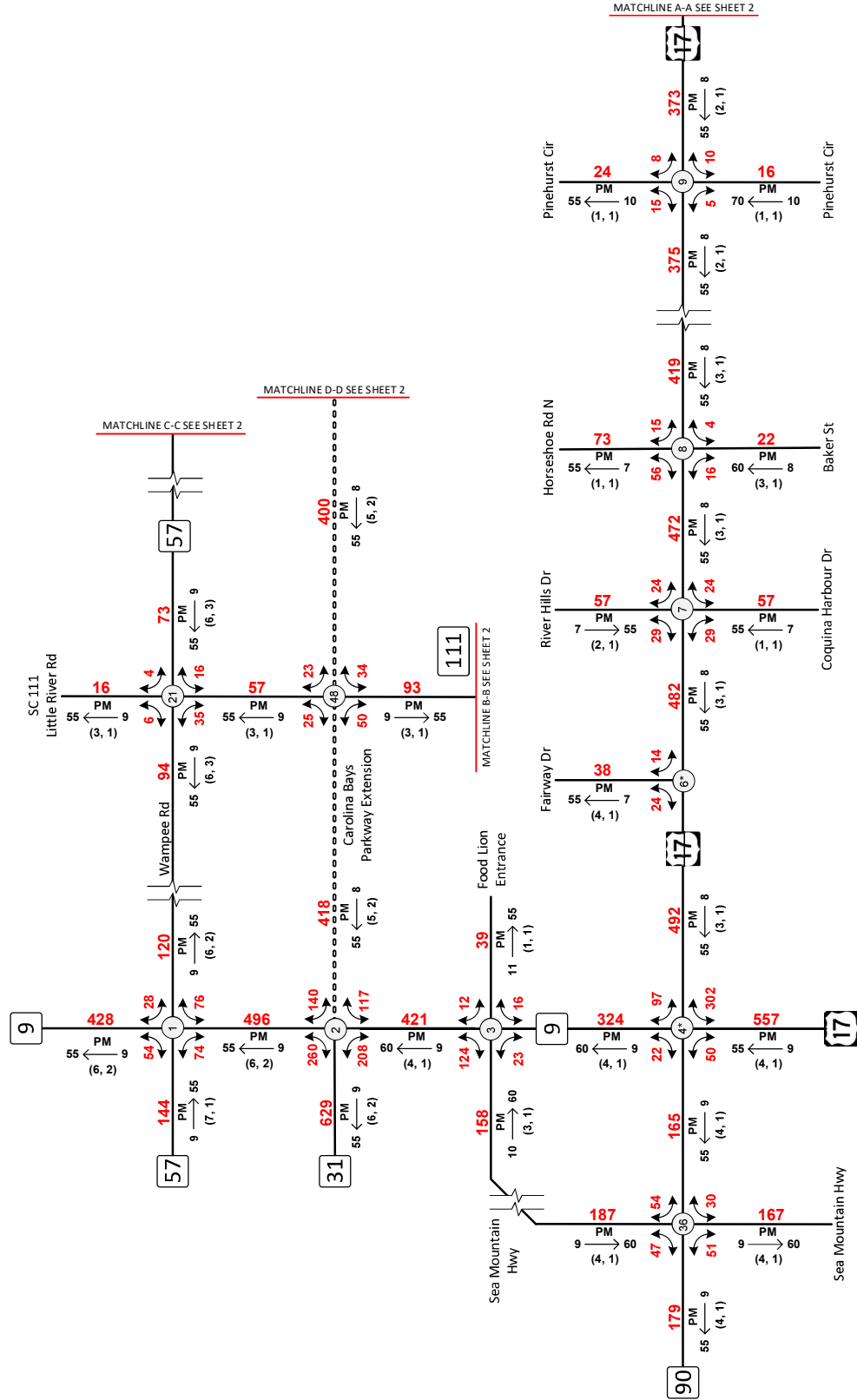
- ### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K Design Hour Factor (%)
- PM PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D (d, t)
- ..... Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD 7  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area







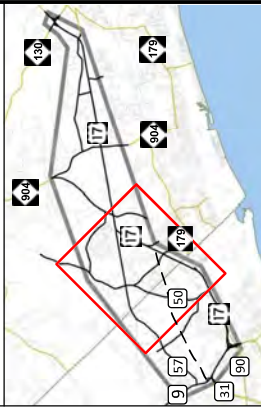
NCDOT Project R-5876  
 Brunswick County

SCDOT Project P029554  
 Horry County

Carolina Bays  
 Parkway Extension  
 From US 17 to US 90

| ### | No. of Vehicles Per Day in 100s |
|-----|---------------------------------|
| 1-  | Less than 50 vpd                |
| X   | Movement Prohibited             |

| K      | Design Hour Factor (%)                     |
|--------|--------------------------------------------|
| PM     | PM Peak Period                             |
| D      | Peak Hour Directional Split (%)            |
|        | Indicates Direction of D                   |
| (d, t) | Duals, TT-STs (%)                          |
| o      | Build Alternative (New Location)           |
| o      | Build Alternative (Improve Existing US 17) |



# 2045

**FUTURE YEAR BUILD 7**  
**SHEET 2 OF 3**

|                |                |
|----------------|----------------|
| NC TIP: R-5876 | SC PN: P029554 |
|----------------|----------------|

COUNTY: Brunswick/Horry

|                    |            |
|--------------------|------------|
| DATE: October 2020 | WBS: 44604 |
|--------------------|------------|

**PREPARED BY:** Clearbox Forecast Group

**LOCATION:** SC 9 to NC 130

**PROJECT:** Carolina Bays Parkway Ext.

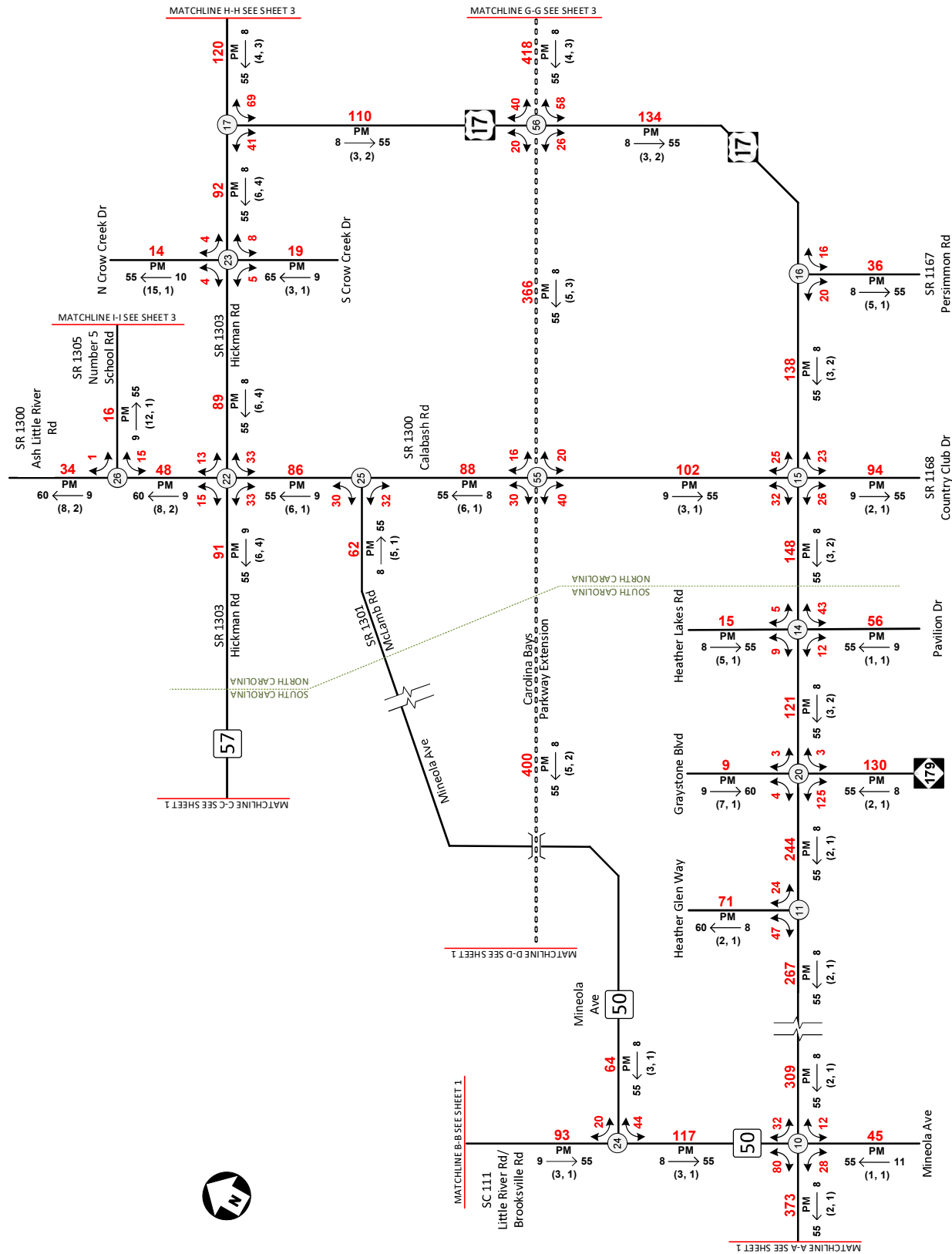
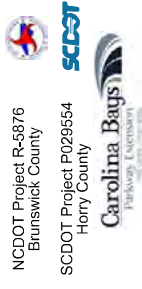




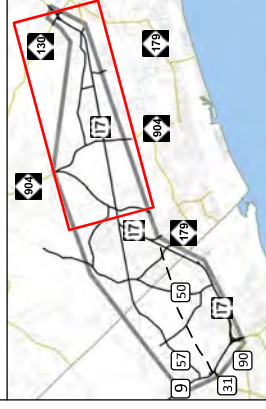
Figure 16R

2045 Average Summer Weekday Traffic  
Future Year - Alternative 7



# LEGEND

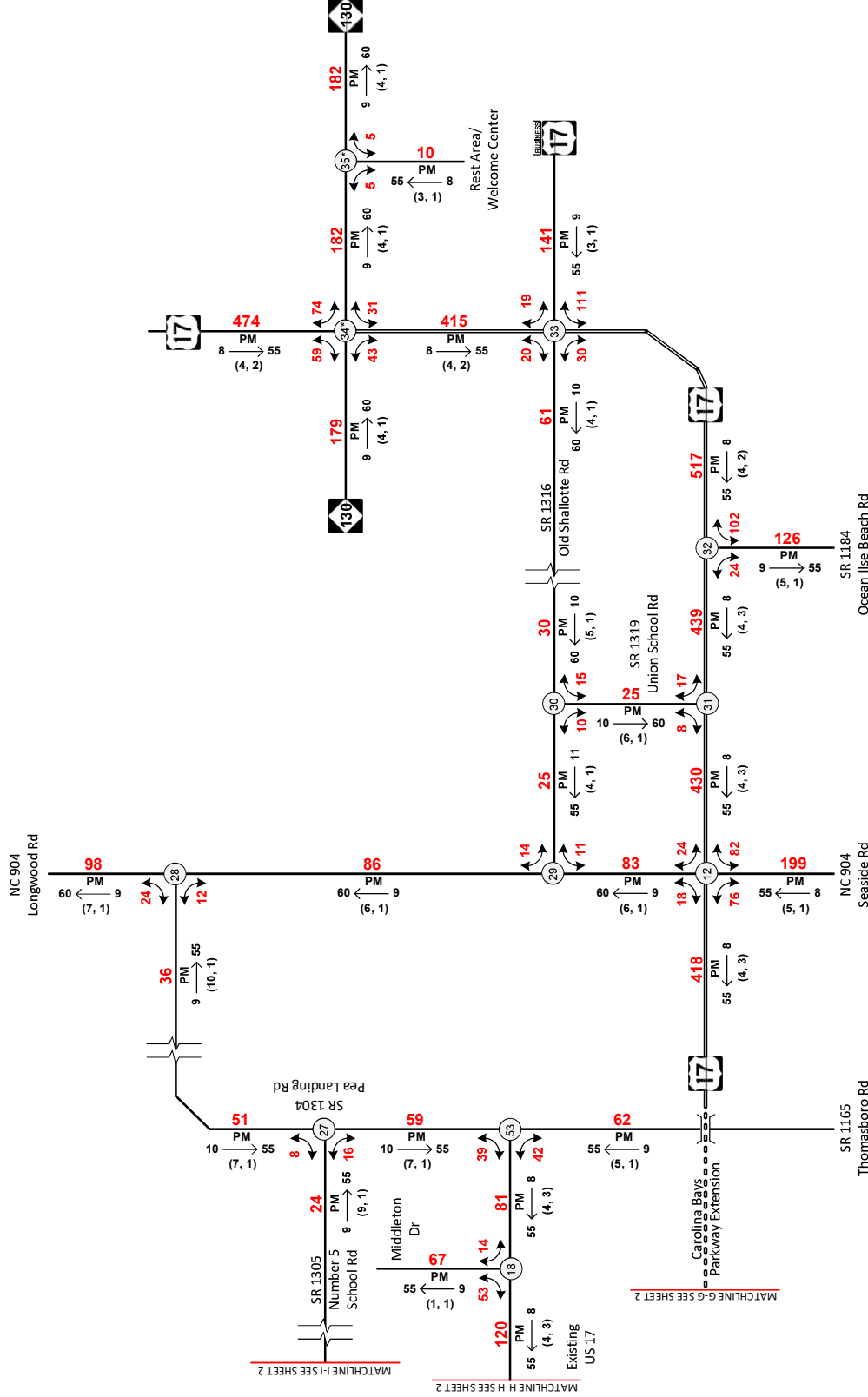
- #### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K  $\xrightarrow{\text{PM}} \text{D}$  Design Hour Factor (%)
- PM Peak Hour Period
- D Indicates Directional Split (%)
- $\rightarrow$  (d, t) Duals, TT-STs (%)
- ..... Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

## FUTURE YEAR BUILD 7 SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.



Figure 16S

2045 Average Summer Weekday Traffic  
Future Year - Alternative 8

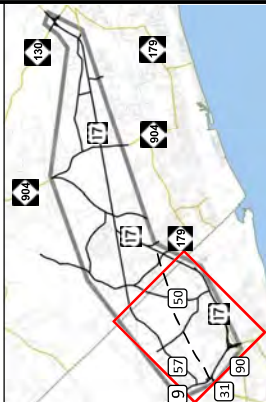
NCDOT Project R-5876  
Brunswick County

SCDOT Project P029554  
Horry County



### LEGEND

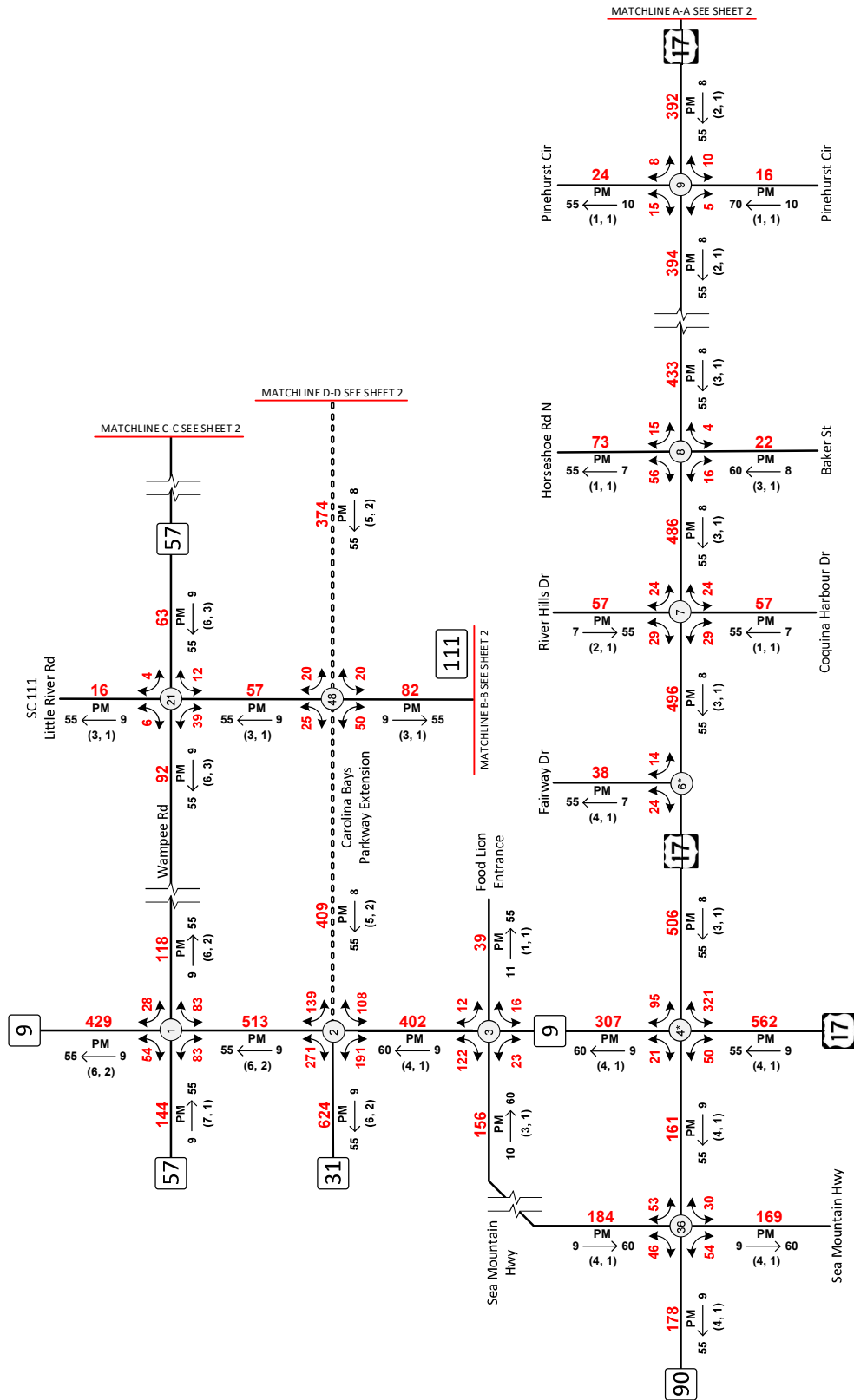
- No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited
- K Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
Indicates Direction of D  
(d, t)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD 8  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area



Figure 16T

2045 Average Summer Weekday Traffic  
Future Year - Alternative 8



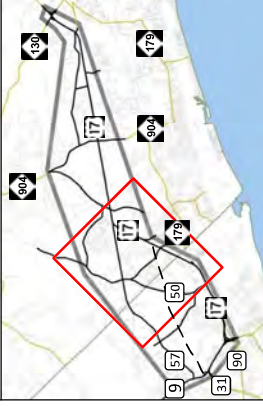
LEGEND

### No. of Vehicles Per Day in 100s  
1- Less than 50 vpd  
X Movement Prohibited

K Design Hour Factor (%)  
PM PM Peak Period  
D Peak Hour Directional Split (%)  
(d, t) Indicates Direction of D  
Duals, TT-STs (%)

Build Alternative  
(New Location)

Build Alternative  
(Improve Existing US 17)



2045 AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD 8  
SHEET 2 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

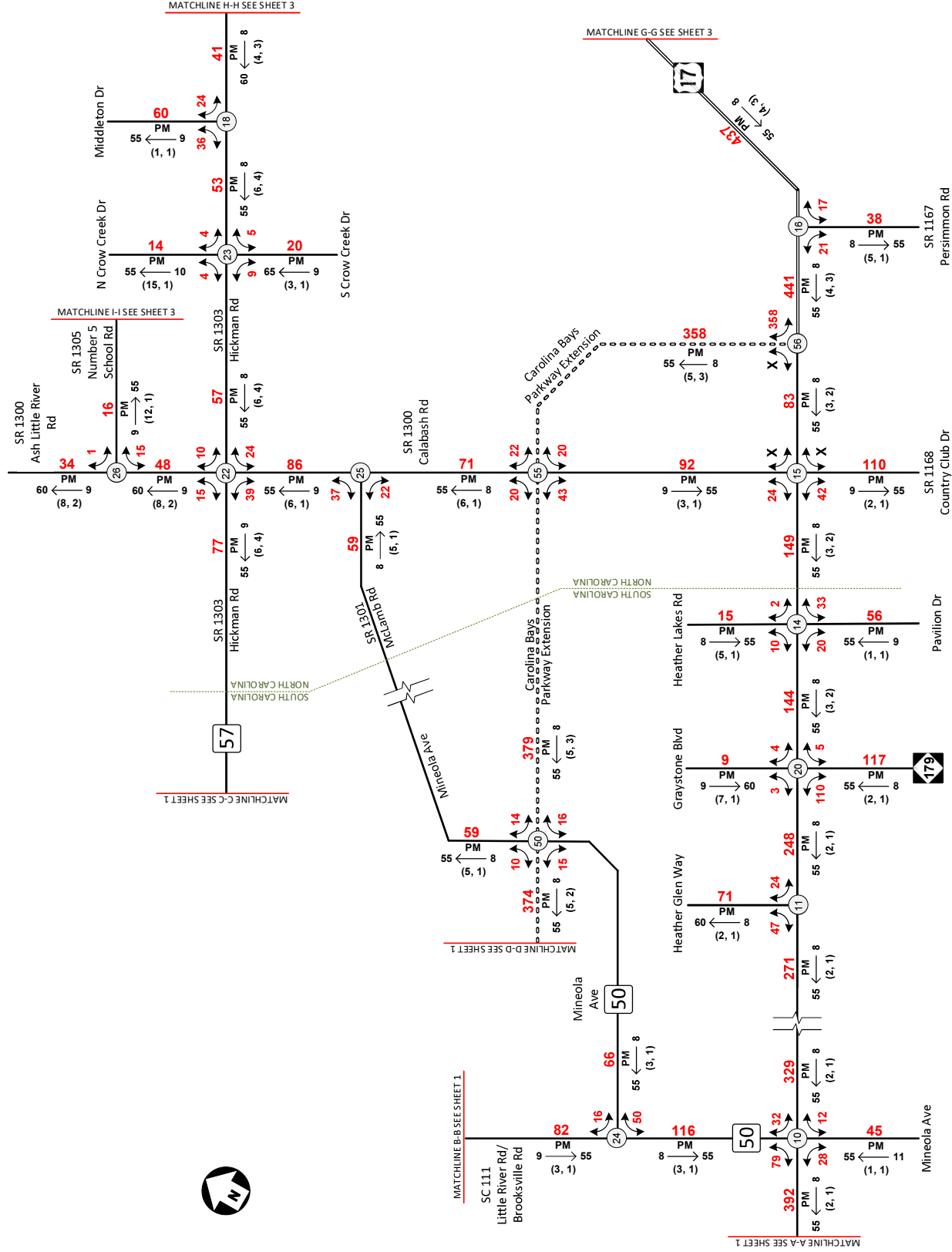
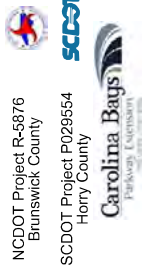


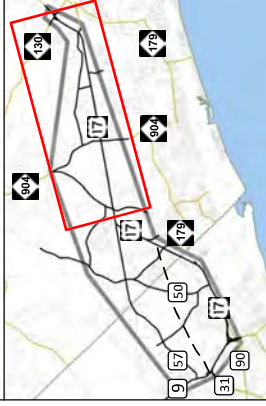
Figure 16U

2045 Average Summer Weekday Traffic  
Future Year - Alternative 8



# LEGEND

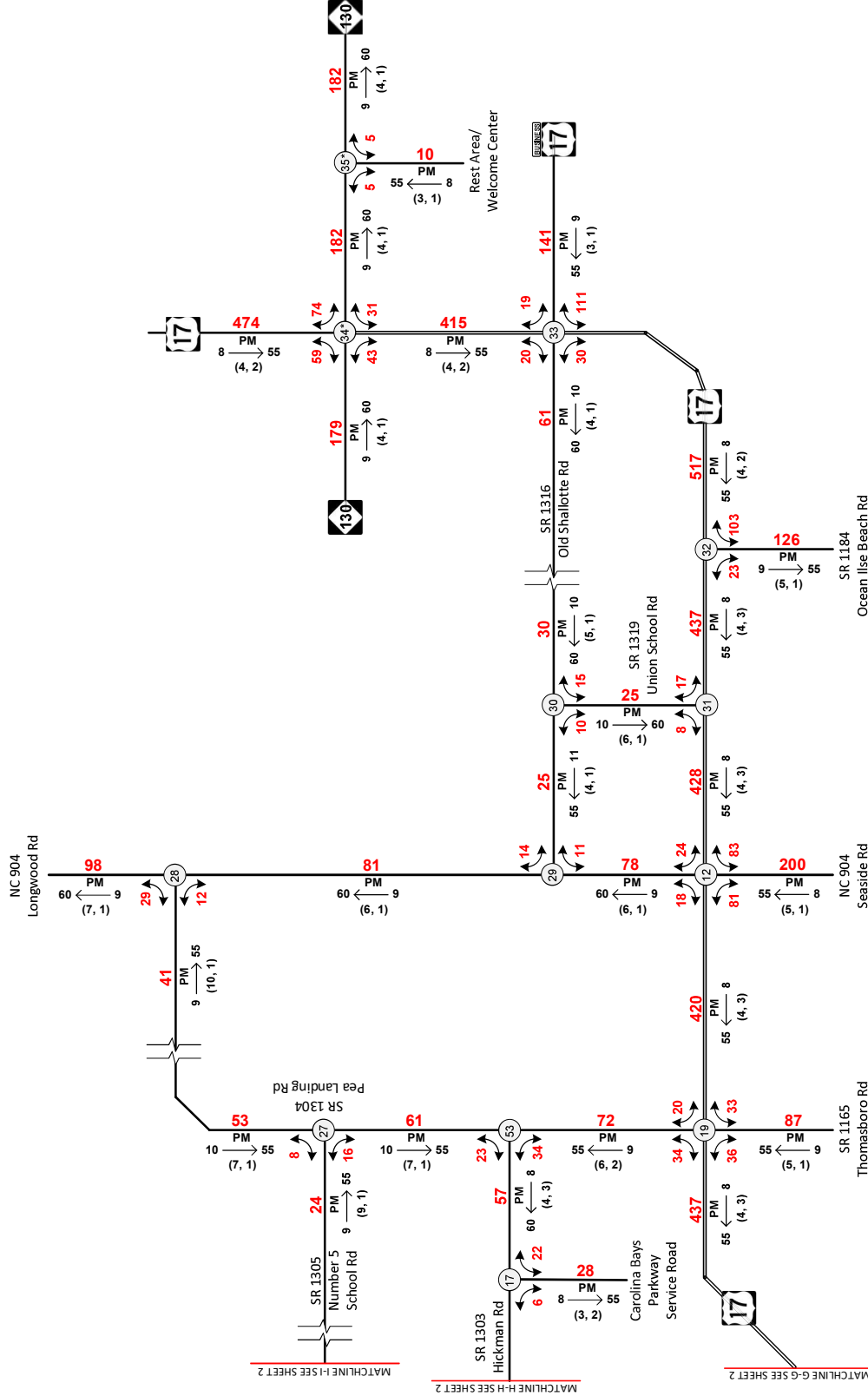
- #### No. of Vehicles Per Day in 100s
- 1- Less than 50 vpd
- X Movement Prohibited
- K  $\frac{PM}{K(d,t)} \rightarrow D$  Design Hour Factor (%)
- PM PM Peak Period
- D  $\rightarrow$  Peak Hour Directional Split (%)
- (d, t) Indicates Direction of D
- Build Alternative
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD 8  
SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: October 2020                   | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TPU compatibility.





**Figure 16V**  
**2045 Average Summer Weekday Traffic**  
**Future Year - CP1-S1**

NCDOT Project R-5876  
Brunswick County

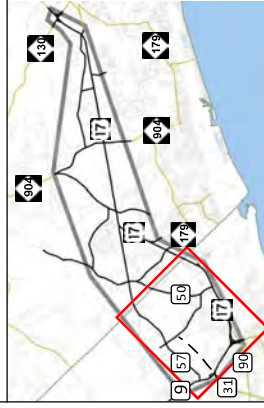
SCDOT  
Horry County

Carolina Bays  
Parkway, Lexington  
North Carolina 27569

## LEGEND

| #### | No. of Vehicles Per Day in 100s |
|------|---------------------------------|
| 1-   | Less than 50 vpd                |
| X    | Movement Prohibited             |

|           | $K$                                            | $\frac{PM}{(d, t)}$ | $\rightarrow D$ |
|-----------|------------------------------------------------|---------------------|-----------------|
| <b>K</b>  | Design Hour Factor (%)                         |                     |                 |
| <b>PM</b> | PM Peak Period                                 |                     |                 |
| <b>D</b>  | Peak Hour Directional Split (%)                |                     |                 |
| $(d, t)$  | Indicates Direction of D<br>Duals, TT-Slts (%) |                     |                 |
| ----      | Build Alternative<br>(New Location)            |                     |                 |
| =====     | Build Alternative<br>(Improve Existing US 17)  |                     |                 |



# 2045

**FUTURE YEAR BUILD CP1-S1**  
**SHEET 1 OF 3**

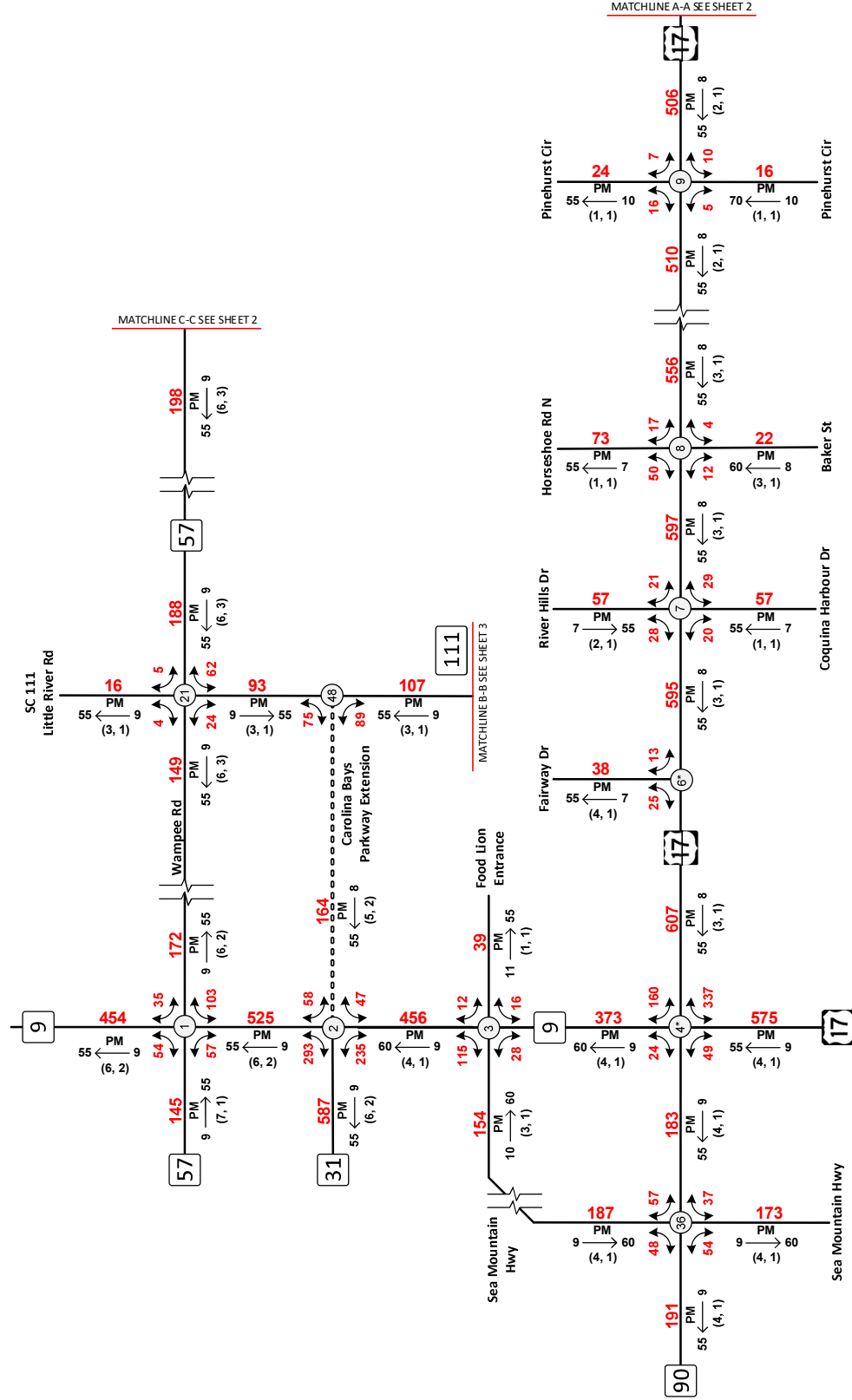
|               |                |
|---------------|----------------|
| NC TP: R-5876 | SC PN: P029554 |
|---------------|----------------|

COUNTY: Brunswick/Horry

|                         |                   |
|-------------------------|-------------------|
| <b>DATE:</b> March 2023 | <b>WBS:</b> 44604 |
|-------------------------|-------------------|

LOCATION: SC 9 to NC 130

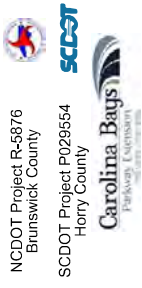
**PROJECT:** Carolina Bays Parkway Ext.



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area

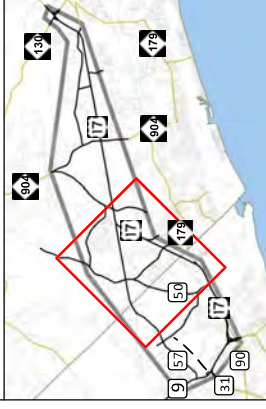


**Figure 16W**  
2045 Average Summer Weekday Traffic  
Future Year - CP1-S1



**LEGEND**

- No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited
- ###**  
**1-**  
**X**
- K** Design Hour Factor (%)  
**PM** PM Peak Period  
**D** Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t) Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



**2045** AVERAGE SUMMER  
WEEKDAY TRAFFIC  
**FUTURE YEAR BUILD CP1-S1**  
**SHEET 2 OF 3**

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: March 2023                     | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

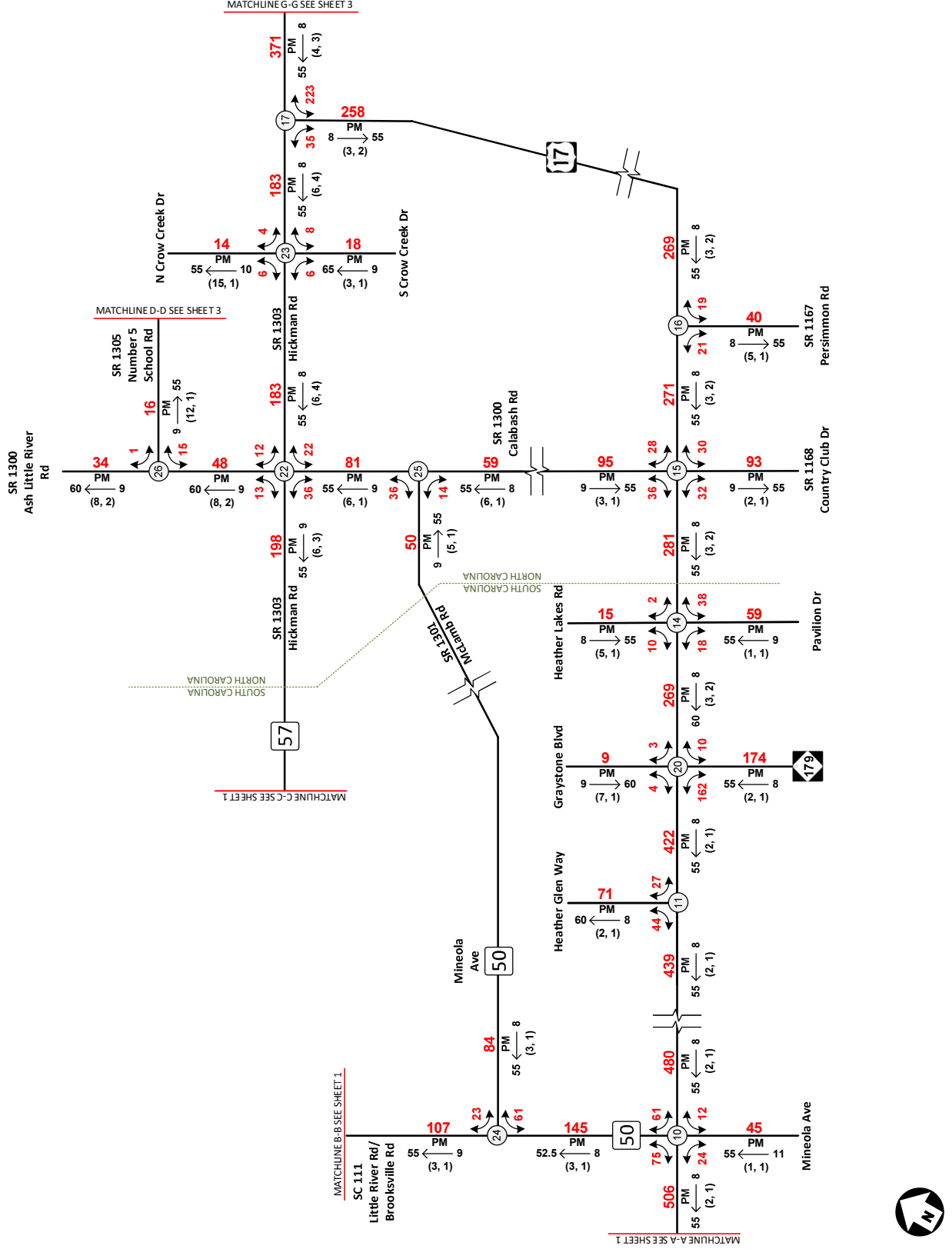
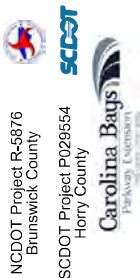




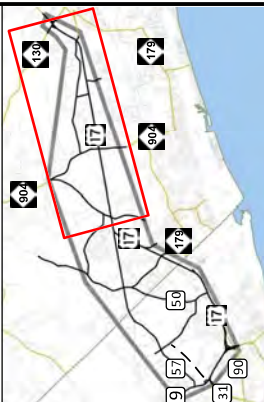
Figure 16X

2045 Average Summer Weekday Traffic  
Future Year - CP1-S1



# LEGEND

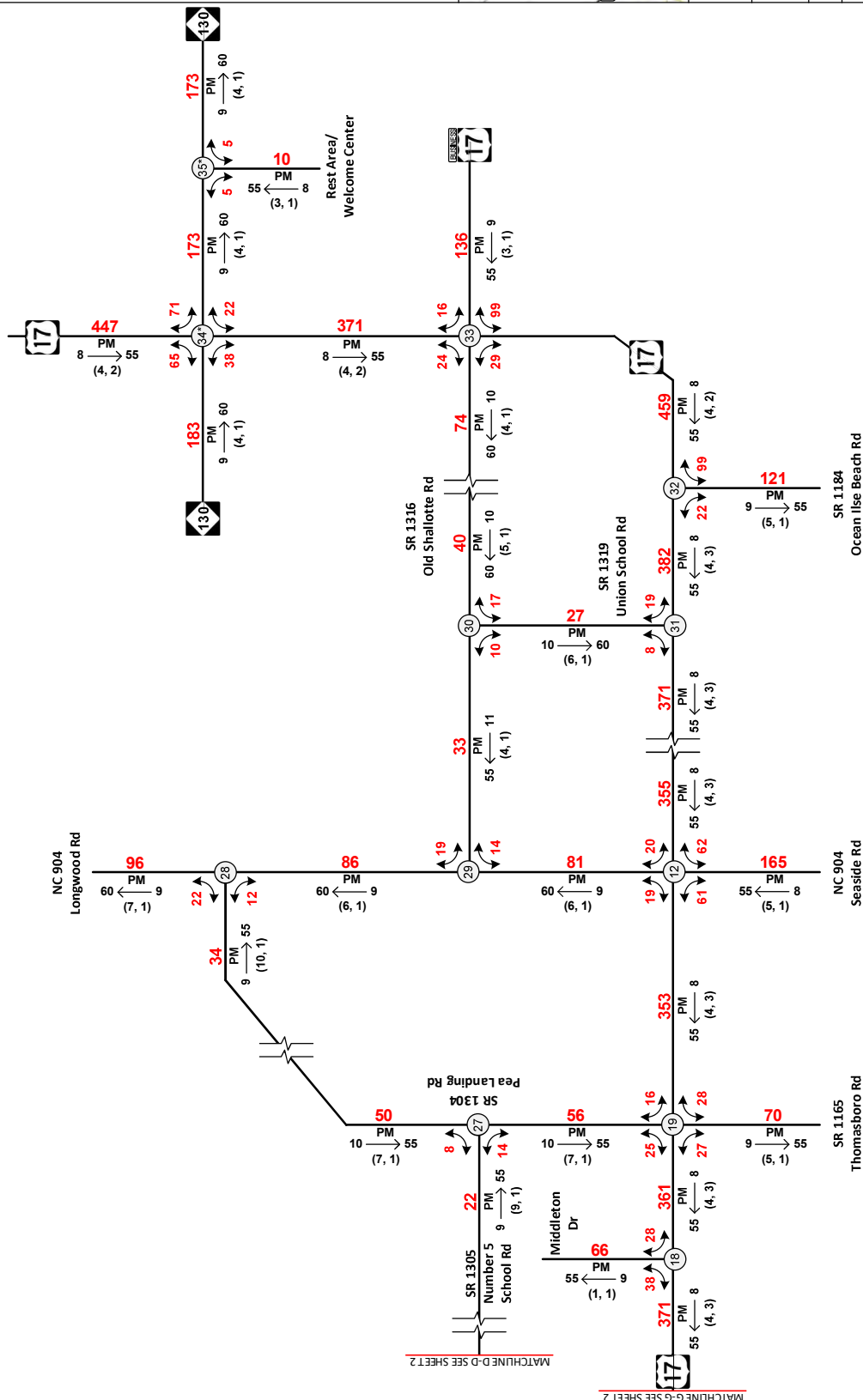
- No. of Vehicles Per Day in 100s
- ### Less than 50 vpd
- 1- Movement Prohibited
- X K PM → D  
K (d, t) → D
- Design Hour Factor (%)
- PM Peak Period
- D Peak Hour Directional Split (%)
- Indicates Direction of D
- Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)



2045 AVERAGE SUMMER WEEKDAY TRAFFIC

FUTURE YEAR BUILD CP1-S1  
SHEET 3 OF 3

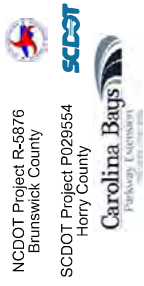
|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: March 2023                     | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFU compatibility.

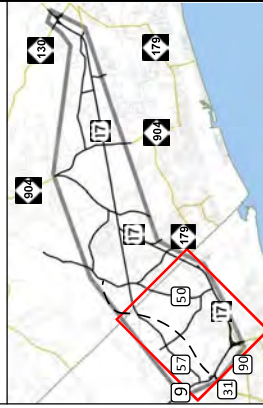


**Figure 16Y**  
2045 Average Summer Weekday Traffic  
Future Year - CP1-S2



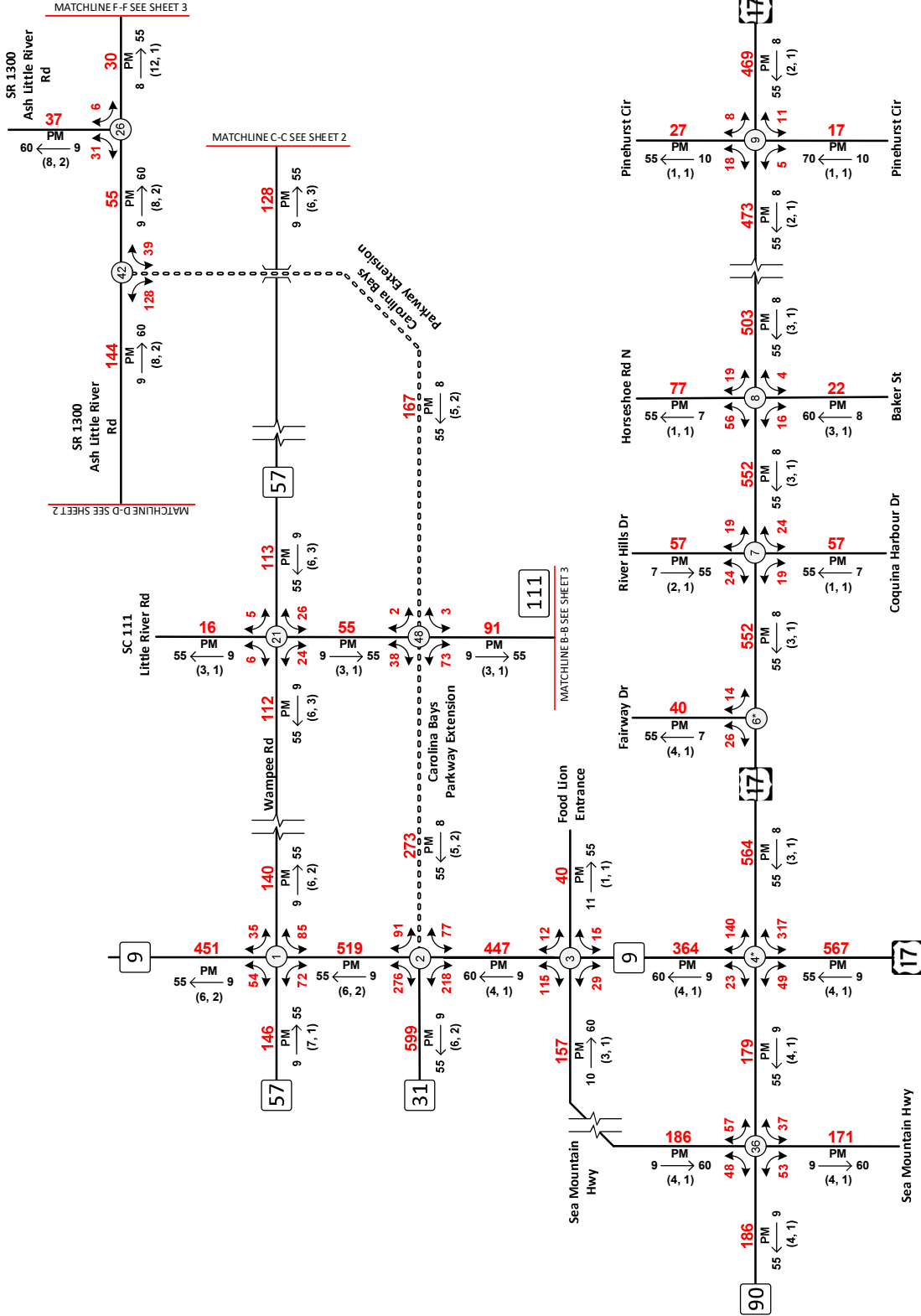
**LEGEND**

- No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited
- ###  
1-  
X
- K Design Hour Factor (%)  
PM Peak Period  
D Peak Hour Directional Split (%)  
↑ Indicates Direction of D  
(d, t)  
Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)
- K PM → D  
(d, t)



**2045** AVERAGE SUMMER  
WEEKDAY TRAFFIC  
**FUTURE YEAR BUILD CP1-S2**  
SHEET 1 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: December 2022                  | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 4 and 6 represent a simplified version of the US 17/SC 9/SC 90 interchange area





Figure 16Z

2045 Average Summer Weekday Traffic  
Future Year - CP1-S2

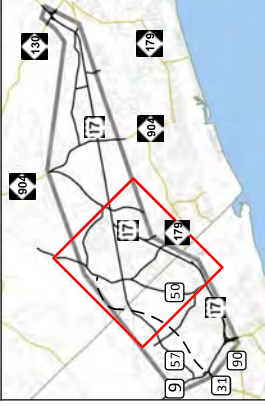


LEGEND

No. of Vehicles Per Day in 100s  
Less than 50 vpd  
Movement Prohibited

K PM  
D (d, t) → D  
K (d, t) → D

Design Hour Factor (%)  
PM Peak Period  
Peak Hour Directional Split (%)  
Indicates Direction of D  
Duals, TT-STs (%)  
Build Alternative  
(New Location)  
Build Alternative  
(Improve Existing US 17)



2045

AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD CP1-S2  
SHEET 2 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: December 2022                  | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |

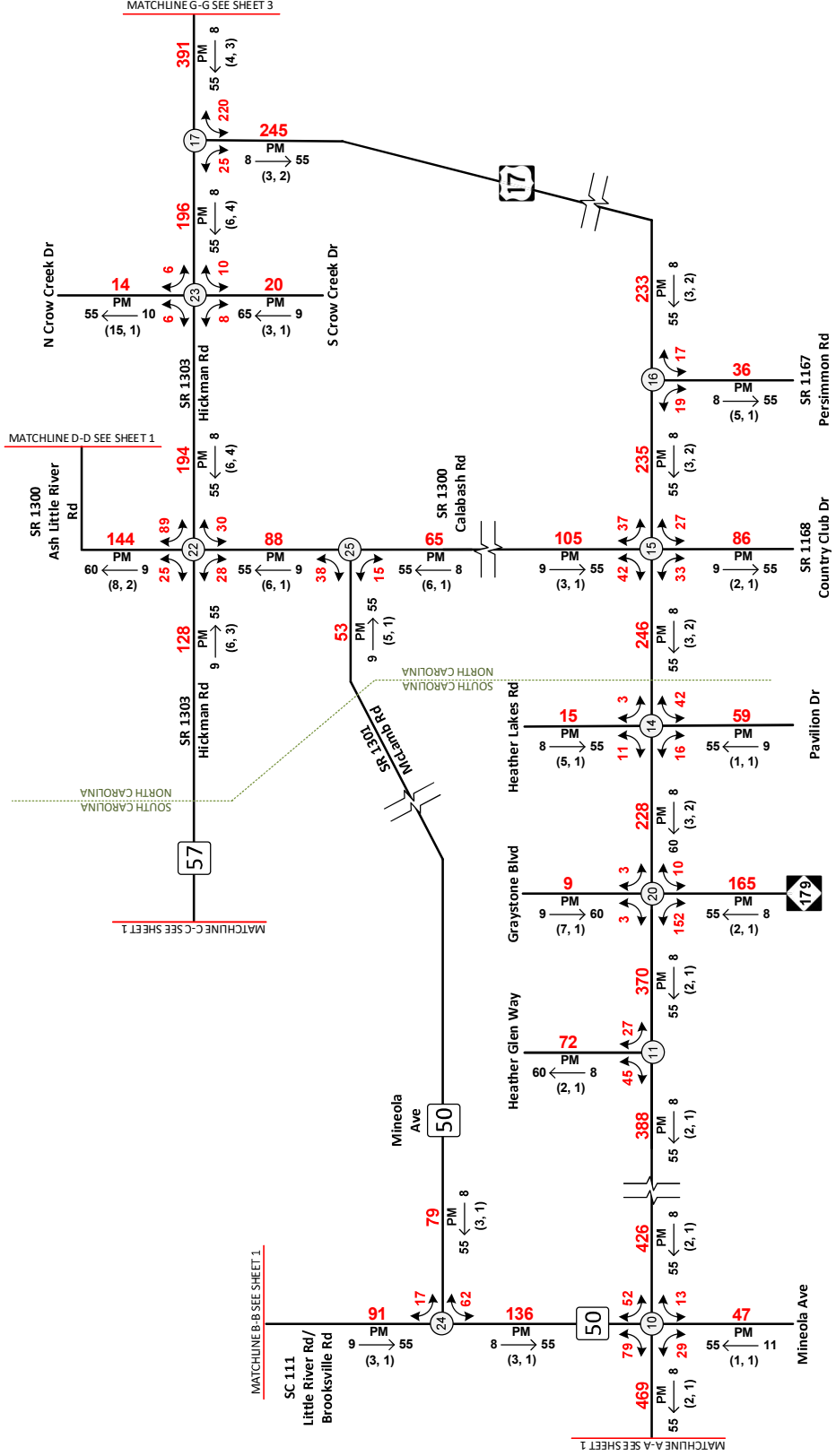
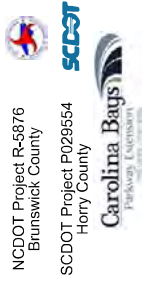
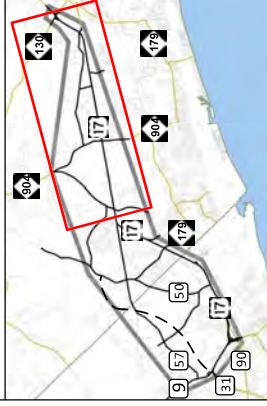


Figure 16AA  
2045 Average Summer Weekday Traffic  
Future Year - CP1-S2



# LEGEND

- No. of Vehicles Per Day in 100s
- Less than 50 vpd
- Movement Prohibited
- Design Hour Factor (%)
- PM Peak Period
- D Indicates Direction of D
- Duals, TT-STs (%)
- Build Alternative (New Location)
- Build Alternative (Improve Existing US 17)

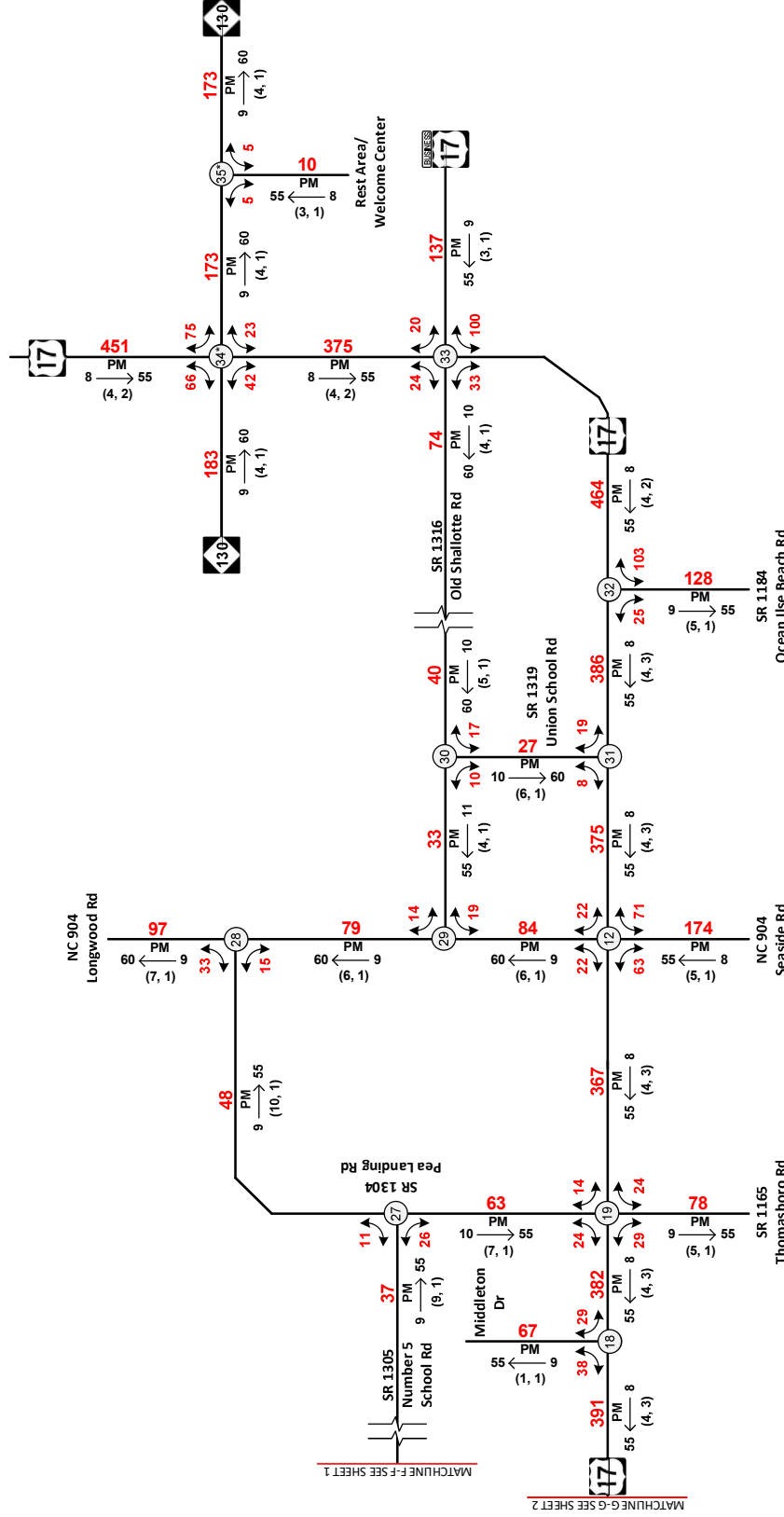


2045

AVERAGE SUMMER  
WEEKDAY TRAFFIC

FUTURE YEAR BUILD CP1-S2  
SHEET 3 OF 3

|                                      |                |
|--------------------------------------|----------------|
| NC TIP: R-5876                       | SC PN: P029554 |
| COUNTY: Brunswick/Horry              | DIVISION: 3/5  |
| DATE: December 2022                  | WBS: 44604     |
| PREPARED BY: Clearbox Forecast Group |                |
| LOCATION: SC 9 to NC 130             |                |
| PROJECT: Carolina Bays Parkway Ext.  |                |



\*NOTE: Intersections 34 and 35 represent a single intersection at US 17/NC 130/Rest Area. Reported separately for TFE compatibility.

