

**CAPITAL TRANSPORTATION PROJECT COST ESTIMATE**

(Current Dollars)

Part III of V

Contract No. \_\_\_\_\_

Project Title: Rt 10 Pathway, Old North Rd to Old Camden Road - P1**PART III - REAL ESTATE**

<b>A. REAL PROPERTY</b>	<u>\$15,000</u>	<b>C. ASBESTOS PROGRAM</b>	<u>\$0</u>
1. Total acquisitions	_____	1. Testing	_____
2. Partial acquisitions	_____	2. Abatement	_____
3. Permanent easements	<u>\$10,000</u>	<b>D. DEMOLITION</b>	_____
4. Temporary easements	<u>\$5,000</u>	<b>E. APPRAISAL FEES</b>	_____
5. Wetland mitigation	_____	<b>F. STAFF</b>	<u>\$5,000</u>
Other (specify)	_____	<b>G. SETTLEMENT</b>	_____
6. _____	_____	<b>H. REAL ESTATE ENG.</b>	<u>\$0</u>
7. _____	_____	1. Consultant survey	_____
<b>B. RELOCATION</b>	<u>\$0</u>	2. As acquired plans	_____
1. Residential	_____	<b>I. CONDEMNATION</b>	_____
2. Business	_____	<b>J. OTHER (specify)</b>	<u>\$0</u>
Other (specify)	_____	1. _____	_____
3. _____	_____	2. _____	_____
4. _____	_____		

**TOTAL COSTS FOR PART III (A thru J) ROUNDED** \$20,000**CONTINGENCY COSTS** 0% \$0  
(normally 5% for large projects and 10% for small projects - to be approved by section head) (% used)**TOTAL REAL ESTATE COSTS** \$20,000  
(also total for Construction Project Estimate form line 7c)Estimator: Century Engineering, Inc. (LCH)Date: 06/03/15

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part IV-A of V

Contract No. \_\_\_\_\_

Project Title Rt 10 Pathway, Old North Rd to Old Camden Road - P1

## PART IV -CONSTRUCTION

### A. ROADWAY/APPROACH CONSTRUCTION

\$791,000

1. Grading
  - a. Excavation  
(includes SWM pond) \_\_\_\_\_
  - b. Borrow \_\_\_\_\_
2. Drainage \_\_\_\_\_
3. Pavement
  - a. Surface \_\_\_\_\_
  - b. Base \_\_\_\_\_
  - c. Subbase \_\_\_\_\_
4. Erosion/Sed. Cont. \_\_\_\_\_
5. Miscellaneous
  - a. Curb/Gutter \_\_\_\_\_
  - b. Sidewalk \_\_\_\_\_
  - c. Guardrail \_\_\_\_\_
  - d. C.P.M. Schedule \_\_\_\_\_
  - e. Clear/Grubb \_\_\_\_\_
  - f. Field Office \_\_\_\_\_
- Other (specify)
  - g. Total Project Construction \$791,000
  - h. \_\_\_\_\_
  - i. \_\_\_\_\_
  - j. \_\_\_\_\_
  - k. \_\_\_\_\_
  - l. \_\_\_\_\_
  - m. \_\_\_\_\_

### B. STRUCTURE CONSTRUCTION

\$0

1. New Bridge
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/s.f. \_\_\_\_\_
2. Old Structure Rem.
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/c.y. \_\_\_\_\_
3. Retaining Wall
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/c.y. \_\_\_\_\_
4. Box Culvert
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/s.f. \_\_\_\_\_

### C. LANDSCAPING

\$0

1. Beautification \_\_\_\_\_
2. Noise Mitigation \_\_\_\_\_
3. Visual Mitigation \_\_\_\_\_
4. Tree Mitigation \_\_\_\_\_

### D. MAINTENANCE OF TRAFFIC

(refer to Capital Improvement Project form, Part IV - Continued)

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part IV-B of V

Contract No. \_\_\_\_\_

Project Title Rt 10 Pathway, Old North Rd to Old Camden Road - P1

## PART IV -CONSTRUCTION (CONTINUED)

**E. PROJECT TRAFFIC ITEMS** \$0

1. Signing Structures  
a. Overhead Bridges \_\_\_\_\_  
b. Cantilever Supports \_\_\_\_\_
2. Roadway Lighting \_\_\_\_\_
3. Pavement Markings \_\_\_\_\_  
Other (specify) \_\_\_\_\_
4. \_\_\_\_\_

**F. WETLAND MITIGATION** \_\_\_\_\_

**G. UTILITY RELOC. IN CONTRACT** \$0

1. Water \_\_\_\_\_
2. Sanitary Sewer \_\_\_\_\_  
Other (specify) \_\_\_\_\_
3. \_\_\_\_\_

**H. SUBTOTAL (A thru G) ROUNDED** \$791,000

**I. MISC. ITEMS** \$79,100

(15% of H for large projects and 20% for small)  
(At SF submission use 10% and 5%)

10%  
(% used)

**J. CONTRACTOR'S CONST. ENG.** \$39,550

(normally 5% of H) 5%  
(% used)

**K. INITIAL EXPENSE** \$39,550

(normally 5% of H) 5%  
(% used)

**L. CONSTRUCTION CONTINGENCY** \$79,100

(normally 10% of H) 10%  
(% used)

**M. TOTAL CONSTRUCTION COSTS (H thru L)**

(Enter on PNR funding line 5)

\$1,028,300

**N. CONSTRUCTION ENGINEERING (normally 15% of construction costs)**

(Enter on PNR funding line 4)

15% \$154,245  
(% used)

**O. TOTAL CONSTRUCTION COSTS (Construction Costs + Construction Engineering)**

(use this total + Q + P for Construction Project Estimate from line 7d)

\$1,182,545

**P. REIMBURSABLE UTILITY RELOCATIONS BY OTHERS** \$0

(Enter on PNR funding line 7)

1. Water \_\_\_\_\_
2. Sanitary Sewer \_\_\_\_\_
3. Electric \_\_\_\_\_
4. Telephone \_\_\_\_\_
5. Gas \_\_\_\_\_
6. CATV \_\_\_\_\_  
Other (specify) \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_

Utilities

Estimator: \_\_\_\_\_

Date: \_\_\_\_\_

**Q. TRAFFIC SECTION ITEMS** \$30,000

(Enter on PNR funding line 6)

1. Signing \$5,000
2. Signals \$25,000
3. Detour Signing \_\_\_\_\_
4. DelTrac \_\_\_\_\_  
Other (specify) \_\_\_\_\_
5. \_\_\_\_\_

Traffic

Estimator: \_\_\_\_\_

Date: \_\_\_\_\_

Estimator: Century Engineering, Inc. (LCH)

Date: 6/3/2015

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part V of V

Contract No. \_\_\_\_\_

Project Title: Rt 10 Pathway, Old North Rd to Old Camden Road - P1

## SUMMARY

<b>PART I - LOCATION AND ENVIRONMENTAL STUDIES</b> (Part I to be included only for class "I" and "III" projects)	<u>\$0</u>
<b>PART II - PRELIMINARY ENGINEERING</b>	<u>\$165,000</u>
<b>PART III - REAL ESTATE</b>	<u>\$20,000</u>
<b>PART IV - CONSTRUCTION</b>	<u>\$1,212,545</u>
<b>TOTAL ESTIMATED PROJECT COSTS</b> (also total for Construction Project Estimate from line 7c)	<u>\$1,397,545</u>

\_\_\_\_\_  
Project Manager

Date: \_\_\_\_\_

## REVIEWED & CONCURRED IN:

\_\_\_\_\_  
Section Head

Date: \_\_\_\_\_

NOTE: Concurring section heads are to forward the original estimate copy to the Director of Transportation Solutions with one estimate copy each to the Assistant Director of Project Development, Assistant Director of Design Support, and the Cost Estimate Engineer.

Route 10 Pathway, Old North Rd to Old Camden Rd (Phase 1)					
Conceptual Cost Estimate - July 2015					
ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$7,500.00	1	\$7,500.00
202000	EXCAVATION AND EMBANKMENT	CY	\$18.00	1,745	\$31,410.34
209002	BORROW, TYPE B	CY	\$30.00	60	\$1,800.00
209006	BORROW, TYPE F	CY	\$24.00	490	\$11,760.00
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	\$5,000.00	1	\$5,000.00
212000	UNDERCUT EXCAVATION	CY	\$18.00	100	\$1,800.00
302007	GRADED AGGREGATE BASE COURSE, TYPE B	CY	\$50.00	525	\$26,259.92
401821	SUPERPAVE BIT. CONCRETE, TYPE C, 160 GYRATIONS, PG64-22, PATCHING	TON	\$85.00	131	\$11,135.00
401822	SUPERPAVE BIT. CONCRETE, TYPE B, 160 GYRATIONS, PG64-22, PATCHING	TON	\$125.00	80	\$10,000.00
401823	SUPERPAVE BIT. CONCRETE BASE COURSE, 160 GYRATIONS, 64-22, PATCHING	TON	\$125.00	79	\$9,875.00
602615	MODULAR BLOCK RETAINING WALL	SF	\$50.00	600	\$30,000.00
612034	REINFORCED CONCRETE PIPE, 36", CLASS IV	LF	\$75.00	1,194	\$89,550.00
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	LF	\$40.00	2,073	\$82,920.00
705002	P.C.C. SIDEWALK, 6"	SF	\$7.00	34,004	\$238,028.00
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	SF	\$30.00	370	\$11,100.00
708053	DRAINAGE INLET, 48" X 48"	EACH	\$2,500.00	10	\$25,000.00
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	\$800.00	1	\$800.00
710507	ADJUST AND REPAIR EXISTING SANITARY CLEANOUTS	EACH	\$250.00	5	\$1,250.00
716000	CONVERTING EXISTING DRAINAGE INLET TO JUNCTION BOX	EACH	\$1,000.00	1	\$1,000.00
727004	CHAIN-LINK FENCE, 6' HIGH	LF	\$20.00	350	\$7,000.00
737523	PLANTINGS	LS	\$5,000.00	1	\$5,000.00
743000	MAINTENANCE OF TRAFFIC	LS	\$18,000.00	1	\$18,000.00
743003	ARROWPANELS, TYPE C	EADY	\$30.00	200	\$6,000.00
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLEMESSAGE SIGN	EADY	\$75.00	30	\$2,250.00
743006	PLASTIC DRUMS	EADY	\$0.50	3,520	\$1,760.00
743007	TRAFFIC OFFICERS	LF	\$85.00	40	\$3,400.00
743009	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR,TYPE I	LF	\$100.00	200	\$20,000.00
743023	TEMPORARY BARRICADES, TYPE III	LFDY	\$3.00	1,120	\$3,360.00
743024	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	\$2.60	1,040	\$2,704.00
743057	FLAGGER, KENT COUNTY, FEDERAL	HOURL	\$47.20	640	\$30,208.00
743066	FLAGGER, KENT COUNTY, FEDERAL, OVERTIME	HOURL	\$68.44	80	\$5,475.20
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	SF	\$8.00	570	\$4,560.00
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$3.50	8,456	\$29,596.00
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLESIGN POST	EACH	\$75.00	8	\$600.00
750000	ADJUST WATER VALVE BOXES	EACH	\$150.00	5	\$750.00
751000	ADJUST FIRE HYDRANTS	EACH	\$1,200.00	2	\$2,400.00
758000	REMOVAL OF EXISTING PORTLAND CEMENTCONCRETE PAVEMENT, CURB,SIDEWALK, ETC.	SY	\$15.00	1,720	\$25,800.00
760000	PAVEMENT - MILLING, HOT-MIX	SYIN	\$3.00	834	\$2,502.00
762001	SAW CUTTING, HOT MIX	LF	\$5.00	2,184	\$10,920.00
762002	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$6.00	45	\$270.00
905001	SILT FENCE	LF	\$3.00	2114	\$6,342.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	20	\$3,000.00
908004	TOPSOIL, 6" DEPTH	SY	\$7.00	300	\$2,100.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	350	\$350.00
	<b>Subtotal</b>				<b>\$791,000.00</b>
	CONTINGENCY FOR MISC. ITEMS	10%			\$79,100.00
763000	INITIAL EXPENSE	5%		1	\$39,550.00
763501	CONSTRUCTION ENGINEERING	5%		1	\$39,550.00
	CONSTRUCTION CONTINGENCY	10%			\$79,100.00
				<b>Subtotal</b>	<b>\$1,028,300.00</b>
	CONSTRUCTION ENGINEERING - 15% (INSPECTION, CCR, CE, ETC)				\$154,245.00
	<b>TOTAL BASE CONSTRUCTION COST</b>				<b>\$1,182,545.00</b>
	REAL ESTATE COSTS				\$20,000.00
	TRAFFIC SECTION ITEMS				\$30,000.00
	PRELIMINARY ENGINEERING				\$165,000.00
	<b>TOTAL ESTIMATED PROJECT COST</b>				<b>\$1,397,545.00</b>

## CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

1. NAME OF PROJECT	<u>Rt 10 Path, Gateway S. Shopping Center to US13 - P2</u>	<u>Kent</u>
	Subdivision or Road Name	County

## 2. LIMITS

Street Name or Road Number	From	To	Length
SR 10 (K356)	Gateway S. Shopping Center	S. State St. (K027)	6,300'

3. ESTIMATE REQUESTED BY:	<u>Jeff Niezgoda</u>	for (check one) <input type="checkbox"/>	Project initiation
	Name	<input checked="" type="checkbox"/>	Estimate only      Section or Legis. Dist.

## 4. DESCRIPTION OF IMPROVEMENT:

Construct a 10' wide multi-use path with 5' grass strip and curb from the Gateway South Shopping Center on the eastbound side of SR 10 to South State Street. New drainage will be installed. No environmental permits are anticipated.

4. PROJECT IN C.I.P. Yes ☐ No ☒ If "Yes", indicate year F.Y. \_\_\_\_\_

## 5. TYPICAL SECTION

3" Superpave Bituminous Concrete, Type C + 8" GABC Type B

6. STATE MAINTAINED ☒ CITY MAINTAINED ☐ PRIVATE ☐ OTHER ☐ (specify)

7. COST ESTIMATE:	from C.I.P. estimate form	Estimate prepared by:	Date:
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a. Location and Environmental Studies	\$0	Part I	Century Engineering,	06/03/15
(Part I to be included only for class "I" and "III" projects)				

b. Preliminary Engineering	\$380,000	Part II	Century Engineering, Inc.	06/03/15
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c. Real Estate	\$100,000	Part III	Century Engineering, I	06/03/15
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d. Construction *	\$3,652,835	Part IV	Century Engineering, I	06/03/15
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e. TOTAL ESTIMATED PROJECT COST	\$4,132,835
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\* Includes Utilities, Traffic, and C.E.

**APPROVED**

Valid thru	_____	_____	_____
	Date	Assistant Director, M&O/Transportation Solutions/Planning	Date

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part I of V

Contract No. \_\_\_\_\_

Project Title: Rt 10 Path, Gateway S. Shopping Center to US13 - P2

## PART I - LOCATION & ENVIRONMENTAL STUDIES (N/A)

(Part I to be included only for class "I" & "III" projects)

### A. ENGINEERING

(Includes NEPA)

### B. ARCHAEOLOGY

1. Phase I (study)

2. Phase 2 (study)

3. Phase 3 (mitigation)

### C. WETLANDS

1. Delineation (study)

2. Permit preparation

3. Mitigation (design)

### D. HAZARDOUS MATERIAL

1. Phase 1 (study)

2. Phase 2 (study)

3. Phase 3 (remediation)

### E. HISTORIC

1. Phase 1 (study)

2. Phase 2 (study)

3. Mitigation (by loc./env.)

4. Mitigation (by design)

### F. NOISE

1. Studies

2. Mitigation (by design)

### G. OTHER

1. \_\_\_\_\_

2. \_\_\_\_\_

### TOTAL COSTS FOR PART I (A thru G) ROUNDED

### CONTINGENCY COSTS

(normally 5% for large projects and 10% for small projects - to be approved by section head)

### TOTAL LOCATION AND ENVIRONMENTAL STUDIES COSTS

(also total for Construction Project Estimate form line 7a)

Estimator: Century Engineering, Inc. (ASH)

Date: 06/03/15

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part II of V

Contract No. \_\_\_\_\_

Project Title: Rt 10 Path, Gateway S. Shopping Center to US13 - P2

## PART II - PRELIMINARY ENGINEERING

### A. SURVEYS

\$40,000

1. Inhouse

\$40,000

2. Consultant

\_\_\_\_\_

### B. DESIGN ENGINEERING

\$335,000

1. Design

\$280,000

a. Inhouse

\_\_\_\_\_

b. Consultant

\$280,000

2. Traffic

\$25,000

a. Inhouse

\$25,000

b. Consultant

\_\_\_\_\_

3. Real Estate Plan Preparation

\$0

a. Inhouse

\_\_\_\_\_

b. Consultant

\_\_\_\_\_

4. Utilities

\$20,000

a. Inhouse

\_\_\_\_\_

b. Consultant

\_\_\_\_\_

c. Test Holes

\$20,000

d. Utility Company

\_\_\_\_\_

5. Materials & Research

\_\_\_\_\_

6. Borings

\$10,000

7. Pile Load Tests

\_\_\_\_\_

8. Subdivision

\$0

a. Inhouse

\_\_\_\_\_

b. Consultant

\_\_\_\_\_

c. Railroad P.E.

\_\_\_\_\_

9. Other (specify)

\$0

a. \_\_\_\_\_

\_\_\_\_\_

b. \_\_\_\_\_

\_\_\_\_\_

### C. ENVIRON. ASSESSMENT

\$5,000

(use for class "II" projects only)

1. Wetlands

\$0

2. Hazardous Materials

\_\_\_\_\_

3. Noise

\_\_\_\_\_

4. Historic

\_\_\_\_\_

5. Archaeology

\_\_\_\_\_

6. Other

a. CEE

\$5,000

b. Env. Permits

\_\_\_\_\_

Loc/Environ

Estimator: \_\_\_\_\_

Date: \_\_\_\_\_

### D. CONTRACT ADMINISTRATION

Cont/Admin

Estimator: \_\_\_\_\_

Date: \_\_\_\_\_

**TOTAL COSTS FOR PART II (A thru D) ROUNDED**

\$380,000

### CONTINGENCY COSTS

(normally 5% for large projects and 10% for small projects - to be approved by section head)

(% used)

\$0

### TOTAL PRELIMINARY ENGINEERING

(also total for Construction Project Estimate form line 7b)

\$380,000

Estimator: Century Engineering, Inc. (ASH)

Date: 06/03/15



**CAPITAL TRANSPORTATION PROJECT COST ESTIMATE**

(Current Dollars)

Part III of V

Contract No. \_\_\_\_\_

Project Title: Rt 10 Path, Gateway S. Shopping Center to US13 - P2**PART III - REAL ESTATE**

<b>A. REAL PROPERTY</b>	<u>\$60,000</u>	<b>C. ASBESTOS PROGRAM</b>	<u>\$0</u>
1. Total acquisitions	_____	1. Testing	_____
2. Partial acquisitions	_____	2. Abatement	_____
3. Permanent easements	<u>\$40,000</u>	<b>D. DEMOLITION</b>	_____
4. Temporary easements	<u>\$20,000</u>	<b>E. APPRAISAL FEES</b>	<u>\$20,000</u>
5. Wetland mitigation	_____	<b>F. STAFF</b>	<u>\$20,000</u>
Other (specify)	_____	<b>G. SETTLEMENT</b>	_____
6. _____	_____	<b>H. REAL ESTATE ENG.</b>	<u>\$0</u>
7. _____	_____	1. Consultant survey	_____
<b>B. RELOCATION</b>	<u>\$0</u>	2. As acquired plans	_____
1. Residential	_____	<b>I. CONDEMNATION</b>	_____
2. Business	_____	<b>J. OTHER (specify)</b>	<u>\$0</u>
Other (specify)	_____	1. _____	_____
3. _____	_____	2. _____	_____
4. _____	_____		

**TOTAL COSTS FOR PART III (A thru J) ROUNDED** \$100,000**CONTINGENCY COSTS** 0% \$0  
(normally 5% for large projects and 10% for small projects - to be approved by section head) (% used)**TOTAL REAL ESTATE COSTS** \$100,000  
(also total for Construction Project Estimate form line 7c)Estimator: Century Engineering, Inc. (ASH)Date: 06/03/15

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part IV-A of V

Contract No. \_\_\_\_\_

Project Title Rt 10 Path, Gateway S. Shopping Center to US13 - P2

## PART IV -CONSTRUCTION

### A. ROADWAY/APPROACH CONSTRUCTION

\$2,333,000

1. Grading
    - a. Excavation  
(includes SWM pond) \_\_\_\_\_
    - b. Borrow \_\_\_\_\_
  2. Drainage \_\_\_\_\_
  3. Pavement
    - a. Surface \_\_\_\_\_
    - b. Base \_\_\_\_\_
    - c. Subbase \_\_\_\_\_
  4. Erosion/Sed. Cont. \_\_\_\_\_
  5. Miscellaneous
    - a. Curb/Gutter \_\_\_\_\_
    - b. Sidewalk \_\_\_\_\_
    - c. Guardrail \_\_\_\_\_
    - d. C.P.M. Schedule \_\_\_\_\_
    - e. Clear/Grubb \_\_\_\_\_
    - f. Field Office \_\_\_\_\_
- Other (specify)  
g. Total Project Construction \$2,333,000
- h. \_\_\_\_\_
- i. \_\_\_\_\_
- j. \_\_\_\_\_
- k. \_\_\_\_\_
- l. \_\_\_\_\_
- m. \_\_\_\_\_

### B. STRUCTURE CONSTRUCTION

\$0

1. New Bridge
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/s.f. \_\_\_\_\_
2. Old Structure Rem.
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/c.y. \_\_\_\_\_
3. Retaining Wall
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/c.y. \_\_\_\_\_
4. Box Culvert
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/s.f. \_\_\_\_\_

### C. LANDSCAPING

\$0

1. Beautification \_\_\_\_\_
2. Noise Mitigation \_\_\_\_\_
3. Visual Mitigation \_\_\_\_\_
4. Tree Mitigation \_\_\_\_\_

### D. MAINTENANCE OF TRAFFIC

(refer to Capital Improvement Project form, Part IV - Continued)

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part IV-B of V

Contract No. \_\_\_\_\_

Project Title Rt 10 Path, Gateway S. Shopping Center to US13 - P2

## PART IV -CONSTRUCTION (CONTINUED)

**E. PROJECT TRAFFIC ITEMS** \$0

1. Signing Structures
  - a. Overhead Bridges \_\_\_\_\_
  - b. Cantilever Supports \_\_\_\_\_
2. Roadway Lighting \_\_\_\_\_
3. Pavement Markings \_\_\_\_\_  
Other (specify) \_\_\_\_\_
4. \_\_\_\_\_

**F. WETLAND MITIGATION** \_\_\_\_\_

**G. UTILITY RELOC. IN CONTRACT** \$0

1. Water \_\_\_\_\_
2. Sanitary Sewer \_\_\_\_\_  
Other (specify) \_\_\_\_\_
3. \_\_\_\_\_

**H. SUBTOTAL (A thru G) ROUNDED** \$2,333,000

**I. MISC. ITEMS** \$233,300

(15% of H for large projects and 20% for small)  
(At SF submission use 10% and 5%)

10%  
(% used)

**J. CONTRACTOR'S CONST. ENG.** \$116,650

(normally 5% of H) 5%  
(% used)

**K. INITIAL EXPENSE** \$116,650

(normally 5% of H) 5%  
(% used)

**L. CONSTRUCTION CONTINGENCY** \$233,300

(normally 10% of H) 10%  
(% used)

**M. TOTAL CONSTRUCTION COSTS (H thru L)**

(Enter on PNR funding line 5)

\$3,032,900

**N. CONSTRUCTION ENGINEERING (normally 15% of construction costs)**

(Enter on PNR funding line 4)

15% \$454,935  
(% used)

**O. TOTAL CONSTRUCTION COSTS (Construction Costs + Construction Engineering)**

(use this total + Q + P for Construction Project Estimate from line 7d)

\$3,487,835

Estimator: Century Engineering, Inc. (ASH)

Date: 6/3/2015

**P. REIMBURSABLE UTILITY** \$40,000

### RELOCATIONS BY OTHERS

(Enter on PNR funding line 7)

1. Water \_\_\_\_\_
2. Sanitary Sewer \_\_\_\_\_
3. Electric \_\_\_\_\_
4. Telephone \_\_\_\_\_
5. Gas \_\_\_\_\_
6. CATV \_\_\_\_\_  
Other (specify) \_\_\_\_\_
7. \_\_\_\_\_ \$40,000
8. \_\_\_\_\_

Utilities

Estimator:

Date:

**Q. TRAFFIC SECTION ITEMS** \$125,000

(Enter on PNR funding line 6)

1. Signing \$25,000
2. Signals \$100,000
3. Detour Signing \_\_\_\_\_
4. DelTrac \_\_\_\_\_  
Other (specify) \_\_\_\_\_
5. \_\_\_\_\_

Traffic

Estimator:

Date:

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part V of V

Contract No. \_\_\_\_\_

Project Title: Rt 10 Path, Gateway S. Shopping Center to US13 - P2

## SUMMARY

<b>PART I - LOCATION AND ENVIRONMENTAL STUDIES</b> (Part I to be included only for class "I" and "III" projects)	<u>\$0</u>
<b>PART II - PRELIMINARY ENGINEERING</b>	<u>\$380,000</u>
<b>PART III - REAL ESTATE</b>	<u>\$100,000</u>
<b>PART IV - CONSTRUCTION</b>	<u>\$3,652,835</u>
<b>TOTAL ESTIMATED PROJECT COSTS</b> (also total for Construction Project Estimate from line 7c)	<u>\$4,132,835</u>

\_\_\_\_\_  
Project Manager

Date: \_\_\_\_\_

## REVIEWED & CONCURRED IN:

\_\_\_\_\_  
Section Head

Date: \_\_\_\_\_

NOTE: Concurring section heads are to forward the original estimate copy to the Director of Transportation Solutions with one estimate copy each to the Assistant Director of Project Development, Assistant Director of Design Support, and the Cost Estimate Engineer.

# Route 10 Pathway, Gateway South Shopping Center to US13 (Phase 2)

## Conceptual Cost Estimate - July 2015

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$15,000.00	1	\$15,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$18.00	5,330	\$95,940.00
209002	BORROW, TYPE B	CY	\$30.00	140	\$4,200.00
209006	BORROW, TYPE F	CY	\$24.00	140	\$3,360.00
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	\$10,000.00	1	\$10,000.00
212000	UNDERCUT EXCAVATION	CY	\$18.00	270	\$4,860.00
302007	GRADED AGGREGATE BASE COURSE, TYPE B	CY	\$50.00	2,250	\$112,500.00
401821	SUPERPAVE BIT. CONCRETE, TYPE C, 160 GYRATIONS, PG64-22, PATCHING	TON	\$85.00	1,910	\$162,350.00
401822	SUPERPAVE BIT. CONCRETE, TYPE B, 160 GYRATIONS, PG64-22, PATCHING	TON	\$125.00	590	\$73,750.00
401823	SUPERPAVE BIT. CONCRETE BASE COURSE, 160 GYRATIONS, 64-22, PATCHING	TON	\$125.00	580	\$72,500.00
602615	MODULAR BLOCK RETAINING WALL	SF	\$50.00	4,320	\$216,000.00
612002	REINFORCED CONCRETE PIPE, 15", CLASS III	LF	\$40.00	4,890	\$195,600.00
612003	REINFORCED CONCRETE PIPE, 18", CLASS III	LF	\$50.00	60	\$3,000.00
701011	PORTLAND CEMENT CONCRETE CURB, TYPE 2	LF	\$22.00	840	\$18,480.00
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	LF	\$40.00	6,740	\$269,600.00
705002	P.C.C. SIDEWALK, 6"	SF	\$7.00	1,500	\$10,500.00
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	SF	\$30.00	1,700	\$51,000.00
708051	DRAINAGE INLET, 34" X 24"	EACH	\$2,000.00	30	\$60,000.00
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	\$800.00	4	\$3,200.00
737523	PLANTINGS	LS	\$25,000.00	1	\$25,000.00
743000	MAINTENANCE OF TRAFFIC	LS	\$50,000.00	1	\$50,000.00
743003	ARROWPANELS, TYPE C	EADY	\$30.00	9,120	\$273,600.00
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLEMESSAGE SIGN	EADY	\$75.00	30	\$2,250.00
743006	PLASTIC DRUMS	EADY	\$0.50	9,120	\$4,560.00
743007	TRAFFIC OFFICERS	HOURL	\$85.00	160	\$13,600.00
743009	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR,TYPE I	EADY	\$100.00	120	\$12,000.00
743023	TEMPORARY BARRICADES, TYPE III	LFDY	\$3.00	480	\$1,440.00
743024	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	\$2.60	1,200	\$3,120.00
743057	FLAGGER, KENT COUNTY, FEDERAL	HOURL	\$47.20	1,920	\$90,624.00
743066	FLAGGER, KENT COUNTY, FEDERAL, OVERTIME	HOURL	\$68.44	480	\$32,851.20
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	SF	\$8.00	4,168	\$33,344.00
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$3.50	1,000	\$3,500.00
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLESIGN POST	EACH	\$75.00	50	\$3,750.00
750000	ADJUST WATER VALVE BOXES	EACH	\$150.00	5	\$750.00
751000	ADJUST FIRE HYDRANTS	EACH	\$1,200.00	5	\$6,000.00
758000	REMOVAL OF EXISTING PORTLAND CEMENTCONCRETE PAVEMENT, CURB,SIDEWALK, ETC.	SY	\$15.00	2,110	\$31,650.00
760000	PAVEMENT - MILLING, HOT-MIX	SYIN	\$3.00	3,840	\$11,520.00
762001	SAW CUTTING, HOT MIX	LF	\$5.00	5,700	\$28,500.00
762002	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$6.00	70	\$420.00
905001	SILT FENCE	LF	\$3.00	12,460	\$37,380.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	60	\$9,000.00
908004	TOPSOIL, 6" DEPTH	SY	\$7.00	7,200	\$50,400.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$7.00	7,200	\$50,400.00
	PEDESTRIAN BRIDGE/RETAINING WALL	LS	\$175,000.00	1	\$175,000.00
	<b>Subtotal</b>				<b>\$2,333,000.00</b>
	CONTINGENCY FOR MISC. ITEMS	10%			\$233,300.00
763000	INITIAL EXPENSE	5%		1	\$116,650.00
763501	CONSTRUCTION ENGINEERING	5%		1	\$116,650.00
	CONSTRUCTION CONTINGENCY	10%			\$233,300.00
				<b>Subtotal</b>	<b>\$3,032,900.00</b>
	CONSTRUCTION ENGINEERING - 15% (INSPECTION, CCR, CE, ETC)				\$454,935.00
	<b>TOTAL BASE CONSTRUCTION COST</b>				<b>\$3,487,835.00</b>
	TRAFFIC SECTION ITEMS				\$125,000.00
	RIGHT-OF-WAY				\$100,000.00
	UTILITY RELOCATIONS				\$40,000.00
	PRELIMINARY ENGINEERING				\$380,000.00
	<b>TOTAL ESTIMATED PROJECT COST</b>				<b>\$4,132,835.00</b>

## CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

1. NAME OF PROJECT	<u>RT10 Path, Gateway S. Shopping Center to US13 - P3</u>	<u>Kent</u>
	Subdivision or Road Name	County

## 2. LIMITS

Street Name or Road Number	From	To	Length
SR 10 (K356)	S. State St. (K027)	US 13	5,780'

3. ESTIMATE REQUESTED BY:	<u>Jeff Niezgoda</u>	for (check one)	<input type="checkbox"/> Project initiation	
	Name		<input checked="" type="checkbox"/> Estimate only	Section or Legis. Dist.

## 4. DESCRIPTION OF IMPROVEMENT:

Construct a 10' wide multi-use path with 5' grass strip and curb from the South State Street on the westbound side of SR 10 to US 13. New drainage will be installed. No environmental permits are anticipated.

4. PROJECT IN C.I.P. Yes ☐ No ☒ If "Yes", indicate year F.Y. \_\_\_\_\_

## 5. TYPICAL SECTION

3" Superpave Bituminous Concrete, Type C + 8" GABC Type B

6. STATE MAINTAINED ☒ CITY MAINTAINED ☐ PRIVATE ☐ OTHER ☐ (specify) \_\_\_\_\_

7. COST ESTIMATE:	from C.I.P. estimate form	Estimate prepared by:	Date:
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a. Location and Environmental Studies	\$0	Part I	Century Engineering,	06/03/15
(Part I to be included only for class "I" and "III" projects)				

b. Preliminary Engineering	\$340,000	Part II	Century Engineering, Inc.	06/03/15
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c. Real Estate	\$100,000	Part III	Century Engineering, I	06/03/15
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d. Construction *	\$2,845,120	Part IV	Century Engineering, I	06/03/15
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e. TOTAL ESTIMATED PROJECT COST	\$3,285,120
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\* Includes Utilities, Traffic, and C.E.

APPROVED

Valid thru			
Date	Assistant Director, M&O/Transportation Solutions/Planning	Date	

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part I of V

Contract No. \_\_\_\_\_

Project Title: RT10 Path, Gateway S. Shopping Center to US13 - P3

## PART I - LOCATION & ENVIRONMENTAL STUDIES (N/A)

(Part I to be included only for class "I" & "III" projects)

### A. ENGINEERING

(Includes NEPA)

### B. ARCHAEOLOGY

1. Phase I (study)

2. Phase 2 (study)

3. Phase 3 (mitigation)

### C. WETLANDS

1. Delineation (study)

2. Permit preparation

3. Mitigation (design)

### D. HAZARDOUS MATERIAL

1. Phase 1 (study)

2. Phase 2 (study)

3. Phase 3 (remediation)

### E. HISTORIC

1. Phase 1 (study)

2. Phase 2 (study)

3. Mitigation (by loc./env.)

4. Mitigation (by design)

### F. NOISE

1. Studies

2. Mitigation (by design)

### G. OTHER

1. \_\_\_\_\_

2. \_\_\_\_\_

### TOTAL COSTS FOR PART I (A thru G) ROUNDED

### CONTINGENCY COSTS

(normally 5% for large projects and 10% for small projects - to be approved by section head)

### TOTAL LOCATION AND ENVIRONMENTAL STUDIES COSTS

(also total for Construction Project Estimate form line 7a)

Estimator: Century Engineering, Inc. (ASH)

Date: 06/03/15

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part II of V

Contract No. \_\_\_\_\_

Project Title: RT10 Path, Gateway S. Shopping Center to US13 - P3

## PART II - PRELIMINARY ENGINEERING

### A. SURVEYS

\$40,000

1. Inhouse

\$40,000

2. Consultant

\_\_\_\_\_

### B. DESIGN ENGINEERING

\$295,000

1. Design

\$250,000

a. Inhouse

\_\_\_\_\_

b. Consultant

\$250,000

2. Traffic

\$25,000

a. Inhouse

\$25,000

b. Consultant

\_\_\_\_\_

3. Real Estate Plan Preparation

\$0

a. Inhouse

\_\_\_\_\_

b. Consultant

\_\_\_\_\_

4. Utilities

\$20,000

a. Inhouse

\_\_\_\_\_

b. Consultant

\_\_\_\_\_

c. Test Holes

\$20,000

d. Utility Company

\_\_\_\_\_

5. Materials & Research

\_\_\_\_\_

6. Borings

\_\_\_\_\_

7. Pile Load Tests

\_\_\_\_\_

8. Subdivision

\$0

a. Inhouse

\_\_\_\_\_

b. Consultant

\_\_\_\_\_

c. Railroad P.E.

\_\_\_\_\_

9. Other (specify)

\$0

a. \_\_\_\_\_

\_\_\_\_\_

b. \_\_\_\_\_

\_\_\_\_\_

### C. ENVIRON. ASSESSMENT

\$5,000

(use for class "II" projects only)

1. Wetlands

\$0

2. Hazardous Materials

\_\_\_\_\_

3. Noise

\_\_\_\_\_

4. Historic

\_\_\_\_\_

5. Archaeology

\_\_\_\_\_

6. Other

a. CEE

\$5,000

b. Env. Permits

\_\_\_\_\_

Loc/Environ

Estimator: \_\_\_\_\_

Date: \_\_\_\_\_

### D. CONTRACT ADMINISTRATION

Cont/Admin

Estimator: \_\_\_\_\_

Date: \_\_\_\_\_

**TOTAL COSTS FOR PART II (A thru D) ROUNDED**

\$340,000

### CONTINGENCY COSTS

(normally 5% for large projects and 10% for small projects - to be approved by section head)

(% used)

\$0

### TOTAL PRELIMINARY ENGINEERING

(also total for Construction Project Estimate form line 7b)

\$340,000

Estimator: Century Engineering, Inc. (ASH)

Date: 06/03/15



# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part III of V

Contract No. \_\_\_\_\_

Project Title: RT10 Path, Gateway S. Shopping Center to US13 - P3

## PART III - REAL ESTATE

<b>A. REAL PROPERTY</b>	<u>\$60,000</u>	<b>C. ASBESTOS PROGRAM</b>	<u>\$0</u>
1. Total acquisitions	_____	1. Testing	_____
2. Partial acquisitions	_____	2. Abatement	_____
3. Permanent easements	<u>\$40,000</u>	<b>D. DEMOLITION</b>	_____
4. Temporary easements	<u>\$20,000</u>	<b>E. APPRAISAL FEES</b>	<u>\$20,000</u>
5. Wetland mitigation	_____	<b>F. STAFF</b>	<u>\$20,000</u>
Other (specify)	_____	<b>G. SETTLEMENT</b>	_____
6. _____	_____	<b>H. REAL ESTATE ENG.</b>	<u>\$0</u>
7. _____	_____	1. Consultant survey	_____
<b>B. RELOCATION</b>	<u>\$0</u>	2. As acquired plans	_____
1. Residential	_____	<b>I. CONDEMNATION</b>	_____
2. Business	_____	<b>J. OTHER (specify)</b>	<u>\$0</u>
Other (specify)	_____	1. _____	_____
3. _____	_____	2. _____	_____
4. _____	_____		

**TOTAL COSTS FOR PART III (A thru J) ROUNDED** \$100,000

**CONTINGENCY COSTS** 0% \$0  
(normally 5% for large projects and 10% for small projects - to be approved by section head) (% used)

**TOTAL REAL ESTATE COSTS** \$100,000  
(also total for Construction Project Estimate form line 7c)

Estimator: Century Engineering, Inc. (ASH)

Date: 06/03/15

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part IV-A of V

Contract No. \_\_\_\_\_

Project Title RT10 Path, Gateway S. Shopping Center to US13 - P3

## PART IV -CONSTRUCTION

### A. ROADWAY/APPROACH CONSTRUCTION

\$1,776,000

1. Grading
  - a. Excavation  
(includes SWM pond) \_\_\_\_\_
  - b. Borrow \_\_\_\_\_
2. Drainage \_\_\_\_\_
3. Pavement
  - a. Surface \_\_\_\_\_
  - b. Base \_\_\_\_\_
  - c. Subbase \_\_\_\_\_
4. Erosion/Sed. Cont. \_\_\_\_\_
5. Miscellaneous
  - a. Curb/Gutter \_\_\_\_\_
  - b. Sidewalk \_\_\_\_\_
  - c. Guardrail \_\_\_\_\_
  - d. C.P.M. Schedule \_\_\_\_\_
  - e. Clear/Grubb \_\_\_\_\_
  - f. Field Office \_\_\_\_\_
- Other (specify)
  - g. Total Project Construction \$1,776,000
  - h. \_\_\_\_\_
  - i. \_\_\_\_\_
  - j. \_\_\_\_\_
  - k. \_\_\_\_\_
  - l. \_\_\_\_\_
  - m. \_\_\_\_\_

### B. STRUCTURE CONSTRUCTION

\$0

1. New Bridge
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/s.f. \_\_\_\_\_
2. Old Structure Rem.
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/c.y. \_\_\_\_\_
3. Retaining Wall
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/c.y. \_\_\_\_\_
4. Box Culvert
  - a. Type \_\_\_\_\_
  - b. Size \_\_\_\_\_
  - c. \$/s.f. \_\_\_\_\_

### C. LANDSCAPING

\$0

1. Beautification \_\_\_\_\_
2. Noise Mitigation \_\_\_\_\_
3. Visual Mitigation \_\_\_\_\_
4. Tree Mitigation \_\_\_\_\_

### D. MAINTENANCE OF TRAFFIC

(refer to Capital Improvement Project form, Part IV - Continued)

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part IV-B of V

Contract No. \_\_\_\_\_

Project Title RT10 Path, Gateway S. Shopping Center to US13 - P3

## PART IV -CONSTRUCTION (CONTINUED)

**E. PROJECT TRAFFIC ITEMS** \$0

1. Signing Structures
  - a. Overhead Bridges \_\_\_\_\_
  - b. Cantilever Supports \_\_\_\_\_
2. Roadway Lighting \_\_\_\_\_
3. Pavement Markings \_\_\_\_\_  
Other (specify) \_\_\_\_\_
4. \_\_\_\_\_

**F. WETLAND MITIGATION** \_\_\_\_\_

**G. UTILITY RELOC. IN CONTRACT** \$0

1. Water \_\_\_\_\_
2. Sanitary Sewer \_\_\_\_\_  
Other (specify) \_\_\_\_\_
3. \_\_\_\_\_

**H. SUBTOTAL (A thru G) ROUNDED** \$1,776,000

**I. MISC. ITEMS** \$177,600

(15% of H for large projects and 20% for small)  
(At SF submission use 10% and 5%)

10%  
(% used)

**J. CONTRACTOR'S CONST. ENG.** \$88,800

(normally 5% of H) 5%  
(% used)

**K. INITIAL EXPENSE** \$88,800

(normally 5% of H) 5%  
(% used)

**L. CONSTRUCTION CONTINGENCY** \$177,600

(normally 10% of H) 10%  
(% used)

**M. TOTAL CONSTRUCTION COSTS (H thru L)**

(Enter on PNR funding line 5)

\$2,308,800

**N. CONSTRUCTION ENGINEERING (normally 15% of construction costs)**

(Enter on PNR funding line 4)

15% \$346,320  
(% used)

**O. TOTAL CONSTRUCTION COSTS (Construction Costs + Construction Engineering)**

(use this total + Q + P for Construction Project Estimate from line 7d)

\$2,655,120

Estimator: Century Engineering, Inc. (ASH)

Date: 6/3/2015

**P. REIMBURSABLE UTILITY** \$40,000

### RELOCATIONS BY OTHERS

(Enter on PNR funding line 7)

1. Water \_\_\_\_\_
2. Sanitary Sewer \_\_\_\_\_
3. Electric \_\_\_\_\_
4. Telephone \_\_\_\_\_
5. Gas \_\_\_\_\_
6. CATV \_\_\_\_\_  
Other (specify) \_\_\_\_\_
7. \_\_\_\_\_ \$40,000
8. \_\_\_\_\_

Utilities

Estimator:

Date:

**Q. TRAFFIC SECTION ITEMS** \$150,000

(Enter on PNR funding line 6)

1. Signing \$25,000
2. Signals \$125,000
3. Detour Signing \_\_\_\_\_
4. DelTrac \_\_\_\_\_  
Other (specify) \_\_\_\_\_
5. \_\_\_\_\_

Traffic

Estimator:

Date:

# CAPITAL TRANSPORTATION PROJECT COST ESTIMATE

(Current Dollars)

Part V of V

Contract No. \_\_\_\_\_

Project Title: RT10 Path, Gateway S. Shopping Center to US13 - P3

## SUMMARY

**PART I - LOCATION AND ENVIRONMENTAL STUDIES** \$0

(Part I to be included only for class "I" and "III" projects)

**PART II - PRELIMINARY ENGINEERING** \$340,000

**PART III - REAL ESTATE** \$100,000

**PART IV - CONSTRUCTION** \$2,845,120

**TOTAL ESTIMATED PROJECT COSTS** \$3,285,120

(also total for Construction Project Estimate from line 7c)

\_\_\_\_\_  
Project Manager

Date: \_\_\_\_\_

## REVIEWED & CONCURRED IN:

\_\_\_\_\_  
Section Head

Date: \_\_\_\_\_

NOTE: Concurring section heads are to forward the original estimate copy to the Director of Transportation Solutions with one estimate copy each to the Assistant Director of Project Development, Assistant Director of Design Support, and the Cost Estimate Engineer.

**Route 10 Pathway, Gateway South Shopping Center to US13 (Phase 3)**  
**Conceptual Cost Estimate - July 2015**

ITEM #	TITLE	UNIT	ESTIMATE COST	UNIT QUANTITY	TOTAL
201000	CLEARING AND GRUBBING	LS	\$10,000.00	1	\$10,000.00
202000	EXCAVATION AND EMBANKMENT	CY	\$18.00	5,270	\$94,860.00
209002	BORROW, TYPE B	CY	\$30.00	140	\$4,200.00
209006	BORROW, TYPE F	CY	\$24.00	140	\$3,360.00
211000	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	LS	\$10,000.00	1	\$10,000.00
212000	UNDERCUT EXCAVATION	CY	\$18.00	270	\$4,860.00
302007	GRADED AGGREGATE BASE COURSE, TYPE B	CY	\$50.00	2,530	\$126,500.00
401821	SUPERPAVE BIT. CONCRETE, TYPE C, 160 GYRATIONS, PG64-22, PATCHING	TON	\$85.00	1,580	\$134,300.00
401822	SUPERPAVE BIT. CONCRETE, TYPE B, 160 GYRATIONS, PG64-22, PATCHING	TON	\$125.00	510	\$63,750.00
401823	SUPERPAVE BIT. CONCRETE BASE COURSE, 160 GYRATIONS, 64-22, PATCHING	TON	\$125.00	500	\$62,500.00
602615	MODULAR BLOCK RETAINING WALL	SF	\$50.00	5,880	\$294,000.00
612002	REINFORCED CONCRETE PIPE, 15", CLASS III	LF	\$40.00	4,740	\$189,600.00
612003	REINFORCED CONCRETE PIPE, 18", CLASS III	LF	\$50.00	60	\$3,000.00
701022	INTEGRAL PORTLAND CEMENT CONCRETE CURB & GUTTER, TYPE 3-8	LF	\$40.00	6,520	\$260,800.00
705002	P.C.C. SIDEWALK, 6"	SF	\$7.00	3,750	\$26,250.00
705007	SIDEWALK SURFACE DETECTABLE WARNING SYSTEM	SF	\$30.00	700	\$21,000.00
708051	DRAINAGE INLET, 34" X 24"	EACH	\$2,000.00	30	\$60,000.00
710001	ADJUSTING AND REPAIRING EXISTING DRAINAGE INLET	EACH	\$800.00	8	\$6,400.00
737523	PLANTINGS	LS	\$35,000.00	1	\$35,000.00
743000	MAINTENANCE OF TRAFFIC	LS	\$50,000.00	1	\$50,000.00
743003	ARROWPANELS, TYPE C	EADY	\$30.00	240	\$7,200.00
743004	FURNISH AND MAINTAIN PORTABLE CHANGEABLEMESSAGE SIGN	EADY	\$75.00	30	\$2,250.00
743006	PLASTIC DRUMS	EADY	\$0.50	9,120	\$4,560.00
743007	TRAFFIC OFFICERS	HOURL	\$85.00	160	\$13,600.00
743009	FURNISH AND MAINTAIN TRUCK MOUNTED ATTENUATOR,TYPE I	EADY	\$100.00	120	\$12,000.00
743024	TEMPORARY WARNING SIGNS AND PLAQUES	EADY	\$2.60	1,200	\$3,120.00
743057	FLAGGER, KENT COUNTY, FEDERAL	HOURL	\$47.20	1,920	\$90,624.00
743066	FLAGGER, KENT COUNTY, FEDERAL, OVERTIME	HOURL	\$68.44	480	\$32,851.20
748015	PERMANENT PAVEMENT STRIPING, SYMBOL/LEGEND ALKYD-THERMOPLASTIC	SF	\$8.00	1,364	\$10,912.00
748548	PERMANENT PAVEMENT STRIPING, EPOXY RESIN PAINT, WHITE/YELLOW, 5"	LF	\$3.50	3,000	\$10,500.00
749687	INSTALLATION OR REMOVAL OF TRAFFIC SIGN(S) ON SINGLESIGN POST	EACH	\$75.00	50	\$3,750.00
750000	ADJUST WATER VALVE BOXES	EACH	\$150.00	5	\$750.00
758000	REMOVAL OF EXISTING PORTLAND CEMENTCONCRETE PAVEMENT, CURB,SIDEWALK, ETC.	SY	\$15.00	90	\$1,350.00
760000	PAVEMENT - MILLING, HOT-MIX	SYIN	\$3.00	1,250	\$3,750.00
762001	SAW CUTTING, HOT MIX	LF	\$5.00	5,520	\$27,600.00
762002	SAW CUTTING, CONCRETE, FULL DEPTH	LF	\$6.00	30	\$180.00
905001	SILT FENCE	LF	\$3.00	10,200	\$30,600.00
905004	INLET SEDIMENT CONTROL, DRAINAGE INLET	EACH	\$150.00	80	\$12,000.00
908004	TOPSOIL, 6" DEPTH	SY	\$7.00	5,970	\$41,790.00
908014	PERMANENT GRASS SEEDING, DRY GROUND	SY	\$1.00	5,970	\$5,970.00
	<b>Subtotal</b>				<b>\$1,776,000.00</b>
	CONTINGENCY FOR MISC. ITEMS	10%			\$177,600.00
763000	INITIAL EXPENSE	5%		1	\$88,800.00
763501	CONSTRUCTION ENGINEERING	5%		1	\$88,800.00
	CONSTRUCTION CONTINGENCY	10%			\$177,600.00
				<b>Subtotal</b>	<b>\$2,308,800.00</b>
	CONSTRUCTION ENGINEERING - 15% (INSPECTION, CCR, CE, ETC)				\$346,320.00
	<b>TOTAL BASE CONSTRUCTION COST</b>				<b>\$2,655,120.00</b>
	TRAFFIC SECTION ITEMS				\$150,000.00
	RIGHT-OF-WAY				\$100,000.00
	UTILITY RELOCATIONS				\$40,000.00
	PRELIMINARY ENGINEERING				\$340,000.00
	<b>TOTAL ESTIMATED PROJECT COST</b>				<b>\$3,285,120.00</b>

# Facilities Map





- ### Proposed Improvements
- 1 CAPITAL CITY TRAIL
  - 2 ROUTE 10 TRAIL
  - 3 LOOCKERMAN STREET
  - 4 WEST DOVER CONNECTOR
  - 5 GOVERNORS AVENUE

### Legend

Type

- Existing Trail
- Trail Construction Scheduled
- Existing Bike Lanes
- Bike Shared Use Markings
- Completed Study
- Under Study



# DART Bus Routes Map





# Historic Documents







Form 10-300  
(July 1967)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: Delaware	
COUNTY: Kent	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

1. NAME	
COMMON: Great Geneva	
AND/OR HISTORIC:	

2. LOCATION			
STREET AND NUMBER: R.D.1, Box 401 (Del. Rt. 356)			
CITY OR TOWN: Dover			
STATE: Delaware	CODE: 10	COUNTY: Kent	CODE: 001

3. CLASSIFICATION			
CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Site <input type="checkbox"/> Object	<input type="checkbox"/> Public <input checked="" type="checkbox"/> Private <input type="checkbox"/> Both	<input checked="" type="checkbox"/> Occupied <input type="checkbox"/> Unoccupied <input type="checkbox"/> Preservation work in progress	Yes: <input checked="" type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input type="checkbox"/> No
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input type="checkbox"/> Museum	<input type="checkbox"/> Park <input checked="" type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input type="checkbox"/> Transportation <input type="checkbox"/> Other (Specify) _____ _____ _____

4. OWNER OF PROPERTY	
OWNER'S NAME: Don and Ruth H. Concilio	
STREET AND NUMBER: R.D.1, Box 401	
CITY OR TOWN: Dover	STATE: Delaware
	CODE: 10

5. LOCATION OF LEGAL DESCRIPTION	
COURTHOUSE, REGISTRY OF DEEDS, ETC. Kent County Courthouse	
STREET AND NUMBER: The Green	
CITY OR TOWN: Dover	STATE: Delaware
	CODE: 10

6. REPRESENTATION IN EXISTING SURVEYS	
TITLE OF SURVEY: Historic American Buildings Survey, No. Del-139	
DATE OF SURVEY: 1960	
<input checked="" type="checkbox"/> Federal <input type="checkbox"/> State <input type="checkbox"/> County <input type="checkbox"/> Local	
DEPOSITORY FOR SURVEY RECORDS: Library of Congress	
STREET AND NUMBER: Washington, D.C.	
CITY OR TOWN: Washington, D.C.	STATE: D.C.
	CODE: 001

SEE INSTRUCTIONS

STATE:

COUNTY:

FOR NPS USE ONLY  
ENTRY NUMBER  
DATE

7. DESCRIPTION	
CONDITION	(Check One)
	<input checked="" type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Deteriorated <input type="checkbox"/> Ruins <input type="checkbox"/> Unexposed
	<div style="display: flex; justify-content: space-between;"> <div>           (Check One)  <input checked="" type="checkbox"/> Altered    <input type="checkbox"/> Unaltered         </div> <div>           (Check One)  <input type="checkbox"/> Moved    <input checked="" type="checkbox"/> Original Site         </div> </div>
DESCRIBE THE PRESENT AND ORIGINAL (If known) PHYSICAL APPEARANCE	
<p>Located north of the Tidbury Branch of St. Jones River, Great Geneva is a two-story-and-attic brick structure constructed on a hall and parlor plan. The house has a north frontage, laid in Flemish bond. Detailing includes a box cornice, keyed lintels, and a rectangular transom over the center entry.</p> <p>The rear wall is laid in English bond. Two of the three south bays are occupied by doorways, one of which formerly communicated to a rear kitchen. This wing has been replaced by a newer one attached to the west gable wall.</p> <p>The west gable wall is laid in Flemish bond with glazed headers. The east gable has been stuccoed. It is further obscured by another recent addition containing bathrooms.</p> <p>Very little original detailing remains on the first floor of the interior. The crown moulding, chair railing, paneled end walls, and cupboards have been added by the present owners. In addition, modern kitchen facilities occupy the southeast room, which was formed by adding a partition wall to the east fireplace breast.</p> <p>The second floor has fared somewhat better. The west bed chamber contains an original paneled end wall, chair railing, and cornice. The east chamber contains portions of original detailing. The second floor has been rather curiously divided into four separate spaces. To the south are the two bed chambers; to the north are a hallway and anteroom.</p> <p>The basement, contained by brick foundation walls laid in English bond, contains three fireplaces spanned by segmental brick arches. The</p>	

SEE INSTRUCTIONS

Form 10-200a  
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY - NOMINATION FORM

(Continuation Sheet)

STATE	Delaware
COUNTY	Kent
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

7. DESCRIPTION (continued)---

water table occurs on the interior, decreasing the wall thickness by one brick course between the basement and first floor. The wall thickness again decreases between the first and second floor.



SEE INSTRUCTIONS

SIGNIFICANCE			
PERIOD (Check One or More as Appropriate)			
<input type="checkbox"/> Pre-Columbian	<input type="checkbox"/> 16th Century	<input checked="" type="checkbox"/> 18th Century	<input type="checkbox"/> 20th Century
<input type="checkbox"/> 15th Century	<input type="checkbox"/> 17th Century	<input type="checkbox"/> 19th Century	
SPECIFIC DATE(S) (If Applicable and Known)			
AREAS OF SIGNIFICANCE (Check One or More as Appropriate)			
<input type="checkbox"/> Aboriginal	<input type="checkbox"/> Education	<input type="checkbox"/> Political	<input type="checkbox"/> Urban Planning
<input type="checkbox"/> Prehistoric	<input type="checkbox"/> Engineering	<input type="checkbox"/> Religion/Philosophy	<input type="checkbox"/> Other (Specify)
<input type="checkbox"/> Historic	<input type="checkbox"/> Industry	<input type="checkbox"/> Science	
<input type="checkbox"/> Agriculture	<input type="checkbox"/> Invention	<input type="checkbox"/> Sculpture	
<input checked="" type="checkbox"/> Architecture	<input type="checkbox"/> Landscape Architecture	<input checked="" type="checkbox"/> Social/Humanitarian	
<input type="checkbox"/> Art	<input type="checkbox"/> Literature	<input type="checkbox"/> Theater	
<input type="checkbox"/> Commerce	<input type="checkbox"/> Military	<input type="checkbox"/> Transportation	
<input type="checkbox"/> Communications	<input type="checkbox"/> Music		
<input type="checkbox"/> Conservation			
STATEMENT OF SIGNIFICANCE			
<p>Great Geneva was intimately connected with the growth of the community of Friends near Camden, and with the fortunes of the Hunn family:</p> <p>The Hunns in Delaware are descended from a certain Nathaniel Hunn of Boston. After he died in King Philip's War, his wife, Priscilla, remarried and moved to Kent County, bringing her young children with her.</p> <p>Jonathan Hunn, the great-grandson of Priscilla Hunn, purchased the tract called Great Geneva before 1765, and probably built his house about the same time. The tract had first been surveyed to Alexander Humphreys in 1683, and passed through several hands before the middle of the eighteenth century. Adjacent to the Great Geneva property is Brecknock, from which Daniel Mifflin took a portion in 1783 to lay out Piccadilly, the present-day Camden, a center for the Society of Friends in Delaware.</p> <p>Sons, grandsons, and great-grandsons of the house's builder lived at Great Geneva, and continued their activities as Friends, and, during the nineteenth century, as abolitionists. Both Ezekiel and John, grandsons of Jonathan, were ardent foes of slavery. The latter was a friend of abolitionist Thomas Garrett. On his deathbed, John</p>			

Form 10-300a  
(July 1969)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
**NATIONAL REGISTER OF HISTORIC PLACES  
INVENTORY - NOMINATION FORM**

(Continuation Sheet)

STATE Delaware	
COUNTY Kent	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

(Number all entries)

8. SIGNIFICANCE (continued)---

is said to have told his son about a diary revealing the story of the Underground Railroad in Delaware. He exacted a promise that it be destroyed. As the son left the sick bed, the father asked, "Son, thee meant to copy that diary before thee destroyed it, is it not so?" The father requested again that the diary be burned. His son, another John, became Delaware's governor between 1901 and 1905.

Another John Hunn, not so closely connected to Great Geneva, although he may have been born there,

trained for the sea, and commanded the privateer SECURITY in Delaware Bay, during the Revolution.

Through him, the Hunns are connected to another prominent Delaware family; his daughter married Caesar Augustus Rodney, nephew of Caesar Rodney.



# 9. MAJOR BIBLIOGRAPHICAL REFERENCES

Hunn, Ezekiel. "Genealogy of the Hunn Family."  
 MacDonald, Betty Harrington. Historic Landmarks of Delaware and the Eastern Shore. Delaware State Society, Daughters of the American Colonists, 1963.  
 Massey, George Valentine II. "Priscilla Kitchen, Quakeress of Salem, Mass., and Kent Co., Del., and Her Family." New England Historical and Genealogical Register. CVI (January, 1952)  
 Conrad, Henry C. History of the State of Delaware. 3 vols. Wilmington, Delaware: By the Author, 1908.

# 10. GEOGRAPHICAL DATA

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees Minutes Seconds	Degrees	Minutes Seconds
NW	0 0 0	0 0 0		37° 07' 03"	75°	30' 32"
NE	0 0 0	0 0 0				
SE	0 0 0	0 0 0				
SW	0 0 0	0 0 0				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: One

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE
STATE:	CODE	COUNTY:	CODE

# 11. FORM PREPARED BY

NAME AND TITLE:

Mr. Vincent Rogers and Miss Rosemary Troy

ORGANIZATION

Division of Historical and Cultural Affairs

DATE

8/23/72

STREET AND NUMBER:

Hall of Records

CITY OR TOWN:

Dover

STATE

Delaware

CODE

10

# 12. STATE LIAISON OFFICER CERTIFICATION

# NATIONAL REGISTER VERIFICATION

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National ☐ State ☒ Local ☐

Name

Dr. E. Berkeley Tompkins

Title

Director, Div. of Historical and Cultural Affairs

Date

I hereby certify that this property is included in the National Register.

Chief, Office of Archeology and Historic Preservation

Date

ATTEST:

Keeper of The National Register

Date

SEE INSTRUCTIONS

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
PROPERTY PHOTOGRAPH FORM

(Type all entries - attach in or enclose with photograph)

STATE Delaware	
COUNTY Kent	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME			
COMMON: Great Geneva			
AND/OR HISTORIC:			
2. LOCATION			
STREET AND NUMBER:			
R.D. 1, Box 401 (Delaware Route 356)			
CITY OR TOWN:			
Dover			
STATE:	CODE	COUNTY:	CODE
Delaware	10	Kent	001
3. PHOTO REFERENCE			
PHOTO CREDIT: Graydon Wood			
DATE OF PHOTO: August 1972			
NEGATIVE FILED AT:			
Historic Registrar's Office, Hall of Records, Dover, Delaware			
4. IDENTIFICATION			
DESCRIBE VIEW, DIRECTION, ETC.			
Front view from the northeast.			





UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

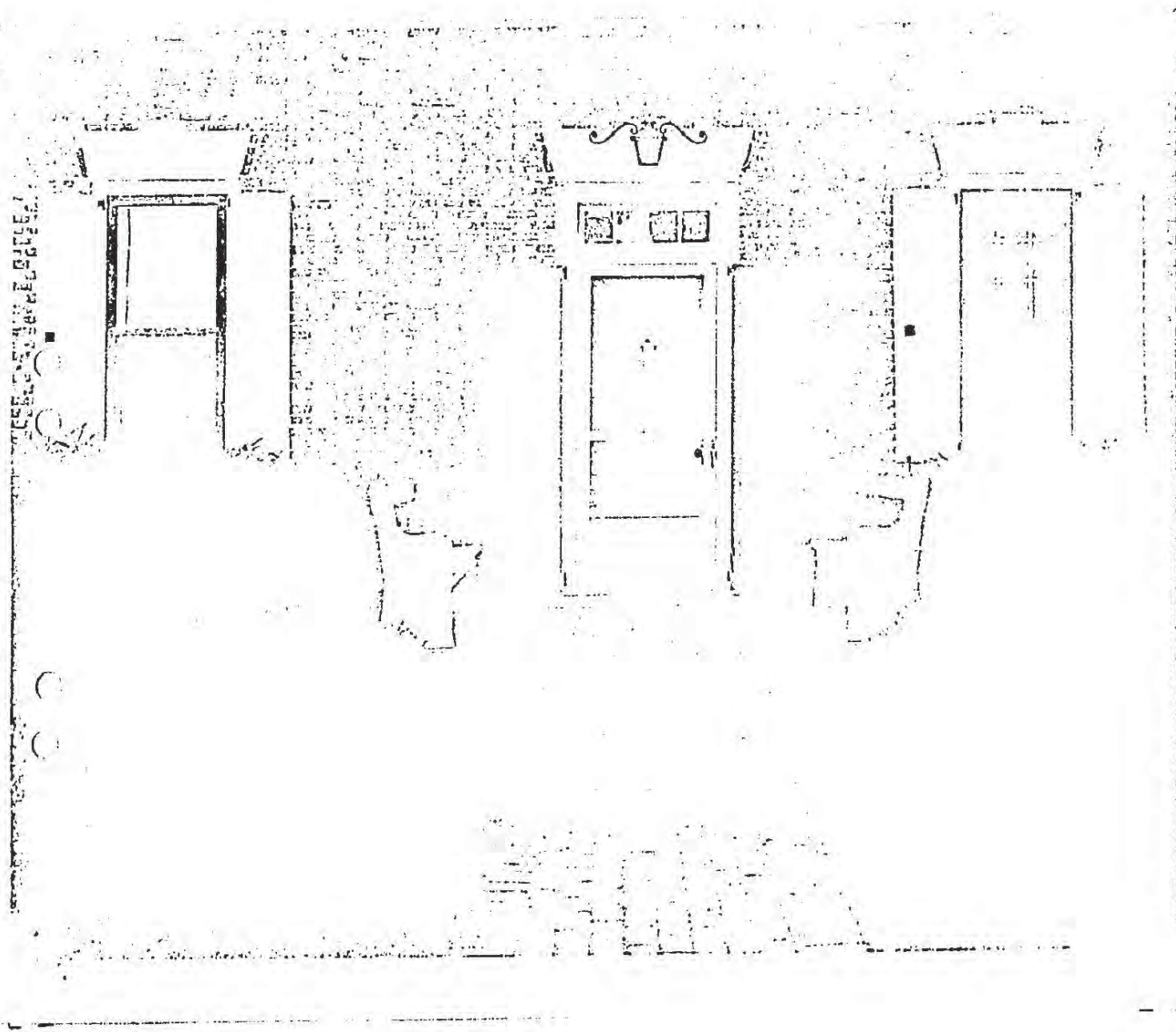
NATIONAL REGISTER OF HISTORIC PLACES  
PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

STATE Delaware	
COUNTY Kent	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

1. NAME			
COMMON: Great Geneva			
AND/OR HISTORIC:			
2. LOCATION			
STREET AND NUMBER:			
R.D.1, Box 401 (Delaware Route 356)			
CITY OR TOWN:			
Dover			
STATE:	CODE	COUNTY	CODE
Delaware	10	Kent	001
3. PHOTO REFERENCE			
PHOTO CREDIT: Graydon Wood			
DATE OF PHOTO: August 1972			
NEGATIVE FILED AT:			
Historic Registrar's Office, Hall of Records, Dover, Delaware			
4. IDENTIFICATION			
DESCRIBE VIEW, DIRECTION, ETC.			
Detail of front door.			



UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

**NATIONAL REGISTER OF HISTORIC PLACES**  
**PROPERTY PHOTOGRAPH FORM**

(Type all entries - attach to or enclose with photograph)

STATE <b>Delaware</b>	
COUNTY <b>Kent</b>	
FOR NPS USE ONLY	
ENTRY NUMBER	DATE

SEE INSTRUCTIONS

<b>1. NAME</b>			
COMMON: <b>Great Geneva</b>			
AND/OR HISTORIC:			
<b>2. LOCATION</b>			
STREET AND NUMBER:			
<b>R.D.1, Box 401 (Delaware Route 356)</b>			
CITY OR TOWN:			
<b>Dover</b>			
STATE:	CODE	COUNTY:	CODE
<b>Delaware</b>	<b>10</b>	<b>Kent</b>	<b>001</b>
<b>3. PHOTO REFERENCE</b>			
PHOTO CREDIT: <b>Graydon Wood</b>			
DATE OF PHOTO: <b>August 1972</b>			
NEGATIVE FILED AT:			
<b>Historic Registrar's Office, Hall of Records, Dover, Delaware</b>			
<b>4. IDENTIFICATION</b>			
DESCRIBE VIEW, DIRECTION, ETC.			
<b>Rear view from the south.</b>			





RECEIVED APR 5 1973

ENTRIES IN THE NATIONAL REGISTER

STATE DELAWARE

Date Entered MAR 26 1973

	<u>Name</u>	<u>Location</u>
map # 24	Great Geneva	Dover vicinity Kent County
map # 44	Liston House	Taylor's Bridge vicinity New Castle County

COPY OF CONGRESSIONAL NOMINATION

Also Notified

Hon. J.R. Biden  
Hon. William V. Roth, Jr.  
Hon. Pierre S. du Pont, IV







CULTURAL RESOURCE SURVEY  
LOCUS IDENTIFICATION FORM

DELAWARE BUREAU OF  
ARCHAEOLOGY AND HISTORIC  
PRESERVATION  
HALL OF RECORDS  
DOVER, DELAWARE 19901  
(302) 736 - 5685



FORM CRS-3

FOR OFFICE USE ONLY

CRS # : K-3345  
Quad Wyoming  
SPO map # 10-11-20  
Hundred North Murderkill  
DOCUMENT 20-06/78/04/7

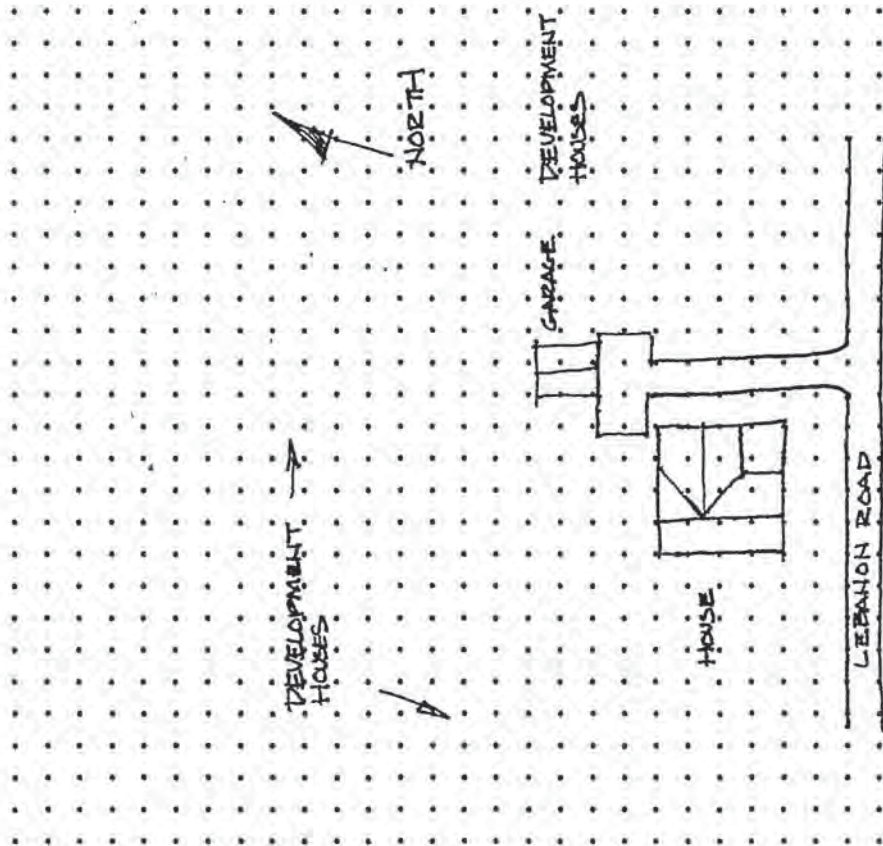
Update

1. NAME OF LOCUS: Hse, Rt 10
2. STREET LOCATION: 515 Lebanon Rd. (Rt. 10, N. side, east of Jct. 13)
3. OWNER'S NAME: \_\_\_\_\_ TEL. # \_\_\_\_\_  
ADDRESS: \_\_\_\_\_
4. TYPE OF LOCUS: a) structure ☒ b) district \_\_\_\_\_ c) archaeological site \_\_\_\_\_  
d) other \_\_\_\_\_
5. SURROUNDINGS OF LOCUS: (check more than one if necessary)  
a) fallow field \_\_\_\_\_ b) cultivated field \_\_\_\_\_ c) woodland \_\_\_\_\_  
d) scattered buildings \_\_\_\_\_ e) densely built up ☒ f) other \_\_\_\_\_
6. THREATS TO LOCUS: (check more than one if necessary)  
a) none known \_\_\_\_\_ b) zoning \_\_\_\_\_ c) roads \_\_\_\_\_ d) developers ☒  
e) deterioration \_\_\_\_\_ f) other \_\_\_\_\_
7. REPRESENTATION ON OTHER SURVEYS:  
TITLE: \_\_\_\_\_ # \_\_\_\_\_  
TITLE: \_\_\_\_\_ # \_\_\_\_\_  
TITLE: \_\_\_\_\_ # \_\_\_\_\_
8. YOUR NAME: Carol A. Benenson/Mark A. Bower TEL. # 215-561-1050  
YOUR ADDRESS: 1316 Arch Street, Philadelphia, PA 19107  
ORGANIZATION (if any) KKFS, Inc. DATE: July 1986

USE BLACK INK ONLY

# 8. SKETCH MAP

Please indicate position of locus in relation to geographical landmarks such as streams and roads.



INDICATE NORTH ON SKETCH

USE BLACK INK ONLY

# 9. COMMENTS:

Consider the following:

- relationship to setting
- associated traditions or stories
- noteworthy features
- comparison with others in area

This house, now closely sited to Route 10, is a rare and good example of the Eastlake-inspired Neo-Grec style in the area. The massive sweep of the low hanging roof also suggests the influence of the late-19th century Shingle Style which is not commonly found in this area.

# 10. Comprehensive Planning:

- Time Period(s) 1880-1940
- Cultural Concept Landscape

# 11. Evaluation:

- Settlement & Development
- Cultural Historic & Ethnic Issues
- ☒ Built Environment
- Material Culture
- not eligible

Survey: Name/Title Benenson/Bower  
BAHP: Name/Title

Date July 1986  
Date



CULTURAL RESOURCE SURVEY  
STRUCTURAL DATA FORM

DELAWARE BUREAU OF  
ARCHAEOLOGY AND HISTORIC  
PRESERVATION  
HALL OF RECORDS  
DOVER, DELAWARE 19901  
(302) 736 - 5685



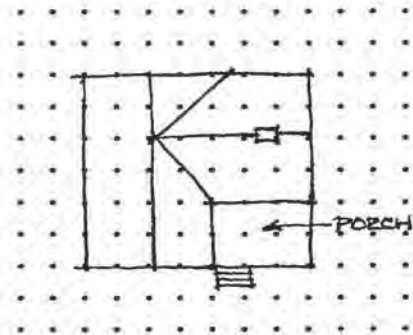
Form CRS-1  
FOR OFFICE USE ONLY

CRS # K-3345  
Quad Wyoming  
SPO map # 10-11-20  
Hundred North Murderkill  
DOCUMENT 20-06/78/08/14

1. ADDRESS OF STRUCTURE : 515 Lebanon Rd. (Rt. 10, N. side, east of Jct. 13)

2. DESCRIBE THE STRUCTURE AS COMPLETELY AS POSSIBLE:

- a) Overall shape square  
stories 2  
bays 3  
wings
- b) Structural system frame
- c) Foundation  
materials brick  
basement yes
- d) Exterior walls  
materials clapboarding  
color(s) blue, ivory trim
- e) Roof  
shape; materials gabled, asphalt  
cornice overhang w/ scrolled brackets  
dormers no  
chimney location(s) ridge line
- f) Windows  
spacing regular  
type single and paired 9/1 d.h.  
trim simple wood surrounds; shed pents supported by brackets over  
shutters none windows of main elevation
- g) Door  
spacing off center  
type single-leaf 6-panel, grooved field, chamfered rails and stiles.  
trim simple wood surrounds original doorbell pull.
- h) Porches  
location(s) front  
materials wood, side area shingled  
supports Neo-Grec chamfered post w/incised bands and dots.  
trim steep overhang
- i) Interior details (if accessible)



SKETCH PLAN

USE BLACK INK ONLY

3. CONDITION:           good     X                       deteriorated

remarks:

4. INTEGRITY: a) original site \_\_\_\_\_ b) moved x  
c) if moved, when and from where c. 1926 from further back in field  
d) list major alterations and dates (if known)

5. DATE OF INITIAL CONSTRUCTION: c. 1890

6. ARCHITECT/BUILDER:

7. RELATED OUTBUILDINGS:

a) barn \_\_\_\_\_ b) carriage house \_\_\_\_\_ c) garage x d) privy \_\_\_\_\_  
e) shed \_\_\_\_\_ f) greenhouse \_\_\_\_\_ g) shop \_\_\_\_\_ h) gardens \_\_\_\_\_  
i) icehouse \_\_\_\_\_ j) springhouse \_\_\_\_\_ k) other \_\_\_\_\_

describe: vertical wook siding, gabled roof

8. BRIEFLY DISCUSS THE ORIGINAL AND SUBSEQUENT USES OF THE STRUCTURE. NOTE ANY ASSOCIATIONS WITH HISTORIC EVENTS OR PERSONS:

The house was built in the late 19th century as a single family dwelling and continues to be used as such.

9. Primary References: (include location of reference).

Cultural Resource Survey Form, 1981, Filed with the Delaware BAHP, Dover, DE.

10. Surveyor: Benenson/Bower - KKFS, Inc. Date of Form: July 1986

USE BLACK INK ONLY







CULTURAL RESOURCE SURVEY  
LOCUS IDENTIFICATION FORM

DELAWARE BUREAU OF  
ARCHAEOLOGY AND HISTORIC  
PRESERVATION  
HALL OF RECORDS  
DOVER, DELAWARE 19901  
(302) 736 - 5685



FORM CRS-3

FOR OFFICE USE ONLY

CRS # K-3772  
Quad Wyoming  
SPO map # 10-11-22  
Hundred East Dover  
DOCUMENT 20-06/78/04/7

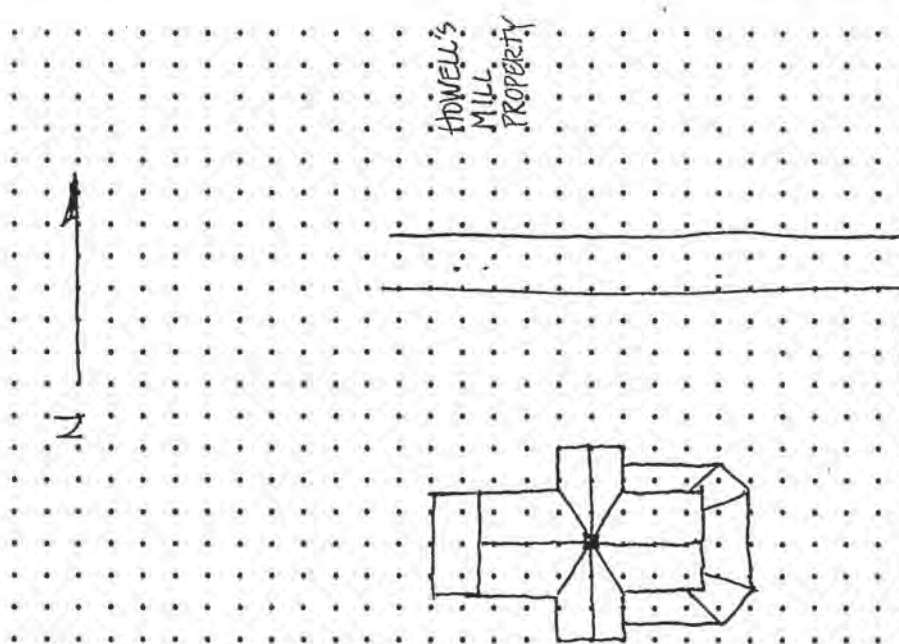
1. NAME OF LOCUS: S. J. Speal Residence (Hsc Rt 13A)
2. STREET LOCATION: 108 Old Camden Road
3. OWNER'S NAME: \_\_\_\_\_ TEL. # \_\_\_\_\_  
ADDRESS: \_\_\_\_\_
4. TYPE OF LOCUS: a) structure ☒ b) district \_\_\_\_\_ c) archaeological site \_\_\_\_\_  
d) other \_\_\_\_\_
5. SURROUNDINGS OF LOCUS: (check more than one if necessary)  
a) fallow field \_\_\_\_\_ b) cultivated field ☒ c) woodland \_\_\_\_\_  
d) scattered buildings ☒ e) densely built up \_\_\_\_\_ f) other \_\_\_\_\_
6. THREATS TO LOCUS: (check more than one if necessary)  
a) none known ☒ b) zoning \_\_\_\_\_ c) roads \_\_\_\_\_ d) developers \_\_\_\_\_  
e) deterioration \_\_\_\_\_ f) other \_\_\_\_\_
7. REPRESENTATION ON OTHER SURVEYS:  
TITLE: Delaware Bureau of Archaeology and Historic Preservation # \_\_\_\_\_  
TITLE: \_\_\_\_\_ # \_\_\_\_\_  
TITLE: \_\_\_\_\_ # \_\_\_\_\_
8. YOUR NAME: Carol A. Benenson/Mark A. Bower TEL. # 215-561-1050  
YOUR ADDRESS: 1316 Arch Street, Philadelphia, PA 19107  
ORGANIZATION (if any) KKFS, Inc. DATE: July 1986

USE BLACK INK ONLY



# 8. SKETCH MAP

Please indicate position of locus in relation to geographical landmarks such as streams and roads.



INDICATE NORTH ON SKETCH

USE BLACK INK ONLY

# 9. COMMENTS:

Consider the following:

- a) relationship to setting
- b) associated traditions or stories
- c) noteworthy features
- d) comparison with others in area

Partially sheltered from Old Camden Road by a stand of trees is the S. J. Speal residence. It is bounded by the cultivated fields of the National Register-listed Howell's mill to its north and by a cluster of 20th century residences to its south, all on the outskirts of Camden, the original location of the house. With its playful composition of forms and milled details, the house recalls the late 19th century pattern book interpretations of the Queen Anne style. Not only is this genre rarely seen in central Delaware, but in the Speal residence, it is executed quite masterfully to create a building of exceptional architectural merit.

# 10. Comprehensive Planning:

- a. Time Period(s) 1880-1940
- b. Cultural Concept Landscape

# 11. Evaluation: Eligible

- a. Settlement & Development
- b. Cultural Historic & Ethnic Issues
- c. Built Environment
- d. Material Culture
- e. not eligible

Survey: Name/Title Benenson/Bower

BAHP: Name/Title

Date July 1986

Date



# CULTURAL RESOURCE SURVEY STRUCTURAL DATA FORM

DELAWARE BUREAU OF  
ARCHAEOLOGY AND HISTORIC  
PRESERVATION  
HALL OF RECORDS  
DOVER, DELAWARE 19901  
(302) 736 - 5685



Form CRS-1  
FOR OFFICE USE ONLY

CRS #	K-3772
Quad	Wyoming
SPO map #	10-11-22
Hundred	East Dover
DOCUMENT	20-06/78/08/14

1. ADDRESS OF STRUCTURE : 108 Old Camden Road, Dover, DE 19901

2. DESCRIBE THE STRUCTURE AS COMPLETELY AS POSSIBLE:

a) Overall shape cross  
stories 2 1/2  
bays various  
wings cross plan

b) Structural system frame

c) Foundation  
materials cmu  
basement no

d) Exterior walls  
materials clapboarding and ornamental shingles  
color(s) yellow and blue

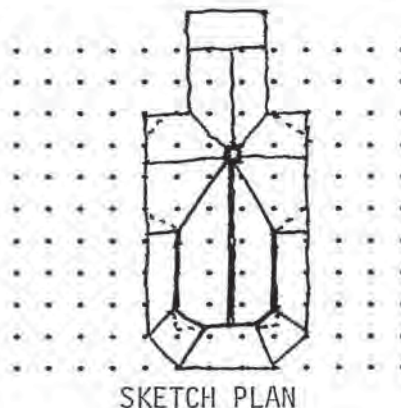
e) Roof  
shape; materials gable, asphalt  
cornice projecting eave w/brackets; projecting soffits at corners w/  
dormers latticed brackets  
chimney location(s) central (see sketch plan)

f) Windows  
spacing regular  
type 2/2 and 1/1 double hung  
trim simple frames  
shutters no

g) Door  
spacing side entrance to front wing; front entrance to side wing  
type wood  
trim simple frame

h) Porches  
location(s) wrap-around  
materials wood  
supports turned posts  
trim Japanesque turned balusters and brackets

i) Interior details (if accessible)  
largely unaltered; stained glass light in hall, handsome turned balustrade,  
colonial revival mantel, grooved moldings with bosses  
USE BLACK INK ONLY



SKETCH PLAN

3. CONDITION:

deteriorated

remarks:

4. INTEGRITY:

b) moved      x

c) if moved, when and from where same lot as church in Camden

d) List major alterations and dates (if known) 20th century shed

added to rear

5. DATE OF INITIAL CONSTRUCTION:

circa 1890

6. ARCHITECT/BUILDER:

likely pattern book construction

7. RELATED OUTBUILDINGS:

a) barn

b) carriage house

c) garage

d) privy

e) shed

f) greenhouse

g) shop

h) gardens

i) icehouse

j) springhouse

k) other

describe:

8. BRIEFLY DISCUSS THE ORIGINAL AND SUBSEQUENT USES OF THE STRUCTURE. NOTE ANY ASSOCIATIONS WITH HISTORIC EVENTS OR PERSONS:

This Queen Anne-style house was built in the late-nineteenth century for S. J. Speal, known as the "Fruit King" of Delaware. Mr. Speal began his business as a fruit buyer in 1887 and by 1902 was the largest buyer of fruits on the peninsula, shipping over 500 car loads of asparagus every year as well as apples, grapes, blackberries, strawberries, raspberries, orchard fruits, and potatoes. He also worked on the propagation of a new pear called the Lalcounte. The Speal residence eventually was acquired by its adjacent church in Camden, then sold to the Veterans of Foreign Wars who moved it to its present site in the 1960s and sold the house. Its current owners have completed a sensitive restoration with considerable respect for the house's architectural integrity.

9. Primary References: (include location of reference).

The Delawarean, 1902. Newspaper clipping with photograph held by the owner.

10. Surveyor:

Date of Form: July 1986

USE BLACK INK ONLY

# Crash Data Summary



## **SR10 Pathway Concept: 3-Year Crash Summary**

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### **BACKGROUND**

The SR10 Pathway project is for the development along SR10, US13 and Alternate US13 of an approximately 10-foot wide, 16,000-foot long multi-modal pathway that will connect the Gateway Shopping Center to Brecknock Park and various residential communities between the two destinations. The project, located in Kent County, is being undertaken as part of the Statewide Trails initiative to improve accessibility and safety for pedestrians and bicyclists throughout the community. The project was also identified as part of an overall statewide master plan to provide a statewide multi-modal transportation network.

### **PURPOSE**

The purpose of this report is to review the frequency of crashes by severity in the vicinity of the roadways and intersections along which the proposed pathway will be developed, especially crashes involving pedestrians and cyclists. The crash reviewed was for the three-year period commencing April 1, 2012 through March 31, 2015.

### **CRASH SUMMARY**

Most of the crashes for the period reviewed involved property damage and/or injury crashes. Two (2) fatalities (none involving pedestrians or cyclists), were reported within that same period. There were two reported injury crashes involving pedestrians for the 3-year period. None of the reported crashes involved cyclists. A summary of the 3-year crash frequency by severity for each location follows, and tables presenting the annual details are provided at the end of the summary.

#### **Intersection of SR10 and Gateway Boulevard**

For the 3-year period, a total of twenty-two (22) crashes were reported at the intersection of SR10 and Gateway Boulevard. Fifteen (15) crashes involving property damage and seven (7) involving injury were reported. None of these crashes involved pedestrians. None of the crashes at the intersection involved a fatality.

#### **Intersection of US13 and SR10**

At the intersection of US13 and SR10, a total of seventy-six (76) crashes were reported for the 3-year period. Sixty-eight (68) crashes involving property damage and eight (8) involving injury were reported. One (1) of these crashes involved a pedestrian. According to the crash report, the pedestrian was skateboarding on the shoulder of US13 with his back to traffic when he was hit. The victim sustained minor injuries. None of the crashes at the intersection involved a fatality.

#### **Intersection of SR10 and Alternate US13**

For the 3-year period, a total of twenty (20) crashes were reported at the intersection of SR10 and Alternate US13. Seventeen (17) crashes involving property damage and three (3) involving injury were reported. None of these crashes involved pedestrians, and none involved a fatality.

## **SR10 Pathway Concept: 3-Year Crash Summary**

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### **Intersection of US13 and Alternate US13**

At the intersection of US13 and SR10, a total of twenty-five (25) crashes were reported for the 3-year period. Nineteen (19) crashes involving property damage and six (6) involving injury were reported. None of these crashes involved pedestrians and none involved a fatality.

### **SR10 – Segment from Gateway Boulevard to US13**

For the 3-year period, a total of one hundred thirty-four (134) crashes were reported along the segment of SR10 from Gateway Boulevard to US13. One hundred eight (108) crashes involving property damage and twenty-four (24) involving injury were reported. Two crashes involving a fatality each were reported. Alcohol involvement was reported in each case. None of the crashes along this segment involved pedestrians.

### **SR10 – Segment from US13 to Alternate US13**

Along the segment of SR10 from US13 to Alternate US13, a total of thirty-five (35) crashes were reported for the 3-year period. Thirty-one (31) crashes involving property damage and four (4) involving injury were reported. None of these crashes involved pedestrians and none involved a fatality.

### **Alternate US13 – Segment from SR10 to US13**

For the 3-year period, a total of nine (9) crashes were reported. Six (6) crashes involving property damage and four (4) involving injury were reported. None of these crashes involved fatalities. One crash involved a pedestrian. According to the crash report, due to the absence of sidewalk, the pedestrian was walking on the shoulder of Alternate US13 when the driver of the vehicle allegedly entered the shoulder to make a right-turn. The pedestrian sustained minor injuries as a result of hitting the pavement when the driver slammed on his brakes to throw the pedestrian off his hood. The pedestrian had reportedly jumped onto the hood of the vehicle to avoid being hit.



SR10, E. Lebanon Road and Gateway Boulevard  
(The signalized intersection at Wawa)



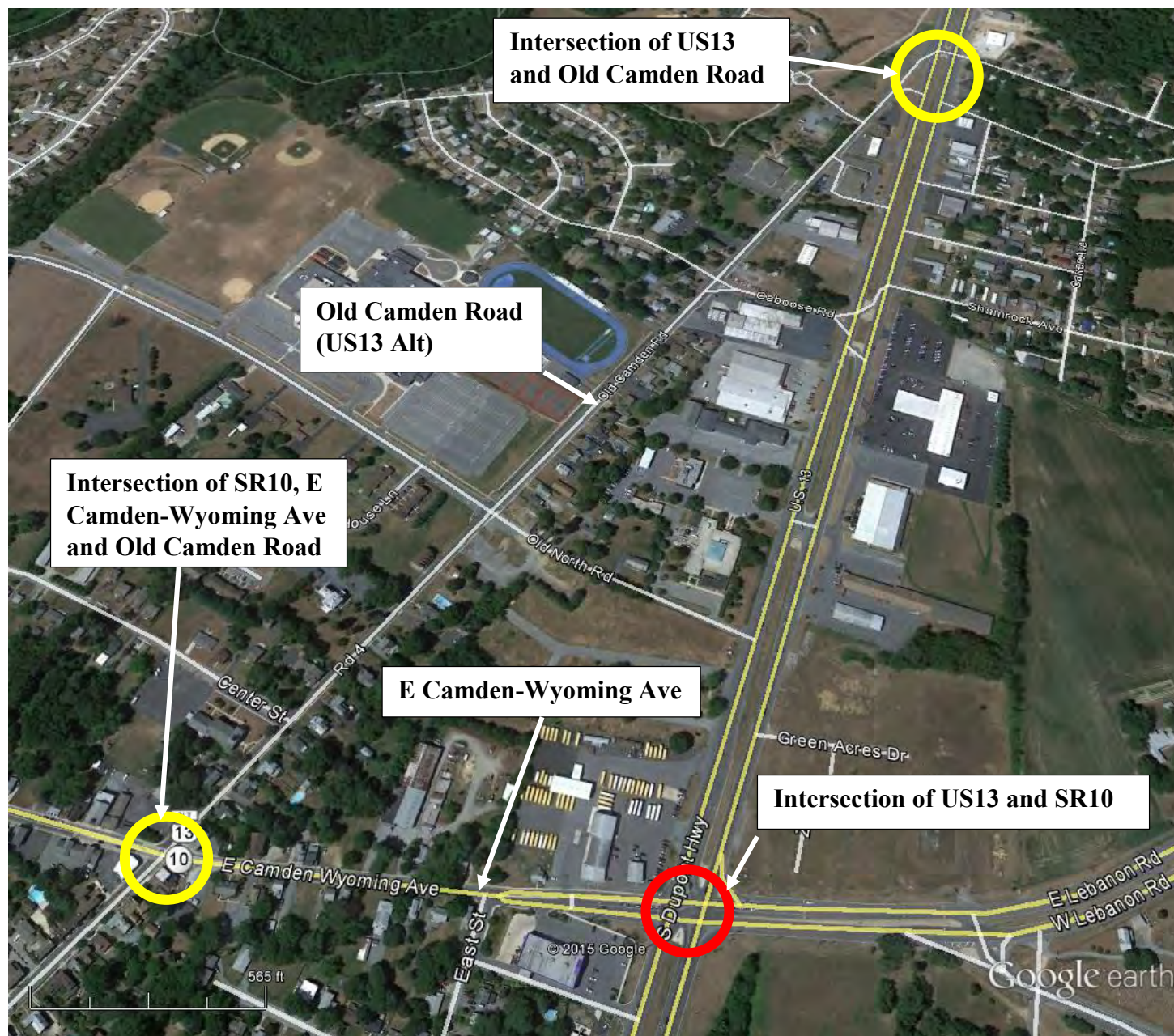
Intersection of US13 and SR10

SR10

SR10

362





## SR10 Pathway Concept: 3-Year Crash Tables

### Intersection of SR10 and Gateway Boulevard

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	4	3	0	7	3	3	0	6	8	1	0	9	22
Involving Pedestrians		0	0	0		0	0	0		0	0	0	0
Involving Bicycles		0	0	0		0	0	0		0	0	0	0

### Intersection of US13 and SR10

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	22	2	0	24	24	1	0	25	22	5	0	27	76
Involving Pedestrians		0	0	0		0	0	0		1	0	1	1
Involving Bicycles		0	0	0		0	0	0		0	0	0	0

Pedestrian Injury: Pedestrian was struck by vehicle traveling at low speed while he was skateboarding on SB shoulder of US13 about 50 ft south of the intersection. Injury comprised a 2.5 inch laceration on right knee.

### Intersection of SR10 and Old Camden Road

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	7	3	0	10	6	0	0	6	4	0	0	4	20
Involving Pedestrians		0	0	0		0	0	0		0	0	0	0
Involving Bicycles		0	0	0		0	0	0		0	0	0	0

### Intersection of US13 and US13Alt

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	10	3	0	13	6	0	0	6	3	3	0	6	25
Involving Pedestrians		0	0	0		0	0	0		0	0	0	0
Involving Bicycles		0	0	0		0	0	0		0	0	0	0



## SR10 Pathway Concept: 3-Year Crash Tables

### SR10: Segment from Gateway Boulevard to US13

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	47	5	0	52	39	10	2	51	22	9	0	31	134
Involving Pedestrians		0	0	0		0	0	0		0	0	0	0
Involving Bicycles		0	0	0		0	0	0		0	0	0	0

### SR10, E Camden-Wyoming Avenue: Segment from US13 to US13 Alt

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	12	1	0	13	16	3	0	19	3	0	0	3	35
Involving Pedestrians		0	0	0		0	0	0		0	0	0	0
Involving Bicycles		0	0	0		0	0	0		0	0	0	0

### Old Camden Road: Segment from SR10 ( E Camden-Wyoming Avenue) to US13

	April 1, 2012 to March 31, 2013				April 1, 2013 to March 31, 2014				April 1, 2014 to March 31, 2015				3-Year
	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Property Damage	Injury	Fatal	Total	Grand Total
Total of All Crashes	1	0	0	1	3	1	0	4	2	2	0	4	9
Involving Pedestrians		0	0	0		0	0	0		1	0	1	1
Involving Bicycles		0	0	0		0	0	0		0	0	0	0

Pedestrian Injury: Pedestrian was injured when he was thrown off a vehicle he had jumped on to avoid being hit. The pedestrian was walking SB on the shoulder of US13 Alt when the vehicle accessed the shoulder. Injury comprised of abrasions to and bleeding of knee and palm.

# Traffic Counts

# Century Engineering, Inc.

4134 North Dupont Highway  
Dover, DE, 19901

Location:: Camden, DE  
Intersection: Old Camden Rd & Chapel Dr  
Date: Wednesday, May 13, 2015  
Counted By: Kent MPO

File Name : Old Camden & Chapel  
Site Code : 00000000  
Start Date : 5/13/2015  
Page No : 1

## Groups Printed- Vehicles

Start Time	OLD CAMDEN RD From North					CHAPEL DR From East					OLD CAMDEN RD From South					CHAPEL DR From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	0	55	1	0	56	0	0	0	0	0	4	6	23	0	33	0	6	8	0	14	103
07:15 AM	2	70	1	0	73	0	0	0	0	0	2	8	19	1	30	0	5	5	0	10	113
07:30 AM	1	79	0	0	80	0	0	0	0	0	3	9	26	0	38	0	8	10	0	18	136
07:45 AM	2	71	2	0	75	0	0	0	0	0	5	11	29	0	45	0	7	4	0	11	131
Total	5	275	4	0	284	0	0	0	0	0	14	34	97	1	146	0	26	27	0	53	483
08:00 AM	6	37	0	0	43	0	0	0	0	0	2	8	23	0	33	1	4	5	0	10	86
08:15 AM	2	44	4	0	50	0	0	0	0	0	2	10	29	0	41	0	2	2	0	4	95
*** BREAK ***																					
Total	8	81	4	0	93	0	0	0	0	0	4	18	52	0	74	1	6	7	0	14	181
*** BREAK ***																					
02:30 PM	2	67	2	0	71	0	0	0	0	0	2	6	6	0	14	0	4	2	0	6	91
02:45 PM	2	54	3	0	59	0	0	0	0	0	6	7	12	0	25	0	3	4	0	7	91
Total	4	121	5	0	130	0	0	0	0	0	8	13	18	0	39	0	7	6	0	13	182
03:00 PM	5	75	1	0	81	0	0	0	0	0	2	5	32	0	39	0	2	2	0	4	124
03:15 PM	4	56	4	0	64	0	0	0	0	0	4	7	17	0	28	0	2	5	0	7	99
03:30 PM	1	62	2	0	65	0	0	0	0	0	2	4	11	0	17	0	0	4	0	4	86
03:45 PM	6	63	5	0	74	0	0	0	0	0	3	4	13	0	20	0	2	5	0	7	101
Total	16	256	12	0	284	0	0	0	0	0	11	20	73	0	104	0	6	16	0	22	410
Grand Total	33	733	25	0	791	0	0	0	0	0	37	85	240	1	363	1	45	56	0	102	1256
Apprch %	4.2	92.7	3.2	0		0	0	0	0		10.2	23.4	66.1	0.3		1	44.1	54.9	0		
Total %	2.6	58.4	2	0	63	0	0	0	0	0	2.9	6.8	19.1	0.1	28.9	0.1	3.6	4.5	0	8.1	

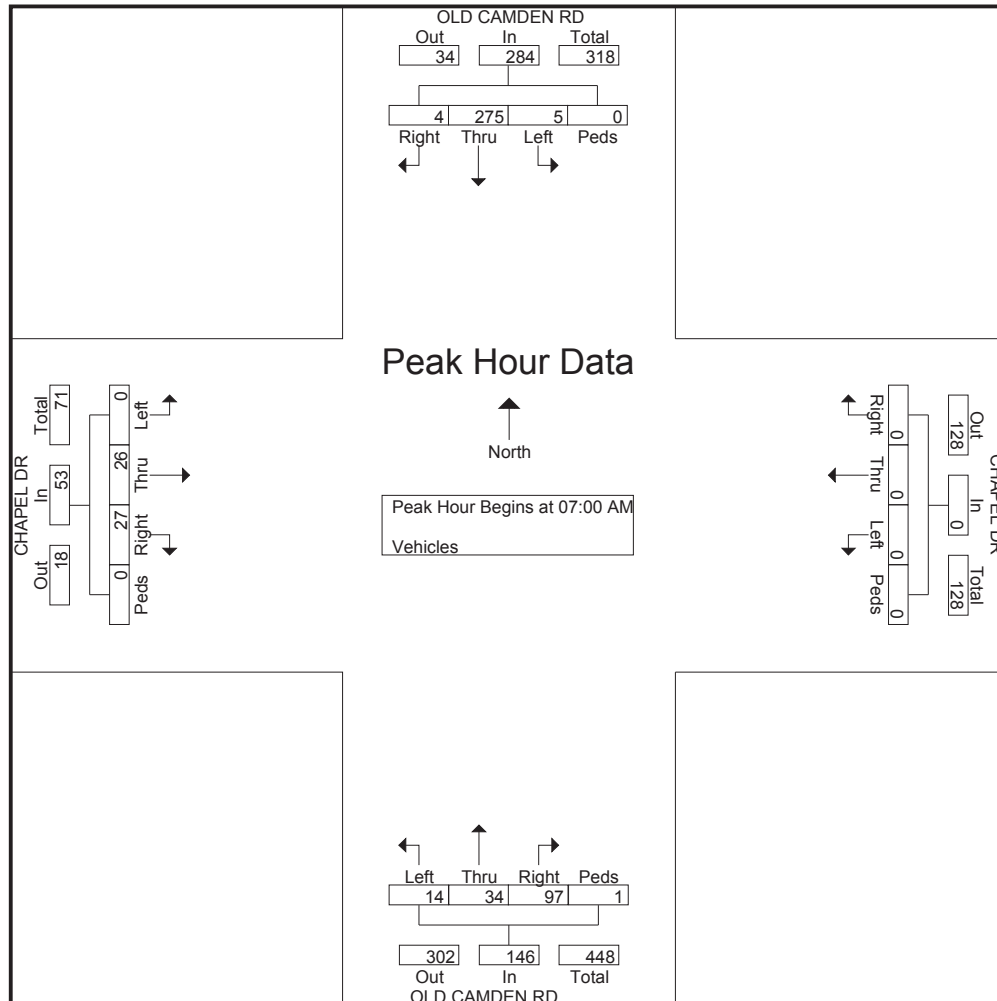
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Page No : 2

	OLD CAMDEN RD From North					CHAPEL DR From East					OLD CAMDEN RD From South					CHAPEL DR From West					
Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:15 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	55	1	0	56	0	0	0	0	0	4	6	23	0	33	0	6	8	0	14	103
07:15 AM	2	70	1	0	73	0	0	0	0	0	2	8	19	1	30	0	5	5	0	10	113
07:30 AM	1	<b>79</b>	0	0	<b>80</b>	0	0	0	0	0	3	9	26	0	38	0	<b>8</b>	<b>10</b>	0	<b>18</b>	<b>136</b>
07:45 AM	2	71	2	0	75	0	0	0	0	0	<b>5</b>	<b>11</b>	<b>29</b>	0	<b>45</b>	0	7	4	0	11	131
Total Volume	5	275	4	0	284	0	0	0	0	0	14	34	97	1	146	0	26	27	0	53	483
% App. Total	1.8	96.8	1.4	0		0	0	0	0		9.6	23.3	66.4	0.7		0	49.1	50.9	0		
PHF	.625	.870	.500	.000	.888	.000	.000	.000	.000	.000	.700	.773	.836	.250	.811	.000	.813	.675	.000	.736	.888



Peak Hour Analysis From 07:00 AM to 08:15 AM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

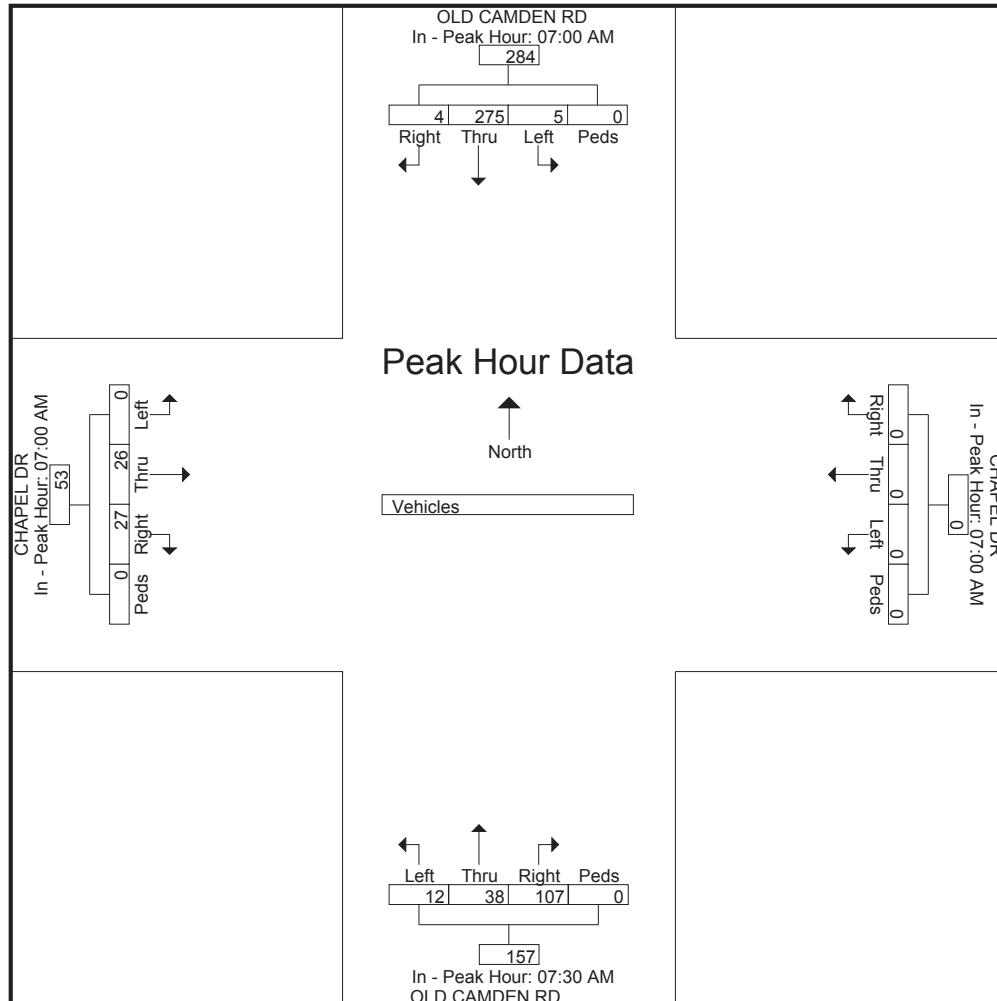
	07:00 AM					07:00 AM					07:30 AM					07:00 AM				
+0 mins.	0	55	1	0	56	0	0	0	0	0	3	9	26	0	38	0	6	8	0	14
+15 mins.	2	70	1	0	73	0	0	0	0	0	<b>5</b>	<b>11</b>	<b>29</b>	0	<b>45</b>	0	5	5	0	10
+30 mins.	1	<b>79</b>	0	0	<b>80</b>	0	0	0	0	0	2	8	23	0	33	0	<b>8</b>	<b>10</b>	0	<b>18</b>
+45 mins.	2	71	2	0	75	0	0	0	0	0	2	10	29	0	41	0	7	4	0	11
Total Volume	5	275	4	0	284	0	0	0	0	0	12	38	107	0	157	0	26	27	0	53
% App. Total	1.8	96.8	1.4	0		0	0	0	0		7.6	24.2	68.2	0		0	49.1	50.9	0	
PHF	.625	.870	.500	.000	.888	.000	.000	.000	.000	.000	.600	.864	.922	.000	.872	.000	.813	.675	.000	.736

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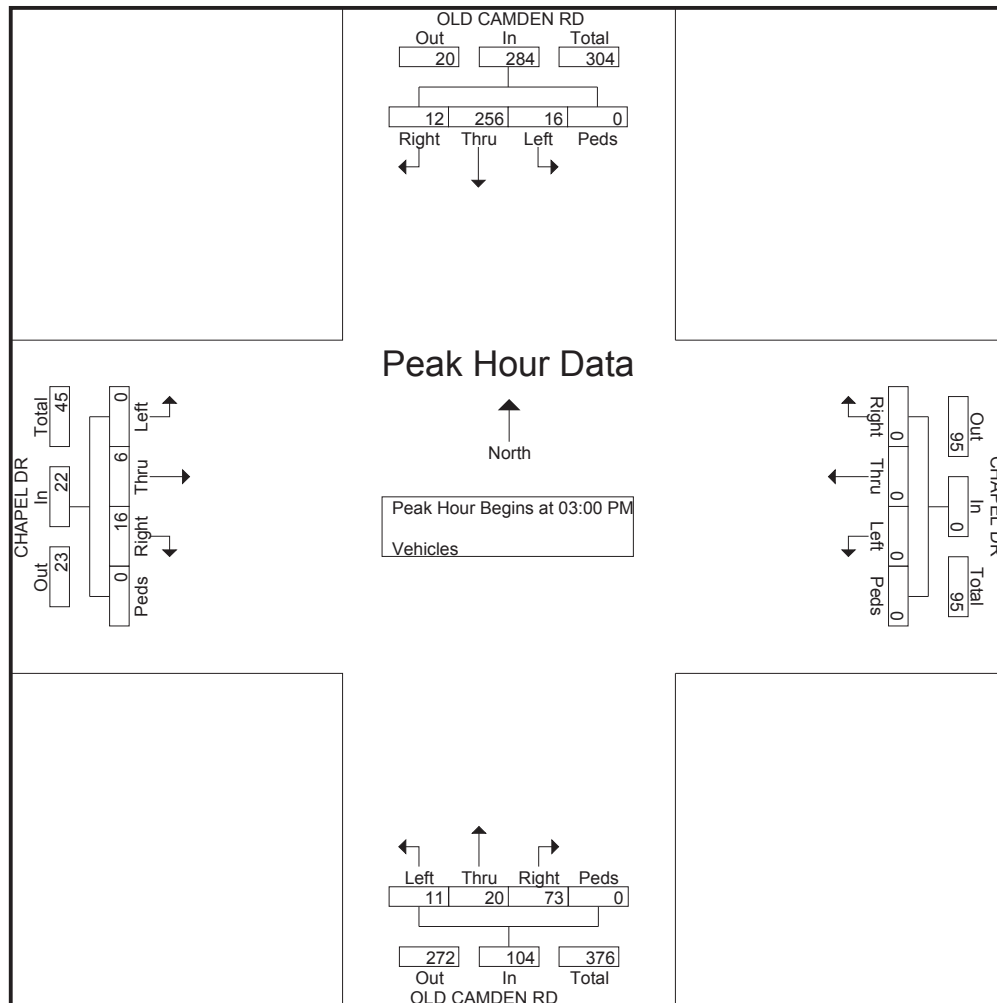
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Start Time	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Int. Total
Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:00 PM																					
03:00 PM	5	75	1	0	81	0	0	0	0	0	2	5	32	0	39	0	2	2	0	4	124
03:15 PM	4	56	4	0	64	0	0	0	0	0	4	7	17	0	28	0	2	5	0	7	99
03:30 PM	1	62	2	0	65	0	0	0	0	0	2	4	11	0	17	0	0	4	0	4	86
03:45 PM	6	63	5	0	74	0	0	0	0	0	3	4	13	0	20	0	2	5	0	7	101
Total Volume	16	256	12	0	284	0	0	0	0	0	11	20	73	0	104	0	6	16	0	22	410
% App. Total	5.6	90.1	4.2	0		0	0	0	0		10.6	19.2	70.2	0		0	27.3	72.7	0		
PHF	.667	.853	.600	.000	.877	.000	.000	.000	.000	.000	.688	.714	.570	.000	.667	.000	.750	.800	.000	.786	.827



Peak Hour Analysis From 02:30 PM to 03:45 PM - Peak 1 of 1  
Peak Hour for Each Approach Begins at:

	03:00 PM					02:30 PM					02:45 PM					02:30 PM				
+0 mins.	5	75	1	0	81	0	0	0	0	0	6	7	12	0	25	0	4	2	0	6
+15 mins.	4	56	4	0	64	0	0	0	0	0	2	5	32	0	39	0	3	4	0	7
+30 mins.	1	62	2	0	65	0	0	0	0	0	4	7	17	0	28	0	2	2	0	4
+45 mins.	6	63	5	0	74	0	0	0	0	0	2	4	11	0	17	0	2	5	0	7
Total Volume	16	256	12	0	284	0	0	0	0	0	14	23	72	0	109	0	11	13	0	24
% App. Total	5.6	90.1	4.2	0		0	0	0	0		12.8	21.1	66.1	0		0	45.8	54.2	0	
PHF	.667	.853	.600	.000	.877	.000	.000	.000	.000	.000	.583	.821	.563	.000	.699	.000	.688	.650	.000	.857

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