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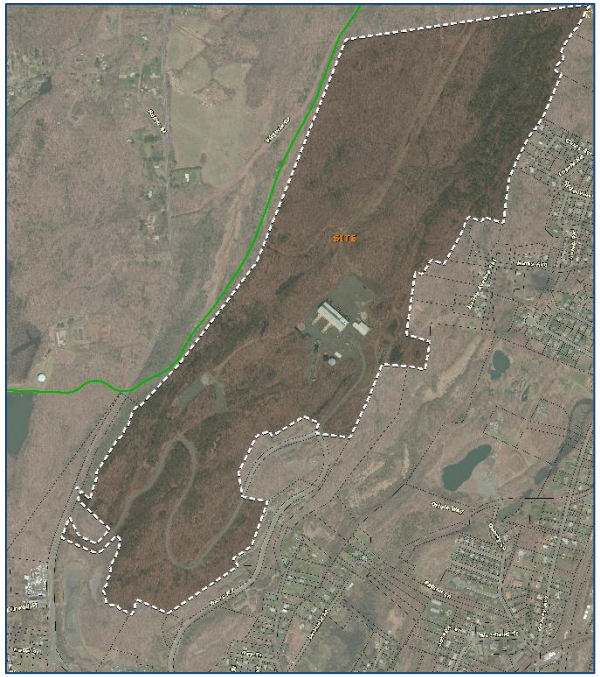
City of Meriden Roadway Evaluation Study
(1 South Mountain Road and 600 South Mountain Road)

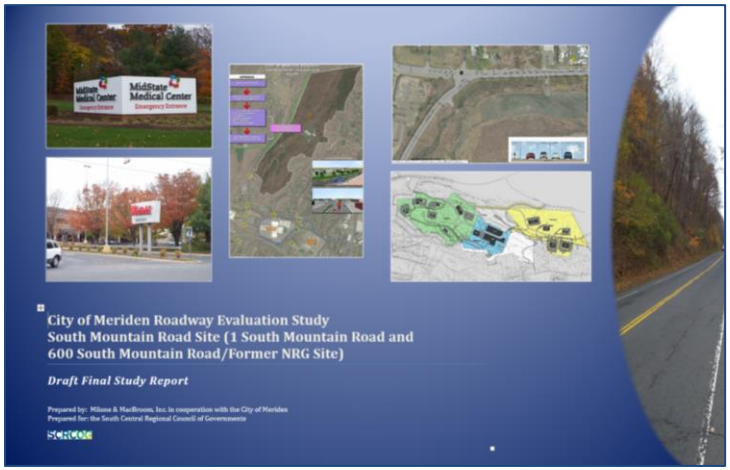
Presentation to City of Meriden Council



Study Goals and Objectives

"To assess existing and future traffic conditions and provide recommendations to address traffic impacts that could result from the potential development of the study site".





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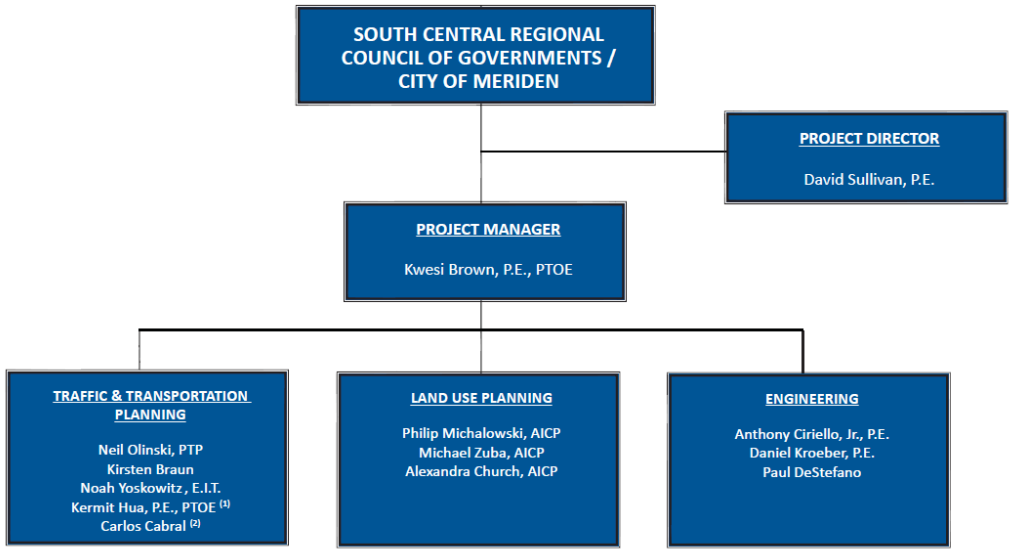
Project Management

- **Study Stakeholders**
  - **South Central Regional Council of Governments**
  - **City of Meriden**
  - **General Public**

Organization Chart

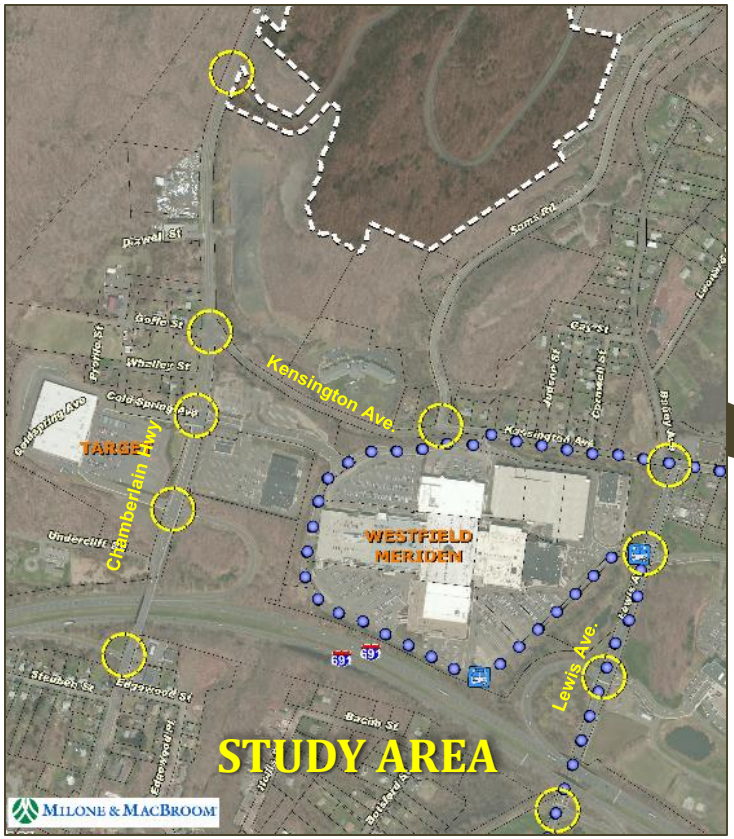
FY 2015 Transportation Planning Studies

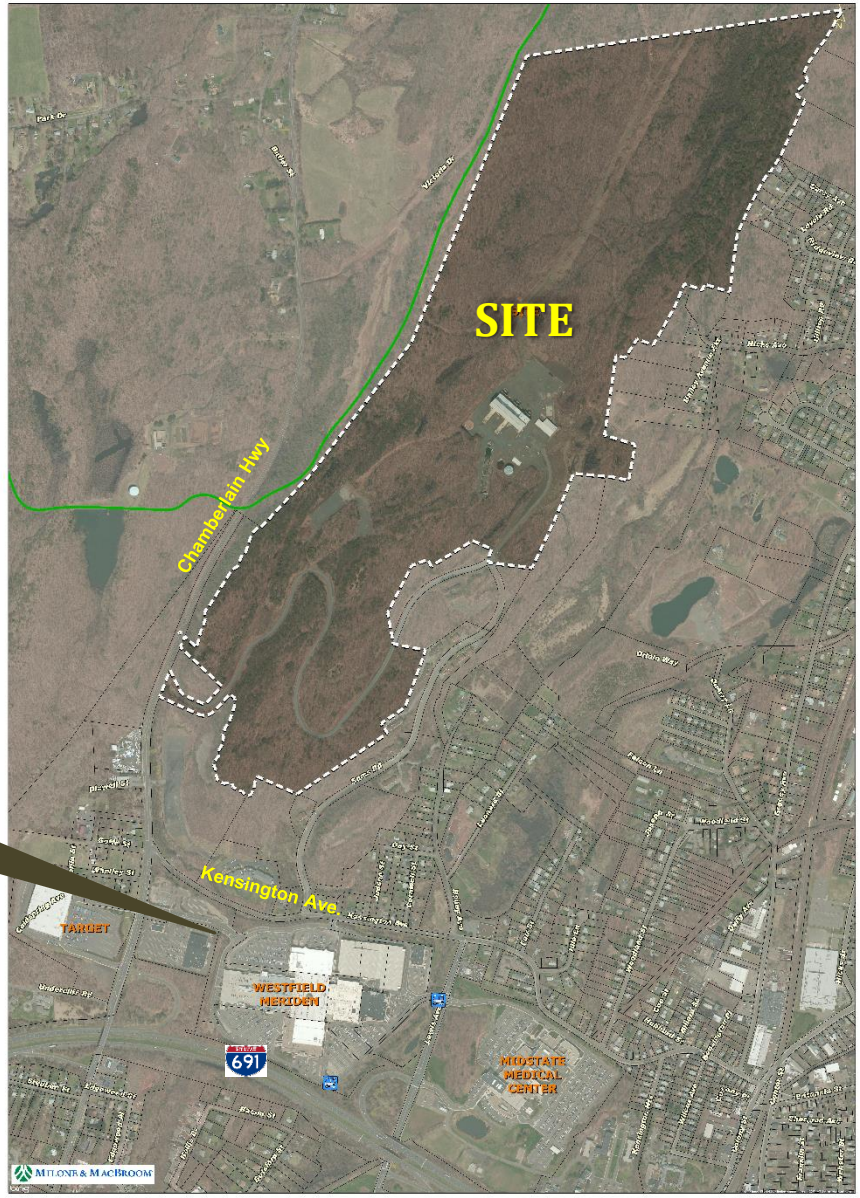


Subconsultants:
(1) KWH Enterprise, LLC (DBE) / (2) Connecticut Counts, LLC (DBE)

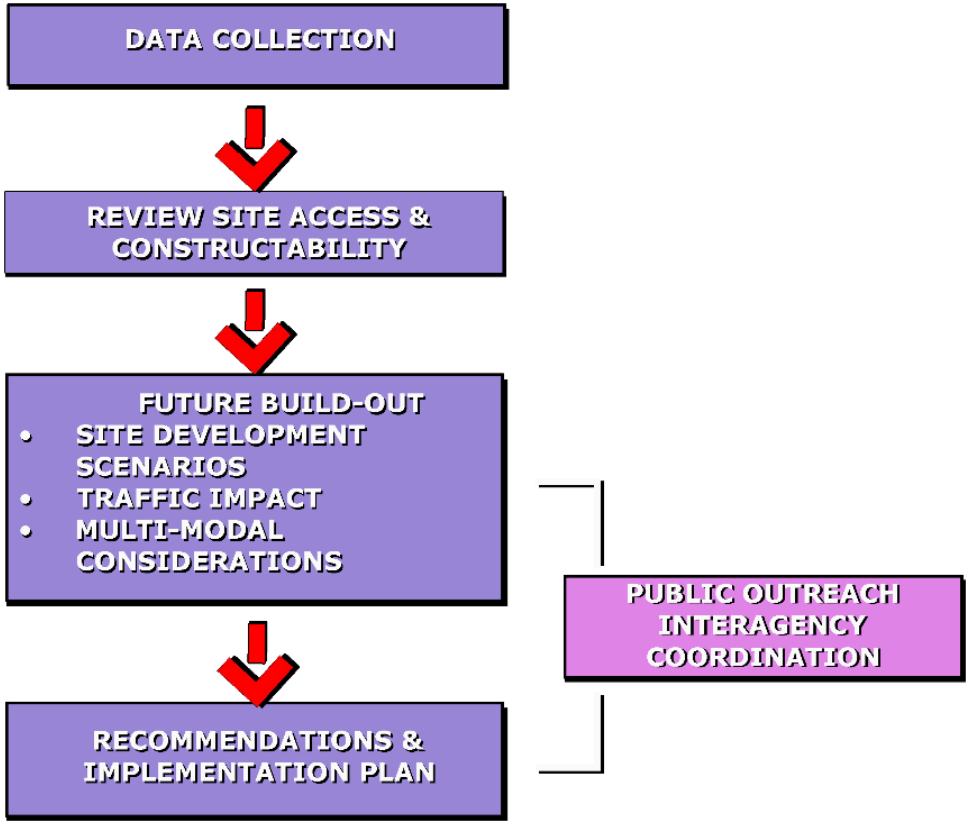
Site Location

- Over 300 acres with approx. 36 acres owned by NRG Company
- Primary access - South Mountain Rd.
-





Study Approach



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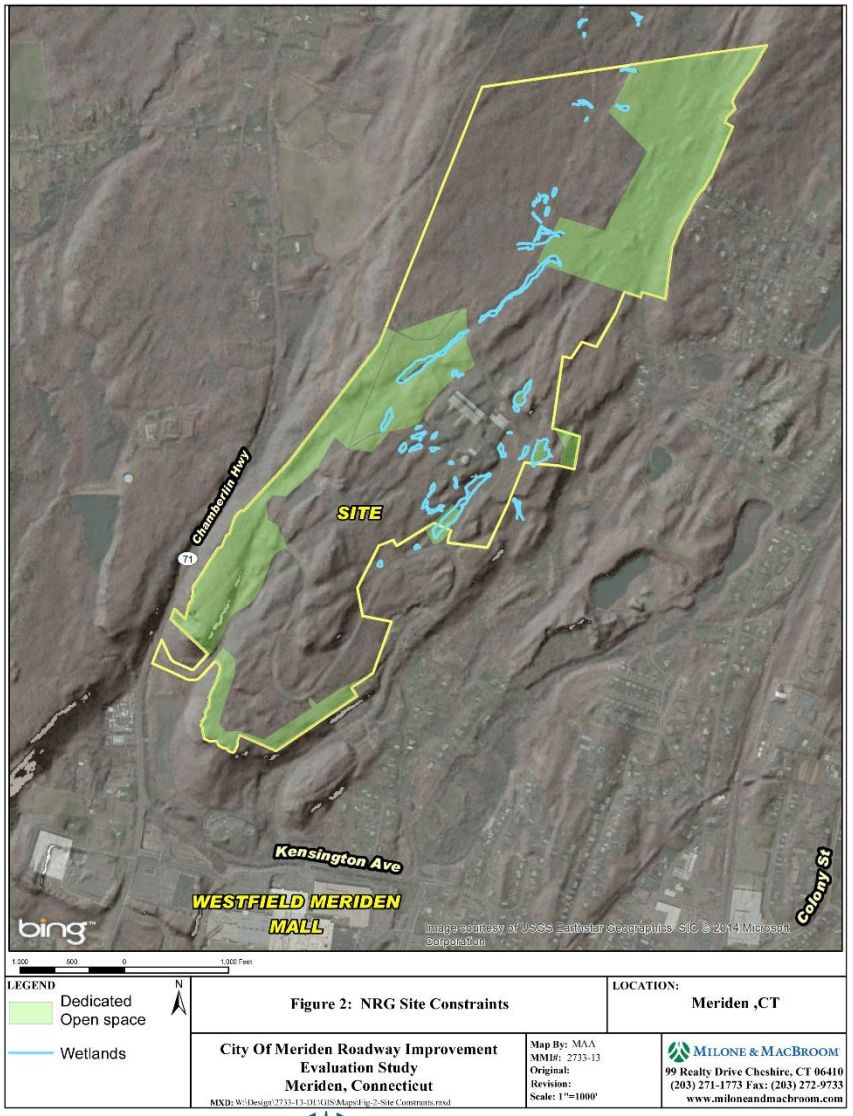
Existing Site Conditions

- Steep topography (25% of site has > 20 percent grades)
- 102 acres of dedicated open space (30%)
- 7.8 acres of wetlands
- Utilities
  - NRG has electric, sewer, gas and water
  - No utilities to rest of site



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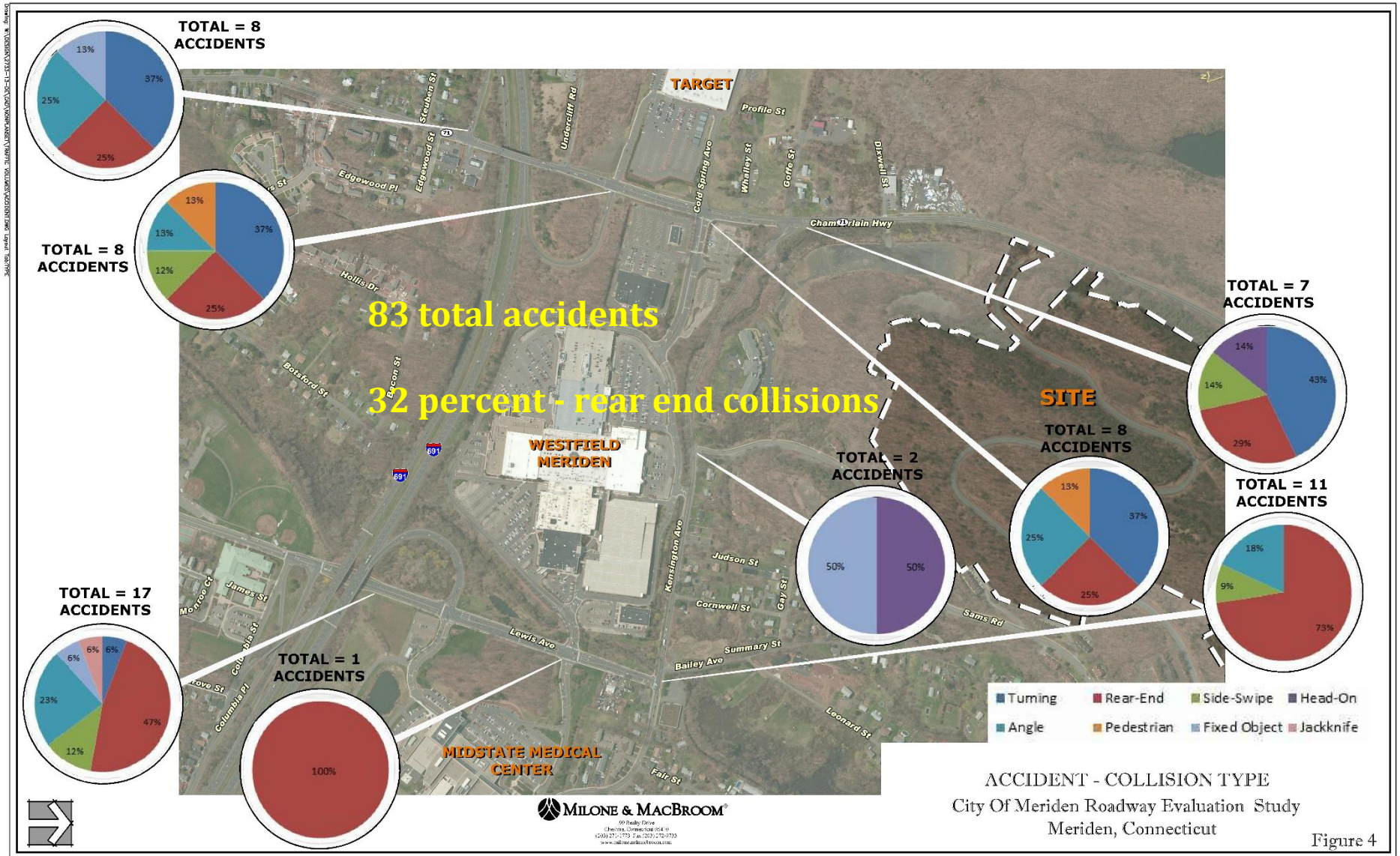
Existing Safety Conditions - Accident Type



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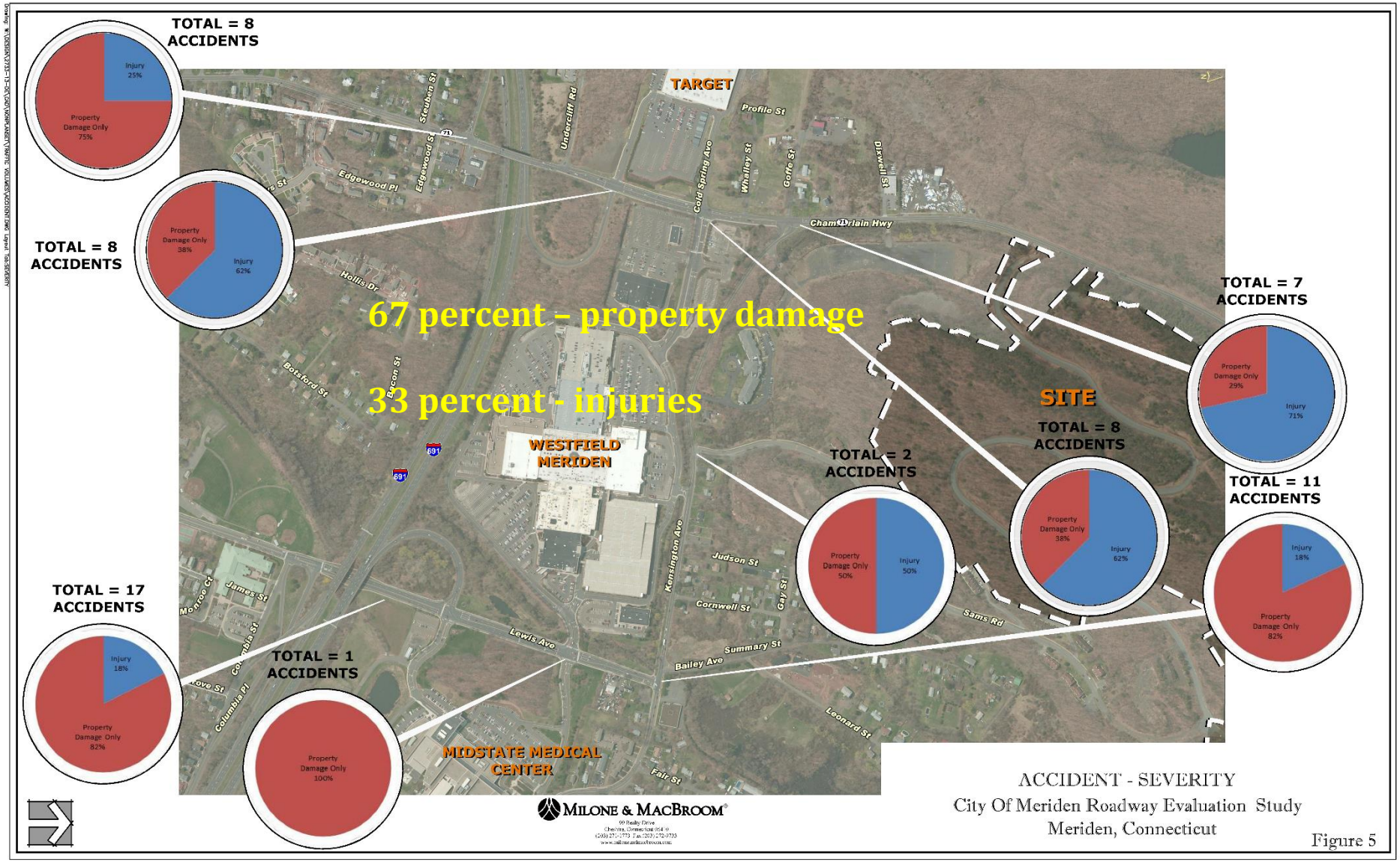
ACCIDENT - COLLISION TYPE
City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 4

Existing Safety Conditions - Accident Severity



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ACCIDENT - SEVERITY
City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 5

Existing Traffic Conditions

- Vehicular Speeds
- Traffic Volumes
  - Average Daily Traffic
  - Segment and Intersection Counts
- Capacity Analysis – Level of Service

Roadway	Posted Speed	85th Percentile Speed
Chamberlain Hwy	35 mph	55 mph
Kensington Avenue	25 mph	41 mph
Lewis Avenue	25 mph	34 mph

	Average Daily Traffic (ADT)			
Location	Year 2007	Year 2010	Year 2013	Year 2014*
Chamberlain Highway north of Kensington Avenue	6,100	6,000	5,800	6,203
Chamberlain Highway north of the I-691 WB on ramp	12,000	12,000	10,700	10,797
Kensington Avenue east of Chamberlain Highway	----	6,300	----	6,085
Lewis Avenue north of the mall entrance	----	6,200	----	----
Lewis Avenue south of the mall entrance	----	----	----	11,271

Source: Connecticut Department of Transportation (* ATR data collected by MMI)
"----": Not Available

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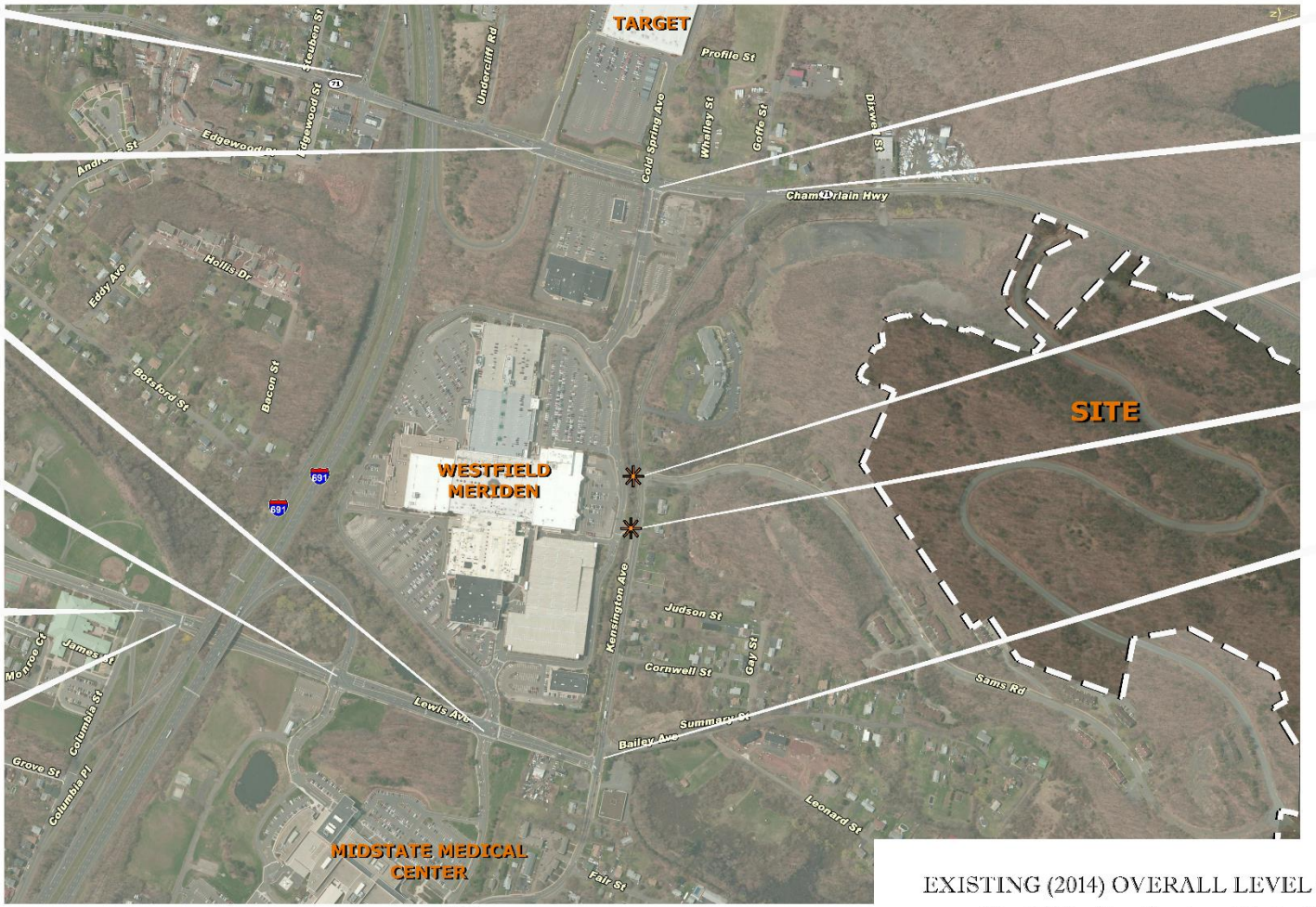
Existing Traffic Conditions



AM	B
PM	B
SAT	B

AM	A
PM	A
SAT	A

AM	B
PM	B
SAT	A

AM	B
PM	B
SAT	B

AM	A
PM	B
SAT	B

AM	A
PM	B
SAT	B

AM	A
PM	A
SAT	B

AM	B
PM	B
SAT	B

AM	A
PM	B
SAT	B

AM	B
PM	B
SAT	B

LEGEND

(LOS)	A-B
(LOS)	C-D
(LOS)	E-F

NOTE:
* = LEVEL OF SERVICE AT UN-SIGNALIZED INTERSECTIONS IS FOR MINOR STREET APPROACH

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EXISTING (2014) OVERALL LEVEL OF SERVICE
City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 9

Existing Multi-modal Amenities

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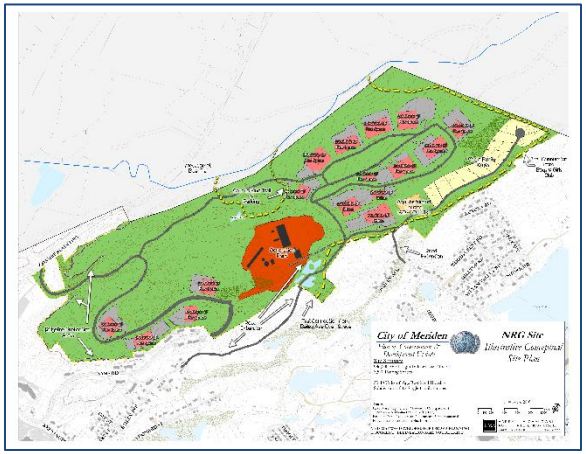
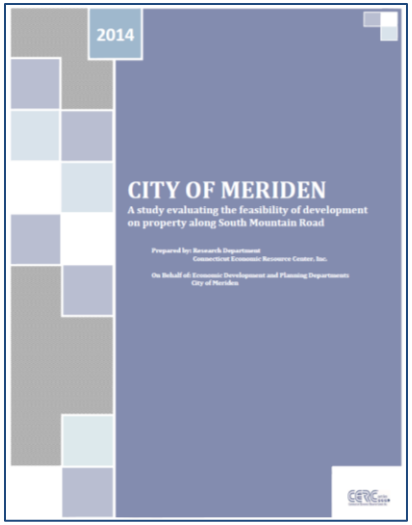
EXISTING MULTI-MODAL AMENITIES
City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 10

Future Development Potential

- **2009 Plan of Conservation and Development**
  - Offices, medical care, light industrial, biomedical research, indoor storage, heavy industrial
- **2014 Connecticut Economic Research Center Study**
  - Destination recreation, wind/solar generation, technology/healthcare office space, light manufacturing
- **Preferred Land-use**
  - Two-thirds light industrial and one-third general office





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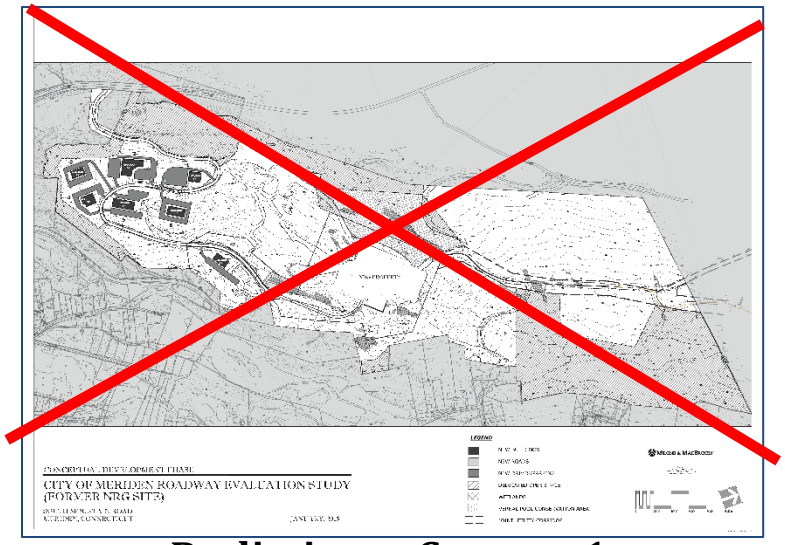
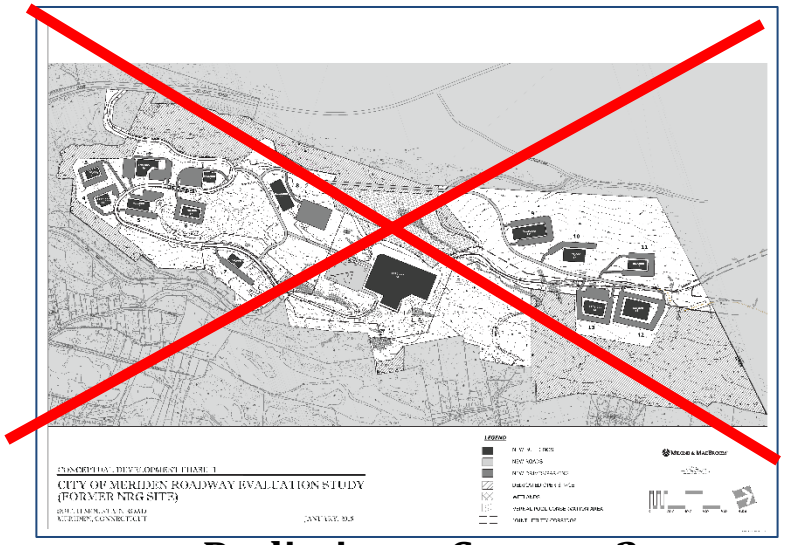
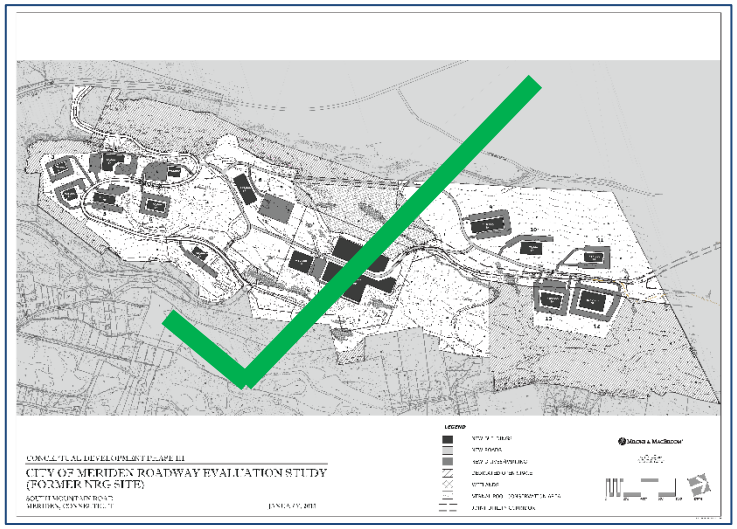
Preliminary Site Development Concepts



Preliminary Concept 1



Preliminary Concept 2



Preliminary Concept 3

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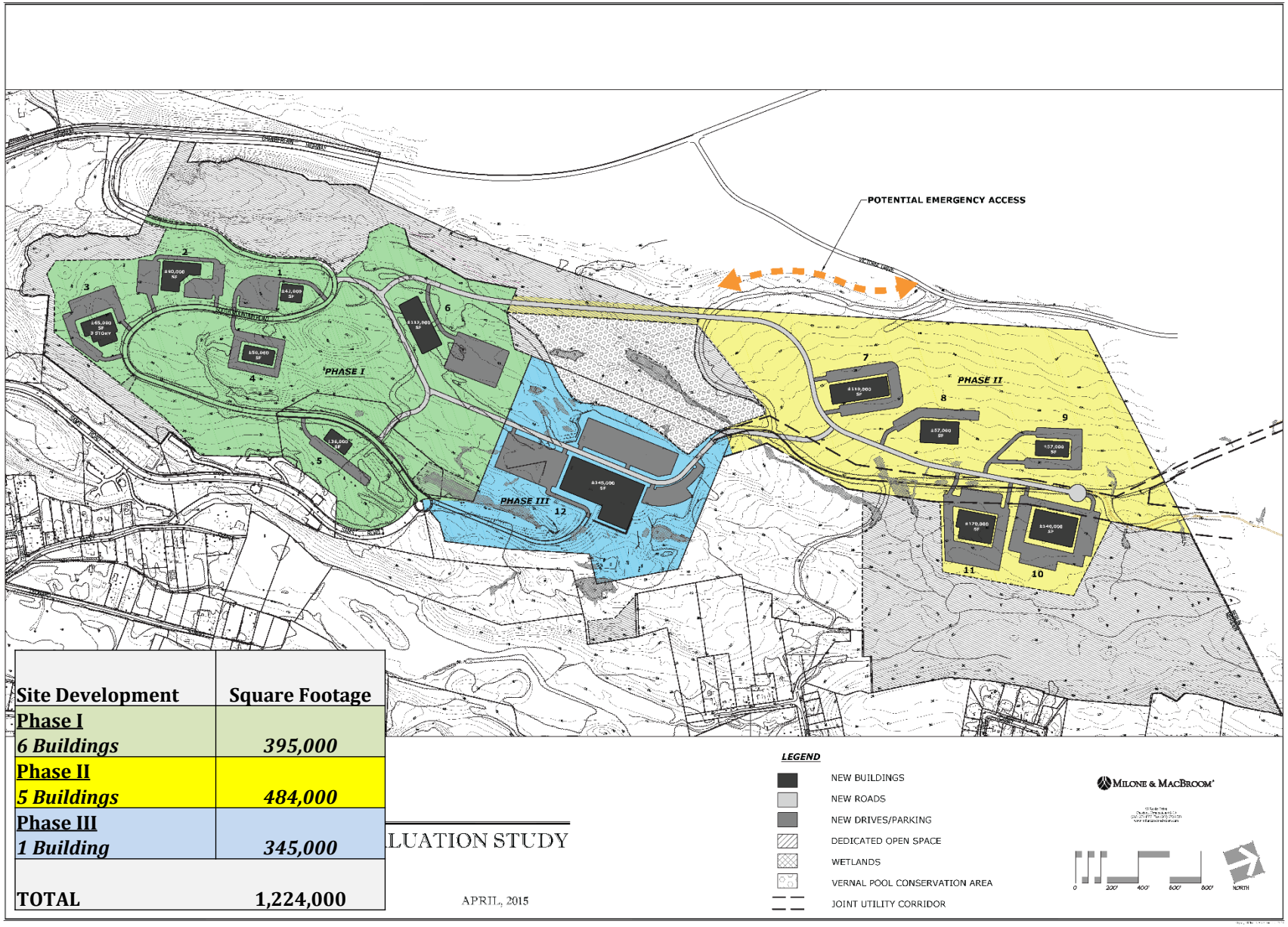
Preferred Site Development Concept



Site Development	Square Footage
Phase I *6 Buildings*	*395,000*
Phase II *5 Buildings*	*484,000*
Phase III *1 Building*	*345,000*
TOTAL	**1,224,000**

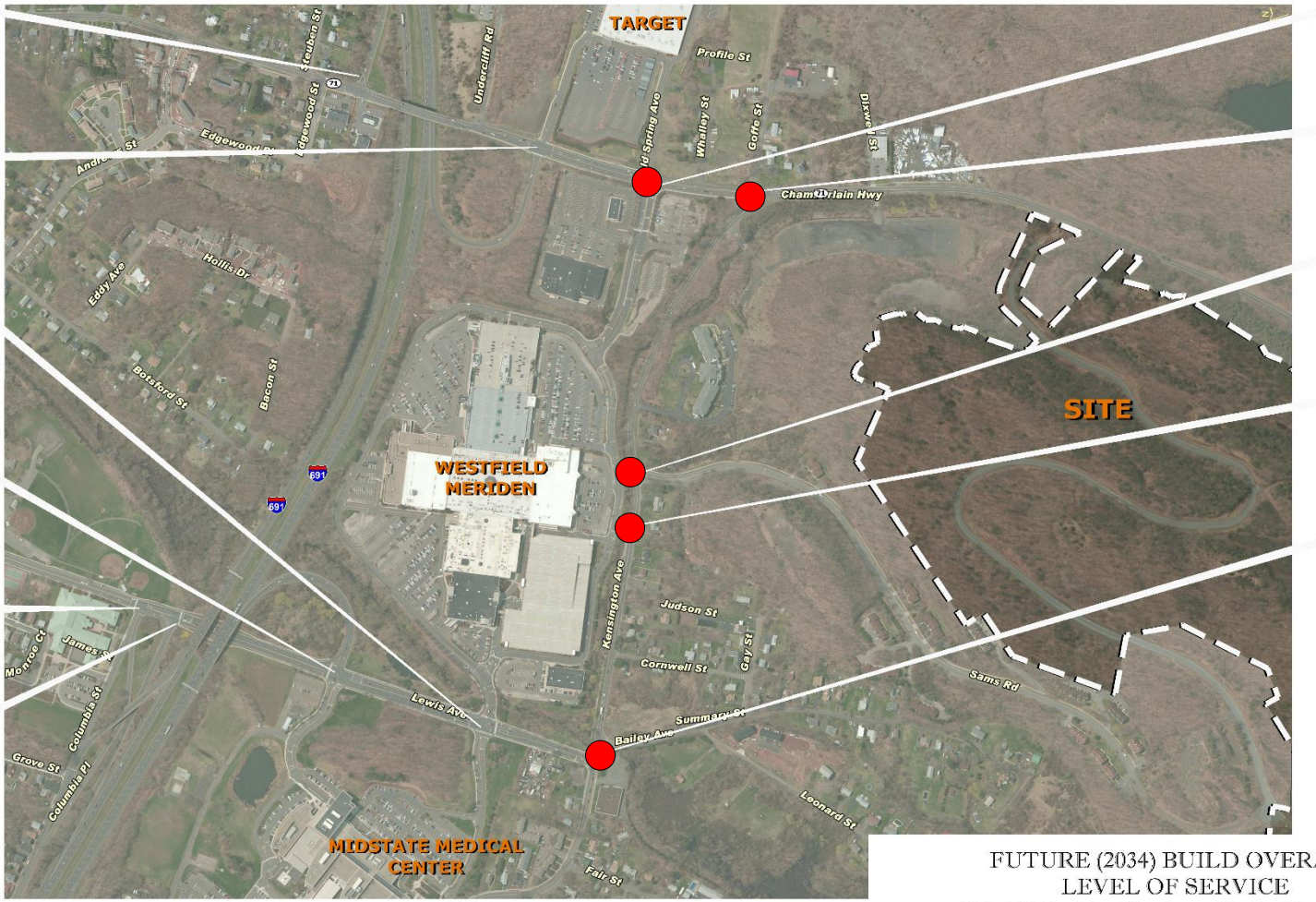
LUATION STUDY

APRIL, 2015

Future Traffic Projections

- **20 year planning horizon (Year 2034)**
- **One percent per year growth**
- **Estimated Site Traffic**
  - **Weekday morning peak – 1,340 vehicles**
  - **Weekday afternoon peak – 1,325 vehicles**
  - **Saturday midday peak – 290 vehicles**

Build-out Traffic Conditions



AM	B
PM	C
SAT	C

AM	A
PM	C
SAT	B

AM	B
PM	D
SAT	B

AM	B
PM	C
SAT	B

AM	A
PM	C
SAT	C

AM	A
PM	B
SAT	B

AM	A
PM	E
SAT	C

AM	E
PM	F
SAT	B

AM	D
PM	E
SAT	C

AM	C
PM	F
SAT	C

AM	D
PM	F
SAT	B

LEGEND

(LOS)	A-B
(LOS)	C-D
(LOS)	E-F

* NOTE:
= LEVEL OF SERVICE AT UN-SIGNALIZED INTERSECTIONS IS FOR MINOR STREET APPROACH

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FUTURE (2034) BUILD OVERALL
LEVEL OF SERVICE
City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 25

Recommendations - Roadway

Recommendations - Roadway

OFFSITE ROADWAY / SIGNALIZATION IMPROVEMENT
(SHEET 2 OF 4)

City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 27

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Recommendations - Roadway

OFFSITE ROADWAY / SIGNALIZATION IMPROVEMENT
(SHEET 3 OF 4)

City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 28

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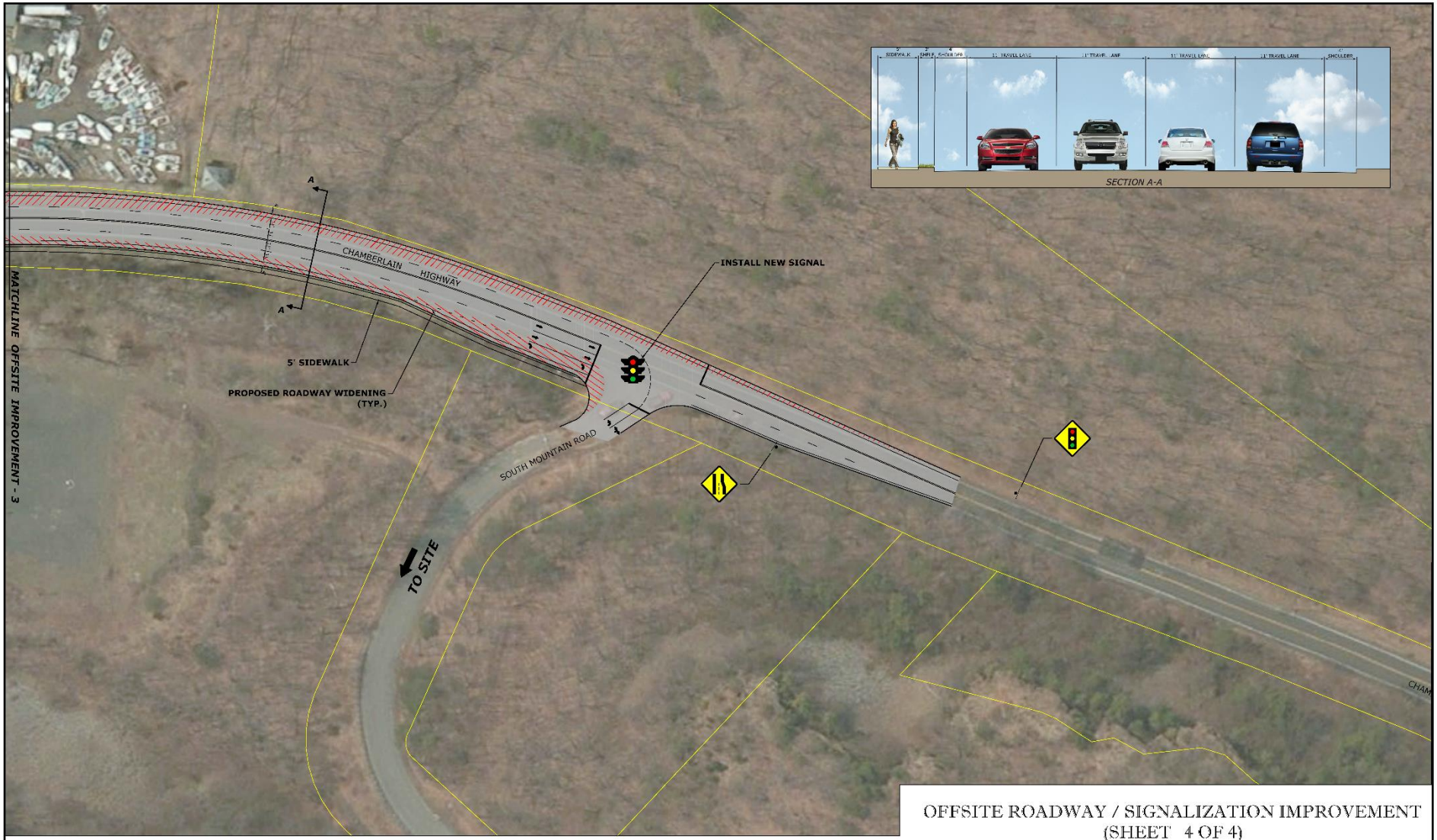
99 Realty Drive
Cheshire, Connecticut 06410
(203) 271-1773 Fax (203) 272-9733
www.miloneandmacbroom.com

Recommendations - Roadway



OFFSITE ROADWAY / SIGNALIZATION IMPROVEMENT
(SHEET 4 OF 4)

City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 29

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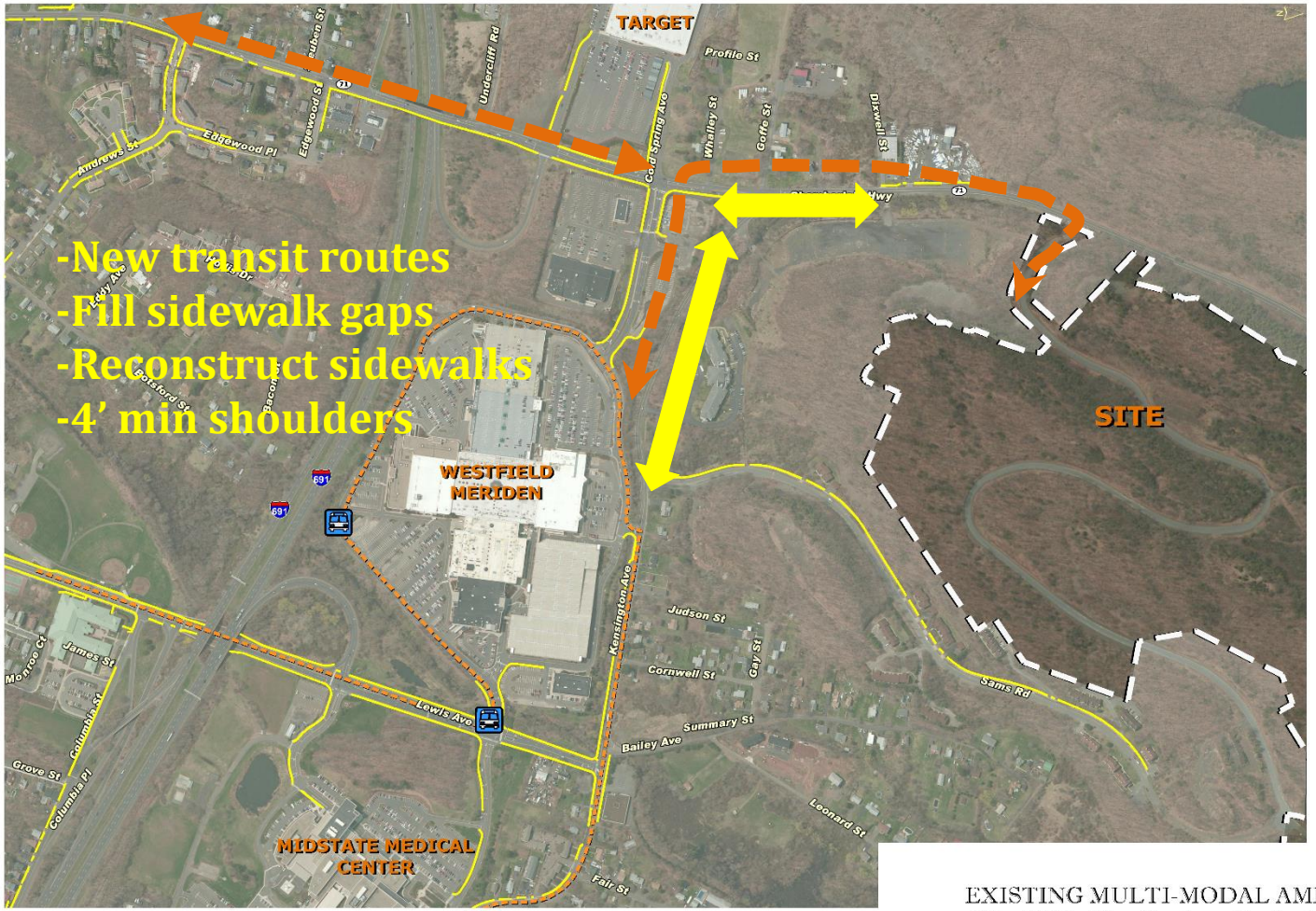
Recommendations – Multi-modal



EXISTING MULTI-MODAL AMENITIES
City Of Meriden Roadway Evaluation Study
Meriden, Connecticut

Figure 10

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Probable Offsite Construction Cost Estimate

	COST
2015 Construction Costs	$8,719,800
Contingencies (±25%)	$2,180,000
Incidentals to Construction (±25%)	$2,180,000
Total 2015 Project Cost	$13,079,800
TOTAL 2015 PROJECT COST (ROUNDED)	$13,080,000

Note: Cost estimate does not account for future inflation costs, cost of right of way impacts, utility relocations

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Funding Sources – Offsite Improvements

- Traffic Impact Fees/Developer Contribution
- Local Transportation Capital Improvement Program (LOTCIP)
- Surface Transportation Program (STP) - Urban
- Transportation Alternatives Program (TAP)

Questions?

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