APPENDIX G

Traffic Management

APPENDIX G: TRAFFIC MANAGEMENT

This appendix presents suggested traffic control measures to facilitate the evacuation of the SSES/Bell Bend Nuclear Power Plant EPZ. Pages G-4 through G-7 provide detailed Traffic Control Point (TCP) schematics; TCPs are established to facilitate the flow of evacuee traffic from within the EPZ. Table G-1 summarizes the TCP and the manpower and equipment needed to implement traffic control. Figure G-1 provides detailed mapping of the location of each traffic control point recommended based on the results of this ETE study.

The intersections listed in Table G-1 were identified based on the simulation of the evacuation traffic. As mentioned in Section 7.2, the majority of congestion in the EPZ is in the Borough of Berwick and the City of Nanticoke. The major evacuation routes servicing these areas, Route 11 and Route 93 in Berwick, and Route 11 and Kirmar Pkwy in Nanticoke exhibit bottlenecks and prolonged congestion at these intersections. These TCP have not been identified in the existing county and local municipality emergency plans; it is recommended that these intersections be considered as additional TCP in future updates to county and local plans.

The county and local municipal emergency plans identify 100 TCPs and 36 ACPs throughout the EPZ and on the periphery of the EPZ. These intersections have also been mapped in Figure G-1.

There are likely to be manpower and equipment shortages in an emergency situation. Prioritization of TCP/ACP and the use of ITS technologies, as outlined in Section 9, will aid in overcoming manpower shortages.

With reference to the discussion of Section 2.3, these TCP serve many vital functions, but are not considered in specifying the inputs to the I-DYNEV system used to calculate ETE. Consequently, the results presented in Section 7 and in Appendix J do not reflect the presence of these TCP.

Table G-1 List of Traffic Control Points					
TCP ID	*Municipality*	*Intersection*	*Priority*	*# of Guides*	*# of Cones*
	Orangeville	Route 93 and Route 487	1	1	3
2	Light Street	Fowlersville Road and Highway 487	1	2	9
3	Nanticoke	Kirmar Parkway, Kirmar Avenue	1	2	6
4	Berwick	Walnut Street and 2nd Street	1	1	6
			Total:	5	24

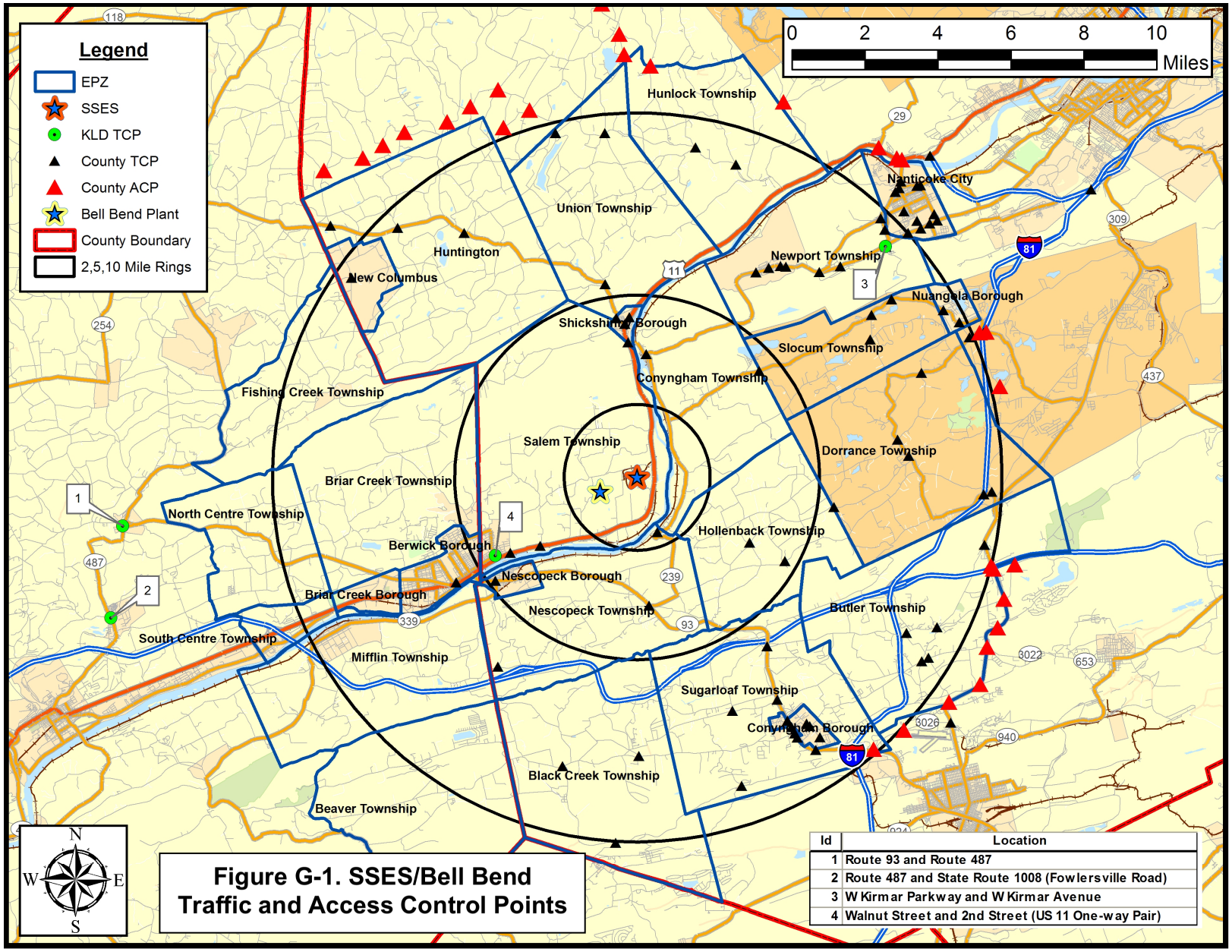


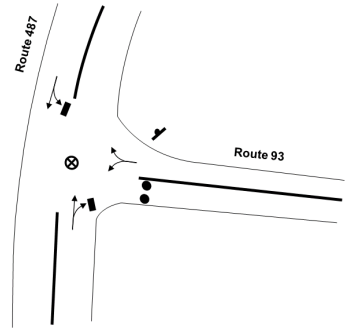
Figure G-1. SSES/Bell Bend Traffic and Access Control Points

TCP

MUNICIPALITY: Orangeville

LOCATION: Route 93 & Route 487

TCP ID: 1



N

**Traffic Guide should position himself safely

KEY

MOVEMENT FACILITATED

MOVEMENT DISCOURAGED/DIVERTED

TRAFFIC GUIDE

STOP SIGN

TRAFFIC BARRICADE

2 ft

3 ft

2 PER LANE (LOCAL ROADS AND RAMPS)

4 PER LANE (FREEWAY AND RAMPS)

TRAFFIC SIGNAL

TRAFFIC CONES SPACED TO DISCOURAGE TRAFFIC BUT ALLOW PASSAGE (3 PER LANE):

8 ft

ACTIONS TO BE TAKEN

1. Discourage eastbound movement on Route 93

MANPOWER/EQUIPMENT ESTIMATE

1 Traffic Guide(s)
3 Traffic Cones

LOCATION PRIORITY

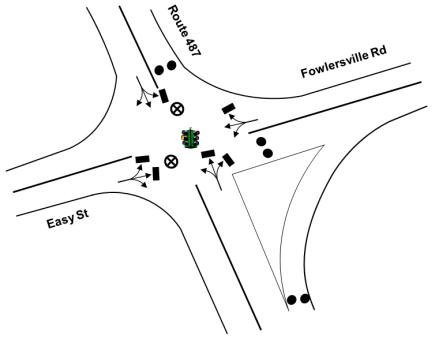
1

TCP

MUNICIPALITY: Light Street

LOCATION: Fowlersville Rd & Route 487

TCP ID: 2



**Traffic Guide should position himself safely

KEY

MOVEMENT FACILITATED

MOVEMENT DISCOURAGED/DIVERTED

TRAFFIC GUIDE

STOP SIGN

TRAFFIC BARRICADE

2 PER LANE (LOCAL ROADS AND RAMPS)

4 PER LANE (FREEWAY AND RAMPS)

TRAFFIC SIGNAL

TRAFFIC CONES SPACED TO DISCOURAGE TRAFFIC BUT ALLOW PASSAGE (3 PER LANE):

ACTIONS TO BE TAKEN

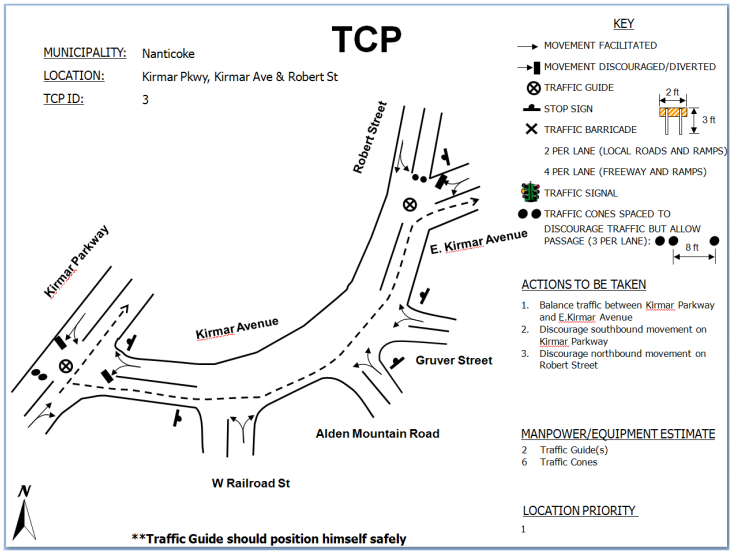
1. Discourage eastbound movement on Fowlersville Rd
2. Discourage northbound movement on Route 487
3. U-turn northbound movement on Route 487 to south
4. Discourage westbound movement on Easy St

MANPOWER/EQUIPMENT ESTIMATE

2 Traffic Guide(s)
9 Traffic Cones

LOCATION PRIORITY

1

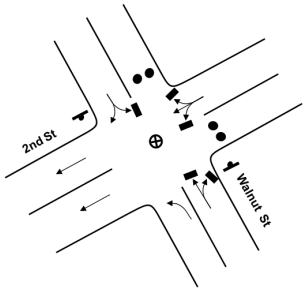

TCP
MUNICIPALITY: Nanticoke
LOCATION: Kirmar Pkwy, Kirmar Ave & Robert St
TCP ID: 3
Robert Street
Kirmar Parkway
Kirmar Avenue
E. Kirmar Avenue
Gruver Street
Alden Mountain Road
W Railroad St
N
**Traffic Guide should position himself safely
KEY
MOVEMENT FACILITATED
MOVEMENT DISCOURAGED/DIVERTED
TRAFFIC GUIDE
STOP SIGN
TRAFFIC BARRICADE
2 ft
3 ft
2 PER LANE (LOCAL ROADS AND RAMPS)
4 PER LANE (FREEWAY AND RAMPS)
TRAFFIC SIGNAL
TRAFFIC CONES SPACED TO DISCOURAGE TRAFFIC BUT ALLOW PASSAGE (3 PER LANE):
8 ft
ACTIONS TO BE TAKEN
1. Balance traffic between Kirmar Parkway and E.Kirmar Avenue
2. Discourage southbound movement on Kirmar Parkway
3. Discourage northbound movement on Robert Street
MANPOWER/EQUIPMENT ESTIMATE
2 Traffic Guide(s)
6 Traffic Cones
LOCATION PRIORITY
1

TCP

MUNICIPALITY: Berwick

LOCATION: Walnut St, 2nd St

TCP ID: 4



N

**Traffic Guide should position himself safely

KEY

MOVEMENT FACILITATED

MOVEMENT DISCOURAGED/DIVERTED

TRAFFIC GUIDE

STOP SIGN

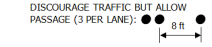
TRAFFIC BARRICADE

2 PER LANE (LOCAL ROADS AND RAMPS)

4 PER LANE (FREEWAY AND RAMPS)

TRAFFIC SIGNAL

TRAFFIC CONES SPACED TO DISCOURAGE TRAFFIC BUT ALLOW PASSAGE (3 PER LANE):



ACTIONS TO BE TAKEN

1. Detour northbound movement on walnut street towards southwest on 2nd St.
2. Discourage eastbound movement on 2nd St.
3. Discourage southeastbound movement walnut St.

MANPOWER/EQUIPMENT ESTIMATE

2 Traffic Guide(s)
6 Traffic Cones

LOCATION PRIORITY

1

APPENDIX H

Evacuation Regions

APPENDIX H: EVACUATION REGIONS

This appendix presents maps of all Evacuation Regions. Table H-1 lists the percentage of population within each emergency response planning area (ERPA) or municipality which evacuates for each of the 22 Regions identified in Section 6.

Table H-1. Percent of ERPA Population Evacuating for Each Region

	REGION																					
	2-Mile Ring, 5-Mile Ring, Entire EPZ			2-Mile Radius and Downwind to 5-Miles				5-Mile Radius and Downwind to EPZ Boundary														
ERPA	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**
1	35%	35%	100%	35%	35%	35%	35%	50%	50%	50%	50%	50%	50%	100%	100%	100%	100%	50%	50%	50%	50%	50%
2	35%	35%	100%	35%	35%	35%	35%	100%	100%	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	100%
3	35%	35%	100%	35%	35%	35%	35%	100%	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	100%	100%
4	35%	35%	100%	35%	35%	35%	35%	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	100%	100%	100%	100%
5	35%	35%	100%	35%	35%	35%	35%	100%	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%	100%	100%	100%	100%
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8	35%	100%	100%	100%	50%	50%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
9	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
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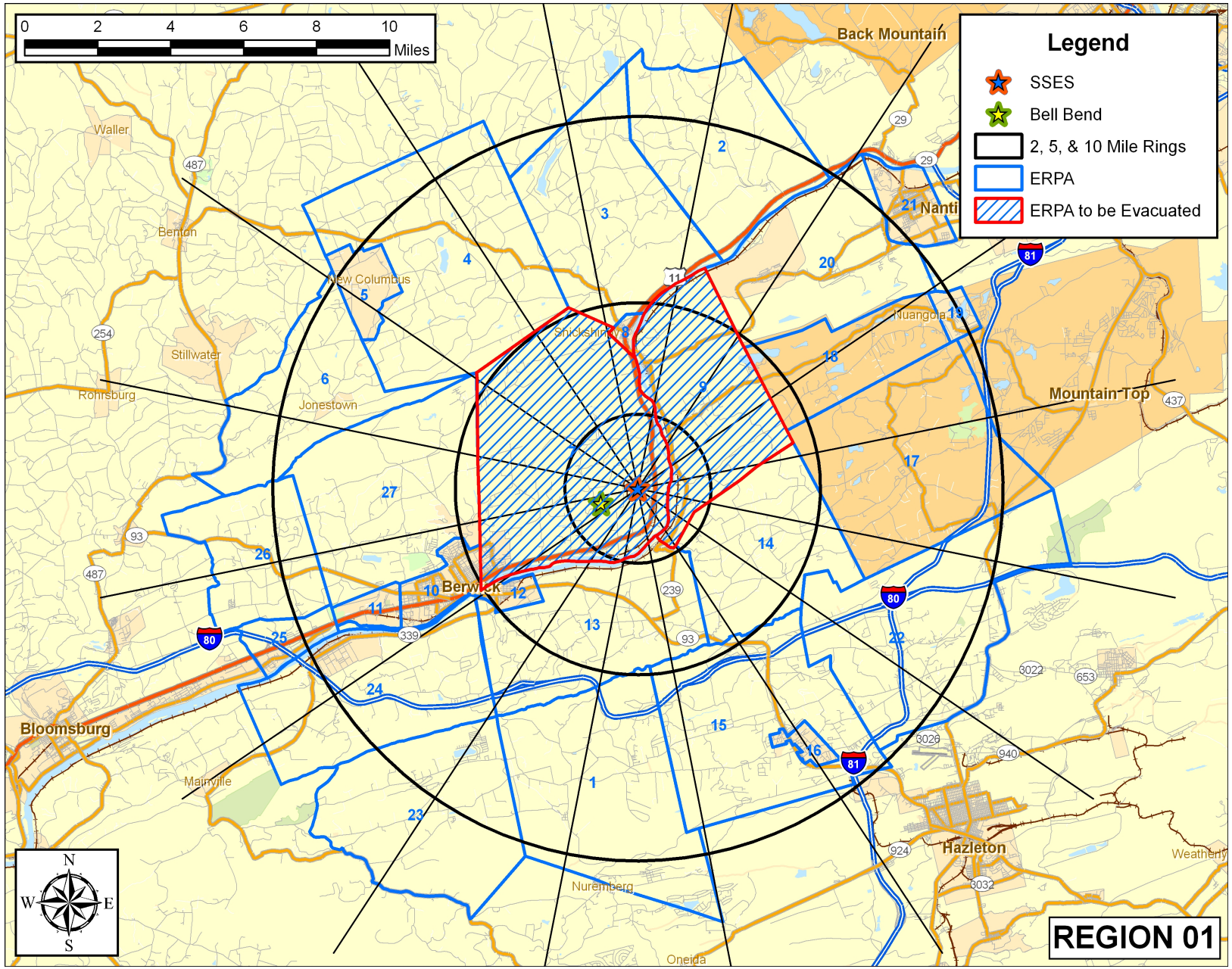
0 2 4 6 8 10
Miles
Legend
SSES
Bell Bend
2, 5, & 10 Mile Rings
ERPA
ERPA to be Evacuated
Back Mountain
Nanticoke
Mountain Top
Berwick
Bloomsburg
Hazleton
Waller
Benton
New Columbus
Stillwater
Rohrsburg
Jonestown
Shickshinny
Nuangola
Mainville
Nuremberg
Oneida
Weatherly
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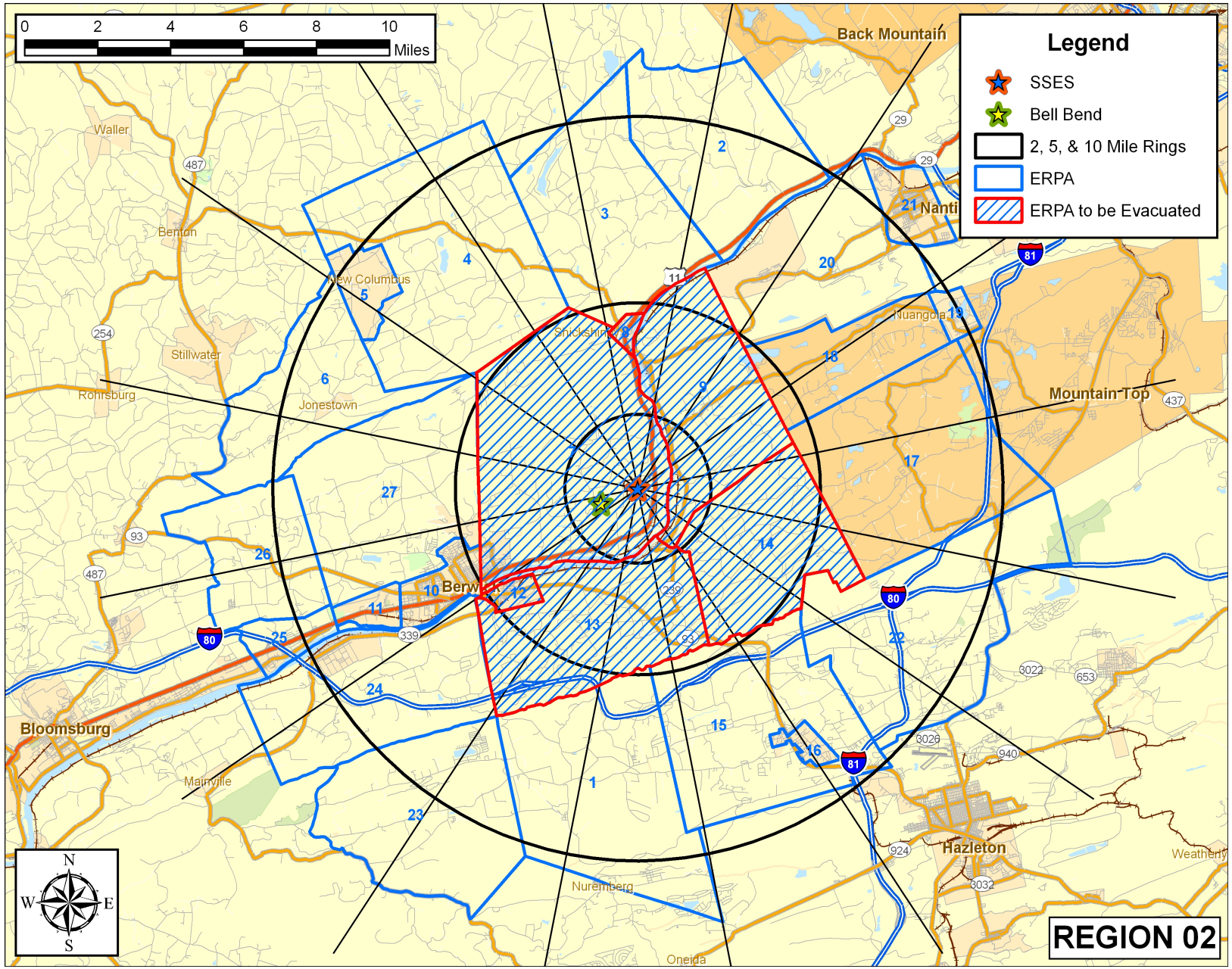
REGION 01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2, 5, & 10 Mile Rings
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Mountain Top
Berwick
Bloomsburg
Hazleton
Nuangola
Shickshinny
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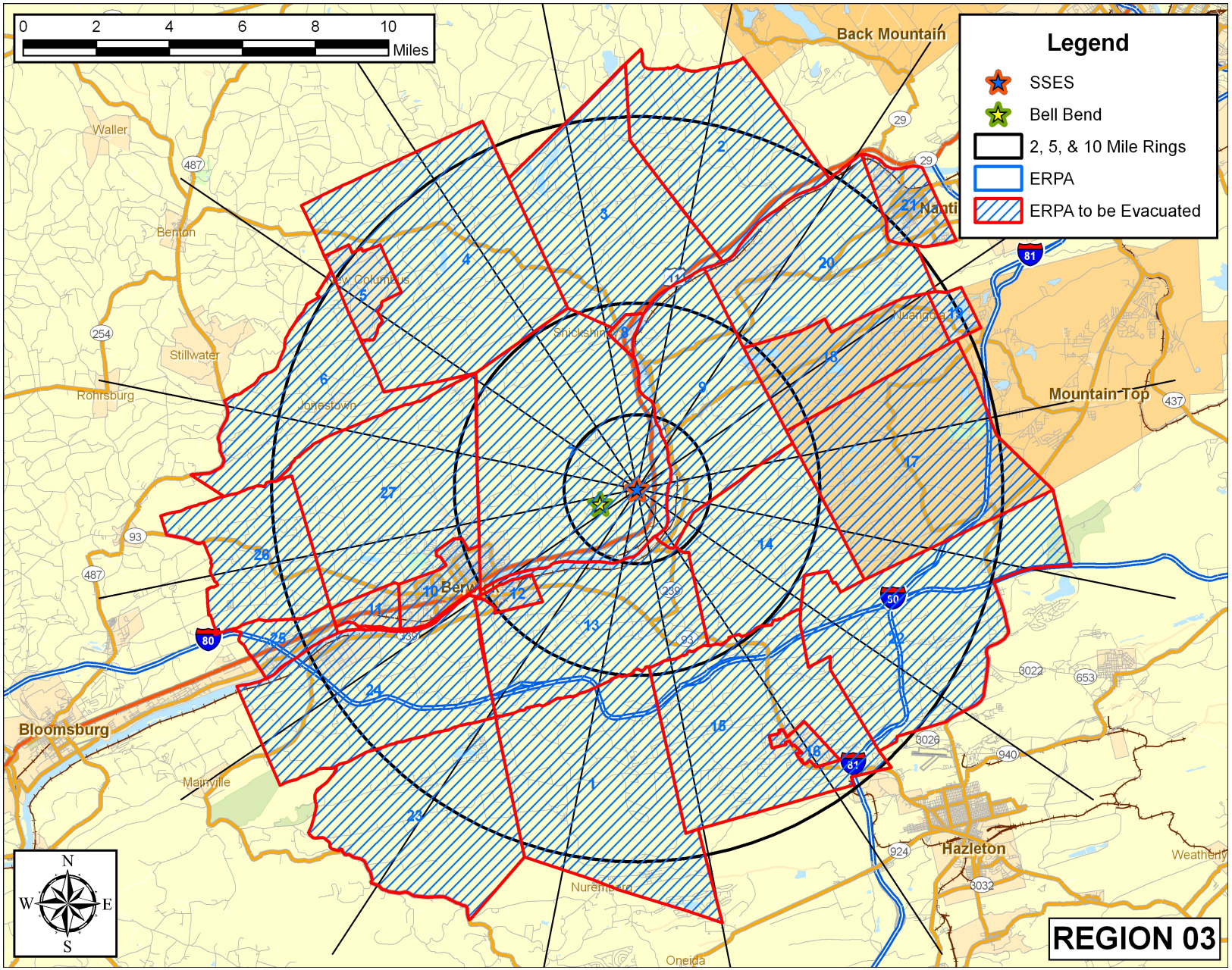
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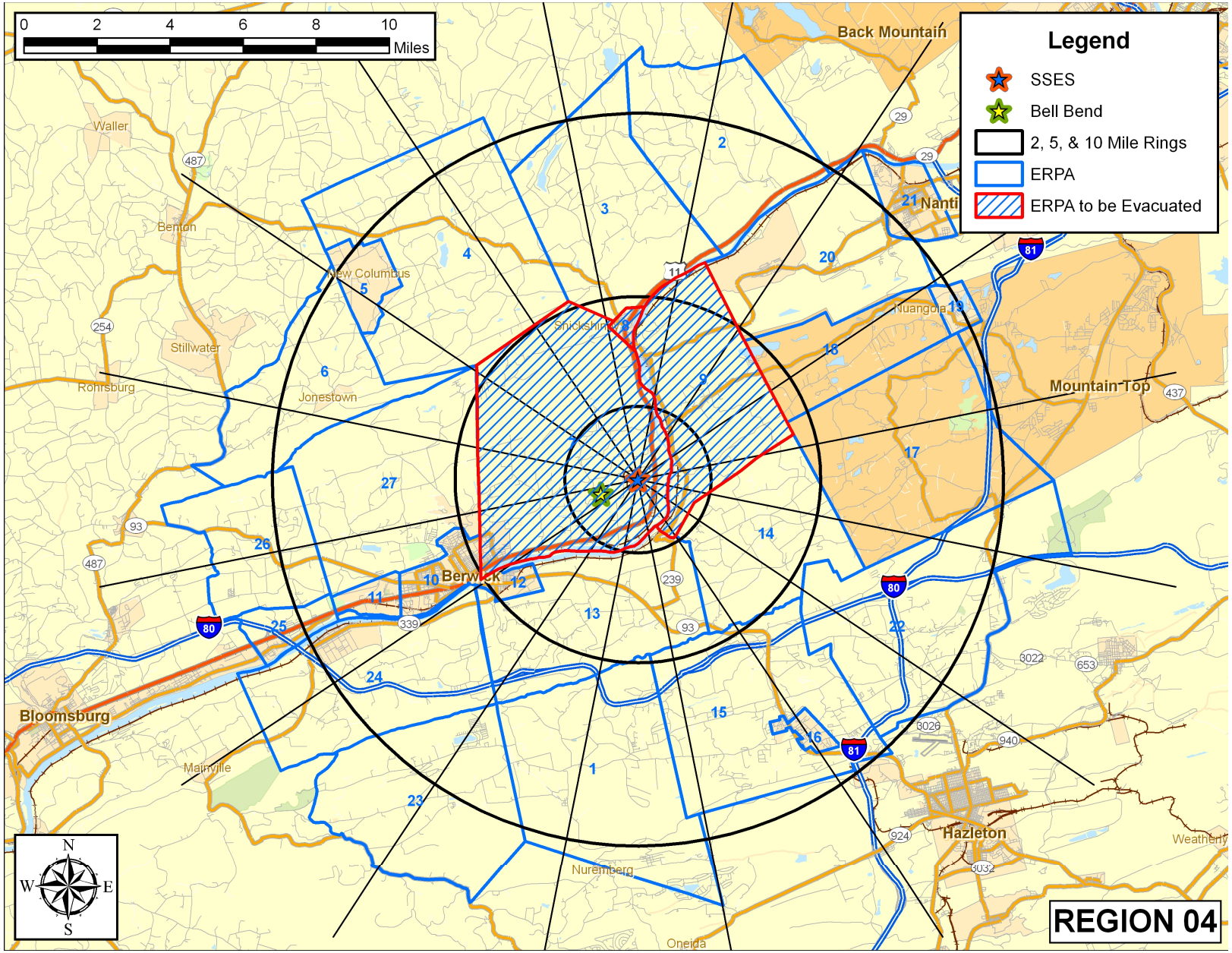
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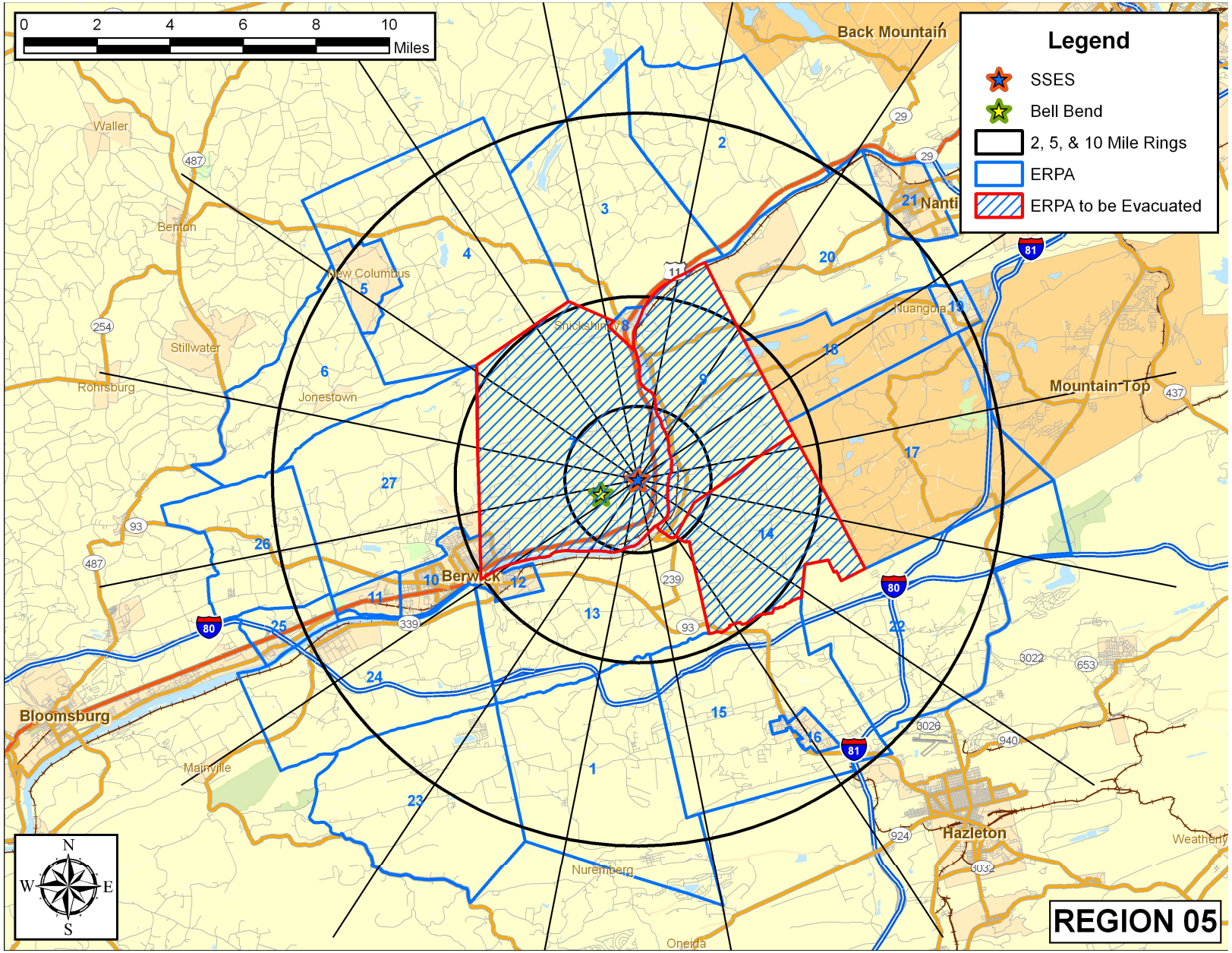
REGION 04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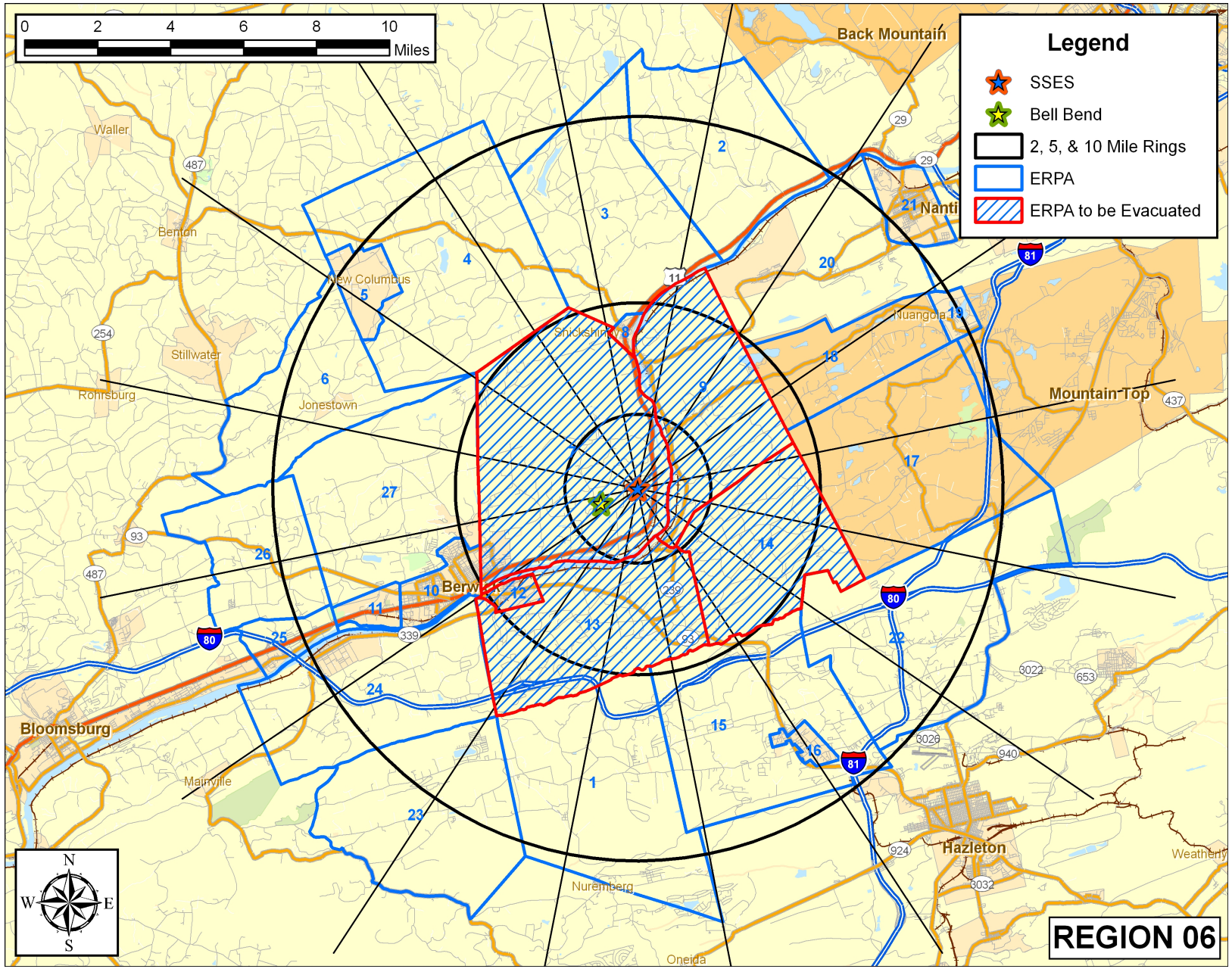
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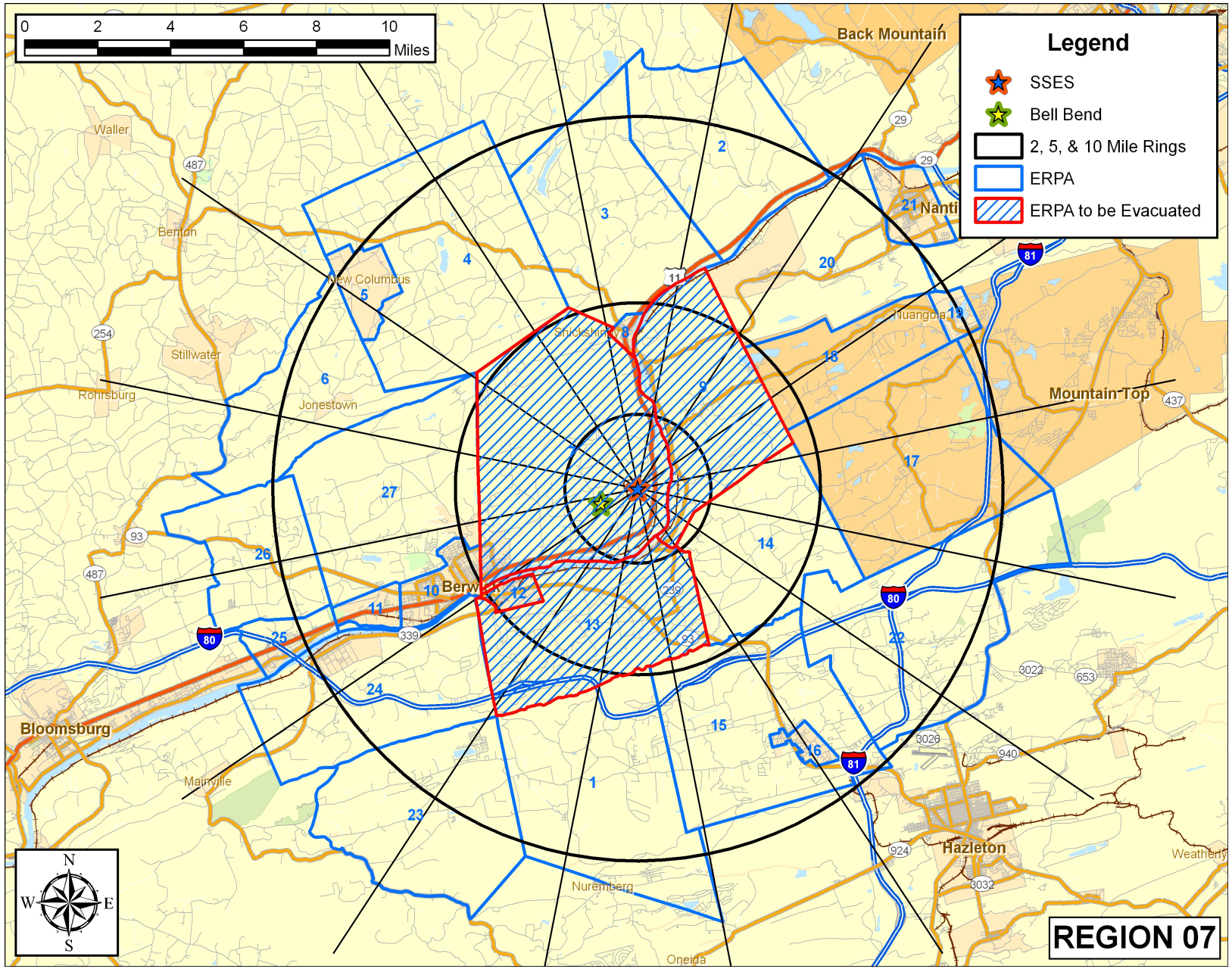
REGION 06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2, 5, & 10 Mile Rings
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