Milford Area

Working Group

Meeting No. 2

March 23, 2004

Working Group Members

Scott Adkisson
Milford Area Resident

Irma Barriga
St. John the Apostle Roman Catholic Church

Thea Becton
First State Community Action Agency

Robert Burris
Burris Logistics

I.G. Burton, III
Businessman

Richard Carmean
City Manager, City of Milford

F. Brooke Clendaniel
Milford Historical Society

Mark Davis
Delaware Dept. of Agriculture

Gary Downes
Milford Area Resident

David Edgell
Office of State Planning Coordination

Terry Feinour
Bayhealth Medical Center

Connie Fox
Farmer, Realtor

Dean Geyer
Geyer's Restaurant

Wyatt Hammond
Milford Chamber of Commerce

E. Keith Hudson
Milford Police Chief

Lawrence Lank
Sussex County Planning & Zoning Commission

Michael Levengood
Perdue Farms

Mark Mallamo
Milford Resident

Randy Marvel
Milford Planning Commission

William Matthews, Jr.
Sussex County Emergency Medical Services

Michael Petit de Mange
Kent County Department of Planning Services

Skip "Michael" Pikus
Downtown Milford Incorporated

Ronald Robbins
Farm Bureau

Mike Simmons
DelDOT, Project Development

Glen Stevenson
Milford School District

Elliott Workman
Delaware Nature Society Abbotts Mill Nature Center

Agenda

5:45	Call to Order	Bob Kramer
5:50	Opening Remarks	Carolann Wicks Monroe Hite, III
6:00	Working Group Guidelines	Bob Kramer
6:15	Draft Vision, Goals and Objectives	Bob Kramer
6:30	Constraints Map	Joe Wutka
7:00	Break	
7:10	Corridor Studies	Project Team
8:20	Meeting Summary	Monroe Hite, III
8:25	Next Meeting	Bob Kramer
8:30	Adjourn	

Project Notebook

- **Tab 1:** PowerPoint Slides
- **Tab 2:** Draft Meeting No. 1 Notes
- **Tab 3:** Study Schedule

Recent Project Team Meetings

- **February 27, 2004:** Cultural Resources Coordination Meeting with State Historic Preservation Office Staff
- **March 1, 2004:** Make-up meeting for members of all three Working Groups who were unable to attend their initial meeting (CHEER Center – Georgetown – abbreviated presentation by Project Team)
- **March 10, 2004:** Millsboro-South Area Working Group Meeting
- **March 18, 2004:** Georgetown Area Working Group Meeting

Upcoming Meetings

- **April 8, 2004:** Update Environmental Resources Agencies – Quarterly Meeting
- **May 2004:** Field Tour with Environmental Resource Agencies
- **May 2004:** Third Round of Working Group Meetings including Field Tours
- **June 2004:** Public Workshops (3)

Working Group Guidelines

- **How We Treat Each Other**
- **How We Make Recommendations**
- **How We Communicate with Those Outside the Working Group**

Working Group Guidelines

- **How We Treat Each Other**
  - Each member has an equal right to speak and ask questions. There are no "dumb questions."
  - Each member is encouraged to share individual viewpoints. Individual opinions are valid whether others agree with them or not.
  - We will listen to, respect and seek to understand the views of others, particularly those perspectives that differ from our own.
  - Disagreements will be explored not suppressed. In some instances, however, disagreements may be discussed outside of meetings so that we are not distracted from achieving the purpose of the meetings.
  - We will be courteous when addressing other members, staff and consultants.
  - We will refrain from interrupting each other, staff or consultants.
  - We will keep our comments relevant to the topic under discussion.
  - Draft materials, plans and reports shared by and among members, staff, and consultants shall be treated as working papers.

Working Group Guidelines

- **How We Make Recommendations**
  - **The Working Group will operate by consensus whenever possible. Consensus does not necessarily mean agreement or active support by each member. Those not objecting are not necessarily indicating that they favor the proposal under consideration, but merely that they can "live with it."**
  - **In the absence of consensus, a super majority of three-quarters (75%) of the members present is required for approval of an action.**
  - **The facilitator will seek the sense of the Working Group on an issue/action. If there is not unanimity and if a clear super majority does not exist, written ballots will be used.**
  - **Members may designate an alternate to attend and participate in discussions in his or her absence. Alternates may vote in the absence of the member, except on the vote to adopt final recommendations.**
  - **The vote to adopt final recommendations will be by super majority. Only members can vote and written "absentee" ballots will be accepted.**
  - **Non-members shall attend meetings as observers and may be invited to offer comments if time allows.**

Working Group Guidelines

- **How We Communicate with Those Outside the Working Group**
  - **Ideas discussed within the Working Group should not be presented as representing the position of the group without the agreement of the group.**
  - **When speaking about the work of the Working Group outside of meetings, members are speaking for themselves only unless speaking from approved documents or positions of the Working Group.**
  - **Draft materials, plans and reports shared by and among members, staff and consultants shall be treated as working papers.**

Draft - Vision, Goals and Objectives

- **Vision = Desired Future**
- **Goals and Objectives = Guide for Developing and Evaluating Alternatives**
- **Draft Vision, Goals and Objectives considered:**
  - **Results of Listening Tour and Workshops**
  - **Milford Comprehensive Plan**
  - **Sussex County Comprehensive Plan**
  - **Kent County Comprehensive Plan**
  - **Sussex County Long Range Transportation Plan**
  - **Kent County Long Range Transportation Plan**
  - **DelDOT's Long Range Transportation Plan**
  - **Delaware's Strategies for State Policies and Spending**
  - **Livable Delaware Initiatives**

Draft Vision

- **The US 113 Working Group for the greater Milford Area envisions a future for the area where:**
  - The movement of people and goods in the study area is not hampered by traffic congestion as experienced today in parts of Kent and Sussex Counties.
  - The character and quality of life in the greater Milford Area have been maintained and the area continues to be a safe and attractive place for residents to live, work and play in and for visitors to enjoy.
  - Mobility and accessibility for local residents, police, fire emergency services and businesses have been preserved and improved.
  - The historic, archaeological, agricultural and natural resources in the greater Milford Area have been preserved while growth, both economic and residential, has been sustained.
- **We expect realization of this vision for the future of the Milford Area will require efforts at two levels.**
  - First, a comprehensive outreach effort with community, business and other stakeholder groups.
  - Second is strengthened communication and coordination among municipal, county, state and federal governments.

Draft Goals

- **The end result will be an efficient transportation infrastructure for the greater Milford Area that meets the following goals:**
  - Supports responsible and sustainable land development and economic growth while accommodating the anticipated growth in local, seasonal and through traffic.
  - Avoids negative impacts from transportation improvements to natural, cultural and historic resources.
  - Respects private property rights of owners on US 113 and along any new or bypass alignment.
  - Includes a limited access, through traffic route to points north and south of the study area
  - Allows for the separation of through (regional) and seasonal traffic from local traffic
  - Preserves and enhances capacity on existing US Route 113
  - Includes improved connections between east-west and north-south routes
  - Enhances the local road network and creates a comprehensive transportation system that accommodates the needs of all modes of transportation serving the residents of the greater Milford Area

Draft Objectives

- **Mobility/Accessibility**
  - Separate local traffic from through and seasonal traffic
  - Provide more travel options for residents
  - Develop a broader range of transportation options (bus, bike and pedestrian ways)
  - Improve the connections between east/west and north/south routes
  - Preserve or increase, where possible, traffic capacity on existing US 113
- **Congestion**
  - Reduce traffic congestion by providing additional capacity where needed
  - Reduce, where possible, traffic through neighborhoods
  - Improve traffic ingress/egress for businesses
- **Safety**
  - Improve safety of residents-pedestrians, bicyclists, children, drivers and transit users in the greater Milford Area
  - Separate through traffic from local traffic, where feasible
  - Improve accessibility for emergency services
  - Enhance safe access to schools, parks and recreation sites, community facilities, businesses and institutions

Draft Objectives

- **Land Use Planning**
  - Accommodate planned growth and the resulting traffic
  - Coordinate transportation improvements with approved land use patterns
  - Be consistent with Delaware's Livable Delaware Initiatives and Strategies for State Policies and Spending and Kent, Sussex and municipal comprehensive plans
- **Environment**
  - Conduct a comprehensive assessment of environmental resources and impacts on those resources
  - Avoid adverse affects to farmland, historic, archaeological and natural resources
  - Develop minimization and mitigation measures where avoidance is not feasible
- **Aesthetics**
  - Improve the view to and from the road
  - Maintain and enhance the character of the greater Milford Area
  - Use context sensitive design and construction techniques
  - Employ a full range of aesthetic options in addressing transportation needs and congestion in the greater Milford Area

Draft Objectives

- **Intergovernmental Coordination**
  - Increase the level of cooperation and coordination among Kent and Sussex Counties, towns along the US 113 Corridor and DelDOT and other State agencies regarding the linkages between land use and transportation
  - Comply with federal and state agency environmental and historic resource regulations and requirements
- **Public Outreach**
  - Undertake comprehensive public outreach efforts including, public workshops; meetings with community, business and interest groups; newspaper articles; a project web site and other appropriate outreach techniques to obtain citizen input
  - Consider citizen input, ideas, suggestions, concerns and solutions before developing options and recommending solutions

Constraints Map Comments

- Homework Assignment
- General Feedback
  - Items that were omitted
  - Areas of Concern / Interest
- Significance of Identifying Constraints
- Presentation of Each Constraint Layer

Planning Information and Resources

US 113 North/South Study Area

- Planning Information
- Land Use
- Community Facilities
- Socio-Economic Resources
- Wetlands / Aquatic Resources
- Protected Lands & Resources
- Cultural & Historic Resources
- Terrestrial Resources

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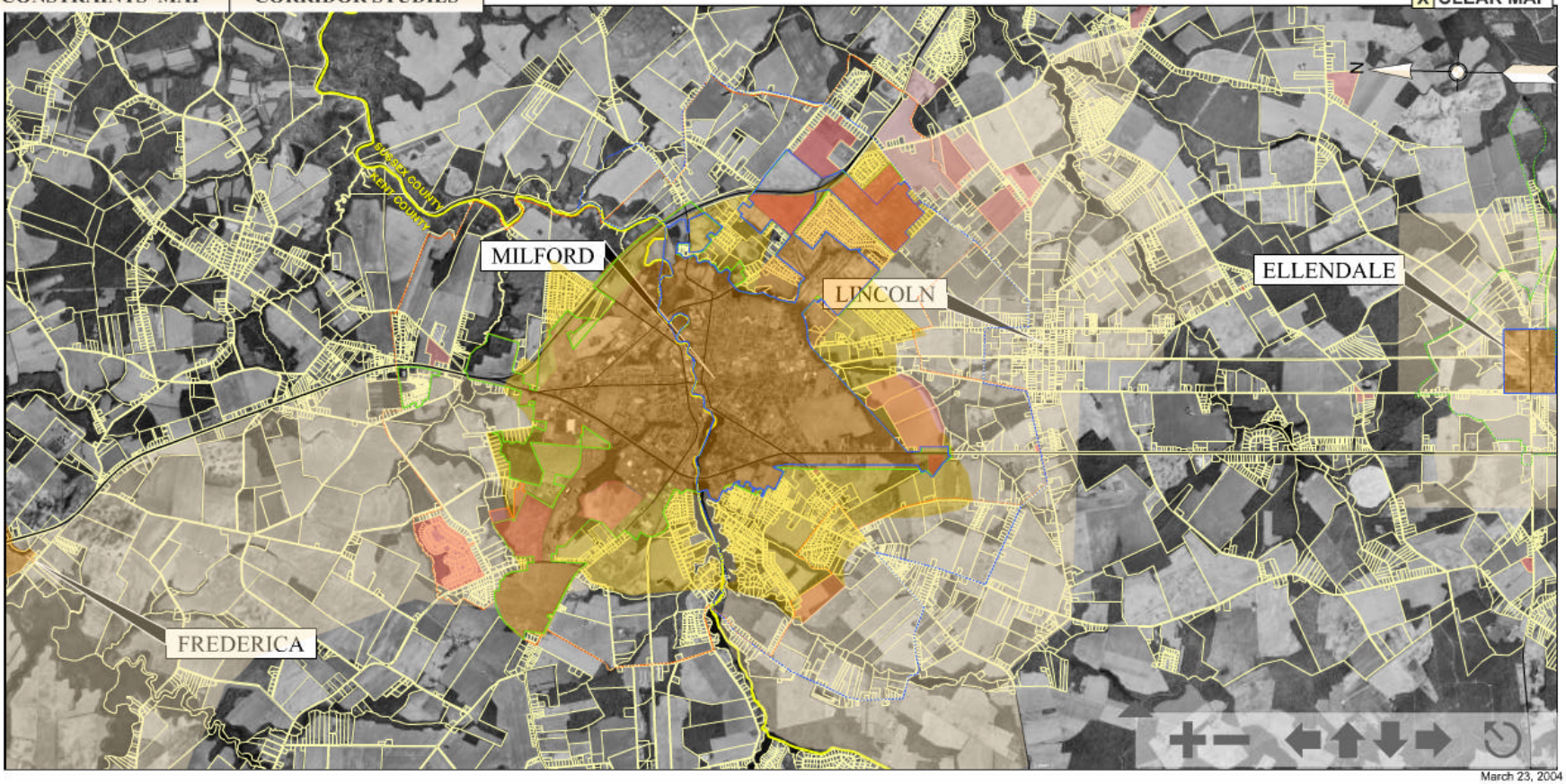
WORK IN PROGRESS

US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

X CLEAR MAP



March 23, 2004

- ☑ PLANNING INFORMATION
  - EXISTING LAND USE
  - EXISTING COMMUNITY FACILITIES
  - SOCIO-ECONOMIC RESOURCES
  - WETLANDS / AQUATIC RESOURCES
  - PROTECTED LANDS & RESOURCES
  - CULTURAL & HISTORICAL RESOURCES
  - TERRESTRIAL RESOURCES
  - ENVIRONMENTAL INVENTORY SUMMARY

Mapping - Dated 2002
- ☑ Road Network
- ☑ Property Lines

Planning Resources
- Towns
- ☑ Municipal Boundaries (OSPC)
- ☑ Future Development (Municipal Comp Plans)

OSP - Strategies for Policy and Spending
- ☑ Community
- ☑ Developing Area
- ☑ Secondary Growth
- Rural (Everything Else)

- ☑ **Municipal Water / Wastewater**
- ☑ **Imminent Development**

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New Construction

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Planning Information

- Mapping
  - Date of Mapping – 2002
  - Road Network (US Routes, State Routes, Local Roads and Traffic Signals)
  - Property Lines (Kent and Sussex Counties Tax Assessment Files)
- Planning Resources
  - Towns
    - Municipal Boundaries
    - Future Development (Municipal Comprehensive Plans)
  - Office of State Planning (OSP) – Strategies for Policy and Spending
    - Community (similar to Municipal boundaries near term)
    - Developing Area (similar to Future Development and Comprehensive Plan - next 20 years)
    - Secondary Growth (50 years – Long-Term)
    - Rural (everything else)
    - Sensitive Areas
  - Municipal Water (Existing / Future)
  - Municipal Sewer
  - Imminent Development
    - Development Approved – may be under construction since Spring 2002
    - Development in Process of Approval - Pending
    - Property that may be developed in the near future

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CONSTRAINTS MAP | CORRIDOR STUDIES

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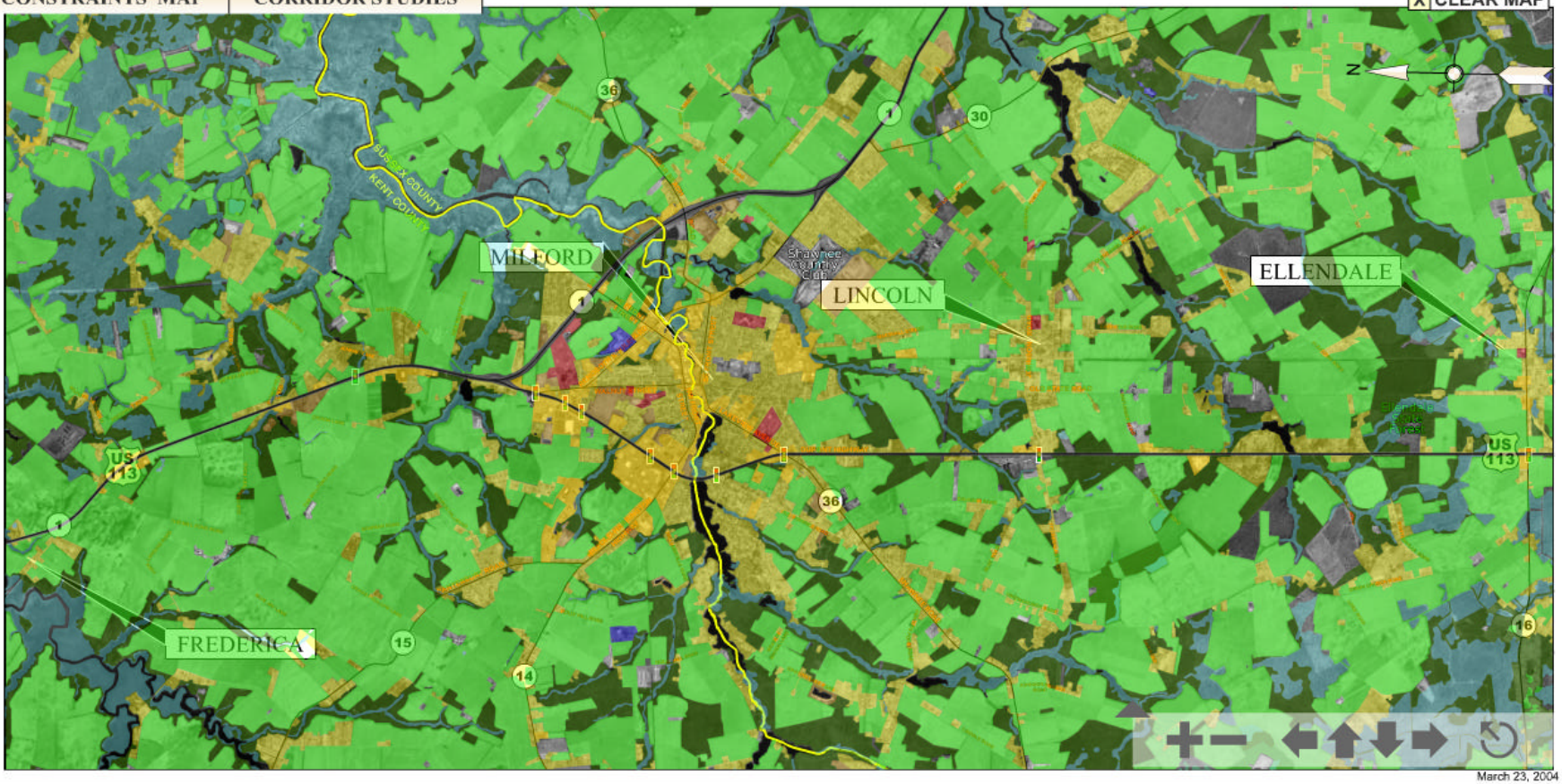

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- ☑ Urban / Built-Up
- ☑ Residential
- ☑ Commercial
- ☑ Industrial (includes Extraction - Borrow Pits)
- ☑ Institutional / Governmental
- ☑ Agricultural
- ☑ Transportation / Communication
- ☑ Forest / Open Space
- ☑ Wetlands / Waters

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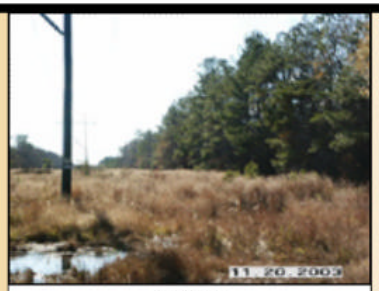

Wetlands

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Existing Land Use

- Urban / Built-Up
  - Land Use Converting from Residential to Retail / Commercial (office) / Industrial
- Residential
- Commercial
- Industrial (Includes excavated borrow pits)
- Institutional / Governmental
- Agricultural
- Transportation / Communication
- Forest / Open Space
- Wetlands / Waters

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US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

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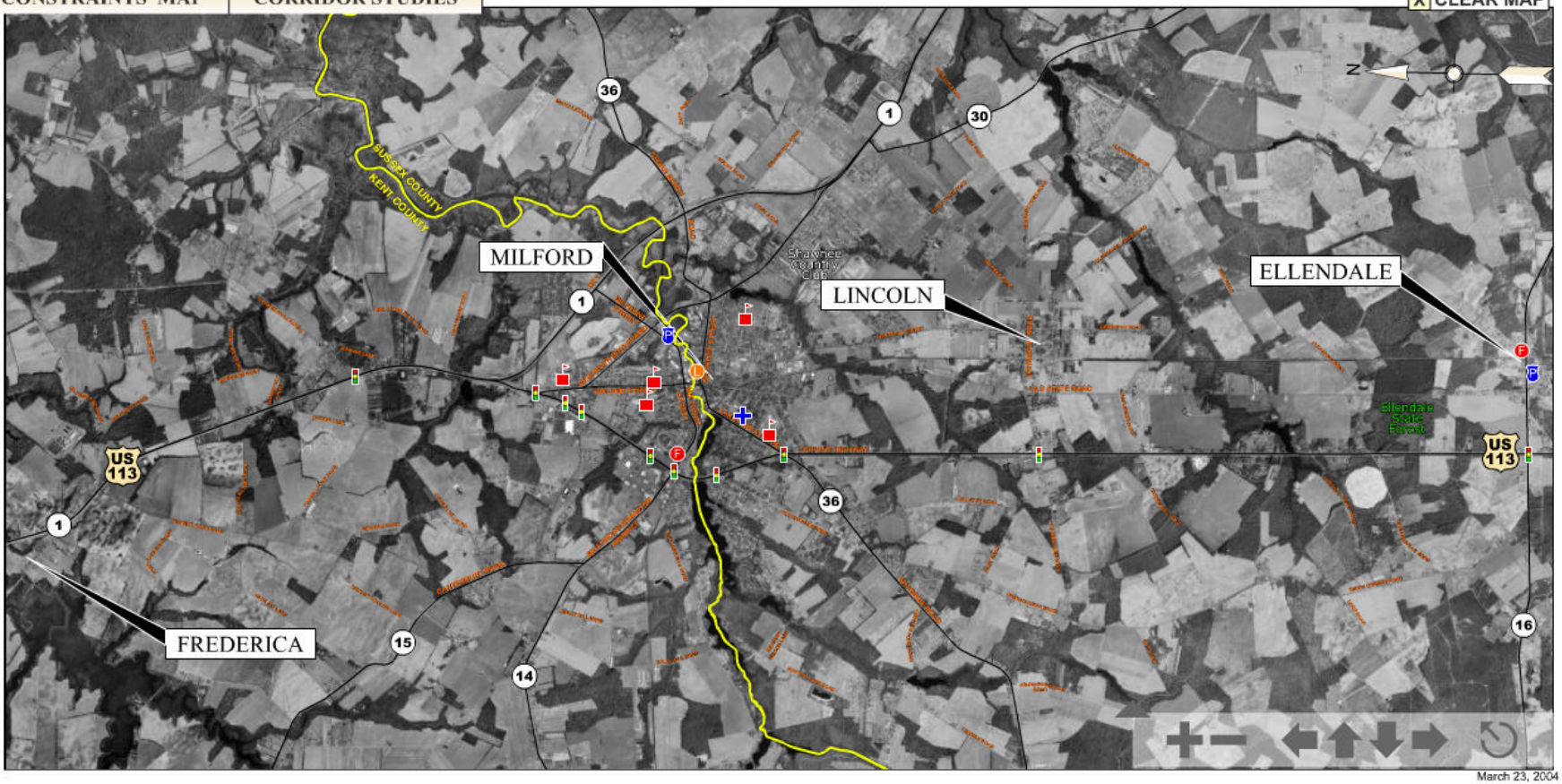

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- ENVIRONMENTAL INVENTORY SUMMARY

- ☑ Fire Stations
- ☑ Police Stations
- ☑ Hospitals
- ☑ Public Schools
- ☑ Libraries

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Frankford Library

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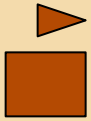
Existing Community Facilities

- Fire Stations (3 sites)

- Police Stations (2 sites)

- Hospitals (1 site)



- Public Schools (6 sites)

- Libraries (1 site)

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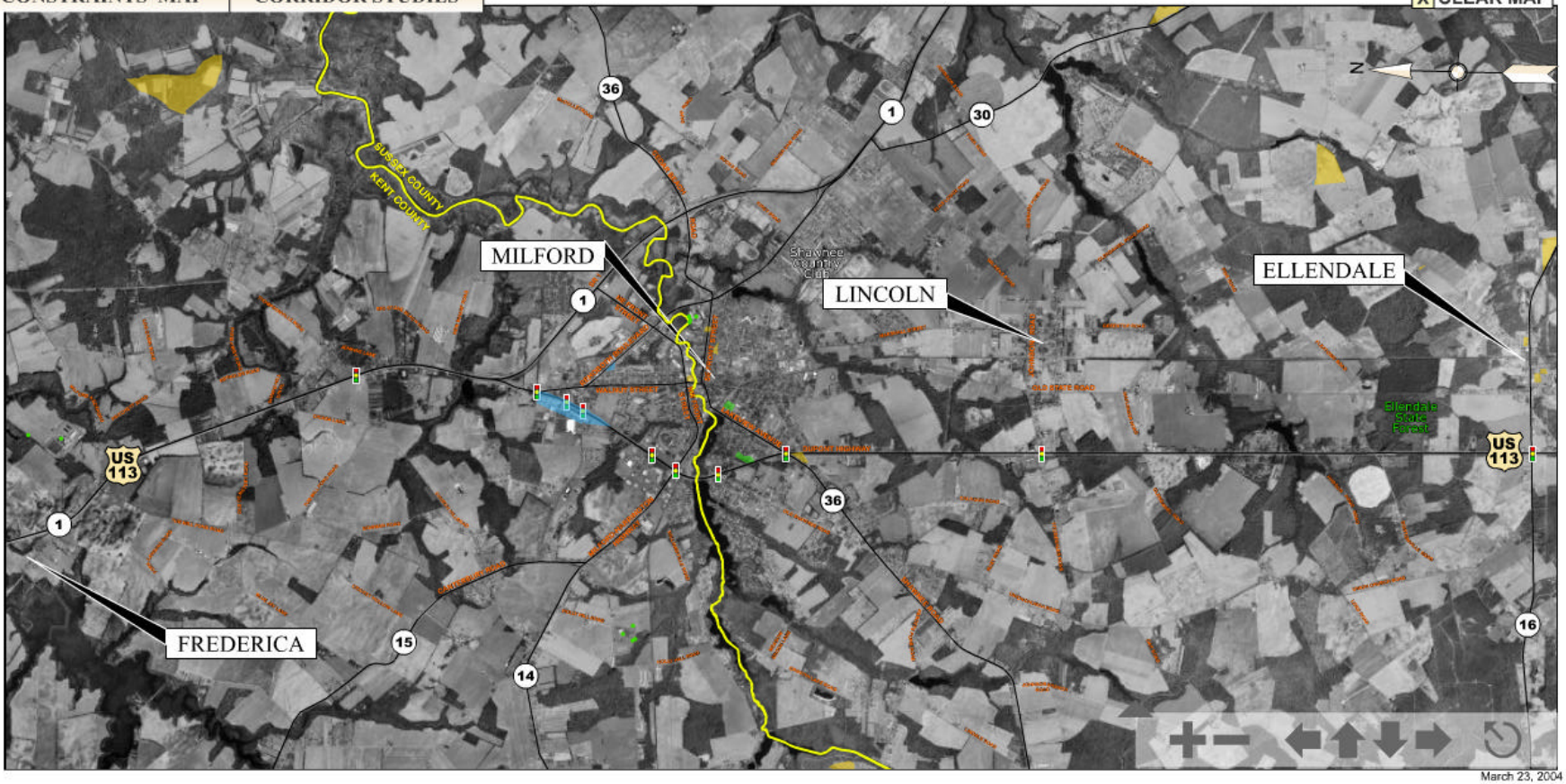

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- ☑ 2000 U.S. Census Tract Data
- ☐ EPA Site
- ☑ NPDES

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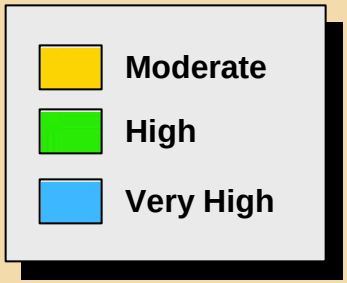
Socio-Economic Resources

- Federal Executive Order 12898 (2/11/94)
- 2000 U.S. Housing Data (Census Tract)
  - Ethnic Distribution by Census Tract
  - Age Distributions
  - Low Income Distributions
  - Mobile Home Sites



- Environmental Protection Agency (EPA) Site
  - Hazardous Waste
  - Solid Waste
  - Liquid Underground Storage Tanks
- Non-Point Discharge Elimination System (NPDES) (Municipal and Industrial Outfalls)

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US 113 North South Study

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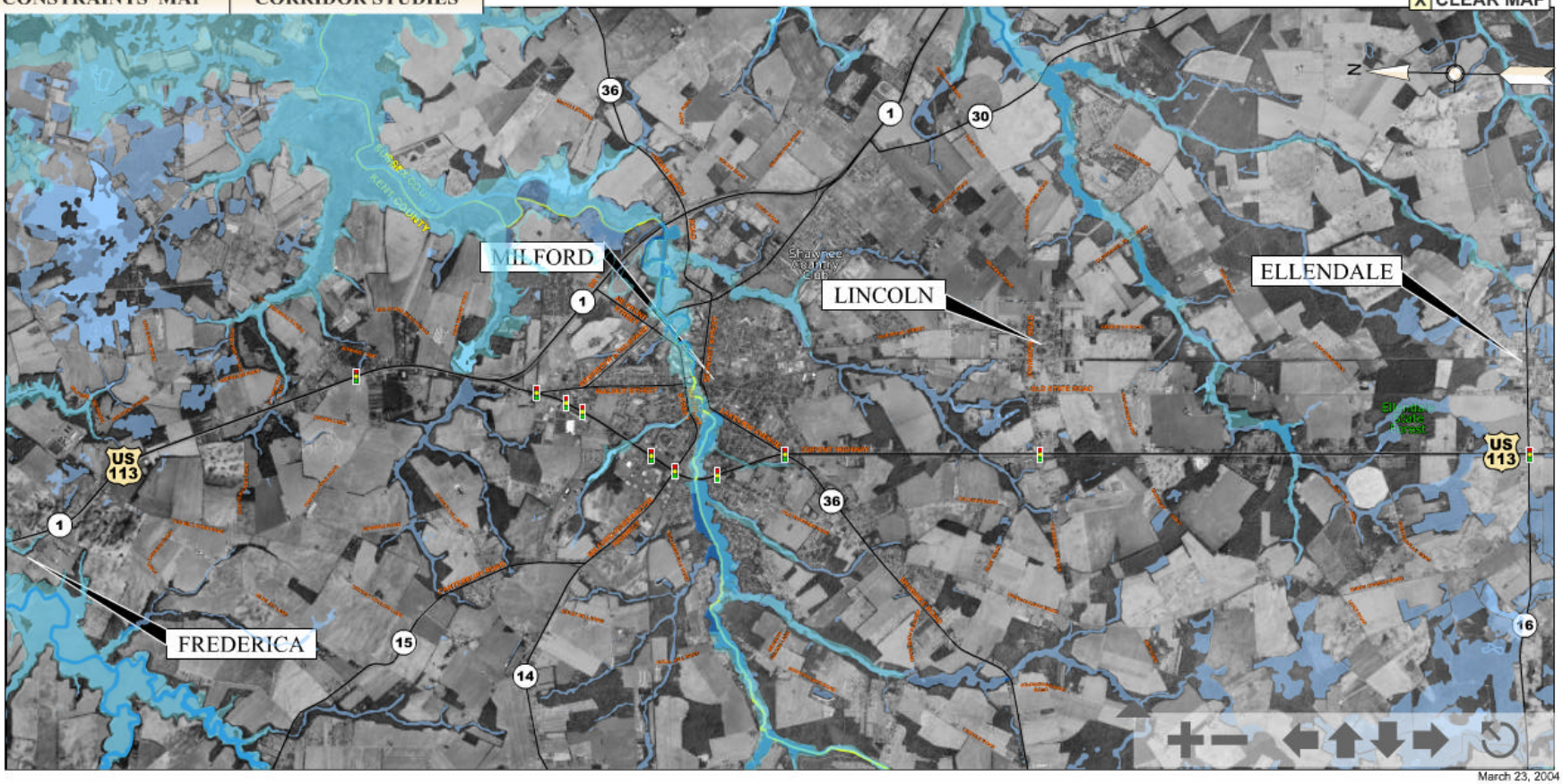

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Types

- ☑ - Estuarine
- ☑ - Lacustrine
- ☑ - Palustrine
- ☑ - Riverine

Watersheds

- ☑ **100-year Floodplains (FEMA)**

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Wetlands / Aquatic Resources

- **Section 404 of the Federal Clean Water Act (CWA)**
  - Army Corps of Engineers Section 404(b)1 guidelines
  - Avoid, Avoid, Avoid - Minimize, Mitigate
  - Permitted Resource
- **Wetlands defined by:**
  - Hydric Soils (Tidal Marsh)
  - Vegetation (Red Maple, Button Bush, Bull Rush)
  - Hydrology (ground or surface water source)
- **Types of Wetlands**
  - Estuarine (tidal waters, tidal wetlands, salt marshes)
  - Lacustrine (lakes, ponds)
  - Palustrine (shallow ponds, marshes, non-tidal wetlands)
  - Riverine (rivers, creeks, sloughs, streams)
- **100-year Floodplains – Federal Emergency Management Administration (FEMA)**
  - Federal Executive Order 11988

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US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

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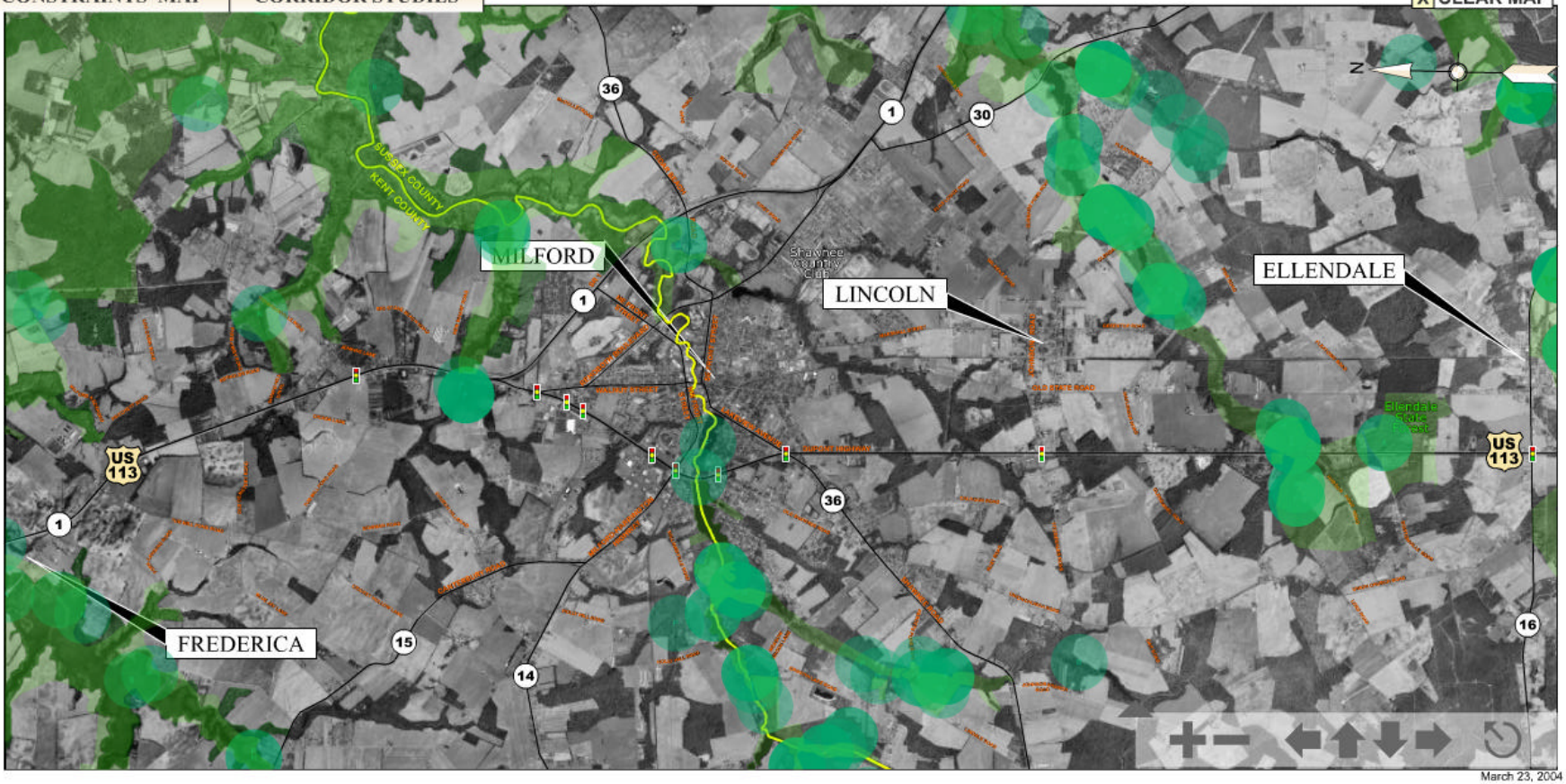

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- CULTURAL & HISTORICAL RESOURCES
- TERRESTRIAL RESOURCES
- ENVIRONMENTAL INVENTORY SUMMARY

- ☑ RTE's
- ☑ Natural Areas
- ☑ State Resource Areas

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Protected Lands & Resources

- Section 7 of Federal Endangered Species Act
- Rare, Threatened and Endangered Species (RTE's) (State and Federal)
  - Birds
  - Animals
  - Plants
  - Fish
  - Natural Communities (Special Ecosystems)

B A P F N

- Natural Areas (State Defined Voluntary Protections)
- State Resource Areas (State Protected Lands)
  - State Parks
  - Conservation Easements
  - Nature Preserves
  - Leased Lands
  - Fish & Wildlife Areas

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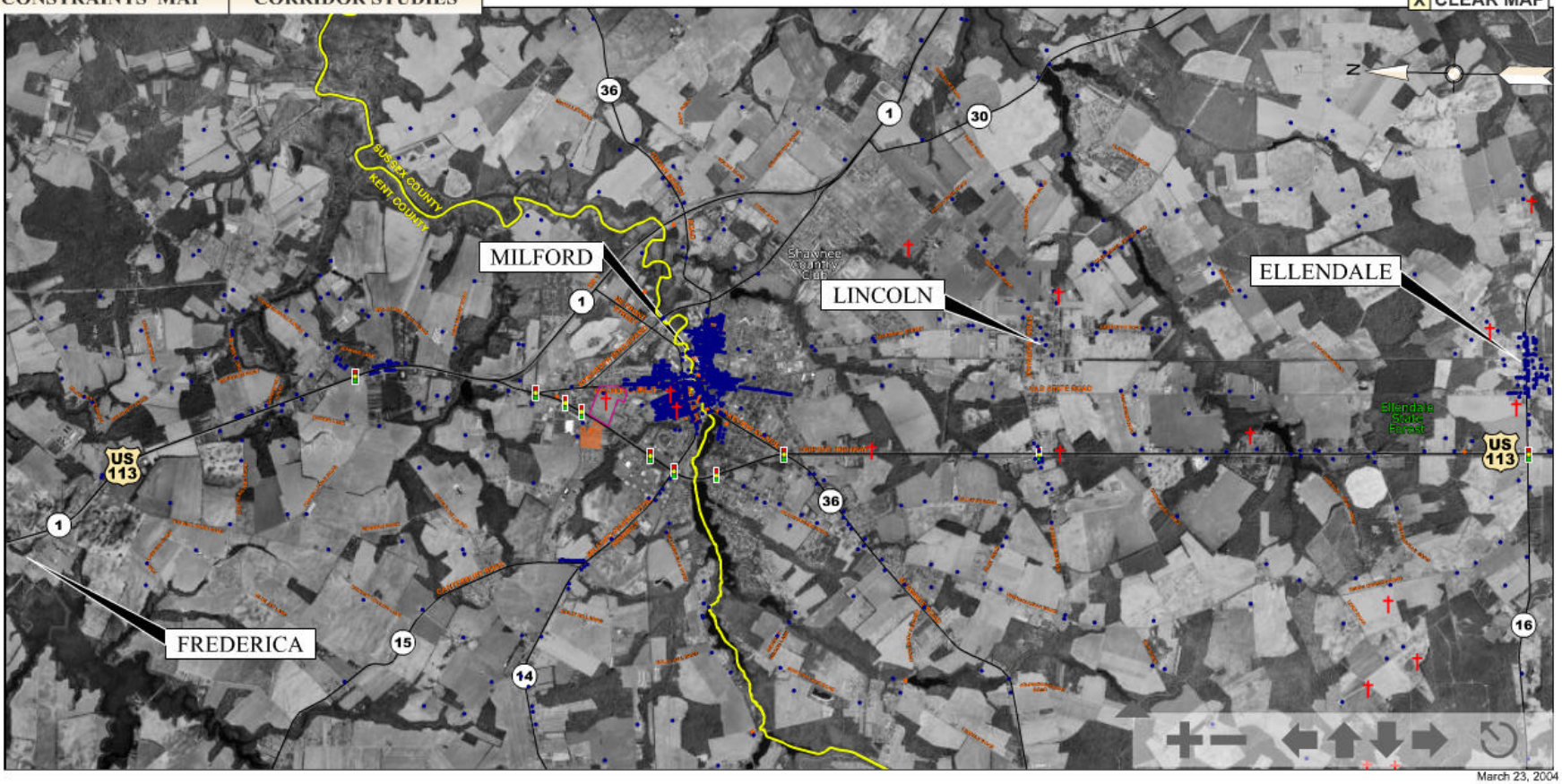

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- ☑ **National Register Properties**
  - ☑ - Districts
- ☑ **CRS Properties (State Listed)**
- ☑ Cemeteries

Woodlawn Memorial Park

▶ NEXT SLIDE

X CLOSE

Cultural & Historic Resources

- Section 106 of the National Historic Preservation Act - Section 4(f) of the Federal Transportation Act
- National Register Properties
  - Buildings, Structures, Objects
  - Archeological Sites
  - Districts
- Cultural Resource Survey Properties (State Listed Sites)
  - Buildings, Structures, Objects
  - Archeological Sites
- Previously Surveyed Cultural Resource Areas
- Cemeteries

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- ☑ Agricultural Development Rights
- ☑ Agricultural Districts
- ☑ Agricultural Suitability / LESA / Prime Farm Soils
- ☑ Domestic Farm Wells

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X CLOSE

Terrestrial Resources

- Delaware Agricultural Lands Preservation Act
- Federal Farmland Protection Policy Act (FPA)
- Agricultural Development Rights (47 parcels)
- Agricultural Districts (43 parcels)
- Agriculture Suitability / Prime Farm Soils / Land Evaluation Site Assessment (LESA)
  - Quality of Land for Agricultural Purposes
  - Agricultural Preservation Suitability
    - Very High
    - High
    - Low (not shown)
    - Very Low (not shown)
- Domestic Farm Wells

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US 113 North South Study

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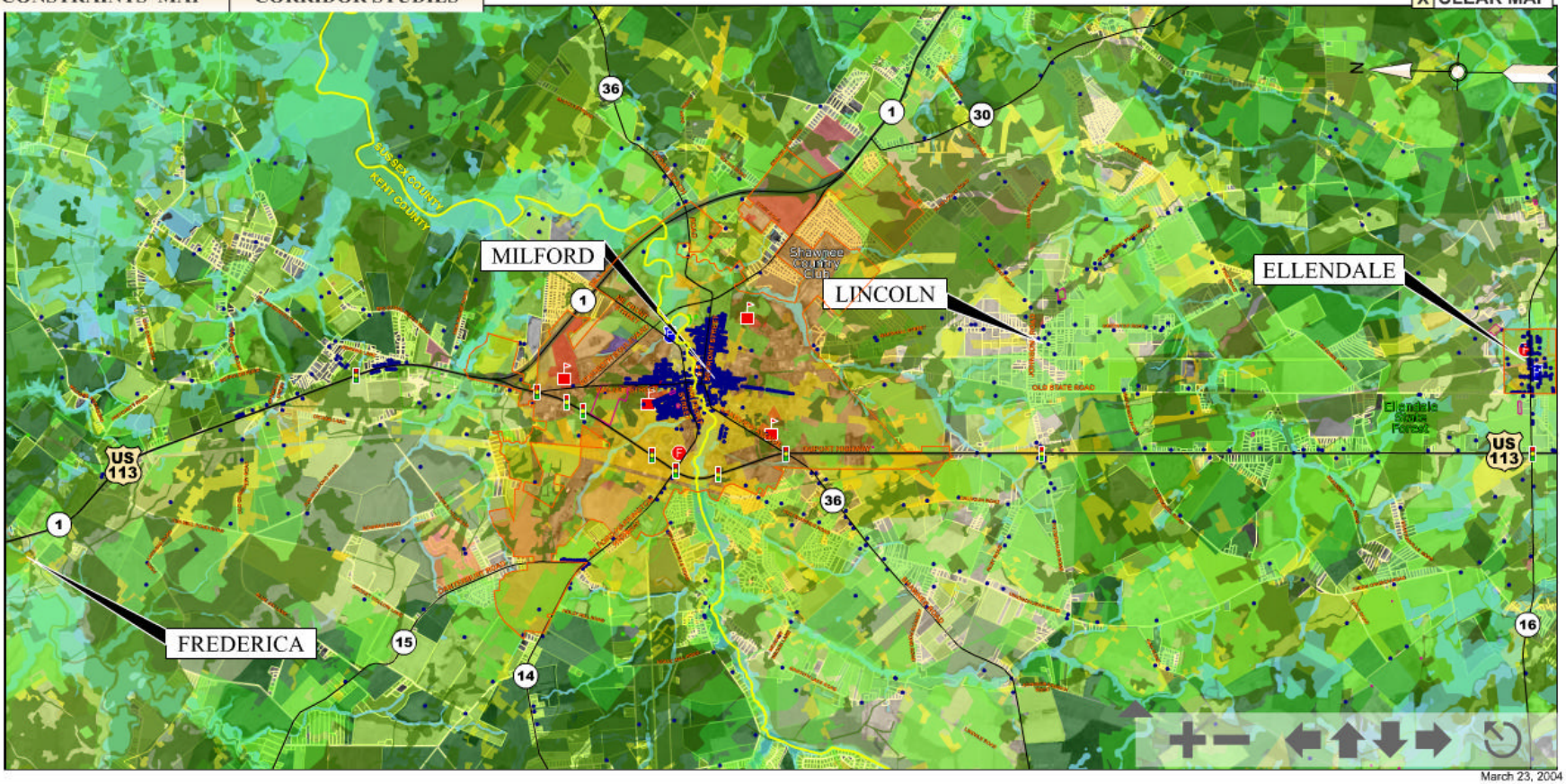

March 23, 2004

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ENVIRONMENTAL INVENTORY SUMMARY

X CLEAR MAP

X CLOSE

Environmental Inventory Summary

- Many Significant Resources in Project Area
- Unfortunately, 100% Avoidance is Impossible
- The Challenge is to Balance Impacts to All Resources
- Results in “Least Impactive Alternative”
- Cooperative and Coordinated Effort between Working Group / DelDOT / Kent and Sussex Counties / Local Governments / Environmental Resource Agencies / General Public

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WORK IN PROGRESS

US 113 North South Study

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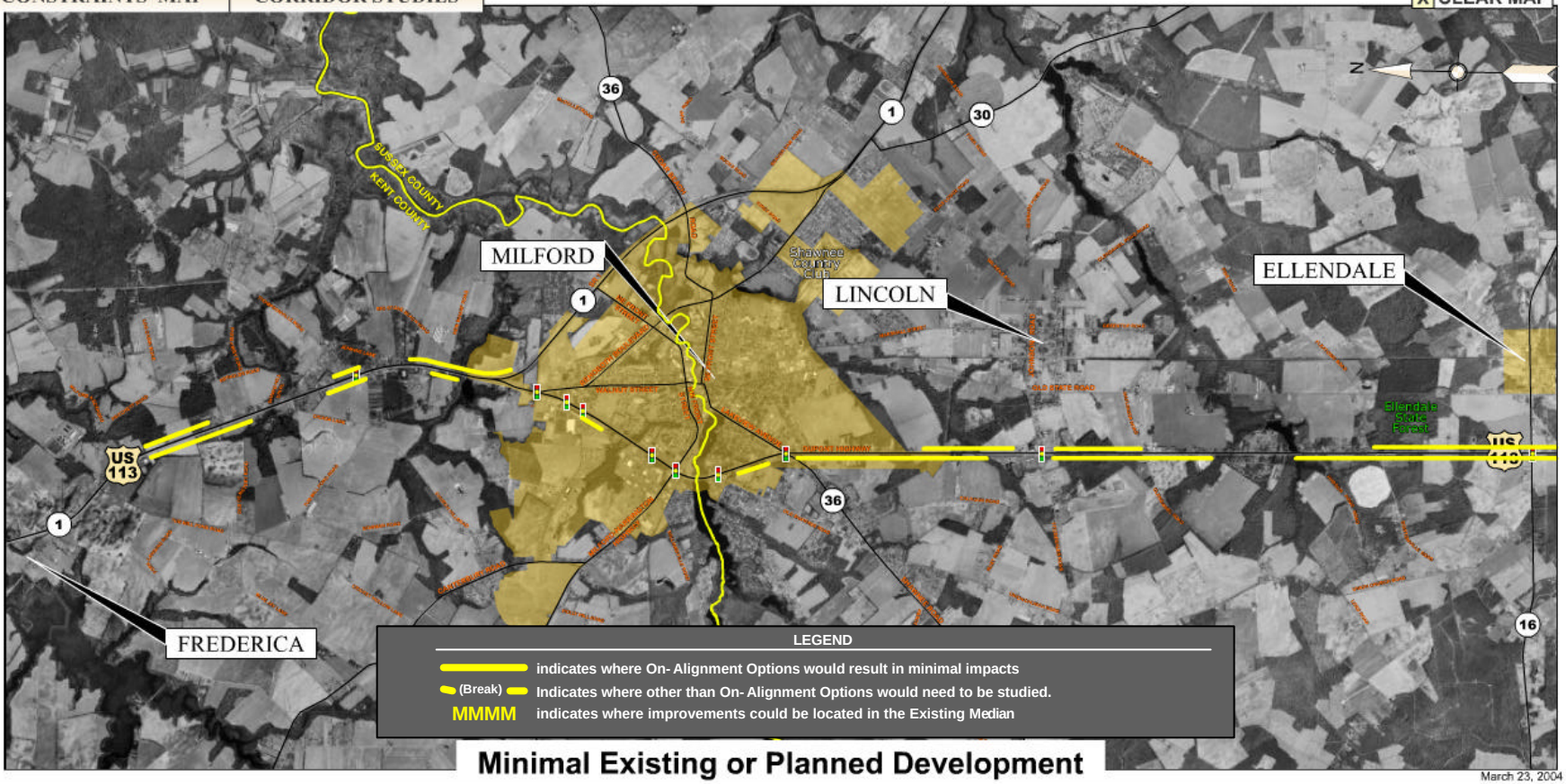

- MINIMAL EXISTING DEVELOPMENT
- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- OFF ALIGNMENT - POTENTIAL CORRIDORS

X CLEAR MAP

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

X CLOSE

Corridor Studies

- **FIRST:** On-Alignment (along existing US 113)
  - Toolbox
  - Examples

- **THEN:** Off-Alignment (on new location (bypass) – if On-Alignment impacts are deemed too severe)
  - Potential Corridors

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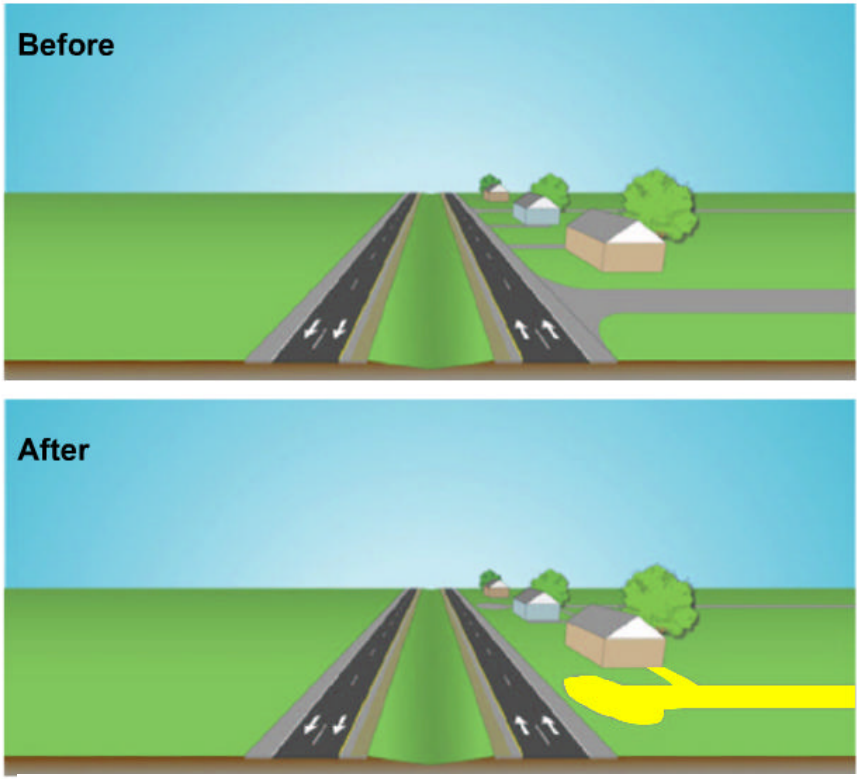
WORK IN PROGRESS

North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



Strategy 1 – Access to Side Road Only

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- [x] Strategy 1 – Access to Side Road Only
- [ ] Strategy 2A – Two-Way Frontage Road
- [ ] Strategy 2B – One-Way Frontage Roads
- [ ] Strategy 3A – Frontage Road on Existing Lanes
- [ ] Strategy 3B – Frontage Road on Existing Lanes
- [ ] Strategy 4 – "Backage" Road Behind Properties
- [ ] Strategy 5 – Access Road Through Properties
- [ ] Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 1 – Access to Side Road Only

- Where parcels front on a roadway other than US 113, provide access only to that side (or rear) road
- Depending on the location, the side road may either cross over limited-access US 113 or end in a cul-de-sac.

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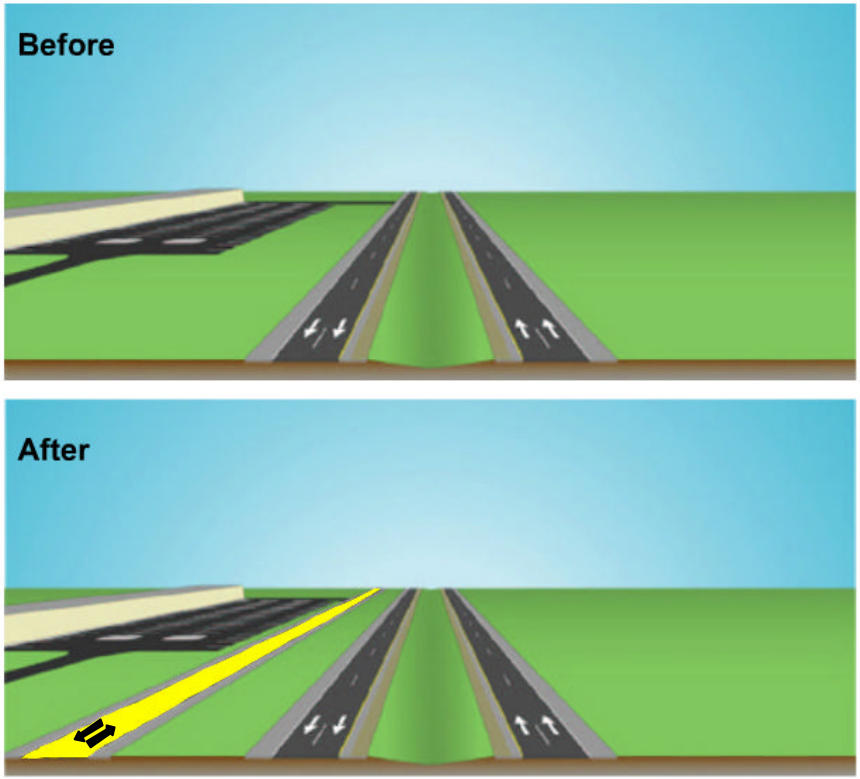
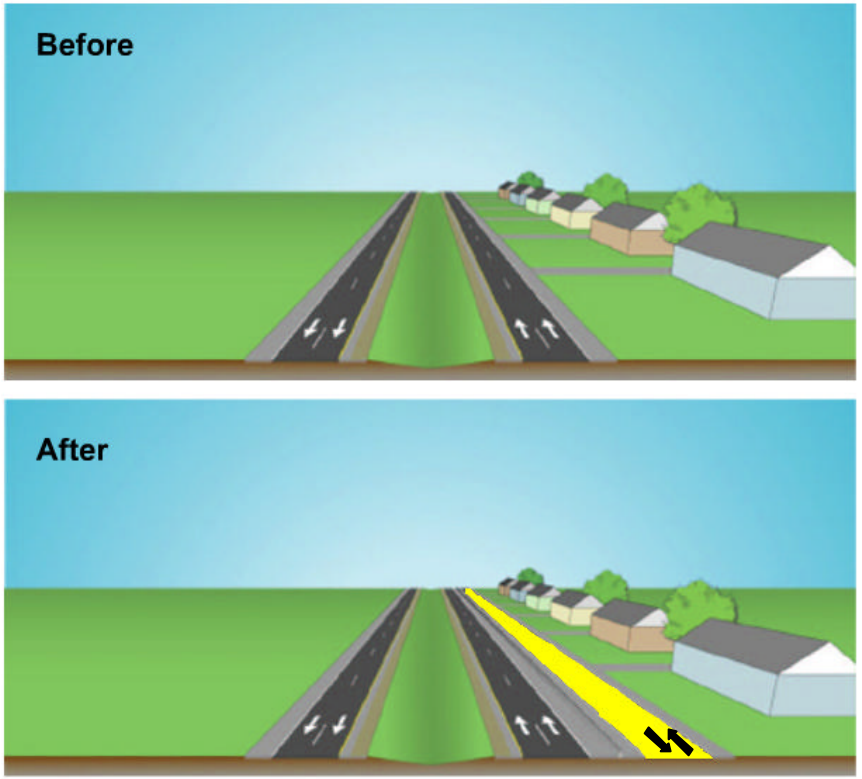
North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



Strategy 2A – Two-Way Frontage Road – West Side



Strategy 2A – Two-Way Frontage Road – East Side

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- [x] Strategy 1 – Access to Side Road Only
- [x] Strategy 2A – Two-Way Frontage Road
- [ ] Strategy 2B – One-Way Frontage Roads
- [ ] Strategy 3A – Frontage Road on Existing Lanes
- [ ] Strategy 3B – Frontage Road on Existing Lanes
- [ ] Strategy 4 – "Backage" Road Behind Properties
- [ ] Strategy 5 – Access Road Through Properties
- [ ] Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 2A – Two-Way Frontage Road

- Where there is sufficient room between existing US 113 and adjacent buildings/parking, build a two-way frontage road next to existing US 113.
- Provide all property access to the frontage road rather than US 113.
- Access to the frontage road may be from side roads, ramps to and from limited-access US 113, or bridges over the highway.

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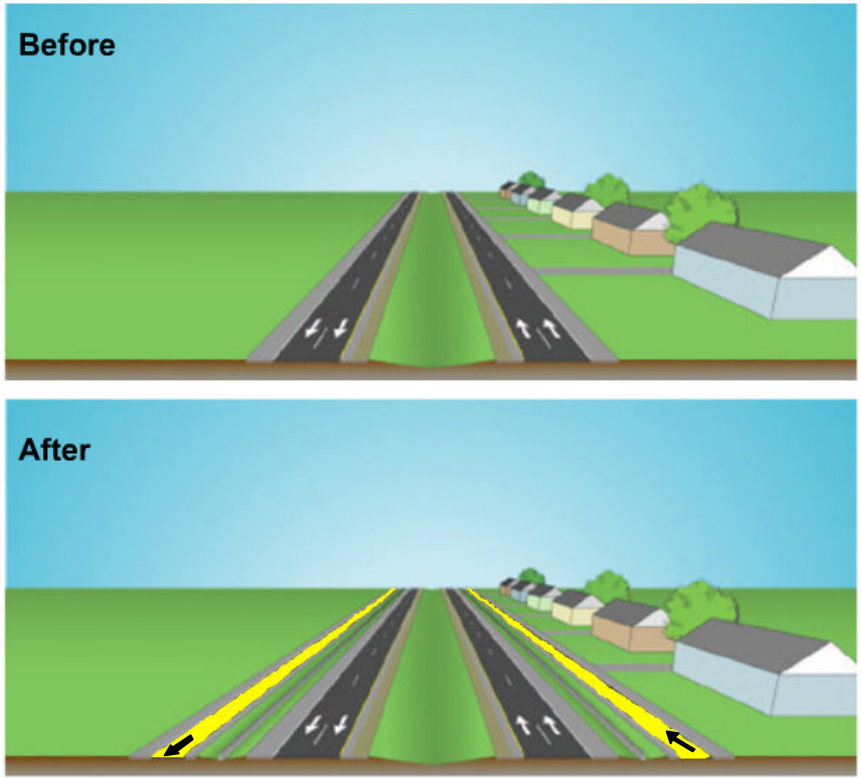
North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



Strategy 2B - One-Way Frontage Roads

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- [x] Strategy 1 – Access to Side Road Only
- [x] Strategy 2A – Two-Way Frontage Road
- [x] Strategy 2B – One-Way Frontage Roads
- [ ] Strategy 3A – Frontage Road on Existing Lanes
- [ ] Strategy 3B – Frontage Road on Existing Lanes
- [ ] Strategy 4 – "Backage" Road Behind Properties
- [ ] Strategy 5 – Access Road Through Properties
- [ ] Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 2B – One-Way Frontage Roads

- Where there is sufficient room between existing US 113 and adjacent buildings/parking, build a one-way frontage road along each side of existing US 113.
- Provide all property access to the frontage roads rather than US 113.
- Access to the frontage road may be from side roads, ramps to and from limited-access US 113, or bridges over the highway.
- Because this option can result in longer trips to access parcels along the highway, it will be considered only where other options appear to be not feasible.

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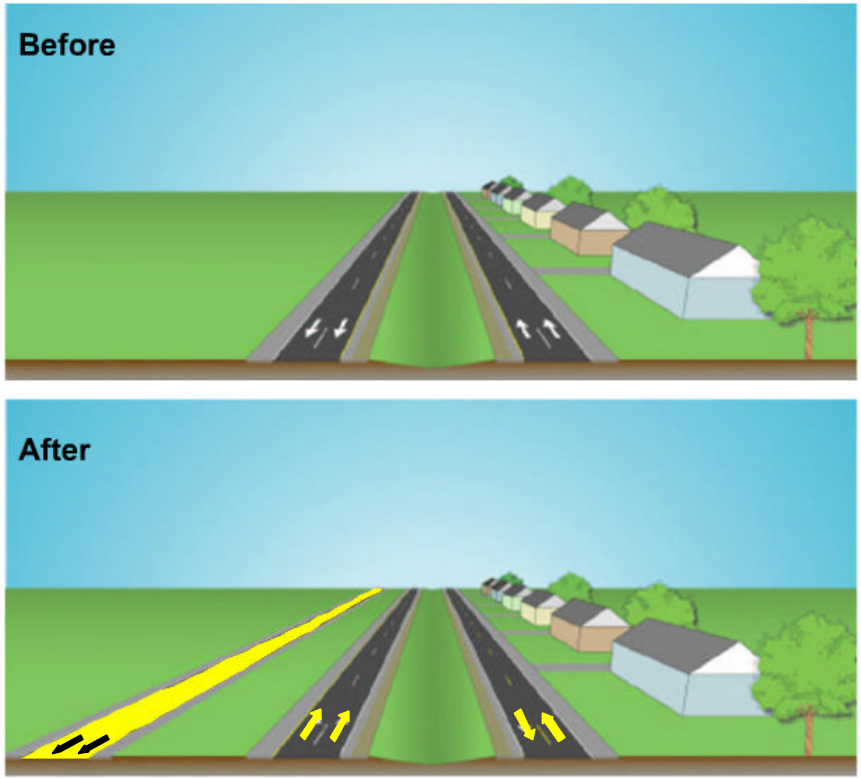
CONSTRAINTS MAP | CORRIDOR STUDIES



Strategy 3A - Frontage Road On Existing Lanes

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- ☑ Strategy 1 – Access to Side Road Only
- ☑ Strategy 2A – Two-Way Frontage Road
- ☑ Strategy 2B – One-Way Frontage Roads
- ☑ Strategy 3A – Frontage Road on Existing Lanes
- ○ Strategy 3B – Frontage Road on Existing Lanes
- ○ Strategy 4 – "Backage" Road Behind Properties
- ○ Strategy 5 – Access Road Through Properties
- ○ Strategy 6 - Acquisition

X CLEAR MAP

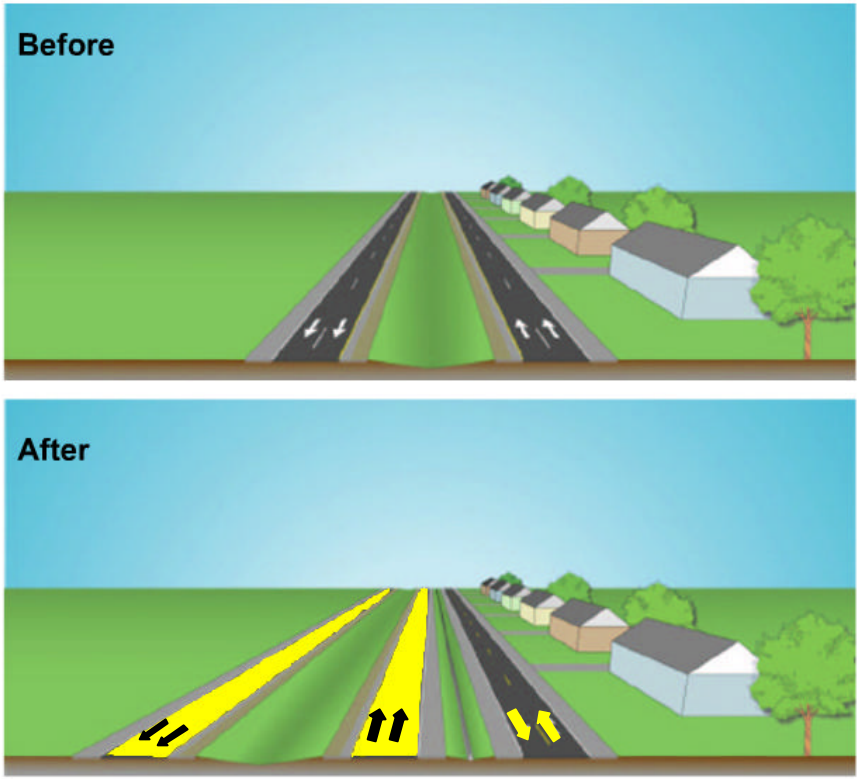
X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 3A – Frontage Road On Existing Lanes

- Where there is not sufficient room between existing US 113 and adjacent buildings/parking, convert the northbound* lanes into a two-way frontage road.
- Change the southbound lanes to the northbound lanes.
- Build new southbound lanes.
- This strategy works where there is substantial open space on the opposite side of the properties in question.

* - Direction of travel is illustrative; this will work in the opposite direction as well.



Strategy 3B - Frontage Road On Existing Lanes

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- Strategy 1 – Access to Side Road Only
- Strategy 2A – Two-Way Frontage Road
- Strategy 2B – One-Way Frontage Roads
- Strategy 3A – Frontage Road on Existing Lanes
- Strategy 3B – Frontage Road on Existing Lanes
- Strategy 4 – "Backage" Road Behind Properties
- Strategy 5 – Access Road Through Properties
- Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 3B – Frontage Road On Existing Lanes

- Where there is not sufficient room between existing US 113 and adjacent buildings/parking, convert the northbound* lanes into a two-way frontage road.
- Build new limited access northbound US 113 lanes in the existing US 113 median.
- Build new limited access southbound US 113 lanes to the west of the new northbound US 113 lanes.
- Purchase access / development rights on properties adjacent to new limited access southbound US 113 lanes.
- Although this strategy is more expensive than 3A, it works better when there is NOT substantial open space on the opposite side of the properties in question.

* - Direction of travel is illustrative; this will work in the opposite direction as well.

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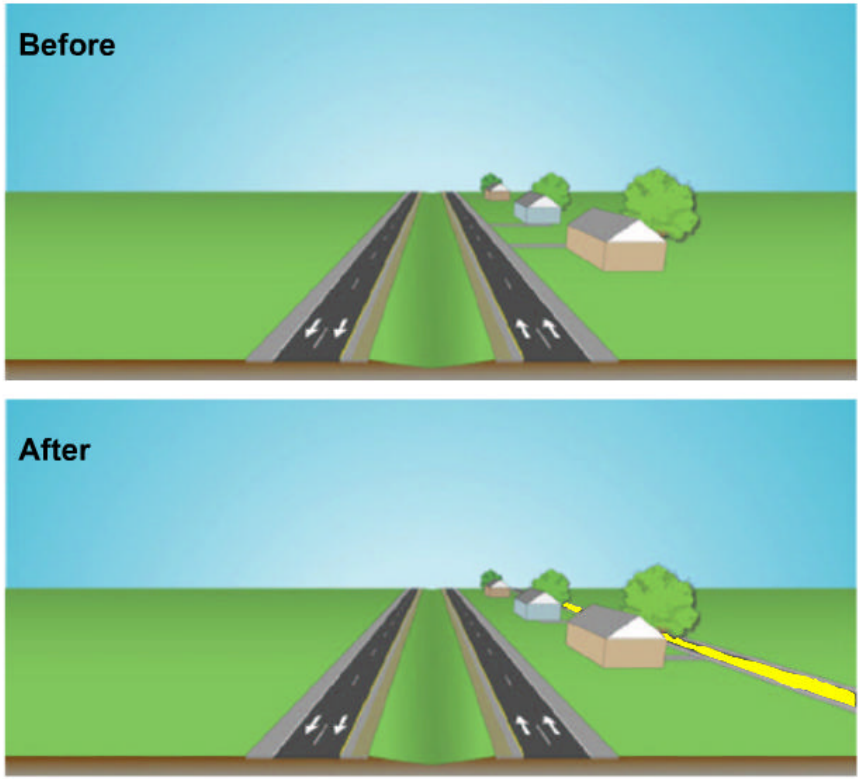
CONSTRAINTS MAP | CORRIDOR STUDIES



Strategy 4 – Rear Access Road Behind Properties

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- Strategy 1 – Access to Side Road Only
- Strategy 2A – Two-Way Frontage Road
- Strategy 2B – One-Way Frontage Roads
- Strategy 3A – Frontage Road on Existing Lanes
- Strategy 3B – Frontage Road on Existing Lanes
- Strategy 4 – "Backage" Road Behind Properties
- Strategy 5 – Access Road Through Properties
- Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 4 – "Rear Access" Road Behind Properties

- Build a new two-way road behind existing properties ("rear access" road)
- Provide all property access to the "rear access" road rather than US 113
- Access to the "rear access" road may be from side roads, ramps to and from limited-access US 113, or bridges over the highway

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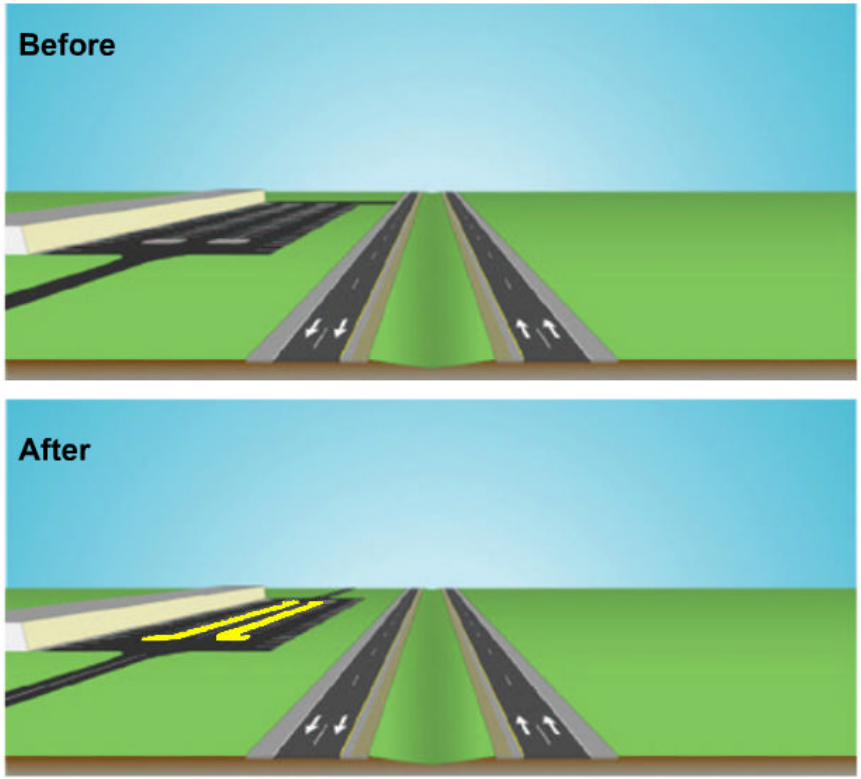
CONSTRAINTS MAP | CORRIDOR STUDIES



Strategy 5 - Access Road Through Properties

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- Strategy 1 – Access to Side Road Only
- Strategy 2A – Two-Way Frontage Road
- Strategy 2B – One-Way Frontage Roads
- Strategy 3A – Frontage Road on Existing Lanes
- Strategy 3B – Frontage Road on Existing Lanes
- Strategy 4 – "Backage" Road Behind Properties
- Strategy 5 – Access Road Through Properties
- Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 5 – "Internal Access" Road Through Properties

- Build a new two-way "internal access" road through properties to tie into side roads.
- Provide all property access to the "internal access" road rather than US 113.
- This strategy generally applies only to commercial properties.

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CONSTRAINTS MAP | CORRIDOR STUDIES

Strategy 6 - Acquisition

March 2004

- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ON ALIGNMENT - POTENTIAL CORRIDORS

- Strategy 1 – Access to Side Road Only
- Strategy 2A – Two-Way Frontage Road
- Strategy 2B – One-Way Frontage Roads
- Strategy 3A – Frontage Road on Existing Lanes
- Strategy 3B – Frontage Road on Existing Lanes
- Strategy 4 – "Backage" Road Behind Properties
- Strategy 5 – Access Road Through Properties
- Strategy 6 - Acquisition

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment "Toolbox"

Strategy 6 – Acquisition

- If it is not prudent and feasible to manage access by using one of the preceding strategies, purchasing property is a potential option.
- To respect property rights, other access strategies will be examined for every property before acquisition is considered.

Airport Road to SR 14

West of Lincoln

Johnson Road to
South of Clendaniel Road

Corridor Studies ◆ On-Alignment Examples

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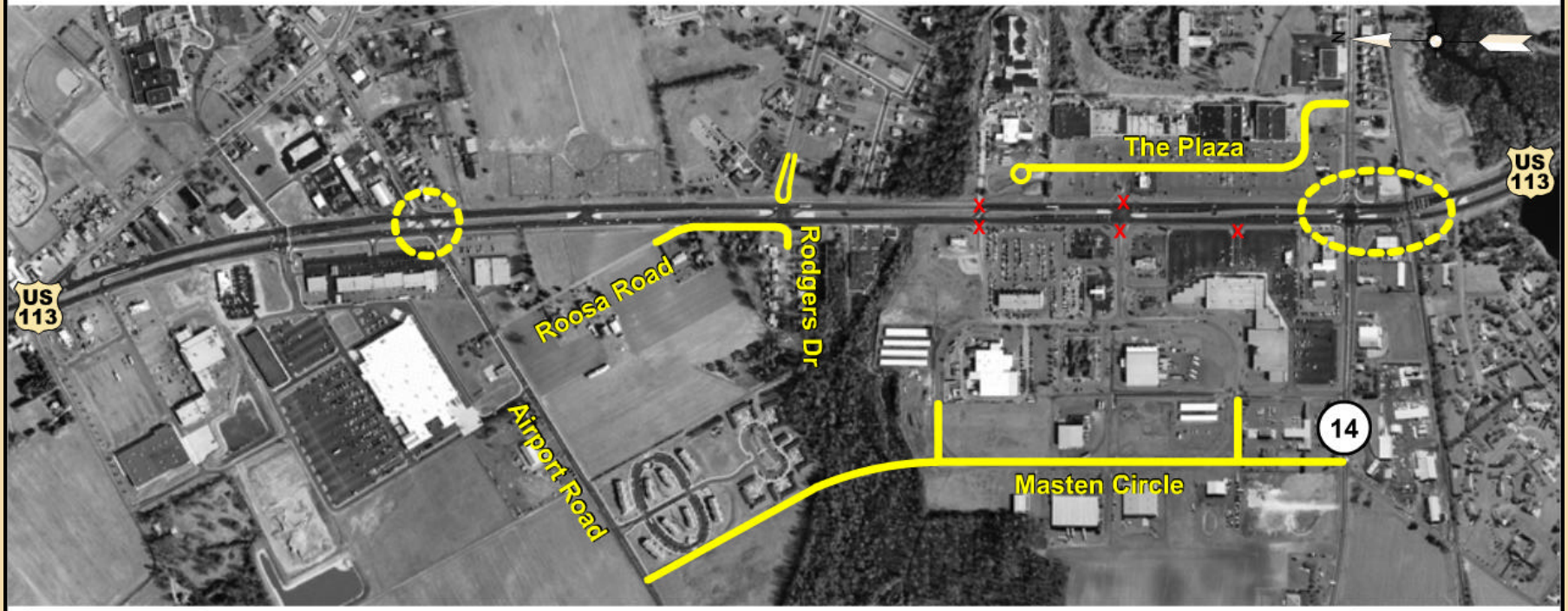
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



▶ NEXT SLIDE

Example 1 - Milford, Airport Road to SR14

March 23, 2004

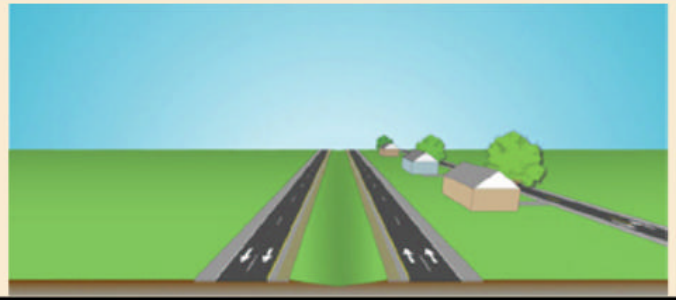
- Minimal Existing Development
- On Alignment "Toolbox"
- ☑ On Alignment Examples
- Off Alignment - Potential Corridors

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

- ☑ Example 1 - Airport Rd to SR14
- ○ Example 2 - Johnson Rd to Clendaniel Rd

X CLEAR MAP



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Corridor Studies ◆ On-Alignment Examples

Example 1 – Milford, Airport Road to SR 14

Engineering

- Provide access to side roads (Strategy 1) for all possible properties on both sides
- Construct frontage road (Strategy 2A) to connect Rogers Drive to Airport Road via Roosa Rd
- Construct rear access road (Strategy 4) to connect properties on the west side of US 113, potentially using parts of Masten Circle
- Construct access road (Strategy 5) connecting Stevenson House and the Plaza at Milford to NW Front Street
- Convert the existing lanes of US 113 to limited access, closing all direct property access to the highway
- Consider interchanges or grade separations at Airport Road / NW 10th Street and/or Milford-Harrington Highway / NW Front Street / Railroad

Environmental / Land Use

- 100-year floodplain and wetlands associated with the Mispillion River, Silver Lake and Mullet Run
- National Register Historic District and National Register eligible building on the west side of US 113
- Rare threatened and endangered species (RTE's) in conjunction with Mispillion River and Silver Lake

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

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US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

TO DOVER

TO ELLENDALE

▶ NEXT SLIDE

Example 2 - West of Lincoln, Johnson Road to south of Clendaniel Road

March 23, 2004

- MINIMAL EXISTING DEVELOPMENT
- ON ALIGNMENT "TOOLBOX"
- ☑ ON ALIGNMENT EXAMPLES
- OFF ALIGNMENT - POTENTIAL CORRIDORS

This is just an example of one possible solution in this area.

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- ○ Example 1 - Airport Rd to SR14
- ☑ Example 2 - Johnson Rd to Clendaniel Rd

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment Examples

Example 2 – West of Lincoln, Johnson Road to South of Clendaniel Road

Engineering	Environmental / Land Use
North of Clendaniel Road ▪ Provide access to side roads (Strategy 1) where possible or acquire access rights (Strategy 6) ▪ Construct frontage road (Strategy 2A) to connect Lincoln Village to Johnson Road rather than directly to US 113	▪ Documented potential cultural resources along US 113, Clendaniel Road and Johnson Road ▪ Potential business and residential acquisitions / relocations ▪ Agricultural Development rights areas immediately south and west of example area ▪ Agricultural preservation suitability generally high or very high in example area

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

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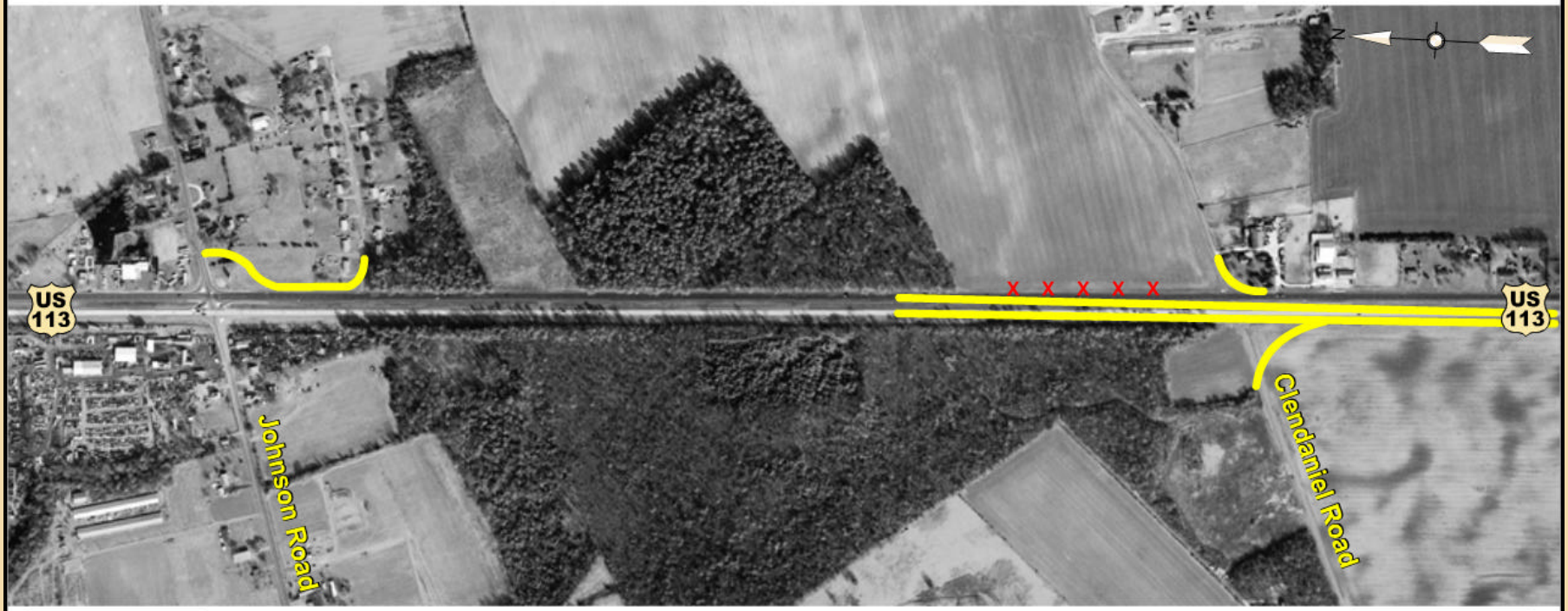
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



TO DOVER

TO ELLENDALE

▶ NEXT SLIDE

Example 2 - West of Lincoln, Johnson Road to south of Clendaniel Road

March 23, 2004

MINIMAL EXISTING DEVELOPMENT

ON ALIGNMENT "TOOLBOX"

☑ ON ALIGNMENT EXAMPLES

OFF ALIGNMENT - POTENTIAL CORRIDORS

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

○ Example 1 - Airport Rd to SR14

☑ Example 2 - Johnson Rd to Clendaniel Rd

X CLEAR MAP

X CLOSE

Corridor Studies ◆ On-Alignment Examples

Example 2 – West of Lincoln, Johnson Road to South of Clendaniel Road

Engineering	Environmental / Land Use
South of Clendaniel Road ▪ Convert northbound lanes of US 113 to frontage road (Strategy 3A or 3B) for access to east side of properties ▪ Convert southbound lanes to northbound travel ▪ Build new southbound lanes along west side of US 113 ▪ Construct frontage road (Strategy 2A) to provide access to west side properties ▪ Tie frontage roads to Haflinger Road, Clendaniel Road and Hudson Pond Road; need for and location of a grade separation in this area to be determined	

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

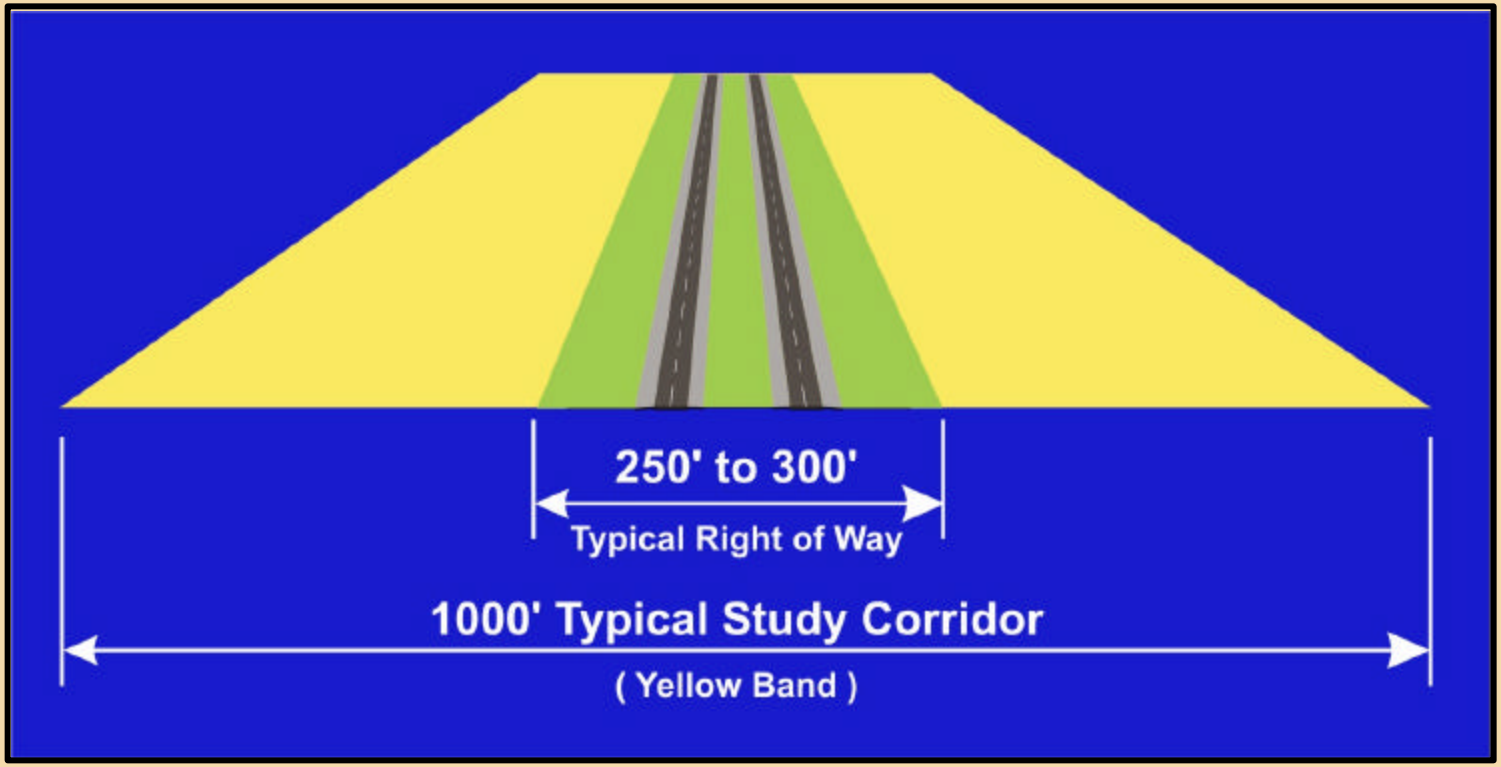
Corridor Studies

- FIRST: On-Alignment (along existing US 113)
  - Toolbox
  - Examples

- THEN: Off-Alignment (on new location (bypass) – if On-Alignment impacts are deemed too severe)
  - Potential Corridors

Corridor Studies ◆ Off-Alignment

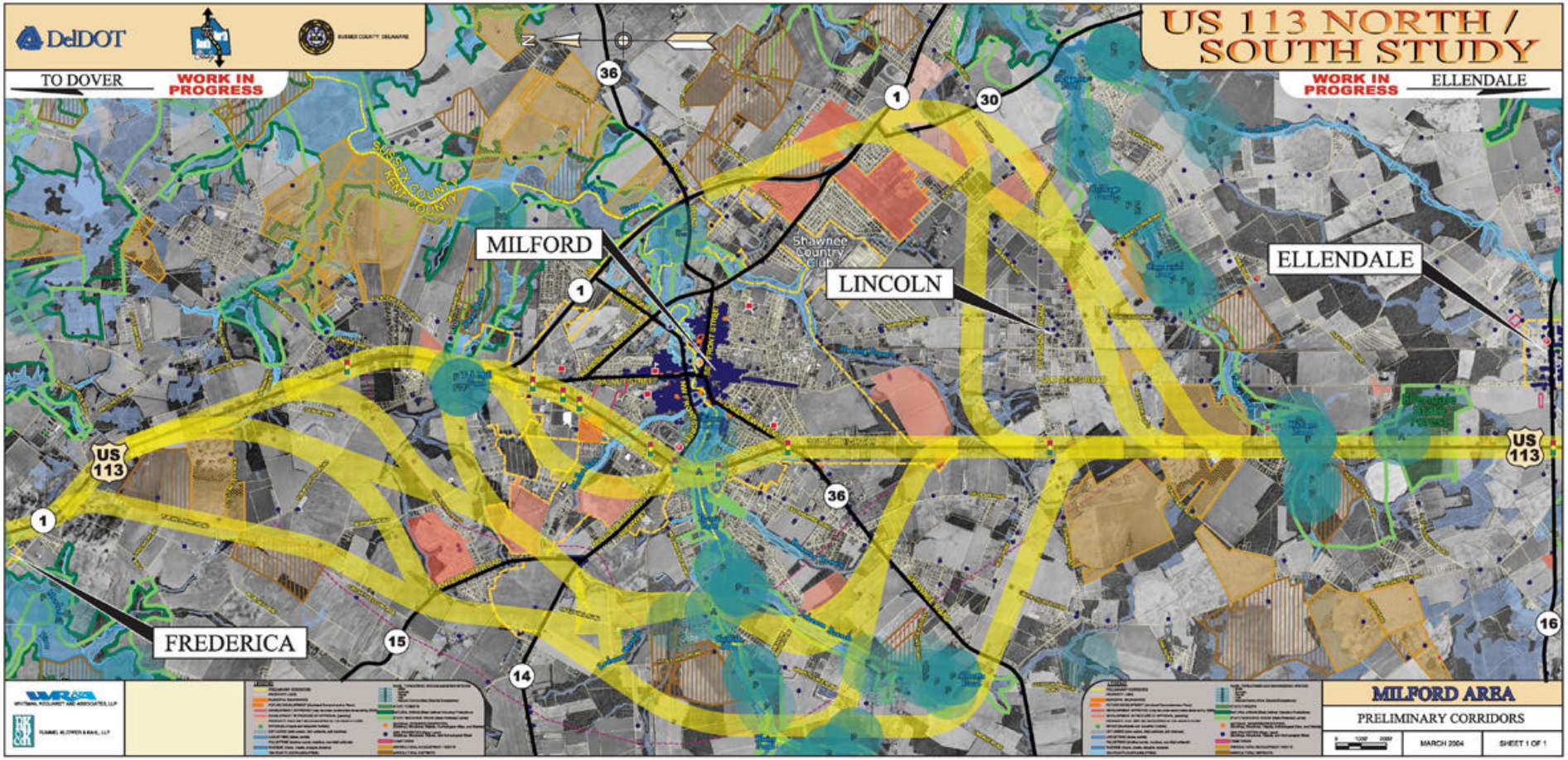
- 1,000-foot Corridor Study Width vs. Potential Roadway Right-of-Way width



- Straight/Tangent Roadway Shown – Roadway could be curvilinear and shifted within the study corridor to minimize impacts

Corridor Studies ◆ Off-Alignment

- Corridors = Yellow Bands = 1000’ width
- New Roadway Right-of Way = 250’ to 300’
- For those corridors selected for detailed study – roadway alignments would be refined “within” the 1000’ corridor



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Shown on Table Top Map

- Routes/Labels
- Traffic Lights
- Schools
- Libraries
- Hospitals
- Fire
- Police
- Property Lines
- Preliminary Corridors
- Development Approved – may be under construction since Spring 2002
- Development in Process of Approval – Pending
- Property that may be developed in the near future
- (NRHP) Buildings, Structures and Objects and Archeological Sites
- National Register Historic Districts
- Buildings, Structures and Objects and Archeological Sites – Cultural Resource Survey (CRS) Areas
- Cemeteries
- EPA Sites – Environmental Protection Agency
- NPDES (outfalls) – National Pollution Discharge Elimination System
- Municipal Boundaries
- Future Development (Municipal Comprehensive Plans)
- Agricultural Easements
- Agricultural Districts
- Wetland (Estuarine, Lacustrine, Palustrine, Riverine)
- 100 Yr. Floodplain
- Natural Areas
- State Resource Areas
- State Forests
- Rare, Threatened, and Endangered (RTE's) Species (Birds, Animals, Plants, Fish, Natural Community)

Not Shown on Table Top Map

- Municipal Water/Wastewater
- OSP – Office of State Planning Coordination – Strategies for Policy and Spending
- Land Use
- Environmental Justice (Census Data, Population/Housing)
- Previously Surveyed Areas
- LESA (Agriculture Suitability/Prime Farm Soils)
- Farm Wells

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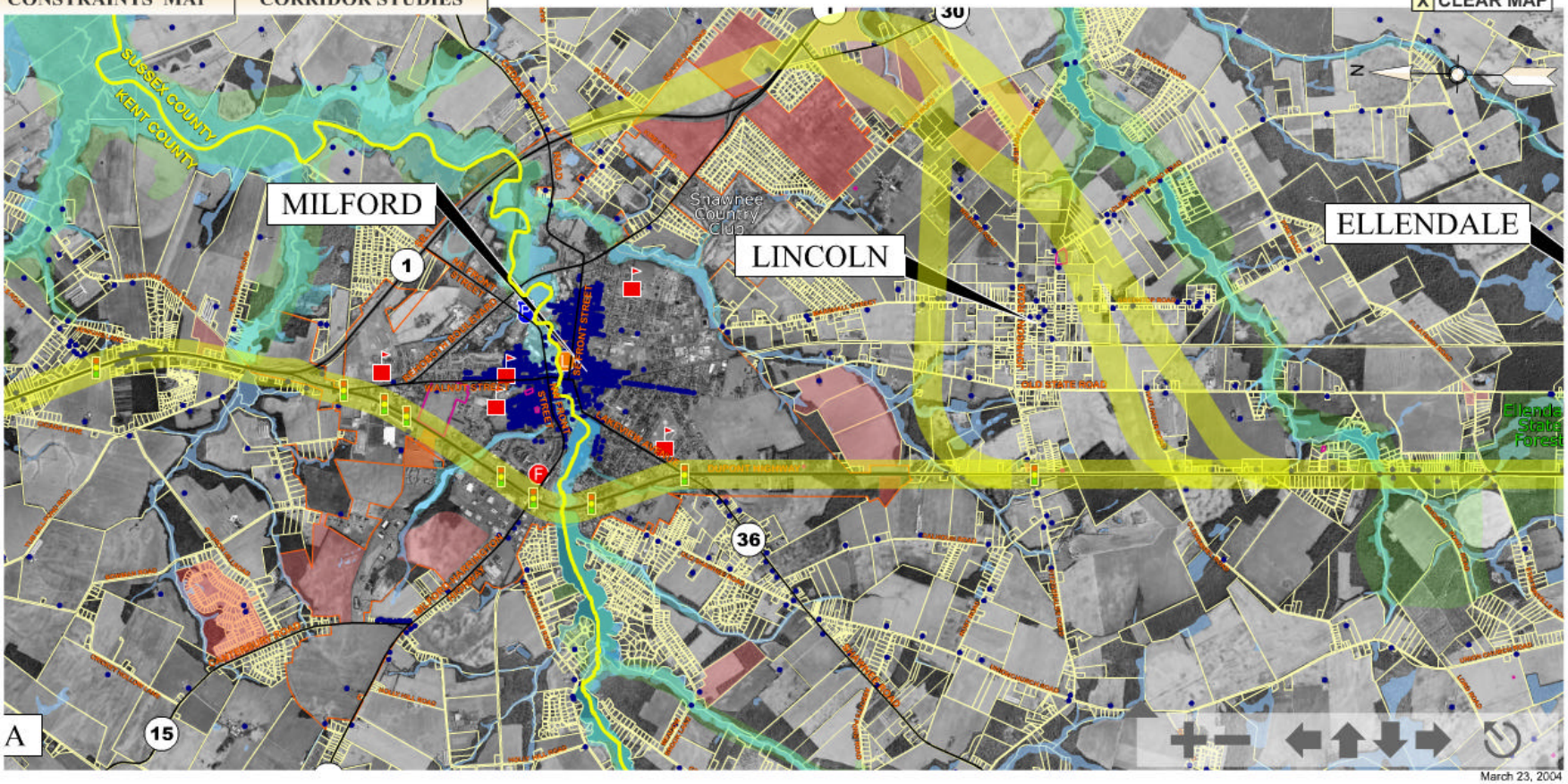
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



- MINIMAL EXISTING DEVELOPMENT
- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- OFF ALIGNMENT - POTENTIAL CORRIDORS

- Milford - Western Bypass
- Milford - Eastern Bypass

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

X CLEAR MAP

X CLOSE

Corridor Studies ◆ Off-Alignment

Milford – Eastern Bypass – North of Lincoln

Engineering

- Development of town and location of Silver Lake not conducive to close-in eastern bypass
- Eastern bypass takes advantage of existing Milford Bypass to reduce length and impact
- Railroad crossing requires grade separation
- Grade separations at both ends of corridor should be designed to preclude new development / keep development where it is planned
- Corridor developed to minimize impacts yet balance unavoidable impacts
- Chain of ponds including Hudson, Clendaniel, Cubbage, Swiggetts and Cedar Creek Mill indicate corridors either north or south of these resources

Environmental / Land Use

- Wetlands associated with Herring Branch and Cedar Creek
- Agricultural Districts east of SR 1 and south of SR 36
- Documented potential cultural resource sites along Marshall Street, Wilkens Road, SR 1 and Fitzgeralds Road
- On the edge of Milford's anticipated future growth boundary; however the City's pending comprehensive plan update would expand the future growth boundary to the south

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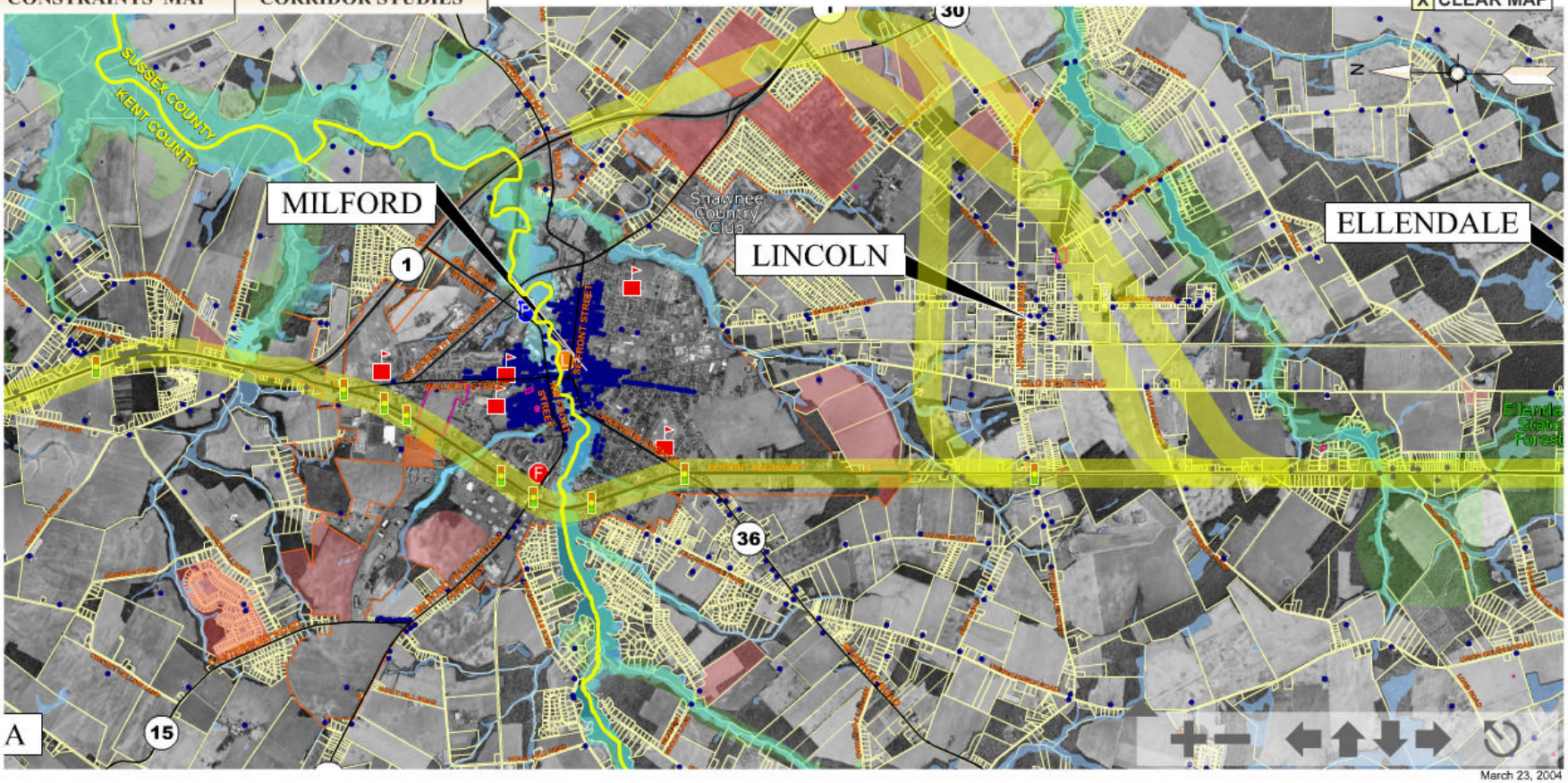
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

X CLEAR MAP



March 23, 2004

MINIMAL EXISTING DEVELOPMENT
ON ALIGNMENT "TOOLBOX"
ON ALIGNMENT EXAMPLES
OFF ALIGNMENT - POTENTIAL CORRIDORS

- Milford - Western Bypass
- Milford - Eastern Bypass

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X CLEAR MAP

X CLOSE

Corridor Studies ◆ Off-Alignment

Milford – Eastern Bypass – South of Lincoln

Engineering

- Development of town and location of Silver Lake not conducive to close-in eastern bypass
- Eastern bypass takes advantage of existing Milford Bypass to reduce length and impact
- Railroad crossing requires grade separation
- Grade separations at both ends of corridor should be designed to preclude new development / keep development where it is planned
- Corridor developed to minimize impacts yet balance unavoidable impacts

Environmental / Land Use

- Wetlands associated with tributaries of Cubbage Pond, Clendaniel Pond and Cedar Creek
- Agricultural Districts east of SR 1 and south of SR 36. Agricultural easements north of Clendaniel Pond and Hudson Pond
- Documented potential cultural resource sites along Johnson Road, Clendaniel Pond Road, Marshall Street, N. Old State Road and Clendaniel Road
- Cemetery along Clendaniel Pond Road
- Slightly outside of Milford's anticipated future growth boundary; however the City's pending comprehensive plan update would expand the future growth boundary to the south

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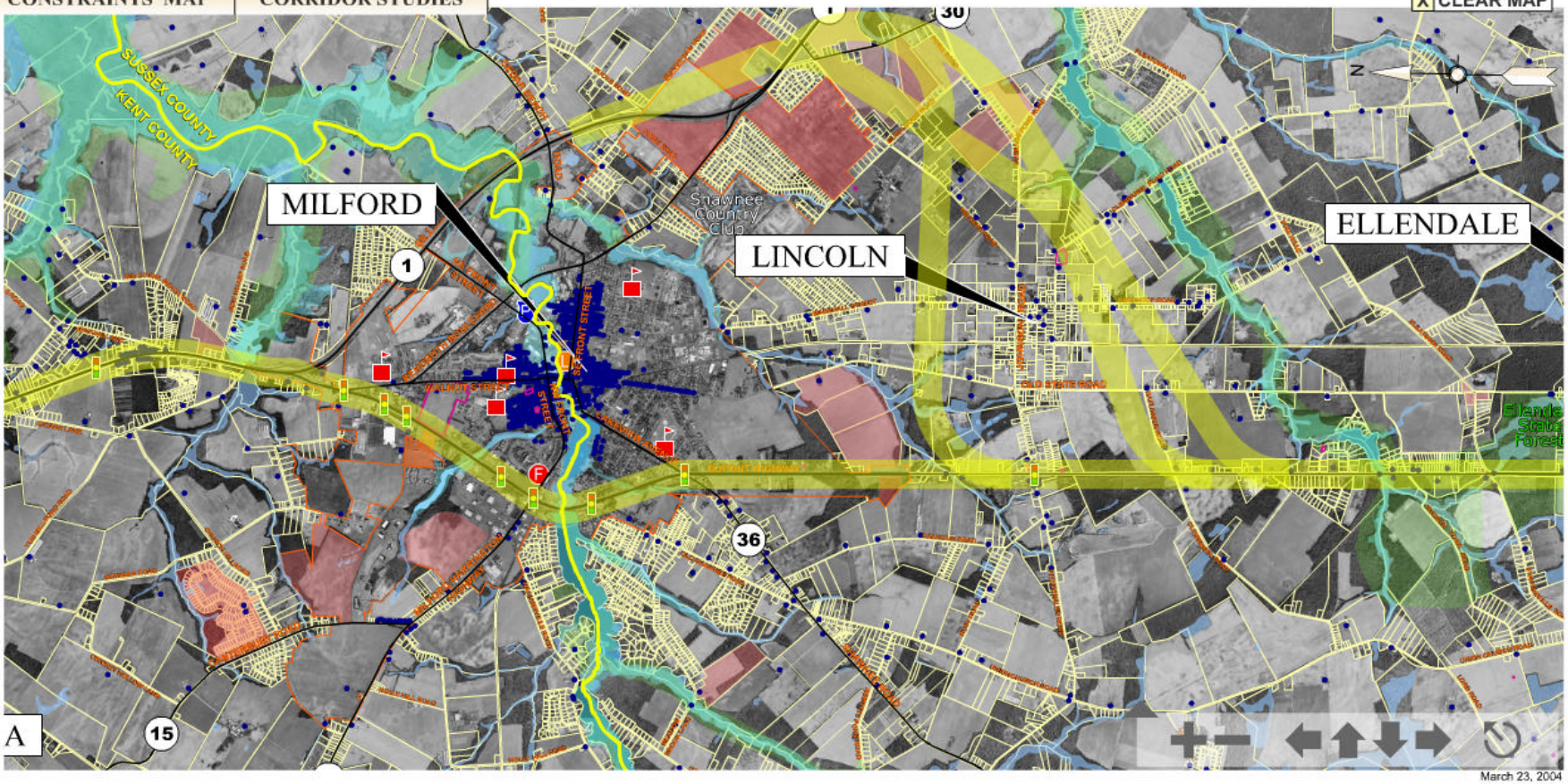
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES



- MINIMAL EXISTING DEVELOPMENT
- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- OFF ALIGNMENT - POTENTIAL CORRIDORS

- Milford - Western Bypass
- Milford - Eastern Bypass

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

X CLEAR MAP

X CLOSE

Corridor Studies ◆ Off-Alignment

Milford – Eastern Bypass – South of Lincoln

Engineering

- Chain of ponds including Hudson, Clendaniel, Cubbage, Swiggetts and Cedar Creek Mill indicate corridors either north or south of these resources

Environmental / Land Use

- State resource area bounding the succession of ponds to the south
- A natural area associated with Cedar Creek Mill Pond
- Rare, threatened and endangered (RTE's) species associated with the state resource area along the ponds south of the corridor

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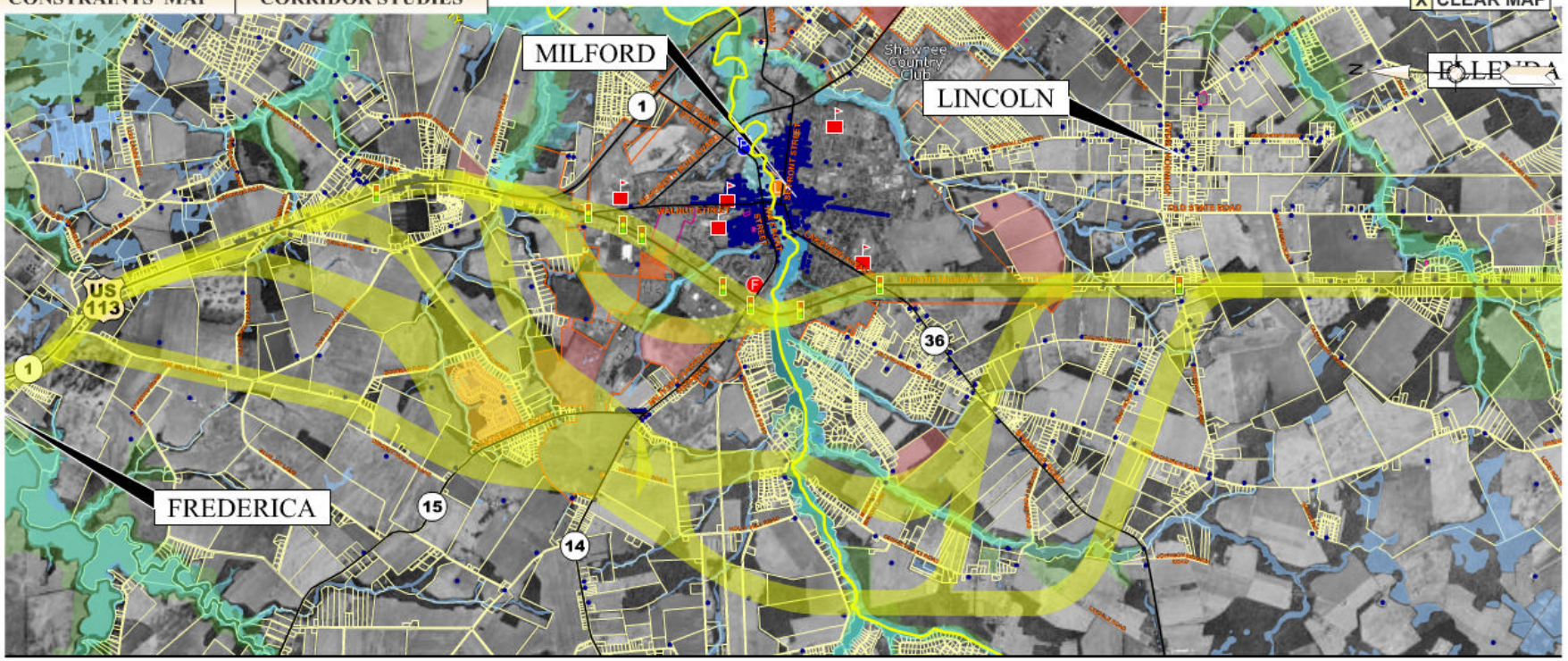
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

X CLEAR MAP



March 23, 2004

- MINIMAL EXISTING DEVELOPMENT
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- ☑ OFF ALIGNMENT - POTENTIAL CORRIDORS

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- ☑ Milford - Western Bypass
- ○ Milford - Eastern Bypass

X CLEAR MAP

X CLOSE

Corridor Studies ◆ Off-Alignment

Milford –Western Bypasses

Engineering	Environmental / Land Use
▪ Chain of lakes on the western side of Milford (Silver, Haven and Griffiths Lakes and Blairs Pond) create limited crossing points for western corridors ▪ Development of the town is conducive to a close-in western corridor if you can take advantage of existing US 113 crossing between Silver and Haven Lakes ▪ Railroad crossing requires grade separation ▪ Grade separations at both ends of the corridor, and any possible intermediate location, should be designed to preclude new development / keep development where it is planned	▪ 100-year floodplain and wetlands associated with Mullet Run, Tantrough Branch and Johnson Branch ▪ Wetlands associated with Church Branch, Tub Mill Branch, Improvement Branch and a tributary to Haven Lake ▪ Agricultural development rights areas at the northern and southern ends of the corridors. Agricultural districts at the northern end of the corridor and north of Griffith's Lake and Abbott's Pond ▪ Mobile home communities south of Church Hill Road and north of Fitzgeralds Road ▪ Documented cultural resources throughout the area west of US 113

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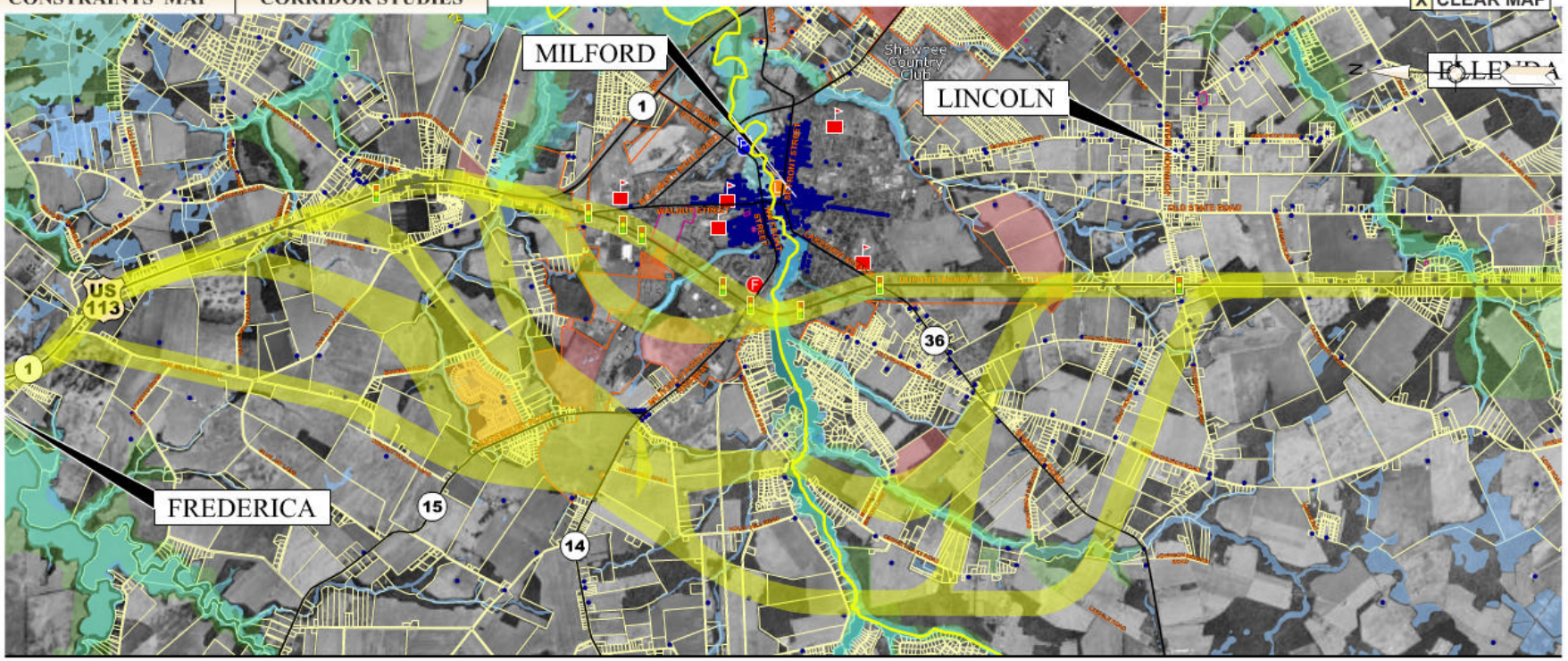
US 113 North South Study

CONSTRAINTS MAP | CORRIDOR STUDIES

X CLEAR MAP



March 23, 2004

- MINIMAL EXISTING DEVELOPMENT
- ON ALIGNMENT "TOOLBOX"
- ON ALIGNMENT EXAMPLES
- ☑ OFF ALIGNMENT - POTENTIAL CORRIDORS

This is just an example of one possible solution in this area.

A full range of alternatives has not yet been developed, and no preferred alternative has been selected.

- ☑ Milford - Western Bypass
- ○ Milford - Eastern Bypass

X CLEAR MAP

X CLOSE

Corridor Studies ◆ Off-Alignment

Milford –Western Bypasses

Engineering	Environmental / Land Use
▪ Corridors developed to minimize impacts yet balance unavoidable impacts	▪ National Register eligible property on Williamsville Road, northeast of Blairs Pond, and immediately north of Abbott's Pond ▪ Documented archaeological resources associated with Tantrough, Herring and Johnson Branches ▪ Western corridors generally near the western edge of Milford's anticipated future growth boundary ▪ RTE's associated with Tub Mill, Abbotts, Blairs Ponds; Silver, Haven, Griffiths Lakes; Tantrough, Johnson Branches and the tributary to Haven Lake ▪ Soils west of US 113 generally high to very high for agricultural preservation suitability under the LESA scoring system

Corridor Studies

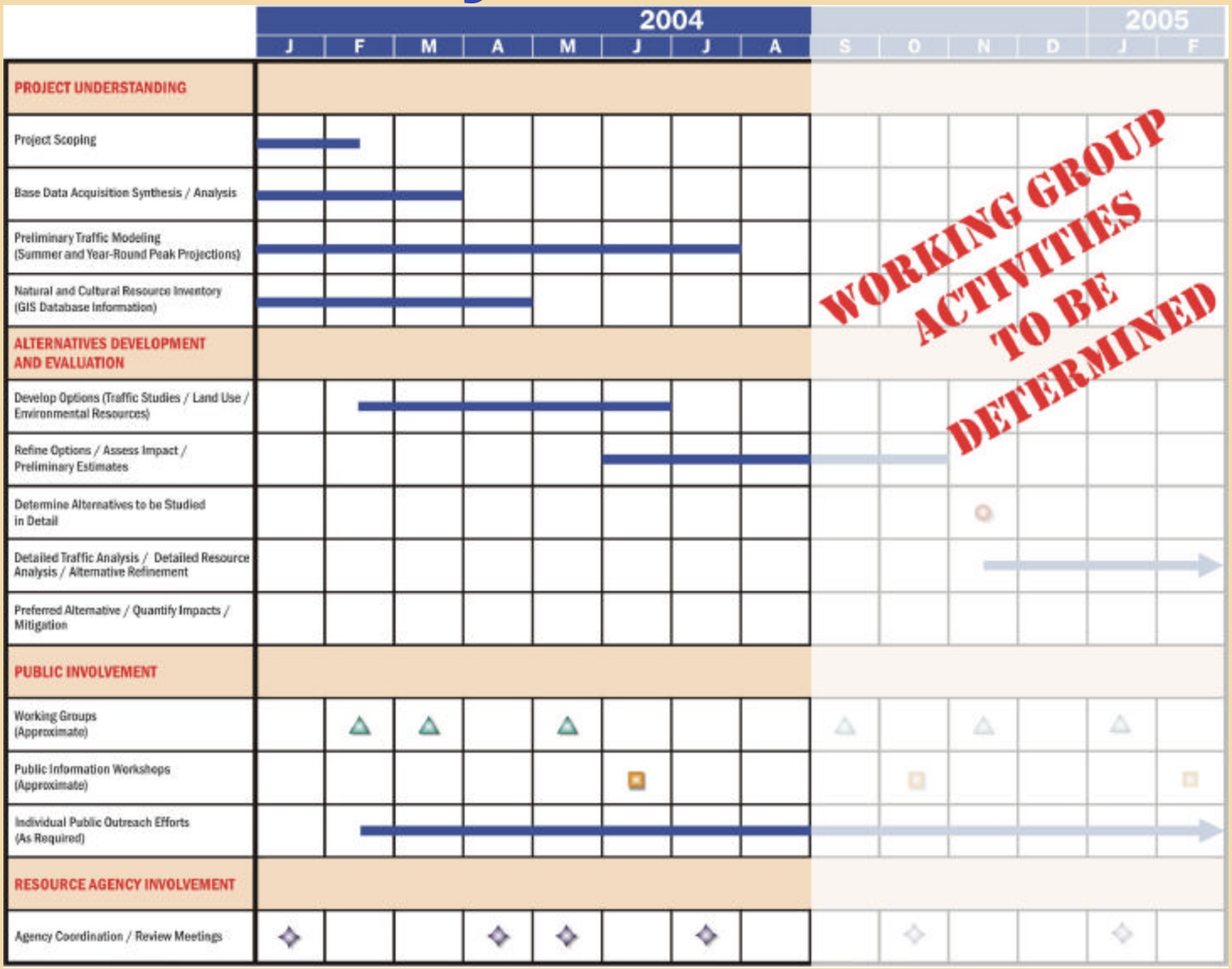
Next Working Group Meeting

- May 11, 2004
- Conduct Combination Field Tour / Working Group Meeting
- Tentative Agenda
  - Quickly review On-Alignment Tool Box Strategies
  - Field tour of existing US 113 alignment with discussion of:
    - Tool box strategies applicable to each sub-area
    - Traffic issues at each intersection or other key areas
    - Resource constraints where appropriate
  - Brainstorming session of studies to be undertaken in each sub-area

Summer – Fall Calendar

- **Jun:** Public Workshops (3)
- **Jul – Aug:** Working Groups take summer off
- **Jul – Sep:** Project Team continues to develop conceptual alternatives
- **May - Jul:** Project Team conducts field tour with Resource Agencies (May) and updates the Resource Agencies on Conceptual Alternatives (July 8, 2004)
- **Sep:** Working Groups Reconvene

Study Schedule



Third Working Group Meeting

- **Date: May 11, 2004 – 4:00 PM (Field Tour)**
- **Location: Carlisle Fire Company Banquet Hall**

Project Web Site: www.deldot.net/static/projects/us113