EGG HARBOR ROAD

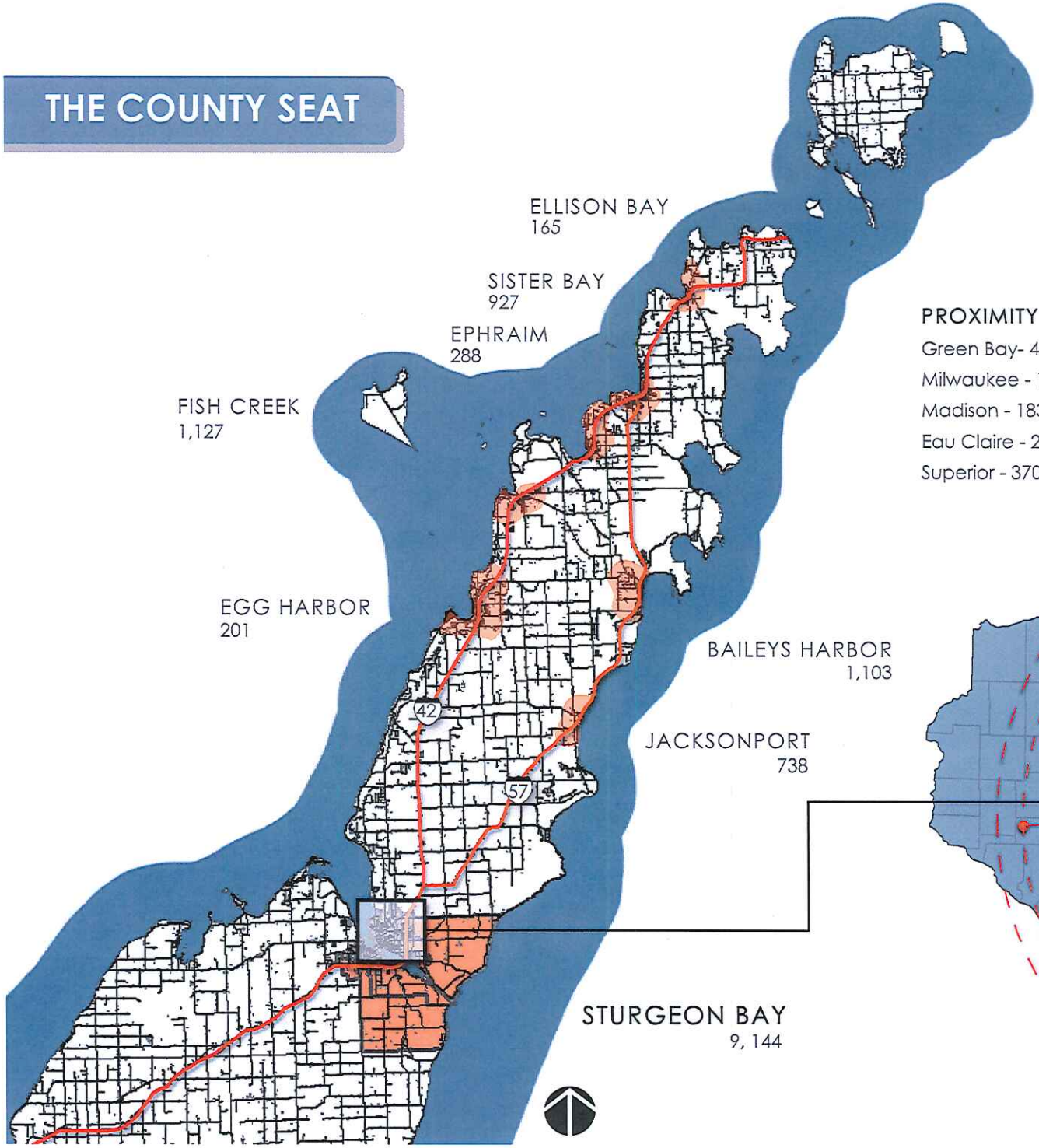
A SENIOR CAPSTONE PROPOSAL

DECEMBER 1ST, 2014

STURGEON BAY, WI

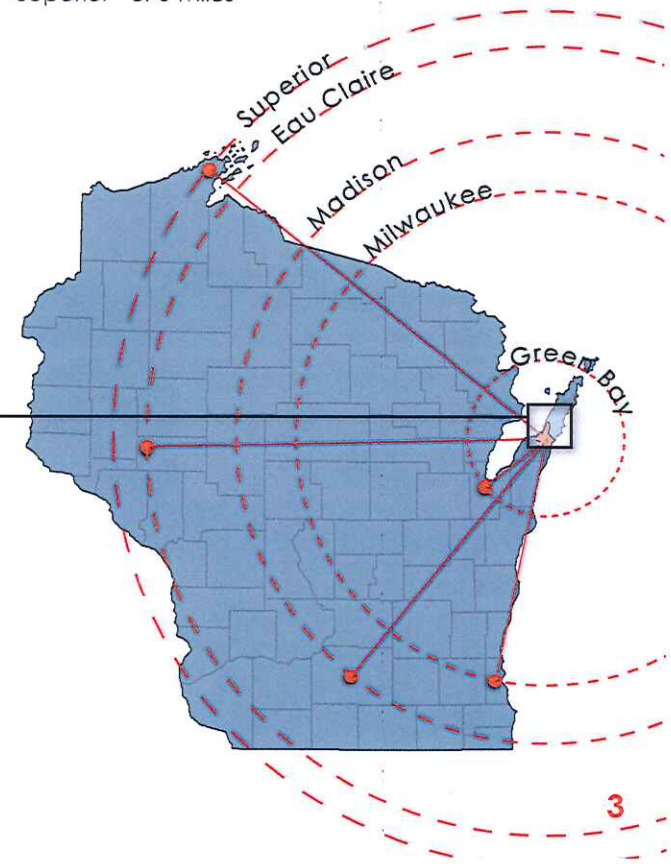
INTRODUCTION

THE COUNTY SEAT

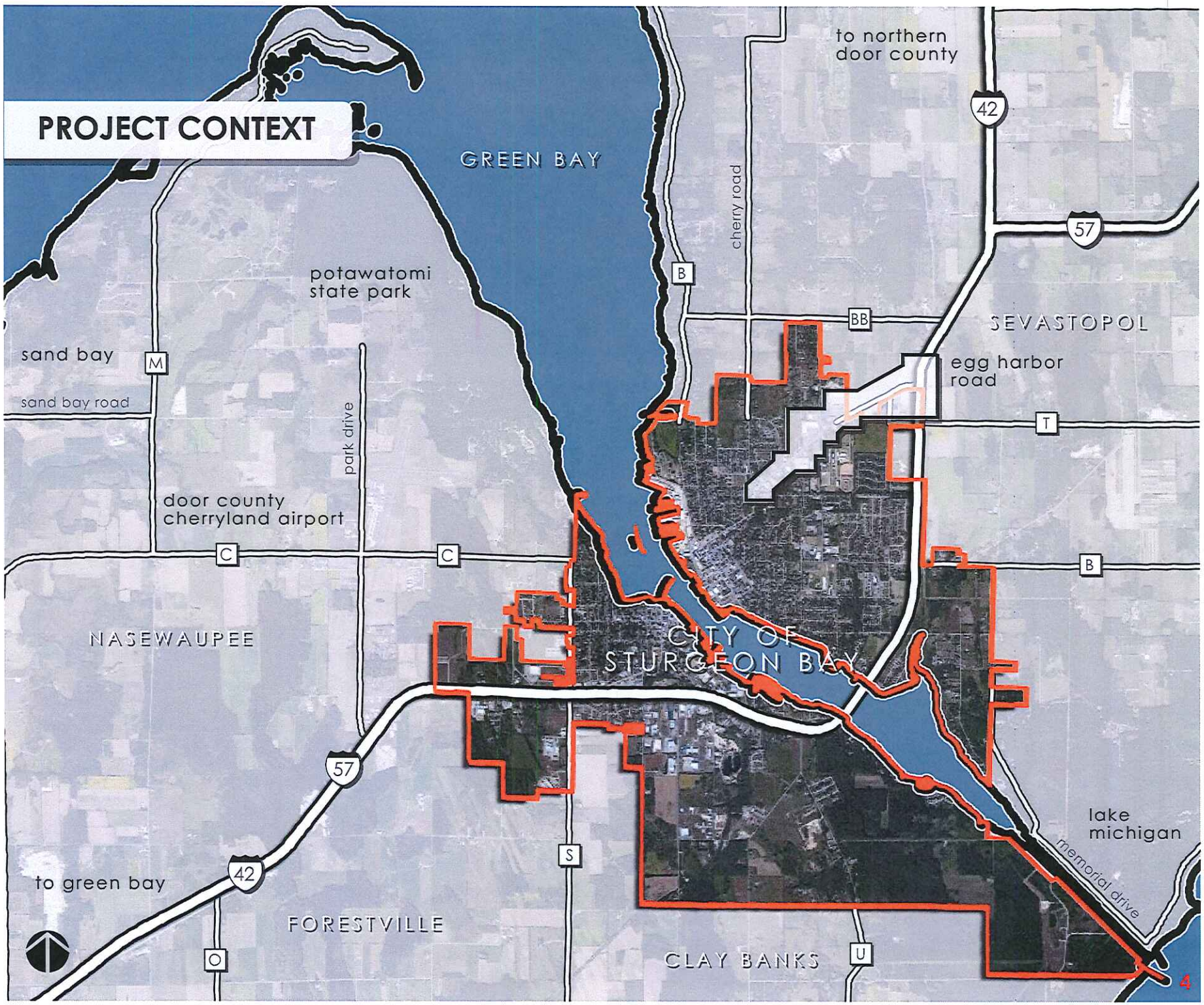


PROXIMITY TO WISONSIN HUBS

Green Bay- 44 miles
Milwaukee - 154 miles
Madison - 183 miles
Eau Claire - 236 miles
Superior - 370 miles



PROJECT CONTEXT



A COASTAL COMMUNITY

1941: DOWNTOWN PERSPECTIVE

The Sturgeon Bay area was originally established as a trading post in 1634, making it the 13th oldest permanent settlement in America. The shipping canal and city itself was intended to provide a shorter and safer route for sailing vessels, but to also to become a vibrant and profitable city.

1913: STURGEON BAY SHIPPING CANAL

The shipping canal was the basis upon which Sturgeon Bay was founded. The city was built around the shipping and maritime industry.

1900: MAIN STREET

Notice the character in the streetscape: cobble roads and boardwalk sidewalks. These historical elements will be incorporated in the proposal.

1909: THE FIRST WARD

The first ward in the early 1900's possessed a great deal of mixed use space. In this image several small town shops and boutiques are situated below residential areas.

STURGEON BAY CHARACTER

STURGEON BAY BRIDGE - MICHIGAN STREET BRIDGE

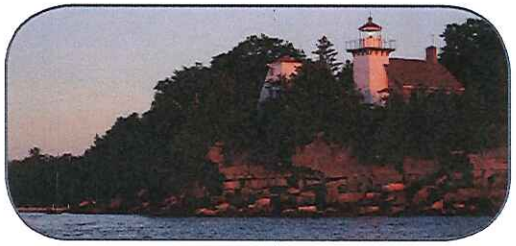
The Michigan Street Bridge is arguably the most historic landmark in the city. It was constructed in 1929 and is officially dedicated as a Door County Veteran's Memorial. Plaques at either end of the bridge read "To honor those who gave themselves, to their country, in times of need." The bridge was closed in 2008 to allow for restoration work and was re-opened in the spring of 2011.

DOWNTOWN

Downtown is a quaint and walkable community with a focus on art and history. Destinations range from the many shops to the maritime museum.

POTAWATOMI STATE PARK

This view of Sawyer Harbor emulates the natural beauty Door County offers. The park offers hiking & biking trails, camping, boating, observation towers, and nature programs.



SHERWOOD POINT LIGHTHOUSE

One of the most historic lightouses in Door County belongs to Sherwood Point. Built in 1883 for $12,000, the lightouse boasts a 35 foot tower and latern that can be seen for 15 miles while flashing.

THE PROJECT

RESEARCH TOPIC
SMART GROWTH

TYPE OF PROJECT
CORRIDOR REVITALIZATION

PROFESSIONAL FOCUS
URBAN DESIGN

SYNTHESIS

OVERALL PROJECT GOAL - produce a comprehensive design that revitalizes the Egg Harbor Road corridor and offers a seamless transition to downtown Sturgeon Bay guided by the principles of smart growth, corridor revitalization, and urban design.

EGG HARBOR ROAD REDEVELOPMENT

THE STAKEHOLDERS

GOVERNEMENTAL

CITY OF STURGEON BAY

Marty Olenjiczak – Community Development Director
Steve McNeil – City Administrator
Brian Spetz – Sturgeon Bay Engineering Department

ORGANIZATIONAL

STURGEON BAY PLANNING COMMISSION

Dan Wiegand – Chair
Ed Ireland
Mike Gilson
Laurel Brooks
Jeff Norland
Steve Parent (Baudhuin Inc.)
Dennis Statz

COMMINUTY

RESIDENTS

Population of Sturgeon Bay
Future residents of new corridor developments

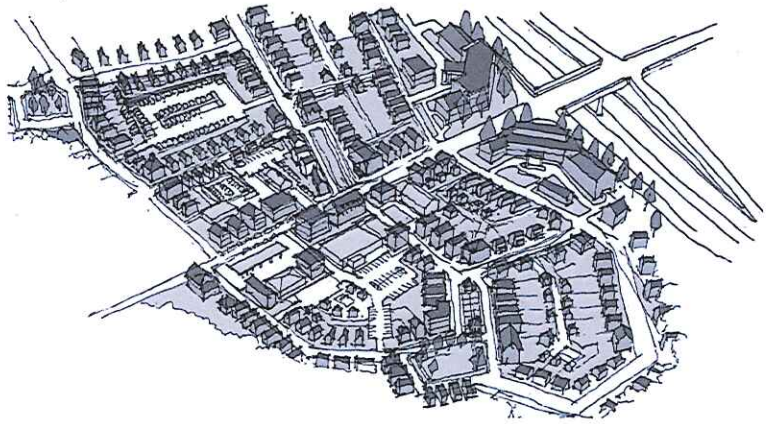
STRATEGIC COORDINATION

CATALYTIC ACTION

SMART GROWTH

Smart Growth Principles

- Creates and Preserves open space, natural beauty, and environmental areas
- Provides a variety of transportation choices
- Offers cost effective living
- Encourages community and stakeholder collaboration in development decisions
- Incorporates mixed land uses
- Has high to medium building densities
- Has wide range of housing opportunities
- Creation of walkable neighborhoods
- Creation of distinctive communities with a strong sense of place



design - robert orr & associates, Tolland, CT

CLIENT & OVERALL GOALS

PROJECT VISION Create a corridor that instills a sense of place, celebrates the history of Sturgeon Bay, and provides new opportunities for housing, retail, office, and public spaces while keeping sustainability at the forefront of design.

1 SITE
Create an evident sense of place in an otherwise faceless corridor

2 SITE
Develop mixed-use areas with opportunities for residential, commercial, and office space

3 SITE
Create a pedestrian realm and people-centered focus for the streetscape

4 COMMUNITY
Alleviate traffic flow along the corridor by creating additional access points to Egg Harbor Road

5 COMMUNITY
Create a brand for the corridor

6 COMMUNITY
Create a walkable corridor with connecting interest points (ex. public parks, residential areas)

7 REGIONAL
Manage and harvest stormwater to improve water quality before reaching the great lakes

ANALYSIS

PROJECT CONTEXT

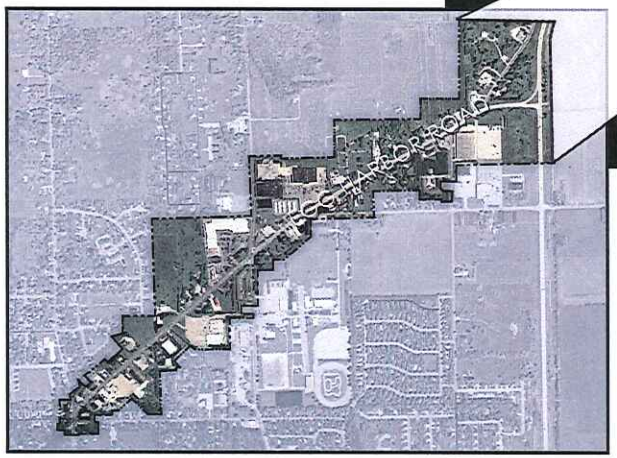
CONNECTION OF NETWORKS

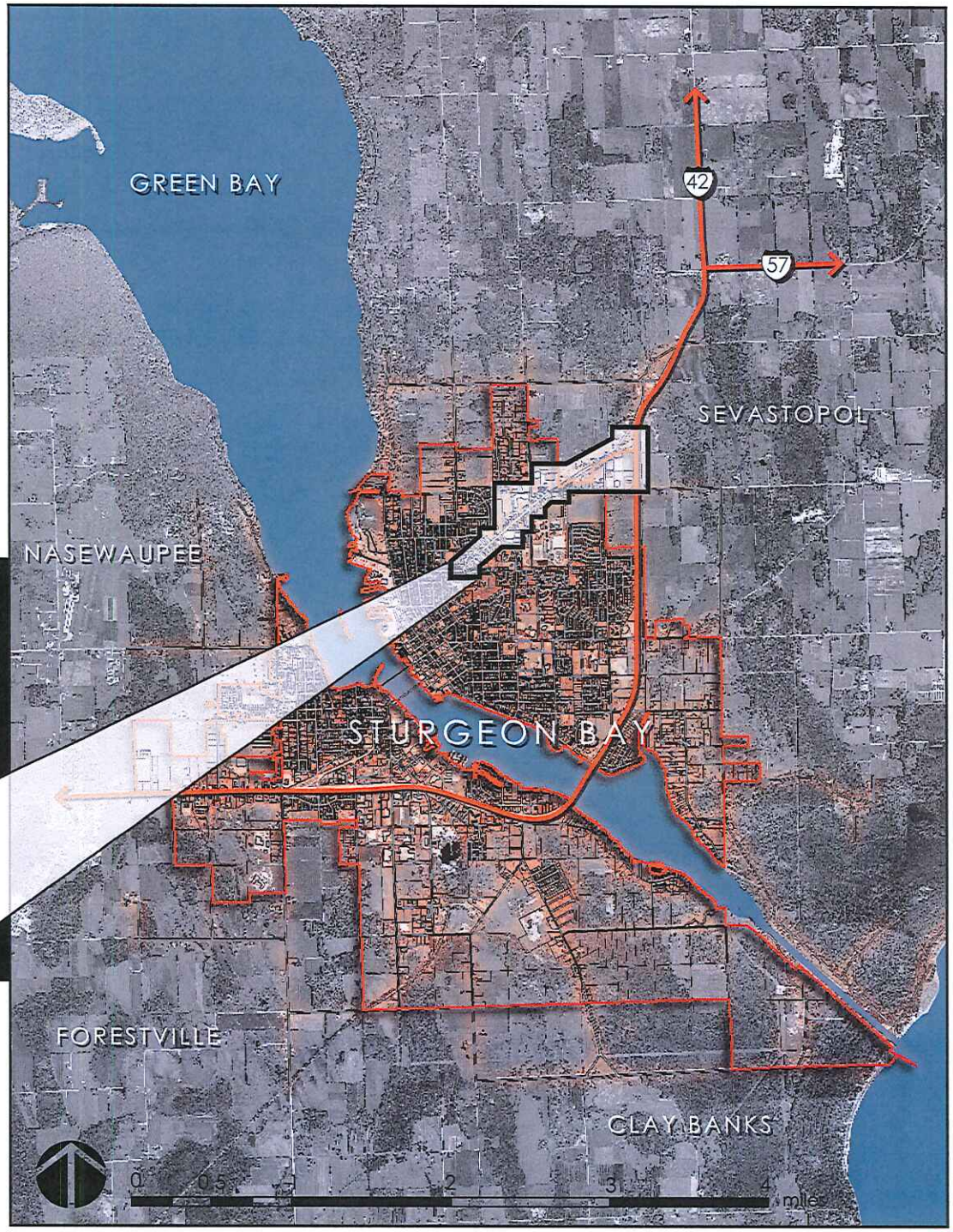
Door County's major cities, villages, and towns are all connection by the main highways systems of 42 and 57. These highways converge at the Egg Harbor Road corridor.

GATEWAY TO DOOR COUNTY

The two major highways (42 & 57) merge in Sturgeon Bay, the largest municipality in the county, making it the central hub of the Door County. The Egg Harbor Road corridor carries traffic from both highways into the city.

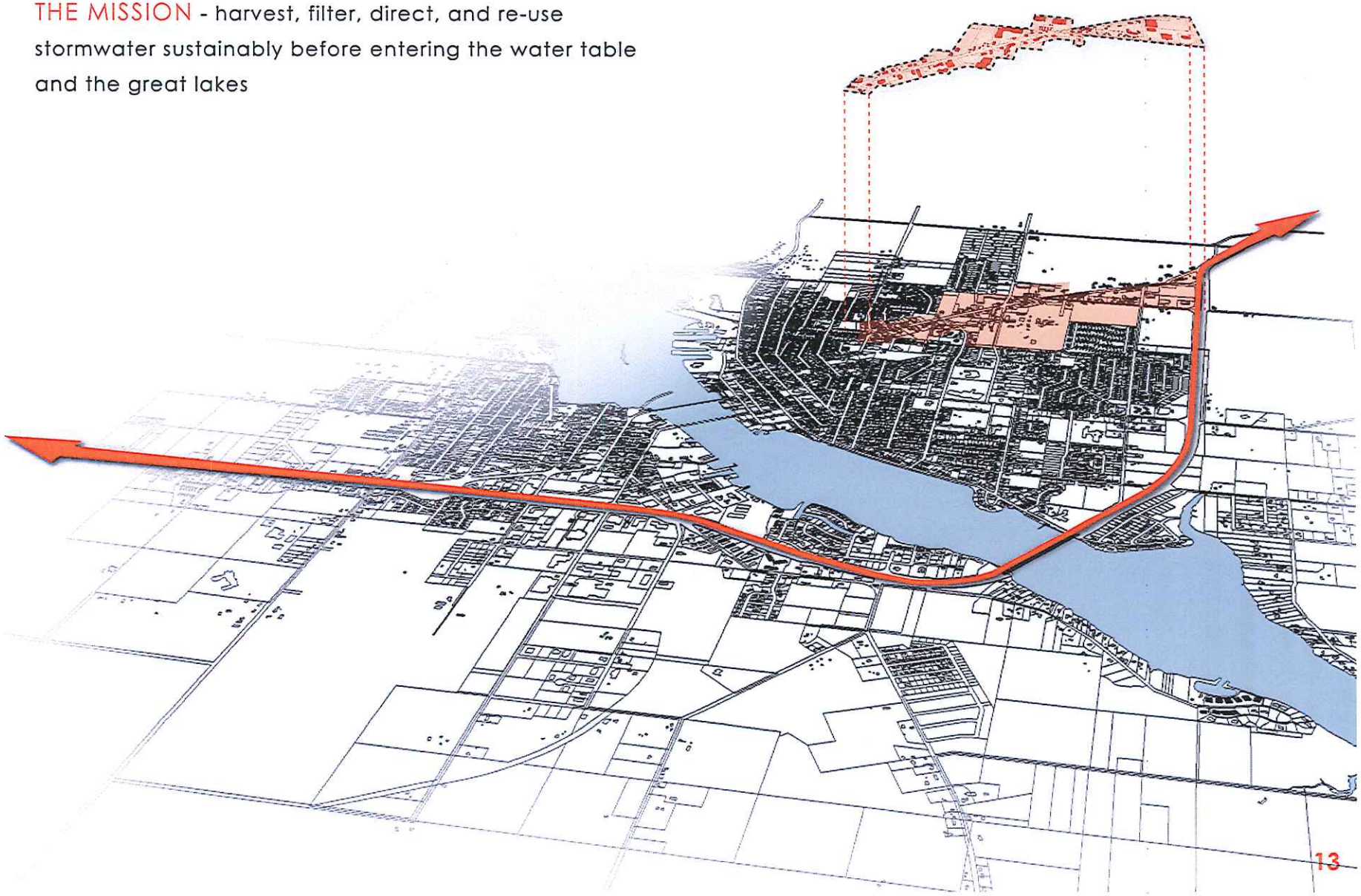
EGG HARBOR ROAD CORRIDOR



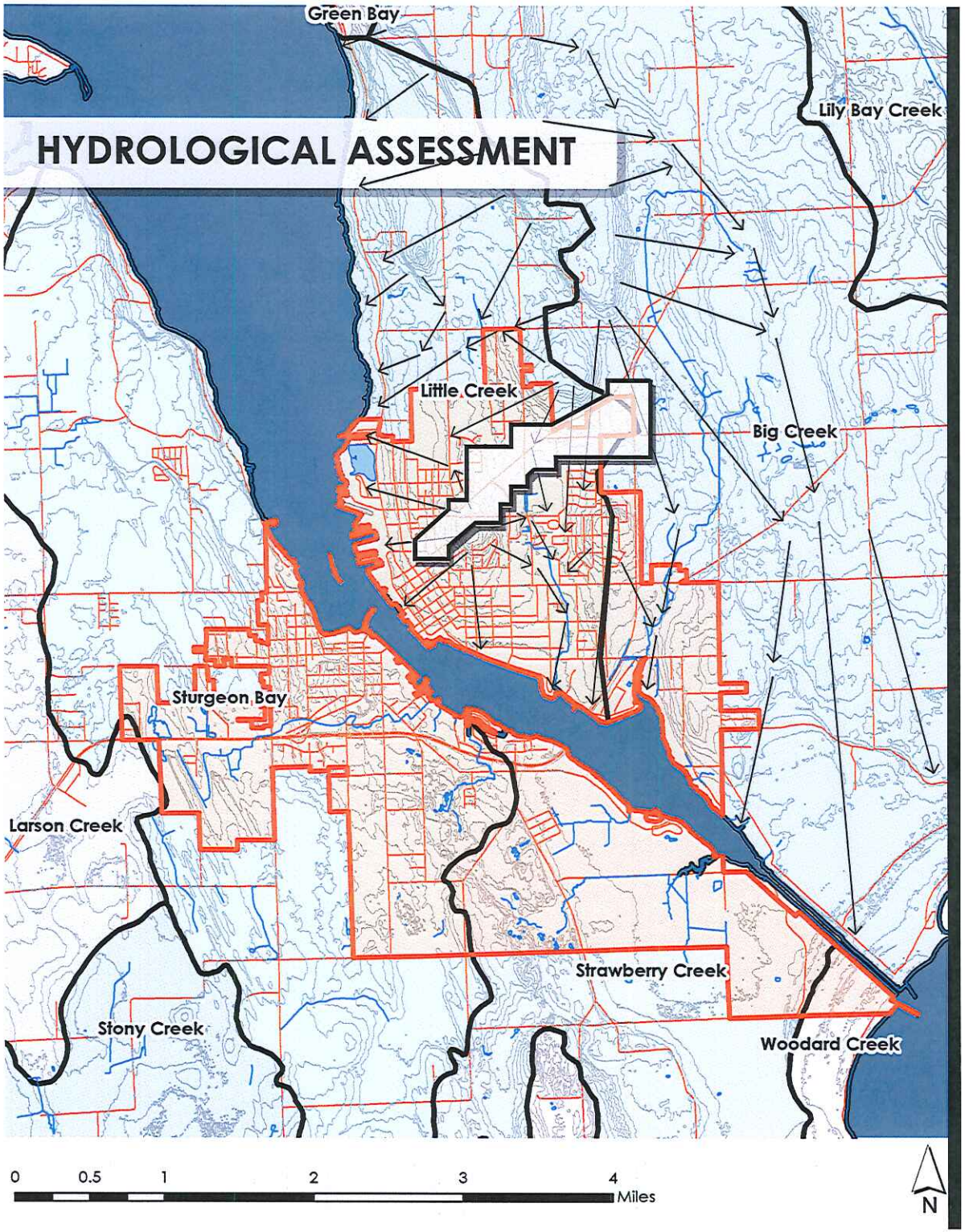


THE REGION

THE MISSION - harvest, filter, direct, and re-use stormwater sustainably before entering the water table and the great lakes



HYDROLOGICAL ASSESSMENT



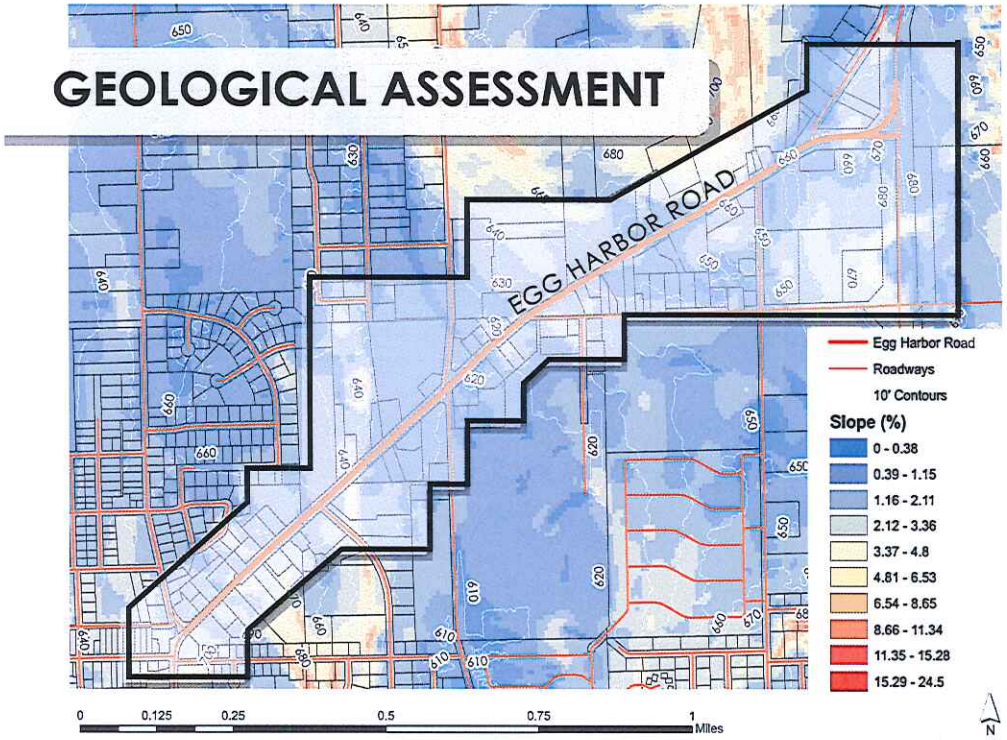
HARVESTING STAGE - BIOSWALES

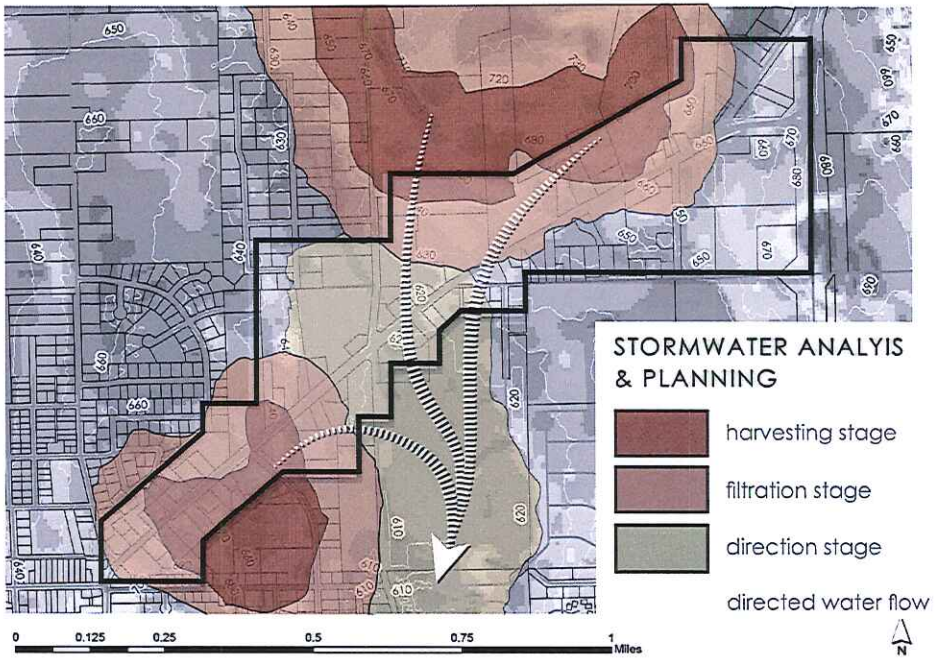
FILTER STAGE - PHYTOREMEDIATION

DIRECTING STAGE - CHANNELS

REUSE STAGE - STORMWATER PARKS

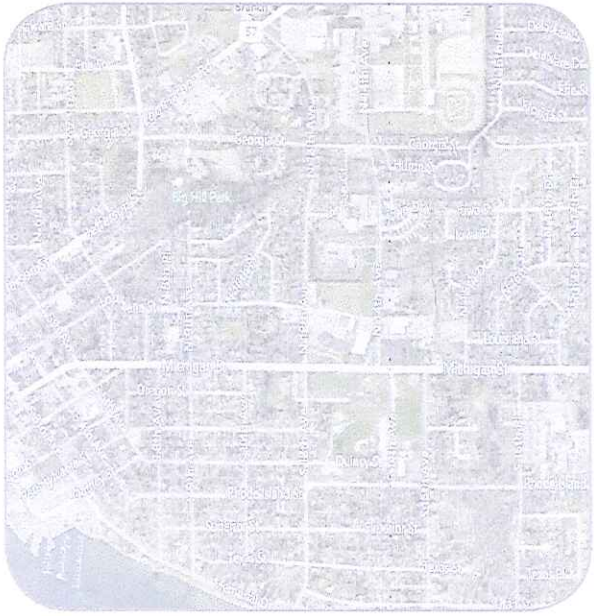
GEOLOGICAL ASSESSMENT





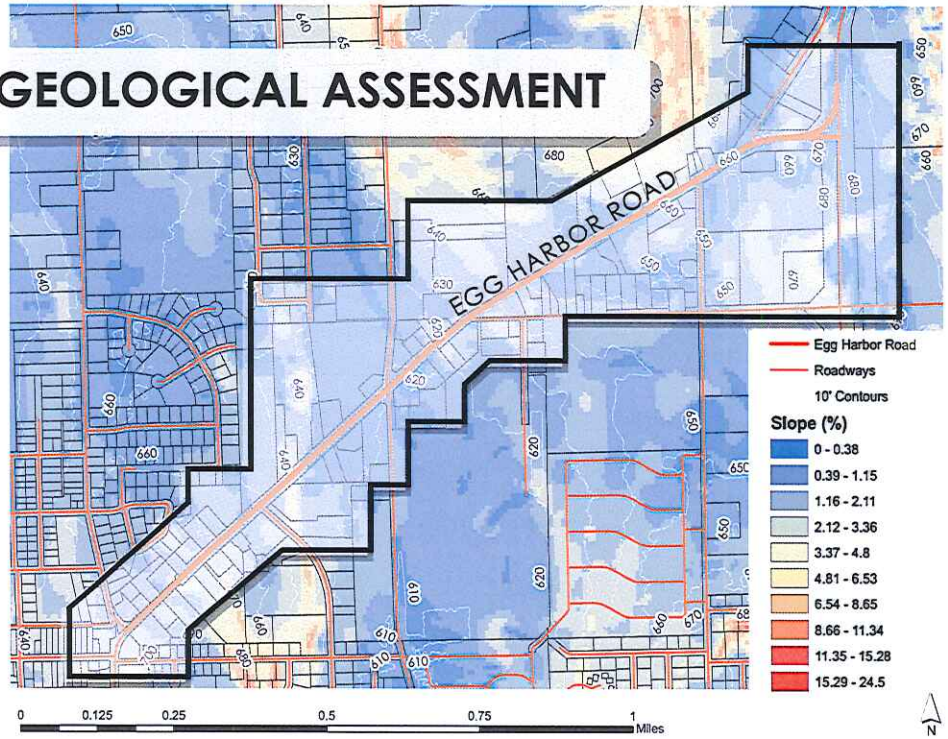
HARVESTING ZONE - AREA 1

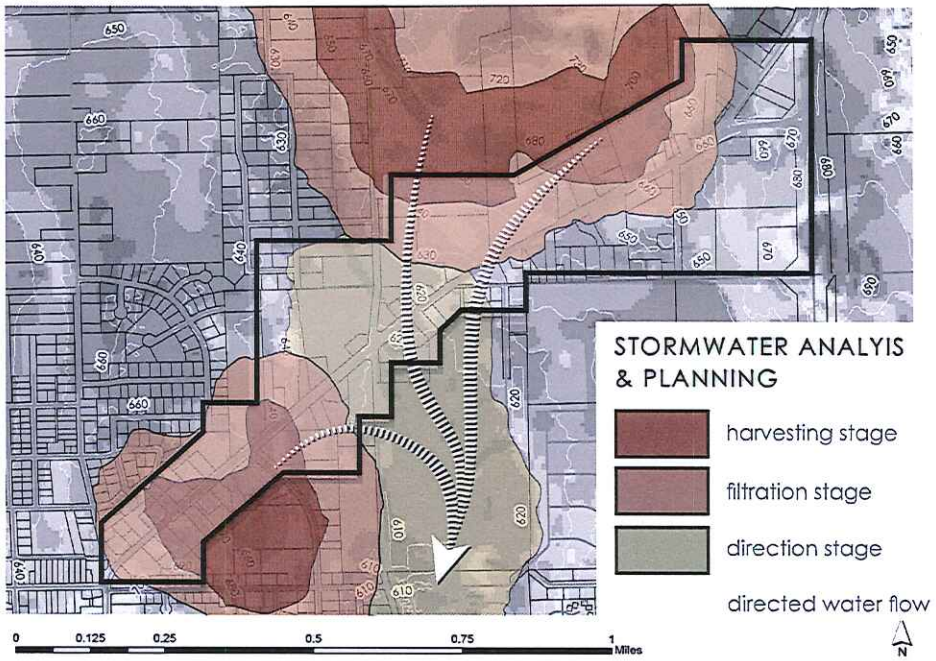
FILTRATING ZONE - AREA 2

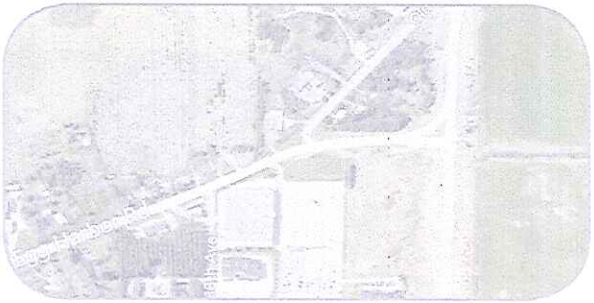


DIRECTING ZONE - TO SHIPPING CANAL

GEOLOGICAL ASSESSMENT

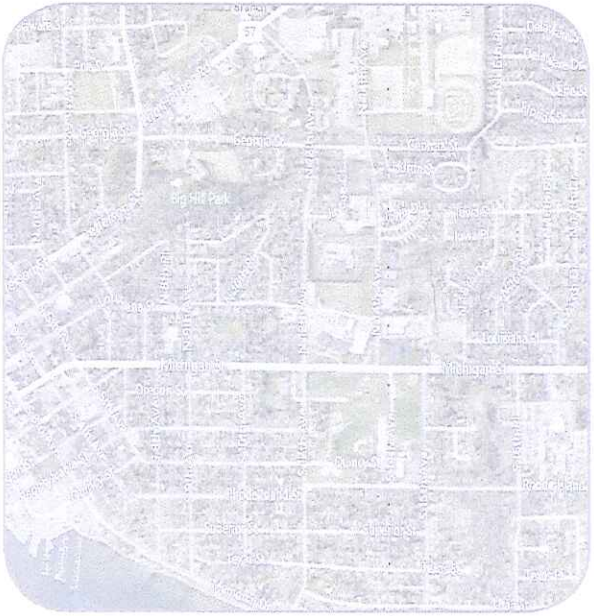






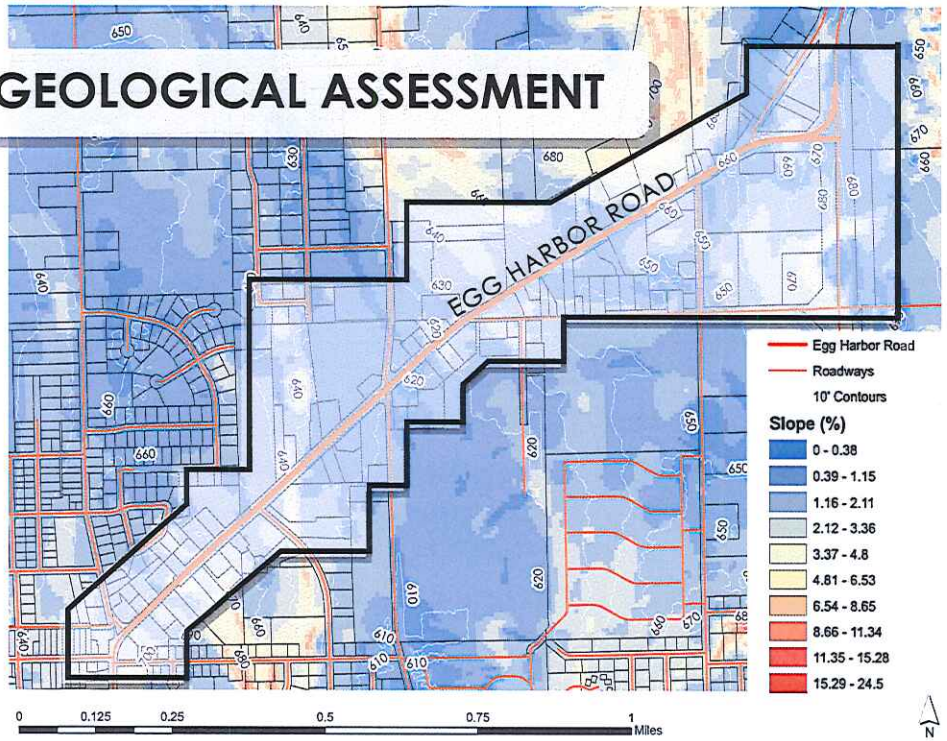
HARVESTING ZONE - AREA 1

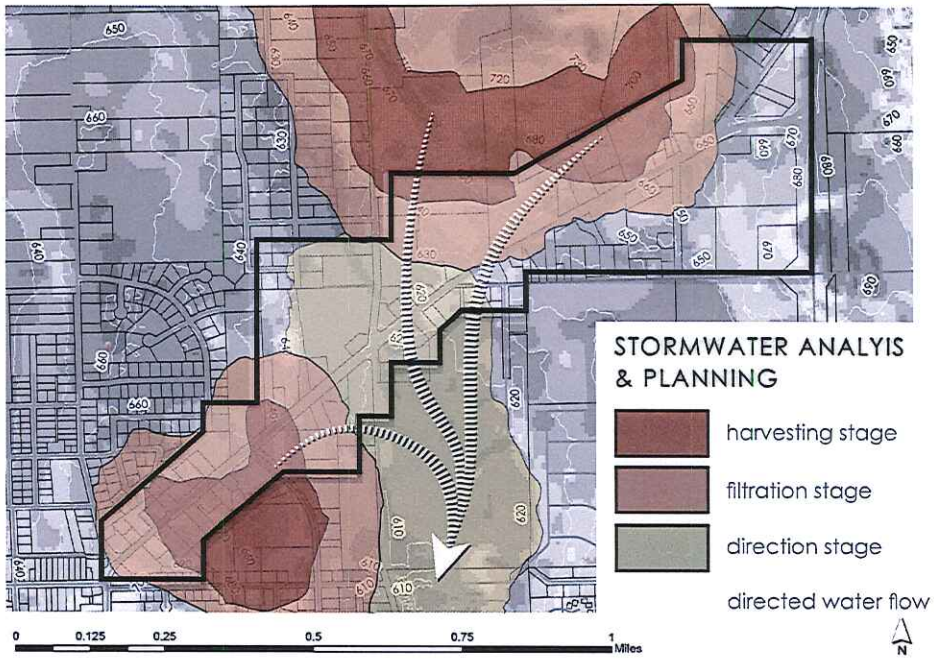
FILTRATING ZONE - AREA 2

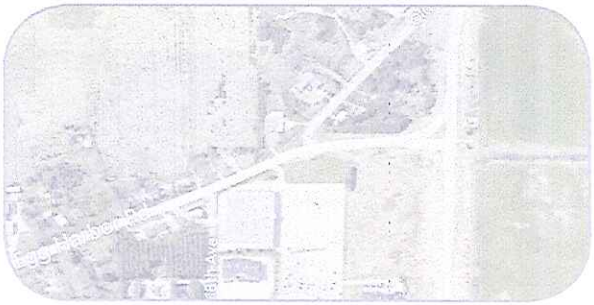


DIRECTING ZONE - TO SHIPPING CANAL

GEOLOGICAL ASSESSMENT





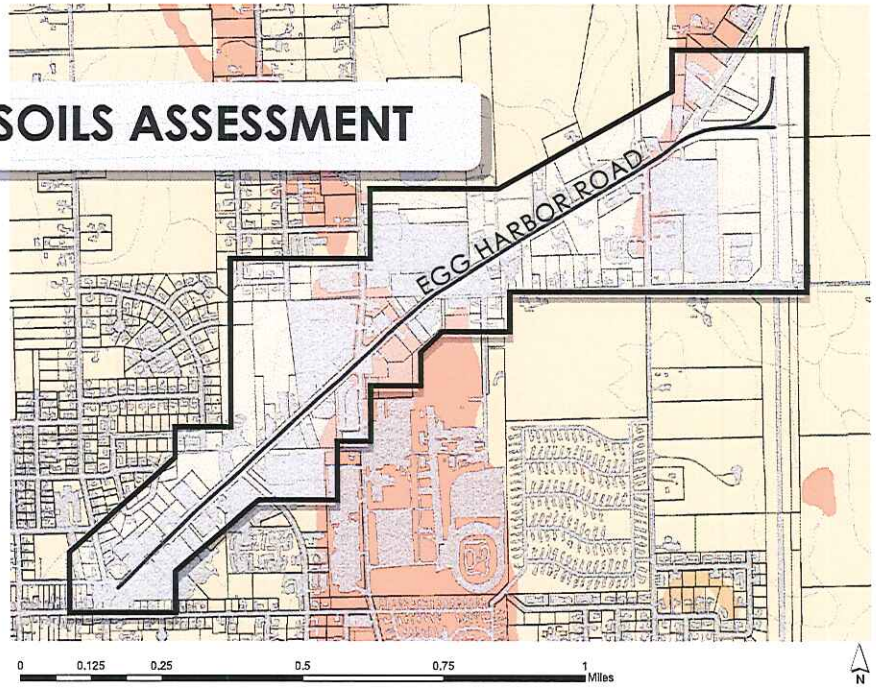


HARVESTING ZONE - AREA 1

HARVESTING ZONE - AREA 2

DIRECTING ZONE - TO SHIPPING CANAL

SOILS ASSESSMENT



DRAINAGE ANALYSIS

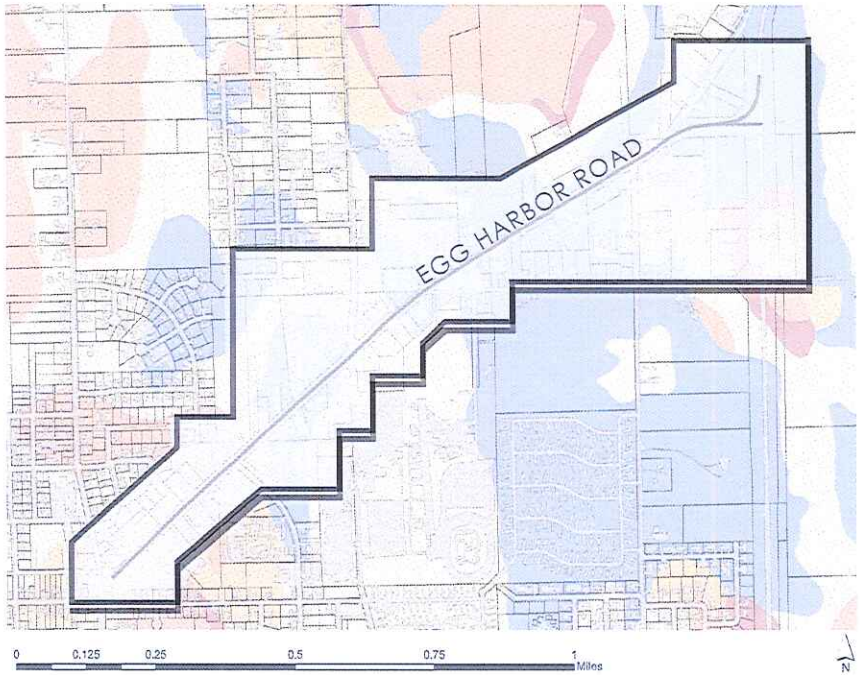
Egg Harbor Road

Impervious Surface

Soil Drainage Factor

Well Drained

Somewhat Poorly Drained



RUNOFF ANALYSIS

Egg Harbor Road

Impervious Surface

Soil Runoff Factor

Very High

High

Medium

Low

Very Low

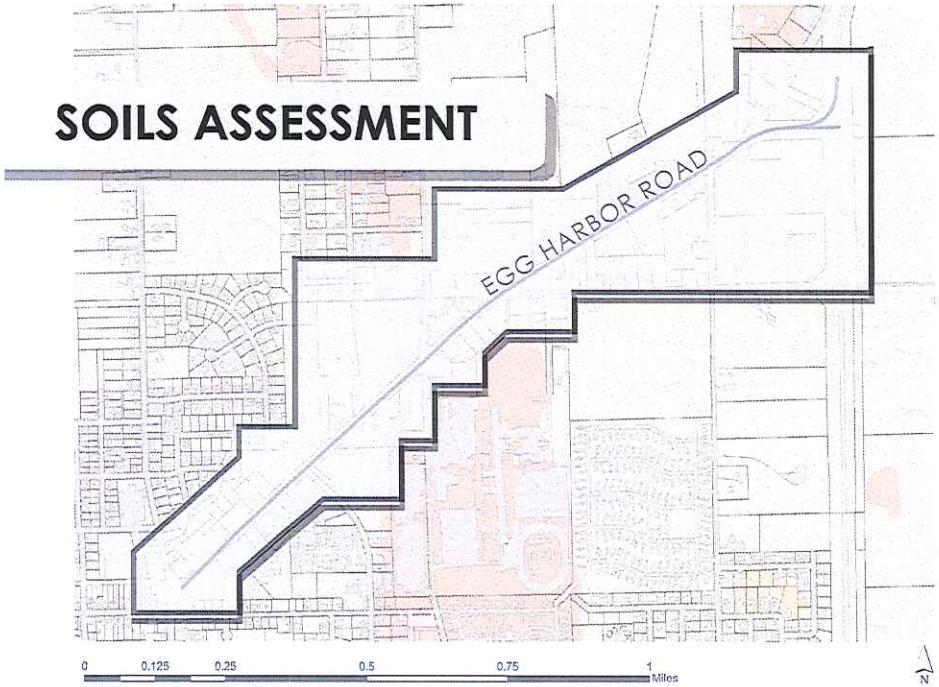
PERMEABLE PAVEMENT

PERMEABLE PAVERS

BOARDWALK SIDEWALKS

SLOWING WATER FLOW & SEDIMENT

SOILS ASSESSMENT



DRAINAGE ANALYSIS

Egg Harbor Road

Impervious Surface

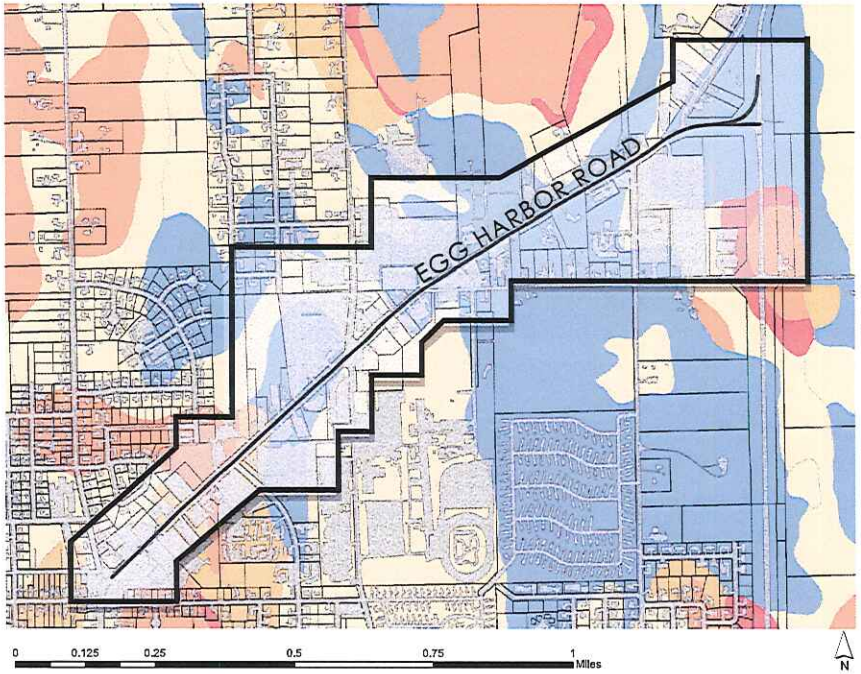
Soil Drainage Factor

Well Drained

Somewhat Poorly Drained

PERMEABLE PAVEMENT

PERMEABLE PAVERS



RUNOFF ANALYSIS

Egg Harbor Road

Impervious Surface

Soil Runoff Factor

Very High

High

Medium

Low

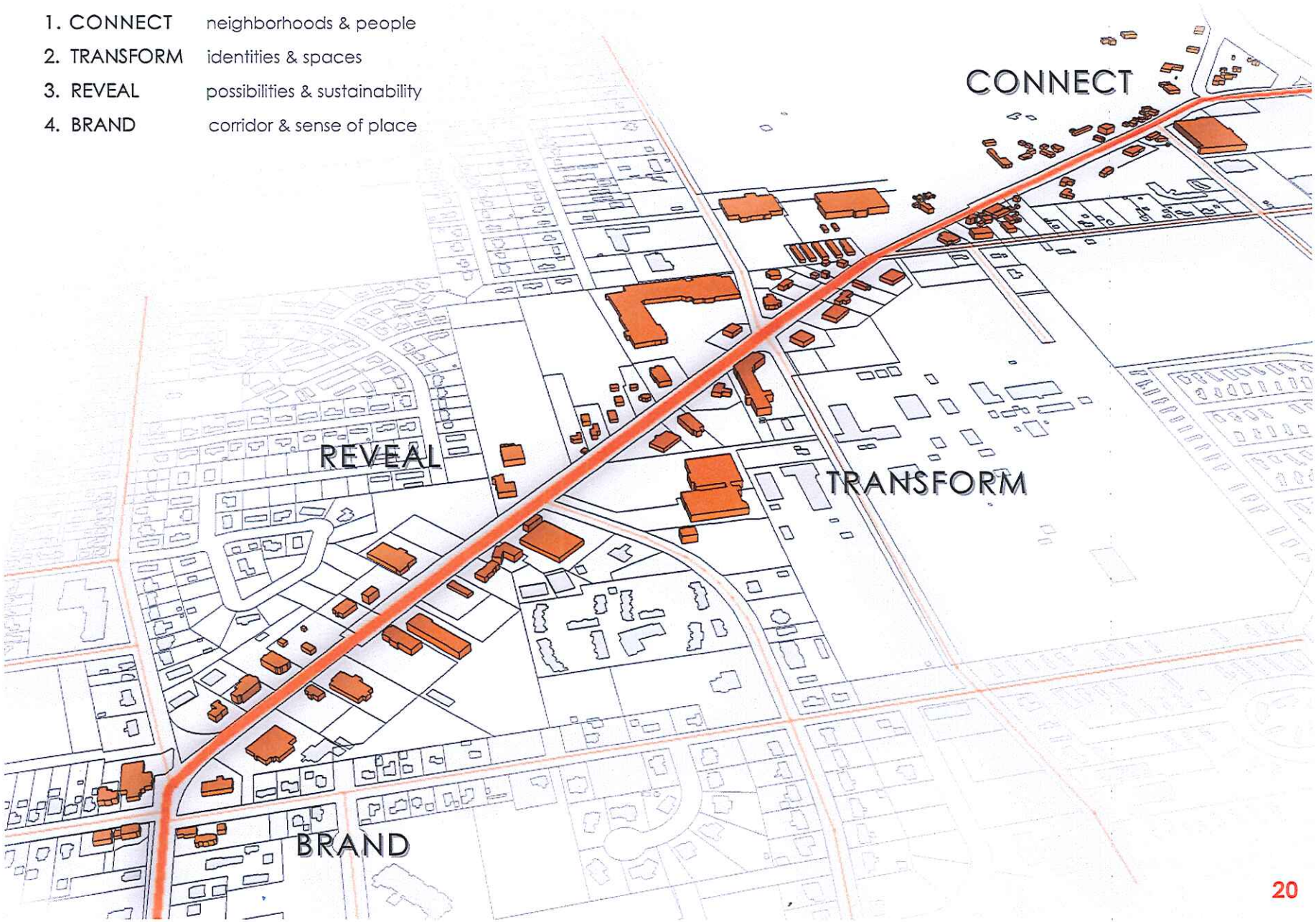
Very Low

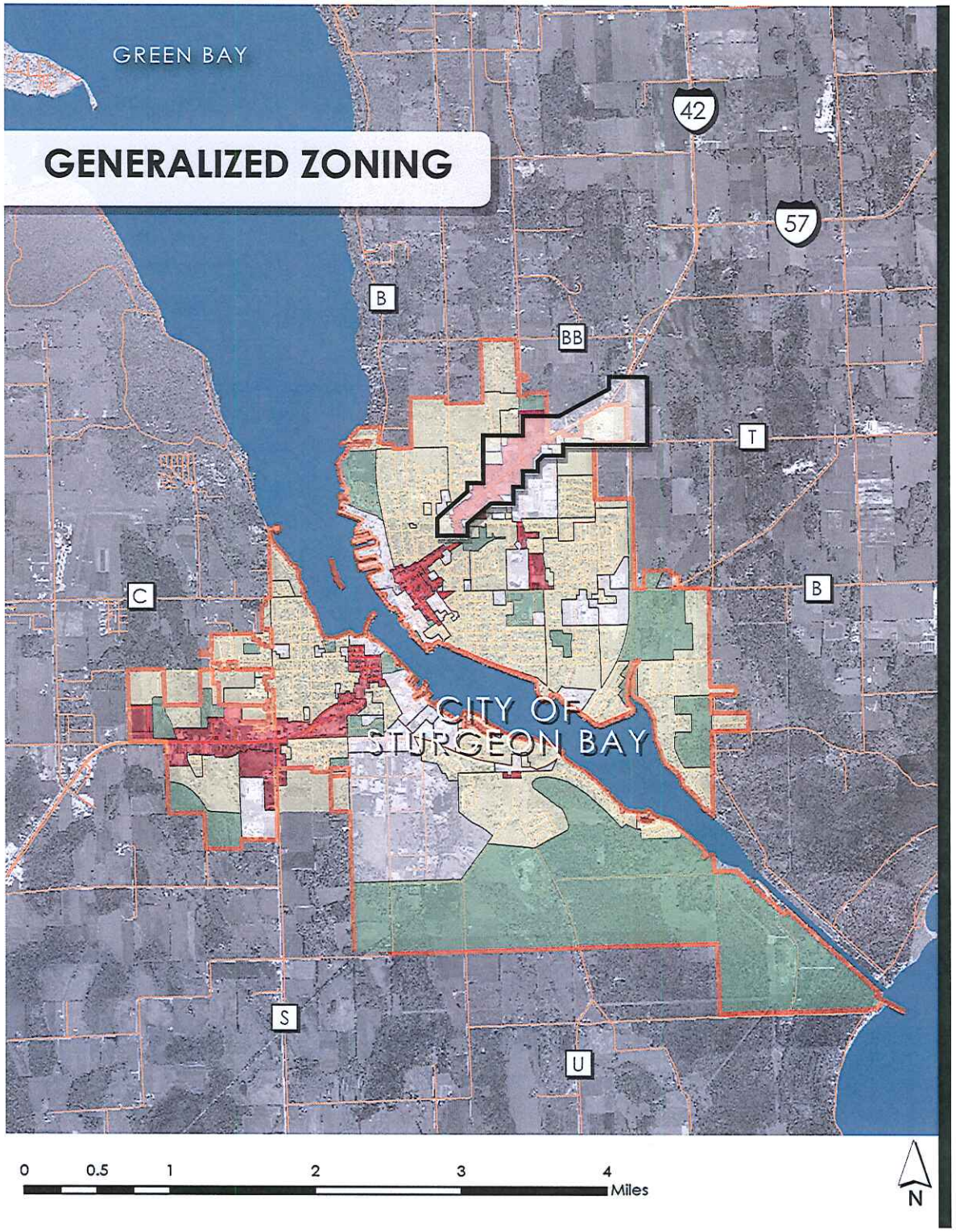
BOARDWALK SIDEWALKS

SLOWING WATER FLOW & SEDIMENT

THE COMMUNITY - 4 TIERED DESIGN APPROACH

1. CONNECT neighborhoods & people
2. TRANSFORM identities & spaces
3. REVEAL possibilities & sustainability
4. BRAND corridor & sense of place





green space

commercial

residential

public, industrial & institutional

Sturgeon Bay City Limits

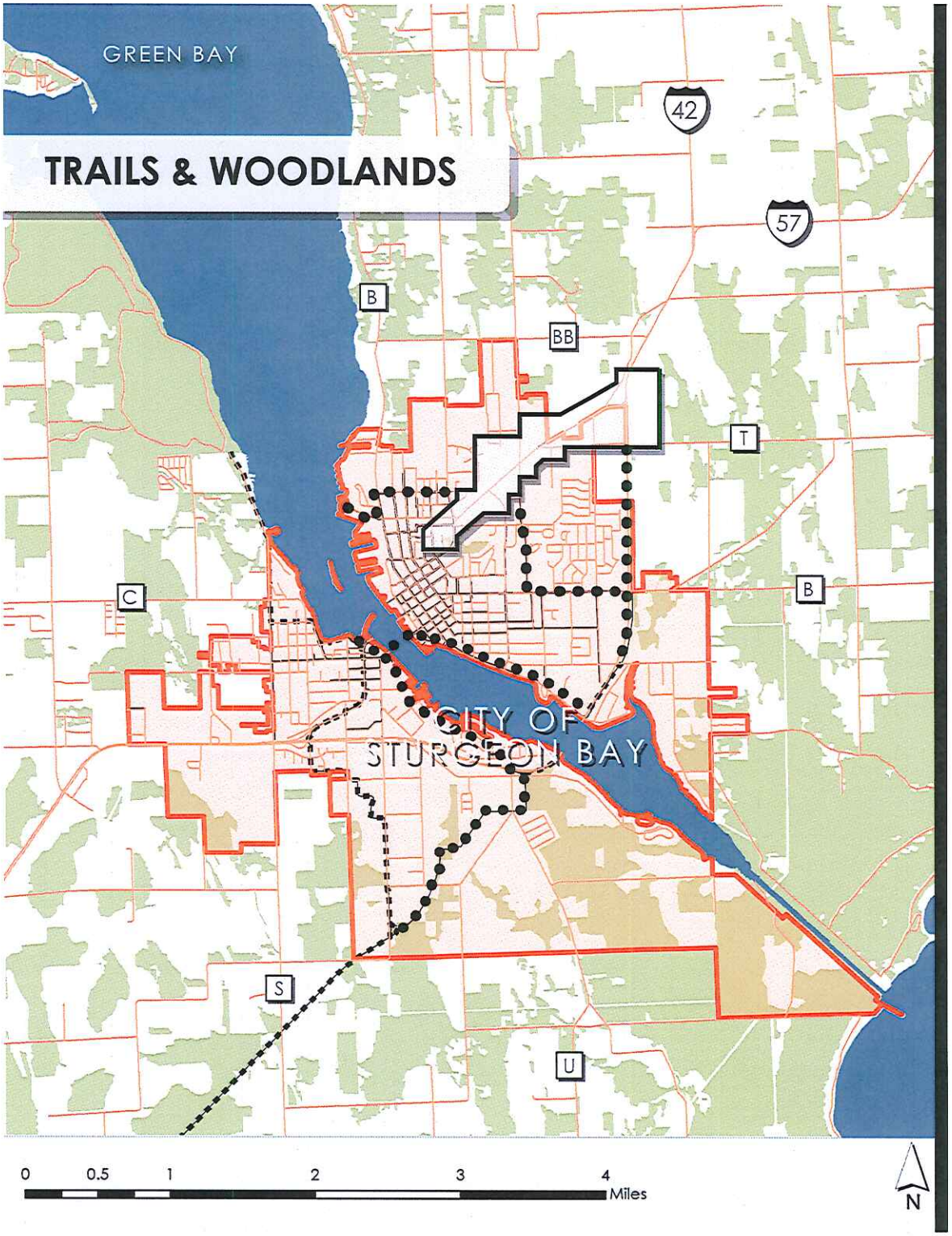
roadways

GOALS OF LAND USE PLANNING

1. Create more division of space - entire corridor currently consists of only commercial land use (red)

2. Create mixed-use development areas within the corridor

3. Plan land use in a way that promotes contextual connections (such as to trails or parks)



Sturgeon Bay City Limits
Bicycle Routes
City Sidewalks
City of Sturgeon Bay
Proposed Trails

Vegetation

Woodlands

GOALS OF TRAILS & WOODLANDS

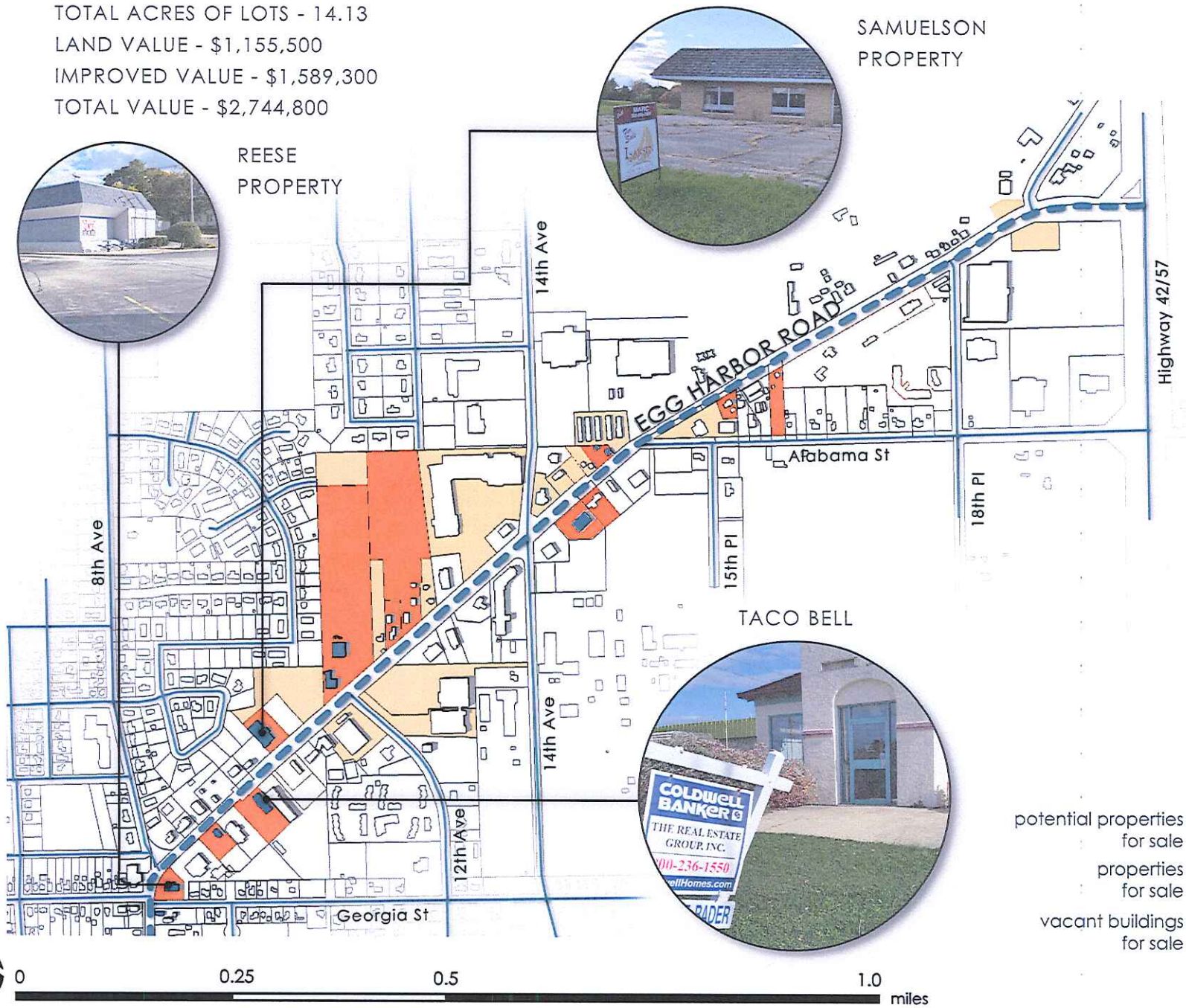
1. Create more connections to existing trails as well as future proposed trails (ie. waterfront loop)

2. Create the opportunity for residential areas to interact with the Egg Harbor Road corridor via new development (parks, trails, mixed-use, etc.)

3. Create the opportunity for residents near the Egg Harbor Road to connect and access the waterfront

VACANT BUILDINGS FOR SALE

TOTAL ACRES OF LOTS - 14.13
LAND VALUE - $1,155,500
IMPROVED VALUE - $1,589,300
TOTAL VALUE - $2,744,800

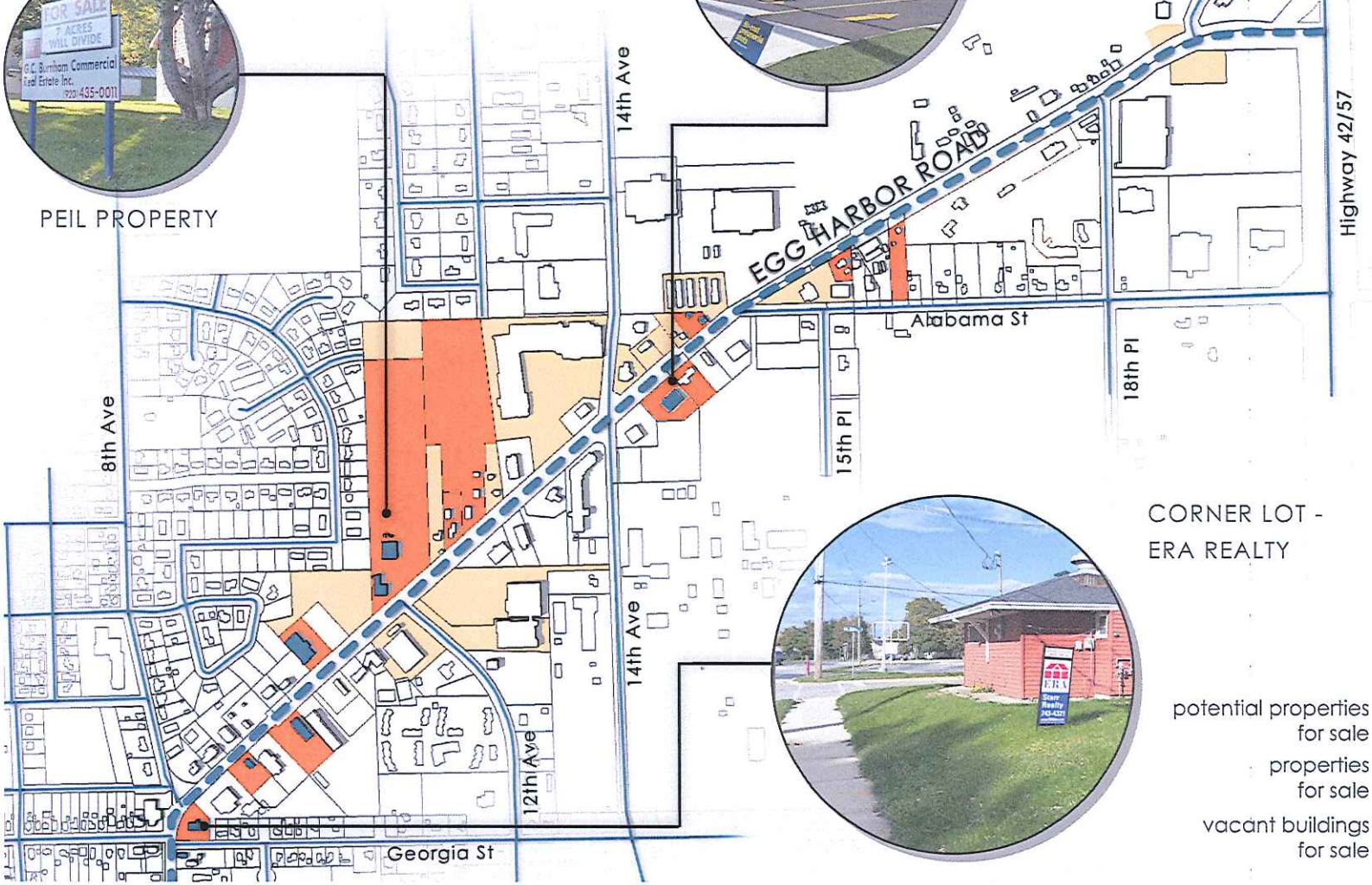


PROPERTIES FOR SALE

TOTAL ACRES OF LOTS - 23.80
LAND VALUE - $1,633,500
IMPROVED VALUE - $2,078,400
TOTAL VALUE - $3,711,900

PEIL PROPERTY

STURGEON BAY
DEVELOPMENT GROUP LLC



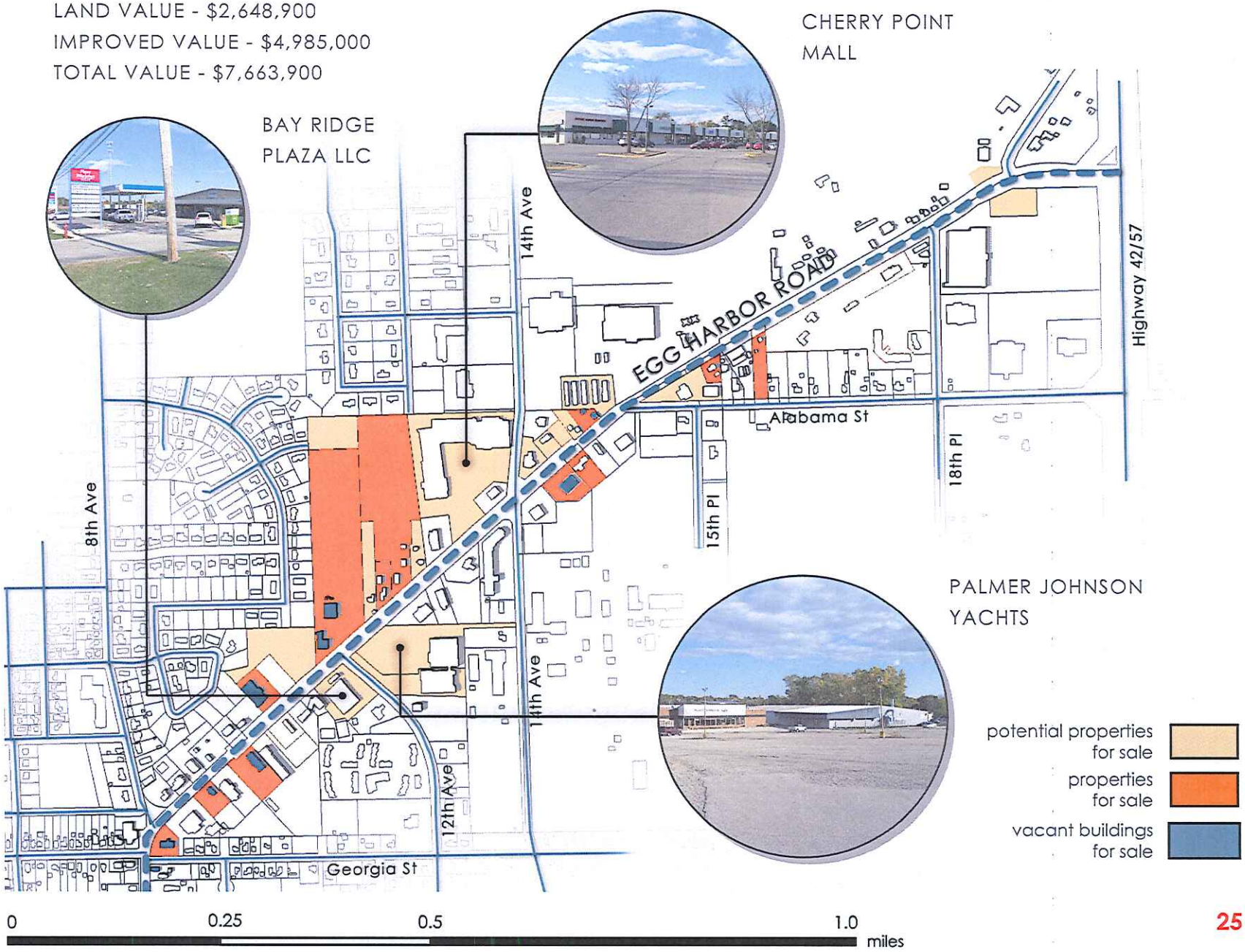
CORNER LOT -
ERA REALTY

potential properties for sale
properties for sale
vacant buildings for sale

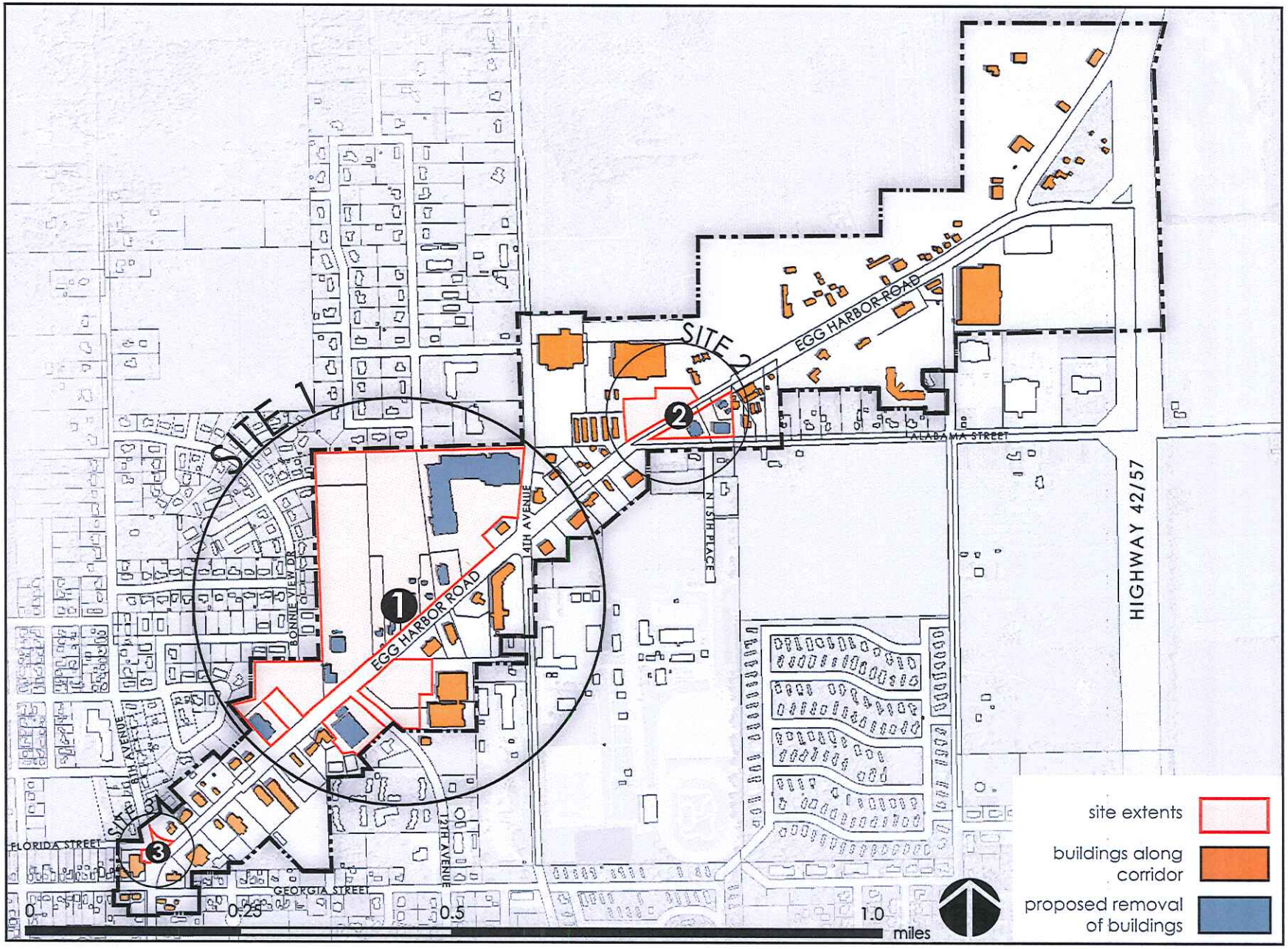
0 0.25 0.5 1.0 miles

POTENTIAL PROPERTIES FOR SALE

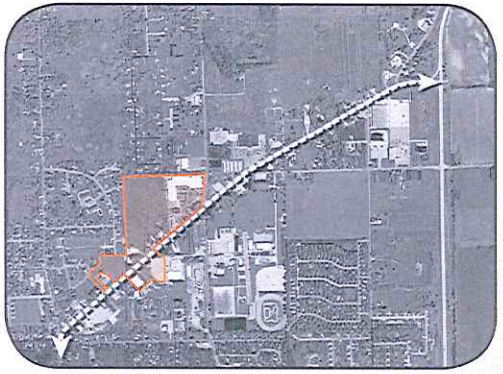
TOTAL ACRES OF LOTS - 30.02
LAND VALUE - $2,648,900
IMPROVED VALUE - $4,985,000
TOTAL VALUE - $7,663,900

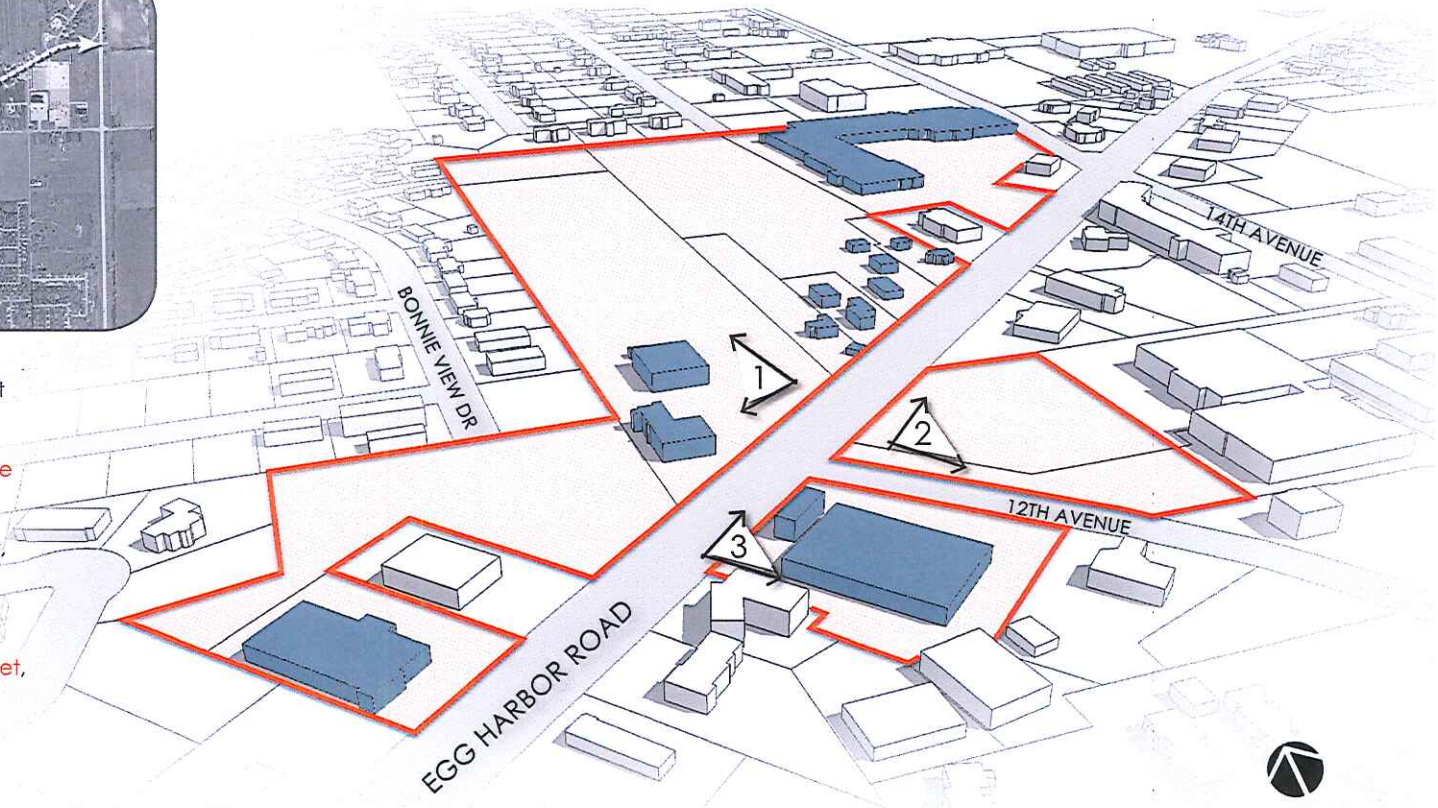


THE SITES - FOCUS AREAS



SITE 1 - MIXED USE DEVELOPMENT





The largest scale redevelopment occurring along the Egg Harbor Road corridor will be a 38.22 acre site encompassing an existing brownfield, gas station and mart, and an parking lot. This will be the site of a new mixed-use development, public park, market, and new roadway system.

site extents

proposed removal of buildings

MIXED-USE DEVELOPMENT

33.12 acres
Total value - $5,417,600

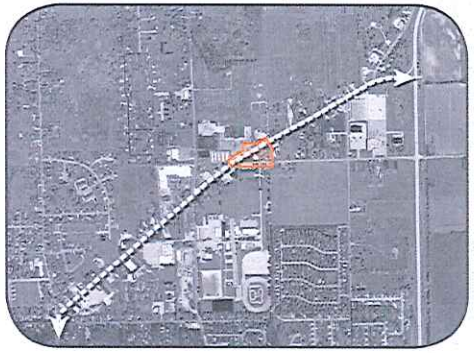
PUBLIC MARKET / PARK

3.21 acres
Un-assessed vacant parking lot

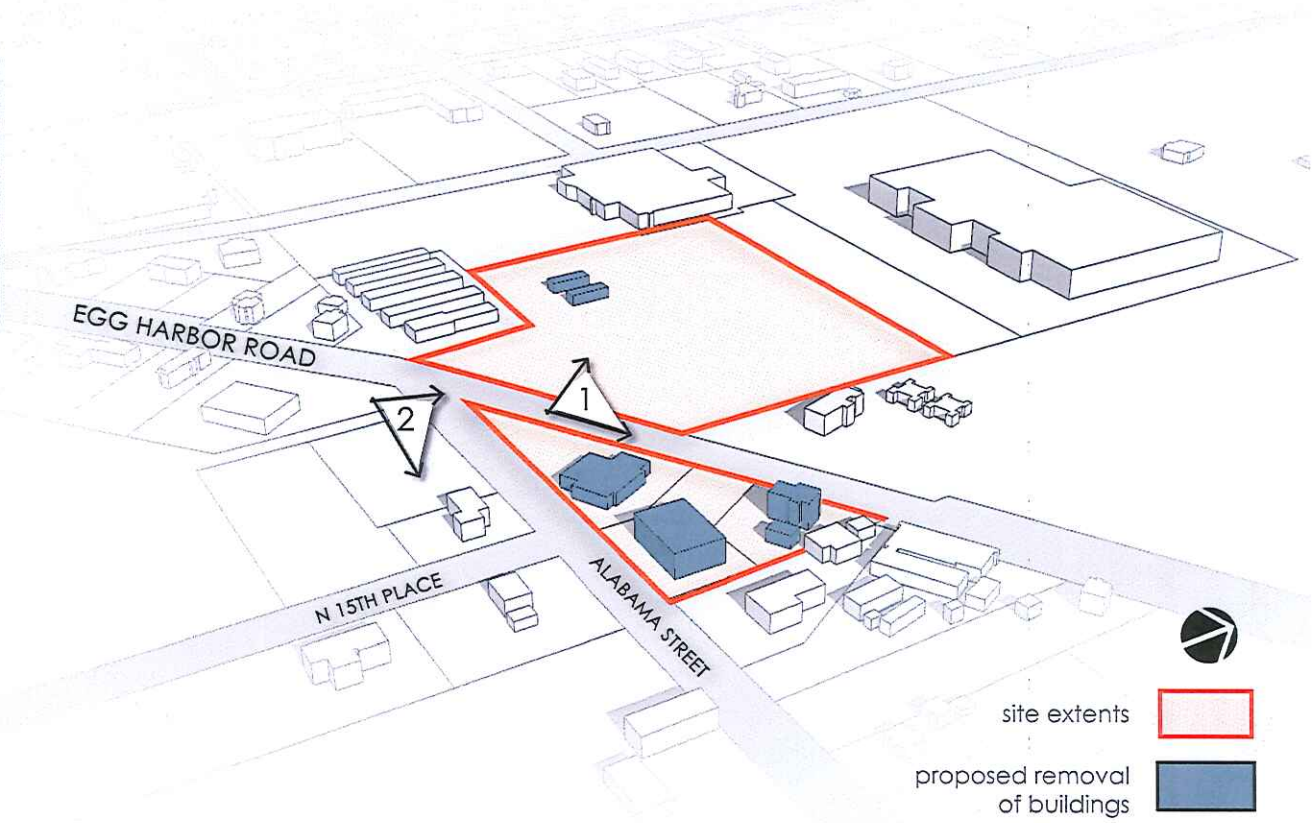
NEW ROADWAY CONNECTION

1.89 acres
Total value - $ 723,000

SITE 2 - ROADWAY RESTRUCTURING



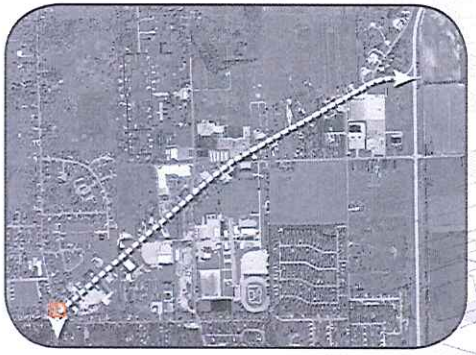
This medium scale development along the Egg Harbor Road corridor includes an existing intersection, WalMart roadway entrance, several commercial lots, and a residential lot. This area will showcase a public plaza, corridor branding (signs), local restaurants, and a safer 90 degree intersection at Alabama Street (as opposed to the existing 30 degree intersection).

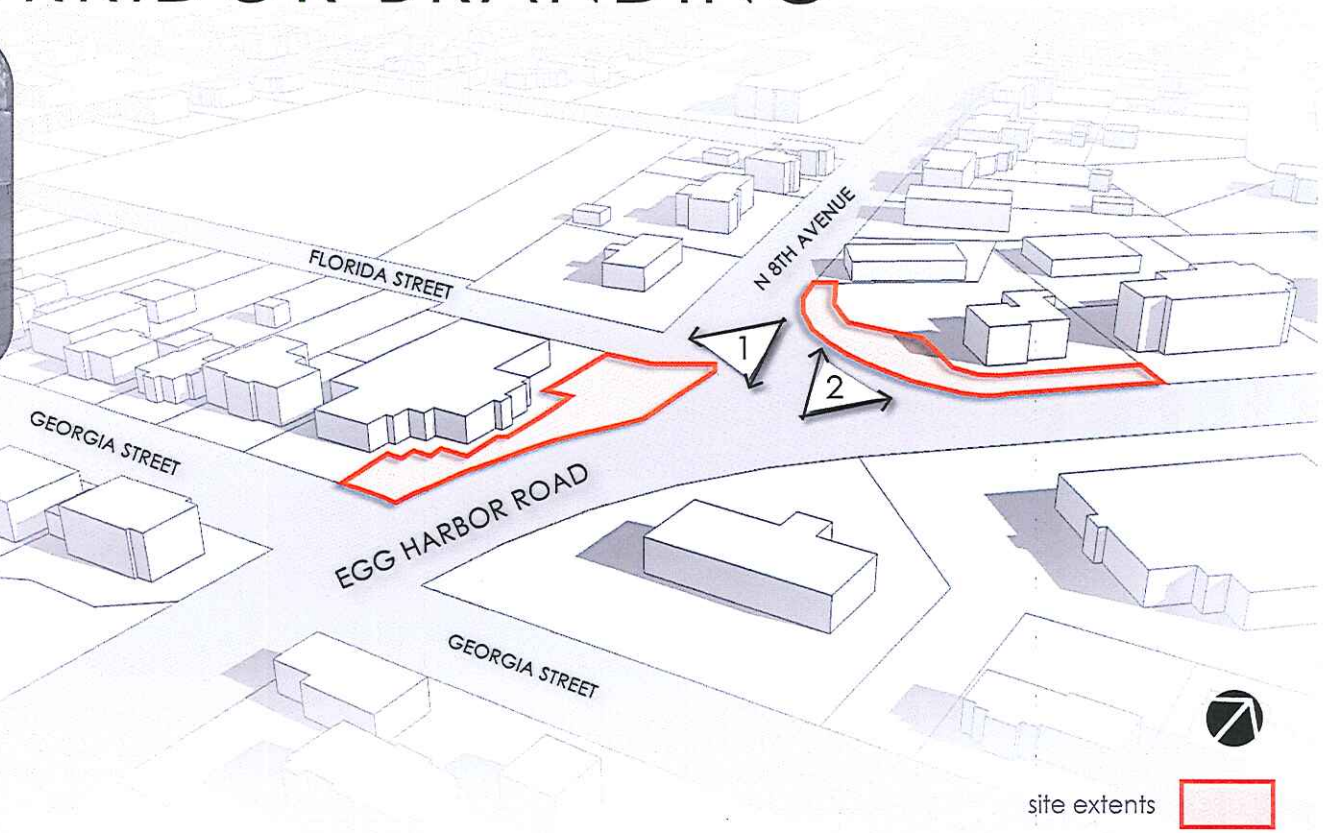


WALMART & EGG HARBOR RD INTERSECTION
Existing 90 degree entrance to new WalMart creates opportunity for new intersection

ALABAMA ST & EGG HARBOR RD INTERSECTION
2.38 acres
Total value - $ 1,123, 400

SITE 3 - CORRIDOR BRANDING





This small scale development occurring along the Egg Harbor Road corridor includes the intersections of Georgia Street, Florida Street, and N 8th Avenue. The existing conditions are open lawn spaces. The areas will become the branding area for the corridor including a miniature public plaza, corridor signs, and elegant plantings.

CITY CORNER LOT - MINI PLAZA AREA

Existing green space and sidewalk owned by the city
Currently under-utilized space at the very southwest end of the corridor

CITY CORNER LOT - CORRIDOR BRANDING AREA

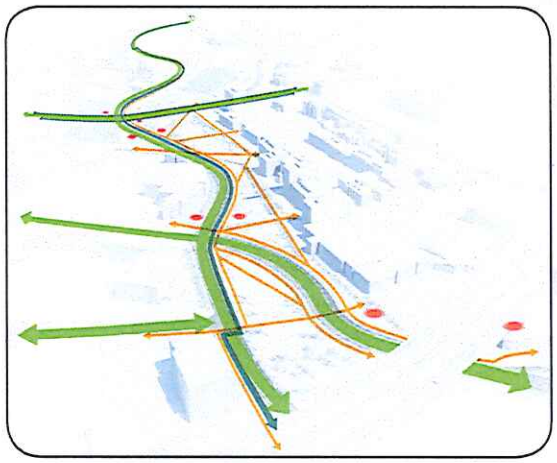
City owned small corner lot
Receives great deal of sunlight due to minimal buildings and infrastructure

PROGRAM DEVELOPMENT

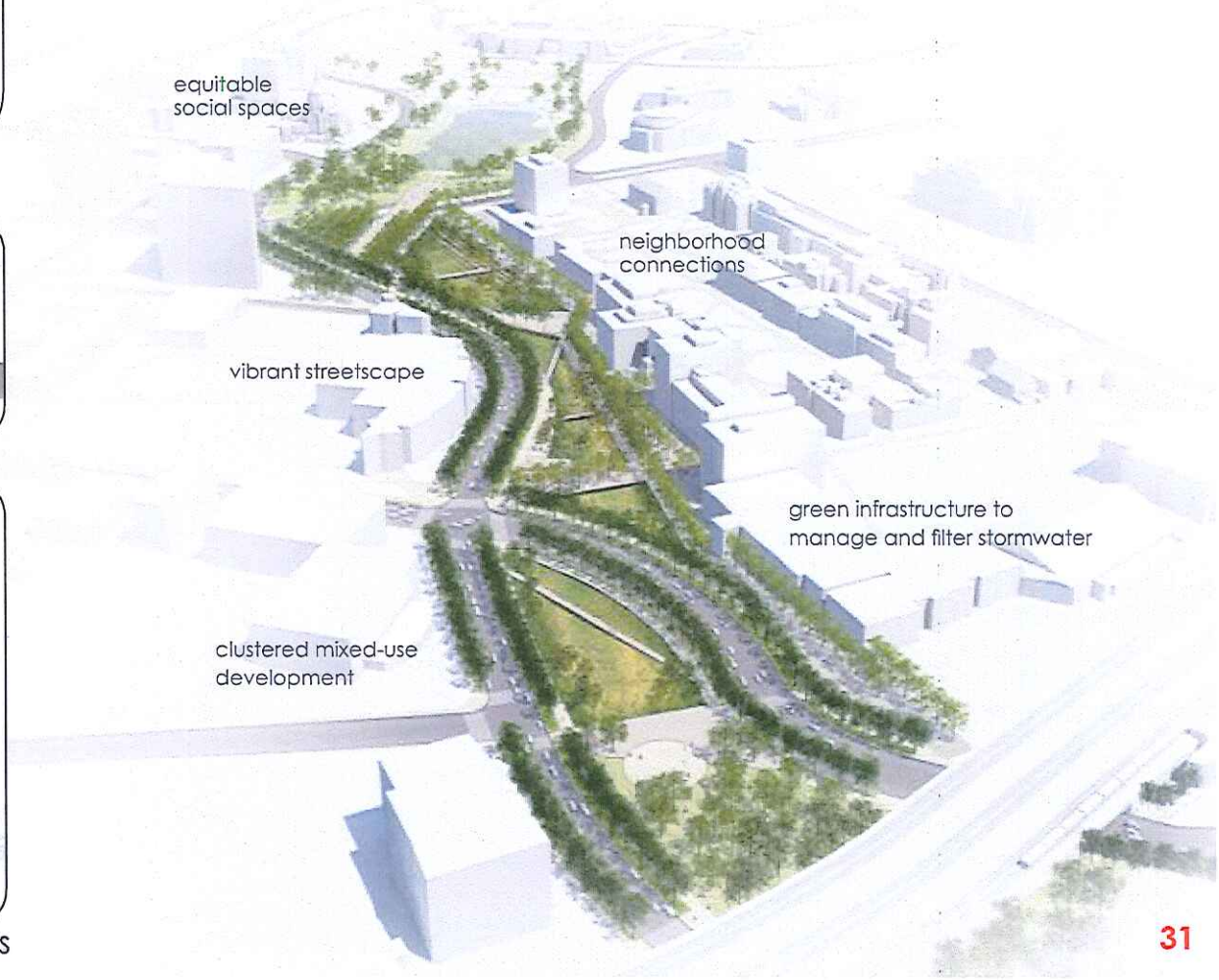
PRECEDENT - GREEN OVER GRAY

MIXED-USE DEVELOPMENT
WITH GREEN INFRASTRUCTURE

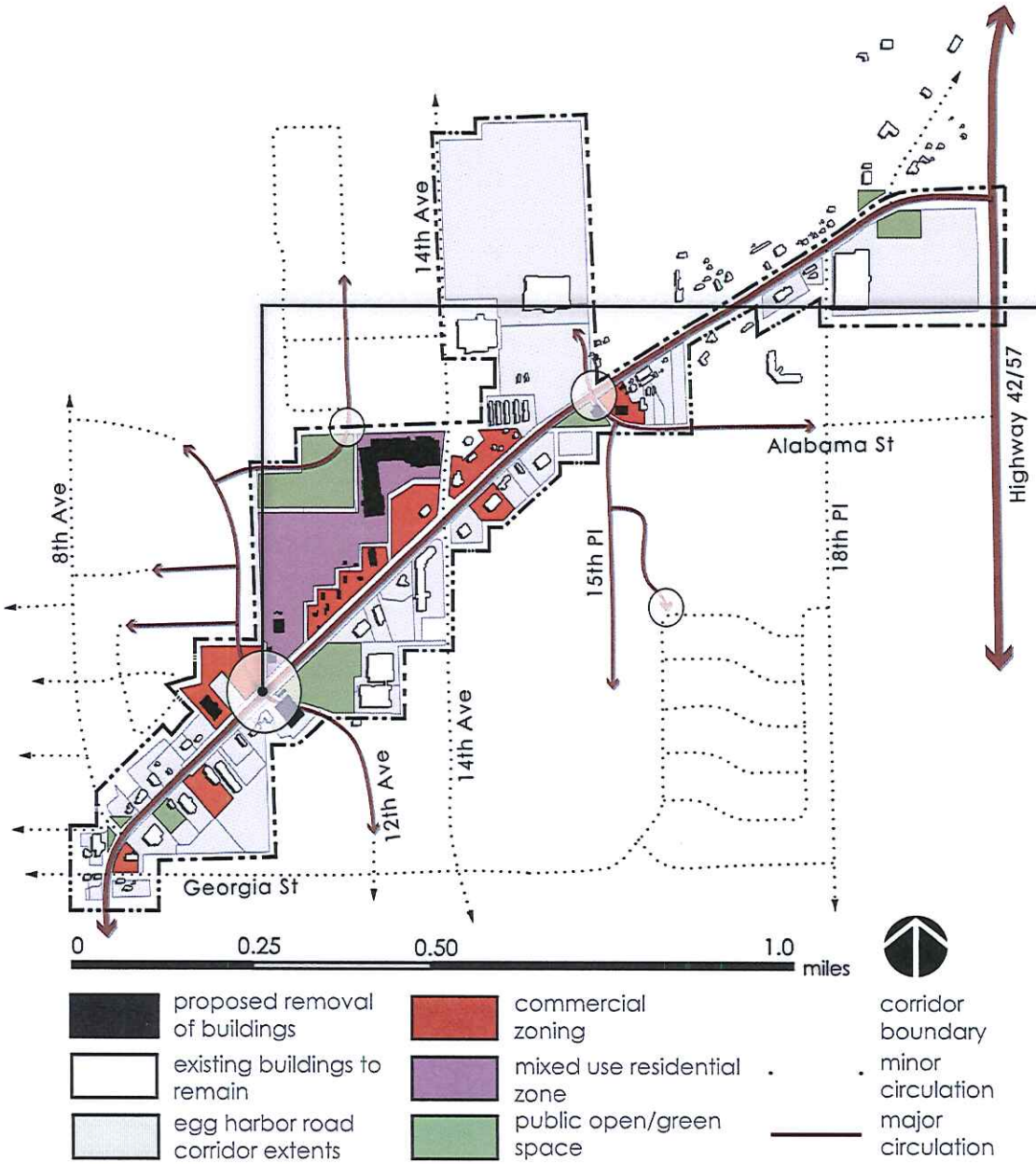
SUB-SURFACE STORMWATER SYSTEMS



CIRCULATION PATTERNS & ACTIVITY NODES

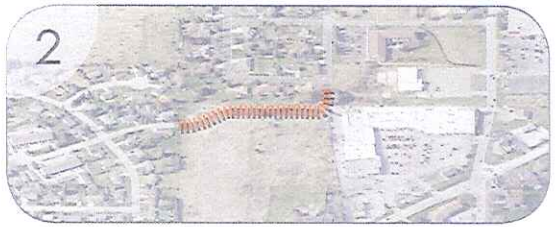


MASTER PLAN - ZONES & ROADWAYS



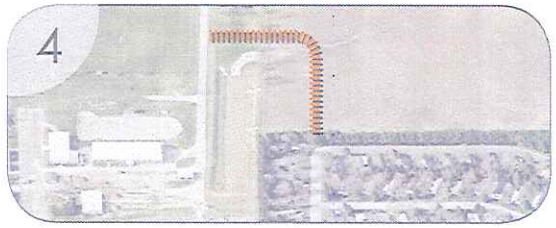
RESTRUCTURED INTERSECTIONS

N 12TH AVENUE & EGG HARBOR ROAD



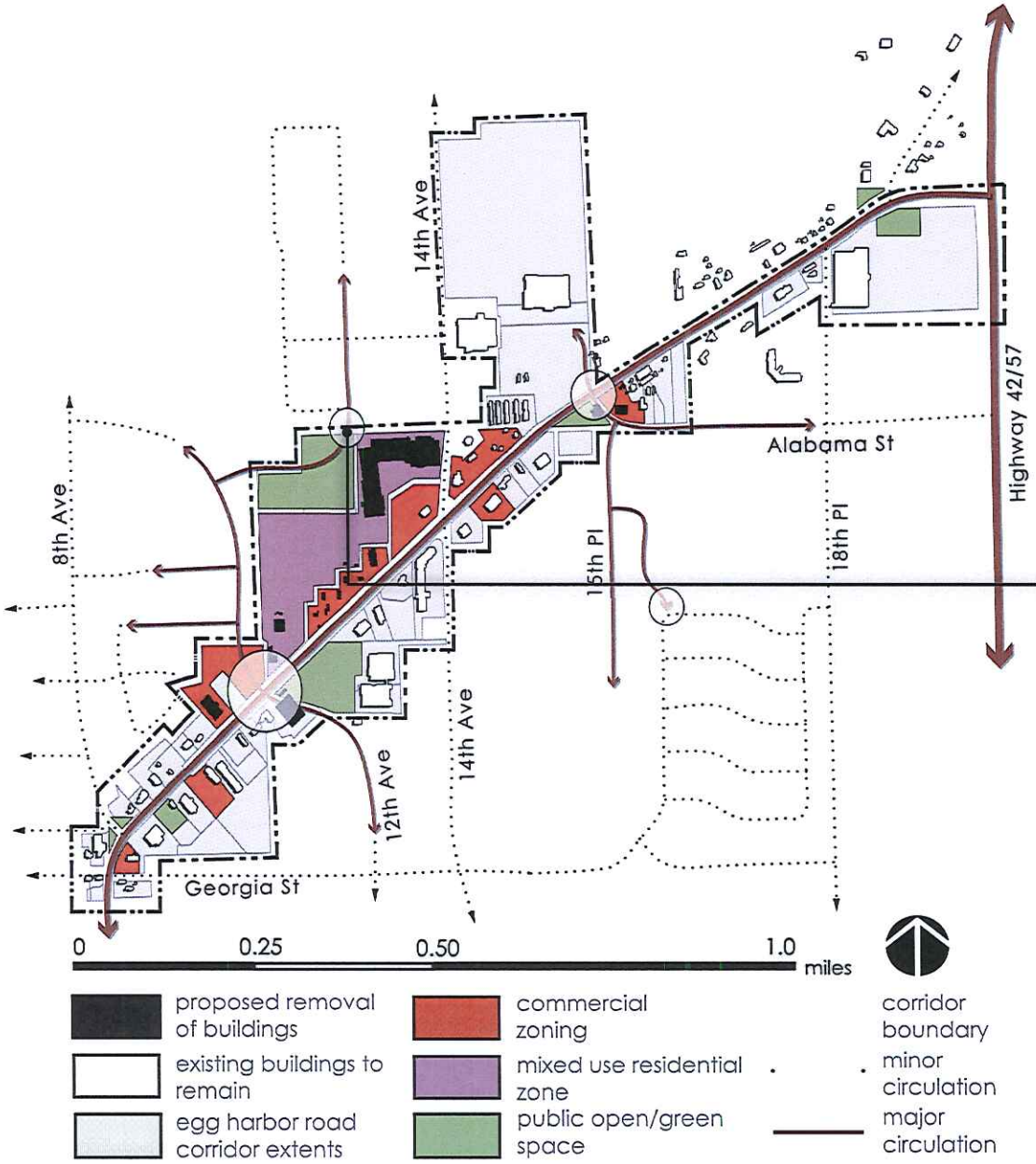
N 12TH PLACE & ALABAMA PLACE

ALABAMA STREET & EGG HARBOR ROAD

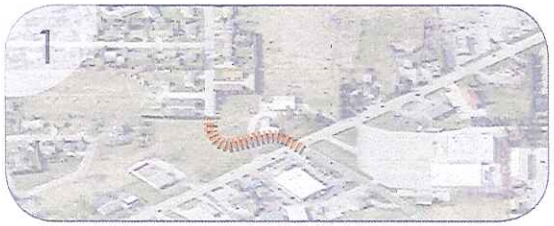


N 15TH PLACE & COLORADO PLACE

MASTER PLAN - ZONES & ROADWAYS



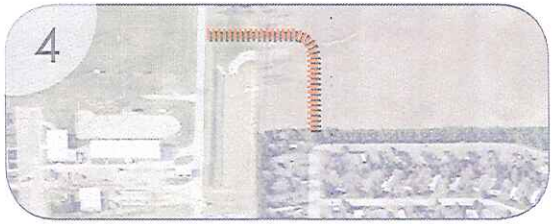
RESTRUCTURED INTERSECTIONS



N 12TH AVENUE & EGG HARBOR ROAD

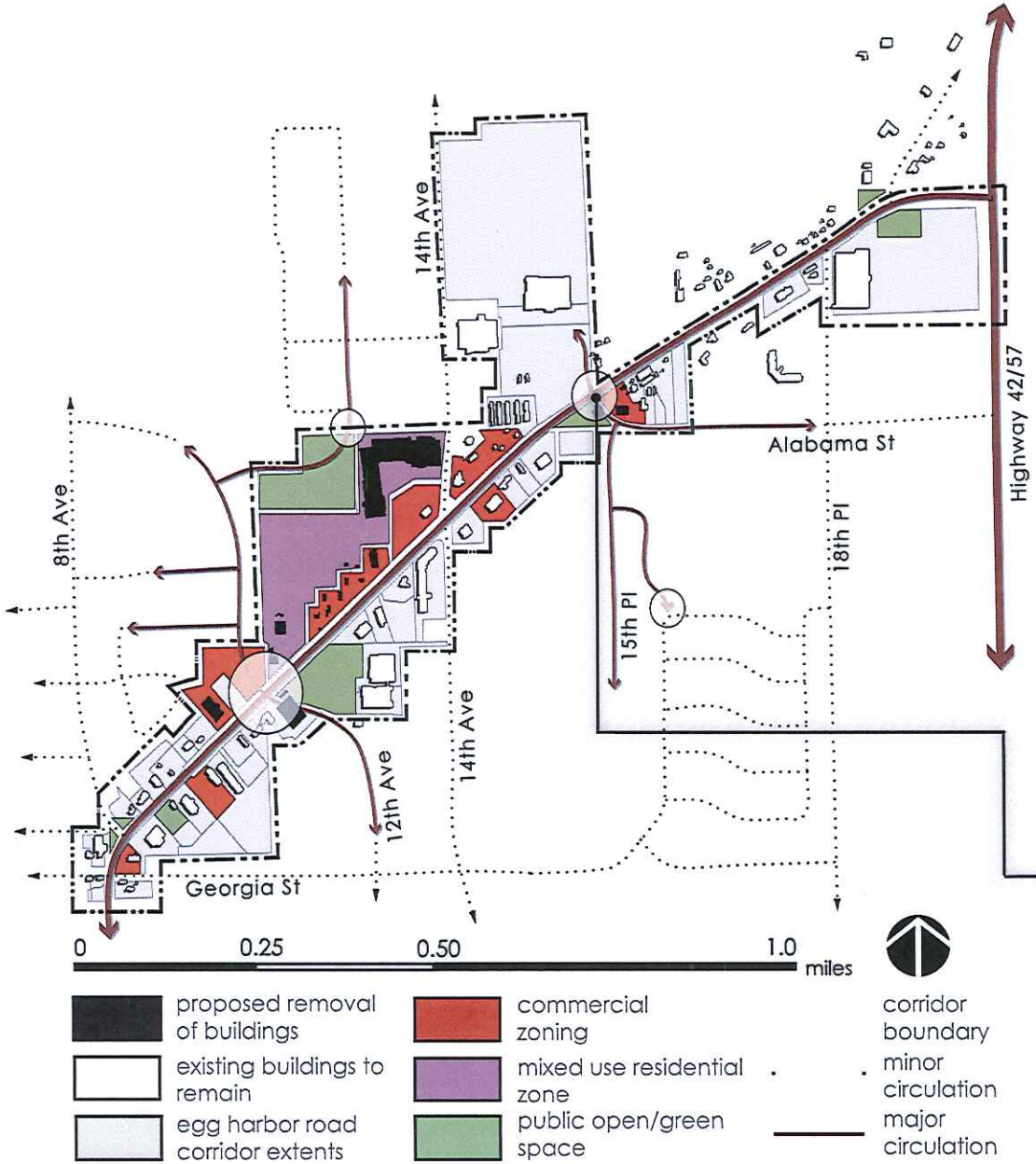
N 12TH PLACE & ALABAMA PLACE

ALABAMA STREET & EGG HARBOR ROAD

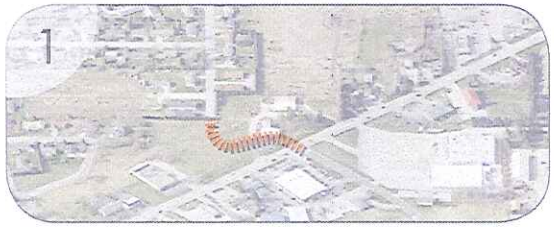


N 15TH PLACE & COLORADO PLACE

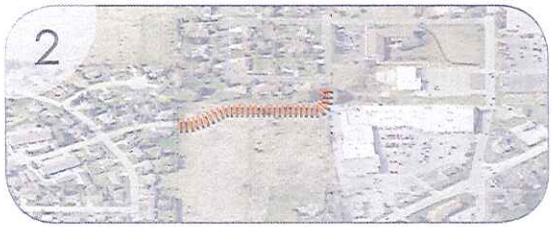
MASTER PLAN - ZONES & ROADWAYS



RESTRUCTURED INTERSECTIONS

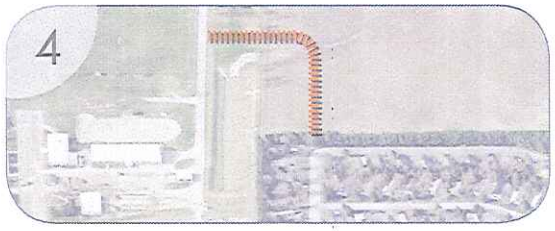


N 12TH AVENUE & EGG HARBOR ROAD



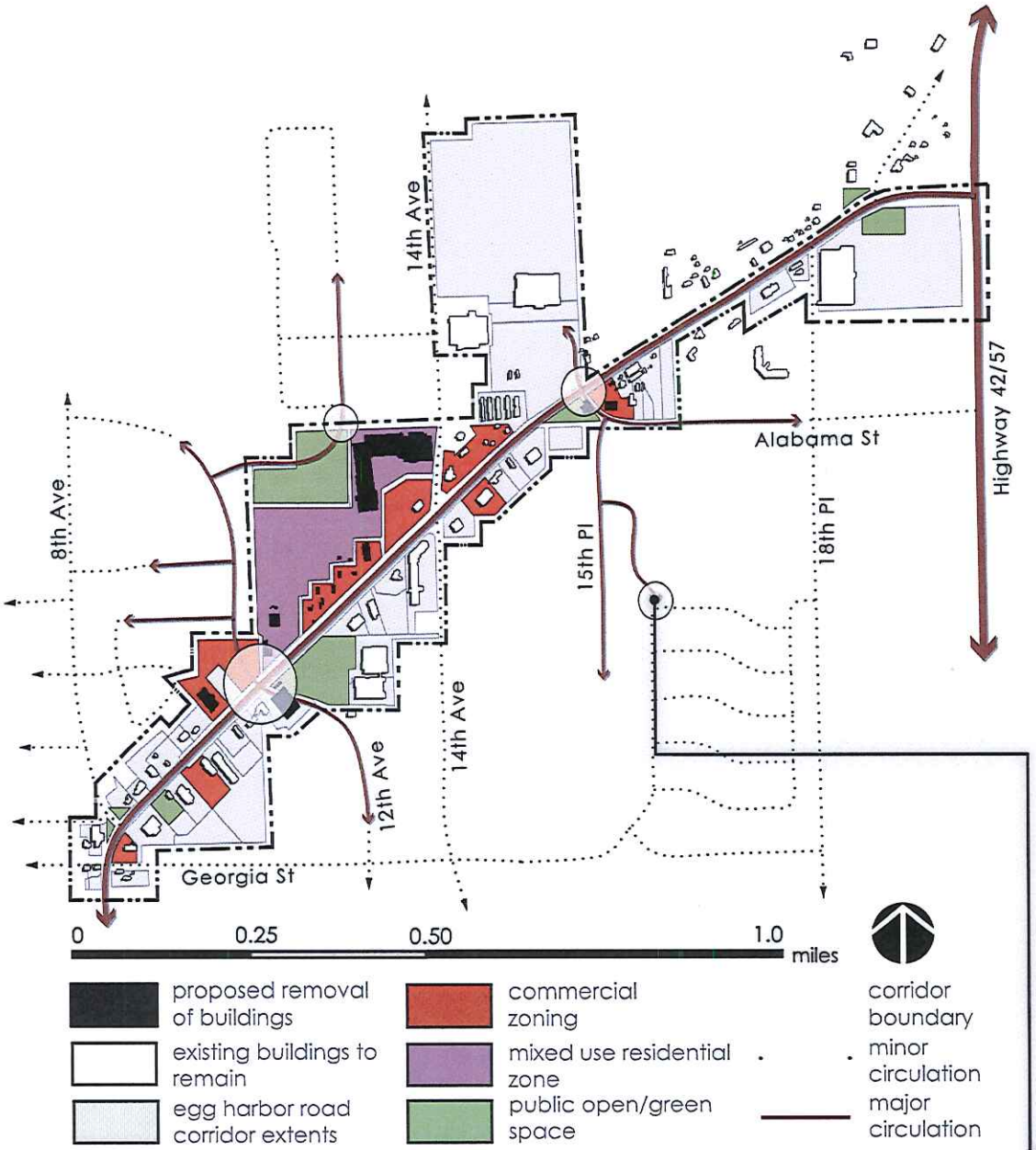
N 12TH PLACE & ALABAMA PLACE

ALABAMA STREET & EGG HARBOR ROAD

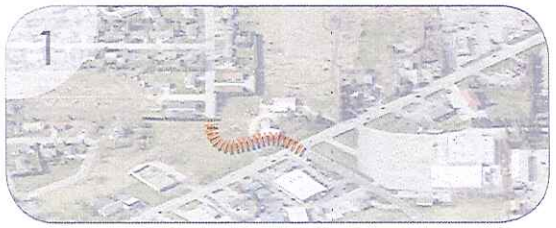


N 15TH PLACE & COLORADO PLACE

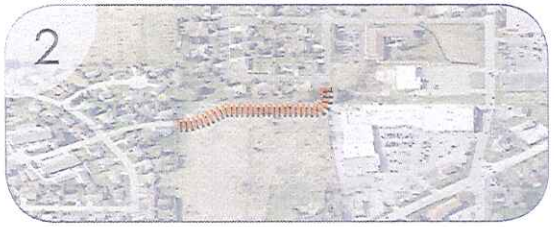
MASTER PLAN - ZONES & ROADWAYS



RESTRUCTURED INTERSECTIONS

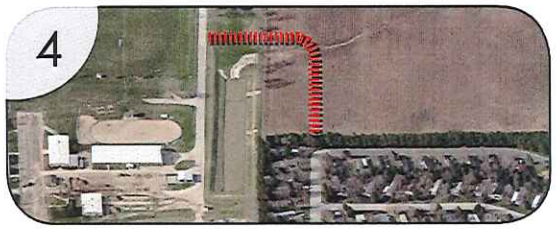


N 12TH AVENUE & EGG HARBOR ROAD



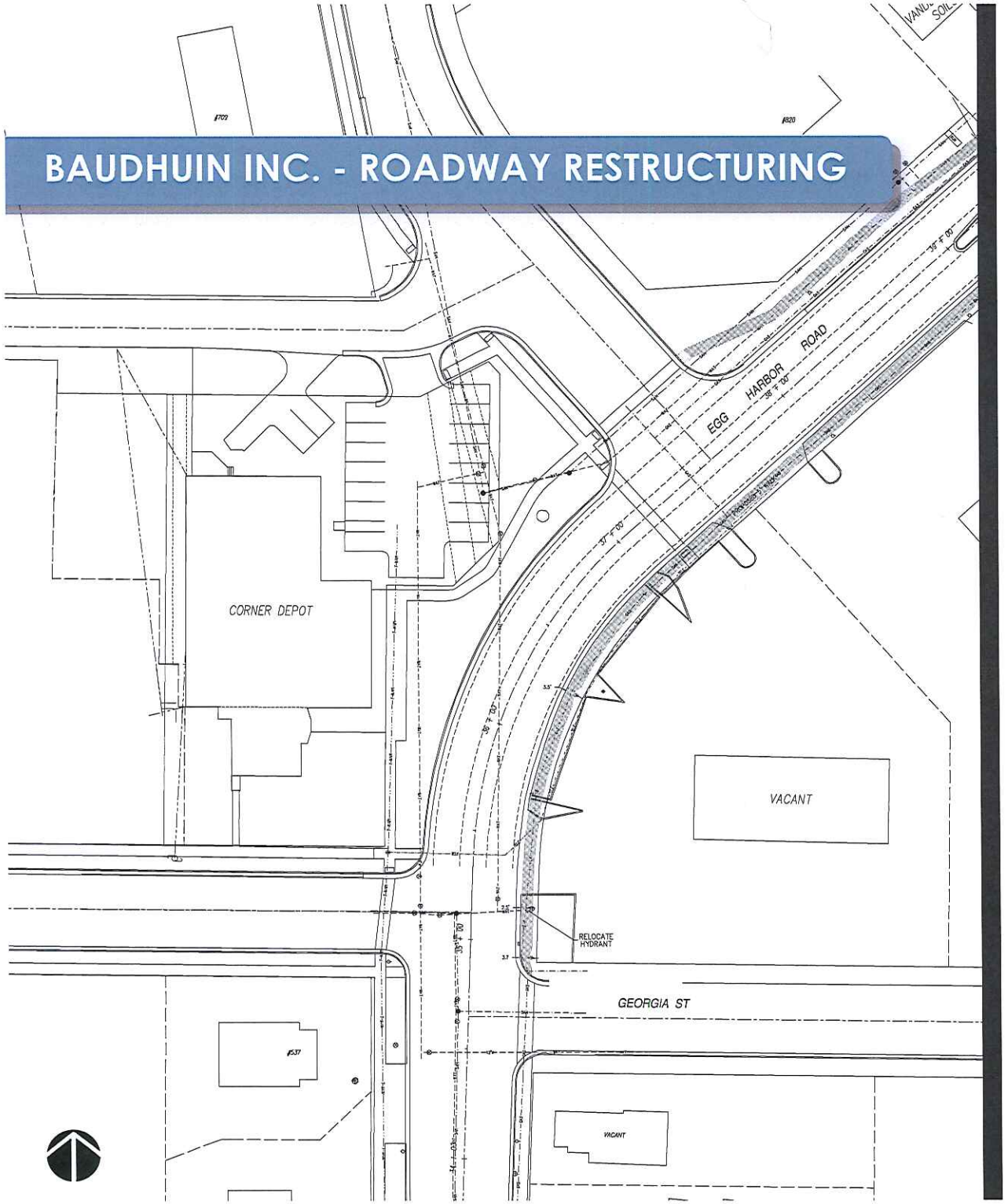
N 12TH PLACE & ALABAMA PLACE

ALABAMA STREET & EGG HARBOR ROAD



N 15TH PLACE & COLORADO PLACE

BAUDHUIN INC. - ROADWAY RESTRUCTURING



ROADWAY VISION

CREATE A FOCUS ON THE PEDESTRIAN REALM ALONG THE STREETSCAPE OF THE CORRIDOR

PROPOSED BY BAUDHUIN

ADDITION OF PUBLIC SIDEWALKS

ADDITION OF CROSSWALKS

RESTRUCTURED ROAD WIDTHS & LANES

ADDITION OF STREET TREES & GREEN BUFFER

ADDITION OF INCREASED LIGHTING

ADDITIONAL PROPOSITIONS

ADDITION OF SITE AMENITIES (BENCHES, LIGHTING, PAVING, ETC.)

ADDITION OF A HIGHER DENSITY OF STREET TREES

PEDESTRIAN ACTIVATED CROSSWALK SYSTEM

HIGHER CONCENTRATION OF LIGHTING OPPORTUNITIES

STREETSCAPE RECOMMENDATIONS

GYNOCLADUS DIOICUS
Kentucky Coffeetree

GLEDITSIA TRIACANTHOS F. INERMIS
Thornless Honeylocust

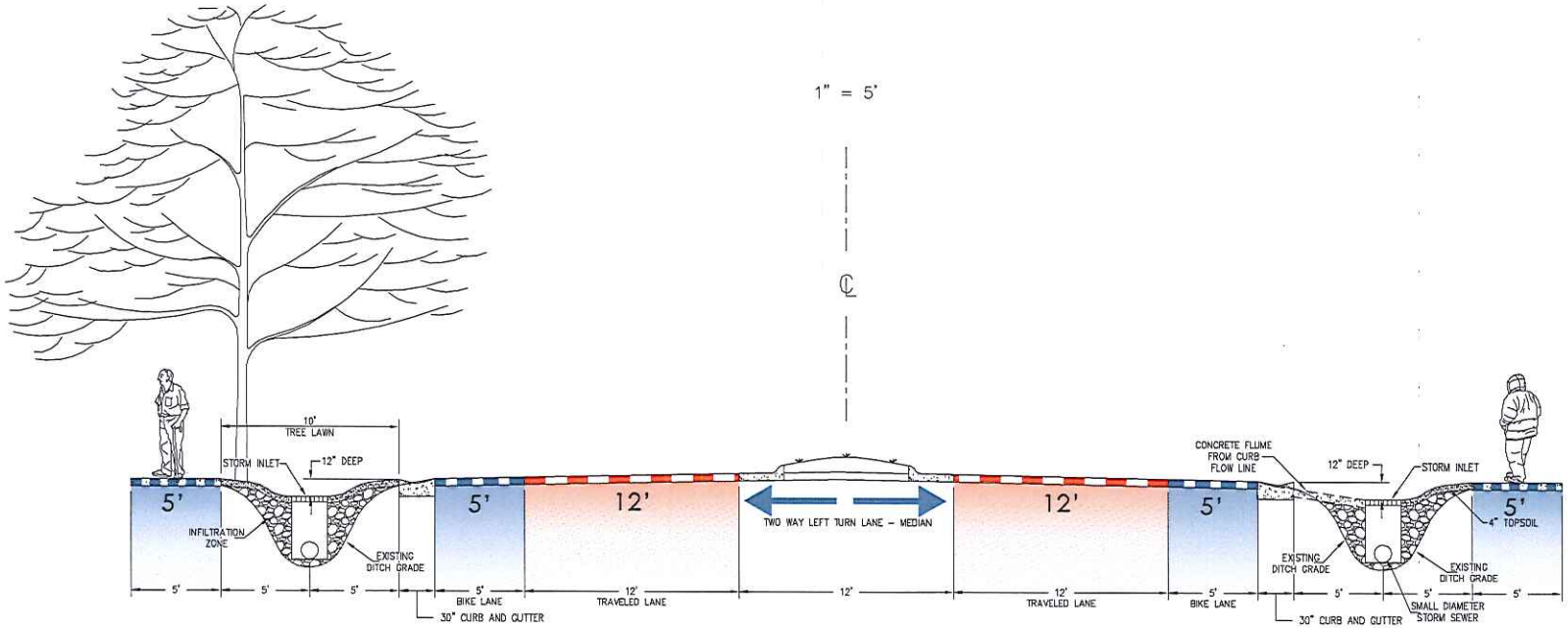
ACER X FREEMANII
Freeman Maple

STREET TREES - communicate a unified space through the use of similar trees in appearance while also preventing disease spreading by using different species

CLASSIC POST MOUNT LIGHTS
Z-lite products

AMENITIES - reflect the cultural history of the City of Sturgeon Bay

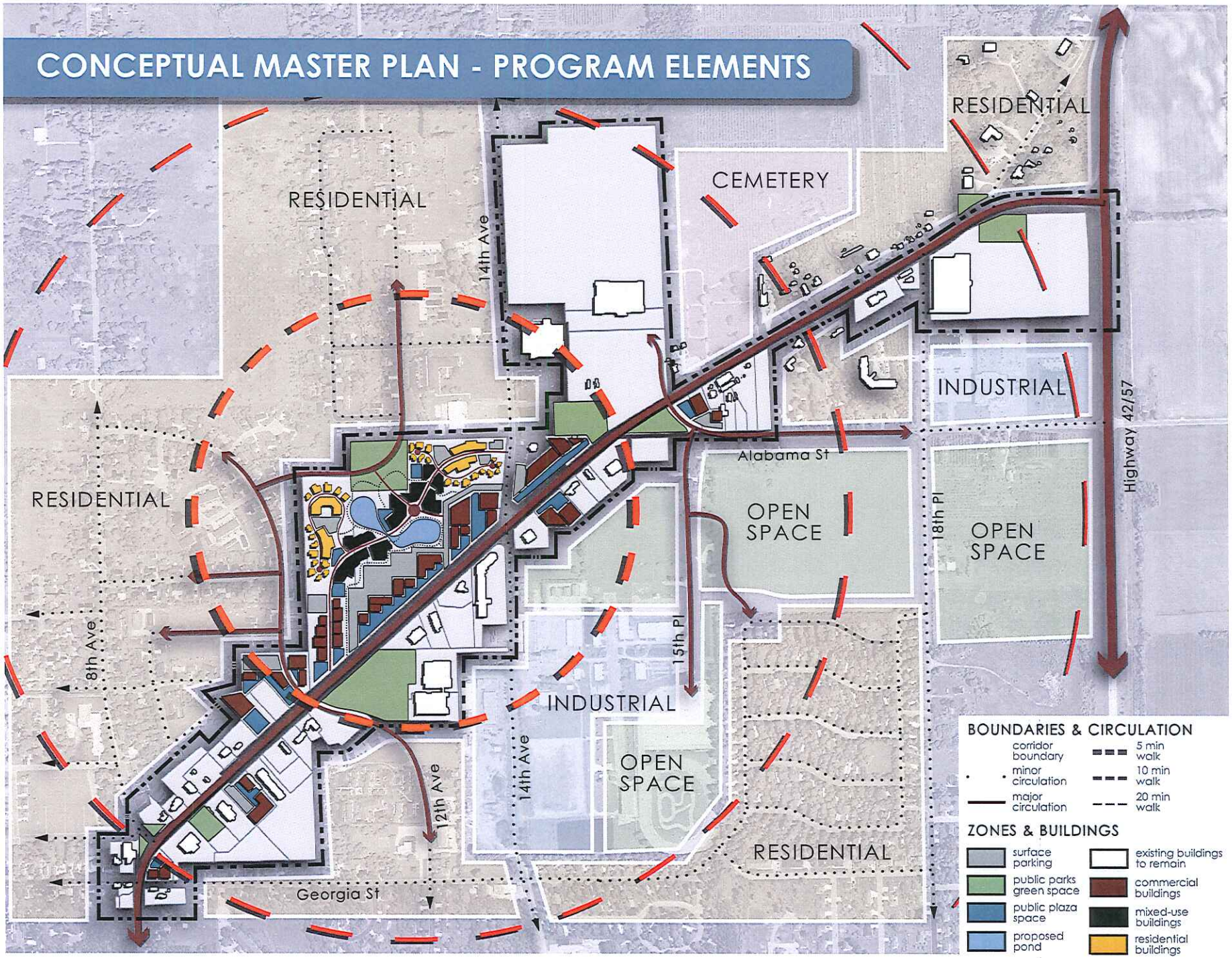
CLASSIC & NAUTICAL BENCH OPTIONS
Peter Harrison & NewTechWood products



TYPICAL STREET SECTION

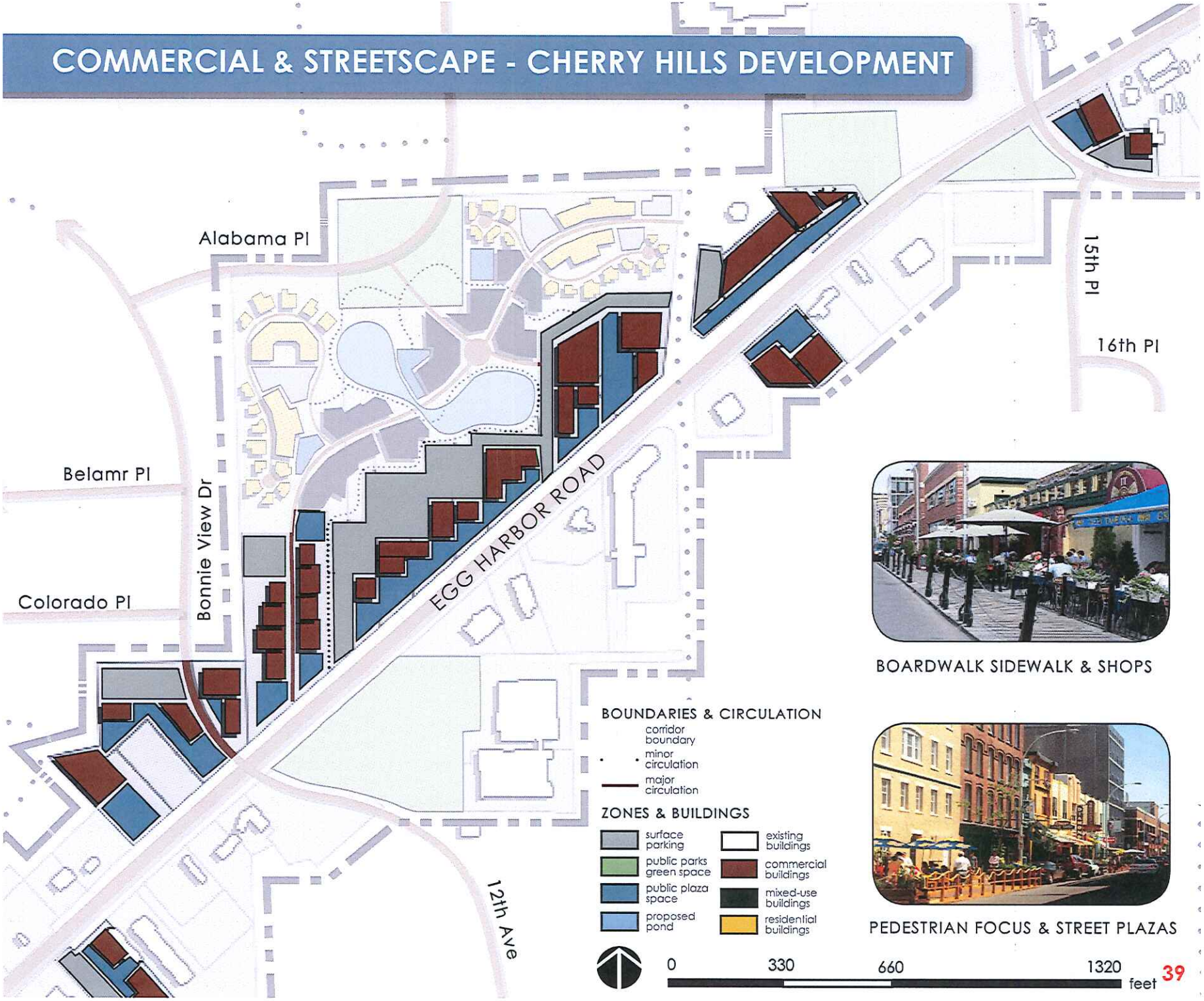
0 5 10 20 30 40 feet

CONCEPTUAL MASTER PLAN - PROGRAM ELEMENTS



0 0.25 0.5 1.0 miles

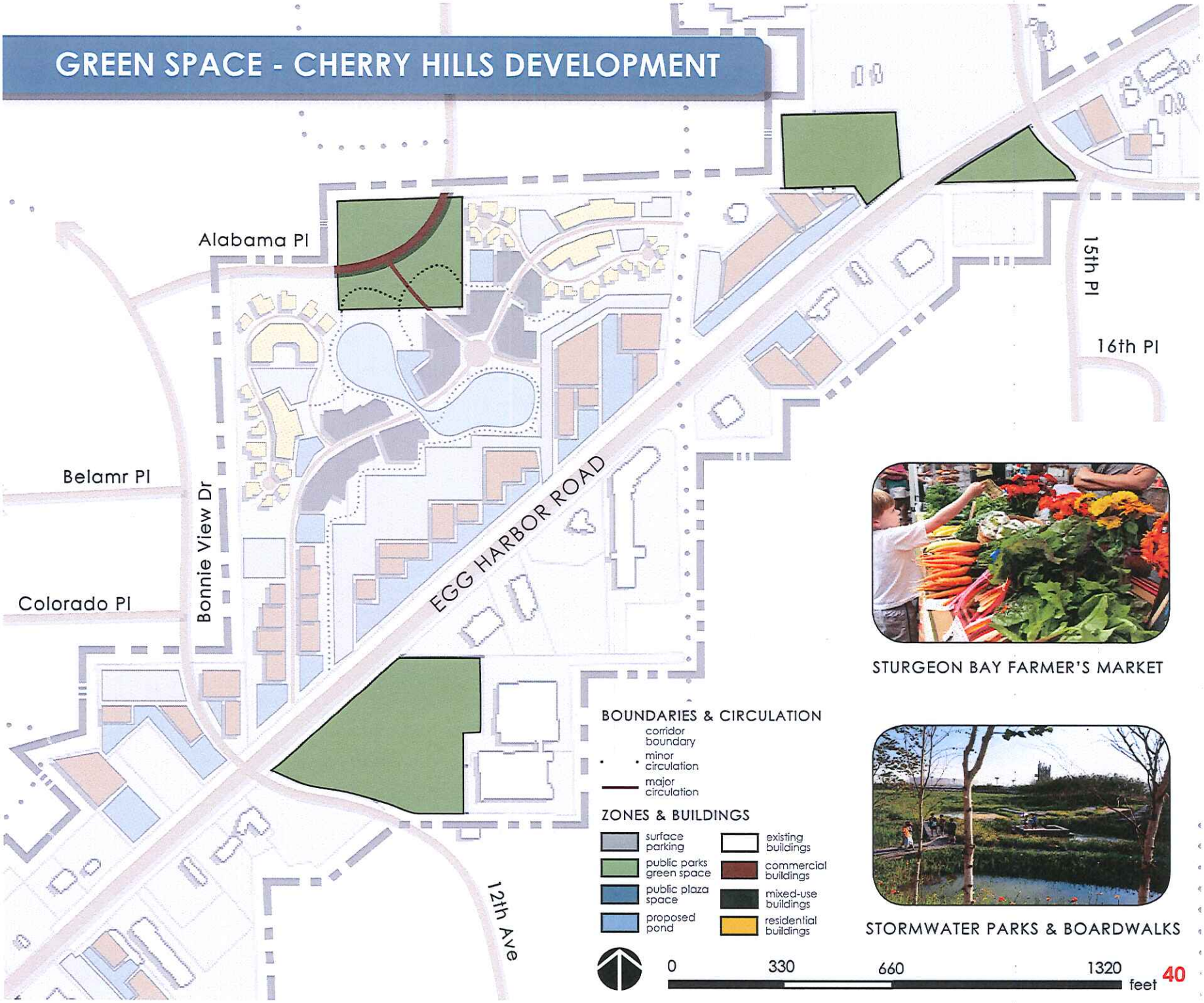
COMMERCIAL & STREETSCAPE - CHERRY HILLS DEVELOPMENT



BOARDWALK SIDEWALK & SHOPS

PEDESTRIAN FOCUS & STREET PLAZAS

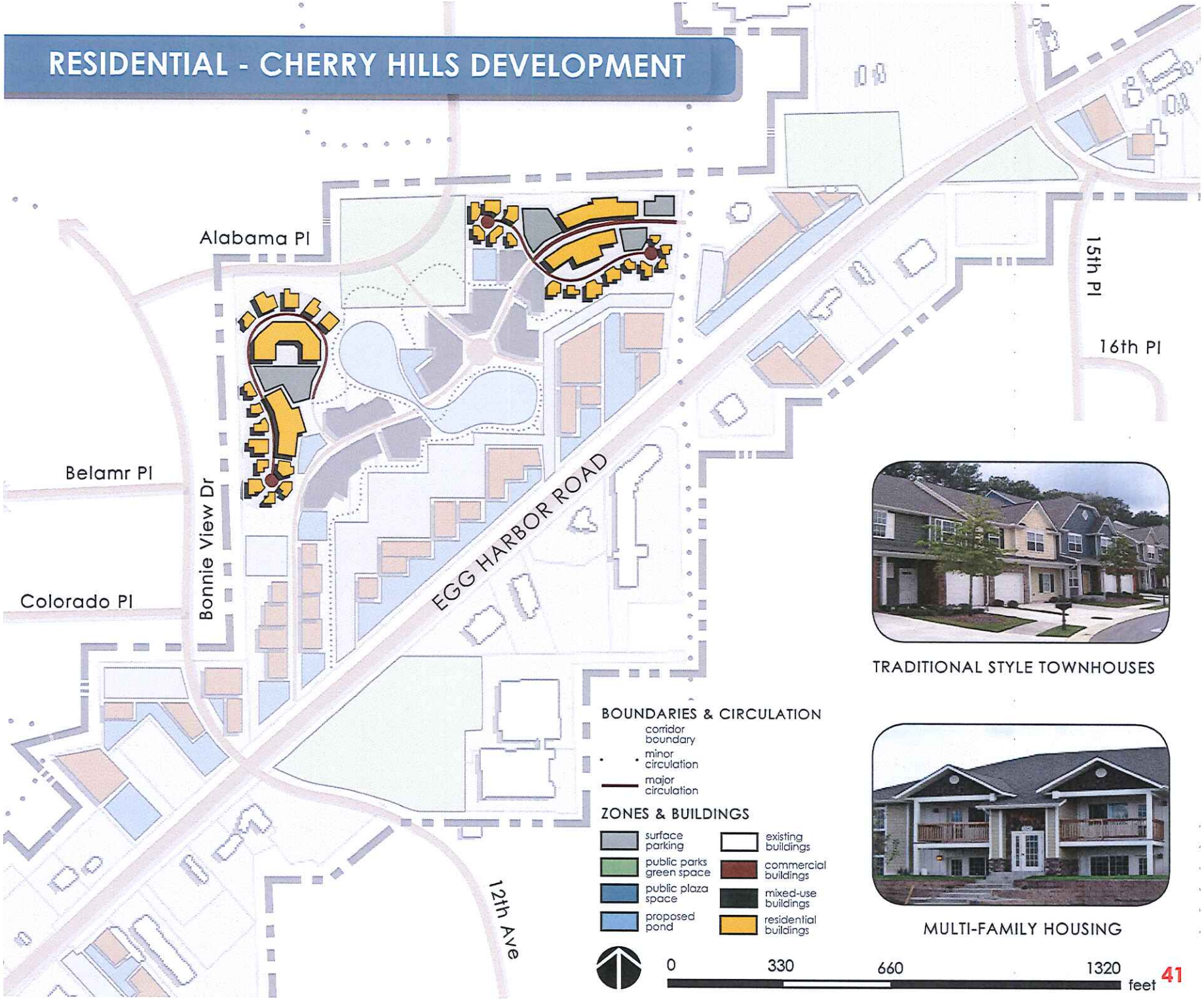
GREEN SPACE - CHERRY HILLS DEVELOPMENT



STURGEON BAY FARMER'S MARKET

STORMWATER PARKS & BOARDWALKS

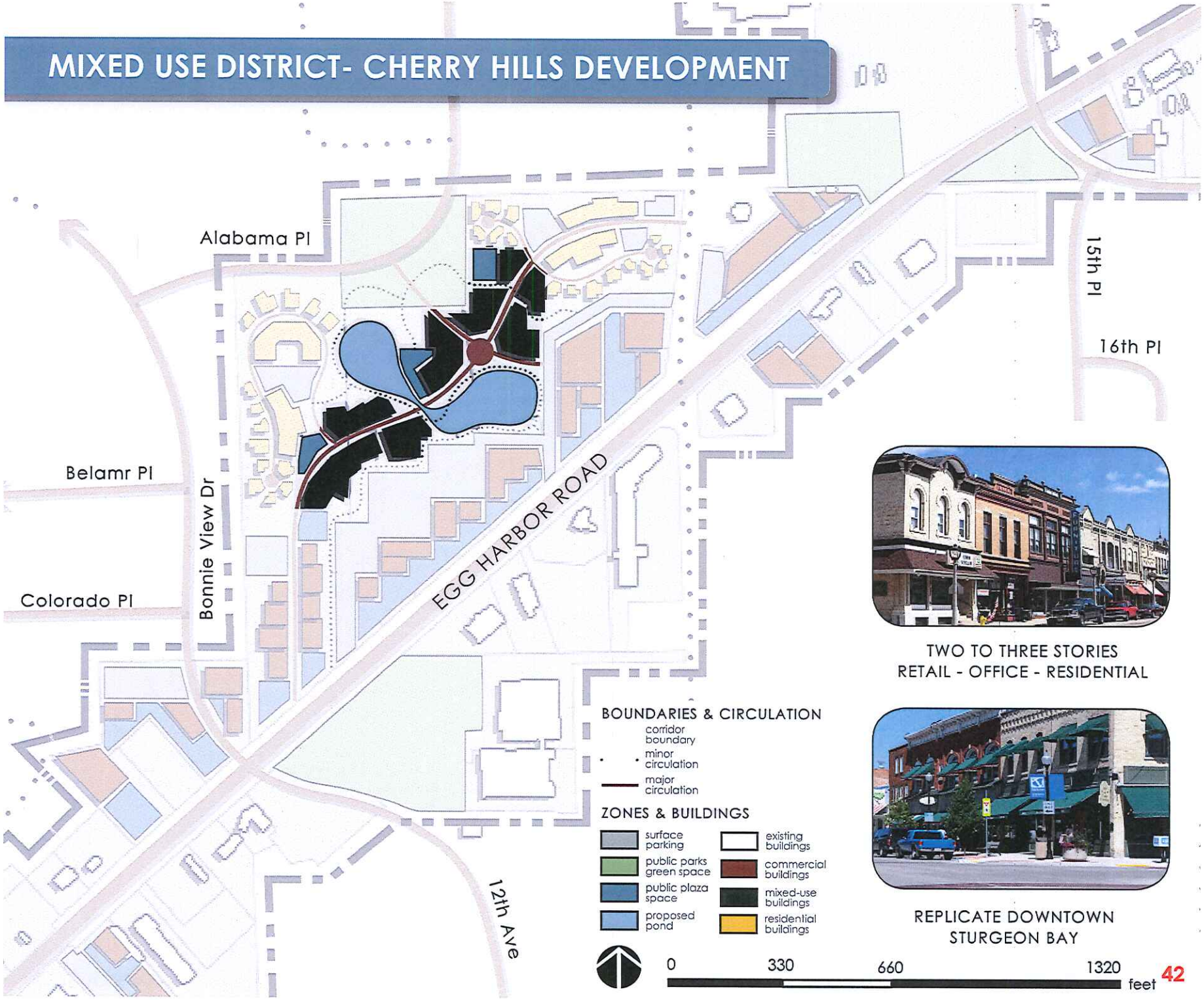
RESIDENTIAL - CHERRY HILLS DEVELOPMENT



TRADITIONAL STYLE TOWNHOUSES

MULTI-FAMILY HOUSING

MIXED USE DISTRICT- CHERRY HILLS DEVELOPMENT



TWO TO THREE STORIES
RETAIL - OFFICE - RESIDENTIAL

REPLICATE DOWNTOWN
STURGEON BAY

SPRING SEMESTER - DESIGN
SUSTAINABILITY
INCREASE PEDESTRIAN FOCUS
CREATE DESIGN GUIDELINES
CREATE A SENSE OF PLACE
CREATE NEW DEVELOPMENT FOR RESIDENTS, BUSINESS, AND PUBLIC SPACE
GIVE NEW LIFE TO THE CORRIDOR