



HELENA HARBOR PORT AUTHORITY MASTER PLAN

Helena, AR | July 2017

JACOBS



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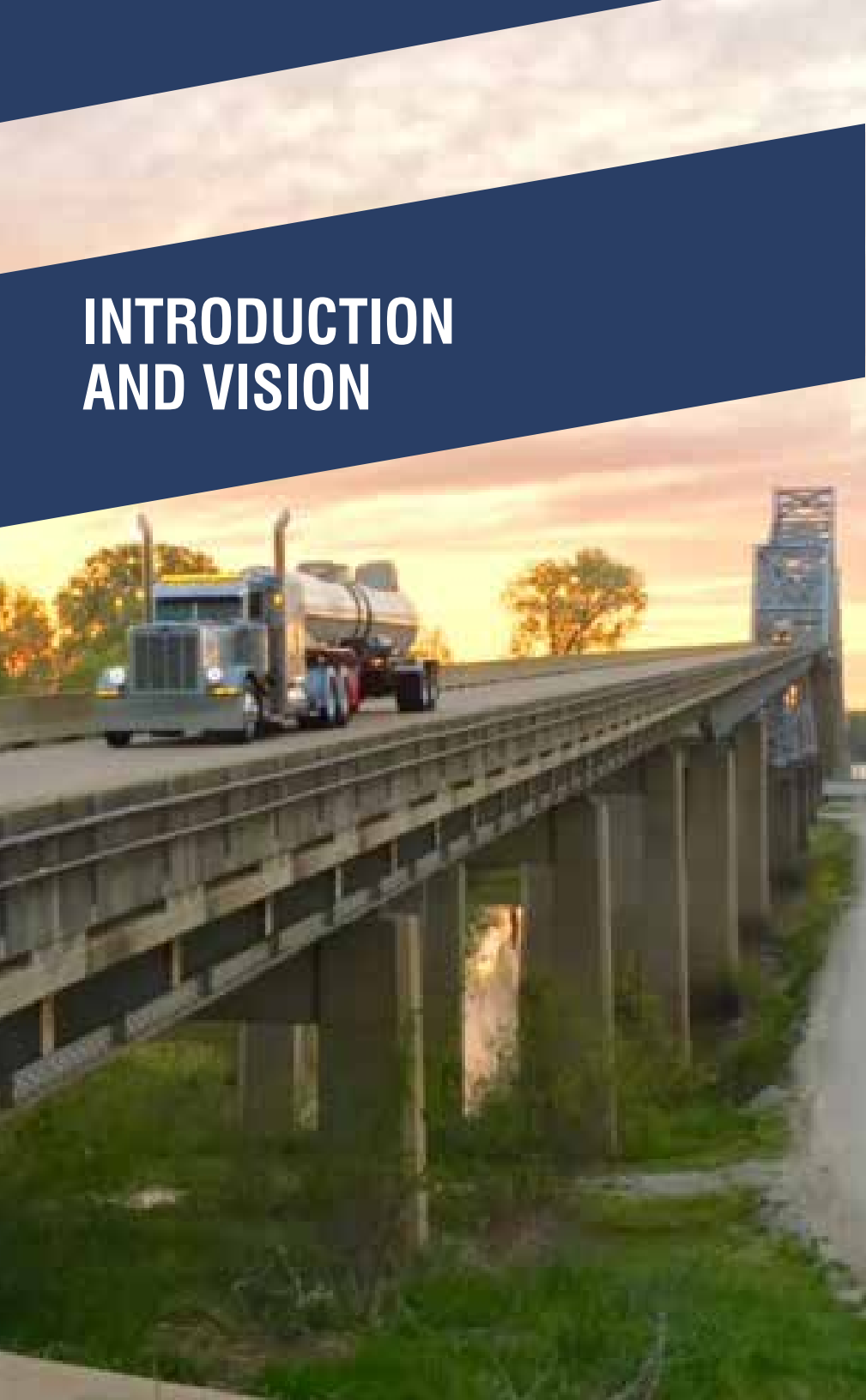
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INTRODUCTION AND VISION

PROJECT OVERVIEW

The Helena Harbor (“Harbor”) Master Plan is a comprehensive, forward looking document that contains the strategy for the land owned and controlled by the Harbor. It addresses both the immediate, critical needs for enabling infrastructure in order to attract investment to the Harbor as well as the longer-term development framework. The desire is to increase economic development in the region through industrial activity and strengthen the community through job creation and growth.

PURPOSE OF THE MASTER PLAN

The purpose of the master plan is to clearly state:

- The context in which the Harbor is operating,
- The opportunities and constraints that exist related to development of the property,
- The market analysis and identified economic activities that could be attracted to the site,
- The overall master plan layout of the land areas which will guide development.

HOW TO USE THE MASTER PLAN

This master plan is divided into distinct sections which correspond to the topic areas. It is intended to be both a compiled document and have the ability to extract sections dependent upon the topic. The intention is that this format makes it easier to utilize the report online, in email correspondence and in printed format.

MASTER PLAN PROCESS

The process applied to the master plan was intended to utilize the benefit of a “cold eyes” analysis from the Jacobs Engineering team while leveraging the local knowledge and expertise of the Helena Harbor staff, business owners, engineers, Arkansas Department of Transportation (ADOT) and municipal leadership.

The overall intention of the master plan is to reflect Helena Harbor’s strategic vision for creating economic development and job growth through logical development of the property owned and controlled by the Harbor while planning for the future. It utilized a three-step process that answers the following questions:

STEP 1: WHERE ARE WE TODAY?

An initial kick-off work session to assess the “current state” of the Harbor land holdings began with addressing the overall process, providing an overview of the project scope and clarifying the project schedule.

A data collection effort of physical, demographic and business environments was also conducted to gather information on all the natural and man-made conditions that could influence future development.

Several site visits to Helena were conducted by the Jacobs Engineering team to:

- Visit the Harbor property and surrounding areas of Helena-West Helena
- Conduct interviews with key stakeholders, local municipal staff and business owners
- Gather an understanding of the area’s context.

STEP 2: WHERE DO WE WANT TO BE ?

In order to define the path forward, a set of goals were identified as an outcome of the data collection and interview efforts.

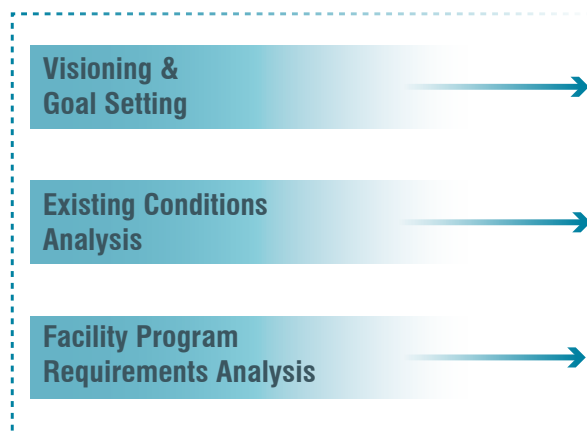
In addition, development opportunities and constraints were defined from the physical analysis of the property. As the current state of the Harbor property is relatively undeveloped, a market study was conducted to identify suitable industries that should be targeted to potentially locate at the site.

This analysis yielded five distinct target industries which became the foundation of the master plan recommendations.

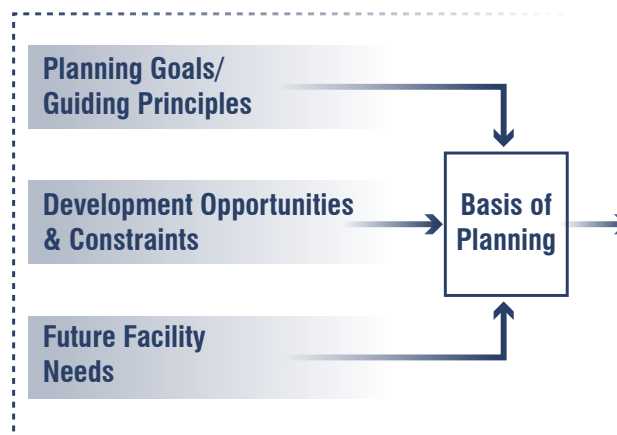
STEP 3: HOW DO WE GET THERE?

The implementation strategy to transition from today’s conditions to tomorrow’s desired outcome was defined through logical and feasible steps. It was very important to define a master plan that was not too far fetched or could not be achieved in a reasonable timeframe. The recommendations are broken into “baby steps” that focus on the critical enabling infrastructure systems that will attract the industries defined in the market study conclusions.

STEP 1 - WHERE ARE WE NOW?



STEP 2 - WHERE DO WE WANT TO BE?



STEP 3 - HOW DO WE GET THERE?



VISION + GOALS

A vision statement and goals were developed to guide the recommendations of the master plan.

VISION

To stimulate feasible and sustainable economic development which results in job growth in the region through industrial development at the Helena Harbor.



GOALS + OBJECTIVES

DEVELOP A REASONABLE AND ACHIEVABLE MASTER PLAN

- Focus on short-term actions that can be quickly implemented and do not require a significant amount of capital investment
- Avoid recommendations that are too grand and risk failure due to the reality of actually being able to implement them
- Be realistic about the amount of skilled workforce available in the region to support short-term industrial development

LEVERAGE THE HELENA HARBOR LOCATION ON THE MISSISSIPPI RIVER AND THE PROXIMITY TO ROAD AND RAIL NETWORKS

- Conduct a market analysis that is customized to the Harbor's location and potential for attracting industrial development
- Clearly and honestly evaluate the development potential of the Harbor property and current infrastructure, including the existing crane
- Evaluate the opportunities generated by the slack water channel as well as the location on the Mississippi River and fast water access
- Explore opportunities to capture overflow business from Memphis and surrounding ports

PROVIDE A SUFFICIENT NETWORK OF ENABLING INFRASTRUCTURE TO ATTRACT INVESTMENT

- Develop system-wide strategies for enabling infrastructure that are holistic and are solutions to support the entire land holding versus single solutions for each development parcel
- Identify the improvements needed to utility systems such as potable water and sewer/process water that must be provided to support industrial growth
- Evaluate the road network to provide multiple points of access to the site as well as alternate routes in times of heavy rain events
- Create a strategy to expand the railroad network further into the Harbor site while avoiding additional road/rail crossings

PROMOTE ECONOMIC DEVELOPMENT AND JOB GROWTH FOR THE SURROUNDING REGION

- In the short term, target industries that do not require significant skilled workforce
- Collaborate with the local community college and businesses to develop technical training programs which will provide longer-term skilled workforce
- Identify industries which utilize readily available resources found in the region such as agricultural crops and strive to create a system of "synergistic industries" which can either feed or utilize products from the core industries

PLANNING PARAMETERS



THE PLANNING PARAMETERS DESCRIBE THE CONTEXT IN WHICH FUTURE DEVELOPMENT AT HELENA HARBOR IS ACHIEVED. IT CONSIDERS THE EXISTING CONDITIONS OF THE PHYSICAL SITE AND SURROUNDING AREA AROUND THE HARBOR, THE AREAS SUITABLE FOR DEVELOPMENT AND THE GUIDING STATEMENTS WHICH WILL FORM THE FOUNDATION OF THE MASTER PLAN RECOMMENDATIONS.

PROJECT CONTEXT

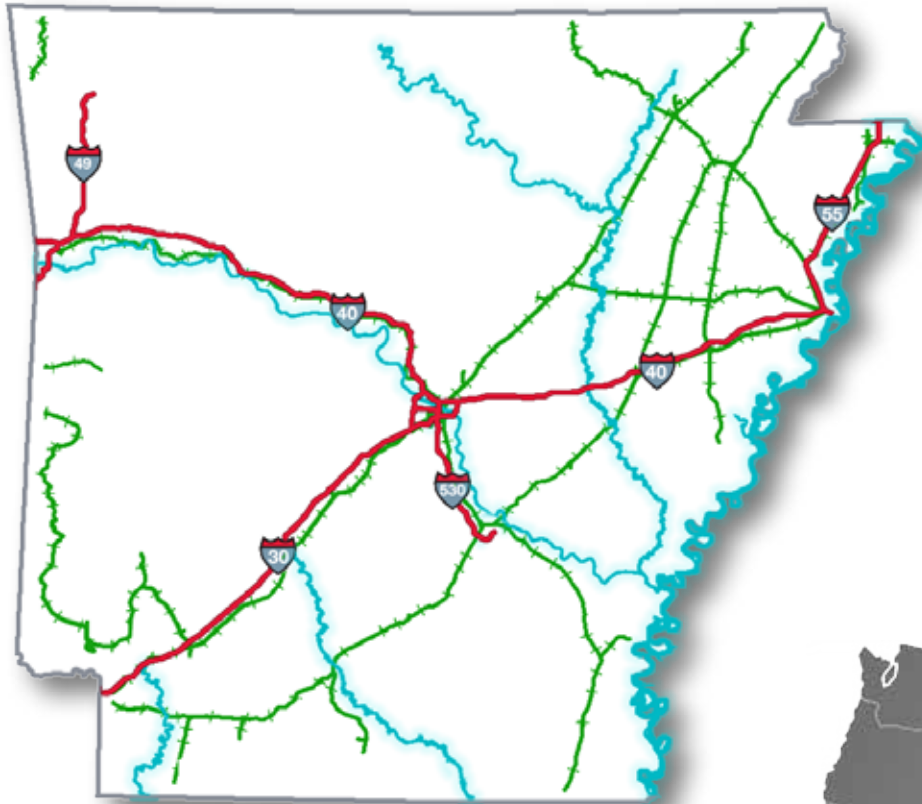
STATE CONTEXT

Helena-West Helena is located on the eastern edge of central Arkansas along the Mississippi River. It is a relatively short distance from larger metropolitan areas such as Memphis (75 miles), Jackson (200 miles), Birmingham (260 miles), Shreveport (280 miles) and Nashville (280 miles).

Figure 1: City Proximity Map



Figure 2: Existing Arkansas Infrastructure



The area has convenient access to major rail lines, water transportation via the Mississippi River, and major interstate highways, as well as regional and international airports. The U.S. Route 49 Mississippi River crossing is one of only four bridges crossing the Mississippi River in the state of Arkansas.



There is a population of roughly 685,000 individuals within 60 miles of Helena Harbor. Major population centers within this distance include the southern portion of Memphis, TN (pop. 653,450) Southaven, TN (pop. 48,982), Forrest City, AR (pop. 15,371), and Cleveland, MS (pop. 12,334). Population centers within Phillips County include Marvell, Elaine, and Lexa, as well as several unincorporated areas.

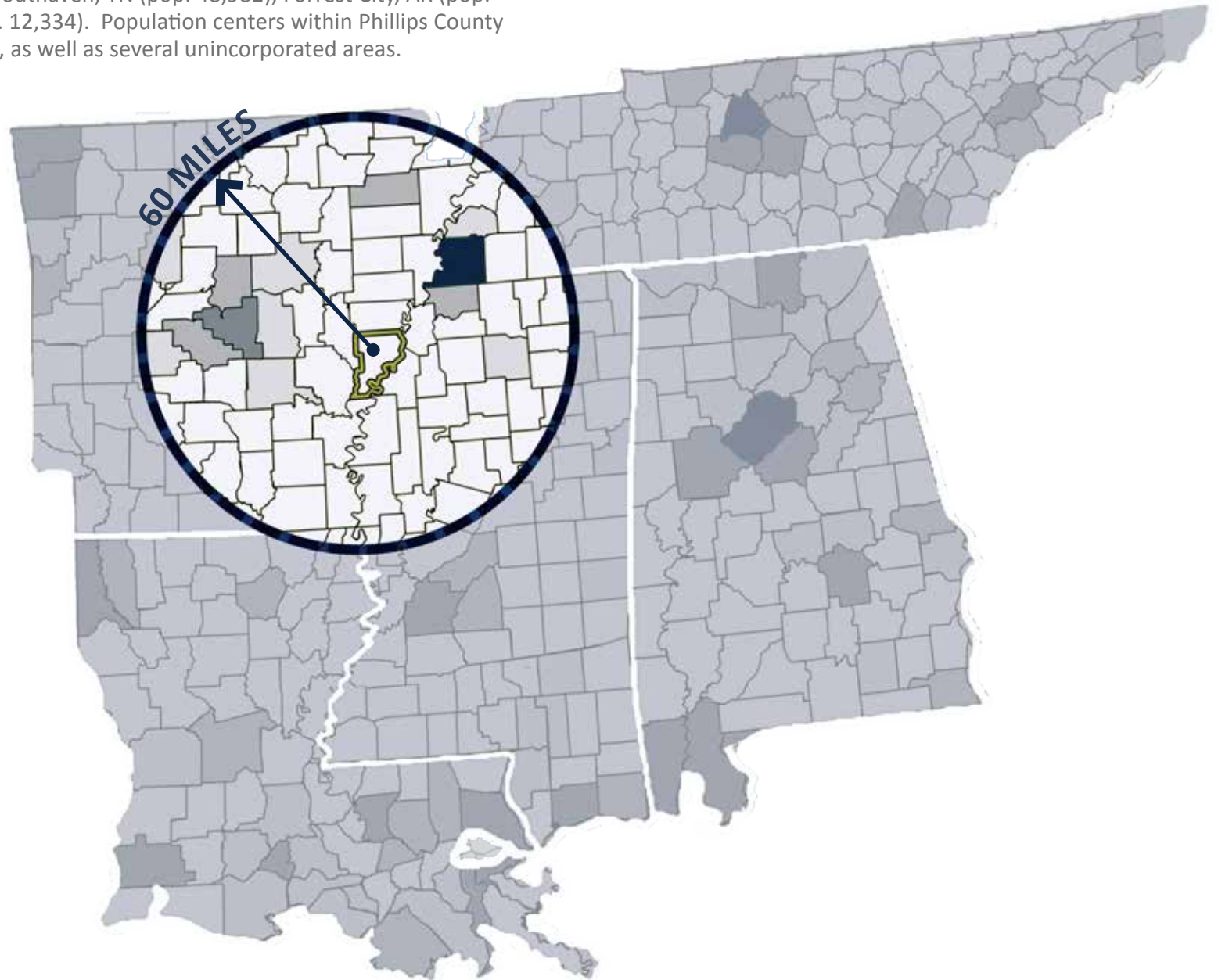
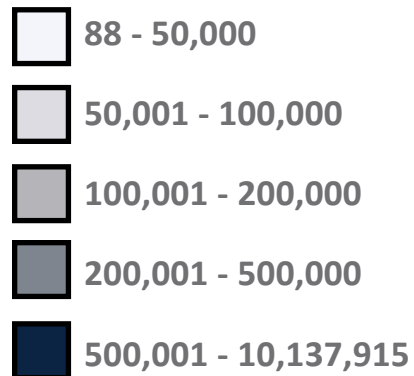


Figure 3: Population Density

POPULATION



Helena Harbor is located in Phillips County in the eastern part of Arkansas known as the Arkansas Delta along the Mississippi River at mile 652 Highway (AH), just south of the city of Helena-West Helena. As of the 2010 Census, the consolidated city of Helena-West Helena had a population of 12,282, which is 56.5 percent of Phillips County's population of 21,757.

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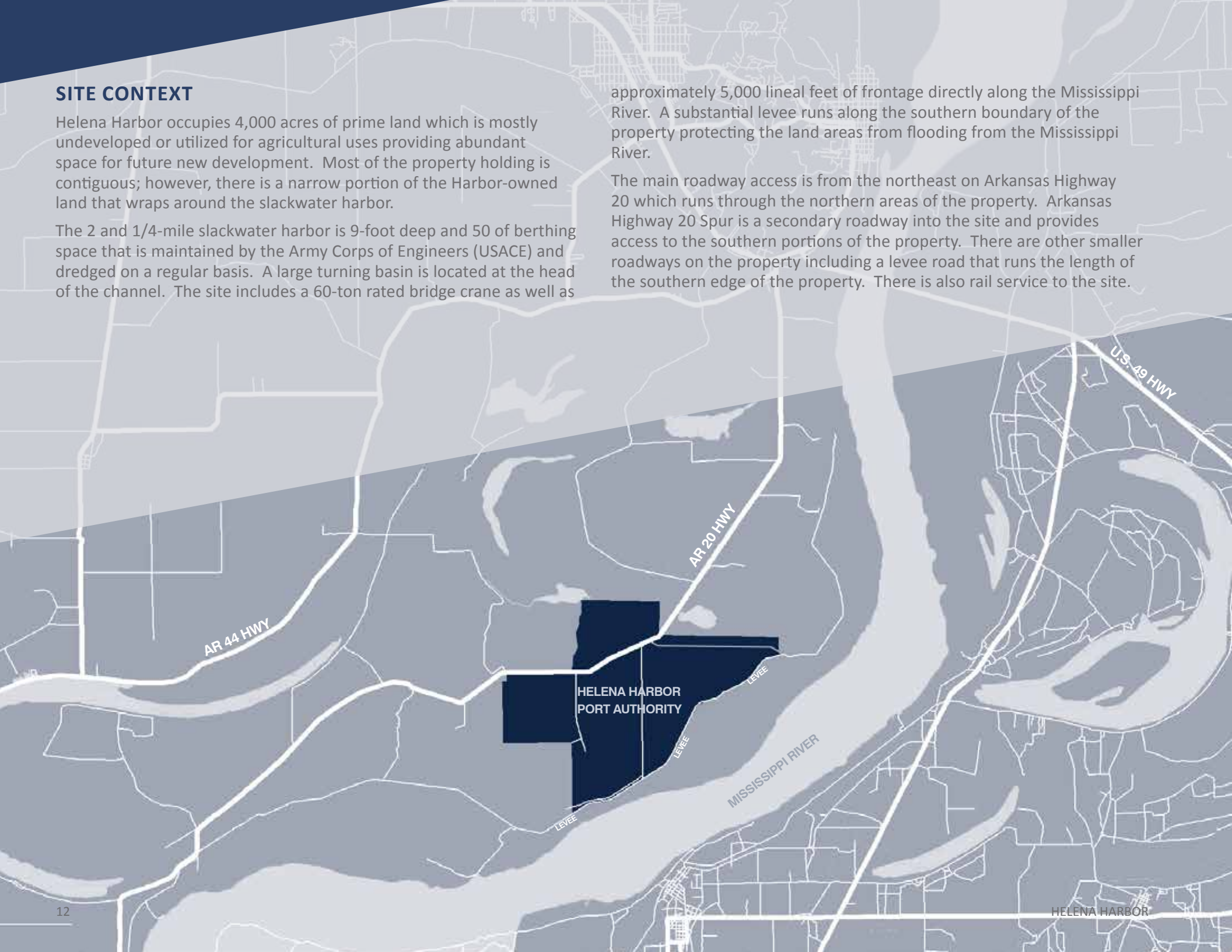
SITE CONTEXT

Helena Harbor occupies 4,000 acres of prime land which is mostly undeveloped or utilized for agricultural uses providing abundant space for future new development. Most of the property holding is contiguous; however, there is a narrow portion of the Harbor-owned land that wraps around the slackwater harbor.

The 2 and 1/4-mile slackwater harbor is 9-foot deep and 50 of berthing space that is maintained by the Army Corps of Engineers (USACE) and dredged on a regular basis. A large turning basin is located at the head of the channel. The site includes a 60-ton rated bridge crane as well as

approximately 5,000 lineal feet of frontage directly along the Mississippi River. A substantial levee runs along the southern boundary of the property protecting the land areas from flooding from the Mississippi River.

The main roadway access is from the northeast on Arkansas Highway 20 which runs through the northern areas of the property. Arkansas Highway 20 Spur is a secondary roadway into the site and provides access to the southern portions of the property. There are other smaller roadways on the property including a levee road that runs the length of the southern edge of the property. There is also rail service to the site.



EXISTING LAND USE

The existing land uses of Helena Harbor are predominately undeveloped or leased for agricultural purposes. Soybeans are currently grown on the site and there are five-year lease agreements in place with the farmers that are subject to extensions. Leases can be canceled in the event land is sold or leased to other prospects.

Several small parcels on the property have been developed for industrial and manufacturing purposes.

- **ENVIROTECH** opened in March of 2015 and is currently looking at an expansion that is anticipated to be completed by Q1 of 2018. They produce liquid disinfectants for the food industry to sanitize equipment. They lease their land from the Harbor.

- **HELM FERTILIZER** has approximately 20 acres and receives and ships both dry and liquid fertilizer. They have purchased their land from the Harbor.

- **MISSISSIPPI LIMESTONE** leases their land from the Harbor.

Aside from the agricultural and active manufacturing land uses, there are a few small buildings that are utilized for security and farming purposes but for the most part the land is not developed beyond farming.

Figure 5: Existing Land Use Map



DEMOGRAPHICS

Several site visits were conducted by the Jacobs Engineering Team over the course of the project in order to make personal observations. During this time it became apparent that individuals are prepared to travel some distance to work. As such, the demographics of Phillips County are evaluated as opposed to the city of Helena-West Helena alone.

Phillips County had a population of 21,757 as of the 2010 Census, according to the U.S. Census Bureau the 2015 population was estimated to be 20,391, which is a decrease of 6.3 percent. The 2015 data also illustrates that roughly 54 percent of the County's residents are between the ages of 20 and 64.

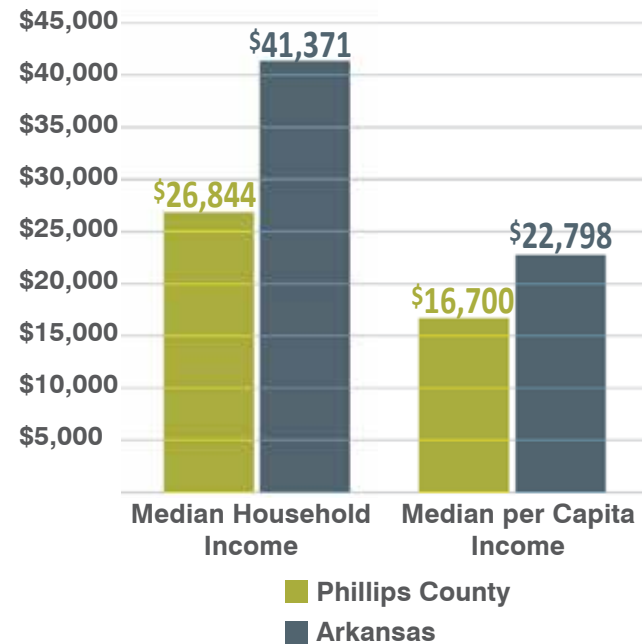
Approximately **75 percent of the Phillips County population has graduated high school**, while roughly 11 percent of the population has gone on to complete a bachelor's degree or higher. Those numbers lag behind the 2015 estimates for the state of Arkansas of 88 and 23 percent, respectively.

The 2015 estimated **unemployment rate for Phillips County is 9.9 percent**, indicating a high level of unemployment, while Arkansas on the whole is at 4.5 percent. The average travel time to work is 19.5 minutes, which suggests that the labor force is prepared to commute to secure employment.

The **median household income for Phillips County in 2015 was \$26,844**, while for Arkansas the median was \$41,371. The per-capita income for Phillips County was \$16,700, while for the state it was \$22,798. This is graphically represented in Figure 6.

The workforce in Phillips County has been shrinking in recent years as the County's population has decreased. As noted earlier, Phillips County lags behind in terms of the overall level of educational attainment and skills when compared to those for Arkansas as a whole. Having said that, it should be noted that Phillips Community College has introduced more trade-related courses in the recent past to try and fill the skills gap.

Figure 6: Incomes, Phillips County v. Arkansas, 2015



Source: U.S Census Bureau American Community Survey 5-Year Estimates

ECONOMY

ARKANSAS

According to data from the U.S. Department of Commerce, Arkansas' inflation-adjusted Real GDP (based on year 2009 prices) was \$108 billion in 2015. This places Arkansas as the 34th largest economy in the United States, behind Nevada and ahead of the District of Columbia. From 2009 to 2015, Arkansas GDP grew at an annual rate of 1.6 percent, in real terms.

The largest employers by industry in Arkansas include health care and social assistance (17.2 percent of employed persons), manufacturing (15.5 percent of employed persons), retail trade (14.2 percent of employed persons), accommodation and food service (9.9 percent of employed persons), and transportation and warehousing (5.1 percent of employed persons).

Manufacturing was the biggest sector of the state's economy, with a Real GDP of \$16 billion in 2015, which equates to 14.9 percent of the state's total economic output for that year. Food products, paper goods, industrial and agricultural chemicals, metal products, machinery, and wood products are among the types of goods manufactured. Agriculture is also a very important factor in the state's economy. Arkansas produces rice (leading the country in rice production), soybeans, corn, cotton, wheat, and sorghum.

Arkansas' natural resources include water, timber, minerals, oil, natural gas and coal. Arkansas is the top producer of bromine in the world. Bromine can be found in agricultural chemicals, insecticides, and pharmaceuticals. Additionally, Arkansas is the only producer of silica stone and novaculite in the nation.

Educational services employers in the county include the Arkansas Human Development Corporation, Barton-Lexa School District, Great Rivers Education Co-op, Helena-West Helena School District, KIPP Delta Public Schools, Phillips Community College of the University of Arkansas, and Teach for America – Arkansas.

These educational organizations provide potential tenants at Helena Harbor a resource for employee training and development. Phillips Community College has expressed its willingness to tailor training programs to meet the needs of industries moving into the county.

PHILLIPS COUNTY

Phillips County is a predominantly agricultural landscape, having 79.1 percent of its land area covered by farms. Major crops produced in the county include soybeans (60.5 percent of farmland), cotton (9.4 percent of farmland), wheat (9.0 percent of farmland), sorghum (5.5 percent of farmland), and rice (5.1 percent of farmland).

The largest employers by industry in Phillips County include health care and social assistance (24.3 percent of employed persons), retail trade (23.2 percent of employed persons), manufacturing (9.1 percent of employed persons), wholesale trade (8.1 percent of employed persons), and educational services (6.5 percent of employed persons).

Figure 7: Manufacturing in Phillips County

Amerimax Home Products, Inc.		Coated Materials
BPS, Inc.		Packaging
Castle Dome Solutions		Packaging
Enviro Tech Chemical Services		Food-processing chemicals
Helena Industries		Packaging
Hoffinger Industries, Inc.		Swimming Pools
NORAC		Chemicals
United Initiators		Organic peroxides

Source: Phillips County Chamber of Commerce

NATURAL RESOURCES IN ARKANSAS



WATER

- Arkansas has over 283,000 hectares (699,293 acres) of surface water.
- Over 800 billion liters of high quality ground water are contained in aquifers.



TIMBER

- Forests cover approximately 19 million acres, or 83 percent non-federal forest lands.
- Timber growing, harvesting, management, transportation, and processing are major industries in Arkansas.



MINERALS

Commercial Production

- Cement rock
- Clay
- Crushed stone
- Dimension stone
- Gravel
- Gypsum
- Kaolin and Fireclays (#4 in the U.S.)
- Lasco (#1 in the US)
- Limestone
- Marble
- Sand
- Serpentine rock
- Shale
- Silica Sand
- Slate
- Syenite
- Novaculite (only producer in US)
- Quartz Crystals (#1 in the US)
- Bromine (#1 in world)



OIL

- Crude oil: total production - 6,536 thousand barrels (2015)
- Natural gas: total production- 1,017,319 million cubic feet (2015)
- Reserves - 12,789 billion cubic feet (2014)
- Coal: total production - 94 thousand short tons (2014)
- Number of mines - 2 (2014)

RIVER TRADE

COST EFFECTIVENESS OF RIVER TRANSPORTATION

It is generally accepted that the use of barges for transportation is one of the most cost effective methods when compared by other. Indeed, a paper produced in 2014 for the Transportation Research Board by Texas A&M Transportation Institute confirms this. The research developed transportation rates (\$/net ton) from origin to destination, including transfer and handling fees, for five waterborne movements and their alternative least-cost all-overland routings (i.e., rail and/or truck). The sample consisted of originating, terminating, internal, or through movements on the Gulf Intracoastal Waterway–East(GIW-E), the Arkansas River, and the Red River. Water linehaul rates, obtained from major barge operators, and handling rates, obtained from terminal operators, were compared to the other modes. Linehaul rail rates were obtained from the Surface Transportation Board’s Carload Waybill Samples while truck rates were obtained from national and interstate motor carriers. Overall, this research concluded that barge shipment is the lowest cost transportation alternative for every commodity group on the GIWW-E and Red Rivers, and for the majority of commodity groups on the Arkansas.

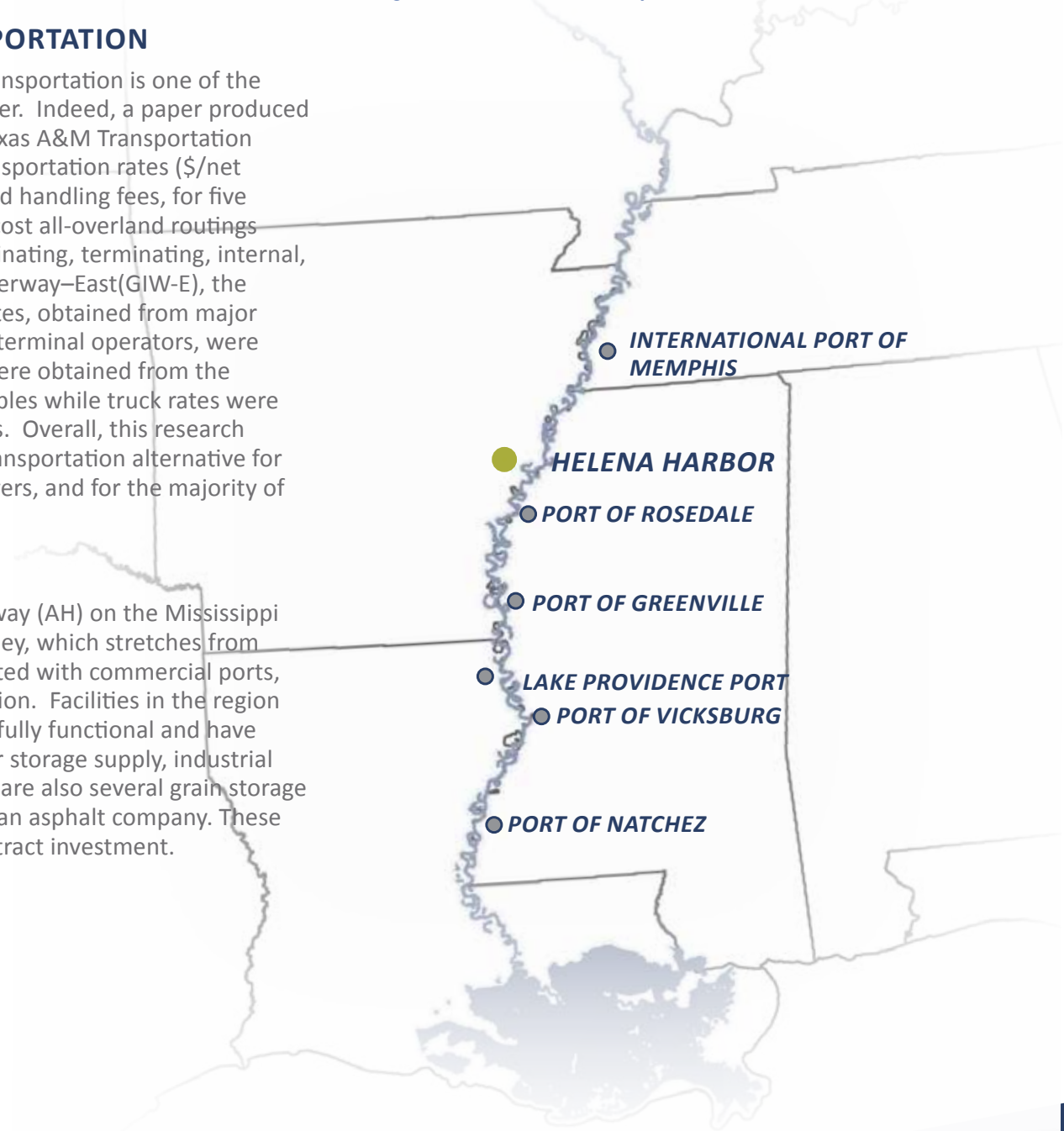
OVERVIEW OF PORTS

Helena Harbor is located at mile 652 Arkansas Highway (AH) on the Mississippi River, in the heart of the Lower Mississippi River Valley, which stretches from Cairo, Illinois to the Gulf of Mexico. The River is dotted with commercial ports, providing a tremendous economic lifeline to the region. Facilities in the region considered competitors to the Harbor are currently fully functional and have all the supporting utility infrastructure such as water storage supply, industrial capacity sewer systems and sufficient power. There are also several grain storage facilities, liquid and dry bulk fertilizer terminals and an asphalt company. These utility systems and existing facilities are critical to attract investment.

Competitors include:

- International Port of Memphis (TN);
- Port of Rosedale (MS);
- Port of Greenville (MS);
- Lake Providence Port (LA);
- Port of Vicksburg (MS); and
- Natchez-Adams County Port (MS).

Figure 8: Ports on Mississippi River near Helena Harbor



Combined, these ports accounted for approximately 27 million tons of cargo being shipped or received on this roughly 360-mile stretch of the Mississippi River in the year 2014. The International Port of Memphis accounted for over half of that total, indicating its status as a dominant port in the region. Given Helena Harbor's proximity to Memphis, there stands good opportunities to not only capture any spillover business from that port but to also "feed" into existing river cargo activities.

Figure 9 shows each port's share of the 27 million tons shipped or received among these ports and how this trade has trended over the past 10 years.

Figure 9: Annual Tonnage at Competitor Ports (2006-2015), Both Directions

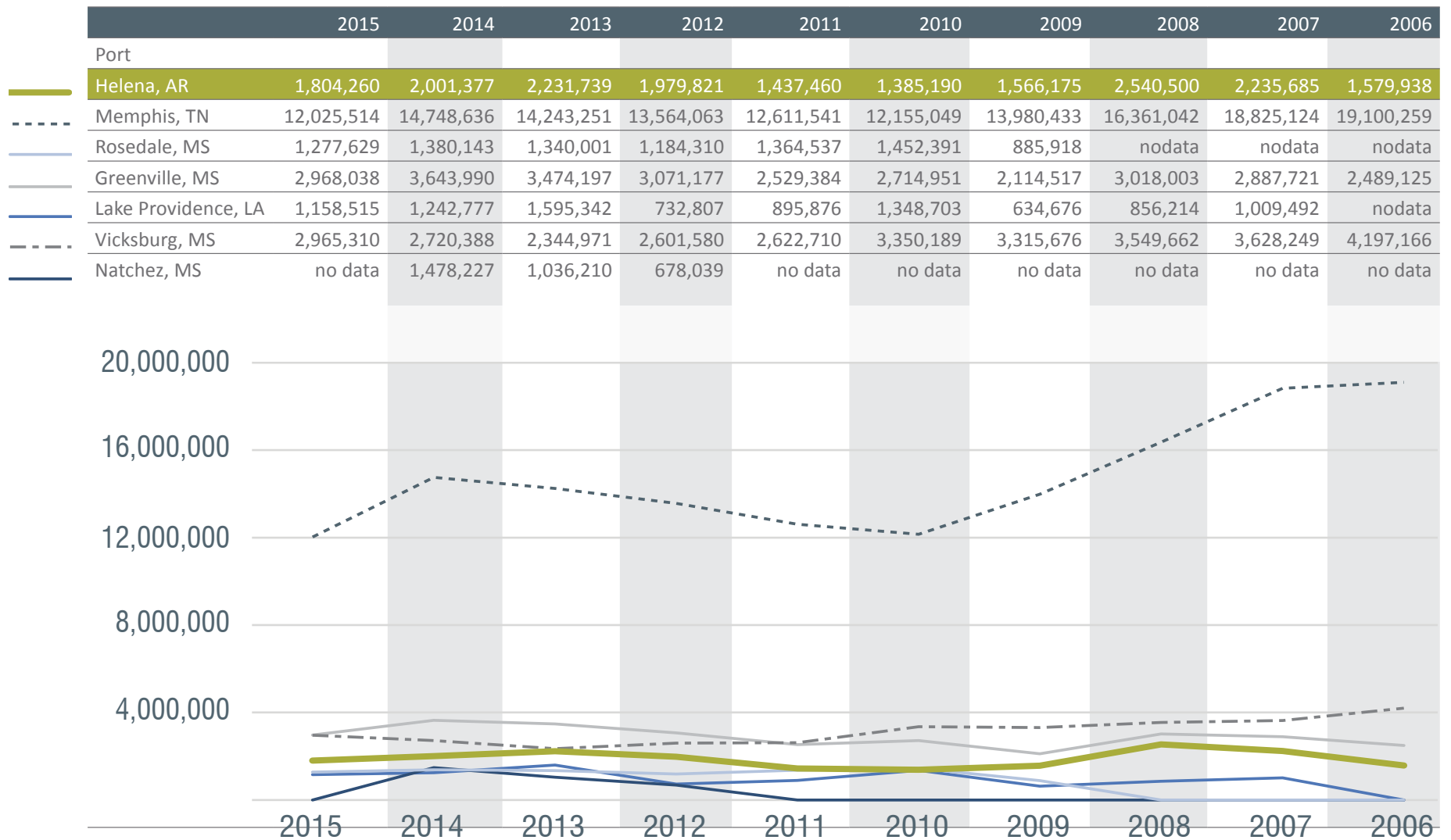
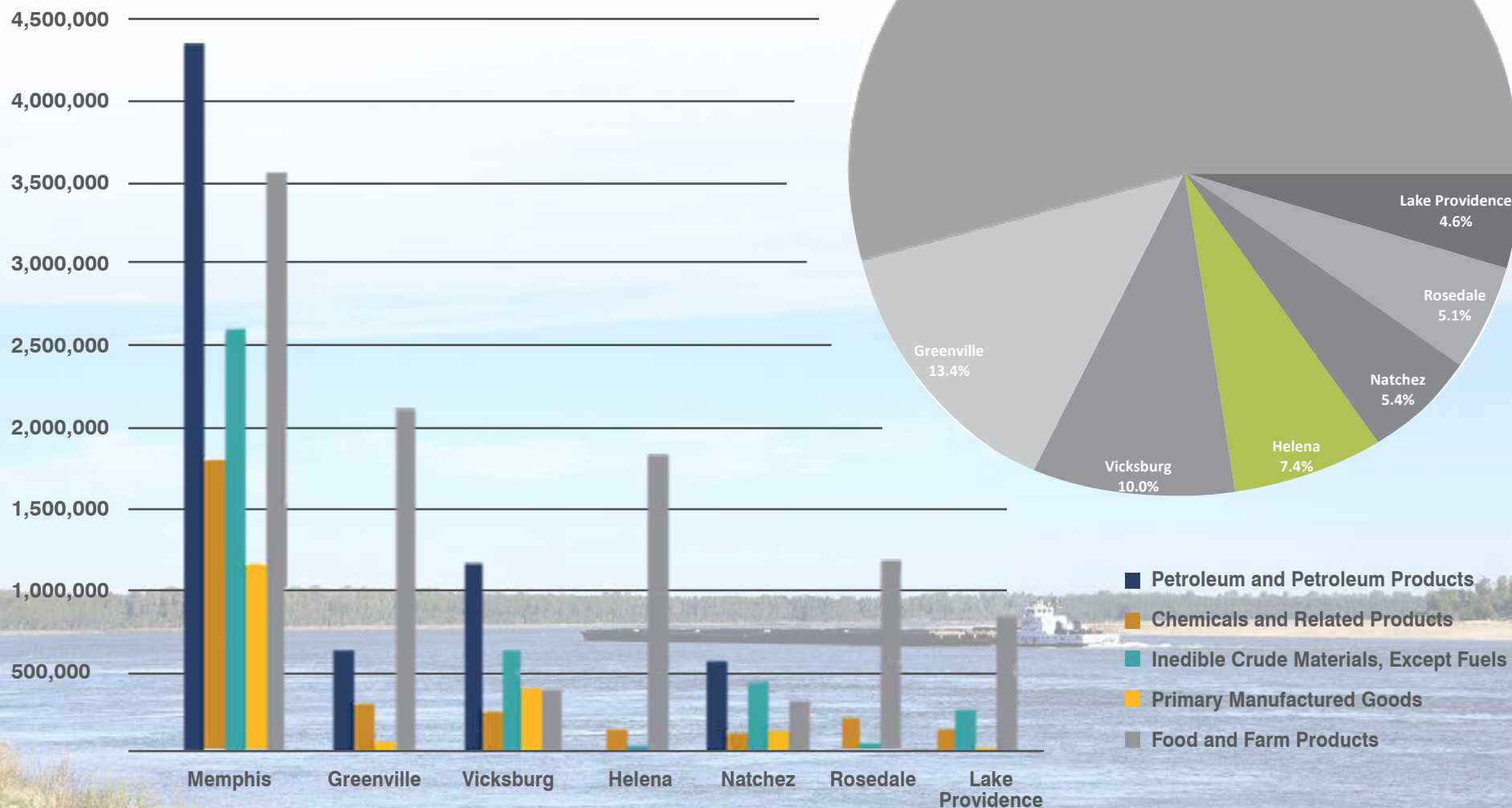


Figure 10 gives a fuller perspective of the type of cargoes handled at these regional river port facilities.

Figure 10: Categories of Cargo Tonnage at Competitor Ports



HELENA HARBOR, AR

Helena Harbor, as defined by USACE, is considered to be the facilities that exist at the Helena Harbor, the facility in downtown Helena-West Helena as well as Helena Marine Service. Collectively, these facilities processed 1.8 million tons of cargo in 2015.



INTERNATIONAL PORT OF MEMPHIS, TN

The International Port of Memphis is one of the larger ports on the Lower Mississippi River, exceeding 12 million tons in receipts and shipments in the year 2015. Chemicals, steel, grain, asphalt, petroleum products and pipe are among the materials traded or produced at the Port. There are currently more than 150 companies with facilities at the Port that are responsible for over 7,000 direct and 12,000 indirect jobs.

Facilities include 6 grain elevators, 50 concrete silos, 25 dry bulk steel tanks, and 130 liquid storage tanks. Fixed, mobile, and floating cranes are available for use, and services including limited repairs, garbage disposal and dirty ballast handling are all available at the Port.

The Memphis port has easy access to several interstate highways, as well as being minutes away from Memphis International Airport.



PORT OF ROSEDALE, MS

The Port of Rosedale is the nearest downriver port from Helena. It is relatively small in size, at 170 acres. This port logged almost 1.3 million tons of cargo (incoming and outgoing) for 2015. Primary commodities being traded at Rosedale include steel, fertilizer, grain, asphalt and grease. Major productions by local manufacturing companies include grease, lubricants, and heavy steel products.

Amenities include a 20,000-square foot climate-controlled warehouse, truck scales, conveyors, forklifts, and a 150-ton crane. The interior roadways were recently upgraded to concrete construction with grants received from the Mississippi Department of Transportation and the USACE.

Located on Mississippi Highway 1, the Port is 45 minutes away from the nearest Mississippi River crossing, and over an hour away from the nearest interstate highway. Commercial flights are 40 miles away at Greenville, and international flights are 110 miles away at Memphis International.

PORT OF GREENVILLE, MS

Further down the Mississippi River is the Port of Greenville, Mississippi. Almost 3 million tons of cargo was exchanged here in 2015. Grain, bulk and break-bulk, petroleum products, sand, chemicals and scrap steel are the main cargoes carried through the Port.

On-site amenities include truck and rail scales, warehouse facilities, forklifts, a covered 60-ton bridge crane with four parallel barge slots and a marine dry dock and repair services.

The port at Greenville is located on U.S. Highway 82, and is 7 miles from the nearest Mississippi River crossing on U.S. Highway 82. It is 80 miles to the nearest interstate highway from this port. Commercial flights can be had at Greenville, and the nearest international airport is 149 miles away at Memphis.





LAKE PROVIDENCE PORT, LA

South of the Port of Greenville is Lake Providence Port, Louisiana. This port received and shipped 1.2 million tons of cargo for the year 2015. Products handled here include aggregates, coal, fertilizer, lime, tire chips, and grain. Companies at this port produce bio-energy products (bio-succinic acid) and provide terminals for liquid fertilizer, grains, and seed.

Lake Providence Port has the advantage of being designated a Foreign Trade Zone, and provides all-weather loading and unloading, warehousing, and the only rail crossing of the Mississippi River in the state of Louisiana.

The port at Lake Providence is located on U.S. Highway 65, and is 45 miles from the nearest Mississippi River crossing on U.S. Highway 82 to the north, or on Interstate Highway 20 to the south. It is 30 miles to the nearest interstate highway from this port. Monroe Regional Airport is 80 miles away, and Jackson International Airport is 90 miles from the port.



PORT OF VICKSBURG, MS

The Port of Vicksburg is further yet down the Mississippi River. This port currently consists of 422 acres, with potential to expand to up to 600 acres. Like Greenville, in 2015 the Port of Vicksburg combined incoming and outgoing freight for a total of nearly 3 million tons. This port handles cargo such as paper products, steel, lumber and wood products, and refined oil products. There are 21 businesses operating at the Port which employ over 4,000 people.

The Port offers a 150-ton crane as well as barge cleaning and refurbishing services.

The Port of Vicksburg sits on U.S. Highway 61, and is 12 miles from Interstate Highway 20, which crosses the Mississippi River a few miles away. Commercial flights are available at the Vicksburg airport and international service is available in Jackson, 60 miles away.



PORT OF NATCHEZ, MS

The Port of Natchez handled almost 1.5 million tons of cargo, both receipts and shipments, for the year 2014, which is the latest year for which data are available. Wood products, structural steel, cotton, liquid petroleum products, grain, and machinery components are among the commodities shipped via this deep-water port.

Multiple warehouses are available on site, as well as three cranes ranging in capacity from 100 to 300 tons.

The Port of Natchez is minutes away from U.S. Highways 84 and 61. The nearest interstate highway is 60 miles away. U.S. Highway 84 also crosses the Mississippi River very near the port. The nearest commercial flights can be found at Baton Rouge, just 10 miles away. International flights are available at Jackson, Mississippi, 90 miles away.

Cargo Types and Amounts, 2014 (short tons)	Helena	Memphis	Rosedale	Greenville	Lake Providence	Vicksburg	Natchez
All Commodities	2,001,377	14,748,636	1,380,143	3,643,990	1,242,777	2,720,388	1,478,227
10 Coal, Lignite and Coal Coke		2,031,021					
11-12 Coal		2,031,021					
1100 Coal & Lignite		2,020,138					
1200 Coal Coke		10,883					
20 Petroleum and Petroleum Products		4,327,277		621,573		1,141,386	551,005
21 Crude Petroleum		63,959				239,836	539,029
2100 Crude Petroleum		63,959				239,836	539,029
22-29 Petroleum Products		4,263,318		621,573		901,550	11,976
2211 Gasoline		1,616,900		290,738		125,252	
2221 Kerosene		88,585					
2330 Distillate Fuel Oil		1,437,659		305,782		255,673	11,976
2340 Residual Fuel Oil		209,603				9,054	
2350 Lube Oil & Greases		48,240				334,173	
2429 Naphtha & Solvents		69,382				38,222	
2430 Asphalt, Tar & Pitch		319,108				102,337	
2540 Petroleum Coke		20,792				36,839	
2640 Hydrocarbon & Petrol Gases, Liquefied and Gaseous				25,053			
2990 Petro. Products NEC		453,049					
30 Chemicals and Related Products	140,705	1,110,916	189,027	259,881	135,030	189,303	58,592
31 Fertilizers	140,705	432,312	189,027	227,149	135,030	124,651	3,030
3110 Nitrogenous Fert.	93,595	280,556	131,223	156,534	96,971	102,301	3,030
3120 Phosphatic Fert.	8,096	31,961	12,036	13,992	7,770	1,518	
3130 Potassic Fert.	18,822	72,659	34,452	38,710	22,486	10,697	
3190 Fert. & Mixes NEC	20,192	47,136	11,316	17,913	7,803	10,135	
32 Other Chemicals and Related Products		678,604		32,732		64,652	55,562
3220 Alcohols		317,798		32,732		64,652	
3230 Carboxylic Acids		27,931					

Cargo Types and Amounts, 2014 (short tons)	Helena	Memphis	Rosedale	Greenville	Lake Providence	Vicksburg	Natchez
3260 Organic Comp. NEC		96,366					
3273 Ammonia		131,137					
3274 Sodium Hydroxide		89,351					16,882
3275 Inorg. Elem., Oxides, & Halogen Salts		1,445					38,680
3276 Metallic Salts		14,575					
3292 Starches, Gluten, Glue		1					
40 Inedible Crude Materials, Except Fuels	42,646	2,589,371	36,907		253,235	621,853	438,154
41 Forest Products, Wood and Chips				6,218			4,095
4161 Wood Chips				6,218			4,095
43 Soil, Sand, Gravel, Rock and Stone	42,646	2,411,143	11,054	572,376	253,235	559,980	399,957
4322 Limestone	42,646	1,174,706	7,963	122,131	1,519	321,905	265,271
4327 Phosphate Rock							12,088
4331 Sand & Gravel		862,019	1,699	450,245	65,206	42,909	92,019
4335 Waterway Improv. Mat		374,418	1,392		186,510	195,166	30,579
44 Iron Ore and Scrap		122,366		5,841		1,190	34,102
4420 Iron & Steel Scrap		122,366		5,841		1,190	34,102
46 Non-Ferrous Ores and Scrap		26,670				10,184	
4670 Manganese Ore		25,025				1,430	
4690 Non-Ferrous Ores NEC		1,645				8,754	
47 Sulphur, Clay and Salt		3,423	24,378				
4782 Clay & Refrac. Mat.		3,423	24,378				
48 Slag		13,514				29,980	
4860 Slag		13,514				29,980	
49 Other Non-Metal. Min.		12,255	1,475	11,057		20,519	
4900 Non-Metal. Min. NEC		12,255	1,475	11,057		20,519	
50 Primary Manufactured Goods		1,148,675		60,024	29,333	390,127	120,925
52 Lime, Cement and Glass		752,065		60,024	29,333	324,667	62,076

Cargo Types and Amounts, 2014 (short tons)	Helena	Memphis	Rosedale	Greenville	Lake Providence	Vicksburg	Natchez
5210 Lime		9,001		60,024	29,333	175,416	15,976
5220 Cement & Concrete		743,064				149,251	46,100
53 Primary Iron and Steel Products		360,426				61,977	
5312 Pig Iron		152,139				32,666	
5315 Ferro Alloys		28,278					
5330 I&S Plates & Sheets		43,365				27,819	
5360 I&S Bars & Shapes		40,986				1,492	
5370 I&S Pipe & Tube		4,083					
5390 Primary I&S NEC		91,575					
54 Primary Non-Ferrous Metal Products		36,184				3,483	58,849
5422 Aluminum		1,420				3,483	
5429 Smelted Prod. NEC		13,409					
5480 Fab. Metal Products		21,355					58,849
60 Food and Farm Products	1,818,026	3,539,194	1,154,209	2,107,020	825,179	377,719	309,551
62-64 Grain	992,508	1,608,059	471,640	921,036	289,288	154,293	108,903
6241 Wheat	103,450	251,571	52,789	41,009	5,910	90,590	25,072
6344 Corn	484,590	887,072	212,078	713,814	246,163	51,970	41,026
6442 Rice	217,491	233,726	170,511	150,998	24,986	4,800	12,306
6447 Sorghum Grains	186,977	235,690	36,262	15,215	12,229	6,933	30,499
65 Oilseeds	825,518	1,509,563	673,882	1,151,578	535,891	199,741	192,505
6522 Soybeans	824,051	1,506,031	673,882	1,151,578	535,891	199,741	187,224
6590 Oilseeds NEC	1,467	3,532					5,281
66 Vegetable Products		101,576		1,151,578			3,073
6653 Vegetable Oils		101,576		1,151,578			3,073
67 Processed Grain and Animal Feed		224,252	8,687	25,607		23,685	5,070
6782 Animal Feed, Prep.		224,252	8,687	25,607		23,685	5,070
68 Other Agricultural Products		95,744					
6865 Molasses		29,686					
6889 Food Products NEC		66,058					
70 All Manufactured Equipment, Machinery		2,182					
71-79 Manufactured Equipment, Machinery & Products		2,182					
7110 Machinery (Not Elec)		2,182					

Regional Manufacturing Facilities			
Name	County	Products Manufactured	No. of Employees
Hydro-Temp Corp Inc	Randolph	Air Conditioning Equipment	50
Prestolite Wire LLC	Greene	Automobile Electric Equipment	170
Tenneco Inc	Greene	Automobile Parts & Supplies	1,042
Tenneco Inc	Greene	Automobile Parts & Supplies	1,042
Earth Grains Baking Co	Greene	Bakery Products - Cookies	58
Mrs Baird's Bakeries Inc	Craighead	Bakery Products - Cookies	58
MAC Lean-Fogg Component Sltns	Randolph	Bolts Nuts Screws Rivets Washers	80
Coca-Cola Bottling Co	Crittenden	Bottlers	61
Acme Brick Tile & Stone	Craighead	Brick-Clay Common & Face	50
Colson Group USA	Craighead	Casters & Glides	125
Viskase Co	Mississippi	Cellophane/Cellulose Materials & Products	230
Post Foods	Craighead	Cereals	110
BASF-Chemical Co	Crittenden	Chemicals - Allyl Alcohol	250
Evonik Cyro LLC	Mississippi	Chemicals - Acrylics	80
Omnium LLC	Mississippi	Chemicals - Pesticide & Agricultural	55
Hanson Pipe & Products	Crittenden	Concrete Blocks & Brick	50
Allen Engineering Corp	Greene	Construction Machinery & Equipment	80
Hytrol Conveyor Co Inc	Craighead	Conveyor Parts & Supplies	570
Automated Conveyor Systems Inc	Crittenden	Conveyors & Conveying Equipment	80
Best Conveyors	Craighead	Conveyors & Conveying Equipment	150
Roach Manufacturing Corp	Poinsett	Conveyors & Conveying Equipment	225
Mueller Copper Tube Products	Cross	Copper Pipe & Tubes	400
Georgia-Pacific Corp	Crittenden	Corrugated & Solid Fiber Boxes	100
Planters Cotton Oil Mill Inc	Craighead	Cotton Oil Mills	70
Smith Drug Co	Greene	Drug Millers	80
Thomas & Betts Corp	Craighead	Electric Equipment	400
Nidec Motor Corp	Greene	Electric Motors	1,250
Camfil Air Pollution Control	Craighead	Fans-Industrial & Commercial	250

Regional Manufacturing Facilities			
Name	County	Products Manufactured	No. of Employees
Farm Service Inc	Lawrence	Fertilizers	100
Crane Composites Inc	Craighead	Fiber & Fiber Products	160
Nestle USA	Craighead	Food Products	90
Scentations Inc	Randolph	Fragrance	75
Center Core	Poinsett	Furniture	50
Wise Co	Clay	Furniture	100
Arkansas Glass Container Corp	Craighead	Glass Containers	350
American Greetings Corp	Mississippi	Greeting Cards	1,250
Mestek Inc Forrest City Div	St Francis	Heating Equipment	85
United Medical	Cross	Hospital Equipment & Supplies	80
Douglas Quikut	Lawrence	Household Vacuum Cleaners	64
Jimco Lamp & Mfg Co	Craighead	Lamps	150
Trinity Lighting Inc	Craighead	Lighting Fixtures	100
Kagome Creative Foods	Mississippi	Margarine	160
Boar's Head Brand	St Francis	Meat Products	600
Martin Sprocket & Gear	Greene	Mechanical Power Trans Equipment	200
Windmill Rice Co	Craighead	Milling	55
Langston Co Inc	Crittenden	Paper Bags	130
Pinnacle Frames & Accents	Randolph	Picture Frames	500
Anchor Packaging	Greene	Plastics & Plastic Products	125
Colson Wheel Plan	Craighead	Plastics & Plastic Products	100
Anchor Packaging Inc	Greene	Plastics-Fabrics, Film	500
System Products Arkansas Corp	Mississippi	Plastics-Products-Finished	91
NIBCO Inc	Mississippi	Plumbing Fixture Fittings & Trim	210
Columbia Forest Products Inc	Poinsett	Plywood & Veneers	105
Robert Bosch Tool Corp	Lawrence	Power-Driven Hand Tools	100
Robert Bosch Tool Corp	Crittenden	Power-Driven Hand Tools	100
Quad/Graphics Inc	Craighead	Printers	260
American Railcar Industries	Greene	Railroad Cars	200

Regional Manufacturing Facilities			
Name	County	Products Manufactured	No. of Employees
American Railcar Industries	Greene	Railroad Cars	200
Busch Agricultural Resources	Craighead	Rice Mills	53
Riceland Foods Inc	Craighead	Rice Mills	375
Riceland Foods Inc	Poinsett	Rice Mills	375
Garlock Rubber Technologies	Greene	Rubber-Synthetic	120
Neal Munro Footwear	Cross	Shoes	230
Harsco Metals	Mississippi	Slag	50
Harsco Metals	Mississippi	Slag	50
Southworth Products	Mississippi	Special Industry Machinery	150
Paco Steel	Mississippi	Steel Mill Services	100
Nucor Steel	Mississippi	Steel Mills	600
Nucor-Yamato Steel Co	Mississippi	Steel Mills	360
Nucor-Yamato Steel Co	Mississippi	Steel Mills	360
Nucor-Yamato Steel Co	Greene	Steel Mills	360
Tenaris	Mississippi	Steel Pipe & Tubes	1200
Tmk Ipsco Tubulars Inc	Mississippi	Steel Pipe & Tubes	170
JMS Processing Inc	Mississippi	Steel Processing	75
L A Darling Co Gondola Div	Clay	Store Fixtures	300
L A Darling Co	Greene	Store Fixtures	800
L A Darling Wood Div	Clay	Store Fixtures	250
Prospect Steel Co	Mississippi	Structural Steel	70
Hoffinger Industries Inc	Phillips	Swimming Pool	120
Sanyo Manufacturing Corp	St Francis	Television & Radio	650
Southern Tire Mart	Crittenden	Tire-Retreading & Repairing	50
Delta Consolidated Industries	Craighead	Tools	301
Pocahontas Aluminum Co Inc	Randolph	Trailers-Camping & Travel	50
Great Dane Trailers	Craighead	Trailers-Truck	430
Knl Holdings LLC	Greene	Trailers-Truck	100
V & B Mfg Co	Lawrence	Wood Products	60



MARKET ANALYSIS

OVERVIEW

The market analysis has been used to identify suitable industries that should be targeted to potentially locate at the site. The rationale behind the market analysis has been unconstrained in terms of development types that are realistic in terms of likelihood and would be well suited at the site. In order to develop a list of potential industries for the site, information on existing businesses and resources available in the area were examined. The economy and demographics of the area were also studied. However, data in itself does not convey the whole story and, as such, this analysis has been confirmed and underpinned via a field visit to help produce the final recommendations.

As part of the process of identifying realistic uses and tenants for the site, Strengths, Weaknesses, Opportunities and Threats (SWOT) and Political, Economic, Social and Technological (PEST) analyses were undertaken. These are described in the following sections.

SWOT ANALYSIS

The following SWOT analysis identifies the Strengths, Weaknesses, Opportunities and Threats of the site and its environs. This objective analysis has been undertaken to help determine the potential market opportunities from an internal (Strengths and Weaknesses) and external (Opportunities and Threats) perspective.

The analysis shows that Helena Harbor demonstrates some notable strengths and opportunities primarily based on the assets at its disposal and the fact that the land has not been, to date, developed to any great extent. This lends a certain degree of freedom as to what may be attracted to the site. The facts that the port area is nestled within a mainly agricultural area and has good yet under-utilized transportation infrastructure are significant plus points. There are downsides too, some of which are internal, such as the need to improve connecting infrastructure, while others are external and tend to be less tangible than the physical attributes such as existing levels of competition in the wider region or the perceptions of potential investors.

What is clear from the analysis is that the strengths and opportunities do appear to outweigh the weaknesses and threats. However, in order to move forward the Harbor will need to overcome its weaknesses and mitigate its threats.

PEST ANALYSIS

This section provides an assessment of a range of the main factors that could have an impact on the Harbor and its ability to perform in the future. These have been separated into four main categories, namely Political, Economic, Social and Technological. It should be noted that these factors are largely out of the control of the Harbor, but their potential and influence should be noted.

The analysis shows that there is a wide range of factors that could influence the use of the Harbor going forward. Even though the Harbor is not restricted as to the overall use of the site there are external factors that could still heavily influence potential uses, both positively and negatively.



- Extensive available land bank
- Relatively easy access to Interstate 40
- No restrictions on potential land uses
- Direct access to the Mississippi River
- Regular scheduled rail link to Class I railroad
- Cost effectiveness of barge transportation
- Nearby Mississippi River crossing
- Increasing interest in the Harbor from investors

- Lack of critical utility infrastructure such as a water tower, industrial sewer and stormwater management
- Weight limit on local access roads
- Lack of cargo handling capabilities
- Cost to develop the site's infrastructure
- Limited resources to promote the site

- Existing strong competition from other river-based facilities
- Skills base of workforce limited
- Continued outward migration
- Lack of economic diversification
- Negative perceptions of the area

SWOT

Strengths

Weaknesses

Threats

Opportunities

- Potential road/rail/river hub
- Barge transportation is the cheapest on a per-ton mile basis
- Proximity to Memphis may enable relocation of activities and availability of managerial workers
- River link to New Orleans, a major international transportation gateway
- International demand for agricultural produce
- Attraction of industries serving the agricultural sector
- Attraction of industrial users of agricultural produce
- Ideal for the handling of low-value products such as recyclable materials
- Re-introduction of trade school courses at Phillips Community College

- Political: the way forward for the Harbor will need to be agreed by stakeholders and decision makers. Current federal budget cuts grant programs which could benefit the Harbor (DRA USDA, RD and EDA)
- Environmental: compliance with statutory environmental rules could delay or cancel plans for the Harbor.
- Fuel taxes: a change in fuel tax would change the competitiveness of barge transport relative to rail and truck movements. Barge transportation is by far the most fuel efficient mode of transportation for freight. Any increase in fuel costs would, therefore, make the use of barges more cost competitive.
- Agricultural policy: any changes to policy could impact the volume and nature of agricultural production and, subsequently, trade volumes.
- Grant provisions: there are transportation grants (TIGER) available that provide for investment in safety and security measures and improved physical infrastructure.

- Vessel size: an increase in river vessel size may provide lower transportation costs through economies of scale.
- Security: the need to install new security technology will influence operational costs.
- Research funding: with particular reference to the energy and environmental industries, increased research, whether private or public, could bolster the development of particular activities.
- Replacement technology/manufacturing trends: this could influence the type and scale of investment and the discrete locational attributes required by specific industries.
- Information technology: given the rapid development in this sector, the capacity and type of facilities are becoming increasingly important.

- International trade: between the U.S. and other countries, particularly with regard to agricultural produce, international trade will influence the volume of traffic carried on the river, most notably downstream to New Orleans.
- The local economy: a strong local economy could spur increased interest for investment in the Harbor, whether in terms of trade or a general increase in economic activities. Conversely, a weakening economy could dampen such demand.
- Fuel prices: fuel prices, determined primarily by supply and demand, will impact the competitiveness of barge transport relative to rail and road.
- The exchange rate: a strong U.S. dollar will make exports more expensive but imports more attractive, and vice versa with regard to a weak dollar.
- Interest rates: an increase in interest rates may dampen demand for products, particularly manufacturing goods.
- Infrastructure investment: increased infrastructure investment would have a two-fold impact, an increase in short-term economic activity through construction and improved access to markets.

- Environmental responsibility: there may be opposition to proposed investments or the transportation of certain commodities due to perceived environmental impacts.
- Corporate governance: private investors and shippers of products may wish to improve their environmental credentials through the use of more energy efficient forms of transportation, such as river and/or rail.
- Demographics: the availability and ability of the workforce to fill roles will influence inward investment decisions.

Political

Economic

PEST

Technological

Social

TARGET INDUSTRIES

OVERVIEW

In identifying industries for potential location at Helena Harbor, it is important to remain realistic in terms of the size and scope of operations to be investigated. The SWOT and PEST analyses presented earlier have been used in determining the most realistic types of development at the site. With this in mind, the following industries have been identified:

- Transportation, distribution + warehousing
- Bioenergy
- Food + agricultural product processing
- Light manufacturing
- Recycling + sustainable energy

TRANSPORTATION, DISTRIBUTION + WAREHOUSING

The earlier SWOT analysis indicates particular strengths for the site in terms of its transportation (road and rail) access, albeit some improvements to the infrastructure would be necessary to fully take advantage of the assets. Of particular value is the direct access to the Mississippi River which provides notable river-based commerce activities. This, in hand with the importance of agriculture to the wider area, cannot be ignored. At the same time it is noted that there are a range of competing facilities on the river and so any cargo handling at this site would be influenced by this competitive environment.

The current state due diligence revealed that a variety of materials are received at nearby ports along the Mississippi River, including limestone, sand, gravel, crude petroleum, distillate fuel oil, fertilizers and, of course, farm and farm products. The latter, along with petroleum and petroleum products, comprise the lion's share of the region's river trade. A variety of storage facilities would be required depending on the materials received/dispatched, from warehouses to liquid storage tanks. Conveyor belts and pumps would be utilized to move materials from barges to trucks, rail cars, or warehouse facilities and vice versa.

Shipments from nearby Mississippi River ports consist primarily of agricultural crops, dominated by soybeans, corn, and rice. These products are typically brought by truck or rail to the barges, the majority of which are heading to New Orleans and the global markets accessible from there. The nearest significant ports for Arkansas' agricultural producers are Memphis and Rosedale, each at least an hour's drive away from the site. Dry storage in the form of metal or concrete silos and terminals would be required for such business.

Minimum land requirements for a river-based distribution service are not significant with a review of existing facilities suggesting that parcels as small as 20 acres could handle the infrastructure required.

Based on crop production in the area, soybeans, sorghum and corn are the more likely commodities to be handled at the site, although bulk commodities such as fertilizer (refer to Helm Fertilizer on pg. 13) and raw materials such as limestone and sand are equally suitable.

In addition to the use of the site for river based cargo handling, the site's extensive land and favorable geographical location make it a good candidate for land based distribution and warehousing activities. The rail link is certainly an added plus in this respect. The attraction of such services could also serve other investors at the site with product transportation needs.

According to the U.S. Energy Information Administration warehouse sizes cover a broad spectrum from around 25,000 square feet to significantly more than 100,000 square feet. There is a similarly broad range in terms of employee numbers with the type and throughput volume of goods being a determining factor.

BIOENERGY

Alternative and renewable sources for energy production are becoming more common in the U.S. As such, opportunities exist to take advantage of local resources to provide energy produced from these renewable resources. Indeed, the recent Solfuels investment in a biodiesel plant in Helena underscores this market opportunity. The consideration of bioenergy is discussed here in terms of timber and agricultural products. More detailed discussion regarding the opportunities related to timber are discussed in the following section on timber-based biomass.

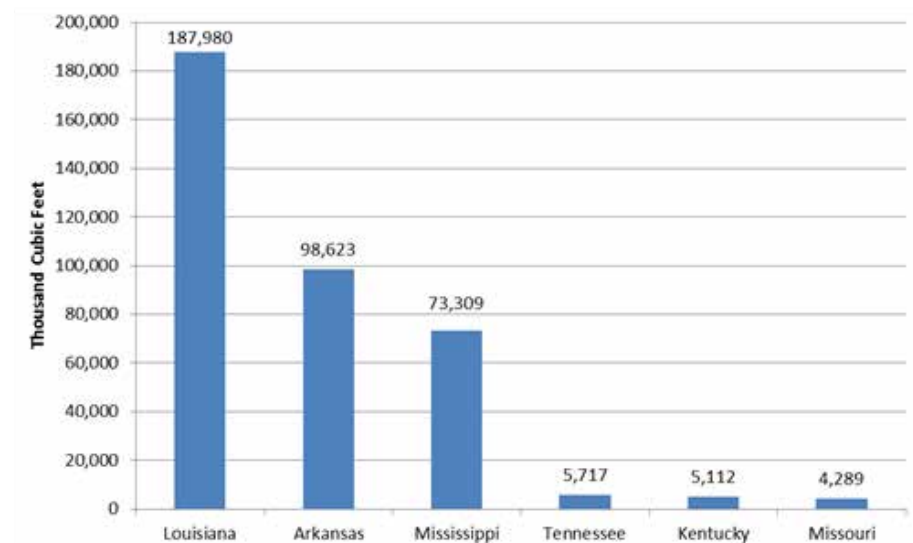
TIMBER-BASED BIOMASS

Parts of eastern and southern Arkansas are heavily forested and, as such, play an important role for the timber industry in the state. As Figure 11 shows, Arkansas is the second-largest harvester of timber in the Lower Mississippi River Valley.

The relatively close proximity to the Arkansas timber industry suggests the site could be suitable for wood-based bioenergy operations. Pulpwood can be used as a wood-to-energy biomass feedstock, and as utilities across the nation are being mandated to produce energy from renewable resources, demand is very likely to increase.

Timber-based bioenergy plants typically have land requirements in the order of 10 to 100 acres. A plant on the scale of 20-30 megawatt production might employ 20-25 persons at the plant, and contribute to 25-35 indirect jobs processing and hauling the timber input.

Figure 11: Amount of Timber Harvesting by State



AGRICULTURAL BASED BIOMASS

As noted earlier, 60 percent of Phillips County farmland is planted in soybeans. Soybean oil can be used in the production of biodiesel. Having large quantities of soybean crops nearby provides distinct advantages for biodiesel production, not least in terms of reduced transportation costs.

Glycerin is one by-product of soy biodiesel. Industrial uses for glycerin include resin and polyurethane production for use in paints, inks and coatings, as well as being a raw material for solvents, plasticizers, and surfactants. The food production industry uses glycerin as a humectant, solvent, preservative, and sweetener. Glycerin is also used in the beauty industry, as it has lubricating, moisturizing, and clarifying properties. In liquid detergents, glycerin plays a role as a viscosity regulator, solvent and clarifying agent.

Sorghum is another important crop in the area. Sorghum is an efficient input to use in the production of ethanol, as it uses less water than comparable feedstocks. Byproducts of the conversion of sorghum to ethanol are used as feed supplements for cattle, swine, and poultry.

As a side note, the successful attraction of these bioenergy-oriented industries could result in additional “spin-off” industries to locate at the site.

Bioenergy plants typically require easy access via truck and rail to receive raw materials. That said, the finished products could feasibly be distributed via the Mississippi River. The parcel size for biofuel plants vary from 10 to 100 acres and can employ anywhere from 30 to 235 persons.

FOOD AND AGRICULTURAL PRODUCT PROCESSING

Given the proximity to raw soybeans, corn, sorghum and rice, food and agricultural-product processing present realistic target industries for the site.

FOOD PROCESSING

Packaged soybean-based food products include dairy-free yogurt alternatives, edamame, miso, soy beverages, soy dairy frozen desserts, soy meat alternatives, soymilk, and tofu. An increasingly health-conscious American consumer provides a growing market for these products.

Corn can be used in a wide variety of packaged food products. In its most natural form it can be packaged for consumption on the cob, or preserved as loose kernels. In its more processed form, products include popcorn, either as popped or un-popped kernels, tortilla chips, tortillas, and corn syrup.

For sorghum the primary uses in packaged foods in the United States are as sorghum grain and sorghum flour, marketed largely to the gluten-free market.

Rice provides an array of opportunities. In addition to the traditional uses of the rice grain, other opportunities exist to produce packaged rice foods. For example, rice flour is another popular gluten-free baking flour option for those who are gluten-sensitive. Rice noodles, egg-roll wrappers, and rice-flour cakes and dumplings are all produced using rice flour.

Rice bran oil can be used as a trans-fat-free cooking oil, or as a nutritional supplement, as it is high in vitamin E and antioxidants. Other liquid rice-based products include rice vinegar, rice milk, and rice syrup, which is used as an alternative sweetener. Convenience foods containing rice include puffed-rice cereals and puffed rice cakes, as well as rice crackers and quick-cooking packaged rice.

Depending on the size and variety of products produced, a packaged-food manufacturer could employ anything from around 10 to more than 100 persons. For example, Nestle employs 90 people in Jonesboro, Post Foods employs 110 for cereal production in Jonesboro, Earth Grains Baking employs 60 in Paragould, and Kagome Creative Foods employs 160 for the manufacture of margarine in Osceola. Land requirements, again, would depend on the amount and type of food product being produced. Parcel size would likely vary from less than 10 up to multiple tens of acres. Large climate-controlled warehousing space would likely be a necessity for many of these facilities.

AGRICULTURAL PRODUCT PROCESSING

Since soybeans are one of the major agricultural products in the area, soybean processing is perhaps a natural industry to locate to the site. Soybeans may be processed for their oil, meal, and hulls. Most soybeans are processed for their oil for cooking uses and protein meal for the animal feed industry. A smaller percentage get processed for human consumption in the way of soymilk, soy protein, tofu protein, and other retail food products.

Less traditional uses for soybeans include bio-composites (building materials made from recycled newspaper and soybeans), soy-based industrial lubricants (lubricating properties as good as petroleum products, with a higher heat threshold), and in the automotive market, soy-based interior parts, seating, and body parts.

The primary traditional use for sorghum grain has been in livestock feed. It is utilized in feed for beef, swine, dairy and poultry industries.

There are opportunities for sorghum use in human food products as well (see above); it is high in antioxidants and is gluten-free, providing a versatile product for the gluten-sensitive market. Alternative uses for sorghum include the pet food industry, fiber insulation, packing peanuts, and cat litter. Corn has traditionally been grown for use in the food industry, and in recent years, in the production of ethanol.

Looking to alternative uses, corn has proven to be a reliable cost input in the manufacture of plastics, unlike petroleum inputs whose prices may fluctuate depending on the geopolitical climate. Corn is both a cheaper and more dependable input than petroleum-based oil. Corn-based plastics use up to 68 percent less fossil fuels during production than traditional plastics, making them a more environmentally responsible option.

Cornstarch-based packaging material in the form of packaging peanuts can replace the less-environmentally friendly petroleum-based foam peanuts, and they are completely biodegradable.

Agricultural crop processing facilities tend to sit on 30 to 60-acre parcels, based on review of existing facilities. That same research revealed that these facilities typically employ from 50 to 75 employees. A relatively local example includes 70 employees at Planters Cotton Oil Mill in Jonesboro.

LIGHT MANUFACTURING

Multiple light manufacturing companies already exist in the area, creating products such as fabricated panels for automotive and recreational vehicle purposes, unit-dose packaging for powders, liquids and granules, water-soluble packaging, swimming pools, proprietary sanding tools, PVC additives, and chemicals for agricultural, lawn, garden and industrial uses. These examples emphasize the potential for similar industries to locate at the site.

With its relatively easy access to truck, rail, and barge routes and services plus land availability, the site makes a realistic location for light manufacturing industries.

The majority of light manufacturing facilities in the area employ between 50 and 150 workers. It is worth noting, however, that there are some significantly larger employers in the wider region.

According to the manufacturing survey for East Arkansas, there is a wide range of products manufactured in the area although much of that occurs outside of Phillips County. Representative manufactured products include air conditioning equipment, automobile parts and supplies, cellophane materials, chemicals, conveyors and conveying equipment, various metal pipes/tubes and milling, plastics and plastic products, and wood products. Figure 7 on pg. 15 highlights the manufacturing facilities identified during that survey.

Given this array of potential manufacturing activities the land take necessary can also vary from a few acres up to around 40 acres.

RECYCLING + SUSTAINABLE ENERGY

Given the extensive nature of the site and the low cost transportation options offered by the site in terms of rail and river, recycling and sustainable energy uses should be considered.

With regard to recycling, it is not suggested that “dirty” products should be accommodated particularly as a range of uses is being considered for the site. A dirty or nuisance neighbor could limit interest from other sectors. In this context recyclable products such as paper, plastic and metal that require minimal processing are worthy of consideration. However, this would be opportunistic and not seen as an immediate or targeted industry to pursue.

For sustainable energy projects requiring relatively large land areas, the site could be of interest. It is understood that the Harbor is currently in discussions with a solar energy company that is interested in the potential of locating at the site.

There is no typical size or workforce profile for these types of investments and they would need to be assessed on a case-by-case basis.

THE WIDER ECONOMY + OTHER CONSIDERATIONS

This master plan and market analysis has concentrated on the economic activities and type of industries most suited to Helena Harbor. It was apparent during the field visits that there are wider issues to be addressed and that there is clearly a link between the potential developments at the site and an improvement in the overall economy and quality of life in the area. A master plan linking the two should cover: increased use and revitalization of downtown Helena; the development of the area's recreation and leisure activities and amenities; and, outreach to potential visitors and investors.

It is clear that there has been investment and effort put into the revitalization and regeneration of the downtown area. However, during the field discussions the overall opinion was that this work needed to be built on and further improvements made if people were to return and/or move to Helena. The existing urban fabric was identified as a particular negative in terms of attracting investment.

At the same time, it was also apparent that there are significant recreational and cultural resources to be found in the area. Historical and cultural attributes include the rich music heritage, Civil War sites, the use of the Mississippi River for general use or for excursions, such as the visits of the American Queen steamboat and architecture.







THE PLAN

INTRODUCTION

The master plan for Helena Harbor is intended to be a guiding framework for attracting new industrial based development that aligns with the recommendations in the market study.

MASTER PLAN

OVERVIEW

The goal is to provide land use designations for the Helena Harbor property that takes advantage of the enabling infrastructure available at the property that will appeal to target businesses outlined in the market study. These industries are:

- Transportation, Distribution + Warehousing
- Bioenergy
- Food + Agricultural Product Processing
- Light Manufacturing
- Recycling + Sustainable Energy

MASTER PLAN RECOMMENDATIONS

The proposed land use plan for Helena Harbor has assigned land areas based upon the proximity to water, road and rail infrastructure which will appeal to the various potential businesses depending upon their operational needs.

The water based development will attract development that could utilize either the harbor channel or the fast water access along the Mississippi depending upon the vessel access needs and type of cargo being transported.

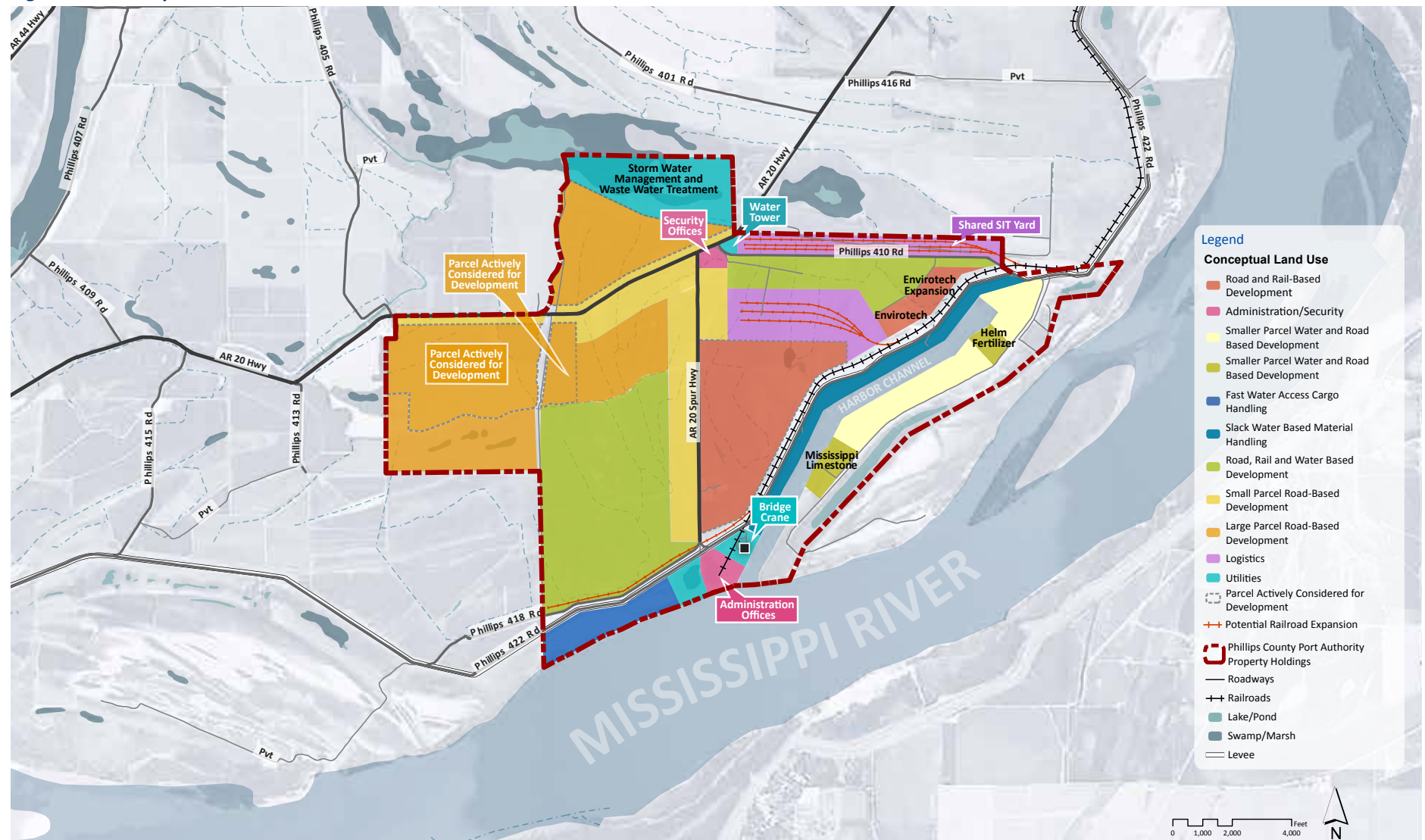
Rail can be expanded to provide service to businesses that may have storage needs for rail cars or want multi-modal access. The road-based development will utilize the existing main roads with additional roadways constructed on an “as needed” basis.

Land areas have been set aside for stormwater management and potential wastewater management in the form of a treatment plant. A new water tower has been sited at the intersection of AR 20 Highway and Phillips 410 Road. This is not only a good location given the elevation of the property but also provides a highly visible landmark.

Aside from the existing industrial development on the property and the expansion of Envirotech, there are several parcels that are being held for businesses in current negotiations with Helena Harbor. EDP Renewables has a 680 acre lease to build a solar farm on the north and western edge of the property which is shown as orange on Figure 12 and labeled “Parcel Actively Considered for Development”.

This land use plan is meant to be flexible as development occurs but should be taken into consideration as site selection decisions are being made. To the greatest extent possible, development decisions should align with the type of transport needed to support operations.

Figure 12: Conceptual Land Use



ENABLING INFRASTRUCTURE COMPONENT PLANS

Providing sufficient enabling infrastructure to support both the existing and desired growth for Helena Harbor is the highest priority of the master plan recommendations and it critical to support the types of development identified in the market study. Without the proper roads, bridges, rail and utility systems the desired growth and investment will not be forthcoming. Potential investors who are undergoing a site selection process will be looking for the following criteria for enabling infrastructure:

1. Availability: The existence of critical infrastructure to support development
2. Reliability: The reliability of the utility sources to avoid outages and disruption to operations
3. Capacity: The total amount of capacity produced by a serving utility or infrastructure and the ability for expansion
4. Condition: The condition of the infrastructure and history of maintenance
5. Redundancy: The ability of the infrastructure to provide redundancy in service and multiple points of access

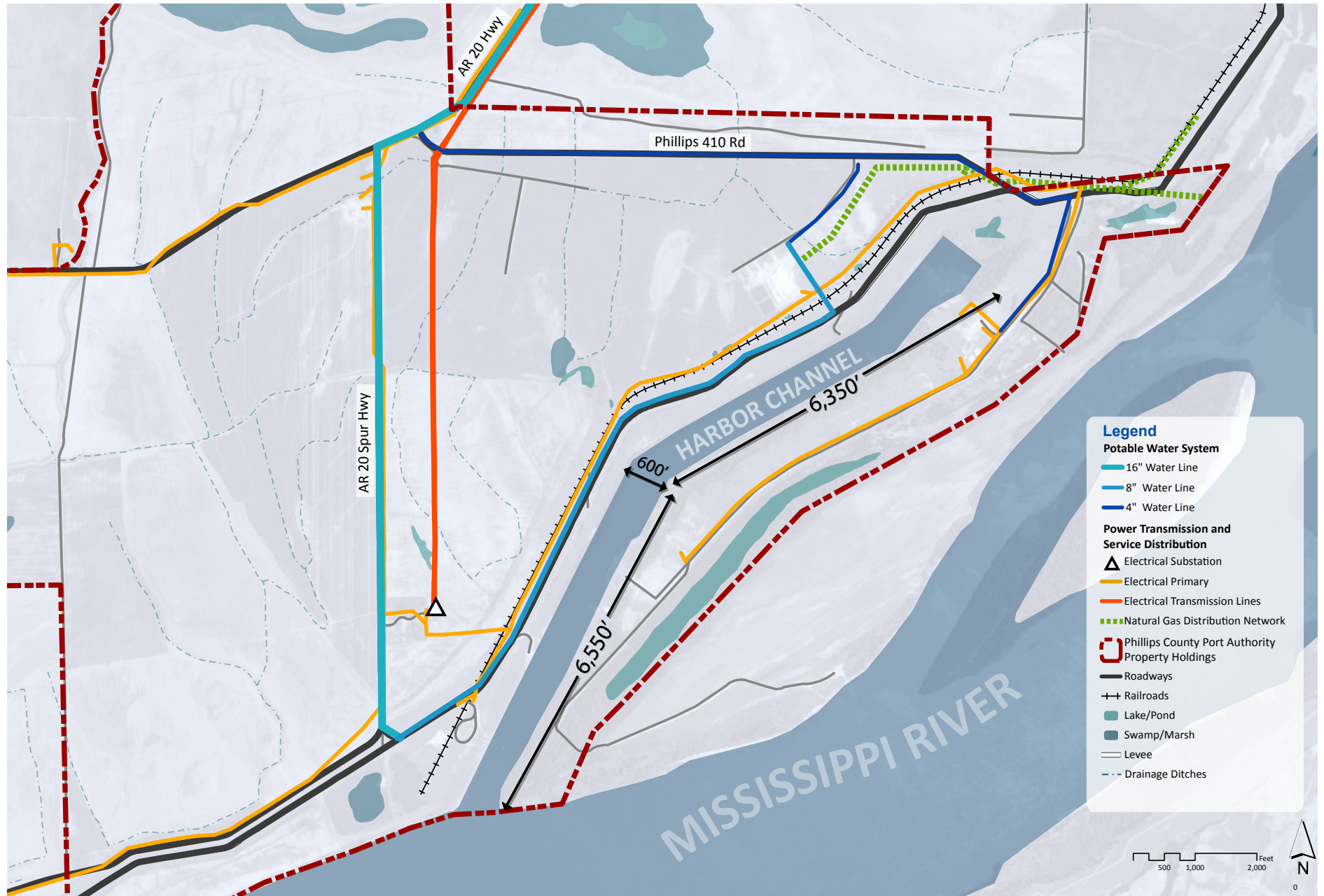
Currently, the property is relatively undeveloped with a small demand for infrastructure. Many demands, such as sewer, have been handled on a parcel by parcel basis versus treating the entire property with a system-wide approach. The master plan recommends migrating from this strategy and treating the enabling infrastructure with a systems-wide strategy that will support the entire buildout of the site. Providing basic enabling infrastructure to support transport, utilities and operations to the site is the greatest need to attract investment.

The following sections will discuss each component of the enabling infrastructure in more detail in terms of the existing system and the recommendations for improvements to the system to support growth.

ENABLING INFRASTRUCTURE

Providing sufficient enabling infrastructure to support the desired growth for Helena Harbor is the *highest priority of the master plan*. It is critical to have utility systems that can attract and support industrial development such as a water tower, waste water treatment plant and storm water management.

Figure 13: Utilities Map



PORT

SLACKWATER CHANNEL

The port at Helena Harbor has a 2-1/4 mile slackwater channel that is 300 feet wide and dredged to a depth of nine feet by the USACE. With an additional 50 feet of berthing space along the length of the channel and a large turning basin, the channel is well suited to accommodate barge traffic.

A 60-ton overhead bridge crane is located at the beginning of the channel just off of the Mississippi River. The bridge crane was constructed to offer offloading services from the Mississippi River to the port and railroad, however, it has only been used once since its commissioning. The current location of the bridge crane at the mouth of the channel is an obstacle to barge traffic and accessing and exiting the port. Due to the crane extending out over the channel, it limits the size and width of vessels that can access the canal easily. Dredging operations are also complicated by the location of the Bridge Crane

Due to its inactivity, the bridge crane is currently decommissioned. In order to recommission the bridge crane, it would need to undergo inspections and reestablish utility connectivity, mainly power. Confirmation of proper operational modes would be confirmed to ensure proper function and a structural inspection would need to be conducted to ensure that it is currently able to handle loads. This would all contribute to a “startup” cost. The potential investor could pay for the startup cost if they had a demand for the bridge crane or Helena Harbor could pay it as an incentive to attract that particular business.



The bridge crane is unique in its configuration, and given the constraints discussed, the potential uses for the bridge crane are limited. That said, it may still be utilized by a potential user. The uses for the bridge crane in its current configuration could include:

- Steel fabrication shop that manufactures large items that could be shipped by barge and loaded/unloaded from barges using the bridge crane loading cargo to the railroad for distribution into/out of the Harbor;
- Warehouse user that ships or accepts cargo in containers that can be transferred by truck or rail to the bridge crane then loaded/off-loaded to a barge;
- Container activity along the river that could use the crane (inland hub for containers);
- Large cargo loading onto barges for transport to Port of New Orleans;
- Move crane to opposite end of channel to eliminate pinch point along channel at current location.

The overall, long-term viability of the crane in its current location is questionable and given its limited uses due to the current configuration as well as the constraints it poses to the usable width of the channel. However, moving the crane to the opposite end of the channel would eliminate pinch point along channel at current location and allow for more opportunities.

Future demand generated by the development of the property will drive any demand for the bridge crane as it currently stands. The business would need to have a demand for a waterfront connection for the distribution or receiving of cargo, bulk or containerized products or pallets.

Ultimately, this high level master plan study cannot say to either “keep the crane”, “move the crane” or “tear it down”. If the right user comes along it would be a useful piece of equipment. However, if the crane becomes an impediment to development activity the choice to move it or tear it down becomes clearer.

INFRASTRUCTURE NEEDS ALONG THE CHANNEL

To support future development along the channel, enabling infrastructure will need to be constructed on an “as needed” basis. The cost of the enabling infrastructure is anticipated to be an outcome of the negotiations with the potential businesses. Any new infrastructure along the channel should be done in a thoughtful way which considers the full buildout of the property and does not block or constrain future development. The land areas along the water and channel should be considered of the highest value and should be developed in a careful way to maximize the potential.

The infrastructure along the channel will need to have docks installed to manage the loading and offloading which will then need to get over the levee. The dock will be determined by the use and mooring system. The options could range from sheet pile which could be operated on top of, to a floating arrangement with piles to anchor the floating dock arrangements (this would depend upon the loads), or piles could be driven to support a stationary dock. The transport of materials over the levee will need to have a crane or some sort of conveying system which will require power and possibly a substation. The levee is controlled by Cotton Belt Levee District No. 1.

Fire water will be required to support any type of dock activity. Potable water is currently available with capacity and service to be improved with addition of the water tower. Electric power service with capacity is currently available to the area along the channel. This limits the current ability to operate the bridge-crane, any future potential material conveyance systems, or other tenant power requirements. The utilities will go over the levee where a dockside distribution system will need to be installed along the channel. Storm drainage is not expected to be an issue unless there is a need for containment and treatment due to possible contaminants.

As prospective tenants and their port infrastructure needs are identified, cargo handling support systems such as a piling structure/dock, platform crane for barge loading, breasting dolphins and mooring points, and walkways can be designed and constructed by the Port Authority.



ROADS

Typically the roadways accessing the Harbor area are two lane roads with minimal to no shoulders. The primary access to the property is AR 20 Highway which is a state-maintained roadway and runs east-west. AR 20 Spur Highway is a segment that runs off AR 20 Highway and provides north-south access down the middle of the property. Phillips 410 Road is a county-maintained roadway which provides access to the northeast portions of the property as well as access to Envirotech.

The current roadway infrastructure is in need of some improvements to mitigate rare surface flooding in times of extreme rains. It is not only important to mitigate surface flooding but to also provide an alternate route to allow large trucks to exit the property aside from AR 20 Highway. The roadway system should also be evaluated to ensure that it can accommodate the increased volume of traffic which will result from increased development as well as sufficient ability to handle heavy haul vehicles.

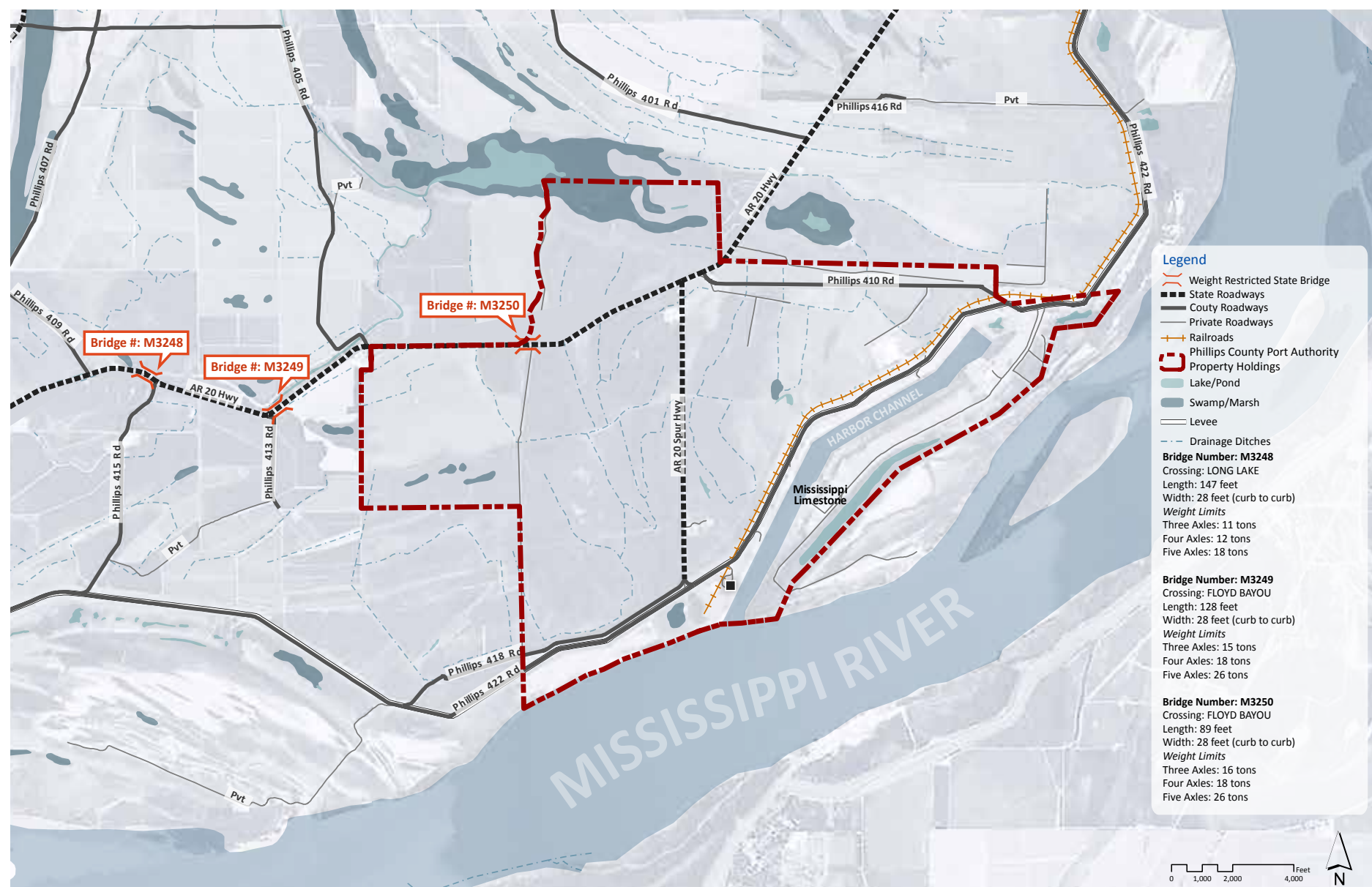
The AHTD currently has plans to create and maintain a loop roadway system to provide uninterrupted access to the Harbor area with detour options in the event of localized roadway flooding, particularly along AR 20 Highway north of the Harbor.

Three bridges under the jurisdiction of the AHTD in the area of the Harbor are identified as Weight Restricted Bridges. See Figure 14 for the bridge locations and weight restrictions.

Along AR 20 Highway bridge number M3249 over the Long Lake has a weight limit of a five-axle vehicle of 26 tons. Bridge number M3248 over the Floyd Bayou has a weight limit for a five-axle vehicle of 18 tons and bridge number M3250 over the Floyd Bayou has a weight limit for a five-axle vehicle of 26 tons.



Figure 14: Transportation Map: Roadways



The AHTD will accomplish this by upgrading portions of Phillips 405, 407, 409 Roads to state roadway standards. This will provide an improved connection to AR 44 Highway to the east of the Harbor. AR 44 Highway and AR 20 Highway will be maintained as a Continuous Improved Route. See Figure 15 for the planned Continuous Improved Route.

The AHTD has indicated that it does not intend on taking on any additional net roadways under the State's jurisdiction. Any new roadways constructed by the Port Authority or the County should be designed to State standards to facilitate future transfer to state control.

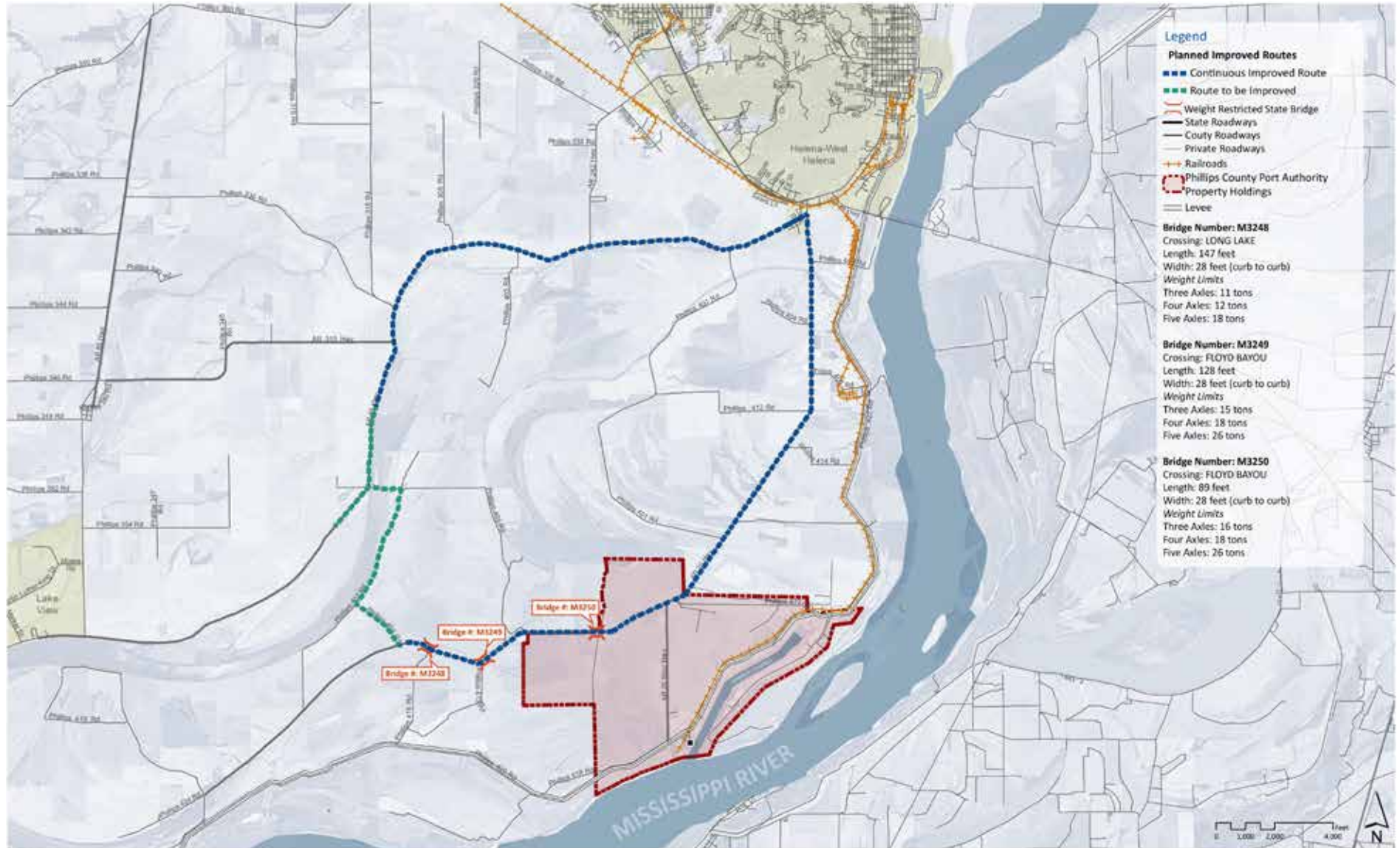
Beyond Spur AR 20 Highway and Phillips 410 Road, the roadways on the levee and along the harbor channel are narrow and constructed of gravel. The structural capacity as well as steep grades and tight

intersections limit maneuverability and access to the east side of the levee.

As development of Helena Harbor progresses efforts to eliminate or minimize additional conflict zones should be considered. Additional at-grade railroad crossings should be avoided. New roadway and driveway intersections should be avoided or aligned with each other to the greatest extent possible. Use of the roadways on the levee or additional encroachment on the levee needs to be carefully evaluated and reviewed with the appropriate regulating agencies.



Figure 15: Transportation Map: Planned Improvements for Roadways



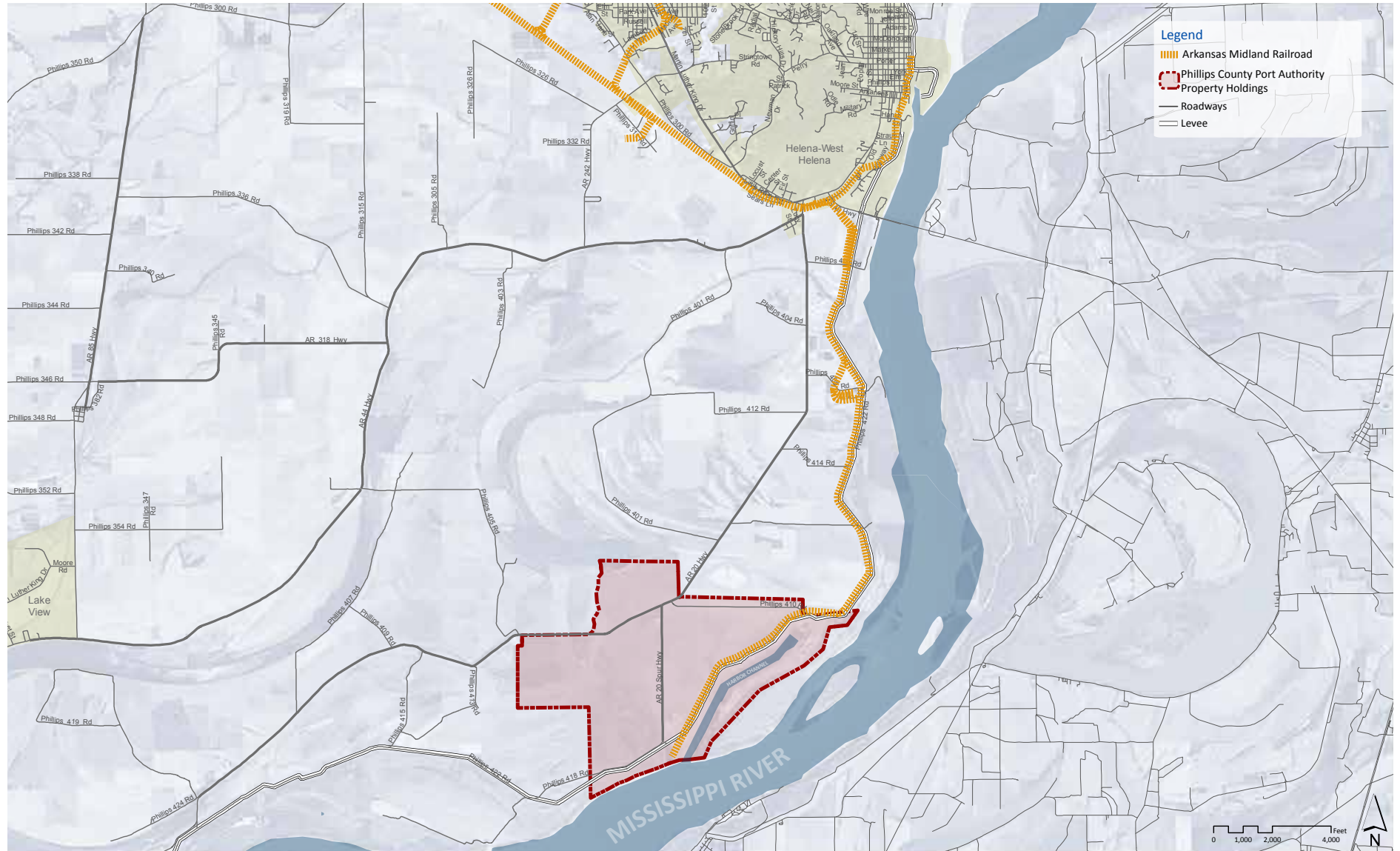
RAIL

The Helena Harbor property is presently served by the Arkansas Midland Railroad, which connects with Union Pacific Railroad approximately 25 miles to the north in the town of Lexa. The Harbor hosts 3.5 miles of recently-renovated rail within its boundaries. Freight rail service currently provides Tuesday, Wednesday Friday rail service to the Harbor area. The potential to move to five-days a week service is currently being discussed.

Increased rail usage and the expansion of the rail network are expected to support growth at Helena Harbor. There are three areas the master plan recommends rail expansion into the site, however, this should be confirmed by a more detailed rail study and will depend upon the types of development is attracted to the site. As there is no desire to add any new rail crossings over State-maintained roadways, the rail expansion is limited to areas where it can avoid a State road crossing but still provide value.



Figure 16: Transportation Map: Railroads

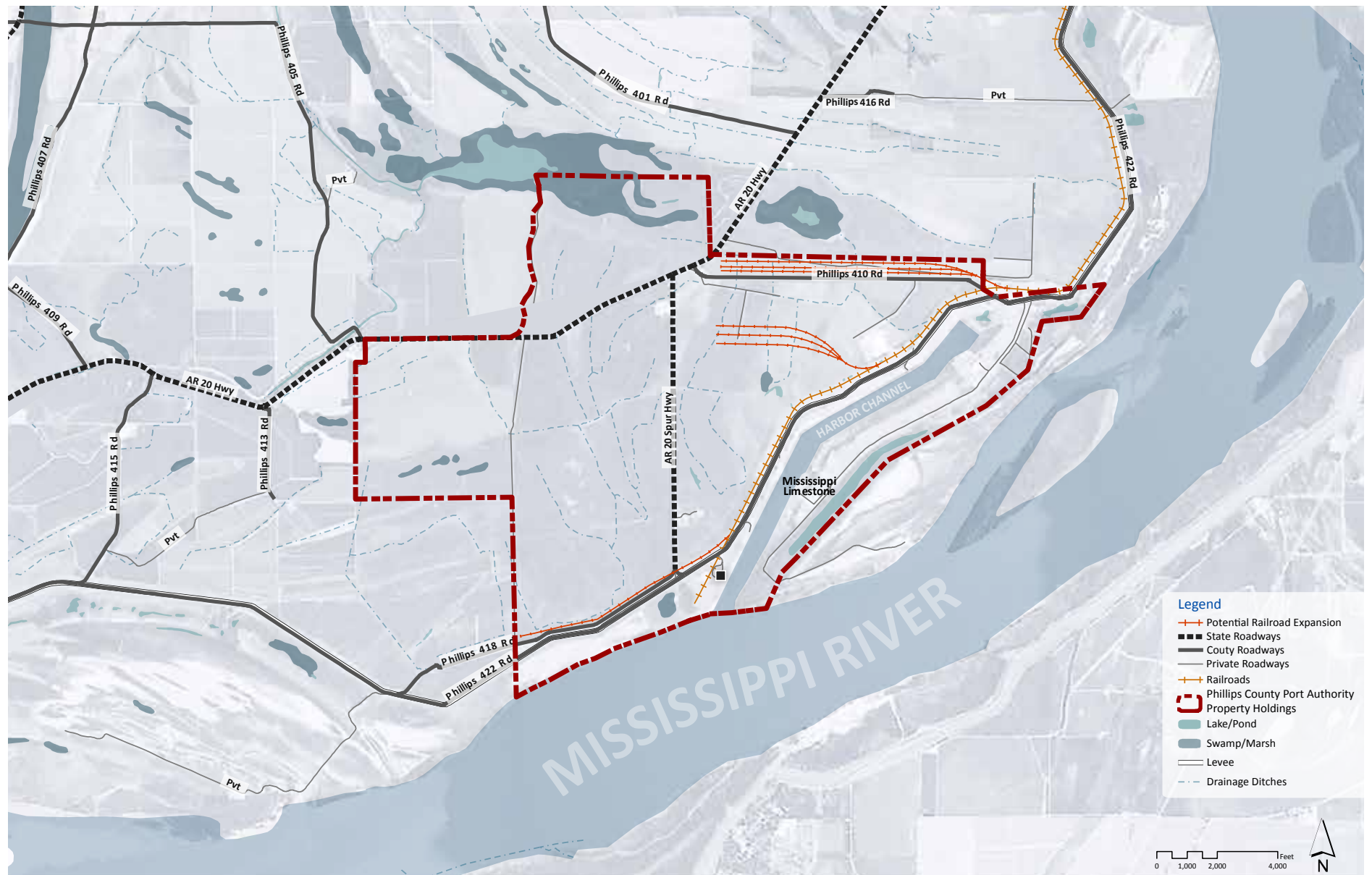


The three recommended rail expansion opportunity areas are:

- North of Phillips 410 Road which could be used for a SIT yard and rail car storage
- A spur off the current line adjacent to the channel which could be a “multi-modal” hub area where trucks load and unload onto the rail line
- An extension to the south along the levee to the property line which would hug the levee to avoid a road crossing over AR 20 Spur Highway



Figure 17: Transportation Map: Railroad Expansion



POTABLE WATER

Potable water service is provided by the Helena-West Helena Municipal Water System. A 16" diameter ductile iron water main enters the Harbor area from AR 20 Highway continuing along Spur AR 20 Highway. An 8" PVC water line runs north along the levee to service Envirotech. A 4" PVC extends east along Phillips 410 Road crossing the levee and turning south to service Helm Fertilizer on the east side of the harbor channel. An additional 4" PVC service line extends south along the driveway to Envirotech, but is currently isolated by a valve and water service to Envirotech is only provided by the 8" water line. See Figure 18 for the Potable Water System network.

In order to meet the future demands for potable and fire water, provision of a water tower is one of the most important priorities for Helena Harbor. A water tower will provide improved water service to existing and future Harbor businesses. Engineering of the water tower should consider the current and future water service demands of the Harbor. Provisions for a fire water system that takes advantage of gravity and minimizes reliance on mechanical solutions should be pursued to ensure system reliability and address insurability. As evaluation of the location of the water tower proceeds, locating the proposed water storage tower at the intersection of AR 20 Highway and Phillips 410 offers an opportunity to create focal feature to identify the entrance to the Port. This location is closely aligned to the 16" water main that would serve as the feed source for the water storage tower.

Although groundwater is considered plentiful in the alluvial aquifers in the area and water wells can be installed, Phillips County is in a Critical Groundwater Area for the alluvial aquifers beginning in 2015. The program is currently a conservation program with no regulatory authority or current regulations impacting water use. Regulation cannot be initiated without a new process involving lengthy legal proceedings, additional notice, and public hearings. Regulation has not been proposed anywhere in the state. An 8"-10" diameter water well approximately 140 ft. in depth will provide 600 Gallons Per Minute (GPM). According to this information, well production is feasible at the project site.

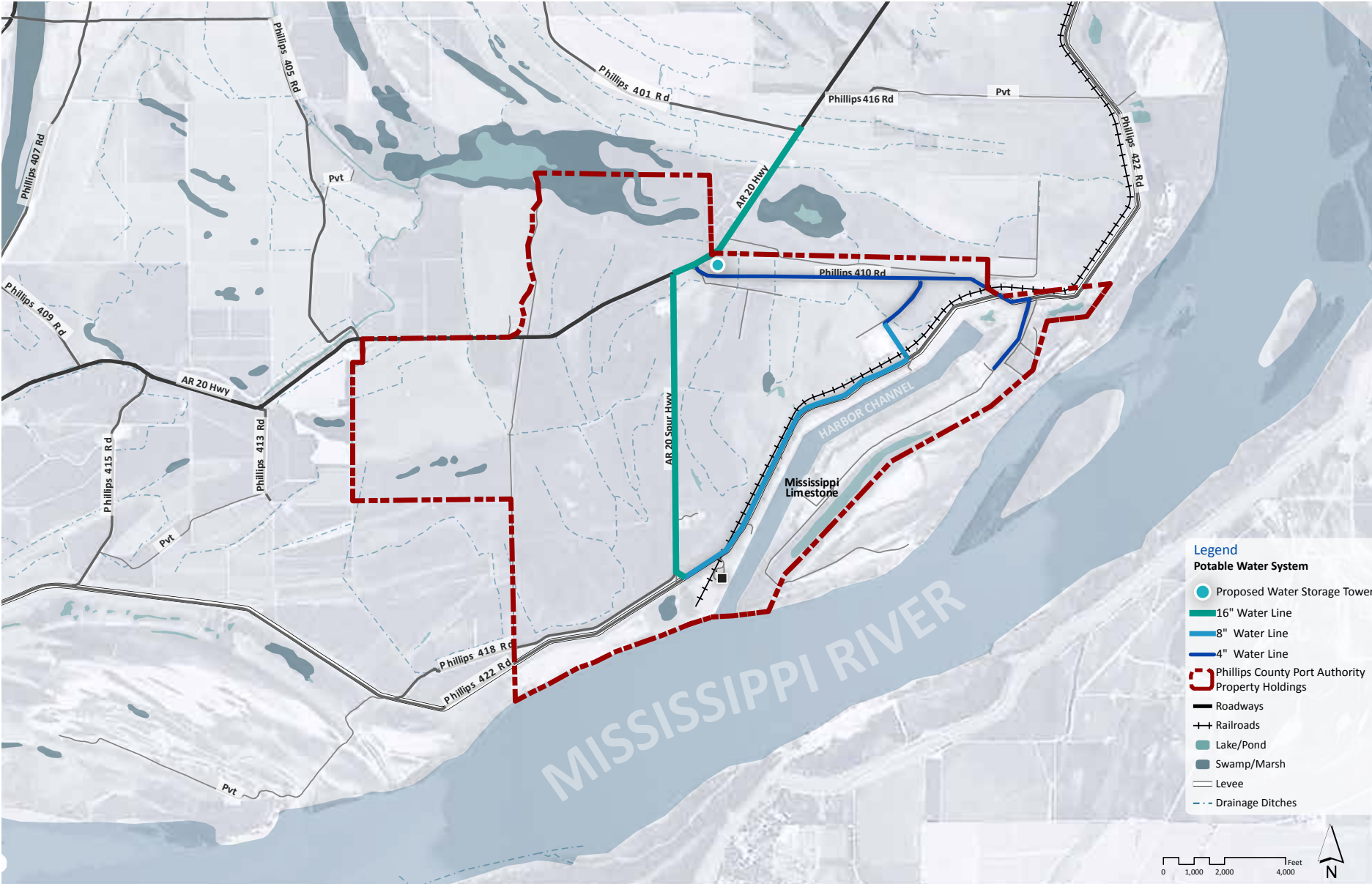
There are no permit requirements on agricultural lands for well drilling but as the property transitions into industrial uses they may be required. The Arkansas Water Well Construction Commission provides the rules and regulations for all well drilling contractors in the State of Arkansas. Arkansas's Water-Use Registration Program provides protection to ensure that the state's water resources are properly managed. In accordance with state laws, any non-domestic user of groundwater that has the potential to withdraw at least 50,000 gallons a day (35 GPM flow rate) or any user of surface water that withdraws 1 acre-foot (325,851 gallons) or more per year, must report their monthly withdrawals between October 1 through March 1, each year, to the Arkansas Natural Resources Commission. The water quality in the area is suitable for irrigation on crops, but if used for any other purpose it will require treatment for iron and possibly sulphur.

As mentioned, depending on the water demands required by prospective businesses the municipal water service can also be supplemented with private water wells, however, a site-wide potable water system is recommended as is the water tower. telecommunications

High-speed fiber-optic internet service is provided to the site by AT&T. This service can be expanded to service additional businesses with the Harbor. At the time of this study a map of the routing was not provided.



Figure 18: Utilities Map: Water



SEWER + PROCESS WATER

The Harbor area currently does not have access to a municipal sanitary treatment system. The nearest sanitary system is located 5-6 miles to the north of the Harbor. A lagoon treatment system (Helena Pond) is located off of AR 44 Highway to the west of AR 20 Highway. See Figure 19 for location of the residential lagoon treatment system. This treatment system is operated by the Helena Municipal Water and Sewer. The lagoon system is only designed to handle residential-grade waste and the current design as well as ADEQ/NPDES environmental permits will not allow industrial-grade waste.

Development of an on-site sanitary sewer treatment system should be a priority and would need to be designed and constructed to handle industrial-grade waste. While a connection to the local municipal system is feasible, it is not recommended due to changing permitting which is making these types of systems obsolete, the residential nature of the system which is not able to handle industrial waste and the elevation which would require pumps to reach the treatment pond.

A recent study conducted by a prospective business looking to move to the at the Helena Harbor property for a biofuels plant recommended a Waste Water Treatment Plant (WWTP) solution which could be scaled up and applied to service the entire site. The proposal was for a Conventional Biological Nutrient Removal (BNR) WWTP. It would include the following components and assumptions:

It would include the following components and assumptions:

- Grit & Grease Removal
- Anaerobic & Anoxic Basins
- Oxidation Ditch
- Clarifiers
- UV Disinfection
- Sludge Digester Basins
- Sludge Dewatering Equipment
- Effluent Holding Tank

ASSUMPTIONS:

- Gravity line used to collect wastewater flows from facility; no pumping required
- Effluent is reused/recycled at facility
- No equalization tanks required
- Discharge to Mississippi River

The on-site WWTP should be located at the low point of the site allowing individual uses to gravity flow to the collection area. One option is to locate it at the very northern central portion of the property where the elevations are at the lowest and already contain some standing water.

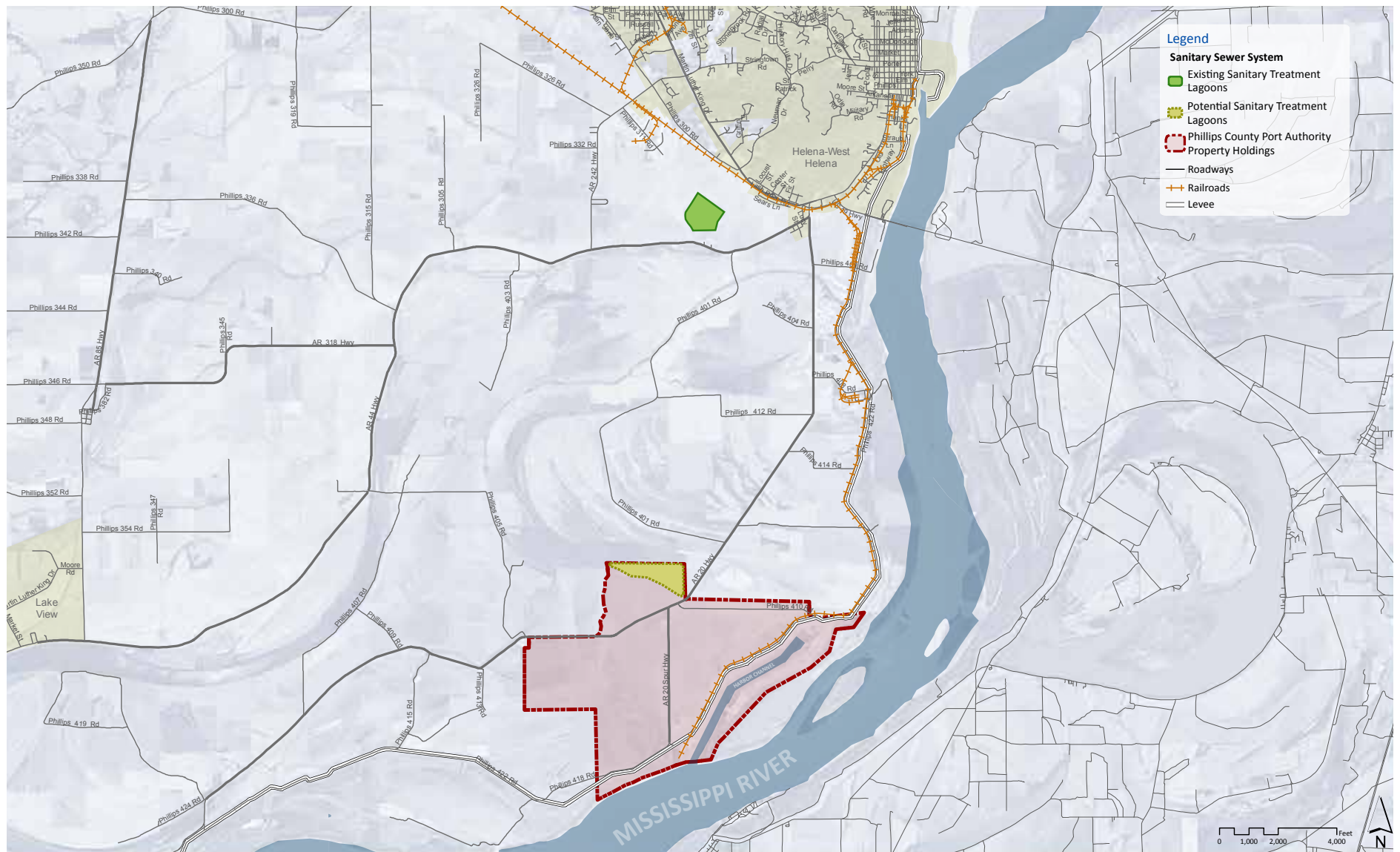
SOLID WASTE

Solid waste collection services are provided by the municipality of Helena-West Helena, with a regional landfill located approximately 17 miles from the Harbor. At this time, for non-hazardous waste, it is anticipated that utilization of the existing municipal system is acceptable. Hazardous waste would need to be handled on a case-by-case basis.

FIRE WATER

As the water tower system is evaluated additional capacity suitable for fire water should be determined. If the proposed water tower cannot sufficiently meet the fire water requirements of the Harbor area, particularly the area to the east of the levee along the channel, then a separate fire water system may need to be explored.

Figure 19: Utilities Map: Sanitary System Improvements



POWER

The Harbor area receives electrical power service from the Woodruff Electric Cooperative. The service to the Harbor originates from the Helena Industrial Substation and is transferred along overhead transmission lines that parallel AR 20 Highway and Spur AR 20 Highway. The portion of the transmission line along Spur AR 20 Highway bisects a portion of the Port property terminating at the Park South Substation. See Figure 20 for the power service network.

The Park South Substation consists of two transformers that are currently operating at 50% capacity. The transmission line servicing the Harbor area transmits 161kv of “clean power”. Depending on the power requirements of prospective tenants, the transmission network

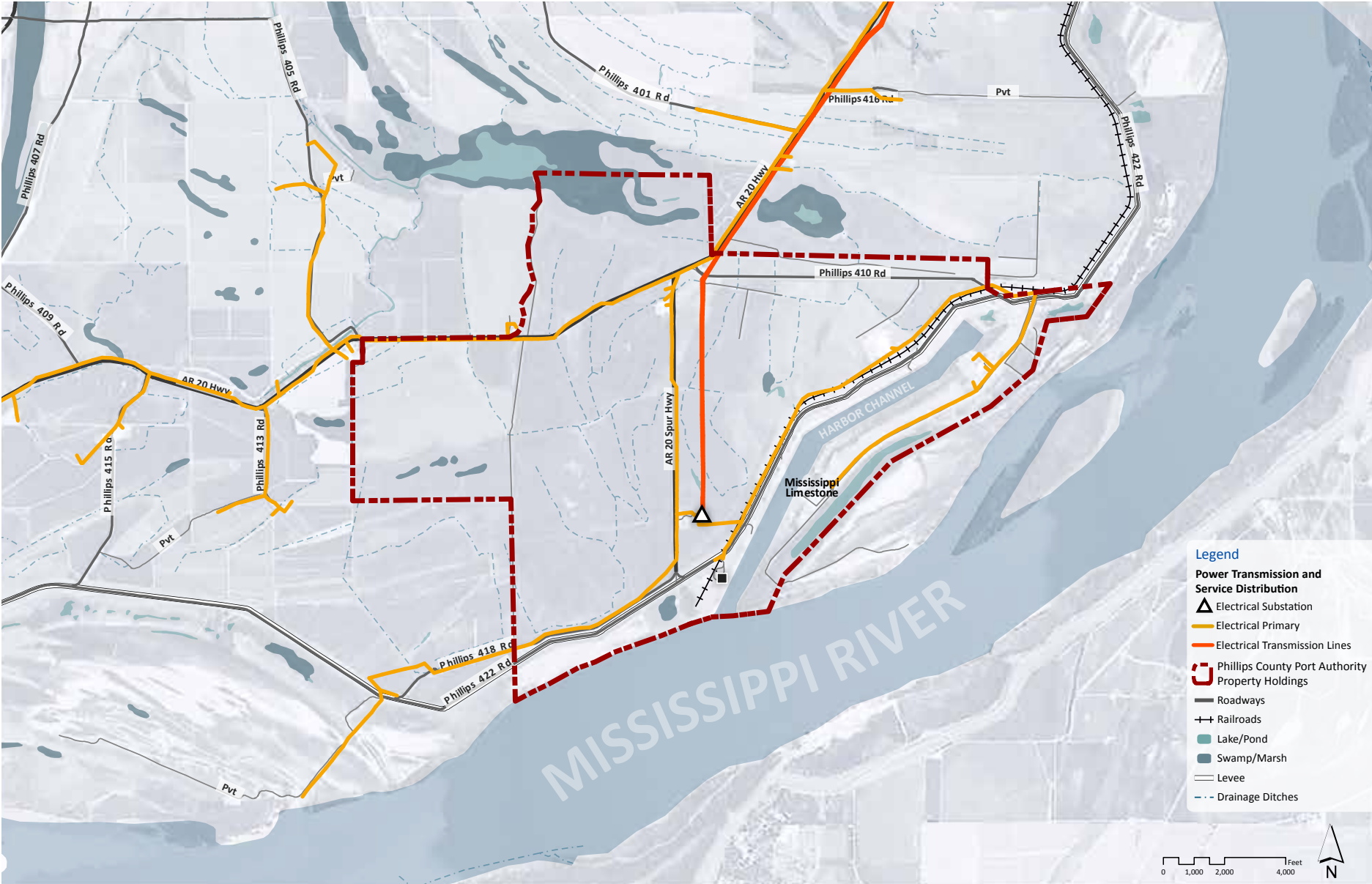
can be upgraded to provide “dirty power”. Preliminary discussions with representatives of Woodruff Electric Cooperative indicate that this portion of the transmission line and the Park South Substation can be relocated to maximize the amount of land available for development.

Overall, there is sufficient power to support the current and future development of the property. No additional improvements to the power system are anticipated at this time. There is a potential for a solar array to be developed on the site, if this was to occur it would provide even more power which would only improve the availability, capacity, redundancy and reliability of the system.

As of February 2016, Helena Harbor is a certified AT&T fiber Ready Site.



Figure 20: Utilities Map: Power



NATURAL GAS

Natural Gas is provided to the Harbor area by CenterPoint Energy. A 10" 800 psi natural gas main enters the Harbor property near the intersection of Phillips 410 and the levee. A 2" natural gas service line currently extends from the 10" main along the levee to service Envirotech. At this time, no improvements to the system aside from line expansion into the development parcels are anticipated.



Figure 21: Utilities Map: Natural Gas



STORMWATER MANAGEMENT

The majority of Helena Harbor area is relatively flat, with system of drainage ditches provide conveyance of stormwater flows terminating into natural ponds/marshes at the north end of the property. A levee system protects the Harbor area from flooding of the Mississippi River. A man-made detention basin is located at the southern edge of the Harbor area, adjacent to the bridge crane allowing for temporary storage/detention of stormwater flows before release.

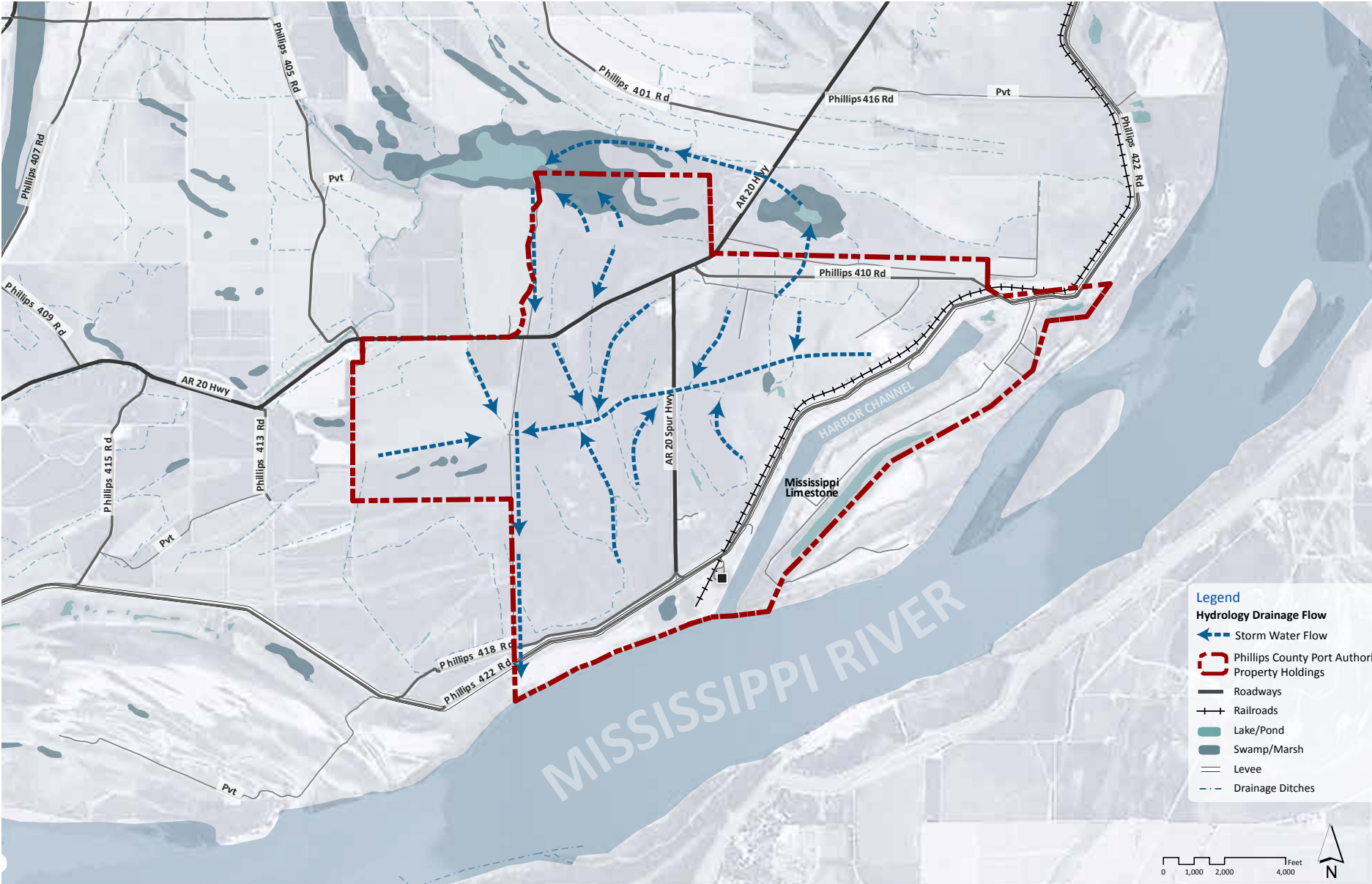
Multiple drainage ditches traverse the Harbor area. Generally the observed flow orients south towards the railroad/levee. The flow then traverses north –northwest away from the levee towards the swamp/marsh areas north of AR 20 Highway. During severe rainfall events as drainage ditches exceed capacity the flows orient north across portions of Phillips 410 and AR 20 Highway where localized flooding of the roadway has been observed in the past. See Figure 22 for the observed stormwater flow.

Due to the levee along the Mississippi River, the floodplains are contained on the south side of the levee along the river. The very northern portions of the property contain a floodplain as well as some areas that may be wetlands. These areas are not confirmed wetlands and will need to be confirmed before that portion of the property is developed in any way.

A stormwater management strategy needs to be developed for the entire property that outlines a holistic plan for drainage and stormwater storage. Given the very flat nature of the land, it is very important to treat the entire property as the study area or each individual parcel will need to handle stormwater for their boundary which will constrain development.



Figure 22: Stormwater Map



SOILS

HSG characteristics of a project site describe water runoff potential. Soils are assigned a classification of A, B, C, or D ranging from high infiltration to low infiltration rates.

The Prime Farmland Protection Act applies to USDA designated “prime farmland” soils. Prime farmland areas are areas that are considered to have optimum conditions for crop growth. The majority of the site is composed of prime farmland. Because of the site’s proximity to the USACE levees, the area will need to be submitted to a Land Evaluation and Assessment (LESA) process and be assigned a score. The USACE will then determine if the proposed project will meet the Farmland Protection Policy Act (FPPA) requirements.

THREATENED AND ENDANGERED SPECIES (T&E)

Arkansas is home to 35 T&E species that range from mammals and birds to insects, amphibians, mussels, and plants. Species of concern that are identified as having habitat in Phillips County, Arkansas are listed below. Third party environmental assessments will further identify any potential impacts to the species listed below and to any others that may be identified through onsite investigations.

BIRDS:

- Bald Eagle (*Haliaeetus leucocephalus*)
- Interior Least Tern (*Sterna antillarum athalassos*)
- Piping Plover (*Charadrius melodus*)

FISH:

- Pallid Sturgeon (*Scaphirhynchus albus*) (possible)

MUSSELS:

- Fat Pocketbook (*Potamilus capax*)
- Pink Mucket (*Lampsilis abrupta*)
- Scaleshell (*Leptodea leptodon*)

Figure 23: Environmental Map



REGULATING ENTITIES

The project site is located within areas governed by several regulating entities. Any development will have to comply with the regulations from each of these entities. Each has its own permit requirements, development review, coordination process, and design criteria.

The following are regulatory agencies identified with jurisdiction for Arkansas site:

- United States Army Corps of Engineers (USACE)
- Helena Harbor Port Authority
- Cotton Belt Levee District Number 1
- Phillips County
- Arkansas Department of Environmental Quality
- Arkansas Department of Health

DESIGN CRITERIA & PERMITS

It is understood that a third party consultant is actively working to develop a detailed permitting matrix that will fully describe the requirements for the Arkansas site. However the Plot Plan identifies items of interest that deserve mentioning as it relates to further design of the site.

- The U.S. Army Corps of Engineers (USACE) will require a permit to discharge waste into the Mississippi River. This coordination will likely involve what is considered a minor Section 408 review for activities that impact USACE sponsored projects such as the Cotton Belt Levee. The Levee district along with the Helena Port Authority will likely be a stakeholder as part of the Section 408 review. From similar projects completed in the past, the USACE will require a set of detailed engineering plans for the anticipated waste water outfall that fully describes the process for crossing the USACE sponsored levee.
- The waste water discharge as discussed earlier in the report will also require permitting from the Arkansas DEQ.
- Railroad Permit/Agreement: Connections to railway tracks must comply with the most current American Railway Engineering and Maintenance-of-Way Association (AREMA) specifications.
- Phillips County Judge will need to review proposed development design plans within Phillips County.

NEXT STEPS

This master plan is a point-of-beginning to creating a roadmap to enable the Helena Harbor property to attract investment and industrial development. The analysis contained within it is high level and should be followed up with more detailed analysis to confirm the findings and assumptions, particularly as it relates to the utility demand. The most critical task that must be undertaken is to ensure that the water systems (potable, sewer and storm) are studied, designed and installed to handle desired industrial buildout.

Similarly, the roads and rail need additional study to determine the system improvements that will facilitate increased volumes and traffic. It is recommended that the enabling infrastructure be the highest priority for Helena Harbor to assure that this property is not eliminated during a prospective investors site selection phase due to inadequate infrastructure. A “systems-wide” approach is recommended that will treat the property as a whole and not push the utility responsibility down to the smaller development parcels.

With the proper attention to the enabling infrastructure, Helena Harbor will become a beacon for new investment and stimulate growth, job creation and economic vitality!

