



# MUNICIPAL CONSULTING





# ABOUT US

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LBYD was founded in 1973 with the incorporation of E. Glenn Bishop & Associates. In 1978, with the merger of the structural engineering firm Lane & Hodnett Structural Engineers, the firm became Lane/Bishop/Hodnett, Inc. In 1987, with the addition of Dale York and Jim Delahay as Principals, the firm became LaneBishopYorkDelahayInc, known today as LBYD, Inc.

In 2001, LBYD began offering civil engineering services. With the addition of the civil department and the continued commitment of our structural department, LBYD has experienced phenomenal growth. We continue to pursue growth opportunities evidenced by opening the Huntsville office in 2009, the Tampa Bay office in 2011, the Auburn office in 2017, and the Nashville office in 2018.

In November 2020, LBYD merged into North Wind Group as a subsidiary company.

LBYD is part of a family of companies with common ownership under Cook Inlet Region, Inc. (CIRI)—an ANC. The North Wind family, comprised of 17 companies, is managed by North Wind Group, a CIRI government contract holding entity. Under North Wind Group, all 17 companies share the same proven corporate infrastructure (i.e., Health and Safety, Quality Programs, human resources, accounting, contract management, project controls) that has been in place over 25 years successfully completing a combined total of over \$2.4B for 35 offices/districts/ sites within 11 Federal agencies and commercial entities through various contract types including firm fixed price (FFP) indefinite delivery/indefinite quantities (IDIQs). This group of companies provides significant flexibility and diversity, enabling us to effectively meet and exceed customer requirements and expectations through significant reach-back to resources within our own organization.

LBYD is certified by the National Minority Supplier Development Council (NMSDC) as well as the Southern Region Minority Supplier Development Council (SRMSP). LBYD is a minority and economically disadvantaged business (SDB) by statute under 43 U.S.C. § 1602 and 1626(3)(1) & (2) and further codified under 13 C.F.R. § 124.109(a)(2) due to our ANC ownership by CIRI, as determined by the National Congress of American Indians (NACI). In addition, LBYD is a Small Business (SB) per the Small Business Association.





## *LARGE FIRM EXPERTISE, SMALL FIRM RESPONSIVENESS*

Large Firm Expertise, Small Firm Responsiveness has become a staple across our company and is present in the work we do on a daily basis. Starting out as a small one-person firm, and growing to over one hundred engineers, we have provided engineering services for various clients including architects, engineers, contractors, commercial developers, public and private institutions, as well as local, state and federal governments.

## OUR PROJECTS

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LBYP provides civil and structural engineering services on a wide variety of project types for architects, engineers, contractors, commercial developers, public and private institutions and local, state and federal governments. Our project experience includes libraries, educational facilities, sports fields and complexes, public parks, office complexes, parking garages, hospitals, mixed-use facilities, convention centers, bridges, stadiums, arenas, correctional facilities, manufacturing and industrial facilities, residential buildings, residential subdivisions, municipal consulting and government facilities.





# OUR SERVICES



## STRUCTURAL ENGINEERING

Our structural engineers are knowledgeable in the development of different framing schemes and foundation designs using a wide variety of construction materials for determining the most economical and constructible structural systems.



## CONSTRUCTION ENGINEERING

We understand that connection design must be safe and must be economical for the fabricator and erector to produce. We work closely with fabricators to provide designs that work well with the fabricator's shop practices and can be erected in the field as easily as possible.



## HYDROLOGY AND WATER RESOURCES

We offer comprehensive hydraulic and hydrology engineering services to ensure quality corrective and preventative measures for stormwater drainage.



## STORM SHELTERS

We design storm shelters within schools and other structures to withstand loading from tornadoes and heavy winds in accordance to ICC 500, and safe rooms according to FEMA P-361.



## INDUSTRIAL APPLICATIONS

We work with industrial clients to identify the problem they are facing, understand the processes that are in place in the facility, and create a custom solution around it to make sure the facility meets their exact needs.



## CITY ENGINEERING

Our engineers can assist municipalities in all areas of city engineering including development plan reviews, roadway inventories and resurfacing schedules, stormwater management and permitting, public works manuals, parks and recreation design, capital improvement plans, funding assistance, and more.



## CIVIL ENGINEERING

Our work includes site grading, storm water management, best management practices, erosion and sediment control, utility design which includes gravity sanitary sewer designs, wetland mitigation, flood plan modifications, stream impacts, on-site sewage disposal, and earthwork calculations.



## TEMPORARY STRUCTURES

We design and verify the structural capacity of temporary structures such as tents, temporary grandstand seating, stage platforms, etc.



## PEER REVIEWS

Peer reviews can include interviews, review of documents obtained during the review process and technical reviews.



## FORENSICS

We offer innovative and economical investigative and corrective design services in areas such as site placement, foundation failures, roofing and envelope investigations, storm damage, earthquake and vibration damage, truss failures, concrete failures, expert testimony and litigation support, and more.



## PARKING

LBYP is a leader in the design of parking facilities in the Southeast. We have designed parking facilities for federal facilities, government facilities, institutional facilities, office buildings, churches, hospitals, mixed-use facilities, commercial buildings, and residential buildings.

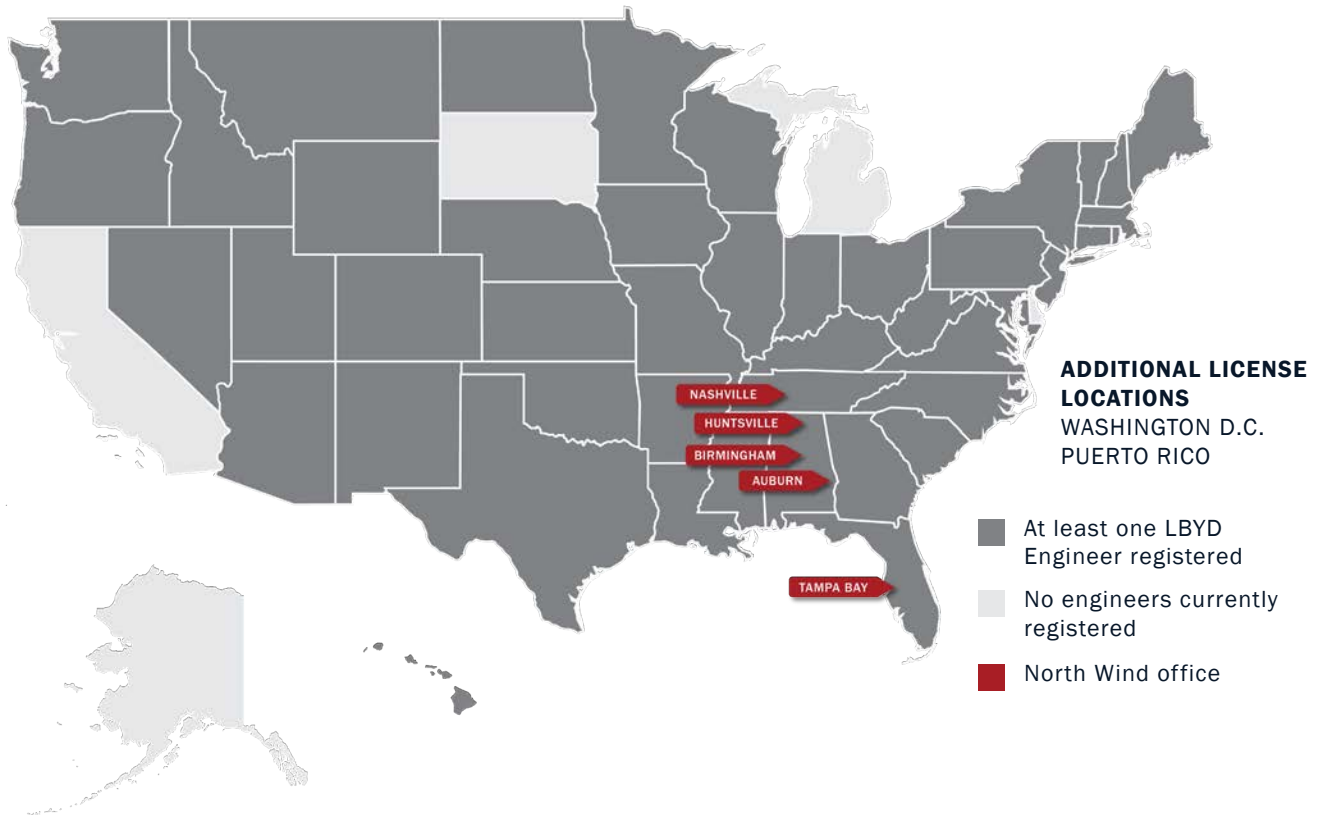


## SUSTAINABLE DESIGN

LBYP is a Founding Member of the Alabama Chapter of U.S. Green Building Council. We have designed many facilities that have earned LEED certifications.

# LICENSED LOCATIONS

LBYP has engineers currently registered in multiple states across the country, but we are continually expanding our licensure as needed.



# LEADERSHIP



**BRAD CHRISTOPHER, PE**  
PRESIDENT / SENIOR PRINCIPAL ENGINEER

Brad Christopher is the President & General Manager of LBYP, Inc. and Engineering Group President. He graduated from Auburn University where he received his Bachelor's and Master of Science degrees in Civil Engineering. Brad has over 30 years of design experience covering new construction, renovation, and additions to existing structures for institutional, athletic, commercial, municipal, and industrial uses. He is registered as a professional engineer in 10 states.

Brad is an active member of the Auburn University Engineering Alumni Council, the American Concrete Institute, the International Code Council, Inc., and the Structural Engineers Association of Alabama. He has also served on the Board of Directors for the Structural Engineers Association of Alabama, and Auburn University Civil Engineering Advisory Board, and annually assists with the senior civil engineering design class at Auburn University. Brad has authored three articles for Structure Magazine on economical concrete construction.



**BOB JONES**  
MUNICIPAL CONSULTANT  
GIS ANALYST, PLANNING & ZONING OFFICIAL, QCI (STORMWATER)

Bob is an APOST certified law enforcement officer utilized in enforcement of ordinances and resolutions. He is a certified planning and zoning official, as well as a GIS analyst responsible for constructing maps for zoning and metadata for census and comprehensive plan analysis and adoption. Bob's other responsibilities throughout his experience have included preparation of ordinances and resolutions for a fluent effective operation for all regulations; ensuring ADA compliance and complaint coordination, permitting development and adoption processes; reviewing applications and plans for compliance with all regulations; and advising and assisting boards, commissions, and councils with all aspects of land use and nuisance abatement.

# SUMMARY OF SERVICES

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## GENERAL ENGINEERING SERVICES

LBYD provides civil and structural engineering services on a wide variety of project types for architects, engineers, contractors, commercial developers, public and private institutions and local, state and federal governments. LBYD's project experience includes libraries, educational facilities, sports fields and complexes, public parks, office complexes, parking garages, hospitals, mixed-use facilities, convention centers, bridges, stadiums, arenas, correctional facilities, manufacturing and industrial facilities, residential buildings, residential subdivisions, municipal consulting and government facilities.



## DEVELOPMENTAL PLAN REVIEWS

Our engineers can assist throughout the Development Plan Review Process, reviewing each set of preliminary plans and verifying final plans.



## ROADWAY INVENTORIES & RESURFACING SCHEDULES

Through our experience with master planning and roadway assessments we are able to assist in developing a priority system for upgrades as well as provide construction administration.



## STORMWATER MANAGEMENT & PERMITTING

Through our 47 years of experience and our development of ADEM MS4 Permits we are well versed in meeting all aspects of stormwater management and the permitting process.



## PUBLIC WORKS MANUAL

Having a standardized Public Works manual will help to provide consistency and accountability. With our experience developing these for cities across the Southeast, we can bring knowledge of best practices when developing and implementing the manual.



## PARKS & RECREATION DESIGN

Parks and Recreational areas are an essential part of the livelihood of a city. We have helped to develop and implement plans for these types of community facilities across the southeast.



## CAPITAL IMPROVEMENT PLANNING (CIP)

With the limited resources that are often available, prioritization of expenditures is key. Our personnel are well suited to assist in the development of CIPs that prioritize expenditures while maintaining compliance with departmental/city wide strategic and/or comprehensive plans.





### **FUNDING ASSISTANCE**

LBYP personnel can help identify funding opportunities for capital improvement projects and assist in completion of grant applications and requirements, to include ALDOT funded projects.



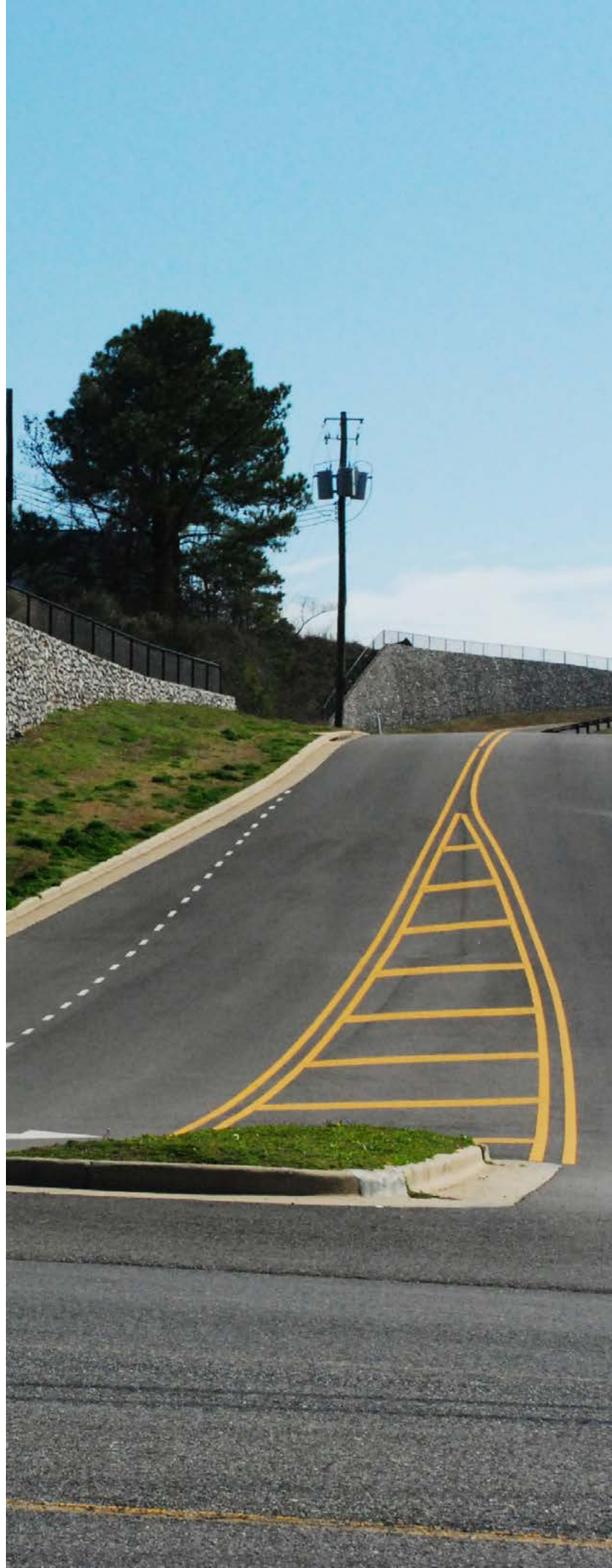
### **GIS SERVICES**

Provide mapping service for tracking and review for departments to maintain up to date and ease of access to information.



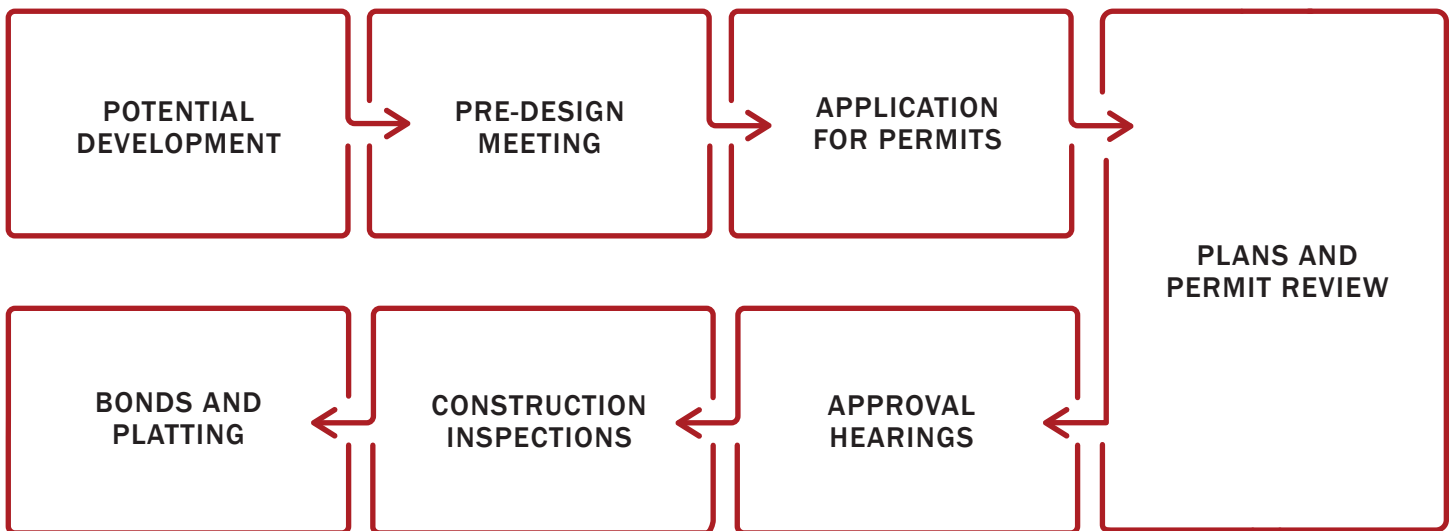
### **GOVERNMENTAL SERVICES (PERMITTING ASSISTANCE AND PLANNING & ZONING)**

Provide training and guidance for boards, commissions and employees for permitting, zoning, subdivisions and other regulations. Assist in ordinance and regulation construction and assist in enforcement methods for abatements or prosecution.



# DEVELOPMENT PLAN REVIEW

Development of, and continuing review and updating regulations relating to Zoning, Subdivisions and ADA Compliance. Assist in the establishment and operations of boards and their legal requirements. Review rezoning, variance, special exception and subdivision submittals. Provide GIS services for mapping master plan and zoning. Create master plans where none are in place and guide development and greenspace within clients' desired outcome. Provide support in constructing ordinances and resolution for fluid operational standards. Assist with ADA compliance and proposals. Provide mentoring to employees/members for performing tasks/projects in conducting meetings, procedures and duties. Provide on-site consulting at public hearings that are unusual or complicated or at anytime requested.



**LBYP can assist with the entire plans review process from the pre-design meeting all the way through construction. We can assist with the following:**

- Assist the local municipality with setting up and running the Pre-design Meeting to ensure that the appropriate approval route is select to streamline permitting.
- Review the annexation, re-zoning, subdivision/platting, variance, etc. applications and make recommendations to the developer and municipality.
- Attend municipal meetings to include Planning Commission, Board of Zoning Adjustments, City Council, etc.
- Review the civil construction documents to include preliminary and plats site layout, accessibility, grading, storm drainage, storm water detention, erosion and sediment control plans and permits, water quality, and site utilities.
- Review bonds for paving and infrastructure.
- Perform site inspections during construction to ensure design standards are being met.
- Review final plats for acceptance by the municipality.



# ROADWAY INVENTORIES AND RESURFACING SCHEDULES

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01.



## INVENTORY

Work with owner to determine what roadways to evaluate.



## PLAN

We will evaluate roadways to determine severity of need and schedule of construction.

02.

03.



## BID

Assist in the development of bid packages and specifications.



## CONTRACT

Identify and adhere to all parties' needs while entering into a formal construction agreement.

04.

05.



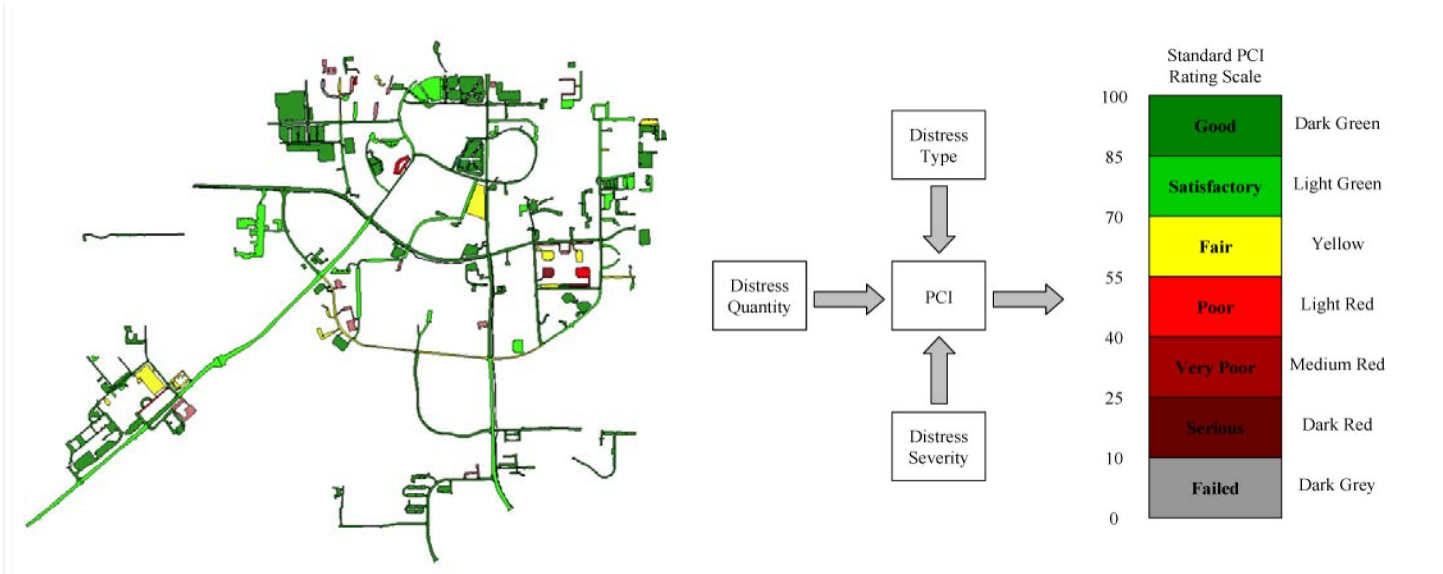
## CONSTRUCTION ADMINISTRATION

Quality Control throughout the construction phase.

# AUBURN UNIVERSITY 5-YEAR PAVEMENT MASTER PLAN

## AUBURN UNIVERSITY | AUBURN, ALABAMA

This project included condition assessment of all asphalt roadways on the University Campus. LBYD teamed with a geotechnical engineering firm to evaluate 3.3 million SF of roadways and 4.5 million SF of parking lots. Data obtained was input into a MicroPaver 7.0 paving database to generate a pavement condition index (PCI) for each pavement section. This system was utilized to provide the client information on pavement current conditions, degradation rates and anticipated future condition if no maintenance is performed. The results of this effort were assembled into a campus-wide condition assessment. From the results of the campus wide assessment, certain priority areas were identified by the University for more detailed evaluation and coring. This data was then evaluated and detailed budget estimates were provided for repair and/or replacement of these priority areas.





# STORMWATER MANAGEMENT

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Our engineers are well versed in meeting all aspects of stormwater management requirements. We have assisted in the development of the ADEM MS4 Permit for several municipalities. Our efforts included reviewing the draft permit, determining if municipal regulations need modifying and propose revisions, assist with obtaining the permit and working with the municipality to ensure the permit is being implemented with new developments. We can also assist with the annual reporting review and the required inspections.

## DESIGN

- Design Drawings meeting all requirements for construction
- Best Management Practices (BMP) Design
- ADEM Permitting
- Water Quality

## STORMWATER FEATURES INCLUDE

- Post-Construction Operations and Maintenance
- Illicit Discharge
- Retention
- Detention
- Water Quality

## POST CONSTRUCTION

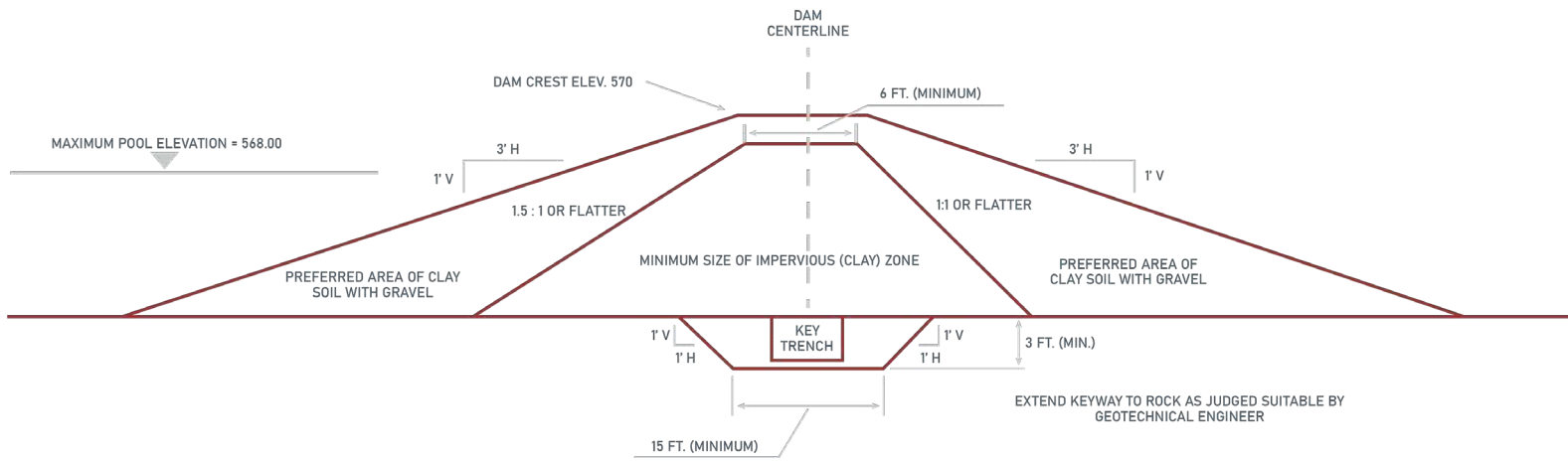
- Operations and Maintenance Manuals
- Annual Reporting
- Inspections
- Condition Assessment

## RISK

- Failure to comply could fall on the developer, home owner or municipality
- Penalties may be assessed for non-compliance with MS4 permits.

## BENEFITS OF STORMWATER MANAGEMENT ASSISTANCE

- Handle all inspections pertaining to ADEM Illicit Discharge
- Handle all inspections for Stormwater Ponds and water quality/measures
- Handle post construction stormwater monitoring and reporting
- ADEM, FEMA, AND USACE Permitting Experience



## FEMA/FLOODPLAIN MANAGEMENT

LBYD has the staff and expertise to handle proposed drainage improvements and developments that are located in the FEMA jurisdictional floodplain. We can complete the necessary flood studies, encroachment analysis, and required permitting for developments located in the floodplain. Our services include:

- Base Flood Elevation (BFE) Determination
- Floodplain and Floodway Delineation and Mapping
- No-Rise Certification (Floodway Encroachment)
- FEMA Letter of Map Revision (CLOMR, LOMR, LOMA) Permitting
- Stormwater Calculations for Bridge/Culvert Design
- Stream Restoration and Rehabilitation
- Coordination and permitting for Waters of the US (WOTUS – streams and wetlands) through the USACE
- Coordination and permitting with U.S. Fish & Wildlife Services and the State Historic Preservation Office (SHPO)

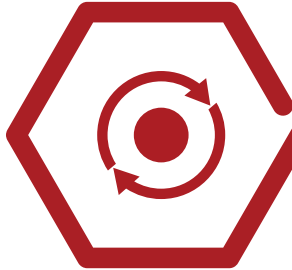
**LBYD HAS A  
CERTIFIED  
FLOODPLAIN  
MANAGER (CPM)  
ON STAFF**



# PUBLIC WORKS MANUAL

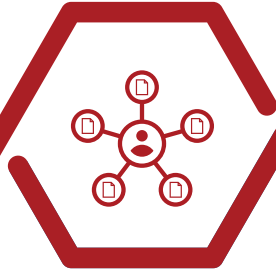
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## BENEFITS



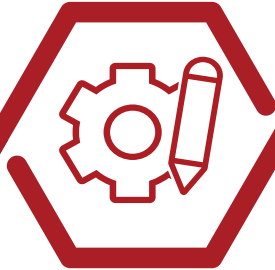
### CONSISTENCY

The document serves as the repository for Departmental processes, procedure, and construction/development standards.



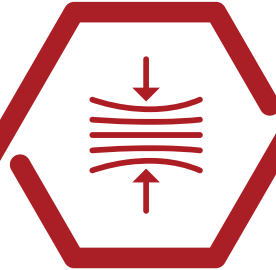
### ACCOUNTABILITY

With the formalization of these processes and standards, everyone knows what is to be expected.



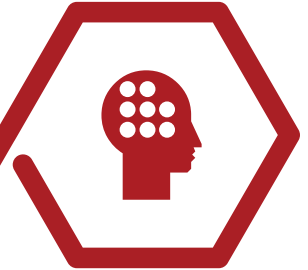
### CUSTOMIZABLE

The manual can be as simple or elaborate as your organization requires, and can be organized in such a way to allow for future customization.



### RESILIENCY

In the event of an unforeseen emergency, this document prevents the loss of institutional knowledge.



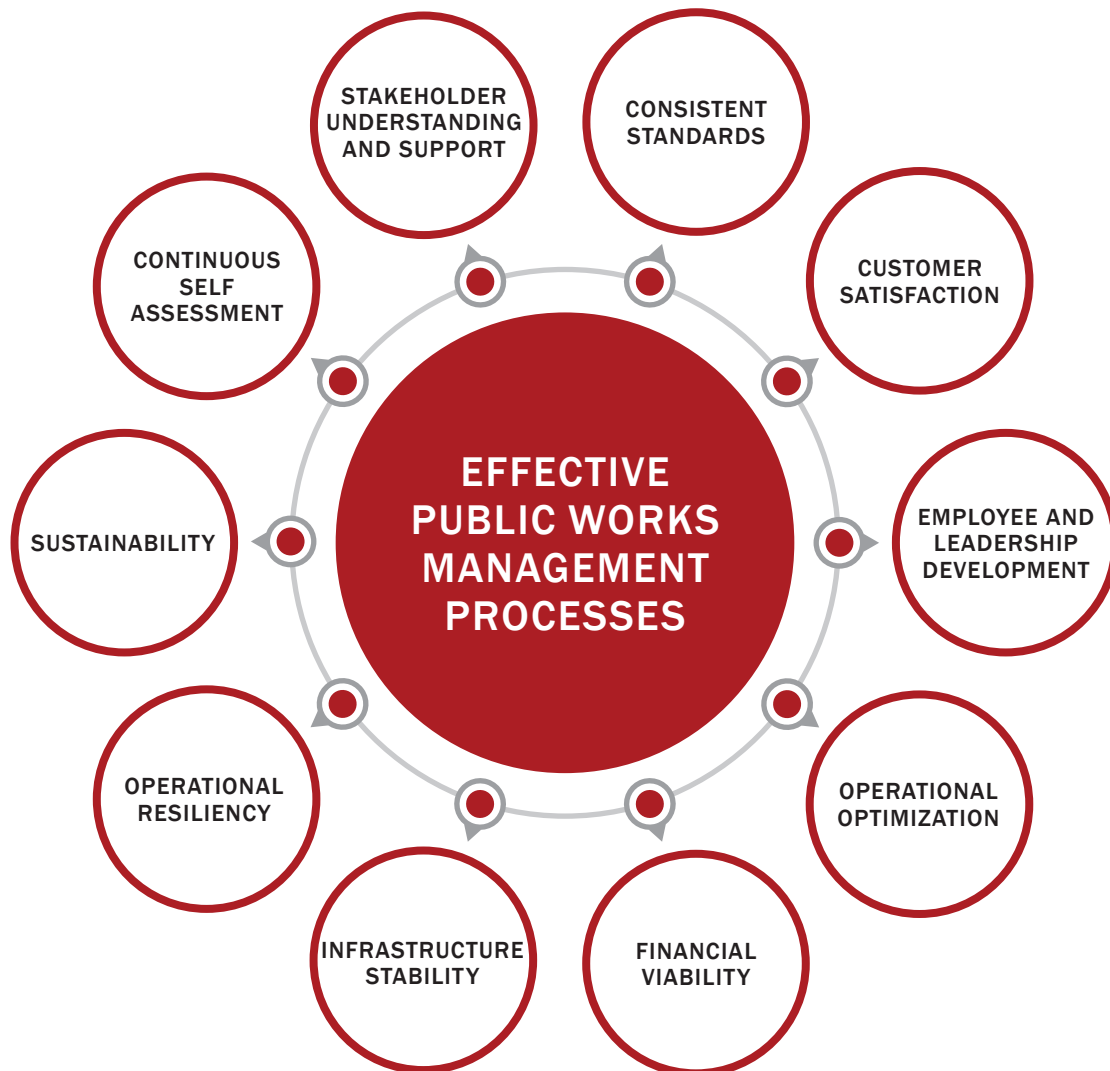
### PROMOTES UNDERSTANDING

Helps stakeholders better understand “what we do” by documenting operations.



# EFFECTIVE PUBLIC WORKS MANAGEMENT PROCESSES

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# PARKS AND RECREATION



## MASTER PLANNING

Working alongside Parks and Rec personnel, LBYP can plan for future projects to accommodate program growth, evolving program needs and other challenges. Master plans can be utilized to evaluate potential site configurations, generate community support and secure project funding.



## PUBLIC ENGAGEMENT PLAN

Working alongside city officials to identify key stakeholders from the community including citizens, politicians and community leaders. Conducting community research and engaging key stakeholders and the community at large to identify critical needs and encourage public buy-in for planned projects.



## SITE PLANNING

Activities may range from high-level site evaluation of multiple sites for site selection for a ground-up project to detailed analysis of expansion or reconfiguration potential of an existing site. These activities are geared toward identifying the most economical and efficient site configurations to meet all needs of a parks and/or recreation facility.

## 6 ELEMENTS OF PARKS AND RECREATION PLANNING



## PERMITTING

Our engineers have experience permitting various city and state funded parks and recreation infrastructure including boat ramps, multi-use trails, splashpads, etc.



## OPERATIONAL / MAINTENANCE PLANNING

Material choices will impact initial cost, long-term cost and level of day-to-day maintenance required (natural vs synthetic turf, asphalt vs concrete pavements, topsoil fields vs sand base with sub-drains, etc.). In addition to material choices, ensuring a facility has the appropriate support facilities for the parks and rec personnel who will be tasked with maintaining the facility is a critical planning element.



## ADA REQUIREMENTS

We can evaluate city infrastructure such as parks, athletics facilities and community facilities for ADA compliance and construction plans for any necessary remedial work to bring the facilities into compliance.



**WEST HOMEWOOD PARK** —————  
HOMEWOOD, ALABAMA



**MAC GRAY PARK** —————  
PRATTVILLE, ALABAMA



**CITY OF CALERA** —————  
CALERA, ALABAMA



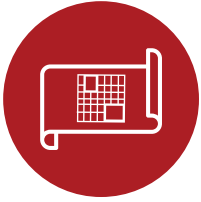
**VANDIVER PARK** —————  
VANDIVER, ALABAMA



**BILL NOBLE PARK** —————  
GARDENDALE, ALABAMA

# CAPITAL IMPROVEMENT PLANNING

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## COMPREHENSIVE PLAN

Addressing features of the community such as zoning, transportation, land use and urban design issues, Comprehensive Planning gives community members the opportunity to shape the neighborhoods where they live and work.

### Features of a Comprehensive Plan:

- Create new or update city's general and character area plans
- Review private-sector projects
- Provide community demographics, market trends and forecast, and real estate profiles
- Process amendments to the general and character area plans
- Perform special planning studies



## CAPITAL IMPROVEMENT PLAN (CIP)

Capital Improvement Plans provide an outline for sustaining and improving a city's infrastructure and other assets.

### Features of a CIP:

- Capital projects, equipment and studies
- Prioritizing expenditures
- Financial planning
- Construction schedules
- Project justification



## STRATEGIC PLANNING

Strategic Planning involves the process of interconnecting the comprehensive plans vision with the CIP and creating a guide for the department.

### Strategic Planning Process:

- Identifying issues
- Stating goals
- Collecting data
- Preparing the plan
- Creating implementation plans
- Evaluating alternatives
- Adopting a plan
- Implementing and monitoring the plan

## COMPREHENSIVE INFRASTRUCTURE ASSESSMENT

In working with cities across the states of Alabama and Florida, our engineers have the experience implementing and developing the Capital Planning Process.

### Comprehensive Infrastructure Assessment

- Evaluate the city's current infrastructure and condition of structures
- Triage order of repair
- Make recommendations
- Seek funding opportunities

### Examples Include

- Pump Stations
- Fleet Equipment
- General Facilities
- Fire Stations
- City Halls
- Police Stations
- Maintenance Facilities
- Roadways



# FUNDING ASSISTANCE

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Meet with appropriate City staff and outside stakeholders to help identify needs and potential funding sources.

Partner with a grant writing agency to ensure all requirements and reporting are met.

Identify grant sources and begin application process.

## EXAMPLES OF GRANT FUNDING AGENCIES

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### **CDBG - COMMUNITY DEVELOPMENT BLOCK GRANT**

Funds are generally used for long-term community needs, including mitigation. Utilities can use these grants to buy, construct, or fix public facilities such as water and sewer systems. They can also match FEMA grants. Grantees may fund activities that meet urgent community development needs.

#### **ENTITLEMENT COMMUNITIES**

Entitlement communities can receive grants directly from HUD. They include three groups:

- Metropolitan cities with populations of at least 50,000
- Principal cities of Metropolitan Statistical Areas (MSAs)
- Urban counties with populations of at least 200,000 (excluding the population of entitled cities)

#### **STATE ADMINISTERED**

The Housing and Community Development Act of 1974 allows each state to manage CDBG funds for non-entitlement areas. Non-entitlement areas:

- Are cities with populations of less than 50,000 people
- Do not include cities that are designated as principal cities of MSAs
- Include some counties with populations of less than 200,000 people

#### **DISASTER RECOVERY ASSISTANCE**

In response to presidentially-declared disasters, the U.S. Congress may authorize disaster recovery funding for the CDBG program. This funding helps cities, counties and states recover from disasters, especially in low-income areas. Disaster Recovery grantees are required to spend at least 50 percent of their funds on activities that principally benefit low- and moderate-income persons.

Examples of CDBG-eligible activities include:

- Debris removal not covered by the Federal Emergency Management Agency
- Acquisition, construction or rehabilitation of public facilities such as neighborhood centers
- Construction or repair of water, sewer, or drainage systems
- Construction or reconstruction of water lift stations
- Public services
- Helping businesses retain or create jobs in disaster-impacted areas
- Planning and administration costs (no more than 20 percent of the grant)

### **CWSRF - CLEAN WATER STATE REVOLVING FUND**

This program is a federal-state partnership that provides communities a permanent, independent source of low-cost financing for a wide range of water quality infrastructure projects.

## **FEMA**

Public Assistance Grant Program allows for communities to recover from major disasters, assist in debris removal, provide life-saving protective measures, and restore public infrastructure.

## **DWSRF - DRINKING WATER STATE REVOLVING FUND**

This is a federal-state partnership program to help ensure safe drinking water. The program provides financial support to water systems and to state safe water programs, as per the 1996 Amendments to the Safe Drinking Water Act (SDWA).

## **ATRIP - ALABAMA TRANSPORTATION REHABILITATION AND IMPROVEMENT PROGRAM**

ATRIP is an ALDOT administered federal aid highway program that funds up to 80% of the construction of important roadway projects.

## **OTHER PROGRAMS & SERVICES FOR COMMUNITIES & NONPROFITS**

- ADECA - Alabama Department of Economics & Community Affairs
- Community Facilities Direct Loan & Grant Program
- Community Facilities Guaranteed Loan Program
- Community Facilities Technical Assistance and Training Grant
- Emergency Community Water Assistance Grants
- Senate Appropriations
- Solid Waste Management Grants
- Strategic Economic and Community Development
- Telecommunications Infrastructures Loans & Loan guarantees
- Water & Waste Disposal Loan & Grant Program
- Water & Waste Disposal Loan Guarantees
- Water & Waste Disposal Predevelopment Planning Grants
- Water & Waste Disposal Revolving Loan funds
- Water & Waste Disposal Technical Assistance & Training Grants

## **OTHER PROGRAMS & SERVICES FOR UTILITIES**

- Energy Efficiency and Conservation Loan Program
- Energy Resource Conservation

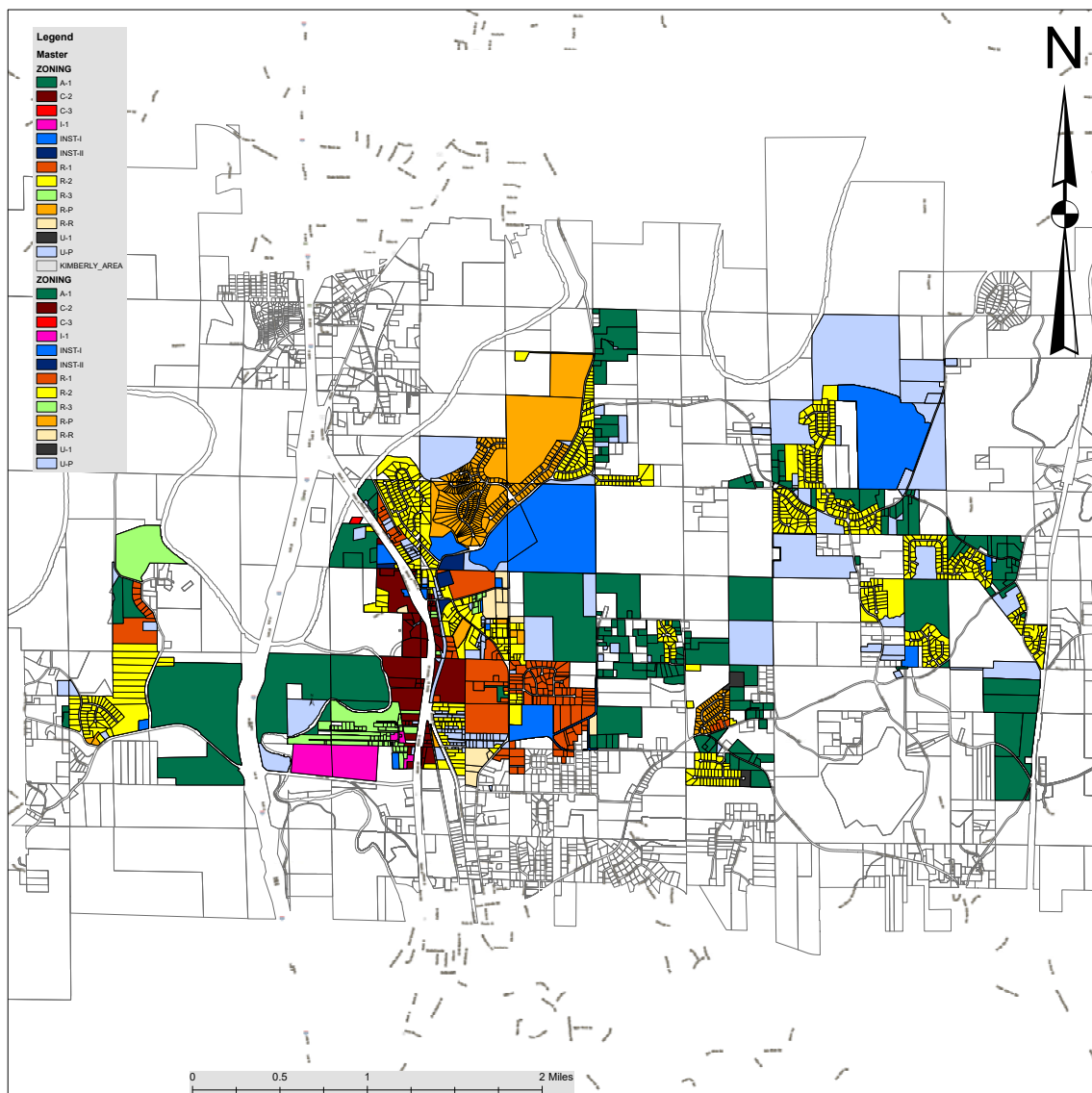


**LBYD STAFF  
HAVE  
COMPLETED  
20-30 GRANT  
FUNDED  
PROJECTS**

# GIS SERVICES

Geographical Information System is a computer system that analyzes and displays geographically referenced information, taking your data and putting it into a display system and storing the properties (metadata) for a living manageable records system. This system's visual properties facilitate an extremely transparent and understandable presentation. There are infinite uses but here are some common types that we can create and maintain as part of our service:

- Maps of crime trends or law enforcement actions for utilization on enforcement
- Maps and data for any public works or utility management for the municipality
- Corporate limit map to maintain up-to-date changes to the footprint of the municipality
- Zoning maps to maintain up-to-date changes for projects or rezoning
- Master plan maps for current and future planning phases
- Road and street maps for developmental process





# GOVERNMENTAL SERVICES

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Assist in establishing and training boards and commissions for content and compliance

Perform reviews of cases, submittals, and decisions in relation to Zoning, Planning, subdivisions, abatement and nuisance events

Provide detailed mapping service for record keeping and information when providing services and reviews

Assist in any permitting, development, or review for any project whether initiated by the entity or a private party, assist with stormwater compliance and BMP's as needed

Provide federal census response for entity to assure complete federal funding





## CONTACT US



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