Bobcat Planning

City Planning and Mapping Solutions

CLAYTON HAHN
Project Manager

JEFF KING
Assistant Project Manager

JOHN REFOLO
Web-Master/GIS Analyst

SHANNAN BRENT
GIS Analyst

WILLIAM MARTHES
GIS Analyst

A PROPOSAL FOR

THE DEVELOPMENT OF

UPDATED DIGITAL MAPS

AND GIS DATA

Prepared for

CITY OF MARTINDALE

CALDWELL COUNTY, TEXAS

Prepared by

BOBCAT PLANNING

SPRING 2008

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INTRODUCTION

Summary

Martindale was established in 1855 by George and Nancy Martindale, pioneers from Mississippi. Together these founders, with the help of various merchants and farmers, established a strong communal foundation that can still be found within this city today. Although Martindale is very much reminiscent of what is was many years ago, this small city's needs have changed and are growing right alongside the increase in population and popularity of Central Texas. The City of Martindale now seeks to update their maps and data that are vital to the City's ability to manage their growth and communication with the growing cities that surround them. The creation of digital maps will allow the City of Martindale to modernize existing city policies, update zoning laws, and manage wastewater system expansion and development. In addition, city leaders will have ability to easily update maps as needed and to direct future growth appropriately.

Purpose

The purpose of this project is to update Martindale's maps to reflect their current situation as a growing city in Central Texas. The GIS data and updated maps that Bobcat Planning will provide for the City of Martindale, will enhance the their ability to update and monitor changes that come with the future expansion of a city. Maps that will be made available to the city upon completion of Bobcat Planning's work are current zoning, wastewater system, proposed extra territorial jurisdiction, current city limits, and property parcels with property information. Bobcat planning will provide maps in both paper and digital format to accommodate current needs of the city and any future modifications that will inevitably occur.

Scope

Bobcat Planning's study area will be the City of Martindale, located in Central Texas, its Extra Territorial Jurisdiction (ETJ) and land parcels within Caldwell County and Guadalupe County. The study area specific to the city limits include the wastewater system and zoning information. The City of Martindale lies within the counties of Caldwell and Guadalupe, and within the Capital Area Council of Government and Alamo Area Council of Government.

PROPOSAL

Data

Secondary data will be used for this project. This data will have been collected and assembled by other agencies. These agencies will include: Capital Area Council of Governments (CAPCOG); Alamo Area Council of Governments (AACOG); Hejl-Lee & Associates, Inc.; Caldwell County Appraisal District (CCAD); Guadalupe County Appraisal District (GCAD); and the City of Martindale. Bobcat Planning will obtain the needed data in various ways, such as downloading from the sources website, data CD's provided by the source upon request, and paper maps provided by the source.

Any other necessary data, such as old paper maps or maps produced by other agencies for the city, may be obtained for the City Council of Martindale, TX.

Data and data sources:

- Wastewater System (Hejl-Lee & Associates, Inc.)

- Property Parcels (CCAD and GCAD)

- Current ETJ (City of Martindale)

- Proposed ETJ Information (City of Martindale)

    - *Will be compiled using various data and working with City Council Members*

- Current Zoning Information (City of Martindale)

- City Limits (CAPCOG)

Methodology

ESRI's ArcGIS 9.2 will be used to prepare the data obtained by Bobcat Planning.

Data Acquisition

- Secondary data will be collected from:

- Capital Area Council of Governments (CAPCOG)

- Hejl, Lee & Associates, Inc.

- Caldwell County Appraisal District (CCAD)

- Guadalupe County Appraisal District (GCAD)

- The City of Martindale

- Alamo Area Council of Governments (AACOG)

Data Analysis

Once the data are obtained, our group will scan and georeference to the city limits layer obtained from CAPCOG.

- The CAD files for the wastewater system will be imported into ArcGIS, geo-referenced to and overlaid on the city limits map.
- The Parcel data will be imported into ArcGIS, georeferenced if needed, and overlaid on the zoning map accordingly.
- Then four map templates will be created; one for the Extra Territorial Jurisdiction, zoning, wastewater system, and property parcel.

Implications

With the data and results that Bobcat Planning intends to deliver, it will be much easier for Martindale to update and monitor changes that come with the expansion of a city. Maps that will be made available to the city upon completion of Bobcat Planning's work include new zoning, wastewater system, ETJ, and property parcel information. With the updated maps it will be easier for the city of Martindale to expand and make updates to these maps once changes in the city have been made. The new zoning map will include previous zoning as well as new zoning standards developed by the City Council. The wastewater system map will allow for the city to integrate future developments on the outskirts of the current wastewater infrastructure. Property parcel information will allow for visualization of current property sizes and location in relation to others, and possible structures contained on each piece of property.

Budget

The following fees apply to this project:

Data Acquisition   **$4,200.00**

    Hours

        ([10 hours/week * 2.5 weeks * 3 consultants]

        + [7 hours/week * 2.5 weeks * 1 asst. mgr.]

        + [5 hours/week * 2.5 weeks * 1 mgr.])

    Total Hours..105

    Hourly Pay.. $ 40.00

Data Analysis   **$14,175.00**

    Hours

        ([10 hours/week * 7.5 weeks * 3 consultants]

        + [7 hours/week * 7.5 weeks * 1 asst. mgr.]

        + [5 hours/week * 7.5 weeks * 1 mgr.]

    Total Hours..315

    Hourly Pay.. $ 45.00

System Management   **$4,900.00**

Project Manager

    Total Hours...50

    Hourly Pay.. $ 65.00

    Pay $3,250.00

Assistant Project Manager

    Total Hours...30

    Hourly Pay.. $ 55.00

    Pay $1,650.00

Web Developer

    Total Hours...15

    Hourly Pay.. $ 43.00

    Pay $645.00

Equipment Cost (10 Weeks)   **$1,001.74**

Supplies

    $40 per Phone * 1 Phone * 2.5 Months.. $100.00

Maintenance

    $125.00/Workstation * 5 Workstations $625.00

Depreciation

    Total Equipment Value.. $3,985.00

    Equipment Life 36

    Months of Equipment Use for Project.. 2.5

    Total Depreciation (Value/Life*Use) $276.74

Data   **$12,530.00**

Purchased Data $30.00

Software License (10 weeks, ESRI License @ $2,500.00 * 5 Units) ... $12,500.00

Travel Expense   **$36.00**

90 Miles @ $0.40 per mile $36.00

Total Project Cost $36,842.74

Timetable

		Week									
		1	2	3	4	5	6	7	8	9	10
Data Acquisition		░	░	░							
Processing				░	░	░	░	░	░	░	
Web design									░	░	░
Final Deliverables										░	░

Timeline

Data Acquisition

- Week 1 to 4
    - Obtain current digital data and paper maps of land parcels from:
        o Caldwell County Appraisal District (CCAD)
        o Guadalupe County Appraisal District (GCAD)
        o Capital Area Council of Governments (CAPCOG)
        o Alamo Area Council of Governments (AACOG)
    - Obtain digital data or paper map of wastewater system from Hejl, Lee & Associates, Inc.

Processing

- Week 3 to 5
    - Scan any paper maps of land parcels
    - Scan any maps of the wastewater system
- Week 6 to 8
    - Georeference scanned maps of land parcels
    - Georeference scanned maps of the wastewater system

- Week 8 to 9
  - Creation of proposed ETJ map
  - Creation of updated zoning map
  - Creation of waste water services map
  - Creating updated city limits map
  - Creating updated parcel map

Web Design

- Week 8 to 10
  - Format web page layout
  - Design and create web page
  - Upload all appropriate digital data
  - Upload finalized maps
  - Cross check all pages, their links, and content

Final deliverables

- Week 9 to 10
  - Creation of final maps
  - Compile all GIS data used on a CD
  - Print updated final maps for the City of Martindale
  - Creation of final report and poster
  - Creation of final PowerPoint Presentation

Final Deliverables

Bobcat Planning will, upon completion of this project, provide the City of Martindale, TX with all the digital GIS data and new updated maps that will have been created.

- **Final Report will include:**
  - Pertinent information regarding what data was used and how it was obtained
  - The methodology behind how the data was used

- **Professional Presentation of updated maps will include:**
  - Proposed Extra Territorial Jurisdiction
  - Current city limits
  - Current wastewater system map
  - Current zoning map
  - Current land parcel map with ownership and property information

- **Data CD containing:**
  - All data in GIS format
  - Metadata for all GIS data that will include source information, dates, projection, and contact information for whoever created the metadata
  - Final Report in Microsoft Word 2007, '93-'03 format, and PDF
  - Digital copy of final Poster
  - Updated maps in digital format
  - PowerPoint presentation of final project
  - Instructions regarding the information contained on the CD and how it can be used

CONCLUSION

The purpose of this project is to produce city planning related maps of the City of Martindale. Bobcat Planning will analyze data from various sources, including Caldwell County Appraisal District, Guadalupe County Appraisal District and Hejl, Lee and Associates, Inc. using ArcGIS and other software to produce the maps detailed in this proposal. The data provided will help the leaders of the City of Martindale in proactive city planning and directing future growth with ease. The project will be completed within the budget and timetable provided in this proposal.

PARTICIPATION

CLAYTON HAHN

Implications
Participation
PowerPoint Presentation

JEFF KING

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JOHN REFOLO

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SHANNAN BRENT

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WILLIAM MARTHES

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