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Springsted provides high quality, independent financial and management advisory services to public and non-profit organizations, and works with them in the long-term process of building their communities on a fiscally sound and well-managed basis.

September 22, 2005

Mr. Randy Wetmore
Assistant City Administrator
City of Franklin
109 Third Avenue South
Franklin, Tennessee 37065-0295

Dear Mr. Wetmore:

The City of Franklin, Tennessee commissioned Springsted Incorporated to conduct an Operations and Administrative Study of the Codes Administration Department. The results of the Study are presented herewith.

This report, containing the consulting team's findings, conclusions and recommendations, is presented for your review and recommended for implementation.

The information contained in the report is the product of the joint efforts of yourself, Springsted Incorporated and the Codes Administration Department staff. The findings are the result of Springsted's independent analysis of the data and information presented by the Codes Administration Department. The recommendations represent our best professional judgment as to the most appropriate course of action for the City of Franklin.

Respectfully submitted on behalf of the team,

SPRINGSTED INCORPORATED

John T. Maxwell, Senior Vice President
Client Representative to the City of Franklin

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1. Introduction

The City of Franklin, Tennessee engaged Springsted Incorporated to conduct an operations and administrative study of the Codes Administration Department. The study consisted of an organizational assessment, workload and work processes analysis and staffing needs evaluation.

The Codes Administration Department is responsible for ensuring the public's safety, health and general welfare are secure by enforcing compliance with codes governing new construction, existing housing and historic districts. The department is responsible for:

- Issuing building trades permits
- Inspecting for compliance with building trades codes
- Floodplain management
- Tree preservation
- Building condemnations
- Removal of disabled vehicles
- Noise abatement
- High grass
- Other rules and regulations in the Franklin Municipal Code

In all, the department enforces seventeen (17) different codes, rules and regulations, including the Franklin Zoning Ordinance.

2. Study Background

The City of Franklin, Tennessee is a rapidly growing community that is located approximately twenty (20) miles south of Nashville along interstate highway 65. The City's population (estimated to be 52,000) has increased by approximately twenty-five percent (25%) since the 2000 Census and by about two hundred percent (200%) since the 1990 Census.

The population growth caused a substantial expansion in land development which, in turn, resulted in a considerable increase in the number of building trades permits issued for residential and commercial construction.

Data supplied by the Codes Administration Department shows that the number of building trades permits issued increased from 4,213 in 2001 to 7,816 in 2004. According to department records 4,917 permits have been issued from January through July 6, 2005. This is approximately sixty-three percent (63%) of the 2004 total.

The amount of population growth has resulted in an influx of residents from various areas of the country. They have different experiences and expectations regarding a community's appearance and related aesthetic issues. Consequently, the Zoning Ordinance and various codes pertaining to the environment (e.g. high grass and abandoned vehicles) also require the staff's attention.

The governing body and staff of rapidly growing communities confront pressure from the land development and construction industry for efficient plans approval and permit compliance inspections. Residents on the other hand, want assurance that their homes and businesses meet code and that property values increase or are at least maintained.

This is the situation in Franklin. In order to ensure that the needs of the land development and construction industry as well as residents and businesses continue to be adequately met the City of Franklin decided to undertake an operations and administrative study of its Codes Administration Department.

3. Study Methodology

The study commenced with a meeting between the Springsted project director and the City Administrator, Assistant City Administrator and Director of Codes Administration. The purpose of the meeting was to review the study approach, confirm the study objectives and finalize the work plan.

The initial meeting was followed by a tour of the Codes Administration Department and the gathering of pertinent documents and reports. The documents and reports obtained included, but were not limited to:

- Employee job descriptions
- Table of organization
- Department budget
- Staffing level and deployment
- Department policies and procedures
- Workload data
- Performance indicators

The consulting team studied the data provided, determined additional information needs and returned to Franklin to conduct interviews and on-site tours.

Interviews were conducted with the Director of Codes Administration and department employees. Additional interviews were held with a member of the Board of Aldermen, representatives of the land development and construction industry, the Planning Department and Engineering Department.

A member of the consulting team also spent time in the field with a Building Inspector and Codes Officer to observe how they perform their duties. The purpose of the field visit was to gain a more thorough understanding of the nature and complexity of the work they perform and the processes they use to complete their tasks.

As a result of the interviews and on-site observations it was determined that the plans review and building and zoning inspections processes should be more closely studied. Members of the consulting team returned to Franklin and met with representatives of the Codes, Engineering and Planning Departments (as a group) for a day to discuss opportunities for improving the flow of work. The group meeting resulted in determining seventeen (17) areas where there are opportunities for simple and small improvements in a process can result in big benefits.

The opportunities for improvement were divided into four major groups.

I. **High Impact / Low Difficulty**

Some examples include:

- Establishing a time frame between a department's review of site plans and notifying the Codes Administration Department that the department is ready to sign off on them.
- The need for other departments to sign-off on permits.

II. **Low Impact / Low Difficulty**

Some examples include:

- The need to clearly communicate engineering standards.
- The need for consistent naming (identification) of submitted plans by City departments and developers.

III. **High Impact / Low Difficulty**

Some examples include:

- Eliminate Planning Commission review of small projects.
- The workload of the administrative staff exceeds their capacity.
- The workload of the inspections staff exceeds their capacity and is requiring considerable overtime in order to meet workload demand.

IV. **Low Impact / High Difficulty**

An example includes:

- Permit software is too time consuming - requires separate entry of each inspection.

Some of the areas for improvement can be readily implemented by staff while others will require additional analysis and outside assistance.

The consulting team also conducted a staffing and workload survey of ten (10) Tennessee communities that are either in the Franklin area and/or are of comparable size.

Seven (7) communities responded to the survey. They are:

- Collierville
- Farragut
- Hendersonville
- Jackson
- Johnson City
- Kingsport
- Murfreesboro

Brentwood, Clarksville and Cleveland did not respond. The survey questionnaire and a summary of the results appear in the Appendix.

Subsequent to the gathering and analyzing the data, conducting the processes review and analyzing the survey results the consulting team prepared its findings, conclusions and recommendations. They appear in Section 4 of this report.

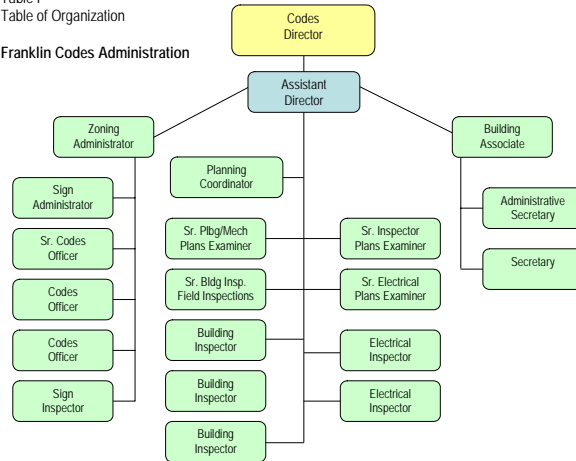
4. Findings, Conclusions and Recommendations

Finding - Organizational Structure

The organizational structure of the department consists of the Director of Codes Administration, Assistant Director and three (3) divisions. The department is organized as shown in Table I.

Table I
Table of Organization

Franklin Codes Administration



Conclusion

The span of control and division of labor conform to modern management practice. The Assistant Director supervises the daily activities of the plans examination and inspections staff, provides guidance on technical issues and interprets policies for staff as well as land development and construction industry representatives.

Recommendation

The consulting team recommends that the current table of organization be maintained.

Finding - Policies and Procedures

The department has a mission statement that appears on the Department's webpage. In addition, there are written policies pertaining to customer service, chain of command, inspections, re-inspections and internal and external communications. Written policies and procedures also exist for plans review and residential and non-residential building permits.

Conclusion

The policies and procedures are reviewed and updated as necessary. The procedures are detailed and clearly written. The staff and the land development and construction industry should have no trouble understanding them.

Recommendation

It is recommended that the staff continue updating the department's policies and procedures. It is further recommended that they be forwarded to appropriate members of the land development and construction industry as well as displayed in a prominent position in the office reception area.

The department should also consider publishing and displaying a brochure regarding its policies and procedures.

Finding - Codes Enforced

The Franklin Codes Administration Department enforces more codes (17) than any of the agencies that responded to the survey. Table II shows the comparison.

<u>Community</u>	<u># of Codes</u>
Collierville	16
Farragut	11
Hendersonville	12
Jackson	11
Johnson City	12
Kingsport	9
Murfreesboro	12
Franklin	17

Finding - Comparison with Survey Communities

The survey results show interesting comparisons with the survey communities and the Franklin Codes Administration Department. Some of the comparisons are:

1. Only the City of Jackson, with a 2004 population of 61,772 issued more building trades permits (8,213) than Franklin (7,816).
2. The Cities of Jackson and Murfreesboro estimated the number of inspections made in 2003 and 2004. They do not maintain those records whereas Franklin keeps the records in order to track workload demand.

3. In 2004, Franklin averaged more building trades inspections per inspector than all the survey communities. Table III shows the comparison.

<u>Community</u>	<u># of Inspections</u>	<u># of Inspectors</u>	<u>Average Per Inspector</u>
Collierville	21,319	9	2,368
Farragut	2,192	3	731
Hendersonville	7,519	7	1,074
Jackson	48,600 ¹	11	4,418
Johnson City	17,442	7	2,492
Kingsport	5,387	5	1,077
Murfreesboro	59,280 ¹	14	4,234
<i>Average</i>	<i>22,483</i>	<i>8</i>	<i>2,810</i>
Franklin	32,228	6	5,371

Finding - Workload Demand

As previously mentioned the workload demands on the staff are increasing to the point where there is some concern over “burn-out” and the thoroughness of inspections. Data supplied by the staff show that from January through August, 2005 there were 248 construction projects submitted. This is almost two new projects per working day that need to be processed, assigned, reviewed and inspected.

A second workload demand indicator is the number of building trade inspections performed daily from January through June, 2005. The data is shown in Table IV.

<u>Month</u>	<u>Daily Average</u>	<u>Average Per Inspector</u>
January	124	21
February	131	22
March	136	23
April	152	25
May	169	28
June	176	29

In order to meet the demand the building trade inspection staff has been working overtime - including the department director and assistant director. In addition, plans examiners have been assigned to assist with inspections which has resulted in a delay in completing plans examinations.

Some overtime is usually welcome but too much overtime is expensive and can have a negative impact on employee morale as well as the quality of the work. Overtime for building trades inspectors and plans examiners from July, 2004 through June, 2005 totaled 467 hours. However, 283 of those hours were worked from January, 2005 through June, 2005. This is sixty percent (60%) of the total number of hours worked in the 12 month period.

The project director discussed the data in Table IV with the Insurance Service Office and the International Code Council. They said that they have a guideline that a building trades inspector should have an average daily workload of 12 to 15 inspections. The data in Table IV shows that Franklin has exceeded the guideline every month.

The staff expressed concern about the amount of time they can spend on each inspection in order to maintain the current level of service to the construction industry. Current policy is to conduct an inspection on the same day if it is requested prior to 7:00am. If requested after 7:00am the staff will attempt to accommodate the request on the same day, but makes the inspection within 24 hours.

This is a very high level of service. Collierville was the only survey community that has the same policy. Murfreesboro has a similar policy.

The difference of the Murfreesboro policy is that it has a 9:00am deadline for a same day inspection. The remaining communities have a 24 hour policy.

Another staff concern with the impact of the workload is their frustration that they are unable to spend more time on each inspection. Although, they ensure the integrity of the building and the electrical, mechanical and plumbing system installations, they would like to have sufficient time for more thorough inspections in order to preclude future problems with the structure and/or an installation.

Finding - Opinion of Stakeholders

Discussions with stakeholders (land development and construction industry representatives) revealed a positive attitude toward the department. Some of the comments made include:

- “Very well-qualified”
- “Helpful and professional”
- “Responsive; best in the area”
- “I hold them in high regard”
- “They have a tough job, but they do it well and work hard.”

Although the general attitude toward the department is positive, land development and construction industry representatives expressed frustration regarding the time taken for plans examinations, lack of consistency among inspectors regarding code interpretations and a negative attitude of some inspectors toward certain developers and/or contractors. Among the comments received were:

- “It takes forever to get my plans through the system.”
- “Franklin takes a lot longer than other cities to approve plans.”
- “They nit-pick you to death.”
- “One inspector will okay an installation and another will red-tag it on the same building.”
- “We need a single inspector for our projects so we will know what to expect.”
- “I complained about him once and he always gives me a hard time ever since.”
- “I don’t think he knows that I am a customer just like the homeowner is.”

Discussions with plans examiners and building trades inspectors regarding the above comments resulted in the following observations by them:

- The quality of work performed by contractors has diminished considerably.
- Some contractors do not learn from previous inspections. They make the same mistake on the same structure.
- Some project superintendents are inexperienced and want inspectors to tell them how to correct deficiencies. They want inspectors to hold their hand. Some superintendents lack sufficient knowledge of construction.
- Some architects and/or engineers use lower level technical staff to prepare plans knowing that the plans examiners will note the necessary corrections.

It should not be the role of building trades inspectors to instruct contractors on how to correct deficiencies nor should plans examiners be responsible for helping an architect or engineer design/redesign a project. If an inspector or plans examiner assumes the role desired by an engineer, architect or contractor the City could assume some liability in the event of a structural or system failure.

Conclusion

The Franklin Codes Administration Department's workload for plans examinations and building trade code inspections is exceeding the staff's ability to perform their duties in accordance with their professional expectations and standards. Furthermore, the plans examination schedule is being compromised because the staff are conducting inspections. Finally, the amount of overtime necessary to maintain the current level of service will have a negative impact of employee morale and, possibly, the quality of inspections.

Recommendation

The consulting team recommends that two full-time building trade inspector positions be added to the department's staffing level as soon as possible.

It is further recommended that the department improve communications with the land development and construction industry. Hosting quarterly meetings to exchange concerns, resolve issues and clarify code interpretations should be on the agenda for each meeting.

Adding staff and hosting information meetings will have a positive impact on employee morale, improve the quality of inspections and reduce time required to examine plans.

Finding - Turnover of Support Staff

The department is experiencing turnover in the administrative support positions at the front desk. This is a critical area because the front desk staff is required to answer the telephone, greet walk-in traffic, provide information to callers and office visitors and perform numerous other administrative support functions.

When the consulting team visited the office the front desk was staffed by one employee. There were four (4) people waiting to be served and there were constant telephone interruptions.

According to the Director of Codes Administration and the Building Associate, employees who resigned from the job did so because the workload was too demanding for them.

Conclusion

The staff takes pride in providing outstanding customer service. However, the amount of turnover has forced the department to use a temporary service for administrative support employees. They can answer the phone but not provide much customer assistance. New permanent administrative support employees require on the job training before they can become proficient in their duties. Consequently, the department is not meeting its expectations for customer service which is another cause of staff frustration.

Recommendation

Many callers and office visitors base their opinion on the department's efficiency and effectiveness on how their calls and visits are handled by the administrative support staff at the front desk.

In order to improve the quality of customer service at the front desk it is recommended that the front desk be staffed by two full-time administrative support employees.

Finding - Zoning Division

The zoning and sign inspection staff is comprised of a Zoning Administrator, Sign Administrator, a Senior Codes Officer, two Codes Officers and a Sign Inspector. All Codes Officers focus on enforcing codes, rules and regulations regarding dilapidated structures, high grass and weeds, abandoned vehicles, the sidewalk café ordinance, peddlers license and property maintenance code. They also enforce the City's business license program and investigate overcrowding of residential structures.

Finding - Zoning Division Workload Demand

Codes Officers are not assigned an area or zone. One of the Codes Officers concentrates on enforcing codes in the industrial areas of the city. The remaining officers patrol the city looking for code violations, conducting inspections and responding to complaints. One Codes Officer stated that he spends five percent of his time inspecting and ninety-five percent of his time patrolling the City.

Data supplied by the staff shows that from January 2003 - July 2005 the codes enforcement staff conducted 4,326 inspections. However, only the initial and final inspections were recorded.

Using the data supplied by the staff, the Code Enforcement Officers averaged approximately three inspections per day over the past 18 months. ($4,326 \div 18 \text{ mo.} = 240/\text{mo.}$; $240 \div 22 \text{ days/mo.} = 11/\text{day}$; $11/\text{day} \div 4 = 2.75/\text{code enforcement officer}$).

Conclusion

Assuming that each incident requires an average of three inspections, it is the consulting team's opinion that the workload can be accomplished with two Codes Officers.

Recommendation

It is recommended that the department train two Codes Officers to inspect both residential and industrial areas. It is also recommended that each officer be assigned responsibility for an area equal to one-half of the city.

It is further recommended that the Sign Administrator position remain in the Zoning Division. When two Codes Officer positions become vacant they should be eliminated from the budget. This would result in two less Codes Officer positions in the Zoning Division.

5. Summary

The Codes Administration Department provides a very high level of service with minimal staff. The increasing workload is over-extending the building trades inspection and plans examination staff and they do not have sufficient time to conduct what they believe to be thorough inspections and plans examinations.

Using plans examiners to assist with building trades inspections results in a delay in plans review. Paying overtime is expensive. Over the long term too much overtime results in potential “burnout” and can have a negative impact upon the thoroughness and quality of reviews and inspections.

The consulting team recommends that two building trades inspectors positions be added to the staffing level. The additional staff will enable the Codes Administration Department to continue the current level of service to the land development and construction industry, enhance the thoroughness and quality of reviews and inspections and abate the potential “burnout” problem.

The codes enforcement program should be able to continue its current level of service with two (2) Code Enforcement Officers. This can be achieved by cross-training employees and assigning them specific areas of the City. When a Codes Officer position becomes vacant it should be transferred to the building trades inspections program. The Sign Administrator position should remain in the Zoning Division.

Front office activities are very busy. It is difficult to retain employees. An additional administrative support position is needed in order to assist callers and visitors.

Codes Administration Survey

City of Franklin, Tennessee
 Codes Administration Department
Staff / Workload Comparison

Criteria	Collierville	Farragut	Hendersonville	Jackson	Johnson City	Kingsport	Murfreesboro	Franklin
Community population (2004)	36,562	18,965	43,866	61,772	57,812	44,070	81,511	48,191
# of codes enforced	16	11	12	11	12	9	12	17
# of building trade permits in 2003	4,874	1,029	2,353	10,702	5,666	911	2,304	6,962
# of building trade permits in 2004	4,636	851	2,827	8,213	6,500	122	2,625	7,816
# of building trade permits as of 6/30/05	N/R	378	1,711	3,894	2,955	N/R		4,917
Total # of inspections - all codes in 2003	21,966	3,875	7,586	63,200 ³	17,383	5,045	48,000 ³	N/R²
Total # of inspections - all codes in 2004	32,665	2,756	8,719	48,600 ³	20,592	5,387	60,480 ³	N/R²
Total # of inspections - all codes as of 6/30/05	N/R	904	5,690	23,364	974	N/R	N/R	N/R²
# of building trade inspections in 2003	19,427	3,589	6,386	63,200 ³	13,414	5,045	46,800 ³	23,986
# of building trade inspections in 2004	21,319	2,192	7,519	48,600 ³	17,442	5,387	59,280 ³	32,228
# of building trade inspections as of 8/15/05	10,795	784	5,090	23,200 ³	8,600	N/R	N/R	22,963
# Bldg Trades Inspectors	9	3	7	11	7	5	14	6
Average # Bldg Trades inspections per Inspector in 2004	2,368	731	1,074	4,418	2,492	205	4,234	5,371
SF Res Res Plans Reviews	Yes	Yes	Yes	No	Yes	Yes	No	No
Average # Plans Review per day	6	3	-1	8	8	2	2	3
\$ Value of Construction 2003	\$193,012,470	\$66,668,853	\$76,400,000	\$432,722,859	\$115,551,164	\$63,549,358	\$307,591,073	\$323,483,556
\$ Value of Construction 2004	\$189,310,678	\$51,225,497	\$103,300,000	\$280,519,784	\$151,287,436	\$86,341,662	\$429,515,486	\$367,554,004

Summary of Study Recommendations

City of Franklin, Tennessee
Operations and Administrative Study

Summary of Study Recommendations

Recommendation	Responsible Party(ies)	Time Frame
Maintain the current table of organization.	Director of Codes Administration; City Administrator; Board of Aldermen	On-going
Continue updating policies and procedures; print and publish brochure.	Director of Codes Administration; staff	As necessary
Increase the building trades inspection staff by two (2) inspectors.	Director of Codes Administration; City Administrator; Board of Aldermen	September, 2005
Host meetings with stakeholders.	Director of Codes Administration; staff	Quarterly
Increase front desk staff by one administrative support position.	Director of Codes Administration; City Administrator; Board of Aldermen	September, 2005
Enforce codes with two (2) code enforcement officers; cross-train staff; assign staff specific areas.	Director of Codes Administration; Zoning Administrator; City Administrator; Board of Aldermen	January, 2006