

BOARD OF ALDERMEN

ITEM NO. D(1)

AGENDA ITEM ABSTRACT

MEETING DATE: Tuesday, December 17, 2002

TITLE: Report on Town Engineering Services

DEPARTMENT: PLANNING	PUBLIC HEARING: YES ___ NO <u>X</u>
ATTACHMENTS: A. Resolution B. Summary Engineering Projects Generated by Development C. Summary Town Engineering Projects	FOR INFORMATION CONTACT: Roy Williford, 918-7325

PURPOSE

The purpose of this item is to report on the categories of engineering services provided by the Town's engineer, Sungate Design Group.

INFORMATION

The Carrboro Board of Aldermen, upon the completion of a Request For Proposals process, approved an engineering services agreement with the Sungate Design Group on June 18, 1996. The agreement with Sungate includes the following scope of services:

- Maintain regular office hours, one day per week, to the extent required by the Town.
- Technical engineering assistance provided to the Board of Aldermen and Town Staff regarding the implementation of engineering policies and standards contained within the Town Code.
- Administration of construction plans.
- Review and approve permit applications and construction plans submitted for approval by applicants desiring to construct projects authorized by a land use permit previously issued by the Town.
- Monitor developments authorized by approved construction plans to assure compliance with the land use permit and associated construction plans.
- Administration of a stormwater management program (quality and quantity) for the Town, including the evaluation of stormwater management plans submitted by applicants requesting land use permits and/or construction plan approval.
- Assist the Public Works Department in the review and approval of facilities proposed for dedication to the Town such as streets, pedestrian, bike park and drainage facilities.
- Review, maintain and recommend appropriate changes to town-wide construction standards.
- Meet with citizens seeking engineering solutions to problems associated with approved land use plans, construction plans or existing Town Facilities.
- Perform engineering services as associated with approved land use plans, construction plans or existing Town facilities that the Board of Aldermen may so direct.

- Attend Board of Aldermen and other meetings upon request by the Town.
- The following Schedule of Fees is included as part of the scope of services (note: these fees have not been adjusted since approved in 1996 and fees are not charged for travel between Sungate’s office in Raleigh and Carrboro):

Schedule of Fees for the Above Services	
<i>Position</i>	<i>Hourly Rate</i>
Senior Engineer	\$70.00
Landscape Architect	\$60.00
Design Engineer	\$60.00
Engineering Technician	\$50.00
CADD Technician	\$40.00

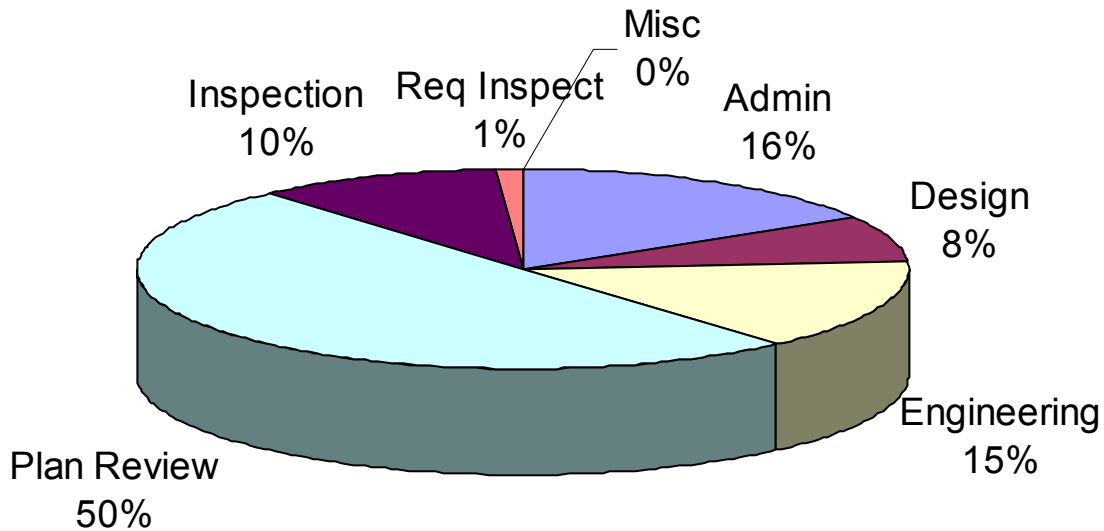
Sungate bills the Town monthly, with a separate invoice for each job or project. The invoice identifies the project by name and number, when the work was performed, the type of work, who did the work and for how long, the hourly fee and the total charge for each line item. The Planning Department receives the bills and requests payment by the Town. A data base has been developed by the Planning Department to track all invoices and to generate bills for developers who owe the Town’s site plan review fee which is 80% of Sungate’s plan review cost. Sungate bills their charges according to the following broad categories authorized by the Scope of Services:

1. Administration - Board meetings, Development Review meetings, staff meetings, other meetings or activities which are not directly involved with a project.
2. Design – Design work that is not related to plan review and has been requested by the Town but is not engineering related. Examples are wetland delineation, Parks design and parking lot design. Surveying services. Examples are fieldwork for the NPDES inventory.
3. Engineering – Engineering design work that is not related to plan review and has been requested by the Town. An example is the Morgan Creek Flood Study. Review of Projects not submitted by developer. An example is the widening of Hillsborough Road by NCDOT.
4. Plan Review – Review of drainage plans for CUP, SUP and/or Zoning permits and construction plans.
5. Inspection – Inspection of development projects that have been approved for construction by the Town.
6. Inspection-Applicant– Inspection of development projects requested by the applicant/builder.
7. Miscellaneous– Travel time to Carrboro (for which the Town is not charged), permit fees, application fees and other services which do not fit into any of the above categories.

Over the last three fiscal years, the major costs have been billed to the Plan Review Activity (50%), with proportional billings for Administration (16%), Design (8%), Engineering (15%) and Inspections (10%). The remaining categories entitled Inspection-Applicant and Miscellaneous account for less than 1% of the total cost. These costs are summarized in the following table and illustrated by the following pie chart entitled “*Engineering Cost by Category*”.

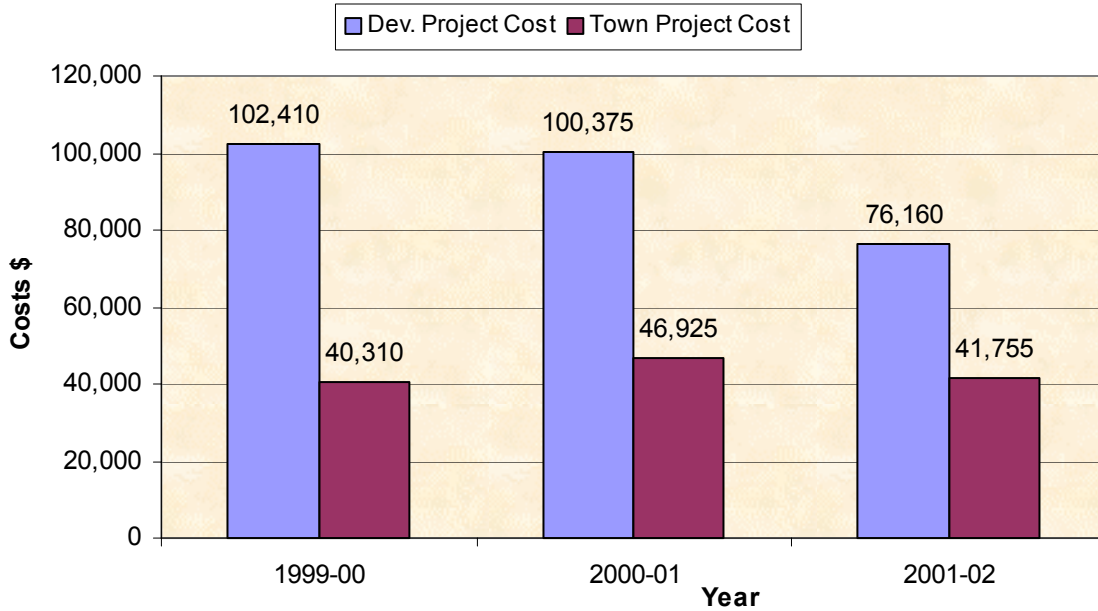
Total Engineering Cost FY 99-00 to 01-02								
Year	Admin	Design	Engineering	Plan Review	Inspection	Req Inspect	Misc	Total
1999-00	29,610	2,960	24,535	71,370	12,040	2,100	105	142,720
2000-01	25,205	2,070	28,140	74,660	16,120	1,105	0	147,300
2001-02	11,735	25,790	7,760	58,045	12,895	1,600	90	117,915
Total	66,550	30,820	60,435	204,075	41,055	4,805	195	407,935
PerCent	16%	8%	15%	50%	10%	1%	0%	

Engineering Cost by Category



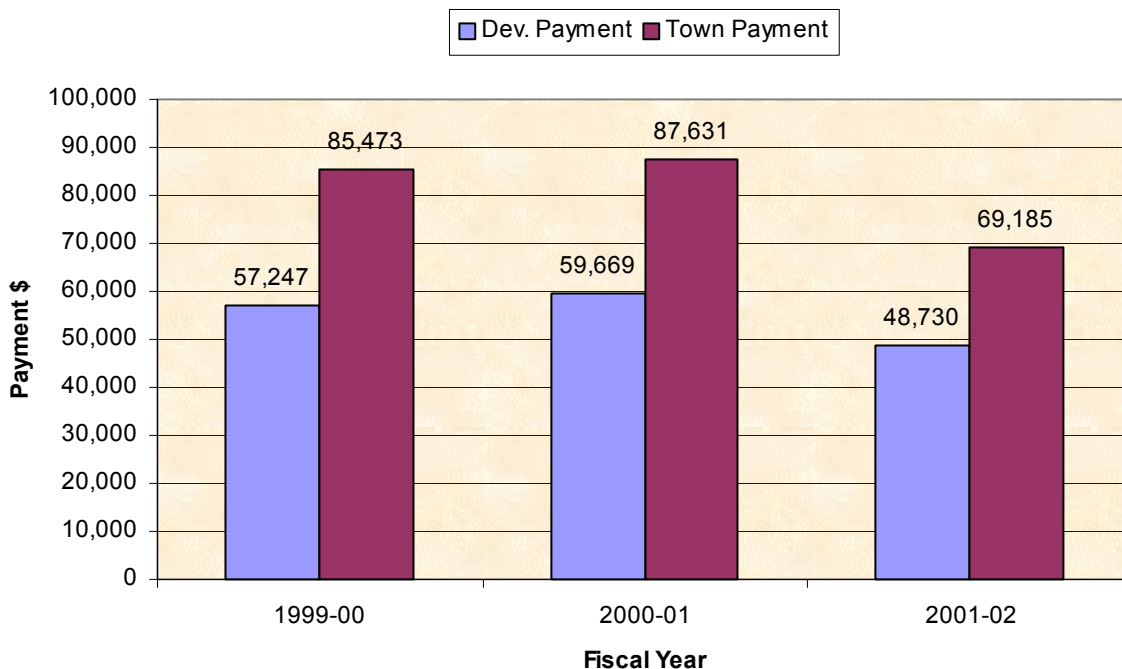
Two primary users, the town itself (including citizen inquiries) and the development community generate the town's engineering costs. The development community generates the majority of the total engineering costs. Over the past 3 years the development community generated the following percentage of the annual engineering cost: 72% in 1999-2000, 68% in 2000-2001 and 65% in 2001-2002. The majority of these expenses were incurred for the completion of flood plain map revisions associated with development such as the Morgan Creek Flood Study and the Hogan Farms-Bolin Creek Study and for the review of major developments such as: the Old Fayetteville Rd Park and Ride Lot, Lake Hogan Farms Subdivision, Morgan Ridge Townhomes, Morningstar Mini-storage, OWASA Operations Center, Ready Mix Concrete, Rock Haven Center, Sheryl-Mar II Office, Smith Middle School Park, the Cedars Subdivision, and Willow Creek Offices. Over the three-year period, Sungate reviewed 256 development related projects consisting of 3,152 separate reviews. The list of projects generated by the development community is provided in (**Attachment B**). Major projects generated by the Town over the same 3 year period included the following: Century Center; Hillsborough Road Park site, wetland and connector road analysis; Canterbury Townhomes-Morgan Creek Flood Study, Hillsborough Road Improvements, Roberson Street Bike Path, and NPDES Storm Water permitting and system analysis. During this 3 year period, Sungate assisted the Town with over 32 projects consisting of 973 separate tasks. The list of projects generated by the Town of Carrboro is provided in (**Attachment C**). The following chart entitled "***Project Costs Generated by Development vs. Project Costs Generated by the Town***" provides a comparison of the annual cost generated by the development community and the Town.

Project Costs Generated by Development vs the Town



Both the development community and the Town of Carrboro pay engineering costs. The development community generally pays an 80% engineering plan review fee and any cost for engineering inspections that they request. Over the past 3 years the development community roughly paid for 40% of the annual development related cost with the Town of Carrboro paying for the remaining 60%. The Town pays a greater share of the development related expenses due in part to the payment of 20% of the plan review cost, and all administrative, design, engineering and town sponsored site inspections costs. The following chart entitled *“Engineering Payments, Development vs. the Town”* provides a comparison of the annual cost generated by the development community and the Town.

Engineering Payments, Development vs. the Town



Last fiscal year (July 1, 2001 through June 30, 2002) the Sungate Design Group provided the Town with 2,047.5 man-hours of engineering service, 2,333 man-hours in fiscal year 2000-2001 and 2,075 man-hours in fiscal year 1999-2000. The three years averaged around \$57.00 per man-hour of engineering service. According to salary survey information provided by *Civil Engineering News*, the average per man-hour cost for a range of similar engineering services is \$ 92.87 per man-hour. The following chart provides the computation for this man-hour cost:

	*Average Compensation	**Overhead @ 150%	Subtotal	Total With **Profit @ 9%	Hourly rate at 2,080 hrs per year
All engineers	\$70,886.00	\$106,329.00	\$177,215.00	\$193,164.35	\$92.87
Private	\$71,702.00	\$107,553.00	\$179,255.00	\$195,387.95	\$93.94
Public	\$68,942.00	\$103,413.00	\$172,355.00	\$187,866.95	\$90.32
*Compensation information from <i>CE News</i> , May 2002.					
**Overhead rate for private firms of 157% and Fee of 9% based on DOT's External					

ADMINISTRATION'S RECOMMENDATION

The administration recommends that the Board of Aldermen adopt the attached resolution accepting this report.