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ABSTRACT

The Grounds Shop of the Chesapeake Public School Division (Virginia) Department of School Plants was evaluated in 1995-96. The goals of the grounds maintenance program are to provide safe and attractive grounds for students, parents, and staff of the school district. The evaluation examined the extent to which these goals are being met by using ratings by 36 principals. Whether the program could be restructured to improve efficiency and effectiveness and whether there is a role for a private provider of lawn services were also explored. Over 60% of the principals rated the overall grounds maintenance activities of the Grounds Shop as above average, but the final appearance of the lawns was not always excellent. Groundskeepers attributed this to not having enough time for the final touches. Better communication between principals and groundskeeping staff would improve the program. It is concluded that the current in-house staff offers generally efficient and cost-effective service when compared with the estimated costs of an outside lawn service. When the Chesapeake Public School Division was compared with other school divisions in the state, it ranked among the top 3 of 11 responding and had the lowest cost per acre for lawn maintenance. Four appendixes contain the survey questionnaire and survey results of principals and two proposal bid forms from different lawn services. (Contains four charts.) (SLD)

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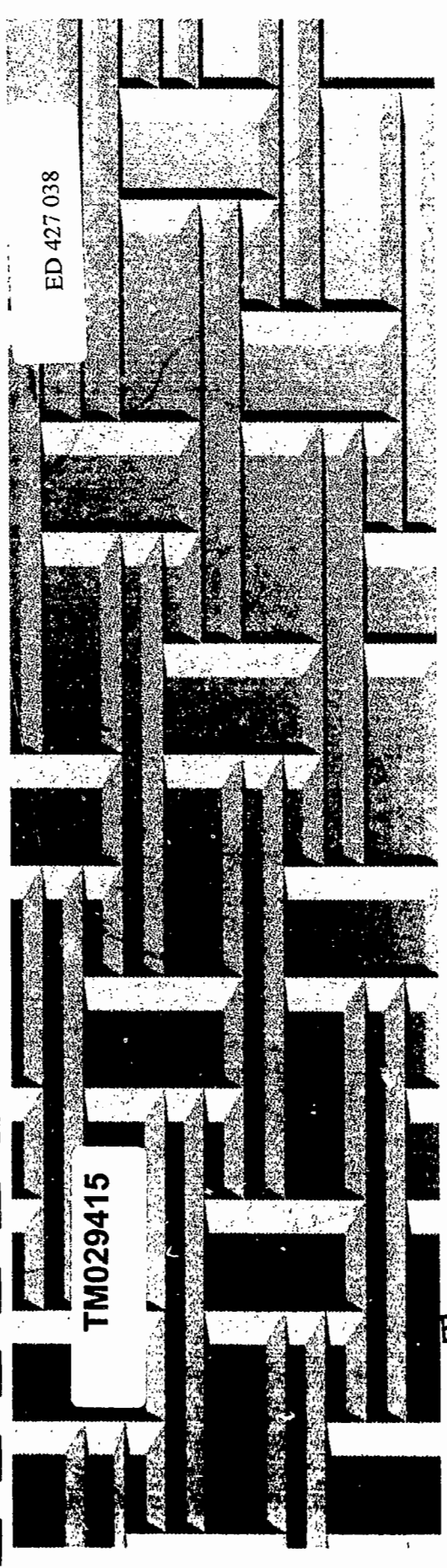

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CHESAPEAKE PUBLIC SCHOOLS

GROUNDS MAINTENANCE EVALUATION

OFFICE OF PROGRAM EVALUATION

AUGUST 1996

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GROUNDS MAINTENANCE EVALUATION
HOW TO READ THE EVALUATION REPORT

This report documents the results of the evaluation of the Grounds Maintenance operation of the school division. The **Table of Contents** lists each section of the evaluation project and the related charts and appendices. The report is divided into the following sections:

- **Summary of the Evaluation**
- **Evaluation Proposal**
- **Review of the Literature**
- **Survey of Administrators**
- **Interviews with Grounds Shop Personnel**
- **Activity-Based Costing**
- **Survey of School Divisions and Municipalities in the Region**
- **Bid to Contract Lawn Maintenance Services**
- **Appendices**

A **Summary of the Evaluation** is provided at the front of the report. The summary is an overview of the evaluation and includes the research questions, performance criteria for success, and **final** findings, conclusions, and recommendations of the evaluation.

To obtain more detailed information regarding the findings, conclusions, and recommendations related to each data collection procedure, the reader should refer to the individual sections of the evaluation. **Charts** pertaining to each section appear immediately after the pages which refer to them.

The **Evaluation Proposal** defines the scope of the evaluation as agreed upon by team members and the administrator of the project and contains the signatures of the program evaluation team leader and the administrator of the project.

The **Review of the Literature** provides information related to the research which guided the data collection activities of the evaluation.

The **Survey of Administrators** section provides results of the formal survey of the forty principals in the school division and the related findings, conclusions, and recommendations.

The **Interviews with Grounds Shop Personnel** section provides the results of structured interviews with employees of the grounds maintenance operation and the related findings, conclusions, and recommendations.

The **Activity-Based Costing** section provides the findings, conclusions, and recommendations related to assigning time and costs to the activities of the grounds maintenance operation.

The **Survey of School Divisions and Municipalities in the Region** section presents in chart form the results of the regional survey to establish efficiency "benchmarks."

The **Bid to Contract Lawn Maintenance Services** section provides the results of the bid for contracting partial lawn maintenance services and the related findings, conclusions, and recommendations.

The **Appendices** section includes the background documents related to the study.

It is hoped that the format of this report will assist the reader in understanding the evaluation of the Grounds Maintenance operation.

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SUMMARY OF THE EVALUATION

SUMMARY OF THE EVALUATION

This section is a summary of the study and includes all final findings, conclusions, and recommendations.

GROUNDS MAINTENANCE EVALUATION
SUMMARY OF THE EVALUATION

The Grounds Shop of the Department of School Plants was approved for evaluation in 1995-96 by the Chesapeake School Board. The **goals** of the grounds maintenance program are **to provide safe and attractive grounds for the students, parents, and staff of the school division and the general public at an economical cost**. The evaluation examined the extent to which the goals are being achieved.

RESEARCH QUESTIONS:

1. What is the **evaluation of the current services** of the Grounds Shop by school principals?
2. Can the current Grounds Shop operation be **restructured to improve efficiency and effectiveness**?
3. Is there **a role for a private provider of lawn maintenance services that will yield savings** to the school division?

PERFORMANCE CRITERIA FOR SUCCESS:

1. An **above average** rating on the **overall quality** of grounds maintenance services (benchmark: an above average rating by **80%** of principals)
2. **Efficiency of current grounds work teams** which is **equal to or better than current practice** (benchmark: staff hours per acre per year for grounds maintenance are comparable to or better than appropriate industry standards)
3. **Cost of lawn service** which is **appropriate for the expected level of service and quality** (benchmark: current per acre cost for lawn service is comparable to appropriate industry standards)

OVERALL FINDINGS:

1. <u>SURVEY OF PRINCIPALS</u>
   - Over sixty percent of principals rated the overall grounds maintenance activities of the Grounds Shop above average. In addition, sixty percent rated general lawn maintenance activities above average. On those lawn maintenance activities related to final appearance, however, fifty percent or less rated items above average.
   - Principals rated many of the grounds activities unrelated to lawn maintenance as not applicable.
   - Items related to the attitude of the crews received above average ratings by the largest percentage of principals.
   - Comments of principals on the survey indicated a need for better communication between the principals and the Grounds Shop with regard to the scheduling and performance of activities.
2. <u>INTERVIEWS WITH GROUNDSKEEPERS/ACTIVITY-BASED COSTING</u>
   - Groundskeepers spend only about half their time performing lawn maintenance activities.
   - In the growing season the workload is heavy, and groundskeepers must concentrate

largely on completing the job on time rather than on the quality of the final product.

- Groundskeepers perform a number of activities which are not directly related to grounds maintenance.
- Some groundskeepers lack motivation due to limited opportunities for recognition and/or promotion.

3. **BENCHMARKING SURVEYS**
   - Chesapeake has the lowest cost per acre for lawn maintenance services, the second lowest number of staff hours per acre for all grounds maintenance, and ranks in the top three among responding area school divisions in other measures of efficiency used in the survey.
   - Chesapeake's expenditures are below the average amount budgeted per student for grounds services in the mid-Atlantic region based on a national survey.
4. **REQUEST FOR BIDS TO PERFORM LAWN MAINTENANCE ACTIVITIES**
   - Based on the quote of the low bidder, it would cost the school division $46,031 more to contract for the services currently performed by part-time temporary and summer workers during the peak growing season (25 sites or 560 acres).

OVERALL CONCLUSIONS:

1. **What is the evaluation of the current services of the Grounds Shop by school principals?**

- The area in which **improvement is most needed is in the effectiveness of the lawn maintenance program** in providing attractive grounds. Principals rated the Grounds Shop as above average in providing a safe exterior environment, but fifty percent of principals rated the operation as average or below on final appearance, which **does not satisfy the first performance criterion for success**. Comments of some groundskeepers indicated that they are in agreement, as they expressed an interest in improving the final appearance of school grounds. Groundskeepers attribute this ineffectiveness to not having the time to apply the final touches which would significantly improve appearance.

- The Grounds Shop employs a group of **personnel who appear to be cooperative and hard working**. However, limited opportunities for recognition and/or promotion have diminished the motivation of some crew members. This has resulted in some inefficiencies in the day-to-day performance of activities. For instance, whole crews sometimes perform tasks which could be divided among members of the crew if all members possessed the same skills.

- It is evident that establishing **better channels of communication between the Grounds Shop and principals** would improve the working relationship. Not only did principals display a lack of knowledge of many of the activities of the Grounds Shop, but they also expressed frustration over not being informed about the schedule of grounds maintenance activities, including failure of the crews to notify principals when they arrive at the schools.

2. **Can the current Grounds Shop operation be restructured to improve efficiency and effectiveness?**

- The Grounds Shop **exemplifies efficiency in the delivery of many services**, a portion of which go beyond the typical scope of grounds maintenance. Chesapeake had the second lowest number of staff hours per acre, the lowest cost per acre, and placed in the top three in other categories of efficiency in a survey of school divisions in the region, thus **satisfying the second performance criterion for success** established for this evaluation. Inefficiencies noted in the evaluation are largely associated with day-to-day activities and usually occur when the regular routine is interrupted (e.g., during inclement weather and when special work orders are received).

3. **Is there a role for a private provider of lawn maintenance services that will yield savings to the school division?**

- The in-house operation also was shown to be **cost effective** when the costs of services currently performed by temporary part-time and summer employees during the peak growing season were compared with the costs of providing the same services by an outside provider of lawn maintenance, thus **satisfying the third performance criterion for success.**

Therefore, the conclusion is that the Grounds Shop meets two of the three performance criteria for success.

OVERALL RECOMMENDATIONS:

Based on the findings of this evaluation, the following actions are suggested (see more specific recommendations in each section of the evaluation):

1. Continue the in-house Grounds Shop operation, including the practice of hiring part-time temporary and summer employees during the peak growing season. Use the Activity-Based Costing Chart to review the costs of all grounds maintenance activities to identify areas in which cost reductions may be feasible by restructuring assignments.

2. Capitalize on the overall **efficiency** of the Grounds Shop by maximizing the efficiency of day-to-day activities. Investigate the following measures to increase the productivity of each crew:

   - Expand minimum performance requirements and training for crew members.
   - Designate expert project teams which specialize in certain tasks within each crew.
   - Assemble required materials the afternoon before a job to increase efficiency and decrease "backtracking."
   - Establish uniformity of work among crews.
   - Plan in advance for inclement weather and special assignments.
   - Restructure "other" grounds activities (e.g., assign some activities such as sign maintenance to other appropriate shops, reorganize some activities among crews, or contract certain activities) to increase efficiency and potentially reduce costs.
   - Reassign the sites within zones if a better balance of acreage among crews can be achieved or if travel time can be reduced.
   - Increase motivation of Grounds Shop personnel through a system of recognition for contributions from outstanding employees (e.g., awards banquet, certificates, and/or pay for performance).
   - Conduct an annual training session (a) to solicit suggestions from crews for increasing the efficiency of day-to-day activities (b) to clarify guidelines for all grounds maintenance activities, and (c) to establish efficiency goals to be achieved in 1996-97 along with standards and methods for assessing the attainment of goals.

3. Increase the **effectiveness** of the Grounds Shop by investigating the following measures to improve the final appearance:

   - Estimate the cost of additional activities which will improve the final appearance and provide a plan for implementation of the improvements (e.g., labor to assist with more frequent mulching).
   - Restructure "other" grounds activities to recover lawn maintenance time which crews can use to apply finishing touches (at least one hour at each school site).
   - Address the final appearance of grounds at an annual training session during which crew members are encouraged to offer suggestions.

- Convene an ad hoc committee of principals, School Plants personnel, and PTA representatives to (a) compile guidelines for lawn maintenance, (b) establish realistic goals for effectiveness for 1996-97 with standards and methods for assessing the attainment of goals (including a followup survey of principals in the spring of 1997), and (c)design cooperative projects between the schools and the Grounds Shop to share minor tasks and costs associated with maintaining the front entrances of school buildings.

4. Increase the **effectiveness** of the Grounds Shop by investigating the following measures to improve communication with schools:

- Provide a list of all services of the Grounds Shop to each principal as well as the basic schedule and procedures for requesting the services.
- Rotate time of day grass cutting occurs among schools. Inform principals when lawn maintenance activities will occur. Provide feedback within 10 days on specifically requested work orders pertaining to grounds maintenance.
- Address sensitivity to private property and protocol upon entering and leaving school grounds at the annual training session.

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EVALUATION PROPOSAL

PROGRAM EVALUATION PROPOSAL

This section includes the evaluation proposal and determines the scope of the study agreed to by members of the evaluation team.

PROGRAM EVALUATION PROPOSAL
CHESAPEAKE PUBLIC SCHOOLS

PROJECT: GROUNDS MAINTENANCE
ADMINISTRATOR: STEVEN GILBERT, ADMINISTRATIVE DIRECTOR FOR OPERATIONS

PROJECT PROFILE

DESCRIPTION OF GROUNDS MAINTENANCE:

Services

The **Grounds Shop** of the Department of School Plants **maintains approximately 1300 acres** of school division property.

Sites maintained in 1995-96 are **26 elementary schools, 8 middle schools, 5 high schools, 5 stadiums, 12 centers and support buildings, and 2 vacant lots, or a total of 58 properties.**

Grounds Shop personnel are responsible for the following **lawn maintenance activities**:

1. Cut and maintain grounds every 12 days
2. Prepare grounds for special events
3. Spray herbicides

Grounds Shop personnel also perform **other grounds maintenance activities** as follows:

4. Install and maintain playground equipment and areas
5. Landscape grounds by special request
6. Remove dead trees and grind stumps
7. Install and repair fences
8. Deliver and spread mulch, gravel, top soil, rock salt
9. Order, install, and maintain signs
10. Make minor concrete repairs
11. Repair pot holes
12. Build walkways
13. Clean and repair storm drains
14. Excavate underground utilities
15. Clean up damage caused by vandalism
16. Conduct drainage projects
17. Maintain and repair wooden walks, platforms, and benches
18. Maintain running tracks and sand pits
19. Pick up equipment for annual maintenance
20. Perform additional grounds duties as assigned (e.g., setting up for graduation, snow removal, delivery assistance)

Staffing

Approximately **40,016 staff hours** are required each year to maintain the **1300 acres** of the **58 properties** with the above services, or **31 staff hours per acre** and **690 staff hours per site.**

The school division is staffed at **14 full-time Grounds Shop positions, 10 part-time temporary groundskeepers,** and **one equipment maintenance mechanic** at **90%** of his total time.

The **three categories of full-time employees** are Shop Leadman, Groundskeeper I, and Groundskeeper II. **One Shop Leadman** supervises **13 Groundskeepers** who are assigned to crews of three or four members in **four geographical zones.** One **Groundskeeper II** from each crew serves as the **leader.** Base **salaries for full-time employees** range from **$13,481 to $22,642**, and the **average full-time salary** is **$17,481.**

The Grounds Shop also employs **part-time temporary personnel** who work **only in the peak growing season (April through mid-November).** The projected annual cost of these employees for 1995-96 is $72,183. In addition, **custodians** at each of the school sites **perform some grounds maintenance duties** under the direction of the principal. The school division also contracts with **outside vendors** to **spray landscape shrubbery, provide handicapped accessibility,** and **pave parking lots.**

<u>Equipment</u>
Grounds maintenance **equipment** consists of **mowers, tractors, trailers, trucks** and a **variety of hand tools** and is valued at **$230,738.**

<u>Expenditures</u>
Attachment I (Table 1) presents the **total amount expended for all grounds maintenance services** in **1993-94 and 1994-95 and projections for 1995-96**, including

1. **Salaries** and **fringe benefits** for **full-time** and **part-time** employees
2. **Outside contracts**
3. **Equipment and supplies**

The **average expenditures** for **all grounds maintenance services** (93-94, 94-95, and 95-96) are **$643,545.** (See Attachment I, Table 1.)

Attachment I (Table 2) presents the **total amount** expended for the **lawn maintenance** portion of the grounds maintenance operation, including

1. **Salaries and fringe benefits** for **full-time** and **part-time** employees
2. **Outside contracts**
3. **Equipment and supplies**

The **average expenditures** for the **lawn maintenance portion** of the grounds maintenance operation (93-94, 94-95, and 95-96) are **$367,108.** The **average expenditures per acre per year** for **lawn maintenance** are **$282.** The **average lawn maintenance expenditures** for **part-time temporary employees** are **$63,505.**

ATTACHMENT I

TABLE 1

	1993 - 1994	1994 - 1995	PROJECTED 1995 - 1996
OUTSIDE CONTRACTS	$ 84,960.00	$ 96,428.00	$110,406.00
TOTAL	$594,334.00	$665,095.00	$671,206.00

TABLE 2

	1993-1994	1994-1995	PROJECTED 1995 - 1996
OUTSIDE CONTRACTS (SPRAYING SHRUBS)	$ 2,756.00	$ 9,042.00	$ 23,000.00
SUPPLIES (85% TO LAWN MAINTENANCE)	$ 45,364.00	$ 45,808.00	$ 47,182.00
AVERAGE EXPENDITURES—LAWN MAINTENANCE (93-94, 94-95, 95-96)	$367,108.00		
AVERAGE EXPENDITURES PER ACRE PER YEAR ($367,108 ÷ 1300)	$ 282.00		

*THE TRANSPORTATION MECHANIC SPENDS 90% OF HIS TIME REPAIRING GROUNDS MAINTENANCE EQUIPMENT.

**66% OF ANNUAL SALARY AND 85% OF EACH WORKING DAY TO LAWN MAINTENANCE

SOURCE: ACCOUNTING DEPARTMENT, CHESAPEAKE PUBLIC SCHOOLS

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GROUP SERVED: Students, parents, and **staff** of the school division and the **general public** who directly use or who observe the facilities maintained

GOALS AND OBJECTIVES OF GROUNDS MAINTENANCE:

1. To maintain the grounds of **school division properties** so that they are **safe** for students, parents, staff, and the general public
2. To maintain the grounds of **school division properties** so that they are **attractive** to students, parents, staff, and the general public
3. To provide grounds maintenance services at **an economical cost** to the **school division**

PURPOSE OF THE EVALUATION:

The school division recognizes the importance of focusing on its primary mission which is educating the students of Chesapeake. The Grounds Shop is one of a number of support operations indirectly related to education. This evaluation does not imply shortcomings with this operation but is an effort to ensure efficiency so that maximum resources can be allocated to instruction. The evaluation seeks

1. To assess **perceptions of building principals/administrators** regarding the quality of **current grounds maintenance services**
2. To examine **opportunities for restructuring the grounds maintenance operation** to improve efficiency and effectiveness
3. To compare the **services and costs** of the **lawn maintenance activities** of the school division with **a private provider** to determine which more closely meets the goals and objectives

EVALUATION METHODOLOGY

RESEARCH QUESTIONS:

1. What is the **evaluation of the current services** of the **Grounds Shop** by school principals?
2. Can the **current Grounds Shop operation** be restructured to improve efficiency and effectiveness?
3. Is there a **role for a private provider of lawn maintenance services** that will yield savings to the school division?

PERFORMANCE CRITERIA FOR SUCCESS:

A **program of grounds maintenance**

1. Which receives an **above average rating** from most principals
   Benchmark: An **overall rating of at least 4** (on a scale of 1 to 5) by **80% of building principals**
2. In which efficiency of current **grounds** work teams is equal to or better than current practice
   Benchmark: Staff hours per acre per year for **grounds maintenance** are comparable to or better than appropriate industry standards
3. In which cost of **lawn service** is appropriate for the expected level of service and quality (i.e., appearance, frequency, or responsiveness to special events)
   Benchmark: Current per acre cost for **lawn service** is comparable to appropriate industry standards

DATA AND METHODS OF COLLECTION:

1. Survey of building principals
2. Interviews with grounds maintenance workers
3. Interviews with key individuals in other school divisions with experience with privatization
4. Accounting and School Plants records on expenditure data for grounds maintenance in Chesapeake Public Schools
5. Formal cost estimates for lawn services from private providers in several regions of the school division
6. Appropriate industry standards from available sources

ANALYSIS PROCEDURES:

1. Tally the responses of the survey of principals.
2. Calculate the total cost of all current grounds services
3. Calculate the cost of current lawn maintenance services
4. Determine patterns in interview responses with grounds maintenance workers
5. Determine patterns in interviews with other school divisions privatizing lawn services
6. Compare lawn maintenance services and costs of a private provider with the Grounds Shop over a specified period of time.
7. Apply performance criteria.
8. Perform cost/benefit analyses.

TIME LINE OF EVALUATION ACTIVITIES:

Interview Project Personnel **Document Goals and Objectives** **Review Literature**	**January 1995**
Establish Research Questions/Objectives and Performance Criteria **Begin Data Collection**	**January and February 1996** **February and March, 1996**
Analyze Data and Answer Research Questions **Compare Performance with Criteria for Success**	**March 1996; November 1996** **November 1996**
Report Finding and Recommendations	**May 1996 (Interim Report)** **November 1996 (Final Report)**
Implement Recommendations	**December 1996**

ADMINISTRATOR **TEAM LEADER**

April 11, 1996
DATE

CHESAPEAKE
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REVIEW OF THE LITERATURE

REVIEW OF THE LITERATURE

This section contains the review of the literature pertinent to the study.

GROUNDS MAINTENANCE EVALUATION
REVIEW OF THE LITERATURE
CONCLUSIONS

A review of the literature was conducted to guide the data collection phase of the evaluation to assist in answering the following questions:

1. **What is the evaluation of current services?**
   - Public attitudes toward the quality of education within schools is influenced by the quality of the exterior landscaping and maintenance.
   - The evaluation of the grounds operation of one large school division revealed a need for improving services directly related to the final appearance (i.e., edging, debris and leaf removal).
   - Both in-house and private providers of grounds maintenance services can be effective if funds are available.
   - Poor performance is cited as a reason for failure of in-house as well as contracted arrangements.

2. **Is efficiency of current work teams equal to or better than current practice?**
   - Improved efficiency is a major reason school divisions consider contracting for grounds services.
   - Before comparisons of efficiency between in-house and private providers of grounds services are made, the in-house operation should be examined thoroughly. Bids submitted by private providers should contain specific information related to efficiency in the performance of all activities.

3. **Is current cost of lawn services appropriate for the expected level of service?**
   - Reduced cost is a major reason school divisions consider contracting for grounds services; however, cost savings are frequently not realized.
   - Three-year price comparisons should be required when contractors submit bids to provide grounds services to ensure that initial bids are not deflated.
   - Regional averages of payroll dollars per student, average grounds salaries, and grounds dollars per square foot are useful benchmarks for determining the cost efficiency of an in-house operation.

4. **Is there a role for a private provider of lawn maintenance services that will yield savings to the school divison?**
   - Privatization is the transfer of functions performed by public employees to the private sector.
   - The terms contracting, purchasing, or buying services are suggested by AASA and NSBA as more appropriate terms than privatization.
   - Management services are contracted more often than instructional programs.
   - A thorough assessment of the advantages (i.e., staff reduction, reduced costs) and disadvantages (i.e., unreliability of services, less control) of contracting is recommended prior to commitment.
   - Decisions regarding contracting should consider first and foremost the best interests of the students.

GROUNDS MAINTENANCE EVALUATION
REVIEW OF THE LITERATURE

	Memphis City Schools <u>**Custodial, Maintenance and Ground Survey**</u>	**Agron**	**King**	**Whiddon**
What is the evaluation of current services?	Ratings of general service, quality, frequency of mowing, and assistance from crew in the Memphis City Schools were all higher after contracting out grounds services Grounds services listed as needing improvement in Memphis City Schools included: frequency of mowing, edging, trimming; pruning; debris and leaf removal; sodding.		The taxpayer's perception of the quality of education is influenced by the quality of landscaping and maintenance of school grounds The climate for parent-principal and parent-teacher interactions is improved through top-rate landscaping. Landscaping is not only ornamental but may improve security as well.	In-house management is as effective as outside management if the availability of funds is the same. <u>Questions to ask when bidding for contract management</u>: *What will a contractor do differently? *Will a contractor be more effective? *What could your in-house management recommend to correct any problems?
Is efficiency of current work teams equal to or better than current practice?				<u>Questions to ask when bidding for contract management</u>: *Is there an efficient, effective current in-house work order tracking system? *Is work checked?
Is current cost of lawn services appropriate for expected level of service and quality? Is there a role for a private provider of lawn maintenance services that will yield savings to the school division?		<u>Mid-Atlantic Region Avgs</u>: *Payroll dollars per student: $21.85 *Equipment & supplies dollars per student: $4.31 *Average grounds salary: $21,896 *Grounds dollars per sq. ft.: $.16 *Equipment & supplies dollars per sq. ft.: $.03	Maintaining well-manicured, well-groomed school grounds is not expensive. Groundskeeping may be an area for cost savings in school budgets, and one option may be contracting out for lawn-cutting services.	<u>Questions to ask when bidding for contract management</u>: *Do you have a 3-year price comparison from the low bidder ? *Can the current in-house budget be justified?

GROUNDS MAINTENANCE EVALUATION
REVIEW OF THE LITERATURE

	American Association of School Administrators and National School Boards Association	Dervarics	Lindley	NSBA "Best Practices Series" (Results of a survey of school districts regarding privatization)	Lyons
What is the evaluation of current services?			As the largest residence in a community, a school should have attractive, functional landscaping. The external setting contributes to learning. Student involvement in landscape projects develops pride and a sense of ownership in the school.	Respondents cited "poor performance by the contractor" as one negative aspect of contracting out.	Appearance of the buildings and grounds contributes to the formation of public attitudes toward the schools.
Is efficiency of current work teams equal to or better than current practice?				Respondents cited "improved efficiency" as one positive aspect of contracting out.	School districts contract primarily because of cost, efficiency, and quality.
Is current cost of lawn services appropriate for expected level of service and quality? Is there a role for a private provider of lawn maintenance services that will yield savings to the school division?	AASA and NSBA •define privatization as "going into the marketplace to hire individuals or companies with special skills or services" •recommend the use of the words contracting,purchasing, or buying services •suggest the following evaluative criteria: efficiency, cost analysis, performance, equity, contractor evaluation •recommend thorough analysis and entering into agreements only if they are a credit to the district, its citizens, and its students	Federal regulations, parent expectations, and lack of money lead many districts to "pay someone else to deal with the problems." Issues such as energy efficiency and building improvements have forced districts to seek help and to contract day-to-day tasks such as cleaning and landscaping. Contractors may offer access to innovations such as computerized landscaping for designing the layout of plants and shrubs. School divisions should examine all options including improving an in-house operation to ensure a high-quality product.		Forty-five percent of respondents contracted to achieve cost savings--only one-third succeeded. Sixty-two percent of respondents have considered some form of privatization. Management services rather than instructional programs are likely to be contracted. Survey comment: "Think through the process and when you believe you have all the answers, think through it again."	Privatization: the transfer of functions performed by public employees to the private sector. Advantages of contracting: relief of administrative overload; reduced costs; access to technical expertise; economies of scale; and staff reduction.. Disadvantages: political implications, less managerial and service quality control, and more potential for improprieties and unreliability of services. The decision to privatize should not be based just on what can be saved but on the best interests of the students.

GROUNDS MAINTENANCE EVALUATION
REVIEW OF THE LITERATURE

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SURVEY OF ADMINISTRATORS

SURVEY OF ADMINISTRATORS

This section describes the purpose of the survey of principals and the findings, conclusions, and recommendations based on the results of the survey.

GROUNDS MAINTENANCE EVALUATION
SURVEY OF ADMINISTRATORS

PURPOSE OF THE SURVEY:
Forty-two surveys were administered to answer the following research question: **What is the evaluation of the current services of the Grounds Shop by school principals? Thirty-six** principals responded to the survey for a return rate of **86%**.

CRITERION FOR SUCCESS:
A program of grounds maintenance which receives an **above average rating** by **80% of principals**

SURVEY RESULTS (See Appendix 1, page 44):

	Percent of Principals Rating the Item Above Average
Lawn Maintenance Activities:	
1. Cut and maintain grounds every 12 days	61%
2. Prepare grounds for special events	59%
3. Spray herbicides	56%
Other Grounds Maintenance Activities:	
4. Install and maintain playground equipment and areas	42%
5. Landscape grounds by special request	50%
6. Remove dead trees and grind stumps	56%
7. Install and repair fences	42%
8. Deliver and spread mulch, gravel, top soil, rock salt	44%
9. Order, install, and maintain signs	61%
10. Make minor concrete repairs	36%
11. Repair pot holes	37%
12. Build walkways	48%
13. Clean and repair storm drains	33%
14. Excavate underground utilities	22%
15. Clean up damage caused by vandalism	67%
16. Conduct drainage projects	17%
17. Maintain and repair wooden walks, platforms, and benches	50%
18. Maintain running tracks and sand pits	31%
19. Pick up equipment for annual maintenance	52%
20. Perform additional grounds duties as assigned (e.g., setting up for graduation, snow removal, delivery assistance)	61%
Grounds Shop Crew	
21. Demonstrates sensitivity to instructional schedule of the school	64%
22. Demonstrates sensitivity to school safety	75%
23. Demonstrates sensitivity to private property (e.g., cars) on school grounds	58%
24. Provides assistance when needed (e.g., icy conditions)	64%
25. Demonstrates sensitivity to the final appearance of grounds (e.g., removes paper prior to lawn service; cleans sidewalks)	50%

26. Overall attitude of crew in work performance	**78%**
27. Overall quality of all grounds maintenance services	**63%**

FINDINGS:

1. None of the items reached the benchmark of **an above average rating by 80% of principals**; however, the following items received an **above average rating** by **60%** or more principals:

   Lawn Maintenance Activities:
   - cut every 12 days (61%)

   Other Grounds Maintenance Activities:
   - order, install, and maintain signs (61%)
   - clean up damage caused by vandalism (67%)
   - perform additional grounds duties as assigned (e.g., graduation) (61%)

   Grounds Shop Crew:
   - demonstrates sensitivity to instructional schedule (64%)
   - demonstrates sensitivity to school safety (75%)
   - overall attitude of crew in work performance (78%)
   - overall quality of all grounds maintenance services (63%)

2. The following items received **not applicable ratings** by **20%** or more principals
   - install and maintain playground equipment and areas (22%)
   - install and repair fences (25%)
   - clean and repair storm drains (20%)
   - excavate underground utilities (44%)
   - conduct drainage projects (39%)
   - maintain running tracks and sand pits (47%)

3. The following items relate to the appearance of school grounds and received **above average** ratings by **50% or fewer** principals:
   - landscape grounds by special request (50%)
   - install and repair fences (42%)
   - deliver and spread mulch, gravel, top soil, rock salt (44%)
   - make minor concrete repairs (36%)
   - repair pot holes (37%)
   - build walkways (48%)
   - clean and repair storm drains (33%)
   - maintain and repair wooden walks, platforms, and benches (50%)
   - **crew demonstrates sensitivity to the final appearance of grounds (50%)**

4. **Comments** of principals were compatible with responses to items on the survey (e.g., "workers attending to grounds maintenance have been courteous," "we were not aware of these activities and have never asked for assistance in those areas," and "...if they could spread the mulch at the schools, it would be a tremendous help").

   Principals **commented** on two areas not specifically addressed in the survey: "(groundskeepers) still do not come to office before beginning...," and "I am not aware of when work will be completed, and in most cases I am not made aware of what is completed."

CONCLUSIONS:

1. A substantial percentage of principals consider the Grounds Shop to be **above average** in their performance on some key items, including **overall quality (63%)**, **sensitivity to safety (75%)**, and **attitude of crew members (78%)**. (See Appendix 1, page 44.)

2. Given the percentage of principals who rated a number of grounds activities as **not applicable**, it appears that certain activities are not performed at some schools (e.g., **track maintenance**) or that these principals have no knowledge of the activities (e.g., work related to **playground equipment**, **fences**, and **storm drains**).

3. Comments offered by principals on the survey suggest that they would appreciate more communication with the Grounds Shop to increase awareness of when to expect services, when groundskeepers arrive at schools and depart, the tasks to be performed, and when jobs are completed.

4. It appears to be the opinion of principals that lawn maintenance is being completed in a timely manner but that the final appearance should be improved. Principals rated items related to general performance of lawn maintenance as **above average**, but an average of only 44% of principals rated items related to final appearance as **above average.**

RECOMMENDATIONS:

1. Provide a listing of all services of the Grounds Shop to each principal, categorizing those activities which are routinely performed and those which must be requested by principals. Information as to what principals should reasonably expect with regard to each item would help decrease the gap between principals' expectations and reality and would improve consistency of service for each school.

2. Develop a rotation schedule for lawn maintenance which allows crews to concentrate more on the final appearance of sites maintained, especially at the front of buildings (i.e., mulching, removing trash prior to cutting, and more care in edging and trimming).

3. Estimate the cost of additional activities needed to improve the final appearance of grounds (e.g., planned mulching and weeding); then develop a checklist for crews which focuses on all tasks. Examine current grounds tasks to determine if restructuring assignments within and between crews will allow more time on "appearance tasks" without additional cost.

4. Devise a method to inform principals when grass cutting is scheduled and provide a range of days so that phone calls requesting service can be avoided. Additionally, rotate among schools the time of day grass cutting is scheduled so that the same schools are not always serviced during the same instructional periods.

5. Conduct an annual training session for crew members to address the following: sensitivity to private property on school grounds, protocol upon entering school grounds (i.e., checking in at office), and final appearance of grounds.

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INTERVIEWS WITH GROUNDS SHOP PERSONNEL

INTERVIEWS WITH GROUNDS SHOP PERSONNEL

This section provides the purpose of the interviews and the findings, conclusions, and recommendations based on the results of the interviews.

GROUNDS MAINTENANCE EVALUATION
INTERVIEWS WITH GROUNDS SHOP PERSONNEL

PURPOSE OF THE INTERVIEWS:

Interviews were conducted with **Grounds Shop personnel** during **February, March, and April** of **1996** to answer the following **research question: Can the current Grounds Shop operation be restructured to improve efficiency and effectiveness?**

Interview **questions** were related to the following: **Experience and Training of Crews, Efficiency** (i.e., organization of crews, startup/shutdown, travel time), **Growing Season Activities, Temporary Employees, Winter Activities, Workload, Time on Task**, and **Non-Grounds Activities.**

Interviews were conducted with the **shop leadman, one crew leader**, and **four groundskeepers.** In addition, interviews pertaining only to **Time on Task** were conducted with **two crew leaders,** the **coordinator of Custodial Services**, and the **shop leadman** to determine the **number of days per year each crew spends on individual grounds maintenance activities.**

CRITERION FOR SUCCESS:

A program of grounds maintenance in which efficiency of current grounds work teams is equal to or better than current practice

FINDINGS:

The following **patterns of responses** and the chart of **Activity-Based Costing** (Chart 1, page 25) represent the **findings** from the interviews:

1. **EXPERIENCE AND TRAINING OF CREWS:**
   - Many of the groundskeepers have been with the shop over 10 years.
   - Training for the shop is largely "on the job" with the shop leadman and experienced groundskeepers teaching those who are willing to learn.
   - The shop leadman instructs all new groundskeepers in the use of equipment and safety.
2. **EFFICIENCY:**
   - **A. ORGANIZATION OF CREWS:**
     - In general, personnel indicated their crews are well organized to get the work done.
     - In each crew the leader operates the riding mower, crew members operate the large mowing trailers, and temporary workers operate small hand tools.
     - Crew leaders exercise leeway in how their crew gets the work done; in all cases individuals are encouraged to work on small tasks so as not to unnecessarily encumber the entire crew.

CHART 1

Grounds Maintenance Evaluation
Activity-Based Costing

Activity Assigned	Estimated Days Per Year Per Crew	1994-95 Cost	Percentage of Total Cost
LAWN MAINTENANCE ACTIVITIES			
1. Cut and maintain grounds (12-day cycle)	136.0	$368,884	
2. Prepare grounds for special events	2.0	5,461	
3. Spray herbicides	1.5	4,056	
Total for Lawn Maintenance	**139.5**	**$378,401**	**56.9%**
OTHER GROUNDS MAINTENANCE ACTIVITIES			
4. Install and maintain playground equipment	6.3	$14,900	
5. Landscape grounds by special request	2.1	4,997	
6. Remove dead trees and grind stumps	6.2	14,752	
7. Install and repair fences	6.2	14,752	
8. Deliver and spread mulch, gravel, etc.	5.8	13,800	
9. Order, install, and maintain signs	14.9	35,453	
10. Make minor concrete repairs	1.0	2,379	
11. Repair pot holes	1.6	3,807	
12. Build walkways	3.6	8,566	
13. Clean and repair storm drains	4.9	11,659	
14. Excavate underground utilities	0.2	476	
15. Clean up damage caused by vandalism	2.0	4,759	
16. Conduct drainage projects	0.7	1,666	
17. Maintain and repair wooden walks, platforms, etc.	0.4	952	
18. Maintain running tracks and sand pits	1.3	3,093	
19. Pick up equipment for annual maintenance	3.0	7,138	
20. Additional grounds duties (e.g., graduation, snow removal)	4.5	10,707	
Total for Other Grounds Maintenance	**64.7**	**$153,946**	**23.1%**
OTHER WINTER ACTIVITIES			
21. Trim trees, haul	16.9	$40,211	
22. Clean school sites	8.5	20,225	
23. Clean wooded areas	1.1	2,617	
24. Fill holes	13.5	32,122	
25. Remove grass (parking lots, etc.)	2.5	5,948	
26. Survey monuments	0.8	1,903	
Total for Other Winter Activities	**43.3**	**$103,026**	**15.5%**
INCLEMENT WEATHER ACTIVITIES			
27. Plumbing shop assistance	0.4	$ 952	
28. HVAC assistance	0.1	238	
29. Carpentry assistance	3.2	7,614	
30. Warehouse assistance	7.2	17,131	
31. Custodial assistance	1.6	3,807	
Total for Inclement Weather Activities	**12.5**	**$29,742**	**4.5%**
Total for Other Grounds, Other Winter, & Inclement Weather Activities	**120.5**	**$286,714**	**43.1%**
GRAND TOTAL (Lawn Maintenance and all Other Grounds Maintenance Activities)	**260.0**	**$665,115**	**100.0%**

The estimated number of days each crew performs an activity during the year was determined through structured interviews with Grounds Shop personnel.

The total costs for grounds maintenance activities and lawn maintenance activities were obtained from the Accounting Department. Total days performed in lawn maintenance activities were subtracted from total contract days to determine total days performed in all other grounds maintenance activities. Estimated cost for each activity was determined by a formula which considered the percentage of total days per activity to the total days worked and the total cost for the category of the activity.

The totals for each major category provide the most reliable data (e.g., Total for Inclement Weather Activities: 12.5 days at $29,890).

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- The shop leadman performs many tasks to prevent the routine of the crew from being interrupted (e.g., repairing storm drains).

B. **STARTUP/SHUTDOWN:**

- Grounds Shop personnel work 8 hours each day. Their lunch period takes an additional half hour.
- Personnel arrive at School Plants by 7:30 a.m. to gather equipment, receive work orders (including inclement weather assignments), and otherwise prepare for the workday.
- Crews are generally on the road within 15 - 20 minutes, arriving at the schools before 8:00 a.m.
- Work is begun immediately unless materials must be obtained to complete a work order.
- Crews return to School Plants around 3:30 to prepare for the next workday or perform odd jobs around the Grounds Shop until they leave at 4:00 p.m.

C. **TRAVEL TIME:**

- Most of the sites maintained by a crew are close together and only 15 minutes from School Plants. Crew assignments to geographical areas overlap, but the crews maintain different schools in those areas.
- Work is organized so that crews usually work at no more than 2 sites per day.
- Crews occasionally have to return equipment to School Plants for repair.

3. **GROWING SEASON (APRIL THROUGH NOVEMBER) ACTIVITIES:**

- The growing season is the peak time of year for the Grounds Shop in that cutting and maintaining lawns takes most of a crew's time with less than an hour each day devoted to other grounds duties.
- Crew members expressed the desire to have more help during this time in addition to the three temporary workers assigned to each crew.
- Personnel are routinely assigned to other shops or to helping school custodians during inclement weather.

4. **TEMPORARY EMPLOYEES:**

- Each crew is assigned three temporary workers during the growing season.
- Good temporary workers often go beyond what is required of them in the hope of being hired as a full-time employee (many of the full-time employees began as "temps").
- Many of the temporary workers have worked with the school division several years.

5. **WINTER SCHEDULE:**

- Although the crews have a schedule of winter activities, the schedule varies each day unlike the growing season schedule (see Chart 1, page 25).
- Several groundskeepers indicated that they could use more help in the winter ("temps" are used only in the summer) to improve their efficiency.
- Personnel are assigned to other shops or to helping school custodians on a daily basis during inclement weather.

6. **WORKLOAD:**

- All personnel indicated that they have a heavy workload in both summer and winter,

and most expressed the desire to have more crew members, either full time or temporary.

- Groundskeepers perform a multitude of tasks in addition to the activities associated with lawn maintenance (see Chart 1, page 25).

7. **TIME ON TASK:**
   - Grounds Shop personnel are responsible for more than 30 categories of activities (see Chart 1, page 25).
   - Crew members are encouraged to rotate breaks and avoid even the appearance of being "off task."
   - The Shop Leadman enforces time on task, checking on each crew twice a day.
8. **NON-GROUNDS ACTIVITIES (ASSISTING OTHER SHOPS):**
   - The Grounds Shop assists other shops during inclement weather and when emergencies arise (see Chart 1, page 25); most personnel expressed dissatisfaction with this arrangement.

CONCLUSIONS:

The following conclusions are based on the comments of Grounds Shop employees during the interviews:

1. **EXPERIENCE AND TRAINING OF CREWS:**
   - On-the-job training is both adequate and appropriate to obtain the skills needed for the basic services provided if groundskeepers are willing to learn.
   - Motivation to learn varies among groundskeepers. Some employees are reluctant to learn new skills because they see no chance for advancement in the Grounds Shop or into other shops, but there appears to be ample opportunity to learn from the more experienced groundskeepers and from the shop leadman.
   - Groundskeepers who take advantage of learning opportunities often have to assume more responsibility by performing the tasks that others have not been trained to perform.
   - Lack of skill by some crew members seems to contribute to the whole crew working on small tasks rather than one or two members being assigned to several tasks at once.
2. **EFFICIENCY:**
   A. **ORGANIZATION OF CREWS:**
      - The general organization of the crews promotes efficiency; however, apparently not all crew members have the skills to work alone on a task and, as stated above, crews do not always break up to perform small tasks.
      - Personnel appear to have a clear idea of their responsibilities but most also seem to be willing to cross over to assume other responsibilities as needed (this includes helping temps, other crew members, and other crews).
      - The work of the shop leadman on certain activities assists crews in maintaining their regular schedules.

- The procedures for completing work varies from crew to crew, and consistency of work performed could better be achieved with more uniformity.

B. **STARTUP/SHUTDOWN:**

- It appears that little time is wasted moving from School Plants to the schools each morning or from the schools to School Plants in the afternoon when crews are on their regular schedules.
- Delays sometimes occur once crews arrive at the schools because crew members must return to School Plants or travel elsewhere to obtain materials to complete a work order.
- During inclement weather delays occur because crews cannot receive assignments until the shop leadman contacts other shops to determine what assistance they need.

C. **TRAVEL TIME:**

- Daily travel time is considered by groundskeepers to be minimal. The crew covering Western Branch has a longer trip to and from the first site, but they have little travel time throughout the day. A check of zone assignments for the four crews shows that each crew serves schools in several different areas of the city and that some areas of the city are served by more than one crew (e.g., Crew 4 serves some schools in South Norfolk, Deep Creek, and Great Bridge; and schools in South Norfolk are served by three of the four crews [see Chart 2, page 29]).

3. **GROWING SEASON (APRIL THROUGH NOVEMBER) ACTIVITIES**:

- Groundskeepers push hard all summer simply to keep up with the grass but are still required to perform other tasks at the schools as requested by principals as well as occasionally assist other shops.
- Crews complete all their tasks (mowing, trimming, sweeping, blowing), but some groundskeepers are concerned that the quality of their work suffers and is reflected in the appearance of the grounds.

4. **TEMPORARY EMPLOYEES**:

- In general, the temporary workers are viewed as helpful, going beyond what is expected of them in many cases.

5. **WINTER ACTIVITIES**:

- Although the winter workload is less grueling than the workload of the growing season (in large part because of the summer heat), groundskeepers are kept busy with a list of specific activities as well as with fulfilling requests from principals and assisting with snow removal and other problems caused by winter storms.

6. **WORKLOAD**:

- The workload is such, especially in summer, that finishing each task takes priority over the quality of the work.
- Some groundskeepers would like the opportunity to concentrate on the final product in addition to getting the job done.

Chart 2
Grass Cutting
Zone Assignments

Zone 1 / Crew 1	Acreage	Zone 2 / Crew 2	Acreage	Zone 3 / Crew 3	Acreage	Zone 4 / Crew 4	Acreage
Crestwood Intermediate	27	**Western Branch High***	109	Indian River High	120	**Deep Creek High***	44
Crestwood Middle	27	**Western Branch Middle***	↓	Indian River Middle	↓	**Deep Creek Middle***	25
Chesapeake Alternative	12	**Western Branch Intermediate***	↓	Indian River Middle Annex	↓	**Deep Creek Elementary***	17
Chesapeake Technical	30	**Western Branch Primary***	↓	Georgetown Primary	19	Great Bridge Primary	25
B.M. Williams Primary	11	**Chittum Elementary***	17	Norfolk Highlands Primary	3	Great Bridge Middle,North	56
Butts Road Primary	17	**Southwestern Elementary***	13	Sparrow Road Intermediate	11	Great Bridge Middle,South	↓
Butts Road Intermediate	15	**SECEP***	6	**Carver Intermediate***	30	**Rena B. Wright Primary***	8
Great Bridge High	72	**Treakle Elementary***	13	**Thurgood Marshall Elem.***	9	**Oscar Smith High***	171
Great Bridge Intermediate	↓	**Camelot Elementary***	17	**Edwards-Wilson Center***	5	**Oscar Smith Middle***	22
Southeastern Elementary	18	**Deep Creek Intermediate***	12	**Portlock Elementary***	30	Truitt Building	5
Hickory Elementary	8	**Deep Creek Central***	12	Greenbrier Primary	15		
Hickory High School	187			Greenbrier Intermediate	15		
Cedar Road Elementary	17						
Total Acres - Zone 1	441	**Total Acres - Zone 2**	199	**Total Acres - Zone 3**	257	**Total Acres - Zone 4**	373
TOTAL ACREAGE 1341							

The School Plants Compound (11 acres), Riverwalk site (15 acres), and Greenbrier site (45 acres) are rotated among all crews.
***The sites which would be contracted** (includes 4 stadiums)

7. **TIME ON TASK:**
   - A rigorous mowing schedule during the growing season and a long list of winter activities require crews to stay on task.
   - Apparently the shop leadman spends a large part of the day ensuring that crew members remain on task, including enforcing rotation of breaks and reorganizing crews to increase productivity. Some crew members view this supervision unfavorably.

8. **NON-GROUNDS ACTIVITIES (ASSISTING OTHER SHOPS):**
   - Although groundskeepers complain about helping other shops, these activities increase productivity in other shops in inclement weather and when additional winter activities are necessary.
   - Special requests for assistance may occur because the requesting shop does not have the equipment needed to haul materials, etc. These requests have decreased as other shops have obtained their own equipment.

RECOMMENDATIONS:

1. Expand minimal training requirements for crew members since motivation to learn is an important factor in the current on-the-job training arrangement of the Grounds Shop. Training would help ensure that responsibility for activities is not always placed on the same individuals and that crew members could be assigned to several tasks at one time if needed. However, when appropriate, designate project teams (e.g., concrete repairs) within each crew so that crew members can specialize in the performance of certain tasks. Explore additional opportunities for combining project teams from several crews to perform tasks during the winter months.

2. Identify areas in which uniformity of the work by crews would contribute to efficiency and effectiveness and provide training to crew leaders to achieve uniformity.

3. Develop a means to identify ahead of time the materials a crew will need to complete work orders so that materials are always assembled the afternoon before a job is to begin.

4. Develop a weekly "inclement weather" plan which includes anticipating possibilities for assignments to other shops to improve the efficiency of startup on those days.

5. Review the current configuration of sites served by each crew to determine if other combinations of sites would further reduce travel time.

6. Develop a plan to allow crews to concentrate more on the final appearance of the sites maintained, especially at the front of buildings (e.g., more frequent mulching, more care in edging and use of equipment, and consultations with principals within guidelines).

7. Convene an ad hoc committee of principals and School Plants personnel to compile a set of guidelines for the performance of lawn maintenance activities.

8. Conduct an annual inservice meeting to clarify guidelines for all grounds maintenance activities and to solicit suggestions from crews for improving their performance in all areas, including the final appearance of school grounds.

9. Examine "other grounds maintenance" tasks to determine if any could be contracted or assigned to another shop to allow crews to concentrate on final appearance (e.g., could the repair of signs and fences be assigned to the Paint Shop or to a "sign" crew during the winter months?).

10. Develop a system which recognizes the contributions of outstanding crew members (e.g., awards banquets, certificates, service pins, pay for performance).

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ACTIVITY-BASED COSTING

ACTIVITY-BASED COSTING

Activity-based costing is a technique that assigns time and costs to activities. This section provides the purpose of the activity-based costing of grounds maintenance services and the related findings, conclusions, and recommendations.

GROUNDS MAINTENANCE EVALUATION
ACTIVITY-BASED COSTING

PURPOSE OF THE ANALYSIS: To estimate the costs of individual activities and the number of days per year each crew performs the activities of the Grounds Shop

CRITERION FOR SUCCESS: A program of grounds maintenance in which efficiency of current grounds work teams is equal to or better than current practice and in which cost of lawn service is appropriate for the expected level of quality and service

RESULTS OF THE ANALYSIS: See Chart 1, page 25.

FINDINGS:

1. **LAWN MAINTENANCE ACTIVITIES:**

   - This analysis reveals that groundskeepers spend about **57%** of their time on **lawn maintenance.**
   - Costs for this category represent **more than half of the costs** of the Grounds Shop.

2. **OTHER GROUNDS MAINTENANCE ACTIVITIES:**

   - About **one-quarter** of each crew's time is spent on these activities.
   - **Costs** for these activities represent **one-quarter** of the costs of the Grounds Shop.
   - The data indicates that **sign maintenance** requires the **most time in this category**, amounting to an average of three weeks per year per crew.

3. **OTHER WINTER ACTIVITIES:**

   - Crews spend about **16%** of their time on these winter activities.

4. **INCLEMENT WEATHER ACTIVITIES:**

   - Crews spend only **5%** of their time performing activities that are assigned because of inclement weather.

CONCLUSIONS:

1. **LAWN MAINTENANCE ACTIVITIES:**

   - Responses on the **survey of principals** indicate that they consider lawn maintenance to be the **most important category** of activities, yet groundskeepers spend only a little more than **half of their time** on this category of activities. This may explain

why only 50% or fewer principals rated the Grounds Shop above average on items related to the **final appearance** of school grounds.

2. <u>OTHER GROUNDS MAINTENANCE ACTIVITIES</u>:

- The Grounds Shop is **responsible for many activities which are unrelated to grounds maintenance** and **of which principals are unaware** (in the **survey of principals**, items in this category were frequently rated as **"not applicable"**). Principals may be under the impression that groundskeepers have more time than is actually available for lawn maintenance.
- **Time** allocated and **monies** spent on these other activities possibly could be redirected to improving the effectiveness of lawn maintenance services.

3. <u>OTHER WINTER ACTIVITIES:</u>

- **Time** allocated and **costs** for these activities appear to be **appropriate** since they supplement other grounds maintenance activities and are performed for only a portion of the year.

4. <u>INCLEMENT WEATHER ACTIVITIES</u>:

- Most of the groundskeepers interviewed emphasized the frequency with which they are called on to provide assistance to other shops. Apparently they **overstated** these activities since this analysis reveals that a **small percentage of time** is devoted to assisting other shops.

RECOMMENDATION:

- Examine **possibilities for restructuring** all activities in the category of **"Other Grounds Maintenance Activities"** to allow crews **to spend more time** on the **final appearance** of grounds in the growing season. Restructuring may involve reassignment of activities to other shops, reorganization within a few crews, or contracting certain activities to outside providers (e.g., order, install, and maintain signs).

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SURVEY OF SCHOOL DIVISIONS AND MUNICIPALITIES IN THE REGION

SURVEY OF SCHOOL DIVISIONS AND MUNICIPALITIES IN THE REGION

This section describes the regional survey conducted to establish efficiency "benchmarks" for grounds maintenance and the resulting findings and conclusions.

GROUNDS MAINTENANCE EVALUATION
SURVEY OF SCHOOL DIVISIONS AND MUNICIPALITIES IN THE REGION

PURPOSE OF THE SURVEY:

Surveys were sent to 14 school divisions and 14 municipalities in the region to establish benchmarks for determining if **the current cost of lawn maintenance services for Chesapeake Public Schools is appropriate for the expected level of service and quality.** Eleven school divisions and three municipalities responded. Due to the limited response from municipalities, only school division responses were used to establish benchmarks. In addition, one small school division was not included in the analysis.

A national survey of school districts in the mid-Atlantic region of the country regarding budgeted expenditures for grounds services also was used. No benchmarking from other data was available.

CRITERION FOR SUCCESS:

Current per acre cost for lawn service is comparable to appropriate industry standards.

SURVEY RESULTS: See Chart 3, page 37, and Appendix 2, page 45.

FINDINGS:

1. **SERVICE PROVIDER:**
   - **Four** school divisions included in the analysis perform **100%** of their lawn maintenance services **in-house**. Another school division performs **two-thirds** of their services **in-house** and has **consolidated** the other **one-third** with the municipality.
   - **One** school division **contracts for 100%** of its lawn maintenance services.
   - **Four** school divisions have **consolidated** with the local municipality for **100%** of their lawn maintenance services.
   - **One** school division has **consolidated** with the local municipality for over **three-quarters** of its lawn maintenance services but also **contracts** for the remainder.

2. **TOTAL COST PER ACRE - ALL GROUNDS MAINTENANCE:**
   - **Seven** school divisions provided this information. Costs ranged from **$353 to $1,959 per acre.**

3. **COST PER ACRE - LAWN MAINTENANCE:**
   - **Seven** school divisions provided this information. Costs ranged from **$283 to $1,959 per acre.**

CHART 3
BENCHMARKING RESULTS

Survey of School Divisions in the Region and American School and University National Survey

Service Provider

School Division	Purchased	In-House	Consolidated
Chesapeake	0.0%	100%	0.0%
Hampton	0.0%	0.0%	100.0%
Norfolk	0.0%	0.0%	100.0%
Newport News	0.0%	0.0%	100.0%
Poquoson	0.0%	67.0%	33.0%
Portsmouth	100.0%	0.0%	0.0%
Southampton	0.0%	100.0%	0.0%
Suffolk	0.0%	100.0%	0.0%
Virginia Beach	22.0%	0.0%	78.0%
Williamsburg/ JCC	0.0%	100.0%	0.0%
York County	0.0%	0.0%	100.0%
# of Divisions in each category	1.22	4.67	5.11
% in each category	11.0%	42.5%	46.5%

Cost Per Acre - All Grounds Maintenance

School Division	Cost
Suffolk	$353
Williamsburg/JCC	475
Chesapeake	496
Southampton	600
Virginia Beach	1,438
Portsmouth	1,932
York County	1,959
Norfolk	Not Available
Newport News	Not Available
Hampton	Not Available

Cost Per Acre - All Lawn Maintenance

School Division	Cost
Chesapeake	$283
Suffolk	318
Williamsburg/JCC	427
Southampton	450
Virginia Beach	575
Portsmouth	773
York County	1,959
Norfolk	Not Available
Newport News	Not Available
Hampton	Not Available

Staff Hours Per Acre - All Grounds Maintenance

School Division	Number of Hours
Suffolk	14
Chesapeake	30
Williamsburg/JCC	39
Virginia Beach	76
Norfolk	Not Available
Newport News	Not Available
Portsmouth	Not Available
Southampton	Not Available
York County	Not Available
Hampton	Not Available

Staff Hours Per Acre - All Lawn Maintenance

School Division	Number of Hours
Virginia Beach	10
Williamsburg/JCC	12
Chesapeake	17
Suffolk	38
Norfolk	Not Available
Newport News	Not Available
Portsmouth	Not Available
Southampton	Not Available
York County	Not Available
Hampton	Not Available

Expenditures Per Student - All Grounds Maintenance

School Division	Cost
Southampton	$16
Suffolk	16
Chesapeake	20
Williamsburg/JCC	22
Virginia Beach	29
York County	71
Portsmouth	183
Norfolk	Not Available
Newport News	Not Available
Hampton	Not Available
MID-ATLANTIC REGIONAL AVERAGE - AS&U Budgeted 1995-96	$26

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4. **STAFF HOURS PER ACRE - ALL GROUNDS MAINTENANCE:**
   - **Four** school divisions provided this information. Staff hours ranged from **14 to 76 per acre.**

5. **STAFF HOURS PER ACRE - LAWN MAINTENANCE:**
   - **Four** school divisions provided this information. Staff hours ranged from **10 to 38 per acre.**

6. **EXPENDITURES PER STUDENT - ALL GROUNDS MAINTENANCE:**
   - **Seven** school divisions provided this information. Expenditures ranged from **$16 to $183 per student.**
   - The average amount budgeted per student in 1995-96 for the **mid-Atlantic region** was **$26.**

CONCLUSIONS:

1. **SERVICE PROVIDER:**
   - Chesapeake is not unusual in it service arrangement. **Forty-five percent** of the school divisions (**5**) used in the analysis indicated they have a **predominantly in-house** arrangement.

2. **TOTAL COST PER ACRE - ALL GROUNDS MAINTENANCE:**
   - Chesapeake has the **third lowest cost per acre** when compared to other school divisions surveyed.

3. **COST PER ACRE - LAWN MAINTENANCE:**
   - Chesapeake has the **lowest cost per acre** for lawn maintenance services and, therefore, **meets the criterion for success.**

4. **STAFF HOURS PER ACRE - ALL GROUNDS MAINTENANCE:**
   - Chesapeake has the **second lowest number of staff hours per acre.**

5. **STAFF HOURS PER ACRE - LAWN MAINTENANCE:**
   - Chesapeake has the **third lowest number of staff hours per acre.**

6. **EXPENDITURES PER STUDENT - ALL GROUNDS MAINTENANCE:**
   - Chesapeake has the **third lowest amount of expenditures per student.**
   - Chesapeake's expenditures are **below the average amount** budgeted per student for grounds expenditures in the **mid-Atlantic region.**

7. **Chesapeake** ranks **among the top three divisions** surveyed on **all measures of efficiency,** including **cost.** With the **lowest cost per acre for lawn maintenance, Chesapeake meets the established criterion for success.**

CHESAPEAKE
PUBLIC
SCHOOLS

BID TO CONTRACT LAWN MAINTENANCE SERVICES

BID TO CONTRACT LAWN MAINTENANCE SERVICES

This section provides the purpose of the bid for contracting partial lawn maintenance services and the related findings, conclusions, and recommendations.

GROUNDS MAINTENANCE EVALUATION
BID TO CONTRACT LAWN MAINTENANCE SERVICES

PURPOSE OF THE BID:

Proposals from outside contractors were requested in order to answer the following research question: **Is there a role for a private provider of lawn maintenance services that will yield savings to the school division?**

The Grounds Shop has traditionally hired **ten part-time temporary employees** and several **summer student workers** to assist full-time groundskeepers in maintaining the **58 sites** of the division during the **peak growing season (April 1 through November 15).** Crews perform **18 cuttings** per school on a **12-day cycle.**

Bids were requested to determine if the lawn maintenance performed by part-time temporary employees and summer student workers could be performed at a lower cost by a private provider of lawn services. Contractors submitted bids to maintain the grounds of **21 schools and 4 stadiums. Full-time groundskeepers** would maintain the remaining **33 sites** (see **Chart 2,** page 29). **Chart 4** (see page 41) indicates the grass cutting zones for which services would be contracted and the zones which would be maintained by full-time crew members of the Grounds Shop. The reassignment of in-house crews from contracted sites is also shown.

CRITERION FOR SUCCESS:

A program of grounds maintenance in which cost of lawn service is appropriate for the expected level of service and quality

RESULTS OF THE BID (see Appendix 3, page 46, and Appendix 4, page 56):

Two contractors submitted bids for maintaining **25 sites (560 acres)** from **April 1 through November 15.** Both bidders quoted costs of maintaining the sites every **12 days** for a total of **18 cuttings** which would include the following: 5 basic cuttings, 9 basic cuttings with edging, and 4 basic cuttings with trimming. This service is identical to that performed by in-house crews.

FINDINGS:

Based on the low bidder's quote, contracting lawn maintenance services for the **25 sites** during the peak growing season would cost the school division **$134,930.** The **1995-96 projected cost** for

CHART 4

GROUNDS MAINTENANCE EVALUATION

Crew Reassignments to Accommodate the Contracting of Lawn Maintenance Services

ZONES	**July 1 - June 30** Number of Groundskeepers	**April 1 - November 15** Number of Groundskeepers
Zone 1	3	3 + 3 = 6
Zone 2	3	Contracted
Zone 3	3	3 + 3 = 6 (8 sites) Contracted (4 sites)
Zone 4	3	Contracted (6 sites) 3 + 3 = 6 (4 sites)
TOTAL	12*	12*

*1 shop leadman supervises 13 groundskeepers (1 groundskeeper works with the shop leadman) for a total of 14 grounds maintenance employees.

temporary employees and supplies to maintain the **25 sites (560 acres) in-house** is **$88,899**. This includes **$68,574 for salaries and FICA** of part-time temporary and summer workers and **$20,325** for supplies (the average cost of supplies is approximately $813 per site).

CONCLUSIONS:

1. Based on the contractor's bid, contracting lawn maintenance services from April 1 to November 15 for **25 sites** would cost the school division **$46,031 more** than the current practice of hiring part-time temporary and summer workers (**$134,930 - $88,899 = $46,031**).

2. Cost estimates of the contractor for maintaining the 25 sites are higher than in-house costs because the costs for unskilled labor mixed with experienced Chesapeake crews are cost efficient.

3. Out of the region, **only one other bid was received**, and the quote of the **second bidder** for the same services was **more than double** the quote of the low bidder (see Appendix 4, page 56). The cost estimate of the second contractor for providing lawn services to **25 sites** during the peak growing season was **$288,776 ($199,877 more than the cost of temporary workers and supplies)**.

RECOMMENDATIONS:

1. Based on the level of efficiency of the current grounds crews and the higher cost of a private provider, continue the practice of hiring part-time temporary and summer employees to assist the Grounds Shop in lawn maintenance during the peak growing season.

3. Use the Activity-Based Costing Chart (Chart 1, page 25) to review the costs of all current grounds maintenance activities of the Grounds Shop to identify areas in which cost reductions in delivering service are feasible among current crews.

CHESAPEAKE
PUBLIC
SCHOOLS

APPENDICES

APPENDICES

Appendix 1
Grounds Maintenance Evaluation
Survey of Principals - Results

	Above Average	Average & Below	N/A
Lawn Maintenance Activities:			
1. Cut and maintain grounds every 12 days	61%	39%	0%
2. Prepare grounds for special events	59%	22%	19%
3. Spray herbicides	56%	30%	14%
Other Grounds Maintenance Activities:			
4. Install and maintain playground equipment and areas	42%	36%	22%
5. Landscape grounds by special request	50%	36%	14%
6. Remove dead trees and grind stumps	56%	28%	17%
7. Install and repair fences	42%	33%	25%
8. Deliver and spread mulch, gravel, top soil, rock salt	44%	56%	0%
9. Order, install, and maintain signs	61%	33%	6%
10. Make minor concrete repairs	36%	50%	14%
11. Repair pot holes	37%	49%	14%
12. Build walkways	48%	33%	19%
13. Clean and repair storm drains	33%	47%	20%
14. Excavate underground utilities	22%	33%	44%
15. Clean up damage caused by vandalism	67%	25%	08%
16. Conduct drainage projects	17%	45%	39%
17. Maintain and repair wooden walks, platforms, and benches	50%	28%	22%
18. Maintain running tracks and sand pits	31%	22%	47%
19. Pick up equipment for annual maintenance	52%	31%	17%
20. Perform additional grounds duties as assigned (e.g., setting up for graduation, snow removal, delivery assistance)	61%	31%	8%
Grounds Shop Crew:			
21. Demonstrates sensitivity to instructional schedule of the school	64%	36%	0%
22. Demonstrates sensitivity to school safety	75%	25%	0%
23. Demonstrates sensitivity to private property (e.g., cars) on school grounds	58%	42%	0%
24. Provides assistance when needed (e.g., icy conditions)	64%	28%	8%
25. Demonstrates sensitivity to the final appearance of grounds (e.g., removes paper prior to lawn service; cleans sidewalks)	50%	50%	0%
26. Overall attitude of crew in work performance	78%	20%	3%
27. Overall quality of all grounds maintenance services	63%	37%	0%
28. Zones of respondents: A Western Branch/Deep Creek 42% B Great Bridge 28% C Indian River/Greenbrier 19% D South Norfolk 11%			

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APPENDIX 2

April 12, 1996

Dr.
Director, Business & Finance
City Schools

Dear :

The Chesapeake School Division is evaluating its **grounds maintenance operation** this year. For purposes of comparison, we are surveying other school divisions and municipalities in Virginia to obtain responses to the following questions:

1. What are your **annual expenditures for total grounds maintenance**?

2. What **percentage** of your **annual expenditures for total grounds maintenance** is for **lawn maintenance**?

3. What **percentage** of your **lawn maintenance** is **Privatized**_____% **In-house**_____% **Consolidated between the school division and local government**_____%?

4. How many **acres** are maintained?

5. How many **FTE hours** are spent on **total grounds maintenance**?

6. What **percentage of FTE hours** spent on total grounds maintenance is for **lawn maintenance**?

Please **respond directly on this communication** and return it in the **enclosed self-addressed, stamped envelope.** We would appreciate hearing from you by **Monday, April 22.** Thank you for your assistance with this evaluation project.

Sincerely,

Davida W. Mutter, Ed.D.
Assistant Superintendent for Budget and Finance

Enclosure

_____ **CHECK HERE IF YOU WOULD LIKE TO RECEIVE THE RESULTS OF THIS SURVEY.**

From April 1 - November 15
(Normal cutting season)

APPENDIX 3
BID PROPOSAL FORM

GROUND MAINTENANCE

SCHOOLS	BASIC SERVICE (5 Times)	BASIC & EDGING SERVICE (9 Times)	BASIC & TRIMMING SERVICE (4 Times)	
CAMELOT ELEMENTARY	240.00 1200	255.00 2295	260.00 1040	4535
G. W. CARVER INTERMEDIATE	240.00 1200	260.00 2340	270.00 1080	4620
E. W. CHITTUM ELEMENTARY	290.00 1450	335.00 3015	460.00 1840	6305
DEEP CREEK CENTRAL ELEM.	290.00 1450	315.00 2835	400.00 1600	5885
DEEP CREEK ELEMENTARY	315.00 1575	325.00 2925	330.00 1320	5820
DEEP CREEK HIGH SCHOOL	600.00 3000	645.00 5805	630.00 2520	11,325
DEEP CREEK INTERMEDIATE	225.00 1125	220.00 1980	220.00 880	3985
DEEP CREEK MIDDLE	250.00 1250	270.00 2430	270.00 1080	4760
EDWARDS WILSON	180.00 900	200.00 1800	200.00 800	3500
PORTLOCK PRIMARY	610.00 3050	630.00 5670	625.00 2500	11,220

Total $ 61,955

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	5-Tim.	9-Tim.	4-Tim.	
OSCAR SMITH HIGH SCHOOL	690.00 3450	735.00 6615	850.00 3400	13,465
OSCAR SMITH MIDDLE	330.00 1650	350.00 3150	390.00 1560	6360
THURGOOD MARSHALL ELEM.	360.00 1800	370.00 3330	410.00 1640	6770
SOUTHWESTERN ELEMENTARY	230.00 1150	250.00 2250	245.00 980	4380
G. A. TREAKLE ELEMENTARY	250.00 1250	270.00 2430	285.00 1140	4820
WESTERN BRANCH HIGH SCHOOL	600.00 3000	630.00 5670	630.00 2520	11,190
WESTERN BRANCH INTERMEDIATE	230.00 1150	265.00 2385	275.00 1100	4635
WESTERN BRANCH MIDDLE	400.00 2000	420.00 3780	430.00 1720	7500
WESTERN BRANCH PRIMARY	280.00 1400	295.00 2655	315.00 1260	5315
RENA B. WRIGHT PRIMARY	235.00 1175	260.00 2655	250.00 1000	4790
SECEP	195.00 975	215.00 1935	210.00 840	3750

Sub-total $ 72,975

There are 43 items which require costing. The above includes 21 of these items.

Grand total $ 134,930

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11 cuttings

Attachment A

From July 1 - November 15

BID PROPOSAL FORM

GROUND MAINTENANCE

SCHOOLS	BASIC SERVICE (3 - Times)	BASIC & EDGING SERVICE (6 - Times)	BASIC & TRIMMING SERVICE (2 - Times)	
CAMELOT ELEMENTARY	240.00 720	255.00 1530	260.00 520	2770
G. W. CARVER INTERMEDIATE	240.00 720	260.00 1560	270.00 540	2820
E. W. CHITTUM ELEMENTARY	290.00 870	335.00 2010	460.00 920	3800
DEEP CREEK CENTRAL ELEM.	290.00 870	315.00 1890	400.00 800	3560
DEEP CREEK ELEMENTARY	315.00 945	325.00 1950	330.00 660	3555
DEEP CREEK HIGH SCHOOL	600.00 1800	645.00 3924	630.00 1260	6984
DEEP CREEK INTERMEDIATE	225.00 675	220.00 1320	220.00 440	2435
DEEP CREEK MIDDLE	250.00 750	270.00 1620	270.00 540	2910
EDWARDS WILSON	180.00 540	200.00 1200	200.00 400	2140
PORTLOCK PRIMARY	610.00 1830	630.00 3780	625.00 1250	6860

Total $37,834

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	3-Tier	6-Tier	2 Tier	
OSCAR SMITH HIGH SCHOOL	690.00 2070	735.00 4410	850.00 1700	8180
OSCAR SMITH MIDDLE	330.00 990	350.00 2100	390.00 780	3870
THURGOOD MARSHALL ELEM.	360.00 1080	370.00 2220	410.00 820	4120
SOUTHWESTERN ELEMENTARY	230.00 690	250.00 1500	245.00 490	2680
G. A. TREAKLE ELEMENTARY	250.00 750	270.00 1620	285.00 570	5620
WESTERN BRANCH HIGH SCHOOL	600.00 1800	630.00 3780	630.00 1260	6840
WESTERN BRANCH INTERMEDIATE	230.00 690	265.00 1590	275.00 550	2830
WESTERN BRANCH MIDDLE	400.00 1200	420.00 2520	430.00 860	4580
WESTERN BRANCH PRIMARY	280.00 840	295.00 1770	315.00 630	3240
RENA B. WRIGHT PRIMARY	235.00 705	260.00 1560	250.00 500	2765
ECEP	195.00 585	215.00 1290	210.00 420	2295

Total $ 47,020

There are 43 sites requiring cabling. The above includes 21 of these sites.

Grand Total $ 84,854

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GROUND MAINTENANCE
CHESAPEAKE PUBLIC SCHOOLS

SCOPE

The successful contractor shall provide all labor, materials, and incidentals necessary to provide lawn maintenance service at twenty-one (21) schools in accordance to the specifications contained herein.

LOCATION

See attached listing of schools and addresses

SITE VISITATION

As per the conditions of Bid, the contractor is required to visit the schools and familiarize himself with all conditions as they exist.

BID BOND

Bidder shall provide a bid bond in the amount of five percent (5%) of the amount of the bid. Bid bond shall be submitted in accordance with Section 11-61 of the Code of Virginia.

PERFORMANCE BOND

The successful bidder shall provide a performance bond in the sum of the contract amount within ten (10) days from notification of intent to award. Performance bond shall be submitted in accordance with Section 11-61 of the Code of Virginia

SPECIFICATIONS

Basic Service - It is the intent of the school system that the requirements listed below be performed every 12 calendar days. (Approximately 11 cuttings during the 1996 calendar year.)

- Clean up trash and debris on grounds prior to cutting
- Cut all open spaces to a height of 2" to include islands in parking lots, ballfields, etc.
- Cutting operation shall be done in such a manner as to prevent the piling of excessive and unsightly grass clippings on the grounds.

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Note: football fields at the six stadiums will not be cut inside the track but all other grass is to be cut.

- Cut all ditches and ditch banks
- Cut all courtyards
- Trim around trees, sign post, immoveable objects (e.g. portable classrooms, bleachers, athletic equipment, etc.) fences, buildings, edge of flower beds, and etc.
- Blow off grass clippings from sidewalks, curb and gutters and tracks.

Edging Service. It is the intent of the school system that during every other cutting that in addition to the basic service the following will be performed. (Approximately 5 times during the 1996 calendar year.)

Edge curbs, sidewalks and remove vegetation between cracks in sidewalks and parking lots

Trimming Service. It is the intent of the school system that during every forth cutting that in addition to the basic service requirements the following will be performed. (Approximately 2-3 times during the 1996 calendar year.)

Trim all scrubs and bushes currently being maintained and remove all clippings from the school site

All cutting and riding equipment will be equipped with the appropriate tires so as not to damage the turf. Any damage to the turf as a result of cutting will be repaired by the contractor at his expense.

Upon arrival at a school one individual shall go to the office to inform the school that you are on site and will begin cutting the grounds.

Contractor's vehicles shall be parked in such a way that they do not block the route of school buses and/or cars. Care shall be taken not to park in fire zones or no parking spaces.

SPECIAL CONDITIONS

- The use of pesticides and herbicides is prohibited
- Contractor's employees are not permitted inside the building
- Water and restroom facilities are the responsibility of the

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contractor

- Smoking on school grounds or the use of tobacco products is prohibited
- The use of alcohol and/or drugs on school property is prohibited as well as being under the influence
- No guns or weapons are permitted on school grounds
- The contractor will ensure that all employees will use appropriate language
- Workers are to be dressed appropriately, must wear shirts at all times. No clothing shall be obscene. Pants must be worn at the waist.

HOURS FOR CUTTING

The contractor may begin work no earlier than 6:30 a.m. and must be finished no later than 4:30 p.m. There shall be no work performed on Sundays and holidays unless approved by the school system. The following is a list of holidays observed by the school system during the contract time within the 1996 calendar year.

Independence Day - July 4
Labor Day - 1st Monday in September
Veterans Day - November 11

SCHEDULE

The contractor will provide to the school system prior to the start of the contract a listing of the schools arranged in the order in which they will be cut. This rotation schedule shall remain in effect unless conditions require a modification. If a modification of the schedule is required it shall be approved by the school system in advance.

INSPECTION

The School system shall have the right at all times to examine the supplies, materials, and equipment used by the contractor.

TERM OF THE CONTRACT

The contract shall begin on July 1, 1996 and run through November 15, 1996. The contract may be extended for the period of time beginning March 10, 1997, and running through November 14, 1997, if mutually agreed by both parties and all conditions governing

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this bid remain in force.

The contract can be terminated immediately should the contractor fail to perform satisfactorily or breach the contract. A written explanation will be provided to the contractor citing the reason(s) for the termination.

PAYMENT

The contractor will submit every two weeks invoices for all completed schools cut during the previous two weeks. Invoices will be mailed or delivered to the Department of School Plants, 1021 Great Bridge Boulevard, Chesapeake, VA 23320. Payment will be rendered within 45 days from the date on which properly executed invoices were received. Payment will be calculated using the amounts given on the bid form.

SCHOOLS UNDER GROUND MAINTENANCE CONTRACT

Camelot Elementary
Ms. Lillian Faulk, Principal
2901 Guenevere Drive
Chesapeake, VA 23323
(804) 494-7595

G. W. Carver Intermediate
Mr. Raymond Hopkins, Principal
2601 Broad Street
Chesapeake, VA 23324
(804) 494-7505

E. W. Chittum Elementary
Mrs. Joanne Sawyer, Principal
2008 Dock Landing Road
Chesapeake, VA 23321
(804) 494-7655

Deep Creek Central Elementary
Ms. Diane Watkins, Principal
2448 Shipyard Road
Chesapeake, VA 23323
(804) 494-7615

Deep Creek Elementary
Mrs. Anita Jones, Principal
2809 Forehand Drive
Chesapeake, VA 23323
(804) 494-7525

Deep Creek High
Mr. Nathan Hardee, Principal
2900 Margaret Booker Drive
Chesapeake, VA 23323
(804) 494-7520

Deep Creek Intermediate
Mrs. Curtis Lane Jr., Principal
140 George Washing Hwy.N
Chesapeake, VA 23323
(804) 494-7575

Deep Creek Middle
Mr. Clyde Sheely, Principal
1955 Deal Drive
Chesapeake, VA 23323
(804) 494-7570

Edwards Wilson
Mrs. Jan Garner, Director
2107 E. Liberty Street
Chesapeake, VA 23324
(804) 494-7600

Portlock Primary
Mrs. Patricia Seldon, Principal
1857 Varsity Drive
Chesapeake, VA 23324
(804) 494-7555

Oscar Smith High
Dr. Jan Andrejco, Principal
1994 Tiger Drive
Chesapeake, VA 23320
(804) 548-0696

Oscar Smith Middle
Mr. Charlie Jubilee, Principal
2500 Rodgers Street
Chesapeake, VA 23324
(804) 494-7590

Thurgood Marshall Elementary
Mr. Steve Lassiter, Principal
2706 Border Road
Chesapeake, VA 23324
(804) 494-7515

Southwestern Elementary
Mrs. Beryl Rooks, Principal
4410 Airline Boulevard
Chesapeake, VA 23321
(804) 494-7665

G. A. Treakle Elementary
Dr. Diane Martin, Principal
2500 Gilmerton Road
Chesapeake, VA 23323
(804) 494-7625

Western Branch High
Mr. Arthur Brandriff,
Principal
4222 Terry Drive
Chesapeake, VA 23321
(804) 494-7530

Western Branch Intermediate
Mr. Richard Rittman, Principal
4013 Terry drive
Chesapeake, VA 23321
(804) 494-7535

Western Branch Middle
Mr. Craig Jones, Principal
4201 Hawksley Drive
Chesapeake, VA 23321
(804) 494-7540

Western Branch Primary
Mr. Michael Clayman, Principal
4122 Terry Drive
Chesapeake, VA 23321
(804) 494-7545

Rena B. Wright Primary
Mr. Zach Quidley, Principal
600 park Avenue
Chesapeake, VA 23324
(804) 494-7585

SECEP
Jack Baker
1238 North River Drive
Chesapeake, VA 23323
(804) 494-7630

Attachment B

18 CUTTINGS

April 1 - November 15

APPENDIX 4
BID PROPOSAL FORM

GROUND MAINTENANCE

SCHOOLS	BASIC SERVICE (5x)	BASIC & EDGING SERVICE (9x)	BASIC & TRIMMING SERVICE (4x)	
CAMELOT ELEMENTARY	$885.00 4425	$1,125.00 10,125	$1,470.00 5880	20,430
G. W. CARVER INTERMEDIATE	$600.00 3,000	$760.00 6,840	$1,087.00 4348	14,188
E. W. CHITTUM ELEMENTARY	$600.00 3,000	$760.00 6,840	$1,380.00 5520	15,360
DEEP CREEK CENTRAL ELEM.	$600.00 3,000	$760.00 6,840	$990.00 3960	13,800
DEEP CREEK ELEMENTARY	$420.00 2100	$520.00 4,680	$1,200.00 4,800	11,580
DEEP CREEK HIGH SCHOOL	$885.00 4425	$1,125.00 10,125	$1,275.00 5,100	19,650
DEEP CREEK INTERMEDIATE	$380.00 1,900	$480.00 4320	$575.00 2300	8520
DEEP CREEK MIDDLE	$885.00 4425	$1,125.00 10,125	$1,470.00 5880	20,430
EDWARDS WILSON	$310.00 1,550	$390.00 3510	$605.00 2420	7480
PORTLOCK PRIMARY	$500.00 2,500	$620.00 5,580	$1,165.00 4,660	12,740

Sub-Total 144,178

	5x	9x	4x	
OSCAR SMITH HIGH SCHOOL	$885.00 4425	$1,125.00 10,125	$1,430.00 5720	20,270
OSCAR SMITH MIDDLE	$885.00 4425	$1,125.00 10,125	$1,550.00 6200	20,750
THURGOOD MARSHALL ELEM.	$380.00 1,900	$480.00 4320	$1,160.00 4640	10,860
SOUTHWESTERN ELEMENTARY	$500.00 2,500	$620.00 5,580	$695.00 2780	10,860
G. A. TREAKLE ELEMENTARY	$500.00 2,500	$620.00 5,580	$1,085.00 4340	12,420
WESTERN BRANCH HIGH SCHOOL	$885.00 4425	$1,125.00 10,125	$1,665.00 6660	21,210
WESTERN BRANCH INTERMEDIATE	$600.00 3,000	$760.00 6,840	$1,380.00 5520	15,360
WESTERN BRANCH MIDDLE	$500.00 2,500	$620.00 5,580	$1,165.00 4660	12,740
WESTERN BRANCH PRIMARY	$310.00 1550	$390.00 3510	$505.00 2,020	7,080
RENA B. WRIGHT PRIMARY	$310.00 1550	$390.00 3510	$505.00 2,020	7080
SECEP	$270.00 1,350	$350.00 3150	$367.00 1,468	5,968
			Sub-Total	144,598
			Grand Total	288,776

Attachment A

11 cuttings
July 1 - November 15

BID PROPOSAL FORM

GROUND MAINTENANCE

SCHOOLS	3x BASIC SERVICE	6x BASIC & EDGING SERVICE	2x BASIC & TRIMMING SERVICE	
CAMELOT ELEMENTARY	$885.00 2,655	$1,125.00 6,750	$1,470.00 2940	12,345
G. W. CARVER INTERMEDIATE	$600.00 1,800	$760.00 4,560	$1,087.00 2174	8534
E. W. CHITTUM ELEMENTARY	$600.00 1,800	$760.00 4,560	$1,380.00 2760	9120
DEEP CREEK CENTRAL ELEM.	$600.00 1,800	$760.00 4,560	$990.00 1980	8340
DEEP CREEK ELEMENTARY	$420.00 1,260	$520.00 3,120	$1,200.00 2400	6780
DEEP CREEK HIGH SCHOOL	$885.00 2,655	$1,125.00 6750	$1,275.00 2550	11,955
DEEP CREEK INTERMEDIATE	$380.00 1,140	$480.00 2880	$575.00 1,150	5,170
DEEP CREEK MIDDLE	$885.00 2,655	$1,125.00 6750	$1,470.00 2940	12,345
EDWARDS WILSON	$310.00 930	$390.00 2340	$605.00 1,210	4480
PORTLOCK PRIMARY	$500.00 1,500	$620.00 3720	$1,165.00 2,330	7550

$86,619

THE COST TO CUT THE *STADIUM WAS NOT INCLUDED IN THE BID (*FOOTBALL FIELD NOT include)

OSCAR SMITH HIGH SCHOOL	$885.00 2655	$1,125.00 6750	$1,430.00 2860	12,265
OSCAR SMITH MIDDLE	$885.00 2,655	$1,125.00 6750	$1,550.00 3,100	12,505
THURGOOD MARSHALL ELEM.	$380.00 1,140	$480.00 2880	$1,160.00 2,320	6,340
SOUTHWESTERN ELEMENTARY	$500.00 1,500	$620.00 3720	$695.00 1,390	6,610
G. A. TREAKLE ELEMENTARY	$500.00 1,500	$620.00 3720	$1,085.00 2170	7,390
WESTERN BRANCH HIGH SCHOOL	$885.00 2,655	$1,125.00 6750	$1,665.00 3330	12,735
WESTERN BRANCH INTERMEDIATE	$600.00 1,800	$760.00 4560	$1,380.00 2760	9,120
WESTERN BRANCH MIDDLE	$500.00 1,500	$620.00 3,720	$1,165.00 2330	7550
WESTERN BRANCH PRIMARY	$310.00 930	$390.00 2340	$505.00 1010	4280
RENA B. WRIGHT PRIMARY	$310.00 930	$390.00 2340	$505.00 1010	4280
SECEP	$270.00 810	$350.00 2,100	$367.00 734	3644
			Sub-Total	86,719
			Grand Total	173,338