

PUBLIC WORKS COMMITTEE

10:00 a.m., Wednesday, August 1, 2018

City Hall Conference Room

1207 Palm Boulevard

AGENDA

1. Call to order and acknowledgement that the press and public were duly notified of the meeting in accordance with the Freedom of Information Act
2. **Approval of Previous Meeting's Minutes**
Regular Meeting of July 6, 2018
3. **Citizens' Comments**
Resident of 21 – 22nd Avenue – Re-opening stormwater ditch
4. **Department Reports for July 2018 – Director Pitts**
Vehicle Maintenance and Trash Collection Tracking Reports
5. **Old Business**
 - A. Update on Phase II Drainage project
 - B. Update on removal/replacement of underground storage tanks at Public Works
 - C. Discussion of Proposal from John Garrels, potential buyer of Schupp Enterprises
6. **New Business**
Update on Cross Lane Ditch
7. **Miscellaneous Business**

Next Meeting Date: 9:00 a.m., Thursday, September 6, 2018 in the Conference Room
8. **Executive Session in accordance with S.C. Code Section 30-4-70(a)(2) – if needed**
9. **Adjournment**

Public Works Committee
9:00 a.m., Wednesday, August 1, 2018

The regular meeting of the Public Works Committee was called to order at 9:00 a.m., Wednesday, August 1, 2018 in the City Hall Conference Room, 1207 Palm Boulevard, Isle of Palms, South Carolina. Attending the meeting were Councilmembers Buckhannon and Kinghorn, Chair Rice, Interim Administrator Fragoso and Director Pitts; a quorum was present to conduct business.

1. Chair Rice called the meeting to order and acknowledged that the press and public were duly notified of the meeting in accordance with the Freedom of Information Act.

2. Approval of Previous Meeting's Minutes

MOTION: Councilmember Kinghorn moved to approve the minutes of the regular meeting of July 6, 2018 as submitted; Councilmember Buckhannon seconded and the motion PASSED UNANIMOUSLY.

3. Citizens' Comments

The resident at 21 – 22nd Avenue who asked to speak was not in attendance.

Jim Raih, 3904 Cameron Boulevard, expressed his difficulty in seeing the total expenditure anticipated for the Assistant Public Works Director of Maintenance and Facilities including the salary, building modifications, etc.; he also asked if a relocation package was included. He stated that he saw the functions as a function of time, of labor, of equipment and of the pumps, and he said that he thought that Director Pitts was “doing a great job.” In his opinion, being just one thousand dollars (\$1,000) over budget in an eighty-five thousand dollar (\$85,000) budget “for vehicle maintenance was remarkable.” Mr. Raih suggested that the City buy all of its fuel from the IOP Marina in the time that the City's pumps were out of service for the removal and replacement of the underground storage tank at the Public Works site. On the subject of trash removal, he noted that the dumpsters at the back of the Municipal Parking Lot were reserved for trash removed from the beach, and the dumpster behind the Public Safety Building was reserved for the restaurants on Front Beach. He thought that the City should look into a way to put all of these dumpsters in one (1) location. In addition, he said that the Target on the other side of the Connector can do upwards of three hundred thousand dollars (\$300,000) on a Saturday in the summer from beach chairs, umbrellas and tents; he opined that the problem of tents being left on the beach was a function of the disposable society in which we live, and he opined that it was cheaper to buy a new tent every day than to rent one (1).

Katrina Limbach stated that she owned IOP Beach Chair and Bike Company with her partner Bert Hemingston and that she was unable to attend the July meeting when rental chairs and tents were discussed. She said that she and her partner were willing to help in any way they could to encourage the renting of tents and chairs for a day at the beach. She reported that the frame tents people were buying at Target were difficult to set up and take down and could be very dangerous in a storm; she indicated that they have researched a different type of tent that would be a much better option. She asked to be on the agenda for the next meeting to open a conversation about tent rentals. She stated that she co-founded a beach sweep group, IOP Clean-up Crew, and, in doing so, researched environmental conservation; the research led to changing many of her old habits. She reported an instance where she wanted to fill her water bottle when at Front Beach and found that there was no place where one could do that. After

talking with her partners, she offered to sponsor some type of water filtration system at Front Beach.

Councilmember Kinghorn asked if the City would allow the rental of tents for the beach, and the response was that tents could be rented for use on the beach.

Councilmember Kinghorn then directed his questions to Ms. Limbach; Was there a market for tent rentals? How they would begin to test the market? He opined that the option was preferable to the disposable tents Public Works was dealing with now.

Ms. Limbach said that their product could not compete with the beach tent being sold at Target based on cost.

Councilmember Buckhannon offered that people would opt for the cheaper tents until the City outlawed them.

Ms. Limbach referred again to the danger of the beach tents in a storm; she would support the City banning them from the beach. She also repeated that the product they would offer would be much easier to set up and taken down and would be safer.

The consensus of the Committee was to continue the discussion about beach tents and filtered water at Front Beach at the next meeting.

Director Pitts reminded the Committee that cooled, filtered water fountains were located inside the entrances to the public restrooms, one (1) on the women's side and one (1) on the men's side; he noted that these fountains were not designed to fill water bottles.

4. Departmental Report for July 2018 – Director Pitts

Vehicle Maintenance and Trash Collection Tracking Reports

Since the meeting was being held on the first day of a new month, Director Pitts stated that he has not received the trash and debris collections tonnage numbers from Charleston County; therefore, he does not have the updated reports and graphs. Due to the construction at the Public Works site and pumping water from flooded streets, the Director said that he has not had the time to devote to the monthly activity report and vehicle maintenance expenditures for July; the information will be included with next month's reports.

Chair Rice asked which streets were being pumped today, and the Director replied that pumping was occurring on 46th, 50th and 51st Avenues; the pump on 52nd Avenue was having fuel problems this morning. He told the Committee that no beach access paths were being pumped and that his concern was safety, septic systems and streets; the streets had to be pumped to allow access by public safety personnel and equipment.

Interim Administrator Fragoso stated that sand has been brought in to repair and grade the beach access paths in the past, but, with the weather prediction for more rain in the near future, she asked when would be the right time to do it.

Director Pitts added that the "game plan" devised with Director Kerr was to "shore up" the base at the 31A access, to put the new wider mats at 42nd Avenue and to move some of the older mats at 31A after the sand shell base is added. He commented that 31A was a long access path and

he is trying to make it a more defined path in the middle of the island like the access paths at 5th, 9th, 25th, 31A, 41st, 42nd and 53rd Avenues.

Since one (1) reason for the pumping was related to septic systems and grinder pumps, Councilmember Kinghorn asked if the IOP Water and Sewer Commission was doing any pumping. When the response was in the negative, he questioned whether the City should request that they rent or purchase pumps to augment the City's efforts to remove stormwater.

The Director explained that stormwater removal was under the City's purview.

Following up, Councilmember Kinghorn asked if the City sent the Water and Sewer Commission a bill.

Councilmember Buckhannon stated that maintenance of a grinder pump system would fall to the homeowner. When the street flooding affects them, the Water and Sewer Commission typically shuts down the grinder pumps, and the City has, on some occasions in the past, provided temporary toilets on certain streets until the stormwater went down and the grinder pumps were again operational.

5. Old Business

A. Update on Phase II Drainage Project

Interim Administrator Fragoso stated that the rain has caused substantial construction delays, so staff was preparing another extension request of forty-five (45) days for the Rural Infrastructure Grant. Included in the forty-five (45) day extension was time to close out the project along with the submission of the financial information to the grant agency; the extension request did not mean that the City expected construction to continue to the middle of November.

The Interim Administrator informed the Committee that the City has been approached by both The Citadel Beach House and individual property owners on 48th Avenue, which are private roads, with an interest in tying into the City's drainage project. In the past couple of weeks, the Interim Administrator and David Stevens of Civil Site Environmental, who designed and oversees the project, met with the manager of The Citadel Beach House, and they were willing to work with Mr. Stevens for the design and engineering to extend the system onto that road. Mr. Stevens has prepared a proposal for them. Mr. Stevens confirmed that the system, as designed, could handle the additional flow. Since the property owners were willing to pay for the design, engineering and construction, the City has no reason to deny their request, assuming that the engineers confirm that the additional flow would not compromise the system. Interim Administrator Fragoso added that the private property owners would also need to be willing to sign an agreement stating that they will pay for future maintenance to their portion of the system.

Councilmember Kinghorn cautioned that the City needed to consider not only the current flow, but to look at the capacity in the future relative to rising sea levels and changing weather conditions.

Although the property owners on 47th Avenue, another private road, have not reached out to the City for inclusion in the project, Councilmember Kinghorn thought the City should contact them and propose the same terms being afforded to property owners on 48th Avenue and The Citadel Beach House.

Chair Rice voiced concern about a future sale of property on 48th Avenue and how the maintenance of the drainage system could be transferred to a new owner.

Referring to the Phase I Drainage Project, Councilmember Buckhannon recalled that a private street was not included because the property owners chose not to participate.

The Interim Administrator said that the City could reach out to the property owners on 47th Avenue about participating in the project; she added that they might have a cost savings if all were included in the design and engineering phase.

Councilmember Kinghorn proposed that the private roads must be deeded back to the City to be included in the project, and Mr. Stevens recalled that was the way the process was addressed in the past.

Since last fall, three (3) property owners on 48th Avenue have approached the City about inclusion in the drainage project; according to Interim Administrator Fragoso, the City has not received anything indicating that all of the property owners on 48th want to participate.

Mr. Stevens reported that he has sent a proposal to the management of The Citadel Beach House, and they are trying to obtain the funding. Although he has not received any feedback, he stated that the managers of The Citadel Beach House were "very interested" in the project.

Providing the construction update, Mr. Stevens reported that the work on 46th Avenue would be completed this week and that a collection box had to be added to 45th Avenue; once that box was in place, the contractor intends to add a second crew to the project, assuming the area dries up. He commented that the water table was so high that the crew had to pump to install pipes that were installed at a depth of only three feet (3 ft.).

B. Update on removal/replacement of underground storage tanks at Public Works

Director Pitts reported that both tanks were in place and strapped down; they have been filled with water for DHEC to perform its tests. In addition, they have back filled some of the gravel and work continues.

According to the Interim Administrator, the contractor has submitted the first pay application to the engineer overseeing the project, and it will likely come to Accounts Payable next week.

When Councilmember Buckhannon asked who would be responsible for any state and/or federal reporting, Interim Administrator Fragoso answered that the oversight engineer from Jones and Frank was responsible for all state and/or federal filings and reporting. She commented that oversight by a qualified engineer was vital in a project of this magnitude, particularly since they know the documentation and permitting necessary.

Chair Rice asked if a second person would be trained on the DHEC testing required every month, taking some of the pressure off Director Pitts.

The Director replied that today the City has three (3) Class AB operators; Travis Stafford, the Fire Inspector, and Chris Enourato, the Animal Control Officer, have completed the certification process. When the Assistant Public Works Director of Maintenance and Facilities is hired, the first task assigned to him will be to obtain this certification.

C. Discussion of Proposal from John Garrels, potential buyer of Schupp Enterprises

Chair Rice noted that Mr. Garrels' proposal and resumes for Mr. and Mrs. Garrels were included in the meeting packet. She expressed concern that the information on previous jobs did not reference a city or state where the work was performed and lacked education information; she, therefore, asked that they re-submit them with the information requested and references. In addition, Chair Rice asked them to agree to background checks, which they were pleased to do.

Mr. Garrels told the Committee that he and Mr. Schupp have discussed dates when they could run the route together and that he had visited with Director Pitts the previous week.

5. New Business

A. Re-opening stormwater ditch at 21st – 22nd Avenue

Director Pitts commented that the property owner sent him the photos in the packet and had intended to attend the meeting; the Director said that the resident had contacted him after Hurricane Matthew but the Public Works Committee meeting was cancelled that month. The resident would like for the ditch to be re-opened and returned to its original form; after he approached the Director last year, Eadies cleaned out the pipe and a portion of open ditch.

Since the fact is that an open ditch flows better, Chair Rice asked what the procedure was to open the ditch, and the Director said that he needed to place a work order with the County to have the ditch opened up after their engineer visits the site and agrees with the request.

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B. Discussion of ditch between 31st and 32nd Avenue

Director Pitts reported that he has walked the ditch between 31st and 32nd Avenues with the Warners. When they initially contacted the City about the ditch, the Director contacted Chris Wannamaker, the Charleston County Stormwater Engineer; after a site visit, he responded that he was concerned about illicit discharge and an iron gate. When the Warner's called this year, he again contacted Mr. Wannamaker, who said that adding to the problem was new construction on 32nd Avenue and silt in the collection box. Director Pitts stated that he then requested a follow-up site visit by the County's inspectors, and he has not yet heard back.

C. Discussion of ditch at 24th and Hartnett Boulevard

Interim Administrator Fragoso reported that the resident at 2400 Hartnett reached out to the City about the condition of the ditch, and SCDOT responded to complaints about ponding issues. They found that the ditch was piped and that the pipe was blocked, so they removed the pipe. SCDOT has been contacted about the erosion of the ditch; they will make a site visit and subsequently do whatever needs to be done.

The Interim Administrator also noted that someone has complained that the open ditch has eliminated parking on that side of the street; she noted that the property was at an intersection with a STOP sign and that parking within thirty feet (30 ft.) of the intersection was prohibited.

D. Discussion of beach cleaning equipment

A copy of the brochure was included in the meeting packet; this beach cleaner is the equipment Councilmember Ward referred to at the July Council meeting. The communities of Myrtle Beach, North Myrtle Beach and Horry County are among the South Carolina beach municipalities using it currently; the cost is approximately sixty thousand dollars (\$60,000) excluding shipping. Councilmember Ward was questioning whether the beach cleaner would be a worthwhile investment for the City.

In discussing the possibility of purchasing one (1), Interim Administrator Fragoso recounted that Director Pitts opined that he would need two (2) additional people to operate it because he could not pull any employees off his current duties to drive this equipment.

Councilmember Kinghorn asked about the merits to this system, and Director Pitts responded that the beach cleaner filtered the sand to a depth of approximately six inches (6 in.) to pull out the small debris, such as cigarette butts, pop-tops, sea weed, etc.

Admitting that cigarette butts were in the sand, the Director thought the volume was far less than in the past and did not warrant the costs of the beach cleaner, additional employees and a tractor to pull it.

MOTION: Councilmember Kinghorn moved to refer the purchase of a beach cleaner and all associated costs to the Ways and Means Committee; Chair Rice seconded and the motion PASSED UNANIMOUSLY.

Chair Rice asked the Director if a date has been confirmed for the fall shred day.

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Director Pitts recalled that the shredder caught fire during the spring shred day and that the company's employee on-site told the Director that the City would not be charged for the service since they did not fulfill their obligation. The City has since received an invoice, and the Director planned to contact the company to get an alternate date in the fall or a credit for the invoice issued.

7. Miscellaneous Business

Next Meeting Date: 9:00 a.m., Thursday, September 6, 2018 in the Conference Room.

8. Executive Session – not needed

9. Adjournment

MOTION: Councilmember Kinghorn moved to adjourn the meeting at 9:50 a.m.; Councilmember Buckhannon seconded and the motion PASSED UNANIMOUSLY.

Respectfully submitted:

Marie Copeland
City Clerk

JLG Enterprise Waste Management Business Plan Summary

Our Services Offering

JLG Enterprise will be established with the aim of meeting and surpassing the expectations of city officials, residents and tourists.

Our service offerings are:

- Waste and refuse collection
- Recyclable material collection

Our Mission Statement

Our mission is to sustain a successful waste management company that will operate on behalf of the city of Isle of Palms in keeping trash collected from the beachfront and beach access paths.

Our Business Structure

Our business structure will consist primarily of the owners, John & Lisa Garrels.

John's responsibilities will be as follows:

- Responsible for handling core services such as, waste and recyclable material collection done around revolving tide tables and beach crowds
- Maintaining a logbook of driving activity
- Inspecting vehicles for mechanical items and safety issues and performing preventative maintenance

Lisa's responsibilities will be as follows:

- Responsible for preparing financial reports and statements
- Handling all financial transactions for the company
- Serving as internal auditor for the company

SWOT Analysis

As a company, we look forward to maximizing our strength and opportunities and also to work around our weaknesses and threats. Here is a summary from the result of the SWOT analysis.

Strength: Our strength is centered around a strong work ethic and love for the Isle of Palms community.

Basically, we reside on the island and call it our home; our location is in fact one of our major strengths. Another strength that counts for us is the power of our team. We are a hardworking and dedicated husband and wife team.

Weakness: As a new waste management provider on the island, we are quite aware that it will take time for us to build trust with our clients. This may appear as an initial weakness.

- **Opportunities:** The opportunities available to us reside in a long-lasting relationship with the Isle of Palms City management. We hope to provide exceptional service for many years to come.
- **Threat:** Some of the threats we are likely to face are rising fuel prices, unfavorable government policies, replacement of equipment, seasonal fluctuations, demographic/social factors, and possible downturn in the economy which may affect consumers spending/vacationing. The most concerning threat is purchasing the business with the remaining two year contract and the city terminating the agreement at the end of the two years.

Our Pricing Strategy

JLG Enterprises will assume the arrangement currently in place with Bill Schupp and the City of Isle of Palms, unless determined by local city government additional routes are needed. As the island continues to grow, we will review scheduled routes to accommodate the growing population.

Startup Capital

JLG Enterprise is set to start as a private business that will be solely owned by John and Lisa Garrels. No additional funding/loans are needed.

One of our major goals is to build a business that will survive off its own cash flow without the need for injecting finance from external sources once the business is transitioned to us.

Insurance

Insurance considerations have been addressed to assume identical coverage with the insurance agency Bill Schupp currently uses.

Items to Complete

- Creation of JLG Enterprise Waste Management company through accountant
- Obtain Isle of Palms business license, effective January 1, 2019
- Conversation with City officials in regard to rewriting current Schupp contract to include remaining two years and an additional five years with a one year probationary period
- Legal contract between Schupp/Garrels executed and signed effective January 1, 2019
- Secure appropriate insurance policies effective January 1, 2019

LISA GARRELS

5 30th Avenue, Isle of Palms, SC 29451

843-475-1588

Project Planning-Project Execution-Communication-Confidentiality-Networking-Programming-Data Modeling-Accounting-Legal Issues-Public Relations

I am a highly skilled data researcher/developer with 35 years' experience working on both large and small projects within State Farm Insurance. My background includes actuarial science work, building statistical models, ad-hoc report development, catastrophe support/work, data preparation for litigation efforts, financial work and large system support. I have served as a team lead in various departments and am an effective trainer/mentor.

Professional Experience – State Farm Insurance, Corporate, Bloomington, IL

December, 1998 – Present – Strategic Resources/Research and Development Team

- Team Lead
- Develop base data for Agent Placement Model, Catastrophe Support Exposure Analysis Tool, Early Loss Detection Tool
- Work with outside vendors to acquire a variety of demographic data to merge with internal State Farm Data for EUC applications used across the company
- Hurricane Katrina Litigation/Resolution data modeler
- Study building code with internal exposure and loss data to try and influence the industry

December, 1995 – December, 1998– Finance/Financial Statements

- Main liaison with Deloitte & Touche in implementing PeopleSoft accounting software into State Farm
- Rewrote quarterly/annual statement processing for state/federal reporting
- Ad-hoc report development for Executive Finance
- Catastrophe support on storm sites and in home office

October, 1988 – December, 1995– Fire Actuarial Department

- Developed in-house report generating system (SAS, Data Analyzer, APL)
- Supported predictive rate making system
- Ad-hoc report development
- Prepared exhibits for rate proposals

August, 1983 – October, 1988– Finance/Statistical Analysis

- Employee Check cashing/issued traveler's checks
- Balanced accounting reports/resolved error issues with regional offices
- Maintained statistical coding manuals for the company

Proficient at: Microsoft Office products, SAS, Data Analyzer, PI/1, APL, DB2/SQL

LISA GARRELS

5 30th Avenue, Isle of Palms, SC 29451

843-475-1588

Education

Associate in Arts - Lincoln College – Normal, Illinois

Normal Community High School – Normal, Illinois

Personal References

Tom Matheis, State Farm Manager (Current)

309-763-5686

Alan Holt, Senior Research Systems Analyst (Co-worker)

309-766-3667

Shebet Shoemaker, State Farm Manager (Former – Now Retired)

309-830-4373

John C. Garrels

5 30th Avenue, Isle of Palms, SC 29451

843-471-4519

Project Planning-Project Execution-Project Management-Communication-Public Relations

I am a results-oriented, skilled Professional with a solid supervisory background and experience working on projects in both private and commercial sectors. My background includes completing assignments in challenging environments and under strict deadlines. I am physically fit to meet the demands of all types of work. I work well with all levels of employees and am an effective trainer to other employees. I have both knowledge of and experience with implementation of safety in the work area. I have excellent communication skills and enjoy working with all types of people.

Professional Experience

May, 2016 – Present (Seasonal) – Chunky's Chairs & Umbrellas – Owner, Isle of Palms, SC

- Provide daily beach chair/umbrella service to vacationing guests on timely basis
- Maintain/repair equipment
- Supervise employees
-

May, 2016 – Present (School Year) – Coastal Bus Line – Mt. Pleasant, SC

- Drive as a part-time and extra-curricular bus driver

December, 2014 – May, 2016 – Somerby of Mt. Pleasant, SC - Maintenance

- Updated residential apartments for incoming residents
- Completed maintenance work orders
- Provided minor electrical, plumbing, painting and carpentry work/repairs throughout the facility

December, 2010 – August, 2014 – El Paso-Gridley School District - El Paso, IL

- Obtained CDL Class B with a School Bus Endorsement
- Drove for the El Paso-Gridley, Illinois school district as a full-time and extra-curricular bus driver
- Provided support to Athletic Department by keeping the official score books at games, running game clocks for both basketball and football events, and assisted with crowd control

August, 2006 – 2014 – Self Employed in Carpentry – El Paso, IL

- Performed Carpentry, Trim Work, Hardwood Floors, Decks, Window/Door Replacement – general construction, minor electrical and plumbing work
- Meet with homeowners to discuss remodel/renovations
- Provided accurate, timely construction bids

August, 2006 – 2014 – Waste Management Handler, HomeTown Disposal – El Paso, IL

- Drove waste truck on part-time basis (CDL license required)
- Followed route sheets
- Worked with no supervision

John C. Garrels

5 30th Avenue, Isle of Palms, SC 29451

843-471-4519

August, 2003 – August, 2006 – Construction Superintendent, Character Builders, LLC - Bloomington, IL

- Emphasis on single family/multi-family home construction
- Scheduled Sub-contractors
- Checked jobsites to ensure work was performed properly, timely and sub-contractors were keeping the jobsites clean and orderly
- Met with homeowners weekly to review changes and job progress
- Met with City Inspectors to ensure jobs were up to code and could proceed in a timely manner
- Ordered material for sub-contractors based on blueprints
- Compiled a jobsite punch list and scheduled sub-contractors to perform work to completion

July, 2002 – August, 2003 – Waste Management Handler, American Disposal - Bloomington, IL

- Drove waste truck on daily basis (CDL license required)
- Followed route sheets
- Worked with no supervision

December, 1995 – July, 2002 – Employee and Shift Manager, Premier Industrial Cleaners MMA (a subcontracting company for Mitsubishi Motors) - Normal, IL

- 1st 2 years worked in Paint Shop performing routine work: cleaned paint booths, ovens, pretreatment tanks, general cleaning of Paint Shop, sweeping and mopping
- Last 5 years worked in Paint Shop as 3rd Shift Paint Shop Manager
 - Supervised 50-60 people
 - Inspected all jobs to ensure completeness and high quality of work
 - Implemented STOP Program
 - Conducted weekly safety and team meetings
 - Prioritized work and adjusted workload according to deadlines
 - Dealt with Human Resource/Safety issues such as: Lock-out Tag out Policies, Confined Space Policies, Sexual Harassment situations, documentation of critical incidents, discipline of workers
 - Worked on Spreadsheets and Word Processing software for documentation

October, 1990 – December, 1995 Factor Worker, American Buildings Company - El Paso, IL

- Operated different machines within factory such as: Brake Presses, Punch Presses, Overhead Cranes, Forklifts
- Worked with little or no supervision on 3rd shift based on 2nd shift management's direction

June, 1983 – October, 1990 Carpenter Local 63, Golden Triangle and King Construction – Bloomington, IL

- Worked in all different phases of carpentry: framing, trim work, hardwood flooring, vinyl siding, door/window installation, built/installed cabinets
- Clinton Power Plant, State Farm Corporate (West Editions), MMA
 - Various concrete form work, scaffolding building, wood/metal stud framing, drywall hanging, door/window installation
 - Supervisory Skills where I delegated jobs to workers, prioritized work and inspected jobs

John C. Garrels

5 30th Avenue, Isle of Palms, SC 29451

843-471-4519

Education

El Paso High School Class of 1982

Personal References

Doug Dewey (remodeled his house) 309-824-5441

Dave Ferrenburg (Athletic Director, El Paso-Gridley Schools) 309-527-4415

Troy Hagemann (Coastal Bus Line Owner) 843-693-6987



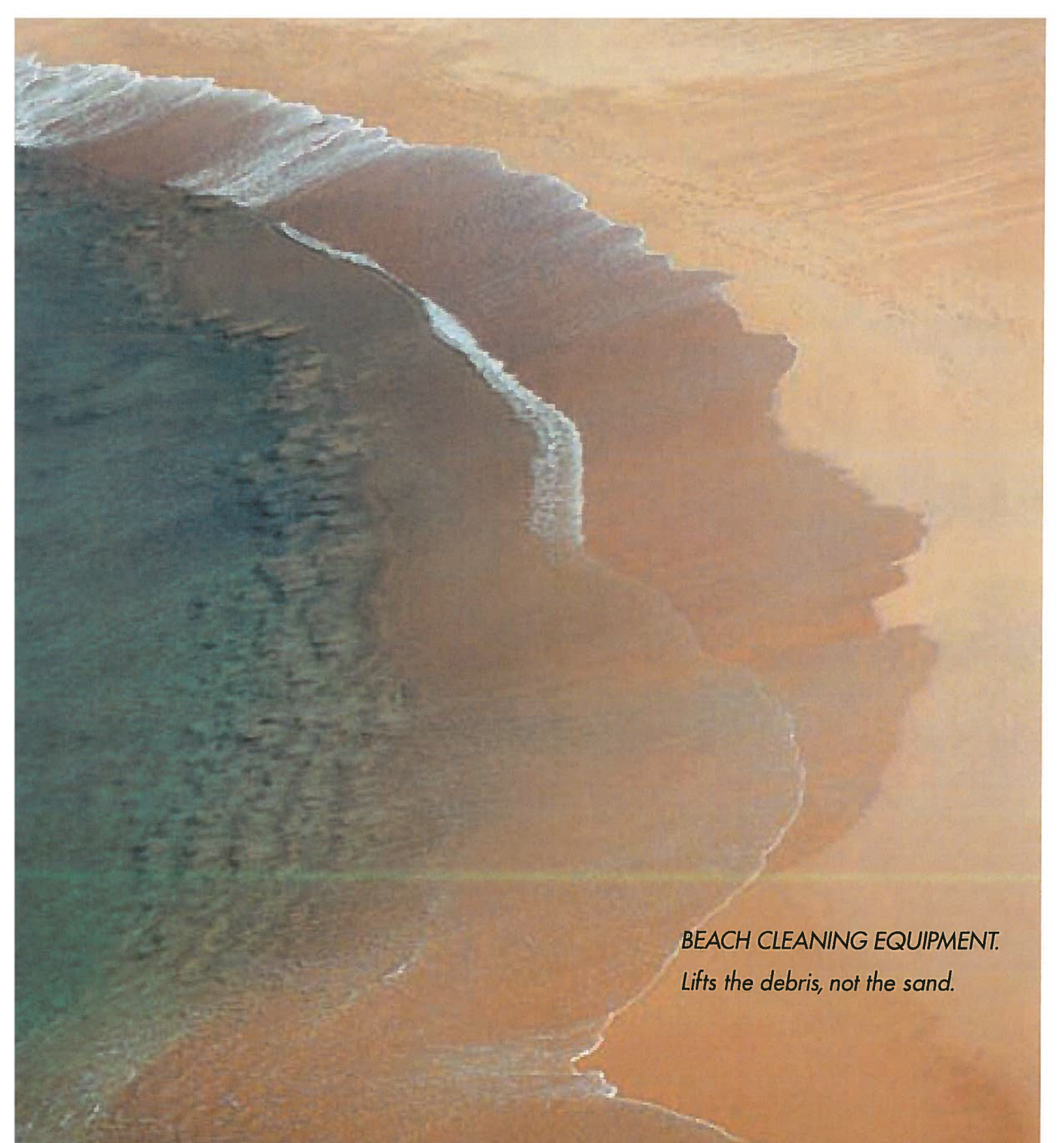






New Ditch at 24th & Hartnett Boulevard





*BEACH CLEANING EQUIPMENT.
Lifts the debris, not the sand.*

 **BARBER** SURF RAKE®

THE COMPLETE LINE OF BARBER SURF RAKES®



Model 600HD

At 3,800 pounds, the 600HD is H. Barber & Sons' largest SURF RAKE®. It has been successfully used in a variety of municipal applications. Cleaning up to eight acres an hour with its seven foot wide cleaning width, the 600HD has the greatest cleaning capacity of any beachcleaner. The 3 cubic yard hopper can lift up to 4,500 pounds of material and dump its contents hydraulically from a clearance height of nine feet.

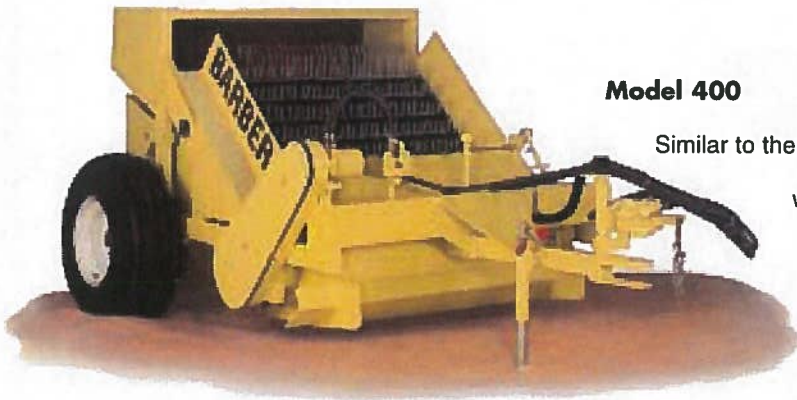
Model 400HD

The model 400HD is an excellent choice for resorts, hotels and lakeshore communities. At 2,700 pounds, it is H. Barber & Sons' moderate-size SURF RAKE®. The 400HD is equipped with a 2 cubic yard hopper which will lift 3,500 pounds of debris to a dumping height of nine feet. This mid-sized model uses the same heavy-duty conveyor and dump components as the 600HD. The 400HD can clean up to five acres per hour.

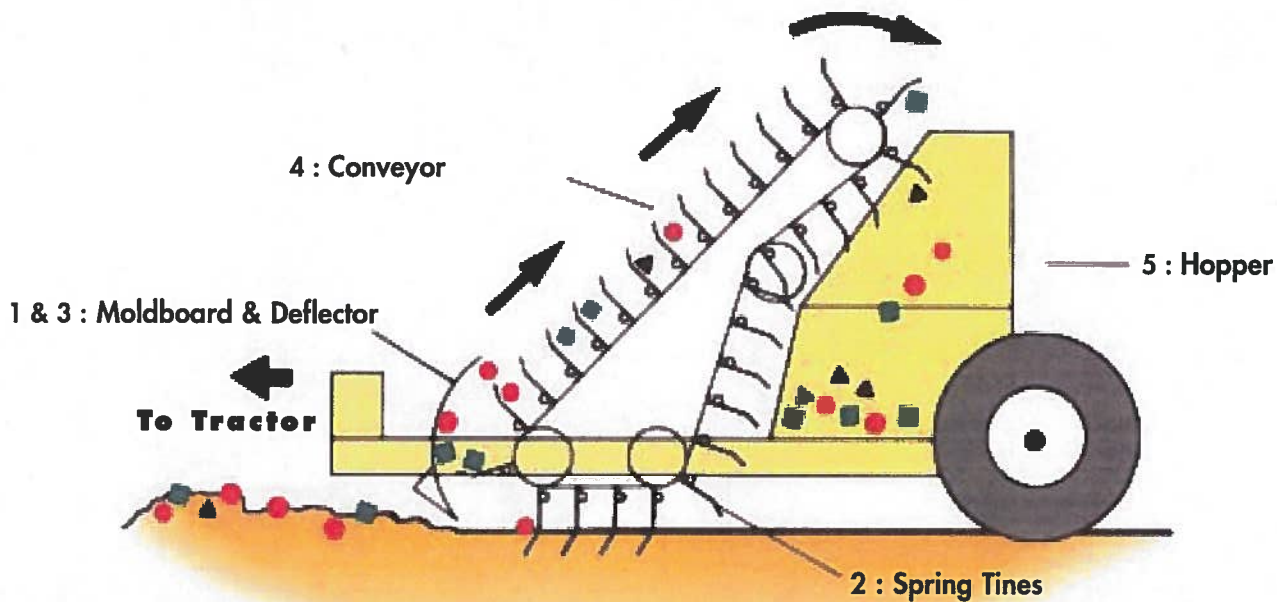


Model 400

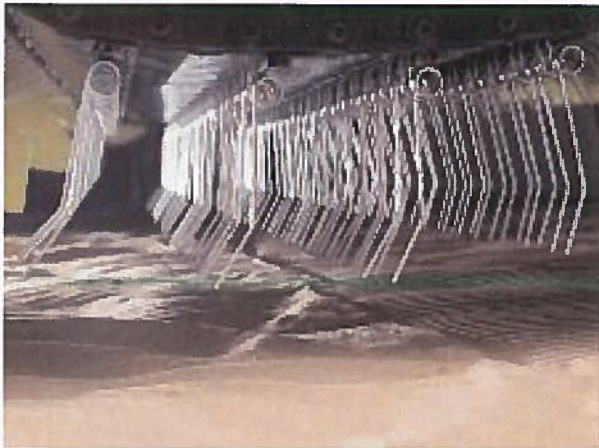
Similar to the model 400HD, the model 400 is the smallest SURF RAKE®. It weighs 1,900 pounds and can lift up to 2,400 pounds in its 1 cubic yard hopper. Its hydraulic dump discards material neatly on the ground. Within one hour, the model 400 can effectively clean up to four acres.



HOW IT WORKS



The Barber SURF RAKE® is a unique mechanical rake operated by one person from the seat of a towing tractor. It provides safe, fast and efficient beach cleaning. Here is how it works: **1.** The moldboard levels uneven areas in the sand. **2.** A 3/8" grid of stainless steel spring tines rake debris from the sand toward **3.** an adjustable deflector plate. As a result, refuse is deposited on **4.** the conveyor to **5.** the hydraulically raised hopper. The result: a clean, safe and well-manicured beach.



◀ THOROUGH CLEANING

Hundreds of stainless steel tines, mounted in offset rows, rake through the sand every second, removing the unwanted debris. Even the smallest objects such as glass, cigarette butts and pop-tops are captured by the SURF RAKE® and deposited in the hopper

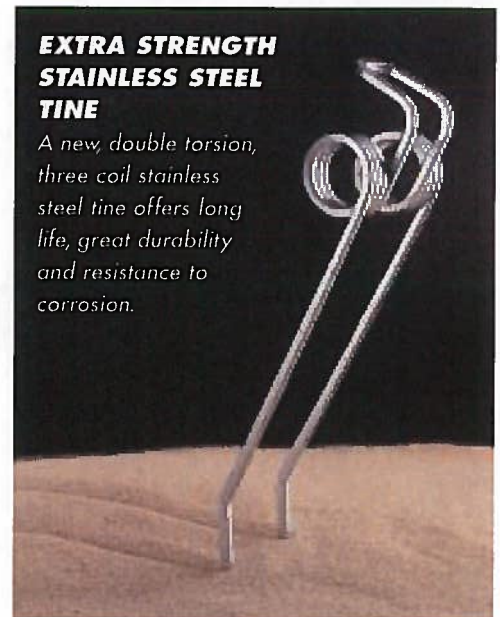
◀ SANITIZING CONVEYOR BELT

The Barber SURF RAKE features a new Sanitizing Conveyor "S-Belt". This new belt design maximizes sand penetration and removal of extremely fine debris. Belt perforations, mounting tines underneath the conveyor and eliminating retaining bars now reduce the risk of residual sand removal. The new conveyor belt is easier to repair and keep clean and clear of debris.

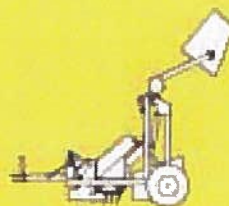
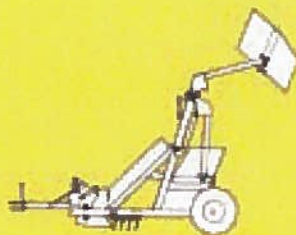


EXTRA STRENGTH STAINLESS STEEL TINE

A new, double torsion, three coil stainless steel tine offers long life, great durability and resistance to corrosion.



SPECIFICATIONS



MODELS	600HD	400HD	400
HYDRAULIC DRIVE	Completely sealed and protected by full flow filter. Large capacity spline mounted cast iron pump, hydraulic motor, flow control, and built-in overflow protection.	Completely sealed and protected by full flow filter. Large capacity spline mounted cast iron pump, hydraulic motor, flow control, and built-in overflow protection.	Completely sealed and protected by full flow filter. Large capacity spline mounted cast iron pump, hydraulic motor, flow control, and built-in overflow protection.
CONVEYOR	Of bar flight type with chain and sprocket drive, covered with continuous 6' wide NBR belt, which will not stretch or corrode.	Of bar flight type with chain and sprocket drive, covered with continuous 4' wide NBR belt, which will not stretch or corrode.	Of bar flight type with chain and sprocket drive, covered with continuous 4' wide NBR belt, which will not stretch or corrode.
TINES	Approx. 700 Stainless steel tines	Approx. 380 Stainless steel tines	Approx. 340 Stainless steel tines
HOPPER	3 cubic yard (4,500 lbs.)/ Hot dip galvanized	2 cubic yard (3,500 lbs.)/ Hot dip galvanized	1 cubic yard (2,400 lbs.) Hot dip galvanized
DUMP HEIGHT	9 feet	9 feet	Ground
TIRES	36 x 13.5 x 15 high flotation design	31 x 13.5 x 15 high flotation design	31 x 13.5 x 15 high flotation design
MOLDBOARD	A moldboard deflector plate is positioned at the front of the machine to level the beach before cleaning.	A moldboard deflector plate is positioned at the front of the machine to level the beach before cleaning.	A moldboard deflector plate is positioned at the front of the machine to level the beach before cleaning.
OPERATING SPEEDS	Up to 15.0 miles per hour	Up to 15.0 miles per hour	Up to 15.0 miles per hour
CLEANING WIDTH	7 feet (6 foot processing width)	6 feet (4 foot processing width)	6 feet (4 foot processing width)
CLEANING DEPTH	Adjustable to 6"	Adjustable to 6"	Adjustable to 6"
DIMENSIONS	Height: 7'6" Length: 13'1" Width: 7'8"	Height: 7'3" Length: 11'9" Width: 7'6"	Height: 4'5" Length: 9'10" Width: 7'6"
WEIGHT	Approximately 3800 lbs.	Approximately 2700 lbs.	Approximately 1900 lbs.
PAINT	Dupont IMRON® Polyurethane enamel	Dupont IMRON® Polyurethane enamel	Dupont IMRON® Polyurethane enamel
FINISHING ATTACHMENT	To smooth the sand and eliminate tire marks for a minimum 9 foot wide path - optional.	To smooth the sand and eliminate tire marks for a minimum 9 foot wide path - optional.	To smooth the sand and eliminate tire marks for a minimum 9 foot wide path - optional.
GALVANIZATION	All frame and body parts Hot Dip Galvanized - optional.	All frame and body parts Hot Dip Galvanized - optional.	All frame and body parts Hot Dip Galvanized - optional.
PERFORMANCE	Cleans up to 8 acres per hour	Cleans up to 5 acres per hour	Cleans up to 4 acres per hour
TRACTOR REQUIREMENTS	60 PTO horsepower 4-wheel drive agricultural type tractor with 30" rear wheels.	35 PTO horsepower 4-wheel drive agricultural type tractor with 28" rear wheels.	30 PTO horsepower 4-wheel drive agricultural type tractor with 28" rear wheels.

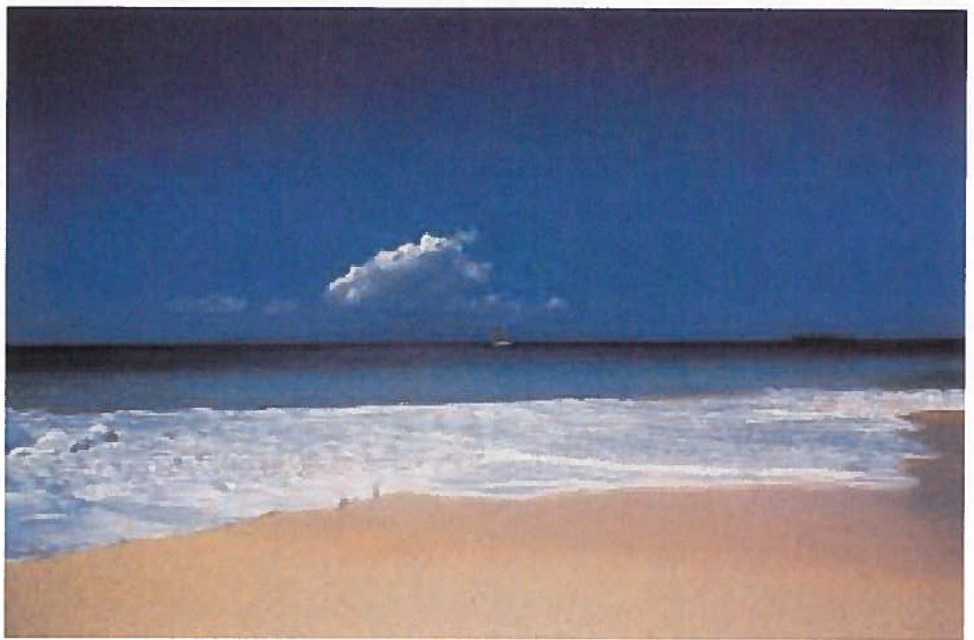
DEBRIS REMOVED

540 RPM rear PTO, 3 point hitch, and 1 remote hydraulic valve (minimum), up to 3 with options. This is a general guideline. Larger or smaller tractors may be used depending on beach conditions.

Broken glass, plastic, syringes, cigarette butts, pop-tops, straws, cans, tar balls, stones 3/8" to 4" in diameter, sea grass, sea weed, fish, small pieces of wood.

The manufacturer reserves the right to change the specifications without notice and without incurring obligation. The information contained herein is from data available at the time of printing.

The Barber SURF RAKE is the beach cleaner of choice for improving the appearance of public and private beaches. The most widely cited reason for choosing the SURF RAKE is its efficiency. It is designed with a unique raking system that quickly and thoroughly cleans an entire beach, including heavy debris areas along the water's edge. It is also the only beach cleaner that is equally effective in wet and dry sand at speeds up to 15 miles per hour. The ultimate result: your beaches are returned to a cleaner, more beautiful condition.



H. Barber & Sons is based in Connecticut. Sales and support services are handled through a worldwide dealer network. Throughout the company, quality production, responsive service and customer support are of utmost importance.

By eliminating the need for hand labor, the SURF RAKE actually reduces time and expense, resulting in an extremely cost-efficient method as well. Users find the SURF RAKE dependable, easy to operate and maintain. And with increasing concern for the environment, the Barber SURF RAKE is the least intrusive method of mechanical beach cleaning available today.

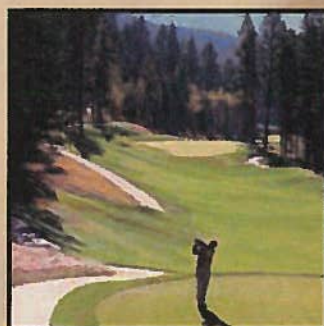
Barber SURF RAKES are maintaining beautiful beaches both domestically and internationally. Regardless of where a customer may be located, H. Barber & Sons promises expedient delivery of all parts and machinery. It is part of the company-wide commitment to excellent service which customers have come to expect from H. Barber & Sons. The corporate headquarters and manufacturing plant of

Since its establishment in 1966, H. Barber & Sons has been committed to the preservation of beautiful beaches and the environment. Its product, the Barber SURF RAKE, is the highest quality, most efficient beach cleaning equipment available. With its ability to clean a variety of beach conditions, the SURF RAKE has earned H. Barber & Sons the distinction of being the leader in beach cleaning technology and the largest manufacturer of beach cleaners in the world.

The World Leader in Tine Raking Cleaning Equipment.



**Litter collection machines for both paved surfaces and grass areas.
Truck towed and tractor towed models for all applications.**



**Stone pickers that remove debris and level work area in one pass.
A variety of models for different size jobs.**



**World leader in beach cleaning equipment for more than 40 years.
Models for all beaches and conditions.**

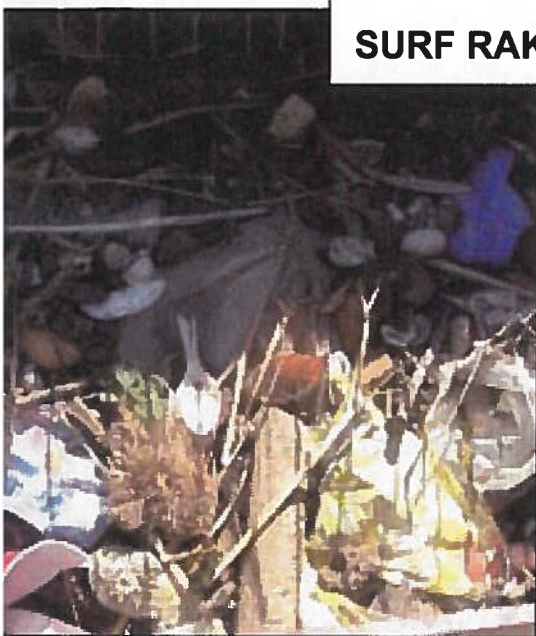


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Naugatuck, CT 06770
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SURF RAKE Applications



beachgoers or pollution washed in with the tide, the
yone-from tourists to protected marine life! It has a low
dly fluids such as Canola Oil. Green is not just our
nd environmentally responsible product.

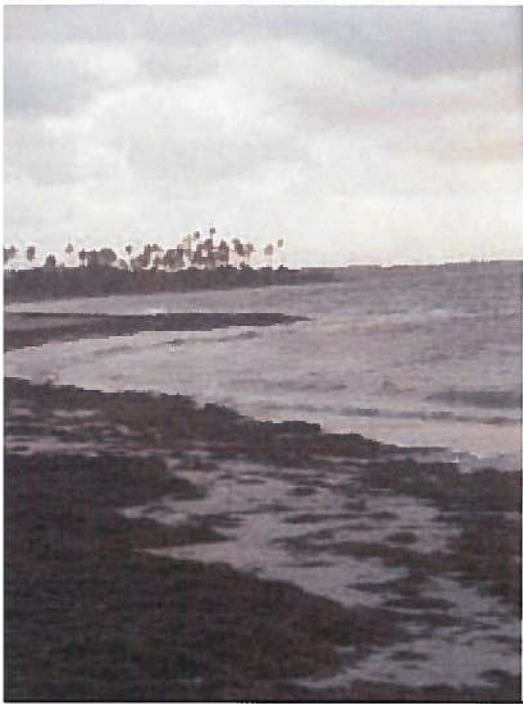


Small Material:
The SURF RAKE effectively removes even the smallest material. Cigarette butts, pop tops, straws, plastic, animal droppings, small shell, small stones, glass, debris and bottle caps are eliminated from beach sand. Our patented sanitizing system helps to remove various sized material while aerating the sand in the process. It can even remove pea gravel sized stone and debris without modifying the machine or changing screens.



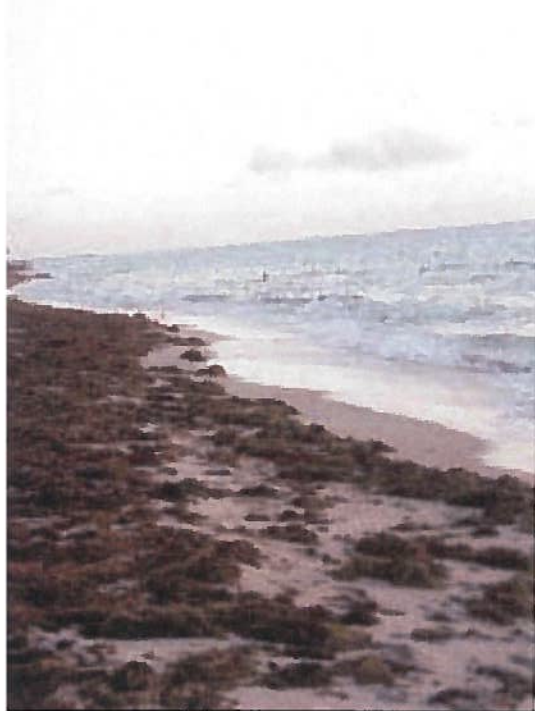
Oil / Sludge: Oil spill recovery requires a concentrated effort and is a major concern for coastal areas worldwide. Under the right conditions, mechanical beach cleaning is a very effective. The SURF RAKE can make oil and sludge clean up faster and more efficient than other methods. Hand labor is time consuming, expensive and remiss to eliminate all of the oil. Using a Sifter can promote erosion adding further negative impact to the environmental. In most situations, the SURF RAKE is capable of removing oil and tar balls in just one pass. Similarly, the SURF RAKE is an effective tool for sludge removal in wastewater basins. It has been used on oil spills in the U.S. and North American as well as Europe, Asia, Africa and Australia.



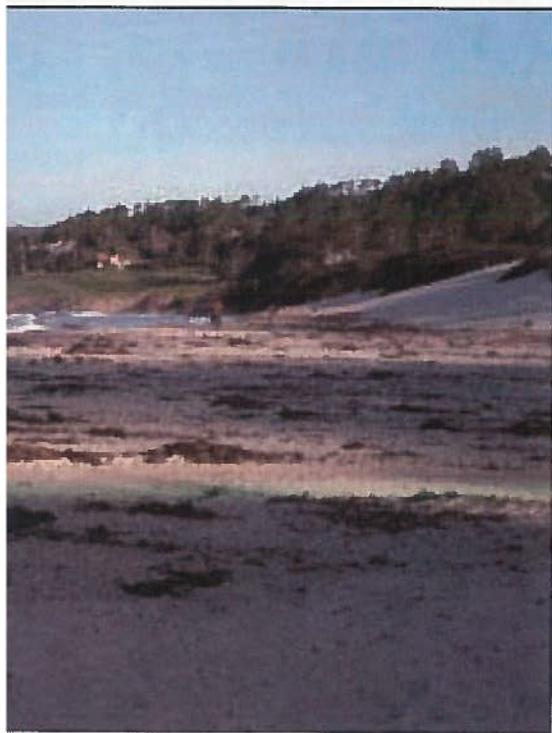


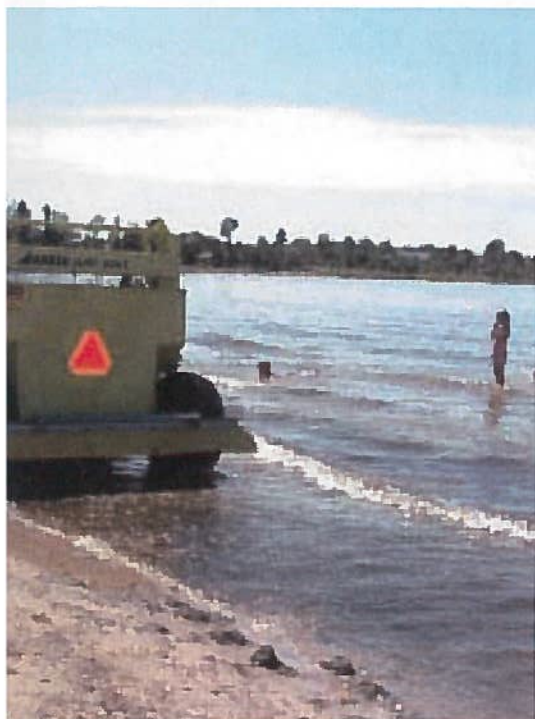
sed by tourists-never cleaned. The seaweed has been deposited, buried and decayed. The tide line is tourist readied in a matter of hours. manmade, you can count on the SURF RAKE to give you a beautiful beach with fast, efficient and trouble free operation!





qually well in both dry and wet sand. If necessary, it can even work in water up to three (3) feet deep. It is the most efficient and effective mechanical beach g seaweed. The SURF RAKE is efficient in all sand conditions-wet or dry and most importantly, removes only the unwanted debris-NOT THE SAND.



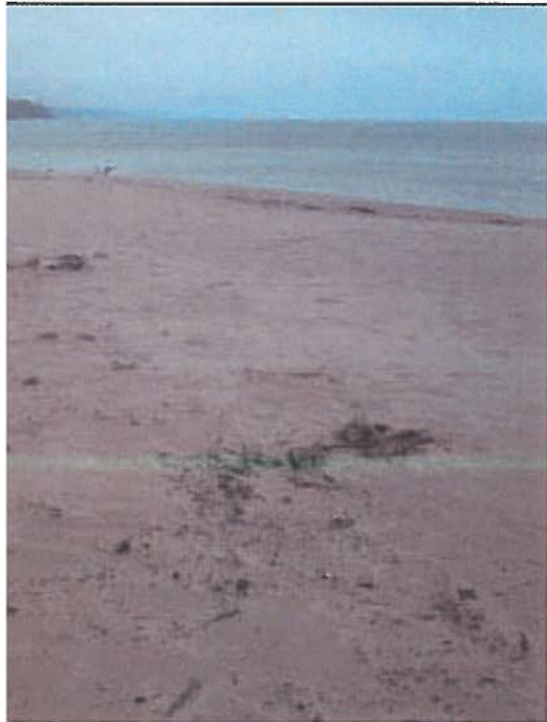


well directly in water as well as wet sand. It can even work in water up to three (3) feet deep. In addition to creating a beautifully manicured beach, the SURF n beach sand. Photo: Door County, WI & RI DEM



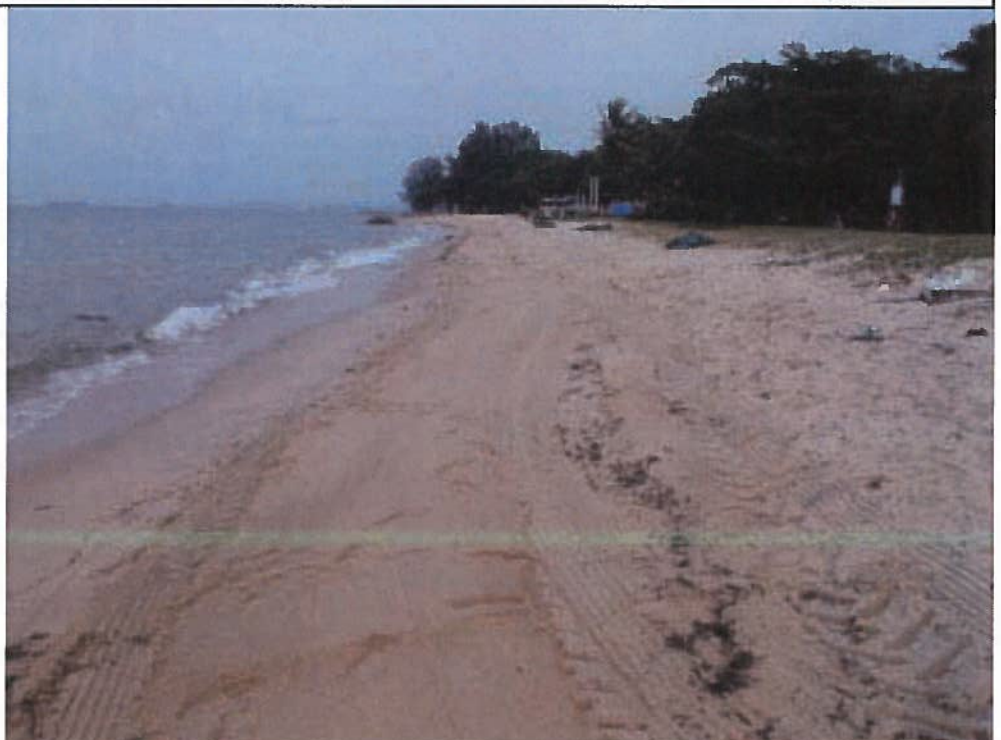


RAKE removes all forms of unwanted material from beach sand. Natural debris that washes to the shore such as vegetation, driftwood, stones, shells, fish or oysters, and other unwanted debris creating a clean, beautiful and safe beach for visitors. It is the only beach cleaner used in scientific studies and proven to reduce pollution. South Haven, MI

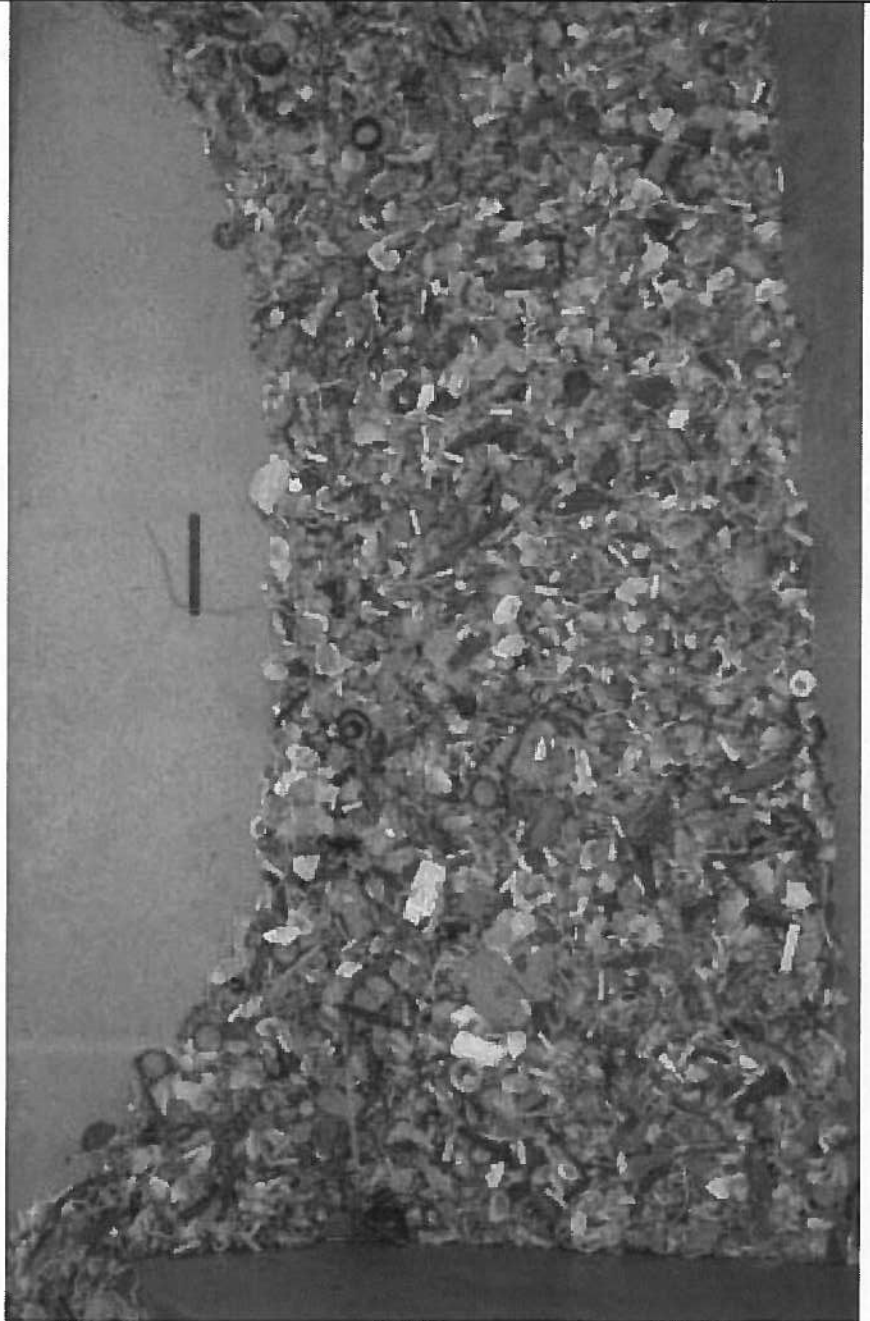
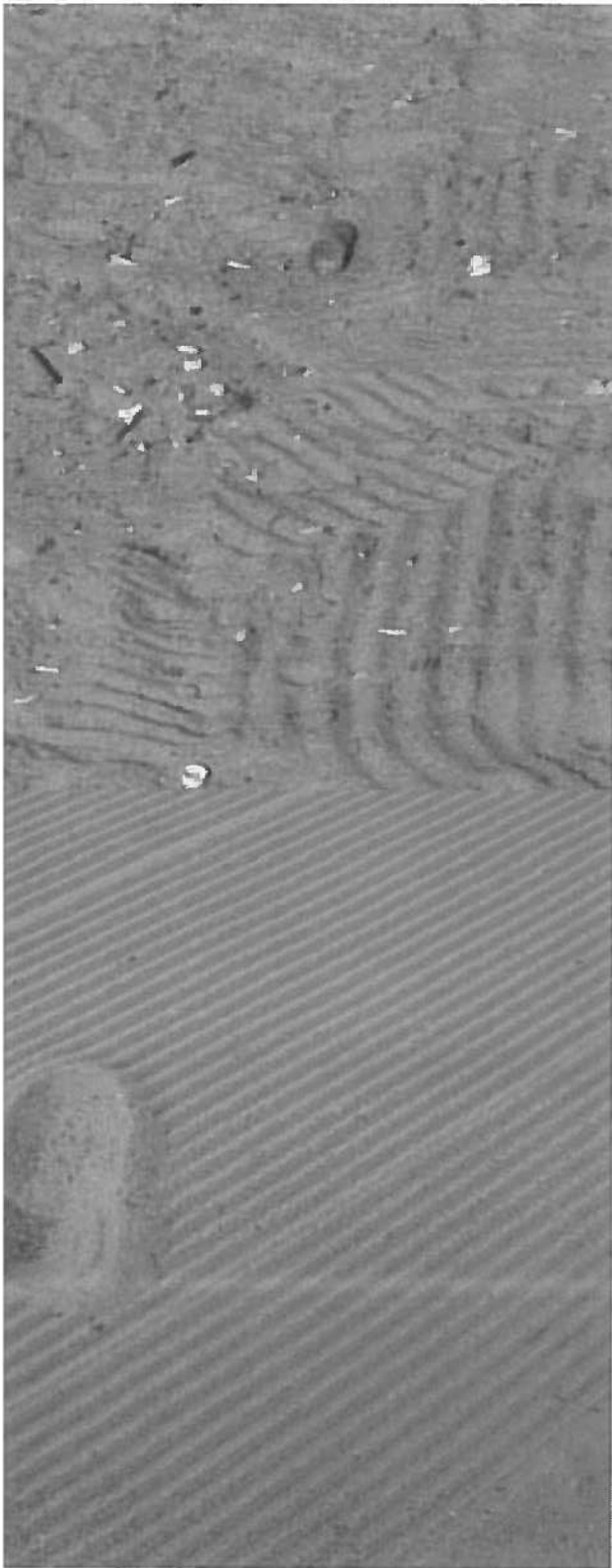




ry debris left on the beach out in to the water and create a vicious cycle of harm to marine life and the environment. The SURF RAKE removes trash that l reducing pollution. The SURF RAKE saves marine life and prevents illness by removing trash and reducing bacteria in beach sand Photo: Oman & Singapore

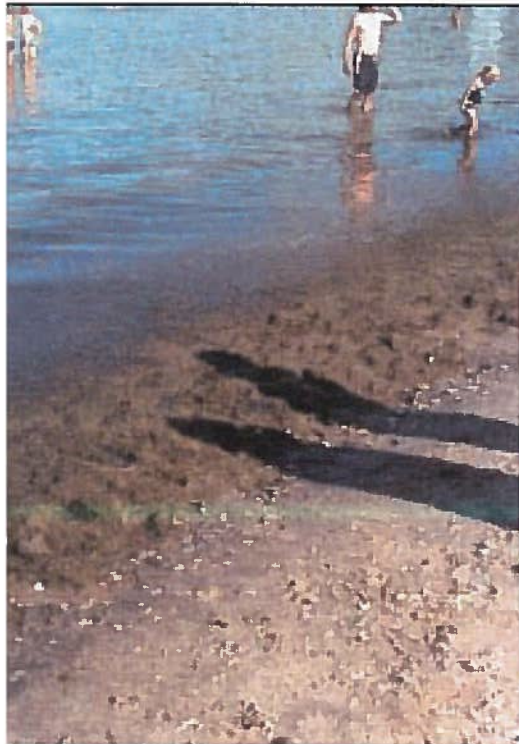


Cigarette Butts, Pop Tops, Broken Glass and Shells: Small but dangerous debris can often be found in beach sand. Whether seen on the surface or buried below, the SURF RAKES unique tine grid separates and removes cigarette butts, glass, broken shells, small stones, pop tops and syringes from beach sand. The SURF RAKE has the only tine grid system that allows you to clean deep and remove small material without "sifting" the sand. The SURF RAKES tine grid is least intrusive to the natural sand structure and will not promote sand erosion by wind and water like sifting machinery can. Photo: Atlantic City, NJ





removes all forms of unwanted material. Algae blooms are a natural and often seasonal occurrence. The SURF RAKE works efficiently to remove and pollutes that air. Early decaying algae is also removed eliminating noxious odors and unsightly material. Photo: Detroit, MI and Nicolet Bay, WI





ing harmony between the environment and recreation, the SURF RAKE is often used to remove encroaching grass and vegetation. Whether maintaining a beach
ents, the SURF RAKE makes beaches beautiful while saving time and money! Photos: Lakewood, OH & Newport News, VA/South Amboy, NJ

