

**CITY OF MANHATTAN BEACH
COMMUNITY DEVELOPMENT DEPARTMENT
STAFF REPORT**

TO: Planning Commission

FROM: Richard Thompson, Director of Community Development

BY: Eric Haaland AICP, Associate Planner

DATE: October 24, 2007

SUBJECT: Coastal Development Permit Amendment to Allow Larger Concrete Pads for Maintenance Vehicle Parking above an Underground Storm Drain Low-Flow Diversion Project on the Public Beach between 27th Street and 28th Street (Los Angeles County Public Works)

RECOMMENDATION

Staff recommends that the Planning Commission **CONDUCT** the continued public hearing, **DISCUSS** the additional information provided, and **DIRECT** staff as determined to be appropriate.

DISCUSSION

On July 25, 2007, the Planning Commission considered a request to amend a coastal permit for a storm drain project primarily under the beach surface between 27th and 28th Streets. During construction of the project, the size of two concrete pads on the beach surface was substantially enlarged beyond the size approved in the project plans. A concern for the extended pads was originally communicated to the State Coastal Commission, which contacted the city to address the project revision. The Planning Commission heard testimony and expressed concerns regarding the aesthetics and necessity of the larger concrete parking area. The applicant's explanation that the public would benefit from the larger parking area by less obstruction of the abutting bike path was not readily accepted by the Commission on July 25th, or at a subsequent September 12th meeting. The Planning Commission directed that more detailed information be provided in writing for inclusion within another report.

The County Public Works Department has provided the attached report explaining details of the low-flow diversion facility including maintenance truck sizes and frequency. The report's conclusion is that it would be unsafe to bike path users and maintenance workers if any more than a total of 13 feet of length were removed from the existing pads. The points discussed in the report to reach this conclusion include the following:

- An average of 27 four-hour maintenance visits are expected each year.

- Over 200 bicycle trips can occur at peak hours on the bike path on summer weekdays.
- The County Public Works Department has deemed any obstructions to the bike path as a hazard to public safety (e.g., August 22, 2007, field test).
- A 23-foot long vacuum truck must be located north of a 17-foot long support truck to remove collected material at each pad/cleanout location.

Staff suggests that the County's proposal for a four- and a nine-foot reduction in the length of the existing concrete pads can be approved if the Planning Commission accepts each of the points made above. The attached draft resolution of approval may be adopted with modifications for these pad-length reductions or any similar modifications found to be appropriate.

Attachments:

Draft Resolution No. PC 07-
County DPW report

c: LA County Public Works Dept., Applicant

RESOLUTION NO PC 07-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF MANHATTAN BEACH APPROVING A COASTAL DEVELOPMENT PERMIT AMENDMENT TO ALLOW ENLARGED CONCRETE SURFACE PADS FOR A STORM DRAIN LOW FLOW DIVERSION PROJECT UNDER THE PUBLIC BEACH BETWEEN 27TH STREET AND 28TH STREET (Los Angeles County Public Works)

THE PLANNING COMMISSION OF THE CITY OF MANHATTAN BEACH DOES HEREBY RESOLVE AS FOLLOWS:

SECTION 1. The Planning Commission of the City of Manhattan Beach hereby makes the following findings:

- A. The Planning Commission of the City of Manhattan Beach conducted a public hearing pursuant to applicable law on July 25, September 12, and October 24, 2007, to consider an application for a coastal development permit amendment for a storm drain low flow diversion project under the public beach between 27th Street and 28th Street in the City of Manhattan Beach. The original Coastal Development Permit was approved on October 26, 2005.
- B. The public hearing was advertised pursuant to applicable law, testimony was invited and received.
- C. The applicant for the Coastal Development Permit is the Los Angeles County Public Works Department, The property/beach is owned by Los Angeles County.
- D. The applicant proposes to extend the length of two approved concrete pads on the beach surface to be 80 feet long to serve a 250 linear feet of concrete pipe underground alongside the county beach bikepath.
- E. The property is located within Area District III and is zoned OS Open Space. The surrounding land uses consist of single and multiple family residences, a lifeguard headquarters facility, a public park, and public beach.
- F. The General Plan designation for the property is Open Space, and the Local Coastal Program/Land Use Plan designation is also Open Space.
- G. The Project is Categorically Exempt from the requirements of the California Environmental Quality Act (CEQA), pursuant to Section 15301 based on staff's determination that the project is a minor alteration of an existing storm drain facility, and will not have a significant impact on the environment.
- H. The project will not individually nor cumulatively have an adverse effect on wildlife resources, as defined in Section 711.2 of the Fish and Game Code.
- I. The project is in accordance with the objectives and policies of the Manhattan Beach Coastal Program, as follows:
 - 1. The proposal is consistent with the surrounding coastal zone area and complies with the applicable standards of the Manhattan Beach Coastal Zone Zoning Code.
 - 2. The project conforms with the certified Manhattan Beach Local Coastal Program in that it is a public works project benefiting ocean water quality that includes minimal visible improvements necessary to achieve that goal.

3. The project is in conformity with the public access and recreation policies of the California Coastal Act since improved ocean water quality will enhance coastal recreation opportunities, permanent coastal access will not be affected, and the proposed paved services are appropriate for maintaining the facility and adjacent bike path access.

- K. The project is consistent with the public access and recreation policies of Chapter 3 of the California Coastal Act of 1976, as follows;

Section 30212 (a) (2): The proposed facility does not impact public access to the shoreline, and adequate public access is provided and shall be maintained along The Strand, 27th Street, and 28th Street .

Section 30221: The project goal of improved ocean water quality will enhance coastal recreation opportunities.

- L. This Resolution upon its effectiveness constitutes the Coastal Development Permit for the concrete pad enlargement for the original low flow diversion storm drain project.

SECTION 2. The Planning Commission of the City of Manhattan Beach hereby **APPROVES** the subject Coastal Development Permit amendment subject to the following conditions:

Standard Conditions

1. *Compliance.* All development must occur in strict compliance with the proposal as set forth in the application for said permit, subject to any special conditions set forth below. Any substantial deviation from the approved plans must be reviewed and approved by the Planning Commission.
2. *Expiration.* The Coastal Development Permit shall be approved for a period of two years after the date of approval, with the option for future extensions, in accordance with the Manhattan Beach Municipal Code (MBMC) Section 10.84.090.
3. *Interpretation.* Any questions of intent or interpretation of any condition will be resolved by the Planning Commission.
4. *Inspections.* The Community Development Department Staff shall be allowed to inspect the site and the development during construction subject to 24-hour advance notice.
5. *Assignment.* The permit may be assigned to any qualified persons subject to submittal of the following information to the Director of Community Development:
 - a. a completed application and application fee as established by the City's Fee Resolution;
 - b. an affidavit executed by the assignee attesting to the assignee's agreement to comply with the terms and conditions of the permit;
 - c. evidence of the assignee's legal interest in the property involved and legal capacity to undertake the development as approved and to satisfy the conditions required in the permit;
 - d. the original permittee's request to assign all rights to undertake the development to the assignee; and,
 - e. a copy of the original permit showing that it has not expired.

6. *Terms and Conditions are Perpetual.* These terms and conditions shall be perpetual, and it is the intention of the Director of Community Development and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.
7. *Effective Date.* This Resolution shall become effective when all time limits for appeal as set forth in MBMC Section 10.100.030, and the City of Manhattan Beach Local Coastal Program - Implementation Program Section A.96.160 have expired; and, following the subsequent Coastal Commission appeal period (if applicable) which is 10 working days following notification of final local action.

Special Conditions

8. The subject Coastal Development Permit will be implemented in conformance with all provisions and policies of the Certified Manhattan Beach Local Coastal Program (LCP) and all applicable development regulations of the LCP - Implementation Program.
9. The final construction shall be in substantial conformance with the plans for the overall project as approved by the Planning Commission on October 26, 2005 except that the southerly concrete pad shall be permitted to be 76 feet long (4 feet less than existing), and the northerly concrete pad shall be permitted to be 76 feet long (9 feet less than existing).
10. The applicant agrees, as a condition of approval of this project, to pay for all reasonable legal and expert fees and expenses of the City of Manhattan Beach, in defending any legal actions associated with the approval of this project brought against the City. In the event such a legal action is filed against the project, the City shall estimate its expenses for the litigation. Applicant shall deposit said amount with the City or enter into an agreement with the City to pay such expenses as they become due.

SECTION 3. Pursuant to Government Code Section 65009 and Code of Civil Procedure Section 1094.6, any action or proceeding to attack, review, set aside, void or annul this decision, or concerning any of the proceedings, acts, or determinations taken, done or made prior to such decision or to determine the reasonableness, legality or validity of any condition attached to this decision shall not be maintained by any person unless the action or proceeding is commenced within 90 days of the date of this resolution and the City Council is served within 120 days of the date of this resolution. The City Clerk shall send a certified copy of this resolution to the applicant, and if any, the appellant at the address of said person set forth in the record of the proceedings and such mailing shall constitute the notice required by Code of Civil Procedure Section 1094.6.

I hereby certify that the foregoing is a full, true, and correct copy of the Resolution as adopted by the Planning Commission at its regular meeting of October 24, 2007 and that said Resolution was adopted by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

RICHARD THOMPSON,
Secretary to the Planning Commission

Sarah Boeschen
Recording Secretary

County of Los Angeles Department of Public Works

Project No. 286 – Low Flow Diversion



October 2007



Project No. 286 – Low Flow Diversion

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Project No. 286 – Low Flow Diversion

1.0 Project No. 286 – Low Flow Diversion

Prior to the construction of this low flow diversion facility, the dry weather flows from the Project 286 storm drain were discharged onto the public beach in the City of Manhattan Beach and drained to the ocean. The poor water quality of the dry weather flows which are conveyed in the Project 286 storm drain system cause degradation of the water quality along the beach where Manhattan Beach residents recreate and swim. The dry weather flows are typically generated from residents over watering their lawns, residential construction work, and other activities. These flows typically have elevated high nitrogen, pesticide and coliform bacteria content.



Figure 1 – Trash and Debris caught by Low Flow Diversion Structure

Public Works constructed the low flow diversion facility for the Project 286 storm drain system to divert the dry weather flows to a sewer line such that these flows will be treated at the downstream sewage treatment plant facility before being discharged to the ocean. Public Works has numerous low flow diversions established in the County of Los Angeles to enhance the water quality of the public beaches where residents recreate. It is noted however, that the location of this site for the low flow diversion for Project 286 was unique as compared to other previously constructed low flow diversions as it is located next to a highly used bike path.

During storm events, the flows in the Project 286 storm drain system increase tremendously and will be discharged onto the beach and flow to the ocean. The sewage system does not have capacity to treat these high flows. On average there is measurable rainfall recorded in the County of Los Angeles 33 days a year. Some of the smaller rainfall events generate minimal storm water runoff. With the operation of the low flow diversion improved water quality is gained over 90 percent of the year during dry weather when City of Manhattan Beach residents enjoy the beach.



Project No. 286 – Low Flow Diversion

However, for the low flow diversion to properly operate, like any flood control facility, proper maintenance as discussed in this report is necessary. Without this maintenance, the facility will not operate properly and dry weather flows will be routed to the beach for conveyance to the ocean.

2.0 Standard Maintenance Procedure and Frequency

DPW has developed standard maintenance procedures in order to maintain safe and efficient operation of the low flow diversion structures. Maintenance requires the use of one vacuum truck for the removal of trash, debris, silt, vegetation or obstructions from Low Flow Diversion (LFD) units as well as a support vehicle to house tools needed for maintenance routine. The support vehicle also houses emergency measures in case any accidents occur while DPW workers perform their duties. The LFD units are accessed by a 72 inch diameter manhole and because of the tight clearances the DPW maintenance worker must have Confined Space training. A normal maintenance crew consists of four members: a foreman, a maintenance worker to enter the units, a vacuum truck operator, and a crew member responsible for the safety of the worker within the confined space.

In order to get the maintenance vehicles to the LFD units, crews must traverse a portion of the Strand. To maintain the safety of pedestrians and bicyclists, a DPW maintenance worker will escort the trucks while they travel on the bicycle path. Workers must check for oncoming foot and bicycle traffic before entering the Strand. Once on the Strand workers are to walk 25 feet ahead of the vehicles to warn pedestrians of the vehicles as well as safely guide the vehicle to its destination. The truck is not allowed to travel faster than a speed of 5 miles per hour. Once the trucks reach the LFD units, traffic safety cones will be placed around the vehicles and workers will ensure pedestrian on the Strand maintain a safe distance from DPW equipment. Warning signs alerting pedestrians of the maintenance will also be near the site. Once the work is complete, crews will remove the traffic safety cones and signs from the site. A DPW crew member will again escort the vehicles to ensure they safely exit the Strand.



Figure 2 – Maintenance worker working in LFD Structure



Project No. 286 – Low Flow Diversion

DPW Flood Maintenance Division and crews anticipate the LFD units will require maintenance be performed once a month during the dry season (April 15th through October 15th) and semimonthly during the rainy season (October 16th through April 14th). Maintenance must also be performed after each storm event. During a typical year, this would result in an average of 27 visits per year. Each visit with the vacuum truck will take an average of four hours.

Manufacturer's specifications for vacuum trucks used by DPW for maintenance purposes are included in the Appendix.

3.0 Staging Area

Due to the heavy pedestrian traffic on the Strand (bicyclists, runners, rollerbladers, etc. – See Appendix for traffic counts) it was determined based on field inspection that a staging area for maintenance crews would be needed to prevent any obstruction of the Strand. DPW has deemed any obstructions to the Strand as a hazard to public safety therefore concrete pads were constructed around the Low Flow Diversion units.

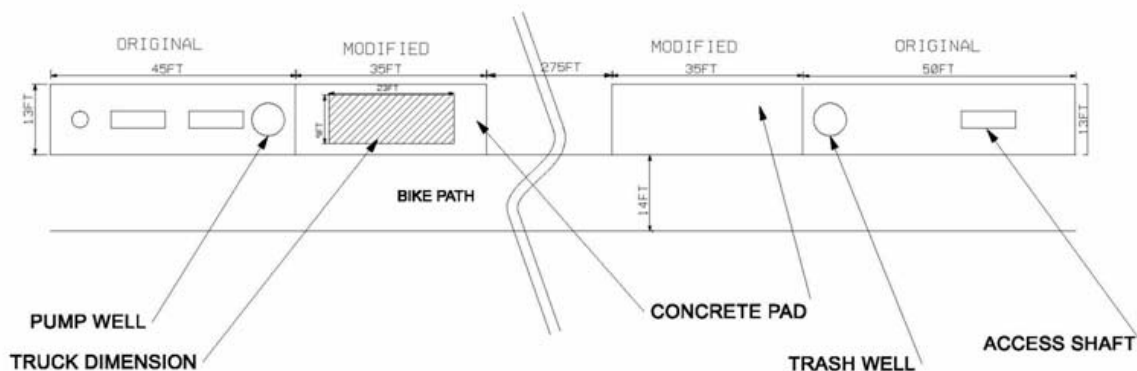


Figure 3 – As-built condition of Project No. 286

If the additional concrete pads did not exist this would cause a safety hazard to both pedestrians and maintenance crews. Based on the suggestion from the Manhattan Beach Planning Commissioners to have the pads removed, a test was setup on August 22, 2007 to determine if obstructing The Strand could be a viable option to the construction of concrete pads. The area of work was sectioned off with traffic safety cones and warning signs were posted requiring bicyclists to walk their bikes in the vicinity of the maintenance. Unfortunately, many bicyclists did not comply with these rules – riding through the coned areas with a few even confronting workers about the obstruction. Because of the confined spaces and use of heavy equipment, the safety of the crews is compromised when they are not allowed to fully concentrate on the task at hand.



Project No. 286 – Low Flow Diversion

This option with the maintenance vehicles was determined to be an unsafe alternative to the concrete staging area because it created significant potential for accidents to both the public and maintenance crews. Another consequence of this alternative is that it will increase the traffic on the walkways creating a mixture of walking pedestrians, speeding bicyclists, and children. Therefore, diverting the Strand with a detour (see Appendix) was also determined to be detrimental to the safety of the public.

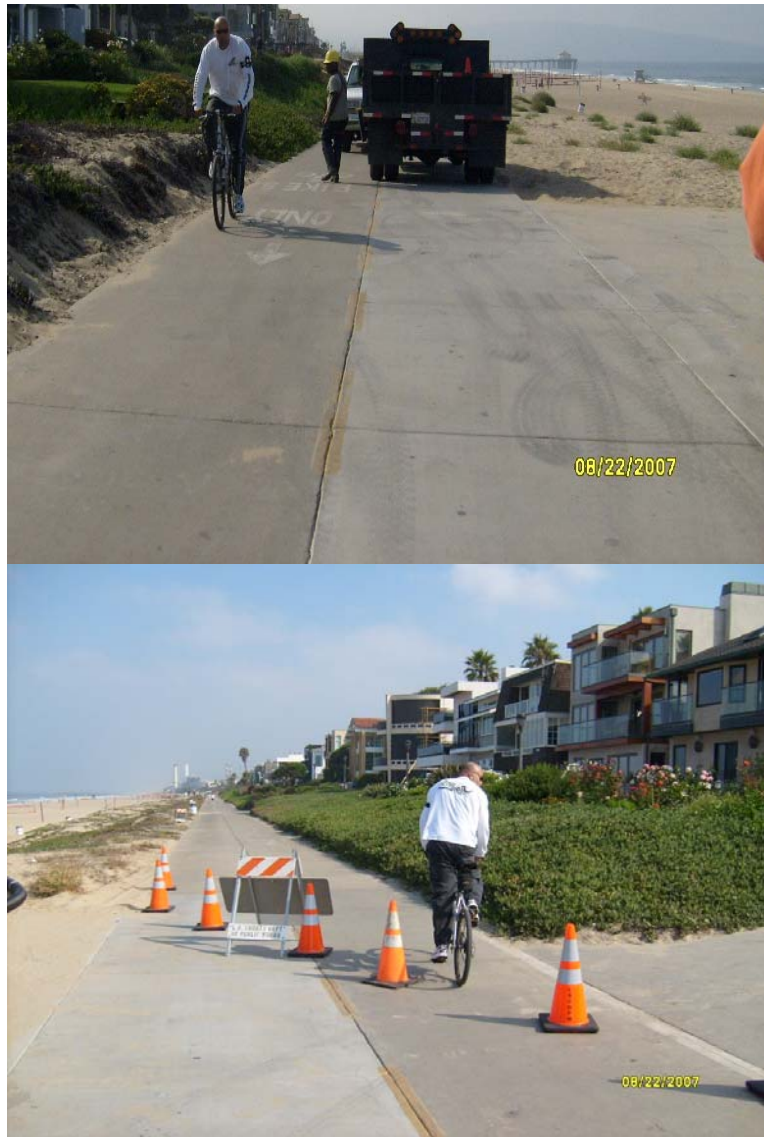


Figure 4 – Bicyclist riding through maintenance site



Project No. 286 – Low Flow Diversion

With the concrete pads in place, traffic on the Strand will not be impeded as maintenance crews perform the necessary work. Other than traveling to and from the project site no portion of the maintenance will encroach onto The Strand.



Figure 5 – Unimpeded use of The Strand facilitated by additional concrete pads

The concrete pad on 28th Street and The Strand is 13 feet by 85 feet and the pad on 27th and The Strand is 13 feet by 80 feet. Upon further review of these dimensions, it has been determined that the pads on 27th and 28th can be reduced by 4 and 9 feet respectively. This is the minimum length required to safely maneuver and operate the vacuum truck and its support vehicle. This minimum length was determined by placing both vehicles end-to-end and measuring the excess concrete on the pads. If deemed necessary, those excess portions of concrete can be removed.



Project No. 286 – Low Flow Diversion

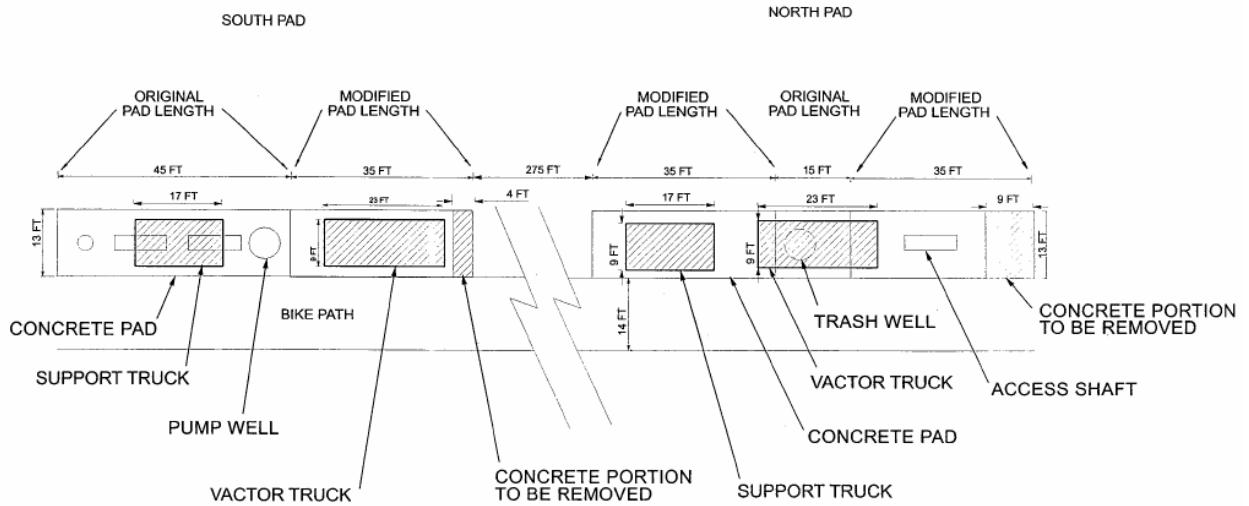


Figure 6 – Minimum Length of Concrete Pads

4.0 Conclusion

The construction of the Low Flow Diversion structures will provide improved water quality along Manhattan Beach and improve the recreational values of the beach. The County of Los Angeles Department of Public Works is committed to developing, operating, and maintaining an effective, safe, and sustainable infrastructure that meets the needs of our customers, complies with environmental regulations, and improves the quality of life in our communities.

However, in order for all these goals to be achieved for the Low Flow Diversion structures at the beaches they need to be properly maintained using heavy construction equipment. As in all of Public Works maintenance activities these tasks are done with an intention to provide maximum safety to the public. Any operational decision that would increase the hazard to the public should be avoided at all costs. For all of our maintenance activities done on our 500 miles of flood control channels, 2800 miles of storm drains, 1600 traffic signals, 3000 miles of roads, and other facilities ensure this maintenance work is done in a safe manner with regards to the residents of the County of Los Angeles is one of our most critical concerns.

The safety of the Manhattan Beach citizens who use The Strand is of paramount concern to Public Works and to the City of Manhattan Beach. Looking at all relevant issues associated with the construction of the enlarged pads, any future decision taken should be weighed against the concern for providing safety for the public who use The Strand. Ensuring maximized public safety during required maintenance activities should be given paramount importance. If the concrete pads are required to be removed the level of safety provided to the public who



Project No. 286 – Low Flow Diversion

use The Strand will be comprised by the use of detours or obstructions being established in The Strand.

The use of the concrete pads is necessary to maintain the safety of not only DPW crews, but also the safety of the community as a whole. Without the concrete staging area, bicyclists and pedestrians will be subjected to unnecessary danger and potential for accidents. It is strongly recommended to maintain the concrete pads in their current configuration.



Project No. 286 – Low Flow Diversion

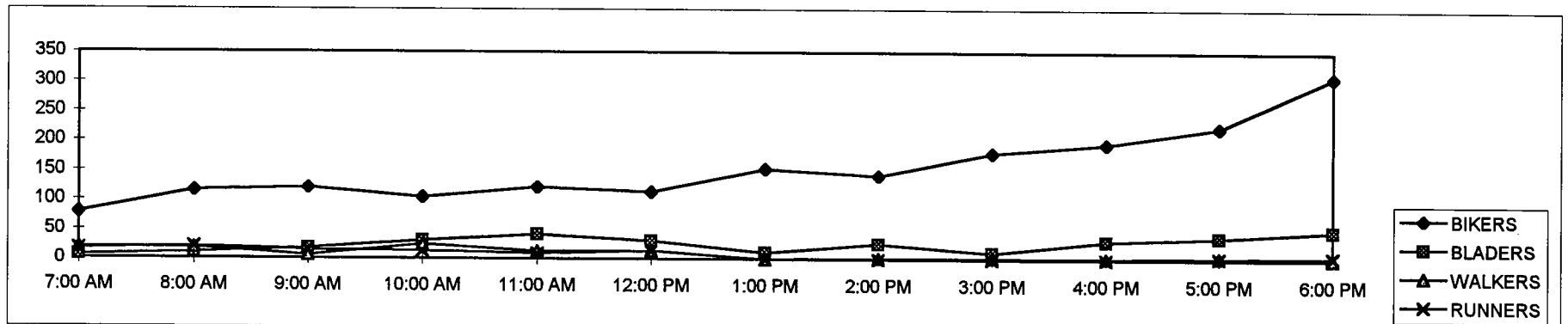
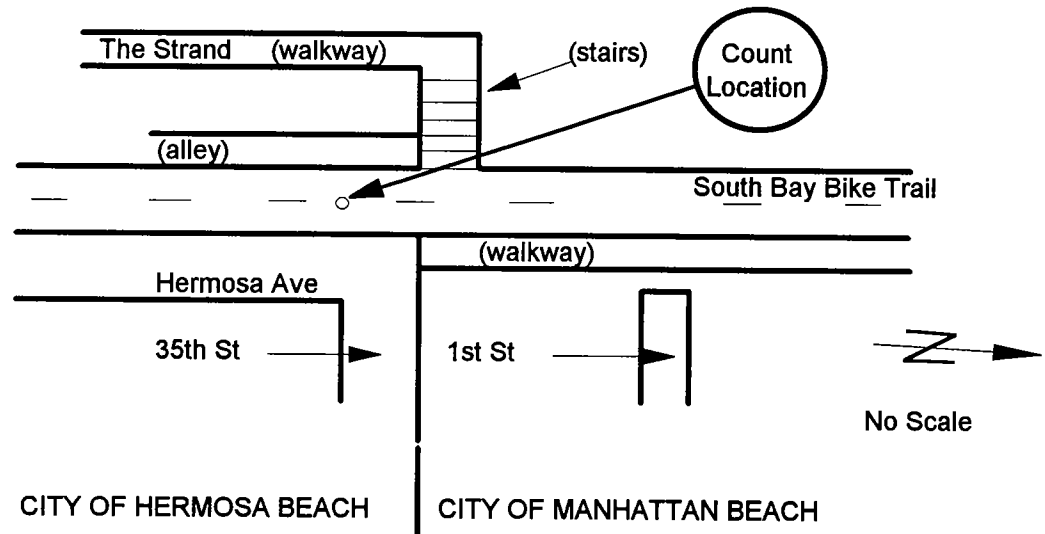
A.0 Appendices

MANHATTAN STATE BEACH COUNT SUMMARY

MONDAY
(AM) August 15, 1994
THURSDAY
(PM) August 11, 1994

SOUTH BAY BIKE TRAIL
~~ON THE STAIRS TO THE STRAND~~
AT 35TH ST (HERMOSA BEACH)

HOUR BEGINNING	HOURLY VOLUMES			
	BIKERS	BLADERS	WALKERS	RUNNERS
7:00 AM	79	6	20	17
8:00 AM	115	10	19	21
9:00 AM	120	18	6	15
10:00 AM	104	31	24	13
11:00 AM	121	41	13	9
12:00 PM	113	31	14	14
1:00 PM	153	11	0	0
2:00 PM	141	26	2	0
3:00 PM	180	11	3	0
4:00 PM	195	31	2	0
5:00 PM	223	37	4	3
6:00 PM	308	49	1	5
TOTAL 7AM-7PM	1852	302	108	97



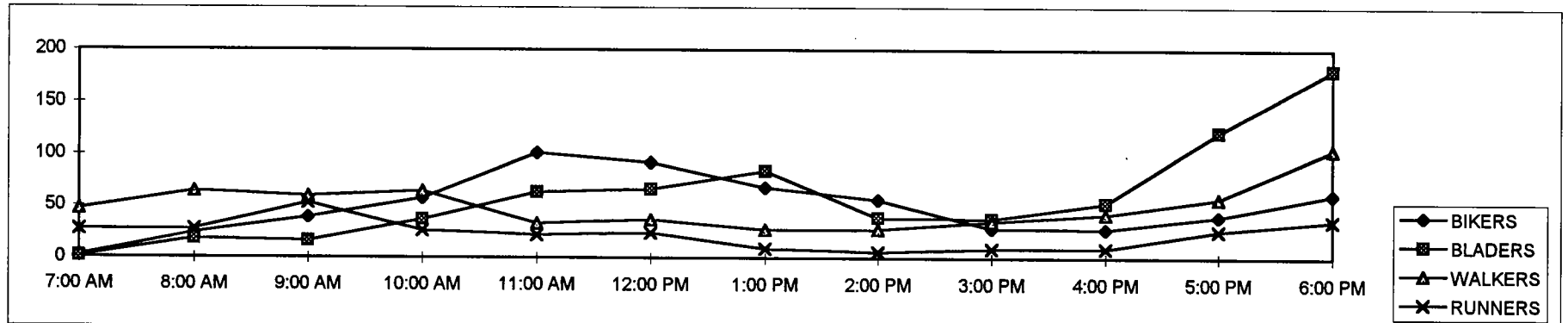
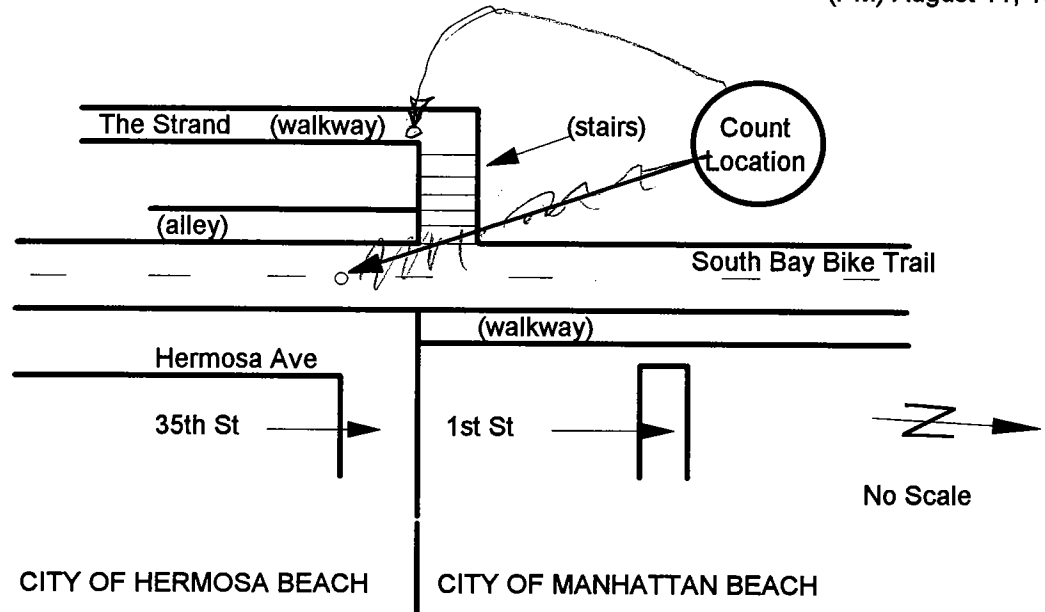
MANHATTAN STATE BEACH COUNT SUMMARY

MONDAY
(AM) August 15, 1994
THURSDAY
(PM) August 11, 1994

SOUTH BAY BIKE TRAIL (walkway)
~~ON THE STAIRS TO THE STRAND~~
A) 35TH ST (HERMOSA BEACH)

s/o

HOUR BEGINNING	HOURLY VOLUMES			
	BIKERS	BLADERS	WALKERS	RUNNERS
7:00 AM	2	1	47	27
8:00 AM	24	18	64	28
9:00 AM	39	16	59	53
10:00 AM	57	37	64	26
11:00 AM	101	63	33	22
12:00 PM	92	66	37	24
1:00 PM	68	84	27	9
2:00 PM	56	39	28	6
3:00 PM	29	38	35	9
4:00 PM	28	53	42	9
5:00 PM	40	121	57	26
6:00 PM	61	181	104	36
TOTAL 7AM-7PM	597	717	597	275



BICYCLE

SOUTH BAY BIKE TRAIL

~~ON THE STAIRS TO THE STRAND~~
~~AT 25TH ST (HERMOSA BEACH)~~

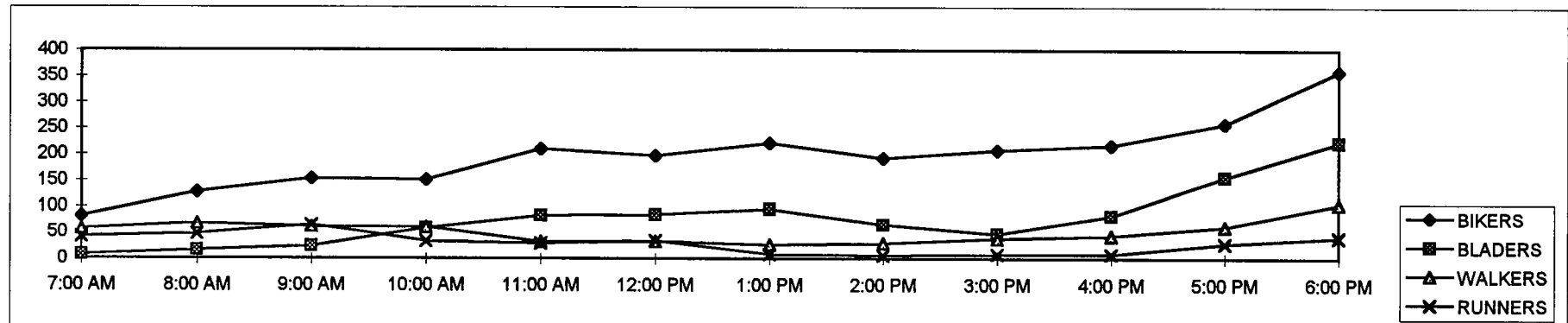
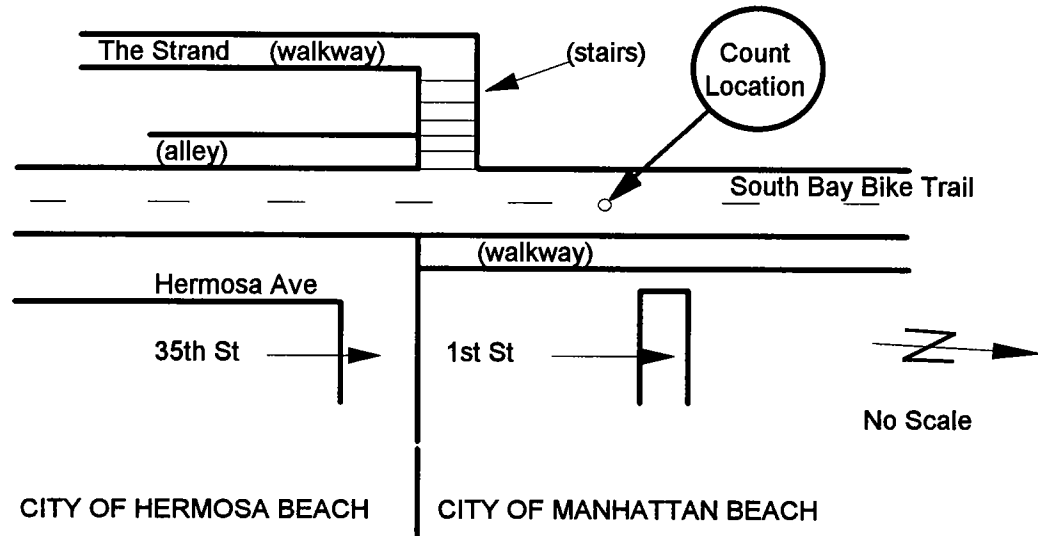
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MANHATTAN STATE BEACH

COUNT SUMMARY

MONDAY
(AM) August 15, 1994
THURSDAY
(PM) August 11, 1994

HOUR BEGINNING	HOURLY VOLUMES			
	BIKERS	BLADERS	WALKERS	RUNNERS
7:00 AM	81	7	57	42
8:00 AM	127	16	67	47
9:00 AM	153	24	61	64
10:00 AM	151	58	60	33
11:00 AM	210	82	32	29
12:00 PM	197	85	33	34
1:00 PM	221	95	27	9
2:00 PM	193	65	30	6
3:00 PM	207	47	38	9
4:00 PM	217	82	44	9
5:00 PM	259	156	61	29
6:00 PM	359	222	105	41
TOTAL 7AM-7PM	2375	939	615	352

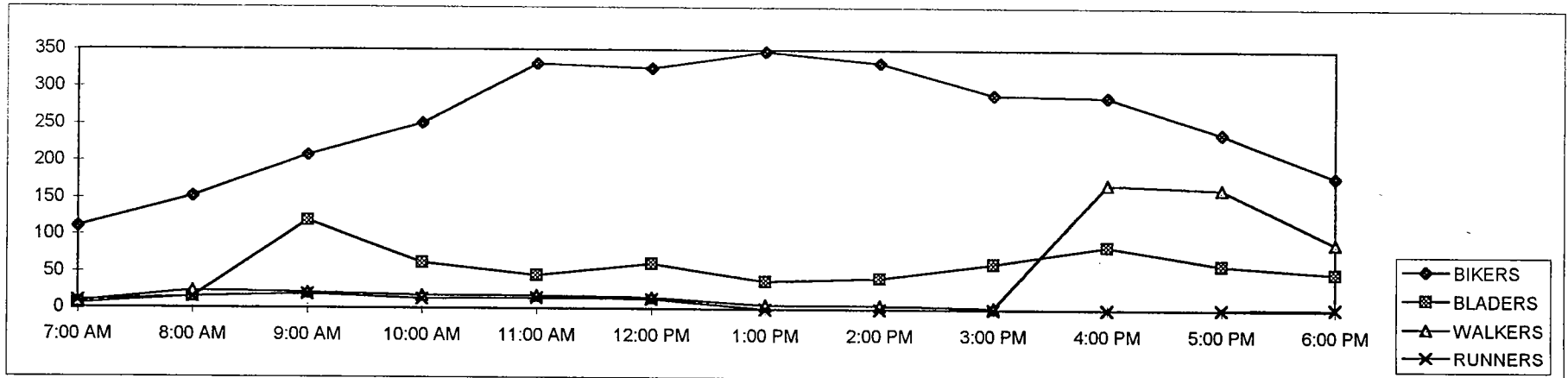
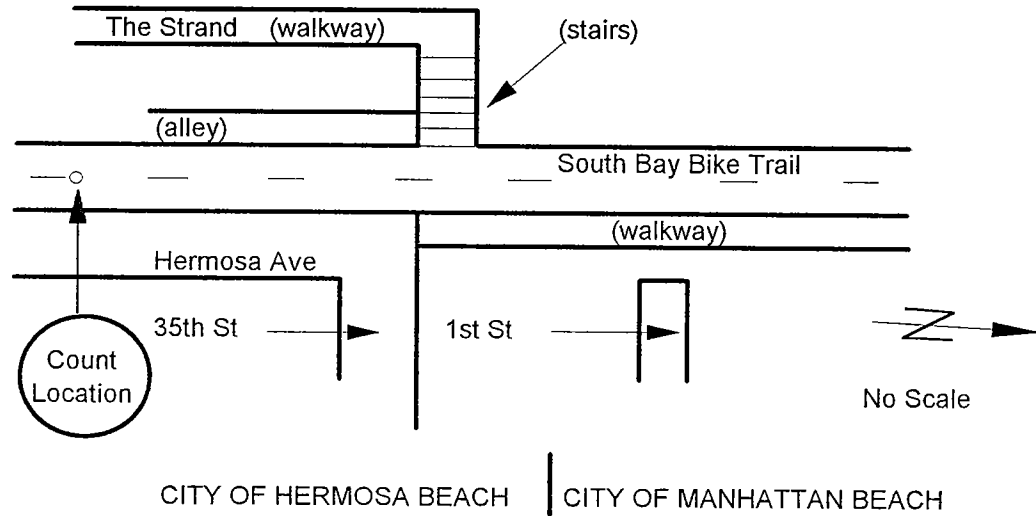


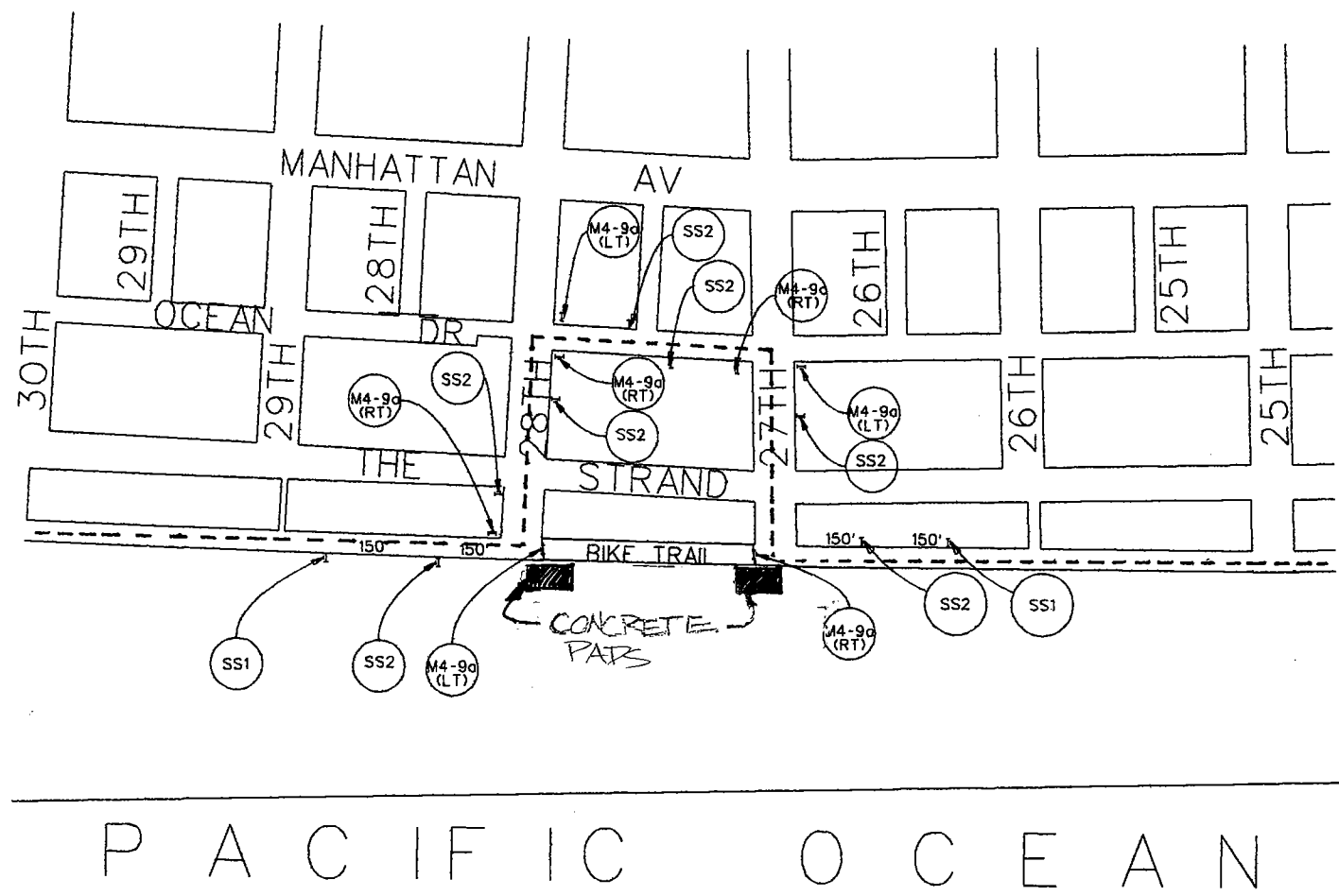
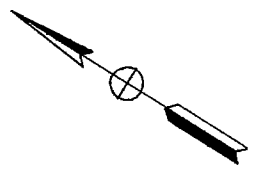
MANHATTAN STATE BEACH COUNT SUMMARY

SUNDAY
August 14, 1994

SOUTH BAY BICYCLE TRAIL
S/O 35TH ST (HERMOSA BEACH)

HOUR BEGINNING	HOURLY VOLUMES			
	BIKERS	BLADERS	WALKERS	RUNNERS
7:00 AM	111	5	8	10
8:00 AM	152	15	23	15
9:00 AM	208	119	21	19
10:00 AM	251	62	17	13
11:00 AM	331	45	17	14
12:00 PM	325	61	15	13
1:00 PM	348	38	5	0
2:00 PM	333	42	5	0
3:00 PM	290	62	2	0
4:00 PM	287	85	169	0
5:00 PM	238	60	163	1
6:00 PM	180	50	90	2
TOTAL 7AM-7PM	3054	644	535	87





SIGNING LEGEND	
SS1	
SS2	
M4-9a	

LOS ANGELES COUNTY
 DEPARTMENT OF PUBLIC WORKS
 TRAFFIC AND LIGHTING DIVISION
 TRAFFIC CONTROL PLAN
 PROJECT 286 MANHATTAN BEACH
 LOW FLOW DIVERSION
 BETWEEN 27TH & 28TH STREET
 PCA/700/093 SCALE: NONE SHT. 1 OF 1

Drawn by: M. Daniel Zahid

TG 732-E5

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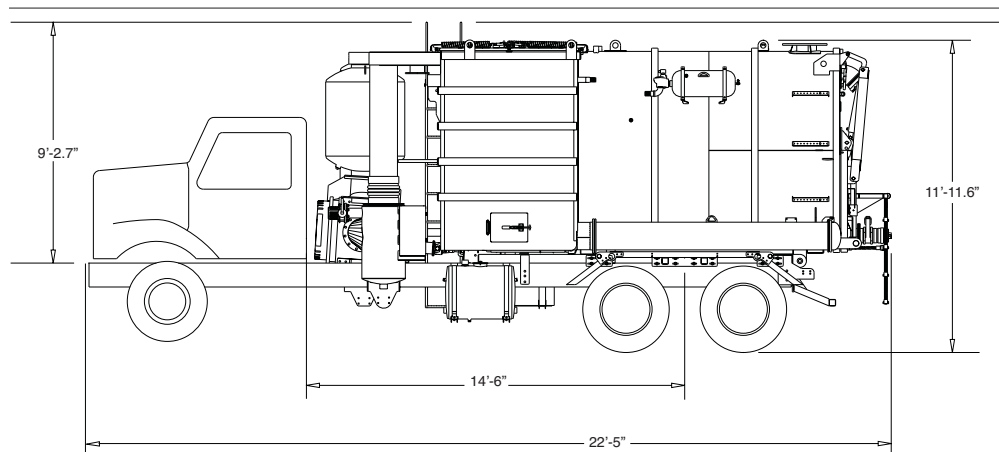
reliable as ever. But, thanks to a host of new

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Guzzler CL Industrial Vacuum Loader

Specifications and Options



Overall Length	CA	Height	Width	Weight Empty
296" (6.83 m)	174" (4.42 m)	143.6" (3.65 m)	102" (2.59 m)	36,000 lb (16,330 kg)

- Blower: Positive Displacement Dual-Lobe or Tri-Lobe Available
- Bolt-On Dumptubes
- Maximum Vacuum Range: 16-28.5 Hg (0.93 kg/cm²)
- Customized Ultra-Quiet Silencer
- Maximum Airflow Range: 5,089-6,000 cfm (8,647 cm³/hr)
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- Liquid Level Float Ball Shut-Off
- Color-Coded, Function-Stamped, Wiring Harness
- Controls: Tachometer, Blower Hourmeter, Pulsation System Air Pressure Gauge, Hydraulic System Pressure Gauge, Blower Vacuum Gauge, Blower Temperature Gauge
- Hydraulic Rear Door: Single-Lever Unlock/Open and Close/Lock
- Hydraulics: Hydraulic Pump Driven by PTO; Hydraulic System Plumbing Assembled Using JIC Fittings and Hydraulic Tubing; 50-Gallon (189.25-Liter) Hydraulic Tank
- 6" Air-Operated Relief Valve
- Heavy-Duty Subframe
- Inline Vacuum Relief Valve
- Payload Capacity: 18 yd³-21 yd³
- Rear Door Prop
- Collector Body: 3/4" (16.35 mm) Thick Construction; Rear Bulkhead Is 1/2" (9.525 mm) Thick Plate with Lower-Edge Reinforcement; Tailgate Is 1/2" (12.7 mm) Thick, Supported by Two Heavy-Duty Hinges; 50" Dump Height and 15" (38.1 cm) Rear Overhang
- Debris Body Prop
- Back-Up Alarm
- Roadside Emergency Kit and Fire Extinguisher
- Single-Mode Filtration System
 - First Stage: Radial Deflection Wing
 - Second Stage: Cyclone Centrifugal Separator
 - Third Stage: Sixty 70" Dacron Filter Bags (5 Micron); 10.72:1 Air-to-Cloth Ratio
 - Fourth Stage: Microstrainer Final Filter

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- Pulp and paper mills • Material processing plants
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Guzzler CL Vacuum Loaders

Superior Design from the World Leader in Vacuum Solutions

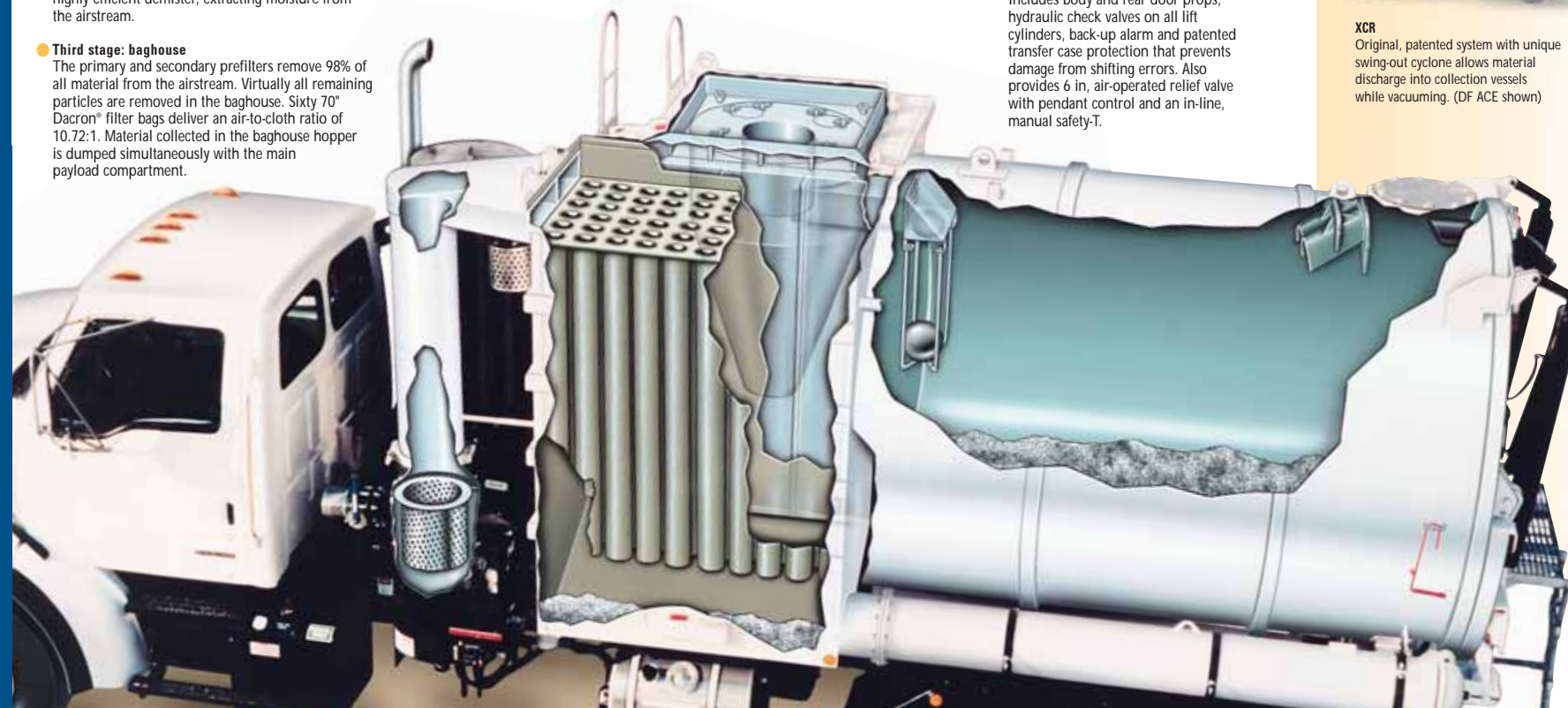
Advanced Guzzler CL Filtration Process

Finding the ideal balance between filtration and productivity is what the Guzzler CL is all about. And, with improved air-routing features, the Guzzler CL delivers even more air where you need it, at the working end of the hose, while maintaining the lowest pressure drop of any machine in its class.

- **First stage: debris tank**
As vacuumed material enters the 18-cubic-yard debris tank, air speed slows. This allows gravity to help the prefilter radial diversion wing remove the bulk of material by deflecting particles to the bottom of the tank.
- **Second stage: cyclone chamber**
From the debris tank, the air flows to the secondary prefilter — the cyclone chamber — where centrifugal force hurls the denser particles to the cyclone wall and spirals them downward into the collection hopper. Material collected in this chamber is dumped simultaneously when the debris tank is discharged. During wet vacuuming, this prefilter serves as a highly efficient demister, extracting moisture from the airstream.
- **Third stage: baghouse**
The primary and secondary prefilters remove 98% of all material from the airstream. Virtually all remaining particles are removed in the baghouse. Sixty 70" Dacron® filter bags deliver an air-to-cloth ratio of 10.72:1. Material collected in the baghouse hopper is dumped simultaneously with the main payload compartment.

- **Final stage: microstrainer**
Final vacuum pump protection is provided by the microstrainer. This is the safety drop-out point for any items that may have entered the system during servicing. A fine mesh screen prevents foreign objects from entering the blower.
- **Easy cleaning and decontamination**
All filter components are 100% accessible. There are no material bridge-points in baghouse and cyclone hoppers, as in other brands.
- **Top access**
Baghouse and cyclone top inspection doors with spring-assist are easily accessed via heavy-duty ladder and platform. No disconnecting of the pulsation hoses required.
- **Direct drive transfer case or International**
Factory-installed at Sterling to ensure correct alignment of all drive-line components. Directly couples vacuum pump to chassis engine. Mounted on vibration isolators to accommodate truck frame movement. Vulcan coupler or pulsation dampener not required, as on other brands.
- **Severe-duty chassis**
Designed specifically for the Guzzler CL. Factory-installed transfer case. Factory-installed, dash-mounted blower and PTO controls for greater reliability and ease of use. Jump-start studs provided for remote equipment power supply.
- **Isolated strainer and silencers**
Independently mounted to prevent vacuum pump case distortion.

- **Advanced rear door design**
½ in (12.7 mm) steel-plate construction prevents deflection and warping. Tapered, locking, over-center chocks and three top-mounting brackets ensure a positive, leak-proof seal. Central hydraulic manifold provides single access point for adjustments. Two double-acting, hydraulic cylinders (versus up to four on other brands) for less maintenance. Hinge blocks are shimmed to allow adjustment.
- **State-of-the-art instrumentation**
Controls mounted in a single, fully sealed panel for easy monitoring. Includes tachometer; blower temperature, hydraulic pressure, vacuum and air pressure gauges; and hourmeter. Each circuit clearly identified and individually grounded.
- **Standard operator safety features**
Includes body and rear door props, hydraulic check valves on all lift cylinders, back-up alarm and patented transfer case protection that prevents damage from shifting errors. Also provides 6 in, air-operated relief valve with pendant control and an in-line, manual safety-T.



The Choice Is Yours.

The Guzzler CL modular design allows you to select the offloading solution that meets your specific needs, so you get minimal downtime and maximum productivity. Guzzler offers the widest selection of configurations of any manufacturer.

Offloading Options

Cycrane with stand-alone cyclone
Designed for maximum flexibility. Ideal for loading rail cars, dump trucks, elevated bins and silos. Heavy-duty crane with 1,400 lb (636 kg) capacity and 31 ft (9,449 mm) horizontal reach. Can be suspended over vessels up to 14 ft (4,267 mm) in height.



XCR
Original, patented system with unique swing-out cyclone allows material discharge into collection vessels while vacuuming. (DF ACE shown)

Tailgate-mounted sludge pump (not shown)
4 in (101.6 mm) removable, hydraulically driven pumphead is ideal for unloading sludges from the debris body and may be used during vacuuming.

High-rail system (shown on page two)
No one provides a more complete high-rail system than Guzzler. Available in three configurations, this option can be as simple as adding high-rail gear to a standard Guzzler. Or choose a fully equipped high-rail cleaning system that features a loading boom, cycrane, hydraulic creep drive and rear-mounted operator chair, where complete operation can be achieved from a single position while loading or driving over the rails.

Vane pump (not shown)
Ideal for fast vacuuming and pressure offloading of liquid material. The system features a 250 cfm, 27 in Hg vane pump, as well as all options required for pressurizing the non-ASME debris tank up to 6 psi.