

BATH IRON WORKS CORPORATION
PORTLAND SHIP REPAIR
FACILITY
MAJOR SITE PLAN REVIEW
SHORELAND ZONING REVIEW

Submitted to:

Portland Planning Board
June 22, 1982

PLANNING REPORT #47-82

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ATTACHMENT A: Department of Environmental Protection Letter
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Figure 2-1 Proposed ship repair facility
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SECTION I

INTRODUCTION

I. INTRODUCTION

This report is submitted to the Portland Planning Board in order to aid in the Boards' review of the following City ordinances as they pertain to the Bath Iron Works Portland Ship Repair Facility Project:

- A. Municipal Code, Chapter 604, Site Plan Review;
- B. Municipal Code, Chapter 602.19A, Shoreland Zoning.

Review of the City Ordinances, Chapter 604 and 602.19A are treated as normal major site plan and shoreland zoning reviews according to the purposes set forth in Section 602.1 of the Municipal Code of the City of Portland.

In addition to City site Plan review requirements the Bath Iron Works Corporation, Portland Ship Repair Facility Project must also be reviewed for compliance with Federal and State regulations. The Department of the Army, United States Corp of Engineers reviews the project under the provision of:

- A. Section 10 of the River and Harbor Act of 1899.
- B. Section 404 of the Clean Water Act;
- C. Section 103 of the Marine, Protection, Research and Sanctuaries Act of 1972.

The State of Maine reviews the proposed project under the provisions of:

- A. M.R.S.A., Title 38, Section 481-488, SITE Location Act;
- B. M.R.S.A., Title 38, Section 474, Alteration of Coastal Wetlands

The DEP approval letter with condition is attached as Attachment A.

SECTION II

BACKGROUND

II. BACKGROUND

As a result of steady growth and near full capacity utilization, about 18 months ago BIW management began to seriously examine the need for a major facility expansion. In so doing, they considered the possibility of expanding Bath's existing shipyard or opening in a new location outside the City of Bath.

At that time, the Company had already committed to an \$18 million capital and systems expenditure program in Bath for 1981 and it was apparent that its most pressing additional shipyard needs were to significantly expand pier facilities and acquire a much larger floating dock which would be virtually impossible to accomplish in Bath because of high cost and geographic and water-depth limitations. Given the great difficulty of going forward with that type of capital expansion within the physical confines of Bath Iron Works, the focus of the Company's study by necessity shifted to areas away from Bath.

Bath Iron Works was approached by officials from the City of Portland and the State of Maine and urged to look at Portland as a possible location where a comprehensive overhaul and repair yard could be built utilizing some existing facilities at the Maine State Pier. BIW accepted this invitation because its goal had been to remain in Maine, and take full advantage of the excellent work ethic which is so prevalent here, if at all possible. Bath Iron Works' previous World War II experience with a shipyard in Portland and the close proximity to Bath made Portland very attractive, if an acceptable facility could be developed.

As a result of these discussions, there was developed a definitive plan for an overhaul facility in Portland which would greatly increase the size of ship which Bath Iron Works can dry-dock and provide the additional piers which are so badly needed.

The \$46.7 million project is being jointly financed by Bath Iron Works, the State of Maine and the City of Portland. Under agreements signed by the three parties BIW will make an initial investment of \$16.7 million. The City of Portland and the State of Maine will each put in \$15 million, those amounts coming from bond issues approved by voters of the City of Portland and the State of Maine. BIW assumes responsibility for any cost over runs.

The City of Portland, State of Maine and Bath Iron Works have negotiated agreements with the understanding that they form a comprehensive business arrangement. The following documents have been approved in order to make the project possible:

- (1) A Comprehensive Commitment Agreement between the State, the City and BIW which summarizes the general description of the business agreement.
- (2) A 20-Year Pier Lease Agreement between the City and BIW for the Use of Portland Waterfront Facility.
- (3) Dry Dock Lease between the State and BIW.

- (4) Purchase and Sales Agreement for the Maine State Pier between the City and the State for \$4.6 million which transfers the Pier from the State to the City.

The Bath Iron Works is now in the process of obtaining all necessary permits in order to begin operation.

SECTION III
TECHNICAL REVIEW

III. TECHNICAL REVIEW

A. PROJECT DESCRIPTION

Bath Iron Works Corporation of Bath, Maine, proposes to construct a new ship repair and overhaul facility in Portland, Maine, adjacent to and including the easterly side of the Maine State Pier. The development area consists of approximately a 50 acre area of water bounded by the State Pier to the west, the shoreline to the north, the extended property line to the east, and the Harbor Commissioner's line to the south along the ship channel. The area contains the ruins, primarily timber piles, of the former Grand Truck Railroad Piers, which cover an area of approximately fifteen acres. The proposed facility comprises an 80,000 ton capacity floating dry dock, which would be permanently moored within the project area described above. Bath Iron Works will modify the existing Maine Pier facility by adding 12.5 feet of apron to incorporate a 25-ton crane, rehabilitate pier structure, add offices and supporting shops for the operations described above. Land area development in locations of old timber pile ruins will be applied for a Phase #1 of two, of 1.61 acres.

A finger Pier will be installed to provide land access to the dry dock.

Alteration of the Maine State Pier

The east side of the Maine State Pier will be extensively remodelled to provide needed operating facilities and space. The east edge will be moved out 12.5 feet to provide space needed for installation of a 25-ton crane with rail runway. This will require placement of additional piles and new pier pavement. The Pier building will be extensively renovated to provide office and shop space.

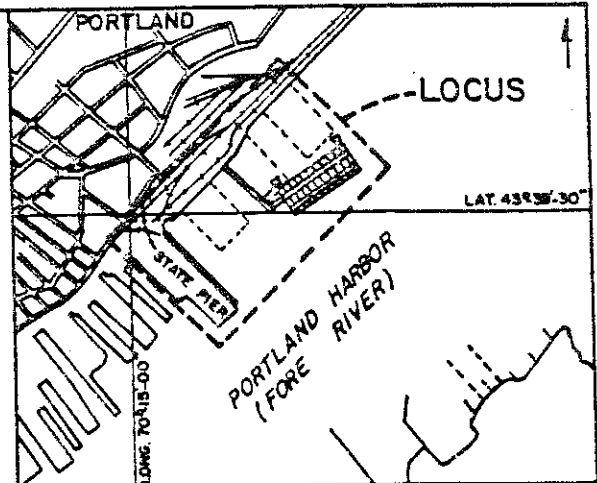
Erection of Finger Pier

A 600-foot finger pier will be constructed approximately 775 feet east of the existing Maine State Pier. This structure will serve as a vessel docking structure and a serviceway to the drydock. The pier will parallel a berth on the west side of the filled area on its eastern edge. The pier will be set on piles and have its surface at 16 feet about mean low water. The finger pier will be 48 feet wide, and a 36-foot railway will be installed on the surface to accommodate a 60-ton crane. A one-foot high concrete curb will extend along the front edge. Utilities for the pier and drydock will be carried on the east side of the pier.

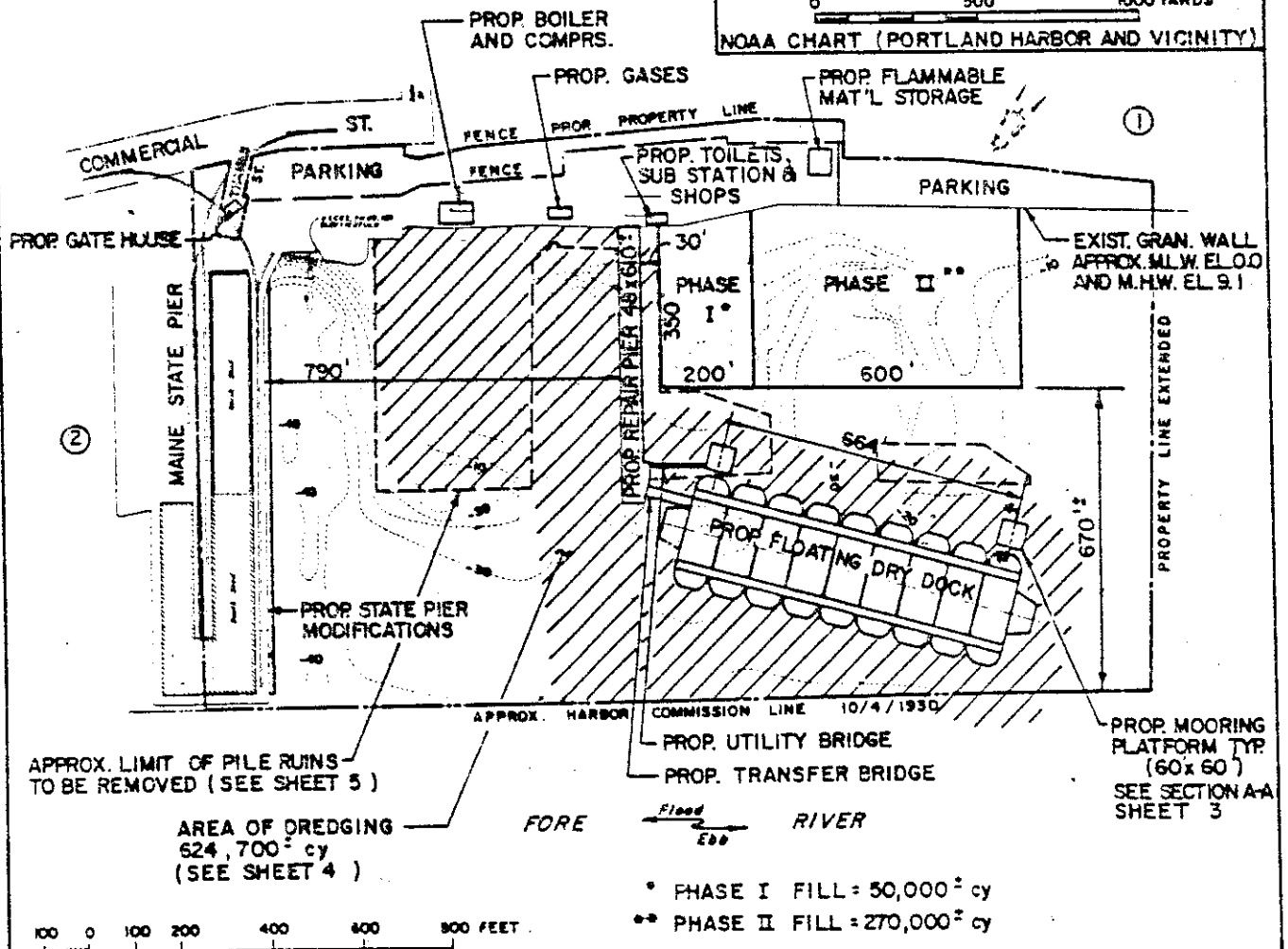
The structure will be mounted on concrete or steel pipe piles with timber fender piles at the outer end and along the western side to supply protection. Location of the finger pier is shown in Figure 2-1. A longitudinal section and representative cross-section are shown in Figure 2-2.

ADJACENT PROPERTY OWNERS :

- ① CANADIAN NATIONAL RAILROAD - NORTH
- ② CITY OF PORTLAND - WEST



VICINITY MAP
NOAA CHART (PORTLAND HARBOR AND VICINITY)



PURPOSE :

MODIFICATION OF EXIST. STATE PIER, CONSTRUCTION OF REPAIR PIER, BRIDGES AND MOORING PLATFORMS NECESSARY FOR OPERATION OF FLOATING DRYDOCK.

DATUM :

MEAN LOW WATER

**PROPOSED SHIP REPAIR FACILITY
in Portland Harbor, Fore River
City of Portland**

County of Cumberland, State of Maine
Applicant: BATH IRON WORKS CORPORATION
SHEET 1 of 7
MARCH 12, 1982

Figure 2-1

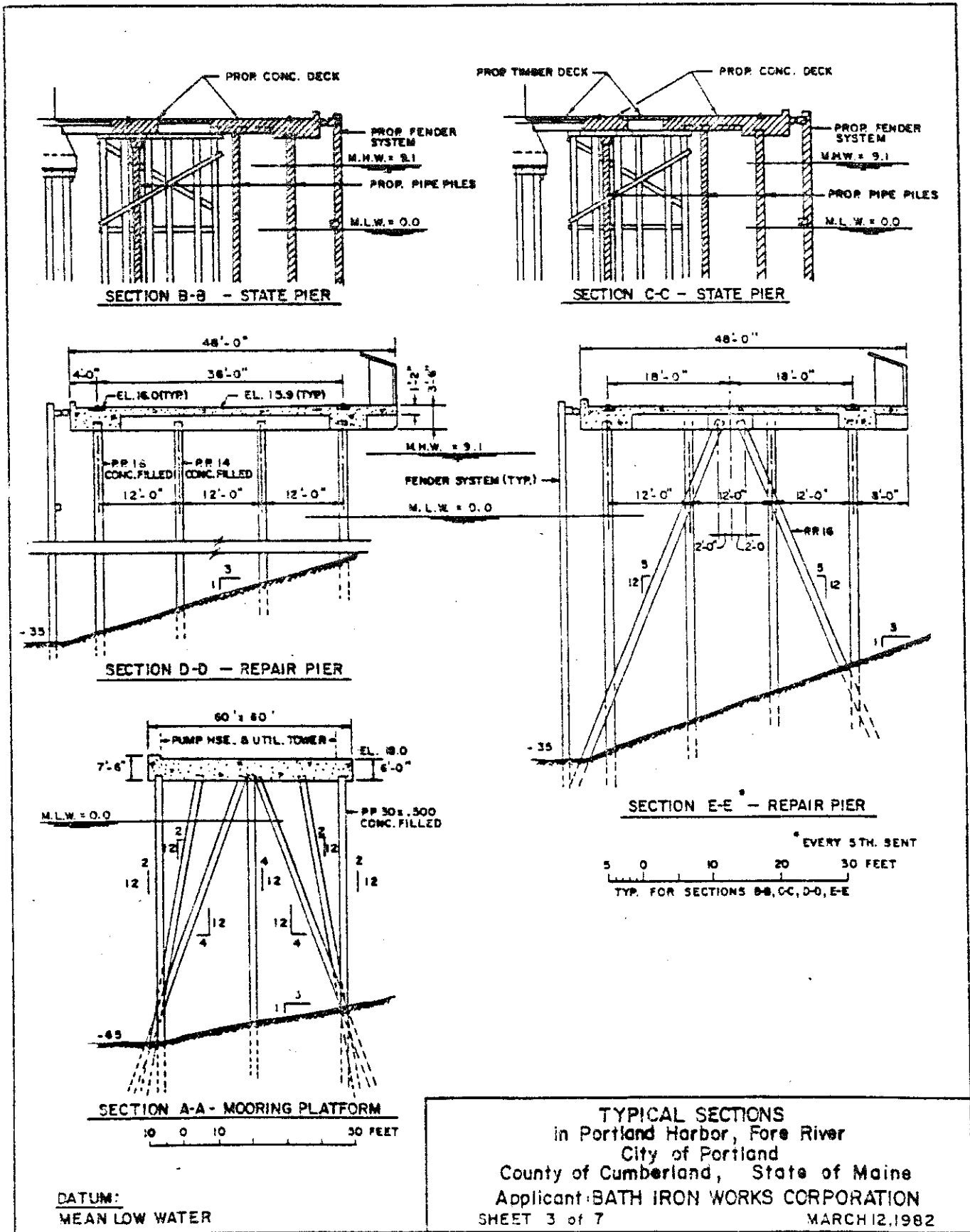


Figure 2-2

Floating Drydock

An 844-foot long steel pontoon drydock will be permanently moored in the waters adjacent to the outer end of the finger pier. The drydock will consist of nine pontoon sections attached side by side along their sides forming the drydock when all are assembled. Each side of the drydock will be edged with bulkheads 50 feet high and 20 feet wide. Rail-carried cranes will be mounted atop each. Location and general configuration of the drydock are shown in Figure 2-1.

The drydock will be towed to the site in separate sections and assembled at the site. The assembled facility will be permanently moored against two large dolphins located on its landward side and aligned such that its "inner" end is adjacent to the channelward end of the finger pier and the seaward corner of its "outer" end approximately 25 shoreward of the Harbor Commission or Pier and Bulkhead line. This arrangement places the drydock at approximately a 15° angle to the general adjacent shoreline angle to the Pier and Bulkhead line. The channel side of the drydock can be equipped with floating fenders, permitting the berthing of large vessels along that side of the drydock.

A 15-foot wide transfer bridge with 3-foot wide walkway extensions will connect the finger pier and drydock. Vehicle and personnel traffic on and off the drydock will pass over the transfer bridge. An eight-foot wide "utility bridge" will extend from the finger pier to the near mooring dolphin. Utility and electrical conduits will be mounted inside this structure.

Nature and Construction of Dolphins

Two mooring dolphins will be erected on the inshore side of the drydock in place. Location of the dolphins is shown in Figure 2-2. Distance between centerlines for these structures is 664 feet.

The dolphins will consist of a series of concrete-filled piles capped with a 6-foot thick concrete platform. The dolphin near the finger pier will have an enclosure on it to accommodate utility and electrical connections. Mooring systems between the dolphins and the drydock will be designed to accommodate extreme tidal fluctuations (100 year flood = extreme high water = 14.1 feet).

Piling Removal

The general area proposed for finger pier and shorezone dredged material containment area construction contains an extremely large number of timber piling previously used for support of the Canadian National (Grand Trunk) Railroad piers. These piles are of virgin Yellow Pine, were installed in the later 1800's and early 1900's, are 50 ft. to 80ft. long, and have an approximate 12-in. butt diameter. The great majority of these piling are still in excellent structural shape, showing minimal damage from marine borers or other deterioration, and tests on piling samples conducted by Haliburton Associates indicated that piling strength equals or exceeds that expected for similar new timber

piles and that the original creosote treatment is still effective.

A large number of these timber piling will be used in construction of the shoreside dredged material containment area, where they will be used to form a double-wall bulkhead and anchor system. In order to provide piling for containment area bulkhead construction and to facilitate both finger pier and containment area bulkhead construction, the majority of piling which previously supported the pier nearest the Maine State Pier will be pulled, inspected for suitability and, if in satisfactory condition, used in the shorezone containment area bulkhead. Depending upon the final construction sequence chosen, piling may be pulled and redriven immediately or pulled and stockpiled on shore immediately northwest of the finger pier and shorezone containment area location. In general, piling in the finger pier area will be pulled as needed. It is anticipated that remaining piles from the second and the pilings in the third pier will not be used in initial containment area bulkhead construction, unless sufficient satisfactory piling are not available at the other location, and these piling will be left undisturbed for the present.

The piles in the pier area closest to the State Pier will be extracted and many of them used as fender piles around the finger pier. The inner three-quarters of the piles in the middle ruin will be left untouched as much of the area will be filled. The remaining outer portion of the middle pile ruin will be removed to make room for the finger pier and for construction activities during dredging for the drydock and erection of the mooring dolphins. Piles in the third area (most distant from the State Pier) will be extracted as needed during construction for use elsewhere or to provide space needed for construction activities.

Excavation of Near-Shore Areas

The area presently occupied by the pile ruin closest to the Maine State Pier will be dredged to a depth of -15 feet, except for the portion close to the seawall where sufficient material will be left to ensure stability of the existing seawall. The material will be deposited in an approved offshore disposal area.

The area between the pile ruin discussed above and the proposed finger pier has been dredged in the past to provide docking depth between the two original piers. This area will be redredged to a depth of -35 feet. This material will be deposited in an approved ocean disposal location or the containment structure alongside the finger pier.

Excavation of Drydock Basin

Vessels are moved into and out of the floating drydock by essentially sinking the structure such that the vessel can be floated in or out as the case may be. Once the vessel has been placed (or removed), water is forced out of the drydock's tanks and it once again rises to the surface and its normal operating position.

Considerable depth of water is required to perform this raising and lowering operation. The area beneath and around the drydock will be dredged to a depth of 65 feet below mean low water. The area excavated to this depth will be somewhat larger than the actual size of the drydock. Slopes of this basin will range from 3 to 1 to 5 to 1. Slopes will be made less steep on the channel side than on the shoreward side. The material taken from this excavation will be placed in the containment structure or the offshore disposal area.

Disposal of Sediment

Materials taken from the nearshore pile area, the finger pier berth area, and from the drydock basin are essentially uncontaminated. Total volume of dredging is estimated as about 625,000 cubic yards. The 625,000 cubic yards will be transported to an offshore regional disposal site, and approximately 50,000 cubic yards may be used in the containment structure.

Construction of Containment and Development of Pier Area

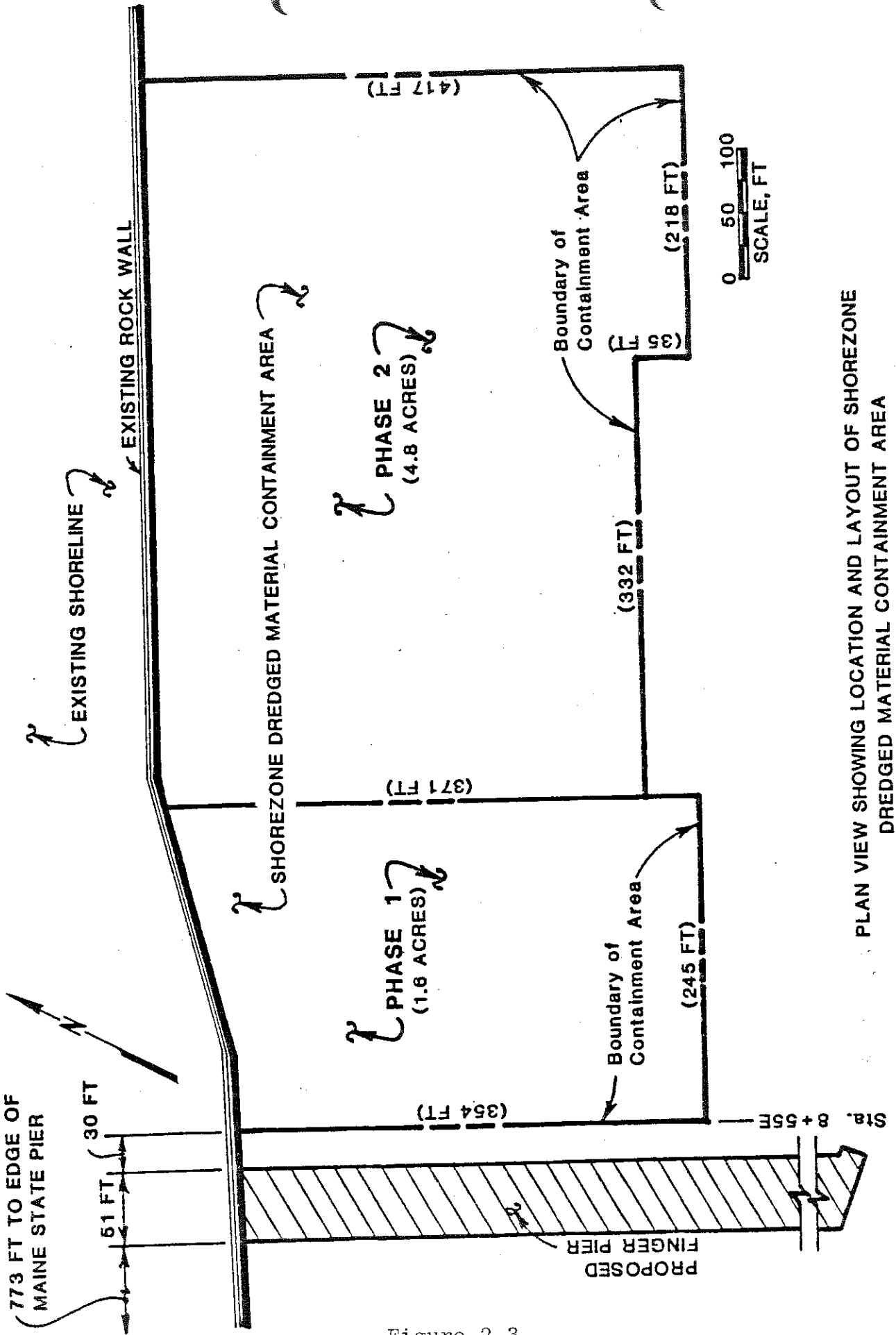
The construction of a containment area appears desirable for several reasons. The Bath Iron Works proposal is to construct a containment area of 1.61 acres. A second phase of 4.8 acres has also been considered, but approval of the second phase is not sought at this time.

Bath Iron Works believes construction of the containment area is advisable. It appears that such a move holds little long-range threat to the ecology of the surrounding harbor area. A "slit curtain," utilizing the most advanced, state-of-the-art technique, will be used in combination with a pile-driven wall to retain the dredge sediments within retention structure.

Construction of a shoreline containment area is also desirable from a standpoint of operating efficiency and economy. Since land area at the site is minimal, there is little room for outside storage, particularly for use as a supply staging area for the drydock. Basically, there are two options in this regard: the construction of a costly wharf or a more economical filling in of a containment structure, utilizing materials dredged at the site. Containmental areas are shown in Figure 2-3.

Structure of New Pier Area and Anticipated Use. Structure Erected Thereon

The main purpose of the pier resulting from filling of the containment structure is to provide an all-important storage and receiving area beneath the operating radius of the crane mounted on the adjacent finger pier. This will allow the transfer of heavy equipment to and from vessels in the drydock or alongside the finger pier to the pier constructed over the containment structure. Equipment, material, and supplies arriving via truck or rail can also be placed temporarily on this pier. No large structures are proposed for this pier.



PLAN VIEW SHOWING LOCATION AND LAYOUT OF SHOREZONE DREDGED MATERIAL CONTAINMENT AREA

Figure 2-3

Distances from Navigation Channels and Anchorages

The project area lies to the north and west of the navigation channel extending up the Fore River. The outer end of the existing Maine State Pier extends to within 8 to 9 feet of the Pier and Bulkhead line marking the northwest site of the channel. The floating drydock will be moored permanently in a position such that its long axis will extend almost directly eastward but at an angle to the existing shoreling. The outer, southeasterly corner of the drydock will reach to about 38 feet from the near edge of the navigation channel. The excavated area sloping down to the bottom of the drydock basin will extend out into the channel about 160 feet at its greatest dimension.

B. FINDING OF FACT

Existing land area involved in the project is 7.87 acres. Wharf areas consist of 3.49 acres on the Maine State Pier and 0.58 acres on the new finger pier. The overall harbor area essentially within the confines of the project is 50 acres.

The area constituting the filled pier is 1.61 acres. A second, future phase of filling would increase the area filled and paved by 4.8 additional acres.

Dimensions of structures are as follows:

Maine State Pier (Existing Building):	1000' x 90'
Boiler and Compressor Building:	40' x 80'
Flammable Storage Building:	40' x 60'
Guard Building	24' x 30'
Floating Dry Dock	844' x 260'
Sanitary Building (and Shop):	50' x 85'

Existing Zoning: W-1-Waterfront
Project Cost: \$46.7 Million
Projected Employment: 1,000 within five years and
beyond 1,200 in ten years.

Maximum Operation Heights of Equipment

- a. 25-ton Crane on
Maine State Pier142 Ft. above M.L.W.
- b. 60-ton Crane on Finger Pier.....276 Ft. above M.L.W.
- c. One set of Tower Lights on
Finger Pier 96 Ft. above M.L.W.
- d. Floating Dry Dock 84 Ft. above M.L.W.
- e. 35-ton Cranes on Floating
Dry Dock219 Ft. above M.L.W.

Compliance with Zoning: Board of Appeals approval was received on March 11, 1982 for height variance see Attachment B

C. SIGNIFICANT LAND USES

The Maine State Pier is presently used for loading and unloading commercial ship traffic, for the storage of both shipping-related and non-transported goods, and provides office space for various shipping-related business and State Department of Transportation offices. Water areas directly adjacent to the Pier are used for docking of vessels--both those being loaded or unloaded and those temporarily requiring berthing during repairs or while receiving provisions and supplies.

Commercial Street and tracks of the Portland Terminal Company lie adjacent to the landward boundary of the project site. Wholesale businesses, storage facilities and warehouses, and a large foundry are located in the vicinity on the other side of Commercial Street. The Canadian National Railway maintains offices and a small freightyard between the facility site and some of the business areas. Other piers and wharves are located to the west along the waterfront.

The areas occupied by the pilings and wharf ruins are not used at present.

D. CONSTRUCTION SCHEDULE

The BIW schedule calls for work to start on State Pier building renovation in early 1982 with completion coming late the same year. Renovation of State Pier deck and piling will begin in mid-1982 and be complete in early 1983. Pile removal and dredging will get underway in mid-1982 and should be complete approximately one year later. Work on the retention structure and filled area will parallel the dredging operation. Construction of the finger pier to serve the drydock will begin in late 1982 and is scheduled for completion in early fall of 1983.

Assuming favorable weather and sea conditions, Haliburton Associates, consultant to BIW, estimates that a construction time of between 60 and 90 working days will be necessary for construction of the Phase 1 containment structure, depending upon the amount of prefabrication done by the contractor and the number of pile driving equipment spreads utilized.

C.E. McGuire, designers of the finger pier, have advised that pilings for this pier must be driven prior to containment structure construction and same should pose no construction problems for the containment structure, but it will be necessary to schedule adequate lead time for the finger pier piling installation. Preliminary construction schedule shown on Fig. 2-4.

E. STAFF REVIEW

1. Traffic

A copy of the "Waterfront Traffic Impact Study" is attached to this report for Board review. This report was prepared by the City of Portland, Maine Department of Transportation and the Portland Area Comprehensive Transportation Study specifically to study the vehicular and parking effects of the BIW proposed Ship Repair Facility Project. The report

**PORTLAND FACILITY SCHEDULE
PRELIMINARY CONSTRUCTION**

1981 1982 1983

1 = COMPLETE FOR BID
2 = STATE PERM ONLY
3 = BOILER PLANT
4 = NEW PIER

NO	ITEM	1981												1982												1983			
		YEAR	MONTH	DEC	NOV	OCT	SEP	AUG	JUL	JUN	MAY	APR	MAR	FEB	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC			
1	SUBMIT ENGINEERING PROPOSALS																												
2	AWARD ENG'G CONTRACT																												
	A. MAINE STATE PIER																												
	B. PIER OR DOCK																												
	C. UTILITIES																												
3	PERMITS																												
	A. HARBOUR COMMISSION																												
	B. ARMY CORP OF ENGRS																												
	C. DEP																												
	D. CITY OF PORTLAND																												
4	SOILS WORK & PILE TEST																												
5	REQUEST FOR BIDS FOR CONSTRUCTION																												
	CONSTRUCTION																												
	A. PILE REMOVAL																												
	B. PILE INSTALLATION																												
	C. DECK CONSTRUCTION																												
	D. STATE PIER																												
	E. NEW PIER																												
7	RENOVATE PIER BULBS																												
	A. OFFICE AREA																												
	B. SHOPS																												
8	UTILITIES																												
	A. BOILER PLANT																												
	B. FIRE SYSTEM																												
	C. ELECTRICAL																												
	D. PIPING SYSTEMS																												
9	GRADING PAVING																												
10	MISC. BULBS (GUARD HOUSE, PAINT STOR., ETC)																												
11	FENCE & GATES																												
12	MISC.																												

Figure 2-4

Construction Schedule for the Bath Iron Works Portland Facility

concludes that the BIW project will create a minimal impact on the local roadway network. The report states that the impacts are not severe and an improvement program can be tailored to eliminate or minimize these impacts.

It should be noted that the traffic study was undertaken with the assumption that BIW will start a first shift at 7:00 a.m. This shift start time will minimize traffic impact. Should BIW not be able to start its shift time at 7:00 a.m. it may significantly alter the results of the traffic study.

2. Parking

On site parking for 451 vehicles will be provided as part of the BIW Ship Repair Facility site plan. Included in the "Waterfront Traffic Impact Study" attached is an analysis of the impacts on parkers presently using the Maine State Pier and an analysis of future traffic parking needs created by the proposed development. Mr. Bill Bray, City Traffic Engineer has calculated a need (not the same as the zoning requirement) for 466 parking spaces. The number of spaces (451) compares favorably with the calculated demand.

In addition to the traffic study included in this report the City of Portland, Maine Department of Transportation and the Portland Area Comprehensive Transportation Study will soon be retaining a traffic consultant to study and develop a redesigned Commercial Street including the intersection of Franklin Street and Commercial Street. This study will further analyze available sites for a possible parking garage facility to be located near the Portland Waterfront. This study will aid not only the BIW project but the entire waterfront development.

3. Surface Water Runoff

Existing runoff to the Harbor will be continued by maintaining existing grades and covering unpaved, gravel areas with bituminous concrete.

4. Provisions for Handling Solid and Liquid Industrial and Process Wastes--Discharges and Special Permits

Solid wastes will be removed by a licensed commercial carrier for disposal in a licensed or approved area. Abrasive blasting of ships' structures to remove unwanted paint and oxidation scale will be completed in the confines of the dry dock basin.

The area to be cleaned will be segregated from other general work and isolated to prevent fugitive particulate matter entering the surrounding atmosphere. Collection and disposal of the abrasive waste will be done in compliance with Local, State, and Federal Regulations regarding the proper disposal method of the abrasive waste.

Bilge water wastes will be treated by a separator. The water will then be discharged to the Portland sanitary waste system. The oils extracted will be burned in on-site boiler or, if not usable, removed by a licensed commercial carrier for disposal at an approved site.

There will be no discharge of hazardous wastes at the project site. All such materials will be removed by a licensed holder.

Regarding paint sprays and surface blasting, the latest "state of the art" equipment will be used to prevent over-spray or blasting. All OSHA or EPA requirements will be met, as they are at the Bath facility.

The BIW plan for Portland calls for hazardous waste to be temporarily stored at the site for no more than 90 days and then for it to be transported to the Bath Iron Works plant in Bath by a licensed hauler and from the Bath shipyard to a disposal area, also by a licensed hauler. There will be no treatment, discharge or long-term storage of hazardous waste at the Portland site.

The hazardous waste generated by Bath Iron Works in its shipbuilding and repair operations mainly involves paints and solvents. Bath Iron Works does not generate any exotic chemical or nuclear waste at its Bath shipyard and does not anticipate any such generation at the Portland site.

5. Lighting

There are six existing light poles at the site. There are 13 new lights proposed. The poles will be 30 feet high and will be of high pressure sodium. All lighting for the parking lot will be angled toward the plant. Temporary lighting will also be used for ship areas while working. The dry dock will have lighted walkways.

6. Fire Prevention

The project has been reviewed by the City's Fire Prevention Bureau (see attachment Fire Prevention). The project has adequate shore side access for fire trucks and more than adequate water depth for the fireboat on the harbor side.

The City Traffic Engineer has determined that a "pump" truck is capable of entering the parking lot, however the parking lot design prohibits a "ladder" truck for entering the rear portion of the parking lot through the parking lot entrance. BIW has stated that an emergency exit will be placed near the rear portion of the parking lot for emergencies.

7. Landscaping and Site Entrance

The visual character of the B.I.W. entrance area is a critical component of the revitalization of the Commercial Street/Waterfront area. Franklin Street Arterial may be perceived as a major "gateway" to the waterfront both visually and functionally for vehicular traffic. The entrance area and large existing warehouse on the site is visible as far up Franklin Street as Congress Street. Therefore there is an opportunity for the B.I.W. development to play a major role in identifying the waterfront and set a precedent for future upgrading of properties on Commercial Street.

The Planning staff is now drafting specific physical design guidelines for the waterfront which will be presented to the Planning Board for comment later this year. These guidelines would become advisory for any private development and mandatory for any development involving public funds.

The proposed B.I.W. final site plan was not available for review of landscaping plans. A major concern of the staff, however, has concerned screening of the large proposed parking lot. As a general policy, the staff recommends that downtown and waterfront parking lots abutting public ways include dense screening to a height of 3 to 4 feet along the lot. Such screening reduces the glare and improves the general appearance and value of the adjacent pedestrian ways and properties. Dense shrub planting along the proposed property fencing on Commercial Street will provide a significant edge of the development which enhances the identity of this "gateway" to the waterfront. In addition, such plantings take little room (18-24" width of the row) and direct the eye of passers-by to the extremely interesting industrial activities of the shipyard itself rather than to a parking area.

The vehicular entrance area abuts the Commercial Street/Franklin Street Arterial intersection which is now undergoing redesign as part of the PACTS Commercial Street study. Due to the uncertain nature of improvements to be proposed for that area in the study, the staff recommends that a \$25,000 escrow fund be set aside for further improvements to the entrance. Bill Bray, City Traffic Engineer has requested that a traffic control official be assigned to direct traffic at this location until improvements to Franklin Arterial are complete.

8. Noise

Noise impact of B.I.W. on the Munjoy Hill neighborhood was recently an issue of concern as expressed by a proposed text amendment to the Zoning Ordinance by residents of the area to further restrict noise emitted from I-3b Industrial activities. At the meeting of June 8, 1982, the Planning Board recommended denial of such an amendment. However, the Board instructed the staff to provide additional information related to this and similar problems in other areas for the Board's consideration.

Noise impacts may be reviewed by the Planning Board as described in the memo from Corporation Counsel, dated 6/4/82 "Re: B.I.W. Site Plan Review." Attachment E.

B.I.W. has presented technical data gathered by BIW personnel at their Bath facility and in the area of the proposed Portland facility. According to B.I.W. the Portland facility will not produce any adverse effect on the Munjoy Hill residential neighborhood. However, the technical data presented by B.I.W. does not, in the opinion of the staff, present any such conclusive assurances. Such assurances are difficult to make where predictive calculations are required for environments including water, slopes, etc. In such cases, the City may take the responsibility of applying regulations which are both reasonable and protective of the public health, safety, and welfare.

Planning Report #43-82, Noise Standards Text Amendment to I-3b Zone, recommended levels which should be applied to industries in the I-3b zone. This recommendation should be addressed here as a site plan condition to protect adjacent residential neighborhoods at night. These levels are 65 dBA (9 p.m. to midnight) and 60 dBA (midnight to 6 a.m.) LEQ, as measured at the residential zone line. The staff recommends that these noise standards be applied to the B.I.W. facility in the form of a special site plan condition. The basis of this recommendation includes:

- 1) The present zoning regulations of 75 dBA day and night, as measured at the industrial property line, do not assure adequate noise protection of adjacent residential neighborhoods, as described in Planning Report #43-82;
- 2) The nighttime noise levels of 65dBA and 60dBA described above are levels which meet or exceed ambient noise levels existing at the adjacent residential zone boundaries and are the most restrictive type and level of regulation which can be practically administered by the City; and
- 3) B.I.W. officials have indicated that the noise levels recommended above can be met by their facility.

9. Air Pollution

The City Zoning Ordinance sets standards for the discharge of smoke and air pollution which B.I.W. must meet. B.I.W. does not anticipate any fugitive dust problems from its abrasive blasting production procedure. Any boilers will be licensed to meet Maine DEP and Federal EPA standards. Low sulfur fuels also will be used and Bath Iron Works anticipates compliance with the Portland Peninsula Air Quality Region standards of the state DEP.

Due to the chances of significant health hazards resulting from industrial activity involving asbestos, this material should be recognized in staff review. OSHA regulates asbestos with regard to permissible exposure levels to employees. It appears that the only hazard asbestos may

present in relation to the BIW development will be when a ship is brought in for repairs and the asbestos must be stripped from boilers, pipes, etc. During asbestor removal, the product is in a "wet state" to limit airborne fiber emission to employees and into the ambient air. The City has the capability to monitor the ambient air for asbestos fibers with a hivol air sampler. In addition, the DEP may be involved in monitoring of the B.I.W. facility.

The OSHA standards for B.I.W. personnel should provide ample protection for citizens in surrounding areas. See Attachment H.

F. SHORELAND ZONING

Section 602.19 A of the Zoning Ordinance sets forth Shoreland regulations and standards to apply to all areas falling within the shoreland zone. Eight standards are set forth in the Ordinance as follows:

1. Beach Construction: None to take place under proposed project.

2. Tree clearance and other landscaping: There is no tree clearance to take place under the proposed project. Landscaping as part of entrance improvements is discussed in III (E) 7 above.
3. Erosion and Sedimentation Control: The ordinance standard requires that filling, grading, lagooning, dredging, earth-moving activities and other site alterations shall be conducted in such a manner as to prevent to the maximum extent possible, soil erosion and sedimentation of surface waters.

The BIW Ship Repair Facility proposes dredging of various areas described in Project Description III. (A) above as well as construction of a Phase I containment area of 1.61 acres.

Erosion and/or sedimentation will be primarily associated with dredging, filling and related activities during construction. No significant amount of erosion is anticipated once the project is complete and operating.

Suspended sediments will be introduced into the water column during dredging and dispersed into adjacent harbor waters. All dredging will be by clam-shell apparatus, keeping the mixing of water and sediment to a minimum. This will similarly keep sediment suspension and dispersion to a minimum.

The only erosion-like condition expected will be the relatively low level of finely divided material which will pass through the retention barriers constituting the containment structure for the filled pier. Passage of this material through the barrier, as indicated by laboratory testing, will be significantly restricted by the nature of the barrier and the quick consolidation rate characteristic of most of the material to be placed in the containment structure.

4. Piers, Docks, Wharves, Breakwaters, Causeways, Marinas, Bridges over 20 Feet in Length, and Uses Projecting into Water Bodies - In addition to federal or state permits which may be required for such structures and uses, all structures and uses projecting into water bodies shall be approved by the Building and Inspection Services Department as to structural adequacy and safety and by the Planning Department for conformance with the following:
 - a. The facility shall be designed so as to minimize disruption of developed beach areas and located so as to minimize significant adverse effects on fisheries.
 - b. The facility shall be no longer in dimension than necessary to carry on the activity and be consistent with existing conditions, use, and character of the immediate area.

In both requirements above, the proposed finger pier and dry dock reflect safe construction standards and are designed and located to minimize any significant impacts.

5. Road Construction: None to take place under proposed project.
6. Structures: The first floor elevation of all new structures must be elevated at least two feet above the elevation of the 100 year flood. The proposed project will be above the 100 year flood of record. The 100 year flood of record is 14.1 feet. The wharves will be 16 feet and the buildings will be 17 and 18 feet. New construction is over two feet.
7. Water Quality Protection: Quite extensive water quality characterization studies were conducted as part of the 1974 NEECO study. In the years following, waste water treatment plants became operational in Portland and the surrounding communities, substantially reducing the pollutant load discharged into the waters of the Harbor and adjacent parts of Casco Bay.

Even in 1974 water quality was surprisingly good. Water quality data taken at that time at what is now the BIW project site documented adequate dissolved oxygen levels. In most instances readings approached saturation. Temperature and salinity were typical for a lower estuarine zone. Bottom waters were fully saline, while surface waters were somewhat less so - perhaps reflecting urban discharges and stream runoff.

The well-documented lack of pollutant and nutrient buildup in Harbor waters plus results of a dye release study conducted as part of the 1974 program revealed that Portland Harbor, overall, enjoys an efficient tidal flushing action, regularly replacing Harbor waters with a new water mass nearby Casco Bay and the offshore area.

There will be no discharges into the Harbor waters as a result of the renovation and construction activity on the State Pier. Thus, no detrimental impacts on the Harbor water quality are anticipated. Release of sediment during dredged material placement in the containment area will be minimized by placement of a perimeter silt curtain on the inside of the piling bulkhead used to retain the dredged material fill. A high-strength, chemically-inert woven polypropylene engineering fabric (trade name Poly-Filter X) will be used as a silt curtain. This fabric was selected for evaluation by Haliburton Associates based on their previous experience in selection and evaluation of engineering fabrics for sediment control and a special testing program was developed to verify the sediment retention characteristics of the silt curtain.

8. General Site Plan Features: The Planning Board, Planning Department, Department of Public Works, and the Fire Department shall approve a preliminary or final site plan unless it makes one or more of the following written findings with respect to a development within a shoreland area or Resource Protection zone, as mapped on the City of Portland Zoning Map:

- a. Will result in a violation of the standards reviewed in this section 1-7 above.

No standards in 1-7 above will be violated.

- b. Will result in damage to spawning grounds, fish, aquatic life, bird, and other wildlife habitat;

Major construction activities will be the driving of additional pilings and the extending of the pier deck approximately 16 feet for the full length of the State Pier. Driving of piles will create some minor and very localized disturbance of the bottom. Some of the bottom fauna will be temporarily dislodged and lost, although some forms may simply resettle elsewhere. Some organisms will be lost, but recolonization should occur quickly inasmuch as the disturbed area will be restricted. There will be no permanent environmental damage or habitat deterioration as a result of this construction activity.

1.61 acres of shallow-to-moderately deep bottom will be irreparably lost by construction of the Phase 1 dredged material containment area. However, it should be noted that the area in question was previously disturbed by construction of the Canadian National Railroad pier structures and has been periodically disturbed over the years by maintenance dredging necessary to keep the pier structures in use. Thus, construction of Phase 1 containment area will have no effect on essentially "virgin" bottom conditions in Portland Harbor, but will essentially return the use of the land area to commercial activities, a use consistent with its prior history before deterioration and abandonment of the Canadian National Railroad piers.

The biological character of the area reflects a modest diversity of organisms could be found in the area earmarked for the containment structure. However, it was also noted that debris, structural remnants such as timbers, boards and sheets of tarpaper, probably prevent full utilization of the habitat. Conceivably a similar habitat unencumbered with the debris might have the potential for supporting more numerous and perhaps more diverse flora and fauna.

The finger pier and dolphin will be supported on pilings driven into the Harbor bottom. At the time that they are driven, the bottom will be disturbed temporarily in the vicinity. Some benthic forms will be lost and epibenthic forms temporarily driven from the area, but this disturbance and habitat disruption will be relatively short-lived. Placement of the new pilings in the water at these locations will supply new habitat surfaces for those attached organisms (rockweeds, blue mussels, and barnacles) using vertical hard surfaces. Addition of the new surface habitat will compensate to some extent for existing vertical surfaces to be lost when old pilings are buried or extracted from the harbor muds. Overall, the impact on biota will be transitory, with no lasting, permanent effect.

- a. Will not conserve visual points of access to waters as viewed from public facilities; Entrance discussed in another section.
- b. Will not conserve actual points of public access to waters; Public landing to be relocated.
- c. Will not conserve natural beauty

SECTION IV
RECOMMENDATIONS

IV. RECOMMENDATIONS

A. MAJOR SITE PLAN REVIEW

Recommendation:

The Planning staff recommends that the Portland Planning Board approve the Bath Iron Works Ship repair facility compliance with the City's Site Plan Ordinance subject to the following conditions:

1. HOURS OF OPERATION: The Bath Iron Works ship repair facility should begin operating the morning shift at 7:00 a.m. This facility is expected to attract 1,000 employees by 1984 and possibly more in the future. The traffic impacts resulting from a 7:00 a.m. shift start time will be minimized. The "Waterfront Traffic Impact Study" (Attachment G) assumed a shift start time of 7:00 a.m. Should B.I.W. require a 7:30 a.m. shift start time, B.I.W. should be required to undertake a traffic study to determine traffic impact and return to the Planning Board for further review.
2. NOISE
Planning Report #43-82, Noise Standards Text Amendment to I-3b Zone, recommended levels which should be applied to industries in the I-3b zone where possible, to protect adjacent residential neighborhoods at night. These levels and 65 dBA (9p.m. to midnight) and 60 dBA (Midnight to 6 a.m.) LEQ as measured at the residential zone line. The staff recommends that these noise standards be applied to the B.I.W. facility in the form of a special site plan condition. The basis of this recommendation includes:
 - a) The present zoning regulations of 75 dBA day and night, as measured at the industrial property line, do not assure adequate noise protection of adjacent residential neighborhoods as described in Planning Report #43-82;
 - b) The nighttime noise levels of 65 dBA and 60 dBA described above are levels which meet or exceed ambient noise levels existing at the adjacent residential zone boundaries and are the most restrictive type and level of regulation which can be practically administered by the City; and
 - c) B.I.W. officials have indicated that the noise levels recommended above can be met by their facility.
3. LANDSCAPING AND ENTRANCE
On-site landscaping should include a dense planting of 3-4' shrubs along the Commercial Street property boundary fence. All plant species, sizes, and locations should be approved by the City Arborist.

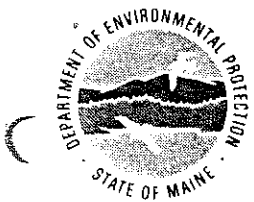
A \$25,000 escrowfund should be set aside for future improvements to the entrance of B.I.W. to be implemented in conjunction with the redesign of Commercial Street. In addition,

upon operation, a traffic control official should be assigned to direct traffic at the entrance location until improvements to Franklin Arterial are complete.

B. SHORELAND ZONING REVIEW

Recommendation:

The Planning Staff recommends that the Portland Planning Board approve the Bath Iron Works Ship Repair Facility for compliance with the City's Shoreland Zoning Ordinance.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER
Attachment A
IN THE MATTER OF

BATH IRON WORKS CORPORATION	)	SITE LOCATION OF DEVELOPMENT,
Portland, Maine, Cumberland County	)	ALTERATION OF COASTAL WETLANDS ACT,
SHIP REPAIR FACILITY	)	AND WATER QUALITY CERTIFICATION
#03/44-7866-05170	)	FINDINGS OF FACT AND ORDER

After reviewing the project file which includes the application with its supportive data, agency review comments, staff summary and other related materials on file with regard to the above noted project, under provisions of Title 38, M.R.S.A., Section 474, Section 433, and Section 401 of the Federal Water Pollution Control Act, the Board finds the following facts:

1. Nature of Project: Construction of a new ship repair and overhaul facility in Portland, adjacent to and including the easterly side of the Maine State Pier. The project area consists of a 50-acre area of water bounded by the State Pier to the west, the shoreline to the north, the extended property line to the east, and the Harbor Commissioner's line to the south along the ship channel. The area currently contains approximately 15 acres of timber pile ruins from the former Grand Trunk Railroad Piers.

The proposed facility consists of an 80,000 ton capacity floating drydock, which would be permanently moored within the project area. The drydock will be 844 feet long, consisting of nine pontoon sections, attached side by side, with 50 feet high and 20 feet wide bulkheads along each edge.

A 600 foot long finger pier will provide access to the drydock as well as provide vessel docking space. The pier will be 48 feet wide and will be supported by concrete or steel pipe piles. The east side of the Maine State Pier will be modified by adding a 12.5 foot apron to provide space for installation of a 25-ton crane with rail runway. In addition, the pier building will be extensively renovated to provide office and shop space.

The area currently occupied by the pile ruin closest to the Maine State Pier will be dredged to a depth of 15 feet. The area between this pile ruin and the proposed finger pier has been dredged in the past and will be redredged to a depth of 35'. The area beneath and around the drydock will be dredged from a current depth of approximately 32 feet at mean low water to a depth of 65 feet. Slopes of this basin will range from 3 to 1, to 5 to 1.

The total volume of dredge material is estimated to be about 625,000 cubic yards. This material will be disposed of at the Army Corps of Engineers approved offshore disposal site, except for approximately 50,000 cubic yards, which will be placed in a 1.6 acre containment area. This containment area will cover submerged land on the east side of the proposed finger pier. This containment area will provide a supply staging area for the drydock. Also considered is a future containment area of 4.8 acres on the east side of the 1.6 acre area. Approval of the 4.8 acre area, however, is not being sought at this time. The proposed containment structure will consist of a double row of timber piles filled in between with rock or rubble fill.

Existing land area on the site is 7.87 acres. Vehicle entrance to the site will be from Commercial Street at the location of present access. There will be parking accommodations on site for approximately 450 vehicles.

2. On May 13, 1982, the Board held a public hearing on the application. Concerns were raised regarding the project's impact on traffic flow, noise levels, air quality, and marine resources.
3. The applicant has provided adequate evidence of financial capacity and technical ability to meet air and water pollution control standards.
4. The applicant has made adequate provision for solid waste disposal, the control of offensive odors, and the securing and maintenance of sufficient and healthful water supplies.
5. The applicant has made adequate provision for traffic movement of all types out of or into the development area provided A) final plans are submitted of the site entrance and the intersection of Commercial Street and Franklin Arterial; and B) either i) the first shift will start at 7:00 a.m., or ii) the applicant shall conduct a revised traffic study based on a different shift start time.

The BIW facility will have minimal impact on traffic, as indicated by the Waterfront Traffic Study, provided the first shift begins at 7:00 a.m. The study indicates, however, that traffic recommendations will be significantly altered should BIW start its first shift at a time other than 7:00 a.m.

6. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character or natural resources in the municipality or in neighboring municipalities provided a plan is developed to limit noise impact to the adjacent residential neighborhood.

Air Quality: Bath Iron Works indicates that all operations will comply with OSHA and EPA guidelines concerning the handling of asbestos and other hazardous materials. BIW will use filtration devices to prevent asbestos from being emitted to the atmosphere and will monitor the air to assure no asbestos fibers are being emitted.

7. The proposed development will be built on soil types which are suitable to the nature of the undertaking.
8. The project will not unreasonably interfere with existing recreational and navigational uses.
9. The project will not cause unreasonable soil erosion.

10. The project will not unreasonably harm wildlife or freshwater, estuarine, or marine fisheries. Dredge spoil analyses show that the disposal of sediment at the proposed ocean disposal site, which is outside state waters, will not have long term adverse effects on the marine environment. 1.6 acres of habitat will be lost by filling. The area, however, does not have a high diversity or abundance of marine life.
11. The project will not unreasonably interfere with the natural flow of any waters.
12. There is reasonable assurance that the activity will not lower the quality of any waters or violate applicable Water Quality Standards.

THEREFORE, the Board APPROVES the application of BATH IRON WORKS COPR. to develop a ship repair facility as described in paragraph #1 subject to the following terms and conditions:

1. The Site Location of Development Standard Conditions of Approval, a copy attached.
2. The Wetlands Standard Conditions of Approval, a copy attached.
3. The applicant shall submit final design plans for the site entrance and the intersection of Commercial Street and Franklin Arterial no later than August 31, 1982. These plans shall be reviewed and approved by the Commissioner prior to operation of the facility.
4. The applicant shall either:
 - a) schedule the first shift to start no later than 7:00 a.m.; or
 - b) conduct a revised traffic study based on a starting time later than 7:00 a.m. This study, including recommendations, shall be submitted to the Commissioner for review and shall be approved prior to scheduling the first shift to start later than 7:00 a.m.
5. The applicant shall conduct a noise survey to determine background noise levels along the residential boundary facing the project site, and at the northerly corner of the development property. Noise readings will be taken hourly between 6:00 p.m. and 7:00 a.m. Based on the survey results, the applicant shall develop a plan to limit noise impact to the adjacent residential neighborhood. This plan shall be approved by the Board prior to any construction activity.

DONE AND DATED AT AUGUSTA, MAINE, THIS 9TH DAY OF JUNE, 1982.

BOARD OF ENVIRONMENTAL PROTECTION

BY: 

HENRY E. WARREN, Chairman

PLEASE NOTE ATTACHED SHEET FOR APPEAL PROCEDURES....

S T A N D A R D C O N D I T I O N S

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.
2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.
3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.
4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.
5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.
6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.
7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.
8. A copy of this approval must be included in or attached to all contract bid specifications for the development.
9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.

November 1, 1979

****STANDARD CONDITIONS****

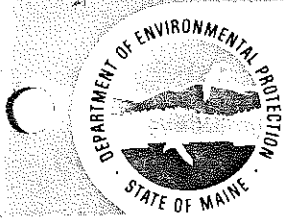
THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE COASTAL WETLANDS LAW, UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Compliance With All Permit Terms and Conditions. The applicant shall submit all reports and information requested by the Board or the Department demonstrating that the applicant has complied or will comply with all terms and conditions of this permit. All preconstruction terms and conditions must be met before construction begins.
- D. Initiation of Activity Within Two Years. If construction or operation of the activity is not begun within two years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits shall state the reasons why the activity was not begun within two years from the granting of the initial permit and the reasons why the applicant will be able to begin the activity within two years from the granting of a new permit, if so granted. Reapplications for permits may include information submitted in the initial application by reference.
- E. Reexamination After Five Years. If the approved activity is not completed within five years from the date of the granting of a permit, the Board may reexamine its permit approval and impose additional terms or conditions to respond to significant changes in circumstances which may have occurred during the five-year period.
- F. No Construction Equipment Below High Water. No construction equipment being used in the undertaking of an approved activity is allowed below the mean high water line.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

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STATE OF MAINE

Department of Environmental Protection

MAIN OFFICE: RAY BUILDING, HOSPITAL STREET, AUGUSTA
MAIL ADDRESS: State House Station 17, Augusta, 04333

JOSEPH E. BRENNAN
GOVERNOR

RIGHTS OF REVIEW AND APPEAL

HENRY E. WARREN
COMMISSIONER

Any person aggrieved by a decision by the Board of Environmental Protection ("Board") or Department of Environmental Protection ("Department") has the following rights of review and appeal:

I. As to any decision by the Board:

A. Request for hearing:

Within 30 days of the applicant's receipt of a Board decision made without public hearing, any person aggrieved by the decision may make a request for a hearing. Such a request shall set forth in detail the basis of the petitioner's grievance; the findings, conclusions or conditions to which the petitioner objects; the basis of the objections; and the nature of the evidence or argument to be offered.

B. Reconsideration by the Board:

Within 30 days of the applicant's receipt of a decision of the Board any person aggrieved by the decision may petition the Board, in writing, to secure reconsideration of the decision. The petition shall include, but need not be limited to, the findings, conclusions or conditions objected to or believed to be in error, the basis of the objections or challenge and the remedy sought.

The Board shall, within 30 days of the receipt of such a petition and after appropriate notice grant the petition in full or in part; order a public hearing to be held within 45 days; or dismiss the petition in full or in part. See 38 M.R.S.A. §344.5 and Chapter 1.15 of the Department Regulations.

C. Judicial appeal:

Any person aggrieved by a final Board decision is entitled to judicial review by filing a petition in Superior Court for Kennebec County or in Superior Court for the county where (1) the aggrieved person resides or has his principal place of business; or (2) the activity or property which is the subject of the proceeding is located.

The petition for review shall be filed within 30 days after receipt of notice if taken by a party to the proceeding of which review is sought. Any other person aggrieved shall have 40 days from the date the decision was rendered to petition for review.

The petition for review shall be served by certified mail, return receipt requested, upon D.E.P., all parties to the proceeding, and the Attorney General.

II. As to a decision by the Department:

A. The Board has delegated authority to Department staff to act on certain applications.

Any person aggrieved by a staff decision may request in writing, within 30 days of receipt of the order by the applicant, that the Board review such decision. Such request for review must set forth the reasons why the review is requested and the actions which the person making the request desires to be taken by the Board. When review of a staff determination is requested, it shall be conducted as if it were an application filed with the Board and not subject to delegation.

NOTE:

1. Because a person other than the applicant may file an appeal, as stated above, any action to commence work according to the terms of the permit prior to the expiration of the appeal or review period entails a risk that the approval may be altered. Applicants must assess the likelihood and extent of such a risk.
2. The filing of a petition for review or appeal does not operate as a stay of the final agency action.
3. Further information concerning review and appeal may be found in the Maine Administrative Procedure Act (5 M.R.S.A. §8001 et seq.) and Department statutes (38 M.R.S.A. §341 et seq. and regulations.
4. You may contact D.E.P. if you have any question about the rights of review and appeal procedures.

CITY OF PORTLAND, MAINE
MEMORANDUM

Attachment B

TO: Patricia Harrington, Chief Planner
FROM: Malcolm Ward, Zoning Enforcement Officer *M. Ward*
SUBJECT: Variances Granted for Bath Iron Works

DATE: 6/15/82

Height Restrictions

Section 602.13.c.3. of the City Zoning Ordinance provides for the following limit on maximum height of principal buildings or structures and accessory buildings or structures in the I-3b Industrial Zone:

"4 stories not to exceed 45 feet."

On March 11, 1982, at 3:30 P.M. the Board of Appeals held a public hearing in Room 209, City Hall, Portland to consider height variances for the following cranes and facilities for the Bath Iron Works Corporation in the vicinity of 40 Commercial Street (Maine State Pier).

Maximum Operation Heights of Equipment

- | | |
|---|-----------------------|
| a. 25 ton crane on Maine State Pier | 142 ft. above M.L.W.* |
| b. 60 ton crane on Finger Pier | 276 ft. above M.L.W. |
| c. One set of tower lights on Finger Pier | 96 ft. above M.L.W. |
| d. Floating Dry Dock | 84 ft. above M.L.W. |
| e. 35 ton cranes on Floating Dry Dock | 219 ft. above M.L.W. |

*M.L.W. means Mean Low Water


These height variances for the above equipment were granted by a unanimous vote of the members of the Board of Appeals following the public hearing on March 11, 1982.

CITY OF PORTLAND, MAINE

MEMORANDUM

Attachment C

TO: Patricia Harrington - Chief Planner

FROM: William J. Bray 

SUBJECT: REVIEW OF B.I.W. SITE PLAN

DATE: 2/24/82

Pursuant to your request I have reviewed the site plan for the B.I.W. Project. Listed below are comments and/or corrections to the plan that should be included:

- a) The proposed entrance/exit onto Commercial Street should remain as it exists today unless the proposed improvements to Franklin Arterial are incorporated as part of this plan. However, if the entrance/exit remains as it is, my recommendation that a Police Officer be assigned to direct traffic at this location until improvements to Franklin Arterial are complete. Possibly we should discuss this issue with the City Manager before this project goes to the Planning Board.
- b) The number of parking spaces (451) compares favorably to the calculated demand (466) contained in the B.I.W. Impact Report.
- c) The entire parking area should be paved and striped to insure actual usage: capacity of the parking lot.
- d) I checked the Fire Truck turning radius at the Flammable Material Storage Building and conclude that a "Pump" truck would be capable of entering the remaining section of the parking lot. However, the current parking lot design prohibits a "Ladder" truck from entering the remainder of the lot.

If you have any additional questions, please advise.

When this project goes to the Planning Board I will provide a copy of the B.I.W. Impact Report for their review.

WJB/d

CITY OF PORTLAND, MAINE
MEMORANDUM

Attachment D

TO: Miss Pat Harrington

DATE: 6/17/82

FROM: Fire Prevention Bureau

SUBJECT: Bath Iron Works Site Plan Approval

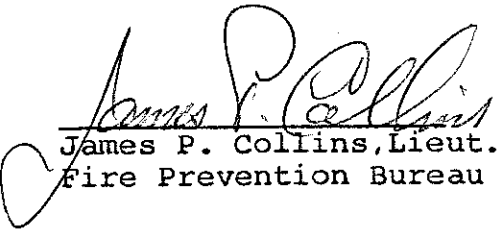
Pat,

The Fire Prevention Bureau has reviewed the Site Plan for the Bath Iron Works expansion, and hereby is giving approval for the project as indicated on the plans presented to me.

It is the understanding of this office that vehicle access will be provided to the dry dock area and water mains will be placed along the access road.

This approval is granted for the general lay out of the grounds, and that separate approval and building permits will be applied for for each structure built or renovated at the site.

Respectfully,


James P. Collins, Lieut.
Fire Prevention Bureau

CITY OF PORTLAND, MAINE
MEMORANDUM

Attachment E

TO: Patricia Harrington, Chief Planner

DATE: 6/4/82

FROM: Richard P. Flewelling, Assistant Corporation Counsel

SUBJECT: BIW Site Plan Review

In relation to your other question concerning the recently proposed anti-noise zoning amendment (see my memorandum of 6/3/82), you have asked whether more-restrictive-than-zoning noise controls could be made conditions of approval of BIW's site plan.

The answer to your question depends on (1) whether the standards for review of site plans (see Section 604.6/A) are sufficiently broad to permit Board consideration of noise impacts; and, (2) if so, whether there is a sufficient factual basis in the record for imposing more stringent standards.

I am, of course, unable to respond to the second of the above questions since the Board has yet to conduct its review. Nonetheless, by posing the question, I hope to underscore the imperative of suitable findings whenever the Board chooses to add special conditions to its approval of a site plan.

As to the first question, however, the answer is at best unclear. While admittedly the Site Plan Ordinance contains no express reference to "noise", the review criteria do refer broadly to uses "detrimental to other private development in the neighborhood" (Section 604.6/A/2) and to on-site landscaping protecting against "detrimental features of the development" (Section 604.6/A/3). Arguably, such criteria may contemplate, *inter alia*, noise impacts, although, frankly, they seem more designed to address a development's visual consequences. Even so, the statement of purposes (Section 604.1) suggests that the full range of zoning considerations (including, presumably, the anti-noise standards of Section 602.13/B/2) are "fair game" for the Board in reviewing developments subject to Chapter 604. Hence, although the imposition of additional noise controls may well be unprecedented, it would not necessarily be indefensible. Needless to say, however, I would feel far more confident in taking such a position if the Site Plan Ordinance expressly contemplated noise as one of the several potential environmental impacts of development.

Richard P. Flewelling

Richard P. Flewelling
Assistant Corporation Counsel

RPF/ljn



CITY OF PORTLAND

STEPHEN T. HONEY
CITY MANAGER

June 8, 1982

Mr. Henry Warren, Commissioner
Maine Department of Environmental Protection
State House Station #17
Augusta, Maine 04333

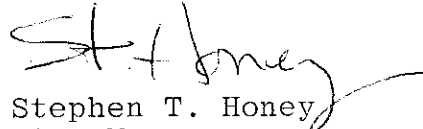
Re: Bath Iron Works

Dear Commissioner Warren:

The method of monitoring air pollution on the Portland waterfront has become a critical concern to the City of Portland especially as it relates to the Proposed Bath Iron Works Ship Repair facility. Because the City is not able to monitor air pollution, I am requesting that the Department of Environmental Protection establish an independent monitoring system to measure any air pollution resulting from the B.I.W. project.

I look forward to hearing from you on this concern and would certainly work with you to establish an effective system.

Sincerely,


Stephen T. Honey
City Manager

STH:vfw

Attachment F

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Patricia Harrington, Chief Planner

DATE: 6/18/82

FROM: George A. Flaherty, Dir. Parks & Public Works

SUBJECT: B.I.W. Site Plan

The Department of Parks/Public Works has reviewed the proposed site plan for Bath Iron Works proposed development of the State Pier.

After a review of the proposed site plan this department has given its approval for the project.

The Traffic Engineer has submitted a separate report on this site plan.



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING & URBAN DEVELOPMENT

March 16, 1983

Mr. John DelVecchio
State Planning Office
184 State Street
Station 38
Augusta, Maine 04333

Dear Mr. DelVecchio:

This is in response to your recent inquiry concerning site plan approvals and permits granted for the Bath Iron Works project in Portland. Copies of pertinent documents, Planning Board minutes and relating correspondence are enclosed.

There was also a height variance granted by the Board of Zoning Appeals on March 11, 1982 for cranes, lightpoles and other paraphernalia which would be in excess of 45 feet in height for the B.I.W. Project. If you desire any additional data, please do not hesitate to contact this office.

Sincerely,

Warren J. Turner
Zoning Specialist

Enclosures

cc: Joseph E. Gray, Jr., Director of Planning & Urban Development
Alexander Jaegerman, Chief Planner

CITY OF PORTLAND, MAINE

PLANNING BOARD

Jean E. Gilpatrick, Chairman
John L. Barker, Vice Chairman
Harry E. Cummings
Nunzio A. DiMillo
Jack Humeniuk
Robert D. Lee
Barbara A. Vestal

June 23, 1982

C O P Y
- - - -

Mr. H. C. Plummer, Jr.
Construction Manager
Bath Iron Works Corp.
700 Washington Street
Bath, Maine 04530

Dear Mr. Plummer:

At the Portland Planning Board meeting held on Tuesday June 22, 1982, the Board voted (5-0) with one abstention to approve the submitted Bath Iron Works Ship Repair Facility Site Plan subject to three conditions.

The conditions are as follows:

1. HOURS OF OPERATION:

The Bath Iron Works Ship Repair Facility should begin operating the morning shift at 7:00 a.m. Should B.I.W. require a 7:30 a.m. shift start time, B.I.W. is required to undertake a traffic study to determine future traffic impacts of the shift change and return to the Planning Board for further review.

2. NOISE:

In order to protect the residential neighborhoods adjacent to the proposed site the Planning Board has stated maximum noise levels which will be allowed from this facility. These levels are 65 DBA from 9:00 p.m. to midnight. Between midnight and 6:00 a.m. 60 DBA LEQ will be allowed as measured at the residential zone line.

3. LANDSCAPING AND ENTRANCE:

A \$25,000 escrow fund should be set aside for future improvements to the entrance of the B.I.W. facility to be implemented in conjunction of the redesign of Commercial Street. In addition, upon operation a traffic control officer must be assigned to direct traffic at the entrance location until improvements to Franklin Arterial are complete.

In addition to site plan approval with the above conditions, the Board voted (5-0) with one abstention to approve the shoreland zoning review.

Sincerely,

Jean E. Gilpatrick
Chairman, Portland Planning
Board

PLANNING BOARD MINUTES
TUESDAY, JUNE 22, 1982, AT 7:30 P.M.
COUNCIL CHAMBERS, CITY HALL, PORTLAND, MAINE.

Members present; Jean Gilpatrick, John Barker, Harry Cummings, James Pierce and Jack Humeniuk. A quorum was declared. Nunzio DiMillo arrived at 8:10 P.M.

1. Approval of Minutes of Previous Meeting

The Planning Board minutes of June 8, 1982, were approved by a unanimous vote.

2. Communications and Reports

Application for a change of zone from R-6 Residence to R-P Residence Professional in the vicinity of 148-152 Spring Street, Mike Fink, Applicant

The Planning Board unanimously set a date for July 13, 1982, to hold a public hearing for review of this item.

Application for a change of zone from R-5 Residence to R-P Residence Professional in the vicinity of Ocean Avenue and George Street - Dr. Ronald L. Breazeale, Applicant

The Planning Board voted unanimously to set a date for July 27, 1982, to hold a public hearing for review of this item.

3. Announcements of Decisions at the Previous Meeting

The Planning Board voted unanimously to have the announcements of decisions at the previous meeting read by title only. Chairman Gilpatrick did so.

4. Warren Sparrow House Reconsideration of Nomination to the National Register of Historic Places

Mr. Pierce said that the process that this has gone through has helped him to understand why a house is nominated for the National Register.

Mr. Barker asked if the owner had been contacted of the nomination and if so what was his response.

Mr. Earle Shettleworth said that he was contacted and given a 30 day period in which to respond, however, he has not responded. Mr. Shettleworth is assuming that no comment is taken as a positive comment.

Mr. Pierce moved that nomination of the Warren Sparrow House to the National Register of Historic Places be approved, Chair seconded, voted unanimously.

5. B.I.W. Site Plan Review

Mr. Humeniuk abstained from discussion. His abstention was voted unanimously.

Mr. Gray, Planning Director, introduced the item. Patricia Harrington, Chief Planner, gave the presentation.

Miss Gilpatrick asked if the 7:00 a.m. starting time was discussed with BIW prior to starting the studies?

Ms. Harrington said that during negotiations with BIW which started over a year ago, that is the hour of operation that was continually assumed. It was later that the issue of 7:30 a.m. came up therefore all the studies were done on 7:00 and it was too late to go back and start over again.

Ms. Harrington pointed out that one of staffs recommendations is to apply the 65 dBA noise level during certain hours to this particular site only.

Mr. Barker asked what the parking lot buffering would be?

Ms. Harrington responded that some low buffering shrubs along Commercial Street to India Street would be planted to screen headlights.

Mr. Barker said he had trouble seeing a critical traffic problem between the hours of 7-7:30 a.m.

Mr. Bray responded that this is a critical problem when adding the additional BIW traffic to the existing street traffic.

Ruth Landberg, 10 Sheridan St., expressed concern with traffic. She felt that traffic leaving work from the BIW site, to avoid the 6 traffic lights at the Franklin Arterial, would make a traffic pattern along Sheridan Street and other residential streets in the area.

Ned Chester, 7 Fore Street, spoke on behalf of himself and the Munjoy Hill Neighborhood Organization. He expressed concerns with traffic. He said the traffic study addresses traffic on major arterial streets but not on residential streets, he was also concerned with traffic patterns forming on the residential streets. He expressed concern with air pollution. Mr. Chester proposed that BIW provide off site parking at I-295, he felt that this would eliminate the traffic problem. He recommended that the traffic issue be left open until a solution is found. Mr. Chester pointed out that he and the neighborhood organization are in support of the BIW project with the understanding that the issues of traffic and noise be addressed adequately at some point.

Mr. Pierce asked where the 7:00 - 7:30 issue stands with BIW?

Mr. Jim McGregor of BIW said that they are attempting to give the labor department the flexibility of changing the shift. He said the logical thing to do is to wait and see what happens when the operation is in full force. Mr. McGregor said that he thought the greater majority of employees would be coming from Portland. He didn't think that there would be a great amount of traffic coming from Bath to create traffic patterns through residential streets.

Mr. Pierce said that there is no way of knowing everything thats going to happen on the site until it is in full operation. He said the staff report was good and very complete. He didn't have any problems with the noise issue, he thought it should be studied further once BIW gets underway.

Mr. DiMillo thought the off site parking was a good idea.

Mr. Cummings concurred with Mr. Pierce. He noted that under fire prevention, in the staff report, it states that a ladder truck cannot get down through the entranceway of BIW and asked staff to respond to that.

Ms. Harrington said that the yard would be open at all times to permit access for the ladder truck.

Mr. Cummings said he had no objection to the site plan and that he would like to leave the noise issue open.

Mr. Barker asked if this would be a 24 hour or a 2 shift operation?

Mr. McGregor said it would be logical to work the same shifts as in Bath, first shift being 7:30 - 4:00, a small second shift, and a third shift from midnight to 7:00 a.m. He said they would definitely be working 2 shifts.

Mr. Barker asked if noises and noise levels at the proposed site would differ from those at the present site in Bath?

Mr. McGregor responded that they operate in the center of Bath with residences almost across the street. He said BIW has the most advanced noise controls and that they have to meet the noise levels required and they do.

Mr. Temple, Laboratory and Environmental Manager for BIW, said that Portland may have fewer of the new construction type noises than they have in Bath. He said that Bath has had an extensive noise conservation program. Extensive monitoring is done on a daily basis. They feel they can meet all noise requirements put forth by the Planning Board.

Miss Gilpatrick pointed out the staffs recommendation and asked if BIW had any problems with them:

1. noise
2. hours of operation
3. landscaping and entrance

Mr. McGregor said that they have no problems with the staffs recommendation other than waiting until the project is in full operation before deciding on the 7:00 a.m. starting time.

Miss Gilpatrick asked if there was any objection to the \$25,000 escrow account to be set aside for future improvements to the entrance of BIW.

Mr. McGregor said they had no objections.

Mr. Cummings moved approval of the BIW site plan with staffs recommendations of 1) hours of operation, 2) noise, 3) landscaping of entrance, seconded by Mr. Pierce, voted unanimously. (Mr. Humeniuk abstained).

Mr. Cummings moved that the shoreland zoning be approved, seconded by Mr. Pierce, voted unanimously. (Mr. Humeniuk abstained).

6. Proposed Text Amendment for Conditional Use Review of Hospitals

Mr. Barker requested to abstain from participating on this item due to an association he has as a trustee to the Maine Medical Center. Mr. Pierce moved that he be excused from deliberation, seconded by Mr. DiMillo, voted unanimously.

Mr. Cummings noted that he holds a similar position with the Osteopathic Hospital and requested to be excused from deliberation. Mr. DiMillo moved to excuse him from participation seconded by Mr. Pierce, voted unanimously.

Mr. Gray, Planning Director, introduced the item. Mr. Knowland, Planner, gave the presentation.

Mr. Heisler, 201 Prospect Street, stated that he supports the staffs recommendation.

Payson Jacobson, 295 Brighton Avenue, stated he is in favor of the staffs recommendation and noted that this is not directed specifically towards the Osteopathic Hospital but it applies to all the hospitals in the City. It is the intent to make the property owners within the City to feel more secure by defining more exactly the regulations in the Zoning Ordinance.

James Roberts, 217 Prospect Street, President of Deering Highlands Neighborhood Association, stated that they support the Planning staffs recommendation.

Robert Hains, Taylor Street, said he thought that a simple zoning change matter had been flown way out of proportion. He noted that hospitals are the largest industry in this community, injecting a multi-million dollar payroll. He said he was glad to have in town community type hospitals because he would hate to have to drive a great distance to get to a hospital if one was to re-locate in the suburbs where there is plenty of land. He suggested that the Board use the most liberal criteria necessary to keep these very viable and essential needs within our community, here in our community.

Gary Barnett, Administrator to the Osteopathic Hospital, spoke, statement is attached.

Don McDowell, MMC, questioned whether hospitals were being picked upon, he said there are other non-profit institutions that have certain rights in residential neighborhoods that are not being addressed by this amendment. He said MMC has not had an opportunity to study the staff report and would like to have that chance to see how these new rules effect MMC's recently approved site plan.

Tom Gruber, Planning Engineer of Mercy Hospital, commented that the fact that the specifications are general and vague will present problems.

Miss Gilpatrick was concerned with the 15 acre requirement. She asked if this would have been put with other institutional uses when the entire zoning ordinance was rewritten?

Ms. Harrington said that yes this would have been included with other institutional uses. She said when Mr. Heisler came in with his proposal they discussed dealing with all institutional uses in the Zoning Ordinance. They went over the effects that it would have in the ordinance and found it was very confusing therefore they felt they could not handle it in any kind of a time frame which was being requested by the applicant.

Miss Gilpatrick asked if the existing hospitals fall under the grandfather clause?

Ms. Harrington explained that they are grandfathered with their existing sites. They can expand, as conditional uses, within their own blocks. They cannot expand into new lots in the R-3, R-4 and R-6 zones in another area unless they meet the proposed conditional use requirements.

Mr. Pierce thought they were moving too fast on this, he said that the other hospitals should have more time to study this proposal. He asked when the entire zoning package would be coming back before the Board?

Mr. Gray answered that the residential policy section that would be addressing many of these institutional use questions, will be returning to the Board hopefully by the end of this summer.

Mr. Pierce said in his opinion he would deny the applicants proposal and continue to work on this in the scope of the overall zoning ordinance amendment.

Mr. Humeniuk said that in the original parking lot site plan for Osteopathic Hospital the Board wished that they could get consideration through other criteria that was not allowable at that site plan review. He said that this is an important issue. He said that the hospitals benefit the neighborhoods but there has to be a balance between them. He said he would like to see this as a part of the overall zoning proposal for the entire city.

Mr. DiMillo thought it would be best to defer the proposal to a future date.

Miss Gilpatrick requested that staff get a response from Mr. Buckley and the other hospital representatives regarding this item and its effect on all hospitals within a 2 week time frame for their next meeting to be held on July 13, 1982.

Mr. Pierce moved that the proposed conditional use amendment by the applicant, Mr. Heisler, not be recommended to the City Council, seconded by Mr. Humeniuk, voted unanimously (Mr. Barker and Mr. Cummings abstained).

Mr. Pierce further moved to table this and that a further review by this Board be held publically regarding the Planning staff text amendment with broader discussion on institutional uses, at the meeting of July 13, 1982. Mr. Humeniuk seconded, voted unanimously. (Mr. Barker and Mr. Cummings abstained).

7. Manufactured Housing

Mr. Gray explained that the City Council has tabled action on manufactured housing and has requested the Planning Board review the latest suggestion of making manufactured housing developments a conditional use in the R-1, R-2 and R-3 zones. In addition to meeting the conditional use criteria, which is presently in the zoning ordinance, the developer would also have to demonstrate that the project would not have any substantial adverse economic impact on the value of adjacent properties in order for them to receive the conditional use approval. The amendment also suggests that rather than having the Board of Appeals review the conditional use, manufactured housing developments would be reviewed by the Planning Board. The rationale being that the Planning Board would be reviewing both the conditional use and the subdivision under one reviewing body. Mr. Gray, noted that all of the additional subdivision standards that this Board has reviewed and recommended to the Council would be part of this overall package of regulatory provisions which would govern manufactured housing development.

Miss Gilpatrick explained to the public that Mr. Lourie, Corporation Counsel, has ruled that it is not required to advertise this meeting for a public hearing, the reason being that this is a technical change.

Mr. Barker read his prepared comments; (summarized)

"... those recommendations that this Board made a few short weeks ago to the Council. Believing then and believing now that land use control is best accomplished through the standard municipal ordinances of zoning subdivision and sites, this Board has recommended to the Council a somewhat unique zoning concept, that of the Overlay or Flexible Zone concept, that protects the underlying zone in all its detail, yet provides additional controls specifically relating to manufactured housing. Additionally this Board has developed and specified specific additional standards to the subdivision ordinance relevant to mobile homes, that must be met by any developer. The option of the conditional use approach in lieu of the flexible zoning concept offers nothing that clearly indicates that either that process or that type of control would either equate to or exceed the process which this Board has already recommended. It seems that the major focus of the conditional use option appears to relate to the responsibility for and the timing of a specific site selection process. The Planning Board in its recommendation to the Council of a specific site for manufactured housing, reviewed all 15-20 ten plus acre sites in the low density R-1, R-2 and R-3 zones, in the process of doing this the Board has in fact evaluated each of those sites using the same standards and the same conditions that would be used under the conditional use option in arriving at its decision."

Mr. Barker went on to say that sooner or later, by whatever process is chosen, the Board will be forced to select a specific site for manufactured housing. He stated "that the flexible zone concept, that the Board has suggested, and the specific site that was selected, and the process in which the Board did it, represents the soundest and most rational approach that the Board could possibly take". He said he is reaffirming strongly the actions of the Board to the Council and he is rejecting the conditional use option.

Mr. Cummings said that he agrees with what the City Council is recommending in regards to the Conditional Use.

Mr. Humeniuk requested his previous comments be reinstated:

1) manufactured housing would lessen property values in neighborhoods, 2) not enough controls to safeguard the neighborhoods from declining in property value, 3) mobile homes depreciate in value, 4) he is not convinced that they are indistinguishable from site built homes, 5) are the standards really enforceable, 6) movement of mobile homes in and out can't compare with site built homes.

Mr. Humeniuk said that the decision the Board made previously had already taken this basic idea of conditional use into effect. He said he didn't like the idea of opening up all the residential sections to possible development of manufactured housing.

Mr. Barker stated that the final decision on manufactured sites, reasonably and rightfully belongs with the City Council. He said this is one of the reasons why he does not want to defer from the zoning control mechanism into the conditional use option.

Mr. Pierce stated that he felt comfortable with the conditional use option.

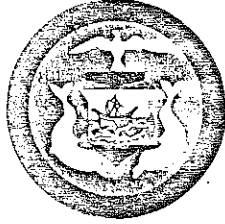
Miss Gilpatrick said that the flexible housing zone recommendation was a good one, but she was not in objection to the conditional use option.

Mr. Humeniuk expressed concerns with manufactured housing coming in as a Planned Unit Development. He said he is not in favor of changing the original recommendation.

The consensus of the Board was that the original recommendation of the Flexible Housing Zone concept was most favorable and the Board still considers it an excellent report, however, Miss Gilpatrick, Mr. Cummings, Mr. DiMillo and Mr. Pierce do not object to the conditional use option, but, Mr. Barker and Mr. Humeniuk do object to the conditional use option.



Attest, Secretary



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

August 19, 1982

Bath Iron Works Corporation
Dept. #20
Bath, Maine

Dear Mr. Plummer,

Your application for a building permit to construct a finger pier, pier apron, shorezone containment, piping, boiler house, underground structure, flammable materials building is being issued with the following requirements.

1. HOUSE OF OPERATION: The Bath Iron Works ship repair facility should begin operating the morning shift at 7:00 a.m. This facility is expected to attract 1,000 employees by 1984 and possibly more in the future. The traffic impacts resulting from a 7:00 a.m. shift start time will be minimized. Should B.I.W. require a 7:30 a.m. shift start time, B.I.W. should be required to undertake a traffic study to determine traffic impact and return to the Planning Board for further review.
2. NOISE: To protect adjacent residential noise levels the Board required that B.I.W. not exceed certain levels. These levels are 65 dBA (9 p.m. to midnight) and 60 dBA (Midnight to 6 a.m.) LEQ as measured at the residential zone line. The basis of this requirement includes:
 - a) The present zoning regulations of 75 dBA day and night, as measured at the industrial property line, do not assure adequate noise protection of adjacent residential neighborhoods as described in Planning Report #43-82;
 - b) The nighttime noise levels of 65 dBA and 60 dBA described above are levels which meet or exceed ambient noise levels existing at the adjacent residential zone boundaries and are the most restrictive type and level of regulation which can be practically administered by the City.
 - c) B.I.W. officials have indicated that the noise levels recommended above can be met by their facility.
- 3) LANDSCAPING AND ENTRANCE: On-site landscaping should include a dense planting of shrubs along the Commercial Street property boundary as shown on site plan (6-17-82), fence is to be 6' decorative steel picket fence.

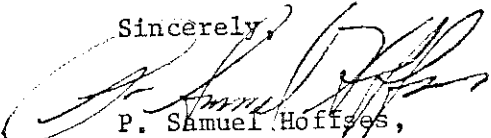
August 19, 1982
Page 2
Bath Iron Works Corp.

A \$25,000 escrow fund should be set aside for future improvements to the entrance of B.I.W. to be implemented in conjunction with the redesign of Commercial Street. In addition, upon operation, a traffic control official should be assigned to direct traffic at the entrance location until improvements to Franklin Arterial are complete.

4. The treatment of timber piles shall conform to AWPBMP1, MP2 or MP4 listed in Appendix A of the 1981 BOCA Basic Building Code. Pile cutoffs shall be treated in accordance with AWP4 M4.
5. Allowable unit stresses for treated round timber piles, normal load duration values at tip of pile for Southern Pine will have 1200 Compression parallel to grain PSI d. Bending PSI d 2400 shear horizontal PSI d 110 Comp. perp. to grain PSI d 250 and modulus of elasticity of 1,500,000.
6. All timber piles shall conform to ASTM 25.
7. Structural steel piles shall conform to ASTM, A36, A252, A283, A572, A585 or A690.
8. H-piles shall conform with section 1015.3 through section 1015.3.3 of the 1981 BOCA Basic Building Code.
9. All electrical and plumbing permits will be obtained by masters of their trade.
10. Every structure, room or space occupied for use involving explosion hazards shall be equipped and vented with explosion relief systems and devices arranged for automatic release under predetermined increase in pressure as herein provided for specific uses.
11. Main storage systems of volatile flammable liquids shall be constructed and installed in accordance with NFPA 30 and the fire prevention Code.

If you have any questions on these requirements please call this office.

Sincerely,



P. Samuel Hoffes,
Chief of Inspection Services

APPLICATION FOR PERMIT

PERMIT ISSUED

AUG 20 1982

CITY of PORTLAND

B.O.C.A. USE GROUP 00687

B.O.C.A. TYPE OF CONSTRUCTION

ZONING LOCATION F-3B PORTLAND, MAINE .. July 19, 1982

To the CHIEF OF BUILDING & INSPECTION SERVICES, PORTLAND, MAINE

The undersigned hereby applies for a permit to erect, alter, repair, demolish, move or install the following building, structure, equipment or change use in accordance with the Laws of the State of Maine, the Portland B.O.C.A. Building Code and Zoning Ordinance of the City of Portland with plans and specifications, if any, submitted herewith and the following specifications:

LOCATION 40 Commerical St. - Maine State Pier..... Fire District #1 , #2

1. Owner's name and address City of Portland, Maine..... Telephone

2. Lessee's name and address Bath Iron Works Corp. - Bath, Me..... Telephone ... 443-3311

3. Contractor's name and address .. Seaward constr. - Kittery, Maine..... Telephone

..... No. of sheets

Proposed use of building ship repair facility..... No. families

Last use cargo handling pier & storage..... No. families

Material No. stories Heat $\frac{1}{2}$ Style of roof Roofing

Other buildings on same lot

Estimated contractual cost \$... 6,098,000

FIELD INSPECTOR—Mr.
@ 775-5451

Appeal Fees	\$
Base Fee	... 30,500
Late Fee	.....
TOTAL	\$ 30,500

Construct finger pier, state pier apron, shorezone containment, Piping, Boiler House. Underground structures, flammable materials building, and toilets.

Stamp of Special Conditions

Major site plan review Send permit to # 2 Dept. # 20

Contact MR. H. C. Plummer, Ext. 2595 (443-3311)

NOTE TO APPLICANT: Separate permits are required by the installers and subcontractors of heating, plumbing, electrical and mechanicals.

DETAILS OF NEW WORK

Is any plumbing involved in this work?	Is any electrical work involved in this work?
Is connection to be made to public sewer?	If not, what is proposed for sewage?
Has septic tank notice been sent?	Form notice sent?
Height average grade to top of plate	Height average grade to highest point of roof
Size, front depth	No. stories solid or filled land?
Material of foundation	Thickness, top bottom cellar
.....	..... Roof covering



CITY OF PORTLAND

DEPARTMENT OF PLANNING & URBAN DEVELOPMENT
INSPECTION SERVICES DIVISION

June 3, 1982

Mr. Harold Plummer
Bath Iron Works Corporation
700 Washington Street
Bath, Maine 04530

Re: Maine State Pier - Commercial Street

Dear Sir:

Your building permit to renovate the North and South Sheds (as per plan) of the Maine State Pier, Commercial Street, Portland, Maine is being issued with the following requirements.

1. A manual fire alarm system will be installed.
2. Flow switches on sprinkler to activate evacuation system.
3. Emergency lighting will be installed.
4. Installation of exit signs at proper exits.
5. Provide additional exits between bay #37 and end of south shed. Exit near bay #37.
6. Provide two (2) hour separation between industrial area (first floor) and office area (second floor).
7. All bath and toilet rooms will be vented of approved non-combustible material with a minimum cross sectional area of $\frac{1}{2}$ square foot and $\frac{1}{3}$ additional square foot for each additional water closet or urinal above two in number. Such ducts shall be of a adequate height and so located as to insure a minimum supply of 2 cubic feet of fresh air per square foot of room area or by a mechanical ventilation system capable of producing a change of air every 12 minutes.
8. Ventilation air for the business area and industrial area will be as per Sections M-1002.0 and M-1003.0 of the 1981 BOCA Basic Mechanical Code.
9. Natural or artificial lighting will be as stated in Section 704.0 and 706.0 of the 1981 Basic Building Code.
10. Plumbing and Electrical permits will be taken out by masters of their trade.

If you have any questions on these requirements, please call this office.

Sincerely,

P. S. Hoffses
Chief of Inspection Services

PSH/jmr

APPLICATION FOR PERMIT

PERMIT ISSUED

B.O.C.A. USE GROUP F
B.O.C.A. TYPE OF CONSTRUCTION EXISTING 00387

JUN 3 1982

ZONING LOCATION PORTLAND, MAINE Jan. 20, 1982

CITY of PORTLAND

To the CHIEF OF BUILDING & INSPECTION SERVICES, PORTLAND, MAINE

The undersigned hereby applies for a permit to erect, alter, repair, demolish, move or install the following building, structure, equipment or change use in accordance with the Laws of the State of Maine, the Portland B.O.C.A. Building Code and Zoning Ordinance of the City of Portland with plans and specifications, if any, submitted herewith and the following specifications:

LOCATION 40 Commercial Street Fire District #1 [] #2 []

1. Owner's name and address Bath Iron Works Corp.- 700 Washington St. 443-3311 Bath Telephone

2. Lessee's name and address Telephone

3. Contractor's name and address Owners Telephone

Proposed use of building No. of sheets
Last use No. families

Material No. stories Heat Style of roof Roofing

Other buildings on same lot
Estimated contractual cost \$ 748,000 Appeal Fees \$ 25.00 pd 3-5-82

FIELD INSPECTOR-Mr. Base Fee 50.00

@ 775-5451

Late Fee pd 4-30-82 3,750.00

Major Site plan review
Building permit as per plans

Stamp of Special Conditions
PERMIT ISSUED
TOTAL \$ 50.00

Appeal sustained 3-11-82

Contact Harold Plummer at Ext 2595 - 443-3311, any questions, on permit

NOTE TO APPLICANT: Separate permits are required by the installers and subcontractors of heating, plumbing, electrical and mechanicals.

DETAILS OF NEW WORK

Is any plumbing involved in this work? Is any electrical work involved in this work?
Is connection to be made to public sewer? If not, what is proposed for sewage?
Has septic tank notice been sent? Form notice sent?
Height average grade to top of plate Height average grade to highest point of roof
Size, front depth No. stories solid or filled land? earth or rock?
Material of foundation Thickness, top bottom cellar
Kind of roof Rise per foot Roof covering

CITY OF PORTLAND, MAINE

SITE PLAN REVIEW

Processing Form

Applicant _____

Date _____

Mailing Address _____

Address of Proposed Site _____

Proposed Use of Site _____

Site Identifier(s) from Assessors Maps _____

Acreage of Site / Ground Floor Coverage _____

Zoning of Proposed Site _____

Site Location Review (DEP) Required: () Yes () No

Proposed Number of Floors _____

Board of Appeals Action Required: () Yes () No

Total Floor Area _____

Planning Board Action Required: () Yes () No

Other Comments: _____

Date Dept. Review Due: _____

PLANNING DEPARTMENT REVIEW

(Date Received) _____

Major Development — Requires Planning Board Approval: Review Initiated

Minor Development — Staff Review Below

	LOADING AREA	PARKING	CIRCULATION PATTERN	ACCESS	PEDESTRIAN WALKWAYS	SCREENING	LANDSCAPING	SPACE & BULK OF STRUCTURES	LIGHTING	CONFLICT WITH CITY PROJECTS	FINANCIAL CAPACITY	CHANGE IN SITE PLAN	
APPROVED	✓	✓	✓					✓	✓	✓	✓	N/A	
APPROVED CONDITIONALLY				✓		✓	✓						CONDITIONS SPECIFIED BELOW
DISAPPROVED													REASONS SPECIFIED BELOW

REASONS: attached memo outlines conditions

(Attach Separate Sheet if Necessary)

Patricia Harrington June 23, 1982
SIGNATURE OF REVIEWING STAFF / DATE



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530

June 1, 1982

City of Portland
Planning Board
Portland City Hall
Portland, Maine 04101

ATTN: PATRICIA HARRINGTON

RE: Portland Ship Repair Facility
NOISE SURVEY

Dear Pat:

Enclosed please find ambient industrial noise survey, as performed by Mr. L. E. Temple of the Bath Iron Works.

Please note that these tests were taken at night at various locations in and around the Portland site.

This information can be added to that which we have already submitted for site permit.

Yours truly,

A handwritten signature in blue ink, appearing to read "H. C. Plummer".

H. C. Plummer
Construction Manager

HCP/r

BATH IRON WORKS CORPORATION

MEMORANDUM

(TDL 3223)

FROM- L. E. Temple

DATE May 20, 1982

TO- Harold Plummer

SUBJECT- Ambient Industrial Noise Survey - Portland - During Evening Hours

Encl: (1) Maps of Test Site Locations

1. The purpose of this Ambient Industrial Noise Survey conducted on May 19, 1982 at various sites near the proposed BIW Portland Facility was to document background ambient industrial noise now existing in the Commercial Street, India Street, Munjoy Hill area during the evening hours to provide baseline data for the proposed Portland Facility. Decibel readings (A scale) for the survey were taken at various sites which were also sampled during daylight hours (see Ambient Industrial Noise Survey - Portland).

Other sites were also sampled in the area during the evening survey to establish background noise levels now existing. Each site was sampled for a period of 10 minutes with a reading being taken each minute. The survey was conducted with a General Radio Octave Band Analyzer.

2. Test Data is tabulated below:

<u>Site #1</u>	<u>Site #2</u>	<u>Site #3</u>
5-19-82 8:00 p.m.	5-19-82 8:15 p.m.	5-19-82 8:30 p.m.
58	63	61
52	56	54
56	57	58
64	58	58
56	58	60
56	59	58
60	62	58
60	62	57
58	57	57
59	57	57
Mean <u>57.9</u>	<u>58.9</u>	<u>57.8</u>

<u>Site #4</u>	<u>Site #5</u>	<u>Site #6</u>
5-19-82 8:45 PM	5-19-82 9:00 PM	5-19-82 9:15 PM
60	56	56
60	56	57
54	57	58
57	58	54
64	60	54
58	57	59
58	56	59
57	57	56
61	60	57
57	58	57
—	—	—
Mean 58.6	57.5	56.7
<u>Site #7</u>	<u>Site #8</u>	<u>Site #9</u>
5-19-82 9:30 PM	5-19-82 9:45 PM	5-19-82 10:00 PM
62	56	57
64 Foundry	58	56
64 ""	58	60
61	58	59
57	54	61
54	56	60
57	58	58
60	53	58
60	53	56
60	56	57
—	—	—
Mean 59.9	56.0	58.2
<u>Site #10</u>	<u>Site #11</u>	<u>Site #12</u>
5-19-82 10:15 PM	5-19-82 10:30 PM	5-19-82 10:45 PM
57	56	56
57	54	53
54	54	53
54	56	52
56	56	54
56	54	54
56	54	56
58	54	54
54	53	54
56	54	54
—	—	—
Mean 55.8	54.5	54.0

	<u>Site #13*</u>	<u>Site #14*</u>	<u>Site #15*</u>
	5-19-82 11:00 PM	5-19-82 11:15 PM	5-19-82 11:30 PM
	70 Foundry	74 Foundry	72 Foundry
	71 Pounding	74 Pounding	74 Pounding
	74 "	78 "	75 "
	74 "	80 "	76 "
	75 "	86 "	76 "
	75 "	74 "	81 "
	73 "	82 "	74 "
	68 "	72 "	74 "
	67 "	73 "	75 "
	68 "	74 "	75 "
Mean	71.5	76.7	75.2

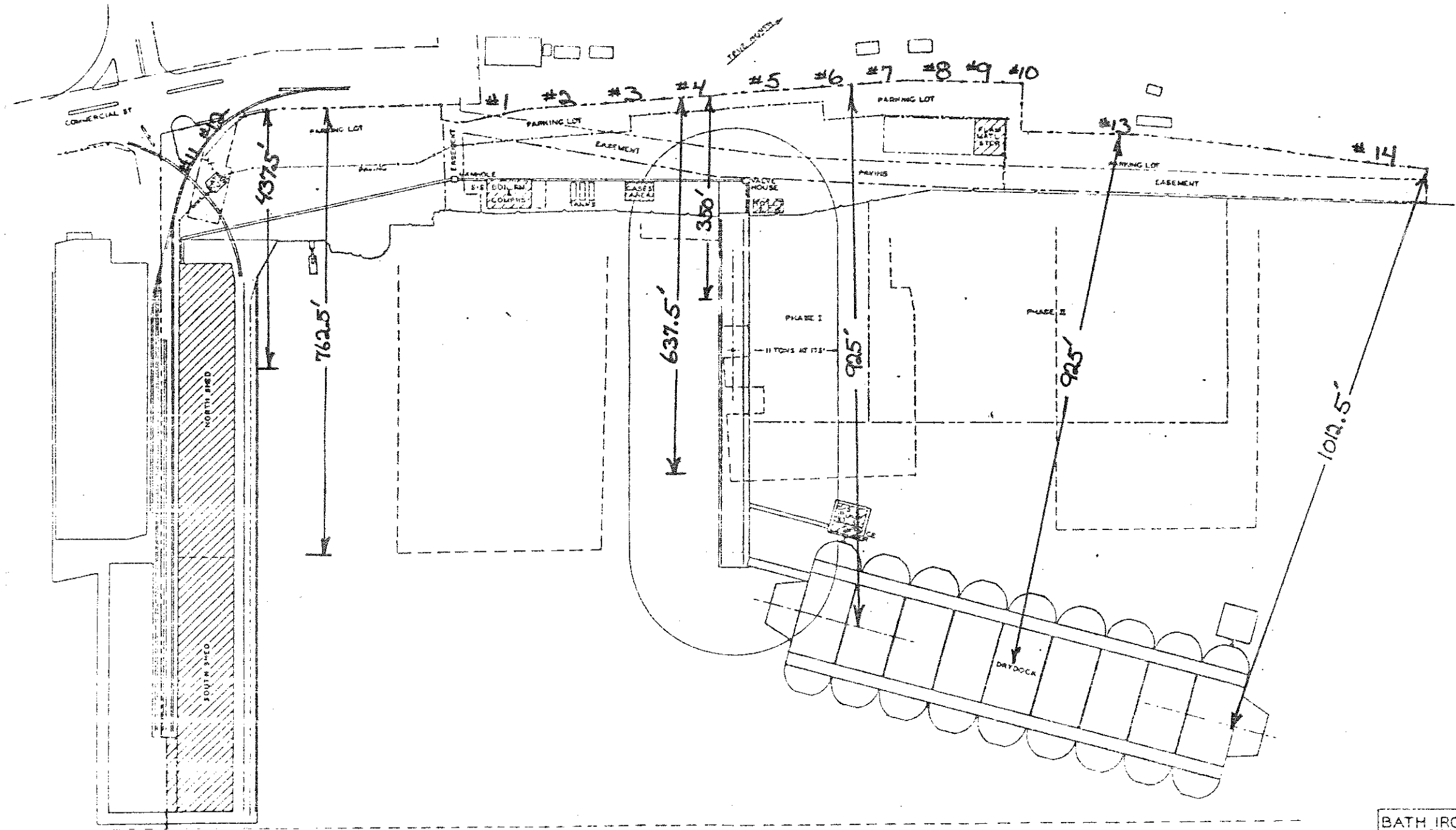
* See Explanation

	<u>Site #16</u>	<u>Site #17</u>	<u>Site #18</u>
	5-19-82 11:45 PM	5-19-82 12:00 PM	5-19-82 12:15 AM
	63	62	56
	63	62	55
	62	61	57
	64	64	56
	63	61	56
	66	62	56
	66	62	56
	62	62	57
	63	63	56
	63	61	56
Mean	63.5	62.0	56.1

	<u>Site #19</u>
	5-19-82 12:30 AM
	56
	54
	54
	53
	54
	53
	52
	52
	52
	54
Mean	53.4

(1)
* Note: Sampling sites 13-15 were taken on Fore Street at the following locations:
Site 13 - Railroad tracks across the road from the Crosby Foundry
Site 14 - Telephone pole #19 on Fore Street
Site 15 - Telephone pole #18½ on Fore Street

(2) All readings are expressed in decibels using the A weighted network (dbA)



BATH IRON WORKS CORP.	
PORTLAND, MAINE	
PORTLAND FACILITY	
SITE PLAN	
DATE: 05-10-77	DWG NO: 10005

1" = 200'

3. These and previously submitted data may be used to estimate the influence of the anticipated noise generated at the proposed BIW Portland Facility on the adjacent neighborhood.

4. Such estimates use the well known characteristic concerning the transmission of sound from its source through a freefield. *The general rule of thumb is: Sound levels will decrease 6 db for every doubling of the distance from the source.

Note: * Based on Technical information from:

Handbook of Noise Measurement, 6th. Edition
General Radio Company
(page 16, para. 2·8·1·2 and 2·8·1·3)


5. For example:

From the data submitted in TDL-3202, chipping noise (one of the noisiest ship repair operations) is 90 dbA at 10 feet from the source. Applying the transmission loss distance criteria, the following table shows dbA vs distance from source for ship repair chipping noise.

<u>dbA</u>	<u>Distance, in feet, from source</u>
90	10
84	20
78	40
72	80
66	160
60	320
54	640
48	1280

etc.

Relating the data compiled in this table to the distances of the several operations at the proposed BIW Portland Facility shows compliance with the pertinent noise ordinances and regulations.

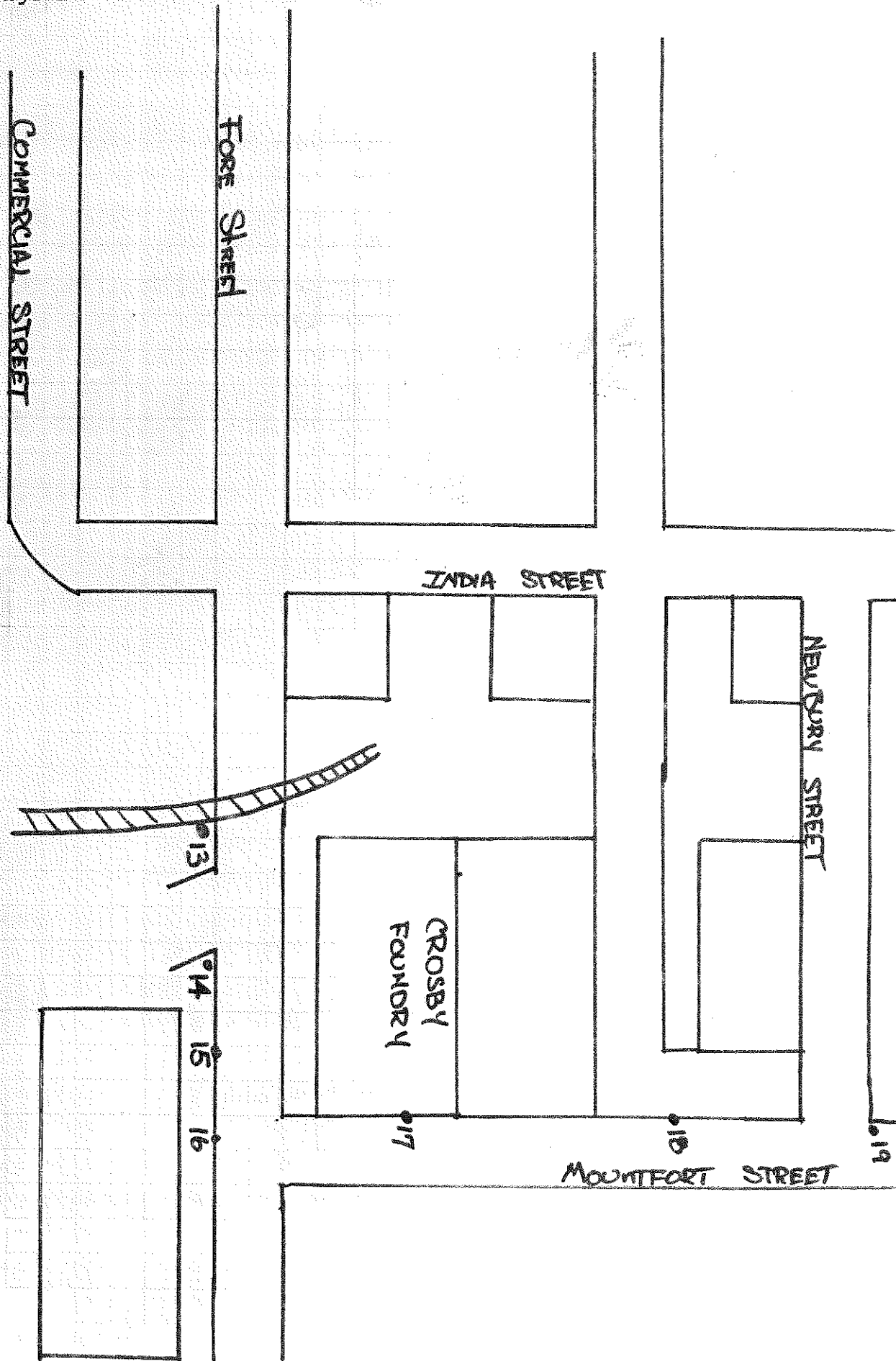


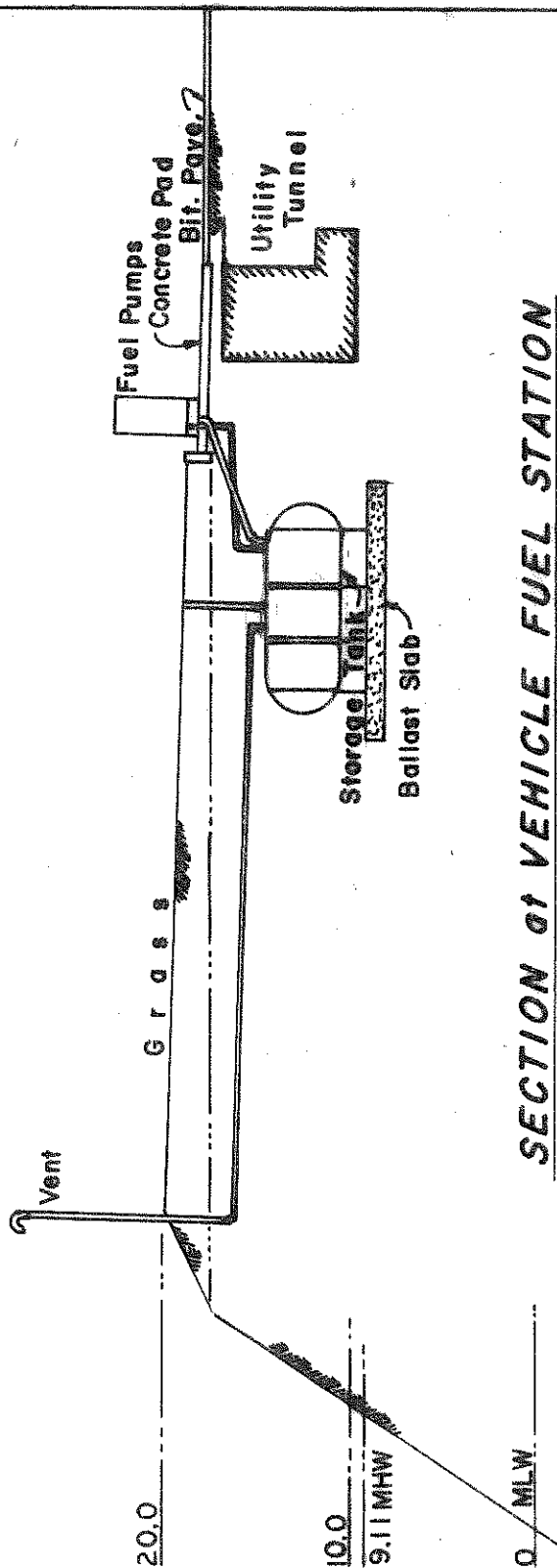
L. E. Temple
Laboratory and Environmental
Manager

LET/SKR/B

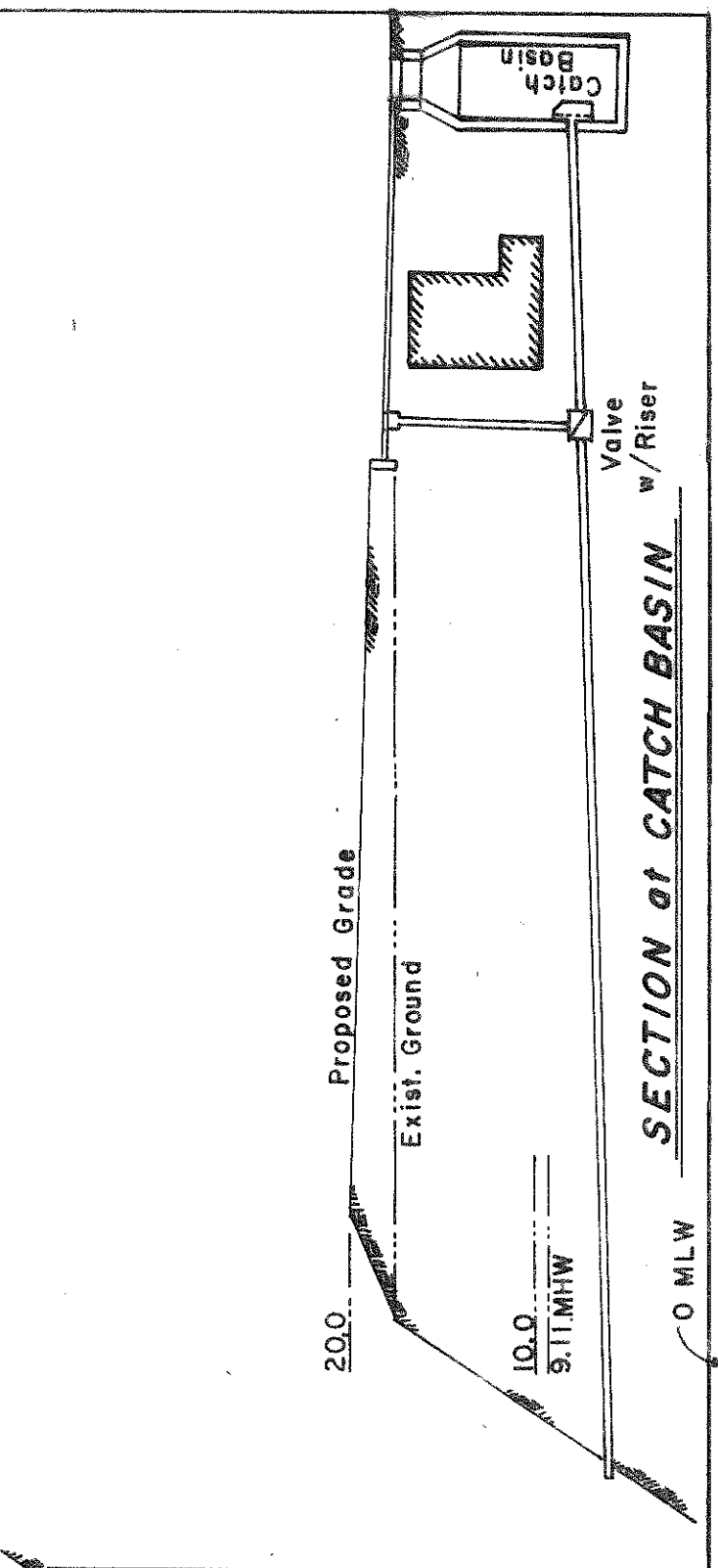
CC: DEP
GH
LET

AMBIENT INDUSTRIAL NOISE SURVEY 5-19-82



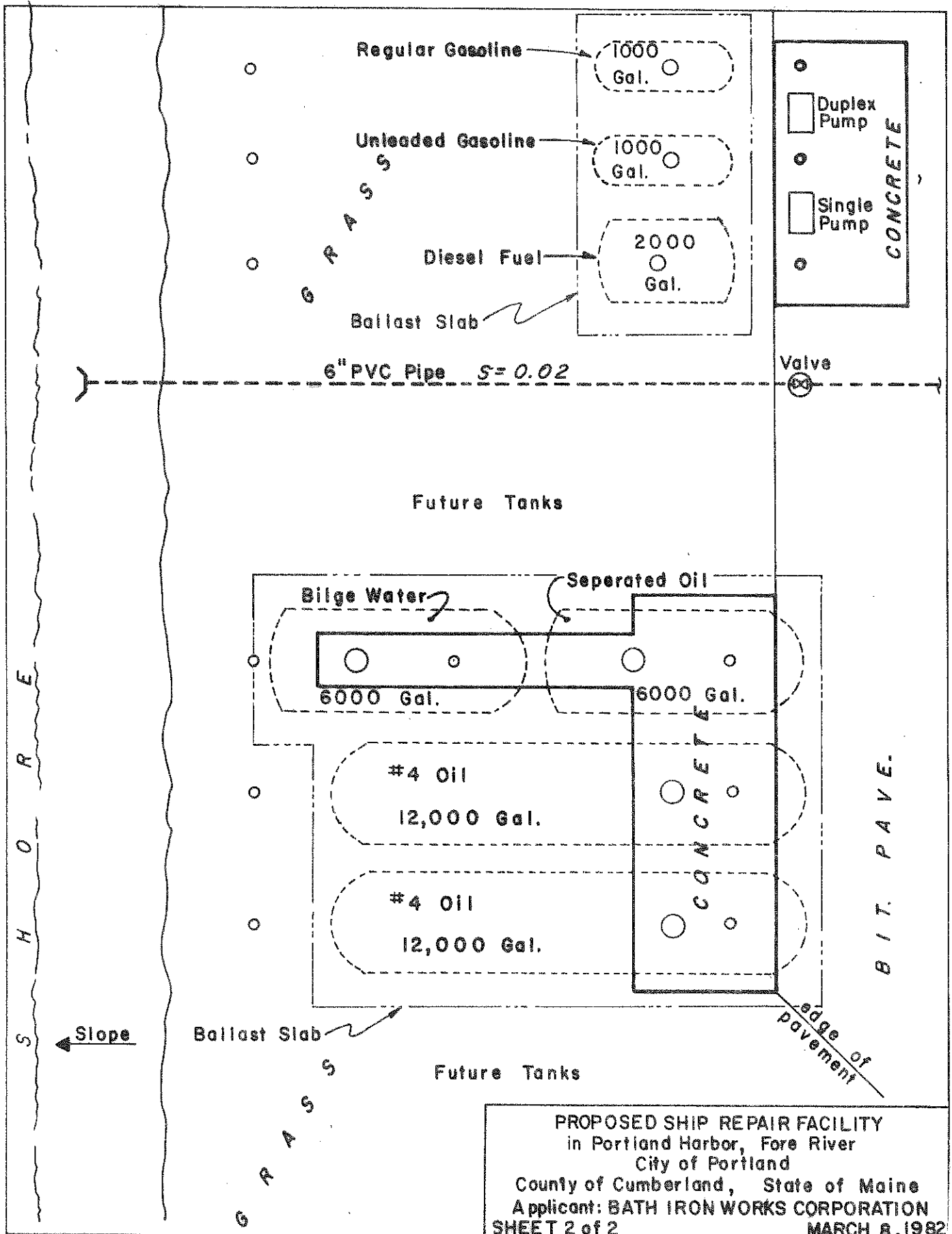


SECTION of VEHICLE FUEL STATION



SECTION of CATCH BASIN

PROPOSED SHIP REPAIR FACILITY
 in Portland Harbor, Fore River
 City of Portland
 County of Cumberland, State of Maine
 Applicant: BATH IRON WORKS CORPORATION
 SHEET 1 of 2 MARCH 8, 1982

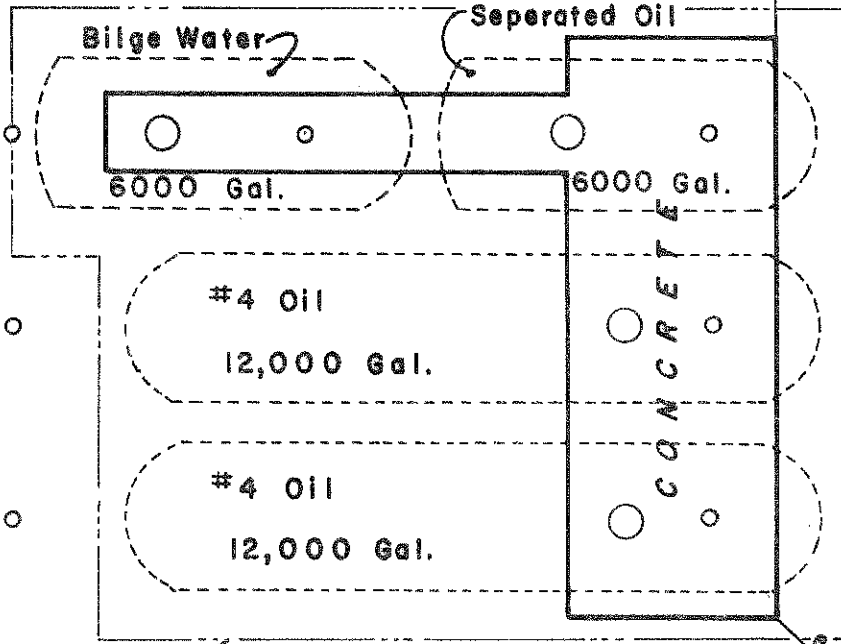


○ Duplex Pump
 ○ Single Pump
 CONCRETE

6" PVC Pipe $S = 0.02$

Valve

Future Tanks



B I T . P A V E .

S H O R E

Slope

Ballast Slab

Future Tanks

G R A S S

PROPOSED SHIP REPAIR FACILITY
 in Portland Harbor, Fore River
 City of Portland
 County of Cumberland, State of Maine
 Applicant: BATH IRON WORKS CORPORATION
 SHEET 2 of 2
 MARCH 8, 1982



Pat Gray

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION, CORPS OF ENGINEERS
424 TRAPELO ROAD
WALTHAM, MASSACHUSETTS 02254

REPLY TO
ATTENTION OF:

NEDOD-R -14-82-194E

PUBLIC NOTICE

13 May 1982

Bath Iron Works Corporation, 700 Washington Street, Bath, Maine
04530

has requested a permit under:

- (XX) Section 10 of the River and Harbor Act of 1899.
- (XX) Section 404 of the Clean Water Act.
- (XX) Section 103 of the Marine, Protection, Research and Sanctuaries Act of 1972.

to: construct and maintain a ship repair facility in Portland Harbor, Fore River adjacent to the east end of Commercial Street at Portland, Maine as shown on the attached plans and described as follows:

- (1) Construct and maintain an addition to the east side of the existing Maine State Pier. The addition will consist of approximately 540 linear feet of 12.5' wide pile and timber decking and an additional 460 linear feet of 12.5' wide concrete pile and concrete decking. The additional width will provide space needed for expanded operation facilities, which include a 12-ton crane.
- (2) Remove or cut to various lengths existing timber piles shown in the corss hatched areas on sheet number 5 of 7 of the attached plans. Remove the existing railroad superstructure extending beyond the mean high water line.

(DESCRIPTION OF WORK CONTINUED ON PAGE 1A)

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted to us in writing by 14 June 1982. If you need additional information, please contact Mr. Michael Conneilly at the above address or by phone at 617-894-2400, extension 372. You may use our toll free line 1-800-343-4789 (use 1-800-362-4367 if calling from within Massachusetts).

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

Sincerely,

Raymond Francisco

RAYMOND FRANCISCO
Chief, Processing Section
Regulatory Branch
Operations Division

SEE REVERSE SIDE FOR
DETAILS OF EVALUATION
FACTORS

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered; among those are conservation, economics, aesthetics, general environmental concerns, historic values, fish and wildlife values, flood damage prevention, land use, navigation, recreation, water supply, water quality, energy needs, safety, food production, and in general, the needs and welfare of the people.

The evaluation of the impact of the activity on the public interest will also include application of the guidelines promulgated by the Administrator, U.S. Environmental Protection Agency, under authority of: Section 404(b) of the Clean Water Act., and/or Section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972 as amended.

Based on experience with similar activities performed in the past, the Division Engineer has made a preliminary determination that an Environmental Impact Statement is not required under provisions of the National Environmental Policy Act of 1969.

Based on his initial review, the Division Engineer has determined that little likelihood exists for the proposed work to impinge upon properties listed in or eligible for listing in the National Register of Historic Places and no further consideration of the requirements of the Preservation of Historical and Archeological Data Act of 1974 is necessary. This determination is based on one or more of the following:

- a. The permit area has been extensively modified by previous work.
- b. The permit area has been recently created.
- c. The proposed activity is of limited nature and scope.
- d. Review of the latest published version of the National Register shows that no presence of registered properties or properties listed as being eligible for inclusion therein are in the permit area or general vicinity.

Presently unknown archeological, scientific, pre-historic or historical data may be lost or destroyed by work to be accomplished under the requested permit.

The Division Engineer has also consulted the latest published version of threatened or endangered species and made a preliminary determination that the proposed activity will not affect those listed or their critical habitat.

Evaluation of the proposed activity will include conformance with appropriate State or local floodplain protection standards; consideration of alternative sites and methods of accomplishment; and weighing of the positive and negative, concentrated and dispersed, and short-and long-term impacts upon floodplain.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice.

The following authorizations have been applied for or have been or will be obtained:

- () Permit, License, or Assent from State.
- () Permit from Local Wetlands Agency or Conservation Commission.
- () Water Quality Certificate in Accordance with Section 401 of the Clean Water Act.

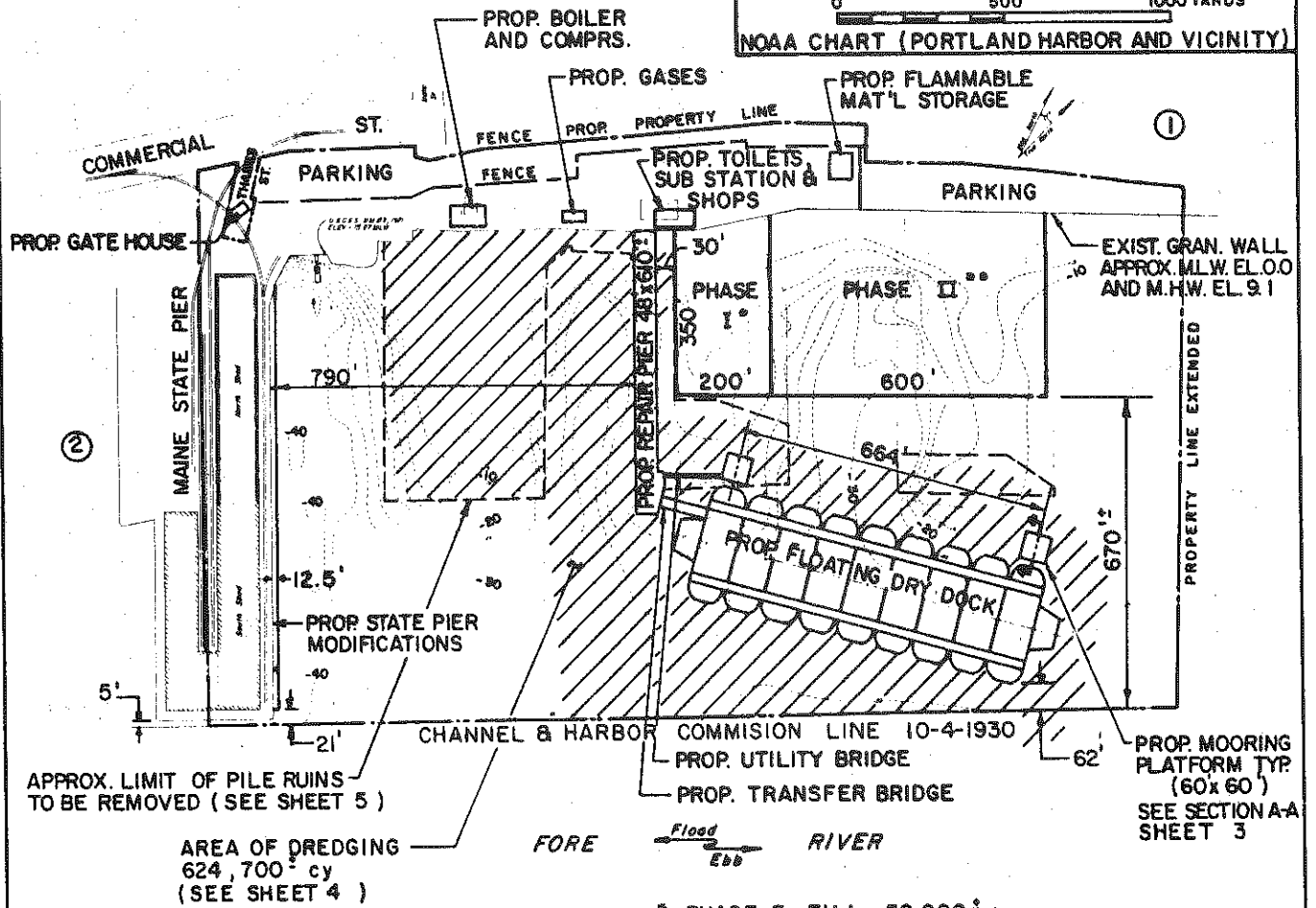
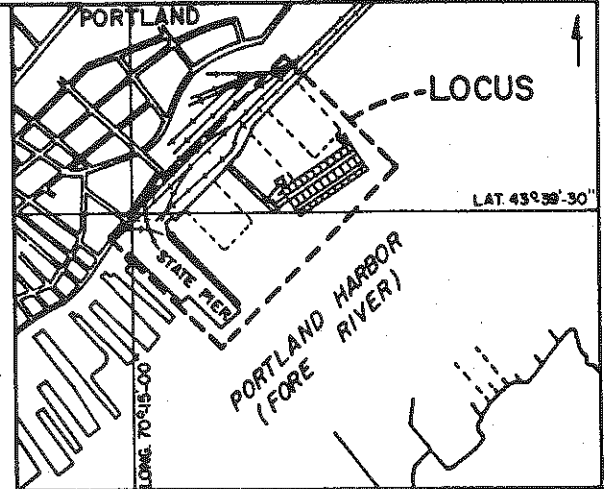
The States of Connecticut, Maine, Massachusetts and Rhode Island have approved Coastal Zone Management Programs. Where applicable, the applicant has stated that the proposed activity complies with and will be conducted in a manner that is consistent with this approved Coastal Zone Management Program. Issuance of a State permit from the appropriate State agency will indicate concurrence with this Statement of Consistency.

All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS NOT AUTHORIZATION TO DO ANY WORK.

ADJACENT PROPERTY OWNERS:

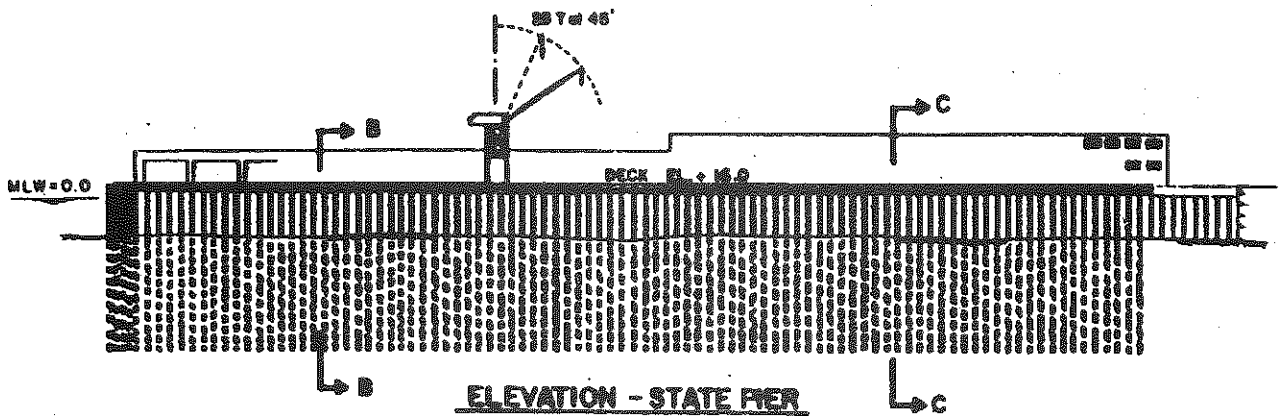
- ① CANADIAN NATIONAL RAILROAD - NORTH
- ② CITY OF PORTLAND - WEST



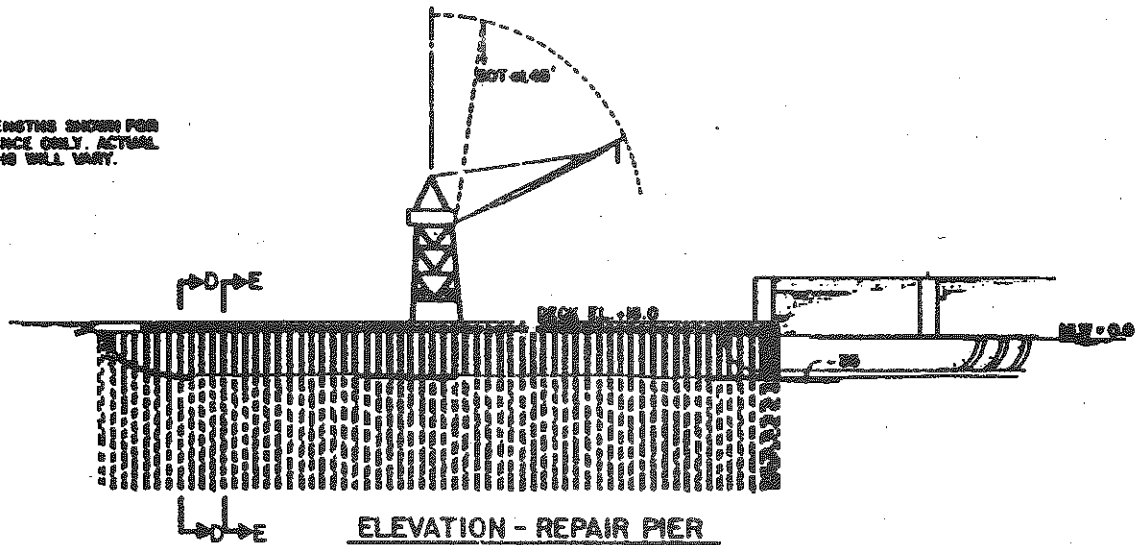
PURPOSE:
 MODIFICATION OF EXIST. STATE PIER, CONSTRUCTION OF REPAIR PIER, BRIDGES AND MOORING PLATFORMS NECESSARY FOR OPERATION OF FLOATING DRYDOCK.

DATUM:
 MEAN LOW WATER

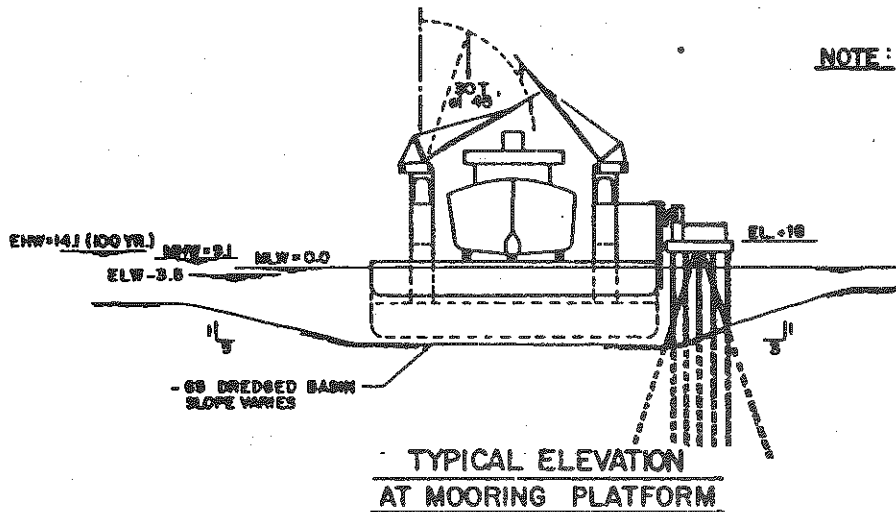
PROPOSED SHIP REPAIR FACILITY
 in Portland Harbor, Fore River
 City of Portland
 County of Cumberland, State of Maine
 Applicant: BATH IRON WORKS CORPORATION
 SHEET 1 of 7
 MARCH 12, 1982



PILE LENGTHS SHOWN FOR
REFERENCE ONLY. ACTUAL
LENGTHS WILL VARY.

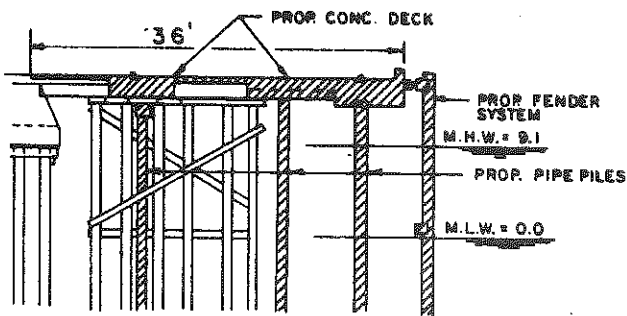


NOTE: SEE SECTIONS ON SHEET 3

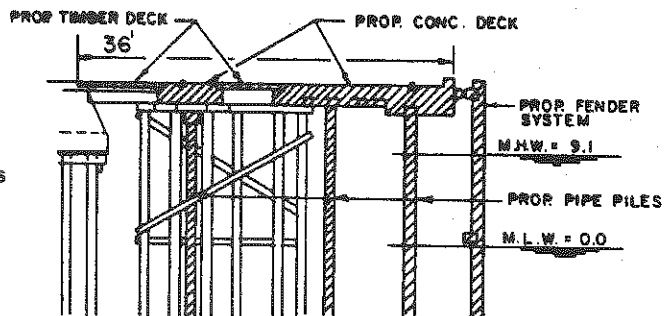


DATUM:
MEAN LOW WATER

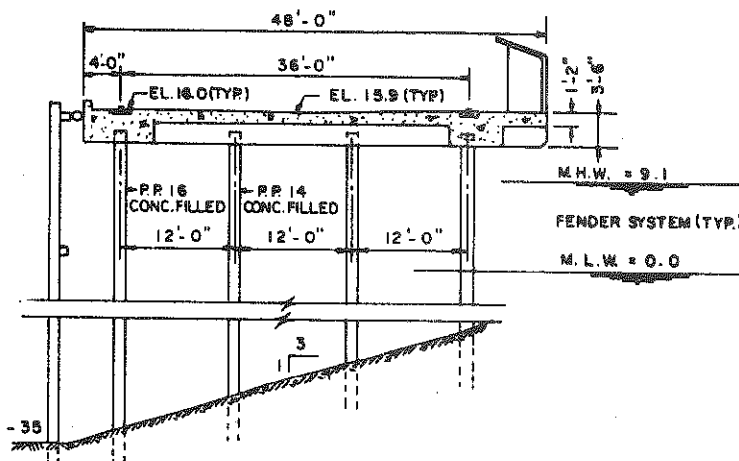
ELEVATIONS
in Portland Harbor, Fore River
City of Portland
County of Cumberland, State of Maine
Applicant: BATH IRON WORKS CORPORATION
SHEET 2 of 7
MARCH 12, 1982



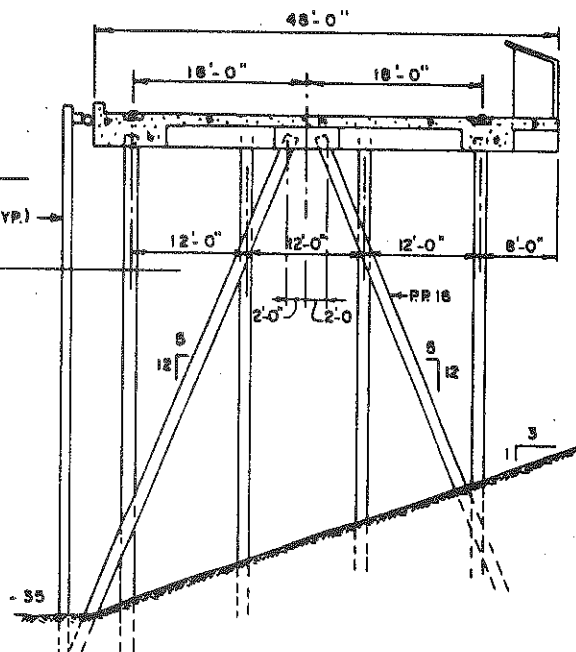
SECTION B-B - STATE PIER



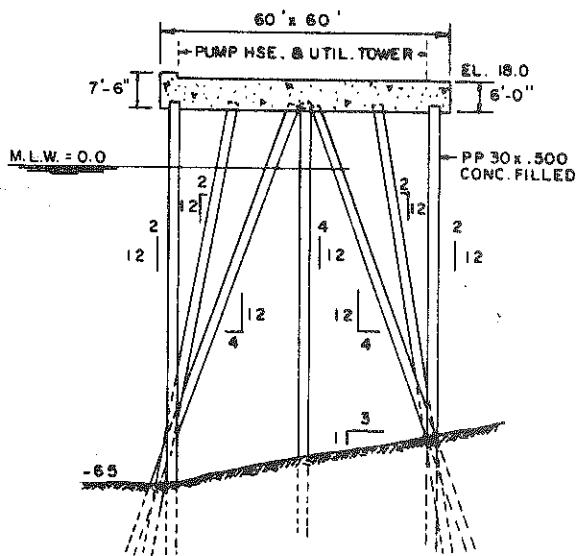
SECTION C-C - STATE PIER



SECTION D-D - REPAIR PIER



SECTION E-E - REPAIR PIER

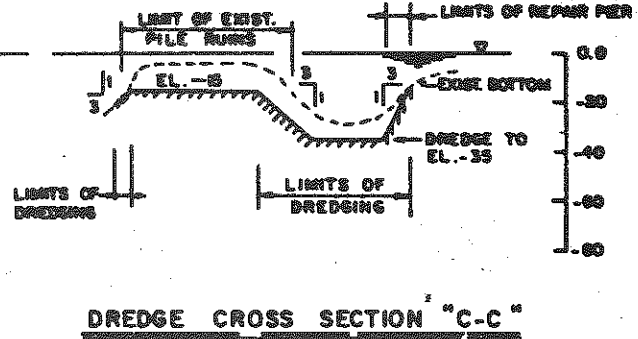
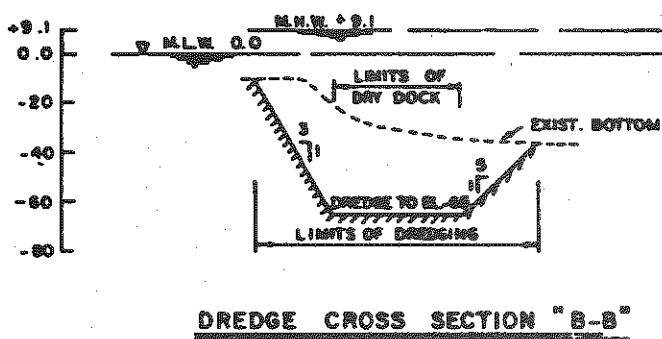
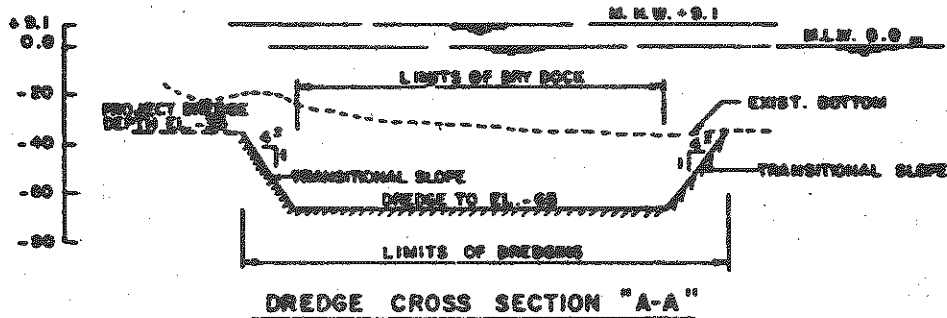
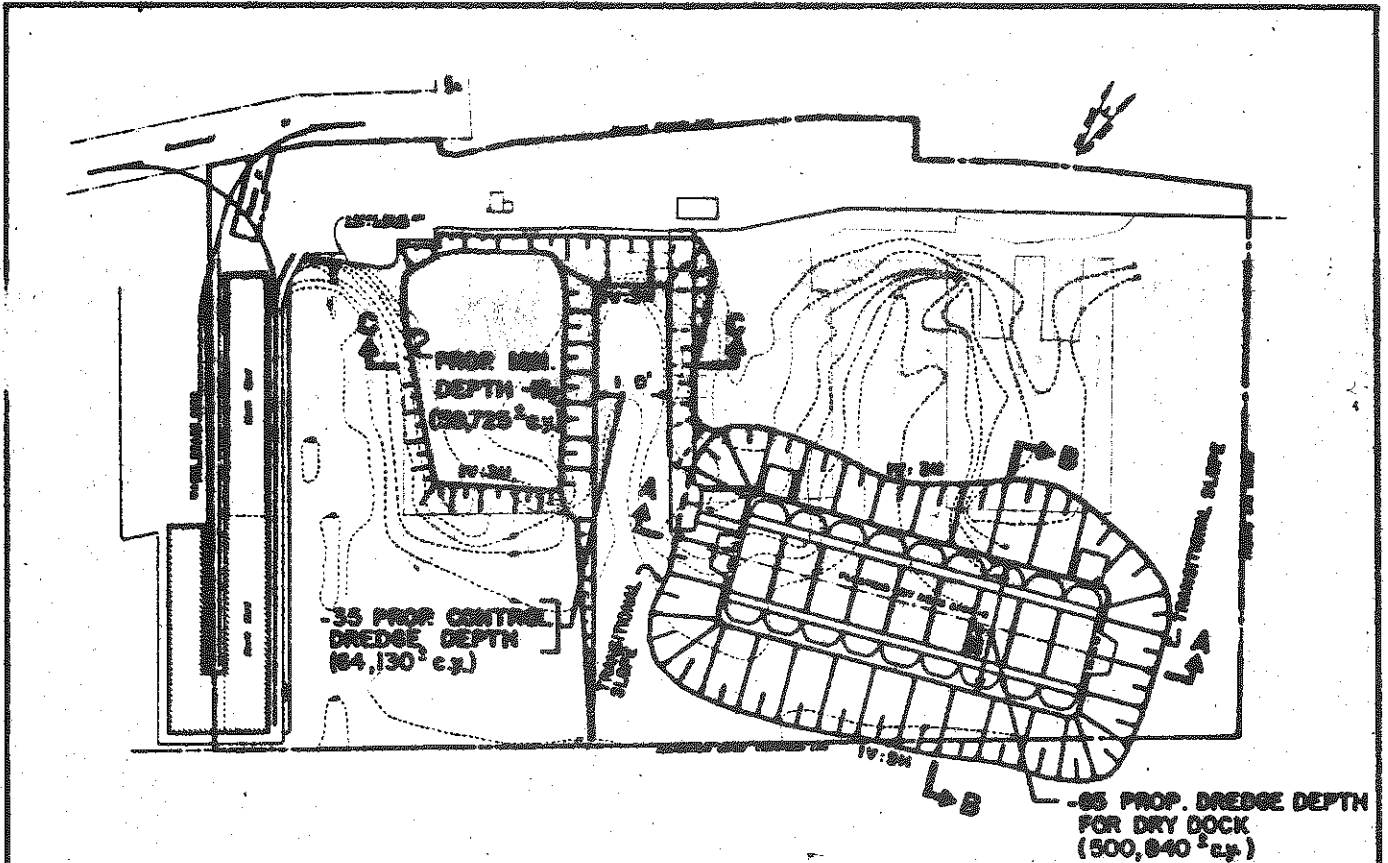


SECTION A-A - MOORING PLATFORM



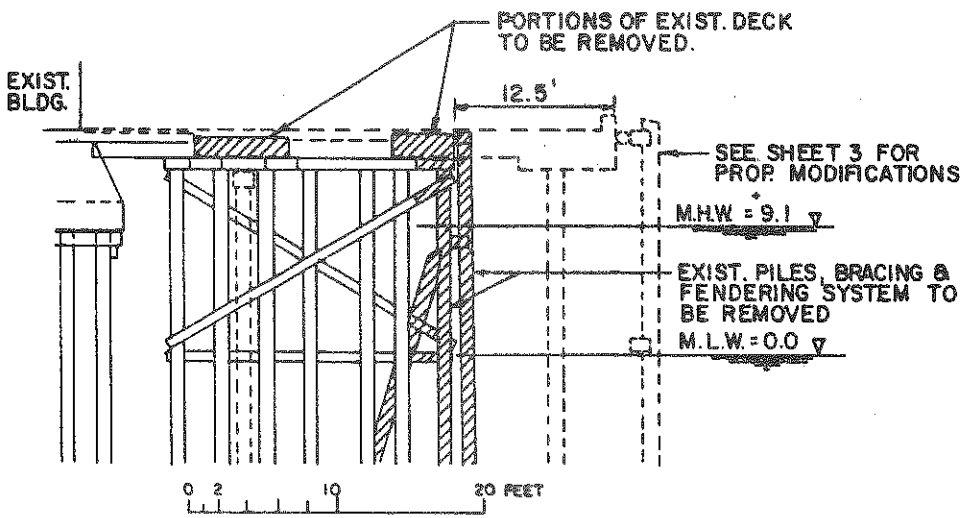
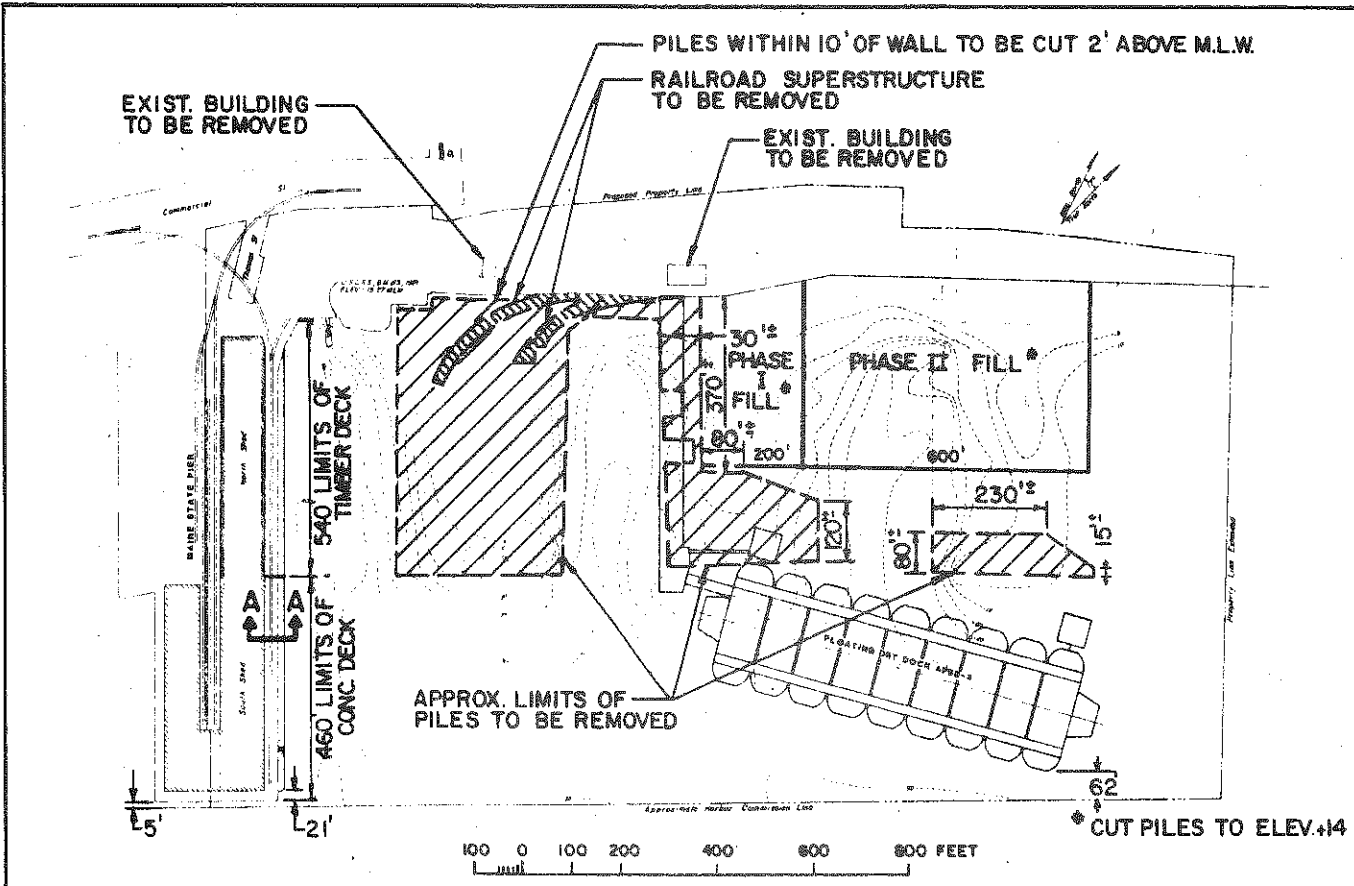
DATUM:
MEAN LOW WATER

TYPICAL SECTIONS
in Portland Harbor, Fore River
City of Portland
County of Cumberland, State of Maine
Applicant BATH IRON WORKS CORPORATION
SHEET 3 of 7
MARCH 12, 1962



DATUM:
MEAN LOW WATER

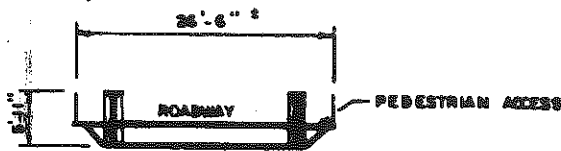
DREDGE CROSS SECTIONS
 in Portland Harbor, Fore River
 City of Portland
 County of Cumberland, State of Maine
 Applicant: BATH IRON WORKS CORPORATION
 SHEET 4 of 7
 MARCH 12, 1982



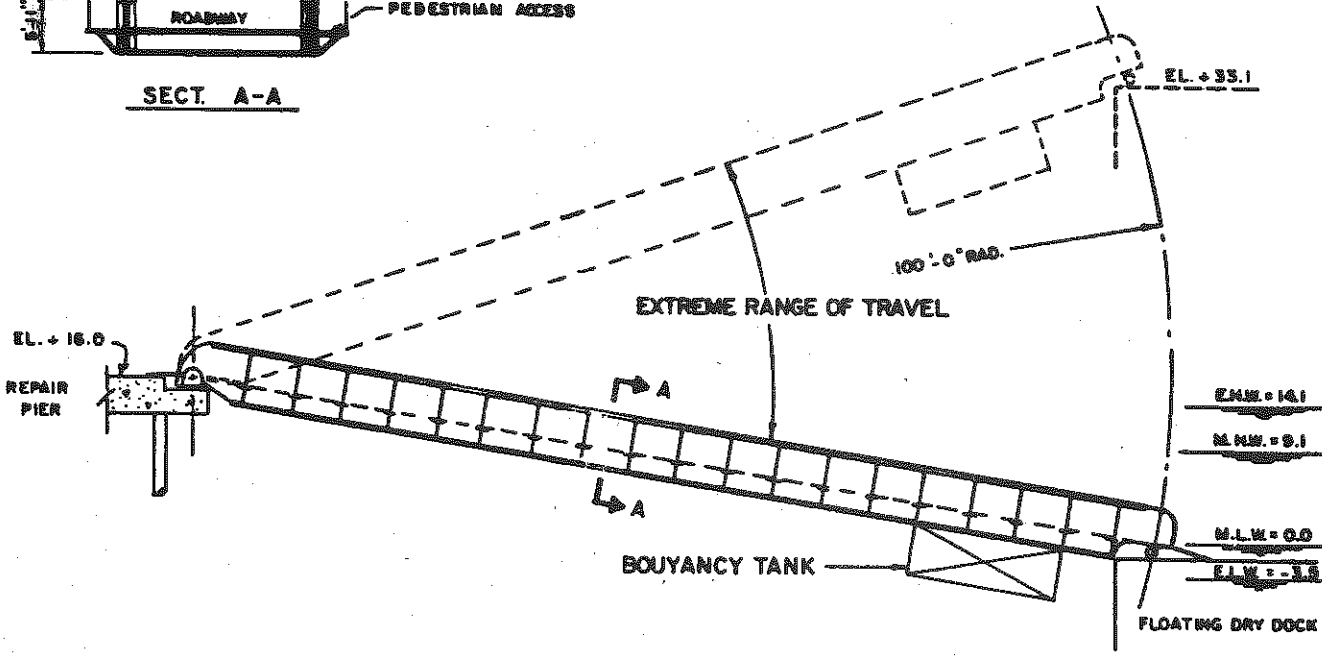
SECTION "A-A"

DATUM
MEAN LOW WATER

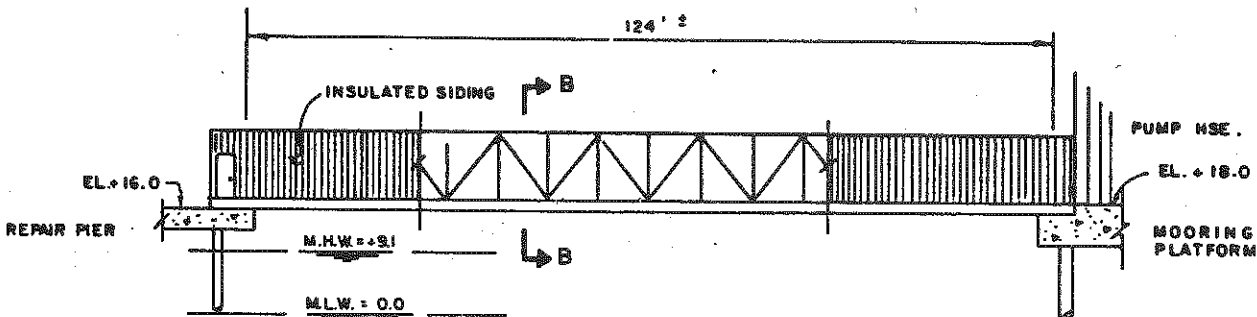
DEMOLITION
 in Portland Harbor, Fore River
 City of Portland
 County of Cumberland, State of Maine
 Applicant: BATH IRON WORKS CORPORATION
 SHEET 5 of 7
 MARCH 12, 1982



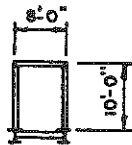
SECT. A-A



ELEVATION - TRANSFER BRIDGE



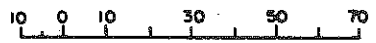
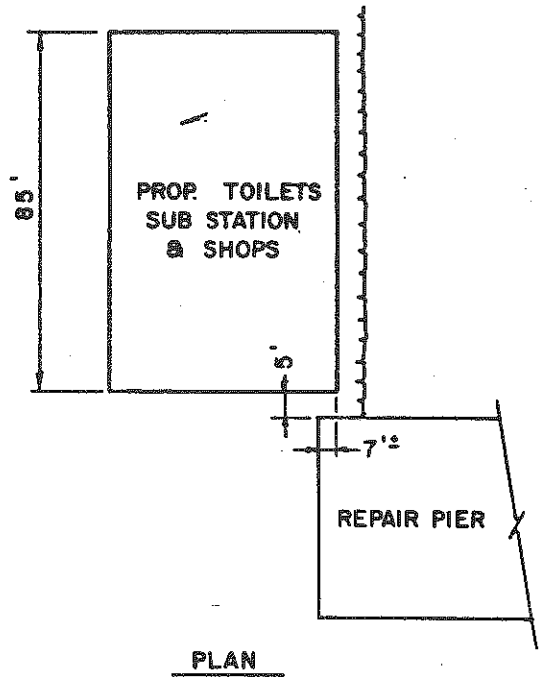
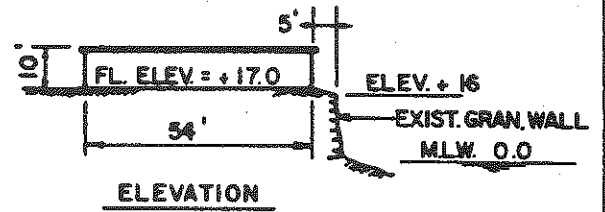
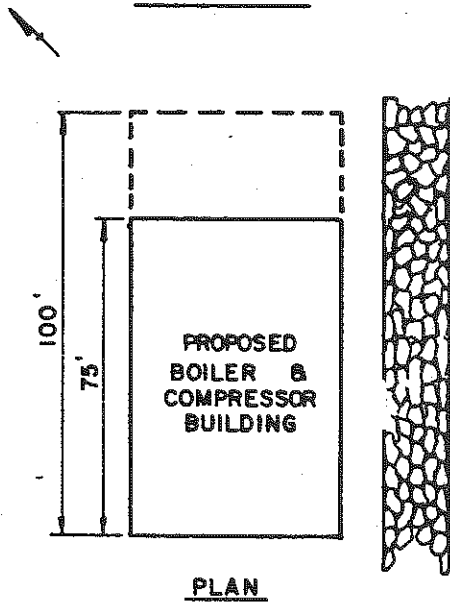
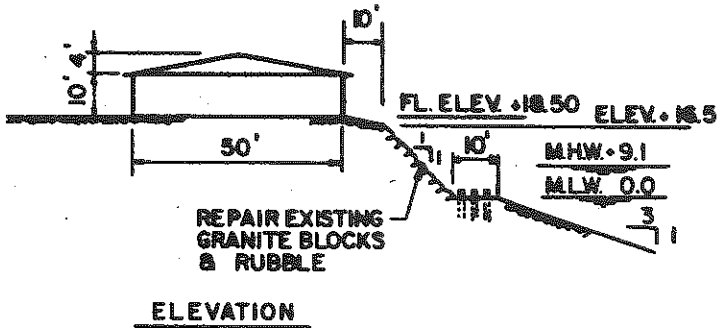
ELEVATION - UTILITY BRIDGE



SECT. B-B

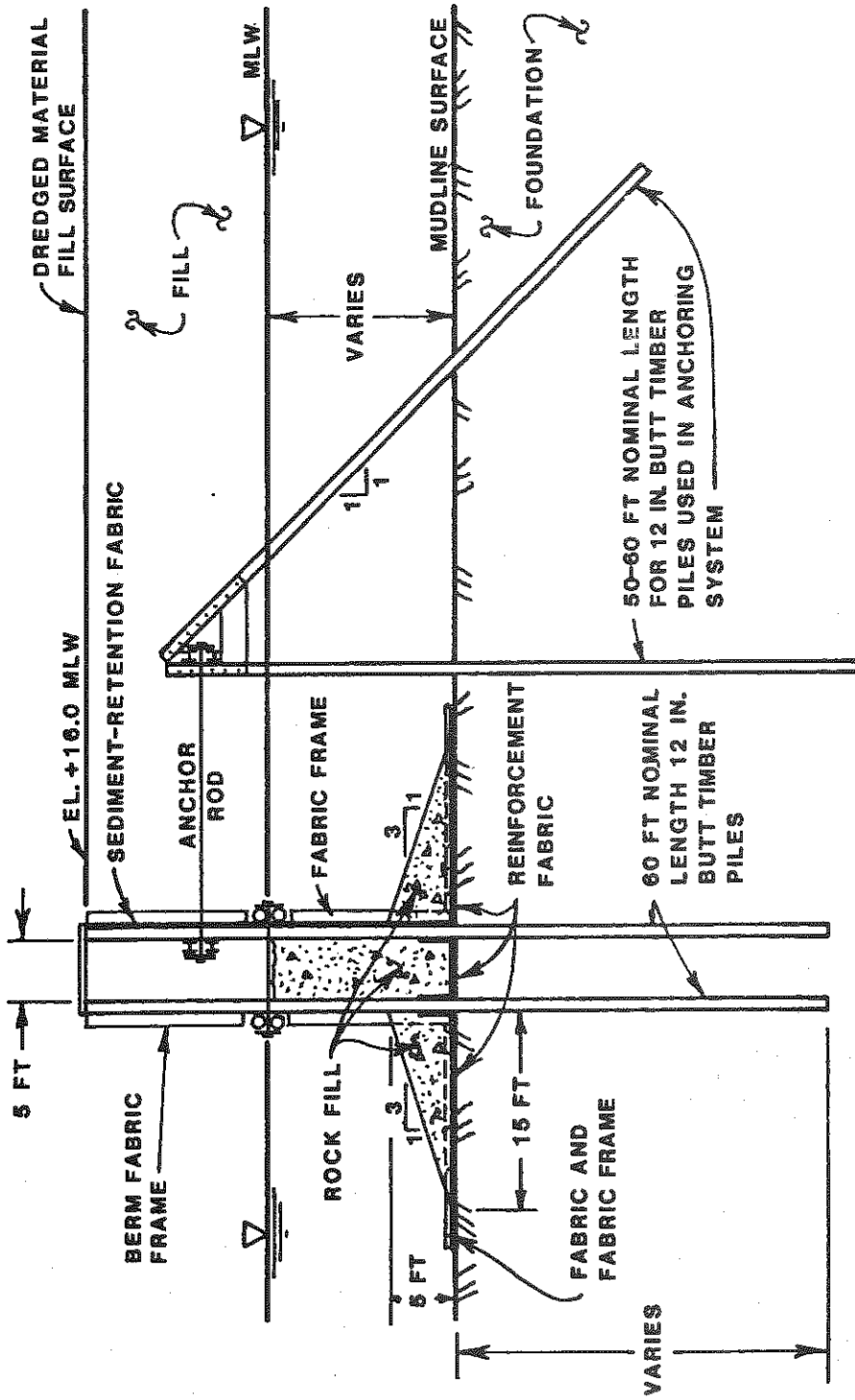
DATUM
MEAN LOW WATER

BRIDGES
In Portland Harbor, Fore River
City of Portland
County of Cumberland, State of Maine
Applicant: BATH IRON WORKS CORPORATION
SHEET 6 of 7
MARCH 12, 1962



DATUM:
MEAN LOW WATER

PROPOSED BUILDINGS
in Portland Harbor, Fore River
City of Portland
County of Cumberland, State of Maine
Applicant: BATH IRON WORKS CORPORATION
SHEET 7 of 7
MARCH 12, 1982



TYPICAL CROSS-SECTION DETAIL OF SHOREZONE CONTAINMENT AREA
TIMBER PILE BULKHEAD RETAINING STRUCTURE

Portland Harbor, Fore River
City of Portland
County of Cumberland, State of Maine
Applicant: BATH IRON WORKS CORPORATION
SHEET 2 of 2
MARCH 24, 1982

Pat
Kille
BTW

3833-00
SL 2.51

Joe
FIT
Pat

August 31, 1981

Mr. Harold Plummer
Bath Iron Works Corporation
Bath, ME 04530

Dear Harold:

Subject: BIW Portland Facility
Feasibility Study
Permit Assessments

In response to our discussions on August 19, 1981, we have made preliminary assessments of the permits required for the subject project and have identified certain permits which will undoubtedly become a lengthy and involved application process. Our comments are presented herein so that BIW may develop a strategy for performing the necessary preapplication research and studies necessary for each. The permits which we recommend BIW address as early as possible are as follows:

A. City of Portland

The City will review this project for compliance with provisions under their Site Plan Review Ordinance and Shoreland Zoning Ordinance. The Planning Board will combine the process of review for both ordinances into a one-approval procedure. These ordinances will address the following issues:

1. Site Plan Review

- . Traffic - vehicular and water borne
- . Parking
- . Fire Protection
- . Soils and Drainage
- . Sewerage and Utilities
- . Lighting and Amenities
- . Landscaping
- . Impact on Adjacent Neighborhoods

2. Shoreland Zoning

- . Erosion and Sedimentation Control
- . Effects on Fishing
- . Impact on Wildlife and Marine Environment
- . Impact on Aesthetic Views of the Waterfront
- . Impact on Public Access to the Water

It is essential to determine early in the permit process the specific data requirements for these permits so that rapid consideration of the applications by the City may be achieved. It is suggested that contact with the following Portland staff be made as soon as possible to begin the application process:

Steven T. Honey - City Manager
Clark Neily - Economic Development Director
Joseph Gray - Community Development Director
George Flaherty - Public Works Director
Donald Olsen - Waterfront Coordinator
Patricia Harrington - Chief Planner

We perceive that strong local support could favorably influence federal agencies in approval of other permits. It would, therefore, seem that contact with local officials would be the first step in any permitting work.

B. State of Maine

Two key regulatory steps which fall within the State's jurisdiction are the Site Location approval and an Air Emissions License. The Site Location approval procedure involves a significant application and review process. The state DEP staff will be heavily involved and eventual action by the Board of Environmental Protection will be essential. Various other state agencies, as well as the general public, will undoubtedly comment on the application. The following issues will be addressed under the site location approval process:

- . Financial Capability to Undertake the Project
- . Provisions for Solid Waste Disposal
- . Provisions for Water Supply
- . Traffic Considerations - Vehicular and Water Borne
- . Air Quality
- . Storm Water Management
- . Noise Control and Buffering
- . Historic and Archeological Sites
- . Effects on Natural and Scenic Areas
- . Protection of Wildlife and Fisheries
- . Soil Suitability

BIW's expansion facility will require boilers for the generation of steam for heating and other operational tasks. Boilers having a combined capacity of 10 million BTU/Hr will require an Air Emissions License. Our experience indicates that extensive computer modeling could be required to determine the impacts on the emissions levels regulated for Portland's Peninsula area. This determination would be required prior to filing an air emissions application.

It is suggested that meetings with state personnel be held to determine their requirements relating to air emissions and assess the modeling that may have to be done. The following persons should be involved in early discussions:

Teco Brown - DEP, Land Bureau
John Chandler - DEP, Air Bureau
Bonny Hadiaris - DEP, Water Quality Bureau
Charles Kellog - DEP, Land Bureau

C. Federal

Portions of three federal statutes provide the framework for permits to be issued by the Corps of Engineers. The River and Harbor Act of 1899, Clean Water Act, and the Marine Protection Research and Sanctuaries Act of 1972 will apply to this project. Approval may be applied for with one joint application. Section 10 of the River and Harbor Act outlines the requirement for the construction of piers and bulkheads in navigable waters. Section 404 of the Clean Water Act requires a permit for any fill material placed in navigable waters. Section 103 of the Marine Protection Research and Sanctuaries Act requires a permit for disposal of dredged material in the ocean.

It is important to meet with the Corps to discuss the plans for dredging and disposal of the material. It is possible that the recent dredging in Portland harbor has generated sufficient data on the bottom sediments to facilitate preparation of the application without extensive data collection and evaluation. The Corps staff should be consulted to determine the extent of background data which will be required. The Environmental Protection Agency will review and comment on the ocean disposal permit and should be included in this phase of discussions. The National Marine Fisheries Service and the U.S. Fish and Wildlife Service have been critical of recent dredging activities in Portland, and their representatives should be brought into these meetings. At least two meetings should be proposed, with the first to include:

Mike Conneilly - Corps Processing Branch
Alan Ikalanin - EPA, Region I
James Vajek - Corps of Engineers

Due to the complexities of the above mentioned permit applications and the lengthy processes in obtaining the required background data for each, we suggest that BIW begin preapplication work as early as possible.

The Jordan Company and Parsons Brinckerhoff have extensive and recent experience with these permit processes and are ready to assist in any way that we can. We would be glad to meet with your staff to review these permits and, should you desire, submit a proposal for permitting services for your consideration.

Please contact me should you desire any further information or assistance in this regard.

Sincerely,

E.C. JORDAN CO.



John R. Chesebro, P.E.
Project Manager

JRC:cm

cc: Dean Marriott ✓
Sverre Bergh

bcc: PAT HARRINGTON



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530

May 5, 1982

Department of Environmental Protection
State of Maine
State House - Station 17
Augusta, Maine 04333

~~Attention: Mr. Robert Ballew~~

*INFO FOR PORTLAND OFF
COPY ONLY*

Dear Sir:

Subject: Application for Air Emission License
Boiler Room Building - Boilers

I have previously left with you a set of topo-maps showing the terrain surrounding the Maine State Pier (Bath Iron Works' Portland facility), a navigational chart showing the mean low water mark and Portland Harbor, and a Bath Iron Works drawing showing the location of the Boiler Room Building in relation to Maine State Pier, Bath Iron Works' new Finger Pier, and the tallest buildings in the area. The heights of the tallest buildings are either designated above ground, i.e. 35 feet, or above mean low water, i.e. elevation 47 feet mean low water. The elevation of the land in the area is 17-20 feet above mean low water.

The purpose for the Boiler Room is for heating only and therefore seasonal. Bath Iron Works plans on using the two existing boilers in the Maine State Pier (M. S. P.) only until the new boiler #1 is in operation (December, 1982) and then use the M. S. P. boilers which burn #2 oil only as backup in the event boiler #1 goes off line. When new boilers #2 and #3 go on line (October, 1983), the M. S. P. boilers will be retired.

Bath Iron Works will burn natural gas (N.G.) and use propane as a back up. Propane will be mixed with air to maintain 1000 BTU/Cu. Ft.

Department of Environmental Protection

2

May 5, 1982

Actual installation of boiler will not start until September, 1982, and it will not be fired until approval of this application.


I appreciate your very helpful guidance during our pre-submittal application meeting. I hope this application meets with your requirements.

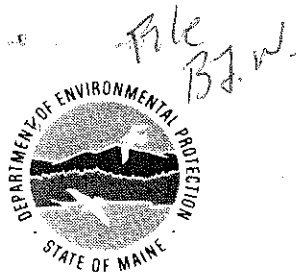
Yours very truly,

BATH IRON WORKS CORPORATION


Albert Hansen
Senior Project Engineer

AH:mr

 cc: Patricia Harrington
Planning Department
City of Portland



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER

IN THE MATTER OF

BATH IRON WORKS CORPORATION)
Portland, Maine, Cumberland County)
SHIP REPAIR FACILITY)
#03/44-7866-05170)

SITE LOCATION OF DEVELOPMENT,
ALTERATION OF COASTAL WETLANDS ACT,
AND WATER QUALITY CERTIFICATION
FINDINGS OF FACT AND ORDER

After reviewing the project file which includes the application with its supportive data, agency review comments, staff summary and other related materials on file with regard to the above noted project, under provisions of Title 38, M.R.S.A., Section 474, Section 483, and Section 401 of the Federal Water Pollution Control Act, the Board finds the following facts:

1. Nature of Project: Construction of a new ship repair and overhaul facility in Portland, adjacent to and including the easterly side of the Maine State Pier. The project area consists of a 50-acre area of water bounded by the State Pier to the west, the shoreline to the north, the extended property line to the east, and the Harbor Commissioner's line to the south along the ship channel. The area currently contains approximately 15 acres of timber pile ruins from the former Grand Trunk Railroad Piers.

The proposed facility consists of an 80,000 ton capacity floating drydock, which would be permanently moored within the project area. The drydock will be 844 feet long, consisting of nine pontoon sections, attached side by side, with 50 feet high and 20 feet wide bulkheads along each edge.

A 600 foot long finger pier will provide access to the drydock as well as provide vessel docking space. The pier will be 48 feet wide and will be supported by concrete or steel pipe piles. The east side of the Maine State Pier will be modified by adding a 12.5 foot apron to provide space for installation of a 25-ton crane with rail runway. In addition, the pier building will be extensively renovated to provide office and shop space.

The area currently occupied by the pile ruin closest to the Maine State Pier will be dredged to a depth of 15 feet. The area between this pile ruin and the proposed finger pier has been dredged in the past and will be redredged to a depth of 35'. The area beneath and around the drydock will be dredged from a current depth of approximately 32 feet at mean low water to a depth of 65 feet. Slopes of this basin will range from 3 to 1, to 5 to 1.

The total volume of dredge material is estimated to be about 625,000 cubic yards. This material will be disposed of at the Army Corps of Engineers approved offshore disposal site, except for approximately 50,000 cubic yards, which will be placed in a 1.6 acre containment area. This containment area will cover submerged land on the east side of the proposed finger pier. This containment area will provide a supply staging area for the drydock. Also considered is a future containment area of 4.8 acres on the east side of the 1.6 acre area. Approval of the 4.8 acre area, however, is not being sought at this time. The proposed containment structure will consist of a double row of timber piles filled in between with rock or rubble fill.

10. The project will not unreasonably harm wildlife or freshwater, estuarine, or marine fisheries. Dredge spoil analyses show that the disposal of sediment at the proposed ocean disposal site, which is outside state waters, will not have long term adverse effects on the marine environment. 1.6 acres of habitat will be lost by filling. The area, however, does not have a high diversity or abundance of marine life.
11. The project will not unreasonably interfere with the natural flow of any waters.
12. There is reasonable assurance that the activity will not lower the quality of any waters or violate applicable Water Quality Standards.

THEREFORE, the Board APPROVES the application of BATH IRON WORKS CORP. to develop a ship repair facility as described in paragraph #1 subject to the following terms and conditions:

1. The Site Location of Development Standard Conditions of Approval, a copy attached.
2. The Wetlands Standard Conditions of Approval, a copy attached.
3. The applicant shall submit final design plans for the site entrance and the intersection of Commercial Street and Franklin Arterial no later than August 31, 1982. These plans shall be reviewed and approved by the Commissioner prior to operation of the facility.
4. The applicant shall either:
 - a) schedule the first shift to start no later than 7:00 a.m.; or
 - b) conduct a revised traffic study based on a starting time later than 7:00 a.m. This study, including recommendations, shall be submitted to the Commissioner for review and shall be approved prior to scheduling the first shift to start later than 7:00 a.m.
5. The applicant shall conduct a noise survey to determine background noise levels along the residential boundary facing the project site, and at the northerly corner of the development property. Noise readings will be taken hourly between 6:00 p.m. and 7:00 a.m. Based on the survey results, the applicant shall develop a plan to limit noise impact to the adjacent residential neighborhood. This plan shall be approved by the Board prior to any construction activity.

DONE AND DATED AT AUGUSTA, MAINE, THIS 9TH DAY OF JUNE, 1982.

BOARD OF ENVIRONMENTAL PROTECTION

BY:


HENRY E. WARREN, Chairman

PLEASE NOTE ATTACHED SHEET FOR APPEAL PROCEDURES....

Please make
copy to
Tom Vaillean
Put in
B7W
file.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER
IN THE MATTER OF

BATH IRON WORKS CORPORATION) SITE LOCATION OF DEVELOPMENT ORDER
Portland, Maine, Cumberland County)
SHIPS REPAIR FACILITY)
#03/44-7866-05170) CONDITION COMPLIANCE

After reviewing the project file which includes the application with its supportive data, agency review comments, staff summary and other related materials on file with regard to the above noted project, under provisions of Title 38, M.R.S.A., Sec. 483, the Board finds the following facts:

1. The applicant has submitted evidence concerning compliance with Condition #5 of the Order by the Board of Environmental Protection dated June 9, 1982. The nature of the evidence is:

A. The applicant has submitted the results of a noise survey. Noise levels were measured at the residential boundary (as delineated by city zoning) and the northeast boundary of the project site hourly between 6:00 p.m. and 7:00 a.m. Also submitted were the results of a noise survey by the City of Portland which measured noise levels at nine locations in the vicinity of the project.

B. The applicant has proposed to meet the following noise standards which were adopted by the City of Portland on June 8, 1982:

- ≤ 75 decibels LEQ anytime at the property line boundary
- ≤ 65 decibels LEQ between 9:00 p.m. and 12:00 midnight local time at the residential zone boundary
- ≤ 60 decibels LEQ between 12:00 midnight and 6:00 a.m. local time at the residential zone boundary

2. Condition #5 reads as follows:

"5. The applicant shall conduct a noise survey to determine background noise levels along the residential boundary facing the project site, and at the northerly corner of the development property. Noise readings will be taken hourly between 6:00 p.m. and 7:00 a.m. Based on the survey results, the applicant shall develop a plan to limit noise impact to the adjacent residential neighborhood. This plan shall be approved by the Board prior to any construction activity.

Based upon the above Findings, the Board concludes that Bath Iron Works Corporation has complied with Condition #5 of the Order for a ship repair facility dated June 9, 1982 subject to the following terms and conditions:

1. The average level of noise shall be measured over a 20 minute duration to determine compliance with the noise standards except condition 2.

CHESTER & VESTAL
ATTORNEYS AT LAW

EDWIN P. CHESTER
BARBARA A. VESTAL

107 Congress Street
Portland, Maine 04101
Telephone (207) 772-7426

May 2, 1984

Doug Mason
Planning Department
City of Portland
389 Congress Street
Portland, ME 04101

RE: BIW Ship Repair Facility

Dear Doug:

Enclosed is a copy of the Site Location of Development Order issued by the DEP on August 11, 1982. Also enclosed is a copy of the letter that I have sent to them requesting a copy of the Program for Monitoring and Reporting Noise Levels that was to have been submitted by BIW.

I would appreciate it if you would keep me informed of your noise monitoring activities. I also understand that you will be getting back to me with the name and phone number of the person to whom noise complaints should be directed by neighborhood residents.

Thank you for your cooperation.

Very truly yours,

Barbara

Barbara A. Vestal

BAV/aj
Enclosures

CHESTER & VESTAL
ATTORNEYS AT LAW

EDWIN P. CHESTER
BARBARA A. VESTAL

107 Congress Street
Portland, Maine 04101
Telephone (207) 772-7426

May 2, 1984

COPY

State of Maine
Dept. of Environmental Protection
State House Station 17
Augusta, ME 04333

RE: Bath Iron Works
Ship Repair Facility # 03/44-7866-05170

Dear Sir or Madam:

I have reviewed the Site Location of Development Order, Condition Complaine in the above captioned matter dated August 11, 1982. As part of the findings, condition number four was imposed, requiring that BIW submit a program for monitoring and reporting noise levels. This noise monitoring and reporting program was to have been filed with the Commissioner for approval no later than October 15, 1982.

Would you please send me a copy of the noise monitoring and reporting program submitted by BIW together with whatever documentation there is to show that it was approved by the Commissioner.

I am also interested in finding out whether or not reports of the results of this monitoring and reporting program have been submitted to the Department of Environmental Protection by BIW.

Thank you for your attention to this matter.

Very truly yours,

/s/ Barbara A. Vestal

Barbara A. Vestal

BAV/aj

DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER
IN THE MATTER OF



BATH IRON WORKS CORPORATION	}	SITE LOCATION OF DEVELOPMENT ORDER
Portland, Maine, Cumberland County		
SHIPS REPAIR FACILITY	}	CONDITION COMPLIANCE
#03/44-7866-05170		

After reviewing the project file which includes the application with its supportive data, agency review comments, staff summary and other related materials on file with regard to the above noted project, under provisions of Title 38, M.R.S.A., Sec. 483, the Board finds the following facts:

1. The applicant has submitted evidence concerning compliance with Condition #5 of the Order by the Board of Environmental Protection dated June 9, 1982. The nature of the evidence is:
 - A. The applicant has submitted the results of a noise survey. Noise levels were measured at the residential boundary (as delineated by city zoning) and the northeast boundary of the project site hourly between 6:00 p.m. and 7:00 a.m. Also submitted were the results of a noise survey by the City of Portland which measured noise levels at nine locations in the vicinity of the project.
 - B. The applicant has proposed to meet the following noise standards which were adopted by the City of Portland on June 8, 1982:
 - ≤ 75 decibels LEQ anytime at the property line boundary
 - ≤ 65 decibels LEQ between 9:00 p.m. and 12:00 midnight local time at the residential zone boundary
 - ≤ 60 decibels LEQ between 12:00 midnight and 6:00 a.m. local time at the residential zone boundary

2. Condition #5 reads as follows:

- "5. The applicant shall conduct a noise survey to determine background noise levels along the residential boundary facing the project site, and at the northerly corner of the development property. Noise readings will be taken hourly between 6:00 p.m. and 7:00 a.m. Based on the survey results, the applicant shall develop a plan to limit noise impact to the adjacent residential neighborhood. This plan shall be approved by the Board prior to any construction activity.

Based upon the above Findings, the Board concludes that Bath Iron Works Corporation has complied with Condition #5 of the Order for a ship repair facility dated June 9, 1982 subject to the following terms and conditions:


1. The average level of noise shall be measured over a 20 minute duration to determine compliance with the noise standards except condition 2.

2. Noise levels referred to in paragraph 1B above and condition #3 below shall not be exceeded by more than 10 dB(A) for more than 60 seconds per hour, except for warning devices as required by the Occupational Safety & Health Administration or emergency conditions.
3. Noise levels in the vicinity of monitoring site #9 as identified on the City of Portland noise survey dated 6-2, 6-3, 6-4, 1982, shall meet the following limits:
 - A. When background noise levels between 9:00 p.m. and midnight are less than 55 dB(A) 20 minute LEQ, total noise levels shall not increase above 60 dB(A) 20 minute LEQ.
 - B. When background noise levels between midnight and 6:00 a.m. are less than 50 dB(A) 20 minute LEQ, total noise levels shall not increase above 55 dB(A) 20 minute LEQ.
4. The applicant shall submit a program for monitoring and reporting noise levels, which shall be developed by a consultant having demonstrated expertise in noise study. The noise monitoring and reporting program shall be filed with the Commissioner for approval no later than October 15, 1982.

DONE AND DATED AT AUGUSTA, MAINE, THIS 11TH DAY OF AUGUST, 1982.

BOARD OF ENVIRONMENTAL PROTECTION

BY:


Henry E. Warren, Chairman

10152

Ambient Industrial Noise Study for the Proposed Portland Facility

Scientists measure sound intensity by a unit called decibel or dB (A). The dB is an abbreviation of decibels and the A refers to the A scale, one of the three frequency patterns on which sound is measured. Federal standards are expressed in the A scale readings, which simulate the response range of the human ear. The Environmental Protection Agency recommends that equivalent sound level be established at 70 dB (A) for 24 hours and 75 dB (A) for 8 hours. Extended exposure to such levels could affect one's hearing capability.

Two industrial noise surveys were conducted using a General Radio Octave Band Analyzer Model 1551-C, to provide baseline information concerning fugitive ambient noise associated with Bath Iron Works new Portland Facility and shipbuilding in general.

The first ambient noise survey was conducted at the perimeter of the Bath Facility during peak production hours of operation to provide background information on ambient noise levels produced by associated shipbuilding activities. The survey clearly showed that ambient noise levels produced by the Bath Shipbuilding complex had minimal impact in the surrounding area. The higher decibel readings were associated with heavy vehicular activity. The mean A Band reading for the 23 sites sampled was 61.7 dB (A).

The second ambient noise survey at the proposed Portland Facility showed decibel readings very similar to those recorded at the perimeter of the Bath complex. The mean A Band value for the 6 sampled sites was 57.7 dB (A). This data coupled with additional octave band analyses will serve as a baseline study for the existing ambient industrial noise present in the area.

BATH IRON WORKS CORPORATION

MEMORANDUM

FROM- L. E. Temple

(TDL-3107)
DATE February 4, 1982

TO- Hal Plummer

SUBJECT- Base Line Sound Survey - Maine State Pier

Ref: TDL-3098 Ambient Industrial Noise Survey at Bath Facility

1. On February 3, 1982, a base line ambient noise survey was made at the Maine State Pier. The survey was completed using a General Radio Octave Band Analyzer, Model 1551-C. The sound survey was made between 1330 and 1500 hrs.
2. The sampling sites were established at the Northern boundary of the State Pier property and on the Northern side of Commercial Street adjacent to the State Pier property.
3. Federal standards are expressed in the A Scale which simulates the response range of the human ear. The mean value for the A Scale readings was 57.7 dB.
4. The result of the Portland survey provides background information on ambient industrial noise in the State Pier area. Should you have any questions, contact the undersigned.



L. E. Temple
Laboratory and Environmental
Manager

LET/SKR/B

CC: LET

L18835

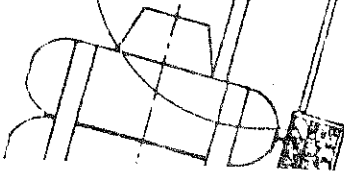
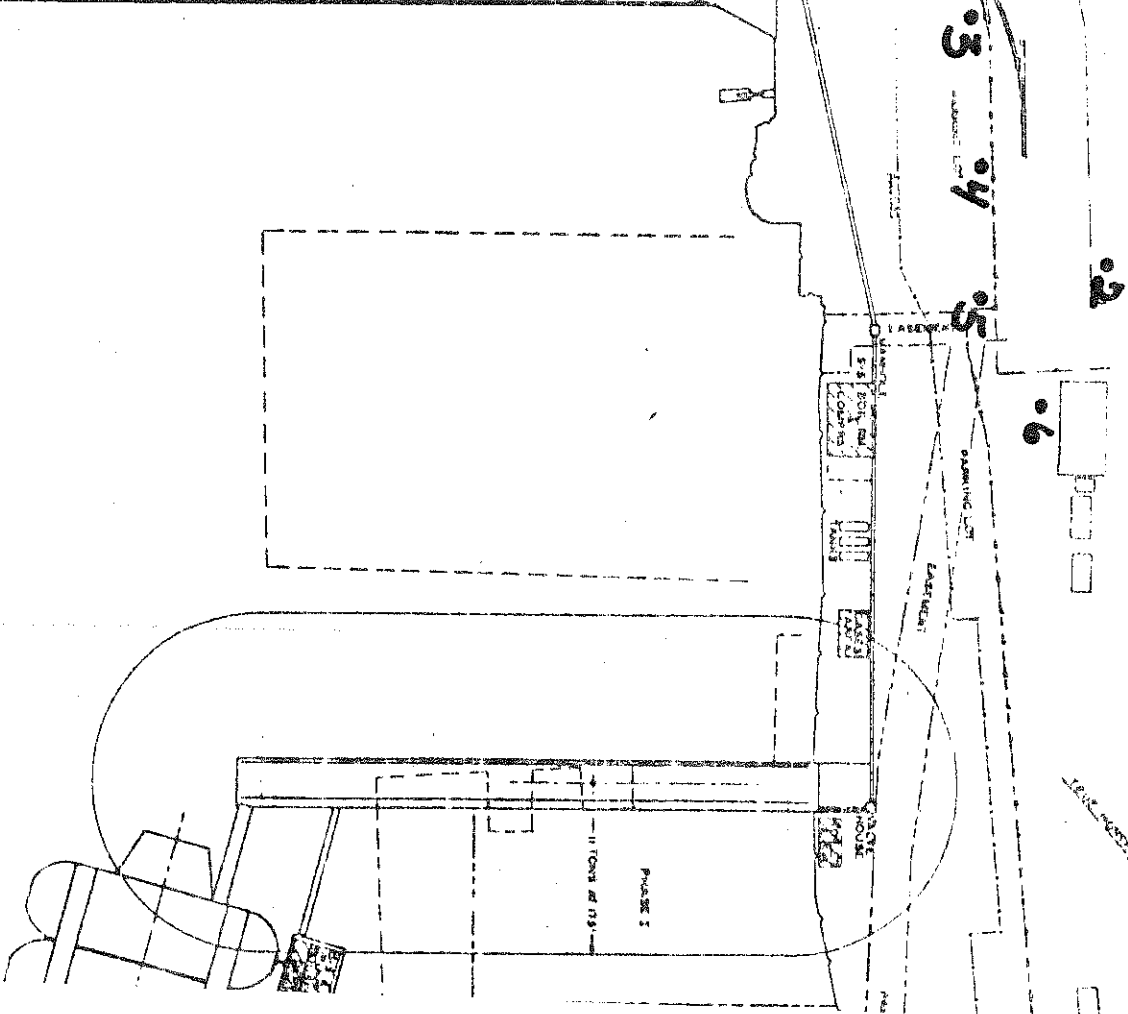
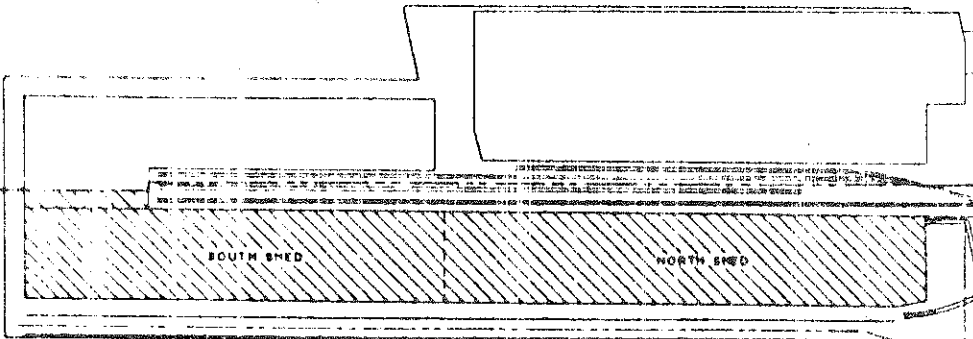
AMBIENT INDUSTRIAL NOISE SURVEY STATE PIER PROPERTY, PORTLAND FREQUENCY

SITE	ALL PASS	FREQUENCY										A SCALE
		1000	800	630	500	400	315	250	200	160	125	
1	80*	<50	<50	<50	53	56	50	63	65	74	72	66
2	79*	<50	62*	<50	<50	55	60	58	67*	69	70	60
3	74	<50	<50	<50	<50	55	50	60*	62	65	65	59
4	72	<50	<50	<50	<50	<50	52	52	59	66	68	50
5	73	<50	<50	<50	<50	44	55	60	60	65	69	52
6	75	<50	<50	<50	50	46	51	57	76*	74	72	59

* HEAVY VEHICULAR TRAFFIC

RESULTS ARE GIVEN IN DECIBELS

MEAN VALUE FOR A SCALE = 57.7 dB



BATH IRON WORKS CORPORATION

MEMORANDUM

(TDL-3098)

FROM- L. E. Temple

DATE January 25, 1982

TO- Hal Plummer

SUBJECT- Ambient Industrial Noise Survey at the Bath Facility

Encl: (1) Survey Map
(2) Test Results

1. On January 7, 1982, an Ambient Industrial Noise Survey was made at the peripheral of the Bath Iron Works property. The survey was completed using a General Radio Octave Band Analyzer, Model 1551-C. The sound survey was made between 1400 and 1500 hrs.

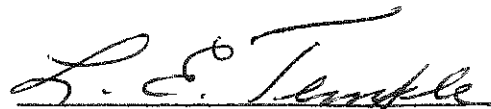
2. There were 27 sampling sites established of which 23 were sampled. The noise level ranged from a low of 45 decibels to a high of 80 decibels. The vehicular traffic adjacent to 20 of the test sites was heavy, which accounts for the majority of the high readings.

3. Federal standards are expressed in the A scale, which simulates the response range of the human ear. The mean value for the A scale readings was 61.7 decibels.

4. The Department of Environmental Protection Site Location Law states that "where background noise levels may be increased by more than ten decibels (dB) at any time for a duration exceeding one minute, a detailed assessment will be submitted including the level and duration of noise expected, the anticipated effect of the noise on surrounding uses, the extent of the area affected, and possible measures to reduce or eliminate the excessive noise".

5. Environmental Protection Agency recommends that equivalent sound levels be established at 70 decibels for 24 hours and 75 decibels for 8 hours. These levels could affect one's hearing capability as a result of extended exposure to such levels. Equivalent sound level is the average A-weighted energy level of sound over a given period of time.

6. The result of the sound survey clearly shows that ship building activity and associated construction at Bath Iron Works does not produce ambient noise levels which would be regarded as harmful or excessive. Should you have any questions concerning the survey, contact Steve Reichel at 2398.


L. E. Temple

LET/SKR/B

CC: LET

L 18670 AMBIENT INDUSTRIAL NOISE SURVEY

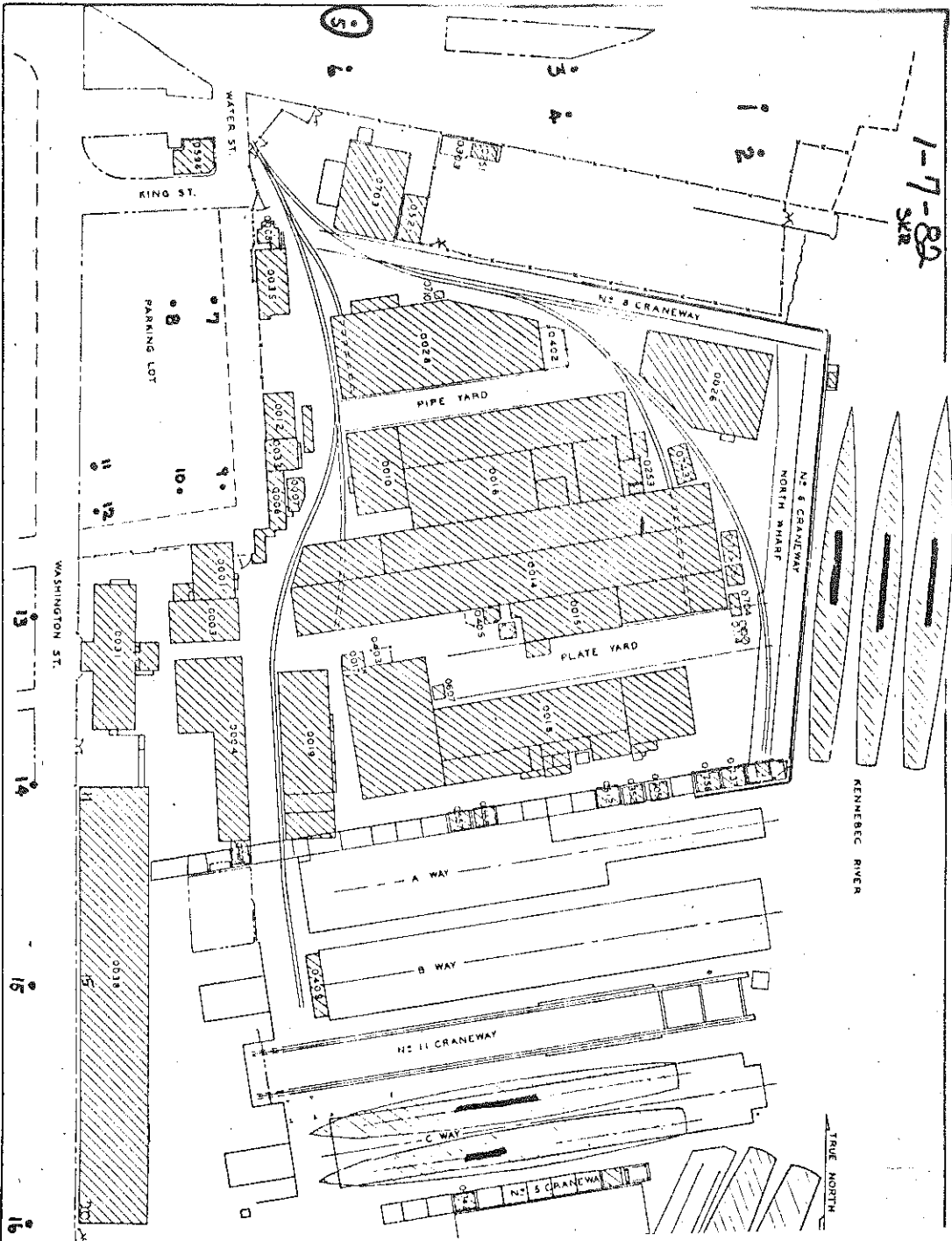
SITE LOCATION	ALL PASS	FREQUENCY										A SCALE
		16000	8000	4000	2000	1000	500	250	125	63	31.5	
1	77	<50	<50	45	50	53	57	57	66	78	76	58
2	75	<50	<50	<50	<50	50	48	48	55	57	57	53
3	73	<50	<50	48	55	57	52	51	54	66	68	58
4	75	<50	<50	<50	<50	45	48	52	54	67	70	56
5		NOT POSSIBLE										
6	72	<50	<50	<50	52	51	50	60	60	66	67	52
7	78	<50	<50	<50	47	51	52	52	66	74	73	58
8	(76)	<50	<50	50	54	51	51	52	64	70	(72)	56
9	(79)	<50	<50	48	44	(60)	56	(65)	62	(70)	(71)	58
10	72	<50	<50	<50	48	51	56	59	60	64	65	57
11	(77)	<50	<50	(59)	45	68	61	(68)	(67)	(69)	(67)	(70)
12	(74)	<50	<50	(60)	(69)	(69)	60	(66)	61	(69)	(70)	57
13	(74)	<50	50	(64)	(70)	54	70	66	(74)	(71)	(73)	(74)
14	(76)	<50	(64)	(69)	55	56	58	60	65	66	66	63
15	(77)	<50	<50	<50	<50	(70)	58	62	66	(68)	64	61
16	(76)	<50	<50	50	55	55	60	60	68	(72)	(70)	64
17	77	<50	<50	<50	54	58	60	62	(71)	(74)	(70)	(70)
18	74	<50	<50	<50	(60)	68	56	58	(70)	(76)	(71)	(76)
19	76	<50	<50	<50	52	55	55	(76)	(72)	(70)	(70)	(75)
20	(79)	<50	<50	<50	53	57	62	64	78	70	65	64
21	(80)	<50	<50	<50	50	(65)	64	(80)	(68)	(77)	(77)	(70)
22	74	<50	<50	<50	49	49	54	56	63	70	66	58
23		NOT POSSIBLE										
24	68	<50	<50	<50	<50	50	50	50	55	62	61	54
25		NOT POSSIBLE										
26	72	<50	<50	<50	<50	51	55	60	61	65	69	58
27		NOT POSSIBLE										

RESULTS ARE GIVEN IN DECIBELS

○ = DENOTES VEHICULAR TRAFFIC HEAVY

4 1/2" x 7 1/2" INCHES V.S. 10 P.S.A. KEUFFEL & ESSER CO.

1-7-82
SKR



O=NOT
built



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530 • (207) 443-3311

(TDL-3202)
May 4, 1982

*Rec'd
May 13, 1982*

Mr. Douglas Mason
Department of Planning
Portland City Hall
389 Congress Street
Portland, Maine 04101

RE: Industrial Noise Levels of Associated Shipbuilding Activities

Dear Mr. Mason:

This letter and enclosures will serve as an Addendum to Document 9876 A Section 3.9.3.4 Ambient Industrial Noise.

The various shipbuilding activities listed in enclosure 1 will be occurring at the Portland Facility. These activities will take place primarily in the AFDB-3 Drydock Basin where the largest percentage of production work will take place. The AFDB-3 Drydock wingwalls are approximately 58 feet high from the pontoon deck to the top of the wingwall. These wingwalls should significantly reduce the amount of transient industrial noise leaving the Drydock Basin.

Two other areas where modest levels of industrial noise will be produced are the Finger Pier and the Maine State Pier. These two piers will be utilized primarily as outfitting and minor repair.

In controlling noise which adversely impacts people, Bath Iron Works Corporation will make all efforts to limit the amount of fugitive industrial noise through a feasible engineering and administrative control program. Documented routine monitoring of industrial noise throughout the Portland Facility will be conducted by the Laboratory to ensure compliance with Portland, State and Federal regulation.

TDL-3202

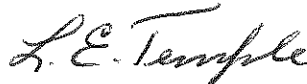
(2)

May 4, 1982

Enclosure 3, Ambient Industrial Noise Survey, will provide additional baseline readings for existing noise levels now present in the surrounding community.

Should you have any questions, please contact the undersigned at 443-3311, extension 2269.

Sincerely,

A handwritten signature in cursive script that reads "L. E. Temple".

L. E. Temple

LET/SKR/B

CC: HP
LET (2)

Ambient Industrial Noise Survey

May 12, 1982

1145

<u>Site #</u>	<u>Reading (dBA A scale)</u>
1	51
2	60
3	52
4	52
5	56
6	50
7	51
8	52
9	52
10	52
11	60
12	66

Congress Street, Munjoy Hill at Fire Station

Reading (A scale dBA)

70 Heavy Traffic

64 Heavy Traffic

The readings are mean values for a 5 minute survey.

Planning Board Report

#43-82

NOISE STANDARDS
TEXT AMENDMENT
TO I-3b ZONE

Submitted To:
Portland Planning Board
Portland, Maine
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I. INTRODUCTION

A. Proposed Text Amendment

The Portland Planning Board has received a request from Edwin P. Chester and Barbara A. Vestal of 107 Congress Street to amend the zoning ordinance to further restrict noise levels emitted from I 3b properties in the vicinity of residential uses, particular night activity (between 9 p.m. and 7 a.m.) (see next page)

This report describes the existing zoning ordinance standards, potential impact of the above proposed standards, and staff recommendations.

Notice has been sent to 50 area property owners and abutters.

B. Noise Monitoring in Portland

Noise monitoring has increased markedly in sophistication in Portland over the last year as a result of recent advances in both the understanding and technology of community noise surveillance and standards. This knowledge reflects a technical services grant received from the Environmental Protection Agency (EPA) in 1979 under the national "ECHO" program. Under the program, City staff were able to visit other cities and receive training in the physics of noise, development of community noise standards, and monitoring techniques. In addition, an extensive random (ambient) noise survey was conducted throughout Portland in 1979 and 1980 to test the adequacy of existing zoning noise standards.¹ Presently, two building inspectors have been trained in and have carried out numerous noise monitoring surveys in Portland over the past several months.

1 (see Appendix E-1981 EPA Community Noise Survey of Portland, Maine).

The Planning staff has initiated a review of current zoning noise standards as a part of the comprehensive zoning review now underway. As a result of this review, recommendations may be presented to the Planning Board during the coming months to amend the zoning ordinance to reflect upgrading of the current noise standards.

Proposed Zoning Text Amendment

Chester & Vestal

I-3b Zone Noise

To amend paragraph 2 of Section 602.13b of the City Zoning Ordinance (Municipal Code) concerning the I-3b Industrial Zones to read as follows (amended text underscored):

"2. Every use, except air-raid sirens or similar warning devices, shall be so operated that the volume of sound inherently and re-currently generated, measured by a sound level meter and frequency weighting network (manufactured according to standards prescribed by the American Standards Association), at any boundary of the lot upon which the use is located, does not exceed 75 decibels, unless the lot upon which the use is located is adjacent to a residential zone or is within 750 feet of a residential structure, in which case the said volume of sound does not exceed 75 dBA LEQ for an eight hour period, does not exceed 70 dBA LEQ for a twenty-four hour period, and does not exceed 55 dBA between 9:00 p.m. and 7:00 a.m., local time."

II. FINDINGS OF FACT

A. What is noise?

"Noise" means any sound which annoys or disturbs humans or which causes or tends to cause an adverse psychological or physiological effect on humans. "Sound" is the sensory perception which results when small vibrations of the air are transferred to the eardrum. The greater the energy or vibrations, the greater the loudness or intensity of sound.

Sound waves travel in straight lines and radiate out from the source. They are, however, easily reflected and refracted by many surfaces such as water, pavement, buildings, and the air itself so that sounds can be heard even if one is not in the direct line of sight of a sound source. In fact, the outstanding acoustics of some auditoriums are the result of the reflections which are all directed back from the walls and ceiling to actually increase the sound one would normally receive at a given distance from a source.

Sound can have a great variety of effects on man, either favorable or unfavorable. Unfavorable effects range from interference with activities to permanent health disabilities. Noise which is of such a nature that normal activities are disturbed can result in simple annoyance or danger resulting from the inability to hear approaching vehicles or warning voices. Physiological and psychological dangers are described in the enclosed EPA pamphlet "Noise: A Health Problem" (Appendix D).

Noise is measured with three major parameters: volume (or loudness, intensity, amplitude); frequency (or pitch); and time (continuous, impulsive, etc). The parameter of major use in community noise con-

trol is volume. Volume is measured in decibels (dB) as described in the following section(B).

Frequency determines the pitch: low-base or high-tenor pitch, for instance. In community noise monitoring, the major frequencies of interest are those sounds perceptible to the human ear and these are accurately recorded by an "A" scale of measurement (the "A" in dBA).

B. What are Noise Standards?

When the present Zoning Ordinance noise standards were developed several years ago, community noise was a relatively poorly understood environmental feature of the community. Recently, however, the ways of measuring and regulating community noise have greatly expanded. Community noise standards are developed to protect the public health and welfare with a margin of safety.

1. Decibels

As described above, noise levels are commonly measured in decibels (dB). Decibels measure sound pressure on a logarithmic rather than a linear scale due to the great range of volume which the human ear can sense. Sharply painful sounds are 10 million times greater in sound pressure than the least audible sound. In decibels this is simplified logarithmically so that 1dB= the least audible sound and 140 dB= a sharply painful sound.

For every increase of 10dB, a sound is perceived as twice as loud. Two sound sources are not directly additive; for instance, a 70 dB sound source near another 70 dB sound source produces a combined volume of 73dB, not 140dB. Appendix A lists representative decibel levels for common sounds.

2. Measurement of Community Exposure to Sound

Sound can be measured by various recording techniques, time durations and locations in order to identify or "describe" noise exposure. For purposes of conveniently monitoring community noise, a particularly good "description" is Equivalent Sound

Level (LEQ).

LEQ measures the average environmental noise levels to which people are exposed over a given period of time (such as yearly, 24 hours, 8 hours, 1 hour, or 15 minutes). LEQ is the sound level (A scale) that is "equivalent" to an actual time-varying sound level in the sense that it has the same total energy for the duration of the actual sound. Most sounds vary greatly in volume level with time. An average level can be derived using special instruments which indicate the noise exposure relative to easily understood standards. The City of Portland now uses such noise instruments which calculate the equivalent average sound level (LEQ) over a period of time. LEQ measurement allows for both continuous and intermittent noise production.¹

LEQ levels do not adequately address the annoying effects of short abrupt or infrequent intermittent sounds such as loudspeakers or short sirens, bells, etc. sometimes used in industrial activities. These effects must be addressed by other monitoring techniques.

1 (Appendix E, Section 6.1 P. 29)

3. Safe Noise Levels - LEQ Levels

The following maximum levels have been established by EPA or HUD as sufficient to protect public health and welfare with a margin of safety.

<u>Effect and Location</u>	<u>Level (Maximum)</u>
Hearing Damage (Noise at the ear)	LEQ (24) = 70dB for a 24 hour period ^{1,2} .
Activity interference and annoyance (in Outdoor Residential Environments where people spend a limited amount of time)	LEQ (24) = 55dB for a 24 hour period ^{1,2} .
Outdoor noise - normally unacceptable (for new construction proposed new housing developments)	LEQ (8) = 65dB for 8 hours in any 24 hour period. ³
Outdoor noise exposure level in an industrial work area	LEQ (8) = 75dB for 8 hours if LEQ (24) is 60dB for 24 hours ²

1= "Community Noise", U.S. EPA, NTIS 300.3, December 1971

2= "Protection Noise Levels", U.S. EPA, NTIS, November 1978

3= "Noise Abatement and Control: Department Policy, Implementation Responsibilities and Standards," U.S. Department of Housing and Urban Development Circular 1390.2, Change 1, August, 1971.

The particular significance of these noise standards as they relate to Portland's noise environment is discussed in the following section.

C. Sound Levels in Portland

The problem of correlating an actual measured community noise level to an impact on the health and welfare of people is a difficult one, as noted in the July, 1981 Community Noise Survey of Portland, Maine (CNSOP) (Appendix E). The CNSOP included an extensive analysis of the Portland sound environment.¹ This survey was conducted in order to "ascertain if the present noise regulations imposed by the City of Portland zoning ordinance are consistent with both the existing community noise levels and the effective control of possible future noise intrusions."

A wide variety of significant noise sources were identified in the CNSOP for the residential, business, industrial and waterfront zones and are summarized below:

1. General Noise Levels In Portland.

The CNSOP survey results² are recorded for both day and night noise levels in Portland and are reported in "LDN" levels.

LEQ= The constant sound level that, in a given situation and time period, conveys the same sound energy as the actual time-varying sound.

1 (Appendix E Section 3.0, 4.0 and 5.0, pp 11-28).

2 (Appendix E, Section 4.0 pp 24-25)

LDN= The 24 hour energy average sound level, with levels during the period 10 p.m. to 7 a.m. the following day increased by 10 dB over the field measured level (to reflect increased perception of people to night-time noise) before averaging. Therefore, a LEQ level is usually 10 to 15 dB less than the existing LDN level.

LDN levels averaged 60 dB in residential zones and 72 dB in commercial and industrial zones. ¹ This is equivalent to an LEQ of 45-50 in residential zones and 57-62 dB in commercial and industrial zones.

2. Auto, Truck, Air Traffic - Automobile and truck traffic is the major intruder in the Portland noise climate. ² These noise sources on public ways cannot usually be controlled through zoning ordinances but must be carefully considered in arriving at meaningful regulatory levels for stationary noise sources.

The noise monitoring techniques used in this survey account for auto and truck traffic by calculating average noise levels over time periods of approximately fifteen to twenty minutes. As a result, infrequent loud truck traffic does not significantly alter the average noise levels received at a monitored site. Such infrequent noise is not a major reason for developing zoning noise standards since zoning addresses other types of land use activities. Therefore, the LEQ levels measured over fifteen minute or twenty minute periods are convenient and useful standards.

Heavier traffic is associated with arterial streets which are

¹ (Appendix E, Table 4.1, p 24)

² (Appendix E, Section 5.0, p 26)

commonly located along or within business and industrial zones, which, in the case of Portland's zoning ordinance, contain higher noise standards.

The actual noise levels occurring at the boundary between the I 3b and residential zones (see map, next page) in the City have been surveyed at several time periods during the day and night. At these locations, night-time levels which exceed 55 dB are virtually all currently attributable to vehicular traffic on public ways. Night-time noise levels along Fore Street abutting a Residential (R-6) zone are normally between 60-63 dBA (LEQ) from 9 p.m. to 12:00 m.n. and fall to 56-58 dBA between 12:00 m.n. and 6 a.m. These levels are probably quite representative of the normal ambient noise levels along Danforth and Fore Street at the I 3b - R-6 and R-4 zone boundary.

D. Existing Portland Zoning Noise Standards

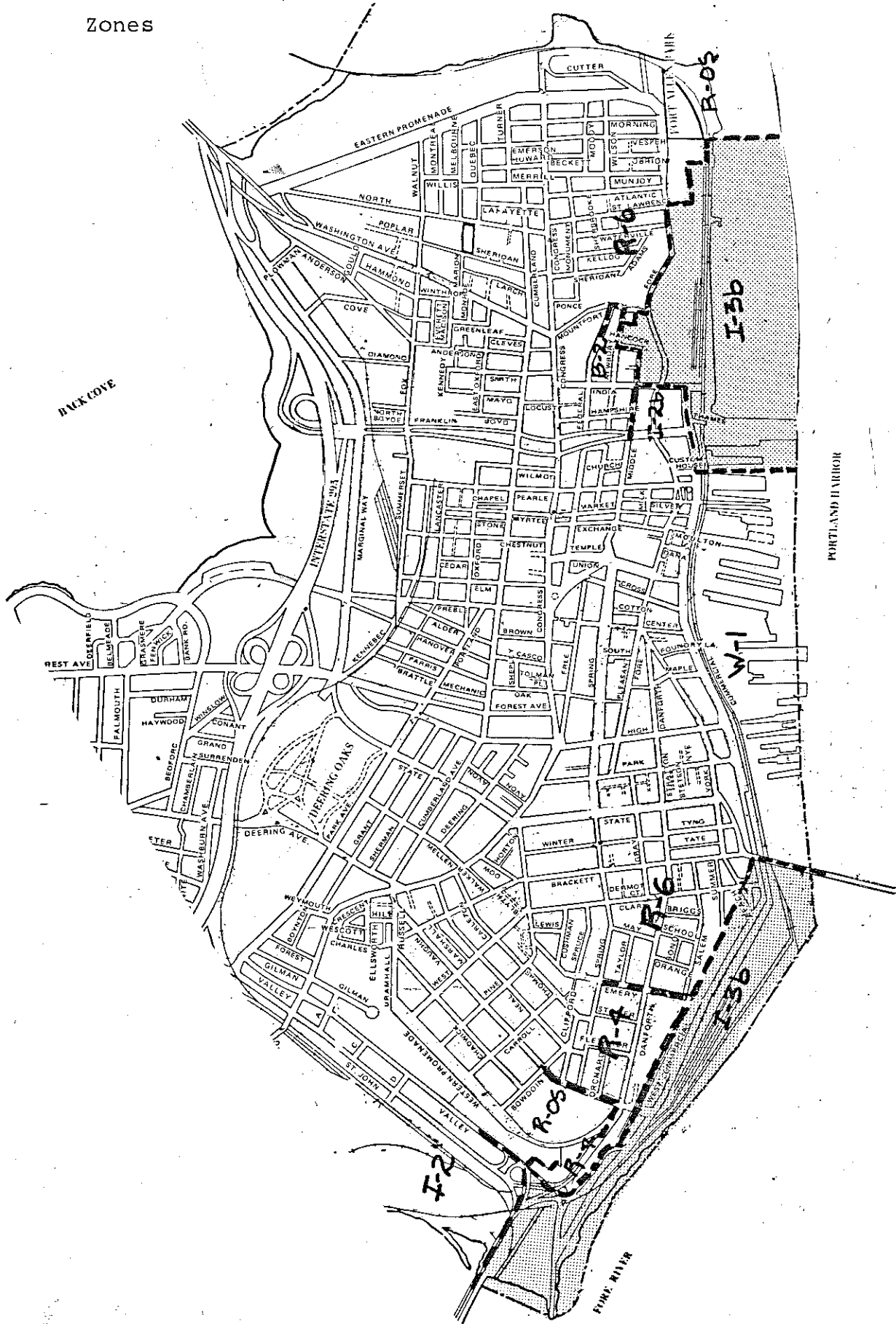
Portland is presently enforcing existing noise standards in the Zoning Ordinance using sophisticated noise ~~mon~~itoring instrument by trained Building Inspectors. The chart below indicates existing standards.

EXISTING ZONING NOISE STANDARDS

<u>Zone</u>	<u>Noise Level (dBA)*</u>	
	Day	Night (9p.m. to 7a.m.)
B1, B2	60	60
B3	70	70
I 1	60	60
I 2, I 2b	70	70
I 3, I 3b	75	75

Portland I-3b INDUSTRIAL

Zones



<u>Zone</u>	<u>Noise Level (dBA)*</u>	
	Day	Night (3p.m. to 7a.m.)
I d	75	65**
I P	55	45
W 1	75	75

*Noise level is measured from a property boundary of the site of the noise source in LEQ for approximately 20 minute periods.

**Recycling operations within 500' of a residential structure shall not be conducted.

The CNSOP study ¹ indicated that the existing standards for the business and industrial zones are compatible with levels measured during the noise survey and should probably not be changed. These levels are adequate with respect to both the existing noise climate and the protection against future noise intrusions for business and industrial zones.

No standards exist in the current Zoning Ordinance for residential areas. They are protected presently only by virtue of their distance from business and industrial zones. As shown in Section B.3 above, LEQ levels of 55dB indicate safe noise conditions for 24 hour periods for residential areas. Zoning noise standards should aim toward conformance with these levels wherever possible.

1 (Appendix E. Section 61, 7.0 p29-p30)

The CNSOP study (Appendix E, Sect-on 611, 7.0 pp 29-30) recommends that Portland's residential zones should have regulatory (LEQ) levels of 60 dB (day) and 55dB (night) to assure both a safe environment and realistic regulatory level for enforcement.

E. Proposed Text Amendment (Chester and Vestal)

1. Proposed Amendment

The proposed (Chester and Vestal) text amendment would restrict night-time (9p.m. to 7a.m.) noise monitored at a property boundary of the noise source in an I3b zone as follows (see Section I.B).

a. Existing Zoning - I3b Zone Noise

<u>Day</u>	<u>Night</u>
75dB ¹	75dB ¹

b. Proposed (Chester and Vestal) Zoning - I3b Zone Noise

<u>Day</u>	<u>Night</u>
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For uses on lots <u>not</u> adjacent to residential zone or greater than 750 feet from resid. structure	75dB ¹	75dB ¹
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For uses on lots adjacent to residential zone or less than 750 feet from resid. structure	75dB ¹	55dB ¹
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and 75dB LEQ measured over a 24 hour period

70dB LEQ measured over an 8 hour period

¹= presently interpreted as LEQ for an approximately 20 minute period, and measured at the property boundary.

The proposed amendment uses levels presented by the EPA as noise levels which protect the health and welfare of the community in residential areas.

2. Staff Analysis

The general intent of this amendment is appropriate. As described in Section D above, residential zones have no existing noise standards. They are protected presently only by virtue of their distance from business and industrial zones. Areas in residential zones which directly abut business and industrial zones are only protected by limits applied to areas at business or industrial property boundaries.

For example it is conceivable that a residence in an R-6 zone could be located twenty feet from a "permitted" 75dB noise source. Such noise levels are significantly above levels which should be considered acceptable by any standards (see Section B.3 above).

The above example is related to the present proposed amendment because it illustrates hazardous levels of noise which could exist at residential property boundaries under current zoning of industrial activities.

In attempting to protect residential zones from industrial noise sources through fair and practical zoning regulations, the proposed amendment is deficient in the following ways:

- 1) The 75 dBA LEQ - 8 hour and 70 dBA LEQ-24 hour standards are reasonable for protection of residential activities but serve as impractical and probably unnecessary regulatory standards for zoning. These standards would require 8 hour or 24 hour continuous monitoring. Alternative standards are proposed by staff in Part III below which may generally satisfy the same intent;
- 2) The standards are proposed to apply to locations at the property

boundary of the industrial source rather than the property boundary of the receiving residential activity but the receiver is the major concern indicated by the proposal. The intent should be to protect the receiver in as direct a manner as possible. The staff has recommended such an alternative procedure in Part III below:
and

- 3) The proposed standards would apply to industrial sources within 750 feet of any residential structure. The application of such a standard to nonconforming residential uses in industrial zones would clearly constitute a special consideration for such structures which is inconsistent with the intent of the zoning ordinance in such cases.
- 4) Given the actual ambient noise conditions due to vehicular traffic in the areas and times concerned, 55dB is probably unreasonable (see Section II C.2).

III. STAFF RECOMMENDATION

A. Proposed Staff Amendment

The proposed (Chester and Vestal) noise standard text amendment to the Industrial (I3b) Zone clearly demonstrates a problem to address with the existing noise standards which offer virtually no protection of residential zone properties near Industrial Zones. This problem had been identified in a technical report to the staff by EPA which recently surveyed noise conditions in Portland as described in the sections above.

The staff is currently reviewing the zoning ordinance in order to identify such problems and bring recommendations for revision of the Zoning Ordinance to the Planning Board in a comprehensive manner. However, the staff proposes the following amendment to address the immediate request of Chester and Vestal. The following amendment is proposed to protect residential zones from I3b noise activities and in a manner consistent with present zoning enforcement methods.

B. PROVISIONS FOR EXISTING INDUSTRIAL ACTIVITY

Existing I-3b industrial activity include some significant night-time noise-producing uses. The proposed staff amendment could potentially restrict the night-time activity of existing industries beyond existing regulations. Therefore it is critical to set night-time noise standards which will not unnecessarily restrict such activities.

The City's Corporation Counsel (Appendix F) has determined that the City may designate any date, or no date, for a grandfathering provision which would limit applicability of a new standard to uses initiated after such a date. The existing ordinance grandfathers all I3b industries existing prior to June 5, 1957 with respect to noise. The staff recommends that such a provision not apply to new noise standards for the following reasons:

- a) Such grandfathering provisions are virtually impossible to administer for noise. A "change" of use, such as an expansion or addition which would change the "vested rights" of a property owner, is difficult to document with respect to noise since no site is regularly monitored for noise. Fixed standards applying to all industrial activities, regardless of length of use, are practical to enforce by monitoring with available techniques.
- b) Reasonable standards which restrict all industrial activities in an equal manner provide greater protection to all residential properties than if grandfathered industries were allowed.

Proposed Staff Amendment

Amend Paragraph 2 of Section 602.13B, External Effects, to read:

"Every use except air-raid sirens or similar warning devices, shall be so operated that the volume of sound inherently and recurrently generated, measured by a sound level meter and frequency weighting network (manufactured according to standards prescribably the American Standards Association), at any boundary of the lot upon which the use is located, does not exceed 75 decibels in the I-3 Zone and in the I-3b Zone. In the I-3b Zone such volume does not exceed 75 decibels LEQ at any time at the property boundary, does not exceed 65 decibels LEQ between 9:00 P.M. and 12 Midnight and does not exceed 60 decibels LEQ between 12 Midnight and 6 a.m., local time, as measured during an approximately 20 minute time period at any residential zone boundary for any such use regardless of the date at which it was established."

Amend Section 602.13B, first sentence, External Effects, to read:

B. Any use established in this Industrial Zone after June 5, 1957 unless otherwise specified below, shall be so operated as to conform with the performance standards set forth herein.

Amend Section 602.27, Definitions, to include the following:

LEQ or Equivalent A-Weight Sound Level: The constant sound level that, in a given situation and time period, conveys the same sound energy as the actual time-varying A-weighted sound.

C. EXEMPTIONS AND APPEALS

In addition to the activities (air raid sirens and similar warning devices) specifically listed as exempted to the existing and proposed standards (602.13B, paragraph 2), water vessels, vehicular traffic on public streets and ways, and interstate railway uses are not required to meet noise standards of the zoning ordinance.

In addition, any new standards could be appealed in the process for seeking a variance from such standards through the Zoning Board of Appeals.

D. BASIS OF RECOMMENDATION

The staff-proposed amendment accomplishes the following objectives:

- a) Retains existing noise standards for I3b activities at the property boundary;
- b) Protects residential zone property from excessive noise I3b Industry at night from either existing or future industrial activities by establishing standards at the residential zone line which are safe and practical, based on actual surveys and a technical analysis of Portland's noise environment (see Sections B and C above for impact on existing activities);
- c) Provides standards interpreted in 20 minute LEQ measurements which clearly indicate the average noise conditions of the site with instruments which the City presently uses for enforcement; and
- d) Protects I3b industry from standards which may be too restrictive due to existing background noise conditions, such as vehicular traffic.



STATE OF MAINE



DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION FOR AIR EMISSION LICENSE

Bath Iron Works Corporation

Corporate Name

Division of Congoleum

Mailing Address

Emission Location

700 Washington Street

Street

40 Commercial Street

Location

Bath

Municipality

Portland

Municipality

04530

Zip

443-3311

Telephone

Cumberland

County

43° 40' N

I-A

70° 15' W

A.Q.C.R.

U.T.M. Coord.

L. E. Temple (Extension 2269), Laboratory and Environmental Manager

Responsible Officer to Contact During Day

Title

Ship Repair and Overhaul

Major Activity

1000

Number Employed

24 Hrs / day

6 Days / wk

52 Wks / year

Hours of Operation

Department regulations require that a copy of your air emission license application be filed for public inspection with the town or city clerk of your municipality.

By signing this application the applicant certifies that a duplicate copy has been filed with the town/city clerk of his municipality.

[Signature]
Signature of Owner or Responsible Officer

Sr. Proj. Eng.
Title

5-10-82
Date

(Please read guidelines before filling in form)

SECTION A		FUEL BURNING EQUIPMENT			PARTICULATE EMISSIONS				
Boiler No.	Design Capacity (BTU/hr)	Firing Rate (gal/hr)	Type Fuel	Control Device (Details in Sec.E)	Stack No.	EMISSION (If Tested)		FOR D.E.P. USE ONLY	
						lb/hr	Method	Calculated	Allowable
1	25.125x10 ⁶	426	N.G.	Modulating Burner	1				
2	25.125x10 ⁶	426	N.G.	Modulating Burner	1				
3	25.125x10 ⁶	426	N.G.	Modulating Burner	1				
*Burner on Boiler will give 80% efficiency - BIW will be adding an O ₂ trim system which will get 88% efficiency.									
*Emission for Natural Gas particulates = 5-15/lb/10 ⁶ Ft. ³									
*N.G.= Natural Gas (1000 BTU per cu. ft.- 59,000 BTU/Gal.- 59 Cu.Ft. per Gal.									

*Firing Rate - Boilers will not be fired at 100% except for emergency. Normal rate will be at 80% or 341 Gal.

TOTAL FUEL CONSUMPTION
BY MONTH FOR 1984

January	613,220	Gallons	(36,180,000 CuFt)	July	0	Gallons
February	613,220	Gallons		August	0	Gallons
March	400,000	Gallons		September	20,000	Gallons
April	200,000	Gallons		October	100,000	Gallons
May	0	Gallons		November	100,000	Gallons
June	0	Gallons		December	400,000	Gallons

TOTAL 2,452,572 GALLONS or 14.47 x 10⁷ Cu. Feet of Natural Gas

$$\begin{array}{r} 2 \\ 17 \\ \times 3 \\ \hline 51 \end{array}$$

249

150	rental
40	regist.
51	meals
<hr/>	
241	

Memo says streets in old part were altered.

Q's already asked -
 work w/ Rick on land use issues
 safety, jobs, transp. other departments,

landuse + design are our dept's issues...
 focus on things we can impact.

Site Plan Review type categories...

PAT... T.H.'s baby... careful w/ public + press. Staff team
 letter w/ copies of app.'s

Land use issues - city to look at impacts we can affect
 things we can control.

housing we can't affect, jobs - targeted jobs is limit of our involvement.
 no targeted jobs on BLW project, Tim refuses to go into it.

Tim thinking of pkg an offer sale of Maine State Park.

2 traffic studies - short + long range - build or buy a dry dock.
 unknown number of employees - how many parking spaces req'd?

BIW (2)

1,000 employees, 300 pkg. spaces,
barbed wire, 8 acre site, expansion in future
SPR must include total site rather than incremental.

Q's West Side of state pier, beverage warehouse,
Dave Brenner, mtg on Oct 15,
housing + jobs, noise, smoke, etc. "complicated issues"
mtg at Cumming Ct, Number of cranes, in

Hal Plummer, BIW person.

City hospital, Naval personnel berthing facility.
Tony Forgiorno, concept disc. Oct 13 about
facility; city lease facility.

CPO's and below, officers in hotels, renting apartments.

Jobs, Housing, Population,

Policy on dwelling unit conversions...

Parking report by consultants for Portland,
Public transportation - every 1/2 hr, 20 min's rush hour,
shuttle service sponsored by Navy
residential land higher than industrial area,

7:30 - 4:00 -

4:45 - 1:15

Shift hours.

3

BIW

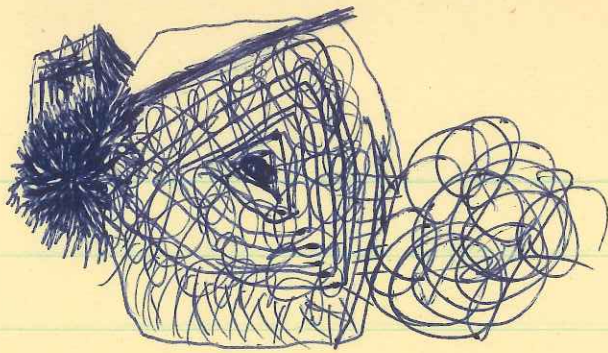
15-20 trailer trucks deliveries per shift (day time)
350 vehicles day shift / 1000 people

early shift gets pkg spaces.

pkg garage ~~Boyer~~ + Commercial + Franklin St.

disruptive uses - fast food, convenience stores / gas sta.

Monitoring MIT impacts. neighborhood study - stable -



Bath Iron Works

More Details -

— First involved - w/ BIW power day - heard Boston was expansion place. Leads + contacted BIW -
Clear they wanted to stay in Maine - Port - w/ facility
Boston - had dry dock + berthing facility - 500,000
a year - available

Port. Realized could not compete - unless had similar offer
Ontario the state - put together package - to be in competitive
position. Had to look at cargo port facilities -
after talking to BIW - 2000 jobs by 1986 - all new
jobs. Cargo - could not forecast jobs etc.

— Patrick got back to BIW - many approx. by deposit uses
base

- ① Loyalty to state
- ② Concern about movement - 150 miles apart -
- ③ quality of labor

Put together package 46 mil dollars - 15 mill each
G. O Bonds - money used to purchase state pier -
IRW. - only use existing size. Purchase C. Nat. Land +
build 800 feet pier

15 mill. - bonds floated - 27 mill - over 20 years

23 - lease payments

41 - guaranteed person

These figures - 100, mill over 20 years sales + income tax.

City agreed - City Hospital - 500 rural personal -
on lease for 20 years. 3-6 months personal
being overhauled. Profit - multi million dollars -

Dry dock - } Payout to State.
4.6 for Pier }

Buy out Schedule - built into agreement

If going by December 1983 -
Friday - being in Augusta - on Amendment.

2 referendums - City wide

Sept. State wide

1st of Jan - construction on Pier
Spring new facility

Sept 1983 - Goal for whole complex

Manojay facility - Tom's factory - West River -
Old Port -
Monjoy Hill
City Hospital

Issues raised - Impact on housing - Rental
+ traffic control
Noise
Bus & Protection

Challenges - take negative impact of lunar work
ie Parking → need additional area for waterfront
area. Balance public parking - & ~~City~~ BICW lease
could put package together

- 5.5 in equipment
23 mill - lease pay.
4 mill - property

12 mill in interest } Spending
15 mill - in principal }

Continue to sustain leases in short run -
holding valuable asset -

Have to shift out of operating budget -
larger percentage to

F/only 15 mill -

G.O. issue - Pushes up per capita debt
Bond rating look + valuation

last city - to have Triple A rating -

Strength of local economy - important to Bond rating
Firm.

Commercial sector & f

Not many cities - reduced 15% of work force
cap property tax

States - Calif

BIW ISSUES - PLANNING DEPARTMENT

The BIW and City Hospital project has been reviewed on a preliminary basis by staff for site plan and community impact issues. As more information becomes available on these projects, the full scope of these issues should become more clearer. The following is an outline of preliminary recommendations on non-site plan issues that should be addressed in the process of reviewing projects. As specific details of these projects are known additional recommendations may become evident.

CITY HOSPITAL - BRIGHTON AVENUE AREA

1. Pedestrian Safety

Sidewalks, traffic lights, cross walks and other pedestrian amenities should be installed as appropriate for greater pedestrian safety in the immediate area of the hospital particularly for pedestrian movements crossing Brighton Avenue to the Pine Tree Shopping Center.

2. Neighborhood Planning

As perhaps part of a larger study of Portland's neighborhoods a planning effort should be developed to stabilize existing residential and business districts in specific neighborhood areas in conjunction with ^{other} planning activities. For the Brighton Avenue - City Hospital area this could entail the following diverse planning issues:

- housing
- economic development (re: neighborhood business, encouraging stable v. transient business)
- strip development
- public infrastructure improvements
- recreation and social planning

3. Limit Commercial Zone Changes

There are existing commercial buildings and business zoned land already vacant in this area. The vacancies include portions of the Pine Tree Shopping Center and a gas station. Given this apparent surplus of business zoned land, there appears to be no compelling ^{to expand the business zone in this area} argument. This position is further justified by the presence of a shopping center and other businesses near the site in Westbrook. Recent experience with road side oriented businesses particularly gas stations indicate these uses are not particularly stable.

BIW ISSUES - PLANNING DEPARTMENT

Key: MSP= Maine State Pier - B.I.W.
 MHOP= Munjoy Hill-Old Port
 CH = City Hospital
 B= Brighton Ave. Neighborhood

ISSUES	IMPACT	LOCATION				RESOLUTIONS
		MSP	MHOP	CH	B	
A. Bulk, Location, Height -Views -Character (visual)	public visual access to water		x			Zoning and site plan(setback,ht,bulk require- ment);ACC plan
	tourism	x	x			Zoning,site plan,ACC plan
	residential	x	x	x	x	" " " " "
	open space	x	x	x	x	" " " " "
	historic socio-cultural(Longfellow,etc.)	x	x			" " " " "
	commercial	x	x	x	x	" " " " "
	"entrances - image"	x		x		" " " " "
-Recreation/Open Space <i>pedestrian access to W front path from Fallon to MSP</i>	facilities for sailors, neighbors	x		x		site plan
		x	x			
B. Noise -Traffic autos,trucks -Industry -People -recreation,parties	residents		x	x	x	zoning, reroute, time regulation
	residents		x			zoning, site plan (physical buffers, distance, quiet source, insulate receiver), DEP
	residents			x	x	site plan (buffer or distance),nuisance ordinance
C. Landscaping (and see A. above)						
D. Traffic	on street and off street ^{parking} availability for: BIW	x		x		time/shift management,site plan,zoning
	nearby commercial		x		x	" " " " "
	nearby residential		x		x	" " " " "
	nearby tourist		x		x	" " " " "
	nearby industrial		x		x	" " " " "

through
 restrict traffic
 down Wash. Ave
 India St to
 Franklin Ave.
 instead.

Key: MSP= Maine State Pier - B.I.W.
 MHOP= Munjoy Hill-Old Port
 CH= City Hospital
 B= Brighton Ave. Neighborhood

ISSUES	IMPACTS	LOCATION				RESOLUTIONS
		MSP	MHOP	CH	B	
D. (cont) Traffic						
-pedestrian issues, sidewalks	pedestrian safety	x	x	x	x	(width, maintenance) site plan, CIP
-crosswalks	" "	x	x	x	x	(adequacy with regard to traffic volume) site plan, CIP
-traffic signalization	" "	x	x	x	x	(adequacy with regard to crosswalks) site plan CIP
-curbcuts	" "	x	x	x	x	(location, width) site plan, CIP
-traffic flow-shortcuts & street traffic capacity	traffic congestion	x	x			rerouting, traffic signals
	noise (see B)	x	x			" " "
-trucks loading	traffic congestion	x				zoning, site plan
-rail	" "	x	x			ACC plan, site plan
-public transportation	access for use by: pedestrian commuters other towns/overall metro	x x	x	x	x	site plan
E. Zoning (and see A,B,C,D)						
-housing (see F)						
-recreation/open space	access (to water)	x	x			site plan, zoning ACC plan
	quantity		x	x	x	" " " " "
	quality		x	x	x	" " " " "
-business and tourism	type/compatibility		x		x	zoning, variances
	quantity		x		x	regulate curb cuts, zoning
	transient businesses		x		x	zoning, variances
-industry	type/compatibility		x			zoning, variances
	quantity		x			regulate curb cuts
-pornography	business, residents		x		x	zoning
-signage-temporary	business, traffic congestion		x		x	city temporary sign regs.
-vendors	business, traffic congestion	x	x	x		city vendor regs.
	pedestrian safety					

*highway sign.
 notice to B.I.W. empl.
 promised B.I.W. shelter
 on emp call.*

Key: MSP= Maine State Pier - ~~B.I.W.~~
 MHOP= Munjoy Hill-Old Port
 CH= City Hospital
 B= Brighton Ave. Neighborhood

ISSUES	IMPACTS	LOCATION				RESOLUTIONS
		MSP	MHOP	CH	B	
F. Housing						
-quantity	market, quality of housing		x		x	condo conversion; zoning, variances; PUD; city monitors gentrification, etc; city-owned land; state and fed. aid; zoning bonuses; other incentives
-quality	housing market, social/health/welfare of residents, character and demographics of neighborhood		x		x	same as above
-transient	see above		x		x	same as above, encourage hotels
G. Utilities						
-air - visible	residents, tourism (dust odors, smoke)	x	x			zoning, DEP, site plan
invisible	same as above	x	x			
-liquid - water	capacity of system	x				PWD
storm: quantity	capacity of system	x	x	x	x	site plan, wetlands alteration permit, corps of eng., etc.
quality	clog or pollution in system	x	x	x	x	same as above
sanitary	capacity of system	x		x		site plan
-solid disposal	storage and disposal sites?	x	x	x	x	site plan
-hazardous wastes	fire, other	x	x			site plan, DEP
energy	see CCEMP, <i>energy consumption natural gas/electricity</i>	x		x		CCEMP
H. Fire						
-access	safety	x		x		site plan, building permit

Key: MSP= Maine State Pier
 MHOP= Munjoy Hill-Old Port
 CH= City Hospital
 B= Brighton Ave. Neighborhood

ISSUES	IMPACTS	LOCATIONS				RESOLUTIONS
		MSP	MHOP	CH	B	
H. Fire (cont) -hazardous wates(see also G)	safety	x				DEP
I. Lighting (exterior)	residents vehicle flow		x		x	site plan site plan
J. Dredging						
K. Vegetation and Wildlife (terrestrial & marine)						
L Soils						
M. Education -family pop/housing changes	school service and location		x		x	?
N. Social Services						
O. Security/Public Safety						
P. Job Oppourtunties						
Q. Water Transportation						
R. Crime	<i>Rape incidence... etc.</i>		x			<i>police protection.</i>

**EXHIBIT 3
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ER-ENCES ³
Preferred Measures	Fallback Measures	Comprehen-sive Plans, Cumulative Effects, Large Rezonings	Small to Medium			
			Resi-dential Rezonings	Commercial-Industrial Rezonings		
I. Local Economy						
<i>Public Fiscal Balance</i>						
1. Net change in government fiscal flow (revenues less expenditures).		x			<i>Public revenues:</i> expected household incomes by residential housing type; added property values. <i>Public expenditures:</i> analysis of new service demand; current costs; available capacities by service.	M
<i>Employment (also indirect)</i>						
2. Change in numbers and percent employed, unemployed, underemployed, by skill level.	2a. Number of net new long-term and short-term jobs provided to local area.	x		x	Direct from new business; or estimated from floor space, local residential patterns, expected immigration, current unemployment profiles.	
<i>Wealth</i>						
3. Change in land values.		x	x	x	Supply and demand of similarly zoned land, environmental changes near property.	
II. Natural Environment						
<i>Air Quality</i>						
<i>Health</i>						
4. Change in air pollution concentrations by frequency of occurrence and number of people at risk. ⁴	4a. Change in air pollutant concentrations relative to standards.	x		x	Current ambient concentrations, current and expected emissions, dispersion models, population maps.	K
	4b. Change in pollutant emissions relative to emission "budgets" ⁵ or targets.					
<i>Nuisance</i>						
5. Change in occurrence of visual (smoke, haze) or olfactory (odor) air quality nuisances, and number of people affected. ⁶	5a. Changes in the likelihood that air quality nuisances (qualitative judgment) will occur or vary in severity.	x		x	Baseline citizen survey, expected industrial processes, traffic volumes.	K,C
<i>Water Quality</i>						
6. Changes in permissible or tolerable water uses and number of people affected—for each relevant body of water.	6a. Change in water pollutant concentrations (relative to standards), for each water pollutant.	x		x	Current and expected effluents, current ambient concentrations, water quality model.	K
	6b. Change in amount discharged into body of water relative to effluent "budgets" for each pollutant. ⁵					
<i>Noise</i>						
7. Change in noise levels and frequency of occurrence, and number of people bothered. ⁶	7a. Changes in traffic levels, sound barriers, and other factors likely to affect noise levels and perceived satisfaction.	x	x	x	Changes in nearby traffic or other noise sources, and in noise barriers; noise propagation model or nomographs relating noise levels to traffic, barriers, etc.; baseline citizen survey of current satisfaction with noise levels.	K,C

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REFERENCES ³
Preferred Measures	Fallback Measures	Comprehensive Plans, Cumulative Effects, Large Rezonings	Small to Medium			
			Residential Rezonings	Commercial-Industrial Rezonings		
<i>Wildlife and Vegetation</i>						
8. Change in diversity and population size (abundance) of wildlife and vegetation (including trees) of common species. ⁷	8a. Changes in amount and quality of (a) habitat by animal type; (b) green space, or (c) number of mature trees.	x	x	x	Wildlife and vegetation inventory; expected removal of cover or changes to habitats.	K
9. Change in numbers of rare or endangered species.	9a. Same as 8a.	x	x	x	Same as 8a.	K
<i>Natural Disasters</i>						
10. Change in number of people and value of property endangered by: flooding, earthquakes, landslides, mudslides, and other natural disasters, by frequency of occurrence.	10a. Change in flooding frequency. 10b. Change in percent of land with impermeable cover relative to "budgeted" levels. ⁸	x	x	x	Flood plain and other hazard maps; changes in local topography and sewerage; change in percent permeable cover; stream flow and hydraulic models.	K
III. Aesthetics and Cultural Values						
<i>Attractiveness</i>						
11. Change in number and percent of citizens who are satisfied with neighborhood appearance.	11a. Disturbance of physical conditions currently considered attractive; removal/improvement of conditions currently rated unattractive.	x	x	x	Baseline citizen survey of ratings of current attractiveness and identification of problems and assets; visual simulation of proposed development using retouched photos, drawings or 3-D models for assessing future preferences using a sample of citizens.	C
<i>View Opportunities</i>						
12. Change in number or percent of citizens satisfied with views from their homes (or businesses).	12a. Number of households (or businesses) whose views are blocked, degraded, or improved.	x	x	x	Baseline citizen survey; geometric analysis of structures to identify view opportunities before and after development.	C
<i>Landmarks</i>						
13. Number and perceived importance of cultural, historic, or scientific landmarks to be lost, made less accessible, or made more accessible.	13a. Rarity of landmark and distance to nearest similar examples of landmarks to be lost (or made more accessible).	x	x	x	Inventory and importance ranking of landmarks; survey of citizens and scholars regarding importance.	C
IV. Public and Private Services						
<i>Drinking Water</i>						
<i>Availability</i>						
14. Change in frequency duration and severity of water shortage incidents, and number of people affected.	14a. Change in likelihood of increased water shortages, and number of people likely to be affected.	x		x	Current usage, expected new demand; projected supplies.	K
<i>Quality</i>						
15. Change in salinity and other indices of drinking water quality and safety, and number of people affected. ⁹	15a. Changes in effluents or purification processing likely to affect taste or other qualities of drinking water.	x	x	x	Expected effluents from new development; purification process used; current and expected usage; profile of underground water system.	K

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ERENCES ³
		Comprehensive Plans, Cumulative Effects, Large Rezoning	Small to Medium			
Preferred Measures	Fallback Measures		Residential Rezoning	Commercial-Industrial Rezoning		
<i>Hospital Care</i>						
<i>Emergency Care Availability</i>						
16. Change in number of citizens beyond x minutes travel time from emergency health care.		x	x	x	Maps of population distribution and emergency facilities; number of emergency vehicles (if any), expected calls, and dispatch policy.	
<i>Availability/Crowdedness</i>						
17. Change in potential bed need versus bed supply of area hospitals, by type of clinical service (medical, surgical, pediatric, obstetrical).		x	x		Current patient hospital bed days per 1000 population by sex-age group and medical service; available bed capacities; expected population by sex-age group.	
<i>Crime Control</i>						
<i>Crime Rate</i>						
18. Change in rate of crimes in existing community.	18a. Expert rating of change in crime hazard.	x	x	x	Current crime rates and case histories of similar neighborhood changes; changes in community lighting, sightlines, hiding places, people mix.	
<i>Feeling of Security</i>						
19. Change in percent of people feeling a lack of security from crime.	19a. Change in people mix, police patrolling, and physical conditions (lighting, sightlines, potential hiding places, etc.) likely to affect feelings of security.	x	x	x	Baseline citizen survey plus the data above.	C
<i>Fire Protection</i>						
20. Change in fire incidence, property loss, and casualty rates.	20a. Expert ratings of change in likelihood of fires, fire spread, rescue hazards.	x	x	x	Incidence rates by occupancy types; people mix; available water supply; available fire suppression equipment and manning; likely building materials; site plan if available.	
<i>Recreation—Public Facilities¹⁰</i>						
<i>Overall Satisfaction</i>						
21. Change in number and percent of households satisfied with public recreation opportunities.	21a. Measure 23 (change in accessibility) and changes in other physical conditions (noise, air quality, hazards, crowdedness) likely to affect satisfaction, and number of households potentially affected.	x	x	x	Baseline citizen surveys, and expected changes in facilities and environment (noise, air quality, dangers).	C
22. Change in number or percent of households using facilities (viewed relative to nominal capacity), by facility. ¹¹	22a. Same as above.	x	x	x	Citizen survey.	C

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ERENCES ³
Preferred Measures	Fallback Measures	Compre-hensive Plans, Cumulative Effects, Large Rezoning	Small to Medium			
			Resi-dential Rezoning	Commercial-Industrial Rezoning		
<p><i>Accessibility</i></p> <p>23. Change in number and percent of households with <u>access to various types of recreation facilities within x minutes travel</u>, by type of facility and mode of travel.¹¹</p> <p><i>Recreation—Informal Settings</i></p> <p><i>Overall Satisfaction</i></p> <p>24. Change in number or percent of households satisfied with <u>recreation in informal outdoor spaces in neighborhood</u>.</p> <p><i>Availability</i></p> <p>25. Change in availability of informal physical settings for recreation and number of people affected.</p> <p><i>Education</i></p> <p><i>Accessibility/Convenience</i></p> <p>26. Change in number and percent of households satisfied with accessibility of schools.</p> <p>27. Change in number and percent of students within x minutes, by type of school and travel mode.</p> <p>28. Number and percent of students having to switch schools or busing status.</p> <p><i>Crowdedness</i></p> <p>29. Change in school crowdedness indicators; e.g., student-teacher ratios, number of shifts.</p> <p><i>Transportation—Mass Transit Satisfaction</i></p> <p>30. Change in number and percent of households satisfied with mass transit service.</p>	<p>24a. Measure 25 (availability) and change in other physical condition likely to affect satisfaction and number of households potentially affected.</p> <p>26a. Change in location of schools, and physical conditions around schools or along routes to schools that are likely to affect satisfaction with accessibility.</p> <p>30a. Expected changes in scheduling, routing, or crowdedness, and number of households likely to be affected.</p>	<p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p>	<p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p>	<p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p> <p>x</p>	<p>Maps of facilities and distribution of population; citizen survey of travel mode.</p> <p>Baseline citizen survey and observation of current usage patterns; physical environment changes expected.</p> <p>Changes in open space and physical environment expected.</p> <p>Citizen survey; changes in available path, nearby traffic conditions en route to schools.</p> <p>Map of school and population distribution; busing records.</p> <p>Relation of capacity to expected demands, and school board policy.</p> <p>Citizen survey; expected change in noise, traffic hazard, air quality, other hazards.</p> <p>Citizen survey, expected service changes, expected change in factors affecting satisfaction.</p>	<p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p>

recreation access

?

?

?

mt. service 6 B1W?

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ERENCES ³
Preferred Measures	Fallback Measures	Comprehensive Plans, Cumulative Effects, Large Rezonings	Small to Medium			
			Residential Rezonings	Commercial-Industrial Rezonings		
	30b. For retrospective studies: changes in number and percent of (a) households and (b) trips using public transit.	x			Usage levels, from fares and surveys.	C
<i>Accessibility</i>						
31. Change in number and percent of citizens residing (or working) within x feet of public transit stop.		x	x	x		C
<i>Transportation-Pedestrians Satisfaction/Accessibility</i>						
32. Change in number and percent of households satisfied with walking conditions and walking opportunities in their neighborhood. ¹²	32a. Change in physical conditions (sidewalks, noise, etc.) affecting current satisfaction or dissatisfaction with walking conditions, and number of households likely to be affected.	x	x	x	Baseline citizen survey, estimated changes in physical walking conditions; additions or removals of desired destinations.	C
<i>Safety</i>						
See measures 33 and 34 below.	32b. The group of measures of accessibility to shopping, schools (27), recreation (23), public transit (31).	x	x	x	N/A	
<i>Transportation-Private Vehicles Safety</i>						
33. Change in number and percent of households satisfied with traffic safety (vehicle and pedestrian).	33a. Change in physical conditions (e.g., traffic volumes, sidewalk width, barriers from traffic) likely to affect perceived safety, and number of households likely to be affected.	x	x	x	Baseline citizen survey, changes in traffic and traffic controls; circulation patterns.	C
34. Change in number and severity of accidents per 1,000 persons by pedestrians and riders.	34a. Change in number and severity of traffic hazards created (may include changes in traffic volume and speed, sightlines, traffic controls), and number of people potentially affected.	x	x	x	Accident frequency and causation data; changes in traffic and traffic controls, circulation patterns, expected traffic volumes.	
<i>Travel Time</i>						
35. Change in vehicular travel times between selected origins and destinations, by time of day and day of week.	35a. Change in "level of service" for selected roads and intersections, by time of day. ¹³	x		x	Current traffic volumes; changes in street layout, width and traffic controls; estimated net new vehicle trips.	

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REFERENCES ³	
		Comprehensive Plans, Cumulative Effects, Large Rezoning	Small to Medium				
Preferred Measures	Fallback Measures			Residential Rezoning	Commercial-Industrial Rezoning		
<i>Parking Availability</i>							
36. Change in average time needed to find acceptable parking space within x feet of residence (or desired destinations) in neighborhood of development, by time of day and day of week.	36a. Change in the ratio of demand for parking spaces to supply of spaces within x distance of destinations in neighborhood of development, by type of space (metered, all-day, sheltered, etc.)	x	x	x	Current spaces available; new demand and supply; math model for estimating parking times (not needed for 36a).		
37. Percent of drivers finding neighborhood parking satisfactory.	37a. Same as 36a.	x	x	x	Baseline citizen survey; expected changes in supply and demand for spaces.	C	
<i>Shopping¹⁴</i>							
38. Change in number and percent of households satisfied with shopping opportunities.	38a. Change in variety, accessibility, and physical conditions of shopping areas.	x		x	Baseline citizen survey; change in physical conditions around shopping areas.	C	
39. Change in number and percent of households within x minutes travel time to shopping, by type store and mode of travel.		x		x	Map showing location of stores and population, before and after development.	C	
<i>Energy Services</i>							
40. Change in the frequency and duration of energy shortages, and the number of people affected, by fuel type.	40a. Expected energy usage per unit area of floor space or per unit of production, relative to standards for usage, by type of buildings and land use.	x	x ¹⁵	x	Current and expected usage and supply in community; design and construction of buildings; type of manufacturing activity expected.		
<i>Housing</i>							
41. Change in number and percent of housing units that are substandard and the number of people living in them.		x	x	x	Current housing stock conditions, number to be removed or improved.		
42. Change in number and percent of housing units relative to need, by type of housing (price, owner/rental, number of bedrooms, style, etc.).	42a. Change in number of units by type, viewed relative to number of families in various income groups in the community.	x	x	x	<u>Current profile of housing stock units added or destroyed; past housing chain effects in distribution of population by income level, indicators of latent demand for housing.</u>		
<i>V. Other Social Impacts (in addition to those included above)¹⁶</i>							
<i>People Displacement</i>							
43. Number of residents (or workers) displaced by development, and whether satisfied with move.	43a. Number of persons displaced.	x	x	x	Number of persons living in building to be destroyed; special survey of them.	C	
<i>Special Hazards</i>							
44. Number of children physically at risk from "special" hazards created by development (e.g., machinery, junk, unguarded deep water).			x	x	Physical outdoor changes expected.	C	

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ERENCES ³
		Comprehensive Plans, Cumulative Effects, Large Rezoning	Small to Medium			
			Residential Rezoning	Commercial-Industrial Rezoning		
Preferred Measures	Fallback Measures					
<p><i>Sociability/Friendliness</i>¹⁷</p> <p>45. Change in social interaction patterns (e.g., frequency of neighboring, community activities).</p>	<p>45a. Identification of changes in people mix, settings for social activities, and physical barriers to social interactions.</p>	x	x	x	<p>Baseline survey of current neighboring and community activity patterns; changes in availability of community and small group meeting places; changes in physical barriers (e.g., highways, fences, heavy traffic, buildings which hinder access from one area of a neighborhood to another or foot-bridges or removal of barriers linking the areas); changes in people mix.</p>	C
<p><i>Privacy</i></p> <p>46. Change in number and percent of households satisfied with privacy in outdoor areas around home.</p>	<p>46a. Change in sightlines, pedestrian volumes, or other conditions likely to affect satisfaction, and number of households potentially affected.</p>	x	x	x	<p>Citizen survey; geometric analysis of sightlines; changes in sight and sound barriers.</p>	C
<p><i>Overall Contentment with Neighborhood</i></p> <p>47. Change in number and percent of citizens satisfied with their residential (or work) neighborhood.</p>	<p>47a. Degree of change to neighborhood elements that citizens express most satisfaction or dissatisfaction with.</p>	x	x	x	<p>Citizen survey using data from other measures.</p>	C

NOTES:

1. Most measures are directly applicable at one time or another to all types of development.

2. The "bases for estimate" column presents a simplified, brief listing of key data and models (if any) needed for the preferred measure. A subset of the data is needed for the backup measures unless otherwise indicated. For retrospective studies, other, more direct measurement procedures are often feasible. Data collection procedures for the measures are outlined in P.S. Schaenman and T. Muller, *Measuring Impacts of Land Development*, Washington, D.C., The Urban Institute, 1974. A more detailed discussion of data collection and analysis may be found in the references.

3. Reference codes:

M = Muller, *Fiscal Impacts of Land Development: A Critique of Methods and Review of Issues*, The Urban Institute, Washington, D.C., 1975.

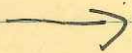
C = Christensen, *Social Impacts of Land Development: An Initial Approach for Estimating Impacts on Neighborhood Usages and Perceptions*, The Urban Institute, Washington, D.C., 1976.

K = Keyes, *Land Development and the Natural Environment: Estimating Impacts*, The Urban Institute, Washington, D.C., 1976.

4. Measure 4 could be expanded, where appropriate, to reflect damage to vegetation and materials as well as to people's health.

Peter Garland - Bath City Manager

First week of March - setting
meeting re:
Joe - will call Eddie to set
up meeting.
+ someone from Transit District



Look at 302(a) regulations
and see if we can use - feasibility
study

- Tourism/Economic Analysis
- Design of Pedestrian Walkway

Asbestos - monitor to meet
EPA and OSHA
emission guidelines -
- 2 fibers per cubic cent

BIW - Never had an OSHA citation

BIW has the best safety record
in the industry for lost work
hours, mandays lost, accidents, etc.

- 1) Wetland + Site location -
- 3) Waste Discharge application

Dept. of Marine Resources - disposal sites questioned

Alex —

Aug 6, 1986

The BIW site plan requirements are as follows:

Local

- ① 65 dBA 9 p.m. to 12 midnight
- ② 60 dBA midnight to 6 a.m.
- ③ 75 dBA 6 a.m. to 9 p.m.

DEP

The DEP required that BIW do a noise survey. Based on the results, applicant was to develop a plan to limit the noise impact. The plan was to be approved by P.B. prior to construction activity. (date of DEP Regmt. - June 9, 1982).

BIW worked w staff and agreed to the above noise limits. The limits were ~~the~~ listed as a condition of the PB approval.

KC

Back In Works

- Tomorrow
- no city staff - no evidence allowed at all

Conditions:

1. stds - can't transfer etc
toilet plate
2. site entrance ~~the~~ plan due by ~~Sept~~ / Aug '82
(date will be appealed)
it puts pressure on them
intent is the same
more than willing to reconsider.
3. Applicant shall adhere:
 - a) start not later than 7 AM.
 - b) of conduct a revised traffic study based on new starting time → and cannot go to new starting time until Commissioner's review and approves. (will come to city for review)

PUBLIC NOTICE AND NOTICE
TO ABUTTING LANDOWNERS

Page #

Please take notice that Bath Iron Works Corporation of Bath, Maine is filing the following applications in conjunction with its construction of a ship overhaul and repair facility at the site of the present Maine State Pier in Portland, Maine.

These applications are:

... A SITE LOCATION application with the Maine Department of Environmental Protection pursuant to the provision of 38 M.R.S.A., Section 481-488:

... A COASTAL WETLANDS AND WATER QUALITY application to the Maine Department of Environmental Protection and the U.S. Corps of Engineers pursuant to the provisions of Title 38 M.R.S.A. Section 474: Section 10 of Rivers Act: Section 404 of Clean Water Act: and Section 103 of Public Law 92-532:

... A DISCHARGE LICENSE application to the Maine Department of Environmental Protection pursuant to provisions of M.R.S.A., Sections 414-A, 413.

It is Bath Iron Works plan to construct a ship overhaul and repair facility at the site with work to be completed in November of 1983. The primary components of the project include a portion of the existing Maine State Pier building and a drydock. The work to prepare the site for operations will include renovations to the office and shop spaces of the Maine State Pier building, and extension of the deck of the Maine State Pier, the location of the drydock directly adjacent to the Pier, the construction of a new finger pier that will provide access to the drydock,

dredging necessary to accommodate the drydock, the construction of some minor storage facilities, the fencing of the area, the construction of a containment area at the shoreline, and necessary improvements to the parking area. This work will be accomplished in the City of Portland, Maine.

These applications will be filed for public inspection at the Department of Environmental Protection office in Augusta, Maine and at City Hall in Portland, Maine on Friday, March 26, 1982.

Written comments from any interested person must be sent to the Department of Environmental Protection within 14 days of filing of the applications to receive consideration.

Requests for a public hearing must also be sent to the department within 14 days of filing of the applications.

6. General Comments (continued)

Paint Sprays

The latest state of the art equipment will be used to prevent over-spray at the Portland site. Also, Bath Iron Works meets all OSHA and EPA requirements and regulations in this area.

Air Pollution

Bath Iron Works utilizes abrasive blasting rather than sandblasting in its production process and does not anticipate any fugitive dust problems from this procedure. Likewise, any boilers installed by Bath Iron Works at the Portland site will be licensed to meet Maine Department of Environmental Protection and Federal EPA standards. Low sulfur fuels also will be used and Bath Iron Works anticipates compliance with the standards of the Portland Peninsula Air Quality Region.

Solid Waste Disposal

A commercial carrier will dispose of all solid wastes.

7. Off-site Public Facilities

- a. Water - Adequate with 12" new service
- b. Sewer - Adequate with 10" main to existing Commercial Street
- c. Streets - Entrance is being designed for new use

8. Drainage

Area will be sloped towards ocean as at present

9. Time to Completion

Full Operation - November 15, 1983

10. Parking Facilities

On-site parking for 451 vehicles will be provided.

At the end of 1981, B. I. W. continued to be deeply involved in the Navy Guided Missile Frigate Program, having seven of the ships still under contract and to be delivered to the Navy. In addition, it had under construction a giant sugar barge and an ocean-going dredge. Also, the shipyard was preparing to start construction of two tankers and had additional contracts for Navy overhaul work. It was also actively pursuing additional Navy and Commercial work.

Need To Expand

As a result of steady growth and near full capacity utilization, about one year ago B. I. W. management began to seriously examine the need for a major facility expansion. In so doing, we considered the possibility of expanding Bath's existing shipyard or opening in a new location outside the City of Bath.

At that time, the Company had already committed to an \$18 million capital and systems expenditure program in Bath for 1981 and it was apparent that its most pressing additional shipyard needs were to significantly expand pier facilities and acquire a much larger floating dock which would be virtually impossible to accomplish in Bath because of high cost and geographic and water-depth limitations. Given the great difficulty of going forward with that type of capital expansion within the physical confines of Bath Iron Works, the focus of the Company's study by necessity shifted to areas away from Bath.

Intended Purpose

The Portland facility will be used primarily as a ship overhaul and repair yard, capable of handling much larger ships than can presently be accommodated in Bath. Since Navy ships are on a regular overhaul cycle of three to five years, there are always 60 to 80 ships scheduled for extensive shipyard availabilities during any given year. The Portland facility should be very competitive and attract a significant quantity of work from this market. In addition, with the large dry dock only 30 miles away, Bath Iron Works will be able to accept contracts to build the larger surface combatant ships now envisioned by the Navy with the confidence that it will be able to dry dock those ships without having to sub-contract work to competitors hundreds of miles away. B. I. W. management is convinced that this capability, which will produce direct employment in Portland, will also have a beneficial effect on its operations in Bath. The piers and dry dock in Portland can also

accommodate the overhaul and dry docking of merchant ships too large for facilities in Bath and will open the merchant ship overhaul and repair market to Bath Iron Works for the first time.

Economic Impact

With over 6,700 employees, B. I. W. is the largest manufacturer in this state. Employees live in some 240 widely distributed cities and towns. As might be expected over 1,800 live in Sagadahoc County, but 1,100 also live in Cumberland County. In fact, B. I. W. has employees living in every county in this state.

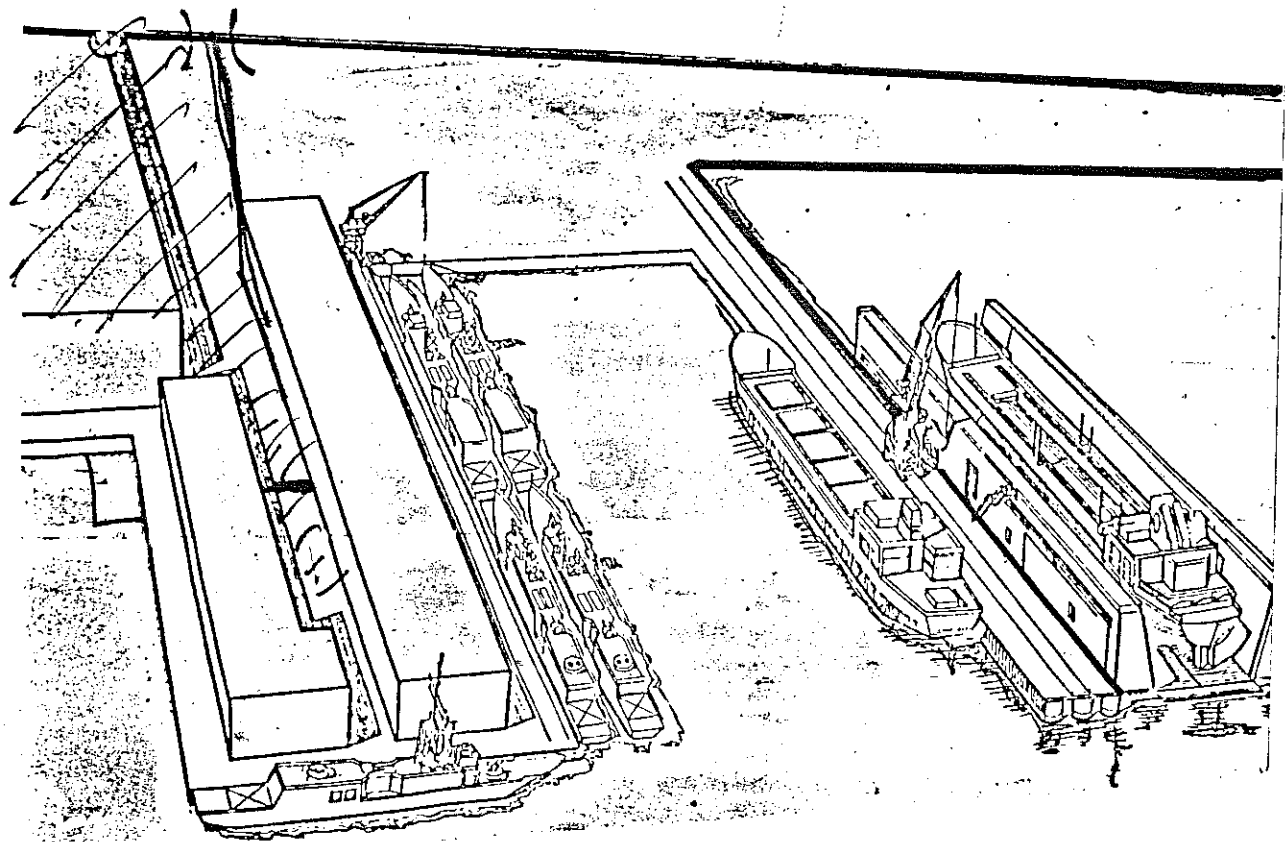
In addition to the direct employment generated by Bath Iron Works, it also supports a wide variety of subcontractors and suppliers from all over the state. Over a recent eighteen-month period, the shipyard procured materials or services from over 800 different firms in Maine, totaling approximately \$40 million. Because the company's purchasing policy gives preference to Maine companies, approximately 44 percent of all the materials which could conceivably be supplied from within this state are purchased here.

It seems apparent that the economic impact created by B. I. W.'s employment, payrolls and purchasing has a very wide and diversified effect throughout our entire state. B. I. W. is not simply a manufacturer operating in Bath, Maine, but in fact a company whose impact is already felt throughout the state.

B. I. W. projects that employment in Portland will reach 1,000 in five years and grow beyond 1,200 in ten years. Likewise, materials and services purchased from Maine businesses by the Portland expansion will grow to \$13.7 million annually in that time.

2. Description

BATH IRON WORKS CORPORATION Portland Shipyard Facility Proposal



FACT SHEET

--Bath Iron Works is Maine's largest manufacturer with over 6,500 employees. It presently operates two major plants; a steel fabricating unit on 33 acres in East Brunswick, and a fully integrated shipbuilding, overhaul and repair facility on 54 acres at the main plant on the Kennebec River in Bath.

--Manning at the Portland facility is projected to grow to 1,000 by 1986.

--The Portland facility is expected to create major industrial expansion in and around Portland, generating 3,500 additional supporting jobs.

--The annual payroll in Portland will grow to \$29.5 million in 1986.

--In addition to the projected wages and salaries that will be generated, subcontract services purchased will also be significant, projected to grow to \$7 million in 1986.

--The expansion will generate approximately \$12 million in tax revenues to the State of Maine and municipal governments.

--The expansion will eliminate the need for the continued \$300,000 annual operating subsidy to the Maine State Pier.

--Initially, the management team will be staffed primarily by current BIW managers and the first production contracts secured will be handled by production workers from Bath. However, it is BIW's plan to supplement the original management with new hires and the transfer of current Portland area residents working in Bath.

--Following necessary development of the Portland facility, BIW intends to immediately put its start-up management organization in place and start marketing work. The phase-in period is anticipated to be 18-24 months.

--Estimated total economic impact by 1986 -- \$299.8 million. This includes BIW salaries, ship's payroll and their multiplier effect, plus locally supplied subcontractor services and materials.

--Estimated total employment by 1986, including BIW, temporary Navy and generated employment, could be approximately 5,000.

BIW'S PLAN FOR A NEW FACILITY

BIW plans to play a leading role in the rapidly increasing maritime market.

Shipbuilding and ship repair work will increase appreciably over the next decade. BIW foresees a dramatic upsurge in all types of marine work. Current opportunities for profitable work are being turned down for lack of capacity at Bath in areas such as drydocking and pier space needed for ship completion and overhaul.

BIW is now active in four major markets. They are: Navy new construction, commercial new construction, Naval combatant ship overhaul and industrial work. BIW has the opportunity to develop a fifth market in commercial overhaul and repair. The recent APOLLO bow replacement job for U. S. Lines in Boston has alerted the commercial ship operators of BIW's interest and ability in this type of work. A strong market exists in this area.

In addition to commercial repair, a new facility will relieve BIW of its pier and drydock congestion at Bath. Newly constructed ships can be moved to a new facility for final drydocking and completion. This will allow the Bath yard to increase new construction work while at the same time making more work available for the new facility. In addition, BIW could bid overhaul work on ships too large for the Bath facilities. This includes ships such as DD963's, AOR's, AOE's, AE's, large commercial ships and conversions, and other large auxiliaries.

In summary, a combination of Bath and a new facility will allow BIW to bid for the construction and repair of a large variety of ships, both Navy and commercial. The two facilities will complement one another allowing each to concentrate on the type of work best suited for its particular strengths.

BIW -- THE NATION'S PREMIER SHIPBUILDER

While always a highly regarded shipyard, since 1975 BIW has emerged as the nation's premier shipbuilder based on its record of accomplishments with respect to schedule adherence, low costs and high quality performance.

Bath Iron Works has combined modern management concepts, a highly productive work force, advanced planning and innovative production methods, all supported by excellent facilities and state-of-the-art equipments to perform in a manner unprecedented in the American shipbuilding industry.

Bath-built Guided Missile Frigates are consistently being delivered 17 weeks ahead of their original contract delivery dates. Three containerships built for Matson and Farrell Lines were delivered 5, 16 and 16 weeks earlier than their original contract delivery dates. Navy combatant ships overhauled at BIW are consistently delivered on or ahead of their contract delivery dates.

On its first 11 FFG's, BIW is underrunning the Navy's target costs in excess of \$5 million per ship and forecasting underruns on subsequent ships in the program. A government consultant estimated that BIW costs on 1 ship in the Frigate Program were approximately \$17 million lower than a West Coast competitor. In the recent award of 6 additional frigates - 3 to BIW and 3 to the West Coast - of the 4th Flight in April 1981, BIW's price was \$10 million per ship less than the West Coast competition.

BIW's quality has been consistently acclaimed by Navy and merchant ship operators as the best in the industry. Management believes it is the Navy's sincere intent to have BIW become very active in the construction of the larger surface combatants such as those in the CG-47 and DDG(X) Cruiser and Destroyer Classes.

Since 1974 BIW's employment levels, backlog, sales, income and return on invested capital have increased each year. Bath's management is convinced that its well-proven systems, methods and disciplines are transferable.

CONGOLEUM CORPORATION

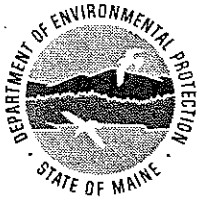
Congoleum Corporation, with its wholly owned subsidiary, Bath Iron Works Corporation, has the management skills and financial strength to quickly develop a major ship repair facility.

Congoleum Corporation, headquartered in Portsmouth, New Hampshire, is one of the largest privately held corporations in the United States. Congoleum, with over 11,000 employees, is a rapidly growing and highly diversified corporation.

The Corporation is comprised of three major operating subsidiaries:

- Bath Iron Works Corporation, the shipbuilding division, is Maine's largest manufacturing company and the nation's 5th largest shipyard specializing in the construction of new ships for the Navy and Merchant Marine, ship overhaul and repair, and industrial products.
- Congoleum Corporation, Resilient Flooring Division of Kearny, New Jersey, is the world's largest manufacturer of cushioned vinyl flooring and is a major supplier of mobile home furnishings.
- Curtis Industries of Cleveland, Ohio, is a highly diverse supplier of parts and equipment to the automotive aftermarket and a major supplier of products for the industrial maintenance market.

Congoleum has the depth, stability and resources necessary to fully implement all aspects of this proposal, and its operating divisions have a proven record of outperforming their competitors because of the management practices implemented throughout the Corporation.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER

IN THE MATTER OF

BATH IRON WORKS CORPORATION	)	SITE LOCATION OF DEVELOPMENT,
Portland, Maine, Cumberland County	)	ALTERATION OF COASTAL WETLANDS ACT,
SHIP REPAIR FACILITY	)	AND WATER QUALITY CERTIFICATION
#03/44-7866-05170	)	FINDINGS OF FACT AND ORDER

After reviewing the project file which includes the application with its supportive data, agency review comments, staff summary and other related materials on file with regard to the above noted project, under provisions of Title 38, M.R.S.A., Section 474, Section 483, and Section 401 of the Federal Water Pollution Control Act, the Board finds the following facts:

1. Nature of Project: Construction of a new ship repair and overhaul facility in Portland, adjacent to and including the easterly side of the Maine State Pier. The project area consists of a 50-acre area of water bounded by the State Pier to the west, the shoreline to the north, the extended property line to the east, and the Harbor Commissioner's line to the south along the ship channel. The area currently contains approximately 15 acres of timber pile ruins from the former Grand Trunk Railroad Piers.

The proposed facility consists of an 80,000 ton capacity floating drydock, which would be permanently moored within the project area. The drydock will be 844 feet long, consisting of nine pontoon sections, attached side by side, with 50 feet high and 20 feet wide bulkheads along each edge.

A 600 foot long finger pier will provide access to the drydock as well as provide vessel docking space. The pier will be 48 feet wide and will be supported by concrete or steel pipe piles. The east side of the Maine State Pier will be modified by adding a 12.5 foot apron to provide space for installation of a 25-ton crane with rail runway. In addition, the pier building will be extensively renovated to provide office and shop space.

The area currently occupied by the pile ruin closest to the Maine State Pier will be dredged to a depth of 15 feet. The area between this pile ruin and the proposed finger pier has been dredged in the past and will be redredged to a depth of 35'. The area beneath and around the drydock will be dredged from a current depth of approximately 32 feet at mean low water to a depth of 65 feet. Slopes of this basin will range from 3 to 1, to 5 to 1.

The total volume of dredge material is estimated to be about 625,000 cubic yards. This material will be disposed of at the Army Corps of Engineers approved offshore disposal site, except for approximately 50,000 cubic yards, which will be placed in a 1.6 acre containment area. This containment area will cover submerged land on the east side of the proposed finger pier. This containment area will provide a supply staging area for the drydock. Also considered is a future containment area of 4.8 acres on the east side of the 1.6 acre area. Approval of the 4.8 acre area, however, is not being sought at this time. The proposed containment structure will consist of a double row of timber piles filled in between with rock or rubble fill.

Existing land area on the site is 7.87 acres. Vehicle entrance to the site will be from Commercial Street at the location of present access. There will be parking accommodations on site for approximately 450 vehicles.

2. Because of the size, complexity, and location of this project, the Board requests that opportunity be given for communication between the applicant and members of the Board, Department staff, government agencies, and the public. In that way, issues may be clearly defined and evaluated.

THEREFORE, the Board POSTS the application of BATH IRON WORKS CORP. for development of a Portland Ship Repair Facility to Public Hearing.

DONE AND DATED AT AUGUSTA, MAINE, THIS 14TH DAY OF APRIL, 1982.

BOARD OF ENVIRONMENTAL PROTECTION

BY: Henry E. Warren
Henry E. Warren, Chairman

PLEASE NOTE ATTACHED SHEET FOR APPEAL PROCEDURES....

Stream Alterations
Yes _____ No

TO: DEPARTMENT OF ENVIRONMENTAL PROTECTION

FROM: Portland Planning Board

TYPE OF APPLICATION: Site Location

Please use this form to return your comments, if any, to this office, in writing not later than April 14. Otherwise, we will assume that you have no objections to this project. Questions concerning this project should be directed to Don Witherill at 289-2111.

PROJECT

APPLICANT

NUMBER: 03/44 - 7866 - 05170

NAME: Bath Iron Works Corp.

NAME: Portland Ship Repair Facility

ADDRESS: 700 Washington St., Bath, ME 04530

LOCATION: Portland

Contact: Harold C. Plummer 443-3311 ext 2595

After a thorough review of the above project, as presented to us, and consideration of our agency's standards, programs and responsibilities, the following comments are submitted to the Department of Environmental Protection.

REGULATIONS

Purposes
602.19A A.

Applicability
602.19A B.

Zoning Districts
and Shoreland
Regulations
602.19A C.

Land use standards
602.19 A D.

(Comments must be signed and dated in order to be accepted by this Department.)
(If additional space is needed, please attach another sheet.)

SIGNATURE: _____ DATE: _____

CHAPTER 604

Effective
June 19, 1974

SITE PLAN ORDINANCE

Section 604.1 In an era of increasing complexity in urban life, the development of private land can have a profound impact upon the cost and efficiency of public services, and upon those facilities and environmental qualities conducive to the well being of citizens, such as open space and the efficiency and safety of vehicular and pedestrian movement. The regulations of the Portland Zoning Ordinance, Chapter 602 of the Municipal Code; and the Subdivision Ordinance, Chapter 603 of the Municipal Code; are sufficient to advance those objectives and to protect the health, safety, convenience and general welfare of the citizens of the City of Portland, where development involves only the construction of single and two family dwellings, but those regulations need to be supplemented when development involves commercial, retail, industrial, institutional uses or multiple family residential development.

Purposes
604.1

Therefore, in order to further the purposes set forth in Section 602.1 of the Municipal Code of the City of Portland; to insure that those purposes will not be distorted in an era of increasingly complex urban growth; in order to encourage the use of the best planning by private developers in an age where there is available sophisticated technology in building and design; and to promote the growth of the City of Portland in a manner that will not only provide its citizens with a safe, healthy and beneficial environment but also will protect property values and thereby secure the fiscal base for public services, THIS ORDINANCE IS HEREBY ENACTED.

Section 604.2 For the purpose of this Ordinance, the following terms and words shall have the meaning given herein:

Definitions
604.2

Approval: Approval by any board or department under this Ordinance shall include any approval with conditions when all the conditions are accepted by the applicant.

Building Addition: Any attached structure which increases the total ground floor area of the original building by 5,000 square feet or more.

Development: The construction of one or more new structures, building additions or surface parking areas by a person, firm, corporation, trust or partnership or combination thereof, and the City of Portland.

Major Development: Development of structures having a total floor area of 10,000 square feet or greater or development located on a parcel or parcels having a total area of two acres or greater and requiring Planning Board and administrative department approvals.

Minor Development: Developments of structures having a total floor area of less than 10,000 square feet and development located on a parcel or parcels having a total area of less than two acres and requiring administrative department approvals.

Multiple-Family Development: Development which includes three or more attached dwelling units.

Owner: Any person, firm, corporation, trust or partnership or any other legal entity that has any interest, legal or beneficial, in any parcel or parcels proposed for development.

Planning Board: The Planning Board of the City of Portland appointed by the City Council.

Planning Department: The Planning Director of the City of Portland and the staff of the Planning Department.

Building and Inspection Services: The Director of Building and Inspection Services and staff members.

Application

604.3
604.3A

Section 604.3

A. This Ordinance shall apply to all proposals for development throughout the City of Portland except proposals for development of detached single and two-family dwellings and uses customarily accessory thereto.

604.3 B

B. No building permit nor certificate of occupancy shall be issued for development within the scope of this Ordinance unless and until a final site plan of the development has been reviewed and acted upon by the Planning Department, Department of Public Works, and the Fire Department in accordance with the procedures of Section 604.4 and the standards of Section 604.6 of this Ordinance.

604.3 C

C. No amendment or other change in or from the map or text of the Zoning Ordinance shall be made to permit the development of any property for uses other than those expressly exempted by Paragraph A. of this Section 604.3, unless and until a preliminary site plan has been reviewed and acted upon by the Planning Board in accordance with the provisions of Section 604.5 and the standards of Section 604.6 of this Ordinance.

Final Site Plan:
Procedure and Content

604.4
604.4 A.

Section 604.4

A. Every application submitted to the Building and Inspection Services for a building permit for a major development in the scope of this Ordinance shall be accompanied by four blue or black line copies of a final site plan and four copies of the statements required by Section 604.4 B. Every application submitted to the Building and

Inspection Services for a building permit for a minor development within the scope of this Ordinance shall be accompanied by a final site plan and statement as required by Section 604.4 C. If such plans are found to be in compliance with the Zoning Ordinance, one copy of the final site plan and statements, or applicable component plans and statements, shall be transmitted forthwith by the Building and Inspection Services to the Planning Department, the Department of Public Works, and the Fire Department for their review. The remaining copy of the site plan and statements shall be retained by the Building and Inspection Services Department. One set of building plans shall also be submitted to Building and Inspection Services. Additional copies of plans may be requested by the Building and Inspection Services for distribution to other concerned departments or agencies. If it is determined by the Building and Inspection Services that any action is required on a development proposal by the Planning Board, a preliminary site plan is required.

B. A final site plan for a major development shall consist of:

604.4 B

1. A map or maps prepared at a scale of not less than one (1) inch to one hundred (100) feet; and shall set forth:

604.4 B.1

(a) name and address of the applicant and name of the proposed development,

604.4 B.1(a)

(b) scale and north points;

604.4 B.1(b)

(c) boundaries of the site;

604.4 B.1(c)

(d) total land area of the site;

604.4 B.1(d)

(e) topography indicating existing and proposed contours at intervals of not more than two (2) feet;

604.4 B.1(e)

(f) existing soil conditions;

604.4 B.1(f)

(g) location of water courses, marshes, rock outcroppings and wooded areas;

604.4 B.1(g)

(h) location, ground floor area and elevations of building and other structures existing and

604.4 B.1(h)

(i) approximate location of buildings or other structures on parcels abutting the site;

604.4 B.1(i)

(j) location of on-site public utilities, water and sewer mains, culverts, drains, existing and proposed, showing size and direction of flow;

604.4 B.1(j)

(k) location and dimensions of any easements, public or private rights-of-way, existing and proposed;

604.4 B.1(k)

(l) location and dimensions of on-site pedestrian and vehicular access ways, parking areas, loading and unloading facilities, designs of ingress and egress of vehicles to and from the site onto public streets, and curb and sidewalk lines;

604.4 B.1(l)

(m) landscape plan showing location, type and approximate size or plantings;

604.4 B.1(m)

(n) location and dimensions of all fencing and screening;

604.4 B.1(n)

(o) location and intensity of outdoor lighting system.

604.4 B.1(o)

2. A written statement by the applicant that shall consist of:

604.4 B.2

(a) a description of the proposed uses to be located on site, including quantity and type of residential units, if any;

604.4 B.2(a)

(b) the total land area of the site, and the total floor area and ground coverage of each proposed building and structure;

604.4 B.2(b)

(c) general summary of existing and proposed easements or other burdens now existing or to be placed on the property;

604.4 B.2(c)

- 604.4 B.2(d) (d) method for handling solid waste disposal;
 - 604.4 B.2(e) (e) the applicant's evaluation of the availability of off-site public facilities including sewer, water and streets;
 - 604.4 B.2(f) (f) a description of any problems of drainage or topography, or a representation that, in the opinion of the applicant there are none;
 - 604.4 B.2(g) (g) an estimate of the time period required for completion of the development.
- 604.4 C. A final site plan for a minor development shall consist of:
- 604.4 C.1 1. A map or maps setting forth:
 - 604.4 C.1(a) (a) name and address of the applicant and name of the proposed development;
 - 604.4 C.1(b) (b) scale and north point;
 - 604.4 C.1(c) (c) boundaries of the site;
 - 604.4 C.1(d) (d) location and ground floor area of buildings and other structures;
 - 604.4 C.1(e) (e) location of parking and loading areas, if any;
 - 604.4 C.1(f) (f) location of areas on the site which will be used to dispose of surface water drainage and related facilities.
 - 604.4 C.2 2. A written statement by the applicant that shall consist of:
 - 604.4 C.2(a) (a) a description of the proposed uses to be located on the site, including quantity and type of residential units, if any;
 - 604.4 C.2(b) (b) the total land area of the site, and the total floor area and ground coverage of the proposed building or structure.
- 604.4 D. A final site plan for a major development shall also be accompanied by four signed copies of a statement by the applicant setting forth the names and addresses of the owner or owners of the parcels proposed to be developed and the estimated cost of the development.
- 604.4 E. Within three days after receipt of a complete final site plan or applicable component plans and accompanying statements for minor development proposals, the Planning Department, Department of Public Works, and Fire Department shall approve or disapprove the plan(s) and shall advise the Building and Inspection Services in writing of their comments.
- For major development proposals, this review period may be extended to seven days or such additional time as may be agreed upon by the Building and Inspection Services and the applicant. Failure of these departments to submit approved or disapproved plans to the Department of Building and Inspection Services within the time allotted shall constitute approval of the plans by the respective department.
- 604.4 F. No building permit shall be issued under this Ordinance until a final site plan, and/or applicable components thereof, have been approved by the Planning Department, Public Works Department, and the Fire Department and a copy of the approved plan(s) are on file in the office of the Building and Inspection Services.

604.4 F.

G. Unless a development which has been approved by the Planning Department, Public Works Department, Fire Department and the Building and Inspection Services shall have commenced within six months of said approval or within such other time period as may be agreed upon in writing by the Building and Inspection Services and the applicant, the approval shall be deemed to have expired, the building permit shall thereupon be revoked and the Director of Building and Inspection Services shall forthwith take the necessary steps to enforce this paragraph.

Preliminary
Site Plan:
Procedure and
Content
604.5

Section 604.5

A. When an application is filed for an amendment, or other change in or from the text or map of the Zoning Ordinance, an applicant who proposes a development shall, in addition to any material submitted in support of the zoning change pursuant to Section 601.6 of the Municipal Code, file with the Planning Department three black or blue line copies of the preliminary site plan and three copies of statements required by this Section 604.5, at least ten days prior to consideration of the proposed zone change. One copy of the preliminary site plan and statements, or applicable component plans or statements, shall be transmitted forthwith by the Planning Department to the Department of Public Works and the Fire Department for their review. The remaining copy of the preliminary site plan and statements shall be retained by the Planning Department. Additional copies of plans may be requested by the Planning Department for distribution to other concerned departments or agencies.

604.5 B.

B. A preliminary site plan shall consist of:

604.5 B.1

1. A map or maps prepared to a scale of not less than one (1) inch to one hundred (100) feet; and shall set forth:

- (a) name and address of the applicant and name of the proposed development;
- (b) scale and north point;
- (c) boundaries of the site;
- (d) total land area of the site;
- (e) topography indicating contours at intervals of not more than six (6) feet;
- (f) location, elevations and dimensions of existing and proposed buildings or other structures and materials to be used;
- (g) location and dimensions of existing or proposed easements, public and private rights-of-way;
- (h) plans for vehicular and pedestrian circulation, parking and loading;
- (i) landscaping, screening and outdoor lighting plans;
- (j) a description of any right-of-way which the developer proposes to designate as public.

604.5 B.1(a)

604.5 B.1(b)

604.5 B.1(c)

604.5 B.1(d)

604.5 B.1(e)

604.5 B.1(f)

604.5 B.1(g)

604.5 B.1(h)

604.5 B.1(i)

604.5 B.1(j)

- 604.5 B.2
- 604.5 B.2(a)
- 604.5 B.2(b)
- 604.5 B.2(c)
- 604.5 B.2(d)
- 604.5 B.2(e)
- 604.5 B.2(f)
- 604.5 B.2(g)
- 604.5 C.
- 604.5 D.
- 604.5 E.
2. A written statement by the applicant that shall consist of:
- (a) a description of the proposed uses to be located on the site, including quantity and type of residential units, if any;
 - (b) the total land area of the site, and the total floor area and ground coverage of each proposed building and structure;
 - (c) general summary of existing and proposed easements or other burdens now existing or to be placed on the property;
 - (d) method for handling solid waste disposal;
 - (e) the applicant's evaluation of the availability of off-site public facilities including sewer, water and streets;
 - (f) a description of any problems of drainage or topography, or a representation that, in the opinion of the applicant there are none;
 - (g) an estimate of the time period required for completion of the development.
- C. A preliminary site plan shall also be accompanied by three signed copies of a statement by the applicant setting forth the names and addresses of the owner or owners of the parcels to be developed and the estimated cost of the development.
- D. Within five (5) days after receipt of a complete preliminary site plan and accompanying statements, the Public Works Department and the Fire Department shall advise the Planning Department in writing of their comments. Failure of these departments to advise the Planning Department within the time allotted shall constitute approval of the plans by the respective department.
- E. Within thirty (30) days after a complete preliminary site plan and accompanying statements have been filed in conjunction with a proposed zoning amendment, the Planning Board shall in writing approve or disapprove the preliminary site plan unless mutually extended in writing by the applicant and the Board, and recommend to the Council the granting or denial of the proposed zoning amendment pursuant to Section 601.6 of the Municipal Code and shall deliver to the applicant a copy of the Board's approval or disapproval and recommendation.

Section 604.6

Standards 604.6

604.6 A.

604.6 A.1

- A. The Planning Board, Planning Department, Department of Public Works and the Fire Department shall approve a preliminary or final site plan unless it makes one or more of the following written findings with respect to the proposed development:
1. The provisions for vehicular loading and unloading and parking and for vehicular and pedestrian circulation on the site and onto adjacent public streets and ways will create hazards to safety, or will impose a significant burden upon public facilities which could be avoided by modifications in the plan.

2. The bulk, location or height of proposed buildings, structures and paved areas and the proposed uses thereof will be detrimental to other private development in the neighborhood or will impose undue burdens on the sewers, sanitary and storm drains, water or similar public facilities which could be avoided by modifications in the plan. 604.6 A.2
 3. The provision of on-site landscaping does not provide adequate protection to neighboring properties from detrimental features of the development that could be avoided by adequate landscaping. 604.6 A.3
 4. The site plan fails to provide for the soil and drainage problems that development will give rise to and it is feasible to prepare a site plan that will avoid drainage and soil problems. 604.6 A.4
 5. The provisions for exterior lighting create undue hazards to motorists traveling on adjacent public streets or are inadequate for the safety of occupants or users of the site or such provisions will damage the value and diminish the usability of adjacent properties. 604.6 A.5
 6. An applicant for site plan approval in conjunction with a zoning amendment has failed to provide reasonable evidence of his financial capability to complete the development as planned. 604.6 A.6
 7. The proposed development will create undue fire safety hazards by not providing adequate access to the site, or to the buildings on the site, for emergency vehicles. 604.6 A.7
 8. In cases where a preliminary plan has been approved there is a substantial change in the final site plan from the approved preliminary site plan, or facilities will not meet the standards provided by this Section 604.6. 604.6 A.8
 9. The proposed development will interfere with a City construction project authorized and funded for construction. 604.6 A.9
- B. All findings by any board or department under this Ordinance shall be accompanied by written statements that set forth with particularity the precise reasons why the findings were made and how the deficiency could be resolved or that it is incapable of solution consistent with the applicant's objectives. Any finding that does not include such a statement shall not be entitled to a presumption of validity in any appeal from such decision. 604.6 B.

Section 604.7

General Provisions
604.7

- A. Consideration of a preliminary site plan may be requested by an applicant even though not required by this Ordinance and in such a case, the applicant shall provide the information and the Planning Department, Public Works and Fire Departments shall take such action as is provided for in this Ordinance for the review of preliminary site plans. 604.7 A.

604.7 B.

- B. Delivery of any notice or other document under this Ordinance shall be deemed to have been made when such notice or other document is delivered in person or is placed in the United States mails, postage prepaid, with the name and address thereon of the person to whom it is intended to be delivered.

Appeal

Section 604.8

604.8

When any board or department shall disapprove an application or refuse to grant approval under this Ordinance when applied for, or when it is claimed that the provisions of the Ordinance do not apply or that the true intent and meaning of the Ordinance has been misconstrued or wrongfully interpreted, the applicant may appeal from the decision of such board or department to the Municipal Officers within thirty (30) days of the disapproval or refusal. The Municipal Officers may reverse the decision of such board or department and permit exceptions to or variances in cases where the enforcement of the provisions of the Ordinance would result in undue hardship, subject always to the rule that the Municipal Officers shall give due consideration to the purposes of the Ordinance in promoting public health, safety and welfare.

Violations

Section 604.9

604.9

All construction performed under the authorization of building permits or certificates of occupancy issued for development within the scope of this Ordinance shall be in conformance with the approved final site plan. The Director of Building and Inspection Services is authorized to institute or cause to be instituted any and all actions, legal or equitable, that may be appropriate or necessary for the enforcement of this Ordinance; provided, however, that this section shall not prevent any person entitled to equitable relief from enjoining any act contrary to the provisions of this Ordinance.

Penalty

Section 604.10

604.10

Any person, firm, or corporation, being the owner or having control of, any building or premises, or part thereof, who violates any of the provisions of this Ordinance shall be guilty of a misdemeanor and upon conviction thereof, shall be fined not less than \$50.00 nor more than \$500.00. Each day such violation continues shall constitute a separate offense.

PROJECT SUMMARY

BATH IRON WORKS CORPORATION

PORTLAND SHIP OVERHAUL & REPAIR FACILITY

TO: DEPARTMENT OF ENVIRONMENTAL PROTECTION

Stream Alterations
Yes No

FROM: Portland Planning Board

TYPE OF APPLICATION: Site Location

Please use this form to return your comments, if any, to this office, in writing not later than April 14. Otherwise, we will assume that you have no objections to this project. Questions concerning this project should be directed to Don Witherill at 289-2111.

PROJECT

APPLICANT

NUMBER: 03/44 - 7866 - 05170

NAME: Bath Iron Works Corp.

NAME: Portland Ship Repair Facility

ADDRESS: 700 Washington St., Bath, ME 04530

LOCATION: Portland

Contact: Harold C. Plummer 443-3311 ext 2595

After a thorough review of the above project, as presented to us, and consideration of our agency's standards, programs and responsibilities, the following comments are submitted to the Department of Environmental Protection.

(Comments must be signed and dated in order to be accepted by this Department.)
(If additional space is needed, please attach another sheet.)

SIGNATURE: _____

DATE: _____



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17
AUGUSTA, MAINE 04333

PUBLIC HEARING NOTICE

Pursuant to the provisions of Title 38, M.R.S.A., Sec. 474, Sec. 401 & Sec. 483, the Federal Water Pollution Control Act, 38 M.R.S.A., Sec. 345 and related regulations, the State of Maine Board of Environmental Protection will hold a Public Hearing on May 13, 1982 at 10:30 A.M. adjourning at 5:00 P.M. and reconvening at 7:00 until 9:00 P.M. at the Portland Public Library located at 5 Monument Square, in the community of Portland, Maine, on the application of Bath Iron Works Corp. to construct and operate a Ship Repair Facility which may substantially affect the environment in the area of Portland.

All interested persons are invited to attend and give such written or oral information including testimony bearing upon the criteria set forth in Title 38, M.R.S.A., Sec. 474, Sec. 401 & Sec. 483, the Federal Water Pollution Control Act, as may be of assistance to the Board in determining whether or not or upon what terms and conditions such construction or operation shall be approved.

A copy of the application is available for public review in the Portland City Office and at the Department of Environmental Protection's Office, Ray Building, Hospital Street, Augusta, Maine, during normal office hours.

Persons may submit written statements for consideration by the Board by forwarding them in advance of the hearing date to the Department of Environmental Protection, Bureau of Land Quality Control, State House, Station 17, Augusta, Maine 04333. Persons having questions may contact Don Witherill, of the Land Bureau at (207) 289-2111.

Henry E. Warren, Commissioner
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Section 602.19A

SHORELAND REGULATIONS

A. The purposes of this section are to further the maintenance of safe and healthful conditions; prevent and control water pollution; protect spawning grounds, fish, aquatic life, bird and other wildlife habitat; control building sites, placement of structures and land uses; and preserve shore cover, visual as well as actual points of access to inland and coastal waters and natural beauty, as appropriate in an urbanized environment.

Purposes
602.19A A.

B. This section applies to all land areas, uses, structures, and land use activities lying between the shoreland zone line and the normal high water mark of the waters of the Stroudwater River, Presumpscot River, Fore River, Portland Harbor, Back Cove, and the bays, coves, sounds, inlets, and open waters of Casco Bay, as shown on the City of Portland Zoning Map. This section also applies to all portions of any islands not having a shoreland zone line on the City of Portland Zoning Map and to all land areas lying within any Resource Protection Zone as mapped on the City of Portland Zoning Map.

Applicability
602.19A B.

C. The regulations and controls of this section of the Zoning Ordinance apply to all land areas, uses, structures, and land use activities cited in 602.19A B. above, in all zones of the City of Portland.

Zoning Districts
and Shoreland
Regulations
602.19A C.

D. All such land uses and land use activities shall conform to the following standards and regulations, as applicable:

Land use standards
602.19 A D.

1. Beach Construction - The creation of sand or other types of beaches and man-made alterations of coastal shoreland areas shall require a permit from the State Department of Environmental Protection. The creation of sand or other types of beaches and man-made alterations of any river, stream, or brook normally capable of floating watercraft shall require approval from the Commission of the State Department of Inland Fish and Game, as required by State law.
2. Tree Clearance and other Landscaping - Clearance of trees and conversion to other vegetation is permitted for approved construction, landscaping, and other site improvements and alterations. Where such clearance extends to the shoreland in the Resource Protection, R-1, R-2, R-3, R-4, and I-1 zones, a cleared opening or openings not greater than the equivalent of thirty feet in length for every 100 feet of shoreline (measured along the normal high water mark) may be created in the strip extending 50 feet inland from the normal high water mark and paralleling the shoreland. In the more intensive R-5, R-6, R-P, B-1, AB, B-2, B-3, I-2 and 2b, and I-3 and 3b Zones, any such tree clearance and conversion to other vegetation is permitted provided such activity is minimized as much as feasible, as determined by a review of the site plan as required under

ACTIVITY LEVEL AT BATH FACILITY

As a result of improving its facilities in Bath, doubling the work force and marketing very aggressively, Bath Iron Works was able to increase its backlog to record heights ... over 900 million in 1981 ... during a period when the shipbuilding industry as a whole was generally depressed. Based on its past record, there is ample evidence to show that Bath Iron Works is here to stay, its future is very bright and its roots in Maine are deep and solid.

At the beginning of 1982, BIW continued to be deeply involved in the Navy Guided Missile Frigate Program. In addition, it had under construction a giant sugar barge and an ocean-going dredge. Also, the shipyard was preparing to start construction of two tankers and had additional contracts for Navy overhaul work. It was also pursuing additional Navy and

ships without having to sub-contract work to competitors hundreds of miles away. BIW management is convinced that this capability, which will produce direct employment in Portland, will also have a beneficial effect on its operations in Bath. The piers and dry dock in Portland can also accommodate the overhaul and dry docking of merchant ships too large for facilities in Bath and will open the merchant ship overhaul and repair market to Bath Iron Works for the first time.

GENERAL BENEFITS - ECONOMIC IMPACT

With some 6,800 employees, BIW is the largest manufacturer in this state. Employees live in some 240 widely distributed cities and towns. As might be expected, over 1,800 live in Sagadahoc County, but 1,100 also live in Cumberland County. In fact, BIW has employees living in every county in this state.

In addition to the direct employment generated by Bath Iron Works, it also supports a wide variety of subcontractors and suppliers from all over the state. Over a recent 18-month period, the shipyard procured materials or services from over 800 different firms in Maine, totaling approximately \$40 million. Because the company's purchasing policy gives preference to Maine companies, approximately 44 percent of all the materials which could conceivably be supplied from within this state are purchased here.

It seems apparent that the economic impact created by BIW's employment, payrolls and purchasing has a very wide and diversified effect throughout our entire state. BIW is not simply a manufacturer operating in Bath, Maine, but in fact a company whose impact is already felt throughout this state.

BIW projects that employment in Portland will reach 1,000 in five years, with a payroll almost \$30 million, and grow beyond 1,200

in ten years. Likewise, materials and services purchased from Maine businesses by the Portland expansion will grow significantly.

DESCRIPTION OF THE PROPOSED ALTERNATIVE

The ship repair and overhaul facility in Portland will be adjacent to and include the easterly side of the Maine State Pier. The development area consists of approximately a 50-acre area of water bounded by the State Pier to the west, the shoreline to the north, the extended property line to the east, and the Harbor Commissioner's line to the south along the ship channel. The area contains the ruins, primarily timber piles, of the former Grand Trunk Railroad Piers, which cover an area of approximately fifteen acres. The proposed facility comprises an 80,000 ton capacity floating dry dock, which would be permanently moored within the project area described above. Bath Iron Works will modify the existing Maine Pier facility by adding 12.5 feet of apron to incorporate a 25-ton crane, rehabilitate pier structure, add offices and supporting shops for the operations described above. Land area development in locations of old timber pile ruins will be applied for a Phase #1 of two, of 1.61 acres.

A finger pier will be installed to provide land access to the dry dock.

PROJECT FINANCING

CONSEQUENCES OF THE PROJECT

"Without overstating the importance of this project, I honestly believe it ranks among the most significant economic development projects ever proposed in Maine. Some economists have ranked it third in importance to Maine's economic growth ... placing it only behind the construction of the interstate highway system and the mega-millions of dollars spent on paper industry expansion."

These were the words of Maine Transportation Commissioner, George Campbell, commenting on the consequences of BIW's decision to expand its operations into Portland Harbor.

This same sentiment has generally been expressed by the Governor of Maine, the Maine Legislature and other state and city officials. It is important to note that the Maine Legislature approved the project with only one dissenting vote; the Portland City Council approved it unanimously and it was finally approved by the voters of Maine. In short, it is a program that has the backing of the entire state.

BIW feels that the evidence shows that any negatives associated with the project are far outweighed by the overwhelming positives.

CONCLUSION

For almost two years, Bath Iron Works has attempted to carefully weigh all the environmental impacts presented by this project and we have concluded -- as we believe have many state and municipal officials and a majority of the people of Maine -- that this expansion on the Portland waterfront represents an almost ideal industrial and economic development project for the City of Portland and the State of Maine.

We believe this is obvious for several reasons:

(1) First of all, shipbuilding and repair is a relatively clean industry with little discharge of pollutants into the ground, air and water.

(2) Secondly, the Portland expansion will not unduly tax the resources of the City of Portland. We have concluded, as we feel have the officials of the City of Portland, that impacts on such things as parking, traffic, housing and governmental and social services will be minimal and that they are certainly manageable with proper planning and cooperation.

(3) We also feel this is an ideal industrial and economic development project for Portland and the entire state of Maine because the state desperately needs quality jobs and Bath Iron Works has a long history of providing some of the best wages and benefits in the state and region. Given area unemployment statistics and the number of job applications BIW receives daily, it is clear that the project will have a positive, rather than any negative, impact on the state's employment picture.

(4) Finally, this major expansion by Bath Iron Works into ship overhaul and repair seems to be a positive step toward the expressed desire of the City of Portland -- and indeed the entire State of Maine -- to redevelop port facilities and -- in effect -- start returning Maine to its rich heritage with the sea.

Thank you.

PORTLAND FACILITY

604.5 B.2

1.

Bath Iron Works Corporation is one of the oldest and most highly regarded shipbuilding companies in this country. Its heritage dates back to the 1880's. Shipbuilding in Bath itself goes back even further. Over the decades Bath-built ships have earned a reputation for quality in both Navy and commercial circles. Since 1910, and primarily because of its great record during World War II, Bath Iron Works became most widely known as a destroyer-building shipyard. B. I. W. also jointly managed the huge Todd/Bath yard, building merchant ships in Portland during the war. As a result of its recent pattern of early deliveries and favorable cost variances, on the Navy guided missile frigate program, B. I. W. retains a destroyer yard identity in the eyes of many and has often been referred to as the "designer of the destroyer line."

Because of the many changes in the company over the past six or seven years, Bath Iron Works today is acknowledged throughout the industry as something far more than just the Navy's leading builder of destroyer and frigate class ships. It is recognized by Navies and merchant ship operators throughout the free world for having excellent facilities, outstanding supervision, a superior work force and advanced management systems and production methods. While these capabilities have all contributed to B. I. W.'s performance on the frigate program, they have also allowed the company to consistently deliver merchant ships ahead of schedule and below target cost and accomplish Navy overhaul and repair programs on or ahead of schedule and with excellent quality.

Business Level

As a result of improving its facilities in Bath, doubling the work force and marketing very aggressively, Bath Iron Works was able to increase its backlog to record heights...over 900 million in 1981...during a period when the shipbuilding industry as a whole was generally depressed. Based on its past record, there is ample evidence to show that Bath Iron Works is here to stay, its future is very bright and its roots in Maine are deep and solid.

3. Land Area

Grand Trunk & Maine Department of Transportation	7.87 Acres
Wharf Area - Maine State Pier	3.49 Acres
Wharf Area - New	.58 Acres
Land Development - Phase #1	1.61 Acres
Land Development - Phase #2	5.17 Acres

4. Floor Area of New Buildings

Four Buildings - 12,000 Square Feet
Two Buildings - Enlarged at later date - 10,250 Square Feet
Total - 22,250 Square Feet

5. Existing Easement

a. Canadian National Railways

Sewer - 30' x 1650' - Portland Sewer Department

b. Maine Department of Transportation

Sewer - 15' x 1650' - Portland Sewer Department

- 30' x 150' - Portland Sewer Department

Ambient Industrial Noise Study for the Proposed Portland Facility

Scientists measure sound intensity by a unit called decibel or dB (A). The dB is an abbreviation of decibels and the A refers to the A scale, one of the three frequency patterns on which sound is measured. Federal standards are expressed in the A scale readings, which simulate the response range of the human ear. The Environmental Protection Agency recommends that equivalent sound level be established at 70 dB (A) for 24 hours and 75 dB (A) for 8 hours. Extended exposure to such levels could affect one's hearing capability.

Two industrial noise surveys were conducted using a General Radio Octave Band Analyzer Model 1551-C, to provide baseline information concerning fugitive ambient noise associated with Bath Iron Works new Portland Facility and shipbuilding in general.

The first ambient noise survey was conducted at the perimeter of the Bath Facility during peak production hours of operation to provide background information on ambient noise levels produced by associated shipbuilding activities. The survey clearly showed that ambient noise levels produced by the Bath Shipbuilding complex had minimal impact in the surrounding area. The higher decibel readings were associated with heavy vehicular activity. The mean A Band reading for the 23 sites sampled was 61.7 dB (A).

The second ambient noise survey at the proposed Portland Facility showed decibel readings very similar to those recorded at the perimeter of the Bath complex. The mean A Band value for the 6 sampled sites was 57.7 dB (A). This data coupled with additional octave band analyses will serve as a baseline study for the existing ambient industrial noise present in the area.

BATH IRON WORKS CORPORATION

MEMORANDUM

FROM- L. E. Temple

(TDL-3107)
DATE February 4, 1982

TO- Hal Plummer

SUBJECT- Base Line Sound Survey - Maine State Pier

Ref: TDL-3098 Ambient Industrial Noise Survey at Bath Facility

1. On February 3, 1982, a base line ambient noise survey was made at the Maine State Pier. The survey was completed using a General Radio Octave Band Analyzer, Model 1551-C. The sound survey was made between 1330 and 1500 hrs.
2. The sampling sites were established at the Northern boundary of the State Pier property and on the Northern side of Commercial Street adjacent to the State Pier property.
3. Federal standards are expressed in the A Scale which simulates the response range of the human ear. The mean value for the A Scale readings was 57.7 dB.
4. The result of the Portland survey provides background information on ambient industrial noise in the State Pier area. Should you have any questions, contact the undersigned.



L. E. Temple
Laboratory and Environmental
Manager

LET/SKR/B

CC: LET

L18835

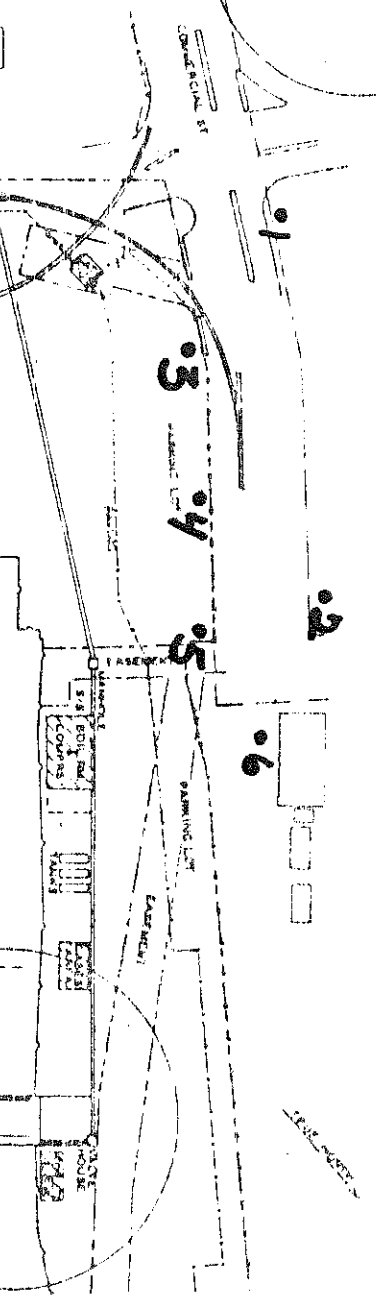
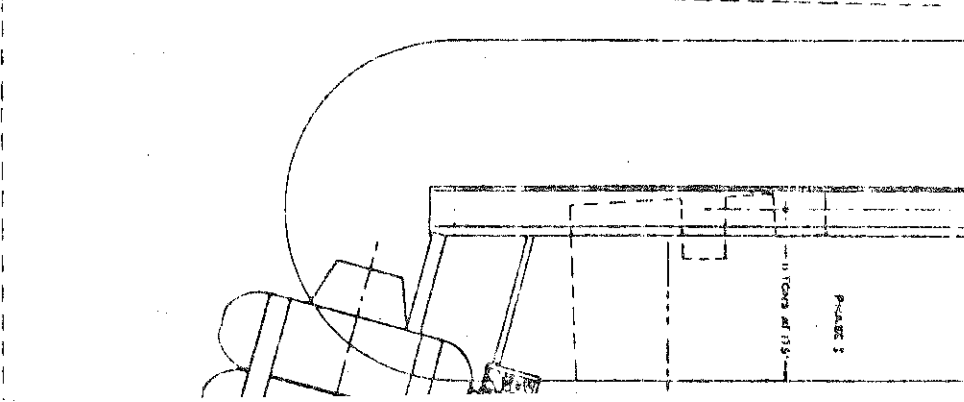
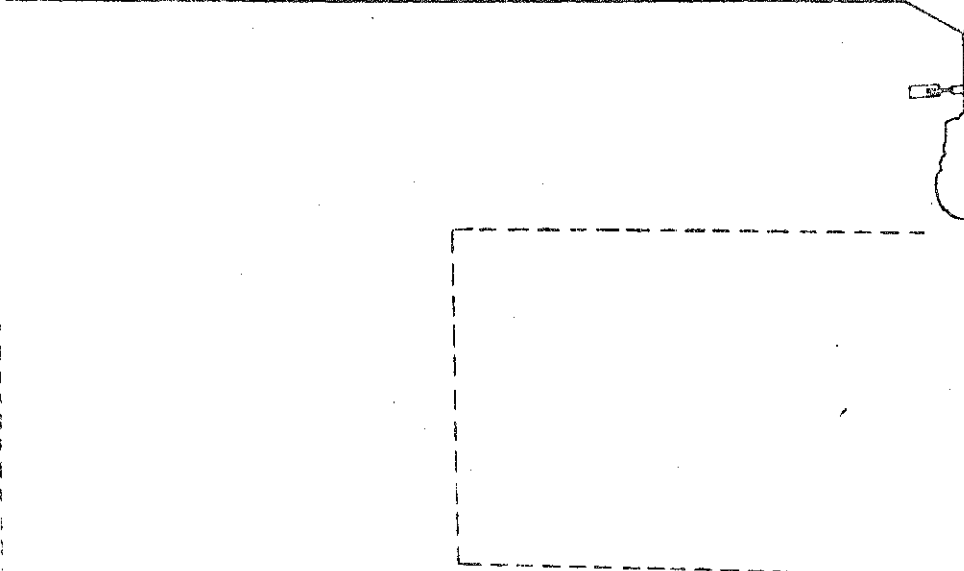
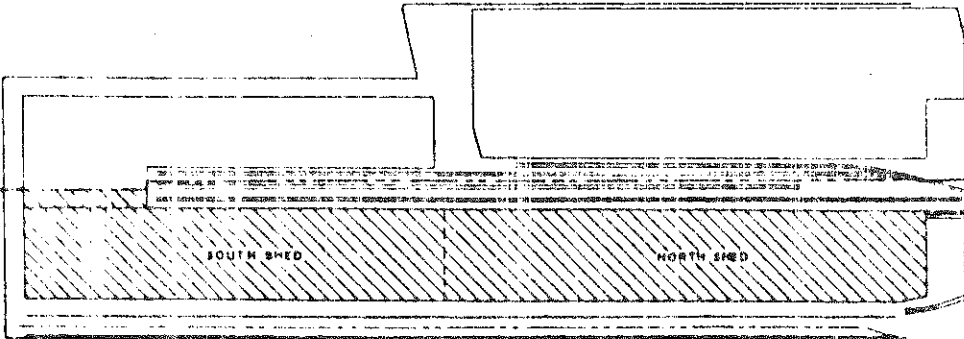
AMBIENT INDUSTRIAL NOISE SURVEY STATE PIER PROPERTY, PORTLAND FREQUENCY

SITE	ALL PASS	FREQUENCY										A SCALE
		10000	8000	4000	2000	1000	500	250	125	63	31.5	
1	80*	<50	<50	<50	53	56	50	63	65	74	72	66
2	79*	<50	62*	<50	<50	55	60	58	67*	69	70	60
3	74	<50	<50	<50	<50	55	50	60*	62	65	65	59
4	72	<50	<50	<50	<50	<50	52	52	59	66	68	50
5	73	<50	<50	<50	<50	44	55	60	60	65	69	52
6	75	<50	<50	<50	50	46	51	57	76*	74	72	59

* HEAVY VEHICULAR TRAFFIC

RESULTS ARE GIVEN IN DECIBELS

MEAN VALUE FOR A SCALE = 57.7 dB



Handwritten notes at the top of the page, including the name 'W. H. HARRIS'.

BATH IRON WORKS CORPORATION

MEMORANDUM

(TDL-3098)

FROM- L. E. Temple

DATE January 25, 1982

TO- Hal Plummer

SUBJECT- Ambient Industrial Noise Survey at the Bath Facility

Encl: (1) Survey Map
(2) Test Results

1. On January 7, 1982, an Ambient Industrial Noise Survey was made at the peripheral of the Bath Iron Works property. The survey was completed using a General Radio Octave Band Analyzer, Model 1551-C. The sound survey was made between 1400 and 1500 hrs.

2. There were 27 sampling sites established of which 23 were sampled. The noise level ranged from a low of 45 decibels to a high of 80 decibels. The vehicular traffic adjacent to 20 of the test sites was heavy, which accounts for the majority of the high readings.

3. Federal standards are expressed in the A scale, which simulates the response range of the human ear. The mean value for the A scale readings was 61.7 decibels.

4. The Department of Environmental Protection Site Location Law states that "where background noise levels may be increased by more than ten decibels (dB) at any time for a duration exceeding one minute, a detailed assessment will be submitted including the level and duration of noise expected, the anticipated effect of the noise on surrounding uses, the extent of the area affected, and possible measures to reduce or eliminate the excessive noise".

5. Environmental Protection Agency recommends that equivalent sound levels be established at 70 decibels for 24 hours and 75 decibels for 8 hours. These levels could affect one's hearing capability as a result of extended exposure to such levels. Equivalent sound level is the average A-weighted energy level of sound over a given period of time.

6. The result of the sound survey clearly shows that ship building activity and associated construction at Bath Iron Works does not produce ambient noise levels which would be regarded as harmful or excessive. Should you have any questions concerning the survey, contact Steve Reichel at 2398.


L. E. Temple

LET/SKR/B

CC: LET

L 18670

AMBIENT INDUSTRIAL NOISE SURVEY

SITE LOCATION	ALL DATA	FREQUENCY										A SCALE
		16000	8000	4000	2000	1000	500	250	125	63	31.5	
1	77	<50	<50	45	50	53	57	57	66	78	76	58
2	75	450	<50	<50	<50	50	48	48	55	57	57	53
3	73	<50	<50	48	55	57	52	51	54	66	68	58
4	75	450	<50	<50	<50	45	48	52	54	67	70	56
5												
6	72	<50	<50	<50	52	51	50	60	60	66	67	52
7	78	<50	<50	<50	47	51	52	52	66	74	73	58
8	76	<50	<50	50	54	51	51	52	64	70	72	56
9	79	<50	<50	48	44	60	56	65	62	70	71	58
10	72	<50	<50	<50	48	51	56	59	60	64	65	57
11	77	<50	<50	59	45	68	61	68	67	69	67	70
12	74	<50	<50	60	69	69	60	66	61	69	70	57
13	74	<50	50	67	70	54	70	66	74	71	73	74
14	76	<50	67	69	55	56	58	60	65	66	66	63
15	77	<50	<50	<50	<50	70	58	62	66	68	64	61
16	76	<50	<50	50	55	55	60	60	68	72	70	64
17	77	<50	<50	<50	54	58	60	62	71	74	70	70
18	74	<50	<50	<50	60	68	56	58	70	76	71	76
19	76	<50	<50	<50	52	55	55	76	72	70	70	75
20	79	<50	<50	<50	53	57	62	64	78	70	65	64
21	80	<50	<50	<50	50	65	64	80	68	77	77	70
22	74	<50	<50	<50	49	49	54	56	63	70	66	58
23												
24	68	<50	<50	<50	<50	50	50	50	55	62	61	54
25												
26	72	<50	<50	<50	<50	51	55	60	61	65	69	58
27												

RESULTS ARE GIVEN IN DECIBELS

○ = DENOTES VEHICULAR TRAFFIC HEAVY

3. Land Area

Grand Trunk & Maine Department of Transportation	7.87 Acres
Wharf Area - Maine State Pier	3.49 Acres
Wharf Area - New	.58 Acres
Land Development - Phase #1	1.61 Acres
Land Development - Phase #2	5.17 Acres

4. Floor Area of New Buildings

Four Buildings - 12,000 Square Feet	
Two Buildings - Enlarged at later date - 10,250 Square Feet	
Total - 22,250 Square Feet	

5. Existing Easement

a. Canadian National Railways

Sewer - 30' x 1650' - Portland Sewer Department

b. Maine Department of Transportation

Sewer - 15' x 1650' - Portland Sewer Department

- 30' x 150' - Portland Sewer Department

Please make
come to
Tom Sullivan
Port &
B2W
file.



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

BOARD ORDER
IN THE MATTER OF

BATH IRON WORKS CORPORATION) SITE LOCATION OF DEVELOPMENT ORDER
Portland, Maine, Cumberland County)
SHIPS REPAIR FACILITY)
#03/44-7866-05170) CONDITION COMPLIANCE

After reviewing the project file which includes the application with its supportive data, agency review comments, staff summary and other related materials on file with regard to the above noted project, under provisions of Title 38, M.R.S.A., Sec. 483, the Board finds the following facts:

1. The applicant has submitted evidence concerning compliance with Condition #5 of the Order by the Board of Environmental Protection dated June 9, 1982. The nature of the evidence is:
 - A. The applicant has submitted the results of a noise survey. Noise levels were measured at the residential boundary (as delineated by city zoning) and the northeast boundary of the project site hourly between 6:00 p.m. and 7:00 a.m. Also submitted were the results of a noise survey by the City of Portland which measured noise levels at nine locations in the vicinity of the project.
 - B. The applicant has proposed to meet the following noise standards which were adopted by the City of Portland on June 8, 1982:
 - ≤ 75 decibels LEQ anytime at the property line boundary
 - ≤ 65 decibels LEQ between 9:00 p.m. and 12:00 midnight local time at the residential zone boundary
 - ≤ 60 decibels LEQ between 12:00 midnight and 6:00 a.m. local time at the residential zone boundary

2. Condition #5 reads as follows:

"5. The applicant shall conduct a noise survey to determine background noise levels along the residential boundary facing the project site, and at the northerly corner of the development property. Noise readings will be taken hourly between 6:00 p.m. and 7:00 a.m. Based on the survey results, the applicant shall develop a plan to limit noise impact to the adjacent residential neighborhood. This plan shall be approved by the Board prior to any construction activity.

Based upon the above Findings, the Board concludes that Bath Iron Works Corporation has complied with Condition #5 of the Order for a ship repair facility dated June 9, 1982 subject to the following terms and conditions:

1. The average level of noise shall be measured over a 20 minute duration to determine compliance with the noise standards except condition 2.

~~Main Post auth~~
#6 Commercial

Both from memo - Spec & Walk
19-29-30

(34)

19-A-1 - Canadian Natl. RR Co.
↓ Box 8100 Montreal Canada ✓
John J. Nissen Baking Co. ✓
59 Wash. ave. 04101

cc: Geo. Dylahety ✓
Clark Neily ✓
Tom Valleau ✓

cc: Fire Chief ✓
Center - Office

19-A-¹³8 - Frank G. & Norma C. Dayiano
3 Jockey Rd., Cape Cod, Me. 04107

RETURNED 3/5/82

19-A-10 - American Hest & Derrick Co.
143 Fore St. 04101 ✓

19-A-12 - Portland Water Dist. ✓
225 Douglas 04102

19-A-13 - Frank Dayiano (Repeat)

Send Canadian Natl.
copy 1 - Linda St. 04101 ✓

Send Portland Eng. Co. ✓
copy 58 Fore St. 04101

The Portland House ✓
45 East Prom. - Manager
04101

MUNJOY HILL NEIGHBORHOOD ORGANIZATION
DR NBD CHRISTON
201 CONGRESS ST
PORTLAND, ME.

PORTLAND WEST NEIGHBORHOOD COUNCIL
W TAMBS OLIVER
155 BRACKETT ST PORTLAND

20-C-9^{1,6,7} - American Hoist + Derrick Co.
143 Fore St. 04101 ✓

20-C-21 - Leo + Chris Micucci ✓
45 Leland St. 04101

20-C-23 - Guy Centofante ✓
27 Leland St. 04101

~~20-C-1~~

20-C-2 - Dorene D. + Robert W. Trickett ✓
12 Mountford St. 04101

20-C-15 } David McCain ✓ RETURNED 3/5/82
RFD 2 So. Paris, Me.

20-C-5

20-C-6 } American Hoist

20-C-7

Repeat

~~29-K-3 W.L. Blake & Co~~

~~79 Commercial St. 04111~~

29-P-27 - Michael D. & Roger C. Marino ✓
769 Congress St. 04102

29-P-31 +

29-P-32 - Richard C. Richard
P.O. Box 3679, City 04104 ✓

²⁵⁻²⁶
29-N-24 - Maybelle C. Haley
73 William St. 04103 ✓

~~29-N-25~~

~~29-N-26~~

²⁵
29-N-3 - Jordan's Ready To Eat Meats ✓
38 India St. 04101

29-N-4 - W.L. Blake & Co. ✓

29-K-3 79 Commercial St 04101

~~29-N-5~~

29-N-8 - Eastern Electrical Corp. ✓
208 Four St. 04101

29-N-9 - Samuel L. German Heirs Clal 90 Russell German
P. O. Box 451, Dover, N.J. 07081 ✓

30-C-1

30-C-2

30-C-3 Richard J. Stridl & ✓
T Scott Teas Dr. of
13 Deans Way

30-C-4 Cumberland Foreside, Me.

30-C-5

30-C-6

30-C-7

30-C-8 - Pine Tree Paper Co., Inc. ✓
102 Commercial St. 04101

30-A-5

30-A-1,2 - Proprietors of Custom House Wharf
To B. C. MacGowan, Jr. ✓
5 E. Prom., City 04101

30-B-1 - Howard C. Stanley ✓
Box 1238, City 04104

30-B-2 - Center Realty Inc. ✓
c/o James S. Priger
13 Larchwood West, S.P. 04106

30-B-4 - Ronald C. Brooks ✓
206 South St.
Yorkham, Me. 04038

30-C-1

30-C-2

30-C-3

30-C-4

30-C-5

30-C-6

30-C-7

Repeat
Richard J. Strick +
T. Scott Jones Jr. ✓

30-H-4,7 - Joel Russ
415 Congress ✓

30-C-8 - Pine Tree Paper Co. since. Repeat
102 Commercial

30-D-1

30-D-2

Schmadel's Realty Corp.
72 Commercial St.
P.O. Box 3542, City 04104 ✓

30-D-5 - Cumberland Oil Co.
84 Commercial St. - 04111 ✓

30-E-1 - ^{to 3} Maine Port Authority RETURNED 3/5/82
P.O. Box 1045
Portland, Me.

Pick
File
B.I.W.

CITY OF PORTLAND, MAINE

MEMORANDUM

TO: David C. Bittbender, Health Officer

FROM: John E. Vandoloski, Environmental Health Director JEV

SUBJECT: Environmental Health Issues, Bath Iron Works Project

Rodent Control

Once heavy work, such as removing piles, etc., commences in the BIW area, there is no doubt whatsoever that the moderate population of Norway rats which presently infest the "shoreline" will be forced to migrate, in this case, towards Munjoy Hill or other areas where food is abundant.

The environmental health division conducted an extensive trapping program during August 1981 to determine rodent activity and results of that program demonstrated that the area in question had a sizable rodent population. Our "survey" concentrated on a 200 foot section of banking which afforded maximum conditions for rodent harborage.

In order to preclude any "forced migration", I would recommend that the entire area be baited with Talon and Zinc Phosphide rodenticides prior to commencement of heavy construction work. In addition, I feel it would be prudent to bait the sewer systems on Fore Street, India Street, and Commercial Street with weather resistant bait blocks. For your information, sewers in specific areas on Munjoy Hill such as Turner and Sheridan Streets have always shown an above average level of rodent activity but I feel we can hold citizen rodent complaints to a minimum by following the above plan of action.

Asbestos

As we are all aware, asbestos fibers have been proven to be a known carcinogenic substance which can lead to asbestosis, lung cancer, or mesothelioma. It is an insidious carcinogen as its effects produce clinical symptoms 20-30 years after exposure. Recent studies of shipyard workers, including those exposed to asbestos even for brief periods of time (as little as a month or two), indicate the presence, in some, of asbestos related diseases. Even some workers who may not have worked directly with asbestos, but whose jobs were located near contaminated areas, have developed asbestos related health problem many years after exposure. There is also some evidence that members of families of workers heavily exposed to asbestos face an increased risk of developing mesothelioma and perhaps other asbestos related diseases, probably as a result of exposure to asbestos dust brought into the home on the shoes and clothing of workers.

When we speak of asbestos as a health hazard, we must keep in mind that the "released" fibers can remain suspended in the ambient air for up to 96 hours and it is the inhalation of these fibers which may lead to health problems in the future. It is very important to keep in perspective that even though health problems are not recognized until 30 years "post" exposure, asbestos is a potent carcinogen which can cause lung cancer and mesothelioma, two medical conditions for which there is no known cure. Exposures associated with the vastly increased amounts of asbestos used during the 1940-1960's have only begun to be seen and will not have their full impact until the 1990's or early decades of the 21st century.

It would appear from available evidence to date that the asbestos fiber burden from the urban environment is of itself not an important factor in the development of primary bronchogenic or gastrointestinal cancer in urban dwellers who are not subjected to industrial exposure.

OSHA does regulate asbestos with regards to permissible exposure levels, which employees may be exposed to. These levels could also pertain to anyone inhaling asbestos fibers.

- a. Permissible exposure to airborne concentrations of asbestos fibers which went into effect July 1, 1976 states "the 8 hour time weighed average airborne concentrations of asbestos fibers to which any employee may be exposed shall not exceed (2) two fibers, longer than 5 micrometers per cubic centimeter of air."
- b. No employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of (10) ten fibers, longer than 5 micrometers, per cubic centimeter of air.

As asbestos is found in a variety of products such as; cement products (pipes, roofing shingles, gutters), textiles (protective clothing lagging, mailbags, conveyor belts), paper products (millboard, flooring and roofing felt), automotive friction products (gaskets, brake linings, clutch plates), and insulation products (pipe and boiler insulation, bulkhead lining for ships), we must be aware that the product is continually in the environment and not only found in ship yards. The product is in our daily lives and environment, at least at a minimum concentration, and I can safely add that we are not sure at what exposure a health problem may be realized.

From speaking with Jim Mitchell, industrial hygienist with the OSHA office in Augusta, it appears that the only hazard asbestos will present will be when a ship is brought in for repairs and the asbestos must be stripped from boilers, pipes, etc. During asbestos removal, the product is in a "wet state" to limit airborne fiber emission to employees and into the ambient air.

We have the capability to monitor the ambient air for asbestos fibers with our hi-vol air sampler which we purchased last year. Also, I recently spoke with Sandy Tate from the DEP office in Portland and she mentioned that the DEP might get involved as far as monitoring is concerned if BIW were to refurbish old ship's hulls or if we were to discover that our monitoring did reveal that asbestos was being released into the environment.

I feel that the standards for emissions which I mentioned earlier provide ample protection for citizens of the Munjoy Hill area. If the employees at BIW are not exposed to levels exceeding permissible exposure, there is no possible way that citizens will be subjected to a significant hazard whatsoever from the proposed BIW expansion with regards to asbestos.

Obviously, if we were to monitor the area, we would have to complete preliminary monitoring to determine amount of asbestos fibers present prior to BIW coming to Portland in order to have a technical comparison.

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Stephen T. Honey, City Manager

DATE: 12/9/83

FROM: Alexander Jaegerman, Chief Planner

SUBJECT: Site visit at BIW

On Tuesday, December 6, staff from planning, inspections, and Tom Valleau conducted an on-site inspection of BIW to check conformance with the site plan as approved by the Planning Board. The following personnel were involved in this inspection:

Alex Jaegerman, Chief Planner
Tom Valleau, Dir., Transportation and Waterfront Facilities
Rick Knowland, Sr. Planner
Doug Mason, Sr. Planner
Marland Wing, Bldg. Inspector

from Bath Iron Works:
Hal Plummer
David ?

By and large the BIW development conforms to the site plan, however the following issues and minor deficiencies were observed and should be addressed:

1. Landscaping - The site plan approved by the Planning Board required 4-6' tall mugho pine shrubs along the Commercial Street fence to screen the parking and soften the appearance of the facility. The inspection revealed that 1-2½' tall shrubs, instead of 4-6' tall shrubs were planted. These smaller slow-growing shrubs are clearly inadequate for the purposes desired. In addition at least a 30' row of shrubs still needs to be installed along the fence. All other landscaping was in place, although several yews were in poor condition and may need replacement in the spring.

The change in the configuration of fencing on Commercial Street at India Street from that shown on the site plan (see #2 below) also provides an opportunity to extend the decorative fencing and shrub screen to the end of Commercial Street. The approved plan showed this landscaping and decorative fencing ending at a point on Commercial Street connecting with a change in property line direction, which has since been eliminated. Although it would be beneficial to extend this landscaping in front of the terminus and view down India Street, this was not a requirement of the site plan.

2. Parking lot - It was noted that the northerly boundary of the parking lot (along the railroad tracks) does not match the boundary shown on the plan. A jog in the fence line was smoothed out, resulting in a small increase in parking spaces along the fence. A revised site plan is to be submitted by BIW to the Planning office reflecting this change. The striping of the

parking area is not yet complete, but is underway and will be finished shortly. Although no curb or bumper guards are required by the site plan along the water's edge of the far lot, BIW has acknowledged the need for a safety barrier at this location.

3. Lighting. The lighting for the site conforms to the site plan. We will be checking whether the angle of the luminaires will cause night visibility conflicts with water traffic in the harbor.

The December 6 inspection revealed progress toward compliance with the terms of the site plan. Additional inspections might be necessary as follow-up or to check such items as utility specifications. I will be informing BIW of our findings by letter next week.

cc: Tom Valteau, Dir., Transportation and Waterfront Facilities
Joseph E. Gray, Jr., Dir., Planning & Urban Development
Sam Hoffses, Chief of Inspection Services
Doug Mason, Senior Planner
Rick Knowland, Senior Planner

DAVID LOURIE, CORPORATION COUNSEL

12/14/83

RICHARD J. RANAGHAN, JR., FINANCE DIRECTOR

FINAL PAYMENT TO BIW (\$2.7 MILLION)

I am in receipt of Jim Gardner's letter of December 1, 1983 and Daniel Webster's letter of December 6, 1983 regarding "final" completion of the Project.

The Purchase and Sales Agreement (item 2) states the City shall pay the \$2.7 million to the State "...within 10 days of certification by the resident engineer of final completion of both the Pier and dry dock...". Two certifications by Paul Pottle, Project Inspector MDOT, and William Fernald, Deputy Commissioner MDOT, state that the project is "...substantially complete...". Mr. Gardner's letter also states that the "...Project is substantially complete..." and lists the following remaining to be completed:

<u>ITEM</u>	<u>COMPLETION DATE</u>
1. Repair the coatings on State Pier pilings	"Spring, 1984"
2. Dredging of 22,000 cubic yards of material	"Next 2 years"
3. List of items to be completed on the dry dock (see attached)	12/17/83
4. Approval to operate the dry dock by the Navy	"Next 60 days"
5. 2 Lawsuits filed	?
6. 2 Lawsuits may be filed	?
7. "As-built" plans	"June 1, 1984"

I am in a position to pay the \$2.7 million as required by Friday, December 16, 1983; however, I need to know if the Project is considered to be finally completed as stated in the Purchase and Sale agreement or if "substantial completion" meets that requirement.

cc: Stephen T. Honey, City Manager
Alex Jaegerman

Copies to
Dick R
Dave L
the file B I W DEC 2 1983



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530

L. JAMES GARDNER
Vice President
and
General Counsel

GC:804/gmw
December 1, 1983

Mr. William F. Fernald
Deputy Commissioner
Bureau of Transportation Services
Maine Department of Transportation
State House Station 16
Augusta, Maine 04333

Subject: Portland Project

Dear Mr. Fernald:

With regard to the subject Project and your letter dated November 9, 1983 requesting information documenting Project Completion thereby permitting final payment, please be advised as follows:

- A. The Project is substantially complete. The Facility is in a workable condition and capable of receiving and repairing ships as contemplated by the existing Agreements among the parties. This acknowledgement, we believe, is confirmed by the fact that the Grand Opening of the Facility is scheduled for December 10, 1983.
- B. As to the specific status of the piers, dolphins and other portions of the Project excluding the drydock, the only punch list item outstanding is repairing the coatings on piles supporting the Maine State Pier, Repair Pier and the Dolphins, a task presently targeted for completion next spring.

Certifications on all cranes installed at the Portland Facility are enclosed as Attachment 1. (The list includes the cranes on the drydock wing walls.)

All utility and service piping systems have been properly tested and certified as complying with construction standards, specifications and building codes imposed by the Agreements and specifications. (See the statement in Attachment 1.)

Mr. William F. Fernald
Maine Department
of Transportation

3

December 1, 1983

Great Lakes Dredge and Dock Company v. Seaward
Construction Company, Seaboard Surety Company, and Bath
Iron Works Corporation

This case was filed in the United States District Court-Portland on November 10, 1983. Plaintiff seeks \$1,500,000 for dredging and pile removal services performed at the Portland Facility site and disruptions allegedly experienced in the course of that performance.

A law suit may be filed in connection with the pile driving work performed at the site and another in connection with the painting of the 60 ton crane.

None of the cases, whether actual or potential, compromise the substantial completion of the Facility which has been achieved and, in our opinion, none should adversely impact on the operation of the Facility in the manner contemplated by the Parties.

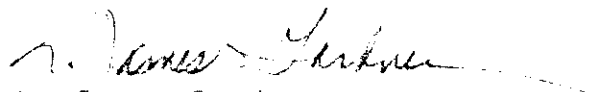
The Drydock Operating Manual once approved will be available for review at the Portland Facility.

Our plans reflecting the "as-built" condition of the Facility will be available for review on June 1, 1984. In the event that you should require any Facility data before that date, you should find useful the Consultant Construction Drawings that have been previously forwarded to your office.

If additional information is required in any of the areas covered by this letter, do not hesitate to call. Your cooperation in this respect is sincerely appreciated as we do not want a lack of verifying documentation to be the cause for any delay by the State in making final payment.

Very truly yours,

BATH IRON WORKS CORPORATION



L. James Gardner
Vice President General Counsel

cc: R. A. Young, Senior Vice President
D. V. McLaughlin, Jr., Assistant Treasurer
A. L. Fairfield, Controller's Office
Stephen T. Honey, City Manager, Portland ✓
Thomas Valleau, Director of Transportation, Portland
Stuart A. Sabeau, State of Maine

BATH IRON WORKS CORPORATION

MEMORANDUM

ATTACHMENT 1

FROM- GARY TOPPI

DATE Nov. 23, 1983

TO- H.C. PLUMMER

SUBJECT- PORTLAND PROJECT COMPLETION

ENCL. 1) CRANE CERTIFICATION SHEETS

1. Pressure testing of all utility piping systems has been performed and has satisfactorily met the standards and specifications set forth to the contractor.
2. Certification letters from an independent testing agency (International Cargo Gear Bureau Inc.) for all seven cranes are Enclosure I. They are as follows:

#1. Repair Pier Access Crane	60T	Washington
#2. Dry Dock Port Wingwall	25T	American
#3. Dry Dock Stbd Wingwall	25T	American
#4. Maine State Pier Crane	25T	American

#1 5 Ton Bridge Crane	Philadelphia	Tramrail
#2 5 Ton Bridge Crane	Philadelphia	Tramrail
#3 5 Ton Bridge Crane	Philadelphia	Tramrail

INTERNATIONAL CARGO GEAR BUREAU, INC.



17 BATTERY PLACE
NEW YORK, N. Y. 10004
212-425-2750
CABLE: INCARGEAR NEWYORK

October 25, 1983

Bath Iron Works Corporation
700 Washington Street
Bath, Maine 04530

Attention: Mr. R.J. Turcott, Purchasing Division &
Mr. Guy Siegers, Purchasing Division

P.O. C 2562-H27

re: WASHINGTON CRANE #1
-IOGB Registration No. ST-4423 (Initial Registration)

- Enclosures: (1) IOGB Quadrennial Certificate, form OSHA 71
effective as of October 7, 1983
- (2) Supplements A, B, & C

Gentlemen:

The enclosed certificate is issued according to the associated procedures completed on the effective date indicated for the referenced equipment.

The enclosed Supplements are applicable to the certificate now provided and are presented for your attention.

As indicated in the enclosed Supplement B, it is recommended that the enclosed certificate be suitably posted in the operating cab or otherwise at or near the worksite as required by USDL/OSHA regulations Section 1919.90 (d) and by such means as will assure continuing durability and legibility of the document.

We are pleased to provide this initial IOGB certification and to record the referenced equipment as currently registered by IOGB. By means of such registration, related records supporting the IOGB certification status will be maintained here and associated advance notification of future certification renewal will be provided by IOGB.

Sincerely yours,
INTERNATIONAL CARGO GEAR BUREAU, INC.

Edward Masel
Edward Masel
Deputy Chief Surveyor

EM:dsg

cc: Mr. Rolf Hansen, Projects Eng. - w/c cert.
Bath Iron Works, Bath, Maine 04530

Mr. D.W. Reynolds - w/c cert.
IOGB Rep. #029 - 3 PORTLAND, MA.

USDL/OSHA - Concord, N.H.
(Form OSHA 71 only)

Unit Test and/or Examination of
Derrick, or Other Material Handling Device

U.S. Department of Labor
QUADRENNIAL CERTIFICATION



This certificate may be issued only by persons acting under current accreditation by the Occupational Safety and Health Administration under the provisions of 29 CFR Part 1919, or otherwise specifically authorized to do so by the Occupational Safety and Health Administration. Use of this certificate by unauthorized persons is prohibited. Violators may subject themselves to the penalties provided in 33 U.S.C. 941 (P.L. 85-742).

Form Approved
O.M.B. No. 44R-1488

Certificate No. ST-4423

1. Owner BATH IRON WORKS CORPORATION BATH, MAINE 04530
700 WASHINGTON STREET
ATT: PROJ. ENG.

2. Description (check): Crane - Derrick - Other (describe) _____
Location: (a) Remains at worksite (b) Changes worksite (c) Aboard vessel

If (a) or (c), describe: IN MARINE INDUSTRY, ON B.I.W. PIER, PORTLAND, YARD, PORTLAND, MAINE

If crane, type (truck, rail, etc.): RAIL TRAVELING GANTRY CRANE, REVOLVING, WITH LUFFING BOOM, SUPPLIED ELEC

Manufacturer WASHINGTON Model 28-175-85 Serial No. 5534
CRANE

If derrick, describe: _____

If spout or other device, describe: _____

Owner's identification, if any: WASHINGTON CRANE #1

3. Service status at time of survey (check) Lifting w/hks* Clamshell Magnet * 2 Lifting Configurations. 1 Main Fall & 1 Whip Fall. Wire Rope Reaving and Data: No. of Parts & Dia. Resp. Main Fall 7 - 1", Other, describe Whip Fall 2 - 1", Boom Hoist 13 - 1", Boom Pendants 2 - 1-3/4".

4. Boom at time of survey (except bridge cranes) Length 190' ** Type STEEL TRUSS, ANGULAR CHORDS & LACING.

5. Test loads applied (cross out if only examination conducted) ** 175' TO MAIN FALL - 190' TO WHIP FALL.

Radius	FALL	Proof Loads	Rated Loads
45'	MAIN	75.7 ST (A)	60 ST
100'	MAIN	30 ST (A)	27 ST
170' - 65'	WHIP	14 ST (A)	11 ST

(A) AS SELECTED BY OWNERS - REQUIRED P/L's 66 ST, 29.7 ST & 12.1 ST RESPECTIVELY

Means of application of proof load KNOWN DEADWEIGHTS

Basis for assigned load ratings MANUFACTURERS PUBLISHED DATA

6. Remarks and/or limitations imposed Notwithstanding any other manufacturer designated operating no. 11, the indicated radii are the maximum radii designated by the Owner for safe lifting and certification.

7. Load limit or limiting factor (check) Accuracy
I certify that on this 7 day of October 1983 that the described device was tested and examined by the undersigned or his authorized representative that said test and examination met or all tests with the requirements of 29 CFR Part 1919 or with requirements prescribed in the under the provisions of 29 CFR 1915 (b) (2) and any other rules considered to constitute a satisfactory condition have been met and that the device is safe for use under the conditions and load limits specified with this governing certificate.

Name and address of agency or person who tested and examined the device: INTERNATIONAL CARGO GEAR BUREAU, INC. NEW YORK, NEW YORK

Name and address of person who attended test: D.W. REYNOLDS PORTLAND, MAINE ATTENDED BY: ICGB #029-3

Position of signatory in the organization: DEPUTY CHIEF SURVEYOR

E. WASE
INTERNATIONAL HEADQUARTERS



This certificate may be issued only by persons acting under current accreditation by the Occupational Safety and Health Administration under the provisions of 29 CFR Part 1919, or otherwise specifically authorized to do so by the Occupational Safety and Health Administration. Use of this certificate by unauthorized persons is prohibited. Violators may subject themselves to the penalties provided in 33 U.S.C. 941 (P.L. 85-742).

Form Approved
 O.M.B. No. 44R-1488

Certificate No. ST-4418

1. Owner BATH IRON WORKS CORPORATION BATH, MAINE 04530
700 Washington Street Att: Project Engineer

2. Description (check) Crane Derrick Other (describe) _____
 Location (a) Remains at worksite (b) Changes worksite _____ for shipment _____

If (a) or (b), describe: IN MARINE INDUSTRY, PORT WINGWALL - BIW DRYDOCK PORTLAND, MAINE

If crane, type (truck, rail, etc.): RAIL TRAVELING GANTRY CRANE, REVOLVING, W/LUFFING BOOM, DIESEL ELECTRIC

Manufacturer American Model --- Serial No. ----
Terry Derrick Co.

If derrick, describe: _____

If spout or other device, describe: _____

Owner's identification, if any DRYDOCK GANTRY CRANE #2

3. Service status at time of survey (check) Lifting w/hrs* W/hrs* W/hrs* * Two Lifting Configurations - 1 Main Fall
 1 Whip Fall. Wire rope reeving & data: No. of Parts & Dia., resp: Main Fall 7-3/4",
 Other, describe: Whip 1-3/4". Boom hoist 10-3/4".

4. Boom at time of survey (except bridge cranes) Length 87' ** Steel truss, angular chords & lacing.

5. Test loads applied (cross out if only examination conducted) ** 75' to Main Fall/87' to Whip Fall.

Radius	Fall	Proof Loads	Rated Loads
45'	Main	30 ST (60,000#)	25 ST (50,000#)
60'	Main	22 ST (44,000#)	17 ST (34,000#)
45'-75'	Whip	7 ST (14,000#)	5 ST (10,000#)

(A) AS SELECTED BY OWNERS - REQUIRED PL 55,000#, 37,400#, and 11,000# RESPECTIVELY.

Means of application of proof loads KNOWN DEADWEIGHTS

Basis for proof load ratings OWNER DESIGNATED AND WARRANTED

6. Remarks and/or limitations imposed Notwithstanding any other manufacturer design-
 rated or stamped limits, the indicated radii are
 the max. and the min. radii designated by the
 Owner's rep. for testing and certification.

7. Load indicator or limit device (check) W35

I certify that on the 26th day of September 1983 the above material was tested and examined W35 by the undersigned or his
 authorized representative that such test and examination were conducted in accordance with the requirements of 29 CFR Part 1919, or with require-
 ments deemed comparable under the provisions of 29 CFR 1919 that the material was in safe condition for use and that the equipment and factory condition have
 been corrected and that the equipment is fit for use.

Name and address of testing agency INTERNATIONAL CARGO GEAR BUREAU, INC. NEW YORK, NEW YORK

Name and address of authorized representative ATTENDED BY:
D.W. REYNOLDS PORTLAND, MAINE ICGB #029-3

Position of authorized representative DEPUTY CHIEF SURVEYOR

[Signature]

Occupational Safety and Health Administration
 Certificate of Unit Test and/or Examination of
 Crane, Derrick, or Other Material Handling Device

U.S. Department of Labor
 QUADRENNIAL CERTIFICATION



This certificate may be issued only by persons acting under current accreditation by the Occupational Safety and Health Administration under the provisions of 29 CFR Part 1919, or otherwise specifically authorized to do so by the Occupational Safety and Health Administration. Use of this certificate by unauthorized persons is prohibited. Violators may subject themselves to the penalties provided in 33 U.S.C. 941 (P.L. 85-742).

Form Approved
 O.M.B. No. 44R-1488

Certificate No. ST-4419

1. Owner BATH IRON WORKS CORPORATION BATH, MAINE 04530
700 Washington Street Att: Project Manager

2. Description (check): Crane Derrick Other (describe) _____
 Location (a) Remains at worksite (b) Changes worksite _____ (c) Aboard vessel _____

If (a) or (c), describe IN MARINE INDUSTRY, STBD. WINGWALL - BIW DRYDOCK PORTLAND, MAINE

If crane, type (truck, rail, etc.) RAIL TRAVELING GANTRY CRANE, REVOLVING W/LUFFING BOOM, DIESEL ELECTRIC

Manufacturer American Model --- Serial No. ---
Terry Derrick Co.

If derrick, describe _____

If spout or other device, describe _____

3. Owner's identification, if any DRYDOCK GANTRY CRANE #3

4. Service status at time of survey (check): Lifted w/hks* * Two Lifting Configurations. 1 Main
 & 1 Whip Fall. Wire rope reeving and data: No. of Parts & Dia. resp. Main Fall 7-3/4",
 Other, describe Whip 1-3/4". Boom hoist 10-3/4".

4. Boom at time of survey (except bridge cranes) length 87' ** Steel truss, angular chords & lacing.
 5. Test loads applied (cross out if only examination) ** 75' to Main Fall/87' to Whip Fall.

Radius	Fall	Proof Loads	Rated Loads
45'	Main	30 ST (60,000#)	25 ST (50,000#)
60'	Main	22 ST (44,000#)	17 ST (34,000#)
45'-75'	Whip	7 ST (14,000#)	5 ST (10,000#)

(A) AS SELECTED BY OWNERS - REQUIRED PL 15,000#, 37,400# and 11,000# RESPECTIVELY.

Means of application of proof load KNOWN DEADWEIGHTS
 Basis for selected load rating OWNER DESIGNATED AND WARRANTED

6. Remarks and/or limitations apply Notwithstanding that the radii are designated by the owner's designation and certification.

7. Load indicator (limiting factor) X was
 located, that on the 26th of September 1982 by the undersigned or his
 authorized representative that said _____
 has determined that the _____

Name and address of test agency INTERNATIONAL GARGO GEAR BUREAU, INC. NEW YORK, NEW YORK

Tested on behalf of D.W. REYNOLDS PORTLAND, MAINE ATTENDED BY: ICGB #029-3

Signature of Chief Surveyor DEPUTY CHIEF SURVEYOR

Grassell

Occupational Safety and Health Administration
 Certificate of Unit Test and/or Examination of
 Crane, Derrick, or Other Material Handling Device

U.S. Department of Labor
 QUADRENNIAL CERTIFICATION



This certificate may be issued only by persons acting under current accreditation by the Occupational Safety and Health Administration under the provisions of 29 CFR Part 1919, or otherwise specifically authorized to do so by the Occupational Safety and Health Administration. Use of this certificate by unauthorized persons is prohibited. Violators may subject themselves to the penalties provided in 33 U.S.C. 941 (P.L. 85-742).

Form Approved
 O.M.B. No. 44R-1488

Certificate No. ST-4359

1. Owner BATH IRON WORKS CORPORATION BATH, MAINE 04530
700 Washington St. Att: Proj. Eng.

2. Description (check): Crane Derrick Other (describe) _____
 Location: (a) Remains at worksite (b) Changes worksite _____ (c) Aboard vessel _____
 If (a) or (c), describe: ON #4 CRANE WAY MAINE STATE PIER PORTLAND, MAINE
 If crane, type (truck, rail, etc.): RAIL TRAVELING GANTRY CRANE, REVOLVING, WITH LUFFING BOOM, SUPPLIED ELEC.
 Manufacturer American Model --- Serial No. 4124
Terry Derrick Co.
 If derrick, describe: _____
 If spout or other device, describe: _____
 Owner's identification, if any: GANTRY CRANE #4

3. Service status at time of survey (check): Lifting / hks / sh / shell _____ Magnet _____
 Other, describe * 1 MAIN FALL & 1 AUX. FALL REEVED WITH 7 PART & 1 PART OF 3/4" WIRE ROPE RESP.

4. Boom at time of survey (except bridge cranes) Length 87' 10" w/ Type Steel truss, angular chords & lacing.
74' 10" to Main Fall / 87' 10" to

5. Test loads applied (cross out if only examination conducted).

Radius	Fall	Proof Loads	Rated Loads	Whip Fall
45'	Main	31 ST (62,000#)	25 ST (50,000#)	
60'	Main	21.25 ST (42,500#)	17 ST (34,000#)	
87'	Whip	6.3 ST (12,600#)	5 ST (10,000#)	

(A) AS SELECTED BY OWNERS - REQUIRED PL 55,000#, 37,400# and 11,000# RESPECTIVELY

Means of application of proof load: KNOWN DEADWEIGHTS
 Basis for assigned load ratings: MANUFACTURERS PUBLISHED DATA

6. Remarks and/or limitations imposed: Notwithstanding any other manufacturer design-
 rated operating radii, the indicated radii are
 the max. and the min. radii designated by the
 Owner's Rep. for testing and certification.

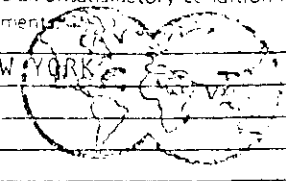
7. Load indicating or limiting device (check): Fitted _____ Not fitted Accuracy _____ was _____

I certify that on the 1st day of March, 19 83, the above described device was (tested and examined) (examined) by the undersigned or his authorized representative, that said (test and examination) (examination) met in all respects with the requirements of 29 CFR Part 1919 or with requirements declared compatible under the provisions of 29 CFR 1918.13(b) (2), that any deficiencies considered to constitute an unsatisfactory condition have been corrected, and that the device has been found to be in compliance in all applicable respects with the governing requirements.

Name and address of accredited or otherwise authorized organization making the test and/or examination: INTERNATIONAL CARGO GEAR BUREAU, INC. NEW YORK, NEW YORK

Name and address of authorized person carrying out the test and/or examination: D.W. REYNOLDS PORTLAND, MAINE ATTENDED BY: _____
ICGB #029-3

Position of signatory in the organization making the test and/or examination: DEPUTY CHIEF SURVEYOR



Signature: [Signature]
 Date: APR 11 1983
 INTERNATIONAL HEADQUARTERS
 RECEIVED NEW YORK



DOCUMENTATION OF UNIT TEST AND/OR EXAMINATION OF CRANE, DERRICK,
OR OTHER MATERIAL HANDLING DEVICE

Annual 2/28/84

A. Type of Documentation QUADRENNIAL for suggested Regular Renewal by Quad 2/28/87

B. Owner: BATH IRON WORKS CORPORATION 700 Washington Street Bath, Maine 04530

Att: Proj. Eng.

C. Description: (check) Crane Derrick Other (describe) _____
Location: Remains at worksite Changes worksite Other (describe) _____
@ MAINE STATE PIER PORTLAND, MAINE

If Crane, type (truck, rail, etc.) OVERHEAD TRAVELING BRIDGE CRANE
Manufacturer: Philadelphia Tremoll Model --- Ser. # 2223
Manufacturer: _____ Model _____ Ser. # _____
Manufacturer: _____ Model _____ Ser. # _____

If Derrick, describe: _____

If other device, describe: _____

Owner's identification, if any: 5 TON WEST BAY CRANE

D. Service status at time of survey (check): Lifting w/hr* Clamshell Magnet
Other (describe) * 1 MAIN FALL REEVED WITH 4 PARTS OF 5/8" WIRE ROPE.

E. Boom at time of survey (except bridge cranes): Length -- Type ----

F. Test loads applied (cross out if only examination conducted);

BRIDGE TRAVEL DISTANCE	Radius/Trolley Travel Distance	Proof Loads	Rated Loads
<u>80'</u>	<u>35'</u>	<u>12,600#</u>	<u>10,000#</u>
_____	_____	_____	_____
_____	_____	_____	_____

Means of application of proof load: KNOWN DEADWEIGHTS

Basis for assigned load ratings: MANUFACTURERS PUBLISHED DATA

G. Remarks and/or limitations imposed: _____

H. This is to verify that on the 28th date of Feb., 1983, the above described device was* (tested as arranged by or with the permission of the Owner, and was examined) (examined) by the herein noted ICGB Representative; that said (test and examination) (examination) procedures were noted to have been satisfactorily completed according to provisions of: USOL/OSHA PART 1910 SUBPART H SECTION 1910.179

This documentation form is issued to record the survey procedures herein noted but does not substitute for any Federal or State certificate which may be otherwise required for the herein listed equipment and which may be recorded by another ICGB certificate form for such Federal or State certification purpose.

Name and ICGB Representative's number of authorized person completing the examination: D.V. REYNOLDS PORTLAND, MAINE ICGB #029-3

Signature: _____

Date: _____



DOCUMENTATION OF UNIT TEST AND/OR EXAMINATION OF CRANE, DERRICK,
OR OTHER MATERIAL HANDLING DEVICE

A. Type of Documentation QUADRENNIAL for suggested Regular Renewal by Annual 2/28/77
Quad 2/28/77

B. Owner: BATH IRON WORKS CORPORATION 700 Washington St. Bath, Maine 04530
Att: Proj. Eng.

C. Description: (check) Crane Derrick Other (describe) _____
Location: Remains at worksite Changes worksite Other (describe) _____
@ MAINE STATE PIER PORTLAND, MAINE

If Crane, type (truck, rail, etc.) OVERHEAD TRAVELING BRIDGE CRANE
Manufacturer: Philadelphia Tramail Model --- Ser. # 2224
Manufacturer: _____ Model _____ Ser. # _____
Manufacturer: _____ Model _____ Ser. # _____

If Derrick, describe: _____

If other device, describe: _____

Owner's identification, if any: 5 TON NORTH END, EAST BAY CRANE

D. Service status at time of survey (check): Lifting w/hk* Clamshell _____ Magnet _____
Other (describe) * 3 MAIN FALL REEVED WITH 4 PARTS 3/8" WIRE ROPE.

E. Boom at time of survey (except bridge cranes): Length -- Type --

F. Test loads applied (cross out if only examination conducted);

BRIDGE TRAVEL DISTANCE	Radius/Trolley Travel Distance	Proof Loads	Rated Loads
<u>30'</u>	<u>25'</u>	<u>12,600#</u>	<u>10,000#</u>
_____	_____	_____	_____
_____	_____	_____	_____

Means of application of proof load: KNOWN DEADWEIGHTS
Basis for assigned load ratings: MANUFACTURERS PUBLISHED DATA

G. Remarks and/or limitations imposed: _____

H. This is to verify that on the 28th date of Feb., 1983, the above described device was (tested as arranged by or with the permission of the Owner, and was examined) (~~examined~~) by the herein noted ICGB Representative; that said (test and examination) (~~examination~~) procedures were noted to have been satisfactorily completed according to provisions of: USDL/OSHA PART 1910 SUBPART N SECTION 1910.179

This documentation form is issued to record the survey procedures herein noted but does not substitute for any Federal or State certificate which may be otherwise required for the herein listed equipment and which may be recorded by another ICGB certificate form for such Federal or State certification purpose.

Name and ICGB Representative's number of authorized person completing the examination: D.W. REYNOLDS PORTLAND, MAINE ICGB #029-3

Signature: _____
Date: _____

INTERNATIONAL CARGO GEAR BUREAU, INC.

17 BATTERY PLACE • NEW YORK, N. Y. 10004



DOCUMENTATION OF UNIT TEST AND/OR EXAMINATION OF CRANE, DERRICK,
OR OTHER MATERIAL HANDLING DEVICE

A. Type of Documentation QUADRENNIAL for suggested Regular Renewal by Annual 2/28/
Quad 2/28/

B. Owner: BATH IRON WORKS CORPORATION 700 Washington St. Bath, Maine 04530
Att: Proj. Eng.

C. Description: (check) Crane Derrick Other (describe) _____
Location: Remains at worksite Changes worksite Other (describe) _____
@ MAINE STATE PIER PORTLAND, MAINE

If Crane, type (truck, rail, etc.) OVERHEAD TRAVELING BRIDGE CRANE
 Manufacturer: Philadelphia Tramail Model --- Ser. # 2225
 Manufacturer: _____ Model _____ Ser. # _____
 Manufacturer: _____ Model _____ Ser. # _____

If Derrick, describe: _____
 If other device, describe: _____

Owner's identification, if any: 5 TON SOUTH END, EAST BAY CRANE

D. Service status at time of survey (check): Lifting w/hk* Clamshell Magnet
 Other (describe) * 1 MAIN FALL REEVED WITH 4 PARTS 3/8" WIRE ROPE.

E. Boom at time of survey (except bridge cranes): Length -- Type ---

F. Test loads applied (cross out if only examination conducted);

BRIDGE TRAVEL DISTANCE	Radius/Trolley Travel Distance	Proof Loads	Rated Loads
<u>25'</u>	<u>25'</u>	<u>12,600#</u>	<u>10,000#</u>
_____	_____	_____	_____
_____	_____	_____	_____

Means of application of proof load: KNOWN DEADWEIGHTS
 Basis for assigned load ratings: MANUFACTURERS PUBLISHED DATA

G. Remarks and/or limitations imposed: _____

H. This is to verify that on the 28th date of Feb., 19 83, the above described device was (tested as arranged by or with the permission of the Owner, and was examined) (~~examined~~) by the herein noted ICGB Representative; that said (test and examination) (~~examination~~) procedures were noted to have been satisfactorily completed according to provisions of: USDL/OSHA PART 1910 SUBPART H SECTION 1910.179

This documentation form is issued to record the survey procedures herein noted but does not substitute for any Federal or State certificate which may be otherwise required for the herein listed equipment and which may be recorded by another ICGB certificate form for such Federal or State certification purpose.

Name and ICGB Representative's number of authorized person completing the examination: D.M. REYNOLDS PORTLAND, MAINE 7025 7029-3

Signature: _____
 Date: _____

INTERNATIONAL CARGO GEAR BUREAU, INC.

17 BATTERY PLACE • NEW YORK, N. Y. 10004

F-295 B

BATH IRON WORKS CORPORATION
MEMORANDUM

FROM- J. E. Carville
 TO- H. M. Stupinski
 SUBJECT-

DATE November 15, 1983

Completion date - Dec. 17th. '83

List of work to be completed on dry dock:

<u>ITEM #</u>	<u>DESCRIPTION</u>
27/30 1004	Paint wingwall decks and draft marks.
25/32 1008	Remove remaining keel blocks.
5/43 1013	Install and weld approximately 50 protective guards on the pontoon check valves.
1013	Install and weld remaining vent caps on wingwall tank vents.
50 1015	Turn two pontoon hatch ladders around on Sections "C" and "H" to allow access through scuttles.
25 1016	Build Qty. 26 bilge block towers 12 feet high.
50 1017	Install drain holes to remove water from between new bilge block runners maintaining runners water tight.
50/43 1018	Complete welding bilge block hauling gear (sheeves upper longitudinal and drive assembly) also install chains.
25 1020	Complete life lines and stanchions including welding.
1022	Remove and realign crane rails as necessary.
50/43 1023	Change grating at crossover ends. Install access to outboard of wingwalls. Install grating between pontoons outboard of wingwalls. Modify sloping ladder on "A" Section port.
50/43 1024	Install kick plate on flying bridge grating and complete welding.
1021	Install dash pot oil on breakers and repair required motors and controllers.

<u>ITEM #</u>	<u>DESCRIPTION</u>
1034 <i>fact</i>	Perform a design study on vent system.
various	Install remaining lagging on the steam, fire main, condensate and potable water system.
15 1038	Relocate compressed air valves to clear bilge block chains.
15 1040	Install sewage discharge line with heat tape and lagging.
1043 <i>Q</i>	Complete hook up of bilge alarm system.
21 various	Fabricate and install hose supports on all shore connections.
43 1047	Complete installation of welding receptacles on "D" Sections.
1048 <i>Q</i>	Fine tune PA and phone system.
19 1050	OK Install pit lights. - Install 16 additional lights on wingwall for surveyor's marks, complete installation of heat tape.
19 1053	Hook up the ship's power on "F" Section and install pump switches.
1056	Complete painting crane-fuel tank and diesel engine.
1057	Rental of condo lift.
43 1065	Complete welding access trunk hangers in wingwalls.
50/39 1072	Remove temporary bracing from atop wingwall deck area prior to painting. Cut rat holes in windlass foundation.
1076	Complete development of certification manual.
50/43 1076	Refit walkway on "A" Section to clear flying bridge.
1084	Clean complete drydock one last time.
1085 <i>Q</i>	Complete testing of drydock. Install timers on main dewatering pumps.

ITEM #DESCRIPTION

1102 Square off the after end of the keel blocks using 12" x 12" oak timbers.

~~1105~~ ~~HOOD~~ Build 14 bilge block towers 12 feet high (required for CG ships).

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION BUILDING
STATE HOUSE STATION 16 AUGUSTA, MAINE 04333

mdot

DEC 8 1983

December 6, 1983

GEORGE N. CAMPBELL, JR.
Commissioner

Mr. Stephen T. Honey, City Manager
City of Portland
389 Congress Street
Portland, Maine 04111

Executive Department
City Manager's Office
Room 208 - City Hall
389 Congress Street
Portland, Maine 04101

Dear Tim:

We are now able to certify that the Bath Iron Works Project including both the dry dock and the pier facilities is substantially complete, is in a working condition, and is capable of receiving and repairing ships as contemplated by the agreements between the City, State, and Bath Iron Works Corporation.

Attached is a certification signed by myself as to the substantial completion of the dry dock together with a certification as to the substantial completion of the pier, moorings, etc. signed by Paul Pottle, Project Inspector, designated by MDOT.

In accordance with Item 2 of the Purchase and Sales Agreement between the State and the City, it is requested that the balance of \$4.6M to be paid by the City for the acquisition of the State Pier property, be released from the escrow account and paid to the State within ten days of the receipt of this certification. The first installment of \$1.9M was paid in June, leaving a balance to be paid at this time of \$2.7M. For all practicable purposes, this completes the ship repair facility and will make it possible for us to complete payment to BIW in accordance with existing agreements.

I know you appreciate the significance of this project and the efficient, effective way in which it has been accomplished by all of the involved parties. We can all look forward with pride to the improvements this has and will continue to make in the revitalization of Portland's Waterfront.

Very truly yours,


Daniel Webster, Jr.
Acting Commissioner

DW/WFF/el
Attach.

cc: R. A. Young, Sr. V.P., BIW
L. James Gardner, V.P.-Gen. Counsel, BIW
D. V. McLaughlin, Jr., Asst. Treasurer, BIW
A. L. Fairfield, Controller's Office, BIW
T. Valteau, Director of Transportation, Portland
S. A. Sabeau, State Purchasing Agent

STATE OF MAINE

Inter-Departmental Memorandum Date December 6, 1983

To File

Dept. _____

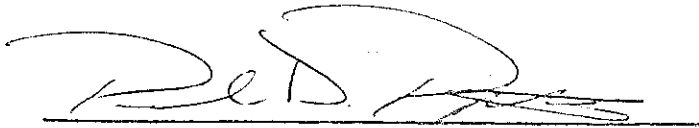
From Paul D. Pottle

Dept. Bureau of Transportation Services

Subject Certification of Project Completion - Dry Dock Facility (State Pier, Access Pier, Mooring Dolphins, Containment Area, and Associated Buildings)

Based upon ongoing inspections during the rehabilitation and new construction work at the old Maine State Pier site, now owned by the City of Portland, the facility has now been made into an operational ship yard in accordance with outstanding agreements. I hereby certify that the dry dock facility is substantially complete in accordance with existing specifications and construction drawings, and that remaining punch list items will be completed by the spring of 1984.

The facility is now operational and ready to receive and repair ships as contemplated by the existing agreements among the parties. This fact is also verified in the letter of L. James Gardner, Vice President - General Counsel, Bath Iron Works Corporation, to William F. Fernald, Deputy Commissioner, Department of Transportation, dated December 1, 1983.



Paul D. Pottle
Assistant Engineer
Bureau of Transportation Services

PDP/el

STATE OF MAINE

Inter-Departmental Memorandum Date December 6, 1983

To File

Dept. _____

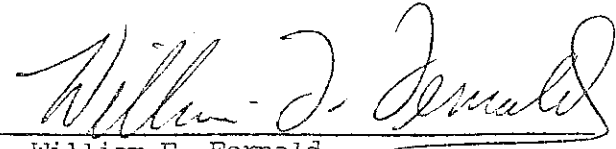
From William F. Fernald

Dept. Bureau of Transportation Services

Subject Certification of Project Completion - Dry Dock

Based upon participation in three operational tests and inspection during the work on the dry dock owned by the State of Maine which has been rehabilitated and made operational by Bath Iron Works Corporation in accordance with outstanding agreements, I hereby certify that the rehabilitation of the dry dock is substantially complete in accordance with existing specifications and that remaining punch list items will be completed on or about December 17, 1983.

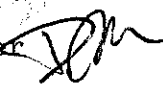
The dry dock is now operational and ready to receive and repair ships as contemplated by the existing agreements among the parties. This fact is also verified in the letter of L. James Gardner, Vice President - General Counsel, Bath Iron Works Corporation dated December 1, 1983.



William F. Fernald
Deputy Commissioner

WFF/el

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Stephen T. Honey, City Manager
FROM: Douglas L. Mason, Senior Planner 
SUBJECT: Signage for B.I.W.

DATE: 9/28/83

In reply to your request to review a 5' x 10' sign for the B.I.W. building facing Commercial Street, I have the following comments:

It is unfortunate that this sign will not contribute toward a more positive image of the physical facility. While the sign will not detract from the image of the facility, it is too small and insignificant to help identify the facility to passers-by in any substantial way or contribute as a really positive architectural element for the building.

I hope that BIW will still consider a larger sign of more significance indicating that they are "Bath Iron Works - Shipbuilders" or something similar. The best location for such a sign would be on the building facade facing Commercial Street, although the cranes or drydock itself might also be considered locations for such signage.

cc: Alex Jaegerman, Chief Planner
Joseph E. Gray, Jr., Dir., Planning & Urban Development

attachment: BIW sign proposal

H.M. STUPINSKI

SEP 23 1983 Bath Iron Works Corp.
40 Commercial Street
Portland, ME 04101

Mr. Tim Honey
City Manager
389 Congress St.
Portland, ME 04101

Dear Tim:

Sorry it took so long to get the sketch of the sign we spoke about over the telephone. No significant changes to what we originally discussed.

I went over the contents with Bill Haggett and Royce Young and have enclosed a copy to you.

I am starting to paint details on the sign for erection in October. If you have any comments, please contact me as soon as possible.

Your truly,



Henry M. Stupinski
General Manager
Portland Facility

HMS:mab

Enclosure

To: Doug
Any thoughts?
TH

require shaded light covering (no direct light visible from commercial Street intersection)

LITE OVER

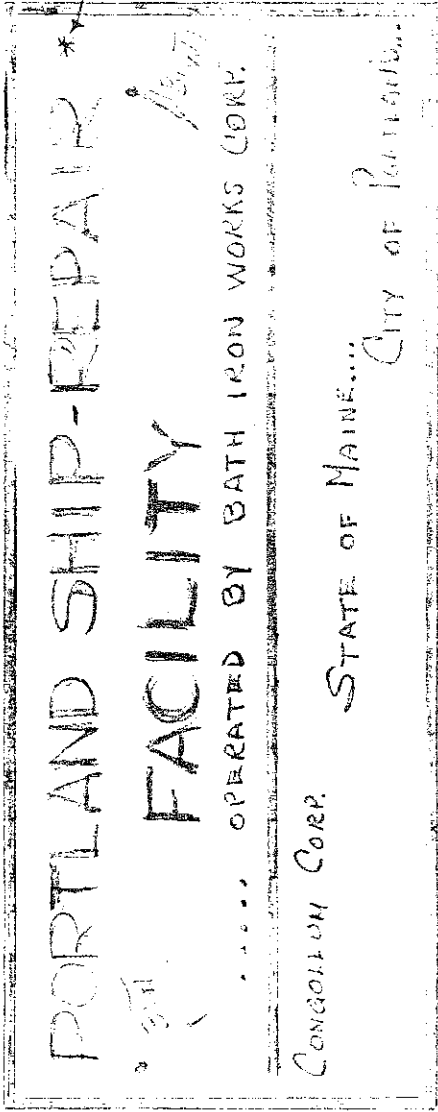
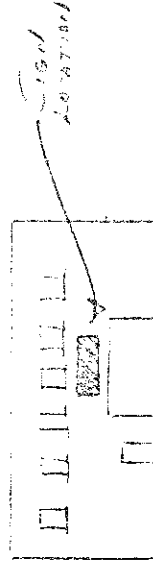


FIGURE EITHER HERE OR DEPENDS THERE. LAYOUT.

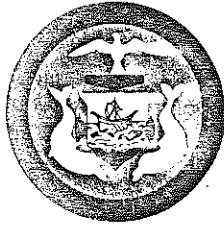
10'

Sept '13

... .. LITE OVER SIGN



PIER-1 (on Main State Pier) K. B. G.



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

August 19, 1982

Bath Iron Works Corporation
Dept. #20
Bath, Maine

Dear Mr. Plummer,

Your application for a building permit to construct a finger pier, pier apron, shorezone containment, piping, boiler house, underground structure, flammable materials building is being issued with the following requirements.

1. HOUSE OF OPERATION: The Bath Iron Works ship repair facility should begin operating the morning shift at 7:00 a.m. This facility is expected to attract 1,000 employees by 1984 and possibly more in the future. The traffic impacts resulting from a 7:00 a.m. shift start time will be minimized. Should B.I.W. require a 7:30 a.m. shift start time, B.I.W. should be required to undertake a traffic study to determine traffic impact and return to the Planning Board for further review.
2. NOISE: To protect adjacent residential noise levels the Board required that B.I.W. not exceed certain levels. These levels are 65 dBA (9 p.m. to midnight) and 60 dBA (Midnight to 6 a.m.) LEQ as measured at the residential zone line. The basis of this requirement includes:
 - a) The present zoning regulations of 75 dBA day and night, as measured at the industrial property line, do not assure adequate noise protection of adjacent residential neighborhoods as described in Planning Report #43-82;
 - b) The nighttime noise levels of 65 dBA and 60 dBA described above are levels which meet or exceed ambient noise levels existing at the adjacent residential zone boundaries and are the most restrictive type and level of regulation which can be practically administered by the City.
 - c) B.I.W. officials have indicated that the noise levels recommended above can be met by their facility.
- 3) LANDSCAPING AND ENTRANCE: On-site landscaping should include a dense planting of shrubs along the Commercial Street property boundary as shown on site plan (6-17-82), fence is to be 6' decorative steel picket fence.

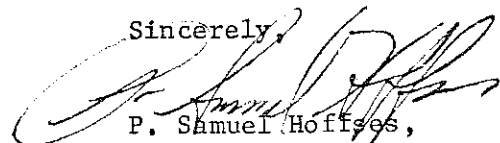
August 19, 1982
Page 2
Bath Iron Works Corp.

A \$25,000 escrow fund should be set aside for future improvements to the entrance of B.I.W. to be implemented in conjunction with the redesign of Commercial Street. In addition, upon operation, a traffic control official should be assigned to direct traffic at the entrance location until improvements to Franklin Arterial are complete.

4. The treatment of timber piles shall conform to AWPBMP1, MP2 or MP4 listed in Appendix A of the 1981 BOCA Basic Building Code. Pile cutoffs shall be treated in accordance with AWP4 M4.
5. Allowable unit stresses for treated round timber piles, normal load duration values at tip of pile for Southern Pine will have 1200 Compression parallel to grain PSI d. Bending PSI d 2400 shear horizontal PSI d 110 Comp. perp. to grain PSI d 250 and modularity of elasticity of 1,500,000.
6. All timber piles shall conform to ASTM 25.
7. Structural steel piles shall conform to ASTM, A36, A252, A283, A572, A585 or A690.
8. H-piles shall conform with section 1015.3 through section 1015.3.3 of the 1981 BOCA Basic Building Code.
9. All electrical and plumbing permits will be obtained by masters of their trade.
10. Every structure, room or space occupied for user involving explosion hazards shall be equipped and vented with explosion relief systems and devices arranged for automatic release under predetermined increase in pressure as herein provided for specific uses.
11. Main storage systems of volatile flammable liquids shall be constructed and installed in accordance with NFPA 30 and the fire prevention Code.

If you have any questions on these requirements please call this office.

Sincerely,



P. Samuel Hoffses,
Chief of Inspection Services



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530 • (207) 443-3311

Request No. 12

Submittal Date October 4, 1982

Mr. Thomas Valleau
Director of Transportation and
Waterfront Activities
City of Portland
Portland, Maine

Dear Tom:

Please find enclosed bid plans, specifications and cost estimates. The attached plans, specifications and cost estimates are submitted for your approval as Capital Improvements in accordance with the executed Pier Lease.

Description

Reserve in escrow monies to construct and design a new entrance on Commercial Street to B. I. W. site as per City's permit

Cost Estimate - \$25,000

Project Charge No. - C2008-0100

BIW Approvals

Project Manager D.H. B...
Facility Manager T. G...
Controller's Office W. D...

Portland Approval
Date Authorized

The above plans and specifications are approved as allowable Capital Improvements and Bath Iron Works is authorized to proceed with those items.

Thomas Valleau 5 OCT 82
Thomas Valleau, Director of Transportation
and Waterfront Activities



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

August 19, 1982

Bath Iron Works Corporation
Dept. #20
Bath, Maine

Dear Mr. Plummer,

Your application for a building permit to construct a finger pier, pier apron, shorezone containment, piping, boiler house, underground structure, flammable materials building is being issued with the following requirements.

1. HOUSE OF OPERATION: The Bath Iron Works ship repair facility should begin operating the morning shift at 7:00 a.m. This facility is expected to attract 1,000 employees by 1984 and possibly more in the future. The traffic impacts resulting from a 7:00 a.m. shift start time will be minimized. Should B.I.W. require a 7:30 a.m. shift start time, B.I.W. should be required to undertake a traffic study to determine traffic impact and return to the Planning Board for further review.
2. NOISE: To protect adjacent residential noise levels the Board required that B.I.W. not exceed certain levels. These levels are 65 dBA (9 p.m. to midnight) and 60 dBA (Midnight to 6 a.m.) LEQ as measured at the residential zone line. The basis of this requirement includes:
 - a) The present zoning regulations of 75 dBA day and night, as measured at the industrial property line, do not assure adequate noise protection of adjacent residential neighborhoods as described in Planning Report #43-82;
 - b) The nighttime noise levels of 65 dBA and 60 dBA described above are levels which meet or exceed ambient noise levels existing at the adjacent residential zone boundaries and are the most restrictive type and level of regulation which can be practically administered by the City.
 - c) B.I.W. officials have indicated that the noise levels recommended above can be met by their facility.
- 3) LANDSCAPING AND ENTRANCE: On-site landscaping should include a dense planting of shrubs along the Commercial Street property boundary as shown on site plan (6-17-82), fence is to be 6' decorative steel picket fence.

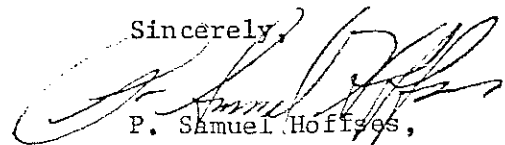
August 19, 1982
Page 2
Bath Iron Works Corp.

A \$25,000 escrow fund should be set aside for future improvements to the entrance of B.I.W. to be implemented in conjunction with the redesign of Commercial Street. In addition, upon operation, a traffic control official should be assigned to direct traffic at the entrance location until improvements to Franklin Arterial are complete.

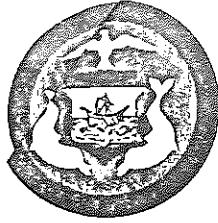
4. The treatment of timber piles shall conform to AWPBMP1, MP2 or MP4 listed in Appendix A of the 1981 BOCA Basic Building Code. Pile cutoffs shall be treated in accordance with AWP4 M4.
5. Allowable unit stresses for treated round timber piles, normal load duration values at tip of pile for Southern Pine will have 1200 Compression parallel to grain PSI d. Bending PSI d 2400 shear horizontal PSI d 110 Comp. perp. to grain PSI d 250 and modularity of elasticity of 1,500,000.
6. All timber piles shall conform to ASTM 25.
7. Structural steel piles shall conform to ASTM, A36, A252, A283, A572, A585 or A690.
8. H-piles shall conform with section 1015.3 through section 1015.3.3 of the 1981 BOCA Basic Building Code.
9. All electrical and plumbing permits will be obtained by masters of their trade.
10. Every structure, room or space occupied for user involving explosion hazards shall be equipped and vented with explosion relief systems and devices arranged for automatic release under predetermined increase in pressure as herein provided for specific uses.
11. Main storage systems of volatile flammable liquids shall be constructed and installed in accordance with NFPA 30 and the fire prevention Code.

If you have any questions on these requirements please call this office.

Sincerely,



P. Samuel Hoffses,
Chief of Inspection Services



CITY OF PORTLAND

STEPHEN T. HONEY
CITY MANAGER

June 8, 1982

John F. Sullivan, Jr.
Chief Executive Officer
Bath Iron Works
700 Washington Avenue
Bath, Maine 04530

Dear John:

As you are probably aware there has been considerable discussion regarding potential impacts of the BIW expansion project on environmental quality in the City of Portland. I feel certain that BIW will always place the highest priority on the health of its employees as well as the health of the surrounding neighborhood.

The issues regarding possible asbestos fiber release into the ambient air have caused the greatest local concern. It is important for the City to fully understand how BIW effectively monitors and controls the potential release of asbestos fibers. I would appreciate receiving an outline of how the company intends to deal with this substance at the Portland facility. This information could then be disseminated to individuals and neighborhood groups who have raised concerns about the dangers of asbestos.

Thank you for your cooperation with this important environmental concern.

Sincerely,

Stephen T. Honey,
City Manager

STH.k
cc: George N. Campbell, Jr.,
Commissioner of Transportation,
Maine Department of Transportation
Augusta, Maine 04330

Issues	Impact	Location				Resolution
		MSP	MH-OP	CH	B	
H. Fire safety water/waste - Access > - Hazardous wastes (see also (a))	access safety safety safety	X X X		X		site plan, building permit DEP
I. Lighting Lighting (exterior)	residents vehicles flow		X X		X X	site plan site plan
J. Dredging						
K. Vegetation ^{and} Wildlife (terrestrial + marine)						
L. Soils						
M. Education - family pop/housing changes _{on}	school service and location school service and location		X		X	?
N. Social Services						
O. Security / Public Safety						
P. Job Opportunities						
Q. Water Transportation						

Issues	Impact	Locations				Resolutions
		MSP	MH-OP	CH	B	
F. Housing						
- quantity	market market, quality of housing		X		X	Condo conversions, zoning; Variances; PUD; city monitors
- quality	housing market, social/health/welfare of residents, character and demographics of neighborhood		X		X	gentrification, etc.; city-owned land; state and fed. aid; zoning bonuses; other incentives
- transient	quantity of housing see above		X		X	same as above, encourage hotels
>						
>						
>						
>						
G. Utilities						
- Air - visible	residents, tourism (dust, smoke)	X	X			zoning, DEP, site plan
- invisible	same as above	X	X			
>						
- Liquid - water	capacity of system	X				PWD
- storm: quantity	capacity capacity of system	X	X	X	X	site plan, Wetlands Alteration Permit, Corp of Eng., etc.
quality	clog or pollution in system	X	X	X	X	site plan
- sanitary	capacity of system	X		X		site plan
>						
Solid - disposal	storage and disposal sites?	X	X	X	X	site plan
>						
Hazardous wastes	fire, other	X	X			site plan, DEP
>						
Energy	see CCEMP	X		X		CCEMP,

Issues	Impacts	Location			B	Resolutions
		MSR	MOP	CH		
E, Zoning (see A, B, C, D)						
- Housing (see F.)						
>						
- Recreation/Open Space	- access (to water)	X	X			Site plan, zoning, ACC plan
	- quantity		X	X	X	" "
	- quality		X	X	X	" "
>						
- Business and tourism	- type/compatibility		X		X	zoning, variances
	- quantity		X		X	regulate curb cuts, zoning
	- transient businesses		X		X	zoning, variances
>						
- Industry	- type/compatibility		X			zoning, variances
	- quantity		X			regulate curb cuts
>						
- Pornography	- business, residents		X		X	zoning
>						
- Signage - temporary	- business, traffic congestion		X		X	city, ^{temporary} sign reqs.
>						
- Vendors	- business, traffic congestion , pedestrian safety	X	X	X		city vendor reqs.
>						
>						
>						

Issues

Impact

Locations

Resolution

C. Landscaping (and see A. above)
 >
 >
 >
 >

D. Traffic

- Parking

on-street and off-street availability for: BLW

M.S.P. Mth-OP CH B

time/shift management, site plan, zoning

- nearby commercial
- nearby resid.
- nearby tourist
- nearby indust.

> - Pedestrian issues

~~Pedestrian safety~~ - sidewalks

Pedestrian safety ~~sidewalks~~

- Crosswalks

~~crosswalks~~

- Traffic signalization
 - Curbside

~~traffic signalization~~

- Traffic flow - shortcuts and street capacity

- Pedestrian safety
~~traffic congestion~~

- noise (see B.)

- trucks loading
 - rail

~~traffic congestion~~
 Traffic congestion

> - Public Transportation

- access for use by pedestrian
 - commuters

M.S.P.	M th -OP	CH	B
X		X	
	X		X
	X		X
	X		X
X	X	X	X
X	X	X	X
X	X	X	X
X	X		X
X	X		X
X	X	X	X

" " "

" " "

" " "

width, maintenance - site plan, CIP

adequacy with regard to traffic volume - site plan, CIP

adequacy with regard to crosswalks - site plan, CIP

~~location, width~~ - site plan, CIP

rerouting, traffic signals

" "

zoning, site plan

All plan, site plan

site plan



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

June 15, 1982

TO RESIDENTS AND PROPERTY OWNERS IN THE VICINITY OF
THE PROPOSED BATH IRON WORKS FACILITY

The Planning Board will consider a proposal by Bath Iron Works to construct a new ship repair and overhaul facility adjacent to and including the easterly side of the Maine State Pier. The development area consists of approximately 50 acres of water bounded by the State Pier to the west, the shoreline to the north, the extended property line to the east, and the Harbor Commissioner's line to the south along the ship channel. The area contains the ruins, primarily timber piles, of the former Grand Truck Railroad Piers, which cover an area of approximately 15 acres. The proposed facility includes an 80,000 ton capacity floating dry dock, a 25 ton crane, offices and supporting shops, staging areas for related ship repair activities along with a 451 space parking lot. Vehicular access to the site will be limited to one entrance off Commercial Street.

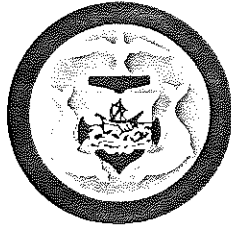
The site plan will be reviewed for compliance with the Site Plan (section 604.6) and Shoreland Regulation (section 602.19A) Ordinances.

Further details of this plan are available in the Portland Planning Department, Room 211 of City Hall. If you are unable to attend the public meeting of the Planning Board, please send your comments in writing to Mr. Joseph E. Gray, Director of Planning & Urban Development, City Hall, 389 Congress Street, Portland, Maine 04101.

Sincerely,

Patricia Harrington
Chief Planner

cc: Jean E. Gilpatrick, Chairman Portland Planning Board
Joseph E. Gray, Director Planning & Urban Development



CITY OF PORTLAND

STEPHEN T. HONEY
CITY MANAGER

June 8, 1982

Mr. Henry Warren, Commissioner
Maine Department of Environmental Protection
State House Station #17
Augusta, Maine 04333

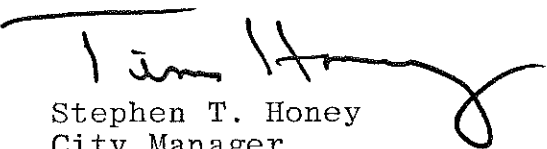
Re: Bath Iron Works

Dear ~~Commissioner~~ Warren:

The method of monitoring air pollution on the Portland waterfront has become a critical concern to the City of Portland especially as it relates to the Proposed Bath Iron Works Ship Repair facility. Because the City is not able to monitor air pollution, I am requesting that the Department of Environmental Protection establish an independent monitoring system to measure any air pollution resulting from the B.I.W. project.

I look forward to hearing from you on this concern and would certainly work with you to establish an effective system.

Sincerely,


Stephen T. Honey
City Manager

STH:vfw

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Stephen T. Honey, City Manager

DATE: 6/3/82

FROM: Thomas F. Valleau, Director Transportation & Waterfront Facilities

SUBJECT: Summary of our meeting at the Bath Iron Works on June 2, 1982

1. I have stoped payment on an \$87,000 BIW requisition since we are not recieving lease payments.
2. The site plan was approved as shown on Bill K's latest plan except there will be a \$25,000 allowance for improvements at the Commercial Street property line.
3. We suggested and Royce agreed on the following points with respect to the Munjoy Hill Neighborhood -- starting time to be 7:am, however this must be negotiated with the union; BIW has no objections to the amended noise ordinance; we will ask for a letter from Mr. Sullivan re: asbestos control and the City will ask the State to monitor air quality from time to time.
4. BIW will include targeted job language in all contract documents and will send copies to me.
5. BIW will meet with Tony and approve the hospital plans. This approval will take about two weeks. Then we will bid the package.
6. I will check the schedule on acquisition of Canadian National land.

TFV/ang

June 2, 1982

MEMORANDUM FOR: Patricia Harrington, Chief Planner

FROM: Warren J. Turner, Planning Division

SUBJECT: Waterfront Zoning Discussed

Existing Zoning Map should now show an extension of the R-6 Residence Zone to center line of Maple Street between Pleasant and Danforth Streets.

Would Boone's be permitted to continue operation in the W-2 Zone? Suppose the Casco Bay Lines were to relocate elsewhere, leaving Boone's in its present location? I expect that existing businesses like Harris Oil Co. would be "grandfathered."

Are we limiting the marketability of those same wharves which we want the owners to rehabilitate by making the W-2 Zone too restrictive? Do we know what uses these owners contemplate for their wharves?

W-2 Waterfront Zone

Building Height: 45 feet (4 stories?)

Is this sufficient to meet future needs? Is it in keeping with existing structures?

Section 26 (2) Noise

Should this be changed to reflect the proposed amendment to I-3b Industrial Zones?

It seems it should if the W-1 Zone is going to have residential uses in it.

Outdoor storage of commodities and materials can become rather unsightly. Open storage of salt for the roads, lumber and commodities such as coal, etc. may not be properly confined or contained within specific areas, unless carefully handled and monitored or controlled. The early coal wharves had bins or restricted areas in which to store the coal prior to delivery to the consumers.

Salt is best stored within a shed or under cover in order to preserve its strength for future projects such as applying salt to the City streets in icy winter driving conditions.

I question if parks should be retained as a W-2 Waterfront use. Suggest that public open space or pedestrian areas be used.

W-1 Waterfront Zones

The W-1 Zone was originally created to accommodate a hotel which failed to materialize and the height was then set at 120 feet for a 9-story building. This was later reduced to 90 feet in the W-1 Waterfront Zone.

Should the W-1 Zone be limited to only 45 feet if a hotel might locate on the ATBRO land? How about other new buildings as to height limits? Offices, apartments or parking structures?

Residential Density for W-1 Zones

While I find no quarrel with permitted as opposed to conditional uses for the apartments on the upper floors, I believe that 140 units per Acre is excessive. Is this based on studios, efficiencies, or how much minimum sq. feet of floor area per apartment unit? The B-3 Zone has a minimum of 174 units per acre or 250 sq. ft. of land area per unit. The density of 140 units per acre is one unit for each 311 sq. ft. of land area. In the existing zoning ordinance, 600 sq. ft. of floor area was set as the minimum size for an apartment. We must be talking of studio units with Murphy beds and kitchenettes in the wall. Perhaps an architect could venture a reasonable minimum floor area for an apartment unit. One could ask for dimensions for Franklin Towers apartments, for example, with kitchen alcoves off the living rooms.

The highest density we have now in R-6 Residence is 43 units per Acre. I think 140 units is too high a density for W-1 Zones. If we divide 600 sq. ft. into 43,560, it gives us a density of 72 dwelling units per Acre, which should be a more suitable density for apartments on the upper floors of the W-1 Zones.

Franklin Towers contains 200 units in 16 stories on roughly less than two acres of land area. This would compute roughly at approximately 100 units per Acre. Do we want apartments on the waterfront at a higher density than that? The proposed Park-Danforth will contain 91 units on 2.5 Acres in a seven story structure.

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: David C. Bittbender, Health Officer

FROM: John E. Vandoloski, Environmental Health Director *JEV*

SUBJECT: Environmental Health Issues, Bath Iron Works Project

DATE: May 24, 1982

Rodent Control

Once heavy work, such as removing piles, etc., commences in the BIW area, there is no doubt whatsoever that the moderate population of Norway rats which presently infest the "shoreline" will be forced to migrate, in this case, towards Munjoy Hill or other areas where food is abundant.

The environmental health division conducted an extensive trapping program during August 1981 to determine rodent activity and results of that program demonstrated that the area in question had a sizable rodent population. Our "survey" concentrated on a 200 foot section of banking which afforded maximum conditions for rodent harborage.

In order to preclude any "forced migration", I would recommend that the entire area be baited with Talon and Zinc Phosphide rodenticides prior to commencement of heavy construction work. In addition, I feel it would be prudent to bait the sewer systems on Fore Street, India Street, and Commercial Street with weather resistant bait blocks. For your information, sewers in specific areas on Munjoy Hill such as Turner and Sheridan Streets have always shown an above average level of rodent activity but I feel we can hold citizen rodent complaints to a minimum by following the above plan of action.

Asbestos

As we are all aware, asbestos fibers have been proven to be a known carcinogenic substance which can lead to asbestosis, lung cancer, or mesothelioma. It is an insidious carcinogen as its effects produce clinical symptoms 20-30 years after exposure. Recent studies of shipyard workers, including those exposed to asbestos even for brief periods of time (as little as a month or two), indicate the presence, in some, of asbestos related diseases. Even some workers who may not have worked directly with asbestos, but whose jobs were located near contaminated areas, have developed asbestos related health problem many years after exposure. There is also some evidence that members of families of workers heavily exposed to asbestos face an increased risk of developing mesothelioma and perhaps other asbestos related diseases, probably as a result of exposure to asbestos dust brought into the home on the shoes and clothing of workers.

When we speak of asbestos as a health hazard, we must keep in mind that the "released" fibers can remain suspended in the ambient air for up to 96 hours and it is the inhalation of these fibers which may lead to health problems in the future. It is very important to keep in perspective that even though health problems are not recognized until 30 years "post" exposure, asbestos is a potent carcinogen which can cause lung cancer and mesothelioma, two medical conditions for which there is no known cure. Exposures associated with the vastly increased amounts of asbestos used during the 1940-1960's have only begun to be seen and will not have their full impact until the 1990's or early decades of the 21st century.

It would appear from available evidence to date that the asbestos fiber burden from the urban environment is of itself not an important factor in the development of primary bronchogenic or gastrointestinal cancer in urban dwellers who are not subjected to industrial exposure.

OSHA does regulate asbestos with regards to permissible exposure levels, which employees may be exposed to. These levels could also pertain to anyone inhaling asbestos fibers.

- a. Permissible exposure to airborne concentrations of asbestos fibers which went into effect July 1, 1976 states "the 8 hour time weighed average airborne concentrations of asbestos fibers to which any employee may be exposed shall not exceed (2) two fibers, longer than 5 micrometers per cubic centimeter of air."
- b. No employee shall be exposed at any time to airborne concentrations of asbestos fibers in excess of (10)ten fibers, longer than 5 micrometers, per cubic centimeter of air.

As asbestos is found in a variety of products such as; cement products (pipes, roofing shingles, gutters), textiles (protective clothing lagging, mailbags, conveyor belts), paper products (millboard, flooring and roofing felt), automotive friction products (gaskets, brake linings, clutch plates), and insulation products (pipe and boiler insulation, (bulkhead lining for ships), we must be aware that the product is continually in the environment and not only found in ship yards. The product is in our daily lives and environment, at least at a minimum concentration, and I can safely add that we are not sure at what exposure a health problem may be realized.

From speaking with Jim Mitchell, industrial hygienist with the OSHA office in Augusta, it appears that the only hazard asbestos will present will be when a ship is brought in for repairs and the asbestos must be stripped from boilers, pipes, etc. During asbestos removal, the product is in a "wet state" to limit airborne fiber emission to employees and into the ambient air.

We have the capability to monitor the ambient air for asbestos fibers with our hi-vol air sampler which we purchased last year. Also, I recently spoke with Sandy Tate from the DEP office in Portland and she mentioned that the DEP might get involved as far as monitoring is concerned if BIW were to refurbish old ship's hulls or if we were to discover that our monitoring did reveal that asbestos was being released into the environment.

I feel that the standards for emissions which I mentioned earlier provide ample protection for citizens of the Munjoy Hill area. If the employees at BIW are not exposed to levels exceeding permissible exposure, there is no possible way that citizens will be subjected to a significant hazard whatsoever from the proposed BIW expansion with regards to asbestos.

Obviously, if we were to monitor the area, we would have to complete preliminary monitoring to determine amount of asbestos fibers present prior to BIW coming to Portland in order to have a technical comparison.

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: File

FROM: Patricia Harrington, Chief Planner

SUBJECT: B.I.W. Site Plan

DATE: 3/30/82

The Bath Iron Works Site Plan contemplates a phase I containment area. The containment area depends on the final test data on contaminates. This data will tell if it will be possible to fill in the area or not. There was a six month settling time period for using the filled area as a staging area. If phase two is done that phase will require an additional permit at a later date. All the soils for the filled area will be sand and gravel.

The proposed project will be above the hundred year flood of record. The hundred year flood of record is 14.1 feet. The wharves will be 16 feet and the buildings will be 17 and 18 feet. New construction is over two feet. The hundred year flood is 9.6 feet at the Maine State Pier at mean low level. To this you add 4.5 feet for mean low water.

Truck circulation and deliveries will come in at the back of the south shed. There is 28 feet loading area. The building itself will be secured with only one receiving door.

The facility will use rail traffic however, it is contemplated that not very much will be used. They do want to keep the rail open however for large items that can be brought in by train.

Lt. Collins has required that they have a one hour fire rating between the shop and the offices.

The lighting will be of high pressure sodium. All lighting for the parking lots will be angled towards the plant. Temporary lighting will also be used for ship areas while working.

The drydock will have lighted walkways that they have not designed lighting to any extent. The street poles will be 30 feet high. There will be 13 new lights proposed. There are six existing lights.

For the hours of shifts there will be a 45 minute lag time between the shifts. This will be in order for the cars to leave before the other cars come in.

The fencing will be black final coated chain link fence around the entrance. The existing fencing will be left. There will be a barbed wire fence on the inside.

Security is based on the military regulations. The ship tie-up area will be used for rafting. They will be able to work on two ships deep at a time. In terms of a stormwater management plan there will be a gentle slope to the harbor. Everything will slope towards the catch basin and the fueling tank area. They will have standard oil

catch basin. Stormwater runs into the water and not onto Commercial Street.

The design of the parking area will mean that a truck ladder will not be able to make it through the twenty seven foot road. The fire department has stated that they will go through the shipyard. Buses probably will be there which will eliminate parking spaces for other cars. At the present time there is no parking system proposed meaning no card passes or stickers at the present time. Snow removal will be hauled away if necessary.

For a dump, a baler will be used, daily trucks will go to the baler unless some material will go to Hamlin pits. Someone commercially will be hired to do it and they may have as many as five or six truck loads a day going to the dump. All metal waste is sold.

The B.I.W. has received Board of Harbor Commission approval already.

The sewer will tie into the system at the State Pier.



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530

March 11, 1982

City of Portland
Planning Department
389 Congress Street
Portland, Maine 04101

Attn: Patricia Harrington, Chief Planner

Dear Pat:

Subject: Site Plan Review - Portland Facility

In reference to items discussed during our meeting with your Planning Department on March 8, 1982, please be advised on the following answers to questions raised:

* Shift Hours Planned for above:

1st Shift - 7:30 A. M. to 4:00 P. M.
2nd Shift - 4:45 P. M. to 12:45 A. M.
3rd Shift - 12:00 Midnight to 7:30 A. M.

NOTE: The above was discussed with our Personnel Department and it was requested to maintain the same hours as at Bath. The reason being the interfacing of labor working between both facilities. With our experience at Bath, it is felt that the greater number of people would use Franklyn Street and Commercial Street during the 6:45 A. M. to 7:15 A. M. periods.

* We have shown additional shrub locations on BIW Drawing #10027 along the Canadian National Railroad line and fence. However, this planting will have to be interfaced with the City of Portland's plans.

* Prior owner names have been shown on our Drawing #10001.

City of Portland

2

March 11, 1982

I hope this answers all the questions which your department raised in your letter dated February 22, 1982. It is our desire to have the meeting with the Planning Board as soon as possible. Therefore, if there are any questions, please don't hesitate to contact me.

Thank you for your interest and assistance in this matter.

Yours very truly,



H. C. Plummer
Construction Engineer

HCP:mr

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Patricia Harrington, Chief Planner

DATE: 3/11/82

FROM: Douglas Mason, Senior Planner

SUBJECT: Review of Noise Data for B.I.W. Site Plan

- I. Purpose of Noise Related Information: The City Zoning Ordinance sets maximum land use noise emissions of 75 dBA at the property line in a W-1 Waterfront Zone. The site abuts an I-2 Industrial Zone with maximum noise standards at the property line of 70 dBA. This standard helps assure protection of the community from excessive industrial or marine-related noise.

The staff recognizes that the proposed B.I.W. project should create no significant additional noise above 70 dBA at the I-2 Industrial Zone property line and should take every reasonable precaution to reduce all noise emissions to low levels, particularly as measured from residential property boundaries on Munjoy Hill

- II. B.I.W. Proposed Noise Emissions: After reviewing the information provided by B.I.W. in the "Ambient Industrial Noise Survey at the Bath Facility," and "Site Plan Package - January 28, 1982," the following conclusions are offered:

A. Chipping

Chipping at the Bath Facility is limited to 10 minutes per hour due to airborne noise. It is not clear whether chipping will occur in Portland, what noise intensity levels are present during such operations, or at what time of day such activity is expected.

B. Compressors and Fans

B.I.W. states that no noise carry-over from these sources will occur on abutting properties. Such proposals should be encouraged.

C. General Industrial Equipment

B.I.W. indicates that all of its equipment meets OSHA and U.S.E.P.A. requirements. These requirements may or may not be applicable in the context of airborne noise at the property line. Therefore this information is of questionable use in this review.

- D. Existing Noise Levels at Bath and Portland: B.I.W. submitted ambient noise studies completed in both Bath and Portland and are analyzed below:

1. Bath Facility

This perimeter survey is presented to "provide background information on ambient noise levels produced by associated

shipbuilding activities. The survey clearly showed that ambient noise levels...had minimal impact in the surrounding area." It's applicability to the Portland noise environment not clear, for the following reasons:

- a. From the limited data presented, it appears possible that many of the stations may be located in noise "shadows"; that is, areas which are significantly protected from general noise levels in the area by buildings located between the source and receiver locations;
- b. No indication was given as to the frequency of tests or description of why the time chosen (1400 hrs.) is representative of peak noise levels. Was chipping occurring?; and
- c. Several stations show dBA equal to, or in excess of 70 dBA. Such readings do not appear to present "clear" evidence that shipbuilding activity and associated construction does not produce ambient noise levels which would be regarded as harmful or excessive, especially given the concerns addressed in (b) above.

2. Portland Facility

This survey conducted on February 3, 1982, provides a valuable base line survey of ambient noise levels at the perimeter of the site. However, in order to provide a more useful background information for future comparison, tests should also be conducted as follows:

- a. stations should be selected nearer the property boundary which is in a line of sight between the B.I.W. facility activities and Munjoy Hill residential properties; and
- b. tests should be selected with a frequency which accurately reflects the diurnal (24 hours) noise environment.

E. Expected Noise Levels at Portland

The information presented appears to suggest that noise levels at Bath may be expected to occur in Portland. The above analysis indicates that the data provided to the City does not clearly indicate either existing conditions at Bath or how they would be representative of conditions in Portland.

The following additional information would be extremely helpful in evaluating the expected noise impacts of B.I.W. in Portland:

- a. More information on Bath facility noises, including
 - i. Effect of buildings and structures in the vicinity of noise survey stations on sampling data;
 - ii. Diurnal A-scale measurements representative of peak and normal operations at the yard with distance between receiver and significant noise sources clearly indicated;

- b. Additional surveys should be provided as described in Section D.2 above if useful existing ambient baseline data is necessary for analyzing community noise impact;
- c. Expected differences in applicable noise-related activities between Bath facility operations and Portland facility operations should be clearly indicated if Bath facility activities are used in comparison to proposed activities at Portland; and
- d. A detailed assessment of noise expected which will exceed background noise levels by more than ten decibels at any time for a duration to exceed one minute.

If any of the above information is not available or attainable, I would be most willing to talk with B.I.W. staff about other alternatives for assessment of community noise impact.

cc: Alex Jaegerman, Senior Planner
Rick Knowland, Planner



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530

March 2, 1982

City of Portland
Planning Department
389 Congress Street
Portland, Maine 04101

Attention: Patricia Harrington, Chief Planner

Dear Pat:

Subject: Site Plan Review

In reference to above and your letter dated February 22, 1982, please note the following answers to questions as itemized:

1. The area to be filled in should be disclosed at the outset as has been done with the other permitting agencies. The Phase I and Phase II areas to be filled should be included on the site plan submitted to the Planning Board. The areas and the possible time frames for this fill should also be noted. A statement for the short and long term uses of the fill area should be included.

Refer to Bath Iron Works Plan #10027

2. The topography of the land area and the type of soils are required for site plan review.

B. I. W. Soundings Plan #10002 & 10001

3. All adjacent properties including the property owners and the building should be located and noted on the site plan.

Refer to B. I. W. Plan #10001

4. An engineer's seal is required on the site plan.

Engineer's seal is shown on survey drawing from E. C. Jordan Engineers.

5. The location of all tracks and all cranes should be located on the site plan.

Refer to B. I. W. Plan #10027

6. The location of shoreland zoning and the 100-year flood plain boundaries is required on the site plan.

Shoreland zoning is shown on Drawing #10001 with 100-year flood plain not above present or future shore line.

7. Truck circulation and landing areas should be located on the site plan.

Refer to B. I. W. Plan #10027

8. Alterations and improvements to the shoreline should be located on the site plan.

Refer to B. I. W. Plan #10027

9. Fire lanes should be located on the site plan.

Refer to B. I. W. Plan #10027

10. Any and all proposed outdoor lighting including the type of luminaire must be noted on the site plan.

Refer to B. I. W. Plan #10001

11. Vehicular and pedestrian lanes and circulation must be noted on the site plan.

Refer to B. I. W. Plan #10027 (Public busing will unload at Commercial Street.)

12. All landscaping, signage, screening along the public street should be located on the site plan.

Landscaping is non-existing because of railroad tracks; however, special treatment for entrance with display as shown on enclosed drawing #10037 will be constructed. Bath Iron Works sign will be on Maine State Pier building with an additional small one at Main Gate.

13. Bus parking and loading areas should be designated on the site plan.

Egress and access to the facility will be by private vehicles from parking areas designated by Bath Iron Works as required. Public busing will unload on Commercial Street. During shift changes a minimum of vehicular traffic will be in operation.

14. Trash and waste disposal, dumpster, etc. should be located and noted on the site plan.

The staging areas for storage will vary throughout the facility as required but not blocking the traffic and fire lanes. Trash and waste will be removed every day as required.

15. Isle widths and stall dimensions for parking and circulation areas should be located on the site plan.

Refer to B. I. W. Plan #10027

16. The harbor line for the Portland Harbor should be located on the site plan.

Refer to B. I. W. Plan #10027

17. Elevations for all structures should be submitted.

Refer to B. I. W. Plan #10001

18. Additional noise information will be required. A decibel level including the frequency and duration of impulse for chippers, compressors, and fans should be provided. Any other noise producer should also be noted along with the required information. These noise levels should be taken at the property line and the time of day should be noted.

Noise information as per attached.

19. Please note the shift hours and the number of employees in writing as part of the site plan review.

1st Shift - 750 employees from 7:30 A. M. to 4:00 P. M.
2nd Shift - 200 employees from 4:00 P. M. to Midnight
3rd Shift - 50 employees from midnight to 7:30 A. M.

20. The type and dimensions of all fencing included in the site plan should be noted.

Refer to B. I. W. Plan #10001

21. The use and doorways on the south shed, north shed, should be noted along with what rehabilitation will be necessary to those buildings.

Refer to B. I. W. Plan # 10027

22. Identify storage areas and the use of the property on the site.

Refer to B. I. W. Plan #10027

23. The ship tie-up areas should be noted along with the area to be dredged.

Refer to B. I. W. Plan #10027

24. Prior to final site plan approval a rendering of the entrance image consistent with the long-range waterfront plans for Portland will be required. The image set by this facility will have an effect on the entire waterfront.

See Drawing # 10001 & 10037

25. Any future expansion possibilities should be noted at this time.

Refer to B. I. W. Plan #10027

26. The City will require that the parking area be paved and stripped, this should be noted on the plan.

Refer to B. I. W. Plan #10027

27. The dimensions of the lot along with the prior owner and bearings is requested.

Refer to B. I. W. Plan #10001

28. A stormwater management plan and a water collection system must be shown.

Refer to B. I. W. Plan #10001

March 2, 1982

29. The site plan, as submitted show a proposed Franklin Arterial alignment, the actual alignment must be shown on the plan. If you wish, the proposed alignment may be shown with a dotted line.

Refer to B. I. W. Plan #10027

30. The Public Works Department requires that drawings be submitted showing the size, dimensions and angles on all type of water and sewer pipes on, and to the site.

Refer to B. I. W. Sewer Plan #10008 and Water Plan #10007.

31. All signage should be noted on the site plan.

Refer to Question #12 (page 2).

We hope these answer all of your questions in relation to the site plan application.

Very truly yours,

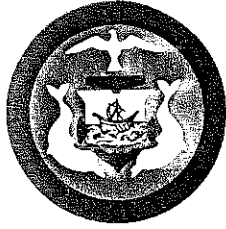
BATH IRON WORKS CORPORATION



H. C. Plummer
Construction Engineer

HCP:mr

Enclosures - BIW Plan #10027
BIW Plan #10002
BIW Plan 10001
E.C.Jordan's survey
BIW Plan #10037
Noise Information
BIW Plan #10008
BIW Plan #10007



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

February 22, 1982

Mr. H.C. Plummer, Jr.
Construction Engineer
Bath Iron Works Corp., A. Congoleum Co.
700 Washington Street
Bath, Maine 04530

Dear Harold:

The Portland Planning staff has had the opportunity to review the officially submitted B.I.W. site plan in a preliminary manner with members of the Public Works and other City departments. There were some questions which I'm sure will be easily answered which are contained in this letter. I am sure there will be additional questions in the future however, I wanted to let you know of our concerns as quickly as possible.

In review of the site plan ACC there are a number of requirements stated in the City's Site Plan Ordinance which must be noted on the site plan. They include:

1. The area to be filled in should be disclosed at the outset as has been done with the other permitting agencies. The Phase I and Phase II areas to be filled should be included on the site plan submitted to the Planning Board. The areas and the possible time frames for this fill should also be noted. A statement for the short and long term uses of the fill area should be included.
2. The topography of the land area and the type of soils are required for site plan review.
3. All adjacent properties including the property owners and the building should be located and noted on the site plan.
4. An engineer's seal is required on the site plan.
5. The location of all tracks and all cranes should be located on the site plan.
6. The location of shoreland zoning and the 100 year flood plain boundaries is required on the site plan.
7. Truck circulation and landing areas should be located on the site plan.
8. Alterations and improvements to the shoreline should be located on the site plan.

9. Fire lanes should be located on the site plan.
10. Any and all proposed outdoor lighting including the type of luminaire must be noted on the site plan.
11. Vehicular and pedestrian lanes and circulation must be noted on the site plan.
12. All landscaping, signage, screening along the public street should be located on the site plan.
13. Bus parking and loading areas should be designated on the site plan.
14. Trash and waste disposal, dumpsters etc. should be located and noted on the site plan.
15. Isle widths and stall dimensions for parking and circulation areas should be located on the site plan.
16. The harbor line for the Portland Harbor should be located on the site plan.
17. Elevations for all structures should be submitted.
18. Additional noise information will be required. A decible level including the frequency and duration of impulse for chippers, compressors, and fans should be provided. Any other noise producer should also be noted along with the required information. These noise levels should be taken at the property line and the time of day should be noted.
19. Please note the shift hours and the number of employees in writing as part of the site plan review.
20. The type and dimensions of all fencing included in the site plan should be noted.
21. The use and doorways on the south shed, north shed, should be noted along with what rehabilitation will be necessary to those buildings.
22. Identify storage areas and the use of the property on the site.
23. The ship tie-up areas should be noted along with the area to be dredged.
24. Prior to final site plan approval a rendering of the entrance image consistent with the long range waterfront plans for Portland will be required. The image set by this facility will have an effect on the entire waterfront.
25. Any future expansion possibilities should be noted at this time.

26. The City will require that the parking area be paved and stripped, this should be noted on the plan.
27. The dimensions of the lot along with the prior owner and bearings is requested.
28. A stormwater management plan and a water collection system must be shown.
29. The site plan, as submitted show a proposed Franklin Arterial alignment, the actual alignment must be shown on the plan. If you wish, the proposed alignment may be shown with a dotted line.
30. The Public Works Department requires that drawings be submitted showing the size, dimensions and angles on all type of water and sewer pipes on, and to the site.
31. All signage should be noted on the site plan.

I'm sure that a number of these requirements are extremely easy for you to note on the site plan. As soon as this information is received and reviewed we will again proceed on the site plan review.

At some time when we are closer to a final site plan I hope that you will be able to attend a Planning Board workshop to explain your model to the Board. This preliminary review will prepare them for the more detail review which will follow.

Thank you for your cooperation and I will be in touch with you soon.

Sincerely,

Patricia Harrington,
Chief Planner



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530

January 28, 1982

Planning Department
City of Portland
City Hall
Portland, Maine 04101

Attention: Patricia Harrington - Chief Planner


Gentlemen:

Subject: Portland Facility

Please find enclosed final site plan and written statement as per Section 604.4B-1 and 604.4B-2 inclusively of Chapter 604 in the City Ordinance. This packet is submitted for final approval to the City of Portland's Planning Board.

Very truly yours,

BATH IRON WORKS CORPORATION


H. C. Plummer, Jr.
Construction Engineer

HCP:mr

- Enclosures
- (1) Site Plan #10001
 - (2) Parking #10027
 - (3) Electrical System #10010
 - (4) Water System #10007
 - (5) Fire Protection #10006
 - (6) Steam System #10009
 - (7) Sewer System #10008
 - (8) Site Plan #10005
 - (9) Dry Dock - Sketch #385-0010 Potable Water System
 - (10) Dry Dock - Sketch #386-0010 Sewage System
 - (11) Dry Dock - Fire Protection

CITY OF PORTLAND, MAINE

MEMORANDUM

Pal
Set in Division
Joe

TO: Brian Dudley, Deputy City Manager
David Lourie, Corporation Counsel
Clark Neily, Director Economic Development
Tony Forgione, Administrator City Hospital
Donald Olsen, Waterfront Administrator Economic Development
George Flaherty, Director Public Works
William Bray, Traffic Engineer Department Public Works
Patricia Harrington, Chief Planner
Larry Mead, Acting Targeted Job Demonstration Program Director
Joseph Gray, Director Planning & Urban Development

DATE: 9/17/81

FROM: Thomas F. Valteau, Director Transportation & Waterfront Facilities

SUBJECT: Bath Iron Works
Schedule of Issues

[Handwritten signature]

The purpose of this memorandum is to organize and provide some direction to the issues which our staff group has raised about the Iron Works project.

As Gertrude Stein so appropriately told us, the problem is not finding the right answers so much as it is asking the right questions.

Our immediate goal is to move towards a report from all of us to the City Manager raising the right issues and answering as many as possible. For those which cannot be answered immediately we should be pointing towards the way and the timetable for finding the answers.

It would be good if appropriate staff could bring to our meeting on September 23rd a first draft report covering the issues outlined below. If you are unable to get this far, at least bring a hand written outline which we can discuss.

Traffic. Here we need a statement of the short term and longer term issues. Examples would be Franklin Street, Commercial Street, Parking, the prospects for a parking garage, etc. the report will need to cover the timetable for addressing these issues, who should address them, and how the whole picture comes together into a workable concept. Another traffic issue would be transporting the ship's crews from City Hospital to the State Pier.

Design. This would cover the look and function of the built environment. What are the opportunities? What are the areas of concern? By now, we are all fairly well acquainted with these. Old Port. Munjoy Hill. India Street. City Hospital/Barron Center. How can a working shipyard be made a point of interest and attraction and strengthened the great asset that the City has in the Old Port Exchange?



DEPARTMENT OF ENVIRONMENTAL PROTECTION

BUREAU OF LAND QUALITY CONTROL, STATE HOUSE, AUGUSTA, MAINE 04333, 289-2111

TO: Review Agencies : Portland Planning Board

Re: BW Ship Repair Facility

DATE: 8/20/82

MESSAGE:

Please review the attached plans for the proposed
site entrance and intersection of Commercial St. and
Franklin St. Arterial. Any comments are due by
September 8th.

- #25 100 final
design

BY: Don Wetherill



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

September 7, 1982

Mr. Don Witherill
Department of Governmental Protection
Bureau of Land Quality Control
State House
Augusta, Maine 04333

Dear Mr. Witherill:

We have received the revised design plan for the Bath Iron Works entrance from your office. As I mentioned in our phone conversation today, the plan is acceptable but there are several points that should be clarified. There is no indication that a \$25,000 escrow fund has been set up for the BIW entrance for future improvements that would be implemented in conjunction with the redesign of Commercial Street. In addition there should be an indication that a traffic officer will be assigned to direct traffic at the entrance until improvements to Franklin Arterial are complete. Both of these items were required as part of the Planning Board approval of the BIW site plan.

Should you have any questions on these points feel free to contact this office.

Sincerely,

Joseph E. Gray, Jr.
Director Planning &
Urban Development

BIW ISSUES - PLANNING DEPARTMENT

The BIW and City Hospital project has been reviewed on a preliminary basis by staff for site plan and community impact issues. As more information becomes available on these projects, the full scope of these issues should become more clearer. The following is an outline of preliminary recommendations on non-site plan issues that should be addressed in the process of reviewing projects. As specific details of these projects are known additional recommendations may become evident.

CITY HOSPITAL - BRIGHTON AVENUE AREA

1. Pedestrian Safety

Sidewalks, traffic lights, cross walks and other pedestrian amenities should be installed as appropriate for greater pedestrian safety in the immediate area of the hospital particularly for pedestrian movements crossing Brighton Avenue to the Pine Tree Shopping Center.

2. Neighborhood Planning

As perhaps part of a larger study of Portland's neighborhoods a planning effort should be developed to stabilize existing residential and business districts in specific neighborhood areas in conjunction with ^{other} planning activities. For the Brighton Avenue - City Hospital area this could entail the following diverse planning issues:

- housing
- economic development (re: neighborhood business, encouraging stable v. transient business)
- strip development
- public infrastructure improvements
- recreation and social planning

3. Limit Commercial Zone Changes

There are existing commercial buildings and business zoned land already vacant in this area. The vacancies include portions of the Pine Tree Shopping Center and a gas station. Given this apparent surplus of business zoned land, there appears to be no compelling argument. ^{to expand the business zone in this area} This position is further justified by the presence of a shopping center and other businesses near the site in Westbrook. Recent experience with road side oriented businesses particularly gas stations indicate these uses are not particularly stable.

4. Recreation

Planning for adequate recreation and leisure time opportunities for naval personnel on site and other locations in the City should be undertaken.

BIW-INDIA STREET (MUNJOY HILL AREA)

1. Pedestrian Safety

Sidewalks, traffic lights crosswalks and other pedestrian amenities should be installed as appropriate relating to the increased traffic demand of the BIW development.

2. Neighborhood Planning

A neighborhood planning effort should be developed as outlined previously. The study should entail the immediate India Street area as well as the Munjoy Hill neighborhood and fringes of the Old Port. The India Street and fringes of the Old Port does not contain an overwhelming number of established and stable commercial uses. With the expected economic impact of BIW this instability factor could have desirable as well not so desirable effects. This is particularly important because India Street is already recognized as a neighborhood in need of revitalization as exemplified by its designation as a Neighborhood Strategy Area. Specific issues might be:

- housing
- economic development (re: neighborhood businesses, encouraging stable v. transient business)
- public infrastructure improvement
- recreation and social planning

3. Limit Commercial Zone Changes

Commercial zone changes should be limited because there are already existing commercial buildings that are either vacant or underutilized (warehousing, or marginal businesses). With a fairly high residential density in the India Street Munjoy Hill area, zone changes could frustrate efforts to stabilize commercial and residential districts and improvement of the quality of life for its residents.

Zoning Board of Appeals variance applications should also be similarly scrutinized for their impact.

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Richard E. Anderson, Sr., Director of Parks and Recreation

FROM: Warren J. Turner, Planning Department

SUBJECT: Longfellow Memorial - Site of Birthplace on Fore Street

DATE:
July 12, 1979

The last time I was down there, the boulder and flagpole at Longfellow's birthplace site on Fore Street beside the American Hoist and Derrick Co. appeared to be in a state of disrepair and neglect.

Is the City responsible for its maintenance?

If so, then perhaps the City Arborist could devise a plan for improving the landscaping for this memorial site. There is such a small area involved that there is scarcely sufficient space for much in the way of planting material; but, anything would look better than what was there.

There used to be two pine trees, but they were not in the best of condition. There used to be grass, but that was not being maintained properly. There is a flag pole, but who is responsible for raising the flag? Can't something be done to spruce up the area, or is it the responsibility of the Longfellow Garden Club to take some action? It looks as if "no monument" would be more respectful to the poet's memory than one that looks seedy.


Warren J. Turner

cc: Donald E. Megathlin, Planning Director

BIW ISSUES - PLANNING DEPARTMENT

Key: MSP= Maine State Pier - *BIW*
 MHOP= Munjoy Hill-Old Port
 CH = City Hospital
 B= Brighton Ave. Neighborhood

ISSUES	IMPACT	LOCATION				RESOLUTIONS
		MSP	MHOP	CH	B	
A. Bulk, Location, Height -Views -Character (visual) -Recreation/Open Space	public visual access to water		x			Zoning and site plan (setback, ht, bulk requirement); ACC plan
	tourism	x	x			Zoning, site plan, ACC plan
	residential	x	x	x	x	" " " " "
	open space	x	x	x	x	" " " " "
	historic socio-cultural (Longfellow, etc.)	x	x	x	x	" " " " "
	commercial	x		x		" " " " "
	"entrances - image"	x			x	site plan
	facilities for sailors, neighbors					
B. Noise -Traffic autos, trucks -Industry	residents		x	x	x	zoning, reroute, time regulation
	residents		x			zoning, site plan (physical buffers, distance, quiet source, insulate receiver), DEP
					x	site plan (buffer or distance), nuisance ordinance
-People -recreation, parties	residents					
C. Landscaping (and see A. above)						
D. Traffic	on street and off street availability		x		x	time/shift management, site plan, zoning
	for: BIW			x	x	" " " " "
	nearby commercial			x	x	" " " " "
	nearby residential			x	x	" " " " "
	nearby tourist			x	x	" " " " "
nearby industrial						

Key: MSP= Maine State Pier - B.I.W.
 MHOP= Munjoy Hill-Old Port
 CH= City Hospital
 B= Brighton Ave. Neighborhood

ISSUES	IMPACTS	LOCATION				RESOLUTIONS	
		MSP	MHOP	CH	B		
D. (cont) Traffic	-pedestrian issues, sidewalks	x	x	x	x	(width, maintenance) site plan, CIP	
	-crosswalks	x	x	x	x	(adequacy with regard to traffic volume) site plan, CIP	
	-traffic signalization	x	x	x	x	(adequacy with regard to crosswalks) site plan CIP	
	-curbcuts	x	x	x	x	(location, width) site plan, CIP	
	-traffic flow shortcuts & street traffic capacity	x	x			rerouting, traffic signals	
	-trucks loading	x	x			" "	
	-rail						
	-public transportation	access for use by: pedestrian commuters	x	x	x	x	zoning, site plan
		other towns/overall metro	x				ACC plan, site plan
							site plan
E. Zoning (and see A,B,C,D)	-housing (see F)		x	x		site plan, zoning ACC plan	
	-recreation/open space		x	x	x	" " " " "	
		access (to water)		x	x	x	" " " " "
		quantity		x	x	x	
		quality		x		x	zoning, variances
		type/compatibility		x		x	regulate curb cuts, zoning
		quantity		x		x	zoning, variances
		transient businesses		x			zoning, variances
		type/compatibility		x			regulate curb cuts
		quantity		x		x	zoning
	business, residents		x		x	city temporary sign regs.	
	business, traffic congestion	x	x		x	city vendor regs.	
	business, traffic congestion						
	pedestrian safety						

Key: MSP= Maine State Pier
 MHOP= Munjoy Hill-Old Port
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ISSUES	IMPACTS	LOCATIONS				RESOLUTIONS
		MSP	MHOP	CH	B	
H. Fire (cont) -hazardous wates (see also G)	safety	x				DEP site plan site plan
I. Lighting (exterior)	residents vehicle flow		x x		x x	
J. Dredging						
K. Vegetation and Wildlife (terrestrial & marine)						
L Soils						
M. Education -family pop/housing changes	school service and location			x	x	?
N. Social Services						
O. Security/Public Safety						
P. Job Oppourtunities						
Q. Water Transportation						

Key: MSP= Maine State Pier - B.I.W.
 MHOP= Munjoy Hill-Old Port
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ISSUES	IMPACTS	LOCATION				RESOLUTIONS	
		MSP	MHOP	CH	B		
F. Housing	-quantity		x		x	condo conversion; zoning, variances; PUD; city monitors gentrification, etc; city-owned land; state and fed. aid; zoning bonuses; other incentives	
	-quality		x		x	same as above	
	-transient	housing market, social/health/welfare of residents, character and demographics of neighborhood see above		x		x	same as above, encourage hotels
G. Utilities	-air - visible		x	x		zoning, DEP, site plan	
	invisible	residents, tourism (dust odors, smoke)	x	x			
		same as above	x	x			
	-liquid - water	capacity of system	x				PWD
	storm: quantity	capacity of system	x	x	x	x	site plan, wetlands alteration permit, corps of eng., etc.
		clog or pollution in system	x	x	x	x	same as above
	quality sanitary	capacity of system	x		x		site plan
-solid disposal	storage and disposal sites?	x	x	x	x	site plan	
-hazardous wastes	fire, other	x	x			site plan, DEP	
energy	see CCEMP	x		x		CCEMP	
H. Fire							
-access	safety	x		x		site plan, building permit	

**EXHIBIT 3
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REFERENCES ³	
		Comprehensive Plans, Cumulative Effects, Large Rezonings	Small to Medium				
Preferred Measures	Fallback Measures			Residential Rezonings	Commercial-Industrial Rezonings		
I. Local Economy							
<i>Public Fiscal Balance</i>							
1. Net change in government fiscal flow (revenues less expenditures).		x				Public revenues: expected household incomes by residential housing type; added property values. <i>Public expenditures</i> : analysis of new service demand; current costs; available capacities by service.	M
<i>Employment</i>							
2. Change in numbers and percent employed, unemployed, underemployed, by skill level.	2a. Number of net new long-term and short-term jobs provided to local area.	x			x	Direct from new business; or estimated from floor space, local residential patterns, expected immigration, current unemployment profiles.	
<i>Wealth</i>							
3. Change in land values.		x	x		x	Supply and demand of similarly zoned land, environmental changes near property.	
II. Natural Environment							
<i>Air Quality</i>							
<i>Health</i>							
4. Change in air pollution concentrations by frequency of occurrence and number of people at risk. ⁴	4a. Change in air pollutant concentrations relative to standards.	x			x	Current ambient concentrations, current and expected emissions, dispersion models, population maps.	K
	4b. Change in pollutant emissions relative to emission "budgets" ⁵ or targets.						
<i>Nuisance</i>							
5. Change in occurrence of visual (smoke, haze) or olfactory (odor) air quality nuisances, and number of people affected. ⁶	5a. Changes in the likelihood that air quality nuisances (qualitative judgment) will occur or vary in severity.	x			x	Baseline citizen survey, expected industrial processes, traffic volumes.	K,C
<i>Water Quality</i>							
6. Changes in permissible or tolerable water uses and number of people affected—for each relevant body of water.	6a. Change in water pollutant concentrations (relative to standards), for each water pollutant.	x			x	Current and expected effluents, current ambient concentrations, water quality model.	K
	6b. Change in amount discharged into body of water relative to effluent "budgets" for each pollutant. ⁵						
<i>Noise</i>							
7. Change in noise levels and frequency of occurrence, and number of people bothered. ⁶	7a. Changes in traffic levels, sound barriers, and other factors likely to affect noise levels and perceived satisfaction.	x	x		x	Changes in nearby traffic or other noise sources, and in noise barriers; noise propagation model or nomographs relating noise levels to traffic, barriers, etc.; baseline citizen survey of current satisfaction with noise levels.	K,C

Suggested Measures

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ERENCES ³
		Comprehensive Plans, Cumulative Effects, Large Rezoning	Small to Medium			
Preferred Measures	Fallback Measures		Residential Rezoning	Commercial-Industrial Rezoning		
<i>Hospital Care</i>						
<i>Emergency Care Availability</i>						
16. Change in number of citizens beyond x minutes travel time from emergency health care.		x	x	x	Maps of population distribution and emergency facilities; number of emergency vehicles (if any), expected calls, and dispatch policy.	
<i>Availability/Crowdedness</i>						
17. Change in potential bed need versus bed supply of area hospitals, by type of clinical service (medical, surgical, pediatric, obstetrical).		x	x		Current patient hospital bed days per 1000 population by sex-age group and medical service; available bed capacities; expected population by sex-age group.	
<i>Crime Control</i>						
<i>Crime Rate</i>						
18. Change in rate of crimes in existing community.	18a. Expert rating of change in crime hazard.	x	x	x	Current crime rates and case histories of similar neighborhood changes; changes in community lighting, sightlines, hiding places, people mix.	
<i>Feeling of Security</i>						
19. Change in percent of people feeling a lack of security from crime.	19a. Change in people mix, police patrolling, and physical conditions (lighting, sightlines, potential hiding places, etc.) likely to affect feelings of security.	x	x	x	Baseline citizen survey plus the data above.	C
<i>Fire Protection</i>						
20. Change in fire incidence, property loss, and casualty rates.	20a. Expert ratings of change in likelihood of fires, fire spread, rescue hazards.	x	x	x	Incidence rates by occupancy types; people mix; available water supply; available fire suppression equipment and manning; likely building materials; site plan if available.	
<i>Recreation—Public Facilities¹⁰</i>						
<i>Overall Satisfaction</i>						
21. Change in number and percent of households satisfied with public recreation opportunities.	21a. Measure 23 (change in accessibility) and changes in other physical conditions (noise, air quality, hazards, crowdedness) likely to affect satisfaction, and number of households potentially affected.	x	x	x	Baseline citizen surveys, and expected changes in facilities and environment (noise, air quality, dangers).	C
22. Change in number or percent of households using facilities (viewed relative to nominal capacity), by facility. ¹¹	22a. Same as above.	x	x	x	Citizen survey.	C

Suggested Measures

**EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES**

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ER-ENCES ³	
		Comprehensive Plans, Cumulative Effects, Large Rezonings	Small to Medium				
Preferred Measures	Fallback Measures			Residential Rezonings	Commercial-Industrial Rezonings		
		30b. For retrospective studies: changes in number and percent of (a) households and (b) trips using public transit.	x			Usage levels, from fares and surveys.	C
<i>Accessibility</i>							
31. Change in number and percent of citizens residing (or working) within x feet of public transit stop.			x	x	x		C
<i>Transportation-Pedestrians Satisfaction/Accessibility</i>							
32. Change in number and percent of households satisfied with walking conditions and walking opportunities in their neighborhood. ¹²		32a. Change in physical conditions (sidewalks, noise, etc.) affecting current satisfaction or dissatisfaction with walking conditions, and number of households likely to be affected.	x	x	x	Baseline citizen survey, estimated changes in physical walking conditions; additions or removals of desired destinations.	C
<i>Safety</i>							
See measures 33 and 34 below.		32b. The group of measures of accessibility to shopping, schools (27), recreation (23), public transit (31).	x	x	x	N/A	
<i>Transportation-Private Vehicles Safety</i>							
33. Change in number and percent of households satisfied with traffic safety (vehicle and pedestrian).		33a. Change in physical conditions (e.g., traffic volumes, sidewalk width, barriers from traffic) likely to affect perceived safety, and number of households likely to be affected.	x	x	x	Baseline citizen survey, changes in traffic and traffic controls; circulation patterns.	C
34. Change in number and severity of accidents per 1,000 persons by pedestrians and riders.		34a. Change in number and severity of traffic hazards created (may include changes in traffic volume and speed, sightlines, traffic controls), and number of people potentially affected.	x	x	x	Accident frequency and causation data; changes in traffic and traffic controls, circulation patterns, expected traffic volumes.	
<i>Travel Time</i>							
35. Change in vehicular travel times between selected origins and destinations, by time of day and day of week.		35a. Change in "level of service" for selected roads and intersections, by time of day. ¹³	x		x	Current traffic volumes; changes in street layout, width and traffic controls; estimated net new vehicle trips.	

Suggested Measures

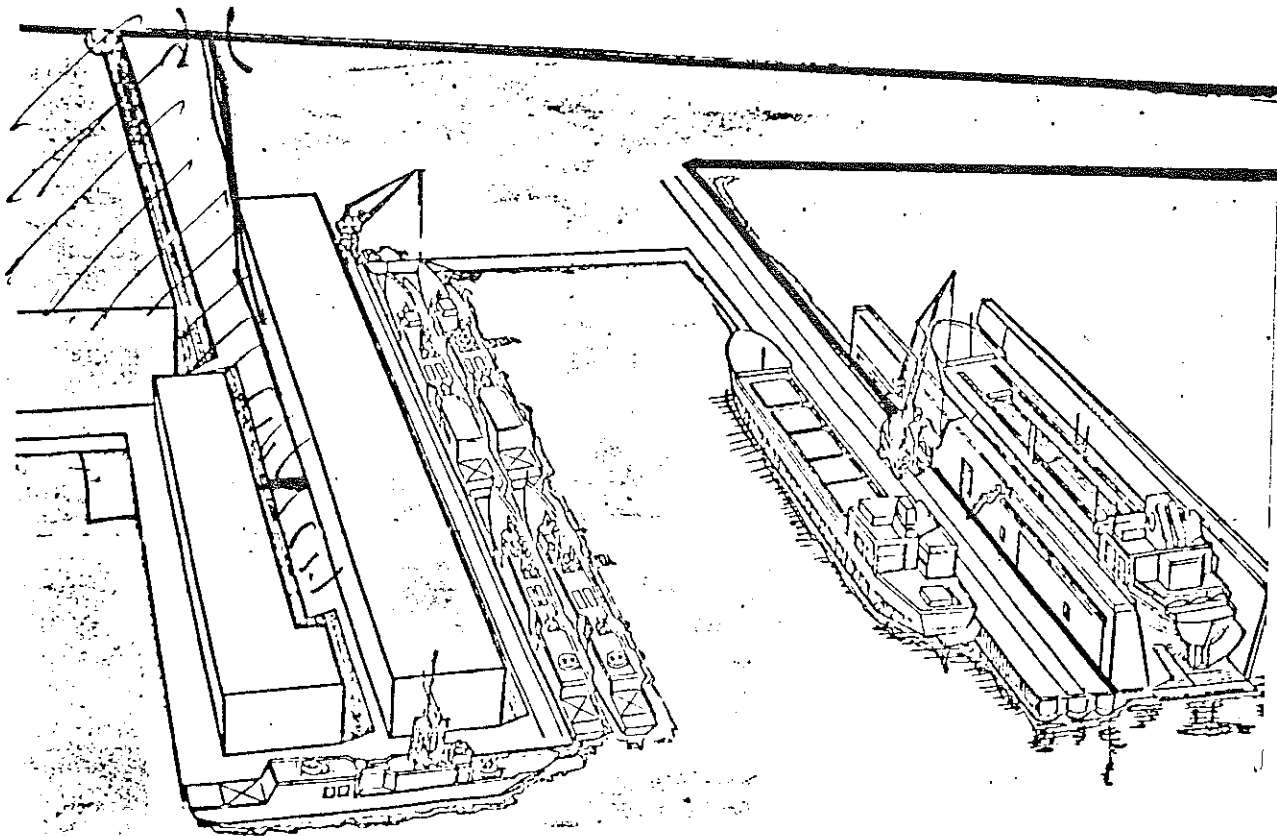
EXHIBIT 3 (CONT.)
SUGGESTED IMPACT MEASURES

IMPACT AREA AND SUBAREAS		USUALLY APPLICABLE TO EVALUATING ¹			BASES FOR ESTIMATES ²	REF-ER-ENCES ³
		Compre-hensive Plans, Cumulative Effects, Large Rezonings	Small to Medium			
Preferred Measures	Fallback Measures			Resi-dential Rezonings	Commercial-Industrial Rezonings	
<i>Sociability/Friendliness</i> ¹⁷ 45. Change in social interaction patterns (e.g., frequency of neighboring, community activities).	45a. Identification of changes in people mix, settings for social activities, and physical barriers to social interactions.	x	x	x	Baseline survey of current neighboring and community activity patterns; changes in availability of community and small group meeting places; changes in physical barriers (e.g., high-ways, fences, heavy traffic, buildings which hinder access from one area of a neighborhood to another or foot-bridges or removal of barriers linking the areas); changes in people mix.	C
<i>Privacy</i> 46. Change in number and per-cent of households satisfied with privacy in outdoor areas around home.	46a. Change in sightlines, pedestrian volumes, or other conditions likely to affect satisfaction, and number of house-holds potentially affected.	x	x	x	Citizen survey; geometric analysis of sightlines; changes in sight and sound barriers.	C
<i>Overall Contentment with Neighborhood</i> 47. Change in number and per-cent of citizens satisfied with their residential (or work) neighborhood.	47a. Degree of change to neighborhood elements that citizens express most satisfaction or dissatisfaction with.	x	x	x	Citizen survey using data from other measures.	C

NOTES:

1. Most measures are directly applicable at one time or another to all types of develop-ment.
2. The "bases for estimate" column presents a simplified, brief listing of key data and models (if any) needed for the preferred measure. A subset of the data is needed for the backup measures unless otherwise indicated. For retrospective studies, other, more direct measure-ment procedures are often feasible. Data collection procedures for the measures are outlined in P.S. Schaenman and T. Muller, *Measuring Impacts of Land Development*, Washington, D.C., The Urban Institute, 1974. A more detailed discussion of data collection and analysis may be found in the references.
3. Reference codes:
M = Muller, *Fiscal Impacts of Land Development: A Critique of Methods and Re-view of Issues*, The Urban Institute, Washington, D.C., 1975.
C = Christensen, *Social Impacts of Land Development: An Initial Approach for Esti-mating Impacts on Neighborhood Usages and Perceptions*, The Urban Institute, Washington, D.C., 1976.
K = Keyes, *Land Development and the Natural Environment: Estimating Impacts*, The Urban Institute, Washington, D.C., 1976.
4. Measure 4 could be expanded, where appropriate, to reflect damage to vegetation and materials as well as to people's health.

BATH IRON WORKS CORPORATION Portland Shipyard Facility Proposal



BATH IRON WORKS

EXPANSION PROPOSAL FINANCING PLAN

CITY OF PORTLAND

-The City will issue \$15 million in General Obligation Bonds for

- a) Acquisition of the Maine State Pier \$ 4.6
- b) Acquisition of portion of Canadian National property,
improvements on the easterly side of the Maine State
Pier and the construction of a new finger pier. 10.4

\$ 15.0 million

STATE OF MAINE. \$ 15.0 million

-The State will issue \$15 million in General Obligation Bonds towards a \$24.1 million floating dry dock. In addition, the State will take \$4.6 million obtained from the City for the State Pier and apply this towards the dry dock.

BATH IRON WORKS

- \$4.5 million towards the dry dock. \$ 4.5 million
- \$5.5 million for production equipment. 5.5
- \$6.7 million in other working capital. 6.7

\$ 16.7 million

TOTALS:

City . . \$15.0 million

State . . 15.0 "

BIW . . 16.7 "

\$46.7 million

=====

FACT SHEET

--Bath Iron Works is Maine's largest manufacturer with over 6,500 employees. It presently operates two major plants; a steel fabricating unit on 33 acres in East Brunswick, and a fully integrated shipbuilding, overhaul and repair facility on 54 acres at the main plant on the Kennebec River in Bath.

--Manning at the Portland facility is projected to grow to 1,000 by 1986.

--The Portland facility is expected to create major industrial expansion in and around Portland, generating 3,500 additional supporting jobs.

--The annual payroll in Portland will grow to \$29.5 million in 1986.

--In addition to the projected wages and salaries that will be generated, subcontract services purchased will also be significant, projected to grow to \$7 million in 1986.

--The expansion will generate approximately \$12 million in tax revenues to the State of Maine and municipal governments.

--The expansion will eliminate the need for the continued \$300,000 annual operating subsidy to the Maine State Pier.

--Initially, the management team will be staffed primarily by current BIW managers and the first production contracts secured will be handled by production workers from Bath. However, it is BIW's plan to supplement the original management with new hires and the transfer of current Portland area residents working in Bath.

--Following necessary development of the Portland facility, BIW intends to immediately put its start-up management organization in place and start marketing work. The phase-in period is anticipated to be 18-24 months.

--Estimated total economic impact by 1986 -- \$299.8 million. This includes BIW salaries, ship's payroll and their multiplier effect, plus locally supplied subcontractor services and materials.

--Estimated total employment by 1986, including BIW, temporary Navy and generated employment, could be approximately 5,000.

PORTLAND FACILITY PRESENTATION

PHYSICAL DESCRIPTION

PORTLAND

ACREAGE

8 Acres (including
Canadian National RR)

PIER FOOTAGE

1,800 Feet

DRYDOCK LENGTH

800 Feet

TONNAGE

24,000+ Tons

BUILDINGS SQ. FT.

90,000 Sq. Ft.

CRANES

2 Gantry Cranes
1 Bridge Crane

AVAILABILITY

1 month - Pier
18-24 mos. - Completed
Facility

PERSONNEL BERTHING
FACILITY

500 persons available

BIW'S PLAN FOR A NEW FACILITY

BIW plans to play a leading role in the rapidly increasing maritime market.

Shipbuilding and ship repair work will increase appreciably over the next decade. BIW foresees a dramatic upsurge in all types of marine work. Current opportunities for profitable work are being turned down for lack of capacity at Bath in areas such as drydocking and pier space needed for ship completion and overhaul.

BIW is now active in four major markets. They are: Navy new construction, commercial new construction, Naval combatant ship overhaul and industrial work. BIW has the opportunity to develop a fifth market in commercial overhaul and repair. The recent APOLLO bow replacement job for U. S. Lines in Boston has alerted the commercial ship operators of BIW's interest and ability in this type of work. A strong market exists in this area.

In addition to commercial repair, a new facility will relieve BIW of its pier and drydock congestion at Bath. Newly constructed ships can be moved to a new facility for final drydocking and completion. This will allow the Bath yard to increase new construction work while at the same time making more work available for the new facility. In addition, BIW could bid overhaul work on ships too large for the Bath facilities. This includes ships such as DD963's, AOR's, AOE's, AE's, large commercial ships and conversions, and other large auxiliaries.

In summary, a combination of Bath and a new facility will allow BIW to bid for the construction and repair of a large variety of ships, both Navy and commercial. The two facilities will complement one another allowing each to concentrate on the type of work best suited for its particular strengths.

BIW - POTENTIAL WORK THAT EXCEEDS CAPACITY AT BATH

BIW will market new work which can only be accomplished with additional capacity. Such work includes:

- Commercial Ship Conversions and Overhauls
 - BIW is being urged to participate in this market by ship operators but its drydock is too small
- MSC Tanker Overhauls
 - 28 overhauls projected for next 3 years - BIW cannot handle because of capacity limitations
- Completion of Commercial Ships begun at BIW
 - Present drydock capacity is inadequate and presently requires subcontracting of the drydocking phase to other shipyards
- Conversion of Large Commercial Ships to Rapid Deployment Ships
 - Given a high priority by present Administration and BIW's drydock is too small
- Overhaul of Large Navy Auxiliary Ships
 - BIW's present drydock limitations precludes competitive bidding
- Overhaul of New Classes of Destroyers and Cruisers
 - BIW is being considered for participation in this market conditioned upon its having available lifting and construction capacity

BIW -- THE NATION'S PREMIER SHIPBUILDER

While always a highly regarded shipyard, since 1975 BIW has emerged as the nation's premier shipbuilder based on its record of accomplishments with respect to schedule adherence, low costs and high quality performance.

Bath Iron Works has combined modern management concepts, a highly productive work force, advanced planning and innovative production methods, all supported by excellent facilities and state-of-the-art equipments to perform in a manner unprecedented in the American shipbuilding industry.

Bath-built Guided Missile Frigates are consistently being delivered 17 weeks ahead of their original contract delivery dates. Three containerships built for Matson and Farrell Lines were delivered 5, 16 and 16 weeks earlier than their original contract delivery dates. Navy combatant ships overhauled at BIW are consistently delivered on or ahead of their contract delivery dates.

On its first 11 FFG's, BIW is underrunning the Navy's target costs in excess of \$5 million per ship and forecasting underruns on subsequent ships in the program. A government consultant estimated that BIW costs on 1 ship in the Frigate Program were approximately \$17 million lower than a West Coast competitor. In the recent award of 6 additional frigates - 3 to BIW and 3 to the West Coast - of the 4th Flight in April 1981, BIW's price was \$10 million per ship less than the West Coast competition.

BIW's quality has been consistently acclaimed by Navy and merchant ship operators as the best in the industry. Management believes it is the Navy's sincere intent to have BIW become very active in the construction of the larger surface combatants such as those in the CG-47 and DDG(X) Cruiser and Destroyer Classes.

Since 1974 BIW's employment levels, backlog, sales, income and return on invested capital have increased each year. Bath's management is convinced that its well-proven systems, methods and disciplines are transferable.

As a result of this performance, BIW backlog has grown from \$120 million to \$897 million in 5 years and the shipyard is now deluged with more marketing opportunities than can be accommodated at Bath - thus, the great need for additional capacity.

CONGOLEUM CORPORATION

Congoleum Corporation, with its wholly owned subsidiary, Bath Iron Works Corporation, has the management skills and financial strength to quickly develop a major ship repair facility.

Congoleum Corporation, headquartered in Portsmouth, New Hampshire, is one of the largest privately held corporations in the United States. Congoleum, with over 11,000 employees, is a rapidly growing and highly diversified corporation.

The Corporation is comprised of three major operating subsidiaries:

- Bath Iron Works Corporation, the shipbuilding division, is Maine's largest manufacturing company and the nation's 5th largest shipyard specializing in the construction of new ships for the Navy and Merchant Marine, ship overhaul and repair, and industrial products.
- Congoleum Corporation, Resilient Flooring Division of Kearny, New Jersey, is the world's largest manufacturer of cushioned vinyl flooring and is a major supplier of mobile home furnishings.
- Curtis Industries of Cleveland, Ohio, is a highly diverse supplier of parts and equipment to the automotive aftermarket and a major supplier of products for the industrial maintenance market.

Congoleum has the depth, stability and resources necessary to fully implement all aspects of this proposal, and its operating divisions have a proven record of outperforming their competitors because of the management practices implemented throughout the Corporation.

BIW
~~BIW~~ Brampton

- gave them my Urban Design Review Guidelines

- significant administration

*D.E.P. Site Location Regulations
(Go into effect Nov. 1, 1979)*

3. Screen planting will be so placed that at maturity it will be no closer than three feet from any street or property line.
4. The screen will be broken only at points of vehicular or pedestrian access.
5. Fencing and screening will be so located within the developer's property line to allow access for maintenance on both sides without intruding upon abutting properties.

C. Submissions. Applications for approval of proposed developments shall include evidence that affirmatively demonstrates that adequate provision of buffer strips, when appropriate, will be made, including information such as the following:

1. The location and width of all natural buffer strips to be retained.
2. The nature, location, width, and height of all vegetative buffer strips or architectural screens to be established.
3. Legal provisions for the maintenance of all buffer strips and architectural screens.

D. Terms and Conditions. The Board may, as a term or condition of approval, establish any reasonable requirement to ensure that the developer has made adequate provision for the establishment of buffer strips, such as requiring:

1. The maintenance of existing vegetation as a natural buffer strip, which shall remain as a permanent feature of the landscape.
2. The incorporation of buffer strip maintenance into deed covenants in projects where deed transfers of property to the general public are contemplated.
3. Written permission of the Department of Environmental Protection for activities which may adversely affect a body of water or wildlife habitat protected by a natural buffer strip, such as: removal of live trees, stump and root systems, and the displacement of rocks, topsoil and similar activities which would cause or allow increased soil erosion.
4. The establishment of particular species of vegetation.
5. The use of particular materials, colors, and styles in the construction of architectural screens.

10. Control of Noise

A. Preamble. The Board recognizes that certain types of industrial and commercial developments, mining operations and roads may cause excessive levels of noise which result in physiological, psychological or economic damage.

B. Scope of Review. In determining whether a developer has made adequate provision for the control of noise generated by the proposed development the Board shall consider all relevant evidence to that effect, such as evidence that:

1. Effective noise muffling devices or other technical solutions will be used to reduce the impact of the proposed development on background noise levels.

C. Submissions. If the development will be the source of significant noise, applications for approval of proposed developments shall include evidence that affirmatively demonstrates that adequate provision for the control of noise will be made, including information such as the following, when appropriate:

1. Identification of the sources and nature of any noises from the development which will be at levels substantially above background noise levels, the levels of noise expected, and methods to be utilized to reduce the impact of noise on surrounding uses.

2. Where background noise levels may be increased by more than ten decibels (dba) at any time for a duration exceeding one minute, a detailed assessment will be submitted including the level and duration of noise expected, the anticipated effect of the noise on surrounding uses, the extent of the area affected, and possible measures to reduce or eliminate the excessive noise.

D. Terms and Conditions. The Board may, as a term or condition of approval, establish any reasonable requirement to ensure that the developer has made adequate provision for the control of noise from the development, such as:

1. Limiting the hours of operation of the development to minimize the impact on surrounding uses.

11. Preservation of Historic Sites

A. Preamble. The Board recognizes the value to society of preserving sites of historic significance.

B. Definition. As used in this section, "historic site" means any site, structure, district or archaeological site which has been officially included on the National Register of Historic Places and/or on the Maine Historic Resource Inventory, or which is established by qualified testimony as being of historic significance.

C. Scope of Review. In determining whether a proposed development will have an adverse effect on the preservation of historic sites either on or near the development site, the Board shall consider all relevant evidence to that effect.

STATEMENT OF FACTS

A. Introduction

The Golden Triangle Competition has focused interest on a key parcel of land and produced a range of outstanding opportunities for its best future use. Innovative ideas were carefully and professionally reviewed leading to specific recommendations for development as described below. A complete report from the Golden Triangle Land Use Design Committee is also enclosed.

B. Background

In July, 1980 the City Council authorized a planning and design competition to develop appropriate possible land use designs for the Golden Triangle. This competition resulted from a perceived need to attract and analyze high quality innovative ideas for the use and form of this important site and as a result, revise the guidelines as necessary for future development of the site. Open space vs. built structures, scale, architectural context, vehicular and pedestrian circulation, and historic identity were some of the issues which the community as a whole felt were still unresolved with respect to the best use and form of the Triangle.

C. Competition Process

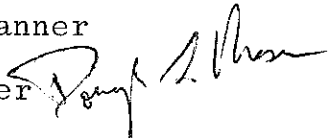
The competition was administered with funds and services provided by the City and a match of \$18,000 provided by thirteen private downtown businesses organized by Louis J. Benoit, President, A. H. Benoit and Company. The City Council appointed an eleven member Golden Triangle Land Use Design Committee (Awards Committee) to conduct the competition.

A formal set of competition regulations, background materials, and national publicity was developed by the Committee. Designers, developers, and planners were invited to submit entries in the open first stage of the competition. One hundred and six (106) entries were received representing all regions of the United States and Canada.

The Committee brought in a Technical Advisory Panel of nationally recognized architects and landscape architect to advise the Committee concerning urban design components of the entries. The Committee selected five finalists to develop their ideas in more detail.

The five finalists produced models, drawings, and financial analysis of their entries in the second stage. The Technical Advisory Panel was brought in again with expanded members including a market analyst, cost analyst and energy consultant. Extensive public input was gained through display of the models at the Portland Public Library. Detailed oral and written reports were submitted by the

CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Patricia Harrington, Chief Planner
FROM: Douglas Mason, Senior Planner 
SUBJECT: Review of Noise Data for B.I.W. Site Plan

DATE: 3/11/82

- I. Purpose of Noise Related Information: The City Zoning Ordinance sets maximum land use noise emissions of 75 dBA at the property line in a W-1 Waterfront Zone. The site abuts an I-2 Industrial Zone with maximum noise standards at the property line of 70 dBA. This standard helps assure protection of the community from excessive industrial or marine-related noise.

The staff recognizes that the proposed B.I.W. project should create no significant additional noise above 70 dBA at the I-2 Industrial Zone property line and should take every reasonable precaution to reduce all noise emissions to low levels, particularly as measured from residential property boundaries on Munjoy Hill

- II. B.I.W. Proposed Noise Emissions: After reviewing the information provided by B.I.W. in the "Ambient Industrial Noise Survey at the Bath Facility," and "Site Plan Package - January 28, 1982," the following conclusions are offered:

A. Chipping

Chipping at the Bath Facility is limited to 10 minutes per hour due to airborne noise. It is not clear whether chipping will occur in Portland, what noise intensity levels are present during such operations, or at what time of day such activity is expected.

B. Compressors and Fans

B.I.W. states that no noise carry-over from these sources will occur on abutting properties. Such proposals should be encouraged.

C. General Industrial Equipment

B.I.W. indicates that all of its equipment meets OSHA and U.S.F.P.A. requirements. These requirements may or may not be applicable in the context of airborne noise at the property line. Therefore this information is of questionable use in this review.

- D. Existing Noise Levels at Bath and Portland: B.I.W. submitted ambient noise studies completed in both Bath and Portland and are analyzed below:

1. Bath Facility

This perimeter survey is presented to "provide background information on ambient noise levels produced by associated

shipbuilding activities. The survey clearly showed that ambient noise levels...had minimal impact in the surrounding area." It's applicability to the Portland noise environment not clear, for the following reasons:

- a. From the limited data presented, it appears possible that many of the stations may be located in noise "shadows"; that is, areas which are significantly protected from general noise levels in the area by buildings located between the source and receiver locations;
- b. No indication was given as to the frequency of tests or description of why the time chosen (1400 hrs.) is representative of peak noise levels. Was chipping occurring?; and
- c. Several stations show dBA equal to, or in excess of 70 dBA. Such readings do not appear to present "clear" evidence that shipbuilding activity and associated construction does not produce ambient noise levels which would be regarded as harmful or excessive, especially given the concerns addressed in (b) above.

2. Portland Facility

This survey conducted on February 3, 1982, provides a valuable base line survey of ambient noise levels at the perimeter of the site. However, in order to provide a more useful background information for future comparison, tests should also be conducted as follows:

- a. stations should be selected nearer the property boundary which is in a line of sight between the B.I.W. facility activities and Munjoy Hill residential properties; and
- b. tests should be selected with a frequency which accurately reflects the diurnal (24 hours) noise environment.

E. Expected Noise Levels at Portland

The information presented appears to suggest that noise levels at Bath may be expected to occur in Portland. The above analysis indicates that the data provided to the City does not clearly indicate either existing conditions at Bath or how they would be representative of conditions in Portland.

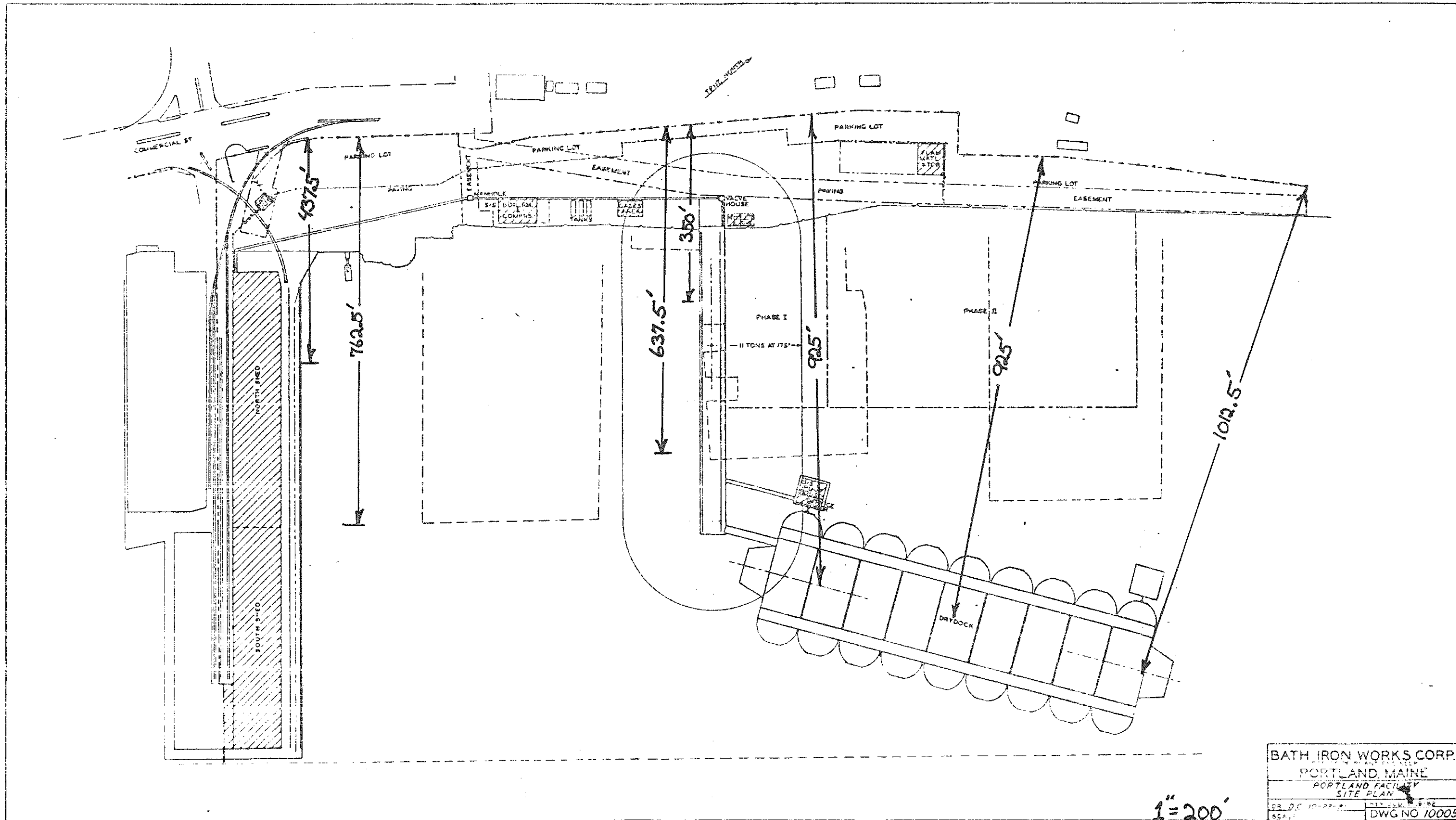
The following additional information would be extremely helpful in evaluating the expected noise impacts of B.I.W. in Portland:

- a. More information on Bath facility noises, including
 - i. Effect of buildings and structures in the vicinity of noise survey stations on sampling data;
 - ii. Diurnal A-scale measurements representative of peak and normal operations at the yard with distance between receiver and significant noise sources clearly indicated;

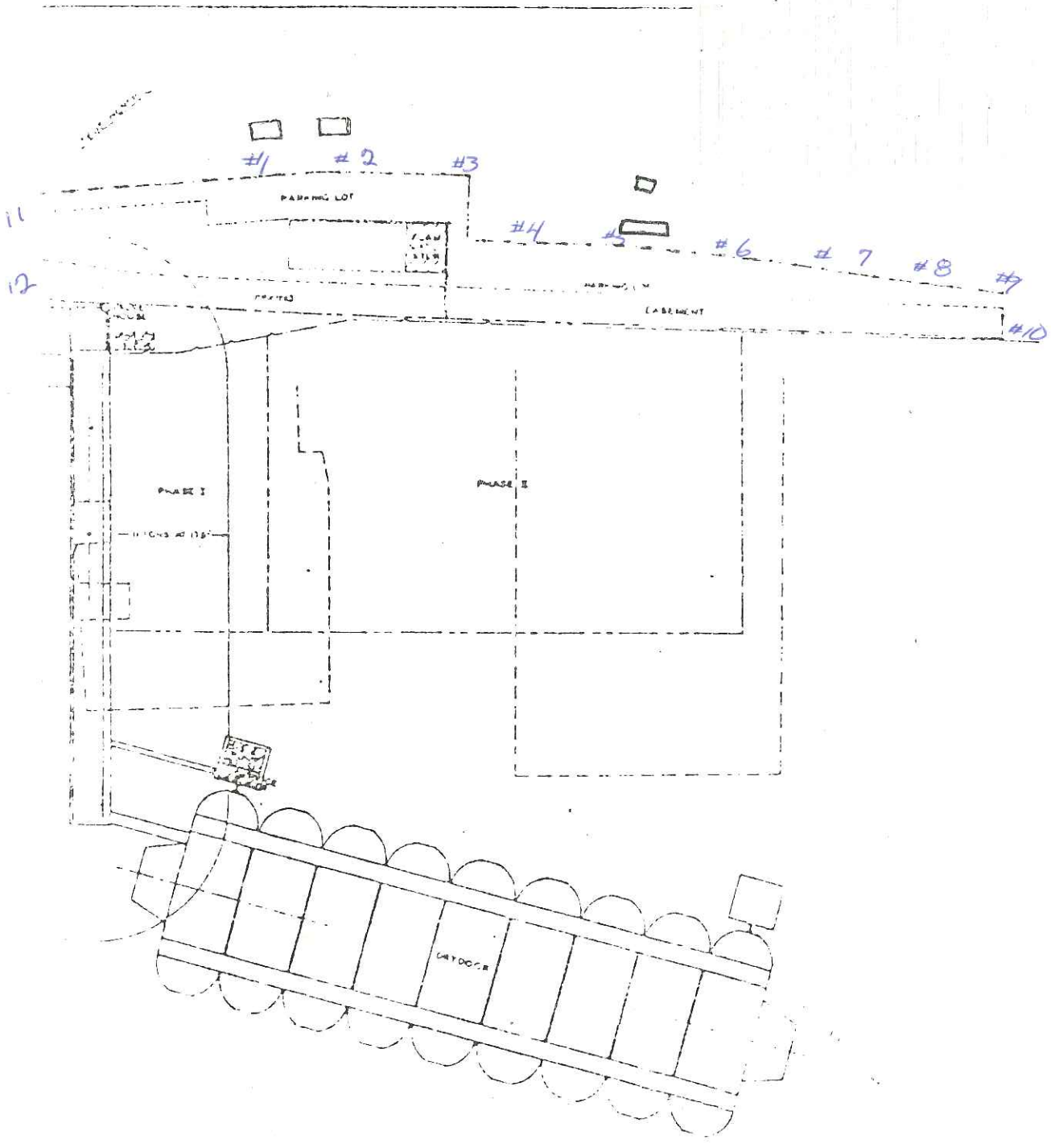
- b. Additional surveys should be provided as described in Section D.2 above if useful existing ambient baseline data is necessary for analyzing community noise impact;
- c. Expected differences in applicable noise-related activities between Bath facility operations and Portland facility operations should be clearly indicated if Bath facility activities are used in comparison to proposed activities at Portland; and
- d. A detailed assessment of noise expected which will exceed background noise levels by more than ten decibels at any time for a duration to exceed one minute.

If any of the above information is not available or attainable, I would be most willing to talk with B.I.W. staff about other alternatives for assessment of community noise impact.

cc: Alex Jaegerman, Senior Planner
Rick Knowland, Planner



BATH IRON WORKS CORP.
PORTLAND, MAINE
PORTLAND FACILITY
SITE PLAN
DR. DC 10-22-81
SCALE: 1"=200'
DWG NO 10005



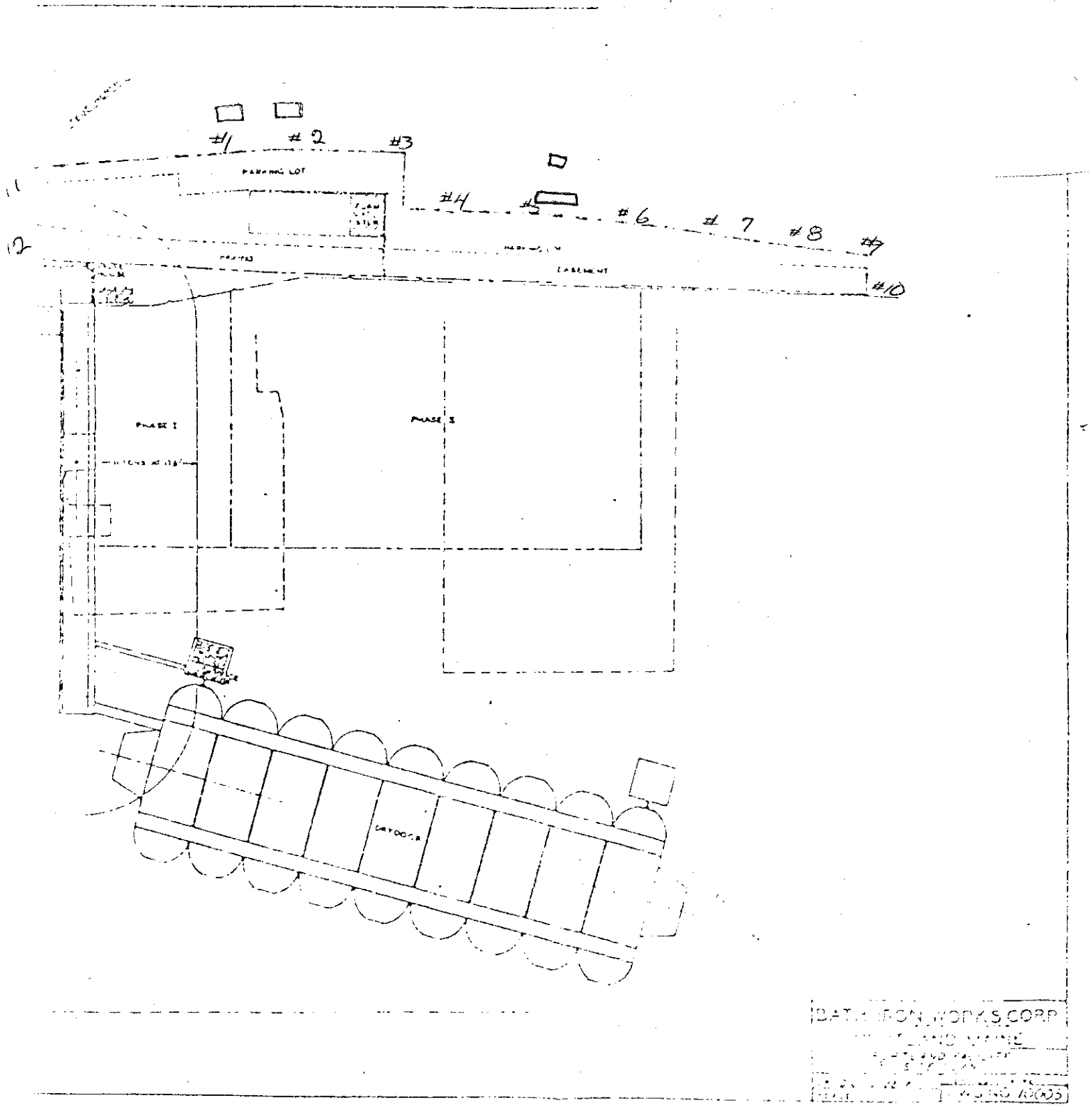
BATH FOUN WORKS CORP
BATH, MAINE
BATH FOUN WORKS CORP
BATH, MAINE
BATH FOUN WORKS CORP
BATH, MAINE

Doug-

This is the sound survey I completed today. I have also a survey on dBA readings for associated activities at Bath. I will put all of this together for you and give them to you tomorrow. Please give me a call when you return.

443-3311 ext 2269

STEVE Reibel
Bath Iron Works



Sound Survey 1145 AM 5-12-82

SITE _____ Reading (A SCALE)
_____ dBA

#1	51
#2	60
3	52
4	52
5	56
6	50
7	51
8	52
9	52
10	52
11	60
12	66

Munjoy Hill

70
64

FIRE STATION

Duration of readings?

Nighttime?

10 54
Ambient Industrial Noise Study for the Proposed
Portland Facility

Scientists measure sound intensity by a unit called decibel or dB (A). The dB is an abbreviation of decibels and the A refers to the A scale, one of the three frequency patterns on which sound is measured. Federal standards are expressed in the A scale readings, which simulate the response range of the human ear. The Environmental Protection Agency recommends that equivalent sound level be established at 70 dB (A) for 24 hours and 75 dB (A) for 8 hours. Extended exposure to such levels could affect one's hearing capability.

Two industrial noise surveys were conducted using a General Radio Octave Band Analyzer Model 1551-C, to provide baseline information concerning fugitive ambient noise associated with Bath Iron Works new Portland Facility and shipbuilding in general.

The first ambient noise survey was conducted at the perimeter of the Bath Facility during peak production hours of operation to provide background information on ambient noise levels produced by associated shipbuilding activities. The survey clearly showed that ambient noise levels produced by the Bath Shipbuilding complex had minimal impact in the surrounding area. The higher decibel readings were associated with heavy vehicular activity. The mean A Band reading for the 23 sites sampled was 61.7 dB (A).

The second ambient noise survey at the proposed Portland Facility showed decibel readings very similar to those recorded at the perimeter of the Bath complex. The mean A Band value for the 6 sampled sites was 57.7 dB (A). This data coupled with additional octave band analyses will serve as a baseline study for the existing ambient industrial noise present in the area.

BATH IRON WORKS CORPORATION

MEMORANDUM

FROM- L. E. Temple

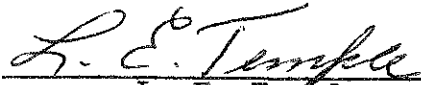
(TDL-3107)
DATE February 4, 1982

TO- Hal Plummer

SUBJECT- Base Line Sound Survey - Maine State Pier

Ref: TDL-3098 Ambient Industrial Noise Survey at Bath Facility

1. On February 3, 1982, a base line ambient noise survey was made at the Maine State Pier. The survey was completed using a General Radio Octave Band Analyzer, Model 1551-C. The sound survey was made between 1330 and 1500 hrs.
2. The sampling sites were established at the Northern boundary of the State Pier property and on the Northern side of Commercial Street adjacent to the State Pier property.
3. Federal standards are expressed in the A Scale which simulates the response range of the human ear. The mean value for the A Scale readings was 57.7 dB.
4. The result of the Portland survey provides background information on ambient industrial noise in the State Pier area. Should you have any questions, contact the undersigned.



L. E. Temple
Laboratory and Environmental
Manager

LET/SKR/B

CC: LET

L18835

AMBIENT INDUSTRIAL NOISE SURVEY STATE PIER PROPERTY, PORTLAND

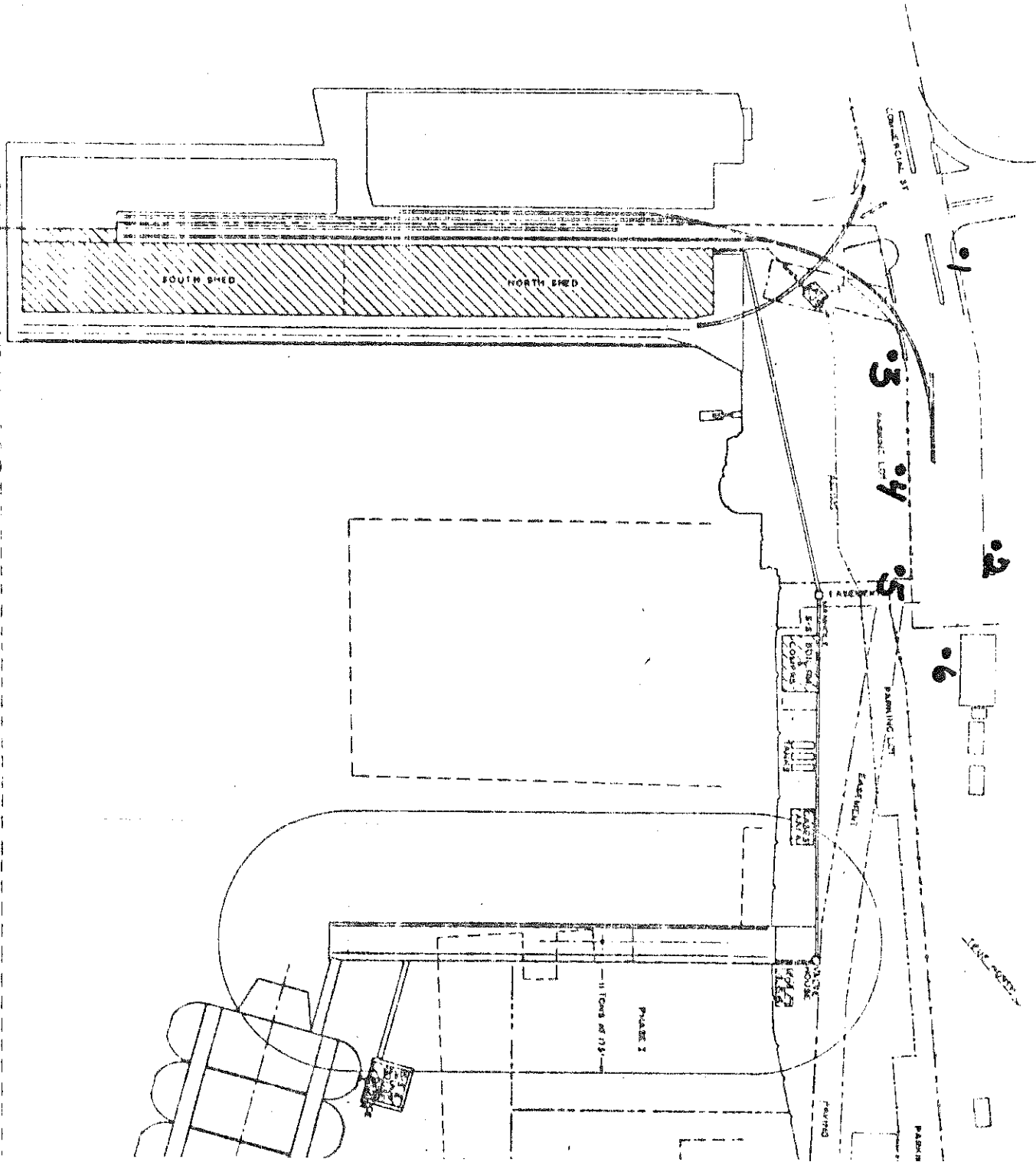
FREQUENCY

SITE	ALL PASS	FREQUENCY										A SCALE
		1000	800	600	400	200	100	50	25	12.5	6.3		3.15
1	80*	<50	<50	<50	53	56	50	63	65	74	72	66
2	79*	<50	62*	<50	<50	55	60	58	67*	69	70	60
3	74	<50	<50	<50	<50	55	50	60*	62	65	65	59
4	72	<50	<50	<50	<50	<50	52	52	59	66	68	50
5	73	<50	<50	<50	<50	44	55	60	60	65	69	52
6	75	<50	<50	<50	50	46	51	57	76*	74	72	59

* HEAVY VEHICULAR TRAFFIC

RESULTS ARE GIVEN IN DECIBELS

MEAN VALUE FOR A SCALE = 57.7 dB



BATH IRON WORKS CORPORATION

MEMORANDUM

(TDL-3098)

FROM- L. E. Temple

DATE January 25, 1982

TO- Hal Plummer

SUBJECT- Ambient Industrial Noise Survey at the Bath Facility

Encl: (1) Survey Map
(2) Test Results

1. On January 7, 1982, an Ambient Industrial Noise Survey was made at the peripheral of the Bath Iron Works property. The survey was completed using a General Radio Octave Band Analyzer, Model 1551-C. The sound survey was made between 1400 and 1500 hrs.


2. There were 27 sampling sites established of which 23 were sampled. The noise level ranged from a low of 45 decibels to a high of 80 decibels. The vehicular traffic adjacent to 20 of the test sites was heavy, which accounts for the majority of the high readings.

3. Federal standards are expressed in the A scale, which simulates the response range of the human ear. The mean value for the A scale readings was 61.7 decibels.

4. The Department of Environmental Protection Site Location Law states that "where background noise levels may be increased by more than ten decibels (dB) at any time for a duration exceeding one minute, a detailed assessment will be submitted including the level and duration of noise expected, the anticipated effect of the noise on surrounding uses, the extent of the area affected, and possible measures to reduce or eliminate the excessive noise".

5. Environmental Protection Agency recommends that equivalent sound levels be established at 70 decibels for 24 hours and 75 decibels for 8 hours. These levels could affect one's hearing capability as a result of extended exposure to such levels. Equivalent sound level is the average A-weighted energy level of sound over a given period of time.

6. The result of the sound survey clearly shows that ship building activity and associated construction at Bath Iron Works does not produce ambient noise levels which would be regarded as harmful or excessive. Should you have any questions concerning the survey, contact Steve Reichel at 2398.


L. E. Temple

LET/SKR/B

CC: LET

L 18670

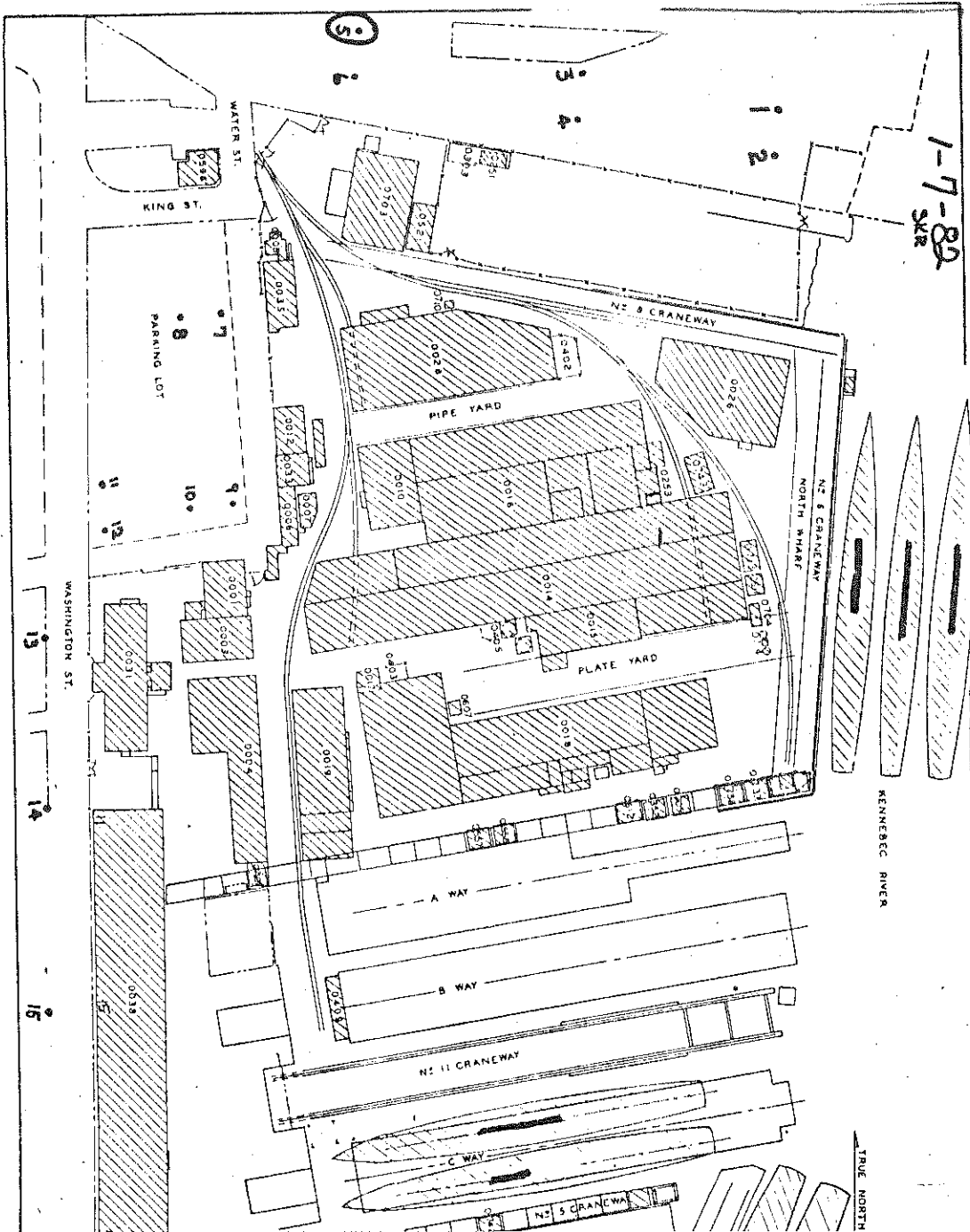
AMBIENT INDUSTRIAL NOISE SURVEY

SITE LOCATION	RUL POSS	FREQUENCY										A SCALE
		16000	8000	4000	2000	1000	500	250	125	63	31.5	
1	77	<50	<50	45	50	53	57	57	66	78	76	58
2	75	<50	<50	<50	<50	50	48	48	55	57	57	53
3	73	<50	<50	48	55	57	52	51	54	66	68	58
4	75	<50	<50	<50	<50	45	48	52	54	67	70	56
5		NOT POSSIBLE										
6	72	<50	<50	<50	52	51	50	60	60	66	67	52
7	78	<50	<50	<50	47	51	52	52	66	74	73	58
8	(76)	<50	<50	50	54	51	51	52	64	70	(72)	56
9	(79)	<50	<50	48	44	(60)	56	(65)	62	(70)	(71)	58
10	72	<50	<50	<50	48	51	56	59	60	64	65	57
11	(77)	<50	<50	(59)	45	48	61	(68)	(67)	(69)	(67)	(70)
12	(74)	<50	<50	(60)	(69)	(69)	60	(66)	61	(69)	(70)	57
13	(74)	<50	50	(64)	(70)	54	70	66	(74)	(71)	(73)	(74)
14	(76)	<50	(64)	(69)	55	56	58	60	65	66	66	63
15	(77)	<50	<50	<50	<50	(70)	58	62	66	(68)	64	61
16	(76)	<50	<50	50	55	55	60	60	68	(72)	(70)	64
17	77	<50	<50	<50	54	58	60	62	(71)	(74)	(70)	(70)
18	74	<50	<50	<50	(60)	68	56	58	(70)	(76)	(71)	(76)
19	76	<50	<50	<50	52	55	55	(76)	(72)	(70)	(70)	(75)
20	(79)	<50	<50	<50	53	57	62	64	78	70	65	64
21	(80)	<50	<50	<50	50	(65)	64	(80)	(68)	(77)	(77)	(70)
22	74	<50	<50	<50	49	49	54	56	63	70	66	58
23		NOT POSSIBLE										
24	68	<50	<50	<50	<50	50	50	50	55	62	61	54
25		NOT POSSIBLE										
26	72	<50	<50	<50	<50	51	55	60	61	65	69	58
27		NOT POSSIBLE										

RESULTS ARE GIVEN IN DECIBELS

○ = DENOTES VEHICULAR TRAFFIC HEAVY

9
N=O



1-7-82
SKR

TRUE NORTH

April 7, 1982

BIW

Parking

- = screening - semi-solid screening to 3'
 - evergreens or earth mound
 - give whole surroundings
 - bold anchors breaking up screen in a rhythm (w/ trees)

Visit site

- = ~~entrance~~ entrance building
 - root pitch
 - doors - not "garage"
 - maybe not square "building" - it certainly is way off street line
 - attractive design to enhance waterfront image at this key visual focal point
- = signage - "BIW" - very prominent w/ explanatory
 - traffic

= fencing - black vinyl

= sidewalks + pd. access to gate - good access

~~entrance~~

- = landscaping - list species, ~~size~~ size, location of all trees, shrubs, groundcovers
- list ~~material~~ material, ~~color~~ color ~~for~~ all and location for fencing, signage, ~~surface materials~~ surface materials, building facades

BATH IRON WORKS CORPORATION

MEMORANDUM

FROM- L. E. Temple

(TDL 3223)

DATE May 20, 1982

TO- Harold Plummer

SUBJECT- Ambient Industrial Noise Survey - Portland - During Evening Hours

Encl: (1) Maps of Test Site Locations

1. The purpose of this Ambient Industrial Noise Survey conducted on May 19, 1982 at various sites near the proposed BIW Portland Facility was to document background ambient industrial noise now existing in the Commercial Street, India Street, Munjoy Hill area during the evening hours to provide baseline data for the proposed Portland Facility. Decibel readings (A scale) for the survey were taken at various sites which were also sampled during daylight hours (see Ambient Industrial Noise Survey - Portland).

Other sites were also sampled in the area during the evening survey to establish background noise levels now existing. Each site was sampled for a period of 10 minutes with a reading being taken each minute. The survey was conducted with a General Radio Octave Band Analyzer.

2. Test Data is tabulated below:

<u>Site #1</u>	<u>Site #2</u>	<u>Site #3</u>
5-19-82 8:00 p.m.	5-19-82 8:15 p.m.	5-19-82 8:30 p.m.
58	63	61
52	56	54
56	57	58
64	58	58
56	58	60
56	59	58
60	62	58
60	62	57
58	57	57
59	57	57
Mean <u>57.9</u>	<u>58.9</u>	<u>57.8</u>

<u>Site #4</u>	<u>Site #5</u>	<u>Site #6</u>
5-19-82 8:45 PM	5-19-82 9:00 PM	5-19-82 9:15 PM
60	56	56
60	56	57
54	57	58
57	58	54
64	60	54
58	57	59
58	56	59
57	57	56
61	60	57
57	58	57
—	—	—
Mean 58.6	57.5	56.7

<u>Site #7</u>	<u>Site #8</u>	<u>Site #9</u>
5-19-82 9:30 PM	5-19-82 9:45 PM	5-19-82 10:00 PM
62	56	57
64 Foundry	58	56
64 ""	58	60
61	58	59
57	54	61
54	56	60
57	58	58
60	53	58
60	53	56
60	56	57
—	—	—
Mean 59.9	56.0	58.2

<u>Site #10</u>	<u>Site #11</u>	<u>Site #12</u>
5-19-82 10:15 PM	5-19-82 10:30 PM	5-19-82 10:45 PM
57	56	56
57	54	53
54	54	53
54	56	52
56	56	54
56	54	54
56	54	56
58	54	54
54	53	54
56	54	54
—	—	—
Mean 55.8	54.5	54.0

	<u>Site #13*</u>	<u>Site #14*</u>	<u>Site #15*</u>
	5-19-82 11:00 PM	5-19-82 11:15 PM	5-19-82 11:30 PM
	70 Foundry	74 Foundry	72 Foundry
	71 Pounding	74 Pounding	74 Pounding
	74 "	78 "	75 "
	74 "	80 "	76 "
	75 "	86 "	76 "
	75 "	74 "	81 "
	73 "	82 "	74 "
	68 "	72 "	74 "
	67 "	73 "	75 "
	68 "	74 "	75 "
Mean	<u>71.5</u>	<u>76.7</u>	<u>75.2</u>

* See Explanation

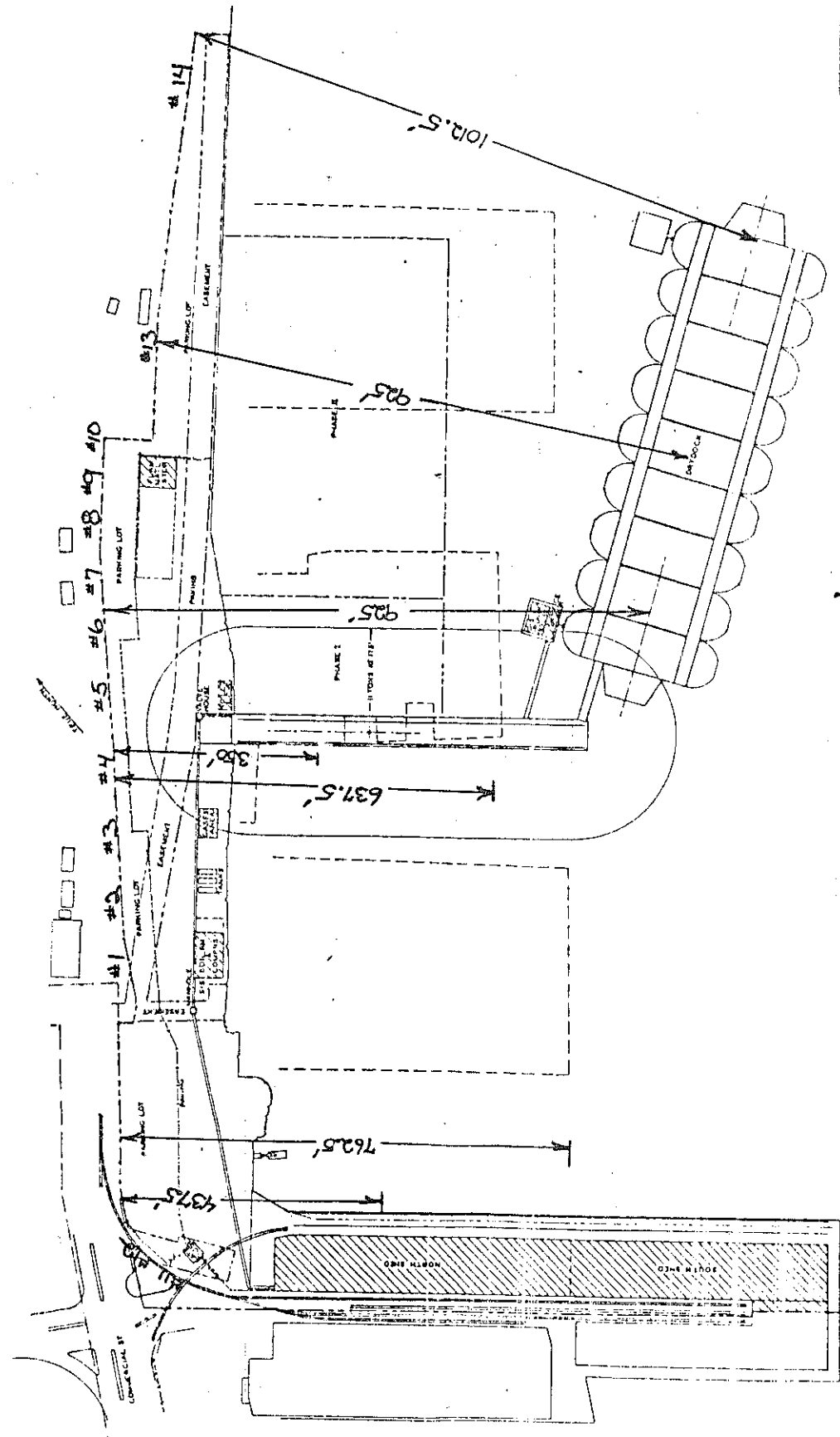
	<u>Site #16</u>	<u>Site #17</u>	<u>Site #18</u>
	5-19-82 11:45 PM	5-19-82 12:00 PM	5-19-82 12:15 AM
	63	62	56
	63	62	55
	62	61	57
	64	64	56
	63	61	56
	66	62	56
	66	62	56
	62	62	57
	63	63	56
	<u>63</u>	<u>61</u>	<u>56</u>
Mean	63.5	62.0	56.1

	<u>Site #19</u>
	5-19-82 12:30 AM
	56
	54
	54
	53
	54
	53
	52
	52
	52
	54
Mean	<u>53.4</u>

(1)
* Note: Sampling sites 13-15 were taken on Fore Street at the following locations:
Site 13 - Railroad tracks across the road from the Crosby Foundry
Site 14 - Telephone pole #19 on Fore Street
Site 15 - Telephone pole #18½ on Fore Street

(2) All readings are expressed in decibels using the A weighted network (dba)

1"=200'



May 20, 1982

3. These and previously submitted data may be used to estimate the influence of the anticipated noise generated at the proposed BIW Portland Facility on the adjacent neighborhood.

4. Such estimates use the well known characteristic concerning the transmission of sound from its source through a freefield. *The general rule of thumb is: Sound levels will decrease 6 db for every doubling of the distance from the source.

Note: * Based on Technical information from:

Handbook of Noise Measurement, 6th. Edition
General Radio Company
(page 16, para. 2.8.1.2 and 2.8.1.3)

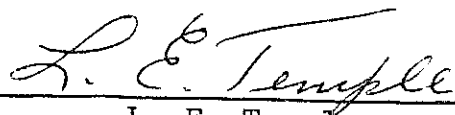
5. For example:

From the data submitted in TDL-3202, chipping noise (one of the noisiest ship repair operations) is 90 dbA at 10 feet from the source. Applying the transmission loss distance criteria, the following table shows dbA vs distance from source for ship repair chipping noise.

<u>dbA</u>	<u>Distance, in feet, from source</u>
90	10
84	20
78	40
72	80
66	160
60	320
54	640
48	1280

etc.

Relating the data compiled in this table to the distances of the several operations at the proposed BIW Portland Facility shows compliance with the pertinent noise ordinances and regulations.



L. E. Temple
Laboratory and Environmental
Manager

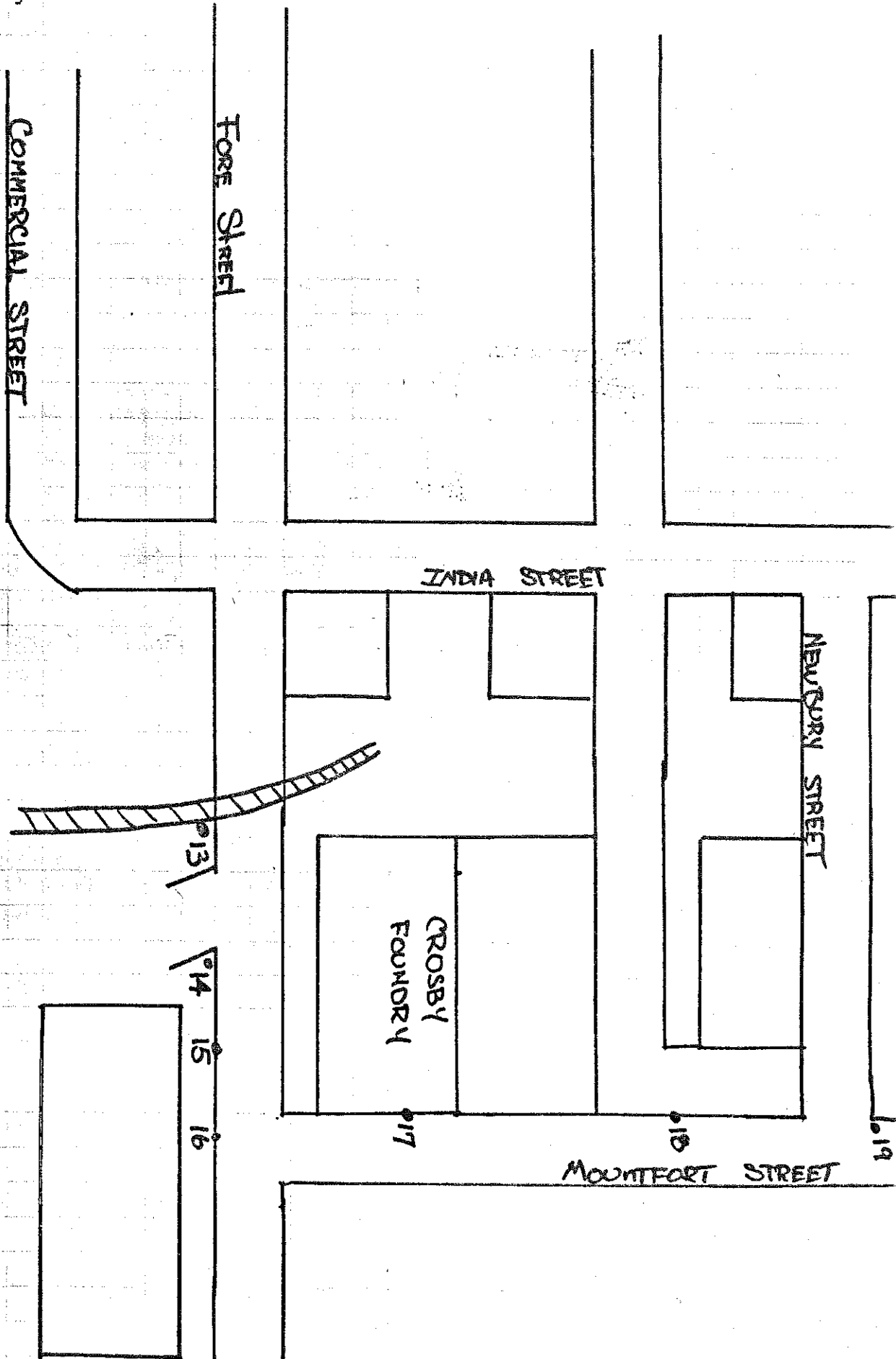
LET/SKR/B

CC: DEP
GH
LET

DL 3223

May 20, 1982

AMBIENT INDUSTRIAL NOISE SURVEY 5-19-82



CITY OF PORTLAND, MAINE
MEMORANDUM

TO: Patricia Harrington, Chief Planner

DATE: 3/11/82

FROM: Douglas Mason, Senior Planner

SUBJECT: Review of Noise Data for B.I.W. Site Plan

I. Purpose of Noise Related Information: The City Zoning Ordinance sets maximum land use noise emissions of 75 dBA at the property line in a W-1 Waterfront Zone. The site abuts an I-2 Industrial Zone with maximum noise standards at the property line of 70 dBA. This standard helps assure protection of the community from excessive industrial or marine-related noise.

The staff recognizes that the proposed B.I.W. project should create no significant additional noise above 70 dBA at the I-2 Industrial Zone property line and should take every reasonable precaution to reduce all noise emissions to low levels, particularly as measured from residential property boundaries on Munjoy Hill

II. B.I.W. Proposed Noise Emissions: After reviewing the information provided by B.I.W. in the "Ambient Industrial Noise Survey at the Bath Facility," and "Site Plan Package - January 28, 1982," the following conclusions are offered:

A. Chipping

Chipping at the Bath Facility is limited to 10 minutes per hour due to airborne noise. It is not clear whether chipping will occur in Portland, what noise intensity levels are present during such operations, or at what time of day such activity is expected.

B. Compressors and Fans

B.I.W. states that no noise carry-over from these sources will occur on abutting properties. Such proposals should be encouraged.

C. General Industrial Equipment

B.I.W. indicates that all of its equipment meets OSHA and U.S.E.P.A. requirements. These requirements may or may not be applicable in the context of airborne noise at the property line. Therefore this information is of questionable use in this review.

D. Existing Noise Levels at Bath and Portland: B.I.W. submitted ambient noise studies completed in both Bath and Portland and are analyzed below:

1. Bath Facility

This perimeter survey is presented to "provide background information on ambient noise levels produced by associated

shipbuilding activities. The survey clearly showed that ambient noise levels...had minimal impact in the surrounding area." It's applicability to the Portland noise environment not clear, for the following reasons:

- a. From the limited data presented, it appears possible that many of the stations may be located in noise "shadows"; that is, areas which are significantly protected from general noise levels in the area by buildings located between the source and receiver locations;
- b. No indication was given as to the frequency of tests or description of why the time chosen (1400 hrs.) is representative of peak noise levels. Was chipping occurring?; and
- c. Several stations show dBA equal to, or in excess of 70 dBA. Such readings do not appear to present "clear" evidence that shipbuilding activity and associated construction does not produce ambient noise levels which would be regarded as harmful or excessive, especially given the concerns addressed in (b) above.

2. Portland Facility

This survey conducted on February 3, 1982, provides a valuable base line survey of ambient noise levels at the perimeter of the site. However, in order to provide a more useful background information for future comparison, tests should also be conducted as follows:

- a. stations should be selected nearer the property boundary which is in a line of sight between the B.I.W. facility activities and Munjoy Hill residential properties; and
- b. tests should be selected with a frequency which accurately reflects the diurnal (24 hours) noise environment.

E. Expected Noise Levels at Portland

The information presented appears to suggest that noise levels at Bath may be expected to occur in Portland. The above analysis indicates that the data provided to the City does not clearly indicate either existing conditions at Bath or how they would be representative of conditions in Portland.

The following additional information would be extremely helpful in evaluating the expected noise impacts of B.I.W. in Portland:

- a. More information on Bath facility noises, including
 - i. Effect of buildings and structures in the vicinity of noise survey stations on sampling data;
 - ii. Diurnal A-scale measurements representative of peak and normal operations at the yard with distance between receiver and significant noise sources clearly indicated;

- b. Additional surveys should be provided as described in Section D.2 above if useful existing ambient baseline data is necessary for analyzing community noise impact;
- c. Expected differences in applicable noise-related activities between Bath facility operations and Portland facility operations should be clearly indicated if Bath facility activities are used in comparison to proposed activities at Portland; and
- d. A detailed assessment of noise expected which will exceed background noise levels by more than ten decibels at any time for a duration to exceed one minute.

If any of the above information is not available or attainable, I would be most willing to talk with B.I.W. staff about other alternatives for assessment of community noise impact.

cc: Alex Jaegerman, Senior Planner
Rick Knowland, Planner

CITY OF PORTLAND, MAINE
MEMORANDUM

Doug
FIT

TO: Stephen T. Honey, City Manager

DATE: 6/3/82

FROM: Thomas F. Valleau, Director Transportation & Waterfront Facilities

SUBJECT: Summary of our meeting at the Bath Iron Works on June 2, 1982

1. I have stopped payment on an \$87,000 BIW requisition since we are not receiving lease payments.
2. The site plan was approved as shown on Bill K's latest plan except there will be a \$25,000 allowance for improvements at the Commercial Street property line.
3. We suggested and Royce agreed on the following points with respect to the Munjoy Hill Neighborhood -- starting time to be 7:am, however this must be negotiated with the union; BIW has no objections to the amended noise ordinance; we will ask for a letter from Mr. Sullivan re: asbestos control and the City will ask the State to monitor air quality from time to time.
4. BIW will include targeted job language in all contract documents and will send copies to me.
5. BIW will meet with Tony and approve the hospital plans. This approval will take about two weeks. Then we will bid the package.
6. I will check the schedule on acquisition of Canadian National land.

TFV/ag

All entries to be made in ink.

Test Purpose: BMW Noise Complaint

Time Started: 9:25 Time Completed: 9:35 Date: 9-10-84
Location: Forest + St. Lawrence P-6 zone, N sidewalk

Equipment: Metrologer City
Make: _____
Model: _____
Serial No.: _____

Calibration: Before 102 After _____
Wind speed (actual) 5-10 Relative humidity low Clear
Wind speed (est.) _____
Wind direction S-SW

Damping: Slow _____ Fast _____
Wind screen used ✓ not used _____

Temperature: 62° 10mm

Test Position	Scale A, B, C, D, Linear	Ambient	Readings																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	L MAX 73	59																				
	FEQ 66		71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
			41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
			61	62	63	64	65	66	67	68	69	70	71	72	73	74	75					

Comments and Sketch (use reverse side if necessary):

Meter turned off w/ passing vehicles
No other significant sources

People Conducting Test: Mason Signatures: [Signature] Date: 9-10-84

All entries to be made in ink.

Test Purpose: BLW Noise Complaint Time Started: 9:36 Time Completed: 9:56 Date: 9-10-84
 Location: Munjoy South sidewalk across from
Portland Engineering driveway

Equipment: Metro logger
 Make: _____
 Model: _____
 Serial No.: _____

Calibration: Before 102 Wind speed (actual) 5-10 Relative humidity low - clear
 After _____ Wind speed (est.) _____
 Slow _____ Wind direction S-SW
 Fast _____ Wind screen used not used

Temperature: 62°

Test Position	Scale A, B, C, D, Linear	Ambient	Readings																			
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	<u>L_{MAX} 715</u>	<u>58</u>																				
	<u>LEQ 67</u>		<u>21</u>	<u>22</u>	<u>23</u>	<u>24</u>	<u>25</u>	<u>26</u>	<u>27</u>	<u>28</u>	<u>29</u>	<u>30</u>	<u>31</u>	<u>32</u>	<u>33</u>	<u>34</u>	<u>35</u>	<u>36</u>	<u>37</u>	<u>38</u>	<u>39</u>	<u>40</u>
			<u>41</u>	<u>42</u>	<u>43</u>	<u>44</u>	<u>45</u>	<u>46</u>	<u>47</u>	<u>48</u>	<u>49</u>	<u>50</u>	<u>51</u>	<u>52</u>	<u>53</u>	<u>54</u>	<u>55</u>	<u>56</u>	<u>57</u>	<u>58</u>	<u>59</u>	<u>60</u>
			<u>61</u>	<u>62</u>	<u>63</u>	<u>64</u>	<u>65</u>	<u>66</u>	<u>67</u>	<u>68</u>	<u>69</u>	<u>70</u>	<u>71</u>	<u>72</u>	<u>73</u>	<u>74</u>	<u>75</u>					

Comments and Sketch (use reverse side if necessary):

Meter turned off w/ passing vehicles
Meter turned off w/ passing landing commencing airline

People Conducting Test: Mason Signatures: [Signature] Date: 9-10-84

CITY OF PORTLAND, MAINE

Community Noise Survey Data Sheet

Test No: 1 4-30-84 Personnel D L M
Location 9 - Parking Lot
Temp. 52° Wind 0.5 Precip. gusts to 10 SW
Start Time 10:00p Stop Time 10:06p

Code _____

Meter Used Metrosonic

Fast/Slow Weighting A Calibration 102

Comments Very disturbance noise - chippers? from B/W,
as major max source, very audible inside building with
closed windows.

$L_{max} - 76 \text{ dBA}$

$L_{eq} 69$

normal B/W running noise of road, intermittent
apparatus 70-71

Background - 59-60 dBA

CITY OF PORTLAND, MAINE

Community Noise Survey Data Sheet

Test No: 5-2-81-1 Personnel PLM

Location 9

Temp. 42 Wind 0-5 Precip. Clear

Start Time 10:30 Stop Time 10:41:04

2:23 L > 65 of > 1 second

1 second
reading of
65

66	66	67	67	72	70	68	68	68	68
70	71	65	66	65	66	67	67	67	66
66	66	67	67	65	66	67	66	68	65
66	66	67	66	68	68	68	57	66	69
65	66	65	65	65	66	65	68	67	69
69	70	66	68	67	68	68	67	68	68

11:04
LEQ: 62
Lmax: 72

Code _____

Meter Used METROSonic

Fast/Slow ✓ Weighting A Calibration 102

Comments NADIR Abs. source: B/W - "Elipper", distal long in house with closed windows

Sketch of Measurement Location

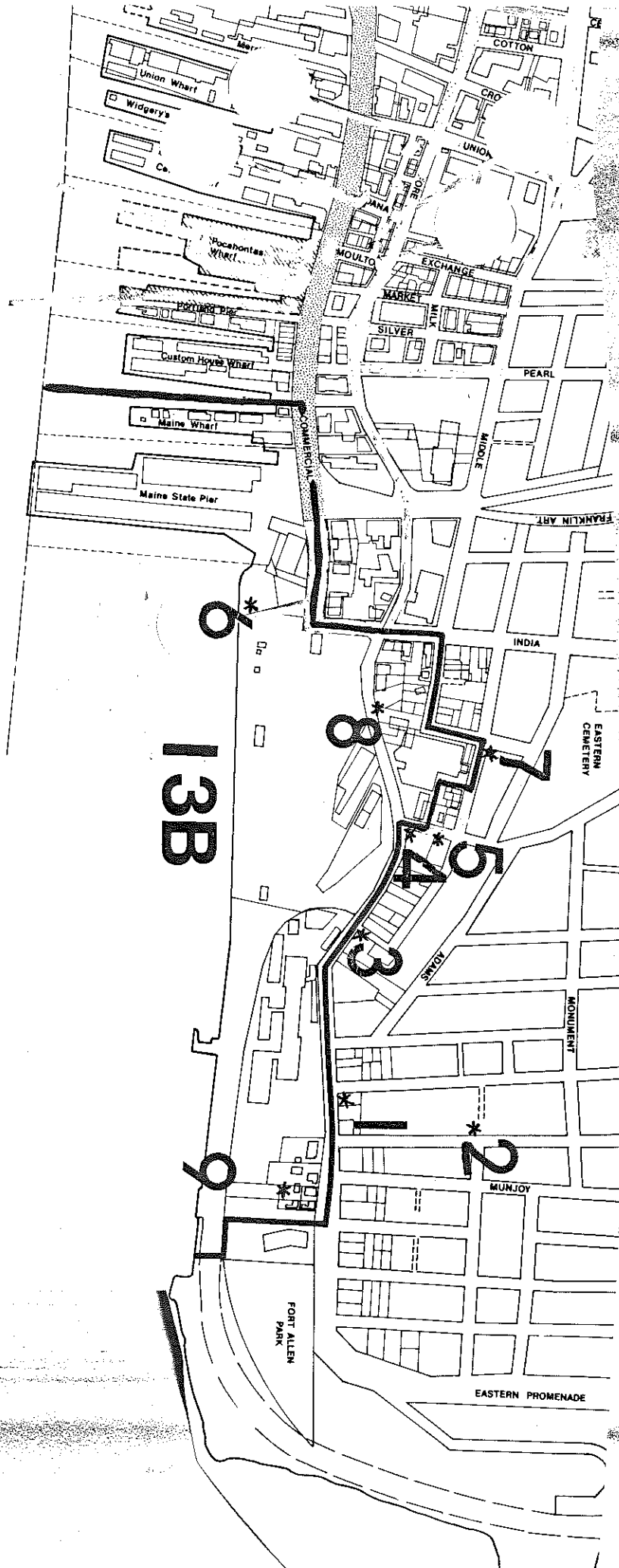
Background → 52 or less (major background continuous source appears to be B/W)

NOISE SURVEY 6-2, 6-3, 6-4

Station No.	Test No.	Location	Time	LEQ	Major Influences Vehicles (Count)	Industry	Misc. Background
1	1	St. Lawrence & Fore	10PM 6-2	63	Primary (6-10)		47
	3		10:45P 6-2	" (5-10)		48	
	11		2:15A 6-3	Occasional (3-6)		46	
2	4	Atlantic & Gilbert	10:25P 6-3	60	Primary (3-1)		47
	7		12:20A 6-4			40	
3	2	Fore St. & Munjoy So, Tel. Pole-J10	10:30P 6-2	53	Infrequent (.3)		43
	4		11:15 6-2	Primary (5-10)	50 non-impulsive	49	
4	5	Fore & Mountfort	11:35P 6-2	61	Primary (3-10)	58-60 (tractor)	48
	3		9:00P 6-3	Primary (6-9)	occ. Impulse (60)	58	
	8		12:55A 6-4	(1-1.5) (Buzzer 66)	Crosby Ave. (50) tractor (60-69)	49	
5	7	-110' up Mountfort	00:45A 6-2	53	On Fore	Non-impulset (tractor)	51
	7		4:15P 6-3	Impulsive			
6	6	Maine St. Pier	0:15A 6-3	51			49
	4		10:15P 6-3				54
7	8	Newbury & Hancock	1:05A 6-3	55	Infreq.	Low Background	
	1		3:50P 6-3	62	(.25)	Impulsive	
	1		9:30P 6-3	60	Primary-background	Frequent impulse (63)	58
	8		12:45A 6-4	49	home at site	Irondrops (67) Crosby (41)	41

NOISE SURVEY 6-2, 6-3, 6-4

Station No.	Test No.	Location	Time	LEQ	Major Influences Vehicles	Industry	Misc. Background
8	9	Fore St. & Crosby	1:10A 6-3	59	Infrequent	Non-Impulsive	55
9	10	Eastern Promenade-Haley	1:25A 6-3	46			46



13B

6

8

7

5

3

1

2

9

FORT ALLEN PARK

EASTERN PROMENADE

EASTERN CEMETERY

FRANKLIN AVE

MUNJOY

MONUMENT

INDIA

PEARL

SILVER

MARKET

EXCHANGE

MOULTON

ANA

UNION

CRO

COTTON

Wadgery's

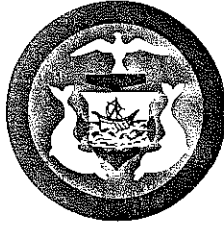
Union Wharf

Pocahontas Wharf

Custom House Wharf

Maine Wharf

Maine State Pier



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

August 19, 1982

Bath Iron Works Corporation
Dept. #20
Bath, Maine

Dear Mr. Plummer,

Your application for a building permit to construct a finger pier, pier apron, shorezone containment, piping, boiler house, underground structure, flammable materials building is being issued with the following requirements.

1. HOUSE OF OPERATION: The Bath Iron Works ship repair facility should begin operating the morning shift at 7:00 a.m. This facility is expected to attract 1,000 employees by 1984 and possibly more in the future. The traffic impacts resulting from a 7:00 a.m. shift start time will be minimized. Should B.I.W. require a 7:30 a.m. shift start time, B.I.W. should be required to undertake a traffic study to determine traffic impact and return to the Planning Board for further review.
2. NOISE: To protect adjacent residential noise levels the Board required that B.I.W. not exceed certain levels. These levels are 65 dBA (9 p.m. to midnight) and 60 dBA (Midnight to 6 a.m.) LEQ as measured at the residential zone line. The basis of this requirement includes:
 - a) The present zoning regulations of 75 dBA day and night, as measured at the industrial property line, do not assure adequate noise protection of adjacent residential neighborhoods as described in Planning Report #43-82;
 - b) The nighttime noise levels of 65 dBA and 60 dBA described above are levels which meet or exceed ambient noise levels existing at the adjacent residential zone boundaries and are the most restrictive type and level of regulation which can be practically administered by the City.
 - c) B.I.W. officials have indicated that the noise levels recommended above can be met by their facility.
- 3) LANDSCAPING AND ENTRANCE: On-site landscaping should include a dense planting of shrubs along the Commercial Street property boundary as shown on site plan (6-17-82), fence is to be 6' decorative steel picket fence.

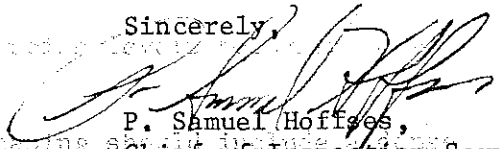
August 19, 1982
Page 2
Bath Iron Works Corp.

A \$25,000 escrow fund should be set aside for future improvements to the entrance of B.I.W. to be implemented in conjunction with the redesign of Commercial Street. In addition, upon operation, a traffic control official should be assigned to direct traffic at the entrance location until improvements to Franklin Arterial are complete.

4. The treatment of timber piles shall conform to AWPBMP1, MP2 or MP4 listed in Appendix A of the 1981 BOCA Basic Building Code. Pile cutoffs shall be treated in accordance with AWP4 M4.
5. Allowable unit stresses for treated round timber piles, normal load duration values at tip of pile for Southern Pine will have 1200 Compression parallel to grain PSI d, Bending PSI d 2400 shear horizontal PSI d 110 Comp. perp. to grain PSI d 250 and modularity of elasticity of 1,500,000.
6. All timber piles shall conform to ASTM 25.
7. Structural steel piles shall conform to ASTM, A36, A252, A283, A572, A585 or A690.
8. H-piles shall conform with section 1015.3 through section 1015.3.3 of the 1981 BOCA Basic Building Code.
9. All electrical and plumbing permits will be obtained by masters of their trade.
10. Every structure, room or space occupied for user involving explosion hazards shall be equipped and vented with explosion relief systems and devices arranged for automatic release under predetermined increase in pressure as herein provided for specific uses.
11. Main storage systems of volatile flammable liquids shall be constructed and installed in accordance with NFPA 30 and the fire prevention Code.

If you have any questions on these requirements please call this office. Residential zone requirements are the most restrictive type and level of regulation which can be practically administered by the City.

Sincerely,


P. Samuel Hoffes,
Chief of Inspection Services

PSH/ln



CITY OF PORTLAND, MAINE

389 CONGRESS STREET
PORTLAND, MAINE 04101
(207) 775-5451

DEPARTMENT OF PLANNING & URBAN DEVELOPMENT

P. SAMUEL HOFFSES, CHIEF
INSPECTION SERVICES DIVISION

May 16, 1988

Bath Iron Works
40 Commercial Street
Department #20
Portland, ME 04101

RE: 40 Commercial Street

Dear Sir:

Your application to construct a 30' x 30' maintenance facility has been reviewed and a permit is herewith issued subject to the following requirements:

1. Provide two separate, remote and approved exits arranged so that no common paths of travel are present.
2. The lowest floor of nonresidential structure shall be elevated at least two (2) feet above the base flood elevation or if no base flood elevation is given, a minimum of two (2) feet above the highest adjacent ground or be floodproofed.

If you have any questions regarding these requirements, please do not hesitate to contact this office.

Sincerely,

P. Samuel Hoffses
Chief of Inspection Services

cc: Lt. James Collins, Fire Prevention Bureau
Maureen O'Meara, Planning

PSH:lab



Bath Iron Works Corporation

A Congoleum Company

700 WASHINGTON STREET, BATH, MAINE 04530 • (207) 443-3311

March 14, 1988

Mr. Alexander Jaegerman
Chief Planner
Planning Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

Dear Mr. Jaegerman:

Bath Iron Works (BIW) wishes to construct a 900 square foot, single story, metal framed maintenance garage at our shipyard in Portland, Maine. The floor of the facility will be a slab on grade with a top of slab elevation of 13.95 feet above mean sea level.

The enclosed site plan shows its proposed location relative to our other facilities. A specification package is also enclosed for your approval.

Please consider this our application for a Flood Hazard Area Development permit. Enclosed please find a \$50 application fee.

If you have any questions regarding this matter, please call me at 443-3311, extention 3435.

Thank you for your time reviewing this matter.

Yours very truly,

BATH IRON WORKS CORPORATION

Robert L. Herman

Robert L. Herman, P. E.
Senior Project Engineer

RLH:mr

Enclosure

CITY OF PORTLAND, MAINE

Community Noise Survey Data Sheet

Test No: _____ Personnel _____

Location _____

Temp. _____ Wind _____ Precip. _____

Start Time _____ Stop Time _____

Code _____

Meter Used _____

Fast/Slow _____ Weighting _____ Calibration _____

Comments _____

Sketch of Measurement Location

.GENERAL

Noise Survey Data Form #101 is intended for recording sound pressure level (SPL) readings taken with a manual sampling technique. It has been designed to obtain a maximum amount of useful information over a relatively short observation time. In this regard it is crucial that the observer conscientiously complete the data form and in particular note his comments concerning existing noise climate.

I. PRELIMINARY SUGGESTIONS

1. The minimum required pieces of noise measurement equipment are: a Type II sound level meter, a calibrator, a windscreen, a tripod and a stop watch. (Watch with second hand will do.)

2. A-scale sound levels are specified. The "slow" meter response will be used for most measurements, but the "fast" response may be used on occasion to obtain short samples of desired sounds in the midst of unwanted interfering sounds.

3. Meter calibrations should be made before and after each set of measurements.

4. When reading the meter, stand back away from the meter as far as practical and place the meter and your body in such a way as to represent minimum interference with the sound field.

5. Avoid noise measurements in high winds (over 12 mph), during rain and at times of very high humidity if the meter shows unexplicable swings in SPL.

6. Be aware that rustling leaves, certain insects and bird songs are rich in high frequency noise (which will influence A-scale readings) and may result in false readings when other background sources are presumably being measured.

7. When setting up for background (L90) measurements at each site, listen for the sounds of the neighborhood and make a list of those to be considered reasonable and representative as opposed to those that are not. (For example, siren noise may not be representative of neighborhood A where it is an unusual occurrence. However, in neighborhood B, which is in vicinity of a fire house, this may be representative of the L90).

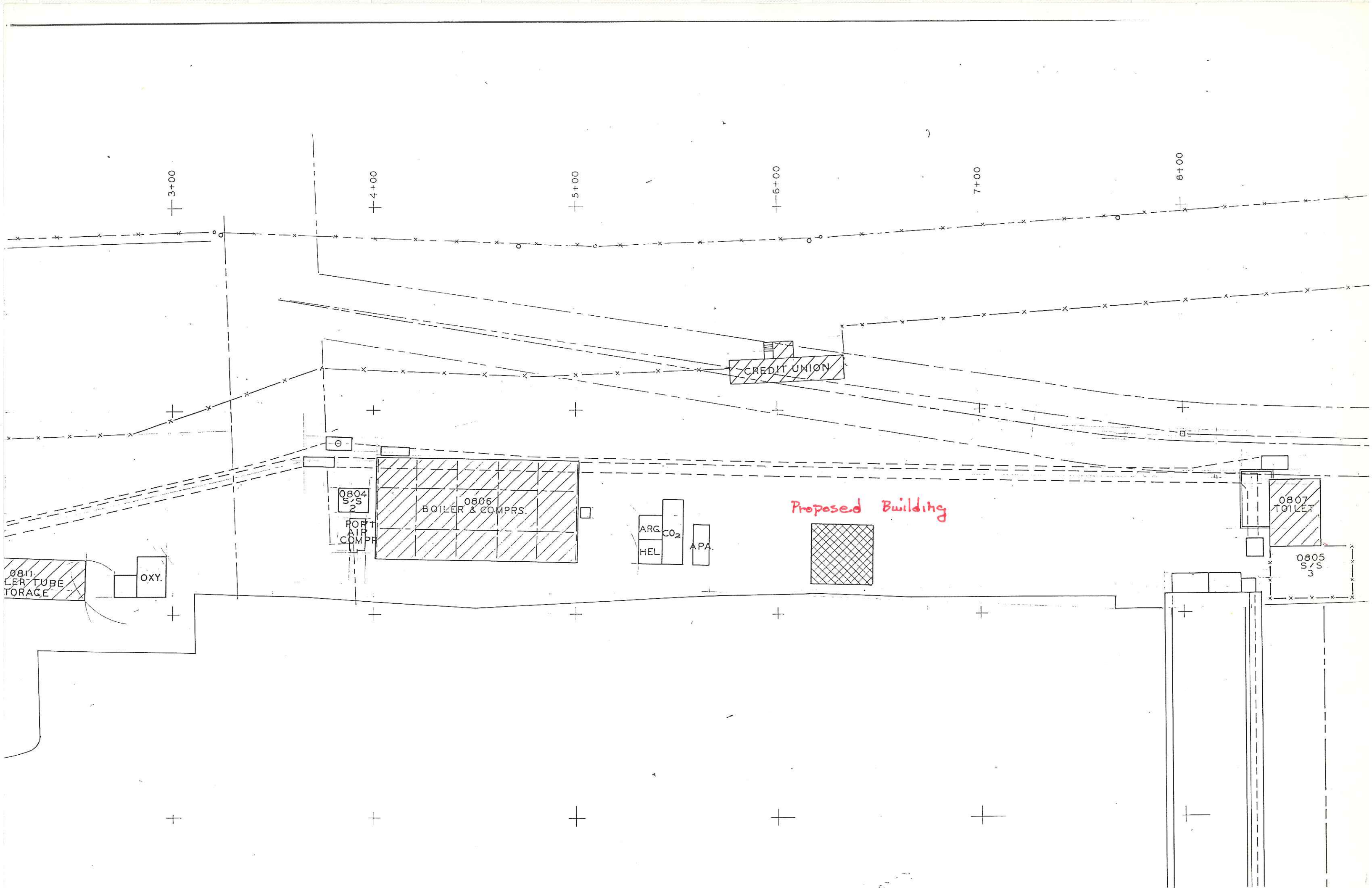
8. Select measurement sites with care so as to represent the noise situation accurately, to remain as close as possible to gridpoint location.

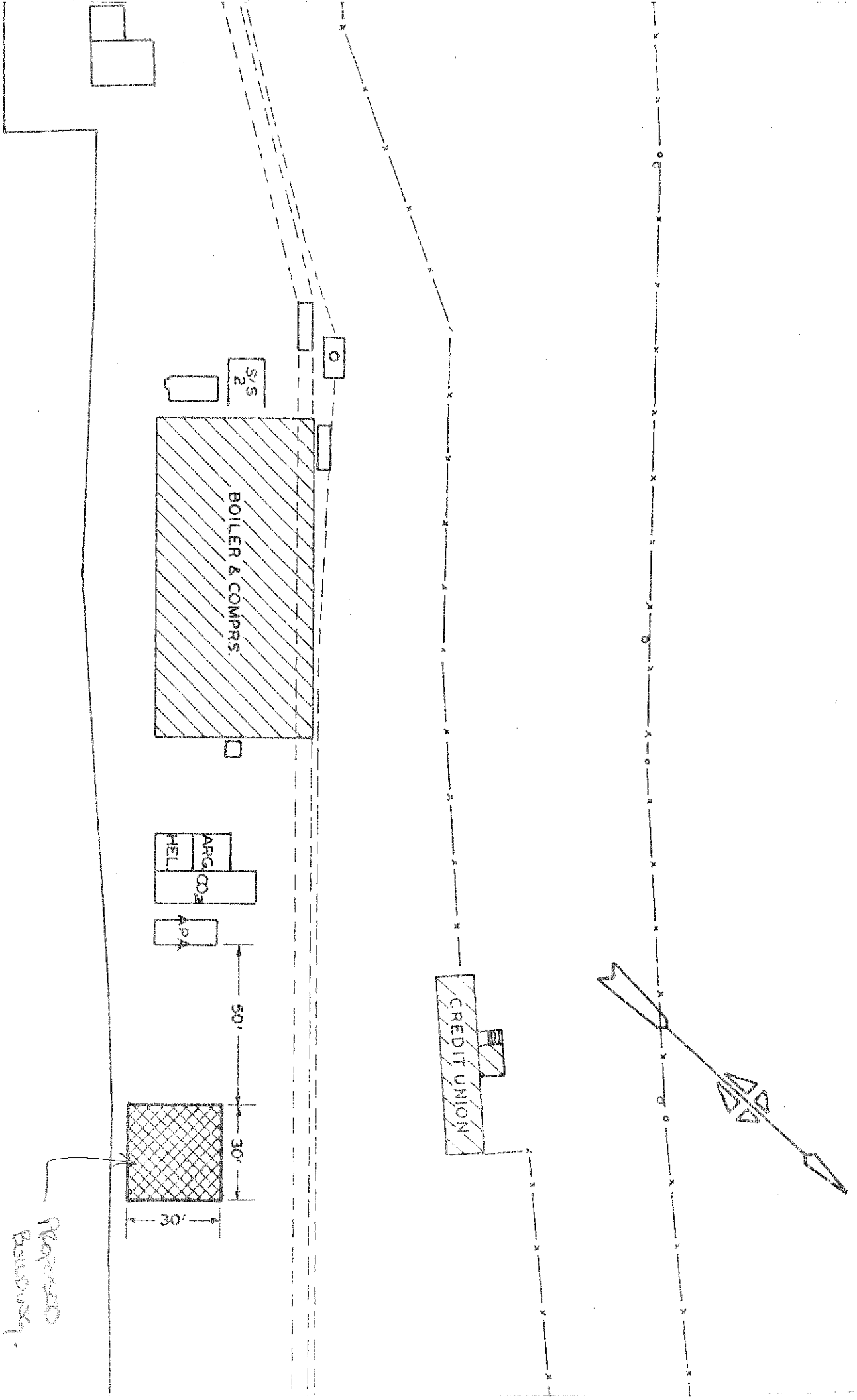
9. Before the actual readings are taken fill out the Data Sheet carefully. Provide enough detail on the sketch of the measurement location to allow the reader, if necessary, to go back to the exact microphone location you have used. (Street names, house numbers, stepped off distances, approximate directions and distances to major sources, etc. are all useful. Use the COMMENTS section of the Data Sheet to describe the types of sounds (close your eyes and just listen) and noises which can be heard.

Industrial Noise Levels Associated with Various Shipbuilding
Activities at Bath Iron Works Corporation, Bath, Maine

<u>Location</u>	<u>Distance from Activity @ 90 dB(A)</u>
Pipe Shop	10' from grinding
Carpenter Shop	10' from planer
Boiler Shop	20' from grinding
Panel Shop	10' from pounding
Panel Shop	10' from P. A. System
Assembly Building	10' from grinding
Assembly Building	50' from P. A. System
Assembly Building	10' from blower
Assembly Building	30' from pounding
Assembly Building	40' from crane siren
Assembly Building	20' from grinding
Assembly Building	2' from blower
Assembly Building	15' from gouging
Tin Shop	11' from grinding
Ship Activity	10' from needlegun
Ship Activity	20' from cutting sheet metal
Hardings Plant	10' from fork lift
Hardings Plant	20' from crane siren
Shell Shop	20' from pounding
Shell Shop	25' from grinding
Shell Shop	10' from grinding
Machine Shop	30' from air drill
Assembly Building	30' from chipping
Assembly Building	30' from P. A. System
Ship Activity	10' from chipping
Ship Activity	10' from chipping
Hardings Plant	8' from grinding
Ship Activity	15' from grinding
Ship Activity	18' from grinding
Carpenters Shop	20' from sawing
Assembly Building	100' from crane siren
Assembly Building	15' from grinding
Assembly Building	30' from grinding
Assembly Building	15' from grinding
Assembly Building	15' from grinding
Assembly Building	15' from P. A. System
Ship Activity	20' from needlegun
Ship Activity	15' from chipping
Ship Activity	10' from chipping
Ship Activity	10' from chipping

<u>Location</u>	<u>Distance from Activity @ 90 dB(A)</u>
Ship Activity	15' from gouging
Shell Shop	50' from chipping
Pipe Shop	10' from brazing
Pipe Shop	10' from brazing
Assembly Building	15' from pounding





Bath Iron Works Corporation
700 Washington Street
Bath, Maine 04530
207 443-3311

April 12, 1988

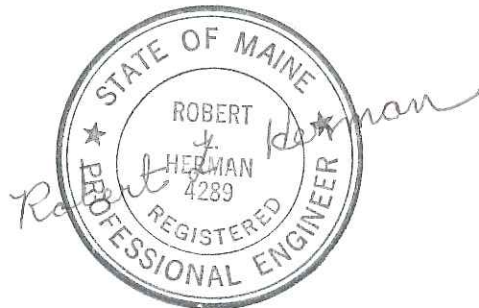
Ms. Maureen O'Meara
Planner,
Portland City Hall
389 Congress Street
Portland, Maine 04101

Dear Ms. O'Meara:

I hereby certify that this project (30 x 30
Maintenance Building), complies with the requirements of
the Portland Flood Plain Management Regulations, Section
14-450.8, sub section 16.

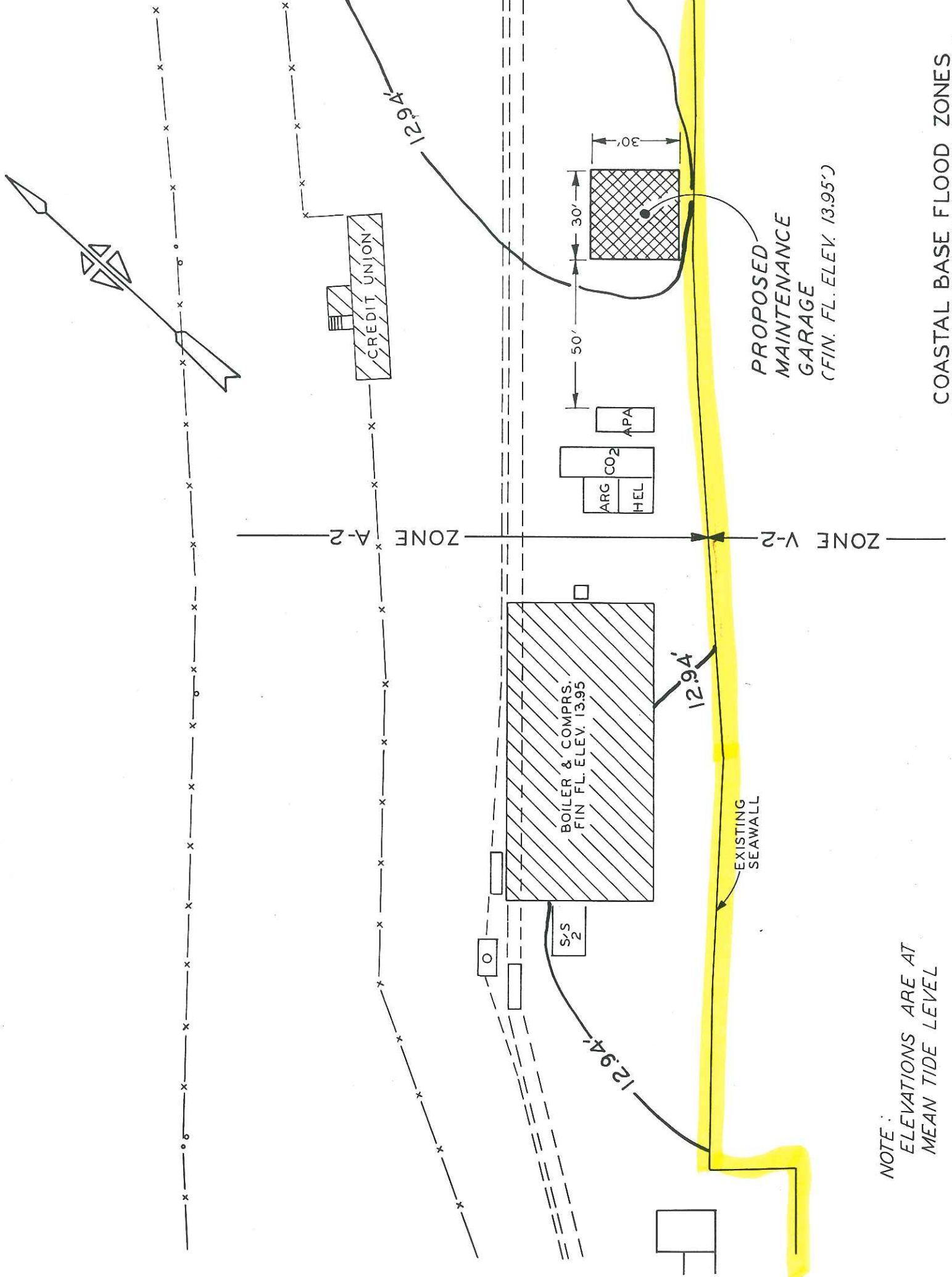
Very truly yours,

BATH IRON WORKS CORPORATION



Robert L. Herman

ROBERT L. HERMAN, P.E.
SENIOR FACILITIES ENGINEER



NOTE:
ELEVATIONS ARE AT
MEAN TIDE LEVEL

COASTAL BASE FLOOD ZONES

4237E RLH:mr
R. L. Herman
Facility Engineering

April 11, 1988

BATH IRON WORKS
PROPOSED BOILER TUBE STORAGE BUILDING
PORTLAND SHIP REPAIR FACILITY

LOCATION - East of Boiler House

CURRENT USE OF AREA - Paved, open storage

SIZE OF BUILDING - 30' x 30', single story w/13' high floor-to-roof peak

TYPE OF BUILDING - Concrete slab-on-grade, steel framed construction,
clear span garage, gable roof

UTILITIES - Sanitary Sewer - None
Storm Sewer - None
Power - Feed from Boiler House
Heat - Steam
Water - None

USE OF BUILDING - Maintenance of department vehicles

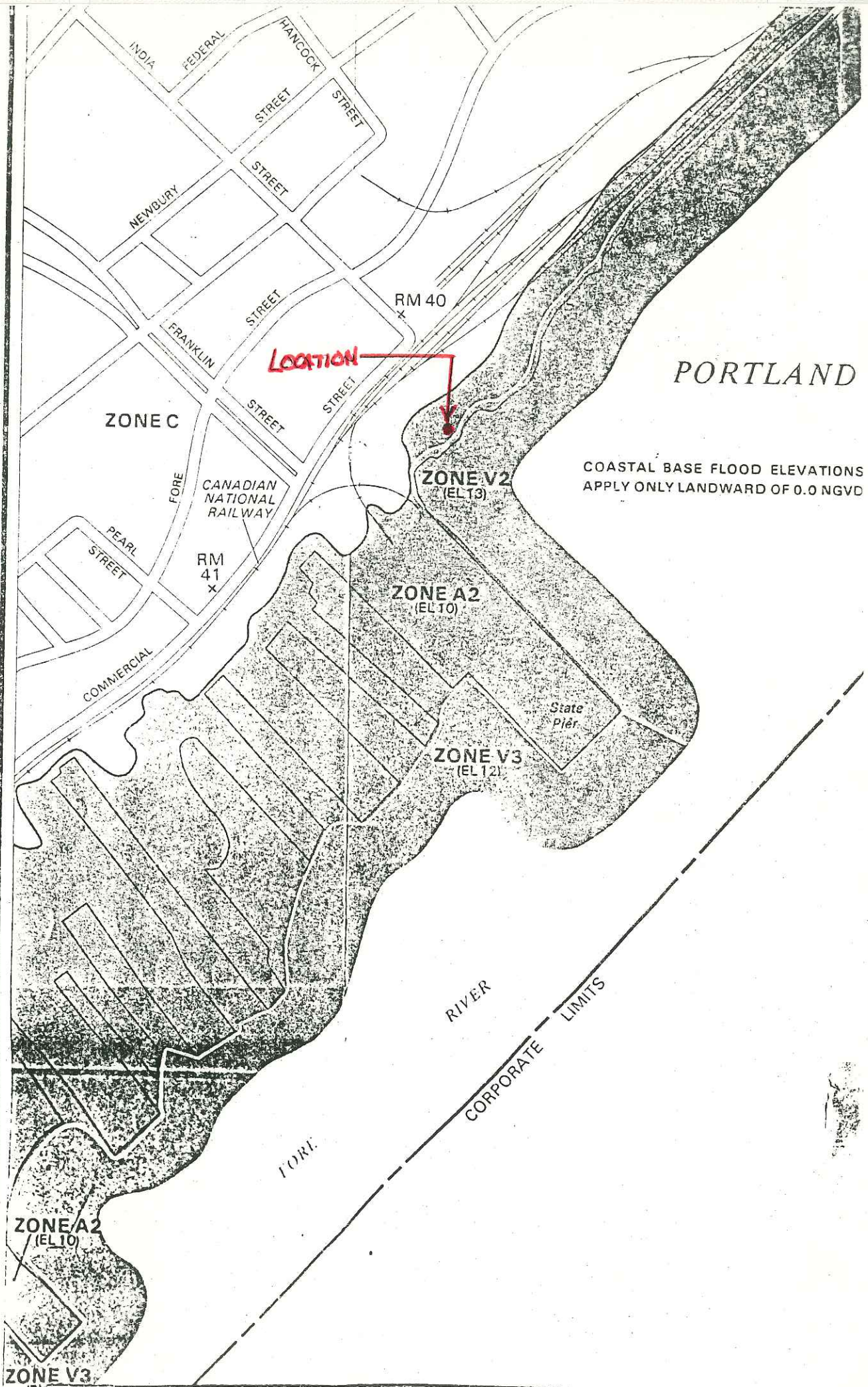
FLOOR ELEVATION - Top of slab will be at 18.5 feet above mean low water,
referenced to USC&G Survey, Benchmark No. 3, established in 1971, at elevation
15.27 MLW.

SITE IMPACTS - No existing water courses or means of drainage, utility
systems, or traffic patterns will be modified as a result of this project.

STATE & FEDERAL PERMITS - None required.

MUNICIPAL PERMITS - Review of the project is required under both the regular
building Code provisions, and also Special Flood Plain Management sections.

FEDERAL FLOOD ZONE - A2, inside the seawall just east of the Maine State Pier.



CITY OF PORTLAND, MAINE

389 CONGRESS STREET

PORTLAND, MAINE 04101

(207) 775-5451



PLANNING & URBAN DEVELOPMENT

JOSEPH E. GRAY, JR.

DIRECTOR

April 12, 1988

Mr. Robert L. Herman, P.E.
Bath Iron Works
700 Washington Street
Bath, ME 04530

Dear Mr. Herman:

Staff has reviewed BIW's plan for the construction of a storage building at the BIW shipyard on Commercial Street for compliance with the City's Flood Plain Management Regulations (Division 26.A). The submitted plan is in conformance with the regulations and BIW may seek a building permit from the Building Inspections Division.

Please note that certification by a professional surveyor of the elevation of the "as-built" slab will be needed before a certificate of occupancy can be issued.

Please contact Maureen O'Meara if you have any questions on the approval of the BIW plan.

Sincerely,

Joseph E. Gray, Director
Planning and Urban Development

cc: Alexander Jaegerman, Chief Planner
P. Samuel Hoffses, Chief of Inspections
Maureen O'Meara, Planner

BW

Bath Iron Works Corporation
700 Washington Street
Bath, Maine 04530
207 443-3311

April 12, 1988

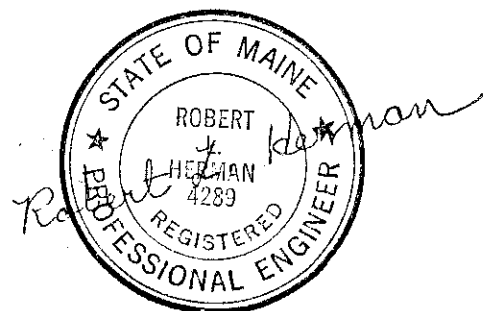
Ms. Maureen O'Meara
Planner,
Portland City Hall
389 Congress Street
Portland, Maine 04101

Dear Ms. O'Meara:

I hereby certify that this project (30 x 30
Maintenance Building), complies with the requirements of
the Portland Flood Plain Management Regulations, Section
14-450.8, sub section 16.

Very truly yours,

BATH IRON WORKS CORPORATION



Robert L. Herman

ROBERT L. HERMAN, P.E.
SENIOR FACILITIES ENGINEER

CITY OF PORTLAND, MAINE

SITE PLAN REVIEW

Processing Form

Applicant 114

Date April 13, 1988

Mailing Address 40 Commercial Street

Address of Proposed Site 40 Commercial Street

Proposed Use of Site Maintenance Trailer

Site Identifier(s) from Assessors Maps _____

Acreage of Site / Ground Floor Coverage _____

Zoning of Proposed Site _____

Site Location Review (DEP) Required: () Yes () No

Proposed Number of Floors _____

Board of Appeals Action Required: () Yes () No

Total Floor Area _____

Planning Board Action Required: () Yes () No

Other Comments: Final Plan Review

Date Dept. Review Due: _____

PLANNING DEPARTMENT REVIEW

(Date Received) _____

Major Development — Requires Planning Board Approval: Review Initiated

Minor Development — Staff Review Below

	LOADING AREA	PARKING	CIRCULATION PATTERN	ACCESS	PEDESTRIAN WALKWAYS	SCREENING	LANDSCAPING	SPACE & BULK OF STRUCTURES	LIGHTING	CONFLICT WITH CITY PROJECTS	FINANCIAL CAPACITY	CHANGE IN SITE PLAN
APPROVED												
APPROVED CONDITIONALLY												
DISAPPROVED												

CONDITIONS SPECIFIED BELOW

REASONS SPECIFIED BELOW

REASONS: _____

(Attach Separate Sheet if Necessary)

Maureen O'Keefe 4/12/88
 SIGNATURE OF REVIEWING STAFF/DATE



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

KC - pls file in master
BIW site plan
file

October 5, 1987

Mr. Vernon Campbell Grant, P.E.
Bath Iron Works
700 Washington Street
Bath, Maine 04530

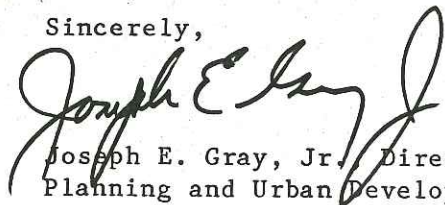
Dear Mr. Grant:

Staff has reviewed BIW's plan for the construction of a storage building at the BIW shipyard on Commercial Street for compliance with the City's Flood Plain Management Regulations (Division 26.A). The submitted plan is in conformance with the regulations and BIW may seek a building permit from the Building Inspections Division. In regard to the issuance of a two-part building permit, Mr. John Swan of Owen Haskell, Inc. sent me a copy of a letter certifying that the elevation of the slab for the storage facility is 16.90 feet. This slab elevation is well above the minimum requirement of two (2) feet above the ten (10) foot base flood elevation and is in compliance with the ordinance. BIW is eligible to receive both parts of the building permit.

Please note that in addition to the above certification, certification by a professional engineer registered in the state that the "as built" development conforms to the construction methods and practices for development of a structure as detailed in section 14-450.9(1)b. is required to obtain a certificate of occupancy.

Contact Kathleen Conner if you have any questions on the approval of the BIW plan.

Sincerely,


Joseph E. Gray, Jr., Director
Planning and Urban Development

KC/eg

cc: Alexander Jaegerman, Chief Planner
P. Samuel Hoffses, Chief of Inspections
Kathleen A. Conner, Senior Planner

CITY OF PORTLAND, MAINE
M E M O R A N D U M

TO: P. Samuel Hoffses, Chief of Inspections
FROM: Kathleen A. Conner, Senior Planner *KC*
DATE: October 7, 1987
SUBJECT: BIW Flood Hazard Review

The storage building plan at the BIW shipyard on Commercial Street is in compliance with the City's Flood Plain Management Regulations. BIW has also submitted a surveyor's certificate as to the as-built elevation of the already poured slab. The elevation is well above the minimum two feet above the base flood elevation (the BFE is 10 feet and the slab elevation is 16.9 feet). With this submission, a full building permit (both parts) can be issued if the development meets your requirements.

Also, please note that before a certificate of occupancy can be issued, a professional engineer must certify that the "as-built" development conforms to the construction methods and practices for development of a structure as detailed in Section 14-450.9 (1)b.

Call me if you have any questions.

KC/jf

CITY OF PORTLAND, MAINE
M E M O R A N D U M

TO: P. Samuel Hoffses, Chief of Inspections
FROM: Kathleen A. Conner, Senior Planner *KC*
DATE: October 7, 1987
SUBJECT: BIW Flood Hazard Review

The storage building plan at the BIW shipyard on Commercial Street is in compliance with the City's Flood Plain Management Regulations. BIW has also submitted a surveyor's certificate as to the as-built elevation of the already poured slab. The elevation is well above the minimum two feet above the base flood elevation (the BFE is 10 feet and the slab elevation is 16.9 feet). With this submission, a full building permit (both parts) can be issued if the development meets your requirements.

Also, please note that before a certificate of occupancy can be issued, a professional engineer must certify that the "as-built" development conforms to the construction methods and practices for development of a structure as detailed in Section 14-450.9 (1)b.

Call me if you have any questions.

KC/jf



CITY OF PORTLAND

JOSEPH E. GRAY, JR.
DIRECTOR OF PLANNING
AND URBAN DEVELOPMENT

October 5, 1987

Mr. Vernon Campbell Grant, P.E.
Bath Iron Works
700 Washington Street
Bath, Maine 04530

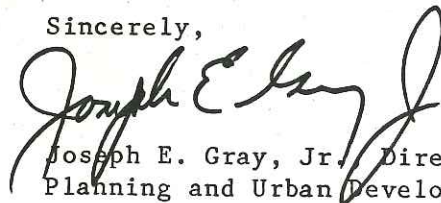
Dear Mr. Grant:

Staff has reviewed BIW's plan for the construction of a storage building at the BIW shipyard on Commercial Street for compliance with the City's Flood Plain Management Regulations (Division 26.A). The submitted plan is in conformance with the regulations and BIW may seek a building permit from the Building Inspections Division. In regard to the issuance of a two-part building permit, Mr. John Swan of Owen Haskell, Inc. sent me a copy of a letter certifying that the elevation of the slab for the storage facility is 16.90 feet. This slab elevation is well above the minimum requirement of two (2) feet above the ten (10) foot base flood elevation and is in compliance with the ordinance. BIW is eligible to receive both parts of the building permit.

Please note that in addition to the above certification, certification by a professional engineer registered in the state that the "as built" development conforms to the construction methods and practices for development of a structure as detailed in section 14-450.9(1)b. is required to obtain a certificate of occupancy.

Contact Kathleen Conner if you have any questions on the approval of the BIW plan.

Sincerely,


Joseph E. Gray, Jr. Director
Planning and Urban Development

KC/eg

cc: Alexander Jaegerman, Chief Planner
P. Samuel Hoffses, Chief of Inspections
Kathleen A. Conner, Senior Planner



Bath Iron Works Corporation

700 WASHINGTON STREET, BATH, MAINE 04530 • (207) 443-3311

September 29, 1987

Mr. David Dominie
Director of Licensing and Review Division
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Mr. Dominie:

RE: My Letter of 3 September 1987

It is our understanding that, under the new law, LD 1681, coming into effect today, the DEP will no longer require a revision to BIW's Site Location permit in order for us to erect a 1,200 square foot storage building at our shipyard in Portland, Maine.

That being the case, please cancel our application made in the above referenced letter.

As you may recall, the City of Portland's Planning Department was holding up review of this project pending DEP approval. Knowing your feelings regarding their policy, I do not expect you to provide them with a written release.

I am sending a copy of this letter to Kathleen A. Conner, Portland Senior Planner. Would you call her (775-5451, extension 266) on or before Tuesday, October 6, if you have a problem with our proceeding?

Thank you for your consideration in making me aware of the impending law change, and for your time in this matter.

Yours very truly,

BATH IRON WORKS CORPORATION

V. C. Grant, P. E.
Senior Project Engineer

VCG:mr 3845E

Conner, Portland
Gott, BIW
York, BIW

Ms. Conner -
I'll call you on 10/7/87
TO BE ADVISED OF STATUS. THANKS
CM

OWEN HASKELL, INC.

Civil Engineer — Land Surveyor
8 Broadway, South Portland, Maine 04106
Telephone 207 799-5694

September 21, 1987

Mr. Cam Grant
Bath Iron Works
Washington Street
Bath, Maine 04530

RE: Portland Repair Faciltiy

Dear Cam:

At your request we have checked the elevation of the newly poured concrete slab at your Portland Repair Faciltiy.

The elevation of the top of the slab is 16.90 feet based on N.A.V.D.

If we can be of further assistance, please do not hesitate to call.

Very truly yours,

OWEN HASKELL, INC.



John W. Swan

cc to: Kathleen Connor, Portland Planning Dept.

JWS/t

① Submission — Submission Complete

2.c. OK

2.d. OK el. 17

minor ^{revision to} DEP Site Location Act

② Standards

1a. 405

1. b. plans for structure certified

* (Need proof of State Certification - stamp and/or #)

c. NA

d. el. 10' = slab @ 17 ±'

e. NA

f. NA

g. NA

h. NA

2. NA

3. NA

* 14.450.7 (2)c. Proof of permits



Bath Iron Works Corporation

700 WASHINGTON STREET, BATH, MAINE 04530 • (207) 443-3311

September 3, 1987

Mr. David Dominie

Director of Licensing and Review Division
Department of Environmental Protection
State House Station 17
Augusta, Maine 04333

Dear Mr. Dominie:

Bath Iron Works (BIW) wishes to construct a 1,200 square foot, single-story, wood framed, storage building at our shipyard in Portland, Maine.

The enclosed site plan shows its proposed location relative to our other facilities. A "specification sheet" is enclosed for your perusal.

I spoke to Don Witherall who worked on the original construction project. He suggested BIW request a minor revision to our permit under the Site Location Act, and that I should apply to you.

Enclosed find a check made out to the Treasurer of State in the amount of \$25.00 to cover the application fee. If this is not the correct amount, then would you call me at BIW, extension 2691, to advise?

Because of the proposed building's location, and since the City of Portland is engaged in Flood Plain Management, it is necessary that they be assured that the D. E. P. is not displeased with the project going forward. Assuming that you see no overriding problem in the D. E. P. permitting for this relatively small project, would you please advise Kathleen Conner, Senior Planner, at the Portland City Hall. A copy of her business card is enclosed.

Parallel processing of permit applications would expedite construction this fall, which is important to us operationally. If there is reason to believe that the D. E. P. revision will not be possible, or if there is reason why you cannot call Ms. Conner, then would you call me to advise?

Thank you very much for your attention to this matter.

Very truly yours,

BATH IRON WORKS CORPORATION

Vernon Campbell Grant, P. E.
Senior Project Engineer

VCG:mr 3805E

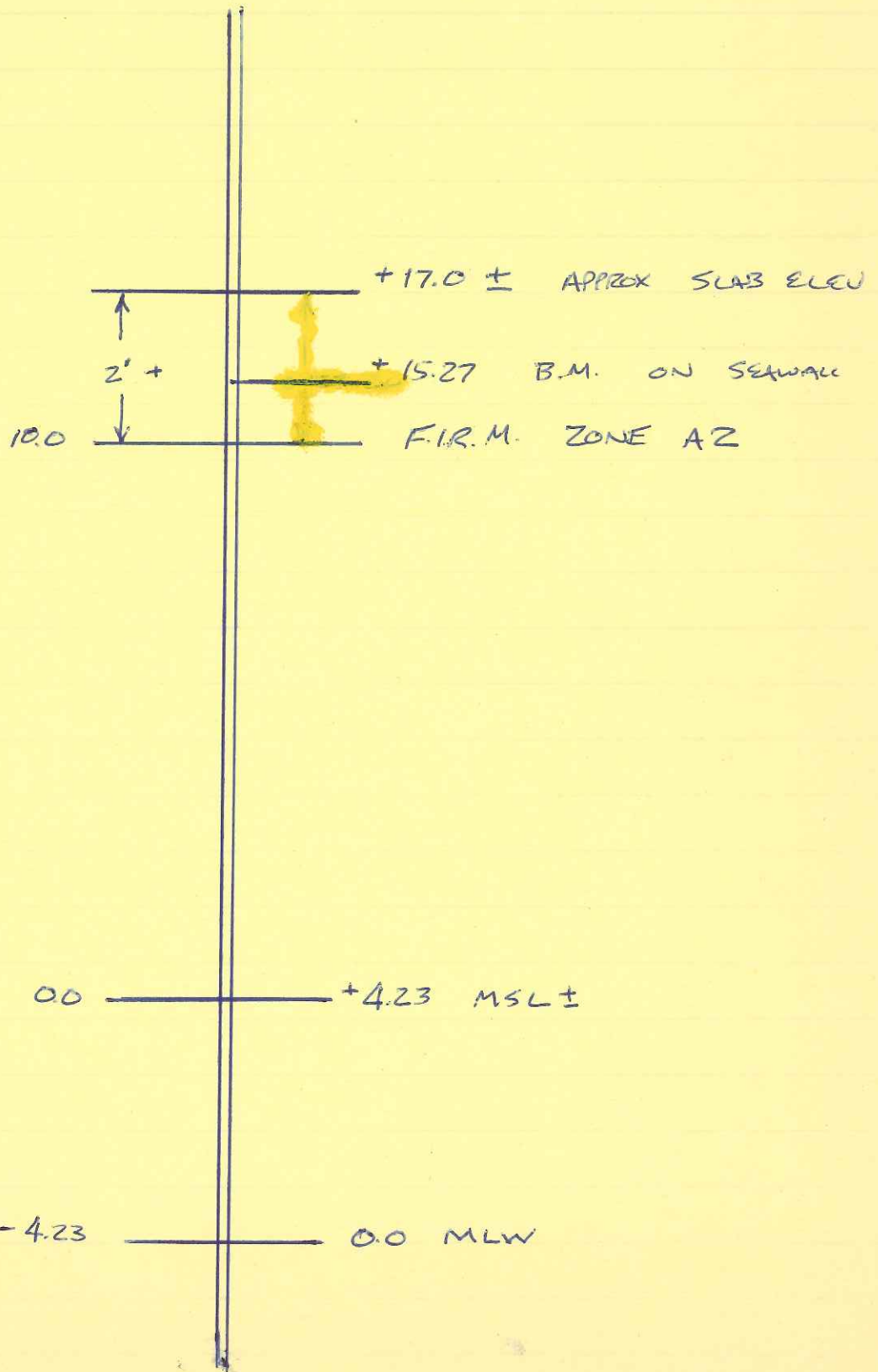
xc: Conner
York

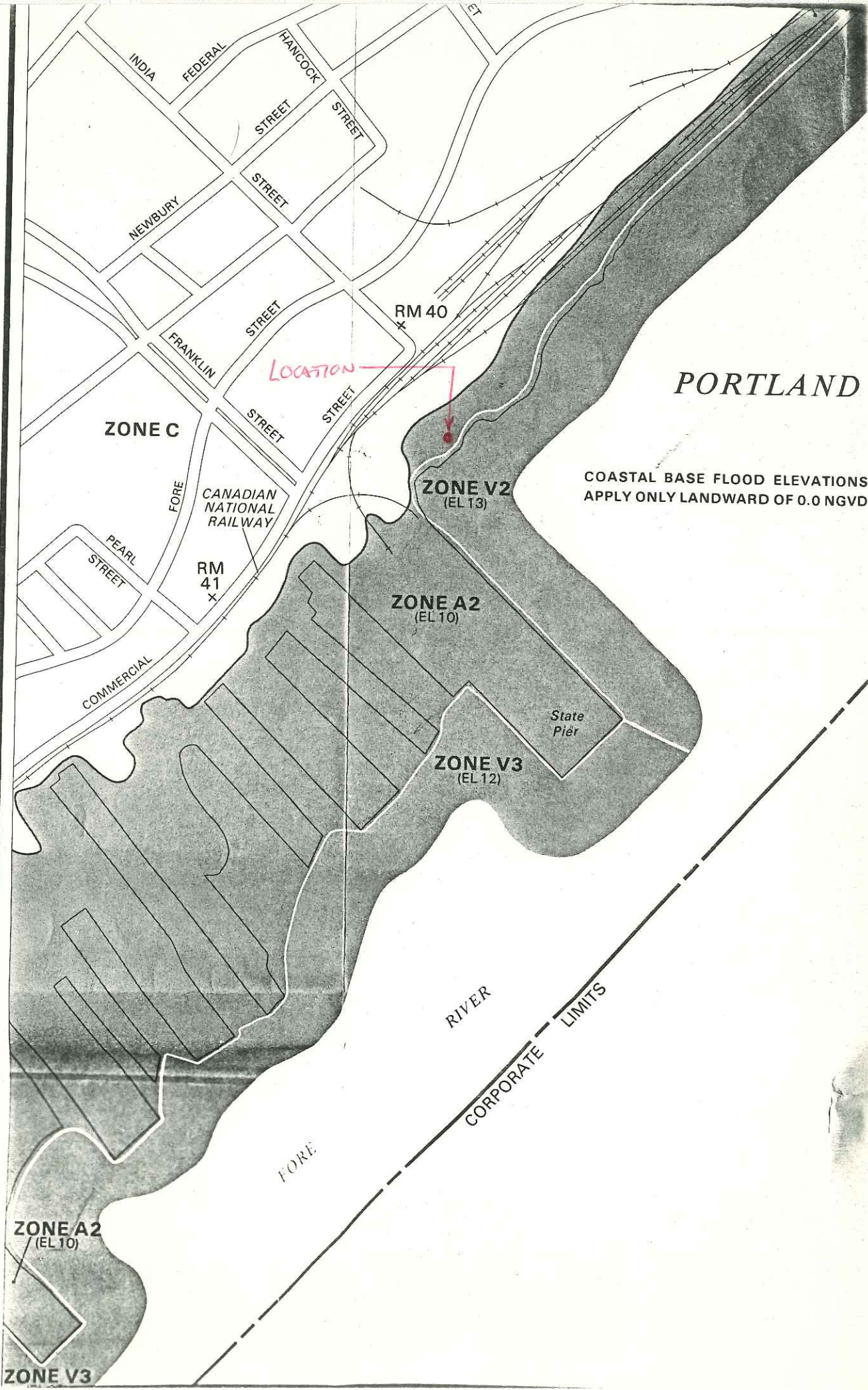
Enclosures

PORTLAND WATERFRONT

NGVD

USCIG





PORTLAND

COASTAL BASE FLOOD ELEVATIONS
APPLY ONLY LANDWARD OF 0.0 NGVD

ZONE V2
(EL 13)

ZONE A2
(EL 10)

ZONE V3
(EL 12)

ZONE A2
(EL 10)

ZONE V3

RIVER
CORPORATE LIMITS

FORE

LOCATION

RM 40

RM 41

ZONE C

CANADIAN NATIONAL RAILWAY

State Pier

INDIA

FEDERAL

HANCOCK

NEWBURY

FRANKLIN

PEARL

COMMERCIAL

FORE

STREET

STREET

STREET

STREET

STREET

STREET

STREET

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Bath Iron Works Corporation

700 WASHINGTON STREET, BATH, MAINE 04530 • (207) 443-3311

September 3, 1987

Kathleen A. Conner
Senior Planner
Planning Department
Portland City Hall
389 Congress Street
Portland, Maine 04101

Dear Ms. Conner:

Thank you for spending your time with me so early in the morning yesterday.

Bath Iron Works (BIW) wishes to construct a 1,200 square foot, single-story, wood framed, storage building at our shipyard in Portland, Maine.

The enclosed site plan shows its proposed location relative to our other facilities. A specification sheet is enclosed for your approval.

Please consider this our application for a Flood Hazard Area Development Permit. Enclosed find \$50.00 application fee.

Also enclosed please find our Letter of Application to the D. E. P. for a revision to our existing Site Location Act Permit.

I hereby certify that the project described herein is in compliance with the requirements of the Ordinance, ~~and ask waiver of the requirement to have a Registered Land Surveyor verify the elevation of the existing slab as recorded herein.~~ *

Thank you for your time in reviewing this matter.

Very truly yours,

BATH IRON WORKS CORPORATION

Vernon Campbell Grant, P. E.
Senior Project Engineer

VCG:mr 3805E

xc: Gott
York

Enclosures

* per our conversation - 9/4/87, BIW will retain Owen Huskell to do this work.

BATH IRON WORKS
PROPOSED BOILER TUBE STORAGE BUILDING
PORTLAND SHIP REPAIR FACILITY

LOCATION - West of Boiler House

CURRENT USE OF AREA - Paved, open storage

SIZE OF BUILDING - 20' x 60', single story w/16' high floor-to-roof peak

TYPE OF BUILDING - Concrete slab-on-grade, wood framed construction,
clear span garage, gable roof

UTILITIES - Sanitary Sewer - None
Storm Sewer - None
Power - Temporary feed from Boiler House, under same Code
requirements as for modular building
Heat - Propane Unit Heater
Water - None

USE OF BUILDING - Storage of Boiler House materials, and Maintenance
Department vehicles

FLOOR ELEVATION - The existing slab is at 17.0^{*} feet above mean low water,
referenced to USC&G Survey, Benchmark No. 3, established in 1971, at elevation
15.27 MLW.

SITE IMPACTS - No existing water courses or means of drainage, utility
systems, or traffic patterns will be modified as a result of this project.

STATE & FEDERAL PERMITS - A minor revision to the existing Maine DEP Site
Location Act Permit is required.

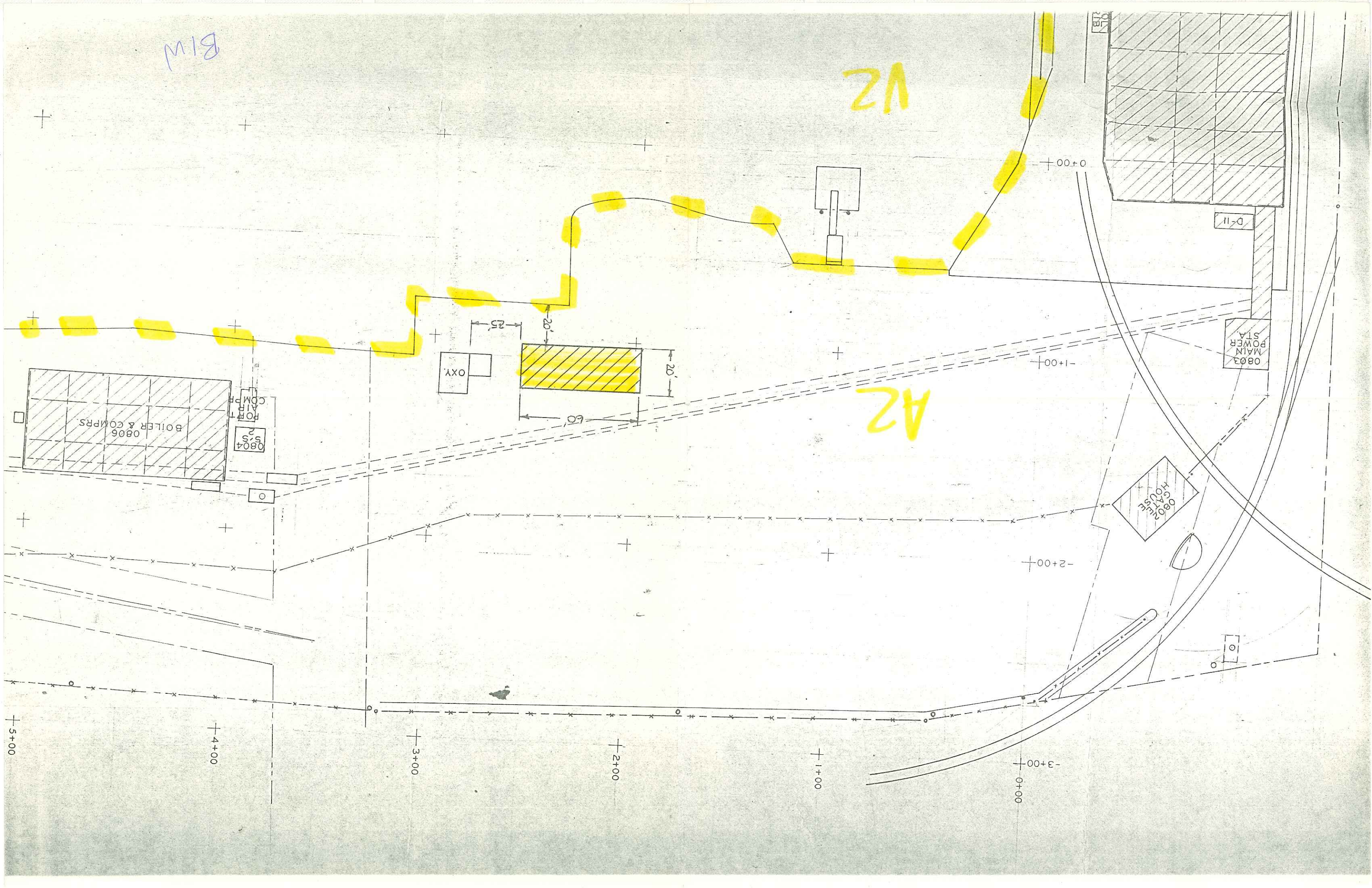
MUNICIPAL PERMITS - Review of the project is required under both the regular
building Code provisions, and also Special Flood Plain Management sections.

FEDERAL FLOOD ZONE - A2, inside the seawall just east of the Maine State Pier.

BIW

VZ

AZ





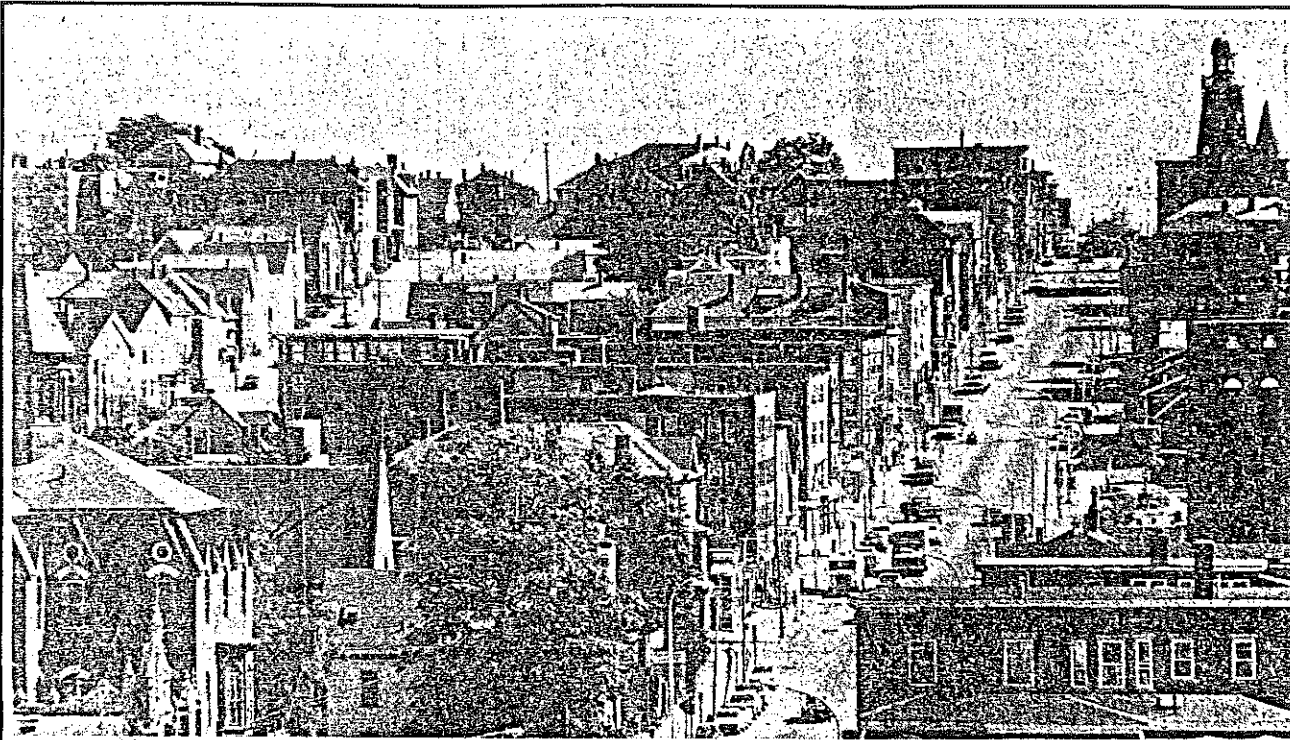
EVENING EXPRESS

Vol. 99—No. 242

25 Cents

Portland, Maine, Friday, July 31, 1981

32



Munjoy Hill: Its residents are keeping eye on developments

Staff photo by Charles Merrill

BIW worries the Hill

By NANCY PERRY
Staff Writer

Residents of Munjoy Hill see some clouds in the silver lining Bath Iron Works' \$46.7 million expansion promises for Portland.

And those clouds are hovering right over their neighborhood.

Increased traffic and noise, higher rental rates and the possibility that their residential community could become the "Combat Zone" of Portland or a haven for transient home buyers are some of the nagging doubts plaguing residents of the Hill these days.

But those concerns aren't great enough - yet - to prompt any sort of organized opposition to the project.

"The positive value outweighs (the problems). But we're not going to stand on the sidelines and applaud either," says Alan Caron, president of the Munjoy Hill Neighborhood Association.

Caron says his group will be keeping a close eye on the project as it develops. In fact, some of its representatives plan to visit Bath next week to interview longtime residents and neighbors of BIW's plant there in order to get an idea of problems that could develop here.

"I'm worried about lower India Street. Are there going to be 15 bars there? (There will be) a lot of pressure on that little strip," said Caron, adding that he doesn't want to see a portion of his neighborhood turned into a Combat Zone.

According to some reports, there already is increased real estate activity in the area.

Edward Manning, who has been quenching the thirst of customers at Eddie's

Shamrock Cafe for the past 25 years, said he's received more than half a dozen offers to sell his business.

And other businesses in the neighborhood of Commercial and India Street are clearly interested - if the price is right.

Higher prices are what scare Rep. Edith S. Beaulieu, one of the city's two representatives from Munjoy Hill.

Although she plans to support the project when the Legislature votes on it Monday, she says she's received numerous calls from neighborhood residents concerned about its impact on their pocketbook.

The high paying jobs BIW will offer its employees could translate into higher rental and housing costs and price hikes on everything from meals to haircuts as businessmen try to make a buck off workers who will be earning more than the average city worker.

"Everyone is talking about jobs and revenues. Everyday people's concerns are on the back burner," she says.

But to Rep. David H. Brenerman, vice president of the Munjoy Hill organization and the second member of the city's legislative delegation representing the Hill, jobs are the issue now.

Although he, too, plans to follow the project's process carefully, he thinks that, at least for the present, the fears of the neighborhood are overridden by the number of jobs people on the Hill can get.

City officials have already initiated efforts to tie Portland's targeted jobs program into the BIW project.

The aim of that program - one of 14 funded nationally by the federal government - is to match up jobless or underemployed city residents with jobs created by local economic development projects.

David C. Bittenbender, director of the

city's health and social services department, said BIW officials have agreed in philosophy to the targets the city has created for its jobs programs.

Those targets include trying to find jobs for longshoremen who may be out of work due to the city's decision to shift gears and push the BIW project instead of a proposed new cargo handling facility; employees tossed out of work by the closing of the General Electric plant in South Portland and low income and unemployed city residents, he said.

Bittenbender said the city hopes to tap into both BIW's own apprentice and training program as well as offerings at the Southern Maine Vocational Technical Institute in order to train these groups for work at BIW.

However, he said it was still too soon to designate a specific number of jobs the city would like to see filled by Portland residents who fall into those target groups.

In addition to the jobs project, city officials are trying to ease some of the fears of Munjoy Hill residents by promising to work with the neighborhood on traffic, noise and housing problems.

Portland City Manager Tim Honey has created a special six-person management team responsible for overseeing the construction project as well as looking into its impact on city services and the Munjoy Hill neighborhood.

In addition to those efforts, the management team will be assessing the impact of converting the old city hospital into a dormitory for naval crews stationed aboard vessels under repair at the shipyard.

Concerns have already been raised about the close proximity of the dormitory to the new city hospital - specifically whether sailors and senior citizens can live in harmony.

Honey ready for gamble

By NANCY PERRY
Staff Writer

AUGUSTA — The City of Portland's \$15 million investment in the \$46.7 million expansion of Bath Iron Works on its waterfront — as with any real estate speculation — is not without risk.

But Portland City Manager Tim Honey is ready to gamble.

And he thinks the state should be, too.

"In any project of this magnitude, there are so many risks which all parties must share. I have carefully outlined these risks to my council and we fully believe that the benefits of this project far outweigh the potential risk factors," Honey noted in a prepared speech scheduled to be delivered to the Legislature's Transportation Committee here this afternoon.

Honey and Portland Mayor Pamela P. Plumb were to present the city's case to the Transportation Committee this afternoon in an attempt to convince lawmakers to come up with the \$15 million state funds needed to wrap up a laboriously negotiated deal with BIW.

While Honey will be focusing on the details of the city's financial arrangement - and its risk - Mrs. Plumb will be taking a broader approach.

"Strengthening the economy of the state, Maine is the most important public policy that elected officials can address, for without healthy and expanding economy, too many of our citizens will be unemployed or underemployed. Without a healthy and expanding economy, sufficient revenues cannot be produced to meet the collective needs of our citizens, needs which range from maintaining our highways to educating our youngsters to assisting our elderly," she notes.

According to Mrs. Plumb, Portland's downtown

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was a dying retail and commercial center just 15 years ago.

Today, because of public and private investments, it is a "truly remarkable city."

"Now our attention is turned to the waterfront, and similar investments must be made to insure its rebirth and economic vitality. If the Port of Portland is going to be restored to its historical prominence, it is imperative that the public sector be willing and able to make the necessary public investments to enhance our competitive posture," she said.

According to Honey, the state's largest city is willing to take chances in order to play its part in improving "the economic climate which is so important to all of us."

Honey plans to outline the risks his city will be taking in order to play that role.

"While BIW will fully pay for the improvements to the facility over the 20-year (bond) period, the lease schedule does present the city with a potential \$3.5 million shortfall between 1985 and 1992. Our greatest risk will occur in 1986 when our cash requirements will be \$804,000 greater than our

lease revenues," he notes.

In addition, Honey said, the city's \$15 million bond will increase Portland's per capita debt by \$240 — compared with a statewide increase of \$13.

"With Portland being the last city in the Northeast to maintain an AAA bond rating, I have given a great deal of time and thought to this concern. Normally, the city issues between \$4 and \$5 million in new debt annually. An additional \$15 million issue represents a very significant departure from previous years," he notes.

But Honey said his discussions with officials who rate state and local governments' bonded indebtedness has left him convinced that city can handle the \$15 million debt.

"The single most important factor in their determinations (of bond ratings) appears to be the underlying strength and vitality of the local economy. The expansion of BIW to Portland will send a powerful economic message to the gentlemen on Wall Street. I am hopeful this economic message will more than offset any concerns which they may have regarding the city's ability to handle \$15 million in additional debt," he notes.

Discussion of BIW proposal attracts audience of one

By PETER MORELLI
Correspondent

WINDHAM — Eight state representatives from outlying towns in Cumberland County were invited to hear a presentation by Portland city officials on the Bath Iron Works proposal this morning, but only one attended, Marion Gowen, a Republican representative from Standish.

"I think it's marvelous," Mrs. Gowen said. "People are very enthusiastic" about the proposal, she said. "I can tell you that the man on the street, my constituents, are."

Speculating on why her colleagues did not attend, Mrs. Gowen said, "I think probably the others are convinced."

Mayor Pamela Plumb of Portland shared that view. "Maybe the people have all the information they feel they need," she said.

Mrs. Gowen, whose family owned a waterfront ship repair business, said of the proposal "I just think it's great."

Portland City Manager Tim Honey said that the state's analysis of the financial impact of the BIW proposal would be released today. "The figure I heard was \$196 million over 20 years. That's not a bad payback for a \$15 million investment," Honey said.

Honey, Mrs. Plumb and Economic Development Director Clark Neily showed Mrs. Gowen a map of the project and touched briefly on some of its physical features. Asked by Mrs. Gowen if the unused east side of the State Pier could continue to be used for cargo, Honey said he thought not, but that the Merrill Industries Pier near Veterans Memorial Bridge could accommodate cargo that has been going to the State Pier. Honey also said, "I hope we can have some discussions with the new owner of the railroad," referring to financier Timothy Mellon, who recently purchased the Maine Central Railroad.

Mrs. Gowen said that she had no reservations about the financing of the BIW expansion, even if some other legislators do.

"It seemed to me that my party was trying to give it (the BIW proposal) a little shaking and then acquiesce in the end. This should not be a partisan issue."

Invited state representatives who did not attend were Ada Brown, Gorham; Gordon Cunningham, New Gloucester; William Diamond, Windham; Robert Dillenback, Cumberland; Patrick Jackson, Yarmouth; Antoinette Martin, Brunswick, and James Mitchell, Freeport.