Phase II Report Final Plan July 15, 1982

Village of Hastings-on-Hudson

Comprehensive Waterfront Development Plan

5 Existing Conditions of Structures

BUILDINGS:

Excellent

Good

Fair

Poor

Very Poor

BULKHEAD:

////. Good

■■■ Fair

--- Poor

Poor but has recently been refilled with concrete to protect buildings

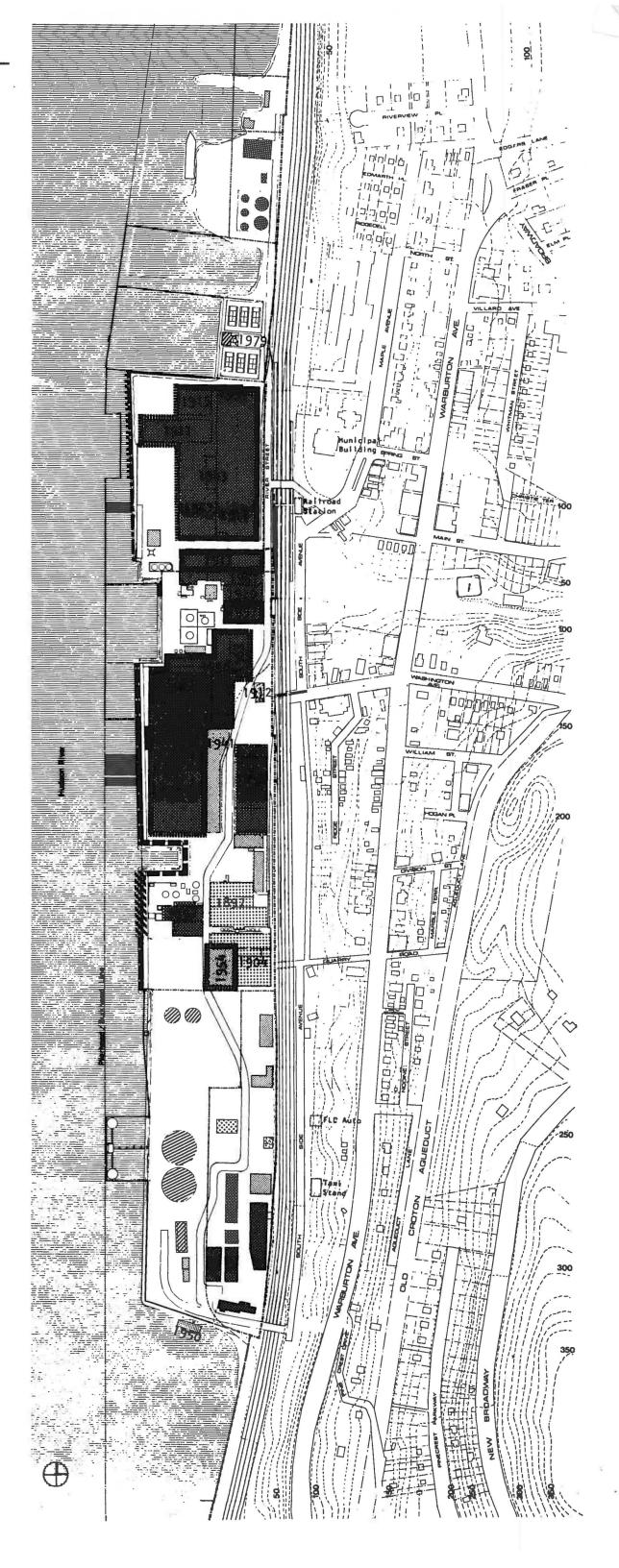
Buildings with structural spans over fifty feet

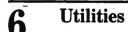
1950 Year of Construction

Comprehensive Waterfront Development Plan Village of Hastings-on-Hudson

The Gruzen Partnership Architects, Planners

1" = 350' 0 175 350 . 700 1050





Westchester county sewer

BBBBB 8" force main

Storm sewers

••••• City gas lines

••••• City water

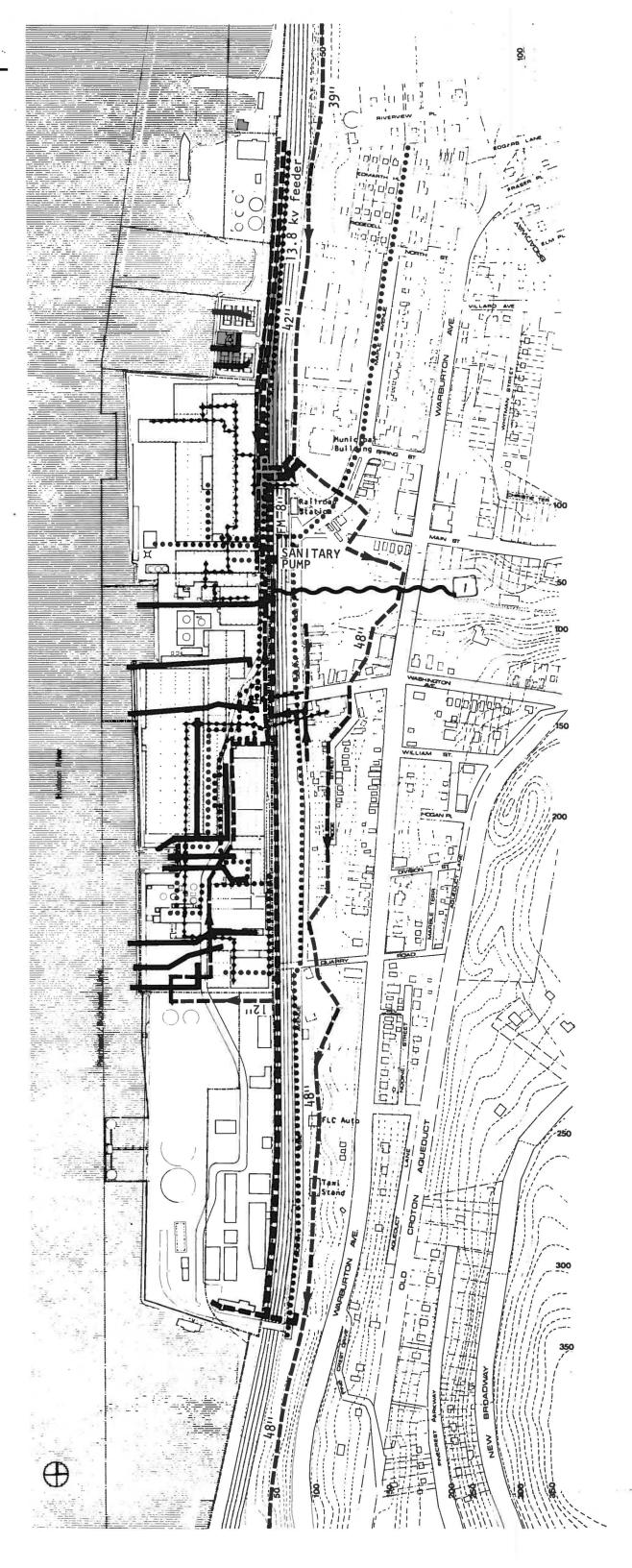
Brook water

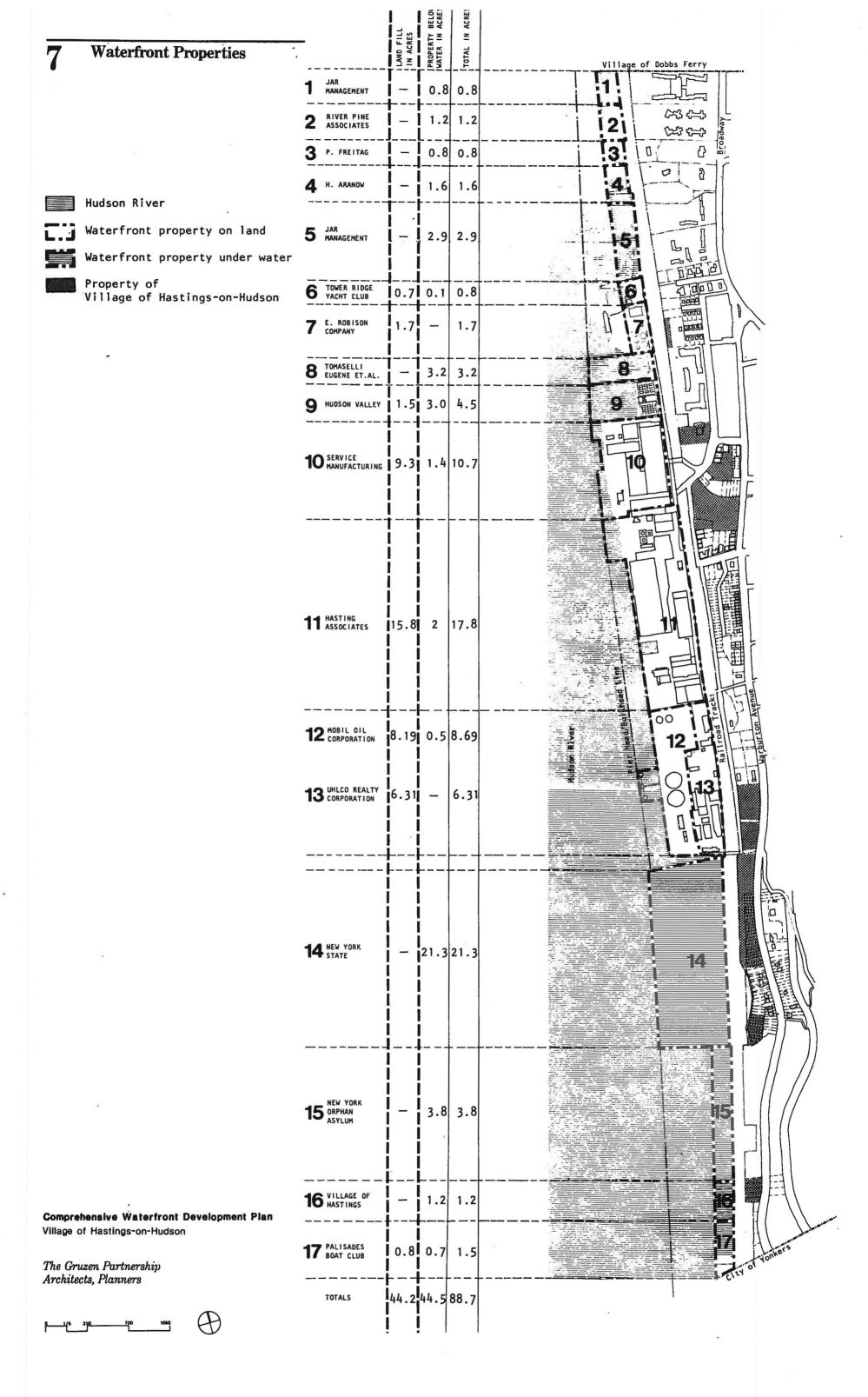
Electric 13.8 kv feeder

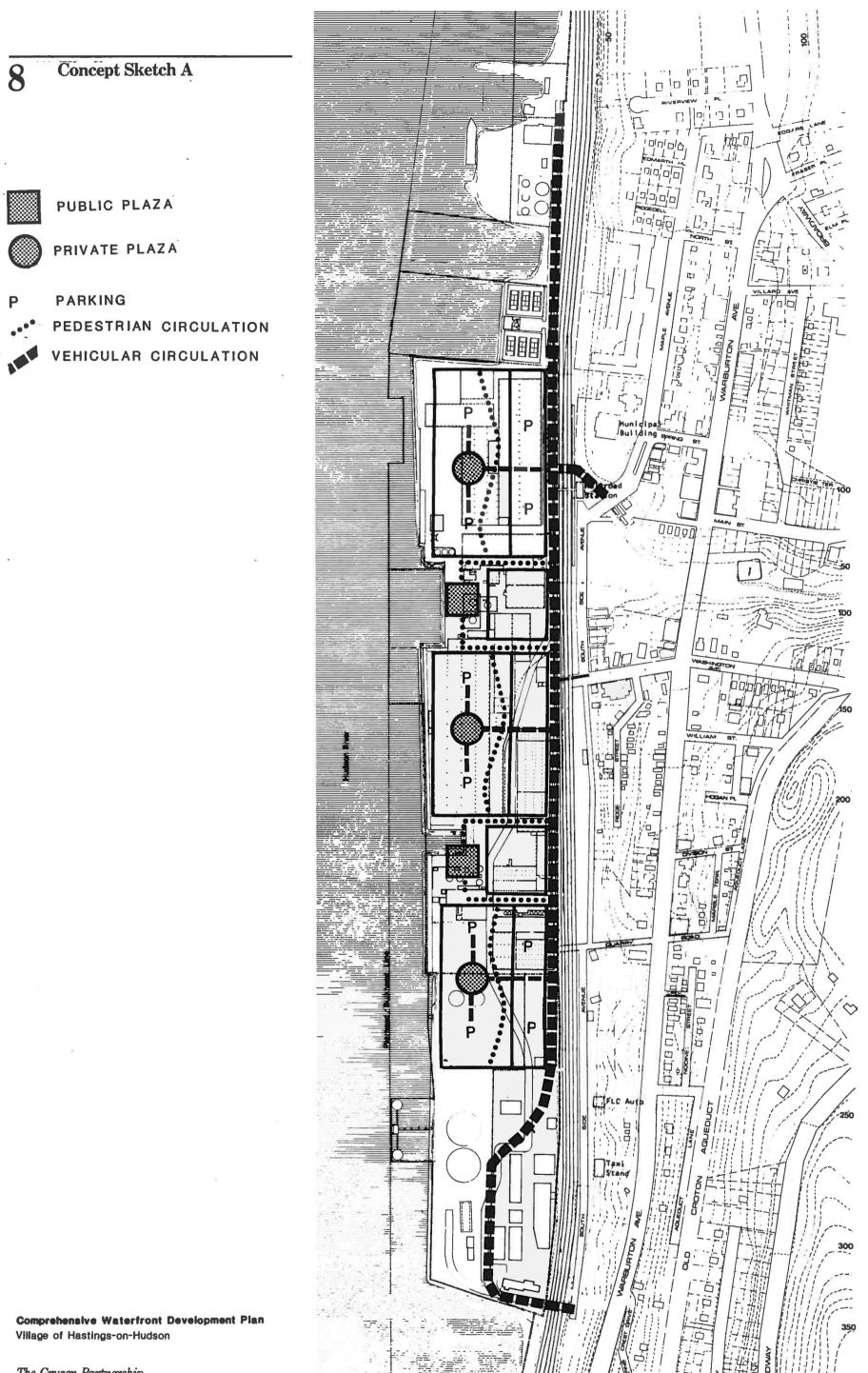
Comprehensive Waterfront Development Plan
Village of Hastings-on-Hudson

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1" = 350' 0 175 350 700 1050







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1" = 350' 0 175 350 700 1050



PUBLIC PLAZA



PRIVATE PLAZA

PARKING



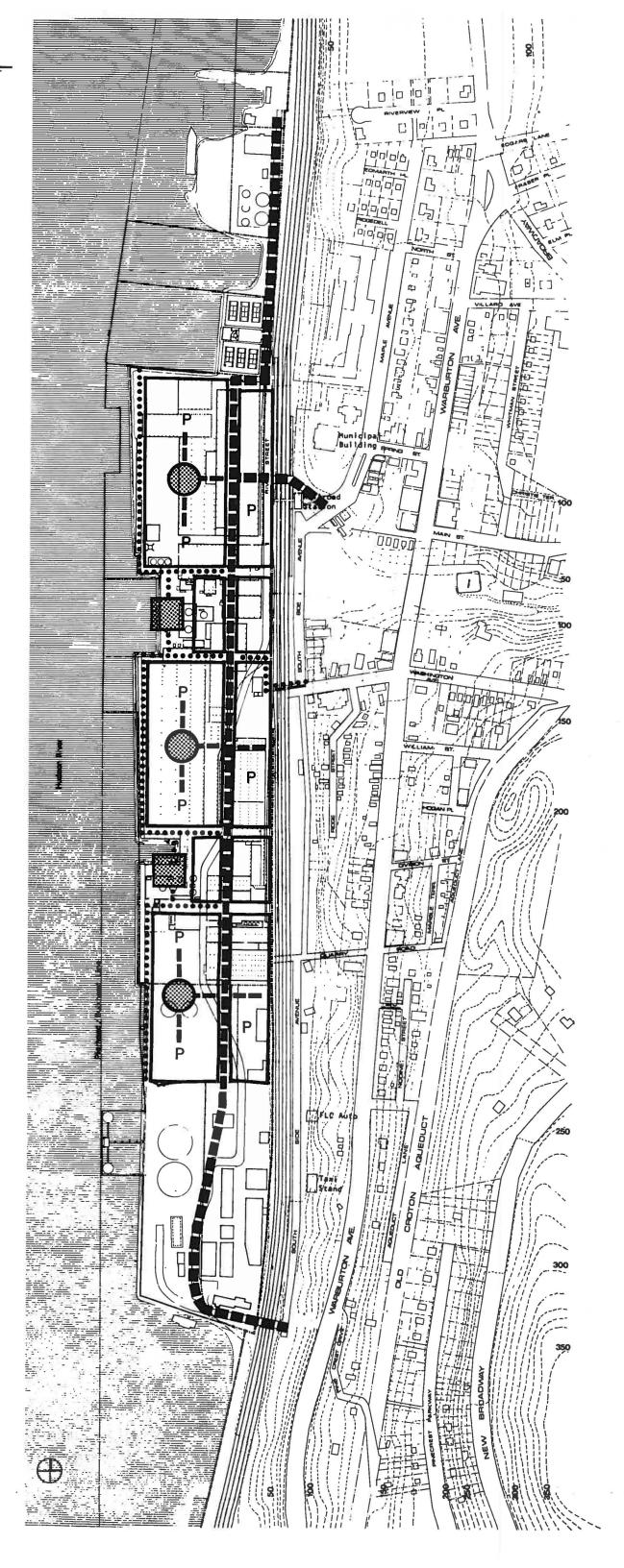
PEDESTRIAN CIRCULATION

VEHICULAR CIRCULATION

Comprehensive Waterfront Development Plan Village of Hastings-on-Hudson

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1" = 350' 1050



RETAIL FRONTAGE

C COMMERCIAL

L LOW RISE

M MID RISE

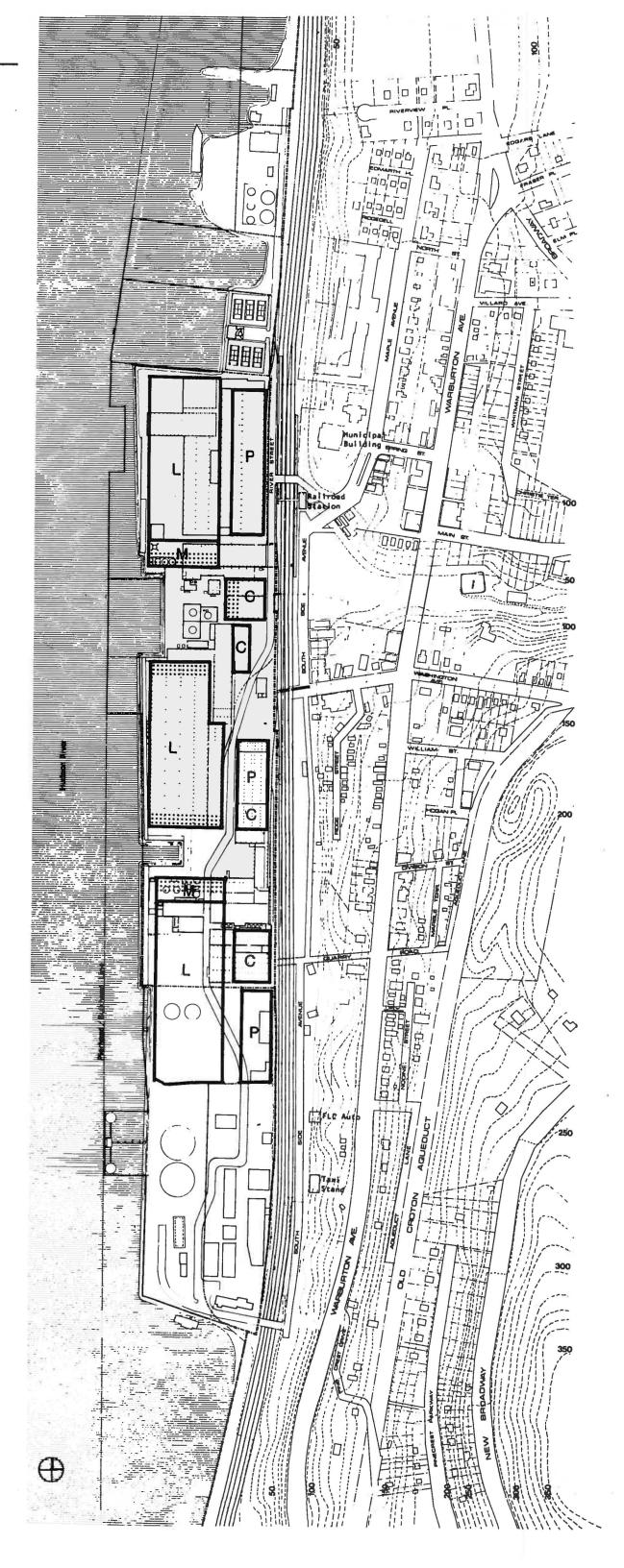
P PARKING

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1" = 350'

0 175 350 700 1050



CONSTRUCTION COSTS, INFRASTRUCTURE AND PUBLIC AMENITIES

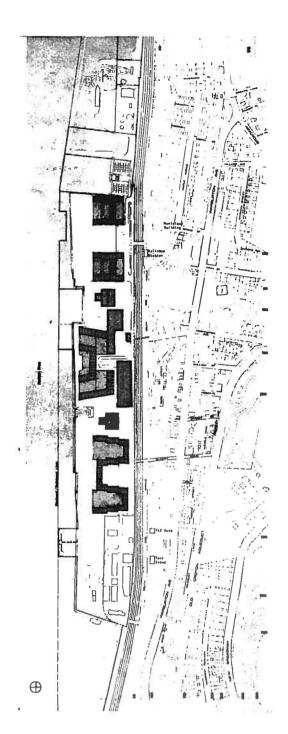
A basic assumption of the proposed rezoning of the waterfront is that, as a trade-off for the substantial up-grading of the properties, the developers will provide a series of basic public amenities in accordance with a time schedule directly related to the construction of revenueproducing buildings and operations. The plaza, to be financed by the developer, will contain a specified amount of paving, planting areas, a feature such as a fountain or skating rink, a small amphitheatre, etc., adequate lighting and benches. The proposed area to be dedicated to public use at each cove is 75,000 SF, including the cove itself. The allowance for such construction will be in the vicinity of \$1,500,000 for each cove. The waterfront promenade, a 20 foot wide easement totalling some 2,200 feet in length, should have an allowance of \$750,000 in addition to providing a boardwalk, railings, benches, lighting and some planting. The two pedestrian easements, 10 feet wide and capable of sustaining emergency vehicles, are to connect the Cove Plazas back to the east service road and the pedestrian sidewalk. They would probably cost another \$200,000.

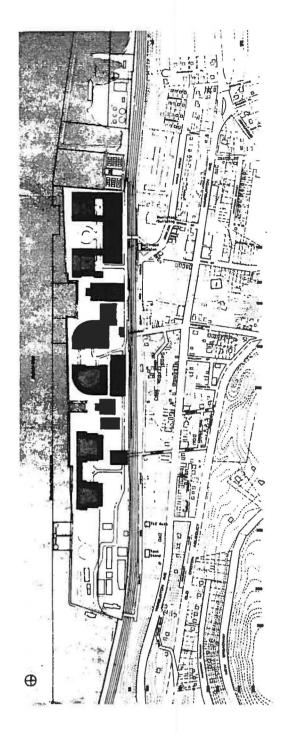
The proposed spine service road, an extension of the 1,200 feet of River Street, will be built by the developers according to Village specifications and deeded to Hastings. This section would be approximately 1,500 feet long with a 22 foot roadway, and cost around \$150,000. Condemnation proceedings will be required to continue the public easement or to purchase the approximately 1,600 feet of roadway built last year by the New York State Department of Transportation on the Mobil Oil and Uhlco properties, connecting up to the Zinsser Bridge. This bridge is private and a public easement would have to be obtained or purchased by the Village.

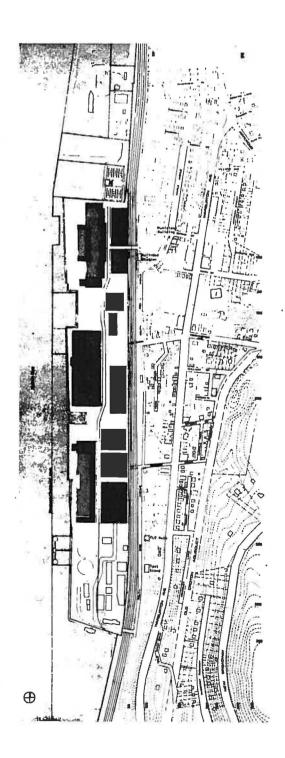
A new bridge across the railroad tracks will be fairly expensive. Only approximate costs can be assigned without more detailed studies of the topography, subsoil conditions and traffic to be serviced. A new vehicular bridge across at Washington Street or Quarry Road and its ramp down to the extended River Street would probably cost in the vicinity of \$2,000,000. A new pedestrian bridge at Washington Street would cost over \$100,000.

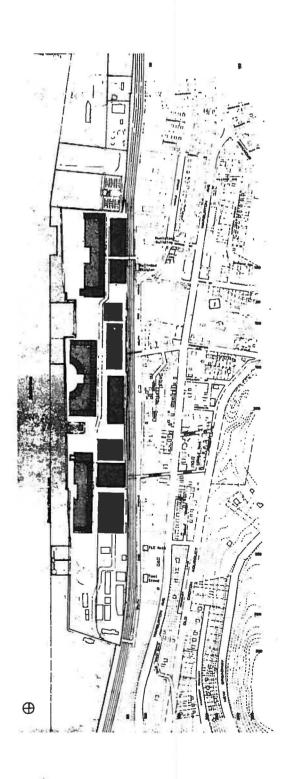
Extending the Dock Street Bridge with a spiral ramp downward, and curving in a 125 foot radius to meet River Street at grade, would cost around \$400,000.

South Side Avenue extensions to Warburton Avenue would be expensive to build. Considering a roadway 22 feet wide, three options have been investigated. Option A, rising 52 feet in 650 feet, would require the roadway to be raised on concrete piles above the steep terrain to achieve a continuous but steep 8% slope. This roadway would be within the Village property. Its approximate cost would be around \$750,000. Option B, rising 48 feet in 900 feet (5.4% slope), would also require the roadway to be elevated. Its approximate cost would be close to a million dollars. It would also fall within Village property. Option C is considerably longer and would require condemnation proceedings for the southern part of the 2,100 foot roadway. Its approximate cost would be \$1,200,000 as almost half would be on grade, provided no rock excavation is required. As discussed under the Access Section, the benefit of this extension would be to relieve the congestion at the Dock Street Bridge, at Spring and Warburton and Main and Warburton. The major portion of road would be below the level of Warburton Avenue and less offensive in terms of noise and view obstructions for Warburton Avenue.









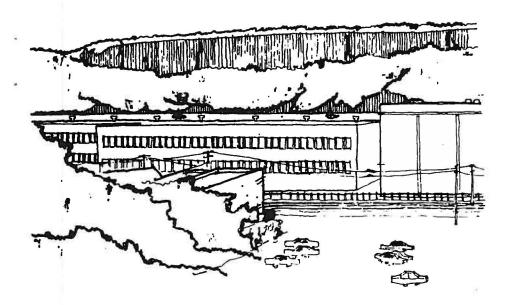
TOPOGRAPHY AND VIEW SHEDS

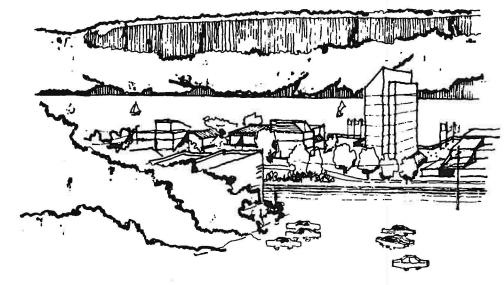
The waterfront site is virtually flat. The major landfill area is approximately 500 feet wide and 3,700 feet long and is almost entirely covered with huge industrial buildings, some 70 feet in height. This impacts the views as seen along Warburton Avenue and below. Above Warburton these industrial buildings do not affect the views.

The proposed zoning will create three low density development zones of approximately eight acres each, divided by two medium density areas directly behind the North and South Mill Coves. A height restriction of forty feet at the low density and one hundred feet at the medium density zones is proposed. These restrictions are already incorporated into the body of the Village Zoning Resolution under RMF-1.5 and RMC-80, respectively.

When the existing industrial buildings are replaced with residential, the overall mass will be lessened and the view of the water's edge will be improved overall for the Village as a whole. The medium density zones will restrict any building to ten stories maximum. Their orientation will be perpendicular to the river's edge in order to furnish views both up and down the Hudson. Therefore, the narrow end of such a building would face the Village. In contrast, the Anaconda buildings are oriented parallel to the river for the most part, creating a wall.

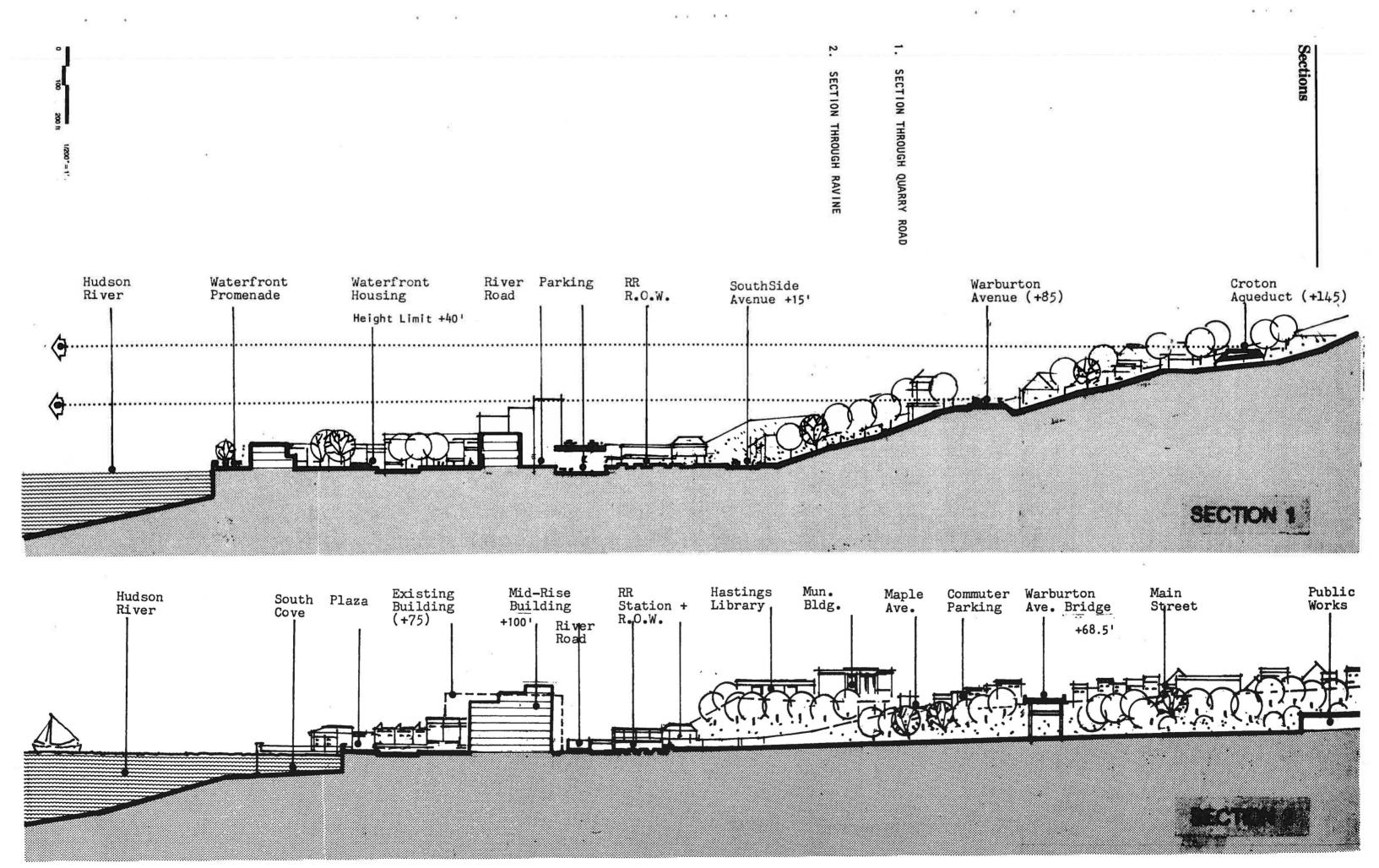
The coves will thus be characterized by a greater urban density than the rest of the development. In order to provide a developer an incentive to build and maintain a public plaza about the two coves, the opportunity to erect mid-rise multi-use buildings will be created. The North Mill Cove and development will replace what is presently one of the tallest buildings on the site - windowless No. 72A which is almost 70 feet high. It is directly across from Zinsser Plaza and the Ravine beyond. Replacing this wall with a residential building only slightly taller will open up this part of the site. As part of a long-range plan, the greenery and pathway from the Aqueduct can be extended down past the Zinsser Place parking, over the tracks, and into the North Mill Cove as a dominant greenbelt through the Village of Hastings.





Existing

Proposed



STRUCTURAL ANALYSIS

A feasibility study has been prepared by the structural engineering firm of Severud Perrone Szegezdy Sturm, based upon a review of the existing subsurface data as well as an inspection of the existing foundations and buildings themselves. It is included in this report.

As described in the Phase I report, and confirmed by borings taken at the South Anaconda Site and structural drawings of the buildings, subsoil conditions are such that virtually any structure will require piles. The length of these piles will vary, depending upon the depth of the sand stratum and the gneiss bedrock. They could be as short as forty feet (the length of the eighteen piles supporting the relatively light weight two story wood clubhouse of the Hudson Valley Tennis Club) or as long as one hundred and six feet, the deepest boring recorded.

Existing buildings are almost all founded on wood piles, clustered about the building columns and also spaced at regular and close intervals to support a thick unreinforced floor slab. The largest building on the site, Building No. 15, between the two coves, has piles spaced at an eight foot grid supporting a twelve inch floor slab. If these buildings were to be demolished the floor slab would be cracked up and removed. It is, however, unnecessary and expensive to remove the wood piles. Driving new wood steel tipped or structural steel piles through this forest of existing piles is not impossible, but is more difficult and constricting than if the new structure were to be located in areas clear of existing foundations.

Reuse of Foundations

This has led us to explore the possibility of reusing the existing wood piles for support, and even the concrete mat itself. The structural engineers have analyzed these potentials. However, a testing program will have to be initiated that will uncover specific sections of slab and piles to determine that the slabs are indeed unreinforced and the capacity of the wood piles. A single note on the grid piles of Building No. 15 indicates that the capacity is fifteen tons.

If the grid piles can support fifteen tons, light weight construction using cold rolled steel sections and steel deck with light weight concrete fill could be erected up to three stories. If the piles can support twenty tons each, four or possibly more stories could be considered. Severud Perrone Szegezdy Sturm proposes to tie pairs of piles together with concrete encased steel grade beams upon which a foundation framing is placed of 16 by 24 foot bays. A new eight inch reinforced concrete slab would be poured at grade level.

If the existing slab and its weight were not removed, and the pile capacity proved to be only fifteen tons, it might prevent the imposition of additional loads over two stories. It is possible to consider a structural system or light weight reinforced slab that could bridge over additional piles beyond the building footprint to create a spread foundation for whatever low-rise structure would be desired to be supported.

The proposed plan indicates buildings whose foundation grid and slabs are sufficiently large in area that they could be reused. This applies to the two largest structures on the site, Building No. 15, between the two coves, and Building No. 52, opposite the Dock Street Bridge. At the same time, locating new structures in those areas would require additional penalties to the relatively high cost of pile foundation. Building No. 15 has portions of its bulkhead tied back to the piles and mat foundation. If they were to be removed, considerable cost would ensue to restrain the bulkhead.

The proposed plan shows these areas containing low density structures (two to four stories), while the areas east of the two coves, not so impacted with existing piles, containing medium density buildings with new pile foundations (eight to ten stories). The subsoil profile indicates a moderate to steep slope of bedrock rising to the surface to the east. Placing mid-rise buildings to the east with the coves and surrounding land to the west kept clear of buildings should make the pile foundations for the mid-rise structures shorter and therefore more economical. Medium density structures must be considered in those areas requiring new piles to offset the extra cost of such foundations.

According to the structural engineers, the premium for normal pile foundations versus normal footings is approximately $\frac{1}{4}$ of 1% of total construction cost. The premium for a ten story building versus a twenty story building is approximately 3/4 of 1% of the total construction cost. The reason for this is the heavy initial cost of piles to rock regardless of building height.

The premium paid for limiting construction to ten stories versus normal foundations for a twenty story structure is therefore 1%. Assuming an average 1,200 square foot apartment at \$65 per square foot (\$78,000 per unit), the premium will be \$780 per apartment. The premium for the height restriction alone will be \$585 per apartment.

On the other hand, the higher the building over the initial ten stories, the more expensive it is to build the mechanical system, which requires a mechanical floor every 13 to 15 levels for supplemental zones and pumps, and more shafts for elevators. As the building approachs a high-rise construction, code imposed wind-load resistances increase, resulting in increased cost of the skin of such a building.

We therefore conclude that the developer will not be imposed unreasonable hardship to limit pile supported buildings to ten stories or 100 feet in height.

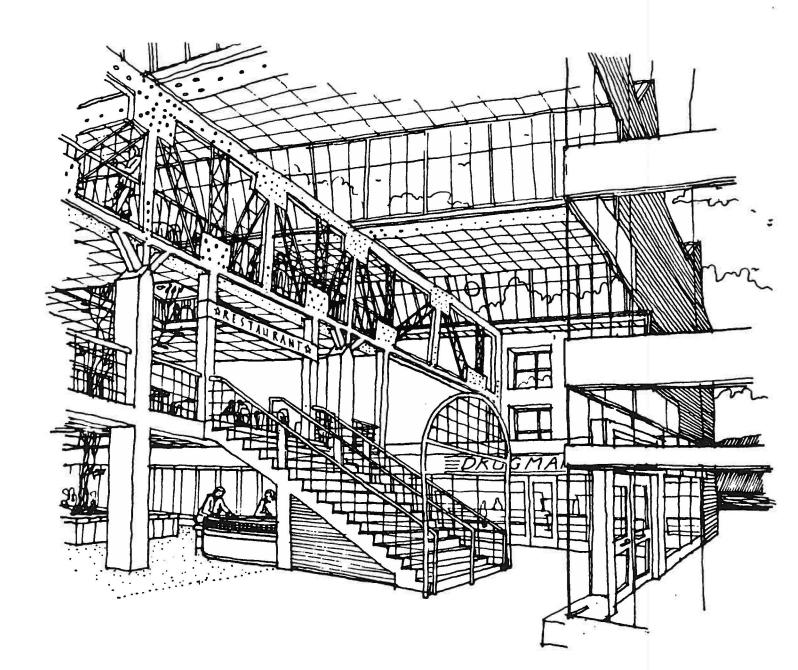
Reuse of Buildings

The reuse of the existing structures has also been explored. Based on visual inspection by the engineers and from the various other reports, the buildings appear to be relatively sound structurally. The problem is one of reuse potential, the costs involved with code compliance, insulation and mechanical systems. The high, large span, exposed steel mill buildings and their north facing skylights do not have an economically viable alternative other than heavy manufacturing, storage, or the type of high-volume retail or exhibit space which is ruled out by the scale and street system of the Village. This is unfortunate, given the great space and the structural drama of it, but there seems to be no feasible reuse that can match the economic return of residential use at the proposed densities.

The rear, eastern buildings could be recycled into office, retail or residential "loft" space. The cluster of buildings to the south, among the oldest on the site, are of masonry bearing walls, wood columns with interesting wood or steel truss roofs that could be featured by skylights. The two masonry and steel buildings south of the South Mill Cove could also be recycled into housing by inserting another floor into the 24 foot clear height, supported at the center of the over fifty foot span by a series of light columns on a concrete or steel transfer grade beam across the existing grid of piles.

Most of the other buildings do not seem suitable for reuse as they are either excessively wide and voluminous, or are oriented incorrectly. This particular site, because of its orientation towards the spectacular view of the Hudson River and the Palisades, will require that as many apartments as possible be oriented towards this view. Therefore, residential buildings should be sited either perpendicular to the river, if double loaded off a central corridor, or single loaded from a corridor along the east side, and parallel to the river.

The existing steel framed buildings No. 22 and 22C, now housing Universal Voltronics, would be ideal for some use requiring large open space, but probably this would be in conflict with other residential goals. Each has a 70 foot clear span with a clear height of 52 feet. As the structures were designed to support travelling cranes of 75 and 50 ton capacities, respectively, several additional floor slabs could be inserted.



Re-usable Foundations and Buildings

REUSEABLE FOUNDATION/SLAB



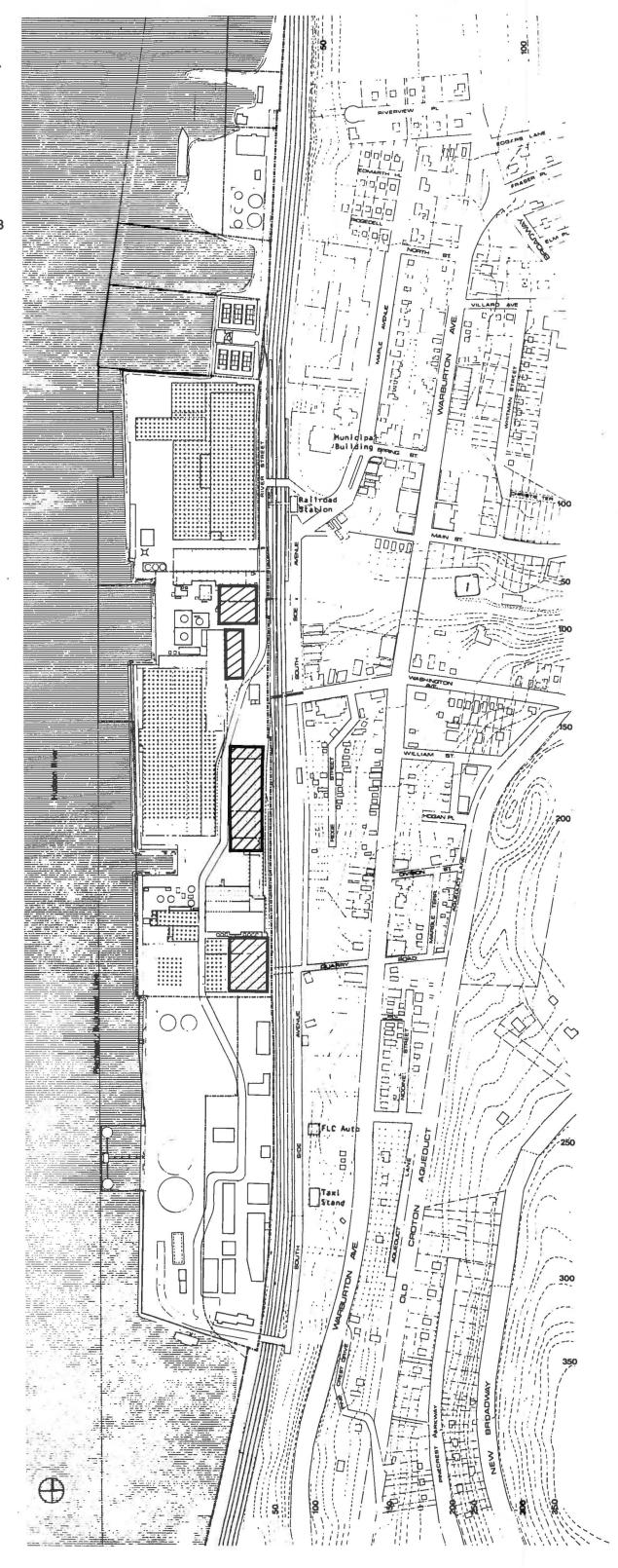
REUSEABLE BUILDING

Comprehensive Waterfront Development Plan Village of Hastings-on-Hudson

The Gruzen Partnership Architects, Planners

1" = 350"

0 175 350 700 1050



PRELIMINARY ENGINEERING FEASIBILITY STUDY by Severud Perrone Szegezdy and Sturm, Consulting Engineers, P.C.

Severud Perrone Szegezdy Sturm, Consulting Engineers P.C., reviewed the existing foundation drawings, subsurface exploration data and made an inspection of the existing buildings for the purpose of determining the feasibility of utilizing the site as a residential community.

Material Supplied

- The Gruzen Partnership preliminary schematic drawings showing proposed land usage.
- 2. Piling layout drawings for the north plant and the south plant, dated 30 November 1918, prepared for the National Conduit & Cable Co., the National Brass & Copper Tube Co. and the logs of test borings taken at the site, dated 17 June 1919.
- 3. The Comprehensive Engineering and Environmental Analysis of the Anaconda Site, Hastings-on-Hudson, New York, prepared by Dolph Rotfield Associates, dated November, 1976.

Description of the Subsurface

- The entire site area appears to have been extensively filled according to the boring information available. This stratum varies in thickness from seven to twenty-six feet and may differ in areas not covered by the borings. The fill material ranges from earth to gravel mixed with masonry rubble, demolition debris and old timbers.
- 2. Underlying the fill is a gray clay stratum which has a very low penetration resistance. The addition of any significant amount of site fill could cause consolidation of this stratum and resulting surface settlements. This stratum is unsuitable for support of building foundation loads.
- 3. Below the clay layer is a grey, red or brown sand stratum with clay and silt lenses. This sand layer is suitable for support of the building foundation. In localized areas the sand stratum is under-layed with a red clay, which might require some special design considerations.
- 4. The bedrock underlying the site is a gneiss with the rock surface sloping sharply in some areas. This rock is suitable for developing end bearing piles; special pile shoes may be required in the sharply sloping rock areas.

Existing Building Foundations

The existing building foundation information is shown on the drawings described in Item 2 (Material Supplied). These drawings indicate the majority of buildings are founded on wood piles. The piles are generally clustered under the building columns and spaced at regular intervals in each direction to form a grid in the floor areas. There is no indication on the drawings of the pile capacities or pile caps at the pile clusters. The floor slabs are shown as being 1'-0" unreinforced concrete slabs supported on the regularly spaced piles.

Proposed Foundations

1. Mid-Rise Buildings

The closest subsurface layer that is capable of supporting this type of structure is the sand layer overlying the bedrock or the bedrock itself. The bearing layer (sand or rock) is at a considerable depth below the ground surface and virtually the same depth below the ground (or tidal) water level. Therefore, the use of conventional foundations such as footings or mats should be dismissed, because of the extensive excavation and dewatering that would be required. The foundation that will prove most feasible for a mid-rise building at this site is a pile system driven through the overlying material to the sand layer or rock.

2. Low-Rise Buildings

a. Reuse of Existing Foundations

Severud Perrone Szegezdy Sturm has prepared a preliminary study showing a possible framing system and bearing wall spacing, as shown on the enclosed sketches. Based on an assumed pile load capacity of 20 tons per pile, three framed levels plus a roof can be supported on the existing piles. The existing pile capacities would have to be verified by inspection to insure the soundness of the piles and load tested to determine their actual allowable load capacity. If, by testing, a higher pile load is allowed, an additional floor or floors may be added. It should be noted that the use of the existing foundations will restrict somewhat the design and locations of the buildings.

b. New Foundations

The surbsurface layer that is capable of supporting a low-rise building would be the sand layer overlying the bedrock. Because of the depth of this layer below the ground surface and the ground (or tidal) water level, conventional foundations would be ruled out. The foundation most feasible for the type of building involved would be a pile system driven to the sand layer.

The foundation systems proposed in 1. and 2.b. above are based on the subsoil data and piling layout drawings included in the material supplied to this office. To the best of our knowledge there is no topographic information available regarding the site prior to the land fill operations. Therefore, our evaluation of the material supplied to date confirms that new structures erected at the referenced site would require a pile foundation system.

When the building or buildings are located on the site and defined, a subsoil exploration program in conformance with the applicable building codes would be required. The information derived from this program would be utilized to develop the most economical foundation system for the building(s).

Preliminary Investigation

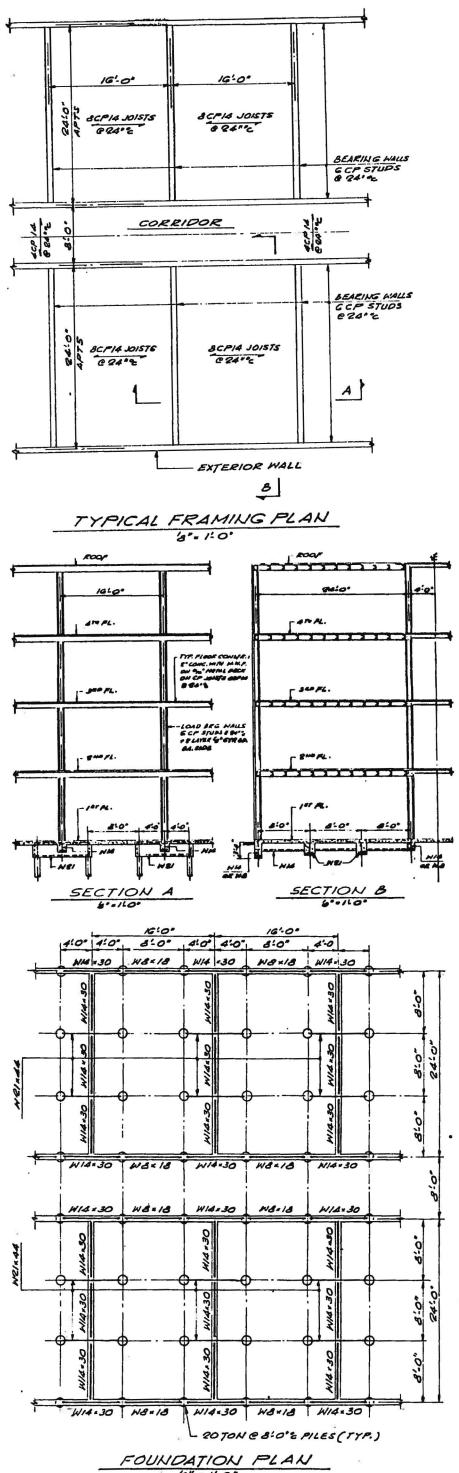
In order to accurately judge the condition and capacity of the existing piling and slabs, a preliminary investigation should be undertaken. This could be accomplished by opening up 8×8 (\pm) foot test pits at 75 foot centers (each way) in the areas being considered for recycling. The test pits would reveal the thickness of the concrete slab and the existence, size and spacing of slab reinforcing. Core samples of the concrete should also be taken and tested to obtain representative strengths. In addition, visual inspection and soundness tests of the existing piling could be made at this time. Load testing of the exposed piles should then proceed to determine the actual pile load capacities.

Reuse of Existing Buildings

- 1. The older buildings are made up structurally of masonry bearing walls, wood columns, beams and trusses. There is presently no information available regarding the structure or foundation system. In order to ascertain the condition and load carrying capabilities of the existing structure an extensive field survey of the wood type, condition, member sizes, connections, etc. would have to be conducted. In addition, the need and method of fireproofing the structure would have to be addressed. The existing foundation system would have to be investigated as to type, capacity and condition.
- The newer buildings at the site are large, open manufacturing type of structures. The roofs are exposed steel trusses supporting roof areas and skylights. We have no information on the superstructure framing. Therefore, an extensive field survey of the existing structures would have to be conducted. Based on the information available, the addition of an intermediate floor would require additional piling to support the increased loads. The present structures are not fireproofed and have to be rated in keeping with a new occupancy classification and the present building codes.

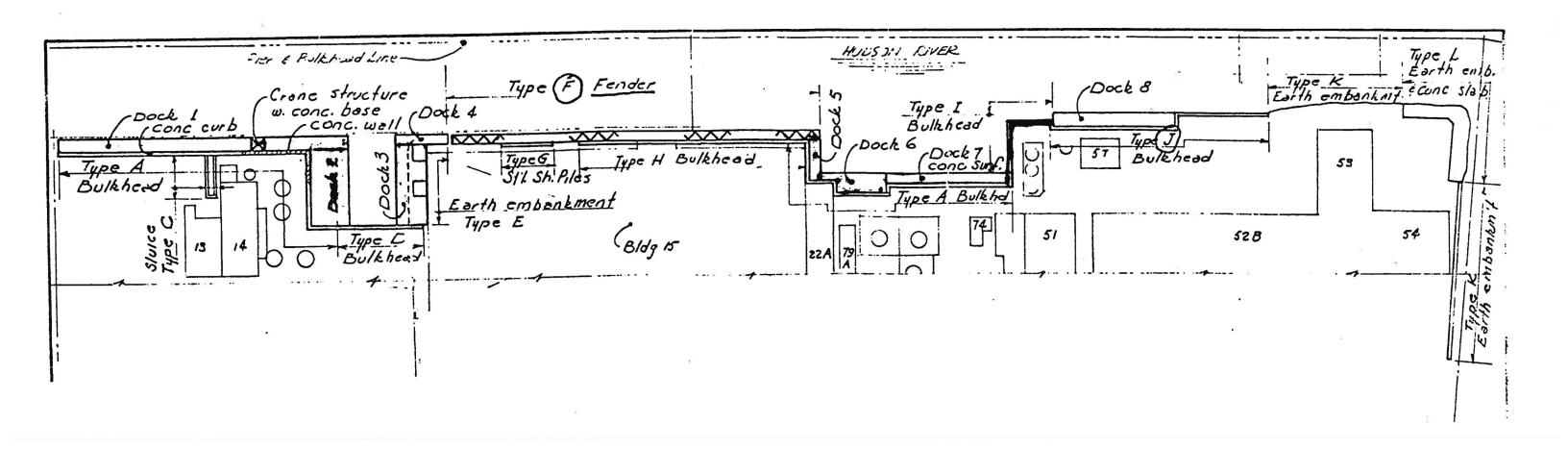
12 Structural Plans

Severud Perrone Szegezdy Sturm, Consulting Engineers P.C.



NOTE: ALL BEAMS TO BE ENCASED IN CONCRETE.

Anaconda Site, Hastings-on-Hudson, New York Figure 15



ACCESS - VEHICULAR AND PEDESTRIAN

Access to the site is potentially the most serious of the problems to be tackled by both the developer and the Village. We suggest in our plan that the Village obtain permanent easements for both vehicles and pedestrians and provide the vehicular road maintenance. These easements would tie the developments together, provide the Villagers access to the waterfront, ease the congestion at the Dock Street Bridge, as well as obtain a second means of access via the Zinsser Bridge.

Vehicular Access

Vehicular access is critical at three points. The new Dock Street Bridge is scheduled for completion shortly. It will have been raised, along with 117 other bridges across the Hudson Division railroad tracks by the New York State Department of Transportation. The roadbed will be increased from 24 to 28 feet between curbs and the curb radius increased to 15 feet at the perpendicular intersection between the bridge and the ramped 23 foot wide River Street. Another critical point is the steep intersection between Spring, or even steeper Washington Avenue, with Warburton Avenue which virtually every vehicle from the site would pass. The third critical point is the intersection between Warburton Avenue and Main Street or Broadway, which leads the vehicles off Warburton and into Farragut Parkway and the Saw Mill River Parkway. The oil trucks from Robison, Whaleco and Mobil and large trucks from industrial users on the site only make the problem worse as these critical intersections occur in the Village's Central Business District.

pource.

Based on previous studies, it has been calculated that between 300 to 400 additional vehicles per hour at peak times could be absorbed by the present circulation system. This would indicate that a residential development of not over 500 units could be absorbed, assuming that each unit would generate six trips per day, 10% of which would be during peak hours. This congestion could be partially relieved if the vehicular spine were extended to the Zinsser Bridge, but this would only relieve a small proportion. In the first place, the Zinsser Bridge itself must be widened to accommodate two lanes. In the second place, once over the Zinsser Bridge, vehicles would have to return north into the Village. But some of this traffic would go to Washington Street, thus avoiding the Main/Warburton/Spring problems.

Therefore a residential development over 500 units, even with access to the Zinsser Bridge, would probably require consideration of some major improvement. As this cost would be borne by the developers, the allowable increase of units to compensate for the cost must be considered. It is therefore recommended that when development reaches the cumulative number of 500 units, the developers must submit a traffic study to determine the need for additional access before completing the last 250 units under the proposed zoning.

Access Alternatives

Several alternatives exist for such access improvement. Possibly the least expensive and most direct would be to solve the intersection between the Dock Street Bridge and the River Street ramp. This will require a new spiral ramp, which could only be built when and if the current operations at Service Manufacturing cease and the area is converted to new use, as the new zoning anticipates. Such a ramp might also provide a good location for a new building, Department of Public Works, thus freeing up the ravine for future park development.

A second alternative is to build a new bridge over the railroad tracks at Washington Avenue. It would have to spring high enough up the steep avenue to clear South Side Avenue by 14 feet and the railroad tracks by 18 feet, and then ramp down to the vehicular spine road. This alternative has several major drawbacks, however. It would (1) complicate the intersection between South Side and Washington Avenue, (2) darken the lower levels of the existing buildings at the corner, and (3) depend on Washington Street as a major access, with its excessively steep slopes.

A third approach would be to build the new bridge over the railroad tracks south of the South Mill Cove, directly across the non-existing, but Village owned, "paper-road" at Quarry Road. More detailed on-site inspections revealed that South Side Avenue at this location has been graded virtually level with the Avenue, allowing a circular ramp to swing south at a 75 foot radius and connect to South Side Avenue. A bridge at this point would connect the southernmost development area to Hastings proper, as the present Dock Street bridge connects the potential northernmost development. Although the Quarry Road easement is already the Village's, the semi-circular ramp would have to be erected on private land and require negotiations and/or condemnation. The advantage over the Washington Street Bridge scheme is that there would not be any existing buildings that would be affected; the land is already graded level and the access would be in good balance with the Dock Street bridge.

A fourth alternative is to extend South Side Avenue, south of the Zinsser Bridge, to connect with Warburton Avenue. We have plotted three options, all of which terminate at Warburton Avenue at locations without houses directly across the intersection. The shortest such connection (Option A) is 650 feet long but results in an 8% slope, very steep for trucks, and requires an elevated roadway, similar to a bridge, to maintain this constant slope. Option B, 900 feet in length, is considerably less steep at 5.4% but also requires an elevated roadway. Option C extends a considerable distance 2,100 feet, before connecting to Warburton Avenue where no present housing exists. The slopes are acceptable, and at least half the roadway is not elevated.

The first two options, A and B, could be erected on Village owned land and are plotted to open onto Warburton Avenue where no residents are immediately situated. Option C would require considerable negotiations and/or condemnation of land. It would, however, open out onto Warburton where the nearest residences are some distance away.

The primary benefit of this alternative approach would be to eliminate southbound traffic through the Village. Northbound traffic would still need to traverse Hastings' Central Business District. The real problem is the fundamental incompatibility of the heavy trucking required by oil-related operations and street capacities and domestic scale of the Village of Hastings. The waterfront location derives historically from the economics of barge deliveries. This is now of diminishing importance and may be phased out altogether. Most of current use is truck-to-truck. In the long run, the predominantly residential small-scale character of Hastings should have priority in these decisions, and the oil operations will consolidate elsewhere. The Village now has the opportunity of unequivocally stating this as a policy goal —to discourage further oil-delivery operations (as distinct from other industrial-type activities not requiring heavy regular trucking burdens on the Village).

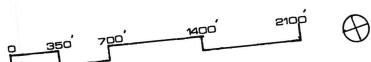


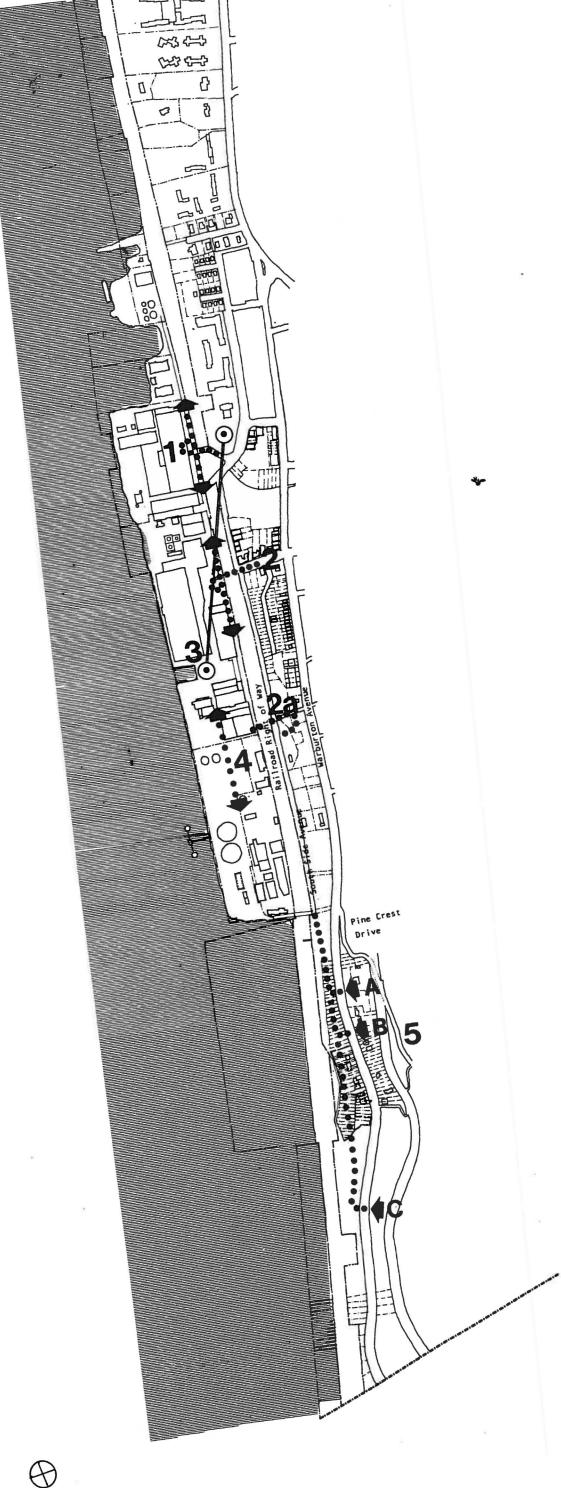
Vehicular Access Alternatives

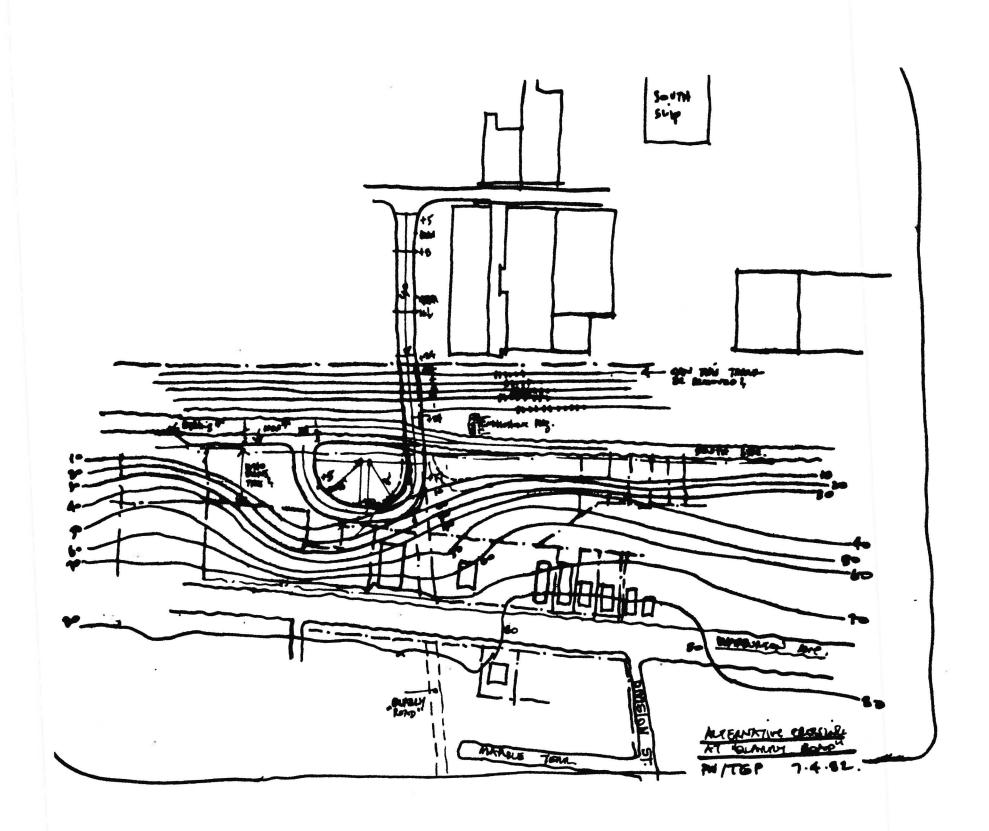
1 Dock Street Bridge Access Improvement 2 Washington Avenue Bridge Access 3 Civic Center and South Cove Trolley Connection 4 Access through Mobil Oil & Uhlco Sites 5 South Side Avenue and Warburton Avenue Connector Option A Option B Option C

> Comprehensive Waterfront Development Plan Village of Hestings-on-Hudson

The Gruzen Partnership Architects, Planners







Vehicular Access Alternatives Warburton Avenue Connector 1

Alternative 1

Elevation Variation - 52'

Roadway Length - 650'

SLOPE - 8%

Road Bed Elevation

35 Contour Elevation

Alternative 2

Elevation Variation - 48'

Roadway Length - 900'

SLOPE - 5.4%

69 Road Bed Elevation

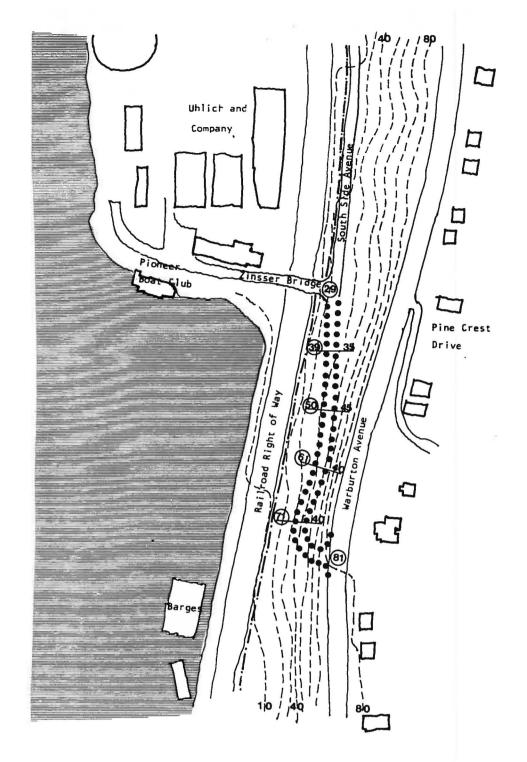
40 Contour Elevation

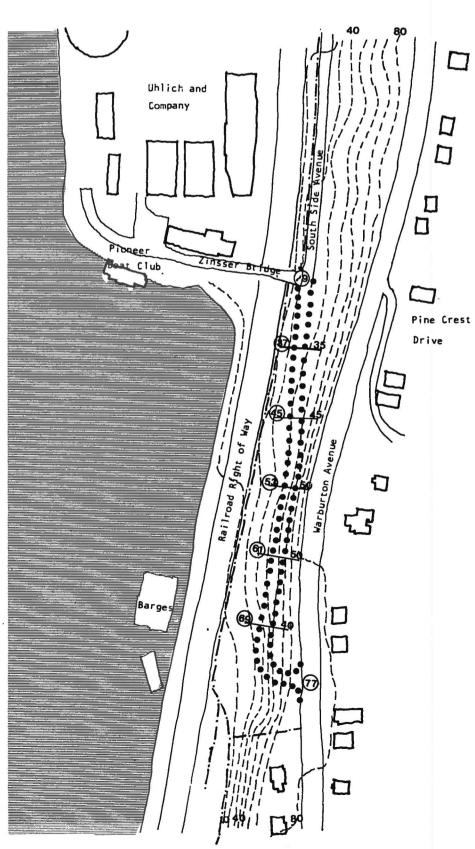
Comprehensive Waterfront Development Plan

Village of Hastings-on-Hudson

The Grazen Partnership Acad Sets, Pareners







Vehicular Access Alternatives Warburton Avenue Connector 2

Alternative 3

Section A-B

Elevation Variation - 50'

Length of Roadway - 800'

SLOPE - 6.25%

Section B-C

Elevation Variation ~ 11'

Length of Roadway - 300'

SLOPE - 3.6%

Section C-D

Elevation Variation - 0'

Length of Roadway - 1000'

Total Length of Roadway - 2100'

Road Bed ElevationContour Elevation

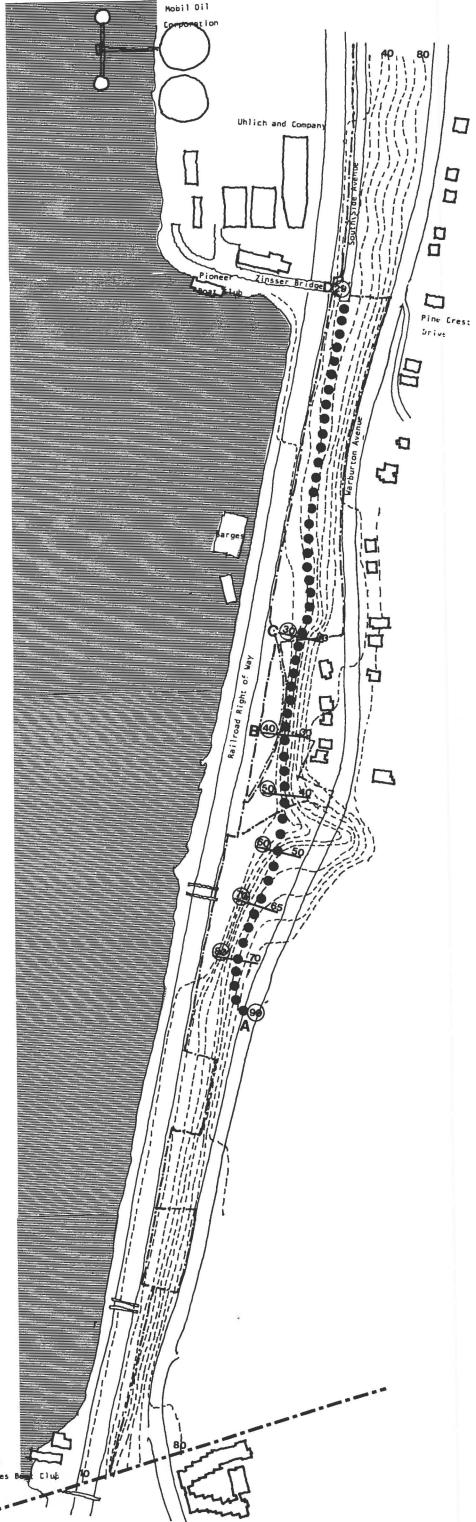
C. T. At ensive Waterfront Development Plan

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Per Grazen Partnerskaj Architects, Planners

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Pedestrian Access

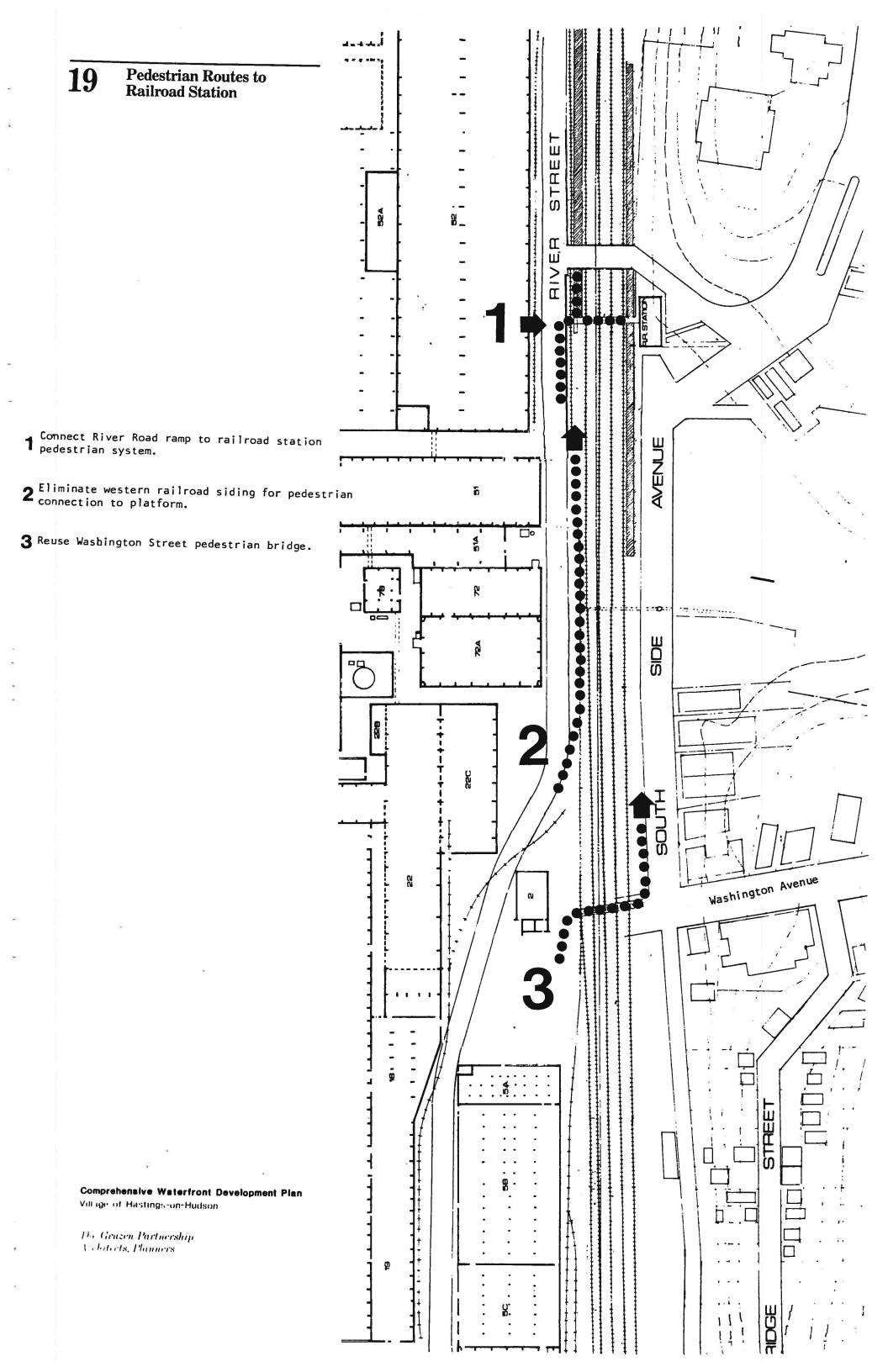
Pedestrian access to the site is of equal importance, both to open up the waterfront, and to relieve potential vehicular congestion by using alternate means of reaching the Railroad Station and the Central Business District.

The easiest means of achieving this would be to extend the Railroad Station pedestrian bridge a few feet west to connect to the ramped sidewalk along River Street rising to meet Dock Street.

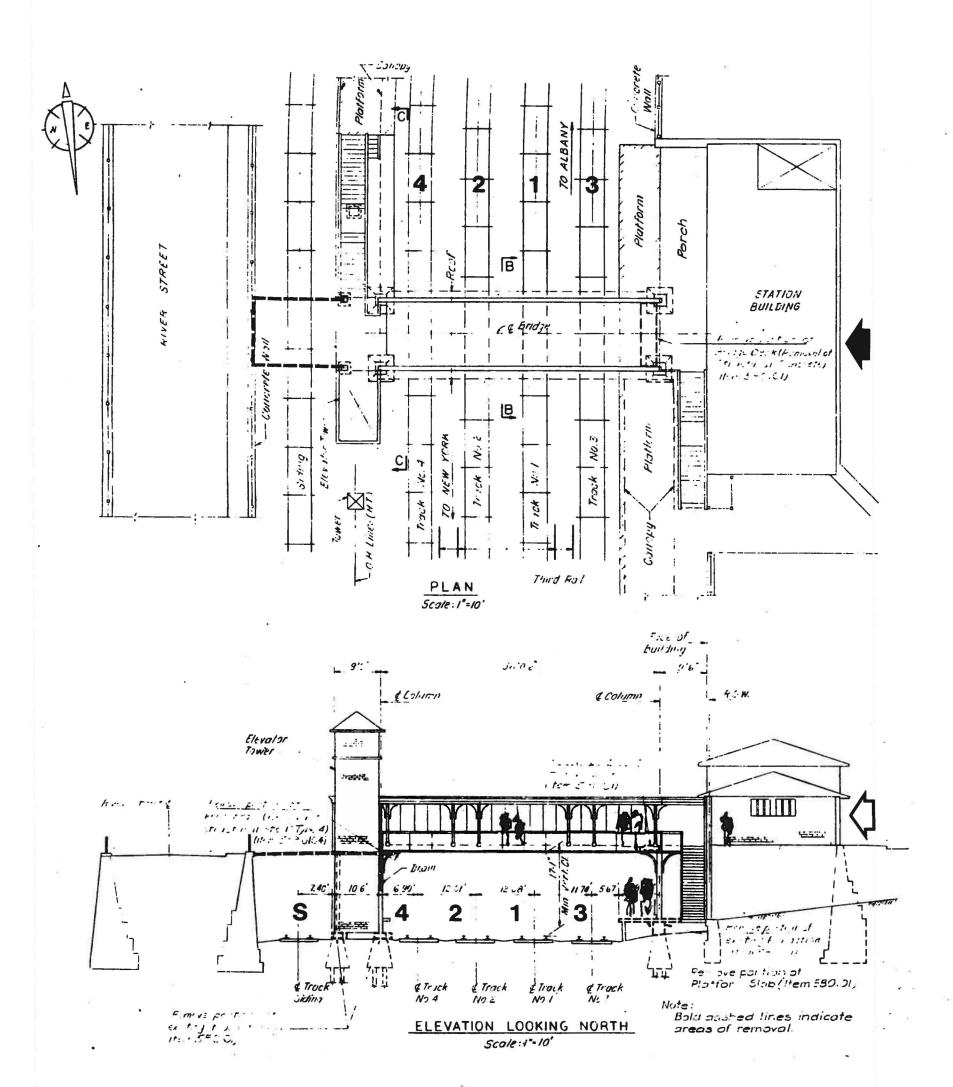
A second means of access would be to replace the Washington Street pedestrian access bridge, which occupies a logical place in the commuter/railroad route, particularly for the evening connection.

The morning commuter access from the new homes could be handled by an extension of the western train platform southward to the foot of the River Street ramp. This would both ease access and shorten the trip, and in no way inconvenience existing commuters.

The Village can also negotiate with Conrail to obtain the right of way now occupied by its western siding. This siding is now unused and would not be required at all if the waterfront were to become residential. Providing such an access, and using the River Street ramp up to the Railroad Pedestrian Bridge level, pedestrian access would be provided to both the Station and the Central Business District.



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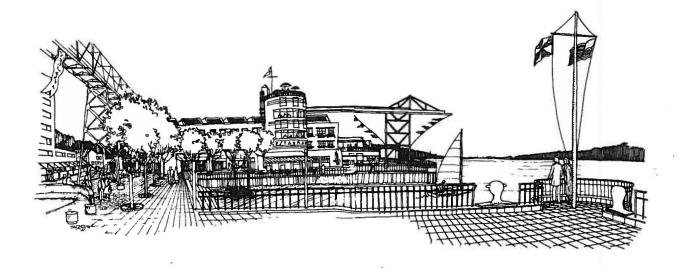
On a more ambitious level, an aerial tramway from some point at Fulton Park to the South Mill Cove could be built, spanning the railway in one bold leap. This would create a local attraction, and reduce vehicular traffic to the South Mill Cove.

The cove itself will be the center of a cluster of restaurants and specialty shops catering to the new development as well as to the established Village businesses up the hill. The tramway would be smaller in scale than the one used at Roosevelt Island. Possibly a purchase of such a used tramway from an exposition, as was done at the Bronx Zoo, could be built with developer assistance. The problem here is to justify "first cost" in the long gestation period required to build up the population and retail business.

Waterfront Access

Pedestrian access to the waterfront is of prime importance. It would finally give the residents of Hastings-on-Hudson access to the river for which the Village is named. Such waterfront centers seem to fall logically about the North and South Mill Coves which already have an urban plaza character which can be easily enhanced. The two "Mill Coves" areas would be zoned to provide public plazas and, at the same time, a higher density to encourage a more concentrated population. The incorporation of mixed use facilities such as restaurants, retail, professional office space, etc. will help to create active centers that would generate self-policing of the otherwise isolated river edges.

A public pedestrian easement could also be established, setting up a waterfront promenade connecting the two coves and the entire water frontage. There are good arguments both for and against. On the one hand, continuous public access to the waterfront is an important goal and a natural expectation of this major effort. On the other hand, security would be difficult to achieve in an isolated and narrow stretch 600 feet long, to say nothing of the costs of maintenance, especially since the river edge bulkheading must be continuously and expensively repaired. Moreover, the marketability of residences directly at the edge of the river would be increased while the first two problems would be resolved. This very increase in marketability would generate additional tax revenue to the Village to allow it to develop further other existing parks and areas. This question deserves further close investigation.

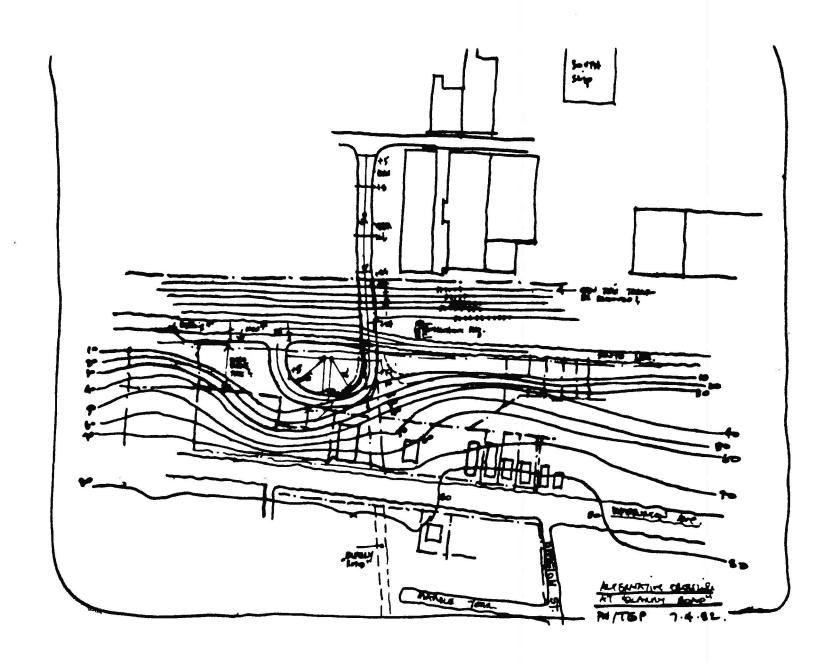


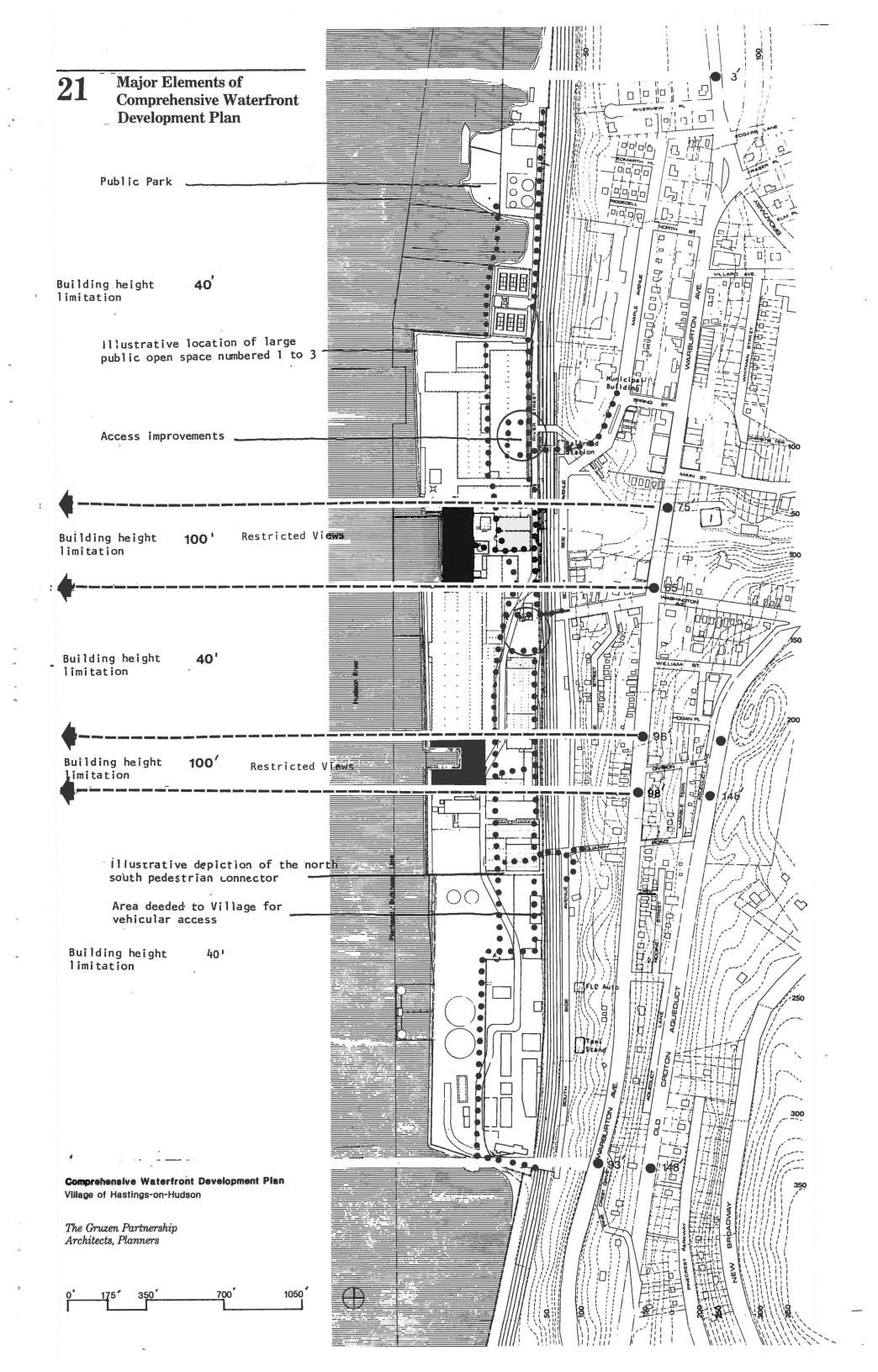
We have reviewed zoning regulations in communities throughout Westchester, especially those for communities adjacent to Hastings. Our zoning proposal is based on the existing regulations already enacted into the Village Zoning Ordinance. We have strived to achieve a balance between the density necessary to provide an incentive for developers and the densities that are absorbable by the Village.

The existing zoning of the major landfill areas is GI-30, which is General Industry with a minimum lot area of 30,000 SF. The submerged State owned land to the south of Zinsser Bridge is zoned RI-20, or one family residential with a minimum lot area of 20,000 SF. The land north of the major landfill is zoned MW, or Marine Waterfront. This includes the Robison Oil property, the Tower Ridge Yacht Club, the Hudson Valley Tennis Club, and the Marinella site.

The primarily residential zoning directly east of the waterfront landfill area and surrounding the Central Commercial District (along Warburton Avenue) is RMF-1.5, RMF-2.5 and RI-7.5. RI-7.5 is the densest one family residential zone allowed (minimum lot area 7,500 SF or one fifth of an acre per unit). RMF-2.5 and RMF-1.5 are both multi-family residential designations, one with minimal lot areas of 2,500 SF and the other 1,500 SF.

The basic proposal now is to rezone 31 acres of the approximately 44 acres of the landfill area now zoned IG-30. The southern end, presently actively used by both Mobil and Uhlco, will remain IG-30 (with the exception of four acres included in the rezoned area). Rezoning would not affect present activities, but owners would not be able to expand facilities in the future.





DENSITY CONTROLS

The proposal is to rezone the central 31 acres as RMF-1.5. The density allowed by the Hastings Zoning Ordinance under such a designation is 29 units per acre. A road, built to Village specifications, will be established between the Dock Street Bridge and the Zinsser Bridge with a fifty foot wide right-of-way. Included in this road easement would be two acres to be held in reserve for possible access improvements. One would be immediately west of the Dock Street Bridge and another to the west of Washington Avenue or Quarry Road. The total road easement would then be 4.43 acres. The developable area would therefore be 26.12 acres. Multiplied by the overall RMF-1.5 density of 29 units per acre, a total of 755 units is generated. This figure closely approximates density calculations arrived at by tests of alternative site massing and circulation configurations.

If the 29 units per acre density were spread uniformly throughout the site, it would require the predominant use of six story multi-family dwellings. This would be at once too low and too high -- uneconomical in a marketing/cost sense and unsatisfactory from a view perspective as seen from the Village and inside the buildings themselves.

Thus it is proposed that the 29 unit average be weighted in two directions -to a low density maximum of four stories for the bulk of the site, and
a medium density maximum of ten floors in the two Cove areas. This
latter category is also defined by the Hastings Zoning Ordinance.

The existing Coves, with their already developed "urban" character, lend themselves to such treatment. Introduction of a higher density and surrounded by activity generated by retail and office uses limited to the Cove areas, would provide the ideal character for not only the new developments but the Village itself.

We therefore are proposing to redistribute the overall density into low and mid-density areas. The two mid-density zones would be limited to the North and South Mill Cove areas. The South Mill Cove, an area of 250 by 250 feet, is to be permanently designated for public use. The same would apply for the North Mill Cove, an area of 360 by 150 feet adjacent to the Hudson River.

Each mid-density zone would be allowed one mid-rise building up to one hundred feet or ten stories in height, whichever is lower, as defined under RMC-80 of the Hastings Zoning Ordinance. The North Mill Cove area, larger than the South, would allow one more mid-rise building, limited to sixty feet or six stories, in the north area of this Cove, in order to enable the rest of the rezoned area to be redistributed to a lower density and height. Any additional buildings in the middensity Cove areas would be limited to four stories or forty feet unless they are recycled existing buildings.

The large areas between the two Coves would be redistributed to a density of 23 units per acre, while the smaller Cove areas raised to 46 units per acre. The developable low density areas, 7.26 acres at the South, 6.17 acres in the Center and 6.00 acres at the North, could produce up to 447 units. The South Cove area at 2.17 acres could produce 100 units while the North Cove area at 4.52 acres, could produce up to 208 units.

The 755 units would be divided into 308 mid-density units and 447 low-density units.

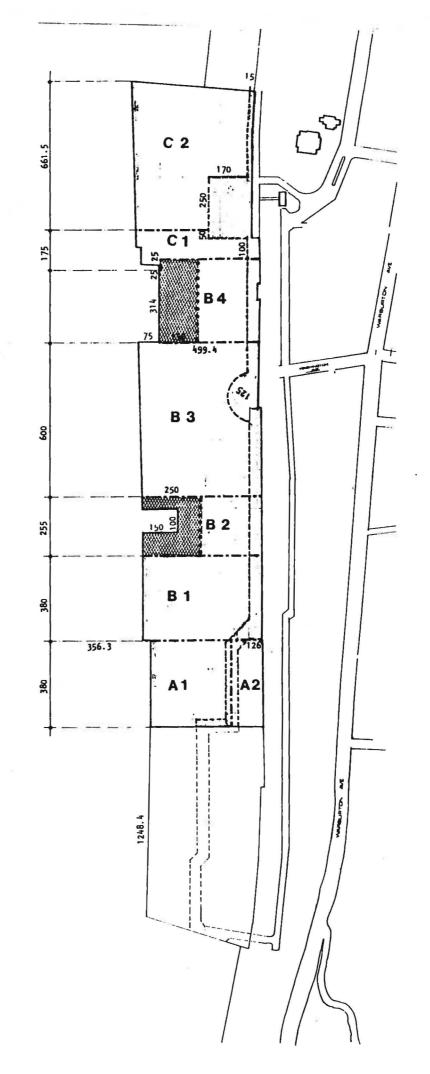
The adjacent chart for the "Proposed Rezoning of the Waterfront at Hastings-on-Hudson" breaks down the development further into areas A through C within the four owner property lines.

22 Density Controls

DIMENSIONS BASED ON VILLAGE TAX MAPS

EASEMENT EXCLUDED FROM NET DEVELOPMENT AREA

EASEMENT INCLUDED IN NET DEVELOPMENT AREA



	OWNER	GROSS AREA	GROSS TOTAL	ROAD R.O.W.	TOTAL DEV. AREA	RMF 1.5 DENSITY	DEVEL ABLE AREA LOW	OP-	DENSITY DISTRI- BUTION	NUMB UNIT	ER OF S MID	TOTALS
A-1	MOBIL	3.10 ACRES	4.20A	.41A			2.69A		23	62		82 UNITS
A-2	UHLCO	1.10A		.24A	3.55A		.86A		23	20		
B-1	HASTINGS ASSOCIATES	4.23A		.52A			3.17A		23	85		
B-2	HASTINGS ASSOCIATES	2.52A	17.73A	.35A	15.05A	29 UNITS/ACRE THROUGHOUT		2.17A	46		100	
B-3	HASTINGS ASSOCIATES	7.50A		1.33A	13.03A				23	142		465 UNITS
B-4	HASTINGS ASSOCIATES	3.48A		.48A	1.5			3.00A	46		138	
C-1	SERVICE MANUFACTURING	1.64A	9.04A	.12A	7.52A		1.52A	.52A 6.00A	46		70	208 UNITS
C-2	SERVICE MANUFACTURING	7.40A		1.04A	, , , , , , , , , , , , , , , , , , , ,				23	138		
TOTALS		30.97A	30.97A	4.43A	26.12A	290 U/AC	19.43A	6.69A	29 AV.	447DU	308DU	755 J UNITS

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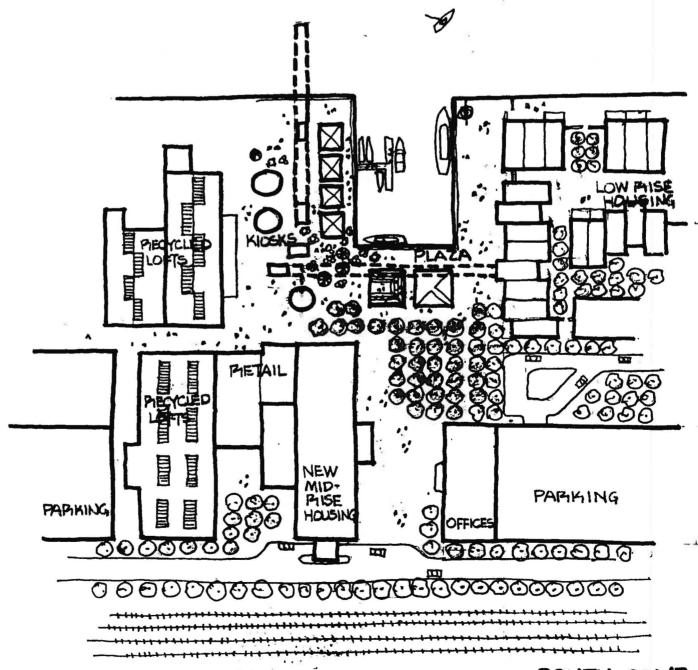
The entire rezoned waterfront area, as mentioned earlier, is to have a height restriction of forty feet or four stories, whichever is less. At the mid-density Coves the height restriction will be 100 feet or ten stories, whichever is less. At each Cove a single building will be permitted conforming to this restriction, perpendicular to the river, to minimize the view interference. Within the C-I area to the north, a single building of sixty feet (or six stories, whichever is less) will as lo be permitted.

Buildings are to be set back a minimum of 30 feet from the zoning lines and are not required to be set back from easement lines. Mid-rise buildings are to be at least 60 feet from other buildings above the first story. Low density buildings need not have side yards. Front and rear yards are as per existing regulations.

Parking will be provided in both on-grade and in multi-tiered garages. A minimum of 1.5 spaces per unit is suggested. If the limited retail and office space were built in the mid-density areas, some additional parking should be provided. Thus we estimate a total of 1,200 spaces would be adequate for the project, as the peak load for commercial and visitor use should not coincide with that of the residential.

Some of this parking can be provided in a structure approximately 120 feet wide and three levels high along the eastern edge of the project. Some will be provided in enclosed or on-grade spaces within the residential units, adjacent to the dwelling units, or in them.

With good, direct pedestrian connections to the commuter station nearby, the peak usage of automobiles can be kept to a minimum.



Commercial Development

Commercial development is to be restricted to the two mid-density zones at the Coves, and be allowed to penetrate sixty feet past each side of the line separating mid from low-density. This would allow the lining of restaurants, shops or office space on both sides of the Coves which is necessary to ensure a lively and exciting character at these public areas.

Retail is to be equally divided at 15,000 gross square feet for each of the two Coves for a total of 30,000 square feet. The South Cove, although smaller, is the most compact, has the most potential for reuse of existing buildings, and is the furthest from the existing Central Business District of Hastings. Therefore, we visualize a demand for restaurants as well as certain convenience shops for the residents.

This proposed shopping will in no way detract from, or reduce, demand at the Hastings retail area; on the contrary, the total impact of the new population should be to increase sales at shops on Warburton, Main, Spring and adjacent streets, with their 132,000 square feet of shopping area.

With the revitalization of the waterfront area, there will be a small demand for offices for professional or service-oriented businesses. We are proposing that a total of 50,000 gross square feet of office space be allowed in the same zoning area defined for retail.

Easements

The two Coves will be created by means of permanent public easements, or they can be deeded outright to the Village. They will provide pedestrian access, for the first time in many years, to the Hudson River for the Villagers. As described elsewhere, the cost of improving the Coves will be borne by the developers. The Coves will be connected to connecting promenades as well as to the vehicular service road and linear walks.

The "spine" vehicular road is to be built by the developers according to Village specifications. The road and pedestrian walk within a fifty foot right-of-way will be given to the Village as a permanent public easement. The Village is to negotiate and purchase the necessary right-of-way to connect this "spine" road to the Zinsser Bridge, as this proves necessary.

These easements will be widened, as shown in our plans, to provide improvement sites for vehicular access as the development rises above the first 500 units. These are described under "Vehicular Access".

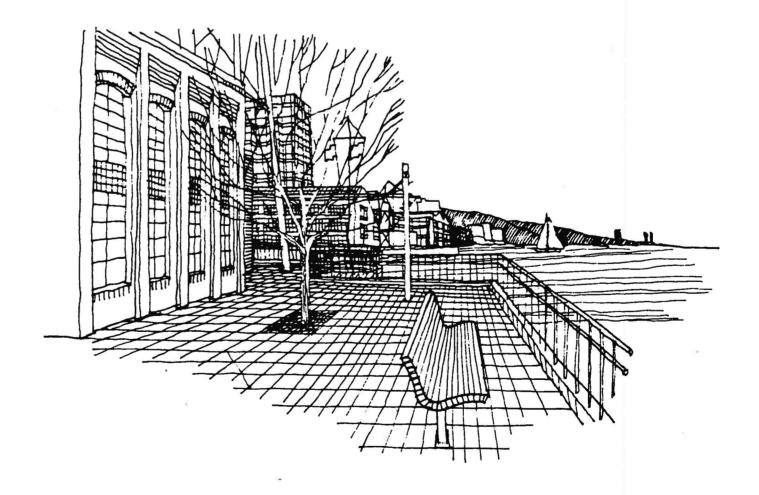
PUBLIC AMENITIES

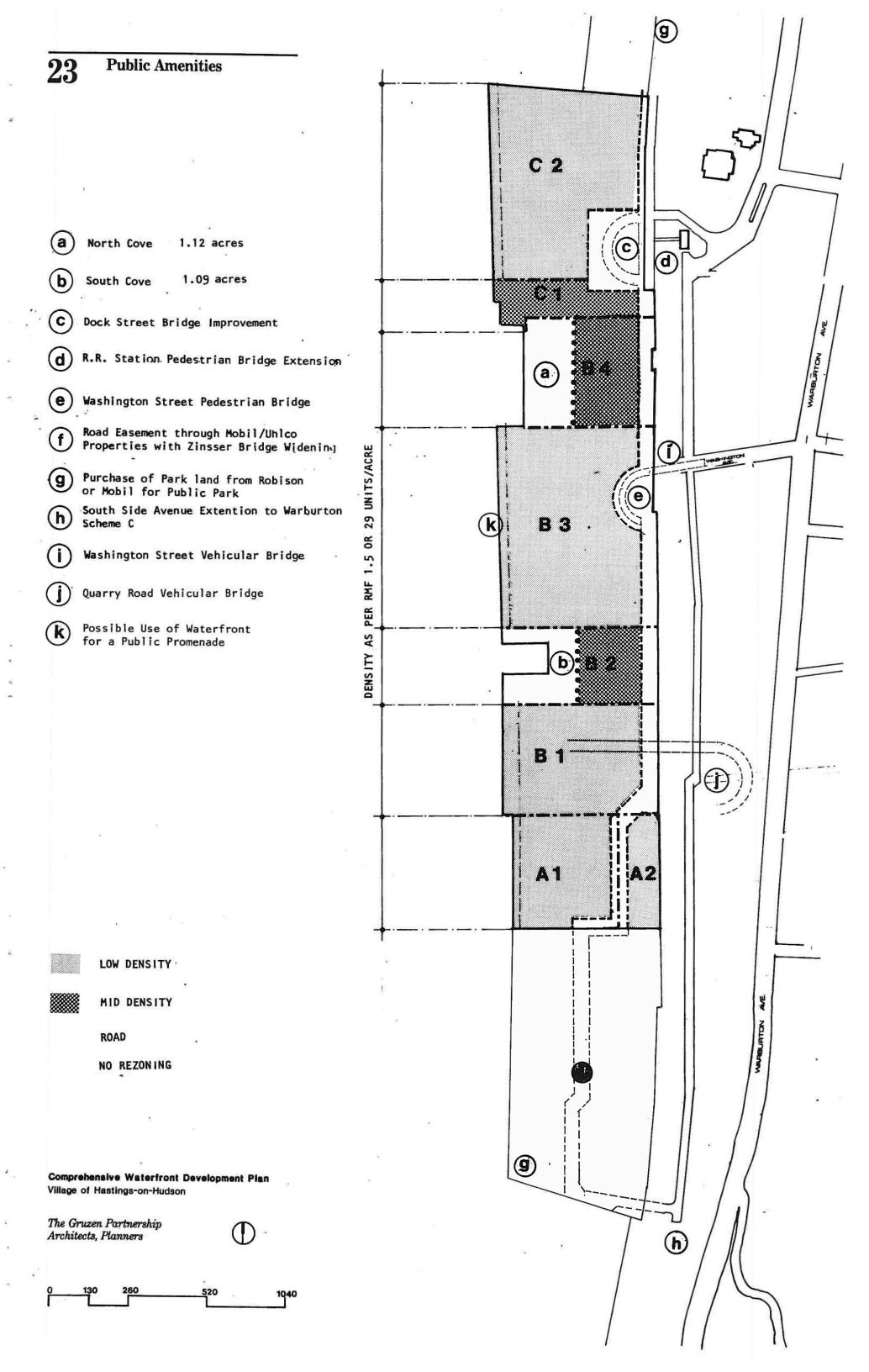
In addition to the major public spaces and streets, the Village of Hastings can also impose a negotiated fee per unit to be paid for by each phase of construction into an amenity fund to be controlled by the Village. This fund will be for the payment of specific projects relating to the waterfront plan. Included in this list will be funds for the acquisition and development of a public park (probably at the extended Robison site to the north) possibly including play areas and a beach (anticipating continuing Hudson clean-up), improved pedestrian connections at the railway station, the pedestrian inter-Cove promenade (whether at the river or inland), a new park ultimately to be built at the southern end of the landfill (the Mobil property).

Many of these amenities will enhance the value of the waterfront in terms of its marketability, and some might have been adopted by the developers on their own initiative. Others must be seen as part of an overall agreement to provide public access along side of profitable private growth. In the former category are included such items as pedestrian and vehicular access, open spaces and bulkhead repairs. Others, such as parkland or extensions of the road, fit into the latter category.

A preliminary list of public amenities follows:

- Improvements to the North Cove with appropriate paving, repair of bulkheads, landscaping, lighting, sculptural or other feature, skating rink, amphitheatre and/or boat docks to be used by the general public.
- 2. Similar improvements to the South Cove.
- 3. Pedestrian bridge extension at the Railroad Station.
- 4. Pedestrian bridge across Washington Avenue or further south.
- 5. Extension of the "spine road" and right-of-way easement into the two southern properties, connection to and widening of the Zinsser Bridge.
- 6. Improvements to South Side Avenue.
- 7. Purchase of potential parkland from Robison Oil Company (2.7 acres) or Mobil Oil Co., or both. Development of such land, with prime vistas, into public parks with such amenities as fishing, boat ramps, recreational and athletic facilities.
- 8. Dock Street Bridge improvement (new ramps to grade).





As revenues to the Village will increase, so will the costs to the Village for services to be provided for the new waterfront development.

We have prepared the following list with the help of the Village Manager.

IMPACTS

1. Police:

Two additional police positions at the peak shift (one for traffic, one for patrol). Two positions require five police officers for partial coverage during the other two shifts, weekends, vacations, sick leave, etc.

2. Fire:

An additional ladder truck may be necessary, amortized over twenty years.

3. Garbage:

We are estimating an additional three person crew with the cost of amortization of an additional, new garbage truck. This cost may be reduced if the developers are required to provide this service in whole or in part.

4. School:

As discussed earlier, the school plant is adequate for the estimated 270 children. Additional staff will be paid by the increased school tax revenue.

5. Recreation:

One additional maintenance person and slightly increased budget to service the new waterfront park at either the Robison or Mobil sites. The cost of land and improvements are to be paid by the public amenities fees per new unit.

6. Library:

We estimate the need for an additional librarian and part-time clerk as well as a slight increase in the book budget.

7. Department of Public Works:

During the period of development, an additional person is required to help process plan reviews and inspection of construction as well as additional part-time clerical help.

8. Additional budget increases should be made for additional snow removal, road and utility maintenance, increased ambulance service etc..

The total estimated increase in Village gross yearly expenditures (in 1982 dollars) for the above services would be approximately \$400,000.

BENEFITS

Population Projections

Assuming 755 new housing units, and the same household size as Hastings now has (2.70 persons per household), the population of the waterfront development will be 2,039 at its completion in five to ten years.

This increase would, if added to the 1980 census of 8,445, result in a total Village population of 10,584. However, assuming a 1995 completion, the total population will be 9,839 (assuming the correctness of the projections of continued decline in the Village population made by the Westchester County Department of Planning).

The population of Hastings in 1965, established during a special census, was 9,777.

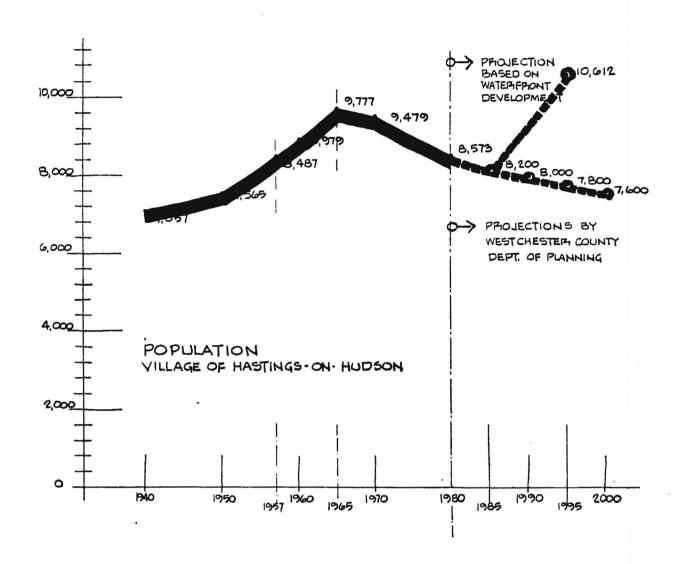
Actually, projections for household size are also assumed to decrease (2.60 persons per household in Hastings in 1995). Total population may well be less than existed in Hastings in 1965.

We can thus say that the anticipated 1995 population of Hastings will be close to the population of 1965.

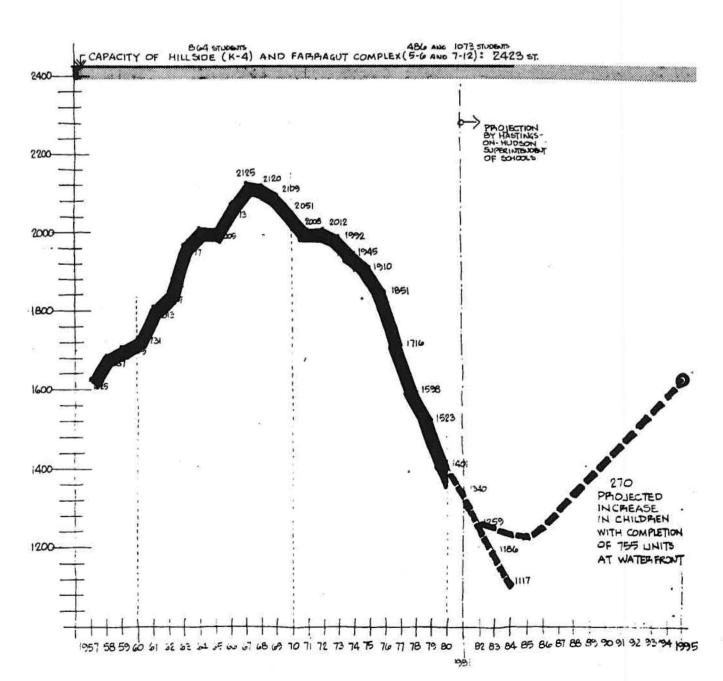
The school population is projected at 270 additional children. This is based on standard planning factors of 0.5 children per low-rise unit ($447 \times 0.5 = 224$) and 0.15 children per mid-rise unit ($308 \times 0.15 = 46$).

The 1981 enrollment in the Hastings schools was 1,340, down from 2,125 in 1967. The total capacity of Hillside School (864 students, K through 4th grade) and the Farragut Complex (1,559 students, 5th through 12th grades) is 2,423. Further declines are anticipated in the future. The increase in school children will use up some of this excess school capacity, while the increased tax revenue will raise the overall school budget at the same time.

Population Trends and Projections



School Enrollment Trends and Projections



Projected Assessments & Tax Revenues

Developments in adjacent communities are presently selling attached, low-rise condominiums, of a quality appropriate to the market at the proposed waterfront development. They vary in quality, view, amenities, size and character. They range in price from \$150,000 to \$225,000. For the sake of our analysis, we have assumed an average cost for the low-rise units of \$180,000 and the average cost of a mid-rise apartment as \$120,000. Thus the 447 proposed low-rise units would be sold for \$80,460,000 (in 1982 dollars), while the mid-rise apartments would be sold for \$36,960,000. The total development (of the residential development alone) would be sold for \$117,420,000. The commercial space will cost \$5,200,000, for a total of \$122,620,000. (The public amenities, plazas, parks, roads, etc. will not of course be taxed.)

The Village presently assesses 14% of the market value of residential buildings for tax purposes. The assessment value of the waterfront rezoned area would be thus \$16,440,000. By contrast, the same area is currently assessed at \$1,131,500. Assuming current rates of taxation, (1) below, this means that the total tax revenue when the waterfront development is complete will be \$3,222,690 in contrast to \$61,119 at present.

The net tax revenue to the Village only will be \$888,000 minus the \$400,000 in service costs. The net benefit to the Village will thus be \$488,000.

The projected increase in revenue for the Village, School District and the Town of Greenburg is considerably more than ever achieved with Anaconda, even if inflation is taken into account. At the same time, the Village would gain access to the waterfront, achieve vital and exciting centers by the Cove, and obtain waterfront public parkland.

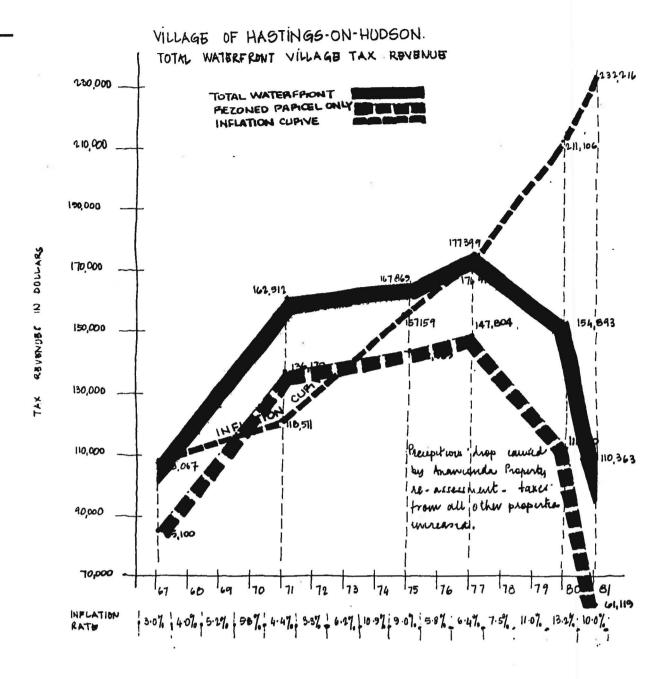
(1) Village of Hastings-on-Hudson: School: Town of Greenburg:

Total Projected Tax Revenue:

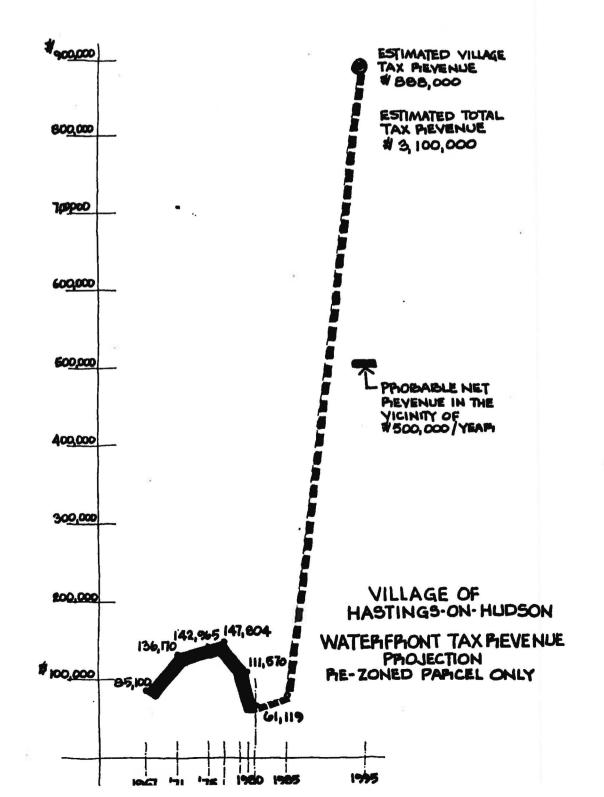
\$54.01/\$1,00 assessed = \$ 888,000 \$110/\$1,000 assessed = \$1,888,350 \$26/\$1,000 assessed = \$ 446,340

= \$3,222,690

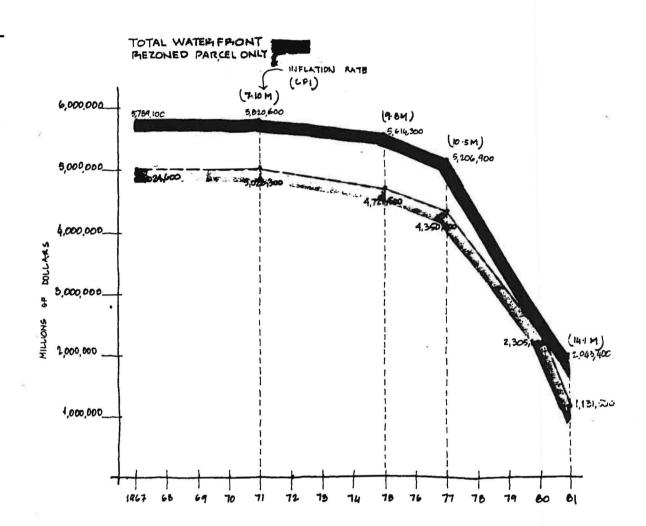
Waterfront Tax Revenue



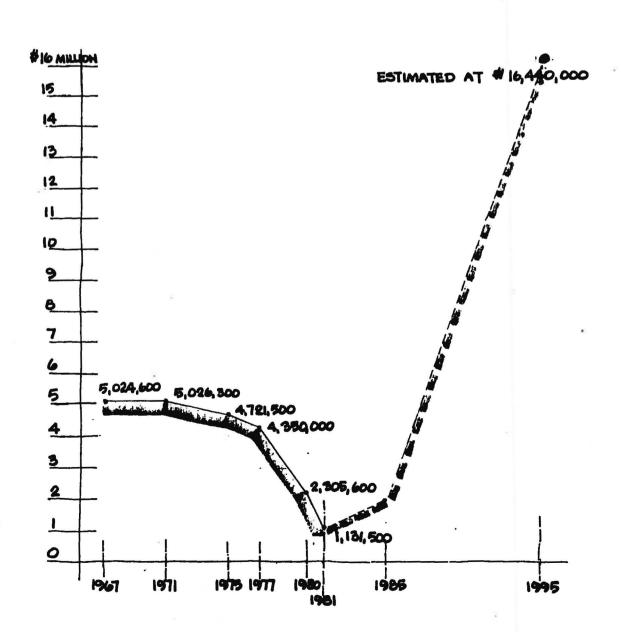


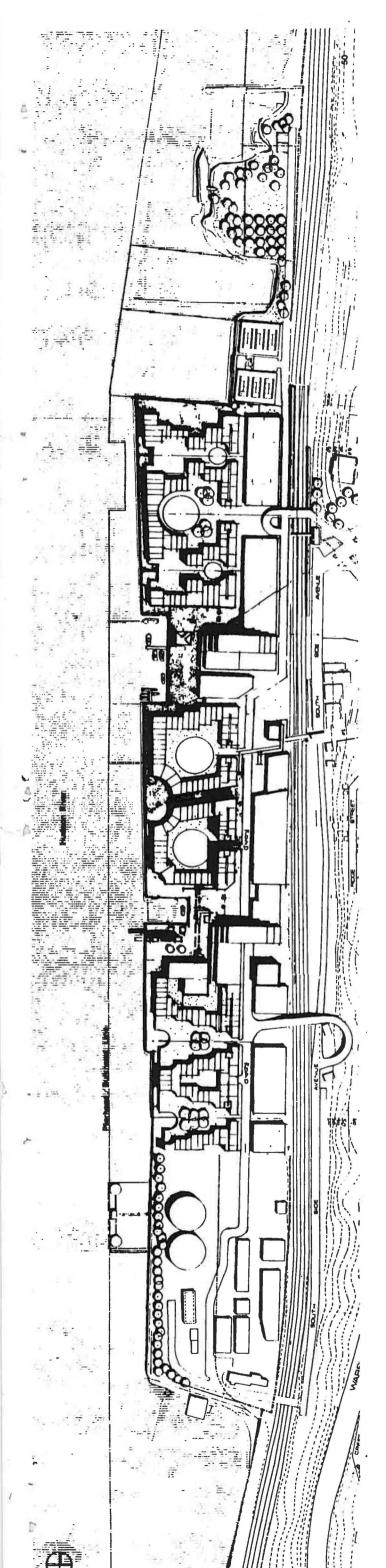


Waterfront Assessments



Projected Assessments in Re-zoned Parcels





4 August 1982

The Village of Hastings-on-Hudson Municipal Building at Fulton Park Seven Maple Avenue Hastings-on-Hudson, New York 10706

Dear Mayor MacEachron, Board of Trustees, and Village Manager Hess:

We submit this final report to you and the Board of Trustees with a sense of special excitement. The time for action on the waterfront seems right. The State's new Coastal Zone Management program has come along just in time to provide that critical extra measure of assistance in the key financial equations of our waterfront plan. At the same time, the State's Department of Environmental Protection has announced that the Hudson River is now fit for swimming as far south as the Tappan Zee, just a few miles to the north of our own shore. And a series of tours of the Hastings waterfront are now underway, involving a wide range of involved Hastings citizens and agencies, focusing attention on our waterfront opportunities as well as on the plans we have set forth, with you, for public review at this time.

These plans provide for a series of waterfront residential communities framed by public recreation spaces, parks, public roads and promenades. The environment will be largely low-scale, with small courtyards, plazas, and vistas of the Palisades -- reutilizing existing older brick structures where suitable. The plans provide the basis on which the Village can come together under a single vision, on which the public and private sectors can negotiate the practical steps to implement our historic waterfront goals.

The Village of Hastings must, in a clear voice, declare where it stands, what it wants for itself, what it will accept, and live with. The private developers will then respond with their concrete proposals in the context of the Village's expressed viewpoint. And on this basis, we believe, the long-delayed Hastings waterfront revitalization will soon take form.

The first step is a Resolution of support for the plan, and the second step is the adoption of a zoning package to implement it, along with a statement of the specific public amenities to be provided in exchange by the private sector. All this can happen this Autumn, and the first groundbreakings should be scheduled for next Spring.

We are ready, of course, to continue to assist you in this effort in any way you deem appropriate. For George Yourke, Devpai Duggal, myself, and the rest of our team at The Gruzen Partnership, our very highest regards.

Cordially,

Paul WMen

Paul Willen, AIA Partner

PW: lkr

ACKNOWLEDGEMENTS

BACKGROUND & RECOMENDATIONS

Land Use

Urban Plan

PHYSICAL CONDITION

Topography And View Sheds

Structural Analysis

Preliminary Engineering Feasibility Study by Severud, Perrone, Szegezdy and Sturm, Consulting Engineers, P.C.

Access - Vehicular And Pedestrian

ZONING PLAN

The Zoning Plan

Density Controls

Zoning Restrictions

Public Amenities

IMPACTS & BENEFITS

Impacts: Municipal Service Costs

Benefits: Population Projections

Projected Assestments & Tax Revenues

Acknowledgements

We would like to thank the Mayor, members of the Board of Trustees, Planning Board, Zoning Board of Appeals, Waterfront Redevelopment Committee, Village Manager and his Administrative staff, for the Village of Hastings-on-Hudson, who participated in the Phase I & II efforts of the "Comprehensive Waterfront Development Plan. Mayor MacEachron and Village Manager Neil Hess and his staff, have played major roles in all of the work to date.

date.
Special thanks are due to the Water-front Establishments who provided us with overview of their activities and physical plant. We were also assisted by the Westchester County Planning department in obtaining relevant data necessary for this phase.

THE GRUZEN PARTNERSHIP

Paul Willen A.I.A. Partner-in-Charge

George Yourke A.I.A. Project Manager

DevPal Duggal Project Planner

Janice Carapellucci Graphic Designer

Ralph Steinglass Studio Director

Peter Gumpel Studio Director

Project Team: Susan Drew Glenn Jaffe Rita Muncie

Participants

VILLAGE OF HASTINGS-ON-HUDSON

Mayor: Fran MacEachron

Village Manager: Neil Hess

Board of Trustees: William Goodwin William Lee Kinnally, Jr. Edward J. Murray Carol Shryock

Planning Board:
Marvin Weinberg, Chairman
Alex Rakotz
Louise Leaf
Gerald Franz
John Fox
Edmund Maleska

Zoning Board of Appeals: Mrs. Cecile Libby, Chairman Charles Saeger Michael J. Fogarty Michael A. McElroy Alfred A. Hansen

Waterfront Development Committee:
Gerard Diaz, Chairman
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Bernard Weissman
Marvin Weinberg
Monica B. Zulauf

Village Attorney: Robert J. Ponzini

Village Planning Consultant: Manuel S. Emanuel

Village Administrative Staff: Mary Callas Ellen Tro

WATERFRONT ESTABLISHMENTS

Tower Ridge Yacht Club: Jim Clark, Commodore Ben Cibo

Robison Oil Company: Robert Peckheiser William Sommers

Hudson Valley Tennis Club: Terry Alleyne, President Dorthea Perry, Vice President

Service Manufacturing: Elliot Edelman William M. Drysdale

Hastings Associates: Mitchell Benerofe Jasper Frand Peter McDonald

Uhlich Dye Company: Justin B. Arnold Michael G. De Maio

Pioneer Yacht Club: Frank Fisher, Commodore Steve Cuppack, V. Commodore

10

South Cove Sketch

Elevation of Village

This is Phase II of the Comprehensive Waterfront Development Plan, commissioned by the Board of Trustees last December. The charge to The Gruzen Partnership was to develop a specific plan around which the Village could rally and thereby end two decades of delay, rebuttal and paralysis in the history of the Hastings waterfront. The goal was to get Hastings finally to get "its act together".

The Phase I report dealt mostly with existing conditions and conceptual alternatives. The Phase II work deals mostly with alternative visions and systems of implementation, including the maximum development vision (which was rejected) and mixed-use waterfront residential communities (which has been strongly recommended).

Maximum Development

The first alternative assumed maximum development of the waterfront in terms of its own great spatial capabilities and its extraordinary visual magnetism. Under this category were a series of proposals for high-volume activities utilizing some of the large existing buildings left over from Anaconda's huge industrial operations. This included such activities as a Shopping Center, a Conference Center, an exhibition/convention hall, a hotel or amusement area. The physical plant could easily be created for such ambitious schemes and, together with the excellent rail connection, could conceivably attract large numbers of people. This would bring considerable revenue to the Village, enliven its atmosphere and generate new customers for its retail businesses.

After brief consideration, this basic option was ruled out. Several reasons can be mentioned:

- a. Access In terms of both auto and truck access, the site is poorly located. It cannot compete with sites on the County's excellent interstate/parkway systems. Neither its fine rail or water systems can compensate for this. The need to traverse the Village of Hastings with its complex road system and steep gradients would mean an endless confrontation between the Village and its waterfront that would be a source of major friction.
- b. <u>Character</u> The high volume solutions must also mean an acceptance of a major change in the character of Hastings itself. The predominantly residential Village would become a Cultural/Commercial center, shifting the balance to the waterfront and the dynamic outside groups that developed it.

2. Mixed-Use Waterfront Communities

The second option is to see in the waterfront an opportunity for an extension of the residential community of Hastings, along with the development of recreational waterfront facilities for the use of the Village itself. In this option the goal would be to maintain the scale and character of the Village, utilizing a variety of building types consistent with the high value of the land along the water's edge. In effect the Village would simply reach out to the waterfront, carrying its life style with it. At the same time, the Village would ensure that its citizens would have continuing and substantial access to the waterfront.

In return for the rezoning necessary to enable residential development to occur, the Village would require the potential developer's participation in this joint process. Included in such a proposal would be public open space, modest office and retail facilities, and Village parks and promenades.

This was the so-called "mixed-use" option favored by the Village residents in polls taken a year or two ago. This option is more amenable to the sensitivities and history of the Village and more compatible with its street system and its resources.

Mixed-Use Waterfront Communities is the basic option that has been developed in Phase II of this planning effort, and which is described in this report. This option is based on several assumptions: First, that the waterfront must itself generate the funds for its renewal and that only a minimum of up-front money will be available to assist in the redevelopment (such as Coastal Zone Management and County road funds). Second, that no major improvement will be made in the existing Hastings road system, and that the capacity of this system sets an ultimate cap on waterfront growth. Third, that no development can occur which does not simultaneously provide for strong Village involvement in the planning and use of the waterfront land. Fourth, that the most effective strategy is for the Village to take a clear initiative in setting forth a development plan, and then soliciting proposals for evaluation in terms of the specific plan itself.

The basic mechanism of the plan is the Village's Zoning Code which provides the use and density categories and controls necessary to implement the plan, as well as the protective application and review procedures necessary to monitor the process as it evolves.

As will be described in the Report, there exists within the Zoning Code a means of governing the implementation of the plan on a month-by-month basis, with strong citizen participation. At the same time, such a Code can provide sufficient commitments to permit long-term planning on the part of the developers. This aspect must not be overlooked, since developer resources are the key to this plan in all respects.

The basic elements of the proposed Plan consist of these:

- 1. The bulk of the waterfront area should be rezoned as Residential, using the existing RMF-1.5 and RMC 80 Categories.
- The three new residential communities will include land set aside for public waterfront plazas, promenades and park areas, open to the Village of Hastings at all times in permanent grants or easements.
- 3. The residential areas will be broken up into three separate waterfront communities with maximum coverage and building heights (recommended maximum: four floors). The maximum number of units will be 755.
- 4. Taking advantage of the existing land configuration, public open spaces or plazas will be created at the North and South Coves. These Coves will be built by the developers, for public use and enjoyment. Limited office and retail space will be permitted at these plazas, as well as a ten-story (100 foot high maximum) residential structure, set perpendicular to the waterfront, at each cove.
- 5. Connecting these communities will be a two-lane north-south road to be built by the developers, maintained by the Village and open to the public. The Road will connect to the Dock Street Bridge. When the waterfront community reaches 500 units, an additional access route must be weighed before additional units are approved.
- 6. Among the amenities for which the developers must provide funds are the following: Footbridge across the tracks to link to the northbound platform; bridge near Dock Street to provide access to southbound platform; plazas and promenades (described above); parkland at southern and northern extremities (Robison and Mobil properties) of the site, second means of egress (at Washington or Quarry Roads); spinal road.
- 7. The proposed developments will, in the five-to-ten year period required for full realization, provide \$888,000 in additional tax revenues to the Village of Hastings, and require an additional \$400,000 in services, resulting in a net gain to the Village of \$488,000 annually.
- 8. The suggested mechanics for the adoption of this plan (with modifications) are roughly as follows: Review plus hearings by the Board of Trustees followed by adoption of a resolution of approval of the basic concepts (with modifications as desired); request for review and adoption by the Planning Board and the Zoning Board of Appeals, which will require development of legal controls by the Village Legal Counsel.
- These steps are designed to allow the completion of the legal rezoning process by the end of 1982, and the start-up of construction on the first community and its public waterfront plaza by the Spring of 1983.

