Title of Document: Ocean View Avenue Corridor Update: Willoughby
Prepared By: Urban Design Associates
Prepared For: City of Norfolk
Date of Preparation: August 2006
Status (as of January 2012): Considered an update of the Ocean View Corridor Study prepared in 2002, providing more detailed recommendations for this area. No action taken by City Council to adopt this plan. Some plan actions reaffirmed by City Council in 2009.
Civic League(s)/Organization(s) Affected: Willoughby

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Norfolk, Virginia  

Urban Design Associates  

September 2006
Willoughby Strategic Development Plan

PREPARED FOR
City of Norfolk
CONSULTANT
Urban Design Associates

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**Overview**

The corridor study was conducted in a public process with a series of working sessions with the Civic League leadership, focus groups with various constituencies, and three public meetings to obtain input and test ideas. The public process has been documented in detail in a separate report, but the central issues that it revealed were:

- Traffic problems caused by the tunnel back-ups, but with great concerns for the impact of new development on traffic
- Streetscape character and general appearance of the area
- The high percentage of rental properties, many of which are over occupied and create parking and social problems
- The difficulty in redeveloping problem properties due to the constraints of current zoning
- The lack of public open space and amenities

It was difficult to find consensus in the public process because there were very different points of view and there seemed to be no idea that was not vigorously criticized by some in the community. Furthermore, the reasons for rejecting ideas were not necessarily factual. In the dynamic of a public program, consensus is essential in order to attract the investment, both public and private, that is needed to overcome the kinds of problems Willoughby now faces.

Therefore, we recommend that it is the role of the Civic League and its committees to determine which, if any of the recommendations can be supported by the community. In the course of meetings following the charrette, the following initiatives emerged as the recommendations to be brought forward to the community:

**Strengths**
- Beaches and waterfront amenities

**Weaknesses**
- Ocean View Avenue as barrier
1. Create Little Bay Avenue streetscapes with roll curb, sidewalk, and new lighting.

2. Improve the Ocean View Avenue landscape to include crosswalks and planting areas along outer edges of the present roadbed, configured to provide a clear 20'0" dimension curb to curb. This would accommodate a 12'-0" lane plus a bike lane as well as large pull off areas to facilitate emergency vehicles in case of breakdowns.

3. Link, through a series of open space and new streets, Ocean View Avenue with Little Bay Avenue at the Captain’s Quarter and 12th View Street.

4. Change zoning to permit higher structures in the middle of the Spit with multi-family building types. We will include guidelines for set-backs, open space requirements, parking requirements and configurations.

5. Illustrate through demonstration projects the potential of these zoning changes as an incentive to property owners.

There are several alternative strategies, including the option of taking no action. This report will include a do-nothing alternative with a description of its consequences.
Illustrative Plan depicting primary initiatives

1. Eye level perspective of improved Little Bay Avenue
2. Eye level perspective looking toward 12th View Street from Ocean View Avenue
3. Aerial view looking toward the American Legion
4. Aerial view of proposed new village square
Analysis

OVERVIEW

Public Process
Following a presentation of research and documentation by Urban Design Associates, participants in the charrette were asked to identify strengths, weaknesses, and areas of highest priority for change in the study area. This information was compiled and used as the impetus for design throughout the charrette process.

X-Rays
Understanding the fabric of the site is a key part of the design process. This is accomplished through a series of diagrams called X-Rays which pull apart information so that the site can be more clearly understood.

Traffic Study
To better understand the traffic conditions in the study area, a Traffic Study was conducted. This study discusses the causes of many traffic problems and provides possible solutions. It also evaluates the possible results of the design proposals presented in this document.

Residential Market Study
A Residential Market Study was conducted to determine the potential market for housing in the study area, as well as evaluate the existing buildings and whether they fulfill the needs. Specific housing types and descriptions were part of the recommendations within the study.
STRENGTHS

- Beautiful beaches and water
- Opportunities for boating, fishing, and sailing
- Public assets such as the boat ramp, marinas, Captain's Quarters, Monkey Bottom Park, and the bike lane
- Strong sense of community
- Heritage and history of Willoughby
- Re-built Ocean View Pier

(TOP): Little Bay Colonial Revival house  
(MIDDLE): Typical beach house  
(BOTTOM): Appropriately scaled and styled beach homes

(TOP LEFT): Water amenities and access  
(TOP RIGHT): The new Ocean View Pier  
(BOTTOM): Shore at Captain’s Quarters
WEAKNESSES

- Traffic, roads, and parking
- Design and maintenance of the streetscape
- Condition and variety of housing types
- Insufficient indoor and outdoor public meeting space
- Safety
- Flooding

Public process to identify weaknesses in the study area
Evidence of ongoing street maintenance
Unsafe and unappealing pedestrian walkways
The streetscape of Mason Creek Road
Street repairs on Ocean View Avenue
The disparity of building types creates odd relationships
VISIONS
- Improved, safe, and pedestrian-friendly streetscape
- Strengthening of a diverse and engaged community
- A variety of community gathering spaces
- More amenities such as small retail, cafes, and restaurants
- Increased owner occupancy
- Enhanced views of the water
- Maintaining public access as well as the residential quality of life

DESIGN PRINCIPLES
- Enhance Ocean View Avenue as the visible focus of community activity and pride.
- Create areas of public open space that celebrate the uniqueness of Willoughby: the proximity of the two coasts.
- Support a variety of housing options while solving the problem of poorly-maintained, high income, rental properties.
- Improve the appearance and access to Willoughby Bay properties.
- Develop a housing strategy that preserves and promotes socioeconomic diversity.
- Develop a comprehensive traffic and parking strategy.
Analysis, continued

X-RAY STUDIES

Portrait

Residential patterns x-ray

Figure ground x-ray

Commercial x-ray

Existing streets and highway network

Existing open space framework
TRAFFIC ISSUES

I-64 Spillover – The Source of All Traffic Congestion in Willoughby

Traffic on Interstate 64 (I-64) westbound approaching the bridge and tunnel section in the vicinity of the Willoughby spit slows to 15-25 miles per hour, with frequent stops, during the daily pm peak period (3:30-5:30 pm). Traffic incidents (vehicle breakdown, running out of fuel, accidents) cause further slowdowns and stops on their own, and greatly intensify the daily recurring backups. Seasonal peak travel (mainly on summer Fridays) to recreation destinations is yet another source of congestion on I-64.

Motorists on I-64 westbound during the pm peak hour, likely to be regular (daily) users of I-64, attempt to bypass delays on I-64 by using local roads to circumvent as much congestion as possible, entering I-64 at the last possible opportunity westbound before the tunnel and bridge.

Attempts by commuters to bypass congestion on I-64, the counter-measures taken by VDOT and the City to get this out of the Willoughby spit, and the reverse counter measures by commuters to continue bypassing the I-64 delays (Figure A) are:

• Before Gate at 15th View Interchange (Interchange 272): Prior to the installation of gates at the 15th View Interchange, bypass drivers traveled on Ocean View Avenue through the Willoughby spit, entering I-64 westbound at Interchange 272. When westbound traffic on I-64 was stopped or even slowed, the bypass traffic would completely fill Ocean View Avenue (both lanes) through Willoughby, rendering Ocean View Avenue westbound impassable. With no other continuous east/west route on the Spit, entry into the Spit westbound, and circulation to the west, was impossible (Figure A).

• After Gate at 15th View Interchange: The installation of the gate, blocking westbound entry into I-64 at Exit 272 during peak traffic periods, solved the problems of vehicles clogging Ocean View Avenue through Willoughby spit. However, with the closure of Interchange 272, bypass traffic shifted to the 4th View Street interchange (Interchange 273) as the last available westward point to enter I-64. As a consequence of the intensified use of Interchange 273, traffic backups extended back from Interchange 273, to the north along 4th View Street, and then east on Ocean View Avenue. With traffic at a standstill or nearly so, the movement between vehicles on Ocean View Avenue wanting to turn left into 4th View Street, weaving with vehicles westbound on Tidewater Drive wanting to continue straight into Willoughby, became impossible. The result was again the inability for Willoughby residents to enter the spit (Figure A).

• Present Condition with Gate and Weave Fix: The December 2005 measures eliminated the weaving problem. Vehicles from either Tidewater Drive or Ocean View Avenue entering the Willoughby spit now do so on Ocean View Avenue. West of Mason Creek Road, the westbound Ocean View Avenue is separated from all other traffic by a raised concrete barrier, which extends through the Ocean View/4th View intersection. Thus, there is no conflict with westbound traffic into the Willoughby spit, and it can flow freely. All traffic destined for I-64 is directed onto Tidewater Drive, from which it makes a left turn into 4th View Street and then onto the Interstate 64 ramps. There is no longer any weaving movement between Tidewater Drive and Ocean View Avenue.

Even with the December 2005 modifications to the Ocean View/4th View intersection, some motorists (“cheaters,” locally) persist in trying to bypass the intended approach to I-64 via Tide Water Drive. They do so by driving into the Willoughby spit on the now free-flowing Ocean View Avenue westbound, then making a U-turn as soon as possible within the Willoughby spit, then proceeding to the east on Ocean View Avenue and making a right turn into 4th View Street (Figure C). The City has attempted to stop this bypassing of the intended approach route to I-64 by: (1) prohibiting U-turns on Ocean View Avenue westbound and (2) prohibiting right turns from Ocean View Avenue eastbound at the Ocean View/4th View intersection during the 3:30-6:30 p.m. time period. However, both of these measures (i.e., U-turn prohibition and right-turn prohibition) are difficult to enforce, are fragrantly violated by commuters, and are regarded as inadequate by residents.

This flyover, consuming some eight acres of land, is a vestige of the pre-Interstate era, when Tidewater Drive and Ocean View Avenue were the primary route between Norfolk and Hampton. With I-64 now serving this movement, there is not traffic need for the flyover. The bridge structure for the flyover is aging, the most important present-day function of Tidewater Drive (safely storing vehicles waiting to get onto I-64) may be better accomplished elsewhere, and the land occupied by Tidewater Drive and the flyover may be far better used as an extension of the Sarah Constant Beach Park or for urban redevelopment.
Analysis, continued

East/West Street Continuity
Ocean View Avenue is the only east/west street through the Willoughby Spit with continuity. Little Bay Avenue provides a parallel alternative to Ocean View Avenue between 9th View Street and 14th View Street only. Staten Street connects to 4th View Street and is parallel to Ocean View Avenue. However, with no connection between Ocean View Avenue and Staten Street, it has no value as a parallel network for Willoughby.

Little Bay Avenue Reconstruction
Little Bay Avenue between 9th View Street and 11th View Street will need to be reconstructed following the utilities work now underway. Important features of the reconstructed street – its cross section, type of drainage (curb or swale), on-street parking availability, intersection corner design and driveway connection policy and design, are either not yet established or are being established in the absence of a controlling vision of what Little Bay Avenue’s role should be in the Willoughby design concept.

4th Leg to the Ocean View/4th View Intersection
Announced plans for the development of the parcel along Ocean View Avenue to the west of 4th View Street call for a driveway connection to Ocean View Avenue opposite the existing 4th View Street approach, thereby making the intersection into a four-way intersection. There is much concern among residents that a 4th leg to this intersection will negate the advantages just recently gained by the barrier across the Ocean View/4th View intersection, in turn leading to a resurgence of “cheater” traffic attempting to turn left from Ocean View eastbound into 4th View northbound. There is further concern that the additional leg to this intersection will seriously degrade traffic service even in the absence of “cheaters.”

Turnaround for Oversized Trucks at Exit 272
Trucks that are too large for the Hampton Road’s tunnel on I-64 are stopped and turned back at Interchange 272. This is accomplished by requiring the truck to leave I-64 at Exit 272, travel east on Ocean View Avenue to 13th View Street, then south on 13th View Street over the Interstate, back to the west on Bayville Street, and then onto I-64 eastbound at Exit 272. Issues associated with this truck turnaround are the volume of trucks involved (600 monthly), problems with the turning radius at the Ocean View/13th View intersection, and turning radius from Bayville Street into Exit 272.

This evaluation provided by Walter Kulash of Glatting Jackson Kercher Anglin Lopez Rinehart, Inc.
Zimmerman Volk Associates conducted a market analysis for Willoughby to determine the potential market for housing and to evaluate the current building stock for its ability to attract that potential market. The study identified a very strong market for high quality ownership units including townhouses and condominiums. The prices that could be achieved would be sufficient for the redevelopment of currently undesirable rental properties and their replacement with homeownership development. However, the form and scale of that new development must be different from the existing housing stock. The existing apartment buildings and old motels with small rooms and low ceilings cannot be renovated in such a way as to attract the potential market. Furthermore, the zoning constraints do not permit the type of development that is needed. Therefore, a new concept for the properties in the center of Willoughby is needed.

The ZVA analysis identified the following Market Potential:

- The target residential mix for larger parcels within the Study Area could include some or all of the following housing types:
  - Rental lofts and apartments (multi-family)
  - For-sale lofts and apartments (multi-family)
  - For-sale townhouses and duplexes (single-family attached)
  - For-sale urban single-family houses (single-family detached)

- Building and unit types most successfully used in infill residential development in other cities comparable in size and scale to Norfolk, include:

  **Multi-Family**
  - Courtyard Apartment Building:
    - Four or more stories, often combined with non-residential uses on the ground floor
    - The building should be built to the sidewalk edge, and the first floor elevated significantly above grade.
    - Parking is either below grade or in an integral structure.
  - “Soft Lofts” units (high ceilings, fully finished, also: exposed ductwork, scored and polished concrete floors, brick walls, particularly if the building is an adapted re-use)
  - The building’s apartments can be leased, or sold to individual buyers under condominium or cooperative ownership.

  **Mid-Rise Building:**
  - Four- to eight-stories, usually with elevator service and double-loaded corridors
  - Apartment Flat: unit on a single level (completely partitioned rooms, finishes and fixtures, and interior doors; kitchens and baths should be offered in a range of minimalist or traditional styles)
  - Two-story apartment: two floor unit (galley kitchen, living area, den or library and half bath on main level, master bedroom, and a full bath on second level); could include a main double-height space, with at least 16-foot ceilings and large, two-story windows
  - The building’s apartments can be leased, or sold to individual buyers under condominium or cooperative ownership.

  **Single-Family Attached**
  - Townhouse/Duplex:
    - Urban townhouses conform to the pattern of streets; shallow front-yard setbacks typical
    - First floor should be elevated significantly above grade.
    - Garage (attached or detached) is located to the rear of the unit, accessed by alley or auto court.

  **Single-Family Detached**
  - Urban House:
    - Two- to three-story single-family detached house, relatively close to the street
    - Attached, detached, or open parking (alley- or street-loaded) set well back from the front facades
    - The placement on the lot should be compatible with existing houses on the block.

**TARGET RESIDENTIAL MIX - 500 HOUSING UNITS**

<table>
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<tr>
<th>HOUSING TYPE</th>
<th>PERCENT OF TOTAL</th>
<th>NUMBER OF UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-family for-rent</td>
<td>31.5%</td>
<td>157</td>
</tr>
<tr>
<td>Multi-family for-sale</td>
<td>27.1%</td>
<td>136</td>
</tr>
<tr>
<td>Single-family attached for-rent</td>
<td>25.2%</td>
<td>128</td>
</tr>
<tr>
<td>Urban single-family detached</td>
<td>16.2%</td>
<td>81</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>500</td>
</tr>
</tbody>
</table>
Recommendations

Illustrative Site Plan with Key Initiatives: A. Little Bay Avenue, B. Ocean View Avenue, C. Captain’s Quarter’s, D. 12th View Street
OCEAN VIEW AVENUE CORRIDOR UPDATE: WILLOUGHBY NORFOLK, VIRGINIA | AUGUST 2006 | URBAN DESIGN ASSOCIATES

The Strategic Plan for Willoughby as illustrated in the top drawing includes two types of recommendations:

Frameworks for Revitalization
These include the framework of streets and public open space which must be improved in order to create an appropriate environment for raising the quality of development. The recommendations include a series of public open spaces and improvements to the streetscapes in the area. These are illustrated in the second drawing. Supporting these recommendations is the traffic evaluation report which accounts for all proposed development on the Willoughby Spit.

Also included are recommendations for zoning modifications in specific areas in order to make it feasible to redevelop problem properties and to attract a diverse market.

Demonstration Projects
There is no possibility of major public acquisition for the redevelopment of those properties which are perceived to be problems in the community. There must be incentives to encourage the private redevelopment of low-quality rental projects into homeownership developments. Using a new form of zoning, it is possible to encourage such development and control its quality. Therefore, the plan does not include fixed proposals but a series of alternatives for demonstration projects in key areas.

These recommendations are preceded by the traffic circulation principles which drove their design.
TRAFFIC RECOMMENDATIONS

The proposed corridor plan attempts to alleviate many traffic problems currently afflicting Ocean View Avenue. Listed below are the solutions to these problems. The circulation principles translate into a series of recommendations:

Long-Term
These will require a more extensive public process and are included here as a record of discussions. They were presented in the charrette and the Civic League determined that they would not be part of the Willoughby plan but should be considered by the larger community.

- Replace the Ocean View/Tidewater Flyover with a new network of urban streets and blocks.
- Abandon, as a vehicular road, the flyover of Ocean View Avenue eastbound over Tidewater Drive (Figure 2). Decide whether the bridge embankments have value to remain as landforms. Build a new segment of arterial two-lane streets between Tidewater Drive and 4th View Street, to serve as the primary means of access from Tidewater Drive and Granby Street into the 4th View Interchange on I-64. Reconstruct Ocean View Avenue as a normal, at-grade two-way arterial street between 4th View Street and Mason Creek Road. Realign the northern end of Tidewater Drive, so that it meets Ocean View Drive in a conventional “T” intersection.

These proposed street changes will:
- Remove I-64 spillback traffic from the Ocean View/4th View intersection, furthering the modifications pursued by VDOT and the City to free Willoughby from immobilization by such traffic.
- Render “cheating” (commuters entering and making u-turns in Willoughby) an unattractive option. “Cheaters” persisting in entering the Willoughby spit and making a “U”-turn on Ocean View Avenue will no longer gain priority entrance to 4th View Street, but will have to share the green time of the signal at 4th View and the new east/west street. Cheaters can be further impeded by a long delay in obtaining a left-turn signal at the Ocean View/4th View intersection.
- Release for other uses the eight acres of land now used for the flyover and its right-of-way.
- Permit the addition of a fourth leg to the Ocean View/4th View intersection.

Short-Term

- Improve East/West Street Continuity
- Provide a north/south connection between Ocean View Avenue and Staten Street, thereby providing an alternative for movement between Ocean View Avenue eastbound and 4th View Street southbound, and vice versa.
- In the detailed site planning for the proposed commercial site to the north of 4th View Street, consider alternatives that not only join 4th View Street in the 4th leg of the intersection, but also connect to one or two other links onto Ocean View Avenue.
- Provide a north/south segment of street linking the east end of Little Bay Avenue (in the vicinity of Captain’s Quarters) to Ocean View Avenue. The link would connect to Ocean View Avenue in the vicinity of 8th View Street.

Provide 4th Leg to the Ocean View/4th View Intersection, and Other Parcel Connections to 4th View Street
- Provide a 4th leg on the north side of the Ocean View/4th View Street intersection, serving the proposed new development at this location (Figure 3). Provide design guidelines that yield a “street-like” connection and internal drive, rather than a conventional driveway appearance. Address the possibility of small-scale streets or drive-lanes within the proposed parcel, providing one or two additional points of entry to Ocean View Avenue in the vicinity of 4th View Street.
- The proposed changes to the Ocean View/Tidewater Flyover and the associated new connector to the 4th View interchange should greatly alleviate the issue of “cheaters” misusing the Ocean View/4th View intersection, thereby permitting it to be a normal four-way signalized intersection.

Improve Accommodation Of Turnaround For Over-size Trucks at Exit 272

- Provide a “turning roadway” (channelized right turn) to accommodate the movement, from Ocean View Avenue eastbound into Thirteenth View Street southbound, of oversized trucks being turned back at Exit 272 (Figure 3). Along with the turning roadway, provide curb extensions (bulbouts) to reduce Ocean View Avenue to a single lane of traffic in each direction.
- Consider the same treatment (channelized right turn) for the turn from Bayville Street into the eastbound onramp at Exit 272.
- Although any truck being accommodated by these right turns is, by definition, in violation of warnings about oversized trucks on I-64, there is no point in penalizing them by making their movement within Willoughby difficult. To the contrary, it is to the advantage of Willoughby residents to smoothly accommodate this turnaround movement, so that it is no longer perceived as a major intrusion into the residents’ quality of life.
- Better accommodation of the turn-back movement for oversized trucks will not increase the likelihood of trucks violating the size restriction on I-64, and being turned back. Reducing the volume of such turnarounds depends on the information and enforcement programs at the Ports and by VDOT, and not on the difficulty of negotiating the local streets on Willoughby Spit.

This evaluation provided by Walter Kulash of Glatting Jackson Kercher Anjlin Lopez Rinehart, Inc.
LITTLE BAY AVENUE
Incorporation of the Little Bay Avenue Reconstruction into the Broad Urban Design Plan for the Willoughby Spit:

Based on the vision shown below, develop design guidelines for the rebuilding of that segment of Little Bay Avenue now closed for utilities repair. Major features of the street design, which should flow from the overall vision for the Willoughby Spit, include the type of drainage (curb or swale) to be placed on the street, the provision (or lack thereof) of on-street parking, the management of access (driveways and turnaround) and their design guidelines, design guidelines for off-street parking in rebuilt driveways, sidewalk design and placement, street lighting, and intersection traffic control devices.
Recommendations, continued

OCEAN VIEW AVENUE

Reclamation of Ocean View Avenue as a Community Street:
Embark on a program of small, incremental measures, transforming Ocean View Avenue from an overly wide vestige of a major arterial highway into a properly sized centerpiece of the community. Major actions within this strategy (Figure 4) include:

- Reducing the travel lanes to a single lane in each direction, incorporating curb extensions, bulbouts or circular planters at corners, segments of curb extensions throughout Willoughby, and widened medians at some points, possibly to accommodate U-turns.
- Providing more opportunities to cross the median, particularly improving access to the redeveloping properties along the street.
- Installing on-street parking, especially where protected by curb extensions or corner bulbouts.

The reclamation of Ocean View Avenue need not be accomplished in a single stroke, but rather can proceed through dozens of small steps, some taken in association with property redevelopment.

The variety of measures possible and the gradual pace of the process suggests that Ocean View Avenue could have different "rooms," each with a distinctive character. Rather than fragmenting the character of Willoughby, a series of "rooms" along Ocean View Avenue could become a unifying force in the community.
OCEAN VIEW AVENUE: ALTERNATIVES EXPLORED

Many alternatives have been explored to slow traffic on Ocean View Avenue, while providing a safer and nicer environment for pedestrians and motorists.

These include eliminating one of the cartways to create a two-way street, various ways of narrowing the cartway in its current configuration, and introducing various landscape and pedestrian crosswalk configurations. The recommended configuration described on the previous pages is the result of testing these alternatives and determining which ones satisfied the various traffic, public safety, and environmental goals of the program.
TRAFFIC EVALUATION

The development program for the proposed Spectrum development at the northern tip of the Willoughby spit includes 351 condominium townhouses and 32,000 square feet of commercial floor area. A detailed traffic impact study (Kubitsins Transportation Group, Inc., February 2005) reported that the project could be accommodated "without any roadway improvements or modifications to traffic control." This finding was based on the assumption of the continuation of the four-lane Ocean Drive Avenue.

The current proposal for the reconfiguration of Ocean Drive Avenue to two lanes of traffic (with occasional left turn lanes) has raised concerns for some residents of the Willoughby spit. The combination of traffic from the proposed Spectrum development and the reconfiguration of Ocean Drive Avenue to a two-lane cross section would create intolerable traffic conditions along Ocean Drive Avenue.

Concerns over the adequacy of a two-lane Ocean Drive Avenue with the Spectrum project in place, while understandable, are not supported by detailed traffic analysis. Specifically:

Traffic Projections are Being Greatly Misunderstood

The peak hour (p.m.) peak direction traffic volume generated by the full Spectrum project, assuming that the I-64 westbound on-ramp is closed, is 139 vehicles hourly in the westbound (inbound) direction. This volume translates, in the peak direction during the peak hour, to a vehicle every 26 seconds, or about two vehicles a minute. The density of peak hour peak-direction traffic due to the Spectrum project is around one vehicle per two blocks. This flow rate and density are far from the “bumper-to-bumper” conditions assumed by some residents.

When the I-64 westbound on-ramp at Interchange 272 is open, the flow rate and density of Spectrum traffic are even less: one vehicle every three minutes, and only two vehicles, during the peak period, over the entire distance of Ocean View Avenue from 4th View Street to 13th View Street.

Spectrum Traffic Needs Only Fraction of a Lane

The increment of traffic due to the Spectrum project, 139 vehicles in the peak hour in the peak direction (“worst case,” with I-64 ramp closed), represents only 8 percent of the peak hour–peak direction capacity of a two-lane street. There is, therefore, no basis for support of additional lanes due to the Spectrum project.

Even With Spectrum, a Two-Lane Ocean View Avenue Has Ample Capacity

Even with Spectrum traffic, and with the I-64 Exit 272 on-ramp closed, a two-lane Ocean View Avenue will operate, in the peak hour in the peak direction, at only 38 percent of its capacity. Thus, there is no basis of support for a four-lane road, even considering total (i.e., existing plus Spectrum) traffic.

Increment of Delay Due to Lane Reduction is Small or Negligible

Outside the immediate vicinity of traffic control devices (signals and STOP signs on the main street), the reduction of Ocean View Avenue to two lanes carrying the added traffic from the Spectrum project will produce no measurable delay. With Spectrum traffic included, the peak-hour, peak-direction flow is 536 vehicles hourly at
Recommendations, continued

the maximum load point just to the west of 4th View. This loading is so far below the capacity of a single lane of street (around 1,800 vehicles hourly when away from traffic control device) that it has no impact on travel speed. Speed only begins to be affected as single direction volumes approach 1,200 vehicles hourly – almost twice the volume on Ocean View Avenue, including Spectrum traffic and with the I-64 Exit 272 westbound on-ramp closed.

At intersections, delay accrues at almost any level of traffic volume because (1) traffic must share the right-of-way (at a traffic signal or STOP sign) with cross street traffic and (2) the time needed to start the queue of vehicles once stopped for a traffic control device.

On Ocean View Avenue, the sole location with a traffic control device on the main street (i.e., Ocean View Avenue) is at the Ocean View/4th View intersection. The average delay per entering vehicle (the standard measure for assessing intersection performance) is summarized for the “worst case” (p.m. peak hour with I-64 Exit 272 on-ramp closed) as follows:

<table>
<thead>
<tr>
<th>Ocean View Avenue Configuration</th>
<th>Delay per Vehicle (Seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-lane Street</td>
<td>10.2</td>
</tr>
<tr>
<td>2-lane Street</td>
<td>12.8</td>
</tr>
</tbody>
</table>

From the above table, it is clear that the Spectrum project traffic has little impact on the performance of the intersection with Ocean View Avenue either as a two-lane or as a four-lane street. Under either street configuration, Spectrum traffic adds only about three seconds of delay in the peak period, with the I-64 Exit 272 on-ramp closed.

For a two-lane Ocean View Avenue, the 14-second delay at the Ocean View/4th View intersection and Level of Service (LOS) “B” are better than average for an urban intersection.

It would be reasonable to continue the existing four-lane cross section of Ocean View Avenue through the Ocean View/4th View intersection, tapering it to two lanes within a short distance (200-300 feet north of the intersection). With this configuration, the Ocean View/4th View intersection without Spectrum would function as a four-lane, perform identically to the existing condition as indicated for the four-lane section (above), and with the Spectrum traffic making less than two seconds of difference in delay per vehicle in the peak hour.

Traffic Impact Statement Numbers are Conservative

The traffic impact statement for the Spectrum project, following standard practice for such analysis, does not deduct from the projected traffic generated by the new development all the traffic already being generated by existing activity. Typically, existing traffic is but a small fraction of projected new traffic, and is ignored in order to be conservative. However, in the case of the Spectrum site, existing uses (to be eliminated as the site is redeveloped) generate well over half the projected traffic of the Spectrum project. Thus, there is great assurance that the actual impact of Spectrum will be even less than the minimal impacts described above.

This evaluation provided by Walter Kulash of Glatting Jackson Kercher Anglin Lopez Rinehart, Inc.
ZONING AND DESIGN GUIDELINES

Zoning and Design Guidelines need to be updated to control the growth on the Willoughby Spit. It is suggested that greater density and height be limited to the frontages along Ocean View Avenue. The height limit should be five stories (to the eave line) in these locations. All properties off of Ocean View Avenue should be limited to three stories. This approach will concentrate the taller buildings along the spine and provide a means for height sensitive infill in other areas closer to the Bays.

Suggested zoning heights

Section cut from Willoughby Bay to Chesapeake Bay illustrating the lower buildings toward the Bays and taller buildings in the middle of the Spit.
DEMONSTRATION PROJECTS: CAPTAIN’S QUARTERS

Diverse building types incorporate a range of units fronting onto a public green, establishing an open space which extends from the American Legion’s front lawn to the Captain’s Quarters. Captain’s Quarters achieves direct access to Ocean View Avenue by means of a new View Street, improving connectivity in this area.
DEVELOPMENT SCENARIO 1: PARCEL GROUPS A AND B
Reconceiving Parcel Group B as a public street allows for up to 24 residential units (12 townhomes plus an optional 12 ground-floor apartment flats) on its east side. In addition to the 28 on-street parking spaces provided by the new street, Parcel Group A accommodates up to 38 off-street parking spaces (including ground-floor “tuck-under” parking) to the rear of the development.

DEVELOPMENT SCENARIO 2: PARCEL GROUPS A, B, C, AND D
Developing Parcel Groups C and D supplements the development in Scenario A with a .3-acre public park and 16-22 residential units (6 townhomes, optional 6 ground-floor apartments, and 10 apartments). Parcel Group C accommodates 27 off-street parking spaces (including “tuck-under” parking) in addition to the on-street parking available on the new street.

DEVELOPMENT SCENARIO 3: PARCEL GROUPS B, C, D, AND E
Redevelopment of Parcel Group E completes the western frontage of the new park with up to 21 apartment units and 14 off-street parking spaces. Improving Little Bay Avenue along Parcel Group E’s frontage allows for 8 additional on-street parking spaces.

DEVELOPMENT SCENARIO 4: PARCEL GROUPS A, B, C, D, AND E
Development of all five parcels in the manner described in the previous three scenarios completes the space. The parcels in total yield 49-67 residential units, 79 off-street parking spaces, and 36 on-street parking spaces. Overall density is 18-25 units/gross acre and the parking ratio is between 1.7 and 2.3 parking spaces/unit.

### PARCEL ADDRESSES KEY

<table>
<thead>
<tr>
<th>PARCEL GROUP</th>
<th>UNITS</th>
<th>PARKING SPACES</th>
<th>OPEN SPACE</th>
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<tbody>
<tr>
<td>A</td>
<td>16</td>
<td>20</td>
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<tr>
<td>B</td>
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<tr>
<td>Total</td>
<td>59</td>
<td>66</td>
<td>49-67</td>
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| PARCEL ADDRESSES KEY | (A) 824-845 Little Bay Avenue and 831-845 Ocean View Avenue | (B) 834 Little Bay Avenue and 851 Ocean View Avenue | (C) 840 Little Bay Avenue and 855 Ocean View Avenue | (D) 861, 865-863, and 867 Ocean View Avenue | (E) 852 and 846 Little Bay Avenue |

### CHARRETTE ILLUSTRATIVE PLAN
Location of potential Captain’s Quarter development model shown.
**DEMONSTRATION PROJECT: 12TH VIEW**

The existing 7-11 parcel is illustrated as a mixed-use building with retail on the street level and offices or residential uses above. Parking is relocated behind the building, resulting in a friendlier pedestrian environment.

<table>
<thead>
<tr>
<th>EXISTING &amp; PROPOSED DEVELOPMENT ACTIVITY</th>
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<tbody>
<tr>
<td>EXISTING UNITS</td>
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<td>IMPROVED UNITS</td>
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<td>EXISTING PARKING</td>
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<tr>
<td>OPEN SPACE</td>
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<tr>
<td>RETAIL SPACE</td>
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**AERIAL VIEW** A new village square is enclosed by diverse new building types.

**Study Area**

**Eye level perspective looking toward 12th View Street from Ocean View Avenue.**

**EXISTING & PROPOSED DEVELOPMENT ACTIVITY**

<table>
<thead>
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<tbody>
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<td>EXISTING PARKING</td>
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<td>OPEN SPACE</td>
<td>1.1 acres</td>
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<tr>
<td>RETAIL SPACE</td>
<td>30,000 SF</td>
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Next Steps

This planning document is intended to serve as a means of facilitating constructive discussions in the Willoughby Community.

Process and Leadership
Community action requires some level of consensus within the community on a preferred course of action. This has been a particularly difficult challenge for the Willoughby Community. Therefore, the first step will be to complete the process of establishing the leadership of the Civic League and its various committees.

We suggest the Civic League and the NRHA consider some form of leadership training for the Civic League to deal with the process issues involved in reaching consensus in a community as diverse as Willoughby.

Determining Priorities
Once the leadership is in place and a process determined, it will be possible to review the various alternatives in this Planning Document. Rather than a single fixed recommendation, it is designed to be a shopping list of possible initiatives. To accomplish all of them will take many years, so it is necessary to determine which are the most important and the most likely to be accomplished.

Packaging the Initiatives
Each of the initiatives can be developed in phases
1. Little Bay Streetscapes: These can be accomplished on a block-by-block basis. The first step is to determine the preferred cross section. Options include:
   - roll curb on both sides of the street, no sidewalks
   - roll curb on both sides of the street, sidewalk attached to curb on one side
   - roll curb on both sides of the street, sidewalk attached to each side
   - all options should include pedestrian scale street lights
2. Ocean View Avenue: This can be implemented block by block or intersection by intersection. It would be best to test the idea in one area before proceeding with a more comprehensive rebuilding of the streetscape. The suggested landscape bump-outs can be located as desired, so long as they do not interfere with driveways or intersections.
3. Public Open Space: The proposed park extension and street connection at the Captain’s Quarters Park have been considered for many years. It is the most logical place to begin and there appears to be consensus for it. It is, therefore, a serious candidate for the first public space initiative to be implemented. It will require public funding for the street and public park.
4. Zoning Changes: If there is support for this concept, a process should begin with the City Planning Department and the legal department to review the implications of the changes.
Demonstration Projects: The Civic League and the NRHA will need to jointly identify a preferred initiative and begin negotiations with property owners and developers. It is important that whichever initiatives are selected for early action be coordinated. For example, the Civic League might consider the following for the targeted area near Captain’s Quarters:

- Improve Little Bay Avenue between 9th View Street and the Captain’s Quarters
- Create new street between Little Bay and Ocean View Avenue at Captain’s Quarters
- Create new park
- Install new streetscapes in Ocean View Avenue block between Captain’s Quarters Park and 9th View Street
- Encourage property owners to redevelop their properties as illustrated and use this as a test case for the new zoning.

Of course, it is possible to do none of these and to continue the current course of action. In our view, this would result in a further decline of the area. The rental income produced by the deteriorated properties will continue to justify a sales value that is greater than can be sustained for a single family house or duplex. This is the case in the middle of the Spit, along Ocean View Avenue, and on the north side of Little Bay, each with properties that do not directly face the waterfront. This will most likely result in the continued conversion of single family houses into rental properties, and the area will continue to decline.

On the other hand, the interventions recommended in this Planning Document provide a set of tools for reversing this downward trend and establishing a new, more positive image for the area.