1. Goals of Study:

The historic Promenade Hill Park, built on a promontory with dramatic views of the Hudson River is an important and popular open space and passive recreation area for the City of Hudson. The purpose of this study is to determine if it is possible to construct a viable route to bring people with disabilities to the upper historic portion of the park. This study looks at the park as a whole for accessibility and documents physical barriers as well as slopes that exceed the ADA (Americans with Disabilities Act) accessibility requirements. The study explores opportunities to overcome these impediments to accessibility and offers options for potential ADA compliant routes.

2. Background:

The park is located at the western terminus of Warren Street, the main street of the City of Hudson and consists of two distinct portions. First, the historic Promenade Hill overlooking the Hudson was granted to the Common Council in 1795 as a public walk or mall and runs approximately 500 feet along the top of an escarpment about 70 feet above the Hudson River. The stone walls that help retain this upper level and the cast stone staircase leading to the Promenade were installed in 1917. A bronze statue of St. Winifred given as a gift to the City in 1896 is a prominent feature of this upper level. The Promenade Hill area has several large mature shade trees, most notably lindens, as well as handsome benches and an historic wrought iron fence that runs the length of the park’s western edge. The grassy ridge is an ideal place for strolling, viewing the river and for passive recreation. Many people, primarily adults of various ages, were observed enjoying this area.

The second, lower portion of the park is located where North and South Front Street meet and at the end of Warren Street. The current angular brick-walled design was built during the 1970’s urban renewal period and forms the park’s major entrance, an open paved square used for public gatherings adjacent to the Fire House Building that houses the Columbia County Chamber of Commerce and the Hudson Development Corporation. From this area there is a steep concrete stairway leading to a higher level and ultimately to the stairway of the Promenade upper level. A secondary entrance further south on South Front Street winds through an underutilized seating area and to the spacious children’s playground and upper park level, avoiding the steep steps. Pavements, plantings and benches of the urban renewal section are in poor condition with the exception of the new colorful play equipment in the playground. This area is well used by children and parents. Apartment complexes are located to the north and south separated from the park by chain link fencing.
3. Existing Conditions (See Figure 1.)

Providing accessibility for the Promenade Hill Park as a whole is a challenge that is primarily due to the significant grade elevation change of about 15 feet from street level to the top of Promenade Hill. There are other factors that have a bearing on park accessibility.

Starting at Street Level:

There are no curb cuts for the crosswalks at the end of Warren Street for park bound users. A large curb cut exists for access to the central paved square next to the Fire House Building but this does not line up with the existing crosswalks. Providing additional curb cuts that line up with the pedestrian crossings would remove a street level accessibility barrier at the park frontage.

Parking:

There are currently no designated accessible parking spaces for the park. Options for parking for people with disabilities include designating a street side parking space(s) near the southern park entrance on South Front Street or within the existing parking lot behind the Fire House Building provided an accessible route leading from this area is made available.

Accessible Routes:

The current southern entrance on South Front Street passes through an 8 foot opening in the brick walls. This is currently the most negotiable and barrier free entrance to the lower level of the park and has no steps or physical barriers. Interior walkways consist of 7’ wide worn colored concrete paths with cut granite curbs and lead to an underutilized seating area, a walkway to the upper historic portion of the park and the children’s playground. Although barrier free, the entry walkways lead uphill at an average slope of 7% which exceeds the ADA accessible route standard for accessible routes (not ramps) of a 5% maximum slope or 1 foot rise for every 20 feet run.

There is a passageway in the brick walls between the southern park access and the large central paved square. However, passing through this space across the slope or diagonally to avoid the steps would be an unstable route for a wheelchair since the cross slope exceeds the ADA accessible route standard of 1 foot rise for every 48 feet of run.

When an opportunity and funding for redesign of the park is available, a more circuitous, winding and naturalistic interior pedestrian circulation system can be incorporated into the design for this lower portion of the park, reducing steepness and creating an accessible route to within ADA standards. Not only would this help park visitors in general, people with strollers, the elderly and very young, but would be important to give persons with disabilities living in the community the opportunity to arrive at the park.
through the street system. A design of this nature could take advantage of the more historic materials and curving shapes of the Promenade aspect of the park thus unifying the park as a whole.

Physical Barriers within the 1970’s Urban Renewal Design:

The central entrance to the park occurs through the open paved public square noted above and leads to a steep six-riser stairway flanked by brick walls of the 1970’s design. It was observed that many park users chose to enter by the southern entrance instead, avoiding these stairs. Other barriers in the lower portion of the park are the asphalt curb and dumpster behind the Fire House Building that are blocking a walk that could lead to the front door of the building and across the open square should this route be redesigned. This walk would need additional improvements to be ADA compliant.

Additional barriers include broken, disconnected and impassible surfaces such as the partial surface that is found along the seating area at the eastern edge of the playground that would prevent children or adults in wheelchairs from accessing this area.

The Historic Promenade:

The cast stone stairway that is part of the 1917 stone wall system has a 3.5 foot grade elevation gain and leads from the 1970’s design portion of the park. The steps are in poor condition with crumbling treads and the flanking stone walls at this location are in need of repair. There is currently no alternative access to the Promenade and the steps are an obvious impediment for accessibility. Elderly persons were observed having a difficult time negotiating these steps since there is no alternative way as in the lower level.

Once past the existing steps, the expansive grassy area with a central concrete paved plaza with flag pole is relatively flat and easily traversed. The nearly level grade is well within ADA compliance for pathway routes. There are partially grassed-in gravel paths that would be difficult for wheelchair accessibility due to the surface. Provided there is an ADA compliant route to get to the top, the concrete plaza at the flagpole is accessible and runs to the iron fence and view as well as two benches. It would be beneficial for a low impact wheelchair friendly paving material that would blend into the historic landscape to follow the old paths at least minimally as a connector along the northern border where additional benches are located.

4. Alternative ADA Compliant Access

The most effective approach would be to redesign the park integrating accessibility into a comprehensive landscape plan that celebrated the historic nature of the Promenade Hill while fulfilling park users and community open space and accessibility needs. At this point, however, the study focuses on solutions that might not preclude future redesign and proposes ways to work with the current design to allow people with disabilities to reach the upper level of the park.
Alternative “A” (See Figure 2.)

Alternative “A” presupposes that it is possible to use a narrow strip along the fence line and property line bordering the neighboring apartment complex to the north owned by Evergreen Partners. This would necessitate removing all or some of the existing chain link fence that separates the properties.

A permanent accessible ramp system would originate in the parking area behind the Fire House Building and have two designated accessible parking spaces. The ramps and landings would have a minimum 60 inch width (5 foot) within them to provide clearance for two passing wheelchairs or a wheelchair and other pedestrians. The retaining walls and ramp system contains five ramps at the maximum slope and distance. Each ramp is 30 feet long and rises 30 inches in elevation for a total of 12.5 feet elevation gain. There is a level landing after each 30 foot ramp section for rest and to change direction as needed. There is a potential connection with the playground from the north that would need to be connected in the future with an interior accessible route if it were used. The ramp system culminates at the top and can be connected to the Promenade Hill concrete plaza with a low impact ADA compliant surface.

Alternative “B” (See Figure 3.)

Alternative “B” would also originate in the Fire House parking area but lead south in the opposite direction and join the existing park path leading to the children’s playground. This area is large and nearly level and affords an opportunity to utilize a portion to construct an accessible ramp system. This alternative shows an accessible walk skirting the southern edge of the playground. It leads to a ramp system along the west length of the playground that repeats the 30 foot run to 30 inch rise. This ramp system turns at 90 degrees to meet the existing historic wall at grade. The historic wall would not be disturbed but become part of the pathway. The accessible route continues as a low impact surface connected to the concrete plaza, views and benches.

5. Advantages and Disadvantages of Alternatives

Alternative “A”

This alternative has the advantage of leaving undisturbed most of the interior of the park, both lower and upper area and not having to cross the historic wall. The disadvantage of this option is straddling the property line to the north. The width of the ramping system would leave room for only a thin strip of landscaping as a buffer and would necessitate taking down or negatively impacting most of the trees between the two properties along the property line including two significant trees, an 18” caliper sugar maple and an 18” linden. These trees provide valuable shade and separation between the properties. It is
unknown what the impact would be with the fence taken down and if there would be increased vandalism. It was observed that wall capstone was being removed where there was a large breach in the chain link fence at the southern fence line by the apartment complex to the south.

Alternative “B”

Alternative “B” is entirely on the park property and utilizes the area by the children’s playground for part of its ramping system. It is placed as far from the active play area as possible and avoids being in the line of children’s play. Both alternatives have the same amount of ramping, 175 feet including landings. Alternative “B” has 60 more linear feet of walkway but this may be helpful to elderly and other park users for connecting interior hard to negotiate areas that otherwise would have to traversed by the steps. Alternative “B” does not impact any significant shade trees (except as noted below). It does cross the historic wall but does not alter it since it crosses it at grade and the top of the wall is proposed to become part of the accessible route.

6. Trees and Landscape Plantings

Besides assisting people with disabilities and others to reach the top of Promenade Hill, both alternative “A” and “B” would help stabilize some of the steep, eroding slopes in the park with retaining walls. The walls also present an opportunity to use groundcovers, shrubs with seasonal interest and other low maintenance plantings behind them in addition to tree plantings if there is adequate space. Any retaining walls built behind the Fire House Building would necessitate removing some of the ash trees on the slope behind the existing parking area. It was observed that these ash are infested with the emerald ash borer and already damage is apparent on trunks. If these trees are important and an accessible ramp is not contemplated for this location they should be looked at by a certified arborist and if salvageable treated with a systemic (injected) insecticide.

7. Materials and Design (See Materials Sheet)

Natural stone retaining walls with a bluestone or cast stone capstone would be most in keeping with the existing historic stone walls. These may be more expensive and time consuming to build than other types of wall construction. An alternative may be a concrete segmental retaining wall system of low walls with a poured and brushed concrete ramp between. A segmental retaining wall does not require the depth of footings of a mortared stone or poured concrete retaining wall and can be made of units that appear somewhat like stone in various colors, textures and shapes. Other options for retaining walls include poured in place concrete that is stamped and colored to look like an old stone wall. Although these need a deep concrete footing, it may be easier and more efficient to form and pour the walls and the ramp surface from the same concrete material.

Until a detailed design is done it is not possible to determine exact methods of construction, or heights of retaining walls but walls would most likely average 3 or 4 feet
in height with a fence/handicap railing running the length of the ramps. The walkways can be made of resin bonded natural gravel, or other low impact paving material, techniques that are ADA compliant and have been used in historic parks and gardens.

8. Other Considerations:

Although moderately exceeding the slope for an accessible route, the present street level entrance at South Front Street does offer a barrier free alternative to get to at least the level of the playground if this is acceptable in the short term. If a future comprehensive redesign of the park is anticipated that addresses accessibility among other goals, creating the ramp system link from the playground to the Promenade may be a first step to building an attractive, permanent upper level link as shown in the upper ramp of Alternative “B”. Ramps starting in the parking area behind the Fire House Building may not address all accessibility needs and may be a difficult starting point for people without vehicles. Curb cuts could be made at the crosswalks from Warren Street and an accessible parking space designated near the opening to the park. In this way accessibility could be designed into park improvements for the future in a more coordinated and thorough manner.
PROMENADE HILL PARK - ADA STUDY
MATERIALS SHEET

MORTARED NATURAL STONE WALL

SEGMENTAL RETAINING WALL

STAMPED AND COLORED CONCRETE WALL

ACCESSIBLE RAMP WITH RAILING, CONCRETE RAMP AND SEGMENTAL WALL

RESIN BONDED NATURAL GRAVEL PATH