



# Holyoke Station Feasibility Study and Site Analysis

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# Pioneer Valley Planning Commission



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Submitted by

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# EXECUTIVE SUMMARY

## Project Purpose and Background

The Pioneer Valley Planning Commission (PVPC) initiated the Holyoke Station Feasibility Study and Site Analysis (Study) to evaluate the options that exist for a new passenger rail station in the City of Holyoke, Massachusetts. The Study is examining the feasibility of providing a passenger rail stop in Holyoke as part of the impending restoration of passenger rail service on a route that passes through the City. Providing a stop in Holyoke is seen as a way of increasing mobility to and from the City. Additionally, the station is seen as being consistent with current downtown revitalization efforts by numerous public and private entities.

The proposed restoration of passenger rail service on a route through Holyoke is an outgrowth of PVPC's *Knowledge Corridor Passenger Rail Feasibility Study* (Knowledge Corridor Study) which was completed in 2009. The Knowledge Corridor Study concluded that significant local and regional economic and mobility benefits could be achieved by restoring intercity passenger rail service to the Connecticut River Rail Line (Rail Line) of the Pam Am Southern (PAS) railroad. This route between Springfield, MA and the upper Connecticut River Valley passes through the municipalities of Holyoke, Northampton, and Greenfield before entering the State of Vermont at East Northfield. Restoring service to these cities and towns was identified as a key goal of the Knowledge Corridor Study.

Subsequent to the completion of the Knowledge Corridor Study, MassDOT was successful in obtaining a Federal Railroad Administration grant (FRA Grant) for the funding of Knowledge Corridor (Knowledge Corridor Project) improvements between Springfield and East Northfield. The scope of the Knowledge Corridor Project will provide for the restoration of operation of the current daily round trip of the Amtrak Vermonter to the Rail Line that passes through Holyoke.

This Study serves as a feasibility analysis to identify the most suitable location for a passenger rail stop in downtown Holyoke. The purpose of the Study is provide a basis for the selection of a potential station site that can then be utilized to move forward to obtain the means to add a Holyoke Station to the Knowledge Corridor Project. The desire is to have the Holyoke Station constructed prior to the projected October 2012 opening of the Amtrak Vermonter service on the Rail Line.

## Station Site Identification

The Knowledge Corridor Study identified four potential locations for a passenger rail station in Holyoke. Two of these locations were deemed to have only limited potential due to various physical and operational constraints, and the remaining two are the subject of this Study. The two sites are referred to in this Study as the "Former Station" site and the "Dwight Street" site.

### Former Station Site

The Former Station site is located off of Main and Canal Streets, approximately four-tenths of a mile from downtown and City Hall and on the east side of the Rail Line. The site is bounded by Lyman Street to the north, Bowers Street to the east, Mosher Street to the south and the Rail Line to the west. The Former Station site was the location of Holyoke's passenger rail station from 1883 until the mid-1960's, and the site includes both the former station building and a former express freight building.

### Dwight Street Site

The Dwight Street site is located at the foot of Dwight Street, on the west side of the Rail Line. This site is located approximately one-tenth of a mile to the south of the Former Station location, and three-tenths of a mile from City Hall. No station has been previously located at this site.

## **Guidelines, Standards and Assumptions**

The primary sources of guidance in developing evaluation criteria and alternative concepts for the two station sites were as follows:

- Amtrak's *Station Program & Planning Standards and Guidelines* ("Amtrak Guidelines") served as the source of technical criteria relating to physical siting and layout of station concepts.
- The City of Holyoke, in particular the Office of Planning and Development, provided input for criteria and assumptions related to the relationship of the candidate station sites to ongoing revitalization and urban renewal efforts in the downtown area. Additional information regarding property ownership and related planned infrastructure projects in the area was obtained.

### Ridership and Station Classification

The Amtrak Guidelines include a system of station classifications based on ridership and revenue<sup>1</sup>. The Knowledge Corridor Study included ridership estimations for Holyoke under several rail service scenarios. For the purposes of this Study, it was agreed that the "Enhanced Intercity" service model from the Knowledge Corridor Study, consisting of four daily trains in each direction through Holyoke, would be the assumed maximum provided service.

For the Enhanced Intercity scenario, using forecast year 2030, which is consistent with the *Amtrak Guidelines* recommendation to plan stations for at least a 15-year horizon, approximately 132 combined boardings and alightings per day<sup>2</sup> were estimated for Holyoke.

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<sup>1</sup> Pg. 9-10, "Station Program & Planning Standards and Guidelines", Version 2.2, Amtrak, March 2008

<sup>2</sup> Pg. 4-16, "Knowledge Corridor Passenger Rail Feasibility Study", Pioneer Valley Planning Commission, December 2009



Considering Amtrak’s recommended peaking factors, this equates to an annual ridership of approximately 35,000, which places the potential Holyoke station into the Class III – Small/Medium Station category. Some of the suggested Class III station amenities are as follows.

**Station Size (Structure)**

Based on the calculation methodology included in the *Amtrak Guidelines*, a waiting room capacity of approximately 200 square feet would be required, exclusive of restrooms and mechanical/janitorial space. Based on input from Amtrak, there will be no accommodation for a station agent in any of the proposed station concepts.

**Platform Length**

Per the Amtrak Guidelines, it is preferred that platforms be able to accommodate the full length of a typical train. The suggested minimum platform length for Corridor Service is 300 feet. For the purposes of this Study a platform length of 400 feet was selected, which would allow for all but two end doors of a six-car train set to board at the platform based on a standard passenger car length of 85 feet.

**Platform Height**

For the purposes of this Study, and based on guidance received from Amtrak, it has been assumed that a low level (8-inches Above Top of Rail) platform will suffice for the implementation of service. Neither of the candidate sites precludes the construction of a high-level platform in the future should this become mandated or otherwise desirable. However, accommodations needed for a high-level platform for each station site are specific to the respective site.

**Parking**

Given the intercity nature of the proposed service at Holyoke, and the urban location and proximity to transit services available at both candidate sites, an assumption of one parking space per two daily riders was used for this Study. This suggests a target parking supply of approximately 65 spaces.

**Historic Preservation Issues**

The former station building was designed by the famed architect H.H. Richardson in 1883 as one of many station buildings he designed for the Connecticut River Division of the Boston and Maine Railroad. While not presently on the National Historic Register, the station is listed as a Massachusetts Cultural Resource by the Massachusetts Historical Commission (MHC). The station and surrounding area are included within the Flats/South Holyoke District (MHC HLY.W), which was surveyed in 1991 by the Holyoke Office of Community Development and recommended eligible for inclusion in the National Register of Historic Places.

Immediately adjacent and to the north of the station, on the same parcel of land, is a small one-story painted brick structure with a hipped roof. The structure is identified on a 1914 railroad valuation plan as “American Express #2”. The building is not identified in any historical documentation on the station or surrounding area; however, based on its age it is considered a contributing structure to the Flats/South Holyoke District.

The Dwight Street site is located on the edge of the Flats/South Holyoke District, and any station components located to the north of Dwight Street would be included within the historic district.

### Permitting

Any project which requires permits, funding, licensing, or approvals from state and/or federal agencies is potentially subject to compliance with the National Environmental Policy Act (NEPA), Section 106 of the National Historic Preservation Act, the Massachusetts Environmental Policy Act (MEPA), Chapter 91 and Chapter 254. Evaluation of permitting issues indicates that there are no substantial permitting issues related to either site location.

Anticipated modifications to the station for reuse as a passenger station were considered in the context of the historical perspective of the station. Proposed improvements were deemed consistent with historical permitting requirements.

### Former Station Site – Summary of Options

The Former Station site is located at 12 Bowers Street. The reuse of the Former Station site would serve to support the restoration and use of a historic structure.

The station site includes two structures. The first is the former passenger station itself, designed by H.H. Richardson and erected in 1883. The second structure was originally a mail and express building, and was believed to have been erected in the early 1900’s.

#### Proposed Restoration and Redevelopment

Existing ridership projections and the *Amtrak Guidelines* indicate that the 200-300 square feet of the existing station that would be required to serve rail passenger functions would be relatively small compared to the overall 5,870 square foot size of building footprint of the former station. Thus, joint development and occupancy with one or more commercial operations would appear to be feasible and required to support the restoration and continued use of the former station.

For this Study it was assumed that the most potentially attractive and unique space for a commercial tenant would be the original waiting room, particularly if the space were restored to its original, grand, double-height configuration. Under this scenario, the railroad passenger waiting functions would be accommodated in one of the smaller ancillary spaces.

### Site Access

The Former Station site is situated in a readily accessible location for pedestrians, auto and transit vehicles. The site is approximately one-half of a mile from the Pioneer Valley Transportation Authority (PVRTA) Intermodal Transportation Center, and is a relatively short walk to other locations in the downtown area, including City Hall, Heritage State Park, and the new Canal Walk. There are accessible sidewalks on both sides of most of the adjacent roadways. Massachusetts State Route 116 runs along Main and Canal Streets just west of the site, providing local access to Chicopee and South Hadley, and Interstate 391 is a short distance to the southwest, providing easy access to the Interstate Highway System.

PVRTA Red 25 bus service stops at the corner of Bowers and Mosher Street, directly abutting the site, on weekdays. The bus currently runs approximately once per hour to the Intermodal Transportation Center downtown, once every two hours to the Holyoke Mall, and once every one-to-two hours to South Hadley.

### Parking

The existing site is quite constrained relative to parking. It would be possible to provide approximately 20 parking spaces directly at the station site, while also including a new pick-up/drop off loop and an additional exit onto Bowers Street.

Several contiguous parcels of vacant land were identified to the south and east of the Main/Mosher Street intersection, a short walk from the station site. Conceptual parking layouts confirmed that these parcels could provide the recommended additional 65 spaces. Under this scenario, it is proposed that handicap accessible parking would be located at the station site proper, as well as spaces reserved for non-rail building tenants. All rail passengers not requiring accessible parking would be required to park at the Main/Mosher Street lot.

## **Platform Location and Configuration**

Two platform concepts were developed for the Former Station site. Under both concepts, the station building would be renovated and off-site parking would be developed at Main and Mosher Streets, both as described above.

### Concept "A"

Concept "A" involves the reconstruction of the passenger platform at its historic location directly adjacent to the station building. The existing wood passenger platform, which is beyond repair, would be replaced with a low-level platform, and would be located underneath the station's canopy. The platform length would be limited to approximately 340 feet as it is constrained by the overpass structures to the north and south of the station site. The platform would be located on a horizontal curve in the track alignment.

### Concept “B”

Concept “B” involves locating a new platform on tangent track to the south of Mosher Street. The platform length would be the recommended 400 feet, and would be accessed by passengers either from the station building or directly from Bowers Street.

Under Concept “B”, the two main line tracks south of Mosher Street would be shifted to the west to allow for construction of a separate platform track. The station track would not be able to occupy its historic alignment, since this alignment would be utilized by a pedestrian walkway across Mosher Street.

It should be noted that while Concept “B” allows for future conversion to high-level boarding if needed, the station platform would be located more than 300 feet to the south of the station building itself. This arrangement results in more complicated and lengthy circulation patterns, both within the site and to and from the downtown area.

### **Permanent Traffic Impacts and Off-site Mitigation**

It is expected that there would be minimal impacts to vehicular traffic flow due to the construction of either of the Former Station site concepts, and therefore no significant roadway or intersection mitigation is anticipated. Any traffic impacts would be the result of additional auto and transit trips to and from the proposed station location. The site is located in a densely developed urban area, and observations during peak hours suggest that the roadway network and key intersections are operating below capacity.

### **Construction Phase Impacts**

#### Railroad Impacts

There would be minimal impacts to railroad operations due to the construction of Concept “A”. As noted, a restored platform track would be provided as part of the overall station restoration project.

As noted under Concept “B”, the existing main line tracks south of Mosher Street would need to be shifted to the west to accommodate the new pedestrian walkway between the station building and platform. In addition, some reconfiguration of the freight sidings serving the Sullivan Scrap operation to the south would be required to accommodate the new platform.

#### Roadway and Traffic Impacts

No significant off-site roadway improvements, and therefore no significant construction phase impacts to area roadways, are anticipated.

**Environmental Site Evaluation**

An environmental site evaluation was performed. The evaluation, which consisted of review of available public documents, identified some minor releases of hazardous materials on-site, but that they appear to have been adequately assessed under Massachusetts Contingency Plan (MCP) requirements.

The conclusion of the environmental site evaluation was that there did not seem to be significant soil or groundwater impacts from oil/hazardous materials.

**Property Impacts**

The Former Station site, including buildings and property, is currently owned by Holyoke Gas & Electric (HG&E). The parcels that would be required for the proposed Main/Mosher Street parking lot are presently privately owned. These parcels are vacant except for a single-story garage occupied by S&L Automotive Service. It was reported that the City might acquire these parcels in the short-term. For the purposes of estimating costs, it is assumed that these parcels would be acquired based on fair market value. The land required for the Concept “B” pedestrian connection across Mosher Street, the platform south of Mosher Street, and the small accessible parking area off Bowers Street is owned by PAS.

**Capital Costs**

The restoration of the former station building is the most significant expense associated with the Former Station site alternatives. The cost for Concept A and Concept B are summarized in Tables ES-1 and ES-2, respectively.

Major renovations include the removal of the interior second floor of the station, improvements to mechanical, electrical and plumbing systems, and door and window replacement. The existing express building to the north of the station would be demolished, and the on-site parking area would be reconstructed. For Concept “A”, the remainder of the major capital costs would involve construction of a platform at the site and the construction of the off-site parking area at Main/Mosher Streets, including the costs to acquire and clear the land for construction. For Concept “B”, the remainder of the major capital costs, in addition to the offsite parking lot, would be for the establishment of a pedestrian walkway over Mosher Street, the new platform and canopy south of Mosher Street, and the secondary accessible parking area off Bowers Street.

**Table ES-1: Capital Costs of Concept “A”\***

Station Building Rehabilitation	\$3,150,000
Station Platform	\$401,000
Station Building Parking Area	\$635,000
Main St./Mosher St. Parking Area	\$998,000
<b>CONCEPT “A” TOTAL COST</b>	<b>\$5,184,000</b>

**Table ES-2: Capital Costs of Concept “B”\***

Station Building Rehabilitation	\$3,150,000
Station Platform	\$787,000
Mosher Street Bridge Walkway	\$190,000
Station Building Parking Area	\$712,000
Main St./Mosher St. Parking Area	\$998,000
Bowers Street Parking Area	\$529,000
<b>CONCEPT “B” TOTAL COST</b>	<b>\$6,366,000</b>

\*Includes property acquisition costs. See discussion under “Property Impacts”.

**Dwight Street Site – Summary of Options**

The Dwight Street site is located at the terminus of Dwight Street immediately east of Main Street, approximately one-tenth of a mile south of the Former Station site. The site is bordered by Main Street to the west; the Rail Line and a steep undeveloped hill approximately 30 feet high to the east; and the Sullivan Scrap Company and auto sales and repair businesses to the south.

The Dwight Street site was historically the location of railroad freight warehouses, and has not been previously used as a location for a passenger rail station. The area surrounding the site is commercial, consisting of a mix of vacant lots, auto-oriented business such as dealerships and repair shops, and small industrial buildings. The Dwight/Main Street intersection sits at the “Transit-Oriented Development” node identified in Holyoke’s “Center City Vision Plan” (2009), which calls for a revitalized Main Street and infill-development on vacant parcels.

**Site Access**

The Dwight Street site is approximately one-half of a mile from the Pioneer Valley Transportation Authority (PVRTA) Intermodal Transportation Center. It is also within close walking distance, and within sight of, Holyoke City Hall, the Volleyball Hall of Fame, and recent and planned redevelopment efforts including the Canal Walk, Open Square, Heritage Park, and the Massachusetts Green High Performance Computing Center. PVRTA Purple 21 bus service stops at the corner of Main and Dwight Street on weekdays and Saturdays. In addition, PVRTA Red 24 bus service runs along the same route on Saturdays only.

**Parking**

Several opportunities for developing parking are available, depending on the final configuration chosen for the station and platform location. Parking is discussed in more detail for each of the various Dwight Street concepts.

**Station and Platform Location and Configuration**

The Dwight Street site offers more design options than the Former Station site, and is therefore somewhat more flexible in terms of potential station, platform, and parking configurations.

Although this Study presents these three configurations as stand-alone concepts, it should be understood that there is somewhat of a “mix and match” quality to the various components, which could be combined differently if desirable.

### Station Building

All three concepts assume the construction of a new purpose-built structure to serve as a passenger rail station. The station would offer a passenger waiting area of approximately 200-300 square feet, in accordance with the *Amtrak Guidelines* for a Class III Small/Medium facility. The station would also include restrooms, janitorial space, and a mechanical room. Each concept would have pick-up/drop-off areas and meet ADA requirements.

### Concept “C”

Concept “C” consists of a proposed station building on the north side of Dwight Street at its current terminus, with a low-level station platform and canopy stretching to the north along the railroad right-of-way, on the western side of the current main line track. A parking area of approximately 50 spaces would be constructed at the southeast corner of the Main/Dwight Street intersection.

### Concept “D”

Concept “D” consists of a proposed station building on the south side of Dwight Street at its current terminus, with a low-level concrete platform and canopy stretching to the south along the railroad right-of-way, on the western side of the current main line track. A parking area of approximately 30 spaces would be constructed at the southeast corner of the Main/Dwight Street intersection.

### Concept “E”

Concept “E” consists of a proposed station building centered at the foot of Dwight Street at its current terminus, with a low-level concrete platform and canopy stretching to the north along the railroad right-of-way, on the western side of the current main line track. Parking would be provided in three separate locations that have approximately 80 total parking spaces. The parking area at the Main/Dwight Street intersection would be ringed by a one-way extension of Dwight Street.

## **Permanent Traffic Impacts and Off-Site Mitigation**

It is expected that there would be minimal impacts to vehicular traffic flow due to the construction of any of the Dwight Street site concepts, and therefore no significant roadway or intersection mitigation is anticipated.



## Construction Phase Impacts

### Railroad Impacts

There would be some minor impacts to railroad operations due to the construction of Concepts “C” through “E”. Some reconfiguration of the freight sidings serving the Sullivan Scrap operation to the south would be required to accommodate the new platform under any of the proposed concepts. This would include relocating the Sullivan scrap sidetrack currently on the west side of the main line to the east side of the main line and shifting the main line tracks to the west.

### Roadway and Traffic Impacts

No significant public roadway improvements are envisioned, and therefore no significant construction phase impacts to area roadways are anticipated.

## Environmental Site Evaluation

An environmental site evaluation was performed. The evaluation, which consisted of review of available public documents, did not identify the presence of either a known underground storage tank on the site or a known release location for both the site and the adjoining properties.

## Property Impacts

The Dwight Street site, depending upon which site concept is chosen, consists of up to ten parcels of land owned by various private interests. Only two of the ten parcels are developed, both to the south of Dwight Street. While some of the concepts would only require portions of these parcels, for the purposes of estimating costs it was assumed that acquisition of the entire property would be obtained at fair market value.

## Passenger and Facility Security

The City has expressed concern that the Dwight Street site, as an unstaffed location without a caretaker or integral development, will require provision of security cameras connected to the Holyoke Police Department in order to monitor passenger safety and discourage any unauthorized activities or property damage. The Former Station site, if integrated with active public or private development, will not require such a camera link.

## Capital Costs - Dwight Street Sites

The construction of a new station building is a significant expense associated with each of the Dwight Street alternatives, as seen in Tables ES-3, ES-4, and ES-5. This station would offer a passenger waiting area of approximately 200-300 square feet, in accordance with the *Amtrak Guidelines* for a Class III Small/Medium facility. The station would also include restrooms, janitorial space, and a mechanical room. Based on input from Amtrak, there will be no accommodation for a station agent.



For Concept “C” (Table ES-3) the remainder of the major capital costs would involve construction of a platform and canopy to the north of Dwight Street and the construction of the parking area at Main/Dwight Streets, including the costs to acquire and clear the land for construction.

For Concept “D” (Table ES-4) the remainder of the major capital costs would involve construction of a platform and canopy to the south of Dwight Street and the construction of the parking area at Main/Dwight Streets, including the costs to acquire and clear the land for construction.

For Concept “E” (Table ES-5) the remainder of the major capital costs would involve construction of a platform and canopy to the north of Dwight Street and the construction of the three parking areas and one-way roadways for access, including the costs to acquire and clear the land for construction.

**Table ES-3: Capital Costs of Concept “C”\***

Station Building Construction	\$1,714,000
Station Platform	\$1,117,000
Station Parking Area	\$1,580,000
<b>CONCEPT “C” TOTAL COST</b>	<b>\$4,411,000</b>

**Table ES-4: Capital Costs of Concept “D”\***

Station Building Construction	\$1,714,000
Station Platform	\$1,097,000
Station Parking Area	\$1,019,000
<b>CONCEPT “D” TOTAL COST</b>	<b>\$3,830,000</b>

**Table ES-5: Capital Costs of Concept “E”\***

Station Building Construction	\$1,714,000
Station Platform	\$1,226,000
Station Parking Area	\$1,913,000
<b>CONCEPT “E” TOTAL COST</b>	<b>\$4,853,000</b>

\*Includes property acquisition costs. See discussion under “Property Impacts”.

**Screening Process**

To facilitate the determination of the preferred station site, a sliding scale ranging from 1 to 5 was used to rate each site against a set of evaluation criteria. A rating of 1 indicates that the site does not

meet the criteria, a rating of 3 indicates neutrality and a rating of 5 indicates that the site completely meets or exceeds the criteria. A detailed discussion of the evaluation criteria and rating assessment is provided in the full report.

**Site Selection**

The following table includes a summation of all of the ratings for each site:

**Table ES-6: Site Selection Criteria Ratings**

	Former Station Site	Dwight Street Site
<b>Transportation and Land Use Criteria</b>		
Traffic impacts	3	3
Accessibility	4	5
Impact on rail operations	3	3
Parking supply	3	4
Consistency with planning policies	4	5
Compatibility with land use	5	5
Phasing opportunities	3	5
<b>Environmental Criteria</b>		
Hazardous materials	2	3
Natural and Historic Resources	5	4
Economic effects	4	5
Relocations	3	3
TOD opportunities	4	5
Security	4	3
<b>Constructability Criteria</b>		
Constructability	3	3
Impact on rail operations (during construction)	2	2
Business relocations	3	3
<b>TOTAL</b>	<b>55</b>	<b>61</b>

**Key Study Findings**

It was determined that both of the proposed station sites are viable options. While the Dwight Street site scored a higher rating than the Former Station site, the final selection of a particular station concept and site could be determined by secondary factors, including the availability of funding sources, the availability of particular land parcels and the on-going implementation of the Center City Vision Plan. These factors will decide which station site is chosen, and which concept, or parts thereof, is selected for construction.

## Conclusion

The purpose of the Study was to determine the most viable location for a passenger station in Holyoke. As noted above, both sites are deemed viable options for the station location. However, based on current information and conditions, the Dwight Street site is deemed the preferred location. The principle reason is the flexibility of the location to be adapted to the development plans and conditions that are anticipated to occur. Included in the assessment of flexibility is the consideration that the Former Station site would require identification and engagement of a joint development for the complete build out and operation of the station. As the ability to progress the design and construction of a station site was deemed a high priority, the Dwight Street site can likely be implemented in the shortest timeframe. In addition, the Dwight Street site is more closely linked to the vision contained in the current Master Plan for the City.

While the Dwight Street site is deemed the preferred site, it is recommended to maintain the Former Station site as an option should future conditions change that would support the use of the Former Station site.

It should be noted that there is an inherent value in flexibility with several of the proposed station concepts, with regard to various phasing opportunities present. It is important to note that as the City's urban renewal vision evolves and potential station funding sources develop, the most desirable station concept may not be static, and may change over time. A proposed station concept with significant design flexibility may be constructed in phases, as ridership levels and available funding allow.



# INTRODUCTION

## Project Purpose and Background

The Pioneer Valley Planning Commission (PVPC) initiated the Holyoke Station Feasibility Study and Site Analysis (Study) to evaluate the options that exist for a new passenger rail station in the City of Holyoke, Massachusetts. The Study is examining the feasibility of providing a passenger rail stop in Holyoke as part of the impending restoration of passenger rail service on a route that passes through the City. Providing a stop in Holyoke is seen as a way of increasing mobility to and from the City. Additionally, the station is seen as being consistent with current downtown revitalization efforts by numerous public and private entities.

The proposed restoration of passenger rail service on a route through Holyoke is an outgrowth of PVPC's *Knowledge Corridor Passenger Rail Feasibility Study* (Knowledge Corridor Study) which was completed in 2009. The Knowledge Corridor Study concluded that significant local and regional economic and mobility benefits could be achieved by restoring intercity passenger rail service to the Connecticut River Rail Line (Rail Line) of the Pam Am Southern (PAS) railroad. This route between Springfield, MA and the upper Connecticut River Valley passes through the municipalities of Holyoke, Northampton, and Greenfield before entering the State of Vermont at East Northfield. Restoring service to these cities and towns was identified as a key goal of the Knowledge Corridor Study.

In 2009, the Massachusetts Department of Transportation (MassDOT) submitted a stimulus grant application to the Federal Railroad Administration's (FRA) High Speed and Intercity Passenger Rail Program to implement the restoration of Amtrak's daily "Vermont" service to its historic route along the Connecticut River Main Line. In January 2010 the FRA awarded MassDOT \$7.0 million for the design and construction necessary for the *Knowledge Corridor – Restore Vermont* (**Restore Vermont**) project<sup>3</sup>.

Subsequent to the completion of the Knowledge Corridor Study, MassDOT was successful in obtaining a Federal Railroad Administration grant (FRA Grant) for the funding of Knowledge Corridor (Knowledge Corridor Project) improvements between Springfield and East Northfield. The scope of the Knowledge Corridor Project will provide for the restoration of operation of the current daily round trip of the Amtrak Vermont to the Rail Line that passes through Holyoke.

<sup>3</sup> Pg. 1, "Holyoke Passenger Rail Station Site Assessment Study Statement of Work", Pioneer Valley Planning Commission, September 1, 2010

This Study serves as a feasibility analysis to identify the most suitable location for a passenger rail stop in downtown Holyoke. The purpose of the Study is provide a basis for the selection of a potential station site that can then be utilized to move forward to obtain the means to add a Holyoke Station to the Knowledge Corridor Project. The desire is to have the Holyoke Station constructed prior to the projected October 2012 opening of the Amtrak Vermonter service on the Rail Line.

### Station Site Identification

The Knowledge Corridor Study identified four potential locations for a passenger rail station in Holyoke. Two of these locations were deemed to have only limited potential due to various physical and operational constraints, and the remaining two are the subject of this feasibility study.

As part of this Study, each of the two candidate sites was evaluated on the basis of accessibility, suitability from a railroad operational perspective, the existence and condition of station facilities and components, available/potential parking, and each site's potential as a "destination" where passengers can get off the train and be at or near their final destination.

The two sites are referred to in this Study as the "Former Station" site and the "Dwight Street" site. They are described briefly below for purposes of identification, and in more detail in subsequent sections of this Study:

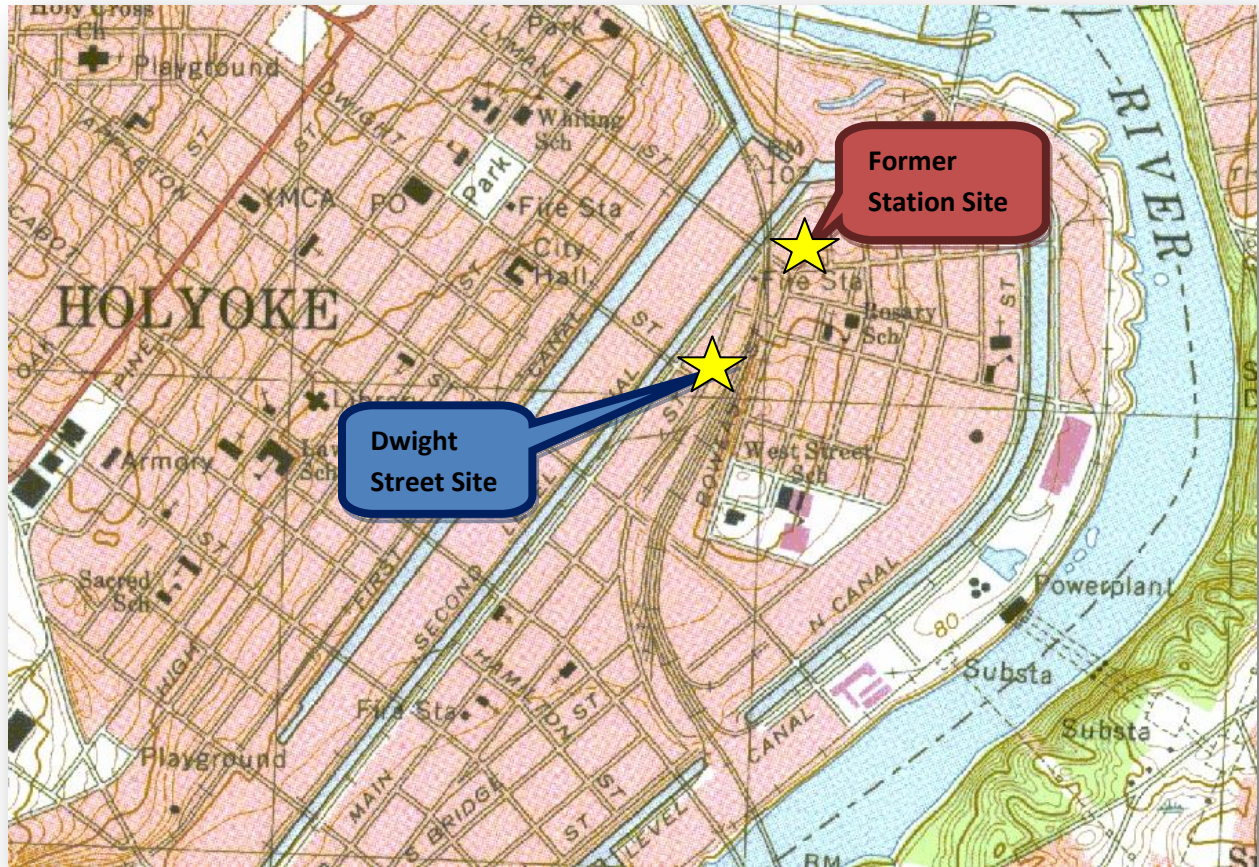
#### Former Station Site

The Former Station site is located off of Main and Canal Streets, approximately four-tenths of a mile from downtown and City Hall and on the east side of the Rail Line. The site is bounded by Lyman Street to the north, Bowers Street to the east, Mosher Street to the south and the Rail Line to the west. The Former Station site was the location of Holyoke's passenger rail station from 1883 until the mid-1960's, and the site includes both the former station building and a former express freight building.

The Rail Line passes through the site in a north-south orientation, with bridges across Mosher Street and Canal Street at either end of the station. There were originally two or more tracks in service, with a stub-end track to the west of the main line, but only the main line track is still in use by Pan Am Southern (PAS). The east track closest to the station building is abandoned and largely removed in its entirety; this track could be restored as a siding for the proposed station. The station is located on a curve, which could complicate raised platform construction and may require the platforms to be located to the south of Mosher Street on tangent track.



Figure 1-1: Location Map (Source: MassGIS)



**Dwight Street Site**

The Dwight Street site is located at the foot of Dwight Street, on the west side of the Rail Line. This site is located approximately one-tenth of a mile to the south of the Former Station location, and three-tenths of a mile from City Hall. No station has been previously located at this site.





## GUIDELINES, STANDARDS AND ASSUMPTIONS

The proposed passenger rail station in Holyoke would be required to meet certain minimum guidelines and standards of several federal, state, and local organizations, most of which apply to either station location. These guidelines and standards cover all aspects of the proposed station, including accessibility, environmental remediation, permitting requirements, and site amenities. The primary sources of guidance in developing evaluation criteria and alternative concepts for the two station sites were as follows:

- Amtrak’s *Station Program & Planning Standards and Guidelines* (“Amtrak Guidelines”) served as the source of technical criteria relating to physical siting and layout of station concepts.
- The City of Holyoke, in particular the Office of Planning and Development, provided input for criteria and assumptions related to the relationship of the candidate station sites to ongoing revitalization and urban renewal efforts in the downtown area; as well as information on property ownership and related planned infrastructure projects in the area.

### Ridership and Station Classification

The *Amtrak Guidelines* include the following system of station classifications based on ridership and revenue<sup>4</sup>. These classifications, in turn, guide the basic layout and selection of station amenities:

- Class I – Large Station; a minimum of 400,000 Amtrak passengers and/or \$35 million in ticket revenues per year, or a major transportation terminal station
- Class II – Medium Station; a minimum of 100,000 Amtrak passengers and/or \$500,000 in ticket revenues per year
- Class III – Small/Medium Station; a minimum of 20,000 Amtrak passengers and/or \$50,000 in ticket revenues per year
- Class IV – Small Station; less than 20,000 Amtrak passengers annually.

The Knowledge Corridor Study included ridership estimations for Holyoke under several rail service scenarios. These scenarios included simply rerouting the once-per-day “Vermont” to the Rail Line; expanding “Vermont” intercity service to two to four daily trains each way; and supplementing “Vermont” intercity service with multiple-frequency commuter service south of Greenfield, MA.

<sup>4</sup> Pg. 9-10, “Station Program & Planning Standards and Guidelines”, Version 2.2, Amtrak, March 2008

For the purposes of this Study, it was agreed that the “Enhanced Intercity” service model, consisting of four daily trains in each direction through Holyoke, would be assumed.

For the Enhanced Intercity scenario, using forecast year 2030 (which is consistent with the *Amtrak Guidelines* recommendation to plan stations for at least a 15 year horizon) approximately 132 combined boardings and alightings per day<sup>5</sup> were estimated for Holyoke. Taking into account Amtrak’s recommended peaking factors, this equates to an annual ridership of approximately 35,000, which places Holyoke into the Class III – Small/Medium Station category.

### General Site Program

Class III stations guidance suggest an enclosed station building including restrooms, janitorial space and other amenities such as concession space. A list of amenities considered generally required for a Class III station is provided below:

- Conformance with all ADA/FRA requirements
- Trailblazer signs on nearby highways
- Paved parking (see further discussion below)
- Auto/Taxi/Pick-up/drop-off lanes
- Transit access
- Bicycle racks
- Exterior signage/lighting
- Amtrak Standard Signage
- Paved platform with overhead canopy (see further discussion below)
- Platform lighting
- Trash receptacles
- Trash pick-up/snow removal
- Janitorial services or caretaker with occasional janitor
- Enclosed waiting room (see further discussion below)
- Restrooms
- Passenger boarding assistance
- Information kiosk
- Passenger Information Display System (PIDS)
- Remote PA w/platform LED signage
- Pay telephones
- Security call box

A more detailed refinement of some of the suggested amenities follows:

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<sup>5</sup> Pg. 4-16, “Knowledge Corridor Passenger Rail Feasibility Study”, Pioneer Valley Planning Commission, December 2009

### Station Size (Structure)

The typical passenger rail station structure provides room for passenger waiting, ticketing, restrooms and vending, depending on ridership levels and the type of service offered. The square footage required, therefore, depends on the level of amenities provided, as well as ridership and train schedules. Based on input from Amtrak, there will be no accommodation for a station agent in any of the proposed station concepts. Tickets will be pre-purchased as in the current practice.

As noted above, the Holyoke Station will fall into the lower end of Amtrak's Class III – Small/Medium category. Based on the calculation methodology included in the *Amtrak Guidelines*, a waiting room capacity of approximately 200 square feet would be required, exclusive of restrooms and mechanical/janitorial space.

### Platform Length

Per the Amtrak Guidelines, it is preferred that platforms be able to accommodate the full length of a typical train. The suggested minimum platform length for Corridor Service is 300 feet. For the purposes of this Study a platform length of 400 feet was selected, which would allow for all but two end doors of a six-car train set to board at the platform based on a standard passenger car length of 85 feet.

### Platform Height

In 2006, the United States Department of Transportation (DOT) issued a Notice of Proposed Rulemaking (NPRM) which addressed the desire to achieve “level boarding throughout the entire length of a passenger train” at a station, not just an individual coach in that train as has been the standard since the early 1990's.

The methodology for achieving level boarding was to mandate two (2) sets of required dimensions for passenger car floor height and for platform height:

- 48 inches Above-Top-of-Rail (ATR) in the Northeast Corridor and at other locations where so-called “high level” platforms can be accommodated
- 15 inches ATR at all other locations

This NPRM has generated a great deal of industry comment and concern about the impact of mandating such structures and the extent to which they would infringe upon required clearances for the safe movement of freight trains, which often operate on the same tracks as passenger trains.

Currently, the Final Rule in this matter has not been published by the DOT. For the purposes of this Study, and based on guidance received from Amtrak, it has been assumed that a low level (8-inches Above Top of Rail) platform will suffice for the implementation of

service. Neither of the candidate sites preclude the construction of a higher level platform in the future should this become mandated or otherwise desirable.

### **Parking**

Provision of adequate parking for private automobiles is one of the critical factors in ensuring that an urban rail station lives up to its full ridership-generating potential, and that it does not become a burden on the parking supply of adjacent neighborhoods. While the *Amtrak Guidelines* emphasize the importance of planning for a projected 15-year time horizon, no specific guidance is provided in terms of correlating the number of spaces with daily ridership.

Given the intercity nature of the proposed service at Holyoke, and the urban location and proximity to transit services available at both candidate sites, an assumption of one parking space per two daily riders was used for this Study. This suggests a target parking supply of approximately 65 spaces.

### **Historic Preservation Issues**

The former station building was designed by the famed architect H.H. Richardson in 1883 as one of many station buildings he designed for the Connecticut River Division of the Boston and Maine Railroad, and, while not presently on the National Historic Register, is listed as a Massachusetts Cultural Resource by the Massachusetts Historical Commission (MHC). The station and surrounding area are included within the Flats/South Holyoke District (MHC HLY.W), which was surveyed in 1991 by the Holyoke Office of Community Development and recommended eligible for inclusion in the National Register of Historic Places. The station building is in a state of disrepair and is currently owned by the City of Holyoke's Gas & Electric Department.

Immediately adjacent to the north of the station, on the same parcel of land, is a small one-story painted brick structure with a hipped roof. The structure is identified on a 1914 railroad valuation plan as "American Express #2". The building is not identified in any historical documentation on the station or surrounding area; however, based on its age, it is considered a contributing structure to the Flats/South Holyoke District.

The Dwight Street site is located on the edge of the Flats/South Holyoke District, and any station components located to the north of Dwight Street would be included in the historic district. The site does not contain any historic buildings scheduled for rehabilitation. However, there are several adjacent properties that may be of historical value.

### **Permitting**

Any project which requires permits, funding, licensing, or approvals from state and/or federal agencies is potentially subject to compliance with the National Environmental Policy Act (NEPA), Section 106 of the Natural Historic Preservation Act, the Massachusetts Environmental Policy Act

(MEPA), Chapter 91 and Chapter 254. A summary of the regulations and their relevance to the proposed Holyoke station development is provided below.

### **National Environmental Policy Act**

The primary law governing federal environmental protection process is the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.), as amended. The regulations of the Council on Environmental Quality (CEQ) implementing NEPA ensure that information on the social and environmental impacts of any federally-funded action is available to public officials and citizens before decisions are made and before actions are taken. NEPA establishes an umbrella process through the preparation of an environmental review document for all federal actions affecting the environment. NEPA regulations direct federal agencies in their planning and decision-making on federally-assisted transportation projects to take into consideration the natural and social sciences, environmental amenities and values, air and water quality, historic preservation, parklands protection, habitat preservation, civil rights, and social burdens of transportation investments.

The process for complying with NEPA and related federal surface transportation statutes is defined in the joint Federal Highway Administration/Federal Transit Administration Environmental Impact and Related Procedures (23 CFR 771). This regulation sets forth the agencies' policy of combining all environmental analyses and reviews into a single process. It defines the roles and responsibilities of the federal agency and its grant applicants in preparing documents and in managing the environmental process within the various project development phases.

When the alternatives to be considered for the proposed Holyoke station have been finalized, the federal agency in consultation with the applicant would advise the applicant which level of action the proposed undertaking would require, as follows:

- **Categorical Exclusion** (23 CFR 771.117): A Categorical Exclusion (CE) is granted for actions that do not individually or cumulatively involve significant social, economic, or environmental impacts. The NEPA regulations outline specific actions that meet the criteria for a CE.
- **Environmental Assessment** (23 CFR 771.119): An Environmental Assessment (EA) is required when the significance of the environmental impact is not clearly established. An EA can result in either a Finding of No Significant Impact (23 CFR 771.121) requiring no further environmental evaluation, or identification of potentially significant impacts requiring the applicant to undertake an Environmental Impact Statement (EIS).

- **Environmental Impact Statement** (23 CFR 771.123 et seq.): Depending on the nature of the proposed project, the federal agency may require applicants to develop an EIS, or request an EIS based on the outcome of the EA. In either case, an EIS requires that a substantial technical analysis and public review process be conducted to evaluate the project alternatives, identify potential social, economic and environmental impacts of the project, and designate methods to avoid or mitigate these impacts.

The proposed development of a passenger rail station in downtown Holyoke may require the preparation of an EA, though consultation with the federal agency could result in the determination that the proposed project meets specific conditions or criteria that qualify it for the preparation of a CE. Consultation with the federal agency would be initiated following the vetting of alternatives for the proposed station.

#### **Section 106 of the National Historic Preservation Act (36 CFR 800)**

Section 106 of the National Historic Preservation Act (referred to as “Section 106”) requires that federal agencies consider what effects their actions and actions they may assist, permit or license may have on historic properties. Because the development of a passenger rail station in downtown Holyoke will likely utilize federal funding, the undertaking is thus expected to be subject to review by the MHC under Section 106 in its federal role as the Massachusetts State Historic Preservation Office (SHPO). The review process is a multi-step sequential process involving the identification and evaluation of historic resources in the vicinity of the proposed undertaking and then determining what effect the undertaking may have on the resources. For the proposed station, the MHC would consider project impacts to the Holyoke Canal System, the Hadley Falls Company Housing District, the former station building itself, and the Flats/South Holyoke District. Review of the project is a consultation process among the federal agency, MHC, consulting parties (e.g. Holyoke Historical Commission), and the project proponent to consider alternatives that would eliminate, minimize, or mitigate any potential adverse impacts to affected historic resources.

The MHC could also require an archaeological survey to determine if any significant prehistoric or historic archaeological resources are within the project’s area of potential impact. However, the project sites under consideration appear to be previously developed urban parcels. A review of the Inventory of Historic and Archaeological Resources of the Commonwealth (the “Inventory”) indicates that there are no previously identified archaeological resources within the parcels. Therefore, due to previous development activities and disturbance, it is anticipated that the sites under consideration are unlikely to contain significant archaeological remains.

**Massachusetts Environmental Policy Act**

Massachusetts Environmental Policy Act (MEPA) review is required of projects that require state agency action, such as funding or permits, and that exceed review thresholds. The project does not appear to meet or exceed MEPA review thresholds with the exception of the “historic” threshold. The MEPA review threshold for historic resources is the demolition of all or any exterior part of any historic resources listed in the Inventory of Historic and Archaeological Assets of the Commonwealth, which would require the filing of an Environmental Notification Form (ENF) (301 CMR 11.03(10)(b)). The proposed station concepts utilizing the former station site (see Section 4) would involve the demolition of a property included in the inventory – the “American Express #2” structure adjacent to the former station building. However, if there are no other MEPA thresholds met or exceeded and the project is subject to a Determination of No Adverse Effect by the MHC or is consistent with a Memorandum of Agreement with the MHC, the MEPA regulations allow for consultation with the MHC outside of the ENF filing procedures. The proponent would be required to submit a Project Notification Form to the MHC to complete the MHC review process.

**MHC State Register Review, Chapter 254**

Under Massachusetts General Laws Chapter 9, Sections 26-27c, as amended by Chapter 254 of the Acts of 1988 (950 CMR 71) (referred to as “Chapter 254”); the MHC has review authority of projects undertaken, funded or licensed by a state body to determine whether such project would have any adverse effect on properties listed in the State Register of Historic Places. The review process mirrors the Section 106 process described above with the exception that projects that involve only inventoried properties and in the absence of any State Register properties, are not subject to Chapter 254 review.

The parcels under consideration for a passenger rail station in downtown Holyoke are not listed in the State Register. However, they are near the Holyoke Canal System and the Hadley Falls Company Housing District, which are listed in the State and National Registers. Therefore, the MHC would review the project for its effects on the Holyoke Canal System and the Hadley Falls Company Housing District. In addition, the MHC would review the project under its Chapter 254 purview to fulfill the project’s MEPA review requirements as described above.

**Massachusetts Public Waterfront Act, Chapter 91**

The Commonwealth’s primary tool for protection and promotion of public use of its tidelands and other passageways is Massachusetts General Law Chapter 91, the waterways licensing program.



The parcels being considered for each station concept are not located on or in waters of the Commonwealth nor within filled tidelands of the Commonwealth and therefore are not subject to the provisions of Chapter 91.

**Massachusetts Wetland Protection Act and Regulations**

Project activities may be located within the 100-foot Buffer Zone of wetland resource areas subject to protection under the Massachusetts Wetland Protection Act and Regulations (Chapter 131, Section 40, 310 CMR 10.00) (the “Act”). Project activities may be located within proximity of a manmade canal, which may qualify as a “stream” as defined in Section 310 CMR, 10.04 of the Act. A filing with the Holyoke Conservation Commission could be necessary to determine if project activities are located within wetland resource areas or applicable buffer zones subject to protection under the Massachusetts Wetland Protection Act.

The following are resource areas that may be associated with the manmade canals:

- **Bank** – is defined in Section 310 CMR 10.54 of the Act. Bank may be associated with the manmade canals and may be comprised of concrete or stone. Work at the Former Station site could potentially occur within 100 feet of the bank. Any work within 100 feet of bank requires a filing with the Holyoke Conservation Commission.
- **Riverfront Area** – is defined in Section 310 CMR 10.58 of the Act. In accordance with 310 CMR, 10.58 (2) (a) (1) (g), “*manmade canals (e.g. the Cape Cod Canal and canals diverted from rivers in Lowell and Holyoke) and mosquito ditches associated with coastal rivers do not have riverfront areas*”. Therefore, a 200-foot riverfront area would not apply to the manmade canals within the project vicinity and the project would not be subject to the riverfront regulations identified in 310 CMR 10.58.
- **Bordering Land Subject to Flooding/Floodplain (BLSF)** – is defined in Section 310 CMR 10.57 of the Act. The project areas under consideration are not mapped within the 100-year floodplain associated with the Connecticut River, and therefore are not located within BLSF subject to protection under the Act.

Based on the above analysis, it appears that the project’s permitting process may entail review under NEPA (either a Categorical Exclusion or Environmental Assessment), Section 106, MEPA, Chapter 254, and possibly the Massachusetts Wetland Protection Act.

Because the sites are previously developed urban locations NEPA review is not expected to be onerous, and archaeological impacts are not anticipated. Any impacts to historic resources will require both federal and state review but, given the significance of the resources potentially affected, these reviews are not expected to be overly burdensome to the proposed project.



## EVALUATION CRITERIA

To develop a recommended alternative, it is important to evaluate whether each site can accommodate the minimum required amenities detailed in Section 2 above. The candidate sites must also be screened against a host of other criteria that incorporate various specific, local considerations. For the purposes of this Study, three main categories of criteria were utilized:

- Transportation and Land Use Criteria
- Environmental Criteria
- Constructability Criteria

These categories of criteria are discussed in detail below, including various sub-categories of each. While the criteria are rated on a pass/fail basis, the ratings are relative in nature. For instance, some of the criteria may be met for a particular site concept, while a differing concept may more completely satisfy the criteria. The rating system utilized for this Study is documented in Section 6 that follows.

There is an inherent value in flexibility with several of the proposed station concepts, with regard to various phasing opportunities present. It is important to note that as the City's urban renewal vision evolves and potential station funding sources develop, the most desirable station concept may not be static, and may change over time. A proposed station concept with significant design flexibility may be constructed in phases, as ridership levels and available funding allow.

### Screening Criteria

The following screening criteria were established to assist in the selection of a recommended station site and concept:

#### Transportation and Land Use Criteria

- **Traffic impacts** – Will passenger trips to and from the station add to congestion on nearby roadways? Will it facilitate traffic patterns that improve traffic circulation?
- **Accessibility** – Is the station accessible via public transportation or via non-motorized transportation?
- **Impact on rail operations** – Will the station concept interfere with current freight rail operations, through either track reconfiguration or clearance issues?
- **Parking supply** – Is there sufficient parking supply at the station to prevent overflow parking in the surrounding area?

- **Consistency with planning policies** – Is the station concept consistent with the City of Holyoke’s urban renewal vision for the downtown area?
- **Compatibility with land use** – Will the station fit in with the surrounding development?
- **Phasing opportunities** – Is it possible to develop the station concept in phases, adding or modifying the station as either ridership levels or available funding permit?

**Environmental Criteria**

- **Hazardous materials** – Will any hazardous material mitigation be required at the station site?
- **Natural and Historic Resources** – Will there be impacts to natural or historic resources?
- **Economic effects** – Will the station affect municipal tax revenue through either converting taxable land to public land or stimulating adjacent development?
- **Relocations** – Will any property owners or tenants be required to relocate for the proposed station concept?
- **TOD opportunities** – Will the site encourage transit-oriented development both within and adjacent to the immediate area?
- **Security** – Are there any issues related to passenger or facility security?

**Constructability Criteria**

- **Constructability** – Are there any anticipated construction issues that would make the station concept undesirable?
- **Impact on rail operations (during construction)** – Would construction place undue restriction on existing freight rail service?
- **Business relocations** – Would any property owners or tenants be required to relocate during construction?

The Sections of this Study that follow present a narrative description of the two candidate sites, and of alternative concepts that have been developed for each site. Following these descriptions, the Study presents an evaluation of each of the sites versus the various screening criteria listed above.

## FORMER STATION SITE

The Former Station site is located at 12 Bowers Street, and is an obvious candidate site for consideration as a new passenger rail station. The reuse of the Former Station site would serve to bring back an important piece of historic architecture from abandonment. While run-down in appearance, the station building appears structurally sound. The site is removed from the heart of downtown by a short distance, and is easily accessible. The station building and site are owned by Holyoke Gas & Electric, who, while not actively using the building, have attempted to stabilize it from further deterioration.



The station site includes two structures. The first is the former passenger station itself, designed by renowned architect H.H. Richardson for the Connecticut River Division of the Boston & Maine Railroad and erected in 1883. The second structure was originally a mail and express building, and are believed to have been erected in the early 1900's.

The Former Station site was last regularly used as a passenger rail stop by the Boston & Maine Railroad in the mid-1960's. Amtrak subsequently operated its overnight "Montrealer" passenger service on this portion of the Rail Line between 1972 and 1987, but this service did not serve Holyoke and passed through the city and the Former Station site without stopping.

The area surrounding the site is mainly residential, and consists mostly of multi-family apartment buildings and some single-family detached residences. The Second Level Canal of the Holyoke Canal System is located immediately to the north and west of the site, across from Route 116 (Canal Street).

## Building History, Condition and Proposed Renovations

### History and Existing Conditions

The study team performed an interior and exterior site inspection of the existing station in the fall of 2010. The team was accompanied by representatives of the structure's current owner, Holyoke Gas & Electric (HG&E); as well as representatives from PAS and Amtrak.

The building, also known as the Connecticut River Railroad Station, is a two-story stone structure with a basement. There is a surrounding outsized roof designed in the Richardson Romanesque style. Characterized by a pattern of random ashlar of gray granite, it displays four belt courses of brownstone at the first floor level and two at the stone dormer above, with window surrounds and dormer coping stones also of brownstone. Interior space is arranged around a central two-story high waiting room and ticketing office. At the north and south ends of the waiting room are stairs to the second floor offices. The remainder of the ground floor consists of a baggage room and restrooms. The basement walls, columns, and arches are characterized by common brick.

The building was purchased and used by Perry Auto Parts in 1965; there is a concrete masonry unit (CMU) enclosure that was added at this time at the south end of the building where the exterior roof columns were enclosed to make additional rooms. In addition, on the east façade a concrete loading dock was added to the front of the building alongside a set of steps. The first floor was cut to provide an opening for a conveyor belt to the basement at the southerly front door entrance.

The main general waiting room was a two-story open space with an open-vaulted ceiling highlighting the elaborate and decorative wood truss roof structure. It has since been divided horizontally with wood joists and a plywood floor to create a second floor for additional interior floor space. The original waiting room, baggage room and other support spaces have been divided up into smaller spaces with partitions. It was also observed that the second floor on the north side was turned into an apartment with a kitchen and full bath.

Based upon an existing plan of the Station from a 1958 alteration, the overall dimensions of the station building are 152'-6" by 38'-6" for a total of 5,871 square feet of space. The existing waiting room is described as 71'-6" by 35'-0" for a total of 2,503 square feet. The former central ticket office is along the westerly exterior wall of the waiting room. The baggage room and restrooms are within the northern portion of the building, and the former locker room, taxi office and Railway Express Agency spaces were within the southern portion of the building. Alterations to the station building while under the ownership of Perry's Auto have resulted in an addition to the southern portion of the building.

### Proposed Restoration and Redevelopment

Staff from the Holyoke Office of Planning and Development indicated that in recent years, several private parties have expressed interest in redeveloping the former railroad station for commercial use. Specific uses that have been mentioned include retail and/or office condominiums. These and other potential uses seek to take advantage of the increased business and pedestrian activity projected to develop in this area of downtown due to current and proposed redevelopment projects such as Open Square and the Massachusetts Green High-Performance Computing Center. Potential business operators also see the revived passenger rail service itself as an important catalyst for redevelopment.

As discussed above, existing ridership projections and the *Amtrak Guidelines* indicate that the portion of the existing station that would be required to serve rail passenger functions would be relatively small (200-300 square feet required versus approximately 5,870 square foot building footprint). Thus, joint development and occupancy with one or more commercial operations would appear to be feasible and required.

For this Study it was assumed that the most potentially attractive and unique space for a commercial tenant would be the original waiting room, particularly if the space were restored to its original, grand, double-height configuration. Under this scenario, the railroad passenger waiting functions would be accommodated in one of the smaller ancillary spaces, such as the original locker room or taxi office.

For cost estimating purposes, it was assumed that the following renovation and repair scope would be performed as part of the rail passenger-station project:

- New exterior doors and windows
- Remove CMU and enclosed space, and expose exterior columns
- Re-point exterior masonry and remove graffiti
- Replace and repair roofing shingles with new architectural shingles (non-slate)
- Remove addition along southeast corner of building
- Finish station interior to a “tenant-ready” state
- Remove interior partitions from Waiting Room space and 2<sup>nd</sup> level floor
- Renovate restrooms for ADA accessibility

Final fit-out of station interior spaces beyond those required for rail passengers spaces would be performed “by others” and is outside the scope of this Study.

### Site Access

The Former Station site is situated in a readily accessible location for pedestrians, auto and transit vehicles. The site is approximately four-tenths of a mile from the Pioneer Valley Transportation Authority (PVTA) Intermodal Transportation Center, and is a relatively short walk to other

locations in the downtown area, including City Hall, Heritage State Park, and the new Canal Walk. There are accessible sidewalks on both sides of most of the adjacent roadways, with the exception of Mosher and Bowers Streets. Mosher Street has only one sidewalk on its northern side due to the space constraints underneath the railroad overpass, and Bowers Street to the south has only one sidewalk on its eastern side due to the varying topography along the roadway.

Massachusetts State Route 116 runs along Main and Canal Streets just west of the site, providing local access to Chicopee and South Hadley, and Interstate 391 is a short distance to the southwest, providing easy access to the Interstate Highway System.

PVTA Red 25 bus service stops at the corner of Bowers and Mosher Street, directly abutting the site, on weekdays. The bus currently runs approximately once per hour to the Intermodal Transportation Center downtown, once every two hours to the Holyoke Mall and once every one-to-two hours to South Hadley.

Several caveats should be noted regarding the former station's accessibility, and these concern the site's orientation. One result of the century-old decision to locate the station on the easterly side of the railroad tracks is that the building faces away from downtown Holyoke. This fact, combined with the elevation of the site above the adjacent street grid, makes the station somewhat isolated from the rest of downtown. This may affect the site's "apparent" accessibility as opposed to its "technical" accessibility. The provision of vehicular and pedestrian wayfinding would thus be an important consideration should this site be adopted. Wayfinding and other pedestrian, vehicular and transit improvements associated with both candidate station sites are currently being studied as part of the U.S. Environmental Protection Agency (EPA) [Linking Transportation Hubs Through Transit-Oriented Design – Holyoke Project](#).

In addition, the site's elevation requires pedestrians arriving from Main Street or downtown to traverse an almost complete circuit around the station block before entering at a level grade off Bowers Street. There exist two sets of granite stairs (one to Mosher Street and one to Lyman Street) for pedestrian connections. These stairs are currently in disrepair and would require reconstruction to meet existing codes. This reconstruction would include shoring the existing granite walls, removing, resetting and replacing the existing steps, installing new handrails, and improving the drainage beneath the steps, and would cost approximately \$200,000 per staircase. Redesign of the stairs would need to be considered if construction of parallel ramp systems is required in order to provide universal accessibility. For the purposes of this Study, repairs of the stairs and construction of ramps have been excluded from the program due to these cost and accessibility concerns.

### **Parking**

As an urban station constructed in the pre-automotive era, the existing site is quite constrained relative to parking. This is exacerbated by the site's location on an elevated plinth above the surrounding street grid. Using current parking standards, and assuming the demolition of the

former express building to the north of the passenger station, it appears that it would be possible to provide approximately 20 parking spaces directly at the station site, while also including a new pick-up/drop off loop and an additional exit onto Bowers Street.

As noted earlier, it was determined that a target of approximately 65 spaces would be appropriate based on projected ridership. This fact, coupled with the need to provide parking for non-rail-passenger tenants at a jointly-developed station, requires that additional off-site parking be provided.

Several contiguous parcels of vacant land were identified to the south and east of the Main/Mosher Street intersection, a short walk from the station site. The City has reported that these parcels are currently in tax-arrears, and may be acquired by the City in the near future. Conceptual parking layouts confirmed that these parcels could provide the recommended additional 65 spaces. Under this scenario, it is proposed that handicap accessible parking would be located at the station site proper, as well as spaces reserved for non-rail building tenants. All rail passengers not requiring accessible parking would be required to park at the Main/Mosher Street lot. It should be noted that this parking arrangement runs counter to Amtrak's recommendation that parking, particularly for intercity service where there is a high likelihood that passengers will be traveling with luggage, be located as close as possible to the station platform.

The parking area at Main/Mosher Street would probably not be visible from the station building. This discontinuity with the station would be further accentuated by the presence of the Mosher Street railroad overpass, which currently allows pedestrian access on only the north side of Mosher Street, across from the proposed parking area. As mentioned above, two former granite staircases lead from the station directly to both Mosher and Lyman Streets; however, these are not proposed for restoration due to the cost and accessibility concerns mentioned above.

The City has identified another potential alternative parking location on the north side of Lyman Street, which would be in closer proximity to the station. This site is currently privately owned and it is recommended that the City continue to pursue this option in order to further improve the viability of the Former Station site.

### **Platform Location and Configuration**

Two platform concepts were developed for the Former Station site. Under both concepts, the station building would be renovated and off-site parking would be developed at Main and Mosher Streets, both as described above.

#### **Discussion of Low-Level and High-Level Platforms**

Currently, in areas where freight trains are operated, high-level platforms must be constructed with sufficient clearance to allow for the passage of wider freight cars. This requires that high-level platforms be constructed with gaps between the rail cars. In curved track, the gap needs to be increased to allow for the additional overhang of rail cars running



over curved track. Because of this, a high-level platform configuration is more difficult to construct on a curve than on tangent track. For high-level platforms, the use of bridge plates to span the gap between railcar and platform is required. The added gap between the railcar and platform edge because of the curvature of the track would make handling of the bridge plates more difficult. This would need to be examined as part of the final station design.

An additional note regarding design and construction of high-level platforms is that the Federal Railroad Administration recently issued a Notice of Proposed Rulemaking regarding the construction of high-level platforms. In this role the FRA proposed mandating that the gap between passenger cars and rail platforms be constructed to enable direct transition from the rail platform to the railcar without the use of bridge plates. The proposed rule has met with substantive opposition from both passenger and freight operators. The proposed rule would require that not only newly constructed platforms be built using high-level platforms, but that existing low-level platforms and non-conforming high-level platforms be converted to new high-level platforms as well. This new rule is of great concern to rail operators as it would be a massive capital expense, and would significantly impact current freight and passenger rail service.

Because of opposition to the proposed rule regarding high-level platforms, the FRA has apparently decided not to progress the proposed rule. What is not known is if the FRA will withdraw the proposed rule entirely, or propose a modified rule. As a result, it is prudent in any evaluation of station modifications to consider how the application of high-level platform requirements would affect station design and how the station design could be altered, if needed, to accommodate future requirements for high-level platforms.

In each of the concepts presented in this and the following Section, consideration will be given to how the proposed station may be modified to accommodate high levels platforms that may be mandated by any future rule.

As an additional consideration, in recent discussions with Amtrak relative to the stations being proposed at Northampton and Greenfield, Amtrak officials have recommended that these stations be constructed utilizing low-level platforms similar to others currently used by the Amtrak Vermonter service on rail lines north of Springfield. Therefore, the design concepts presented below are based on the assumption of utilizing a low-level platform. As noted in the relative discussion for each station concept, consideration of a future conversion to a high-level platform has been noted.

### Concept “A”

Concept “A” (see Figure 4-1) involves the reconstruction of the passenger platform at its historic location directly adjacent to the station building. The existing wood passenger



platform, which is beyond repair, would be replaced with a low-level platform, and would be located underneath the station's canopy. The canopy would be repaired and integrated with the platform design. The materials used and details for the low-level platform would be determined during final design. A manual lift for ADA access to the train would be required as part of Concept "A".

The track next to the platform is the former northbound main line. This track is currently out of service. It would be restored as part of the restoration of the station. The platform length would be limited to approximately 340 feet as it is constrained by the overpass structures to the north and south of the station site.

A concern with Concept "A" is that the platform would be located on a horizontal curve in the track alignment. As noted above, the conversion to a high-level platform at the Former Station site would be difficult or potentially impossible to build because of the curvature of the track adjacent to the station. Additionally, the use of a high-level platform with the canopy extended from the existing station could prove to be problematic in developing an effective design. The potential solution for this occurrence would be to relocate the station platform to the south of the former station and along tangent track. This consideration is contemplated in Concept "B" presented below. As such, Concept "B" can be considered an option to provide for future high-level platforms if a low-level platform is initially constructed at the former station location, or an option to be constructed as part of initial restoration of the former station.

### **Concept "B"**

Concept "B" (See Figure 4-2) involves locating a new platform on tangent track to the south of Mosher Street. The platform length would be the recommended 400 feet, and would be accessed by passengers in one of two ways:

- Passengers arriving either by vehicle or on foot, and not requiring the use of any of the station amenities in the building, could access the site directly from Bowers Street, where a new sidewalk would be provided. There would also be a small parking area with several accessible spaces located off of Bowers Street.
- Passengers requiring the use of station facilities in the building would access the platform via a pedestrian walkway that bridges over Mosher Street. Subject to further investigation, this would be either a new independent structure or a reconstruction of the presently unused easterly bay of the existing railroad bridge.

Under Concept "B", the two main line tracks south of Mosher Street would be shifted to the west to allow for construction of a separate platform track. The station track would not be able to occupy its historic alignment, since this alignment would be utilized by the pedestrian walkway across Mosher Street.

It should be noted that while Concept “B” allows for future conversion to high-level boarding if needed, the station platform would be located more than 300 feet to the south of the station building itself. This arrangement results in more complicated and lengthy circulation patterns, both within the site and to/from the downtown area.

For example, a passenger walking from either downtown or the Main/Mosher Street parking area, and desiring the use of station amenities, would travel in a circuitous “cloverleaf” path, passing first beneath and then over the Mosher Street bridge to access the platform. Similarly, passengers wishing to go directly from Main Street to the platform without using the station building would have to have to cross Mosher Street twice since there is currently no sidewalk on the south side of Mosher Street, or risk walking in a narrow roadway with limited sightlines due to the bridge structure. One related travel option would be to make Mosher Street a one-way street. This could provide the opportunity to add a sidewalk to the south side of Mosher Street. This sidewalk could then be used to allow pedestrians to walk from the parking lot on the west side of the tracks to a new station platform on the side of the tracks. A more direct route between the parking lot on the west side of the tracks and the platform would be via an illegal crossing of the tracks at grade. As this would create an unsafe condition, fencing would be required to prevent this action.

### Permanent Traffic Impacts and Off-Site Mitigation

It is expected that there would be minimal impacts to vehicular traffic flow due to the construction of either of the Former Station site concepts, and therefore no significant roadway or intersection mitigation is anticipated. The PAS Rail Line has no grade crossings near the site, so traffic will not be affected by stopped trains directly. Any traffic impacts would be the result of additional auto and transit trips to and from the proposed station location. The site is located in a densely developed urban area, and observations during peak hours suggest that the roadway network and key intersections are operating below capacity.

New driveway entries at Bowers Street at the station site, and along Main Street at the offsite parking facility would need to be carefully designed to ensure that all appropriate standards for sight distance and other safety criteria are met.

The limited amount of parking adjacent to the station building may tempt passengers to park on Bowers Street in spaces currently used by nearby residents. Should this site be adopted, this situation should be monitored and these parking spaces could be posted as “Resident Only” or “Short Term Only” if required.

As noted above, under a separate initiative, the U.S. EPA is working with the City of Holyoke to identify pedestrian and streetscape improvements that would benefit the new passenger rail station at either site, and improve pedestrian connectivity to the downtown area and to the Transit Oriented

Development (TOD) district. For the Former Station site, we would specifically recommend that the EPA project consider sidewalk improvements along both sides of Mosher Street, as well as crosswalk improvements at adjacent intersections, as the pedestrian connection between the off-site parking area, the station building, and the platform is critical.

## Construction Phase Impacts

### Railroad Impacts

There would be minimal impacts to railroad operations due to the construction of Concept “A”. As noted, a restored platform track would be provided as part of the overall station restoration project.

As noted under Concept “B”, the existing main line tracks south of Mosher Street would need to be shifted to the west to accommodate the new pedestrian walkway between the station building and platform. In addition, some reconfiguration of the freight sidings serving the Sullivan Scrap operation to the south would be required to accommodate the new platform.

### Roadway and Traffic Impacts

No significant off-site roadway improvements, and therefore, no significant construction phase impacts to area roadways are anticipated.

## Environmental Site Assessment

A Phase I Environmental Site Assessment was conducted by O’Reilly, Talbot & Okun Associates, Inc. (OTO) in January 2011 for the Former Station site, which included both the station property and the Concept “B” parking and platform area. A site reconnaissance visit and research performed by OTO identified the following Recognized Environmental Condition (REC) and Historical Recognized Environmental Conditions:

- **REC-1** – A release of Extractable Petroleum Hydrocarbons (EPH’s), metals, and Polychlorinated biphenyls (PCB’s) was discovered in shallow soils in the former station passenger platform area during an environmental assessment in February and March 2009. The Site owner’s consultant submitted a Class B-1 Response Action Outcome (RAO) Statement Report to the Massachusetts Department of Environmental Protection (MADEP) on June 15, 2009. This report included a Method 1 Risk Characterization, which concluded that a condition of no significant risk to human health, public welfare and the environment exists at the site.
- **HREC-1** – A review of Holyoke Fire Department records indicated that two fuel oil underground storage tanks (UST’s) were formerly located west of the former station building, and that they were removed in 2003. A record was also found for the proposed

installation of a 1,000 gallon UST and pump dispenser along the northern border of the Former Station site, adjacent to Lyman Street. It is not known if this tank was ever installed.

- **HREC-2** – A historic review indicated that the former express building was occupied by the Holyoke Screw Machine Company (from 1965 through 1990) and the former station building was occupied by a machine shop (from 1970 through the 1990’s). Machine shop operations typically include use/storage/disposal of oil and hazardous materials, including solvents, lubrication and cutting oils. Waste oil and solvents are also generated in machining operations.
- **HREC-3** – A historic review indicated that the abutting property to the west of the site has been operated as a railroad since at least the mid 1800’s through the present. In addition, the vacant lot south of Mosher Street was occupied by a railroad turn-table in the early 1900’s, and then by a railroad siding from the 1930’s through the present. Historical railroad operations typically include the use/storage/disposal of oil and hazardous materials.
- **HREC-4** – A historic review indicated that the vacant lot south of Mosher Street was occupied by a coal loading and storage building from the 1930’s through the 1950’s. Coal and coal ash debris was observed on the lot during the site reconnaissance visit, though there was no evidence of petroleum odors or staining. Coal and coal ash fill may contain heavy metals and polycyclic aromatic hydrocarbons (PAH’s). However, MADEP regulations allow for the exemption from release reporting obligations for certain materials including coal and coal ash.

It appears that the existing release condition in the platform area west of the former station building has been adequately assessed under Massachusetts Contingency Plan (MCP) requirements. The assessment did not indicate significant soil or groundwater impacts from oil/hazardous materials commonly associated with petroleum UST’s or machine shop operations. Should the platform area to the west of the former station building be disturbed, additional surface soil testing and impacted soil management would be necessary.

A Phase II Environmental Assessment may be appropriate for the vacant lot to the south of Mosher Street to determine whether historical railroad operations have affected either the site soil and/or the groundwater above MADEP standards. Activities under this Phase II assessment would include soil borings, monitoring well installations and soil/groundwater sampling and analysis. A ground-penetrating radar (GPR) survey of the northern portion of the former station site may be prudent, as a check for the 1,000-gallon UST which may or may not exist.

It is important to note that the presence of undiscovered releases of oils or hazardous materials is a possibility that cannot be ruled out completely without subsurface explorations and chemical testing of both soils and groundwater. No Environmental Site Assessment can wholly eliminate uncertainty regarding environmental matters in connection with a site.

### Property Impacts

The Former Station site, including buildings and property, is currently owned by Holyoke Gas & Electric (HG&E). Depending on joint-development arrangements which may be pursued for this site, it is conceivable that the property could be sold outright, with Amtrak, the City, or other public entity leasing space for passenger facilities; or the property could remain in HG&E or other public entity hands with space leased to commercial tenants. For the purposes of estimating costs, it was assumed that no property acquisition costs would be incurred.

The parcels that would be required for the proposed Main/Mosher Street parking lot are presently privately owned. The parcels are vacant except for a single-story garage occupied by S&L Automotive Service. It is our understanding that the City may acquire these parcels in the short-term due to outstanding tax liens. For the purposes of estimating costs, however, it was assumed that these parcels would need to be acquired. Acquisition costs were estimated based on current assessed values in the immediate area, and these costs are included in the conceptual cost estimates that follow.

The land required for the Concept “B” pedestrian connection across Mosher Street, the platform south of Mosher Street, and the small accessible parking area off of Bowers Street is currently owned by PAS. For the purposes of estimating costs it was assumed that property or right-of-ways would need to be acquired. Acquisition costs were estimated based on current assessed values in the immediate area, and these costs are included in the conceptual cost estimates that follow.

### Costs

The capital costs to establish the station, as well as the operations and maintenance costs to sustain the station, need to be considered. While the capital costs are the most significant factor in deciding which concept or parts thereof is selected, the long-term operations and maintenance costs are also an important consideration.

#### Capital Costs

The restoration of the former station building is the most significant expense associated with the Former Station site alternatives, as seen in Tables 4-1 and 4-2. Major renovations include the removal of the interior second floor of the station, removal of the southerly building addition, replacing all doors/windows/trim, replacing damaged sections of roofing, and installing all new electrical/mechanical/plumbing/HVAC systems to provide for a “move-in ready” environment for rail passengers and a “tenant-ready” environment for potential joint users. The existing express building to the north of the station would be demolished, and the on-site parking area would be reconstructed and reconfigured to provide a new pick-up/drop-off loop at the southern end of the building.

For Concept “A” (Table 4-1) the remainder of the major capital costs would involve construction of a platform at the site (although a new canopy would not be required as much

of the platform would lie under the existing building overhang), and the construction of the off-site parking area at Main/Mosher Streets, including the costs to acquire and clear the land for construction.

**Table 4-1: Capital Costs of Concept “A”\***

Station Building Rehabilitation	\$3,150,000
Station Platform	\$401,000
Station Building Parking Area	\$635,000
Main St./Mosher St. Parking Area	\$998,000
<b>CONCEPT “A” TOTAL COST</b>	<b>\$5,184,000</b>

For Concept “B” (Table 4-2) the remainder of the major capital costs, in addition to the offsite parking lot, would be for the establishment of a pedestrian walkway over Mosher Street, the new platform and canopy south of Mosher Street, and the secondary accessible parking area off of Bowers Street.

**Table 4-2: Capital Costs of Concept “B”\***

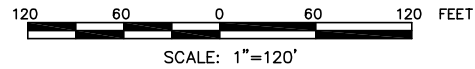
Station Building Rehabilitation	\$3,150,000
Station Platform	\$787,000
Mosher Street Bridge Walkway	\$190,000
Station Building Parking Area	\$712,000
Main St./Mosher St. Parking Area	\$998,000
Bowers Street Parking Area	\$529,000
<b>CONCEPT “B” TOTAL COST</b>	<b>\$6,366,000</b>

\*Includes property acquisition costs. See discussion under “Property Acquisition”.

**Operations and Maintenance Costs**

The interior space within the former station building is much larger than the required space for an Amtrak Class III station – 5,871 square feet versus the required 200-300 square feet. Consequently, the costs related to operating and maintaining the former station building would likely prove prohibitive without other commercial development on-site. While Amtrak is not proposing the inclusion of a Station Agent in Holyoke, a caretaker will be necessary for opening and closing the station, in addition to performing periodic maintenance. The caretaker costs are not deemed to be significant if the caretaker function could be integrated with another operation associated with the station or other nearby activity.





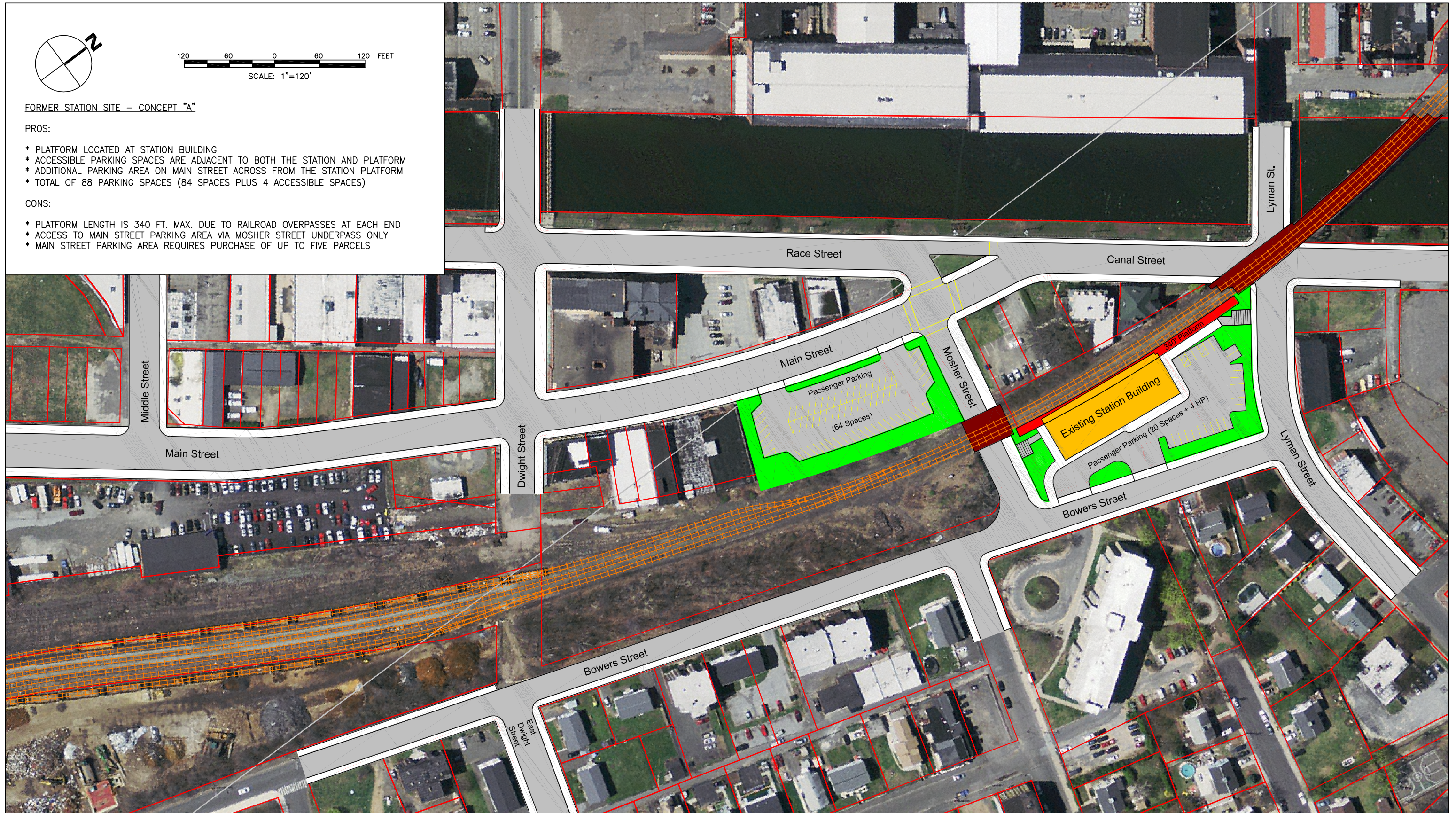
**FORMER STATION SITE – CONCEPT "A"**

**PROS:**

- \* PLATFORM LOCATED AT STATION BUILDING
- \* ACCESSIBLE PARKING SPACES ARE ADJACENT TO BOTH THE STATION AND PLATFORM
- \* ADDITIONAL PARKING AREA ON MAIN STREET ACROSS FROM THE STATION PLATFORM
- \* TOTAL OF 88 PARKING SPACES (84 SPACES PLUS 4 ACCESSIBLE SPACES)

**CONS:**

- \* PLATFORM LENGTH IS 340 FT. MAX. DUE TO RAILROAD OVERPASSES AT EACH END
- \* ACCESS TO MAIN STREET PARKING AREA VIA MOSHER STREET UNDERPASS ONLY
- \* MAIN STREET PARKING AREA REQUIRES PURCHASE OF UP TO FIVE PARCELS







120 60 0 60 120 FEET  
SCALE: 1"=120'

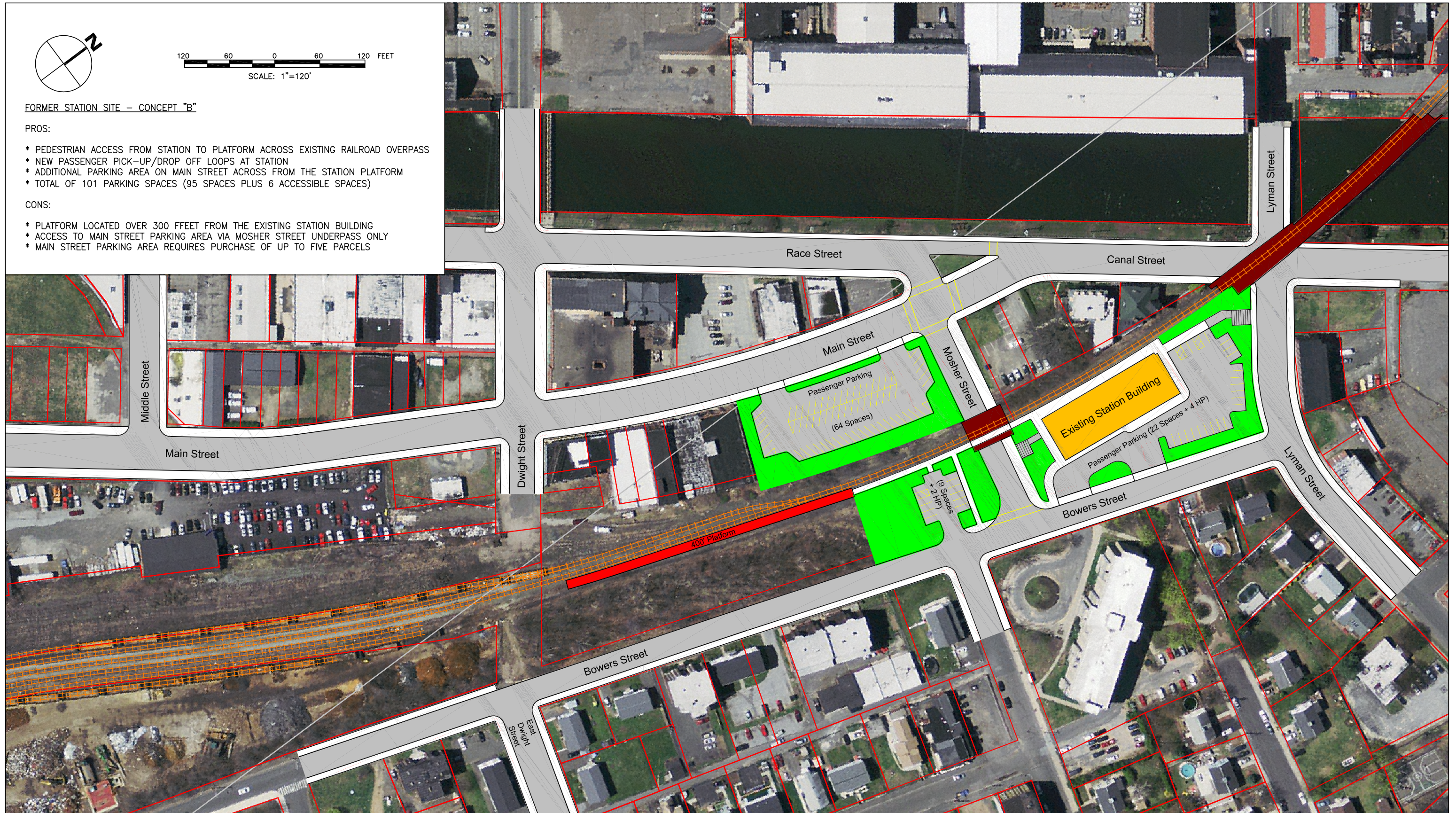
**FORMER STATION SITE – CONCEPT "B"**

**PROS:**

- \* PEDESTRIAN ACCESS FROM STATION TO PLATFORM ACROSS EXISTING RAILROAD OVERPASS
- \* NEW PASSENGER PICK-UP/DROP OFF LOOPS AT STATION
- \* ADDITIONAL PARKING AREA ON MAIN STREET ACROSS FROM THE STATION PLATFORM
- \* TOTAL OF 101 PARKING SPACES (95 SPACES PLUS 6 ACCESSIBLE SPACES)

**CONS:**

- \* PLATFORM LOCATED OVER 300 FEET FROM THE EXISTING STATION BUILDING
- \* ACCESS TO MAIN STREET PARKING AREA VIA MOSHER STREET UNDERPASS ONLY
- \* MAIN STREET PARKING AREA REQUIRES PURCHASE OF UP TO FIVE PARCELS

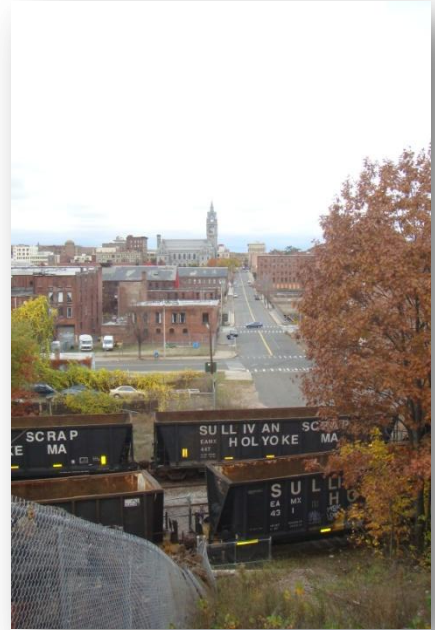




## DWIGHT STREET SITE

The Dwight Street site is located at the terminus of Dwight Street immediately east of Main Street, approximately one-tenth of a mile south of the Former Station site. The site is bordered by Main Street to the west; the Rail Line and a steep undeveloped hill approximately 30 feet high to the east; and the Sullivan Scrap Company and auto repair businesses to the south. There was formerly a pedestrian bridge providing access between the end of Dwight Street and East Dwight Street atop the hill in the “Flats” neighborhood, but this connection was removed due to structural deterioration in September 2006. The site is located within sight of City Hall, providing easy pedestrian connections and wayfinding orientation within the downtown area.

The Dwight Street site was historically the location of railroad freight warehouses, and has not been previously used as a location for a passenger rail station.



The PAS Rail Lane passes through the site in a north-south orientation. Only one operating track is presently owned by PAS. A number of freight sidings on the east and west sides of the PAS track are owned by the Sullivan Scrap Company.

The area surrounding the site is commercial, consisting of a mix of vacant lots, auto-oriented business such as dealerships and repair shops, and small industrial buildings. The Dwight/Main Street intersection sits at the “Transit-Oriented Development” node identified in Holyoke’s “Center City Vision Plan” (2009), which calls for a revitalized Main Street and infill-development on vacant parcels.

### Site Access

The Dwight Street site is located adjacent to Main Street (Route 116), providing local access to Chicopee and South Hadley, and Interstate 391 is a short distance to the southwest, providing easy access to the Interstate Highway System. The site is approximately four-tenths of a mile from the Pioneer Valley Transportation Authority (PVTa) Intermodal Transportation Center. It is also within close walking distance, and within sight of, Holyoke City Hall, the Volleyball Hall of Fame, and recent and planned redevelopment efforts including the Canal Walk, Open Square, Heritage Park and the Massachusetts Green High Performance Computing Center.

Wayfinding within the area would be straightforward, with some additional signage required to guide passengers to and from the downtown area. As noted earlier, wayfinding and other pedestrian, vehicular and transit improvements associated with both candidate station sites are currently being studied as part of the U.S. EPA’s Linking Transportation Hubs Through Transit-Oriented Design – Holyoke Project.

PVTA Purple 21 bus service stops at the corner of Main and Dwight Street on weekdays and Saturdays. The bus currently runs 21 trips per day between 5:50 AM and 7:10 PM to the Intermodal Transportation Center downtown and 22 trips per day between 5:05 AM and 7:20 PM to Springfield. Saturday service is operated with approximately 12 trips per day. In addition, PVTA Red 24 bus service runs along the same route on Saturdays only, with eight trips each to the Intermodal Transportation Center and the Holyoke Mall.

### **Parking**

Several opportunities for developing parking are available, depending on the final configuration chosen for the station and platform location. Parking is discussed in more detail within subsequent sections that describe the various Dwight Street concepts.

### **Station and Platform Location and Configuration**

The Dwight Street site offers more design options than the Former Station site, and is therefore somewhat more flexible in terms of potential station, platform and parking configurations. Three different station concepts were developed for this site, Concepts “C” through “E”. Although this Study presents these three configurations as stand-alone concepts, it should be understood that there is somewhat of a “mix and match” quality to the various components, which could be combined differently if desirable.

#### **Station Building**

All three concepts assume the construction of a new purpose-built structure to serve as a passenger rail station. The station would offer a passenger waiting area of approximately 200-300 square feet, in accordance with the *Amtrak Guidelines* for a Class III Small/Medium facility. The station would also include restrooms, janitorial space, and a mechanical room.

#### **Pedestrian Overpass**

As noted above, a pedestrian overpass formerly connected the terminus of Dwight Street with the “Flats” neighborhood located above, and the east of, the railroad. This connection was important in minimizing the isolation of the Flats neighborhood from the downtown’s government, business, cultural, recreational, and transportation opportunities and services. City officials have noted the desirability of restoring this pedestrian connection in the form of a modern, fully accessible pedestrian way. Recognition of the pedestrian overpass option is contained in the current urban renewal planning of the City. The Dwight Street site is not

dependent on the restoration of the pedestrian connection. However, this Study includes the restored pedestrian overpass in the various Dwight Street conceptual layouts, as a means of illustrating how a passenger rail station and pedestrian overpass could be integrated, either in the short, medium, or long-term.

### Concept “C”

Concept “C” consists of a proposed station building on the north side of Dwight Street at its current terminus, with a low-level station platform and canopy stretching to the north along the railroad right-of-way, on the western side of the current main line track. A parking area of approximately 50 spaces would be constructed at the southeast corner of the Main/Dwight Street intersection. It would be ringed by a one-way extension of Dwight Street. The extension would accommodate a passenger pick-up/drop-off area, along with bus and taxi parking. Accessible parking would be located immediately across the street from the station building. See Figure 5-1 for a detailed plan of the proposed station concept.

### Concept “D”

Concept “D” consists of a proposed station building on the south side of Dwight Street at its current terminus, with a low-level concrete platform and canopy stretching to the south along the railroad right-of-way, on the western side of the current main line track. A parking area of approximately 30 spaces would be constructed at the southeast corner of the Main/Dwight Street intersection. It would be ringed by a one-way extension of Dwight Street. The extension would accommodate a passenger pick-up/drop-off area, along with bus and taxi parking. Accessible parking would be located immediately across the street from the station building. See Figure 5-2 for a detailed plan of the proposed station concept.

### Concept “E”

Concept “E” consists of a proposed station building centered at the foot of Dwight Street at its current terminus, with a low-level concrete platform and canopy stretching to the north along the railroad right-of-way, on the western side of the current main line track. Parking would be provided in three separate locations. One parking area for approximately 20 spaces would be constructed at the southeast corner of the Main/Dwight Street intersection. A second area for approximately 50 spaces would be constructed at the southeast corner of the Main/Mosher Street intersection. A third parking area of approximately 10 spaces would be constructed in-between the two other parking areas adjacent to the proposed platform. The parking area at the Main/Dwight Street intersection would be ringed by a one-way extension of Dwight Street. This extension would accommodate a passenger pick-up/drop-off area, along with bus and taxi parking. A new one-way roadway would be constructed parallel to Main Street to connect the three parking areas. Accessible parking would be located in the parking area adjacent to both the station building and platform. See Figure 5-3 for a detailed plan of the proposed station concept.

### Station Agent

Based on input from Amtrak, there will be no accommodation for a station agent in any of the station concepts.

### **Permanent Traffic Impacts and Off-Site Mitigation**

It is expected that there would be minimal impacts to vehicular traffic flow due to the construction of any of the Dwight Street site concepts, and therefore no significant roadway or intersection mitigation is anticipated. The PAS Rail Line has no grade crossings near the site, so traffic will not be affected by stopped trains directly. Any traffic impacts would be the result of additional auto and transit trips to and from the proposed station location. The site is located in a densely developed urban area, and observations during peak hours suggest that the roadway network and key intersections are operating below capacity.

New driveway entries along Main Street at the two parking areas and the proposed one-way roadway extensions would need to be carefully designed to ensure that all appropriate standards for sight distance and other safety criteria are met.

The limited amount of parking proposed under Concept “D” may tempt passengers to park on Main and Dwight Streets in the surrounding neighborhood. While there is little activity at the Dwight Street site presently, this street parking would be incompatible with the transit-oriented development proposed in the City’s urban renewal vision for the area. Should this site concept be adopted, this situation should be monitored and these parking spaces could be posted as “Short Term Only” if required.

As noted above, U.S. EPA is working with the City of Holyoke to identify pedestrian and streetscape improvements which would benefit the new passenger rail station (at either site), and improve pedestrian connectivity to the downtown area and to the Transit Oriented Development (TOD) district. For the Dwight Street site, we would specifically recommend that the EPA project consider sidewalk improvements along both sides of Main Street and Dwight Street, crosswalk improvements at key intersections, and new wayfinding signage to connect the site to the greater downtown area.

### **Construction Phase Impacts**

#### Railroad Impacts

There would be some minor impacts to railroad operations due to the construction of Concepts “C” through “E”. Some reconfiguration of the freight sidings serving the Sullivan Scrap operation to the south would be required to accommodate the new platform under any of the proposed concepts. This would include relocating the Sullivan scrap sidetrack

currently the west side of the main line to the east side of the main line and shifting the main line tracks to the west.

### Roadway and Traffic Impacts

No significant public roadway improvements are envisioned, and therefore no significant construction phase impacts to area roadways are anticipated.

### **Environmental Site Assessment**

A preliminary environmental site assessment review was conducted by O'Reilly, Talbot & Okun Associates, Inc. (OTO) in January 2011 for each of the Dwight Street site concepts. This review consisted of a review of site history information and regulatory file information from an Environmental FirstSearch Report. This review did not include site reconnaissance or subsurface exploration.

### Local Information

Local files reviewed at the Holyoke Fire Department revealed that there was formerly a 1,000 gallon underground storage tank (UST) removed from the site on September 1, 1989; this tank was located to the southeast of the Main/Dwight Street intersection at the site of a former Freight House No. 8. There were no local records of any fuel releases or other health issues at the site.

### History

A review of historic Sanborn Fire Insurance Maps indicated that the site was developed before 1895, and was the location of a Boston & Maine Railroad freight storage warehouse. This warehouse was a long rectangular building that was located on the west side of the railroad tracks south of Dwight Street, between the tracks and Main Street.

### State and Federal File Information

A review of various EPA and State regulatory information sources was performed in November 2010 and included (but was not limited to) the following Massachusetts Department of Environmental Protection (MADEP) sources:

- Solid Waste Facilities: Active & Inactive
- CERCLIS (Superfund Act) and National Priorities List (NPL)
- Resource Conservation and Recovery Act (RCRA) Generators List
- RCRA Treatment, Storage and Disposal Facilities (TSD)
- Bureau of Waste Site Cleanup (BWSC) Spills List
- State Leaking Underground Storage Tank (LUST) Release Prevention Program
- State Underground Storage Tank /Above-Ground Storage (AST/UST) Tank List

Research with both MADEP and the City of Holyoke's Health Department indicates that the Dwight Street site is not located within a Current or Potential Drinking Water Source Area. Current and Potential Drinking Water Source Areas are defined in 310 CMR 40.000 as areas:

- 1) Within a Zone II or Interim Wellhead Protection Area for a public water supply;
- 2) Within the Zone A of a Class A surface water body used as a public water supply;
- 3) Within 500 feet of a private water supply well or greater than 500 feet from a public water supply distribution pipeline;
- 4) Within a municipally-designated aquifer protection area; or
- 5) Within a Potentially Productive Aquifer not excluded as a Non-Potential Drinking Water Source Area.

Soil and groundwater classifications should be reviewed and confirmed if further testing indicates that a reporting standard is exceeded at the site. City and state records do not indicate the presence of either a known underground storage tank on the site or a known release location on both the site and the adjoining properties.

It is important to note that the presence of undiscovered releases of oils or hazardous materials is a possibility that cannot be ruled out completely without subsurface explorations and chemical testing of both soils and groundwater. No Environmental Site Assessment can wholly eliminate uncertainty regarding environmental matters in connection with a site.

### Property Impacts

The Dwight Street site, depending upon which site concept is chosen, consists of up to ten parcels of land owned by various private interests. Only two of the ten parcels are developed, both to the south of Dwight Street. The remaining eight parcels on either side of Dwight Street are vacant. It is our understanding that the City may acquire some of these parcels in the short-term due to outstanding tax liens. While some of the concepts would only require portions of these parcels, for the purposes of estimating costs it was assumed that acquisition of the entire property would be required. Acquisition costs were estimated based on current assessed values in the immediate area, and these costs are included in the conceptual cost estimates that follow.

There is a public right-of-way across the Sullivan Scrap property that used to be a part of the Dwight Street layout; it is assumed that this portion of land would be acquired from Sullivan Scrap for either of the Dwight Street site concepts. The remaining acquisition costs involve the purchase of railroad land currently owned by PAS.

**Costs**

The capital costs to establish the station, as well as the operations and maintenance costs to sustain the station, need to be considered. While the capital costs are the most significant factor in deciding which concept or parts thereof is selected, the long-term operations and maintenance costs are also an important consideration.

**Capital Costs**

As noted above, the Dwight Street concepts contain several elements that can be “mixed and matched”. These elements can be constructed as part of an initial build project or as smaller projects which are phased in over time. For purposes of this Study, costs have been tabulated to be consistent with the three specific concepts presented.

The construction of a new station building is a significant expense associated with each of the Dwight Street alternatives, as seen in Tables 5-1, 5-2 and 5-3. This station would offer a passenger waiting area of approximately 200-300 square feet, in accordance with the *Amtrak Guidelines* for a Class III Small/Medium facility. The station would also include restrooms, janitorial space, and a mechanical room. Based on input from Amtrak, there will be no accommodation for a station agent.

For Concept “C” (Table 5-1) the remainder of the major capital costs would involve construction of a platform and canopy to the north of Dwight Street and the construction of the parking area at Main/Dwight Streets, including the costs to acquire and clear the land for construction.

For Concept “D” (Table 5-2) the remainder of the major capital costs would involve construction of a platform and canopy to the south of Dwight Street and the construction of the parking area at Main/Dwight Streets, including the costs to acquire and clear the land for construction.

For Concept “E” (Table 5-3) the remainder of the major capital costs would involve construction of a platform and canopy to the north of Dwight Street and the construction of the three parking areas and one-way roadways for access, including the costs to acquire and clear the land for construction.

**Table 5-1: Capital Costs of Concept “C”\***

Station Building Construction	\$1,714,000
Station Platform	\$1,117,000
Station Parking Area	\$1,580,000
<b>CONCEPT “C” TOTAL COST</b>	<b>\$4,411,000</b>



**Table 5-2: Capital Costs of Concept “D”\***

Station Building Construction	\$1,714,000
Station Platform	\$1,097,000
Station Parking Area	\$1,019,000
<b>CONCEPT “D” TOTAL COST</b>	<b>\$3,830,000</b>

**Table 5-3: Capital Costs of Concept “E”\***

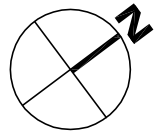
Station Building Construction	\$1,714,000
Station Platform	\$1,226,000
Station Parking Area	\$1,913,000
<b>CONCEPT “E” TOTAL COST</b>	<b>\$4,853,000</b>

\*Includes property acquisition costs. See discussion under “Property Acquisition”.

**Operations and Maintenance Costs**

While Amtrak is not proposing the inclusion of a Station Agent in Holyoke, a caretaker will be necessary for opening and closing the station, in addition to performing periodic maintenance. The caretaker costs are not deemed to be significant if the caretaker function could be integrated with another operation associated with the station or other nearby activity. Maintenance costs of the proposed station building are not deemed to be significant.





120 60 0 60 120 FEET  
SCALE: 1"=120'

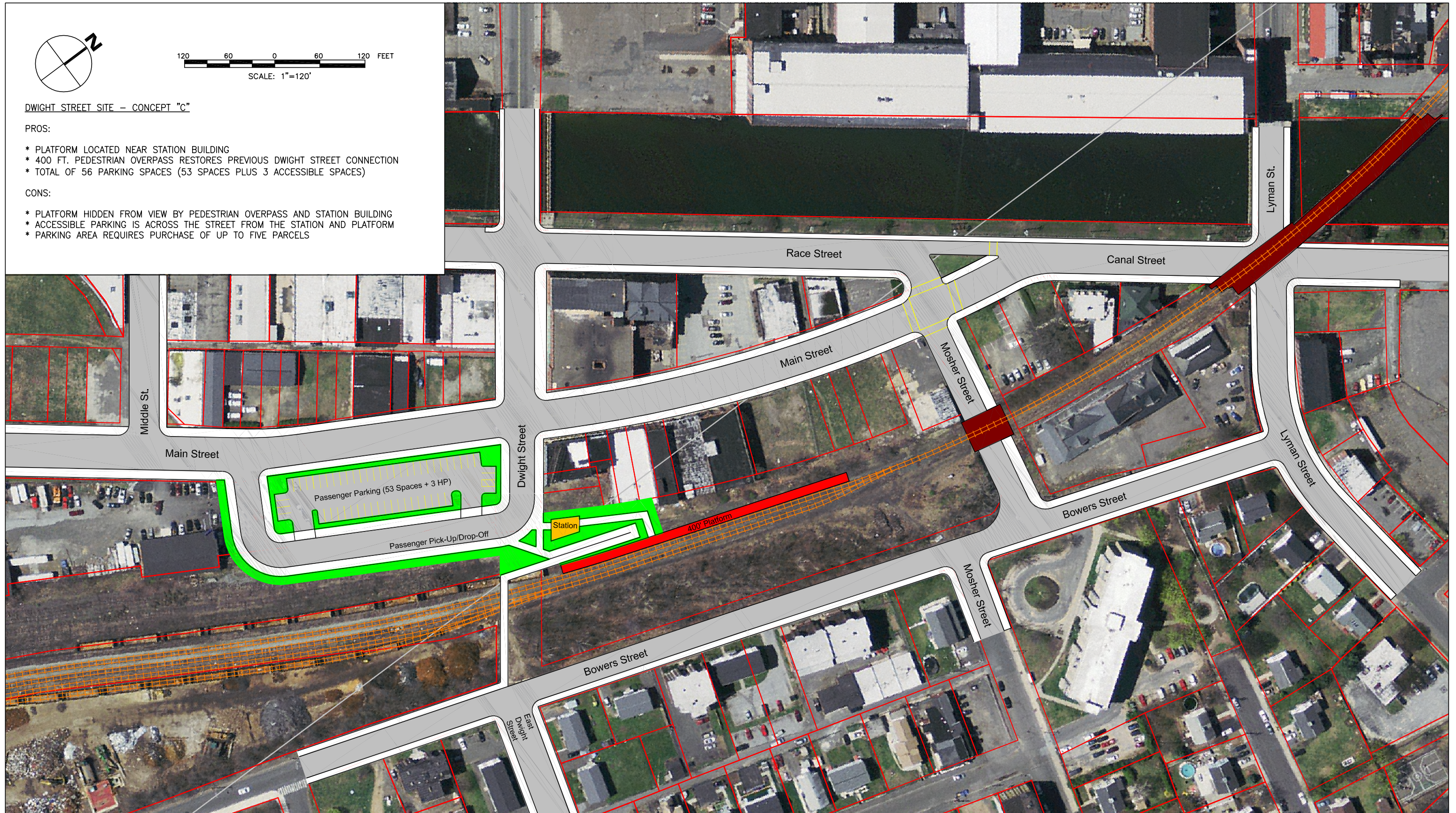
DWIGHT STREET SITE – CONCEPT "C"

PROS:

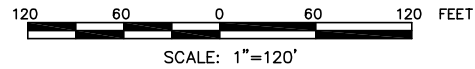
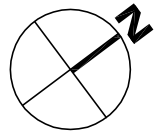
- \* PLATFORM LOCATED NEAR STATION BUILDING
- \* 400 FT. PEDESTRIAN OVERPASS RESTORES PREVIOUS DWIGHT STREET CONNECTION
- \* TOTAL OF 56 PARKING SPACES (53 SPACES PLUS 3 ACCESSIBLE SPACES)

CONS:

- \* PLATFORM HIDDEN FROM VIEW BY PEDESTRIAN OVERPASS AND STATION BUILDING
- \* ACCESSIBLE PARKING IS ACROSS THE STREET FROM THE STATION AND PLATFORM
- \* PARKING AREA REQUIRES PURCHASE OF UP TO FIVE PARCELS







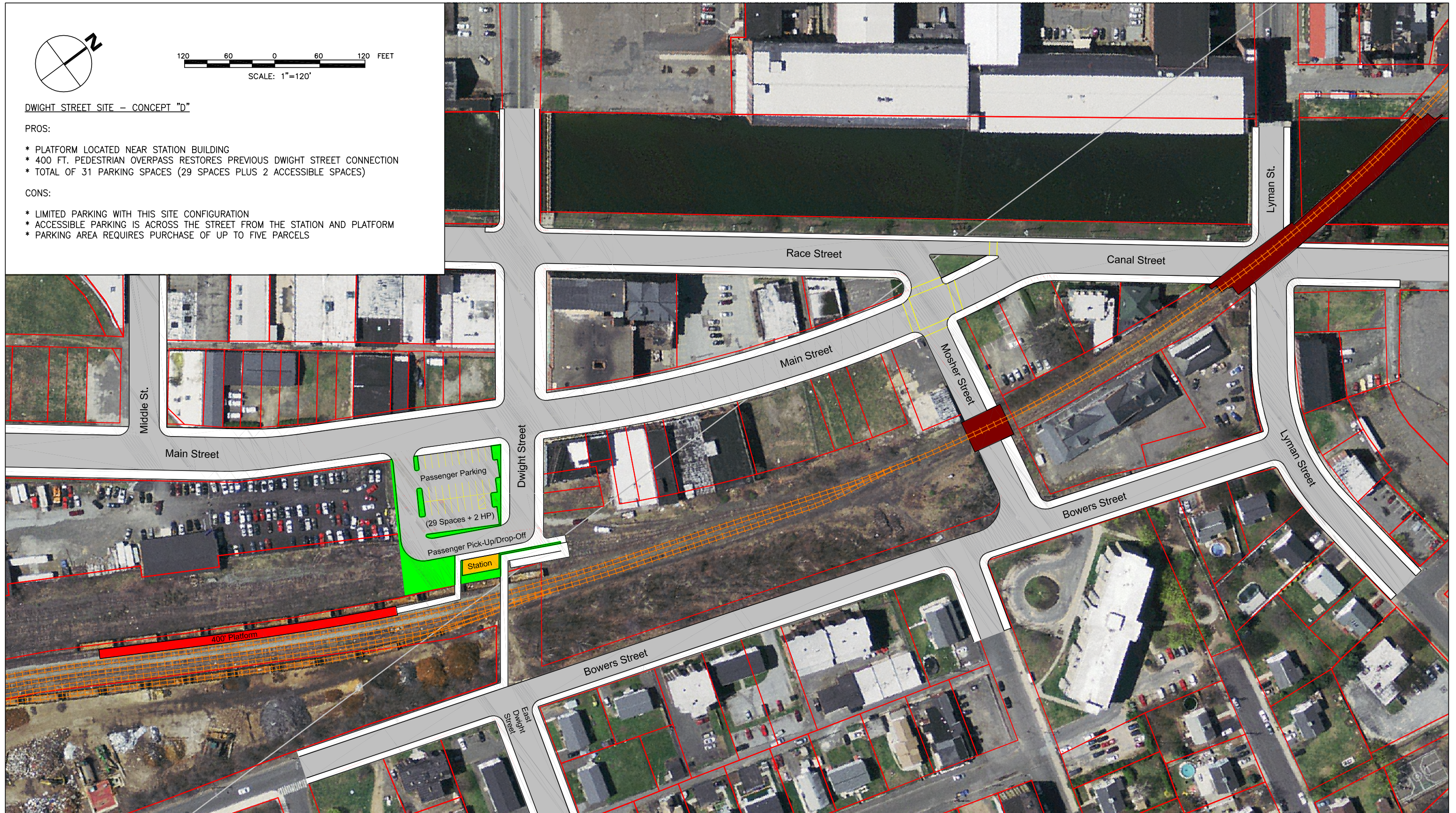
**DWIGHT STREET SITE – CONCEPT "D"**

**PROS:**

- \* PLATFORM LOCATED NEAR STATION BUILDING
- \* 400 FT. PEDESTRIAN OVERPASS RESTORES PREVIOUS DWIGHT STREET CONNECTION
- \* TOTAL OF 31 PARKING SPACES (29 SPACES PLUS 2 ACCESSIBLE SPACES)

**CONS:**

- \* LIMITED PARKING WITH THIS SITE CONFIGURATION
- \* ACCESSIBLE PARKING IS ACROSS THE STREET FROM THE STATION AND PLATFORM
- \* PARKING AREA REQUIRES PURCHASE OF UP TO FIVE PARCELS







120 60 0 60 120 FEET  
SCALE: 1"=120'

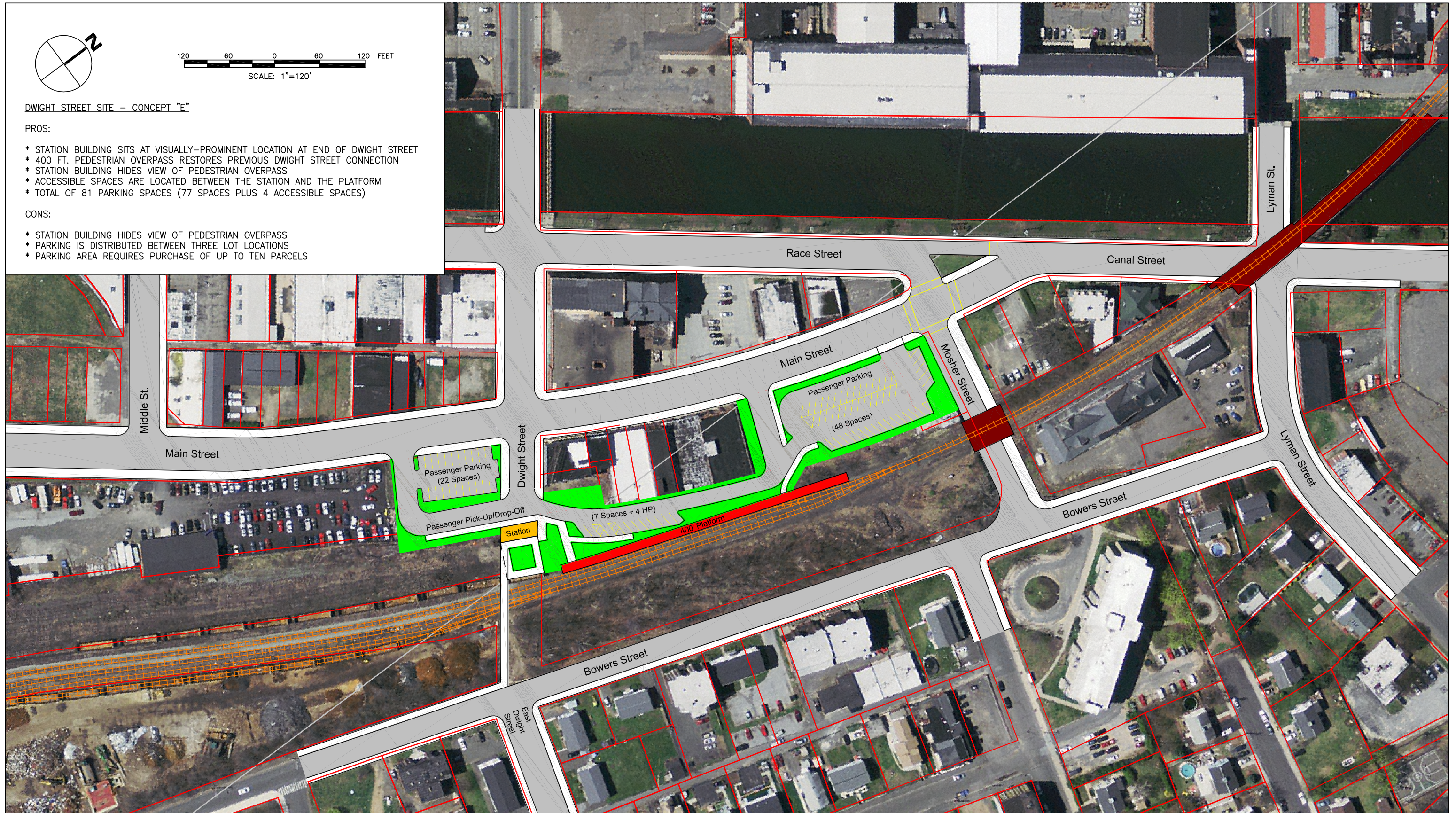
DWIGHT STREET SITE – CONCEPT "E"

PROS:

- \* STATION BUILDING SITS AT VISUALLY-PROMINENT LOCATION AT END OF DWIGHT STREET
- \* 400 FT. PEDESTRIAN OVERPASS RESTORES PREVIOUS DWIGHT STREET CONNECTION
- \* STATION BUILDING HIDES VIEW OF PEDESTRIAN OVERPASS
- \* ACCESSIBLE SPACES ARE LOCATED BETWEEN THE STATION AND THE PLATFORM
- \* TOTAL OF 81 PARKING SPACES (77 SPACES PLUS 4 ACCESSIBLE SPACES)

CONS:

- \* STATION BUILDING HIDES VIEW OF PEDESTRIAN OVERPASS
- \* PARKING IS DISTRIBUTED BETWEEN THREE LOT LOCATIONS
- \* PARKING AREA REQUIRES PURCHASE OF UP TO TEN PARCELS







## SITE SELECTION

As discussed in Section 3, “Evaluation Criteria”, it is important to not only evaluate whether each site can accommodate the minimum required amenities detailed in Section 2; the candidate sites must also be screened against a host of other criteria which incorporate specific, local considerations.

While there are five proposed passenger rail station site concepts, only the two sites themselves were rated against the evaluation criteria discussed in detail in Section 3. This is due to the inherent design flexibility with the various station components at each site. For the purposes of this Study, each concept demonstrates the possible configuration of each site, and is not and independent site in itself.

### Screening Process

To facilitate the determination of the preferred station site, a sliding scale ranging from 1 to 5 was used to rate each of the evaluation criteria listed below. A rating of 1 indicates that the site does not meet the criteria, a rating of 3 indicates neutrality and a rating of 5 indicates that the site completely meets or exceeds the criteria. These ratings are subjective in nature and thus should be used as a means to determine relative merits between the two sites. It should be further noted that the ultimate selection of the site location may hinge on the availability of either public and/or private funding sources as they develop. Other factors such as vacant land parcels becoming developed could also have substantive impact on the final decision as to which station concept is utilized.

#### Transportation and Land Use Criteria

- **Traffic impacts** – There will be a negligible increase in traffic at any of the proposed station locations.

*RATINGS: Former Station site – 3; Dwight Street site – 3*

- **Accessibility** – The accessibility of a passenger rail station is of paramount concern, as an accessible station building promotes the success of the rail service and provides a seamless passage between travel modes. The station design shall assure simple, convenient, and easy circulation and flow for both embarking and disembarking passengers. Both station sites are located in a previously-developed urban area, and are within one-tenth of a mile from each other. The Dwight Street site currently has more frequent PVRTA bus service than the Dwight Street site, but it is assumed that PVRTA could adjust service patterns to align with demand generated by rail service at either site. The Dwight Street site is slightly closer to the downtown area and is centered on the “Transit Oriented Development” node of the Center City Vision Plan.

*RATINGS: Former Station site – 4; Dwight Street site – 5*

- **Impact on rail operations** – The restoration of passenger rail service will involve improvements to the current tracks passing by both of the sites, and freight service to both the Pioneer Valley Railroad and local customers will be maintained during construction. There is no significant difference between sites with respect to railroad operations impact.

*RATINGS: Former Station site – 3; Dwight Street site – 3*

- **Parking supply** – While there is land for adequate parking supply at both sites, the land is privately-owned and would have to be acquired for station construction. The Former Station site parking would potentially be south of the Main/Mosher Street intersection, across the railroad tracks from the station building, and would not be within sight of the station. It should be noted however, that the City has recently identified a potential parking site on the north side of Lyman Street, which would be in closer proximity to the station. The Dwight Street site can accommodate parking adjacent to the station and platform in several possible locations.

*RATINGS: Former Station site – 3; Dwight Street site – 4*

- **Consistency with planning policies** – The Transit-Oriented Development Node of the Center City Vision Plan is located at the Main/Dwight Street intersection, thus placing the node directly on the Dwight Street site. The Former Station site is one-tenth of a mile to the north of the Plan’s desired location, and is located in a less-conspicuous location with respect to downtown.

*RATINGS: Former Station site – 4; Dwight Street site – 5*

- **Compatibility with land use** – The Former Station site is obviously a compatible location for a passenger rail station. The Dwight Street site is also located on former railroad property, and would also be compatible with local land use.

*RATINGS: Former Station site – 5; Dwight Street site – 5*

- **Phasing opportunities** – The Former Station site is not amenable to phased construction, as it would not make sense to renovate only a portion of the existing station building. The Main/Mosher Street parking area would also be a required component of the Former Station site. The Dwight Street site could have any number of its components constructed in phases as funding and ridership levels warrant.

*RATINGS: Former Station site – 3; Dwight Street site – 5*

**Environmental Criteria**

- **Hazardous materials** – There were some hazardous materials located at the former station’s platform, which would require a Phase II Environmental Site Assessment (ESA) should the site be selected. The City is currently pursuing grant funding to perform a Phase II ESA. The Dwight Street site has no known hazardous materials; however, railroad property is likely to contain oil or other hazardous materials underground.

*RATINGS: Former Station site – 2; Dwight Street site – 3*

- **Natural and Historic Resources** – The restoration of the former passenger rail station would obviously be a positive historical impact. The Dwight Street site would not have any known natural or historic resource impacts; however, the proposed parking areas at the Main/Dwight Street intersection may not be fully compatible with the City’s urban renewal vision for the area.

*RATINGS: Former Station site – 5; Dwight Street site – 4*

- **Economic effects** – The former station building, while currently owned by HG&E, is currently vacant. Any joint development within the renovated station building would add tax revenue, so the economic effect of re-using the former station building can only be positive. It is unlikely however, that re-use of the former station property would stimulate adjacent redevelopment due to the relative isolation and size constraints of the site. The Dwight Street site is largely vacant and undeveloped, so no tax revenue would be lost at this site either. However, Center City Vision Plan calls for a station here to stimulate the redevelopment of the immediate, largely-vacant neighborhood, which would produce additional tax revenue for the City.

*RATINGS: Former Station site – 4; Dwight Street site – 5*

- **Relocations** – No property owners or tenants will be required to relocate for either site.

*RATINGS: Former Station site – 3; Dwight Street site – 3*

- **TOD opportunities** – As noted in “Economic effects” above, the transit-oriented development opportunities are limited at the Former Station site due to the size constraints and the relative isolation of downtown from the site. The Dwight Street site is described in the Center City Vision Plan as the future “Transit-Oriented Development node” of the downtown area, and the TOD opportunities present at that site are numerous.

*RATINGS: Former Station site – 4; Dwight Street site – 5*

- **Security** – The City has expressed concern that the Dwight Street site, as an unstaffed location without a caretaker or integral development, will require provision of security cameras connected to the Holyoke Police Department in order to monitor passenger safety and discourage any unauthorized activities or property damage. The Former Station site, if integrated with active public or private development, will not require such a camera link.

*RATINGS: Former Station site – 4; Dwight Street site – 3*

**Constructability Criteria**

- **Constructability** – There are no anticipated construction issues that would make either site undesirable.

*RATINGS: Former Station site – 3; Dwight Street site – 3*

- **Impact on rail operations (during construction)** – The Former Station site would have some temporary impact on rail operations during platform construction and when

constructing the new Mosher Street overpass, if applicable to the concept. For both sites, several of Sullivan Scrap’s rail sidings would need to be relocated throughout construction.

*RATINGS: Former Station site – 2; Dwight Street site – 2*

- **Business relocations** – As noted under “Relocations” above, no property owners or tenants will be required to relocate for either site.

*RATINGS: Former Station site – 3; Dwight Street site – 3*

**Site Selection**

The following table includes a summation of all of the ratings for each site:

**Table 6-1: Site Selection Criteria Ratings**

	Former Station Site	Dwight Street Site
<b>Transportation and Land Use Criteria</b>		
Traffic impacts	3	3
Accessibility	4	5
Impact on rail operations	3	3
Parking supply	3	4
Consistency with planning policies	4	5
Compatibility with land use	5	5
Phasing opportunities	3	5
<b>Environmental Criteria</b>		
Hazardous materials	2	3
Natural and Historic Resources	5	4
Economic effects	4	5
Relocations	3	3
TOD opportunities	4	5
Security	4	3
<b>Constructability Criteria</b>		
Constructability	3	3
Impact on rail operations (during construction)	2	2
Business relocations	3	3
<b>TOTAL</b>	<b>55</b>	<b>61</b>

For each of the fifteen criteria, a sliding scale of 1 to 5 points was utilized, where 1 point meant that the criteria were not met and 5 points meant that the criteria were satisfied. Therefore, a total rating of 16 to 80 points would result, with the highest rating indicating the most desirable alternative.



Based upon these assumptions, the Former Station site was rated at 55 points and the Dwight Street site was rated at 61 points, making the Dwight Street site the more desirable alternative of the two based on the simple comparison of the two numerical results. For further discussion of the results, please see the following section.



## DEVELOPMENT AND IMPLEMENTATION

An independent component of the site selection process concerns the development and implementation of passenger rail service to Holyoke, which will assist in the selection the final station site. Various secondary factors, such as funding sources and land acquisition costs will play a key role in deciding which station concept is implemented.

### Key Study Findings

It was determined in this Study that both of the proposed station sites in question are viable options, and would both provide for a successful passenger rail station in Holyoke. While the Dwight Street site scored a slightly higher rating than the Former Station site, the ratings are close enough to each other that neither site should be eliminated from consideration at this time. For instance, either site would supplement the City's on-going urban renewal efforts, both sites have similar environmental and historic permitting requirements, and more importantly both sites have no great order-of-magnitude cost difference between themselves.

### Community and Stakeholder Input

A stand-alone community process was not performed specifically for this Study. Instead it was decided, in conjunction with PVPC and the City of Holyoke Office of Planning and Development, to seek input regarding the station options as part of the City's community process for the Center City Vision Plan.

The City held a series of four public meetings for the Center City Vision Plan during February and March 2011. The various station options included in this report were presented at these meetings, and initial feedback from City staff indicates that community preference was fairly evenly divided between the Former Station and Dwight Street sites. Support for the Former Station site was typically based on the historic value of the existing station building and the wish to preserve it. Support for the Dwight Street site was typically based on the site's superior connectivity to the rest of downtown Holyoke.

### Project Development Process

- The final selection of a particular station concept and site will instead be determined by secondary factors, including the availability of funding sources, the availability of particular land parcels and the on-going implementation of the Center City Vision Plan. These factors will decide which station site is chosen, and which concept, or parts thereof, is selected for construction.

- **Available Funding Sources** – The availability of either private or public funding sources will be the most significant factor in selecting the final station location and concept. For instance, a private developer interested in a joint-development initiative at the Former Station site would suddenly shift favor to that site over the Dwight Street site, and vice versa. Any number of public funding sources may be utilized, such as historic preservation funding for the rehabilitation of the existing station building or federal transportation funding for the construction of the selected station concept.
- **Availability of Land** – The City is actively taking several parcels of land along Main Street which could modify the estimated cost of each of the concepts, thereby making one or more concept a more attractive alternative.
- **Implementation of the Center City Vision Plan** – Conversely, the on-going urban renewal efforts may redevelop land that is required for a concept and thus remove it from consideration. As the plan implementation progresses, the most desirable station site may evolve over time.

## CONCLUSION

The Pioneer Valley Planning Commission's Knowledge Corridor Study concluded that there were significant local and regional economic and mobility benefits that could be achieved by restoring passenger rail service throughout the Connecticut River Valley. Providing a stop in Holyoke was seen as a way of increasing mobility to and from the City. In addition, this station was seen as being consistent with the current downtown revitalization efforts by numerous public and private entities.

The purpose of the Study was to determine the most viable location for a passenger station in Holyoke. As noted above, both sites are deemed viable options for the station location. However, based on current information and conditions, the Dwight Street Station location is deemed the preferred location. The principle reason is the flexibility of the location to be adapted to the development plans and conditions that are anticipated to occur. Included in the assessment of flexibility is the consideration that the Former Station site would require identification and engagement of a joint development for the complete build-out and operation of the station. As the ability to progress the design and construction of a station site was deemed a high priority, the Dwight Street Site can likely be implemented in the shortest timeframe. In addition, the Dwight Street site is more closely linked to the vision contained in the current Master Plan for the City.

While Dwight Street is deemed the preferred site based on current conditions, it is recommended to maintain the Former Station Site as an option should future conditions change that would support the use of the Former Station Site.

