Chapter 2: Probable Impacts of Project 1, Shaft and Bypass Tunnel Construction Section 2.3: Neighborhood Character

## 2.3-1 INTRODUCTION

This section of Chapter 2 discusses the potential for Project 1, Shaft and Bypass Tunnel Construction to result in significant adverse impacts on neighborhood character. Neighborhood character can be described as a blend of various elements that give neighborhoods their distinct personalities. These elements can include land use patterns, development density, and streetscape design; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; and noise.

Construction activities generally have the potential to affect neighborhood character from increased traffic and noise. Consistent with the study area established for the land use, open space, zoning, and public policy analysis, the study area for the assessment of neighborhood character has been defined as the area roughly within <sup>1</sup>/<sub>4</sub> mile of each component of Project 1.

# 2.3-2 METHODOLOGY

The *CEQR Technical Manual* (January 2012) states that an assessment of neighborhood character is generally needed when a proposed project has the potential to result in significant adverse impacts in any of the following technical areas: land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; or noise. Even if a project does not have the potential to result in a significant adverse impact in any of the technical areas listed above, an assessment may be required if the project would result in a combination of moderate effects to several elements that cumulatively may affect neighborhood character. According to the *CEQR Technical Manual*, a "moderate" effect is generally defined as an effect considered reasonably close to the significant adverse impact threshold for a particular technical analysis area. If a project would result in only slight effects in several analysis categories, then no further analysis is needed. However, where it is determined that two or more categories may have potential "moderate effects" on the environment, an assessment would be made to establish if the proposed project would result in a combination of moderate effects that cumulatively would affect neighborhood character.

As described in the relevant chapters of this EIS, Project 1, Shaft and Bypass Tunnel Construction would not result in potential temporary significant adverse impacts in these technical areas with the exception of transportation and noise. Near the east connection site, views of the site and the Hudson River along River Road would be adversely affected, but these effects would be temporary, limited in location, and not expected to result in significant adverse impacts on visual character. Project 1 would not result in effects considered reasonably close to the significant adverse impact thresholds in the other technical areas considered when making a determination of whether a neighborhood character assessment is appropriate (i.e., land use, zoning, and public policy; socioeconomic conditions; open space; historic and cultural resources; shadows). Further, transportation and noise impacts would be temporary and would occur only during certain phases of construction activities. Once construction is complete, neighborhood character would not be adversely affected. Therefore, an assessment of potential neighborhood character impacts from Project 1 is provided below, with particular consideration of potential impacts from traffic and noise during construction.

The study area for this analysis (see **Figures 2.3-1 and 2.3-2**) is defined by a <sup>1</sup>/<sub>4</sub>-mile radius surrounding each component of Project 1 (i.e., the west connection site and along the route of the water main extension and dewatering pipeline west of the Hudson River, and the east connection site east of the Hudson River and along the construction truck route).

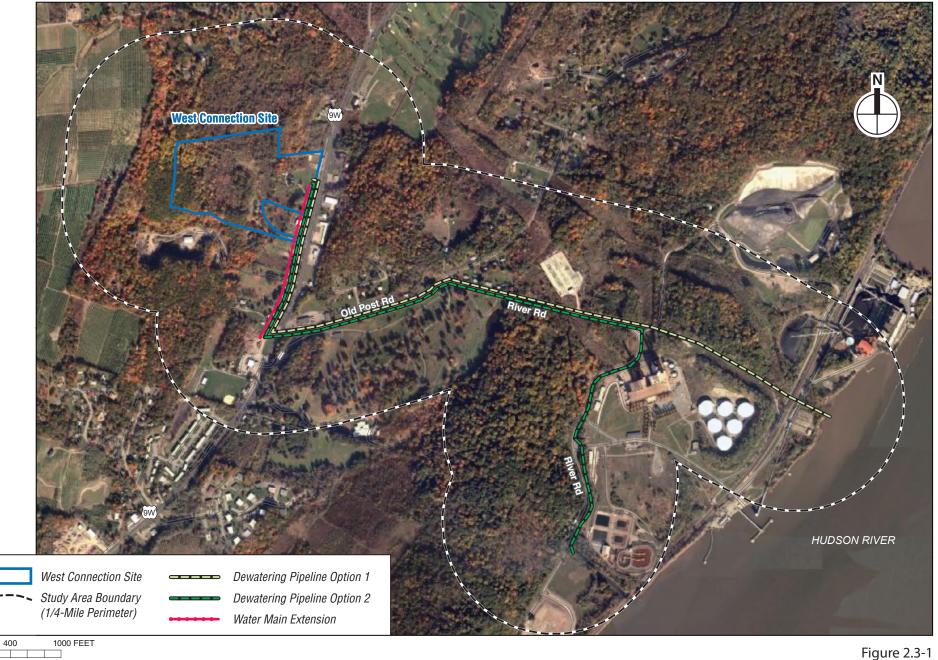
# 2.3-3 WEST OF HUDSON

#### 2.3-3.1 EXISTING CONDITIONS—WEST OF HUDSON

The defining features of neighborhood character within the study area can be divided into two distinctive areas: the area around the west connection site, which is largely defined by the Route 9W commercial corridor (and which includes the area around the water main extension), and the area surrounding the dewatering pipeline route east of Route 9W, which is largely defined by the large-scale land uses in that area. This section first describes the character of the neighborhood around the west connection site, and then follows with a description of the neighborhood around the dewatering pipeline route east of Route 9W.

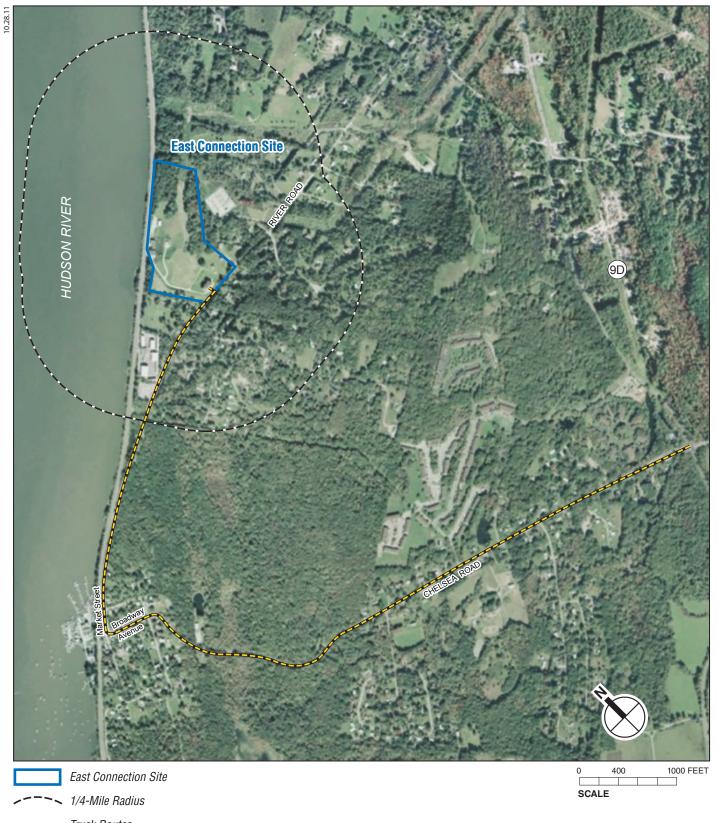
#### WEST CONNECTION SITE

Neighborhood character within the study area near the west connection site is largely defined by the Route 9W commercial corridor, which has a number of commercial uses, including motels, gas stations, truck rental facilities, contractor storage yards, an all-terrain vehicle dealership, and a bottled water distribution facility, with a few residential uses interspersed. In general, these uses include large open parking areas and one-story buildings that are characteristic of a suburban/rural commercial corridor. Interspersed among these commercial uses are a number of vacant, undeveloped lots and several single-family residences as well as residential buildings that have been converted to offices. However, the neighborhood character is dominated by the larger



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West Connection Site: Neighborhood Character Study Area



Truck Routes

Figure 2.3-2 East Connection Site: Neighborhood Character Study Area commercial uses including two motels located directly across Route 9W from the west connection site. A number of buildings in the study area and on the west connection site are vacant, aging and appear to be in a deteriorating condition, giving portions of the study area a blighted appearance. On the eastern portion of the west connection site, there is a vacant restaurant and bar, and an unoccupied single-family home with a barn, a cinderblock outbuilding, and several trailers. The south-central portion of the site has an unoccupied single-family home and a shed. Route 9W, a busy commercial arterial roadway with relatively high volumes of truck traffic also defines the character of the neighborhood. The combination of land uses and high volume of traffic, along with noise levels consistent with the volume of traffic, give the area a commercial character.

As discussed in Section 2.2, "Land Use, Zoning, Public Policy, and Open Space," the west connection site is located in both the Business (B) and Agricultural Residential (AR) districts. Permitted uses vary for each district, but "public utility structures and rights-of-way" are permitted in both districts.

## DEWATERING PIPELINE ROUTE

In the area around the dewatering pipeline route, neighborhood character is largely defined by the mix of land uses. Along Old Post Road, the residential uses to the north and the cemetery to the south combine to create a quieter feel than the Route 9W corridor described above (see "West Connection Site"). Near the intersection with Old Post Road, River Road has a rural character with four residential parcels to the north and the cemetery to the south. Further east heading toward the Hudson River, River Road is characterized by large-scale utility uses including an electrical substation and the Dynegy Plant. Between the cemetery and Danskammer Road, River Road is largely forested on both sides with electrical transmission lines crossing the roadway in multiple locations. Along this section of River Road, the larger parcel sizes and abundant vegetation minimize the industrial feel of the area. At the intersection of Danskammer Road, River Road turns south parallel to the Hudson River. Along the east side of River Road, the waterfront is dominated by the Dynegy Plant and the bulk oil terminal to the south. The west side of the road is largely forested with the exception of an historic church and two residential uses opposite the Dynegy facility. Traffic on Old Post Road and River Road is much more limited than on Route 9W, and consists mainly of vehicle trips associated with the surrounding residential uses and truck trips associated with the Dynegy plant and other industrial land uses. The combination of land uses and traffic, along with noise levels consistent with the volume of traffic, give the area a quiet industrial character.

Subsequent to the issuance of the DEIS, DEP advanced the design of the dewatering pipeline that would be constructed from the west connection site to the Hudson River, selecting one potential dewatering pipeline route (Option 2 in the DEIS) as the only route further evaluated for the FEIS. See the revised Figure 1-11, which for reference purposes still includes Option 1 considered in the DEIS. For The proposed dewatering pipeline, Option 1 would extend to the Hudson River across the privately owned Dynegy property. Option 2 would <u>and</u> continue south on River Road past the church and the single-family homes and would discharge immediately south of the Dynegy property into a watercourse (see Figure 2.3-1).

#### 2.3-3.2 FUTURE WITHOUT PROJECT 1, SHAFT AND BYPASS TUNNEL CONSTRUCTION—WEST OF HUDSON

## WEST CONNECTION SITE

As discussed in Section 2.2, "Land Use, Zoning, Public Policy, and Open Space," there is one new development project that is currently proposed near the west connection site. This project would add residential development south of the west connection site, in the area near Cortland Drive. Other areas near the west connection site have the potential to be developed with commercial uses, including a small convenience store/gas station on Route 9W, however no such development projects are being reviewed by the Town of Newburgh Planning Board at this time. Therefore, the neighborhood character near the west connection site is expected to remain largely unchanged, and traffic and noise levels are expected to remain similar to those in the existing conditions. The west connection site itself would also be anticipated to remain in its current state.

## WATER MAIN EXTENSION AND DEWATERING PIPELINE ROUTE

The area around the water main extension and dewatering pipeline routes is also not expected to change in the future without Project 1.

#### 2.3-3.3 PROBABLE IMPACTS OF PROJECT 1, SHAFT AND BYPASS TUNNEL CONSTRUCTION—WEST OF HUDSON

Project 1 would result in the construction of a water supply-related use on a site located in a busy commercial corridor that is currently vacant, and was formerly occupied by residential and commercial uses. Construction activities would be contained within the west connection site and would not alter land uses within the study area. However, there would be changes in the site's visual character and temporary increases in construction truck and worker vehicle trips to the site, which would increase the perceived level of activity in the study area. There would also be a temporary increase in noise levels during Project 1 construction.

#### WEST CONNECTION SITE

The site's visual character would change during Project 1, primarily as a result of the tree clearing and grading required for the construction of the new site driveway and shaft on the west connection site, as well as the construction equipment that is brought onto the site. The site would transform from a largely wooded and undeveloped parcel with several unoccupied structures into a partially cleared construction site throughout the duration of Project 1. Since the

shaft on the west connection site would be a subsurface structure, it would not be visible above ground.

During construction, landscaping would be installed at the site entrance and along the northern half of the site's Route 9W frontage to soften the appearance of the security fence and buffer views into the site. Landscaping would also be installed along the top of the hill and within the cleared areas to reduce the visibility of the proposed roadway, exposed slopes, and construction activity. In addition, a split rail fence with mesh fabric would be installed around the stormwater detention basin located on the eastern portion of the site.

During construction, portable lighting units used to illuminate the site may be visible, but would comply with local codes and would be removed once construction is complete. Construction lighting would be oriented away from neighboring properties and would not result in any significant light spillover at the Shaft 5B property line. While there would at times be a glow visible from the site when lighting is used, the photometric models show that light levels at the west connection site property lines would be below 0.5 footcandles. DEP would attempt to minimize any spillover of light onto adjacent properties to the extent practicable.

A complete assessment of noise impacts can be found in Section 2.13, "Noise." The maximum allowed sound pressure values for residential districts between the hours of 7 PM and 7 AM specified by the Town of Newburgh Code is expected to be exceeded near the west connection site with the construction of Project 1. However, under existing conditions the measured existing noise levels in the west of Hudson study area along the Route 9W corridor can exceed the Town of Newburgh Noise Code limit during the applicable time periods.

As noted in Section 2.13, "Noise," in the west of the Hudson study area, construction of Project 1 would result in predicted temporary significant adverse noise impacts at the the exterior of two residences residential locations within the area shown in Figure 2.13-13. These temporary significant adverse noise impacts would be expected to occur primarily during the third shift, between the hours of 11 PM and 7 AM, when there are very low existing ambient noise levels expected in these locations. The predicted noise level increases, which were up to 6.6 dBA above existing levels, could occur for approximately 5 to 6 years. These temporary significant adverse noise impacts were predicted for the exterior of these two residences during the overnight period, and would not be expected to adversely impact neighborhood character, since people are typically not outdoors for most of this period. Based on the duration and magnitude of the predicted exceedances, there would be predicted temporary significant adverse noise impacts at these locations. Furthermore, residences that would be expected to experience interior noise levels that exceed the level considered acceptable by CEQR criteria during overnight periods as a result of construction of Project 1 would be eligible for receptor controls, such as storm windows and air conditioners if they do not already have these features, to bring interior noise levels resulting from construction within the acceptable range according to CEQR (see Appendix 2.19-2) However, at these residences the interior L<sub>10(1)</sub> noise levels during construction of Project 1 would be acceptable (less than 45 dBA) even with windows open for the 11 PM to 7 AM period.

Overall, these effects to neighborhood character would be temporary and would not be expected to result in any long-term disruptions to neighborhood character once construction is complete. Further, the commercial character of the study area and the site's location along a busy arterial roadway, with relatively high levels of truck traffic, would diminish the effects of the Project 1 construction activity within the study area, and therefore, no significant adverse impacts on neighborhood character are expected.

## WATER MAIN EXTENSION AND DEWATERING PIPELINE ROUTE

Construction of the water main extension and dewatering pipeline would advance approximately 100 feet per day (between 7 AM and 3 PM), and once constructed, the water main and pipeline would be located entirely underground. While additional residences may be temporarily affected by the construction of the water main and dewatering pipeline, the duration of activity would be relatively short and would not result in any long-term disruptions. Therefore, the construction of the water main extension and dewatering pipeline is not expected to result in significant adverse impacts on the character of the neighborhood.

# 2.3-4 EAST OF HUDSON

## 2.3-4.1 EXISTING CONDITIONS—EAST OF HUDSON

#### EAST CONNECTION SITE

The defining features of neighborhood character in the study area surrounding the east connection site are the mix of land uses, which are predominantly residential, and in a quiet rural setting with relatively low levels of traffic. Additional defining elements are the relationship between the study area's land uses and the Hudson River, and the River Road corridor, which is the major roadway in the study area. The east connection site also contributes to the character of the neighborhood.

As described in Section 2.2, "Land Use, Zoning, Public Policy, and Open Space," land uses located east of River Road in the study area are predominantly residential with few exceptions. Residences consist of approximately 70 single-family homes of various sizes and architectural styles on lots that range in size from ¼-acre to 3 acres (with some larger lots). Several historic residences are located within the study area or immediately outside the study area. A number of non-residential parcels are located west of River Road with frontage on the Hudson River; these include a lumberyard, the east connection site itself, utility parcels for high-voltage electrical lines and a Town Park. In general, these non-residential uses are unobtrusive, are located on larger parcels than the residential lots, and include dense vegetation thereby reducing the influence of these uses on the overall quiet residential character of the neighborhood.

Another defining element of neighborhood character in the study area is River Road. River Road is a narrow, curvy road with a rural residential character and no sidewalks or shoulder.

Pedestrian activity and vehicular traffic are relatively light since the road primarily serves as a route for local traffic. Cars and trucks traveling along River Road have limited passing, partial views of the east connection site. As detailed in Section 2.13, "Noise," existing noise levels at times are relatively low. The dominant sources of noise are traffic along River Road and the trains that run along the Hudson River.

The Hudson River is also a defining element to neighborhood character in the study area. While there are no shoulders or sidewalks along River Road, views of the Hudson River are visible from some residences within the study area and from vehicles and pedestrians travelling on River Road in some locations. In most instances though, these views are at least partially screened by buildings and vegetation located on the east connection site and adjacent properties.

The east connection site itself also contributes to the character of the neighborhood. With the Shaft 6 superstructure clearly visible from River Road, the site's municipal water supply character stands out among the residential and other non-residential uses. Although there is currently construction activity occurring at the site, under the future without Project 1 conditions, the east connection site would have very little traffic and activity. With the exception of the existing DEP east connection site, most properties in the study area have minimal nightime lighting. There are some residences that have interior lighting that is visible from River Road, but the permanent security lighting and lighting associated with the existing construction activities at the east connection site is currently the greatest source of lighting in the area, as street lights are generally not present along this section of River Road.

As described in Section 2.2, "Land Use, Zoning, Public Policy, and Open Space," the east connection site is located in the R-80 zoning district. The continued use of the Shaft 6 property as water supply land is a permitted use within the R-80 zoning district ("Buildings, structures and uses owned or operated by the Town of Wappinger; buildings, structures, and uses of any other governmental entity or district, excluding garages and dumps").

## **CONSTRUCTION TRUCK ROUTE**

From Route 9D, all construction truck traffic arriving from the south and north and departing the site would be required to travel along Chelsea Road and River Road to access the east connection site (see Figure 2.3-2). This section provides a description of the neighborhood character of this construction truck traffic route for Project 1 under existing conditions.

Chelsea Road is a county road providing access to the hamlet of Chelsea, the Chelsea Marina, and the residential uses along Chelsea Road, including the Chelsea Ridge Garden Apartments. Between 9D and the hamlet of Chelsea, Chelsea Road is a windy residential road with relatively moderate levels of traffic and no sidewalks or shoulder. Pedestrian activity is relatively light since the road primarily serves as a route for local traffic. As Chelsea Road heads west approaching towards the Hudson River and historic Chelsea hamlet, it becomes Broadway Avenue and Market Street. Within the historic hamlet of Chelsea, Broadway Avenue narrows and the area is characterized by quaint frame houses standing close together on narrow streets.

Most homes in the hamlet were built between 1835 and the 1930's and have at least partial views of the Hudson River and the Chelsea Marina. The hamlet also contains a post office, a fire house and a church. Traveling further west along Broadway Avenue, the Chelsea Marina becomes more visible and is a defining element of neighborhood character. At the intersection of Broadway Avenue and Market Street, the construction truck route for Project 1 would travel north on Market Street, which becomes River Road outside the hamlet. Market Street/River Road runs immediately parallel to the railroad tracks and the Hudson River. Within the Hamlet of Chelsea, it is characterized by its views of the River and the railroad tracks to the west and a small number of picturesque historic homes with river views to the east. Until it reaches the east connection site, River Road is largely characterized by residential uses on large lots. As discussed above, a small lumberyard is located on the west side of River Road a few hundred feet south of the entrance to Shaft 6, but this use is secondary to the more dominant residential uses in the area.

### 2.3-4.2 FUTURE WITHOUT PROJECT 1, SHAFT AND BYPASS TUNNEL CONSTRUCTION—EAST OF HUDSON

No planned development projects have been identified within the study area. While there is a possibility for some limited redevelopment activity to occur within the east connection site and along the construction truck route for Project 1 study areas, no significant changes to neighborhood character are anticipated.

#### 2.3-4.3 PROBABLE IMPACTS OF PROJECT 1, SHAFT AND BYPASS TUNNEL CONSTRUCTION—EAST OF HUDSON

Project 1 would result in construction of additional water supply-related uses on a site that is already used for water supply. Construction activities would be contained within the east connection site and would not alter land uses within the study area. However, there would be changes in the site's visual character and increases in construction truck and worker vehicle trips to the site, which would increase the perceived level of activity in the study area. Noise levels and light emanating from the site would also increase during Project 1 construction. These changes are discussed in more detail in this section.

## EAST CONNECTION SITE

The site's visual character would change during Project 1 primarily as a result of tree clearing for construction of the new internal driveway and shaft, the new construction equipment that would be brought onto the site, and the installation of additional noise barriers at the site. The location of the tree clearing and noise barriers would be visible from the Hudson River and partially visible from a small number of residences located on the west side of River Road immediately north of the Shaft 6 building, but would not be visible from most locations in the study area due to the forested buffer that would remain on the adjacent parcels. Additional noise barriers along

River Road would change the character of the site in comparison to the future without Project 1. Construction activity and equipment would be visible from the Hudson River and from most of the residences in close proximity to the site. Since Shaft 6B would be a subsurface structure, it would not be visible above ground. Views of the site and to the Hudson River along River Road near the east connection site would be adversely affected by the construction of Project 1. However, as discussed in Section 2.4, "Visual Character, " these effects would be temporary, limited in location, and are not expected to result in significant adverse impacts on the visual character of the study area.

During construction, portable lighting units used to illuminate the site may be visible, but would comply with local codes and would be removed once construction is complete. Construction lighting would be oriented away from neighboring properties and would not result in any significant light spillover at the east connection site property line. While there would at times be a glow visible from the site when lighting is used, the photometric models show that light levels at the east connection site property lines would be below 0.5 footcandles, with the exception of one point on east connection site where an existing light fixture right next to the property line results in a level of 1.2 footcandles. DEP would attempt to minimize any spillover of light onto adjacent properties or to the Hudson River to the extent practicable.

A complete assessment of noise impacts can be found in Section 2.13, "Noise." The maximum allowed sound pressure values for residential districts between sunset and 8 AM specified by the current Town of Wappinger Noise Code is expected to be exceeded near the east connection site with the construction of Project 1. However, under existing conditions the measured existing noise levels in the east of Hudson study area can exceed the Town of Wappinger Noise Code limits during the applicable time periods.

As noted in Section 2.13, "Noise," in the east of the Hudson study area, construction of Project 1 would result in predicted exceedances of the CEQR impact noise guideline. These predicted incremental noise levels at the exterior of residences were up to 25 dBA above existing levels and are expected to occur primarily at residences adjacent to the east connection site. Based on the duration and magnitude of the predicted exceedances, there would be predicted temporary significant adverse noise impacts at these locations residential locations within the area shown in Figure 2.13-14. Furthermore, residences that would be expected to experience interior noise levels that exceed the level considered acceptable by CEQR criteria during overnight periods as a result of construction of Project 1 would be eligible for receptor controls, such as storm windows and air conditioners if they do not already have these features, to bring interior noise levels resulting from construction within the acceptable range according to CEQR (see Appendix 2.19-2) However, for locations where a predicted temporary significant adverse noise impact would occur near the east connection site, the interior L<sub>10(1)</sub> noise levels during construction of Project 1 would be acceptable (less than 45 dBA) with windows closed for the 11 PM to 7 AM period.

During construction activities, the changes to visual character as well as the increases in traffic, lighting, and noise (as described in detail in Sections 2.4, "Visual Character," 2.10,

"Transportation," and 2.13, "Noise," respectively) would temporarily adversely affect the neighborhood character near the east connection site. Residences immediately surrounding the construction site would experience increased activity and light from the construction as well as temporary significant adverse noise impacts from construction of Project 1. **Figure 2.3-3** depicts the area near the east connection site that construction of Project 1 is expected to result in a temporary significant adverse impact on neighborhood character. However, these impacts to neighborhood character would be temporary and would not be expected to result in disruptions to neighborhood character once construction is complete.

## **CONSTRUCTION TRUCK ROUTE**

Construction of Project 1 would likely result in truck trips that would average between 1 and 5 trucks per hour when construction is most active at the east connection site. Chelsea Road, Broadway Avenue, Market Street and River Road currently experience local truck traffic and truck traffic related to operations at the Chelsea Marina and the lumberyard. As discussed in Sections 2.10, "Transportation," and 2.13, "Noise," while Project 1 would result in an increase in truck traffic, the additional truck and worker trips that would result from the construction activity would not be expected to result in significant traffic or noise impacts on the construction truck route for the east connection site. Therefore, no significant adverse impacts to the local neighborhood character along the construction truck or worker routes are expected.

# 2.3-5 CONCLUSIONS

## 2.3-5.1 WEST OF HUDSON

The site's visual character would change during Project 1 as a result of the tree clearing and grading, as well as the construction equipment that is brought onto the site. Lighting associated with site illumination during construction may also be visible, but would comply with local codes and would be removed once construction is complete. Construction lighting would be oriented away from neighboring properties and would not result in any significant light spillover at the west connection site property line. In the area immediately around the west connection site, construction activity would be visible and traffic volumes and noise levels would increase. Overall, these effects to neighborhood character would be temporary and would not be expected to result in any long-term disruptions to neighborhood character once construction along a busy arterial roadway with relatively high levels of truck traffic would diminish the effects of the Project 1 construction activity within the study area, and therefore, no significant adverse impacts on neighborhood character are expected near the west connection site or along the water main extension and dewatering pipeline route.

#### 11.23.11



## East Connection Site: Area of Temporary Significant Adverse Neighborhood Character Impact

## 2.3-5.2 EAST OF HUDSON

The site's visual character would change during Project 1 primarily as a result of tree clearing for the construction of the new internal driveway and shaft, the new construction equipment that would be brought onto the site, and the installation of additional noise barriers on the site, including those that would be installed along River Road. Views of the site and to the Hudson River along River Road near the east connection site would be adversely affected by the construction of Project 1. However, these effects would be temporary, limited in location, and are not expected to result in significant adverse impacts on the visual character of the study area. Lighting associated with site illumination during construction may also be visible, but would comply with local codes with the exception of one point on east connection site where an existing light fixture right next to the property line would result in a level of 1.2 footcandles, and would be removed once construction is complete. Construction lighting would be oriented away from neighboring properties and would not result in any significant light spillover at the east connection site property line. Residences immediately surrounding the construction site would experience changes to visual character and increases in traffic, lighting, and noise during construction of Project 1, and near the east connection site, construction of Project 1 is expected to result in a temporary significant adverse impact on neighborhood character. However, this impact to neighborhood character would be temporary and would not be expected to result in disruptions to neighborhood character once construction is complete.

As discussed in Sections 2.10, "Transportation," and 2.13, "Noise," while Project 1 would result in an increase in truck traffic, the additional truck and worker trips that would result from the construction activity would not be expected to result in significant traffic or noise impacts on the construction truck route for the east connection site. Therefore, no significant adverse impacts to the local neighborhood character along the construction truck or worker routes are expected. **\***