

2.5 COMPARISON OF ALTERNATIVES

The current condition of environmental resources potentially affected by the Applicant's Proposed Project (Alternative 1) and the associated environmental consequences of the Navy Base ICTF activities on these resources are described in Chapters 3 and 4, respectively. The results of the impact analyses for the No-Action Alternative and the seven alternatives, including Alternative 1 (Proposed Project) are summarized in Table 2.5-1.

To comply with NEPA, agencies require a detailed analysis of reasonable alternatives and the potential environmental consequences of each so that their comparative merits may be considered by agency decision makers (40 C.F.R. 1502.14[b]). As a result, Alternative 2 was evaluated in this document for comparative analysis purposes as it was reasonable (per 40 C.F.R. 1502.14[a]) and practicable (per 40 C.F.R. 230.10 [a][1-3]) to assume that an existing, inactive rail corridor could potentially be used for the Proposed Project. Since inception of the Proposed Project, the Applicant has examined the use of the S-Line as a potential alternative. However, FRA has determined that Alternative 2 is not prudent (per 23 C.F.R. 774.17). See Section 4.18 for analysis and full details.

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Table 2.5-1
Summary of Potential Impacts by Alternative and Environmental Resource

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Geology and Soils	Negligible effects to unique geologic features. Potential minor adverse impact resulting from a short-term increase in soil erosion, a loss of topsoil, soil compaction, and runoff.	Negligible effects to unique geologic features. Potential minor adverse impact resulting from a short-term increase in soil erosion, a loss of topsoil, soil compaction, and runoff.	Similar to Alternative 1 (Proposed Project)	Similar to Alternative 1 (Proposed Project)	Similar to Alternative 1 (Proposed Project)	Negligible effects to unique geologic features. Potential minor adverse impact resulting from a short-term increase in soil erosion, a loss of topsoil, soil compaction, and runoff.	Similar to Alternative 5	Similar to Alternative 5
Hydrology	<ul style="list-style-type: none"> Negligible impact to surface water flows and circulation resulting from construction activities within and/or adjacent to waterways (e.g., bridges); negligible impact to groundwater. Permanent, minor adverse impact from increase in impervious surface; minor beneficial impact from improved stormwater management. Negligible impact to base floodplains resulting from the placement of fill; negligible impact to flood hazard for other adjacent areas. 	<ul style="list-style-type: none"> Negligible impact to surface water flows and circulation resulting from roadway and rail improvements (e.g., arrival/departure tracks, bridges) across Noisette Creek and Shipyard Creek; negligible impact to groundwater. Permanent, minor adverse impact from increase in impervious surface; minor beneficial impact from improved stormwater management. Negligible effect on groundwater recharge. Negligible impact to base floodplains resulting from the placement of fill; negligible impact to flood hazard for other adjacent areas. 	Similar to Alternative 1 (Proposed Project)	Similar to Alternative 1 (Proposed Project)	Similar to Alternative 1 (Proposed Project)	<ul style="list-style-type: none"> Negligible impact to surface water flows and circulation resulting from roadway and rail improvements (e.g., arrival/departure tracks, bridges) across Noisette Creek and Shipyard Creek; negligible impact to groundwater. Minor beneficial impact from improved stormwater management. Negligible effect on groundwater recharge. Negligible impact to base floodplain resulting from the placement of fill; negligible impact to flood hazard for other adjacent areas. 	Similar to Alternative 5	Similar to Alternative 5
Water Quality	<ul style="list-style-type: none"> Negligible surface water quality impacts in vicinity of the project, downstream, and throughout tidal segments of on-site creeks from potential changes in runoff, watershed alterations, and increased vehicular and rail traffic. Possible 	<ul style="list-style-type: none"> Similar to the No-Action Alternative, with a few exceptions. Negligible to minor short-term effect on TSS, turbidity and concentrations of heavy metals and other toxic contaminants due to disturbance of sediments in Shipyard 	<ul style="list-style-type: none"> Similar to Alternative 1 (Proposed Project). Impacts to surface waters may be slightly increased as a new bridge would be constructed over Noisette Creek. Stormwater runoff, sediment quality and groundwater resources impacts similar to 	<ul style="list-style-type: none"> Impacts to surface water quality, stormwater runoff, sediment quality, and groundwater resources similar to Alternative 1 (Proposed Project). 	<ul style="list-style-type: none"> Impacts to surface water quality similar to Alternative 1 (Proposed Project). Impacts to surface waters of Noisette Creek would be negligible to minor and limited to those associated with a short-term increase in stormwater runoff 	<ul style="list-style-type: none"> Surface water quality impacts similar to the No-Action Alternative, with a few exceptions. Negligible to minor short-term effect on TSS, turbidity and concentrations of heavy metals and other toxic contaminants due to disturbance of 	<ul style="list-style-type: none"> Surface water quality impacts, stormwater runoff, and sediment quality impacts similar to Alternative 5. Groundwater resource impacts similar to Alternative 5, but with 12 fewer potentially contaminated sites impacted. 	<ul style="list-style-type: none"> Impacts to surface water quality similar to Alternative 5. Impacts to surface waters of Noisette Creek would be negligible to minor and limited to those associated with a short-term increase in stormwater runoff from disturbed lands

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<p>beneficial effect on DO, TSS, and concentrations of nutrients, heavy metals and other toxic contaminants in downstream waters. Minor and/or major direct impacts from accidental spills.</p> <ul style="list-style-type: none"> Negligible effect on water quality from stormwater runoff with implementation of current stormwater management practices. Possible beneficial effect on DO, TSS, and concentrations of nutrients, heavy metals and other toxic contaminants in downstream waters Minor short-term effect during construction activities from disturbance of sediments and associated release of pollutants into the water column. Negligible effect on groundwater recharge. Minor direct impact on groundwater quality from accidental spills. Minor effect on groundwater quality due to excavation and use of stormwater infrastructure and ponds in vicinity of contaminated groundwater. 	<p>Creek (during new bridge construction) and Noisette Creek (during bridge rehabilitation).</p> <ul style="list-style-type: none"> Stormwater runoff impacts similar to the No-Action. Beneficial effect on DO, TSS, and concentrations of nutrients, heavy metals and other toxic contaminants in downstream waters compared to the existing condition. Sediment quality impacts similar to the No-Action Alternative. Groundwater resource impacts similar to the No-Action Alternative, but with multiple areas with groundwater monitoring that would be impacted and more potentially contaminated sites. 	<p>Alternative 1 (Proposed Project).</p>		<p>from disturbed lands during upland construction activities.</p> <ul style="list-style-type: none"> Stormwater runoff, sediment quality and groundwater resources impacts similar to the Alternative 1 (Proposed Project). 	<p>sediments in Shipyard Creek (during new bridge construction) and Noisette Creek (during bridge rehabilitation).</p> <ul style="list-style-type: none"> Stormwater runoff impacts similar to the No-Action with beneficial effect on DO, TSS, and concentrations of nutrients, heavy metals and other toxic contaminants in downstream waters. Sediment quality and groundwater resource impacts similar to the No-Action Alternative. 		<p>during upland construction activities.</p> <ul style="list-style-type: none"> Stormwater runoff, sediment quality, and groundwater resources similar to Alternative 5.
Vegetation and Wildlife	<ul style="list-style-type: none"> Negligible effect on vegetative land cover classes from habitat alteration and fragmentation due to 	<ul style="list-style-type: none"> Minor adverse effect on habitat. Loss of habitat from removal of vegetation during construction but would 	<ul style="list-style-type: none"> Same as Alternative 1 (Proposed Project) but approximately 236.83 acres of vegetation would be removed, of 	<ul style="list-style-type: none"> Same as Alternative 1 (Proposed Project) but approximately 214.27 acres of vegetation would be removed, of 	<ul style="list-style-type: none"> Same as Alternative 1 (Proposed Project) but approximately 235.89 acres of vegetation would be removed, of 	<ul style="list-style-type: none"> Minor adverse effect on habitat. Loss of habitat from removal of vegetation during construction but would 	<ul style="list-style-type: none"> Effect on habitat is the same as Alternative 5, but approximately 175.15 acres of vegetation would be 	<ul style="list-style-type: none"> Effect on habitat is the same as Alternative 5, but approximately 197.98 acres of vegetation would be

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<p>the continuation of mixed use and industrial land uses.</p> <ul style="list-style-type: none"> Minor adverse impact on the introduction of invasive/noxious species. Routine maintenance (cutting and mowing) of vegetation could result in the proliferation of invasive/noxious plants present within the study area. Negligible effect on species displacement. Existing and future land uses are not expected to directly or indirectly displace the wildlife species inhabiting the study area. Negligible effect on species mortality. Existing and future land uses are not expected to result in the mortality of species inhabiting the study area. 	<p>not degrade the stability of animal populations; approximately 233.71 acres of vegetation would be removed, of which 95.5 percent would consist of previously disturbed communities and 4.5 percent of natural communities (10.35 acres of marsh and 0.17 acre of marine open water) increase in habitat fragmentation.</p> <ul style="list-style-type: none"> Minor adverse effect from routine maintenance (cutting and mowing) of vegetation could result in the proliferation of invasive/noxious plants present within the study area. Minor adverse short-term effect on species displacement. Potential exists for direct and indirect species displacement during construction; common species are relatively abundant and adapted to living in close association with human activity and infrastructure. Minor adverse effect on species mortality. Potential exists for mortality of species during construction; wildlife would likely move away in the presence of human activity. 	<p>which 94.4 percent would consist of previously disturbed communities and 5.6 percent of natural communities (12.93 acres of marsh and 0.36 acre of marine open water).</p>	<p>which 95.14 percent would consist of previously disturbed communities and 4.9 percent of natural communities (10.34 acres of marsh and 0.17 acre of marine open water).</p>	<p>which 95.7 percent would consist of previously disturbed communities and 4.3 percent of natural communities (10.07 acres of marsh); no marine open water would be impacted.</p>	<p>not degrade the stability of animal populations; approximately 194.32 acres of vegetation would be removed, of which 95.7percent would consist of previously disturbed communities and 4.35 percent of natural communities (8.28 acres of marsh and 0.17 acre of marine open water); increase in habitat fragmentation.</p> <ul style="list-style-type: none"> Minor adverse effect on introduction of invasive/noxious species as routine maintenance (cutting and mowing) of vegetation could result in the proliferation of invasive/noxious plants present within the study area. Minor short-term adverse effect on species displacement. Potential exists for direct and indirect species displacement during construction; common species are relatively abundant and adapted to living in close association with human activity and infrastructure. Minor adverse effect on species mortality. Potential exists for mortality of species during construction; wildlife would likely move away in the presence of human activity. 	<p>removed, of which 95.2 percent would consist of previously disturbed communities and 4.83 percent of natural communities (8.28 acres of marsh and 0.17 acre of marine open water).</p> <ul style="list-style-type: none"> Potential for introduction of invasive/noxious species, species displacement, and species mortality would be the same as Alternative 1 (Proposed Project). 	<p>removed, of which 96.0 percent would consist of previously disturbed communities and 4.0 percent of natural communities (8.00 acres of marsh); no marine open water would be impacted.</p> <ul style="list-style-type: none"> Potential for introduction of invasive/noxious species, species displacement, and species mortality would be the same as Alternative 1 (Proposed Project).

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
Waters of the United States	Future construction and/or other human activities could adversely impact Waters of the U.S. within the Waters of the U.S. Study Area; any permanent or temporary impacts would require a permit from the Corps.	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Direct impacts from fill/shading activities during construction would result in the permanent impact of approximately 15.84 acres of Waters of the U.S., including 6.65 acres of tidal salt marsh, 8.01 acres of freshwater wetlands, 1.14 acres of tidal open waters, and 0.04 acres of non-tidal open waters. 	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Similar to Alternative 1 (Proposed Project) but would result in the permanent impact of approximately 17.92 acres of Waters of the U.S. including 8.86 acres of tidal salt marsh, 7.64 acres of freshwater wetlands, 1.35 acres of tidal open waters, and 0.07 acres of non-tidal open waters. 	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Similar to Alternative 1 (Proposed Project) but would result in the permanent impact of approximately 11.81 acres of Waters of the U.S. including 6.66 acres of tidal salt marsh, 3.86 acres of freshwater wetlands, 1.14 acres of tidal open waters, and 0.15 acres of non-tidal open waters. 	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Similar to Alternative 1 (Proposed Project) but would result in the permanent loss of approximately 15.98 acres of Waters of the U.S. including 6.66 acres of tidal salt marsh, 8.22 acres of freshwater wetlands, 1.03 acres of tidal open waters, and 0.07 acres of non-tidal open waters. 	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Would result in the permanent loss of approximately 14.75 acres of Waters of the U.S. including 5.29 acres of tidal salt marsh, 8.36 acres of freshwater wetlands, 1.01 acres of tidal open waters, and 0.09 acres of non-tidal open waters. 	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Similar to Alternative 5 but would result in the permanent loss of approximately 10.82 acres of Waters of the U.S. including 5.29 acres of tidal salt marsh, 4.35 acres of freshwater wetlands, 1.01 acres of tidal open waters, and 0.17 acres of non-tidal open waters. 	<ul style="list-style-type: none"> Major adverse impacts to Waters of the U.S. Similar to Alternative 5 but would result in the permanent loss of approximately 15.01 acres of Waters of the U.S. including 5.32 acres of tidal salt marsh, 8.68 acres of freshwater wetlands, 0.92 acre of tidal open waters, and 0.09 acres of non-tidal open waters.
Protected Species	<ul style="list-style-type: none"> Negligible effect on habitat alteration/fragmentation with implementation of avoidance and minimization measures due to the continuation of mixed use and industrial land uses. Potential exists for direct and indirect species displacement during future land use activities but minor effects with implementation of avoidance and minimization measures. 	<ul style="list-style-type: none"> Negligible effect on habitat alteration/fragmentation of Protected Species with implementation of avoidance and minimization measures during construction activities. Potential exists for direct and indirect short-term species displacement effects during construction; but negligible with implementation of Applicant's prescribed avoidance and minimization measures in combination with the additional Corps mitigation measures listed in Section 4.6.12. 	Same as Alternative 1 (Proposed Project).	Same as Alternative 1 (Proposed Project).	<ul style="list-style-type: none"> Habitat alteration/fragmentation impacts would be same as Alternative 1 (Proposed Project). Species displacements impacts would be similar to Alternative 1 (Proposed Project) but in-water construction activities would be limited to Shipyard Creek. 	<ul style="list-style-type: none"> Negligible effect on habitat alteration/fragmentation of Protected Species with implementation of avoidance and minimization measures during construction. Potential exists for direct and indirect effects during construction, but minor effects with implementation of Applicant's prescribed avoidance and minimization measures in combination with the additional potential mitigation measures listed in Section 4.6.12. 	Same as Alternative 5.	<ul style="list-style-type: none"> Habitat alteration/fragmentation impacts would be same as Alternative 5. Species displacements impacts would be similar to Alternative 5, but in-water construction activities would be limited to Shipyard Creek.
Essential Fish Habitat	<ul style="list-style-type: none"> Negligible effect on loss of Essential Fish Habitat (EFH) that currently exists within the study area. Negligible effect on species displacement. Potential exists for a small impact (in number, quantity, or extent) to federally 	<ul style="list-style-type: none"> Minor impact on loss of EFH as approximately 7.79 acres of EFH, including 6.65 acres of Estuarine Emergent Marsh (EEM) and 1.14 acres of Intertidal Flats/Estuarine Water Column (IF/EWC) would be impacted. 	Same as Alternative 1 (Proposed Project) except approximately 10.24 acres of EFH, including 8.86 acres of EEM, 0.03 acre of oyster reefs/shell banks (OR/SB), and 1.35 acres of IF/EWC, would be impacted.	Same as Alternative 1 (Proposed Project) except approximately 7.80 acres of EFH, including 6.66 acres of EEM and 1.14 acres of IF/EWC, would be impacted.	Same as Alternative 1 (Proposed Project) except approximately 7.69 acres of EFH, including 6.66 acres of EEM and 1.03 acres of IF/EWC, would be impacted.	<ul style="list-style-type: none"> Minor impact on loss of EFH as approximately 6.30 acres of EFH, including 5.29 acres of EEM and 1.01 acres of IF/EWC, would be impacted. Minor Potential exists for a small impact to federally managed 	Same as Alternative 5 except approximately 6.30 acres of EFH, including 5.29 acres of EEM and 1.01 acres of IF/EWC, would be impacted.	Same as Alternative 5 except approximately 6.24 acres of EFH, including 5.32 acres of EEM and 0.92 acre of IF/EWC would be impacted.

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	managed species during construction, such as brown and white shrimp, which are relatively abundant and adapted to living in close association with human activity and infrastructure.	<ul style="list-style-type: none"> Minor impact to species displacement as potential exists for a small impact to federally managed species during construction, such as brown and white shrimp, which are relatively abundant and adapted to living in close association with human activity and infrastructure. Negligible impact to oysters with the implementation of water quality BMPs and the potential for future oyster settlement and propagation with the new pilings. 				species during construction, such as brown and white shrimp, which are relatively abundant and adapted to living in close association with human activity and infrastructure.		
Traffic and Transportation	No impacts	<ul style="list-style-type: none"> Negligible short-term impact during construction to I-26, I-526, US 17, and at-grade rail crossings; minor short-term adverse impact during construction to North Charleston intersections. Negligible permanent impact on majority of I-26 corridor in the opening year 2018 and design year 2038; beneficial or adverse permanent impact on a few segments due to a LOS change. Negligible permanent impact on majority of I-526 corridor in the opening year 2018 and design year 2038; beneficial or adverse permanent impact on a few segments due to a LOS change. 	Same as Alternative 1 (Proposed Project) except: <ul style="list-style-type: none"> Slightly different number of impacted North Charleston intersections; and Major permanent adverse impact on the opening year 2018 and design year 2038 at-grade crossing operations as the Alternative would increase the frequency and number of train occurrences in North Charleston. Additionally, two new at-grade crossings would be created. 	Same as Alternative 1 (Proposed Project) except for: <ul style="list-style-type: none"> Impacts to at-grade rail crossings are similar to Alternative 1 but with different number of new at-grade rail crossing locations (2-Meeting Street and Spruill Avenue at Kingsworth Avenue) and operations. Additionally, two new at-grade crossings would be created. 	Same as Alternative 1 (Proposed Project) except for: <ul style="list-style-type: none"> Impacts to at-grade rail crossings are similar to Alternative 1 (Proposed Project) but with different at-grade rail crossing locations and operations as this Alternative would have double (8/day) the number of train occurrences on the southern rail connection as Alternative 1. 	<ul style="list-style-type: none"> Negligible short-term impact during construction to I-26, I-526, US 17, and at-grade rail crossings; minor short-term adverse impact during construction to North Charleston intersections. Negligible permanent impact on majority of I-26 corridor in the opening year 2018 and design year 2038; beneficial or adverse permanent impact on a few segments due to a LOS change. Negligible permanent impact on majority of I-526 corridor in the opening year 2018 and design year 2038; beneficial or adverse permanent impact on a few segments due to a LOS change. 	Same as Alternative 5 except for: <ul style="list-style-type: none"> Major permanent adverse impact on the opening year 2018 and design year 2038 at-grade crossing operations as the Alternative would increase the frequency and number of train occurrences in North Charleston. Additionally, two new at-grade crossings would be created. 	Same as Alternative 5 except for: <ul style="list-style-type: none"> Impacts to at-grade rail crossings are similar to Alternative 5 but with different at-grade rail crossing locations and operations as this Alternative would have double (8/day) the number of train occurrences on the southern rail connection as Alternative 5.

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
		<ul style="list-style-type: none"> Negligible permanent impact on the opening year 2018 and design year 2038 US 17 operations as Alternative 1 (Proposed Project) would have minimal influence on the US 17 traffic volumes. Minor permanent adverse impact on the opening year 2018 and design year 2038 North Charleston intersection operations. Traffic patterns would change but slightly more intersections would degrade than improve operations. Moderate permanent adverse impact on the opening year 2018 and major permanent adverse impact design year 2038 at-grade crossing operations as the Proposed Project would increase the frequency and number of train occurrences in North Charleston. Additionally, one new at-grade crossing would be created. 				<ul style="list-style-type: none"> Negligible permanent impact on the opening year 2018 and design year 2038 US 17 operations as Alternative 5 would have minimal influence on the US 17 traffic volumes. Minor permanent adverse impact on the opening year 2018 and design year 2038 North Charleston intersection operations. Traffic patterns would change but slightly more intersections would degrade than improve operations. Moderate permanent adverse impact on the opening year 2018 and major permanent adverse impact design year 2038 at-grade crossing operations as Alternative 5 would increase the frequency and number of train occurrences in North Charleston. Additionally, one new at-grade crossing would be created. 		
Land Use and Infrastructure	<ul style="list-style-type: none"> Negligible impact on land use change. No change in land use designation required. Negligible impact on displacement of structures. No non-Palmetto Railways owned or specially designated structures would have to be displaced or demolished. 	<ul style="list-style-type: none"> Major permanent impact on land use change. Rezoning of the residential area along the western boundary of the ICTF and rezoning of portions of the project site from Institutional future land use. Comprehensive Plan amendment also required. 	Similar to Alternative 1 (Proposed Project) except additional off-site roadway and rail improvements would cause the displacement of approximately 26 structures.	Similar to Alternative 1 (Proposed Project) except additional off-site roadway and rail improvements would cause the displacement of approximately 25 structures.	Similar to Alternative 1 (Proposed Project)	<ul style="list-style-type: none"> Negligible impact on land use change. No change in land use designation required. Major permanent impact on displacement of structures. Approximately 33 non-Palmetto Railways owned or specially designated structures would have to be displaced or 	Similar to Alternative 5 except additional off-site roadway and rail improvements would cause the displacement of approximately 16 structures.	Similar to Alternative 5

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<ul style="list-style-type: none"> Negligible impact on infrastructure and utilities. No impacts as upgrades to service are not anticipated. 	<ul style="list-style-type: none"> Major permanent impact on displacement of structures. Approximately 88 non-Palmetto Railways owned or specially designated structures would have to be displaced or demolished. Additional off-site roadway and rail improvements would cause the displacement of approximately 23 structures. Negligible short-term impact on infrastructure and utilities as any interruption of service to local area residents and businesses would be less than 12 hours. 				<p>demolished. Additional off-site roadway and rail improvements would cause the displacement of approximately 14 structures.</p> <ul style="list-style-type: none"> Negligible short-term impact on infrastructure and utilities as any interruption of service to local area residents and businesses would be less than 12 hours. 		
Cultural Resources	No effect	<ul style="list-style-type: none"> Adverse effect on Charleston Naval Hospital (CNH) Historic District from demolition of contributing elements of the Historic District, and altered setting of the District. No effect on Charleston Naval Yard (CNY) Historic District, Charleston Navy Yard Officer's Quarters (CNYOQ) Historic District, or other historic properties outside the Charleston Naval Complex (CNC). Adverse effect from altered setting for U.S. Marine Corps (USMC) Barracks. 	No effect	Same as Alternative 1 (Proposed Project)	Same as Alternative 1 (Proposed Project)	<ul style="list-style-type: none"> Adverse effect on CNH Historic District and CNY Historic District from demolition of contributing elements of the Historic Districts, and altered settings of the Districts. Adverse effect on the CNYOQ Historic District from altered settings. Adverse effect on USMC Barracks from demolition of NRHP-listed building and altered settings of the District. No effect on other historic properties outside the Charleston Naval Complex (CNC). 	Same as Alternative 5	Same as Alternative 5
Visual Resources and Aesthetics	<ul style="list-style-type: none"> No impact to scenic views. 	<ul style="list-style-type: none"> Minor, permanent adverse impact to scenic views from 	<ul style="list-style-type: none"> Minor, permanent adverse impact to scenic views from 	<ul style="list-style-type: none"> Same as Alternative 1 (Proposed Project). 	<ul style="list-style-type: none"> No impact to scenic views. 	<ul style="list-style-type: none"> Major, permanent adverse impact on viewer sensitivity to 	<ul style="list-style-type: none"> Same impact to scenic views as Alternative 5. 	<ul style="list-style-type: none"> Same impact to scenic views as Alternative 5.

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<ul style="list-style-type: none"> Minor adverse impact to scenic resources through the removal of mature trees. Potential minor beneficial impacts to visual quality and character from redevelopment efforts as vacant parking lots are replaced with newer built structures and associated landscaping. No impact from light and glare. 	<p>renovation and slight elevation of existing rail over Noisette Creek along Noisette Boulevard.</p> <ul style="list-style-type: none"> Major, permanent adverse impact to scenic resources from the removal of contributing elements of the CNH Historic District and mature trees, as well as the altered setting of the USMC Barracks. Major, permanent adverse impact to visual quality and character from demolition of contributing elements of the CNH historic district and altered setting of the USMC Barracks. Moderate, permanent adverse impact from new vertical elements in the VRSA (wide-span gantry cranes and high mast lighting). Minor, permanent adverse impact to visual quality and character from renovation and slight elevation of existing rail bridge) over Noisette Creek. Negligible impact to visual quality and character from the arrival/departure tracks to the south of the ICTF. Negligible impact to visual quality and character from the realignment of Hobson Ave/Bainbridge Ave and construction of 	<p>construction of a new rail bridge over Noisette Creek along Spruill Avenue.</p> <ul style="list-style-type: none"> Minor adverse impact to scenic resources from the removal of mature trees. Similar impacts to visual quality and character as described under Alternative 1 (Proposed Project), but no impact to CNH historic district and USMC Barracks. Similar impacts from light and glare as those described under Alternative 1 (Proposed Project). 		<ul style="list-style-type: none"> Same impacts to scenic resources as Alternative 1 (Proposed Project). Similar impacts to visual quality and character as described under Alternative 1 (Proposed Project), but without renovated rail bridge over Noisette Creek. Similar impacts from light and glare as those described under Alternative 1 (Proposed Project), but negligible effect resulting from nighttime train head lamps due to lack of curvatures (and affected residences) on the southern arrival/departure tracks. 	<p>scenic views from renovation and slight elevation of existing rail bridge near Noisette Boulevard over Noisette Creek and placement of the ICTF adjacent to Noisette Creek.</p> <ul style="list-style-type: none"> Major, permanent adverse impact to scenic resources from the removal of contributing elements to the CNH and CNY historic districts, the USMC Barracks, and mature trees, as well as the altered setting associated with the CNH, CNY, and CNYOQ. The overall impacts to visual quality and character would be similar to Alternative 1 (Proposed Project), including the major, permanent adverse impact to visual quality and character from the demolition of contributing elements of to the CNH and CNY historic districts, demolition of the USMC Barracks, and altered settings of the CNH, CNY, and CNYOQ. Minor, permanent adverse impact from light and glare associated with high mast lighting, but negligible effect resulting from nighttime train head lamps due to lack of curvatures (and affected residences) on the southern arrival/departure tracks. 	<ul style="list-style-type: none"> Same impacts to scenic views and resources as Alternative 5. The overall impacts to visual quality and character would be similar to Alternative 5. Similar impact from light and glare as those described under Alternative 5. 	<ul style="list-style-type: none"> Same impacts to scenic views and resources as Alternative 5. The overall impacts to visual quality and character would be similar to Alternative 5. Similar impact from light and glare as those described under Alternative 5.

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
		<p>the drayage road; minor, permanent adverse impact from the removal of the Viaduct Road Overpass.</p> <ul style="list-style-type: none"> Minor, permanent adverse impact to visual quality and character from the construction of the earthen berm adjacent to the Chicora-Cherokee neighborhood. Minor, permanent adverse impact from light and glare associated with the new 85-foot tall mast lighting that will be illuminated from dusk to dawn, and from nighttime train head lamps. 						
Noise and Vibration	No impacts	<ul style="list-style-type: none"> Negligible traffic noise impacts with negligible beneficial effect for several streets. Minor to moderate rail noise impact along several segments due to increased rail activity and new track builds. Negligible rail vibration impact. Minor to moderate construction noise impact in the vicinity of noise berm. Minor to Moderate exterior daytime operational noise impact and major exterior nighttime operational noise impact. Refer to subsection 4.12.3.5 for information on exterior to interior 	<ul style="list-style-type: none"> Negligible traffic noise impacts similar to Alternative 1 (Proposed Project). Minor to moderate rail noise impact along several segments due to increased rail activity and new track builds. Major rail noise impact for up to 4 land uses along one future track segment. Negligible rail vibration impacts similar to Alternative 1 (Proposed Project), except potential impact for two or three receptors near curved track of S-line. Construction impacts and Operational impacts are similar to the Alternative 1 (Proposed Project). 	Similar to Alternative 1 (Proposed Project), except additional potential for rail vibration impact for one or two receptors near the curved track at Kingsworth Avenue.	Similar to Alternative (Proposed Project) except minor to moderate rail noise impact along several segments due to increased rail activity in the southern alignment.	<ul style="list-style-type: none"> Negligible traffic noise impacts with a minor to moderate impact along one future road. Minor to moderate rail noise impact along several segments due to increased rail activity and new track builds. Moderate rail noise impact along one future track segment Negligible rail vibration impact. Minor to moderate construction noise impact in the vicinity of construction. Negligible exterior daytime impact and moderate to major exterior nighttime impact. Refer to subsection 4.12.7.5 for information on exterior to interior 	Similar to Alternative 5 except <ul style="list-style-type: none"> Minor to moderate rail noise impact along several segments due to increased rail activity and new track builds and moderate rail noise impact along one new build future segment. Additional potential for rail vibration impact for one or two receptors near the curved track at Kingsworth Avenue. 	Similar to Alternative 5 except <ul style="list-style-type: none"> Minor to moderate rail noise impact along several segments due to increased rail activity in the southern alignment and moderate rail noise impact along one new build future segment. Major additive noise impact at Port drayage road (Traffic + Rail). Negligible daytime impact and major nighttime impact for additive noise for Noisette Boulevard (Traffic + Operations).

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
		<p>noise reduction. Interior noise levels are not anticipated to disrupt sleep.</p> <ul style="list-style-type: none"> Negligible additive noise impacts (Virginia Avenue - Traffic + Rail Noise) and minor to moderate additive noise impacts (St. Johns Avenue - Traffic + Rail Noise) 	<ul style="list-style-type: none"> Negligible additive noise impacts (Virginia Avenue and Spruill Avenue - Traffic + Rail Noise) 			<p>noise reduction. Interior noise levels are not anticipated to disrupt sleep.</p> <ul style="list-style-type: none"> Negligible additive (daytime) impacts and moderate to major additive (nighttime) impacts (Noisette Boulevard –Traffic + Rail Noise), Negligible [Virginia Avenue (Traffic + Rail Noise)] and major additive impacts (Port drayage road – Traffic + Rail) 		
Air Quality	<ul style="list-style-type: none"> Impacts from construction emissions of criteria pollutant would be minor short-term adverse. Operational criteria pollutant emissions would be less than 1 percent of Study Area's criteria pollutant emissions. Potential impacts would be minor permanent adverse. Criteria pollutants emitted, along with the existing and projected criteria pollutants, would not put the Tri-County area into non-attainment for any criteria pollutants and the National Ambient Air Quality Standard (NAAQS) would remain in compliance. Potential impacts would be minor permanent adverse. Non-diesel particulate matter (DPM) hazardous air pollutant (HAP) emissions from would each equal less 	<ul style="list-style-type: none"> Impacts from construction emissions of criteria pollutants would be minor short-term adverse because emissions would be short-term and spread out over 5 years. Operational criteria pollutant emissions would be less than one percent of study area's criteria pollutant emissions. Potential impacts would be minor permanent adverse. Criteria pollutants emitted, along with the existing and projected criteria pollutants, would not put the Tri-County area into non-attainment for any criteria pollutants and the NAAQS would remain in compliance. Potential impacts would be minor permanent adverse. Non-DPM HAP emissions would each equal less than one-tenth of one percent of 	Similar to Alternative 1	Similar to Alternative 1	Similar to Alternative 1	<ul style="list-style-type: none"> Impacts from construction emissions of criteria pollutants would be minor short-term adverse because emissions would be short-term and spread out over five years. Operational criteria pollutant emissions would be less than 1 percent of study area's criteria pollutant emissions. Potential impacts would be minor permanent adverse. Criteria pollutants emitted from Alternative 5, along with the existing and projected criteria pollutants, may put the Tri-County area into non-attainment for the NO₂ 1-hour NAAQS. Potential impacts would be minor adverse. Non-DPM HAP emissions would each equal less than one-tenth of 1 percent of the total HAPs emitted in the Study Area. 	Similar to Alternative 5	Similar to Alternative 5

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<p>than one-tenth of 1 percent of the total HAPs emitted in the study area. Potential impacts would be acceptable.</p> <ul style="list-style-type: none"> Potential excess cancer risk would be within the acceptable range. Impacts from cancer risk would be acceptable. The maximum noncancer hazard would be below 1. Potential impacts from noncancer hazard would be negligible. 	<p>the total HAPs emitted in the Study Area. Potential impacts would be acceptable.</p> <ul style="list-style-type: none"> Potential excess cancer risk would fall within the acceptable range. Impacts from cancer risk would be acceptable. The maximum noncancer hazard would be below 1. Potential impacts from noncancer hazard would be negligible. 				<p>Potential impacts would be acceptable.</p> <ul style="list-style-type: none"> Potential excess cancer risk would fall within the acceptable range. Impacts from cancer risk would be acceptable. The maximum noncancer hazard would be below 1. Potential impacts from noncancer hazard would be negligible. 		
Climate Change	<ul style="list-style-type: none"> The No-Action Alternative results in short term construction period greenhouse gas (GHG) emissions and potential short-term impacts would be minor adverse. Annual Operational GHG Emissions Inventory would be 36,060 MT CO₂e. The No Action Alternative would be the least efficient. Long-term effects would be major adverse. The predicted sea level rise would not cause detectable changes to on-site structural integrity at the Proposed Project and River Center project sites, nor would it cause predictable impacts to human health and safety. Impacts due to sea level rise at the 	<ul style="list-style-type: none"> Because the GHG emissions from the construction phase provide the needed infrastructure for the increased efficiency in the transport of goods, the short-term impacts would be minor adverse. Annual Operational GHG Emissions Inventory would be 30,948 MT CO₂e. The Proposed Project would be the most efficient. Long-term effects would be minor adverse. The predicted sea level rise would not cause detectable changes to on-site structural integrity at the Proposed Project site, nor would it cause predictable impacts to human health and safety. Impacts would be negligible. The Proposed Project is predicted to get a level of storm surge 	Similar to Alternative 1	Similar to Alternative 1	Similar to Alternative 1	<ul style="list-style-type: none"> Because the GHG emissions from the construction phase provide the needed infrastructure for the increased efficiency in the transport of goods, the short-term impacts would be minor adverse. Annual Operational GHG Emissions Inventory would be 32,208 MT CO₂e. Alternative 5 would be more efficient than the No Action Alternative and nearly as efficient as the Proposed Project. Long-term effects would be minor adverse. The predicted sea level rise would not cause detectable changes to on-site structural integrity at the River Center site, nor would it cause predictable impacts to human health and safety. Impacts would be negligible. 	Similar to Alternative 5	Similar to Alternative 5

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<p>Proposed Project and River Center project sites would be negligible.</p> <ul style="list-style-type: none"> The Proposed Project and River Center sites are predicted to get a level of storm surge inundation that could damage on-site structures to the point of altering their structural integrity, move and damage heavy equipment, and pose a threat to human health and safety of people on-site. Impacts on the Proposed Project and River Center project sites would be major. 	<p>inundation that could damage on-site structures to the point of altering their structural integrity, move and damage heavy equipment, and pose a threat to human health and safety of people on-site. Impacts would be major.</p>				<ul style="list-style-type: none"> The River Center site is predicted to get a level of storm surge inundation that could damage on-site structures to the point of altering their structural integrity, move and damage heavy equipment, and pose a threat to human health and safety of people on-site. Impacts would be major. 		
Hazardous, Toxic, and Radioactive Waste	<ul style="list-style-type: none"> Eight active monitoring sites with contamination (two requiring investigation) for a total of 10. Potential minor adverse impacts to soil (contamination) from excavation activities (after compliance with the Navy's permitting process, RCRA Permit #SCO 170 022 560 and all applicable laws for testing and disposal of contaminated soils). Ten known active contamination sites have been identified in the areas associated with the No-Action Alternative. Potential minor adverse impacts to groundwater (contamination) from dewatering in excavation areas (after compliance with the 	<ul style="list-style-type: none"> Eight active monitoring sites with contamination (15 requiring investigation) for a total of 23. Approximately 107 buildings requiring demolition/renovation. Potential minor adverse impacts to soil (contamination) from excavation activities (after compliance with the Navy's permitting process, RCRA Permit #SCO 170 022 560 and all applicable laws for testing and disposal of contaminated soils). 24 potentially contaminated sites would be impacted. Potential minor adverse impacts to groundwater (contamination) from dewatering in excavation areas (after 	<p>Similar to Alternative 1 but with:</p> <ul style="list-style-type: none"> Eight active monitoring, 14 requiring investigation for a total of 22 contaminated sites. Approximately 114 buildings requiring demolition/renovation Impact approximately 114 buildings impacted through demolition of structures with asbestos and/or metals-based paints (after survey and applicable abatement measures). 	<p>Similar to Alternative 1 but with:</p> <ul style="list-style-type: none"> Eight active monitoring sites with contamination, three requiring investigation for a total of 11. Approximately 113 buildings requiring demolition/renovation . 13 fewer potentially contaminated sites would be impacted. Impact approximately 113 buildings through demolition of structures with asbestos and/or metals-based paints (after survey and applicable abatement measures). 	<p>Similar to Alternative 1</p>	<ul style="list-style-type: none"> Eight active monitoring sites, with contamination (16 requiring investigation) for a total of 24. Approximately 47 buildings requiring demolition/renovation Impacts to groundwater similar to Alternative 1 (Proposed Project); but fewer areas with existing groundwater contamination and monitoring wells. Impact from demolition of structures with asbestos and/or metals-based paints (after survey and applicable abatement measures) similar to Alternative 1 (Proposed Project); 82 fewer buildings impacted. 	<p>Similar to Alternative 5 but with:</p> <ul style="list-style-type: none"> Eight active monitoring sites with contamination (four requiring investigation) for a total of 12. Approximately 49 buildings requiring demolition/renovation. Impact 49 buildings through demolition of structures with asbestos and/or metals-based paints (after survey and applicable abatement measures). 	<p>Similar to Alternative 5</p>

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<p>Navy's permitting process, RCRA Permit SCO 170 022 560, and all applicable laws for treatment and disposal of dewatering effluent.</p> <ul style="list-style-type: none"> • Potential minor adverse impact from demolition of structures with asbestos and/or metals-based paints (after survey and applicable abatement measures). • Potential for minor and/or major adverse impacts from accidental spills). 	<p>compliance with the Navy's permitting process, RCRA Permit SCO 170 022 560, and all applicable laws for treatment and disposal of dewatering effluent. Multiple areas with groundwater monitoring would be impacted and potentially contaminated sites would be impacted.</p> <ul style="list-style-type: none"> • No anticipated involvement with the Macalloy Superfund Site. • Potential minor adverse impact from demolition of approximately 107 structures with asbestos and/or metals-based paints (after survey and applicable abatement measures). • Potential for minor and/or major adverse impacts from accidental spills resulting from use of above ground storage tanks (ASTs) (diesel fuel), storage of other minor amounts of solvents on the premises, and from containers containing hazardous materials. 				<ul style="list-style-type: none"> • Potential for minor and/or major adverse impacts from accidental spills resulting from use of ASTs (diesel fuel), storage of other minor amounts of solvents on the premises, and from containers containing hazardous materials. 		
Socioeconomics and Environmental Justice	<ul style="list-style-type: none"> • Negligible as there are no impacts to economic and business resources. • Minor adverse impact from private developer construction. • Negligible impact to community safety and emergency response 	<ul style="list-style-type: none"> • Major short-term and indirect long-term benefit to local and regional economy; minor indirect adverse impact to local businesses adjacent to project (access, relocations, and aesthetics). 	<p>Similar to Alternative 1 (Proposed Project) except:</p> <ul style="list-style-type: none"> • Additional minor adverse impact to mobility and access from the creation of cul-de-sac at St. Johns Avenue and McMillian Avenue, 	<p>Similar to Alternative 1 (Proposed Project) except:</p> <ul style="list-style-type: none"> • Businesses north of Milford Street would be avoided. • Location of 2 new at-grade crossings are located at Meeting Street and Spruill 	<p>Similar to Alternative 1 (Proposed Project). except:</p> <p>Localized moderate impacts to emergency response.</p>	<ul style="list-style-type: none"> • Major short-term and indirect long-term benefit to local and regional economy; direct adverse impacts to businesses on River Center project site; major direct adverse impacts to businesses relocations along 	<p>Similar to Alternative 5 except:</p> <ul style="list-style-type: none"> • Businesses north of Milford Street would be avoided. • Approximately 8 additional residential displacements from Union Heights neighborhood. 	<p>Similar to Alternative 5</p>

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<p>as any delay would be similar to existing conditions.</p> <ul style="list-style-type: none"> Major impact from displacement of Sterett Hall and surrounding arts facilities. Negligible as there is no physical impact in terms of new barriers to the elderly and handicapped. Environmental Justice considerations are not applicable (no Federal action). 	<ul style="list-style-type: none"> Minor short-term adverse impacts from construction; minor adverse access impacts for Chicora-Cherokee residents; minor adverse mobility impacts from new at-grade rail crossings and increased delay at intersections and at-grade crossings. Potential minor adverse emergency response time impacts due to delay at at-grade crossings compared to No-Action however, alternate routes are available. Potential minor safety impacts due to additional conflict points at Meeting Street at-grade crossing. Negligible impact from displacement of Sterett Hall and surrounding arts facilities as they would be displaced with or without Alternative 1 (Proposed Project). Major adverse impacts to Chicora-Cherokee neighborhood from approximately 134 residential displacements; minor to moderate adverse impact from visual and noise impacts. Minor indirect impact from exacerbation of housing and population loss. Minor adverse impacts to Olde North Charleston and minor to moderate impacts 	<ul style="list-style-type: none"> Indirect minor adverse impacts (noise, light and glare) to residents and businesses along Spruill Avenue and Bexley Street corridor. Additional 33 residential relocations within Olde North Charleston neighborhood. 	<p>Avenue at Kingsworth Avenue.</p> <ul style="list-style-type: none"> Localized moderate impacts to emergency response. Approximately 8 additional residential displacements from Union Heights neighborhood. 		<p>Noisette Boulevard and the Lowcountry Innovation Center; minor adverse impact to properties adjacent to project (truck traffic, noise, aesthetics).</p> <ul style="list-style-type: none"> Minor, long-term adverse impact to east-west mobility for residents and businesses within the study area; Closure of McMillan Avenue would result in a minor adverse impact from the disruption of CARTA Route 104. Potential for major adverse impact to emergency response, as a result of delay at at-grade crossings and limited east-west access to the study area. Potential for minor safety adverse impacts due to additional conflict point at Meeting Street at-grade crossing. Negligible impact from displacement of Sterett Hall and surrounding arts facilities (they would be displaced with or without Alternative 5). For the Chicora-Cherokee neighborhood, overall noise impacts would be minor to moderate adverse from rail and a localized major adverse noise impact from rail and drayage road. Chicora-Cherokee 		

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
		<p>to Howard Heights, Union Heights, and Windsor neighborhoods from noise.</p> <ul style="list-style-type: none"> Negligible impact in terms of new barriers to the elderly and handicapped. Environmental Justice considerations are applicable: Major adverse impact from displacement of approximately 134 residential units would result in a disproportionately high and adverse impact to Chicora-Cherokee neighborhood. 				<p>neighborhood would have negligible visual impacts.</p> <ul style="list-style-type: none"> Major adverse impact to River Center neighborhood from displacement of approximately 62 residential units (includes approximately 60-unit West Yard Lofts). Barriers to the elderly and handicapped are the same as Alternative 1 (Proposed Project). Environmental Justice considerations are applicable: Major adverse impact from displacement of the approximately 60-unit West Yard Lofts low-income housing development would result in a disproportionately high and adverse impact. 		
Human Health and Safety	<ul style="list-style-type: none"> Negligible impact on worker safety, drinking water quality, hazardous materials. No impact from noise and vibration. Minor impact from air quality. Negligible impact from hazardous materials due to implementation of BMPs during construction and operation. Negligible impact for community safety and emergency response times as impact from delay would be similar to existing conditions. 	<ul style="list-style-type: none"> Negligible impact on worker safety, drinking water quality, hazardous materials, traffic noise and vibration. Minor to moderate impact (several areas) from rail noise, construction noise (short-term), and operational noise (daytime). Major operational noise impact (nighttime). Additive noise impacts: negligible [Virginia Avenue (Traffic + Rail Noise)] minor to moderate [St. Johns Avenue (Traffic + Rail 	Similar to Alternative 1 (Proposed Project).	Similar to Alternative 1 (Proposed Project) except with localized moderate impacts to emergency response.	Similar to Alternative 1 (Proposed Project) except with localized moderate noise impacts.	<ul style="list-style-type: none"> Negligible impact on worker safety, drinking water quality, hazardous materials, ICTF operational noise (daytime) and vibration. Minor to moderate impact (several areas) from traffic noise, rail noise, and construction noise (short-term). Moderate to Major exterior nighttime impact. Additive noise impacts: negligible (daytime) moderate to major (nighttime) [Noisette Boulevard (Traffic + Operations)], negligible [Virginia 	Similar to Alternative 5 with additional localized moderate impacts to emergency response.	Similar to Alternative 5 with additional localized moderate impacts to emergency response.

Table 2.5-1, cont'd

Resource Area	No Action	Alternative 1 (Proposed Project)	Alternative 2	Alternative 3	Alternative 4	Alternative 5	Alternative 6	Alternative 7
	<ul style="list-style-type: none"> No impact from light and glare. 	<p>Noise). Overall impact to human health is minor with noise mitigation measures.</p> <ul style="list-style-type: none"> Minor permanent adverse impact to air quality (criteria pollutants and the NAAQS would remain in compliance). Potential impacts from non-DPM HAP emissions would be acceptable. Potential excess cancer risk and cancer risk would be acceptable. Potential impacts from noncancer hazard would be negligible. Potential for minor adverse impact on emergency response times and minor indirect adverse impact to community safety. Negligible effect from high mast lighting, minor, permanent adverse impact from light and glare associated with nighttime train head lamps to residential structures along curvatures of the track. 				<p>Avenue (Traffic + Rail Noise)), and major [Port drayage road (Traffic + Rail)]</p> <ul style="list-style-type: none"> Minor impact to air quality (Tri-County area may be in non-attainment for NO₂). Potential impacts from non-DPM HAP emissions would be acceptable. Potential excess cancer risk and cancer risk would be acceptable. Potential impacts from noncancer hazard would be negligible. Potential for major impact to emergency response times and minor impact to community safety Negligible effect from high mast lighting, negligible effect from nighttime train head lamps due to lack of curvatures (and affected residences) on the southern arrival/departure tracks. 		
Section 4(f)/6(f)	No constructive or permanent use of any 4(f) resource. No conversion of 6(f) resources.	<ul style="list-style-type: none"> Uses of Section 4(f) resources: permanent use of CNH Historic District from demolition of contributing elements of the historic district and permanent use of the parade ground of the USMC Barracks. No conversion of 6(f) resources. 	Not prudent (per 23 C.F.R. 774.17). See Section 4.18 for analysis and full details.	Same as Alternative 1 (Proposed Project)	Same as Alternative 1 (Proposed Project)	<ul style="list-style-type: none"> Uses of Section 4(f) resources: permanent use of CNH Historic District, CNY Historic District, and USMC Barracks from demolition of contributing elements of the historic district. Use of CNYOQ Historic District from altered setting of the historic district. No conversion of 6(f) resources. 	Same as Alternative 5.	Same as Alternative 5