

FINAL Environmental Assessment (24 CFR Part 58)

Project Identification: Meriden Mills Apartments Disposition and Related Parcel

Assembly Meriden, CT

Map/Lots: 0106-0029-0001-0003

0106-0029-0002-0000 0106-0029-001A-0000

Responsible Entity: City of Meriden, CT

Month/Year: October, 2016

Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Responsible Entity: City of Meriden, CT

[24 CFR 58.2(a)(7)]

Certifying Officer: City Manager, Meriden, CT

[24 CFR 58.2(a)(2)]

Project Name: Meriden Mills Apartments Disposition and Parcel Assembly

Project Location: 144 Mills Street, 161 State Street, 177 State Street, 62 Cedar

Street; Meriden CT.

Estimated total project cost: TBD

Grant Recipient: Meriden Housing Authority, Meriden CT.

[24 CFR 58.2(a)(5)]

Recipient Address: 22 Church Street

Meriden, CT 06451

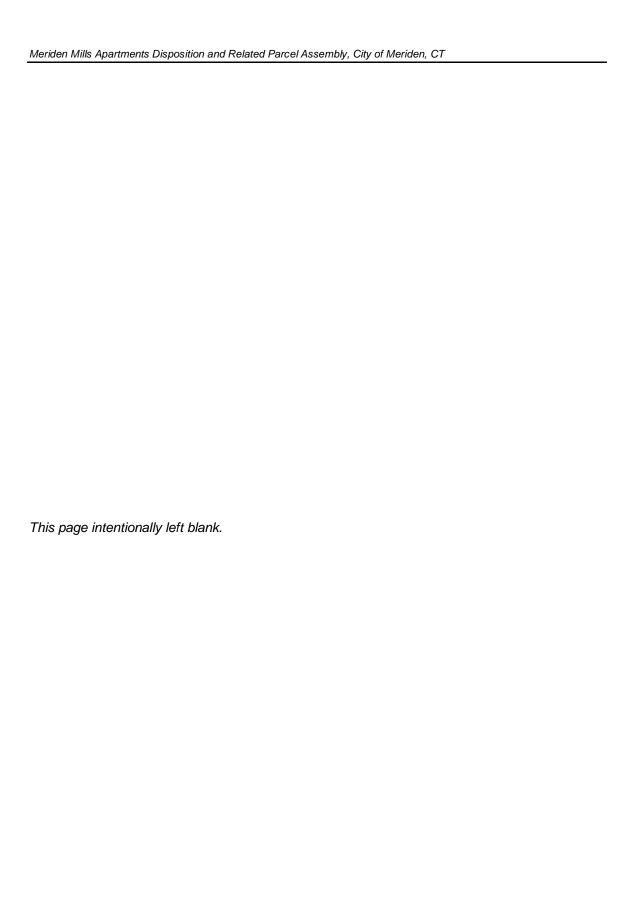
Project Representative: Robert Cappelletti

Telephone Number: 203-235-0157

Conditions for Approval: (List all mitigation measures adopted by the responsible entity to eliminate or minimize adverse environmental impacts. These conditions must be included in project contracts or other relevant documents as requirements). [24 CFR 58.40(d), 40 CFR 1505.2(c)]

The proposed action requires no mitigation measures.

	Significant Impact sult in a significant impact on the quality of the human environment.	onment)
	inificant Impact ay significantly affect the quality of the human environment)	
Preparer Signature: Name/Title/Agency:	Nicole L. Weymouth, AICP Sr. Environmental Planner, AECOM	10/02/2016 Date
Recipient Signature: Name/Title/Agency:	City Manager, City of Meriden	Date
Recipient Signature: Name/Title/Agency:	Robert Cappelletti Executive Director, Meriden Housing Authority	Date
RE Reviewing Official Signature Name/Title/Agency:		Date
RE Approving Official Signature Name/Title/Agency:		Date



Statement of Purpose and Need for the Proposal: [40 CFR 1508.9(b)]

This Environmental Assessment (EA) is a revision of the Final EA for Meriden Mills Apartments Disposition and Related Parcel Assembly prepared for the City of Meriden ("the City") in October 2013. In accordance with 24 CFR Part 58, the Meriden Housing Authority (MHA) is pursuing a disposition and parcel assembly action for future new construction of housing in the city's Inner Tax District. The purpose of this disposition is to facilitate the eventual removal of the five structures of the Mills Memorial Apartments, a 140-unit federal family public housing development, from the federal public housing program so the land can be part of a larger parcel assembly for the purposes of future development under a separate action. The parcel assembly also includes the transfer of two City-owned sites to the MHA (177 State Street was acquired by the City in 2014 for the purposes of this parcel assembly; the action was addressed in the previous version of the EA finalized in October 2013).

144 Mills Memorial consists of three low-rise structures and two high-rise structures. Disposition and parcel assembly of two of the low-rise structures (located at 144 Mills Memorial), surface parking lots (located at 161 State Street and 177 State Street) and public open space (62 Cedar Street) were addressed in the 2013 EA. This current revision to the EA considers the disposition and parcel assembly of an additional low-rise apartment structure and two high-rise apartment structures also located at 144 Mills Memorial.

The lots within and adjacent to the Mills Memorial Housing Complex are referred to as the "Mills Megablock." The Mills Megablock is bounded by Park Street to the north, State Street and Mills Street to the west, Cedar Street to the east, and Pratt Street to the south. Redevelopment of the Mills Megablock is a part of the US Department of Housing and Urban Development (HUD) Choice Neighborhood Transformation Plan. HUD approved the demolition of two low rise structures and parking lots in 2015. These two low-rise buildings are vacant and tenants have been relocated. The HUD demolition and dispositioning application for the remaining three buildings at 144 Mills Memorial is still pending. Once MHA obtains demolition and disposition approval and the structures are removed from federal housing trust, the MHA will transfer the property and structures at 144 Mills Memorial to the City for the purposes of demolition and construction of the Harbor Brook Flood control plan at the site.

A consolidated parcel would provide great opportunities for future development under Meriden's HUD Choice Neighborhood Transformation Plan. Redevelopment of the Mills Memorial public housing and central business district are critical transformation goals for the project. The project was conceived within the context of the current administration's proposed HUD Choice Neighborhood Transformation Plan, which is predicated upon a holistic approach to revitalizing communities through close connections among housing, educational opportunities, and wrap-around services. The future development project would attempt to meet these HUD Choice Neighborhood Transformation Plan goals by providing community services for Meriden residents as well as expanding the supply, providing better affordable housing within the city limits. Between the years 2010 and 2015, the population of Meriden decreased slightly from 60,868 to 59,988, a 1.4 percent decrease. However, the population of the City of Meriden is projected to increase in the future as a result of downtown redevelopment near the site. Therefore, the proposed disposition and parcel assembly represents the first step to meet the current and future housing needs of Meriden residents.

¹ http://www.meridenbiz.com/Customer-Content/www/CMS/files/Presentation 1-19-2016 144 Mills remediation FINAL3.pdf

² http://www.census.gov/quickfacts/table/PST045215/09,09009,0946450,00

³ http://www.meriden2020.com/Customer-Content/www/CMS/files/MeridenChoice_102015_transformation_plan_final_2.pdf

⁴ http://www.meriden2020.com/Downtown-Development/The-Meriden-HUB-Park-and-Flood-Control-Project/

Description of the Proposal: Include all contemplated actions, which logically are either geographically, or functionally a composite part of the project, regardless of the source of funding. [24 CFR 58.32, 40 CFR 1508.25]

Disposition and parcel assembly approval from HUD is being requested by the MHA to facilitate the HUD Choice Neighborhoods Transformation Plan and Harbor Brook Flood Control Plan.

The proposed action would include disposition of one low-rise apartment and two high-rise apartments located at 144 Mills Memorial in addition to the previously approved disposition of two low-rise apartments (at 144 Mills Memorial) and transfer and/or acquisition of the parking lots (at 161 State Street and 177 State Street) and Cedar Park (at 62 Cedar Street) addressed in the previous version of the EA (finalized in October 2013).

Under the disposition action, pursuant to 24 CFR 970, the following lot within the Mills Memorial Apartments complex (as shown in Figure 1) would be removed from the Federal public housing program:

• Three low-rise structures containing 12 housing units (36 units total) and two high-rise structures containing 52 housing units each (104 units total) located on Cedar Street and Mills Street. (This parcel is known as 144 Mills Memorial.)

The parcel would still be owned and managed by MHA; however, the housing units would be removed from the HUD Declaration of Trust.

The proposed action would involve the transfer of property to the MHA, as well as property disposition, for the purposes of larger parcel assembly to facilitate the HUD Choice Neighborhoods Transformation Plan as well as the Harbor Brook Flood Control Plan construction, which is separate but related. The proposed parcel assembly would provide the opportunity for the construction of affordable housing that will be outside of the 100-year floodplain. Upon successful disposition and parcel transfer/acquisition, the existing structures would be demolished to initiate the two plans.¹

Activities such as building construction, demolition or the future usage of these parcels will be determined at a later date, and are not included in this assessment. This environmental review analyzes the potential impacts of this property disposition for the purposes of parcel assembly only.

Existing Conditions and Trends: Describe the existing conditions of the project area and its surroundings, and trends likely to continue in the absence of the project. [24 CFR 58.40(a)]

The City of Meriden has a population of 59,988 and is located within New Haven County in central Connecticut. According to 2015 Census data, median household income in Meriden is \$53,401, which is below that of New Haven County (\$61,646) and Connecticut (\$69,899).² The MHA was established in 1943 to provide housing assistance for low-income families and individuals. The Mills Memorial Apartment complex is owned and managed by MHA and was built in 1961.

Mills Memorial includes two seven-story high-rise buildings and three three-story low-rise buildings that house a total of 140 units. A community center is situated within this housing complex. The remainder of the site consists of asphalt parking, walkways and grassy landscaped areas. An open space resource is located in the northern portion of the block, and features both active and passive recreation areas. Driveway access to the site is obtained via Mill and Cedar Streets. Harbor Brook runs in an underground culvert beneath the central portion of the complex and continues southward through the "Meriden Green" (former HUB site) to Hanover Pond.

The surrounding area generally consists of residential uses, vacant land, commercial properties and parking lots. South of the project site across Mill Street is a downtown redevelopment site known as the Meriden Green or Meriden HUB reuse project. The Meriden Green is a 14-acre flood control/park and economic development project located in the heart of downtown Meriden.⁴ At present, the project is under construction. In the future, Meriden HUB will include the restoration of Harbor Brook, creation of a town-green, economic development options, and transit-oriented development opportunities. A new intermodal transportation center is also planned which will take advantage of the adjacent planned commuter rail service. East of Cedar Street are additional low-rise multi-family residential buildings. These two-story brick buildings are set back from Cedar Street and include shared parking for the building residents. Low-rise semi-attached residential structures are also found north of the project site, on both sides of Park Street. Further east, several detached residential buildings are located on the north side of Park Street, near Center Street.

South of Pratt Street are additional residential buildings. Southwest of the project site on Pratt Street and Caitlin Street is a large five-story multi-family residential building with off-street parking in the back. To the east, both sides of Twiss Street contain single-family detached residences. A Meriden Public School career center is located on Pratt Street between Twiss Street and Center Street. A large U.S. Post Office and mail distribution center is located on the western block face of Center Street between Pratt and Miller Streets. On the opposing side of Center Street is a large light industrial/manufacturing structure occupied by the Miller Company.

Northwest of the project site, State Street contains a variety of commercial and community facility uses. Located primarily in one- and two-story brick buildings, tenants include a rehabilitation agency, pharmacy and a community health clinic. A portion of State Street from Mills Street to East Main Street is currently closed for construction. One-half block west of State Street is the New Haven-Springfield Railroad Line, which runs at-grade west of the project site.

Several blocks north of the project site is U.S. Interstate 691, which is classified by the Connecticut Department of Transportation as a Principal Arterial roadway. To the southeast of the project site, Pratt Street and State Street are classified as Collector roadways. All other streets surrounding the project site are classified as local roadways. A roadway functional class map for the City of Meriden is shown in Figure 2.

Several bus lines are found within close proximity to the project site. The "A", "B", "C" and "M" lines, operated by North East Transportation and Middletown Area Transit, run on State Street directly

west of the project site, with the "M" bus offering regional service to Middletown and Cromwell. CT Transit operates the "C" bus line along Main Street, which runs north-south approximately ½-mile east of the project site. Additional bus lines are operated throughout Meriden and the region.

Aside from the Meriden Green (HUB Reuse Project) located adjacent to the project site, no significant changes in the immediate vicinity of the proposed action are projected in the future.

Statutory Checklist

[24CFR §58.5]

For each listed statute, executive order or regulation, record the determinations made. Note reviews and consultations completed as well as any applicable permits or approvals obtained. Attach evidence that all required actions have been taken. Record any conditions or mitigation measures required. Then, make a determination of compliance or consistency.

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5

Executive Orders, and Regulations listed at 24 CFR \$5.5		Are formal	
Section Sect	Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5	compliance steps or	
Flood Hazard Area (ŚFHA) Zoné AE, which is subject to inundation by the 1 percent annual chance flood. This 100-year floodplain, a known as the base flood, is the flood that has a 1 percent chance being equaled or exceeded in any given year. The base flood elevation is the water-surface elevation of the 1 percent annual chance flood. In Zone AE, which covers a portion of the project sit the base flood elevation is approximately 130 feet. Executive Order 11988, as implemented by 24 CFR Part 55, Floodplain Management, does apply to the proposed action following the decision-making process in Section 55.20, the proposed action is demonstrated to comply with 24 CFR Part 55. There would be no potential direct and indirect impacts associate with the occupancy of the floodplain under the proposed action since there would be no demolition, construction or soil disturbance on the project site. Development within and adjacent to the floodplain would remain in its current state. There is no practicable design or modification to the proposed action that would minimize the potential adverse impacts within the floodplain or restore and preserve its natural and beneficial value. The proposed action would not result in flood hazards in the floodplain, aggravate the current hazards to other floodplains, or disrupt floodplain values. Therefore, the project would be in compliance with Executive Order 11988. See Figure 3: FEMA Floodplain Map (Panel #0166H) and Attachment A, "Determination of Applicability to 24 CFR 55."			paved parking lots, a public park open space, three low-rise structures and two high-rise structures that were constructed around 1961 and that are not believed to be historically significant. As part of the proposed disposition, these structures would remain in their current state. Furthermore, as there would be no development as part of the proposed disposition action, it is anticipated that any buried archaeological resources that may be present on the project site would remain <i>in situ</i> . MHA and/or City would consult with CT State Historic Preservation Office (SHPO) following disposition approval and prior to demolition (under a separate project). Therefore, the proposed action would not violate
[Executive Order 11990] Yes No federal wetlands. Therefore, the proposed action would not viola	Management [24 CFR 55, Executive		elevation is the water-surface elevation of the 1 percent annual chance flood. In Zone AE, which covers a portion of the project site, the base flood elevation is approximately 130 feet. Executive Order 11988, as implemented by 24 CFR Part 55, Floodplain Management, does apply to the proposed action following the decision-making process in Section 55.20, the proposed action is demonstrated to comply with 24 CFR Part 55. There would be no potential direct and indirect impacts associated with the occupancy of the floodplain under the proposed action since there would be no demolition, construction or soil disturbance on the project site. Development within and adjacent to the floodplain would remain in its current state. There is no practicable design or modification to the proposed action that would minimize the potential adverse impacts within the floodplain or restore and preserve its natural and beneficial values. The proposed action would not result in flood hazards in the floodplain, aggravate the current hazards to other floodplains, or disrupt floodplain values. Therefore, the project would be in compliance with Executive Order 11988. See Figure 3: FEMA Floodplain Map (Panel #0166H) and
See Figure 4: National Wetlands Inventory Map.			federal wetlands. Therefore, the proposed action would not violate Executive Order 11990.

HUD Environmental Standards	Are formal compliance steps or mitigation required?	Compliance Determination
Coastal Zone Management Act [Sections 307(c),(d)]	Yes No	The project site is not located within Connecticut's designated Coastal Boundary; therefore, the proposed action would not violate the Coastal Zone Management Act.
Sole Source Aquifers [40 CFR 149]	Yes No	The proposed disposition and parcel transfer is not located above a designated sole source aquifer; therefore, the proposed action would not violate 40 CFR 149.
Endangered Species Act [50 CFR 402]	Yes No	The project site is centrally located in Meriden, a highly developed urban area. According to information obtained through the Department of Energy and Environmental Protection (DEEP) ⁵ , Federally listed endangered, threatened and special concern species are found in New Haven County. However, according to the Connecticut DEEP's Natural Diversity Data Base (NDDB) (dated June, 2016), there are no known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of the site ⁶ ; therefore, the proposed action would not violate the Endangered Species Act.
Wild and Scenic Rivers Act [Sections 7 (b), (c)]	Yes No	There are no designated Wild or Scenic Rivers within or adjacent to the project site ⁷ ; therefore, the project would not violate the Wild and Scenic Rivers Act.
Air Quality [Clean Air Act, Sections 176 (c) and (d), and 40 CFR 6, 51, 93]	Yes No	As there would be no construction, demolition or change in use as part of the proposed action, exceedances of the National Ambient Air Quality Standard (NAAQS) would not occur and the proposed action would conform with the State Implementation Plan (SIP).
Farmland Protection Policy Act [7 CFR 658]	Yes No	The project would not involve the conversion of farmland to non- agricultural use and therefore would not violate the Farmland Protection Policy Act.
Environmental Justice [Executive Order 12898]	Yes No	The proposed action would not result in a disproportionately high adverse human health impact or environmental impact on minority or low-income populations. Although the proposed action is located in a predominantly low-income area, the proposed action would not result in any unmitigated adverse environmental impacts.
Noise Abatement and Control [24 CFR 51 B]	Yes No	The project site is not located near a heavily trafficked thoroughfare, and the proposed disposition and parcel transfer would not generate or reroute vehicular traffic. At-grade rail tracks are present approximately 200 feet west of State Street, and are used by Amtrak and freight carriers. However, no new sensitive noise receptors or noise sources (including mobile and stationary sources) would be introduced as part of the proposed action. Therefore, no noise abatement or control measures would be required.

http://www.ct.gov/deep/lib/deep/endangered_species/species_listings/newhavenctyspecies.pdf ftp://ftp.state.ct.us/pub/dep/gis/endangeredspeciesmaps/nd080.pdf http://www.nps.gov/ncrc/programs/rtca/nri/states/ct.html

HUD Environmental Standards	Are formal compliance steps or mitigation required?	Compliance Determination
Toxic or Hazardous Substances and Radioactive Materials [HUD Notice 79-33]	Yes No	A Phase II Environmental Site Investigation (ESI) was performed in December, 2012, and a Phase III Environmental Site Assessment (ESA) was performed in March, 2016 for the project site at 161 State Street. The Phase II and Phase III indicate that PAHs and metals are present in subsurface materials at the site at concentrations above the Residential Direct Exposure Criteria (RDEC), industrial/commercial direct exposure criteria (I/C DEC), and or Ground Water Classification Pollutant Mobility Criteria (GB PMC) in soil samples. Arsenic and Phenanthrene were present above Surface Water Protection Criteria (SWPC) in groundwater. PAH and metal concentrations in soils and groundwater are likely associated with fill material underlying the site. Arsenic concentrations are likely due to silt content of samples and/or naturally occurring concentrations documented throughout the area. Based on the findings of the Phase II and Phase III for 161 State Street, it is recommended that the site will be enrolled into a CT environmental regulatory program. It is expected that prior to any future development the property will be entered into a Voluntary Remediation Programs (VRP). A Phase I ESA for the project site at 144 Mills Memorial was performed in June, 2012. This report identified several Recognized Environmental Conditions (RECs), including the historic presence of woodworking and painting operations in the 1890s and 1900s, and an automotive repair shop in the 1950s and 1960s. In addition, an inactive 10,000 gallon heating oil underground storage tank (UST) was identified south of the project site, in the high-rise building along Pratt Street. An oily pit with standing water was observed in the boiler room of this building, and is believed to be associated with this inactive UST. It is recommended that the fill material found on-site be evaluated prior to any construction activities as part of a soil management plan. Further, due to the presence of COCs and RECs at 144 Mills Memorial, a Phase II ESI has been recommended.
		As the proposed action involves property disposition and parcel

HUD Environmental Standards	Are formal compliance steps or mitigation required?	Compliance Determination
		assembly only, no potential adverse impacts are expected to occur as they relate to toxic or hazardous substances and radioactive materials.
Explosive and Flammable Hazards [24 CFR 51 C]	Yes No	The Phase I ESAs and Phase II ESI prepared for the project site revealed that there are no hazardous operations that pose a threat to the project site. A survey of the area revealed that there are 22 underground storage tanks (UST) present within approximately ¼ mile of the project site and no above ground storage tanks (AST).
		The project site is located within a primarily residential area of Meriden. No hazardous operations, including industrial operations, fuel supply depots or private filling stations, are located within 1,000 feet of the project site; therefore, the proposed action is in compliance with 24 CFR 51 C.
		See related Phase I & Phase II documentation, attached.
Airport Clear Zones and Accident Potential Zones [24 CFR 51 D]	Yes No	The project site is located more than one mile northeast of the Meriden-Markham Municipal Airport; therefore, no further assessment is warranted and no impacts would result.
List of Permits Obtained	Yes No	No permits are required as part of the proposed action.
Public Outreach [24 CFR 50.23 and 58.43]	Yes No	The Draft Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) were made available for public comment for a 15-day period from September 7 to September 21, 2016. A notification of the FONSI and opportunity for public comment was published in the Record Journal on September 7, 2016.
Cumulative Impacts Analysis [24 CFR 58.32]	Yes No	No significant adverse impacts are anticipated as a result of the proposed action; therefore no cumulative impacts need to be assessed. Implications of demolition and construction would be assessed under a separate NEPA document for any future development, once such plans have been determined. The cumulative social impacts to public housing are being considered for the City of Meriden as part of the Choice Neighborhoods Initiative, which is part of a holistic approach to revitalizing communities through close connections among housing, educational opportunities, and wrap-around services.

Environmental Assessment Checklist

[Environmental Review Guide HUD CPD 782, 24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]

Evaluate the significance of the effects of the proposal on the character, features and resources of the project area. Enter relevant base data and verifiable source documentation to support the finding. Then enter the appropriate impact code from the following list to make a finding of impact. **Impact Codes**:
(1) - No impact anticipated; (2) - Potentially beneficial; (3) - Potentially adverse; (4) - Requires mitigation; (5) - Requires project modification. Note names, dates of contact, telephone numbers and page references. Attach additional materials as needed.

Land Development	Code	Source or Documentation
Conformance with Comprehensive Plans and Zoning	1	The project site is located within a mapped Transit Oriented District (TOD) Zone and the parcels are in the TOD-Park Subdistrict (adopted in 2013). As shown in Figure 5. Multi-family residences (up to 100 dwelling units per site) are permitted in this district, as are TOD mixed-income residences with up to 100 units per site. In a TOD-park district, a maximum lot coverage of 75 percent is permitted for multi-family dwellings. Any future TOD mixed-income development on this site would be limited to eight stories in height under the existing zoning regulations. The proposed action, which includes a disposition and parcel assembly only, would not result in a change to the site's existing zoning, and would conform to existing zoning regulations.
Compatibility and Urban Impact	1	Uses on the project site include two parking lots, public open space and three low-rise and two high-rise residential buildings with 140 total dwelling units. The proposed disposition and parcel assembly would not alter the land use conditions in the neighborhood or on the project site, which would remain in its present state.
Slope	1	The topography of the site is generally flat. As the proposed action involves property disposition and parcel assembly only, no construction, demolition or soil disturbance would take place on the project site. No impacts to slope are anticipated. See Phase I ESA for 144 Pratt Street and 161 State Street.
Erosion	1	The topography of the site is generally flat. As the proposed action involves property disposition and parcel assembly only, no construction, demolition or soil disturbance would take place on the project site. No erosion impact is anticipated. See Phase I ESA for 144 Pratt Street and 161 State Street.
Soil Suitability	1	The Phase II Subsurface Investigation Report determined that the project site is underlain by fill material followed by sand, asphalt, brick and concrete fragments, which commonly occur in the area and is suitable for redevelopment. As the proposed action involves property disposition and parcel assembly only, no construction, demolition or soil disturbance would take place on the project site. See Phase II ESA Report, December 2012.
Hazards and Nuisances including Site Safety	1	There would be no significant hazards or nuisances associated with the proposed action. No demolition, construction or change in use would occur on the project site as a result of the proposed action. The proposed disposition and parcel assembly would result in no increased emissions of air pollutants, exposure to heavy metals or other contaminants, attract vermin or pests, or create noise or odors. Therefore, no significant hazard or nuisance impacts are expected.

Energy Consumption	1	The proposed action involves parcel disposition and transfer only, and would have no impact on energy generation or distribution.
Noise - Contribution to Community Noise Levels		The project site presently contains three low-rise residential buildings (with 12 occupied dwelling units and 24 vacant dwelling units), two high-rise residential buildings (with 104 occupied dwelling units), two surface parking lots and a publicly accessible open space. Many of these residents are believed to own vehicles, which contribute to the ambient noise profile of the area. During visual and auditory field inspection, the existing residential buildings' mechanical systems (i.e., heating, ventilation, and air conditioning systems) were observed to be operating within a normal decibel range.
		Additionally, users of the open space at 62 Cedar Street, which includes active recreation elements such as playground equipment, are considered an existing stationary noise source on the project site. Construction noise from Meriden Green (former HUB site) located at Pratt Street is considered a temporary noise source.
		As a result of the proposed action, no new stationary or mobile noise sources would be introduced on the project site. Therefore, elevated community noise levels are not expected to result from the proposed action, and no impact is anticipated.
Air Quality Effects of Ambient Air Quality on Project and Contribution to Community Pollution Levels	1	To assess the effects of ambient air quality on the proposed action, a visual survey was conducted to determine whether there are any industrial emission sources in the area that could potentially affect existing residents and users of the project site. The result of the industrial source visual survey is that the potential for air toxic impacts on the project site is not significant.
		As a result of the proposed action, no new stationary or mobile emission sources would be introduced on or near the project site. Furthermore, no construction or demolition would occur on-site, which precludes any construction-related air quality impacts. Therefore, the proposed action would have no significant adverse impact on community pollution levels.
Environmental Design Visual Quality - Coherence, Diversity, Compatible Use and Scale	1	As part of the proposed action, no new construction would occur on the project site. The project site would remain in its current condition, which includes three low-rise and two high-rise residential buildings, two surface parking lots, and a publicly-accessible open space resource.
		As property disposition and parcel assembly are the only discretionary activities included as part of the proposed action, no adverse impacts to Environmental Design are expected, and an assessment is not warranted.
Demographic Character Changes	1	Under the disposition action, 140 units (24 vacant units and 116 occupied units) would be removed from the Federal public housing program. Current tenants would be allowed to fulfill their lease and may receive relocation vouchers following the disposition. The residents who relocate out of the immediate area over several years would not cause a significant change in the demographics of the neighborhood. No new residents would be introduced to the project site as a result the proposed action. The project would not result in a significant adverse impact to the area's demographic character.

Socioeconomic	Cod	e Source or Documentation
Displacement	1	Under the disposition action, 140 units (24 vacant units and 116 occupied units) would be removed from the Federal public housing program. Current tenants would be allowed to fulfill their lease and may receive relocation vouchers following the disposition. The residents who relocate out of the immediate area over several years would not have an impact on population or housing. The proposed action would not displace any residences or businesses; therefore, no displacement impact would occur.
Employment and Income Patterns	1	The proposed action would not have an effect on employment, as no construction, demolition or change in use is expected on the project site. The proposed action would therefore not result in significant adverse impacts associated with employment and income patterns.

Community Facilities and Services

Code

Source or Documentation

and Services	Code	Source or Documentation
Educational Facilities	1	Under the disposition action, 140 units (24 vacant units and 116 occupied units) would be removed from the Federal public housing program. A small number of school-aged children may relocate out of the immediate area over several years; however, that would not cause a significant impact on educational facilities.
Commercial Facilities	1	The proposed action would not introduce new commercial uses or have an adverse effect on existing commercial uses in the area.
Health Care	1	As part of the disposition, the relocation of residents may occur in the long term. However, this is not expected to result in a noticeable change in the demand on local health care services, and a significant impact is not expected as a result.
Social Services	1	As part of the disposition, the relocation of residents may occur in the long term. However, this is not expected to result in a noticeable change in the demand on social services, and a significant impact is not expected as a result.
Solid Waste	1	As part of the disposition, the relocation of residents may occur in the long term. Reduction in solid waste generation would occur as a result of the proposed project. No significant impact is expected as a result of proposed action.
Waste Water	1	The proposed action would not adversely affect Meriden's waste water conveyance system or treatment facilities. Waste water would continue to be handled by the Water Pollution Control Facility Division. As no construction or change in use would occur on the project site, the proposed action would not result in increased demand for sewage disposal or treatment, and no impacts would occur.
Storm Water	1	The proposed action would not adversely affect Meriden's storm water system. No increase in the amount of impervious surface would occur on the project site as a result of the proposed action.
Water Supply	1	The proposed action would not adversely affect Meriden's water supply.
Public Safety - Police	1	There would be no impact on police services due to the proposed action. Police protection services are provided by the Meriden Police Department, and the station nearest to the project site is located at 50 West Main Street.
- Fire	1	There would be no impact on fire services due to the proposed action. Fire protection services are provided by the Meriden Fire Department, and the station nearest to the project site is located at 50 West Main Street.
- Emergency Medical	1	The proposed action would not result in increased demand on emergency medical services. The Midstate Medical Center provides emergency medical services and is located approximately one mile northwest of the project site.

Community Facilities and Services Code **Source or Documentation** Open Space and Recreation The proposed action would not result in the removal of landscaped - Open Space areas on the project site. Included as part of this proposal is the transfer of an open space resource by the City to the MHA to complete the parcel assembly. Featuring both active and passive recreation elements, Cedar Park is 1.6 acres of public open space. The change in land use at 62 Cedar Street from open space to development is allowed under the TOD zoning ordinance. However, under the current proposed action, this open space would remain in its current state and its use would not change. Meriden Green includes 11 acres of public open space that became available to the public starting on September 9, 2016. No new residents would be introduced as part of the proposed action and the relocation of residents may occur over a long period, therefore, utilization rates of the open space are not expected to change as a consequence. Therefore, the proposed action would not result in a significant adverse impact to any open space resource. - Cultural Facilities The proposed action would not adversely affect cultural facilities, as 1 no new residents would be introduced as a result. Transportation 1 As there may be a minor reduction in residents over time as a result of the proposed disposition, a slight decrease in traffic volumes, pedestrian volumes, transit ridership and parking demand may occur. However, significant impacts to any of these conditions would not occur. The project site is bound to the north by Park Street, to the west by State Street and Mill Street, to the east by Cedar Street, and to the

State Street and Mill Street, to the east by Cedar Street, and to the south by Pratt Street. Several blocks north of the project site is U.S. Interstate 691, which is classified by the Connecticut Department of Transportation as a Principal Arterial roadway. To the southeast of the project site, Pratt Street and State Street to the west of the project site are classified as Collector roadways. All other streets surrounding the project site are classified as local roadways.

Several bus lines are found within close proximity to the project site. The "A", "B" and "C" lines, operated by North East Transportation and "M" line, operated by Middletown Area Transit, run on State Street directly west of the project site, with the "M" bus offering regional service to Middletown and Cromwell. CTTransit operates the "C" bus line along Broad Street, which runs north-south approximately ½-mile east of the project site. Additional bus lines are operated throughout Meriden and the region. Less than ¼-mile southwest of the project site is the Meriden Amtrak Station.

In addition ample on-street parking is found throughout the study area. As additional residents or employees would not be generated by the proposed action, increased parking demand is not projected to occur.

Similarly, pedestrian elements such as sidewalks and crosswalks would not be altered under the proposed action.

Natural Features	Co	de Source or Documentation
Water Resources	1	The proposed project would not result in a significant effect on water resources, including groundwater and surface water. A portion of the project site lies over Harbor Brook, which is a low gradient stream that flows through an underground culvert beneath a portion of the project site, but not the residential structures, at 144 Mills Memorial. In addition, a portion of the project site is located within a Special Flood Hazard Area (SFHA) Zone AE, which is subject to inundation by the 1 percent annual chance flood. Based on surface topography, groundwater flow is assumed in a southwesterly direction towards Hanover Pond (Figure 3).
		The proposed action involves property disposition and parcel assembly and the future activities include demolition of the structures for the purposes of implementing the Harbor Brook Flood Control Plan and daylighting Harbor Brook at the site. There would be no impacts to water resources as a part of this proposed action.
Surface Water	1	The proposed project would not result in a significant effect on surface water resources. The nearest surface water body is Harbor Brook, which flows through an underground culvert beneath a portion of the project site and is classified by CTDEEP as "B" surface water. Based on CTDEEP Water Quality Standards, "B" surface water is designed for recreational use, fish and wildlife habitat, agricultural and industrial supply and other legitimate uses including navigation. Stormwater catch basins were observed in various areas throughout the exterior portions of the site. These catch basins are believed to discharge to Harbor Brook. Figure 6 shows the Water Quality Classification Map for City of Meriden.
		As the proposed action involves property disposition and parcel assembly only, no construction, demolition or soil disturbance would take place on the project site. There would be no additional discharge to nearby surface water.
Unique Natural Features and Agricultural Lands	1	There are no unique natural features or agricultural lands near the project site. Therefore, the proposed action would have no impact on such resources.
Vegetation and Wildlife	1	The project site and its immediate surroundings are occupied by buildings, paved areas or landscaped areas. There are no significant plant or animal species, including any State or Federally listed threatened or endangered species, occupying the project site or the surrounding neighborhood. No significant impacts to vegetation or wildlife would result from the proposed action.

NOTE: The Responsible Entity must additionally document compliance with 24 CFR §58.6 in the ERR, particularly with the Flood Insurance requirements of the Flood Disaster Protection Act and the Buyer Disclosure requirements of the HUD Airport Runway Clear Zone/Clear Zone regulation at 24 CFR 51 Subpart D.

Summary of Findings and Conclusions

The proposed action is part of the Meriden Housing Authority's initiative to take advantage of development opportunities on vacant and underutilized land, as these properties provide significant opportunities to create new affordable housing and other amenities that can benefit Meriden residents. The proposed action includes the property disposition and parcel assembly only. The future plans for the project site would include demolition of five residential buildings to facilitate construction of a flood control plan (at 144 Mills Memorial) and development of the Meriden Green (former HUB Site) and the Mills Megablock site (located at 161-177 State Street and 62 Cedar Street). The project was conceived within the context of the current administration's proposed Choice Neighborhoods Initiative (CNI), which is predicated upon a holistic approach to revitalizing

communities through close connections among housing, educational opportunities, and wrap-around services. A HUD Choice Neighborhood Transformation Plan would attempt to meet these goals by providing community services for Meriden residents as well as expanding the supply of affordable housing within the city limits.

The proposed action would not adversely affect the character, features and resources of the surrounding area, and would not result in a significant impact on the quality of the human environment. As this proposal involves property disposition and parcel assembly only, no potential adverse impacts are expected to occur, and mitigation as part of the proposed action would not be required through the Request for Release of Funds.

ALTERNATIVES TO THE PROPOSED ACTION

Alternatives and Project Modifications Considered [24 CFR 58.40(e), Ref. 40 CFR 1508.9] (Identify other reasonable courses of action that were considered and not selected, such as other sites, design modifications, or other uses of the subject site. Describe the benefits and adverse impacts to the human environment of each alternative and the reasons for rejecting it.)

No other reasonable alternatives were considered or selected for the proposed action. Upon successful disposition and parcel acquisition, additional discretionary actions will be pursued that will involve demolition and/or construction on the project site as part of Meriden HUD Choice Neighborhood Transformation Plan. Several other development alternatives were considered, but ultimately not selected by the community and development team because of inability to mitigate flooding caused by Harbor Brook that runs directly under the Mills Memorial, high cost of modernization of the existing units and lack of suitable sites with access to services/transit.8

No Action Alternative [24 CFR 58.40(e)]

(Discuss the benefits and adverse impacts to the human environment of not implementing the preferred alternative).

Under the No Action Alternative, the proposed disposition of 144 Mills Memorial would not be pursued. The one low-rise and two high-rise residential structures at the Mills Memorial Housing complex would remain within the Federal public housing program. Additionally, the City would not transfer to the MHA the parcels at 62 Cedar Street and 177 State Street to complete the parcel assembly. In the absence of these actions, it is assumed that the project site would remain in its current state, which includes 116 residential units at 144 Mills Memorial, a privately-owned parking lot at 177 State Street, as well as an open space at 62 Cedar Street. The ownership and management of the parcels would remain the same.

There would be no adverse impacts to human health and the environment under the No Action Alternative; however, a larger parcel assembly would not be made available for future development and the project purpose and need would not be achieved. No action means that all existing units remain within a 100-year floodplain that has a history of frequent flooding or negative impact on the households and housing due to mildew and soil erosion risks.

Mitigation Measures Recommended [24 CFR 58.40(d), 40 CFR 1508.20]

(Recommend feasible ways in which the proposal or external factors relating to the proposal should be modified in order to eliminate or minimize adverse environmental impacts.)

Disposition and parcel assembly would allow opportunity for the future demolition of the structures by the City after the disposition and property transfer occurred. However, as no construction, demolition or change in use would occur under the Proposed Action, adverse environmental impacts would not be expected. Therefore, no mitigation measures are required to ensure there are no significant impacts, and none are recommended in the assessment.

⁸ http://www.meriden2020.com/Customer-Content/www/CMS/files/Exhibitsfile.pdf

Additional Studies Performed

Phase I Environmental Site Assessment (ESA), 62 Cedar Street, Meriden CT, Tighe & Bond, April 2012.

Phase I Environmental Site Assessment (ESA), 177 State Street, Meriden CT, AECOM, November 2015.

Phase I Environmental Site Assessment (ESA), 144 Pratt Street, Meriden CT, Tighe & Bond, June 2012.

Phase I Environmental Site Assessment (ESA), 161 State Street, Meriden CT, Tighe & Bond, April 2012.

Phase II Environmental Site Assessment (ESA), 161 State Street, Meriden CT, Tighe & Bond, December 2012.

Phase III Environmental Site Assessment (ESA), 161 State Street, Meriden CT, AECOM, March 2016.

Phase III Environmental Site Assessment (ESA), 177 State Street, Meriden CT, AECOM, March 2014.

Hazardous Materials Building Assessment High Rise 1, AECOM, October 2015.

Hazardous Materials Building Assessment High Rise 2, AECOM, October 2015.

Hazardous Materials Building Assessment Low Rise 1, AECOM, October 2015.

Hazardous Materials Building Assessment Low Rise 2, AECOM, October 2015.

Hazardous Materials Building Assessment Low Rise 3, AECOM, October 2015.

List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]

HUD Exchange "Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58". https://www.hudexchange.info/resource/3140/part-58-environmental-assessment-form/. Accessed July 26, 2016

HUD Exchange "Additional Factors to Consider for Environmental Assessments".

https://www.hudexchange.info/resource/3895/additional-factors-to-consider-in-an-environmental-assessment/. Accessed July 26, 2016.

United States Census Factfinder. http://www.census.gov/quickfacts/table/PST045215/09,09009,0946450,00. Accessed August 3, 2016.

City of Meriden GIS Home Page. http://gis.meridenct.gov/meriden/MapSearch.aspx. Accessed August 3, 2016.

A County Report of Connecticut's Endangered, Threatened and Special Concern. http://www.ct.gov/deep/endangered_species/species_listings/newhavenctyspecies.pdf. Accessed August, 3 2016.

Natural Diversity Data Base Areas for Meriden, CT. ftp://ftp.state.ct.us/pub/dep/gis/endangeredspeciesmaps/nd080.pdf. Accessed August 3, 20160.

National Park Service Rivers, Trails and Conservation Program, Connecticut Segments. https://www.nps.gov/ncrc/programs/rtca/nri/states/ct.html. Accessed August 3, 2016

City of Meriden Administration legislation, Chapter 2013-Zoning, Article V-Commercial District. http://ecode360.com/13397144. Accessed August 3, 2016

City of Meriden, Zoning Map. http://gis.meridenct.gov/website/StaticMaps/ZoningMap.pdf. Accessed August 3, 2016.

Meriden Biz, City of Meriden Economic Development, Presentation "Demolition and Remediation of 144 Mills Memorial, Meriden, CT, January 2016". http://www.meridenbiz.com/Customer-Content/www/CMS/files/Presentation_1-19-2016_144_Mills_remediation_FINAL3.pdf. Accessed August 1, 2016

Meriden Biz, City of Meriden Economic Development, http://www.meriden2020.com/Customer-content/www/CMS/files/Exhibitsfile.pdf. Accessed August 3, 2016

Meriden Biz, City of Meriden Economic Development, http://www.meriden2020.com/Customer-content/www/CMS/files/MeridenChoice_102015_transformation_plan_final_2.pdf. Accessed August 4, 2016

Meriden Biz, City of Meriden Economic Development, http://www.meriden2020.com/Downtown-Development/The-Meriden-HUB-Park-and-Flood-Control-Project/. Accessed on August 9, 2016

HUD Exchange "Floodplain Management and Protection of Wetlands" https://www.hudexchange.info/resource/3769/24-cfr-part-55-floodplain-management-and-protection-of-wetlands/. Accessed August 4, 2016

Harbor Brook Flood Control and Linear Trail Project Master Plan for Meriden, Ct. Prepared by GZA GeoEnvironmental, Inc. November, 2011.

Phase I Environmental Site Assessment (ESA), 62 Cedar Street, Meriden CT, Tighe & Bond, April 2012.

Phase I Environmental Site Assessment (ESA), 177 State Street, Meriden CT, AECOM, November 2015. Phase I Environmental Site Assessment (ESA), 144 Pratt Street, Meriden CT, Tighe & Bond, June 2012.

Phase I Environmental Site Assessment (ESA), 161 State Street, Meriden CT, Tighe & Bond, April 2012.

Phase II Environmental Site Assessment (ESA), 161 State Street, Meriden CT, Tighe & Bond, December 2012.

Phase III Environmental Site Assessment (ESA), 161 State Street, Meriden CT, AECOM, March 2016.

Phase III Environmental Site Assessment (ESA), 177 State Street, Meriden CT, AECOM, March 2014.

Hazardous Materials Building Assessment High Rise 1, AECOM, October 2015.

Hazardous Materials Building Assessment High Rise 2, AECOM, October 2015.

Hazardous Materials Building Assessment Low Rise 1, AECOM, October 2015.

Hazardous Materials Building Assessment Low Rise 2, AECOM, October 2015.

Hazardous Materials Building Assessment Low Rise 3, AECOM, October 2015.

Other Requirements (Section 58.6) Checklist

PROJECT NAME Meriden Mills Apartments Disposition and Related Parcel Assembly, Meriden CT

In addition to the duties under the laws and authorities specified in 58.5 for assumption by Responsible Entities (REs) under the laws cited in 58.1(b), REs must comply with the following requirements. Applicability of the following requirements does not trigger the certification and release of funds procedure under this Part or preclude exemption of an activity under 58.34 (a) (12) and/or the applicability of 58.35(b). However, the RE remains responsible for addressing the following requirements in its Environmental Review Record (ERR) under 58.38 and meeting these requirements, where applicable, regardless of whether the activity is exempt under 58.34 or Categorically Excluded under 58.35 (a) or (b).

- (a) Federal Flood Insurance Purchase Requirements (do not apply to funds from Federal formula grants made to a State).
 - (1) Does the project involve acquisition or construction (including rehabilitation) in a community identified by the Federal Emergency Management Agency (FEMA) as having special flood hazard areas (100 year and 500 year floodplains)? Yes No X If "Yes," go to (a)(2). If "No," go to Question (b).
 - (2) Is the project located in 100 year flood plain (500 year floodplain for "critical" actions*)? Yes __ No _If "Yes," go to (a) (3). If "No," go to Question (b).
 - (3) Is the community in which the project is located (X) participating in the National Flood Insurance Program or, () has less than a year passed since FEMA notified the community concerning such hazards. (Please check one of the above depending on the situation) Yes ____ No ___. If "Yes," attach a statement concerning how you will assure that flood insurance will be maintained in accordance with the "Flood Insurance Protection" guidance sheet attached to this Checklist and go to Question (b). The implementation of this project consistent with your statement must be made a condition on the environmental findings and recommendations for the project. If "No," project cannot be funded.
- * As defined in the U.S. Water Resources Council's Floodplain <u>Management Guidelines for Implementing Executive Order 11988.</u>

See Attached Standard Flood Hazard Determination indicating that Federal Flood Insurance is available as part of the Regular Program.

(b) Coastal Barriers Resources

Is the project to be undertaken located in the Coastal Barrier Resources System, as amended by the Coastal Barrier Improvement Act of 1990 (16 U.S.C. 3501)?

Yes ____ No __X_. If "Yes," Federal financial assistance may not be provided. If "No," then go to Question (c).

(c) Projects located in Close Proximity to Airports Contained on the HUD list of 24 CFR Part 51D Covered Airports.

Does the project involve assistance, subsidy, or insurance for the purchase or sale of an existing property in a Runway Clear Zone or Clear Zone as defined in 24 CFR Part 51D? Yes ____ No __X_ If "Yes," the buyer must be advised that the property is in a runway Clear Zone or Clear Zone, what the implications of such a location are, and then there is a possibility that the property may, at a later date, be acquired by the airport operator. The buyer must sign a

statement acknowledging receipt of this information. The implementation of this requirement must be made a condition in the environmental review findings and recommendations for this project.

Although Federal financial assistance would be used for acquisition of land within an area identified by the Federal Emergency Management Agency (FEMA) as having special flood hazards, financial assistance would not be provided to property owners under the proposed action (existing public housing units would be removed from the Federal public housing program and no new units would be constructed under the proposed action). The future action includes redevelopment of Mills Megablock. Under selected alternative Mills Megablock would be constructed outside the flood zone. For such a development, flood insurance protection funding would not be required.

Preparer Signature: Name/Title/Agency:

Priyal Pandya

Environmental Engineer, AECOM

24

Attachment A

Determination of Applicability to 24 CFR 55: Floodplain Management and Protection of Wetlands

24 CFR Part 55, Floodplain Management, covers the proposed acquisition, construction, improvement, disposition, financing and use of properties located in a floodplain for which approval is required either from HUD under any applicable HUD program or from a grant recipient subject to 24 CFR part 58. The determination of applicability of the proposed action (Meriden Mills Apartments Disposition and Related Parcel Assembly) to the regulations is based on the following understanding:

- The proposed action includes proposed HUD financial assistance for acquisition purposes in an area having special flood hazards (i.e., 100-year floodplain, Zone AE).
- The action would not be located in a floodway or coastal high hazard area.
- The proposed action is not a "critical action" (i.e., activity for which even a slight chance of flooding might result in loss of life, injury to persons, or damage to property).
- The proposed action does not involve "substantial improvement" as defined in Part 55.2(b)(8).
- The community, the City of Meriden, does participate in the National Flood Insurance Program.

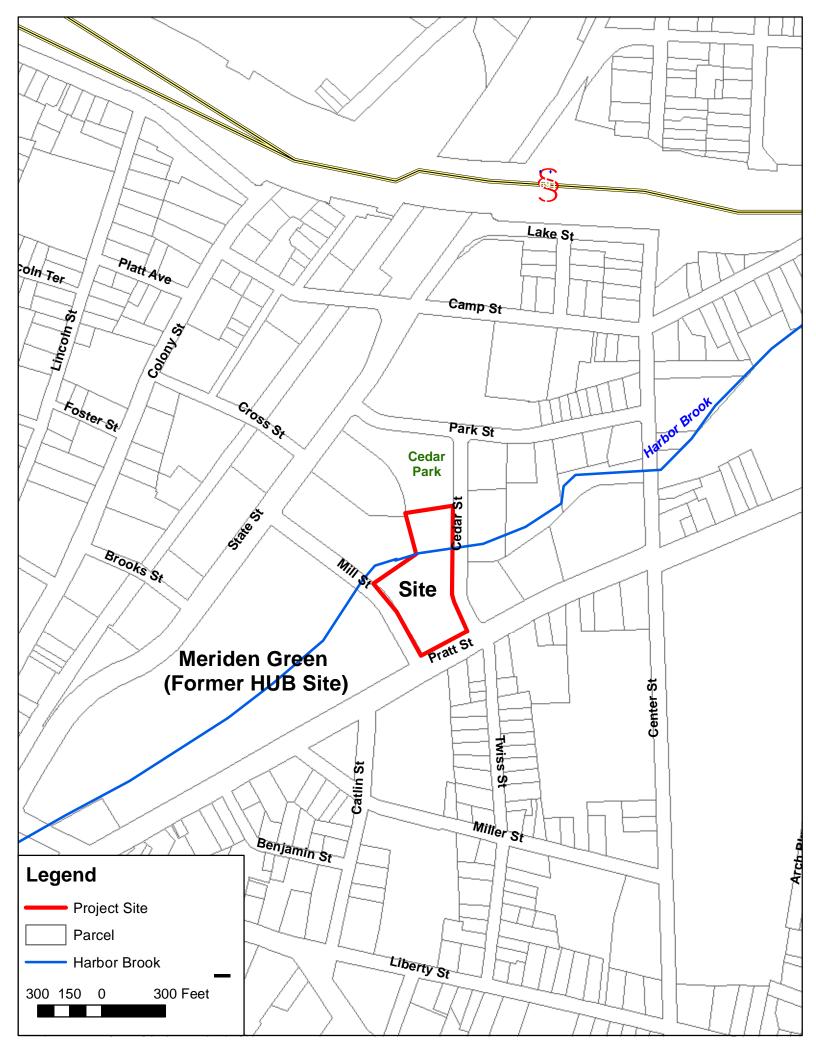
As defined in 24 CFR Part 55, Subpart B, Application of Executive Order on Floodplain Management, Executive Order 11988 does apply to the proposed action. The proposed action is a non-critical action that is not excluded under Section 55.12 (b) or (c) and a portion of the action would be located within a 100-year floodplain outside the high hazard area (see Table 1 in Section 55.11). Therefore, the decision-making process in Section 55.20 must be followed for the proposed action to be allowed. Per Section 55.12(a), since the proposed action is a HUD action involving disposition of HUD-acquired multifamily housing projects in a community that is in the Regular Program of the National Flood Insurance Program and in good standing, the decision-making steps 2, 3 and 7 do not apply. These involve notification of the public at the time the proposal is considered, identification and evaluation of practicable alternatives to locating the proposed action in a floodplain, and publication of a final, detailed notice of the proposal.

Following the decision-making process in Section 55.20, the proposed action does comply with 24 CFR Part 55.

- Step 1: The proposed action is located in a 100-year floodplain.
- Step 2: Not applicable
- Step 3: Not applicable
- Step 4: There would be no potential direct and indirect impacts associated with the
 occupancy of the floodplain under the proposed action since there would be no
 demolition, construction or soil disturbance on the project site. Development within and
 adjacent to the floodplain would remain in its current state.
- Step 5: There is no practicable design or modification to the proposed action that would
 minimize the potential adverse impacts within the floodplain or restore and preserve its
 natural and beneficial values. There are no adverse impacts within the floodplain as a
 result of the proposed action; therefore, no modification is necessary.
- Step 6: Reevaluation of the proposed action determined that the proposed action is still
 practicable since it would not result in flood hazards in the floodplain, aggravate the
 current hazards to other floodplains, or disrupt floodplain values.
- Step 7: Not applicable
- Step 8: Decision-making is complete and the proposed action may be implemented, with no mitigating measures required.

FIGURES

FIGURE 1: PROJECT LOCATION



Meriden Mills Apartments Disposition and Related Parcel Assembly, City of Meriden, CT
FIGURE 2: MERIDEN ROADWAY FUNCTIONAL CLASS MAP

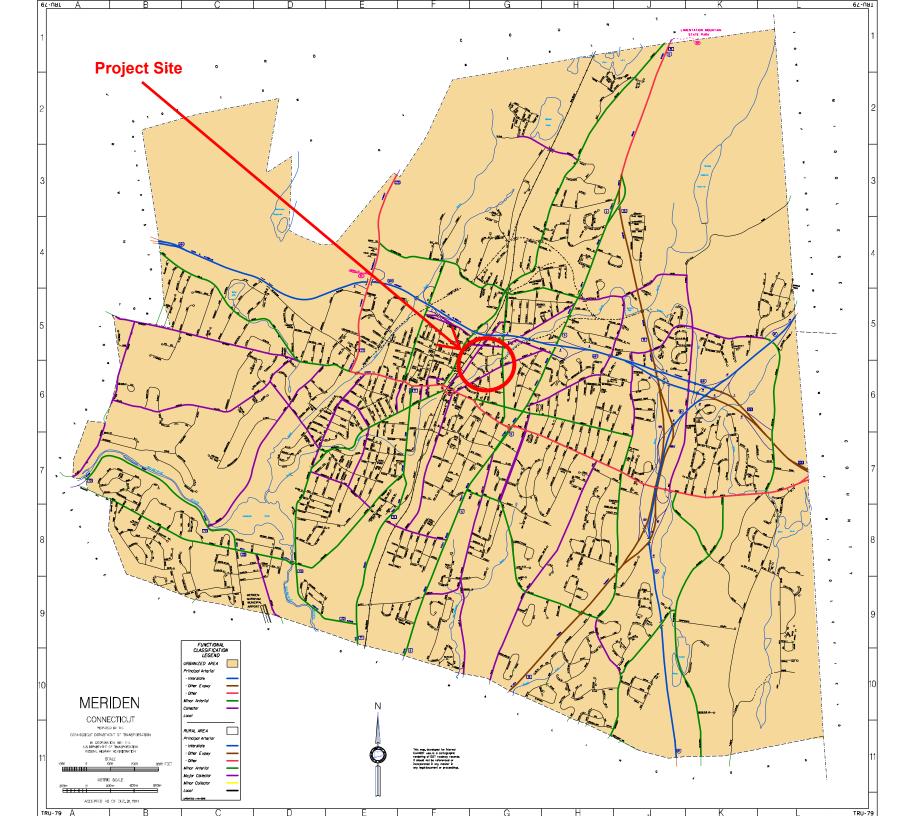


FIGURE 3: FEMA FLOOD INSURANCE RATE MAP

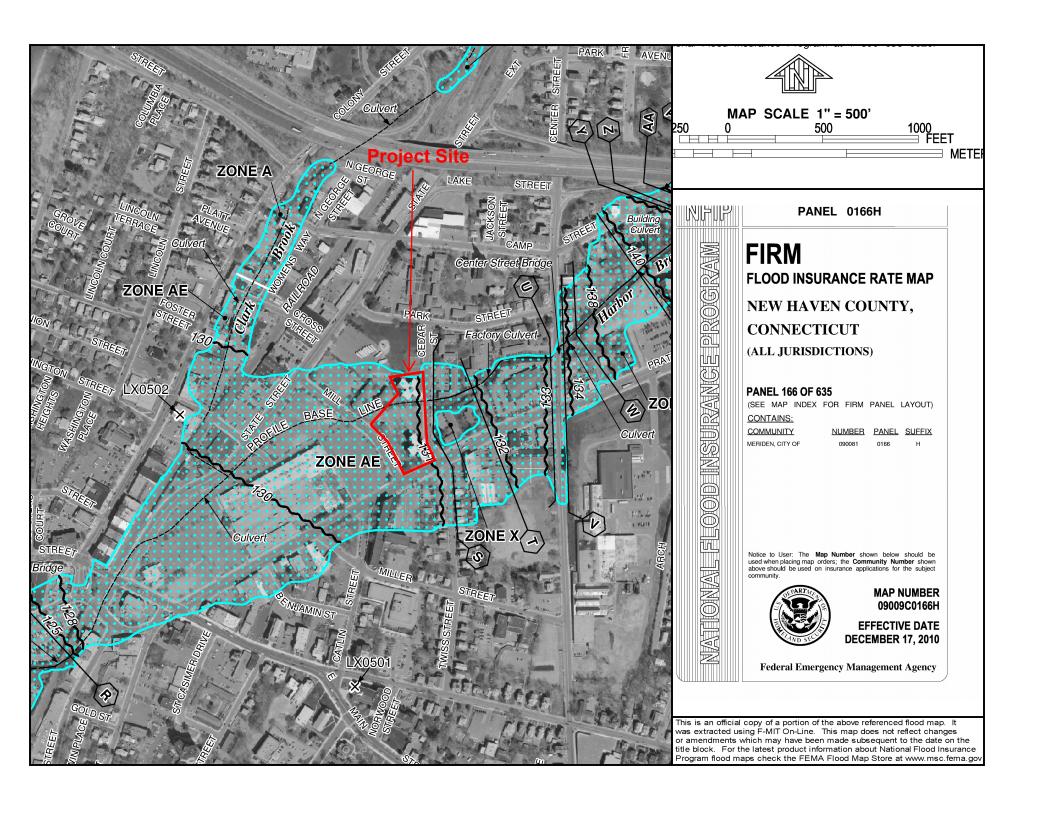


FIGURE 4: NATIONAL WETLANDS INVENTORY MAP



U.S. Fish and Wildlife Service

National Wetlands Inventory

Wetland Map

Jul 28, 2016

Wetlands

Freshwater Emergent

Freshwater Forested/Shrub

Estuarine and Marine Deepwater

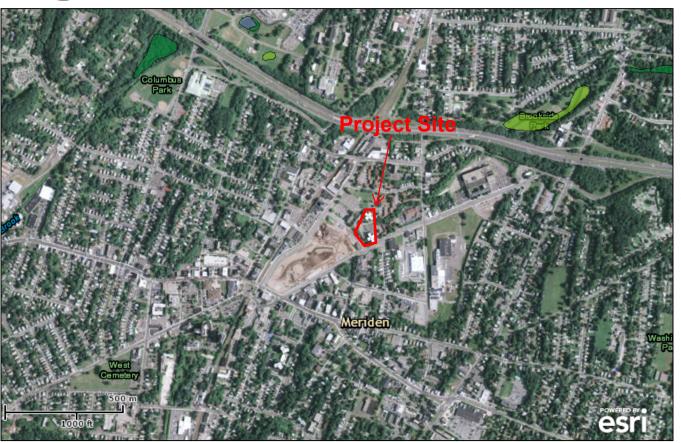
Estuarine and Marine

Freshwater Pond

Lake

Riverine

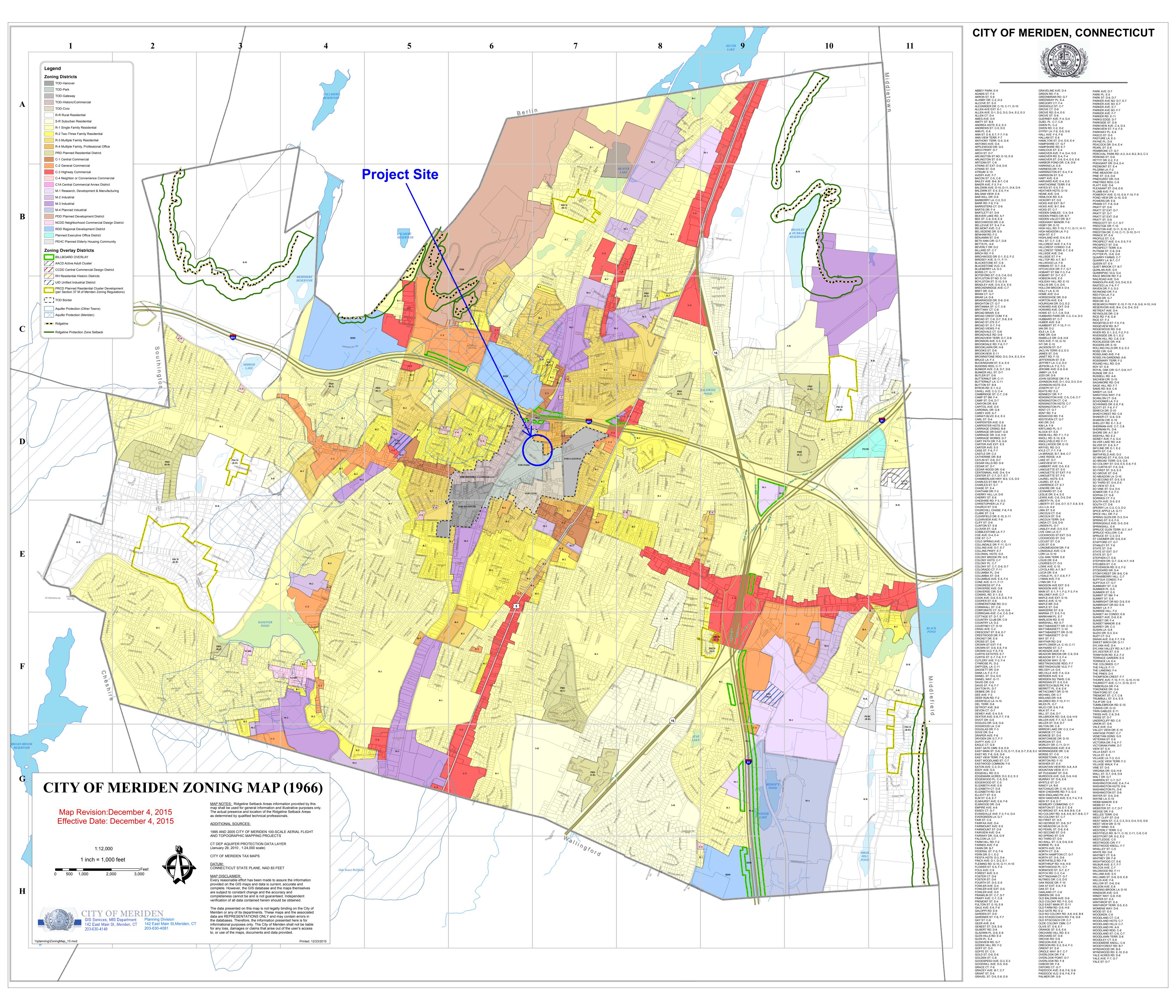
Other



This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

User Remarks:

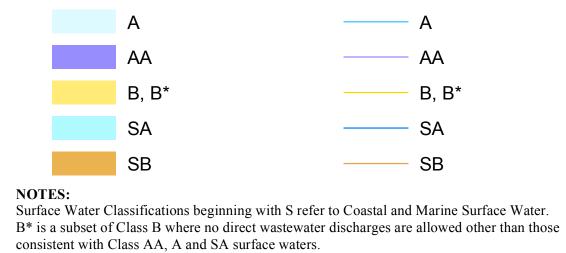
FIGURE 5: CITY OF MERIDEN ZONING MAP



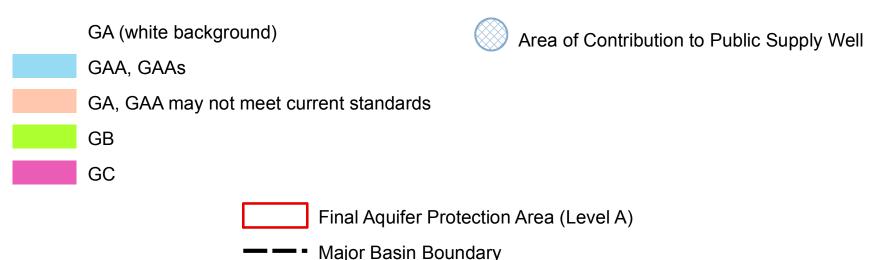
Meriden Mills Apartments Disposition and Related Parcel Assembly, City of Meriden, CT
FIGURE 6: CITY OF MERIDEN WATER QUALITY CLASSIFICATION MAP
FIGURE O. CITY OF MERIDEN WATER QUALITY CLASSIFICATION MAP

WATER QUALITY CLASSIFICATIONS MERIDEN, CT





GROUND WATER QUALITY CLASSES



EXPLANATION

of the elements of the Water Quality Standards (WQS) for the State of Connecticut. The WQS are a part of Connecticut's clean water program and are essential for protecting and improving water quality. The WQS follow the principles of Connecticut's Clean Water Act which is in Chapter 446K of the Connecticut General Statutes. The WQS provide policy guidance in many areas, for example decisions on acceptable discharges to water resources, siting of landfills, remediation or prioritization of municipal sewerage system projects. The first two elements of the WQS are the Standards, which set an overall policy for management of water quality, and the Criteria, which are descriptive and numerical standards that describe the allowable parameters and goals for various water quality classifications. A discussion of these two elements is found in the Water Quality Standards document available on the CT DEEP website. The third element is the Classifications and the Water Quality Classification Maps which show the Classification assigned to each surface and groundwater resource throughout the State. The WQS are adopted using a public participation process. The WQC maps are also adopted using a public participation process but go through hearings separately from the Standards and Criteria hearings. Revision and adoption of the WQC data occurs in accordance with the public participation procedures contained in Section 22a-426 of the Connecticut

WATER QUALITY CLASSIFICATIONS (WQC) MAPS are one

General Statutes. Ground WQC is subject to Connecticut regulation and changes must be reviewed and adopted. All changes to the Surface WQC require an adoption process which is subject to federal review and approval in addition to CT regulation. The adoption dates for the WQC by major drainage basin are: Housatonic River, Hudson River and Southwest Coastal Basins - March 1999; Connecticut River and South Central Coastal Basins - February 1993; Thames River, Pawcatuck River and Southeast Coastal Basins - December 1986. Surface Water Classifications do not change after the adoption date until the next major revision. Ground Water Classifications may change after the adoption date under specific circumstances. The map may have more than one WQC adoption date because a town may be in more than one major drainage basin.

SURFACE WATERS in Connecticut are divided into freshwater classified as AA, A, B or B* and saline waters classified as SA or SB. Class AA designated uses are existing or proposed drinking water supplies; habitat for fish and other aquatic life and wildlife; recreation; and water supply for industry and agriculture. Class A designated uses are habitat for fish and other aquatic life and wildlife; potential drinking water supplies; recreation; navigation; and water supply for industry and agriculture. Class SA designated uses are habitat for marine fish, other aquatic life and wildlife; shellfish harvesting for direct human consumption; recreation; industrial water supply; and navigation. Class B designated uses are habitat for fish and aquatic life and wildlife; recreation; navigation; and industrial and agricultural water supply. Class B*, applicable to Candlewood Lake, is a subset of Class B and is identical in all ways to the designated uses, criteria and standards for Class B waters except for the restriction on direct discharges. Class SB designated uses are habitat for marine fish and aquatic life and wildlife; commercial shellfish harvesting; recreation;

industrial water supply; and navigation.

Surface waters which are not specifically classified shall be considered as Class A or Class AA. Surface waters in GA ground water areas are assumed Class A or Class SA unless otherwise indicated. Surface waters in GAA ground water areas are assumed Class AA unless otherwise indicated.

On the WQC map a surface water quality goal of A is represented by blue colored water bodies. Surface water quality goal of AA is represented by purple colored water bodies. Surface water quality goal of B is represented by gold colored water bodies.

GROUND WATERS in Connecticut are classified as GAA, GA, GB and GC. Class GAA designated uses are existing or potential public supply of water suitable for drinking without treatment and baseflow for hydraulically-connected surface water bodies. The Class GAAs is a subclass of GAA for ground water that is tributary to a public water supply reservoir. The area of contribution to a public water supply well is represented by a 500-foot radius around the well and is assumed to be Class GAA unless otherwise classified. Class GA designated uses are existing private and potential public or private supplies of water suitable for drinking without treatment and baseflow for hydraulically-connected surface water bodies. All ground waters not specifically classified are considered as Class GA. Class GB designated uses are industrial process water and cooling waters and baseflow for hydraulically-connected water bodies and is presumed not suitable for human consumption without treatment. Class GC designated uses are assimilation of discharges authorized by the Commissioner pursuant to Section 22a-430 of the General Statutes.

On the WQC map GA is represented by white colored land areas. Class GAA and class GAAs are represented by blue colored land areas. The area of contribution to a public water supply well is shown by a blue cross-hatch overprint. A notation of GAA followed by a state abbreviation indicates a watershed that contributes to the public water supply for a state other than Connecticut. Class GA or Class GAA areas that currently may not be meeting the GA or GAA standards are represented on the WQC maps by tan colored land areas. Class GB is represented by green colored land areas. Class GC is represented by magenta colored land areas.

FINAL AQUIFER PROTECTION AREAS (Level A) are included on the WQC maps for informational purposes. These areas are anticipated to be reclassified GAA during the next major basin updates, subject to public participation. The Aquifer Protection Program helps protect Connecticut's public drinking water resources by delineating aquifer protection areas (also called wellhead protection areas) for public supply wells and establishing land use regulations within these areas. These areas represent the land area contributing ground water to active public water supply wells or well fields that serve more than 1000 people and are set in sand and gravel aquifers (stratified drift deposits).

DATA SOURCES

WATER QUALITY CLASSIFICATIONS DATA – Water quality classifications shown on this map are based on information from the following digital spatial datasets that are typically shown together - Ground Water Quality Classifications Poly, Surface Water Quality Classifications Line, and Surface Water Quality Classifications Poly. The map legend above reflects the content of these three data sources. These WQC data were initially compiled on 1:24,000-scale 7.5 minute USGS topographic quadrangle maps and later digitized at 1:24,000 scale. For example, the Surface Water Quality Classifications Line and Surface Water Quality Classifications Poly digital data assigns surface water quality classifications to water bodies such as rivers, streams, reservoirs, lakes, ponds and coves found in 1:24,000-scale hydrography data available from CT DEEP. The hydrography may not include all the waterbodies in Connecticut. The Ground Water Quality Classifications Poly data assigns ground water quality classifications, at 1:24,000 scale, to the remaining land areas in

AQUIFER PROTECTION AREA DATA – Aquifer Protection Areas shown on this map are from the Aquifer Protection Area digital dataset which contains polygon data intended to be used at 1:24,000 scale. The dataset contains regulated areas classified as Level A Aquifer Protection Area (Final) and Level B Aquifer Protection Area (Preliminary). The Level B areas are not shown on the WQC maps. The data was collected from 1991 to the present and is actively updated as Final area mapping replaces earlier Preliminary areas. The Aquifer Protection Areas are delineated by

ADOPTED DATES

Water Quality Standards
February 25, 2011

Thames River, Pawcatuck River and Southeast Coastal
Basins: December 1986

February 1993

Housatonic River, Hudson River and Southwest Coastal
Basins: March 1999

Connecticut River and South Central Coastal Basins:

the individual water companies owning the well fields and submitted to the CT DEEP for approval. Preliminary mapping provides a general estimate of the area contributing ground water to the well field. Final mapping is based on extensive, site-specific, detailed modeling of the ground water flow system. CT DEEP may adjust Final area boundaries to be consistent with 1:24,000 scale topography and base map data where appropriate during the approval process.

MAJOR DRAINAGE BASIN DATA – Major drainage basins shown on this map are from Major Basin Line data developed by CT DEEP and intended to be used at 1:24,000 scale.

BASE MAP DATA - Based on data originally from 1:24,000-scale USGS 7.5 minute topographic quadrangle maps published between 1969 and 1992. It includes political boundaries, railroads, airports, hydrography, geographic names and geographic places. Streets and street names are from Tele Atlas® copyrighted data. Base map information is neither current nor complete.

RELATED INFORMATION

This map is intended to be printed at its original dimensions in order to maintain the 1:24,000 scale (1 inch = 2000 feet).

WATER QUALITY STANDARDS - Go to the CT DEEP website for a summary and the full text of the "Water Quality Standards" and for other information on water quality.

AQUIFER PROTECTION AREAS - Go to the CT DEEP website for more information.

MAP LOCATION

1 Pawcatuck
2 Southeast Coast
3 Thames
4 Connecticut
5 South Central Coast
6 Housatonic
7 Southwest Coast
8 Hudson

State Plane Coordinate System of 1983, Zone 3526
Lambert Conformal Conic Projection
North American Datum of 1983

1 0.5 0 1 Miles

1000 0 1000 2000 3000 4000 5000 6000 7000 Feet

1 0.5 0 1 Kilometers

SCALE 1:24,000 (1 inch = 2000 feet) when map is printed at original size



Map created by CT DEEP
November 2015

Map is not colorfast
Protect from light and moisture

