Docket No. 272

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

# APPENDIX B

# SITING COUNCIL DECISION AND ORDER

DOCKET NO. 272 - The Connecticut Light and Power	}	
Company and The United Illuminating Company application		Connecticut
for a Certificate of Environmental Compatibility and Public	}	
Need for the Construction of a New 345-kV Electric		
Transmission Line and Associated Facilities Between Scovill	}	Siting
Rock Switching Station in Middletown and Norwalk		
Substation in Norwalk, Connecticut Including the	}	
Reconstruction of Portions of Existing 115-kV and 345-kV	}	Council
Electric Transmission Lines, the Construction of the Beseck		
Switching Station in Wallingford, East Devon Substation in	}	
Milford, and Singer Substation in Bridgeport, Modifications at		April 7, 2005
Scovill Rock Switching Station and Norwalk Substation and	}	
the Reconfiguration of Certain Interconnections.		

#### **Decision and Order**

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction of a new 345-kV electric transmission line and associated facilities between Scovill Rock Switching Station in Middletown and Norwalk Substation in Norwalk, Connecticut including the reconstruction of portions of existing 115-kV and 345-kV electric transmission lines, the construction of the Beseck Switching Station in Wallingford, East Devon Substation in Milford, and Singer Substation in Bridgeport, modifications at Scovill Rock Switching Station and Norwalk Substation and the reconfiguration of certain interconnections, including effects on the natural environment; ecological integrity and balance; forests and parks; scenic, historic, and recreational values; air and water purity; fish and wildlife; and public health and safety are not disproportionate either alone or cumulatively with other effects compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application. Therefore, the Council directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to the Connecticut Light and Power Company (CL&P), and the United Illuminating Company (UI), (collectively referred to as the "Applicants") for the construction, operation and maintenance of such facilities.

The facilities shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and is subject to the following conditions:

- 1. The Certificate Holders shall construct new substations or switching stations at Beseck, East Devon and Singer, and the modification of the existing facilities at Scovill Rock and Norwalk all as proposed in the application except that the Singer Substation is to be located on a parcel of property in Bridgeport bounded by Main Street, Russell Street, Atlantic Street, and Henry Street, and owned by PSEG Power of Connecticut.
- 2. The Certificate Holders shall install 500-kV rated equipment in the new 345-kV substations and replace approximately 1,200 lightning arresters in various existing substations with similar units having a higher rating.
- 3. The Certificate Holders shall construct and reconstruct facilities from Scovill Rock to Chestnut Junction; Oxbow Junction to the proposed Beseck Switching Station and Black Pond Junction to Beseck Switching Station as proposed in the application.
- 4. The Certificate Holders shall utilize the Royal Oak Bypass which shall include a rights-of-way not to exceed 165 feet in width, and cleared rights-of-way of 125 feet, for the proposed 345-kV transmission line and leave the existing 115-kV ROW in place.

- 5. The Certificate Holders shall construct and reconstruct facilities from Beseck Switching Station to Cook Hill Junction as proposed in the application and the supported route change as follows:
  - a. Cheshire supported change. Removing one of the existing 115-kV overhead circuits (Circuit 1640) from the ROW and placing it underground (using 115-kV XLPE cable) along Old Farms Road and Old Lane Road for approximately 5,000 feet. The proposed 345-kV transmission line and the remaining 115-kV line (Circuit 1208) would be installed on a single double-circuit monopole structure.
- 6. The Certificate Holders shall construct and reconstruct facilities from Cook Hill Junction to East Devon Substation as proposed in the application except that:
  - a. In the vicinity of the Jewish Community Center the Certificate Holders shall use of the center of the ROW.
  - b. In the vicinity of Congregation B'Nai Jacob/Ezra Academy the right-of-way shall be shifted farther away from buildings on property owned by Congregation B'Nai Jacob/Ezra Academy.
- 7. The Certificate Holders shall construct and reconstruct 115-kV circuits between the existing Devon Generating Station and the proposed East Devon Substation as proposed in the application.
- 8. The Certificate Holders shall construct an underground 345-kV circuit from the proposed East Devon Substation to the proposed Singer Substation substantially as proposed in the application except that the cable to be utilized shall be 3,000 kcmil XLPE and as follows:
  - a. Bridgeport supported change as follows: proceeding along Noble Street under the Metro North Railroad and then cross the Pequonnock River onto waterfront property owned by the city. The variation would then cross back under the railroad and turn south on Housatonic Avenue/Water Street.
- 9. The Certificate Holders shall construction an underground 345-kV circuit from the proposed Singer Substation to the existing Norwalk Substation substantially as proposed in the application except that the cable shall be 3,000 kcmil XLPE and the supported route change as follows:
  - a. Westport supported change as follows: proceeding south from the proposed route on the Post Road and follow Imperial Avenue for approximately a quarter of a mile, and turn west into Westport Commuter Metro North parking lot before crossing the Saugatuck River. On the west side of the river, the route would cross over Riverside Avenue and continue west along Lincoln Street before merging with Post Road.
  - b. Norwalk supported change as follows: construction of an alternate Norwalk River crossing that would begin approximately 1,000 feet south of the original location to mitigate impacts to the Riverside Cemetery Association.
- 10. The Certificate Holders shall conform to the Council's Best Management Practices for Electric and Magnetic Fields, in accordance with the Opinion.
- 11. The Certificate Holders shall develop low magnetic field designs as outlined in the Council's Findings of Fact Appendix B (Cross Sections 1-8) as part of the Development and Management (D&M) Plan and file the D&M Plan with each municipality regarding facilities in said municipality for comment. The Council will allow the municipality to file comments for a period of not more than 30 days after the filing a D&M Plan section. The Certificate Holders are encouraged to consult with the municipality prior to such filing.

- 12. The record indicates that EMF levels may be greater in the immediate vicinity of underground transmission lines than in the immediate vicinity of overhead lines. Where the underground portions of the line are in the vicinity of facilities listed in Conn. Gen. Stat. § 16-50p(i), the Certificate Holders are directed to utilize measures necessary to ensure that public health and safety is protected no less than in the vicinity of statutory facilities adjacent to the approved overhead portions of the line.
- 13. The Certificate Holders shall comply with all future electric and magnetic field standards promulgated by State or federal regulatory agencies. Upon the establishment of any new standards, the facilities granted in this Decision and Order shall be brought into compliance with such standards.
- 14. The Certificate Holders shall not commence construction of the overhead and underground electric transmission system until securing Council approval of a D&M Plan, consistent with the Regulations of Connecticut State Agencies Section 16-50j-60 through Section 16-50j-62 and which includes the following elements:
  - a. A detailed site plan showing the placement of the access roads, structure foundations, equipment and material staging area for the overhead route;
  - b. A detailed site plan showing the underground route, splice boxes, provisions for underground cable protection, and equipment and material staging area;
  - c. Identification of horizontal directional drill and jack and boring sites;
  - d. An erosion and sediment control plan, consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control as amended for both overhead and underground routes;
  - e. Provisions for crossing inland wetland and watercourses for both overhead and underground routes;
  - f. Vegetative clearing plan;
  - g. A wetland restoration plan;
  - h. Invasive species management plan;
  - i. A Plan for a pre-construction survey for all other endangered, threatened and species of special concern, flag areas of mudwort and bayonet grass, sweep areas for eastern box turtle and wood turtle prior to construction and abide to construction periods as outlined by the DEP Wildlife Division;
  - j. A post-construction electric and magnetic field monitoring plan;
  - k. A plan for installing construction fencing at vernal pools near construction activities and a buffer area be established around inland wetlands;
  - 1. An inland wetlands restoration plan;
  - m. Monitoring and Operations Plan for each water body crossing;
  - n. A traffic control plan to include scheduling of construction hours during nights and/or weekends and mitigation of lighting and noise;
  - o. A blasting plan;
  - p. Groundwater best management practices plan;
  - q. Identification of developed areas for staging and equipment lay down, field office trailers, sanitary facilities and parking before establishing a new area;
  - r. Excavated material in upland construction may be allowed to be graded in proximity to the structure and excavated soil in wetland construction shall be stockpiled in an upland area for use in wetland restoration;
  - s. Conductor installation sites shall be within the existing ROW, use of existing cleared area, to the extent possible, and pulling sites will not be allowed in wetlands;

- t. A plan for the following: structure #4010 may be eliminated; in Woodbridge, details on removal of structure #3920 and new poles may be eliminated in the area of wetland #133; a number of structures within wetland #70 adjacent to Tamarac Swamp in Wallingford may be reduced, especially structures #8769 and 8800; and a set of existing pole structures immediately adjacent to the Farmington Canal Recreational Trail in Hamden could be removed.
- 15. The Certificate Holders are directed to consult with DEP on the following matters:
  - a. Concerning horizontal directional drill and the jack and bore crossing techniques;
  - b. Fording streams; and
  - c. Construction scheduling at the Milford boat launch and the line should be sited so as to not interfere unreasonably with any future maintenance needs.
- 16. The Certificate Holders shall abide to the following Regional Water Authority (RWA) conditions:
  - a. Shall provide all information necessary for the RWA to prepare a DPH Change in Use Application and Revocable License Agreement for the construction activities on RWA owned watershed land.
  - b. Shall prepare a Stormwater Pollution Prevention Plan (SWPPP) during the development of the Development and Management Plan (D&M Plan). The D&M Plan shall be prepared in accordance with the Connecticut Guidelines for Soil Erosion and Sediment Control.
  - c. Refueling of construction equipment on public water supply watershed and aquifer areas shall only be conducted over portable spill containment areas. Absorbent spill response materials shall be readily available on-site. The RWA shall be immediately notified of any hazardous material spills or other water quality incidents on its public water supply watershed or aquifers.
  - d. Any fuel, oils, paints, solvents, or other hazardous materials stored on-site during the construction process shall be in a secure area with at least 100 percent secondary containment.
  - e. Submittal of an Integrated Pest Management Pan for long-term maintenance of right-of-ways and submittal of an annual summary of pesticide use and other maintenance activities on RWA property.
  - f. If blasting is required, pre-blast surveys of RWA facilities shall be done, recording seismographs shall be in place during blasting, and copies of the survey sand seismograph results shall be provided to the RWA.
  - g. Provision of reimbursement for reasonable costs incurred by the RWA regarding review and inspection of the Project, including costs for review by its special consultants, and costs associated with designing and relocating the RWA's facilities, if required.
  - h. Preliminary and final D&M Plans shall be provided to the RWA for its review comments. The RWA shall be allowed at least 30 days to review and comment.
  - i. The RWA shall receive between three and five days notice prior to commencement of construction activity on public water supply watershed or aquifers, or in the vicinity of RWA facilities.
- 17. The Certificate Holders shall use the DOT encroachment permit process developed for the Docket No. 217 project as a template.
- 18. The Certificate Holders shall provide the following permits prior to the commencement of construction:
  - a. Department of Public Health change-in-use permit;
  - b. Office of Long Island Sound Programs (OLISP) coastal permits for the Singer and East Devon Substations; and
  - c. DEP water body crossing permits.

- 19. The Certificate Holders shall obtain necessary waste management permits for activity in any solid waste disposal area and remove and dispose of contaminated soil per municipal, state, and federal regulations
- 20. The Certificate Holders shall hire an independent environmental consultant, subject to Council approval, to monitor and report on the installation of the overhead and underground transmission system.
- 21. The Certificate Holders shall conduct a Phase II Archeological Reconnaissance Survey in consultation with the Connecticut Historical Commission prior to construction.
- 22. The Certificate Holders shall provide to the Council an operating report within three months after the conclusion of the first year of operation of all facilities herein, and annually thereafter, with information relevant to the overall condition, safety, reliability, and operation of the cable systems, for three years.
- 23. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within six years of the effective date of the Decision and Order, or within six years after all appeals to this Decision and Order have been resolved.

We hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of the Decision published in the <u>Hartford Courant</u>, <u>The Connecticut Post</u>, <u>Norwalk Hour</u>, <u>Minuteman Press</u>, <u>The Middletown Press</u>, <u>The New Haven Register</u>, <u>The Record-Journal</u>, <u>The Advisor</u>, <u>The Amity Observer</u>, <u>The Bridgeport News</u>, <u>The Cheshire Herald</u>, <u>The Courier(Monroe/Easton)</u>, <u>The Fairfield Citizen News</u>, <u>The Hamden Journal</u>, <u>The Milford Mirror</u>, <u>The Milford Weekly</u>, <u>The Norwalk Hour</u>, <u>The Norwalk Citizens News</u>, <u>The North Haven Post</u>, <u>The Stratford Bard</u>, <u>The Stratford Star</u>, <u>The Trumbull Times</u>, <u>The Wallingford Voices</u>, <u>The Waterbury Republican</u>, <u>The West Haven News</u>, <u>The Weston Forum</u>, <u>The Westport News</u>, <u>The Wilton Bulletin</u>, and <u>The Wilton Villager</u>.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The Parties and Intervenors in this proceeding are:

Applicant	The Connecticut Light and Power Company	Anthony M. Fitzgerald, Esq. Brian T. Henebry, Esq. Carmody & Torrance LLP 50 Leavenworth St., P.O. Box 1110 Waterbury, CT 06721-1110 (203) 573-1200 (203) 575-2600 - fax <u>afitzgerald@carmodylaw.com</u> <u>bhenebry@carmodylaw.com</u> <u>tranmn345docket272@nu.com</u>
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Applicant	The United Illuminating Company	Linda L. Randell, Esq. Bruce L. McDermott, Esq. Wiggin & Dana LLP One Century Tower New Haven, CT 06508-1832 (203) 498-4322 (203) 782-2889 - fax <u>lrandell@wiggin.com</u> <u>bmcdermott@wiggin.com</u>
Party	Honorable Robert W. Megna State Representative - 97 <sup>th</sup> District 40 Foxon Hill Road, #54 New Haven, CT 06513 (860) 240-8585 1-800-842-8267 <u>Robert.Megna@po.state.ct.us</u>	
Intervenor	Honorable Al Adinolfi State Representative 103 <sup>rd</sup> District 235 Sorghum Mill Drive Cheshire, Connecticut 06410 (203) 272-9701 - Home 1-800-842-1423 – Capitol (860) 240-0207 - fax Alfred.adinolfi@housegop.state.ct.us	
Party	Town of Middlefield	Eric Knapp, Esq. Branse & Willis, LLC 41-C New LondonTurnpike Glen Lochen East Glastonbury, CT 06033-2038 (860) 659-3735 (860) 659-9368 – fax eknapp@bransewillis.com
Party	Town of Milford	Julie Donaldson Kohler, Esq. Hurwitz & Sagarin, LLC 147 North Broad St. Milford, CT 06460 (203) 877-8000 (203) 878-9800 - fax jdk@hurwitz-sagarin.com

Party	Town of Wallingford	Peter G. Boucher, Esq. Halloran & Sage, LLP 225 Asylum Street Hartford, CT 06103 (860) 297-4650 (860) 548-0006 fax boucher@halloran-sage.com
Party	Town of Wallingford continued	Janis M. Small, Esq. Town Attorney Wallingford Town Hall 45 South Main St. Wallingford, CT 06492 (203) 294-2140 (203) 294-2112 – fax wlfdlaw@sbcglobal.net
Party	Town of Durham	Peter G. Boucher, Esq. Halloran & Sage, LLP 225 Asylum Street Hartford, CT 06103 (860) 297-4650 (860) 548-0006 fax boucher@halloran-sage.com Maryann Boord First Selectwoman Durham Town Hall 30 Townhouse Rd. Durham, CT 06422 (860) 349-3625 (860) 349-8391 – fax mboord@townofdurhamct.org
Party	City of Norwalk	Louis S. Ciccarello Corporation Counsel P.O. Box 798 Norwalk, CT 06856-0798 (203) 854-7750 (203) 854-7901 fax lciccarello@norwalkct.org

Party	Town of Westport	Town of Westport c/o Ira W. Bloom, Esq. 27 Imperial Avenue Westport, CT 06880 (203) 227-9545 (203) 227-2443 - fax <u>ibloom@wsdb.com</u> <u>ecederbaum@wsdb.com</u>
Intervenor	Honorable Mary G. Fritz State Representative - 90 <sup>th</sup> District 43 Grove Street Yalesville, CT 06492 (203) 289-1169 1-800-842-1902 (860) 240-0206 - fax mary.fritz@po.state.ct.us	
Party	Town of Woodbridge	David A. Ball, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 337-4134 (203) 576-8504 fax dball@cohenandwolf.com
Party	City of Meriden	Deborah L. Moore, Esq. Legal Department City Hall 142 East Main Street Meriden, CT 06450 (203) 630-4045 (203) 630-7907 - fax <u>dmoore@ci.meriden.ct.us</u>
Party	Attorney General Richard Blumenthal	Michael C. Wertheimer Assistant Attorney General Office of the Attorney General 10 Franklin Square New Britain, CT 06051 (860) 827-2603 (860) 827-2893 <u>michael.wertheimer@po.state.ct.us</u>

Intervenor	Honorable Raymond Kalinowski State Representative – 100 <sup>th</sup> District P.O. Box 391 Durham, CT 06422 1(800)842-1423 860) 240-0207 - fax repkalinowski@aol.com	
Party	City of Bridgeport	Melanie J. Howlett Associate City Attorney Office of the City Attorney 999 Broad Street Bridgeport, CT 06604-4328 (203) 576-7647 (203) 576-8252 – fax Howlem0@ci.bridgeport.ct.us
Party	Communities for Responsible Energy	Trish Bradley, President Ed Schwartz, Treasurer Comunities for Responsible Energy, Phase II 45 Ironwood Lane Durham, CT 06422 (860) 349-9137 thebradco7@aol.com
Party	Office of Consumer Counsel	Bruce C. Johnson Litigation Attorney Office of Consumer Counsel Ten Franklin Square New Britain, CT 06051 (860) 827-2900 (860) 827-2929 – fax bruce.johnson@po.state.ct.us
Intervenor	Honorable Themis Klarides State Representative – 114 <sup>th</sup> District 23 East Court Derby, CT 06418 (203) 735-5911 1-800-842-1423 (860) 240-0207 - fax <u>Themis.klarides@housegop.state.ct.us</u>	

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Party	The Woodlands Coalition for Responsible Energy, Inc.	Lawrence J. Golden, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 (860) 424-4346 (860) 424-4370 <u>lgolden@pullcom.com</u> <u>Ruthann@woodlandscoalition.com</u>
Intervenor	ISO New England Inc.	Anthony M. Macleod, Esq. Whitman Breed Abbott & Morgan LLC 100 Field Point Road Greenwich, CT 06830 (203) 869-3800 (203) 869-1951 – fax <u>amacleod@wbamct.com</u>
Party	Department of Transportation	Charles H. Walsh Assistant Attorney General Juris. No. 402623 55 Elm St., P.O. Box 120 Hartford, CT 06141-0120 (860) 808-5090 (860) 808-5384 fax charles.walsh@po.state.ct.us <u>Arthur.gruhn@po.state.ct.us</u>
Party	Town of Fairfield	Honorable Kenneth A. Flatto First Selectman Independence Hall 725 Old Post Road Fairfield, CT 06824 (203) 256-3030 (203) 256-3008 – fax firstselectmanffld@town.fairfield.ct.us ekennelly@town.fairfield.ct.us

Party	PSEG Power Connecticut LLC	David A. Reif Jane K. Warren Joel B. Casey McCarter & English, LLP CityPlace I Hartford, CT 06103 (860) 275-6700 (860) 724-3397 – fax <u>dreif@mccarter.com</u> jwarren@mccarter.com jcasey@mccarter.com h.borden@pseg.com
Party	Town of Wilton	Monte E. Frank, Esq. Cohen and Wolf, P.C. 158 Deer Hill Avenue Danbury, CT 06810 (203) 368-0211 (203) 576-8504 fax <u>mfrank@cohenandwolf.com</u>
Party	Town of Weston	David A. Ball, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 337-4134 (203) 576-8504 fax dball@cohenandwolf.com
Party	South Central Connecticut Water Authority	Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I, 29th Floor 185 Asylum Street Hartford, CT 06103-3469 (860) 240-6180 (860) 240-6150 alord@murthalaw.com

Party	Town of Orange	Brian M. Stone,Esq. Sousa, Stone & D'Agosto, LLC 375 Bridgeport Avenue Shelton, CT 06484 (203) 929-8283 (203) 548-0006 <u>brianstone@snet.net</u> <u>Mitchgoldblatt@aol.com</u>
Intervenor	Connecticut Business & Industry Association (CBIA)	Robert E. Earley Connecticut Business & Industry Assoc. 350 Church Street Hartford, CT 06103-1106 (860) 244-1900 (860) 278-8562 fax earleyr@cbia.com
Party	Town of Cheshire	Richard J. Buturla, Esq. Town Attorney Berchem, Moses & Devlin, PC 75 Broad Street Milford, CT 06460 (203) 783-1200 (203) 878-4912 fax <u>rbuturla@bmdlaw.com</u> <u>mmilone@cheshirect.org</u>
Party	Town of Hamden	Joaquina Borges King Assistant Town Attorney Hamden Government Center 2750 Dixwell Avenue Hamden, CT 06518 (203) 287-7050 (-7053) (203) 287-7051 fax jborgesking@hamden.com jgruen@hamden.com

Party	City of Middletown	Timothy P. Lynch Deputy City Attorney City Attorney's Office 245 deKoven Drive, P.O. Box 1300 Middletown, CT 06457-1300 (860) 344-3422 (860) 344-3521 timothy.lynch@cityofmiddletown.com
Party	Town of Bethany	Honorable Derrylyn Gorski First Selectman Bethany Town Hall 40 Peck Road Bethany, CT 06524-3378 (203) 393-2100 ext. 100 DGorski@Bethany-CT.com Kevin195774@yahoo.com
Party	Town of Easton	William J. Kupinse, Jr. First Selectman Easton Town Hall 225 Center Road, P.O. Box 61 Easton, CT 06612 (203) 268-6291 (203) 268-4928 fax w_kupinse@eastonct.org
Intervenor	Honorable William A. Aniskovich State Senate – 12 <sup>th</sup> District 15 Grove Avenue Branford, CT 06405 (860) 240-0596 <u>William.A.Aniskovich@po.state.ct.us</u>	
Party	Town of North Haven	David J. Monz Updike, Kelly & Spellacy, P.C. One Century Tower 265 Church Street New Haven, CT 06510 (203) 786-8303 (203) 772-2037 fax <u>dmonz@uks.com</u>

Party	Woodbridge Jewish Organizations (Ezra Academy, Congregation B'Nai Jacob, the Jewish Community Center of Greater New Haven, the Jewish Federation of Greater New Haven, and the Department of Jewish Education).	David R. Schaefer, Esq. Brenner Saltzman & Wallman, LLP 271 Whitney Avenue New Haven, CT 06511 (203) 772-2600 (203) 562-2098 fax dschaefer@bswlaw.com
Intervenor	Senator Joseph J. Crisco, Jr. 17 <sup>th</sup> District State Capitol Hartford, CT 06106-1591 (860) 240-0189 (860) 240-0027 – fax Crisco@senatedems.state.ct.us	
Intervenor	First District Water Department	Franco Chieffalo General Supervisor First District Water Department P.O. Box 27 Norwalk, CT 06852 (203) 847-7387 (203) 846-3482 fax fchieffalo@norwalkfdwd.org
Intervenor	Honorable Leonard A. Fasano State Senator – 34 <sup>th</sup> District 7 Sycamore Lane North Haven, CT 06473 <u>Len.Fasano@po.state.ct.us</u>	
Party	City of New Haven	Elizabeth Gilson, Esq. 383 Orange Street New Haven, CT 06511 (203) 777-4050 (203) 787-3259 – fax egilson@snet.net

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Intervenor	Branford Conservation and Environment Commission	Karyl Lee Hall, Esq. Co-Chairman Branford Conservation & Environment Comission c/o Box 3072 Branford, CT 06405 860-262-5044 <u>Karylleehall1@aol.com</u>
Party	Town of Branford	Honorable John E. Opie, First Selectman Branford Town Hall P.O. Box 150, Town Hall Branford, CT 06405 (203) 488-8394 jopie@branford-ct.gov
Party	Linda Wilson	Sebastian N. Giuliano, Esq. Giuliano, Rafala & Scalora P.O. Box 820 Middletown, CT 06457-0820 (860) 344-9045 (860) 344-8397 fax Robert Hoff, Esq. Reid and Riege, P.C. One Financial Plaza Hartford, CT 06103 (860) 278-1150 (860) 240-1002 RHoff@ReidandRiege.com TArmstrong@ReidandRiege.com
Intervenor	The Honorable Kevin M. DelGobbo, Ranking Member Energy and Technology Committee Legislative Office Building, Room 3904 Hartford, CT 06106-1591 (860) 240-8700 (860) 240-0207 fax Kevin.delgobbo@housegop.state.ct.us	

Party	Ralph E. Wilson, Allison Wilson, and the South Main Street Irrevocable Trust	Sebastian N. Giuliano, Esq. Giuliano, Rafala & Scalora P.O. Box 820 Middletown, CT 06457-0820 (860) 344-9045 (860) 344-8397 fax
		Robert Hoff, Esq. Reid and Riege, P.C. One Financial Plaza Hartford, CT 06103 (860) 278-1150 (860) 240-1002 RHoff@ReidandRiege.com TArmstrong@ReidandRiege.com

#### **CERTIFICATION**

The undersigned members of the Connecticut Siting Council (Council) hereby certify that they have heard this case, or read the record thereof, in **DOCKET NO. 272** - The Connecticut Light and Power Company and The United Illuminating Company Application for a Certificate of Environmental Compatibility and Public Need for the Construction of a New 345-kV Electric Transmission Line and Associated Facilities Between Scovill Rock Switching Station in Middletown and Norwalk Substation in Norwalk, Connecticut Including the Reconstruction of Portions of Existing 115-kV and 345-kV Electric Transmission Lines, the Construction of the Beseck Switching Station in Wallingford, East Devon Substation in Milford, and Singer Substation in Bridgeport, Modifications at Scovill Rock Switching Station and Norwalk Substation and the Reconfiguration of Certain Interconnections, and voted as follows to approve the applicant with modifications as outlined in the Opinion and Decision and Order:

**Council Members** 

#### Vote Cast

Yes Pamela B. Katz, P.E., Chairmai Yes Commissioner Donald W. Downes Designee: Gerald J. Heffernan Yes Commissioner Gina McCarthy Designee: Brian J. Emerick Rhli Yes Philip T. Ashton Yes Daniel P. Lynch, Jr. Yes ames Yes Brian F. O'Neilt

Colin C. Tait

Edward S. Wilensky

Yes

Yes

Dated at New Britain, Connecticut, April 7, 2005.

STATE OF CONNECTICUT)ss. New Britain, Connecticut:COUNTY OF HARTFORD)

I hereby certify that the foregoing is a true and correct copy of the Findings of Fact, Opinion, and Decision and Order issued by the Connecticut Siting Council, State of Connecticut.



I certify that a copy of the Findings of Fact, Opinion, and Decision and Order in Docket No. 272 has been forwarded by Certified First Class Return Receipt Requested mail on April 14, 2005 to all parties and intervenors of record as listed on the attached service list, dated January 26, 2005.

ATTEST:

Lisa Fontaine

Pre-Professional Trainee Connecticut Siting Council

## Date: January 26, 2005

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LIST OF PARTIES AND INTERVENORS
SERVICE LIST

	Status Holder	Representative
<b>Status Granted</b>	(name, address & phone number)	(name, address & phone number)
Applicant	The Connecticut Light and Power Company	Anthony M. Fitzgerald, Esq. Brian T. Henebry, Esq. Carmody & Torrance LLP 50 Leavenworth St., P.O. Box 1110 Waterbury, CT 06721-1110 (203) 573-1200 (203) 575-2600 - fax <u>afitzgerald@carmodylaw.com</u> <u>bhenebry@carmodylaw.com</u> <u>tranmn345docket272@nu.com</u>
Applicant	The United Illuminating Company	Linda L. Randell, Esq. Bruce L. McDermott, Esq. Wiggin & Dana LLP One Century Tower New Haven, CT 06508-1832 (203) 498-4322 (203) 782-2889 - fax <u>lrandell@wiggin.com</u> <u>bmcdermott@wiggin.com</u>
Intervenor (granted 11/20/03)	Norwalk Association of Silvermine Homeowners ~STATUS WITHDRAWN 03/26/04~	Norwalk Association of Silvermine Homeowners c/o Leigh Grant 99 Comstock Hill Road Norwalk, CT 06850 (203) 846-4577 (203) 846-4577 - fax cartellino@aol.com
Party (granted 11/20/03)	Honorable Robert W. Megna State Representative - 97 <sup>th</sup> District 40 Foxon Hill Road, #54 New Haven, CT 06513 (860) 240-8585 1-800-842-8267 <u>Robert.Megna@po.state.ct.us</u>	

## Date: January 26, 2005

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Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (granted 11/20/03)	Honorable Al Adinolfi State Representative 103 <sup>rd</sup> District 235 Sorghum Mill Drive Cheshire, Connecticut 06410 (203) 272-9701 - Home 1-800-842-1423 – Capitol (860) 240-0207 - fax Alfred.adinolfi@housegop.state.ct.us	
Party (granted 11/20/03)	Town of Middlefield	Eric Knapp, Esq. Branse & Willis, LLC 41-C New LondonTurnpike Glen Lochen East Glastonbury, CT 06033-2038 (860) 659-3735 (860) 659-9368 – fax eknapp@bransewillis.com
Party (granted 11/20/03)	Town of Milford	Julie Donaldson Kohler, Esq. Hurwitz & Sagarin, LLC 147 North Broad St. Milford, CT 06460 (203) 877-8000 (203) 878-9800 - fax jdk@hurwitz-sagarin.com
Party (granted 11/20/03)	Town of Wallingford	Peter G. Boucher, Esq. Halloran & Sage, LLP 225 Asylum Street Hartford, CT 06103 (860) 297-4650 (860) 548-0006 fax boucher@halloran-sage.com

	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Party (granted 11/20/03)	Town of Wallingford continued	Janis M. Small, Esq. Town Attorney Wallingford Town Hall 45 South Main St. Wallingford, CT 06492 (203) 294-2140 (203) 294-2112 – fax wlfdlaw@sbcglobal.net
Party (granted 11/20/03)	Town of Durham	Peter G. Boucher, Esq. Halloran & Sage, LLP 225 Asylum Street Hartford, CT 06103 (860) 297-4650 (860) 548-0006 fax <u>boucher@halloran-sage.com</u> Maryann Boord First Selectwoman Durham Town Hall 30 Townhouse Rd. Durham, CT 06422 (860) 349-3625 (860) 349-8391 – fax <u>mboord@townofdurhamct.org</u>
Party (granted 11/20/03)	City of Norwalk	Louis S. Ciccarello Corporation Counsel P.O. Box 798 Norwalk, CT 06856-0798 (203) 854-7750 (203) 854-7901 fax lciccarello@norwalkct.org
Party (granted 11/20/03)	Town of Westport	Town of Westport c/o Ira W. Bloom, Esq. 27 Imperial Avenue Westport, CT 06880 (203) 227-9545 (203) 227-2443 - fax <u>ibloom@wsdb.com</u> <u>ecederbaum@wsdb.com</u>

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (granted 11/20/03)	Honorable Mary G. Fritz State Representative - 90 <sup>th</sup> District 43 Grove Street Yalesville, CT 06492 (203) 289-1169 1-800-842-1902 (860) 240-0206 - fax mary.fritz@po.state.ct.us	
Party (granted 11/20/03)	Town of Woodbridge	David A. Ball, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 337-4134 (203) 576-8504 fax dball@cohenandwolf.com
Party (granted 11/20/03)	City of Meriden	Deborah L. Moore, Esq. Legal Department City Hall 142 East Main Street Meriden, CT 06450 (203) 630-4045 (203) 630-7907 - fax <u>dmoore@ci.meriden.ct.us</u>
Party (granted 11/20/03)	Attorney General Richard Blumenthal	Michael C. Wertheimer Assistant Attorney General Office of the Attorney General 10 Franklin Square New Britain, CT 06051 (860) 827-2603 (860) 827-2893 michael.wertheimer@po.state.ct.us

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Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (granted 11/20/03)	Honorable Raymond Kalinowski State Representative – 100 <sup>th</sup> District P.O. Box 391 Durham, CT 06422 1(800)842-1423 860) 240-0207 - fax repkalinowski@aol.com	
Party (granted 11/20/03)	City of Bridgeport	Melanie J. Howlett Associate City Attorney Office of the City Attorney 999 Broad Street Bridgeport, CT 06604-4328 (203) 576-7647 (203) 576-8252 – fax Howlem0@ci.bridgeport.ct.us
Party (granted 11/20/03)	Communities for Responsible Energy	Trish Bradley, President Ed Schwartz, Treasurer Comunities for Responsible Energy, Phase II 45 Ironwood Lane Durham, CT 06422 (860) 349-9137 <u>thebradco7@aol.com</u>
Party (granted 11/20/03)	Office of Consumer Counsel	Bruce C. Johnson Litigation Attorney Office of Consumer Counsel Ten Franklin Square New Britain, CT 06051 (860) 827-2900 (860) 827-2929 – fax bruce.johnson@po.state.ct.us

Status Granted	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Intervenor (granted 11/20/03	Honorable Themis Klarides State Representative – 114 <sup>th</sup> District 23 East Court Derby, CT 06418 (203) 735-5911 1-800-842-1423 (860) 240-0207 - fax <u>Themis.klarides@housegop.state.ct.us</u>	
Party (granted 11/20/03)	The Woodlands Coalition for Responsible Energy, Inc.	Lawrence J. Golden, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 (860) 424-4346 (860) 424-4370 <u>lgolden@pullcom.com</u> <u>Ruthann@woodlandscoalition.com</u>
Intervenor (granted 12/9/03)	ISO New England Inc.	Anthony M. Macleod, Esq. Whitman Breed Abbott & Morgan LLC 100 Field Point Road Greenwich, CT 06830 (203) 869-3800 (203) 869-1951 – fax <u>amacleod@wbamct.com</u>
Party (granted 12/9/03)	Department of Transportation	Charles H. Walsh Assistant Attorney General Juris. No. 402623 55 Elm St., P.O. Box 120 Hartford, CT 06141-0120 (860) 808-5090 (860) 808-5384 fax charles.walsh@po.state.ct.us <u>Arthur.gruhn@po.state.ct.us</u>

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (granted 12/9/03)	Honorable John E. Stripp State Representative – 135 <sup>th</sup> District 4 Scatacook Trail Weston, CT 06883 1(800)842-1423 (860)240-0207 – fax john.stripp@housegop.state.ct.us ~STATUS WITHDRAWN 01/04~	(name, address et phone namber)
Party (granted 12/9/03)	Town of Fairfield	Honorable Kenneth A. Flatto First Selectman Independence Hall 725 Old Post Road Fairfield, CT 06824 (203) 256-3030 (203) 256-3008 – fax <u>firstselectmanffld@town.fairfield.ct.us</u> <u>ekennelly@town.fairfield.ct.us</u>
Party (granted 12/9/03)	PSEG Power Connecticut LLC	David A. Reif Jane K. Warren Joel B. Casey McCarter & English, LLP CityPlace I Hartford, CT 06103 (860) 275-6700 (860) 724-3397 – fax <u>dreif@mccarter.com</u> jwarren@mccarter.com jcasey@mccarter.com h.borden@pseg.com
Party (granted 12/22/03)	Town of Wilton	Monte E. Frank, Esq. Cohen and Wolf, P.C. 158 Deer Hill Avenue Danbury, CT 06810 (203) 368-0211 (203) 576-8504 fax <u>mfrank@cohenandwolf.com</u>

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party (granted 12/22/03)	Town of Weston	David A. Ball, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 (203) 337-4134 (203) 576-8504 fax dball@cohenandwolf.com
Party (granted 12/22/03)	South Central Connecticut Water Authority	Andrew W. Lord, Esq. Murtha Cullina LLP CityPlace I, 29th Floor 185 Asylum Street Hartford, CT 06103-3469 (860) 240-6180 (860) 240-6150 alord@murthalaw.com
Party (granted 12/22/03)	Town of Orange	Brian M. Stone,Esq. Sousa, Stone & D'Agosto, LLC 375 Bridgeport Avenue Shelton, CT 06484 (203) 929-8283 (203) 548-0006 brianstone@snet.net <u>Mitchgoldblatt@aol.com</u>
Intervenor (granted 01/12/04)	Connecticut Business & Industry Association (CBIA)	Robert E. Earley Connecticut Business & Industry Assoc. 350 Church Street Hartford, CT 06103-1106 (860) 244-1900 (860) 278-8562 fax earleyr@cbia.com

	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Party (granted 01/12/04)	Town of Cheshire	Richard J. Buturla, Esq. Town Attorney Berchem, Moses & Devlin, PC 75 Broad Street Milford, CT 06460 (203) 783-1200 (203) 878-4912 fax <u>rbuturla@bmdlaw.com</u> <u>mmilone@cheshirect.org</u>
Party (granted 1/12/04)	Town of Hamden	Joaquina Borges King Assistant Town Attorney Hamden Government Center 2750 Dixwell Avenue Hamden, CT 06518 (203) 287-7050 (-7053) (203) 287-7051 fax jborgesking@hamden.com jgruen@hamden.com
Party (approved 2/3/04)	City of Middletown	Timothy P. Lynch Deputy City Attorney City Attorney's Office 245 deKoven Drive, P.O. Box 1300 Middletown, CT 06457-1300 (860) 344-3422 (860) 344-3521 timothy.lynch@cityofmiddletown.com
Party (approved 2/3/04)	Town of Bethany	Honorable Derrylyn Gorski First Selectman Bethany Town Hall 40 Peck Road Bethany, CT 06524-3378 (203) 393-2100 ext. 100 <u>DGorski@Bethany-CT.com</u> <u>Kevin195774@yahoo.com</u>

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party (approved 2/3/04)	Town of Easton	William J. Kupinse, Jr. First Selectman Easton Town Hall 225 Center Road, P.O. Box 61 Easton, CT 06612 (203) 268-6291 (203) 268-4928 fax w_kupinse@eastonct.org
Intervenor (approved 2/18/04	Honorable William A. Aniskovich State Senate – 12 <sup>th</sup> District 15 Grove Avenue Branford, CT 06405 (860) 240-0596 <u>William.A.Aniskovich@po.state.ct.us</u>	
Party (approved 2/18/04)	Town of North Haven	David J. Monz Updike, Kelly & Spellacy, P.C. One Century Tower 265 Church Street New Haven, CT 06510 (203) 786-8303 (203) 772-2037 fax <u>dmonz@uks.com</u>
Party (approved 3/17/04)	Woodbridge Jewish Organizations (Ezra Academy, B'Nai Jacob, the Jewish Community Center of Greater New Haven, the Jewish Federation of Greater New Haven, and the Department of Jewish Education).	David R. Schaefer, Esq. Brenner Saltzman & Wallman, LLP 271 Whitney Avenue New Haven, CT 06511 (203) 772-2600 (203) 562-2098 fax <u>dschaefer@bswlaw.com</u>

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (approved 3/17/04)	Senator Joseph J. Crisco, Jr. 17 <sup>th</sup> District State Capitol Hartford, CT 06106-1591 (860) 240-0189 (860) 240-0027 – fax Crisco@senatedems.state.ct.us	
Intervenor (approved 3/23/04)	First District Water Department	Franco Chieffalo General Supervisor First District Water Department P.O. Box 27 Norwalk, CT 06852 (203) 847-7387 (203) 846-3482 fax fchieffalo@norwalkfdwd.org
Intervenor (approved 4/15/04)	Honorable Leonard A. Fasano State Senator – 34 <sup>th</sup> District 7 Sycamore Lane North Haven, CT 06473 Len.Fasano@po.state.ct.us	
Party (approved on 7/13/04)	City of New Haven	Elizabeth Gilson, Esq. 383 Orange Street New Haven, CT 06511 (203) 777-4050 (203) 787-3259 – fax egilson@snet.net

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (approved 7/13/04)	Branford Conservation and Environment Commission	Karyl Lee Hall, Esq. Co-Chairman Branford Conservation & Environment Comission c/o Box 3072 Branford, CT 06405 860-262-5044 Karylleehall1@aol.com
Party (approved 07/13/04)	Town of Branford	Honorable John E. Opie, First Selectman Branford Town Hall P.O. Box 150, Town Hall Branford, CT 06405 (203) 488-8394 jopie@branford-ct.gov
Party (approved as intervenor on 08/26/04- changed on 01/19/05)	Linda Wilson	Sebastian N. Giuliano, Esq. Giuliano, Rafala & Scalora P.O. Box 820 Middletown, CT 06457-0820 (860) 344-9045 (860) 344-8397 fax Robert Hoff, Esq. Reid and Riege, P.C. One Financial Plaza Hartford, CT 06103 (860) 278-1150 (860) 240-1002 RHoff@ReidandRiege.com TArmstrong@ReidandRiege.com

Status Granted	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Intervenor (approved on 8/26/04)	The Honorable Kevin M. DelGobbo, Ranking Member Energy and Technology Committee Legislative Office Building, Room 3904 Hartford, CT 06106-1591 (860) 240-8700 (860) 240-0207 fax Kevin.delgobbo@housegop.state.ct.us	
Party (approved as intervenor on 12/21/04 – changed on 01/19/05 to party)	Ralph E. Wilson, Allison Wilson, and the South Main Street Irrevocable Trust	Sebastian N. Giuliano, Esq. Giuliano, Rafala & Scalora P.O. Box 820 Middletown, CT 06457-0820 (860) 344-9045 (860) 344-8397 fax Robert Hoff, Esq. Reid and Riege, P.C. One Financial Plaza Hartford, CT 06103 (860) 278-1150 (860) 240-1002 RHoff@ReidandRiege.com TArmstrong@ReidandRiege.com

Docket No. 272

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

# APPENDIX C

# PROPOSED GENERAL TRAFFIC MAINTENANCE AND CONTROL PLAN

# (DETAIL DRAWINGS ARE SHOWN AS APPENDIX D)

Docket No. 272

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

#### Traffic Management Plan

Reference is made in this Traffic Management Plan to Sections or Articles of the Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816, dated 2004 and any subsequent Supplemental Specifications to the Standard Specifications. Reference is designated by the abbreviation "CDOT – Form 816". The referenced Section, Article or Sub article along with title may follow the abbreviation CDOT – Form 816. Modifications may include additions, deletions, corrections and changes. Copies of CDOT Form 816 may be purchased from:

Connecticut Department of Transportation Manager of Contracts P.O. Box 317546 2800 Berlin Turnpike Newington, CT 06131-7546

Within the CDOT – Form 816 Standard Specifications and wherever the following terms are used they shall mean, respectively:

<u>CDOT – Form 816 or</u> Contract Documents term	Meaning Herein	
State, Department	State of Connecticut Department of Transportation (CDOT)	
Owner	The United Illuminating Company (UI)	
Engineer	Design Representative of the Owner	
Inspector	Construction Representative of the Owner	
Laboratory	Laboratory designated by the Owner	
Contractor	Contractor hired by the Owner	

All work under this contract shall follow and be constructed in conformance with CDOT – Form 816 except as amended herein.

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

#### Note:

This specification is to be used with the Maintenance and Protection of Traffic drawings to form a composite Traffic Management Plan.

#### **General Work Rules**

The Contractor shall conduct the work with as little interference as possible to traffic, and the work of other Contractors. Whenever it is necessary to cross, obstruct, or close roads, driveways, parking areas and walks, the Contractor shall provide and maintain suitable and safe bridges, detours, or other temporary expedients at his own expense. The Contractor shall follow the direction of all Special Provisions, CDOT Standards, the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD) and approved Site Specific Maintenance and Protection of Traffic Plans (M&PT) allowing for traffic management as shown in the Contract Drawings.

During daily allowable active work periods, the Contractor shall establish, at minimum, an alternating one-way traffic operation following the appropriate MUTCD Construction Traffic Control Plan. In areas where the construction duration will exceed the daily allowable work hours and plating limits, (such as for the installation of the Splicing Chambers), the Contractor shall follow the Site Specific M&PT Plans that allow for traffic management generally as shown in the Contract Drawings.

The Project will require sidewalk pedestrian traffic to be maintained with directional signs to re-direct pedestrian traffic away from work areas during construction.

All operations which will present a hazard to traffic, both pedestrian and vehicular, shall be suitably protected by use of a combination of barrier curbs, barricades, impact attenuators, traffic drums, warning lights and temporary pavement markings. Installation and maintenance of all traffic control patterns, safety and warning equipment shall be according to the guidelines from the governing authority and following MUTCD standards all at the Contractor's expense.

#### **Temporary Plating of Trench**

The Contractor shall maintain traffic and access to driveways, parking facilities, sidewalks, walkways, and similar facilities to minimize inconvenience to the public. Temporary steel plates shall be utilized to

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maintain access where necessary, and with the permission of the governing authority. CDOT regulations include but are not limited to:

- For trench wider than 3' a Professional Engineer licensed in the State of Connecticut must approve design and support system.
- The maximum covered trench length is 300'.
- If the trench depth is more than 3', sidewall shoring must be used.
- Plates must have a permanent slip-resistant surface.
- Plates may be used from March 15 to the day before Thanksgiving subject to plate removal and trench patching within 24 hours of receipt of notification from CDOT that a significant winter weather event is anticipated. The use of steel plates may be resumed upon completion of storm clean-up activities.
- Plates may be used in intersections, but may not be used within 100 feet of a stop sign or stop bar approaching any intersection.
- If steel plates are needed within 100 feet of a stop sign or stop bar, they shall be buried and paved over or other skid-resistant means approved by the governing authority.

#### Notification

The Contractor shall notify the Police, Fire and local governing authorities at least 24 hours in advance setting up maintenance and protection of traffic.

A minimum of 24 hours advance notice to the Connecticut Department of Transportation and local governing authorities is required before impacting critical intersections on State and local roads.

A ten (10) day minimum notice to the Connecticut Department of Transportation and governing local authorities is required for all State and local road detours.

The Contractor will submit any revisions to the proposed M&PT Plans or any other traffic related changes to the CDOT (on State roads) or municipal officials (on City roads) for review and approval at least thirty (30) days prior to implementation.

The Contractor will notify each abutter at least 24 hours in advance of the start of any work that will require the temporary closure of access.

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

The Contractors work schedule should be coordinated on a daily basis, with at a minimum: CDOT inspection personnel, the Bridgeport and Stratford Traffic Operations Center, and local police and fire departments.

The Contractors work schedule shall be made available on a weekly basis to other impacted road users and local officials, such as: local elected officials, public works personnel, emergency service providers, hospitals, public transit providers, Board of Education transportation coordinators, US Postal Service, etc.

#### **Time Restrictions and Allowable Traffic Impacts**

The Contractor can work within roadways and impact traffic operations during the approved daily allowable work hours allowed by the State and local government agencies having authority and following CDOT standards and the latest edition of the MUTCD. The daily allowable work hours shall generally apply for short-duration construction operations such as trenching and installation of the duct bank. Where construction of facilities, such as the splicing chambers, will have a longer duration the Contractor shall provide Traffic Management measures generally as shown on the site specific M&PT plans as shown in the Contract Drawings.

#### **Daily Allowable Active Work Hours and Traffic Impacts**

#### State of Connecticut Roadways:

#### Water Street (Route 130), Stratford Avenue (Route 130)

The Contractor shall maintain and protect the existing number of lanes of traffic, including turning lanes at intersections, each lane on a paved travel path not less than 11 feet in width.

Except between <u>7:00 P.M. and 6:00 A.M. from Sunday evening through</u> <u>Friday morning</u>, subject to CDOT final approval, when the Contractor is actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

During this period, the Contractor will be allowed to halt traffic for a period not to exceed ten minutes. The Contractor shall allow all stored vehicles to proceed through the work area before halting traffic for another tenminute period.

The Contractor's construction equipment shall not obstruct sight lines at intersecting roadways and drives.

The Contractor shall not leave construction materials or equipment on the State right-of-way during non-working hours.

### Barnum Avenue (U.S. Route 1)

The Contractor shall maintain and protect the existing number of lanes of traffic, including turning lanes at intersections, each lane on a paved travel path not less than 11 feet in width.

#### From Boston Avenue (U.S. Route 1) to Nichols Avenue (Route 108)

Except between <u>9:00 P.M. and 6:00 A.M. from Sunday evening through</u> <u>Friday morning</u>, subject to CDOT final approval, when the Contractor is actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

#### From Nichols Avenue (Route 108) to Longbrook Avenue

Except between <u>10:00 P.M. and 6:00 A.M. from Sunday evening through</u> <u>Friday morning</u>, subject to CDOT final approval, when the Contractor is actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

#### From Long Brook Avenue to East Main Street (Route 110)

Except between <u>8:30 P.M. and 6:00 A.M. from Sunday evening through</u> <u>Friday morning</u>, subject to CDOT final approval, when the Contractor is

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

During these periods, the Contractor will be allowed to halt traffic for a period not to exceed ten minutes. The Contractor shall allow all stored vehicles to proceed through the work area before halting traffic for another ten-minute period.

The Contractor's construction equipment shall not obstruct sight lines at intersecting roadways and drives.

The Contractor shall not leave construction materials or equipment on the State right-of-way during non-working hours.

Barnum Avenue (Route 1) acts as a back-up artery for I-95. In the event of a major accident on I-95 the Contractor will immediately halt all construction activities affecting traffic and restore all travel lanes that had been closed.

#### City of Bridgeport Roadways:

# Main Street; Ferry Access Boulevard; Noble Avenue; Barnum Avenue

The Contractor shall maintain and protect the existing number of lanes of traffic, including turning lanes at intersections, each lane on a paved travel path not less than 11 feet in width.

Except between <u>9:00 A.M. and 4:00 P.M.</u>, and additionally between <u>7:00</u> <u>P.M. and 6:00 A.M. in designated Commercial/Industrial areas subject to</u> <u>City final approval</u>, when the Contractor is actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

During this period, the Contractor will be allowed to halt traffic for a period not to exceed ten minutes. The Contractor shall allow all stored vehicles to proceed through the work area before halting traffic for another tenminute period.

The Contractor's construction equipment shall not obstruct sight lines at intersecting roadways and drives.

The Contractor shall not leave construction materials or equipment on the State and Municipal right-of-way during non-working hours.

#### Town of Stratford Roadways:

#### Barnum Avenue

The Contractor shall maintain and protect the existing number of lanes of traffic, including turning lanes at intersections, each lane on a paved travel path not less than 11 feet in width.

Except between <u>9:00 A.M. and 4:00 P.M.</u>, and additionally between <u>7:00</u> <u>P.M. and 6:00 A.M. in designated Commercial/Industrial areas subject to</u> <u>Town final approval</u>, when the Contractor is actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

During this period, the Contractor will be allowed to halt traffic for a period not to exceed ten minutes. The Contractor shall allow all stored vehicles to proceed through the work area before halting traffic for another tenminute period.

The Contractor's construction equipment shall not obstruct sight lines at intersecting roadways and drives.

The Contractor shall not leave construction materials or equipment on the State and Municipal right-of-way during non-working hours.

#### All Other Roadways:

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

The Contractor shall maintain and protect one lane of through traffic in each direction and turning lanes at intersections, each lane on a paved travel path not less than 11 feet in width.

Except during the approved work hours for the associated roadway, or during hours approved by the governing authority, when the Contractor is actively working, at which time the Contractor will be allowed to maintain and protect at least an alternating one-way traffic operation on a paved travel path not less than 11 feet in width. The length of the alternating one-way traffic operation shall not exceed 300 feet. When more than one alternating one-way traffic operation is in place at the same time, there shall be at least one mile between signing patterns.

During this period, the Contractor will be allowed to halt traffic for a period not to exceed ten minutes. The Contractor shall allow all stored vehicles to proceed through the work area before halting traffic for another tenminute period.

The Contractor's construction equipment shall not obstruct sight lines at intersecting roadways and drives.

The Contractor shall not leave construction materials or equipment on the State and Municipal right-of-way during non-working hours.

#### Night Work

The entity having jurisdiction over the roadway must approve all requests to work at night.

During night work, existing roadway lighting must be maintained. Temporary lighting may have to be installed.

#### Other Work Stipulations

The Contractor will not be allowed to perform work that will interfere with existing traffic flows on any streets during the following periods:

#### On the following State observed Legal Holidays:

New Year's Day\* Good Friday, Easter\*\*\* Memorial Day\* Independence Day\* Labor Day\*

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Columbus Day Thanksgiving Day\*\* Christmas Day\*

A Holiday marked with an \* also designates the following restrictions:

On the day before and the day after any of the above Legal Holidays.

On the Friday, Saturday and Sunday immediately preceding any of the above Holidays celebrated on a Monday.

On the Saturday, Sunday and Monday immediately following any of the above Holidays celebrated on a Friday.

\*\* From 6:00 a.m. the Wednesday before the Holiday to 8:00 p.m. the Monday after the Holiday.

\*\*\* From 6:00 p.m. the Thursday before the Holiday to 8:00 p.m. the Monday after the Holiday.

#### **Commercial and Residential Driveways**

The Contractor shall maintain access to and egress from all commercial and residential driveways throughout the project limits. The Contractor will be allowed to close driveways to perform the required work during those periods when the businesses are closed unless permission is granted from the business owner to close the driveway during business hours. If a temporary closure of a residential driveway is necessary, the Contractor shall coordinate with the owner to determine the time period of the closure.

All cones will be approximately placed and moved as necessary to maintain adequate abutter access at all times. Work may require additional signs, cones, drums and other traffic control devices, grading and temporary pavement for passage of pedestrian, vehicular and emergency traffic through the work areas, both during and after work hours, to maintain such access.

#### Materials

All barrier curbs, barricades, impact attenuators, traffic drums, warning lights and temporary pavement markings shall conform to the CDOT standards. Installation of safety and warning equipment shall be sufficient

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to comply with the latest edition of the MUTCD and to the satisfaction of the United Illuminating Company.

#### **Traffic Signals**

The Contractor shall keep each traffic signal in the project limits operational at all times during construction. Operational shall mean operating in a manner similar to its operation prior to the commencement of work.

Vehicle loop detectors and system detectors damaged during construction operations shall be replaced within twenty-four (24) hours. If it is anticipated that detectors cannot be restored within twenty-four (24) hours, the Contractor shall first install temporary video or microwave detection and make them operable prior to disturbing the existing detectors. Temporary detection shall remain operable until such time that the detectors can be restored. Use of a traffic signal contractor on stand-by duty during new construction activities shall be provided. The specification for Camera Video Detection System is included in this Appendix.

The Contractor shall coordinate all work with the responsible Municipal Traffic Engineer or CDOT District Engineer as the case may be.

#### Signing

The Contractor shall maintain all existing signs throughout the project limits during the duration of the project. The Contractor shall temporarily relocate any existing signs that are impacted during construction. Once construction has been completed, the Contractor shall re-install the signs to their original locations. Any signs or supports damaged during construction must be replaced by the Contractor at no additional charge.

#### **Requirements for Winter**

The Contractor shall schedule a meeting with representatives of the Engineer, Maintenance and Traffic authorities to determine what interim traffic control measures the Contractor must accomplish for the winter to provide safety to the motorist and permit adequate snow removal procedures.

#### **Signing Patterns**

The Contractor shall erect and maintain all signing patterns in accordance with the latest edition of the MUTCD and M&PT Plans contained herein. All sign patterns shall follow MUTCD guidelines. No sign shall obscure any existing traffic sign or any other signs.

All non-essential temporary construction traffic control devices will be covered or removed during non-working hours.

All flaggers shall be in accordance with the requirements under Section 9.74 "Trafficperson" in the State of Connecticut Department of Transportation Standard Specifications for Roads, Bridges and Incidental Construction, Form 816 and shall have completed training through ATSSA (American Traffic Safety Services Association) or other organizations, as approved by CDOT.

The Contractor shall have at least one person trained as a work zone safety supervisor through ATSSA, or other organization approved by CDOT.

#### **Restoration of Traffic Facilities**

All traffic facilities and equipment shall be restored as follows:

Guide rail and appurtenances shall conform to Sections 9.10, 9.11, 9.12 and 9.18 of the CDOT Form 816.

Traffic Signals and appurtenances shall conform to Sections 10.01, 10.02, 10.08, 10.10, 10.012, 11.05, 11.06, 11.07, 11.08, 11.11 and 11.12 of the CDOT Form 816.

All permanent pavement markings shall be Epoxy Resin and shall conform to standards in Section 12.10 of the CDOT Form 816.

All temporary pavement markings shall be Plastic Pavement Marking Tape and shall conform to standards in Section 12.12 of the CDOT Form 816.

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All permanent signs shall conform to standards in Sections 12.07 and 12.08 of the CDOT Form 816.

All construction signs shall conform to standards in Section 12.20 of the CDOT Form 816.

Other Surfaces – restore all sidewalks, ramps, curbs etc. to "as-new" condition.

#### Supplemental Information

The following CDOT Guidelines shall apply to all State and Municipal roadways as part of this Traffic Management Plan:

#### **Pavement Markings -Non-Limited Access Multilane Roadways**

#### Secondary and Local Roadways

During construction, the Contractor shall maintain all pavement markings on paved surfaces on all roadways throughout the limits of the project.

#### **Interim Pavement Markings**

The Contractor shall install plastic pavement marking tape which shall include centerlines, shoulder edge lines, lane lines (broken lines), laneuse arrows, and stop bars, on each intermediate course of bituminous concrete pavement and on any milled surface by the end of the work day/night. Centerlines shall consist of two 4 inch wide yellow markings, 2 feet in length, side by side, 4 to 6 inches apart, at 40-foot intervals, or as shown on the Contract Drawings. No passing zones should be posted with signs in those areas where the final centerlines have not been established on two-way roadways. Stop bars may consist of two 6 inch wide white markings or three 4 inch wide white markings placed side by side. If the next course of bituminous concrete pavement will be placed within seven days, shoulder edge lines are not required. The Contractor shall remove and dispose of the Temporary Plastic Pavement Marking Tape when another course of bituminous concrete pavement is installed. The cost of furnishing, installing and removing the Temporary Plastic Pavement Marking Tape shall be at the Contractor's expense.

If an intermediate course of bituminous concrete pavement will be exposed throughout the winter, then Epoxy Resin Pavement Markings should be installed unless directed otherwise by the Engineer.

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#### **Final Pavement Markings**

In accordance with Section 12.10 of CDOT Form 816 entitled "Epoxy Resin Pavement Markings, Symbols, and Legends," the Contractor should install permanent Epoxy Resin Pavement Markings on the final course of bituminous concrete pavement by the end of the work day/night. If the permanent pavement markings are not installed by the end of the work day/night, then Temporary Plastic Pavement Marking Tape shall be installed as described above and the permanent Epoxy Resin Pavement Markings shall be installed by the end of the work day/night on Friday of that week.

If Temporary Plastic Pavement Marking Tape is installed, the Contractor shall remove and dispose of these markings when the permanent Epoxy Resin Pavement Markings are installed. The cost of furnishing, installing and removing the Temporary Plastic Pavement Marking Tape shall be at the Contractor's expense.

NOTE: Painted pavement markings will not be allowed as a substitution for either the permanent Epoxy Resin Pavement Markings or the Temporary Plastic Pavement Marking Tape on the final course of bituminous concrete pavement.

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### **Traffic Control During Construction Operations**

The following guidelines shall assist field personnel in determining when and what type of traffic control patterns to use for various situations. These guidelines shall provide for the safe and efficient movement of traffic through work zones and enhance the safety of work forces in the work area.

The Contractor shall use CDOT typical traffic control plans at all locations during normal approved hours of work.

At the following locations, the Contractor shall follow the M&PT plans included in the Contract Drawings:

Crossing	Station Numbers
Horizontal Directional Drill –	STA. 56 to STA 64
Pequonnock River	
Jack and Bore – Yellow Mill	STA. 114+25 to STA 114+95
Creek	
Jack and Bore – Bruce Brook	STA. 159+10 to STA 159+80,
	STA. 160+75 to STA 161+55
Jack and Bore – Long Brook	STA. 240+45 to STA 241+15

**TRAFFIC CONTROL PATTERNS:** Traffic control patterns shall be used when a work operation requires that all or part of any vehicle or work area protrudes onto any part of a travel lane or shoulder. For each situation, the installation of traffic control devices shall be based on the following:

Speed and volume of traffic Duration of operation Exposure to hazards

Traffic control patterns shall be uniform, neat and orderly so as to command respect from the motorist.

In the case of a horizontal or vertical sight restriction in advance of the work area, the traffic control pattern shall be extended to provide adequate sight distance for approaching traffic.

If a lane reduction taper is required to shift traffic, the entire length of the taper should be installed on a tangent section of roadway so that the entire taper area can be seen by the motorist.

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Any existing signs that are in conflict with the traffic control patterns shall be removed, covered, or turned so that they are not readable by oncoming traffic.

When installing a traffic control pattern, a Buffer Area should be provided and this area shall be free of equipment, workers, materials and parked vehicles.

Typical traffic control plans shown on the Maintenance and Protection of Traffic Plans and Details which are part of this appendix may be used for moving operations such as line striping, pot hole patching, mowing, or sweeping when it is necessary for equipment to occupy a travel lane.

Traffic control patterns will not be required when vehicles are on an emergency patrol type activity or when a short duration stop is made and the equipment can be contained within the shoulder. Flashing lights and appropriate trafficpersons shall be used when required.

Although each situation must be dealt with individually, conformity with the typical traffic control plans contained herein is required. In a situation not adequately covered by the typical traffic control plans, the Contractor must contact the Engineer for assistance prior to setting up a traffic control pattern.

**PLACEMENT OF SIGNS:** Signs must be placed in such a position to allow motorists the opportunity to reduce their speed prior to the work area. Signs shall be installed on the same side of the roadway as the work area. On multi-lane divided highways, advance warning signs may be installed on both sides of the highway. On directional roadways (on-ramps, off-ramps, one-way roads), where the sight distance to signs is restricted, these signs should be installed on both sides of the roadway.

#### Allowable Adjustment of Signs and Devices Shown on the Traffic Control Plans

The traffic control plans contained herein show the location and spacing of signs and devices under ideal conditions. Signs and devices should be installed as shown on these plans whenever possible.

The proper application of the traffic control plans and installation of traffic control devices depends on actual field conditions.

Adjustments to the traffic control plans shall be made only at the direction of the Engineer to improve the visibility of the signs and devices and to better control traffic operations. Adjustments to the traffic control plans shall be based on safety of work forces and motorists, abutting property requirements, driveways, side roads, and the vertical and horizontal curvature of the roadway.

The Engineer may require that the traffic control pattern be located significantly in advance of the work area to provide better sight line to the signing and safer traffic operations through the work zone.

Table I indicates the minimum taper length required for a lane closure based on the posted speed limit of the roadway. These taper lengths shall only be used when the recommended taper lengths shown on the traffic control plans cannot be achieved.

POSTED SPEED LIMIT	MINIMUM TAPER LENGTH IN FEET
MILES PER HOUR	FOR A SINGLE LANE CLOSURE
30 OR LESS	180
35	250
40	320
45	540
50	600
55	660
65	780

## TABLE I – MINIMUM TAPER LENGTHS

## SECTION 1. WORK ZONE SAFETY MEETINGS

- 1.a) Prior to the commencement of work, a work zone safety meeting will be conducted with representatives of CDOT and/or Municipal Traffic Authority, Owner, Engineer, Municipal Police, the Contractor (Project Superintendent) and the Traffic Control Subcontractor (if different than the prime Contractor) to review the contract requirements and discuss the procedures. Other work zone safety meetings during the course of the project should be scheduled as needed.
- 1.b) A Work Zone Safety Meeting Agenda, shall be developed and used at the meeting to outline the anticipated traffic control issues during the construction of this project. Any issues that can't be resolved at these meetings will be brought to the attention of the Owner, CDOT and/or Municipal Traffic Authority.

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### SECTION 2. INSTALLING AND REMOVING TRAFFIC CONTROL PATTERNS

- 2.a) Lane Closures shall be installed beginning with the advanced warning signs and proceeding forward toward the work area.
- 2.b) Lane Closures shall be removed in the reverse order, beginning at the work area, or end of the traffic control pattern, and proceeding back toward the advanced warning signs.
- 2.c) Stopping traffic may be allowed:
  - As per the contract for such activities as blasting, steel erection, etc.
  - During paving, milling operations, etc. where, in the middle of the operation, it is necessary to flip the pattern to complete the operation on the other half of the roadway and traffic should not travel across the longitudinal joint or difference in roadway elevation.
  - To move slow moving equipment across live traffic lanes into the work area.
- 2.d) Under certain situations when the safety of the traveling public and/or that of the workers may be compromised due to conditions such as traffic volume, speed, roadside obstructions, or sight line deficiencies, as determined by the Engineer and/or Police, traffic may be briefly impeded while installing and/or removing the advanced warning signs and the first ten traffic cones/drums only. Appropriate measures shall be taken to safely slow traffic. If required, Police may use traffic slowing techniques, including the use of Truck Mounted Impact Attenuators (TMAs) as appropriate, for a minimum of one mile in advance of the pattern starting point. Once the advanced warning signs and the first ten traffic cones/drums are installed/removed, the two TMAs and sign crew should continue to install/remove the pattern as described in Section 4c and traffic shall be allowed to resume their normal travel.
- 2.e) The Contractor must adhere to using the proper signs, placing the signs correctly, and ensuring the proper spacing of signs.
- 2.f) Additional devices are required on entrance ramps, exit ramps, and intersecting roads to warn and/or move traffic into the proper travelpath prior to merging/exiting with/from the main line traffic. This shall be completed before installing the mainline pattern past the ramp or intersecting roadway.

- 2.g) Prior to installing a pattern, any conflicting existing signs shall be covered with an opaque material. Once the pattern is removed, the existing signs shall be uncovered.
- 2.h) On limited access roadways, workers are prohibited from crossing the travel lanes to install and remove signs or other devices on the opposite side of the roadway. Any signs or devices on the opposite side of the roadway shall be installed and removed separately.

### SECTION 3. USE OF HIGH MOUNTED INTERNALLY ILLUMINATED FLASHING ARROW

- 3.a) On limited access roadways, one Flashing Arrow shall be used for each lane that is closed. The Flashing Arrow shall be installed concurrently with the installation of the traffic control pattern and its placement shall be as shown on the traffic control plan. For multiple lane closures, one Flashing Arrow is required for each lane closed. If conditions warrant, additional Flashing Arrows should be employed (i.e.: curves, major ramps, etc.).
- 3.b) On non-limited access roadways, the use of a Flashing Arrow for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the Flashing Arrow.
- 3.c) The Flashing Arrow shall not be used on two lane, two-way roadways for temporary alternating one-way traffic operations.
- 3.d) The Flashing Arrow board display shall be in the "arrow" mode for lane closures and in the "caution" mode for shoulder work, blocking the shoulder, or roadside work near the shoulder. The Flashing Arrow shall be in the "caution" mode when it is positioned in the closed lane.
- 3.e) The Flashing Arrow shall not be used on a multi-lane roadway to laterally shift all lanes of traffic, because unnecessary lane changing may result.
- 3.f) If the required number of Flashing Arrows is not available, the traffic control pattern <u>shall not</u> be installed.

## SECTION 4. USE OF TRUCK MOUNTED IMPACT ATTENUATOR VEHICLES (TMAS)

4.a) For lane closures on limited access roadways, a minimum of two TMAs shall be used to install and remove traffic control patterns. If two TMAs are not available, the pattern shall not be installed.

- 4.b) On non-limited access roadways, the use of TMAs to install and remove patterns closing a lane(s) is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to utilize the TMAs.
- 4.c) Generally, to establish the advance and transition signing, one TMA shall be placed on the shoulder and the second TMA shall be 1000 feet ahead blocking the lane. The sign truck and workers should be immediately ahead of the second TMA. In no case shall the TMA blocking the lane be used as the sign truck. Once the transition is in place, both TMAs shall travel in the closed lane until all Changeable Message Signs (CMS), signs, Flashing Arrows, and cones/drums are installed.
- 4.d) A TMA shall be placed prior to the first work area in the pattern. If there are multiple work areas within the same pattern, then additional TMAs may be positioned at each additional work area as needed.
- 4.e) TMAs shall be positioned a sufficient distance prior to the workers or equipment being protected to allow for appropriate vehicle roll-ahead in the event that the TMA is hit, but not so far that an errant vehicle could travel around the TMA and into the work area. For additional placement and use details, refer to the specification entitled "Type 'D' Portable Impact Attenuation System". Some operations, such as paving and concrete repairs, do not allow for placement of the TMA(s) within the specified distances. In these situations, the TMA(s) should be placed at the beginning of the work area and shall be advanced as the paving or concrete operations proceed.
- 4.f) TMAs should be paid in accordance with how the unit is utilized. When it is used as a TMA and is in the proper location as specified, then it should be paid at the specified hourly rate for "Type 'D' Portable Impact Attenuation System". When the TMA is used as a Flashing Arrow, it should be paid at the daily rate for "High Mounted Internally Illuminated Flashing Arrow". If a TMA is used to install and remove a pattern and then is used as a Flashing Arrow, the unit should be paid as a "Type 'D' Portable Impact Attenuation System" for the hours used to install and remove the pattern, typically 2 hours (1 hour to install and 1 hour to remove), and is also paid for the day as a "High Mounted Internally Illuminated Flashing Arrow".
- 4.g) If the required number of TMAs is not available, the pattern <u>shall not</u> be installed.

# **SECTION 5. USE OF POLICE OFFICERS**

Uniformed Municipal Police Officers shall be used as Trafficpersons on all non limited access highways as outlined in CDOT Form 816 and as required by the governing authority.

- 5.a) At least one Officer should be used per critical sign pattern. Shoulder closures and right lane closures can generally be implemented without the presence of a Police Officer. Likewise in areas with moderate traffic and wide, unobstructed medians, left lane closures can be implemented without Police presence. Certain situations may require Police presence, if one is available, even though the general guidelines above indicate otherwise. Examples of this include: nighttime lane closures; left lane closures with minimal width for setting up advance signs and staging; lane and shoulder closures on turning roadways/ramps or mainline where sight distance is minimal; and closures where extensive turning movements or traffic congestion regularly occur.
- 5.b) Once the pattern is in place, the Police Officer should be positioned in a non- hazardous location at the beginning of the pattern or at one of the work areas not protected by a TMA. If traffic backs up beyond the beginning of the pattern, then the Police Officer should be repositioned prior to the backup to give warning to the oncoming motorists. Where Police Officer and TMA are in proximity to each other, the TMA should be placed to protect the Police Officer's vehicle from oncoming traffic.
- 5.c) Other functions of the Police Officer(s) shall include:
  - \*Assisting entering/exiting construction vehicles within the work area.
  - \*Enhancing worker visibility/safety for workers in close proximity to the open travel lane(s).
  - Speed control of traffic within the work area.
  - Enforcement of speed and other motor vehicle laws within the work area.

Typically, the Police Officer should be out of the vehicle for the functions marked with an asterisk (\*).

### SECTION 6. USE OF (REMOTE CONTROL) CHANGEABLE MESSAGE SIGNS

- 6.a) For lane closures on limited access roadways, one Changeable Message Sign shall be used in advance of the traffic control pattern. Prior to installing the pattern, the Changeable Message Sign shall be installed and in operation, displaying the appropriate lane closure information (i.e.: Left Lane Closed Merge Right). The Changeable Message Sign shall be positioned ½ 1 mile ahead of the lane closure taper. If the nearest Exit ramp is greater than the specified ½ 1 mile distance, then an additional Changeable Message Sign shall be positioned a sufficient distance ahead of the Exit ramp to alert motorists of the lane closure and provide them an opportunity to take the exit.
- 6.b) On non-limited access roadways, the use of Changeable Message Signs for lane closures is optional. The roadway geometry, sight line distance, and traffic volume should be considered in the decision to use the Changeable Message Sign.
- 6.c) The advance Changeable Message Sign is typically placed off the right shoulder, 5 feet from the edge of pavement. In areas where the Changeable Message Sign cannot be placed beyond the edge of pavement, it may be placed on the paved shoulder with a minimum of five (5) traffic drums placed in a taper in front of it to delineate its position. The advance Changeable Message Sign shall be adequately protected if it is used for a continuous duration of 36 hours or more.
- 6.d) When the Changeable Message Signs are no longer required, they should be removed from the clear zone and have the display screen cleared and turned 90° away from the roadway.
- 6.e) The Changeable Message Sign generally should not be used for generic messages (ex: Road Work Ahead, Bump Ahead, Gravel Road, etc.).
- 6.f) The Changeable Message Sign should be used for specific situations that need to command the motorist's attention which cannot be conveyed with standard construction signs (Examples include: Exit 34 Closed Sat/Sun - Use Exit 35, All Lanes Closed - Use Shoulder, Workers on Road - Slow Down).
- 6.g) Messages that need to be displayed for long periods of time, such as during staged as shown on the Contract Drawings construction, should be displayed with construction signs. For special signs, please coordinate with the Owner and the Engineer for the proper layout/dimensions required.

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- 6.h) Section 10 contains the messages that are allowed on the Changeable Message Sign. For any other message(s), approval must be received from the Office of Construction prior to their use. No more than two (2) displays shall be used within any message cycle.
- 6.i) If the required number of Changeable Message Signs is not available, the pattern shall not be installed.

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## SECTION 7. USE OF TRAFFIC DRUMS AND TRAFFIC CONES

- 7.a) Traffic drums shall be used for taper channelization on limited-access roadways, ramps, and turning roadways and to delineate raised catch basins and other hazards.
- 7.b) Traffic drums shall be used in place of traffic cones in traffic control patterns that are in effect for more than a 72-hour duration.
- 7.c) Traffic Cones less than 42 inches in height shall not be used on limited-access roadways or on non-limited access roadways with a posted speed limit of 45 mph and above.
- 7.d) Typical spacing of traffic drums and/or cones shown on the Traffic Control Plans in the Contract are maximum spacings and may be reduced to meet actual field conditions as required.

# SECTION 8. GENERAL

- 8.a) If the required minimum number of signs and equipment (i.e. one High Mounted Internally Illuminated Flashing Arrow for each lane closed, two TMAs, Changeable Message Sign, etc.) are not available, the traffic control pattern shall not be installed.
- 8.b) The Contractor shall have back-up equipment (TMAs, High Mounted Internally Illuminated Flashing Arrow, Changeable Message Sign, construction signs, cones/drums, etc.) available at all times in case of mechanical failures, etc. In the case of sudden equipment breakdowns, the pattern may be installed but the Contractor must provide replacement equipment within 24 hours.
- 8.c) Failure of the Contractor to have the required minimum number of signs and equipment, which results in the not being installed, shall not be a reason for a time extension.
- 8.d) In cases of legitimate differences of opinion between the Contractor and the Inspection staff, the Inspection staff shall err on the side of safety. The matter shall be brought to the Owner for resolution immediately or, in the case of work after regular business hours, on the next business day.

#### SECTION 9. UNUSED

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# SECTION 10. WORK ZONE SAFETY PROCEDURES - ALLOWABLE CMS MESSAGES

Message No	Frame 1	Frame 2 M	lessage No	Frame 1	Frame 2
1	LEFT LANE CLOSED	MERGE RIGHT	9	LANES CLOSED AHEAD	REDUCE SPEED
2	2 LEFT LANES CLOSED	MERGE RIGHT	10	LANES CLOSED AHEAD	USE CAUTION
3	LEFT LANE CLOSED	REDUCE SPEED	11	WORKERS ON ROAD	REDUCE SPEED
4	2 LEFT LANES CLOSED	REDUCE SPEED	12	WORKERS ON ROAD	SLOW DOWN
5	RIGHT LANE CLOSED	MERGE LEFT	13	EXIT XX CLOSED	USE EXIT YY
6	2 RIGHT LANES CLOSED	MERGE LEFT	14	EXIT XX CLOSED USE YY	FOLLOW DETOUR
7	RIGHT LANE CLOSED	REDUCE SPEED	15	2 LANES SHIFT AHEAD	USE CAUTION
8	2 RIGHT LANES CLOSED	REDUCE SPEED	16	3 LANES SHIFT AHEAD	USE CAUTION

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#### Notices to Contractor

### NOTICE TO CONTRACTOR – TRAFFIC DRUMS AND TRAFFIC CONES

Traffic Drums and 42-inch Traffic Cones shall have four six-inch wide stripes (two - white and two - orange) of flexible bright fluorescent sheeting.

The material for the stripes shall be one of the following, or approved equal:

- 3M Scotchlite Diamond Grade Flexible Work Zone Sheeting, Model 3910 for the white stripes and Model 3914 for the orange stripes,
- Avery Dennison WR-7100 Series Reboundable Prismatic Sheeting, Model WR-7100 for the white stripes and Model WR-7114 for the orange stripes.

### NOTICE TO CONTRACTOR – NCHRP REPORT 350 REQUIREMENTS FOR WORK ZONE TRAFFIC CONTROL DEVICES

# CATEGORY 1 DEVICES (traffic cones, traffic drums, tubular markers, flexible delineator posts)

Prior to using the Category 1 Devices on the project, the Contractor shall submit to the Engineer a copy of the manufacturer's self-certification that the devices conform to National Cooperative Highway Research Program (NCHRP) Report 350.

# CATEGORY 2 DEVICES (construction barricades, construction signs and portable sign supports)

Prior to using Category 2 Devices on the project, the Contractor shall submit to the Engineer a copy of the Letter of Acceptance issued by the Federal Highway Administration (FHWA) to the manufacturer documenting that the devices (both sign and portable support tested together) conform to NCHRP Report 350 (TL-3).

Specific requirements for these devices are included in the Special Provisions.

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

Information regarding NCHRP Report 350 devices may be found at the following web sites:

#### <u>FHWA:</u>

http://safety.fhwa.dot.gov/roadway\_dept/road\_hardware/index.htm

#### ATSSA:

http://www.atssa.com/resources/NCHRP350Crashtesting.asp

<u>NOTE</u>: The portable wooden sign supports that have been traditionally used by most contractors in the State of Connecticut do NOT meet NCHRP Report 350 criteria and shall not be utilized on any project advertised after October 01, 2000.

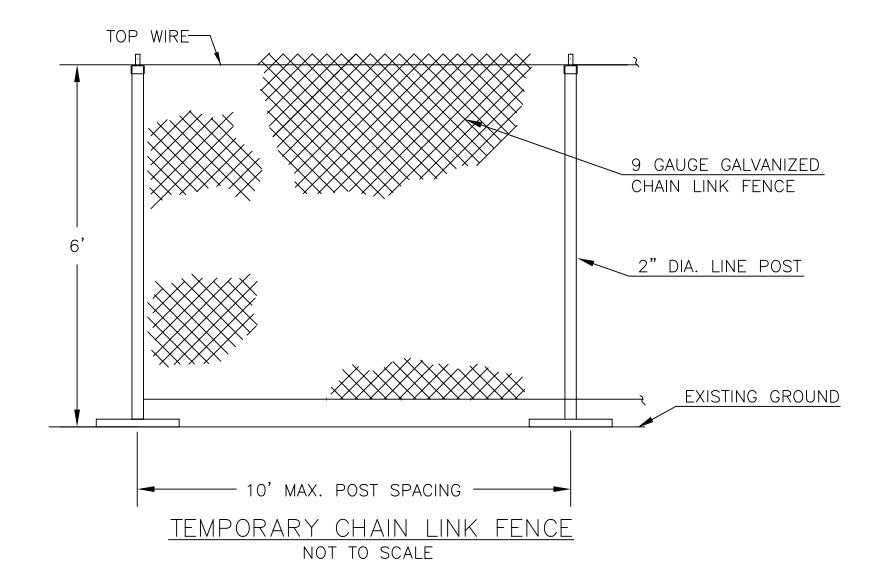
# CATEGORY 3 DEVICES (Truck-Mounted Attenuators & Work Zone Crash Cushions)

Prior to using Category 3 Devices on the project, the Contractor shall submit to the Engineer a copy of the Letter of Acceptance issued by the FHWA to the manufacturer documenting that the devices conform to NCHRP Report 350.

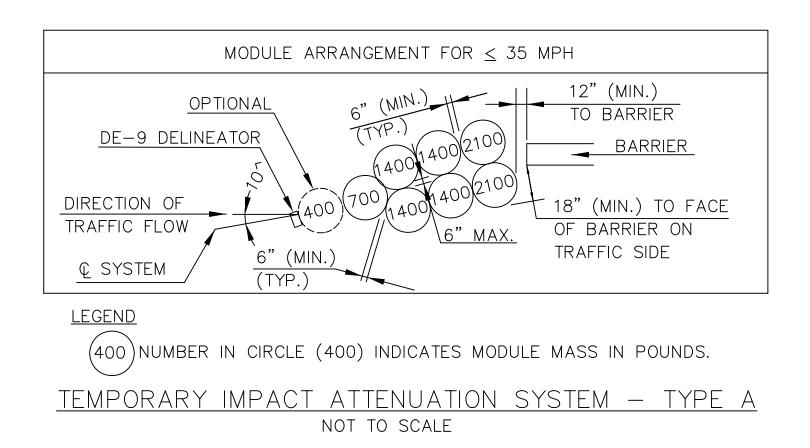
The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

# APPENDIX D

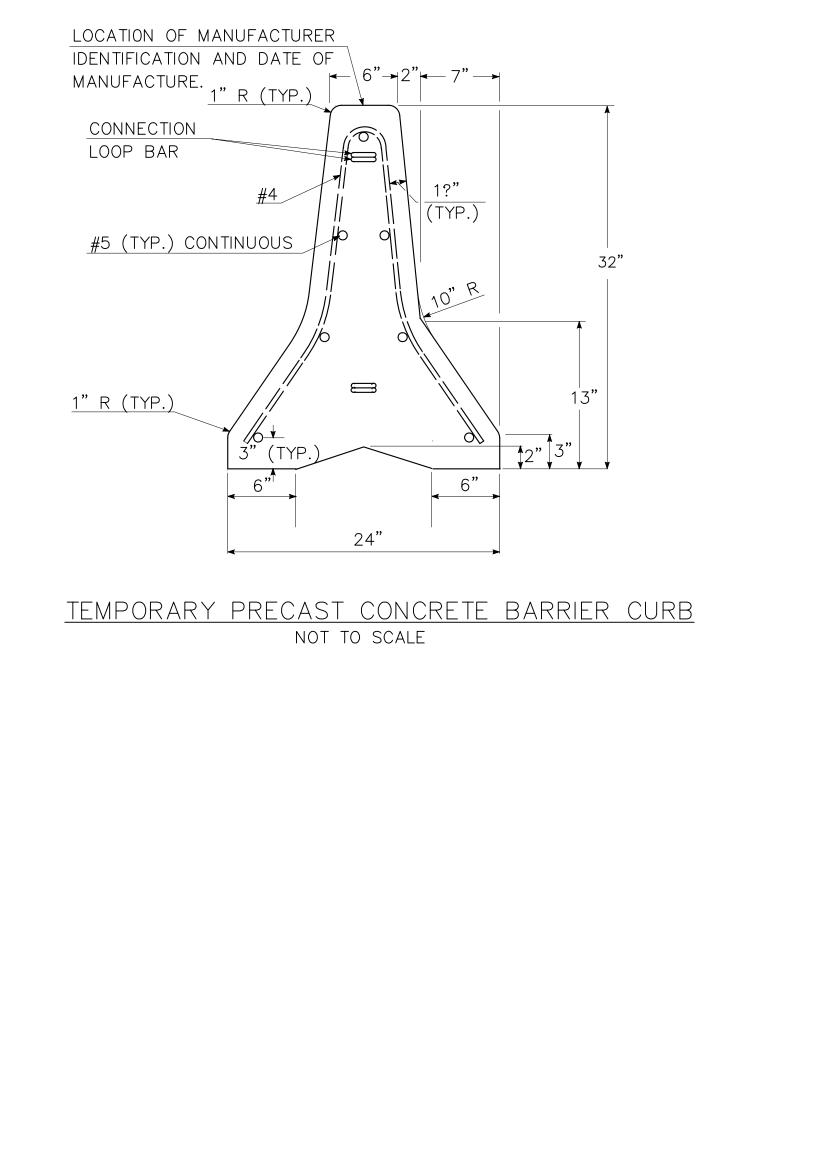
# PROPOSED TRAFFIC MAINTENANCE AND CONTROL PLAN DRAWINGS



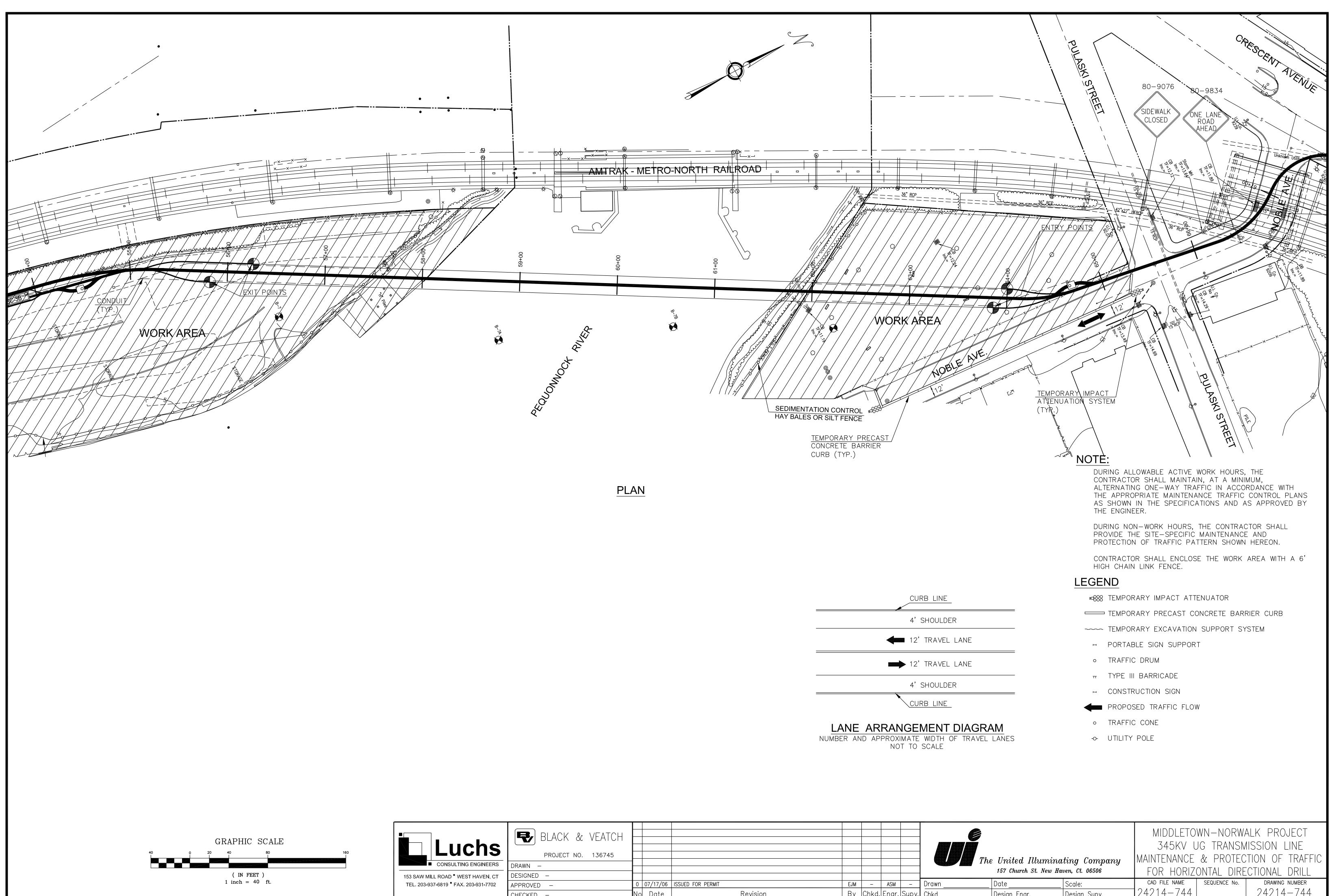




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WEST HAVEN, CT	DESIGNED –								
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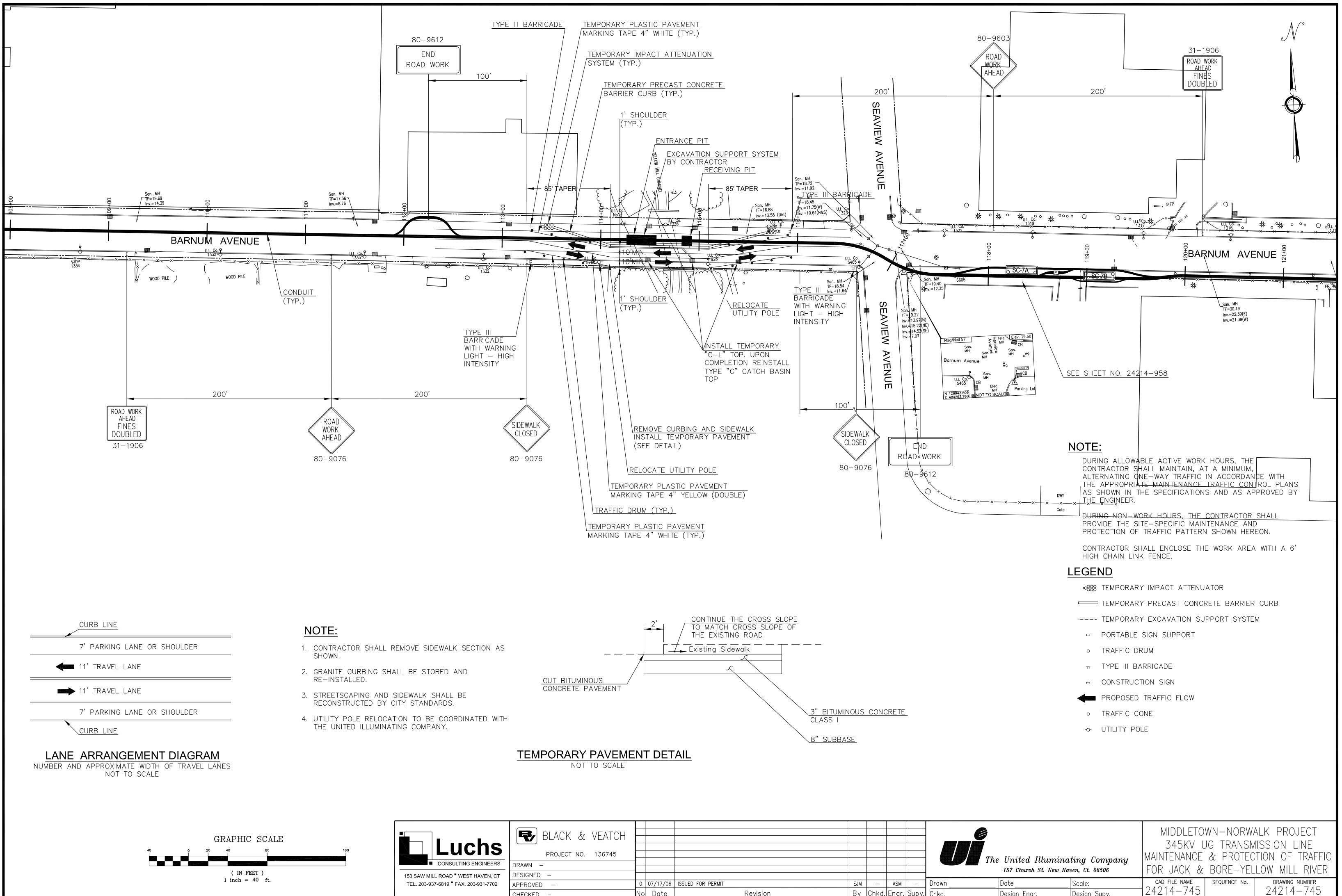


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d	Design Engr	Design Supv	<u>24214-743</u>		



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I	12'	TRAV
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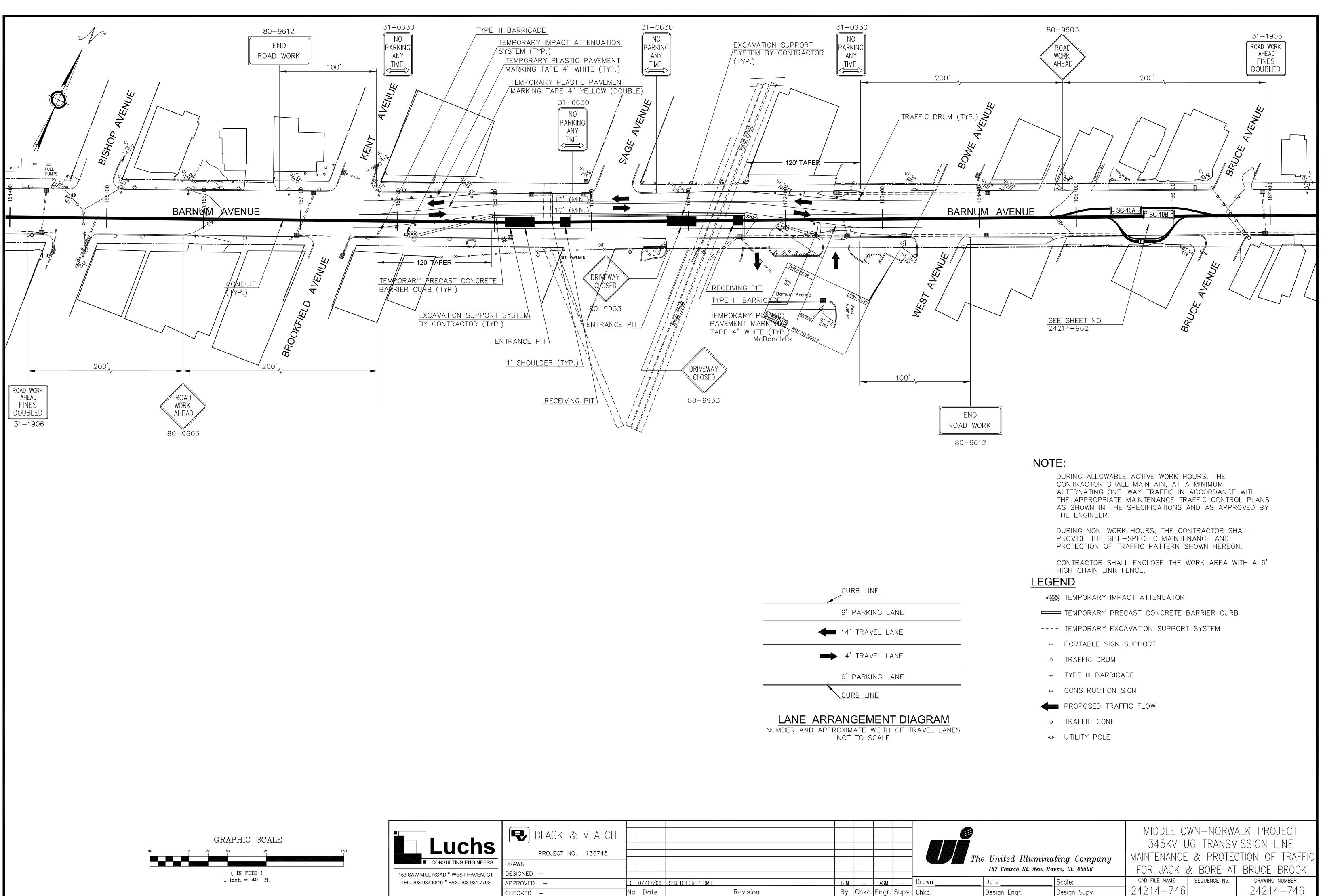
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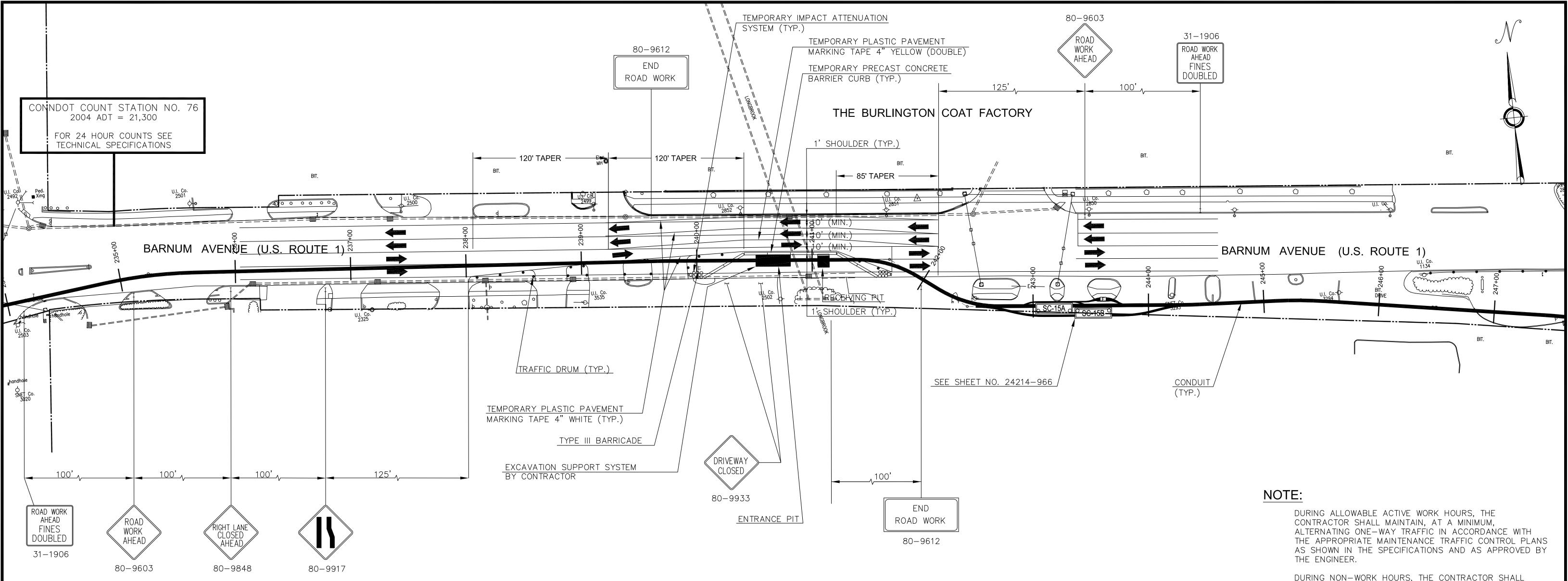
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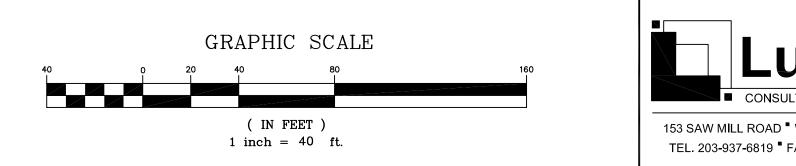


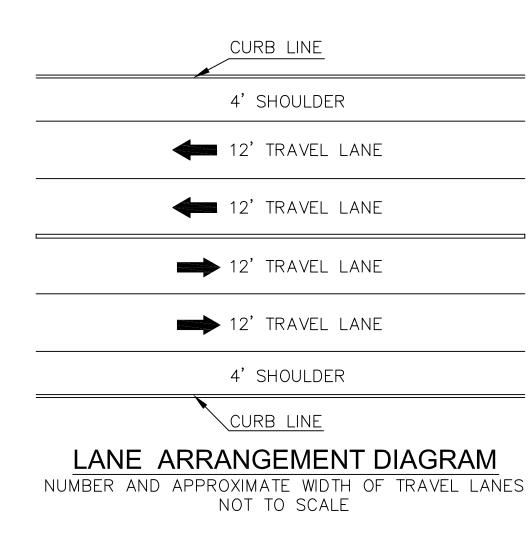
Design Engr.

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9 <b>FAX.</b> 203-931-7702	APPROVED – CHECKED –	0 07-17-06 No Date	ISSUED FOR PERMIT Revision	EJM – By Chkd.	ASM Engr	– Supy.	Drawn	Date Design Engr.	Scale: Design Supv.	cad file name	SEQUENCE No.	drawing number $24214 - 747$

DURING NON-WORK HOURS, THE CONTRACTOR SHALL PROVIDE THE SITE-SPECIFIC MAINTENANCE AND PROTECTION OF TRAFFIC PATTERN SHOWN HEREON.

CONTRACTOR SHALL ENCLOSE THE WORK AREA WITH A 6' HIGH CHAIN LINK FENCE.

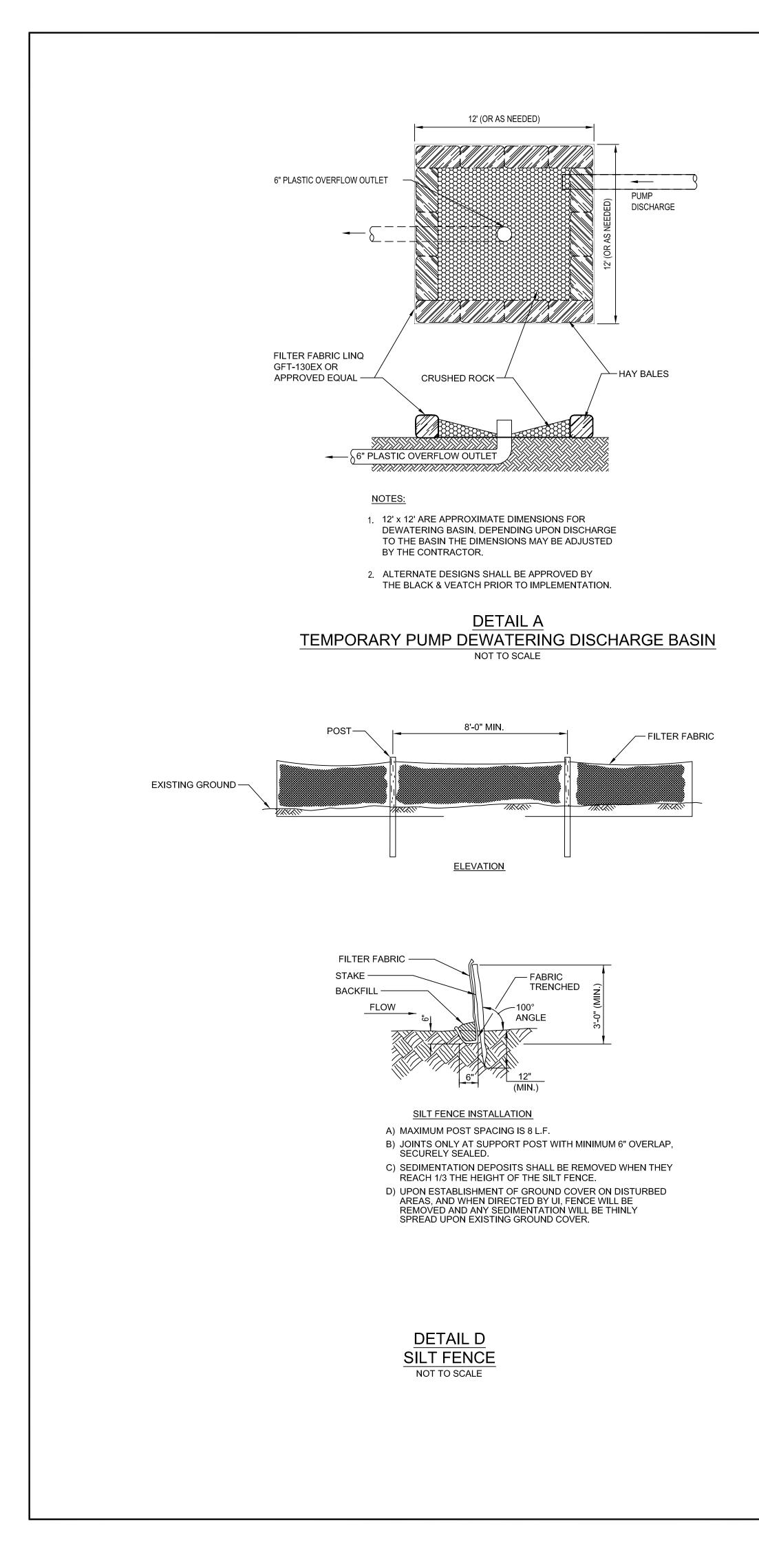
# LEGEND

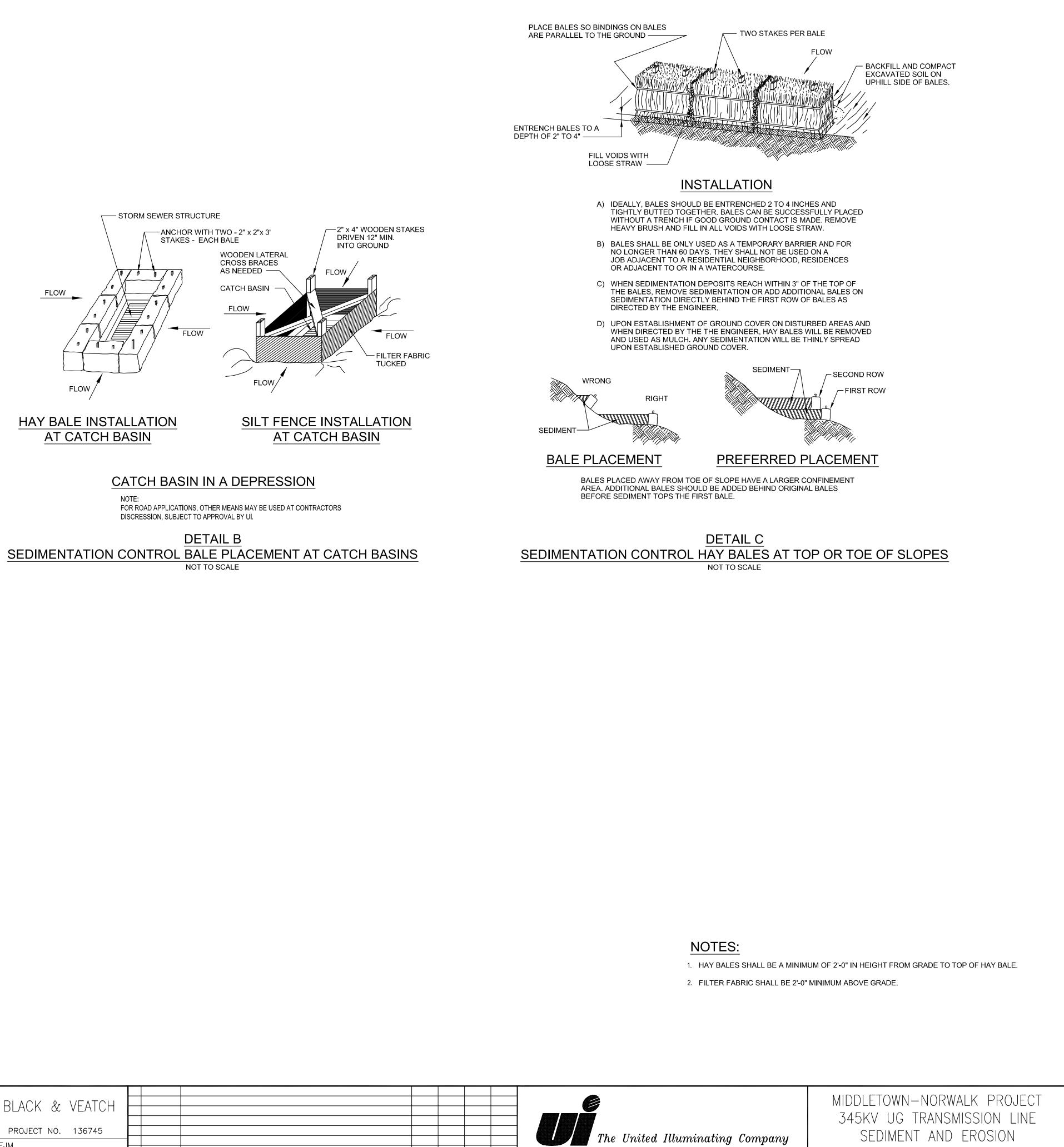
- ∞888 TEMPORARY IMPACT ATTENUATOR
- TEMPORARY PRECAST CONCRETE BARRIER CURB
- ----- TEMPORARY EXCAVATION SUPPORT SYSTEM
- TRAFFIC DRUM
- TYPE III BARRICADE
- H CONSTRUCTION SIGN
- PROPOSED TRAFFIC FLOW
- TRAFFIC CONE
- -0- UTILITY POLE

The United Illuminating Company's and the Connecticut Light & Power Company's April 7, 2005 receipt of a Certificate of Environmental Compatibility and Public Need from the Connecticut Siting Council for the construction of a 345 kV electric transmission line and associated facilities between the Scovill Rock Switching Station in the City of Middletown and the Norwalk Substation in the City of Norwalk, Connecticut.

# APPENDIX E

# **EROSION AND SEDIMENT CONTROL PLAN**





BLACK & VEATCH											MIDDLETOWN-NORWALK PROJECT 345KV UG TRANSMISSION LINE							
PROJECT NO. 136745								The United Illum	inatina Company		JG TRANSIV MENT AND							
DRAWN EJM DESIGNED ASM							The United Illuminating Company 157 Church St. New Haven, Ct. 06506			CONTROL DETAILS								
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