CDOT MAJOR TRAFFIC GENERATOR AND DISTRICT PERMIT MAPPING

CONNECTICUT ASSOCIATION OF LAND SURVEYORS
GENERAL MEMBERSHIP MEETING
MAY 6, 1999

PRESENTED BY:
ROBERT J. BARON, PLS
MANAGER OF SURVEY OPERATIONS
STATE OF CONNECTICUT DEPT. OF TRANSPORTATION
CALS GENERAL MEMBERSHIP MEETING
MAJOR TRAFFIC GENERATOR / PERMIT MAPPING

TOPICS OF DISCUSSION:

1) GOAL OF THIS PRESENTATION
   A) TO TAKE THE "RE" OUT OF "REITERATIVE" WITH RESPECT TO
      THE SURVEY RELATED ISSUES IN THE PERMIT PROCESS.
   B) PROMOTE A BETTER UNDERSTANDING OF THE CDOT PROCESS
      AND PROVIDE SAMPLES FOR FUTURE REFERENCE

2) DIFFERENCE BETWEEN NORMAL STATE ACQUISITION MAPPING AND
    THESE TYPES OF SURVEYS.
   A) AS MTG / PERMIT PLANS ARE NORMALLY TIED INTO
      PROPERTY LINES, THEY REQUIRE SOME TYPE OF PROPERTY
      BOUNDARY OPINION
   B) THEY TYPICALLY ONLY RELATE TO A SPECIFIC PARCEL OF
      LAND AND NOT A UNIFORM STRIP OF LAND AFFECTING
      NUMEROUS OWNERS
   C) THEY ARE PREPARED FOR A DIFFERENT PURPOSE THAN DOT
      ACQUISITION MAPS
   D) TYPICALLY THEY ARE NOT TIED TO A BASELINE /
      CENTERLINE

3) TYPES OF SURVEYS WITH RESPECT TO TYPE OF PERMIT
   REQUIREMENT
   A) WHEN HIGHWAY LINE IS TO BE ALTERED AND TIED TO A
      PRIVATE PROPERTY LINE A PROPERTY BOUNDARY SURVEY
      OR LIMITED PROPERTY BOUNDARY SURVEY AND MONUMENT
      SETTING ARE REQUIRED.
   B) IF THE HIGHWAY LINE IS NOT GOING TO BE ALTERED, LESS
      STRINGENT MAPPING GUIDELINES ARE FOLLOWED
   C) SO WHEN CAN I USE A "CLASS D" MAP?

4) MONUMENTING THE HIGHWAY LINES

5) OPEN DISCUSSION QUESTIONS OR COMMENTS
PROCEDURES FOR TRANSFERRING PROPERTY AND/OR EASEMENTS TO THE STATE OF CONNECTICUT

The Connecticut Department of Transportation has established a Rights of Way file and file number for the transfer of property and/or easements to the State by the permittee (applicant). The Rights of Way file number shall appear on all documents, maps and correspondence regarding this matter.

A person within a district or engineering office shall be assigned as the Department's representative. The permittee should correspond with this staff representative.

The permittee shall prepare a linen or film conveyance map showing what is to be deeded to the State and how it is to be tied to the present highway line. For any strip of land located within ten feet of the proposed curb lines, this map will indicate "Land Acquired" (fee simple). In the event that this dedication would adversely affect local zoning regulations for set back and/or area, this strip of land shall be mapped as an "Easement for Highway Purposes." Said map shall conform to Class A-2 horizontal accuracy standards and shall conform to "Property/Boundary Survey or Limited Property/Boundary Surveys" as appropriate and defined in Section 20-300b of the Regulations of State Agencies.

"Right of Way Surveys" for land or defined easements will only be acceptable if prior authorization from the ConnDOT Office of Central Surveys is received through the representative. However, "Right of Way Surveys" are suitable for drainage right of ways, traffic easements, or any other base line controlled easements. "Compilation Plans" (Class D Maps) are only acceptable for minor impacts such as easements to drain or slopes, and also must receive prior authorization as noted above. Refer to attachment "Requirements for the Monumenting and Mapping...."

The permittee shall submit two preliminary prints of the map to the representative. Department staff will review the mapping for conformance to standards and compliance with right of way conditions.

The permittee shall prepare a proper instrument transferring title to the State. Sample instruments are available from the representative.
Upon receipt of State approval of the map, the permittee shall assemble the following items, in package form.

A. Certificate of Title
B. Executed Instrument
C. Partial Release of Encumbrances
D. One Paper Copy of the Approved Taking Map

The permittee will forward this package to the following person/address.

Mr. Richard C. Allen  
Division Chief of Administration  
Office of Rights of Way  
Connecticut Department of Transportation  
P.O. Box 317546  
Newington, Connecticut 06131-7546

Upon receipt of approval from the Office of Rights of Way the permittee shall forward a signed and sealed mylar suitable for filing on the Land Records and a mylar copy for the Office of Rights of Way.

The permittee shall notify the representative of this transmittal. When all documents have been entered into the Land Records, the Office of Rights of Way will notify the representative who will in turn notify the permittee to set Connecticut Department of Transportation boundary monuments at all angle points of the new highway line. The representative will request District Surveys to field check all new monuments set. If the positions are deemed acceptable, the representative may then release the bond associated with the permit.

April 1999
REQUIREMENTS FOR MONUMENTING AND MAPPING
OF LAND AND PERMANENT EASEMENTS FOR HIGHWAY
PURPOSES ACQUIRED BY THE STATE OF CONNECTICUT
IN CONNECTION WITH THE SUBJECT DISTRICT PERMIT

1. The permittee shall have a Land Surveyor, licensed by the State of Connecticut, mark the taking line delineating the land acquisitions and/or the easement lines, delineating the permanent easements acquired for highway purposes, and set Connecticut Department of Transportation boundary monuments (to be furnished by District Surveys) at all angle points on the line. When the monuments are set, District Surveys will field check for proper position.

2. A survey map as previously outlined will be prepared on linen or film. The map will show the complete outline of the parcel to be acquired and how it is tied to the present highway line. Said map is to be signed and sealed by the licensed surveyor. This is the same map referred to in Page 1 of these procedures.

3. The above required monumenting and mapping shall be done in accordance with the Connecticut Department of Transportation manual entitled “Specifications for Monumenting and Mapping of State Highways.” This manual is available through the Department’s Office of Central Surveys. Their telephone number is (860) 594-2509.

April 1999
CONNECITICUT DEPARTMENT OF TRANSPORTATION
CHECKLIST FOR TRANSFER OF PROPERTY AND/OR
EASEMENTS TO THE STATE OF CONNECTICUT

1. The District or Engineering's designated representative will act as liaison between
the permittee (applicant) and the Office of Rights of Way.

2. At an appropriate time, the representative shall contact the Office of Rights of
Way, Bureau of Records Center (telephone number (860) 594-2437) and request a
miscellaneous file number be assigned to this matter. This number shall appear
on all documents, maps and correspondence.

3. The representative shall provide a copy of directions entitled "Procedures for
Transferring Property and/or Easements to the State of Connecticut" to the
permittee. A sample instrument should be attached to these directions which will
assist in developing proper language.

4. The permittee will supply the representative with two advanced prints of the
conveyance mylar for review of standards and compliance with permit needs.
The Central Survey Unit or The District Survey Unit shall be consulted regarding
mapping standards.

5. Upon approval of the prints, the permittee shall assemble and submit a package
containing: A) Certificate of Title; B) Proposed Instrument; C) Partial Release of
Encumbrances; and, D) One Paper Copy of the Approved Taking Map to:

Mr. Richard C. Allen
Division Chief of Administration
Office of Rights of Way
P.O. Box 317546
Newington, Connecticut 06131-7546
Telephone Number (860) 594-2486

Upon approval from the Office of Rights of Way (Titles Division) the permittee shall
forward two signed and sealed, reproducible conveyance mylers (one being suitable for
filing on Land Records) to the above address.

6. The permittee shall notify the representative of this transmittal.

7. When all documents have been entered into the Land Records, the Office of
Rights of Way will notify the representative who will in turn notify the permittee
to set Connecticut Department of Transportation boundary monuments at all angle
points of the new highway line. The representative will request District Surveys
to field check all new monuments set. If the positions are deemed acceptable, the
representative may then release the bond associated with the permit.
CHECKLIST

[ ] File Number

[ ] Procedures and Samples
   Forwarded to Permittee

[ ] Map Approved

[ ] Package Forwarded to
   ROW by Permittee
   A. Certificate of Title
   B. Proposed Instrument
   C. Partial Releases of Encumbrances
   D. Copy of Approved Taking Map

[ ] Conveyance Mylars Forwarded to Rights of Way

[ ] Right of Way Activity Completed
   Representative Notified

[ ] Monuments Set by Permittee
   Checked by District Surveys

April 1999
SCHEDULE OF EASEMENTS (TEXT NOTATIONS)

THE FOLLOWING EASEMENTS GENERALLY DO NOT REQUIRE A PROPERTY/BOUNDARY OPINION AND ARE USUALLY LABELLED AS APPROXIMATE LOCATIONS NOR ARE THEY TIED TO THE HIGHWAY LINE OR BASELINE:

FILL SLOPE - “EASEMENT TO SLOPE FOR THE SUPPORT OF THE HIGHWAY ACQUIRED”

CUT SLOPE - “EASEMENT TO SLOPE FOR THE SAFETY OF THE HIGHWAY AND REMOVE, USE OR RETAIN EXCAVATED MATERIAL ACQUIRED”

DRAINAGE SLOPE - “EASEMENT TO SLOPE FOR THE DRAINAGE OF THE HIGHWAY ACQUIRED” (THIS IS GENERALLY A SLOPE OR SWALE PLACED ON PRIVATE PROPERTY THAT CONFINES HIGHWAY SURFACE WATER FLOWS RUNNING ALONG THE HIGHWAY)

EASEMENT TO DRAIN - “EASEMENT TO DRAIN ACQUIRED” (A DRAINAGE EASEMENT DIFFERS FROM A DRAINAGE RIGHT OF WAY IN THAT IT ONLY INDICATES THAT STORM WATER FROM THE HIGHWAY WILL BE DISCHARGED ONTO THE SUBJECT PROPERTY BUT THERE WILL NOT LIKELY BE A NEED FOR MAINTENANCE SINCE NO STRUCTURES HAVE BEEN PLACED ON PRIVATE PROPERTY. IT IS GENERALLY NOT REQUIRED IF THE SYSTEM OUTFLOWS DIRECTLY INTO AN EXISTING WETLAND OR WATERCOURSE)

THE FOLLOWING EASEMENTS REQUIRE ACCURATE TIES TO HIGHWAY LINES AND/OR PROPERTY LINES AND MAY VERY WELL REQUIRE A PROPERTY/BOUNDARY OPINION:

SIGHTLINE - “DEFINED EASEMENT FOR SIGHTLINE ACQUIRED” (INFREQUENTLY USED)

DRAINAGE RIGHT OF WAY - “DRAINAGE RIGHT OF WAY ACQUIRED”

TRAFFIC EASEMENT - “DEFINED TRAFFIC EASEMENT” AND THEN IN A SEPARATE BOX TIED TO AND UNDERNEATH IN SMALLER TEXT “EASEMENT TO INSTALL AND MAINTAIN TRAFFIC SIGNALIZATION DEVICES AND APPURTEANCES THERETO ACQUIRED”

HIGHWAY PURPOSES - “DEFINED EASEMENT FOR HIGHWAY PURPOSES” AND THEN IN A SEPARATE BOX TIED TO AND UNDERNEATH IN SMALLER TEXT “EASEMENT FOR HIGHWAY PURPOSES AND APPURTEANCES THERETO ACQUIRED”

(Please note that the easement line delineating a defined easement for highway purposes becomes the highway line and is monumented as such. Traffic, sightline and drainage right of ways are not monumented)
CHECKLIST FOR PLANS

NOTE: FOLLOW THE "STANDARDS FOR SURVEYS AND MAPS, SECTION 20-300b-1
THROUGH 20" FOR NOTATIONS, AND GENERAL SURVEY REQUIREMENTS. THE
FOLLOWING GUIDE IS INTENDED TO ASSIST IN MEETING CDOT'S REQUIREMENTS IN
ADDITION TO WHAT IS REQUIRED BY LAW

1) PROPER SURVEY TYPE SELECTED BASED UPON PERMIT REQUIREMENTS AND
PRESENTATION HANDOUT GUIDELINES

2) PROPOSED HIGHWAY LINE AND/OR EASEMENTS ARE TIED ACCURATELY INTO
EXISTING HIGHWAY LINES WHETHER TO CHD'S FOUND OR IF MON. NOT FOUND
LOCATIONS HAVE BEEN COMPUTED

3) PROPER WORDING FOR TYPE OF ACQUISITION USED (SEE SAMPLE TEXT SHEETS)

4) SURVEYOR'S LICENSE NUMBER, NAME, TITLE, COMPANY NAME, ADDRESS AND
TELEPHONE NUMBER SHOULD BE ON PLAN BUT NOT IN TITLE BLOCK

5) PROPER TITLE BLOCK FORMAT USED

6) RIGHTS OF WAY FILE NUMBER DEPICTED IN PROPER PLACE

7) FOR ALL DRAINAGE RIGHTS OF WAYS AND TRAFFIC EASEMENTS, THE PROPOSED
TYPE OF HIGHWAY APPURTENANCES AND THEIR LOCATIONS HAVE BEEN
DEPICTED (THIS INCLUDES BUT IS NOT LIMITED TO DRAINAGE STRUCTURES, SIZE
AND TYPE OF PIPES AND CULVERT ENDS, LOOP DETECTORS, SPAN POLES, HAND
HOLES, TRAFFIC CONTROL BOXES AND PEDESTRIAN PUSH BOXES ETC.)

8) ENSURE THAT ALL CHD MONUMENTS WHICH NEED TO BE SET ARE CALLED OUT
ON PLAN (NEW MONUMENTS NEED TO BE SET AT ALL ANGLE POINTS IN THE NEW
HIGHWAY LINE)

9) IN THE EVENT THAT THE PROJECT IS LOCATED ON AN UNBOUND STATE
HIGHWAY, THE HIGHWAY LINES MAY BE LABELLED AS APPROXIMATE. A
NOTATION SHALL BE PLACED TO ALERT CDOT REVIEWERS OF THIS
OCURRENCE. HOWEVER, IT IS STILL THE SURVEYOR'S RESPONSIBILITY TO
HAVE DONE ADEQUATE RECORD RESEARCH TO BE ABLE TO LAYOUT THIS
HIGHWAY LINE. OFTEN TIMES THE APPROPRIATE DISTRICT MAY HAVE A
SIGNIFICANT AMOUNT OF INFORMATION TO ALLOW FOR ACCURATE LOCATIONS.

10) PROPER REFERENCE TO EXISTING CDOT RIGHT OF WAY MAPPING OR
CONSTRUCTION PLANS AND SHEET NUMBERS IS MADE
(IE: Right of Way Map No. 85-02, Sheet 2 of 2, or Construction Project 63-376, Sheet 43 of 69 etc.)
References:

1. General Location Survey Provided
   By Conn. D.O.T., Dist. 1
   (Digital File: 10000grn)

2. Conn. D.O.T. Construction Plan
   Entitled: "Farmington Avenue (U.S. Route 6)
   Safety Improvements"
   (Digital File: 70000dgn)

3. Conn. D.O.T. R.D.J. Map *17-00,
   Sh. 1 of 1

4. V. 288, P. 59 (War)

5. V. 1068, P. 46 (Prob)

6. Map Entitled: "Boardman Manor Owned
   And Developed By Scott Elson,Bristol,
   Conn. Dated August 1940 By Laurel And
   Hardy, Inc., C.E.
   (BLR. V. 219, P. 371)

Notes:

1. This survey has been prepared in accordance with
the Regulations of Connecticut State Agencies, Sections
20-300b through 20-300b-20, the Standards for Surveys
And Maps in the State Of Connecticut as adopted by the
Connecticut Association of Land Surveyors, Inc. on
September 26, 1996.

   The type of survey is an Improvement Location Survey
   and is intended to depict the limits of property transaction
   for the project referenced herein.

   The property lines depicted hereon conform to Class A-2
   horizontal accuracy.

2. The property lines and highway lines depicted hereon
   conform to reference numbers 3-6 and as such constitute a
   Dependent Resurvey Boundary Line Option.

3. The features depicted hereon are the result of the
   topographic survey and conform to Class T-2 accuracy.
JOHN Q. PUBLIC, LLC.
DEFINED EASEMENT FOR HIGHWAY PURPOSES
AREA = 2969 SQ.FT.

Easement For Highway Purposes And
Appurtenances Thereto Acquired.

PRESENT FARMINGTON AVENUE (U.S. ROUTE 6)
References:
1. General Location Survey Provided
   By Conn. D.O.T., Dist. 1
   (Digital File: 17000.dgn)
2. Conn. D.O.T. Construction Plan
   Entitled, "Farmington Avenue (U.S. Route 6)
   Safety Improvements"
   (Digital File: 17000.dgn)
3. Conn. D.O.T. ROW, Map #17-00,
   Sh. 1 of 1
4. V. 288, P. 59 (War.)
5. V. 1068, P. 46 (Prob.)
6. Map Entitled, "Boardman Manor Owned
   And Developed By Scott Eisdan, Bristol,
   Conn." Dated August 1940 By Laurel And
   Hardy, Inc., C.E.
   (B.L.R. V. 219, P. 37)

Notes:
1. This survey has been prepared in accordance with
   the Regulations of Connecticut State Agencies, Sections
   20-300b-1 through 20-300b-20, the Standards for Surveys
   and Maps in the State of Connecticut as adopted by the
   Connecticut Association of Land Surveyors, Inc., on
   September 26, 1996.
   The type of survey is an Easement Map and is intended
   to depict the limits of property transaction for the project
   referenced herein.
   The property lines depicted herein conform to Class A-2
   horizontal accuracy.
   2. The property lines and Highways lines depicted herein
   conform to reference numbers 3-6 and as such constitute a
   Dependent Resurvey Boundary Line Option.
   3. The features depicted herein are the result of the
   topographic survey and conform to Class T-2 accuracy.

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Easement To Slope For The Safety Of The Highway And Remove, Use Or Retain Excavated Material Acquired

Easement Area = 864 sq ft (93 sq ft)

Notes:

1. This plan has been prepared in accordance with the Regulations of Connecticut State Agencies, Sections 20-300b-1 through 20-300b-20, the Minimum Standards For Surveys And Maps In The State Of Connecticut as adopted by the Connecticut Association of Land Surveyors, Inc. on September 26, 1996.

This Compilation Plan conforms to Class D accuracy and is only intended to establish the limits of property transportation as noted herein.
THE CITY OF SHELTON
DEFINED TRAFFIC EASEMENT
AREA = 1.5m²
(16.4 SQ. FT).

Easement To Install And Maintain
Traffic Appurtenances Acquired

Present Center Street
(S.R. 714)

Present Howe Avenue
(CONN. ROUTE 110)
TO ALL PEOPLE TO WHOM THESE PRESENTS SHALL COME, GREETING:

KNOW YE THAT, a Connecticut limited partnership, having an office in the Town of Farmington, County of Hartford and State of Connecticut, formerly known as , acting herein by , hereunto duly authorized, for Good and Valuable consideration, received to its full satisfaction of the State of Connecticut, does hereby grant unto the State of Connecticut, its successors and assigns forever, that certain full and perpetual easement to construct and maintain traffic structures under, over and across portions of the land of , situated in the Town of Bristol, County of Hartford and State of Connecticut, on the northerly side of Present Farmington Avenue, U.S. Route 6, within an area of 1,305 square feet, more or less, and bounded:

SOUTHERLY - by Farmington Avenue, U.S. Route 6, 35 feet;
WESTERLY - by land of , 40 feet;
NORTHERLY - by said land of , 35 feet;
EASTERLY - by said land of , 35 feet.

The easement herein conveyed is located upon portions of the premises contained in a Quit-Claim Deed dated January 4, 1991, and recorded in Volume at Page of the Bristol Land Records.

The Grantor herein reserves the right for itself, its successors and assigns, its employees, guests, and invitees, the right to continue to use the land through which the aforementioned easement has been granted for any uses and purposes which do not interfere with the easement, including the purpose of ingress and egress to and from the land of the Grantor.

For a more particular description of the above-described premises, reference is made to a map to be filed in the Bristol Town Clerk’s Office, entitled: "TOWN OF BRISTOL MAP SHOWING EASEMENT ACQUIRED FROM BY THE STATE OF CONNECTICUT U.S.ROUTE 6 (FARMINGTON AVENUE) SCALE 1" = 40’ APRIL 1995 JAMES F. BYRNES, JR. P.E.- TRANSPORTATION CHIEF ENGINEER BUREAU OF ENGINEERING AND HIGHWAY OPERATIONS", Town No. 17, Project No. , Serial No. , Sheet 1 of 1 Sheet, Revised 8-18-95.

TO HAVE AND TO HOLD the premises for the purpose aforesaid unto the State of Connecticut, its successors and assigns forever.
IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal this _______day of______________, A.D. 1995.

Signed, Sealed and Delivered in the presence of

_______________________________________ BY____________________________(L.S.)


STATE OF CONNECTICUT ) SS:
COUNTY OF HARTFORD )

The foregoing Instrument was acknowledged before me this ___ day of ____________, A.D. 1995, by

of: __________________________, a Connecticut limited partnership on behalf of the partnership.

My Commission Expires ____________________ Notary Public
KNOW YE THAT, I, James E. Whitman, of the Town of Putnam, County of Windham
and State of Connecticut, for consideration paid ($1,250.00), Grant to the State of Connecticut,
with WARRANTY COVENANTS,

That certain parcel of land, situated in the Town of Killingly, County of Windham and
State of Connecticut, on the easterly side of Present Country Club Road, containing 2013 square
feet, more or less, bounded and described as follows, and shown on a map hereinafter referred to:

WESTERLY - by Present Country Club Road, 198.70 feet, more or less;
NORTHERLY - by land now or formerly of Margaret H. Bentley, 10 feet, more or
less;
EASTERLY - by remaining land of James E. Whitman, 199 feet, more or less, by
a line designated "Taking Line", as shown more particularly on said
map;
SOUTHERLY - by land now or formerly of William J. Weiss, 10 feet, more or less.

Together with the right to enter portions of the land of James E. Whitman, for the purpose
of grading, constructing driveway, and relocating stone wall, as more particularly shown on said
map. Said right of entry shall automatically terminate upon completion of said work by the State.

The above-described premises are conveyed subject to such rights and easements as
appear of record.

The premises herein conveyed are a portion of the premises contained in a Warranty Deed,
dated November 27, 1965 and recorded in Volume 162 at Page 94 of the Killingly Land Records.

For a more particular description of the above-described premises, reference is made to a
map to be filed in the Killingly Town Clerk's Office, entitled: "TOWN OF KILLINGLY MAP
SHOWING LAND ACQUIRED FROM JAMES E. WHITMAN BY THE STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION RECONSTRUCTION OF TRACEY ROAD AND PARK
ROAD APRIL 1997 JAMES F. BYRNES, JR., P.E. - CHIEF ENGINEER BUREAU OF
ENGINEERING AND HIGHWAY OPERATIONS". Town No. 68, Project No. 68-161, Serial No.
28, Sheet 1of 1. Last Revised 8/2/98.
James E. Whitman
68-161-28

IN WITNESS WHEREOF, I have hereunto set my hand and seal this ______ day of _______________, A.D. 1998.

Signed, Sealed and Delivered
in the presence of

__________________________________________

__________________________________________

James E. Whitman (L.S.)

STATE OF CONNECTICUT )
) ss:
COUNTY OF WINDHAM )

The foregoing Instrument was acknowledged before me this ______ day of _______________, A.D. 1998 by James E. Whitman.

My Commission Expires

__________________________________________

Notary Public

2 of 2
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS
FOR
MONUMENTING AND MAPPING
OF
STATE HIGHWAYS

APRIL, 1984
of 10 seconds times the square root of the number of angles in the loop, whichever is less. Each loop will have an error in position closure after distribution of azimuth error not exceeding 1:10,000. Three or four way mean junction adjustments may often be necessary and sample computations of such an adjustment are shown in exhibits "D" & "E". Accepted methods of precise surveying and traverse closure are described in U.S.C. & G.S. Special Publication No. 225-The State Coordinate System and Special Publication No. 145 - A manual of 2nd and 3rd Order Triangulation and Traverse and these manuals should be referred to for more detailed specifications. Additional field work and computations shall not proceed further until the base line and traverse closure have been reviewed and approved by the Engineer.

SECTION 7. MONUMENTING ACQUIRED RIGHTS OF WAY

Whenever possible the following method of staking the boundary monuments will be used. Monuments whose locations are fixed solely with reference to the base or centerline of construction will be coordinated using the information shown on the construction plan. A base line shall be established as prescribed previously and connected to the construction survey control points and to the Connecticut Coordinate System control monuments (C.G.S.). Preliminary project coordinates are to be established on the base line using the connection to the construction control points. These coordinates are to be used to establish the relationship between the base line and the boundary line and from this information, C.D.O.T. boundary monuments are to be staked and later pointed. Final coordinates and final base line angles and distances are then established on the base line using the connection to the Connecticut Coordinate System control monuments and these values are to be shown on the final map.

All monuments shall be staked by transit and tape or electronic distance
meter from the monumented base line. Tacked hubs shall be placed at all angle points, points of curvature and tangency and other critical points as designated by the Engineer. When the distance between angle points is in excess of 600 feet additional monuments shall be set on line. As a general rule, hubs shall be driven flush with the ground and suitable witness stakes shall be driven to protect and identify the hub locations.

Standard C.D.O.T. boundary monuments are to be set at all points, generally flush with the ground. See Exhibit "H" for boundary monument specifications. Whenever the full length of the monument cannot be set due to ledge then the monument is to be cut and cemented securely onto the ledge. Disks only may be cemented flush onto surface ledge. Angle points in shallow water may be pinned and in deep water no point need be set. Following the setting of the monuments, the disks shall be marked with drill holes at the precise point determined by transit and tape or E.D.M. from the base line. It is important that the disk be drilled rather than punched.

SECTION 8. COMPUTATION OF HIGHWAY LINE DATA

The preliminary coordinates referenced to the construction project control points and used to establish the relationship between the base line and the boundary line may now be disregarded. Revised coordinates are now to be established along the base line referencing it to CGS monuments designated by the Engineer and computing a revised traverse. These revised values will provide adjusted angles and distances along the base line and using the previously established relationship between the base line and the boundary line, final values may be obtained on the highway line. The angles are to be shown to the nearest five seconds and distances to the nearest hundredths along the highway line. A perimeter closure along the highway line is also to be computed and provided to the Engineer as a final check on the highway line data.
STATE OF CONNECTICUT
DEPARTMENT OF TRANSPORTATION

STANDARD BOUNDARY & BASE LINE MONUMENTS

STANDARD METAL DISCS

DETAIL OF DISC SAME AS SHOWN BELOW

SCALE 2" = 1'-0"