



CONSTRUCTION LEADERS

LETTER OF TRANSMITTAL	
DATE: March 4, 2015	PCL JOB NO: 5515002
ATTN: Chris Barker	TRANSMITTAL NO: 028

To: **State of Vermont Agency of Transportation**
 One National Life Drive
 Montpelier, VT 05633-5001
 (802) 828-0053

Re: Hartford Lateral Slide
 Project No.: IM 091-2(79)
 Contract ID.: 12A132

County: Windsor

PCL FILE NO: 5515002-18

WE ARE SENDING Attached _____ Under separate cover via Email & SP the following:
 _____ Shop drawings _____ Prints Plans _____ Samples _____ Specifications
 _____ Copy of Letter _____ Change Order _____ Other

COPIES	SPEC.	REVISION	DESCRIPTION
1	105.25		Off-Site Activity Form

TRANSMITTED for as checked below:

For approval _____ Approved as submitted _____ Resubmit 1 Copies for approval
 _____ For your use _____ Approved as noted _____ Submit _____ Copies for distribution
 _____ As requested _____ Returned for corrections _____ Return _____ Corrected prints
 _____ For review and comment

Remarks:

The attached submittal is in regards to the increase in site area above what was listed in the contract drawings. Pages from Submittal 015.1 EPSC Site Plan are attached for reference.

Please return an email of this approved submittal to Erich Heymann (ewheymann@pcl.com) and Jeremy Mackling (jmackling@pcl.com).

We request the review and return of this submittal within **7 days**. Please advise if this request cannot be met so we can plan accordingly.

By: **Erich Heymann**, Project Engineer

COPY TO: Project Files



CONSTRUCTION LEADERS

**SUBMITTAL NO. : 18
Off-Site Activity Form**

Item No.	Specification	Description
1	105.25	Off-Site Activity Form

PROJECT:
HARTFORD LATERAL SLIDE
PROJECT NO.: IM 091-2(79)
CONTRACT ID.: 12A132

OWNER:
STATE OF VERMONT AGENCY OF TRANSPORTATION

ENGINEER OF RECORD:
STATE OF VERMONT AGENCY OF TRANSPORTATION

CONTRACTOR:
PCL CIVIL CONSTRUCTORS, INC.

MARCH 4, 2015

OFF-SITE ACTIVITY SUBMITTAL



- **This form is to be completed in its entirety by the Contractor/District Tech** when proposing any waste, borrow, or staging area or any work outside the defined Contract construction limits.
- **Submit to Karen Spooner:** karen.spooner@state.vt.us, Phone: (802)828-2169, Fax: (802)828-2334, VTrans Program Development Division, Environmental Section, One National Life Drive, Montpelier, VT 05633-5001
- **Submit a copy to the Resident Engineer**
- **Allow 21 calendar days (see Section 105.25 (c) of the VTrans Standard Specifications For Construction) for review once the application is administratively complete.**

SUBMITTAL INFORMATION

Project Name/District: Hartford IM 091-2(79)	Contractor/District Tech: PCL Civil Constructors, Inc.		
Contact: Erich Heymann	Phone: 407-235-5843	Fax: _____	E-mail: ewheymann@pcl.com
Resident Engineer: Chris Baker	Phone: 802-279-8161		

- **PROPOSAL INFORMATION** (Select one type of area being proposed for use per submittal and describe associated characteristics)

<input type="checkbox"/> Waste	<input type="checkbox"/> Borrow	<input checked="" type="checkbox"/> Staging	<input type="checkbox"/> Other (ex. dewatering location): _____
Material: Type (asphalt, concrete, earthen, etc.)		Select backfill, falsework, approach slabs, const. equip.	Quantity (yds ³) TBD
Total Area of Land Disturbance (sq ft) 257,004 SF			
Additional Info: _____			

- **LANDOWNER/PROPERTY INFO** (Fill all applicable boxes; **attach a Location Map and Sketch of Area**)

Name: Vermont Agency of Transportation	Address: One National Life Drive	Phone: 802-828-3970
Print Name	Montpelier, VT 05633-5001	
<input type="checkbox"/> Private Residential/Commercial	<input checked="" type="checkbox"/> Town/State Owned Facility	<input type="checkbox"/> Other
Additional Info: _____		
Are there other users of this site?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Known past uses: _____		
<input type="checkbox"/> Location Map (must be USGS Geological Survey Map (7.5'))	<input checked="" type="checkbox"/> Sketch of Area	<input checked="" type="checkbox"/> North arrow
	<input checked="" type="checkbox"/> Approx scale	<input checked="" type="checkbox"/> Recognizable features
Permit Info:		
Act 250 Permit Exists?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
If Yes, # _____	Copy Enclosed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
List of Other Existing Permits: _____		

Landowner Agreement (Signature is required for all private-, town-, and state-owned properties)
I, _____, warrant that the information in the above permit application is accurate and agree
Landowner/Facility Manager Signature
to the use of the proposed area by <u>PCL Civil Constructors, Inc.</u> as shown on the attached sketch. If acting as the agent of
Name of Contractor
the Landowner, I warrant (1) that the Landowner has the full right, power, and authority to authorize the proposed use, (2) that I am authorized to act as the Landowner's agent, and (3) that my authority to act as the Landowner's agent has not been revoked.
Date: _____

This clearance is for the Natural and Cultural Resources Only.

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL OF BRIDGE 43N AND 43S ON INTERSTATE 91 OVER US-5 AND LOCATED IN THE TOWN OF HARTFORD, VT. BRIDGES 43N AND 43S WILL BE REPLACED WITH SINGLE SPAN BRIDGES. BOTH BRIDGES WILL BE BUILT ON THE EXISTING ALIGNMENT. BRIDGE 43N AND 43S WILL BOTH BE APPROXIMATELY 136 FEET IN LENGTH.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBED EARTH (UNPAVED AREAS) AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 5.90 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS SLOPING OPEN GROUND WITH SOME AREAS THAT ARE GENTLY SLOPING TO NEARLY FLAT. INTERSTATE 91 AND US-5 ARE RELATIVELY FLAT BUT WITH SLOPING AREAS BETWEEN THE TWO CORRIDORS.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THERE ARE NUMEROUS EXISTING AND PROPOSED DRAINAGE SYSTEMS WITHIN THE PROJECT LIMITS, INCLUDING CULVERTS, DROP INLETS, STONE LINED DITCHES AND GRASS SWALES. SOME CULVERTS AND DRAINAGE DITCHES WITHIN THE PROJECT LIMITS DRAIN TO AN EXISTING STORM WATER RETENTION POND OUTSIDE OF THE PROJECT LIMITS. FOR DETAILS SEE THE DRAINAGE LAYOUT SHEET.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF MOWED GRASSES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT.

GLOVER VERSHIRE COMPLEX	15% - 35% SLOPES	"K" FACTOR = 0.32 - 0.28
URBAN LAND WINDSOR-AGAWAM COMPLEX	0% - 8% SLOPES	"K" FACTOR = 0.17 - 0.28

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: NO
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: NO
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT FALLS UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR LOW RISK PROJECTS. ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

BARRIER FENCE (BF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

FILTER FABRIC DROP INLET PROTECTION SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLANS.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN, AT A MINIMUM.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS. CULVERTS, DROP INLETS, STONE LINED DITCHES AND GRASS SWALES SHALL BE INSTALLED AS SHOWN ON THE DRAINAGE LAYOUT SHEET.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

DEWATERING IS NOT ANTICIPATED ON THIS PROJECT SITE.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.

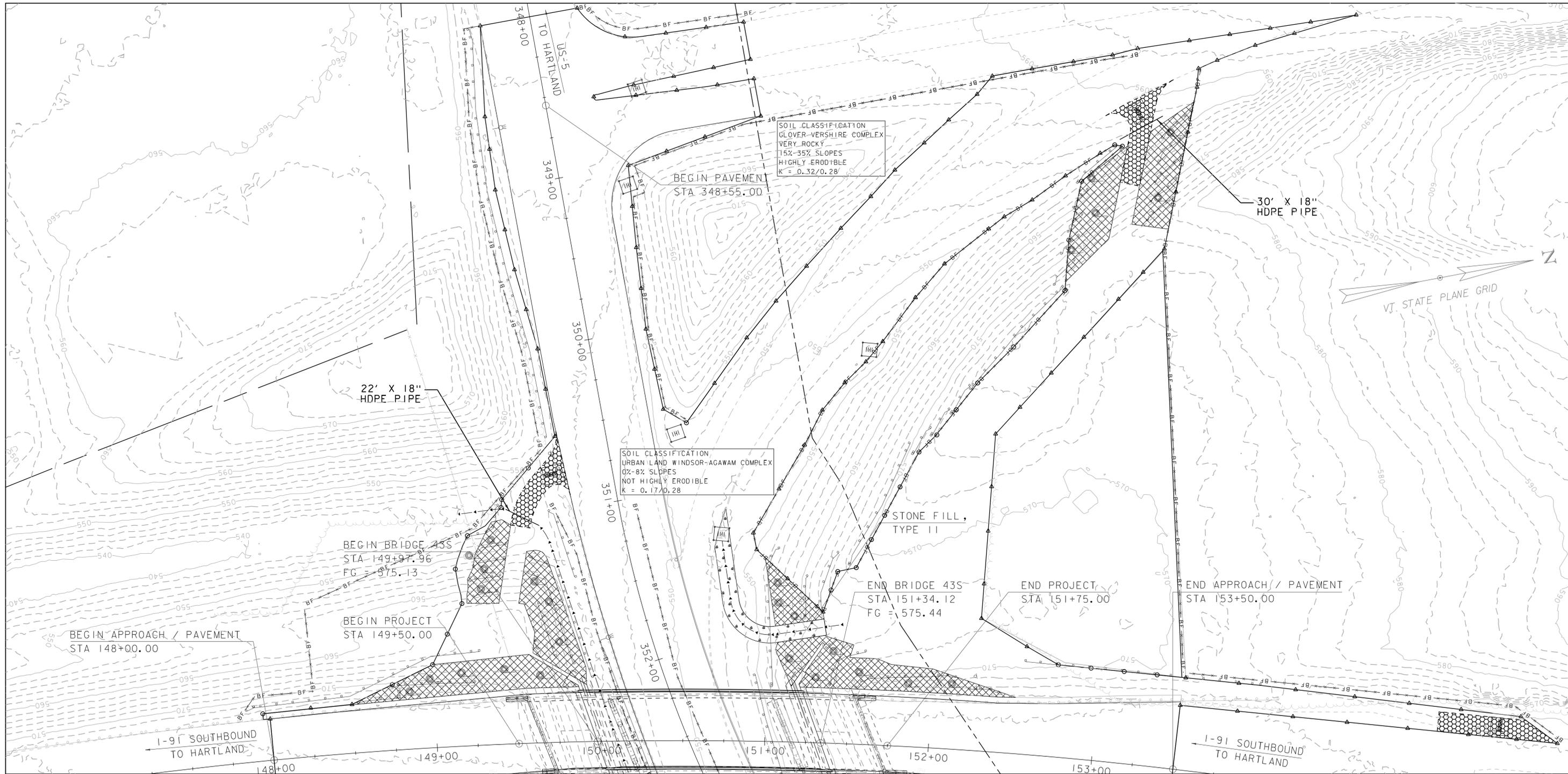
1.5 SEQUENCE AND STAGING

1.5.1 CONSTRUCTION SEQUENCE:

- INSTALL ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES. ESTABLISH NECESSARY MAINTENANCE OF TRAFFIC MEASURES. CONSTRUCT PROJECT SITE ACCESS ROADS AND PREPARE STAGING AREAS.
- CONSTRUCT ABUTMENTS UP TO THE UNDERSIDE OF THE EXISTING BRIDGES. CONSTRUCT REPLACEMENT BRIDGE SUPER-STRUCTURES ON FALSE WORK.
- CLOSE I-91 TO TRAFFIC AND IMPLEMENT DETOURS. COMPLETE DEMOLITION OF EXISTING I-91 BRIDGES. SLIDE NEW BRIDGE SUPER-STRUCTURES INTO PLACE, BACKFILL AND RECONSTRUCT APPROACH ROADWAYS.
- REVEGETATE DISTURBED AREAS OF THE PROJECT SITE, INCLUDING STAGING AREAS. REMOVE TEMPORARY EROSION PREVENTION AND SEDIMENT CONTROL MEASURES. REMOVE MAINTENANCE OF TRAFFIC MEASURES.



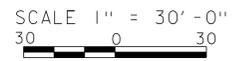
PROJECT NAME: HARTFORD	FILE NAME: sl2al32ero.narrative.dgn	PLOT DATE: 27-FEB-2015
PROJECT NUMBER: IM 091-2(79)	PROJECT LEADER: K. HIGGINS	DRAWN BY: R. MEEK
	DESIGNED BY: R. MEEK	CHECKED BY: S. SAWYER
	EPSC NARRATIVE	SHEET 1 OF 6



MATCHLINE STA 352+75.00

- LEGEND**
- BF — BARRIER FENCE
 - SILT FENCE
 - CHECK DAM
 - ▨ ROLLED EROSION CONTROL PRODUCT
 - ▩ INLET PROTECTION
 - ▧ STABILIZED CONSTRUCTION ENTRANCE

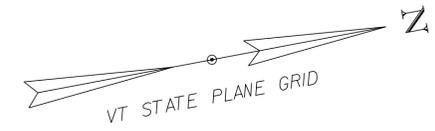
EPSC DURING CONSTRUCTION SHEET 1



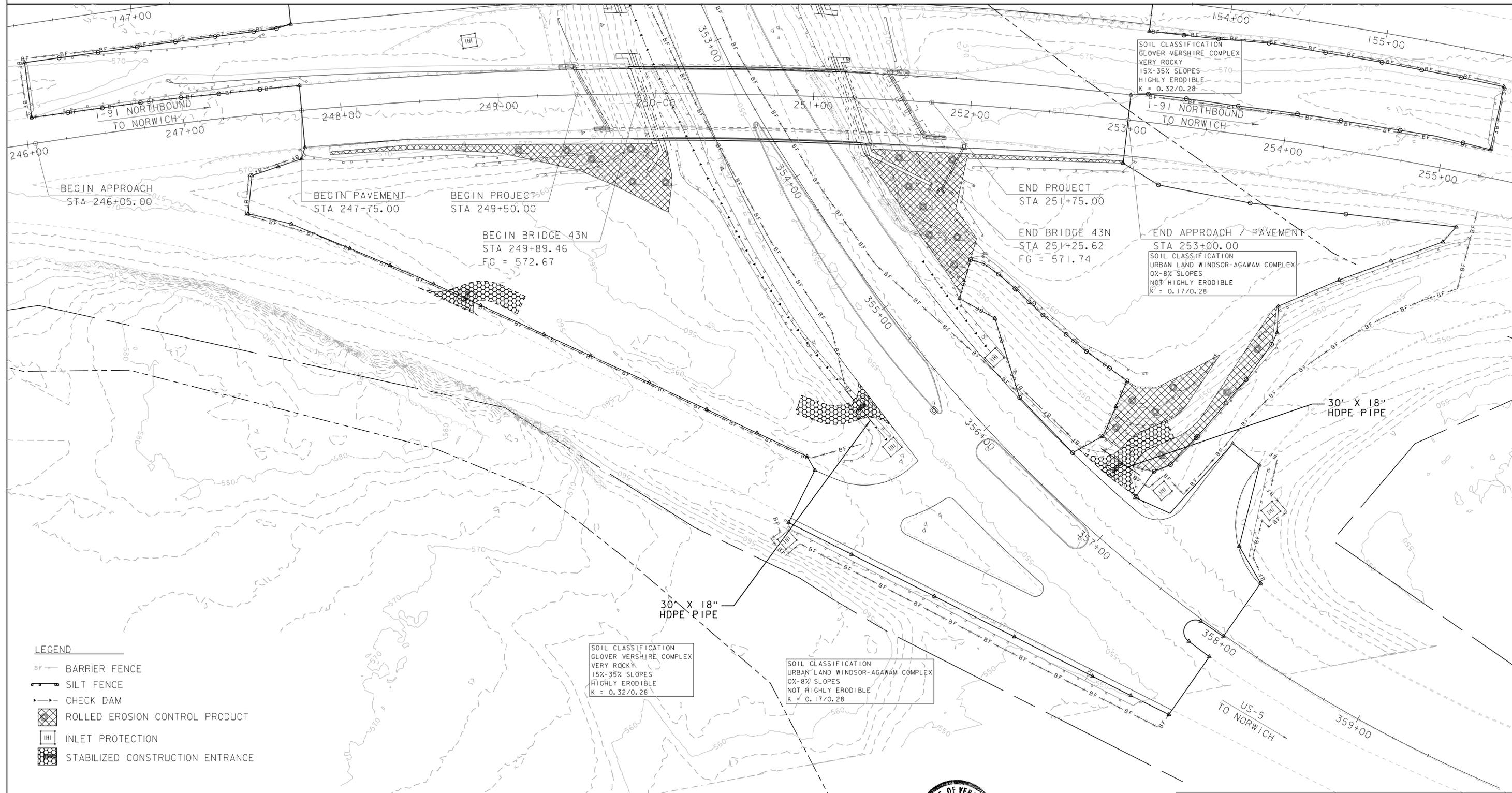
STEPHEN S. SAWYER
 No. 4040
 REGISTERED PROFESSIONAL ENGINEER
 2/27/15

PREPARED BY:
SEBAGO
 TECHNICS

PROJECT NAME: HARTFORD	PLOT DATE: 27-FEB-2015
PROJECT NUMBER: IM 091-2(79)	DRAWN BY: R. MEEK
FILE NAME: sl2al32bdr_ero_dur.dgn	CHECKED BY: S. SAWYER
PROJECT LEADER: K. HIGGINS	SHEET 2 OF 6
DESIGNED BY: R. MEEK	
EPSC DURING CONSTRUCTION SHEET 1	



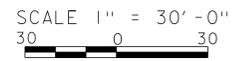
MATCHLINE STA 352+75.00



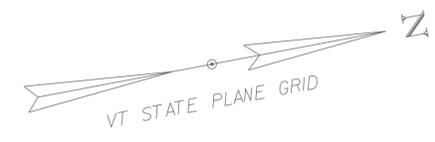
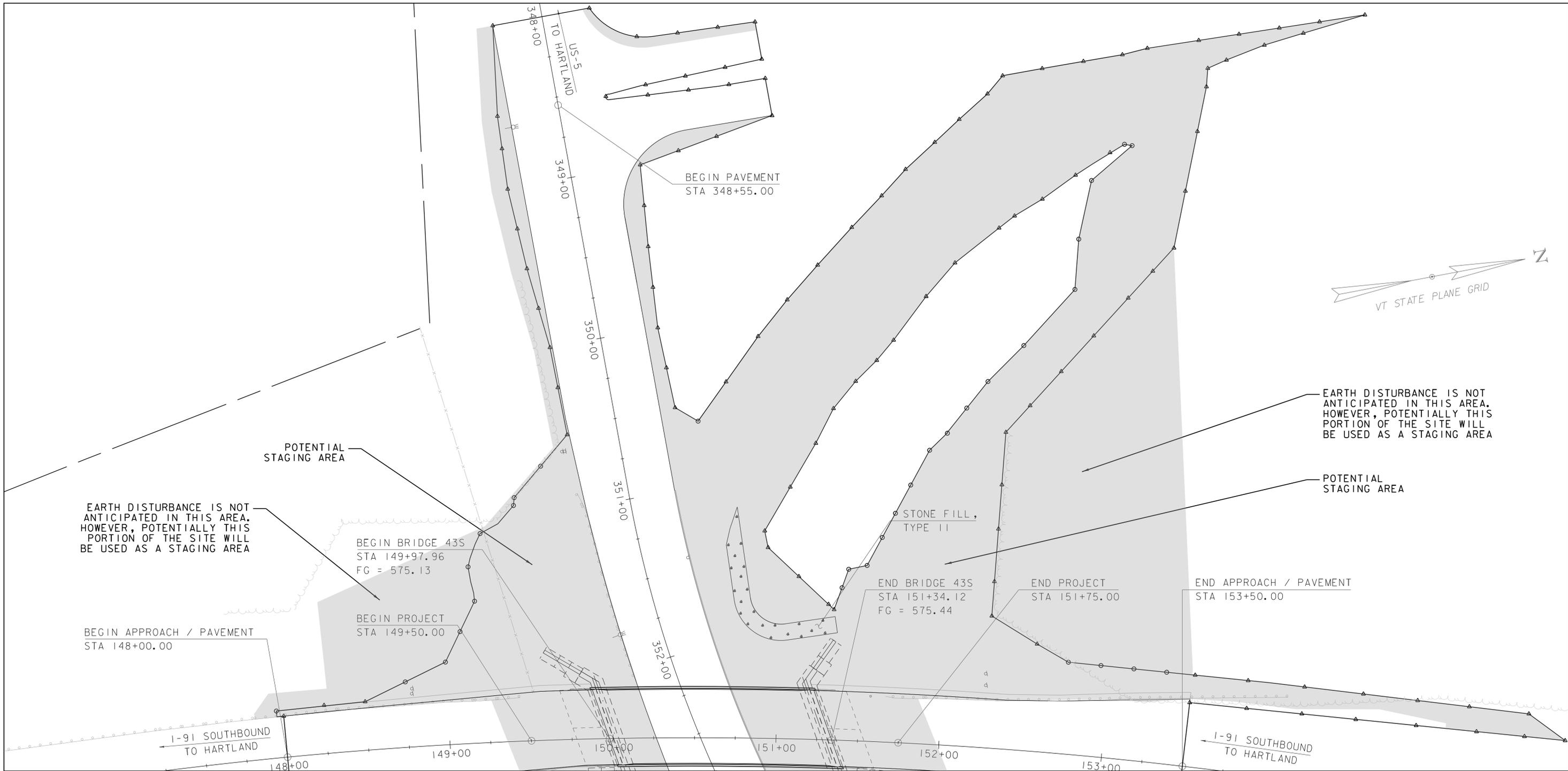
- LEGEND**
- BF — BARRIER FENCE
 - SILT FENCE
 - CHECK DAM
 - ▨ ROLLED EROSION CONTROL PRODUCT
 - ▩ INLET PROTECTION
 - ▩ STABILIZED CONSTRUCTION ENTRANCE

- NOTES:**
1. TEMPORARY CRANE PAD TO BE DESIGNED BY CONTRACTOR.

EPSC DURING CONSTRUCTION SHEET 2



PROJECT NAME:	HARTFORD	FILE NAME:	sl2al32bdr_ero_dur.dgn	PLOT DATE:	27-FEB-2015
PROJECT NUMBER:	IM 091-2(79)	PROJECT LEADER:	K. HIGGINS	DRAWN BY:	R. MEEK
		DESIGNED BY:	R. MEEK	CHECKED BY:	S. SAWYER
		EPSC DURING CONSTRUCTION SHEET 2		SHEET	3 OF 6



EARTH DISTURBANCE IS NOT ANTICIPATED IN THIS AREA. HOWEVER, POTENTIALLY THIS PORTION OF THE SITE WILL BE USED AS A STAGING AREA

POTENTIAL STAGING AREA

BEGIN BRIDGE 43S
STA 149+97.96
FG = 575.13

BEGIN PROJECT
STA 149+50.00

BEGIN APPROACH / PAVEMENT
STA 148+00.00

BEGIN PAVEMENT
STA 348+55.00

STONE FILL,
TYPE II

END BRIDGE 43S
STA 151+34.12
FG = 575.44

END PROJECT
STA 151+75.00

END APPROACH / PAVEMENT
STA 153+50.00

EARTH DISTURBANCE IS NOT ANTICIPATED IN THIS AREA. HOWEVER, POTENTIALLY THIS PORTION OF THE SITE WILL BE USED AS A STAGING AREA

POTENTIAL STAGING AREA

I-91 SOUTHBOUND
TO HARTLAND

I-91 SOUTHBOUND
TO HARTLAND

MATCHLINE STA 352+75.00

■ AREAS OF EARTH DISTURBANCE THAT MAY REQUIRE REVEGETATION.

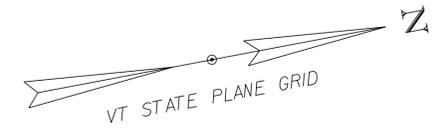
EPSC FINAL CONDITIONS SHEET 1

SCALE 1" = 30'-0"
30 0 30

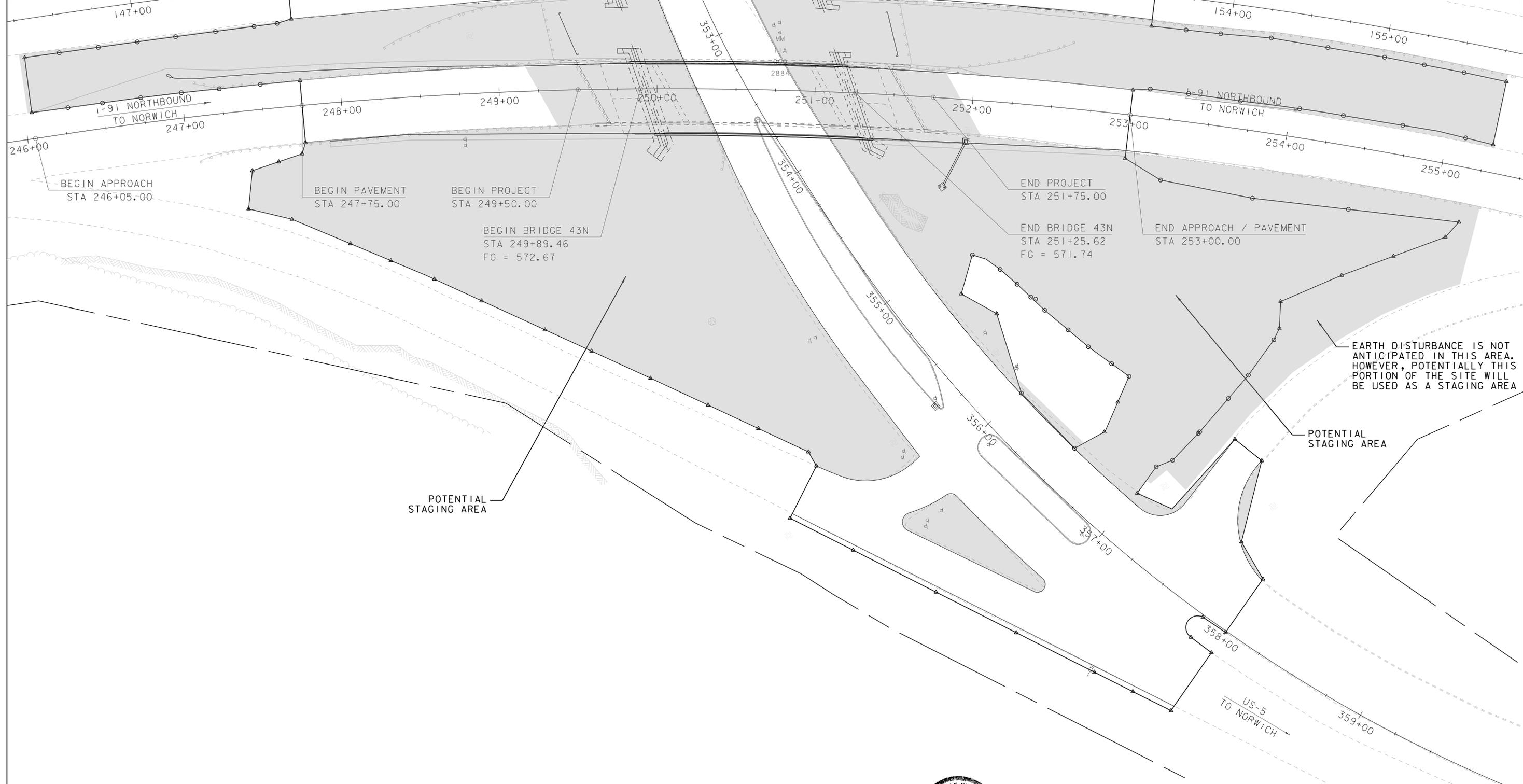
STEPHEN S. SAWYER
REGISTERED PROFESSIONAL ENGINEER
No. 4040
2/27/15

PREPARED BY:
SEBAGO
TECHNICS

PROJECT NAME: HARTFORD	FILE NAME: sl2a32bdr_ero_final.dgn	PLOT DATE: 27-FEB-2015
PROJECT NUMBER: IM 091-2(79) 101/100	PROJECT LEADER: K. HIGGINS	DRAWN BY: R. MEEK
	DESIGNED BY: R. MEEK	CHECKED BY: S. SAWYER
	EPSC FINAL CONDITIONS SHEET 1	SHEET 4 OF 6



MATCHLINE STA 352+75.00



BEGIN APPROACH
STA 246+05.00

BEGIN PAVEMENT
STA 247+75.00

BEGIN PROJECT
STA 249+50.00

BEGIN BRIDGE 43N
STA 249+89.46
FG = 572.67

END PROJECT
STA 251+75.00

END BRIDGE 43N
STA 251+25.62
FG = 571.74

END APPROACH / PAVEMENT
STA 253+00.00

EARTH DISTURBANCE IS NOT
ANTICIPATED IN THIS AREA.
HOWEVER, POTENTIALLY THIS
PORTION OF THE SITE WILL
BE USED AS A STAGING AREA

POTENTIAL
STAGING AREA

POTENTIAL
STAGING AREA

■ AREAS OF EARTH DISTURBANCE
THAT MAY REQUIRE REVEGETATION.

EPSC FINAL CONDITIONS SHEET 2

SCALE 1" = 30'-0"
30 0 30



PROJECT NAME:	HARTFORD	PLOT DATE:	27-FEB-2015
PROJECT NUMBER:	IM 091-2(79 101/100)	DRAWN BY:	R. MEEK
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PROJECT LEADER:	K. HIGGINS	SHEET	5 OF 6
DESIGNED BY:	R. MEEK		
EPSC FINAL CONDITIONS SHEET 2			