

# The Reinforced Earth Company

8614 Westwood Center Drive Suite 1100, Vienna, Virginia 22182 (703) 821-1175

## GENERAL NOTES

### DESIGN CRITERIA

- DESIGN IS BASED ON THE ASSUMPTION THAT THE MATERIAL WITHIN THE REINFORCED EARTH VOLUME, METHODS OF CONSTRUCTION AND QUALITY OF PREFABRICATED MATERIALS SHALL CONFORM TO THE CONTRACTING AGENCY'S TECHNICAL SPECIFICATIONS FOR REINFORCED EARTH WALLS.
- SOILS CHARACTERISTICS ASSUMED FOR DESIGN:  
SELECT GRANULAR BACKFILL  
 $\phi = 34$  degrees,  $c = 0$  KPa,  $\gamma = 18.84$  KN/m<sup>3</sup>  
RANDOM BACKFILL  
 $\phi = 24$  degrees,  $c = 4.79$  KPa,  $\gamma = 18.84$  KN/m<sup>3</sup>  
FOUNDATION MATERIAL  
 $\phi = 25$  degrees,  $c = 9.58$  KPa,
- THE MAXIMUM APPLIED BEARING PRESSURE AT THE FOUNDATION LEVEL IS AS SHOWN ON THE WALL ELEVATIONS FOR EACH DESIGN CASE. IT IS THE RESPONSIBILITY OF THE PROJECT DESIGN ENGINEER TO DETERMINE THAT THIS APPLIED BEARING PRESSURE IS ALLOWABLE FOR THAT LOCATION.
- ANY UNSUITABLE FOUNDATION MATERIAL BELOW THE REINFORCED EARTH VOLUME, AS DETERMINED BY THE ENGINEER, SHALL BE EXCAVATED AND REPLACED WITH SUITABLE MATERIAL OR OTHERWISE STABILIZED AS DIRECTED BY THE ENGINEER.
- REINFORCING STRIPS SHALL BE RIBBED 50mm WIDE AND 4mm THICK, AND SHALL CONFORM TO THE PHYSICAL AND MECHANICAL PROPERTIES OF ASTM A-572M GRADE 450. TIE STRIPS SHALL CONFORM TO ASTM A-570M, GRADE 345. GALVANIZATION SHALL BE APPLIED IN ACCORDANCE WITH ASTM A-123m OR AASHTO M111 (610 g/m<sup>2</sup>). BOLTS (12.7 mm  $\phi$ ) SHALL CONFORM TO THE ASTM A-325M, GALVANIZED PER ASTM A-153, CLASS C.

### WALL CONSTRUCTION

- STATIONS SHOWN ARE ALONG  $\phi$  OF SURVEY AND CONSTRUCTION.
- REINFORCED EARTH WALLS IN CURVES WILL FORM A SERIES OF SHORT CHORDS TO MATCH DESIRED WALL ALIGNMENT.
- FOR LOCATION OF REINFORCED EARTH WALLS, SEE CONTRACT PLANS.
- IF MANHOLES AND DROP INLETS ARE PRESENT, THEY SHALL BE LOCATED AS SHOWN ON WALL ELEVATIONS.
- IF PILES ARE LOCATED WITHIN THE REINFORCED EARTH VOLUME, THEY SHALL BE DRIVEN PRIOR TO CONSTRUCTION OF THE REINFORCED EARTH WALL UNLESS A METHOD TO PROTECT THE STRUCTURE, WHICH IS ACCEPTABLE TO THE ENGINEER AND THE REINFORCED EARTH COMPANY, IS PROPOSED AND APPROVED IN WRITING.
- BACKFILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH THE SPECIFICATIONS FOR REINFORCED EARTH WALLS TO A LEVEL OF 50mm ( $\pm$ ) ABOVE THE TIE STRIPS EMBEDDED IN THE PANELS. INSTALLATION OF REINFORCING STRIPS SHALL BE PERMITTED ONLY AFTER PLACEMENT AND COMPACTION OF THE BACKFILL MATERIAL HAS REACHED THE REQUIRED LEVEL.
- COMPACTION AND OPERATION EQUIPMENT SHALL BE KEPT A MINIMUM DISTANCE OF 1.0 m FROM THE BACK FACE OF THE REINFORCED EARTH PANELS. COMPACTION WITHIN 1.0 m OF THE REINFORCED EARTH PANELS SHALL BE ACHIEVED WITH AT LEAST THREE (3) PASSES OF A LIGHTWEIGHT MECHANICAL TAMPER, ROLLER OR VIBRATORY SYSTEM.
- IF STRUCTURES IN EXCESS OF 6m IN HEIGHT OCCUR, THE FINISHED GRADE IN FRONT OF THE WALL SHALL BE PLACED AND COMPACTED BEFORE WALL CONSTRUCTION EXCEEDS A HEIGHT OF 6m. FINISHED GRADE BACKFILL SHALL BE COMPACTED TO 95% OF ASTM D-698, METHOD 'C', UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LOCATION OF ANY GUARDRAIL POSTS BEHIND THE REINFORCED EARTH PANELS. PRIOR TO PLACEMENT OF THE TOP LAYER OF REINFORCING STRIPS, INDIVIDUAL STRIPS MAY BE SKEWED TO AVOID THE POST LOCATIONS IF AUTHORIZED BY THE REINFORCED EARTH COMPANY. ANY DAMAGE DONE TO THE REINFORCING STRIPS DUE TO THE INSTALLATION OF THE GUARDRAIL SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

### WALL CONSTRUCTION (CONT.)

- IF EXISTING OR FUTURE STRUCTURES, PIPES, FOUNDATIONS OR GUARDRAIL POSTS WHICH ARE WITHIN THE REINFORCED EARTH VOLUME INTERFERE WITH THE NORMAL PLACEMENT OF REINFORCING STRIPS AND SPECIFIC DIRECTION HAS NOT BEEN PROVIDED ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE REINFORCED EARTH COMPANY TO DETERMINE WHAT COURSE OF ACTION SHOULD BE TAKEN.
- ALL DETAILING AND CHECKING OF REINFORCING STEEL FOR ANY C.I.P. CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.
- TOP PANELS BENEATH CAST-IN-PLACE COPING SHALL HAVE DOWELS, EPOXY COATED, PROTRUDING FROM THEIR TOP EDGE.
- FOR OTHER INFORMATION PERTAINING TO WALL CONSTRUCTION PLEASE REFER TO THE REINFORCED EARTH CONSTRUCTION MANUAL.
- THE CONTRACTOR IS RESPONSIBLE FOR GRADUALLY DEFLECTING UPPER REINFORCING STRIPS DOWNWARD TO AVOID CONFLICTS WITH PAVING AND SUBGRADE PREPARATION. THE CONTRACTOR'S ATTENTION IS DIRECTED ESPECIALLY TO SITUATIONS WHERE ROADWAY SUPERELEVATION AND/OR SOIL MIXING ARE ANTICIPATED.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTROLLING STORM WATER DRAINAGE IN THE VICINITY OF THE WALL DURING CONSTRUCTION. STORM WATER RUNOFF IS TO BE COLLECTED AND DISCHARGED AWAY FROM THE WALL AND REINFORCED BACKFILL.

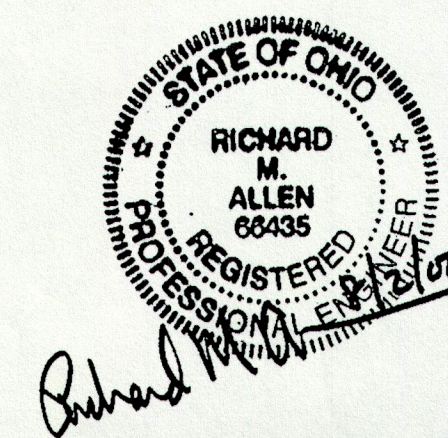
### MATERIALS NOTES

- NOMINAL STRIP LENGTHS  
THE REINFORCING STRIP LENGTHS SHOWN ON THE PLANS, MEASURED FROM BACK FACE OF PANEL, ARE THE NOMINAL LENGTHS REQUIRED BY CALCULATION. THE ACTUAL FABRICATED STRIP LENGTHS ARE OFTEN LONGER (UP TO 15cm) DUE TO MANUFACTURING TOLERANCES. THE REQUIRED HORIZONTAL LIMIT OF GRANULAR BACKFILL IS EQUAL TO THE NOMINAL STRIP LENGTH. ADDITIONAL GRANULAR BACKFILL BEYOND THE NOMINAL STRIP LENGTH IS NOT REQUIRED BY CALCULATION.
- PANEL FINISH  
THE PRECAST PANELS FOR THIS PROJECT SHALL HAVE A PLAIN FINISH. FINISHED WALL SHALL BE SEALED USING AN EPOXY-URETHANE SEALER, IN ACCORDANCE WITH THE SPECIAL PROVISIONS FOR THE REINFORCED EARTH WALLS. MATERIAL AND APPLICATION SUPPLIED BY THE CONTRACTOR.
- NOTE TO CONTRACTORS  
ONLY THE FOLLOWING MATERIALS ARE SUPPLIED BY THE REINFORCED EARTH COMPANY:
  - PRECAST CONCRETE FACING PANELS
  - REINFORCING STRIPS
  - BOLT SETS (FOR ATTACHING PANELS TO THE REINFORCING STRIPS)
  - BEARING BLOCKS
  - RUBBER SHIMS
  - FILTER CLOTH AND ADHESIVE (FOR PANEL JOINTS ONLY)
  - TIE STRIPS TO BE CAST IN BACK OF BRIDGE ABUTMENTS AND WINGWALLS
  - HILTI BOLT CONNECTORS & ANGLE IRONS.
- ANY OTHER MATERIALS CALLED FOR IN THE CONTRACT PLANS OR SPECIFICATIONS ARE TO BE SUPPLIED BY THE CONTRACTOR. ANY JOINT MATERIALS SHOWN AT THE INTERFACE OF PRECAST PANELS AND CAST-IN-PLACE CONCRETE STRUCTURES ARE TO BE SUPPLIED BY THE ERECTION CONTRACTOR. ALL SANDBLASTING, PAINTING, SEALERS OR OTHER SPECIAL APPLIED COATINGS ARE ALSO SUPPLIED/INSTALLED BY THE CONTRACTOR IN THE FIELD FOLLOWING PANEL ERECTION.

### MATERIALS NOTES (CONT.)

- THE REINFORCED EARTH COMPANY SUPPLIES PRECAST CONCRETE FACING PANELS AND ACCESSORIES TO BE USED IN CONJUNCTION WITH OTHER MATERIALS IN THE CONSTRUCTION OF THE REINFORCED EARTH® RETAINING WALLS DETAILED HEREIN. THE CONSTRUCTION AND QUALITY CONTROL PROCEDURES MANUAL FURNISHED BY THE REINFORCED EARTH COMPANY IS INTENDED TO PROVIDE A GENERAL EXPLANATION OF THE SYSTEM. IT IS THE CONTRACTOR'S OBLIGATION TO DEVISE AND EXECUTE A PROJECT SPECIFIC ERECTION SEQUENCE, PANEL UNLOADING, HANDLING AND BRACING SYSTEM, AND FALL PROTECTION SYSTEM. THE BRACING SYSTEM SHOWN IN THE CONSTRUCTION AND QUALITY CONTROL PROCEDURES MANUAL IS GENERAL IN NATURE AND DOES NOT ACCOUNT FOR PROJECT SPECIFIC CRITERIA. COMPLIANCE WITH THE GUIDELINES IN THIS MANUAL DOES NOT RELIEVE THE CONTRACTOR OF ITS RESPONSIBILITY TO ADHERE TO THE PROJECT PLANS, SPECIFICATIONS AND CONTRACT DOCUMENTS OR COMPLIANCE WITH ALL FALL PROTECTION, SAFETY, LAWS, STANDARDS AND PROCEDURES AT THE JOBSITE. CONTRACTORS SHOULD TAKE SPECIAL PRECAUTIONS TO PREVENT THE PANELS FROM SHIFTING OR FALLING DURING THE ERECTION PROCESS.
- MSE WALLS SHOWN ON THESE PLANS MAY REQUIRE SETTLEMENT PLATES, MONITORING, AS WELL AS WAITING PERIOD TO COMPLETE WALL CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE PROJECT DESIGN ENGINEER, FIELD ENGINEER, AND GEOTECHNICAL ENGINEER ON THESE REQUIREMENTS.
- ALL DIMENSIONS ARE IN METRIC UNITS UNLESS OTHERWISE NOTED.

| INDEX |                          |
|-------|--------------------------|
| NO.   | DRAWING COVERS           |
| 1     | GENERAL NOTES            |
| 2     | ELEVATION FWD ABUT.      |
| 3     | ELEVATION REAR ABUT.     |
| 4     | SECTIONS & SKEW DETAILS. |
| 5     | MISCELLANEOUS DETAILS.   |
| 6     | STANDARD PANEL DETAILS.  |

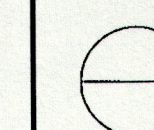


This drawing contains information proprietary to The Reinforced Earth Company, and is being furnished for the use of The Ohio Department of Transportation only in connection with this project, and the information contained is not to be transmitted to any other organization unless specifically authorized in writing by The Reinforced Earth Company. The Reinforced Earth Company is exclusive licensee in the United States under patents issued to Henri Vidal, and the furnishing of this drawing does not constitute an expressed or implied license under the Vidal patents.

The design contained on these drawings is based on information provided by the owner. On the basis of this information, The Reinforced Earth Company has designed, and is responsible for the internal stability of the structure only. External stability, including foundation and slope stability, is the responsibility of the owner.

JAC-32-27.631

1 / 6



RE 13273

GENERAL NOTES  
BRIDGE NO. JAC-32-1712 L & R  
S.R. 32 OVER S.R. 327

DESIGNED  
RCM  
CHECKED  
FC

DRAWN  
RCM  
REVISED

REVIEWED  
RMA  
DATE  
08/2002

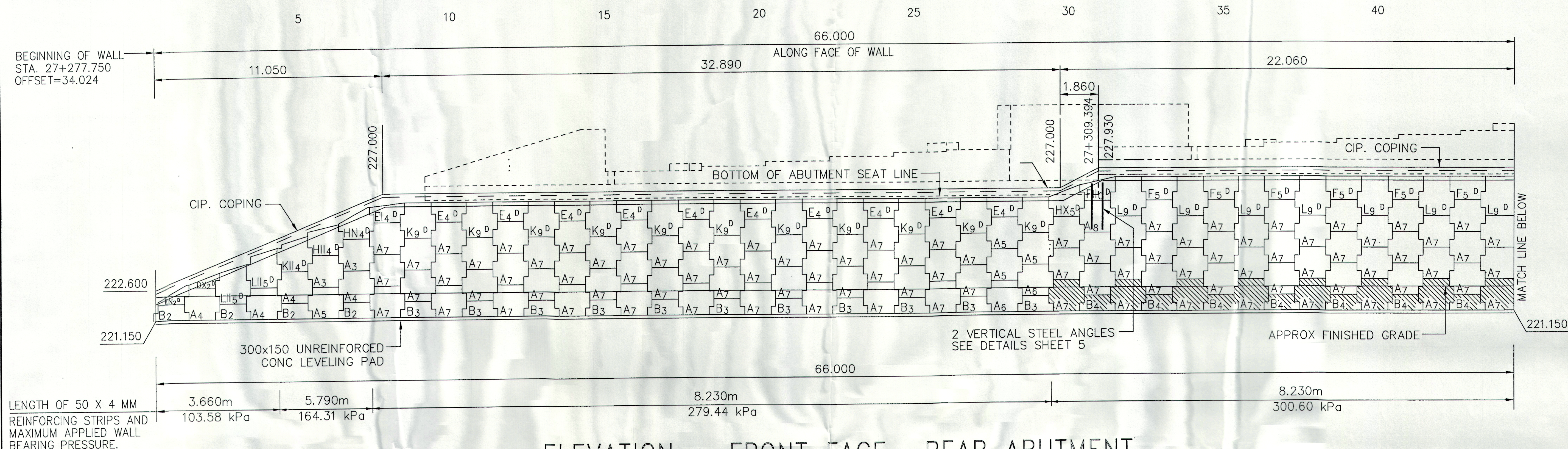
STRUCTURE FILE NO.

The Reinforced Earth Company  
8614 Westwood Center Drive  
Suite 1100 Vienna, Virginia 22182  
(703) 821-1175 FAX-(703) 821-1815



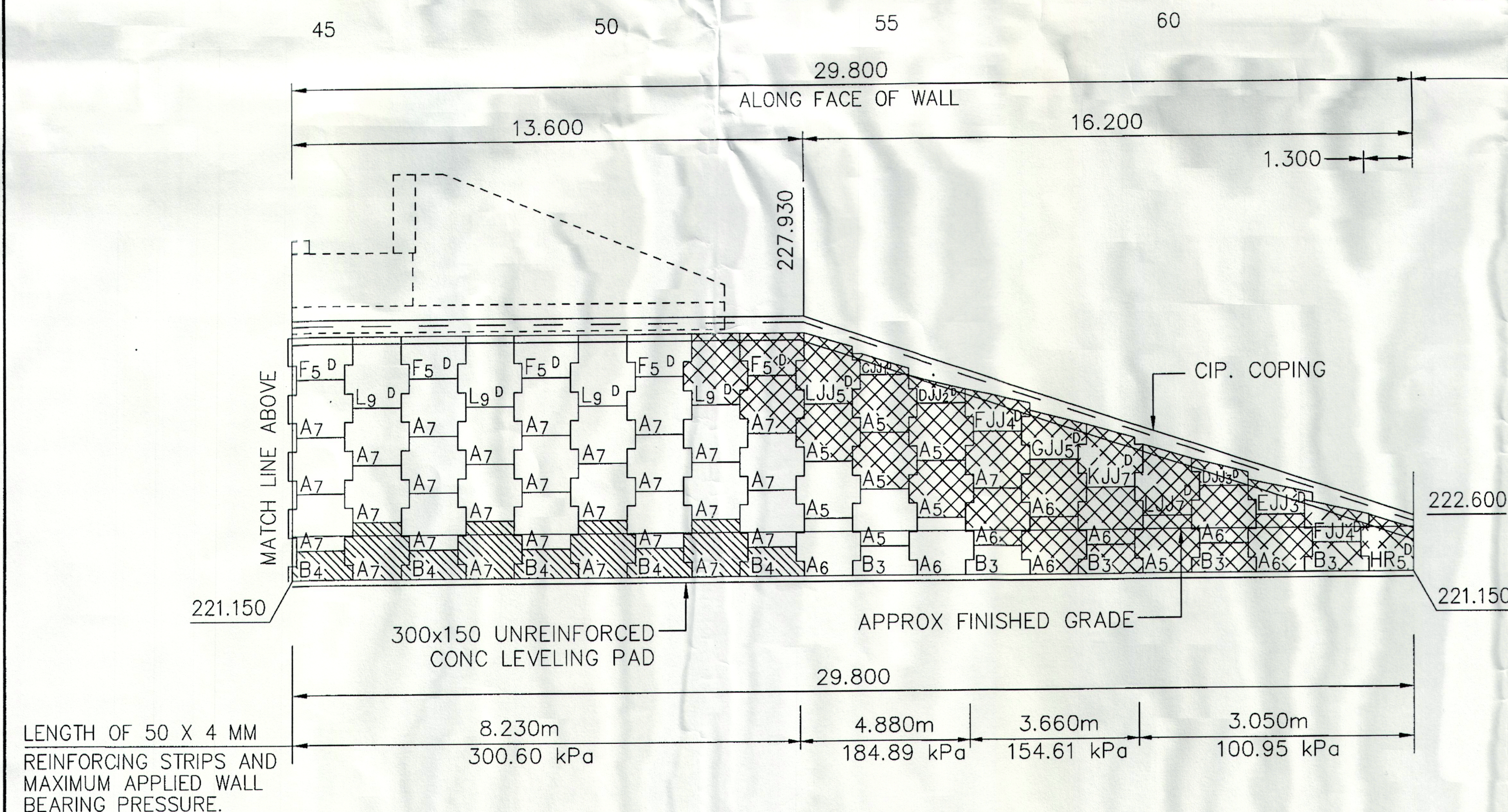




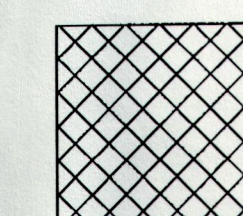


## ELEVATION - FRONT FACE- REAR ABUTMENT

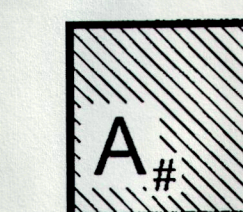
SCALE = 1 : 100



| SYMBOL | DESCRIPTION           |
|--------|-----------------------|
| D      | DOWEL BAR DESIGNATION |
| A      | PANEL DESIGNATION     |
| 4      | NO. OF TIE STRIPS     |



HATCHED PANELS INDICATES  
SKEWED STRIPS, REFER TO  
SHEET 4 FOR DETAILS.



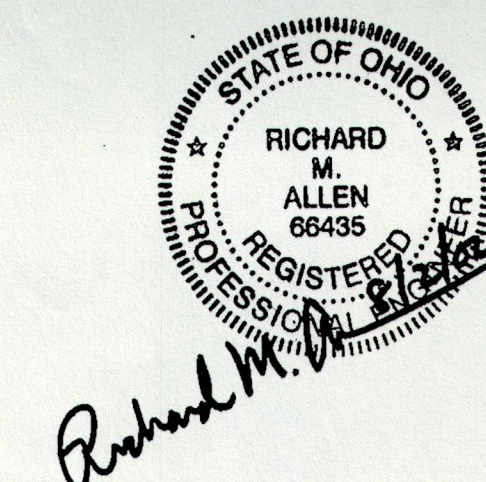
HATCHED PANELS DENOTE  
R7 PANEL REINFORCEMENT

## ELEVATION - FRONT FACE- REAR ABUTMENT

SCALE = 1 : 100

This drawing contains information proprietary to The Reinforced Earth Company, and is being furnished for the use of The Ohio Department of Transportation only in connection with this project, and the information contained is not to be transmitted to any other organization unless specifically authorized in writing by The Reinforced Earth Company. The Reinforced Earth Company is exclusive licensee in the United States under patents issued to Henri Vidal, and the furnishing of this drawing does not constitute an expressed or implied license under the Vidal patents.

The design contained on these drawings is based on information provided by the owner. On the basis of this information, The Reinforced Earth Company has designed, and is responsible for the internal stability of the structure only. External stability, including foundation and slope stability, is the responsibility of the owner.



The Reinforced Earth Company  
 8614 Westwood Center Drive  
 Suite 1100 Vienna, Virginia 22182  
 (703) 821-1175 FAX-(703) 821-1815

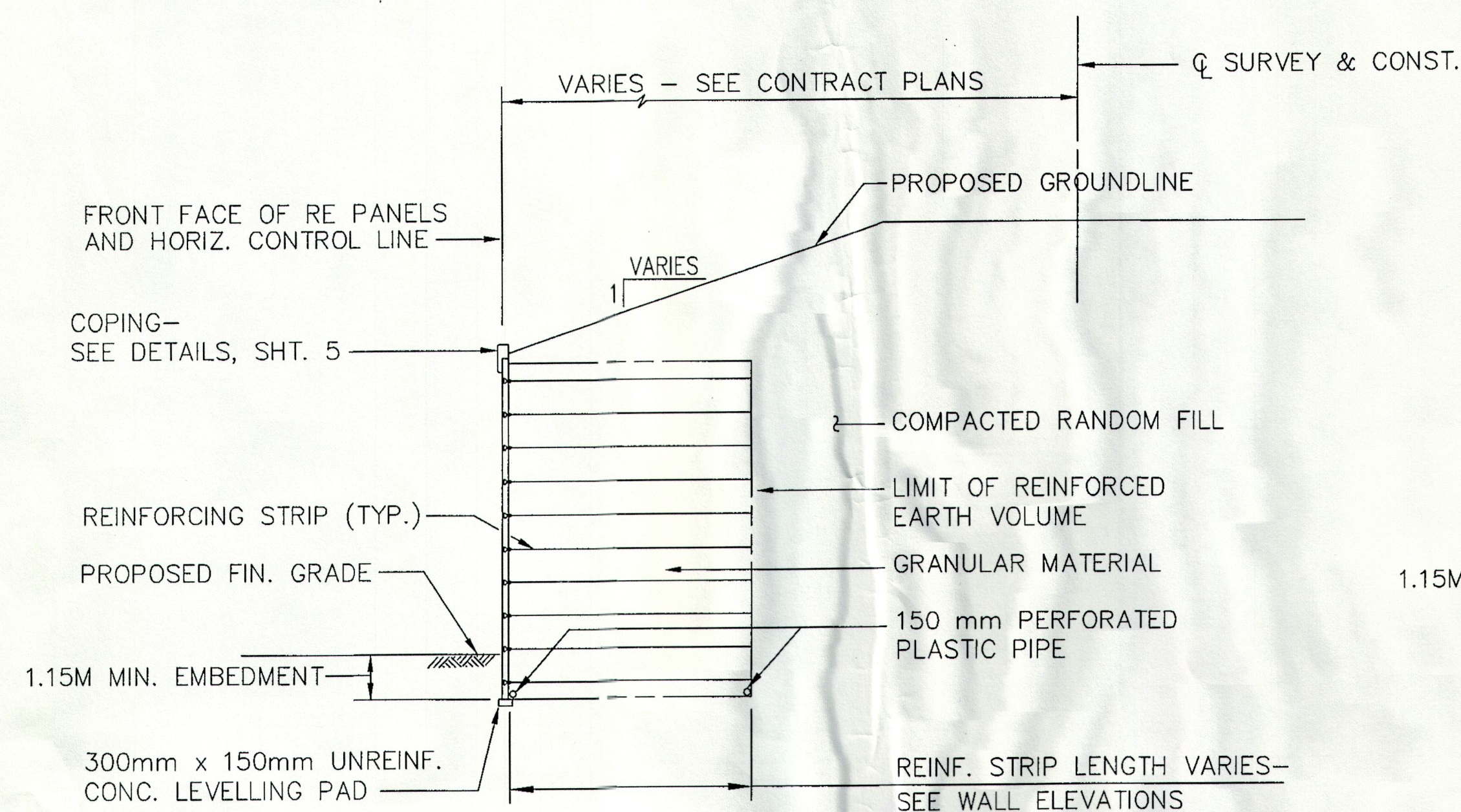
DATE 08/2002  
 REVIEWED TMA  
 STRUCTURE FILE NO.  
 DRAWN RCM  
 REVISION  
 DESIGNED RCM  
 CHECKED FC

ELEVATION - REAR ABUTMENT  
 BRIDGE NO. JAC-32-1712 L & R  
 S.R. 32 OVER S.R. 327

JAC-32-27.631  
 3 / 6

RE 13273

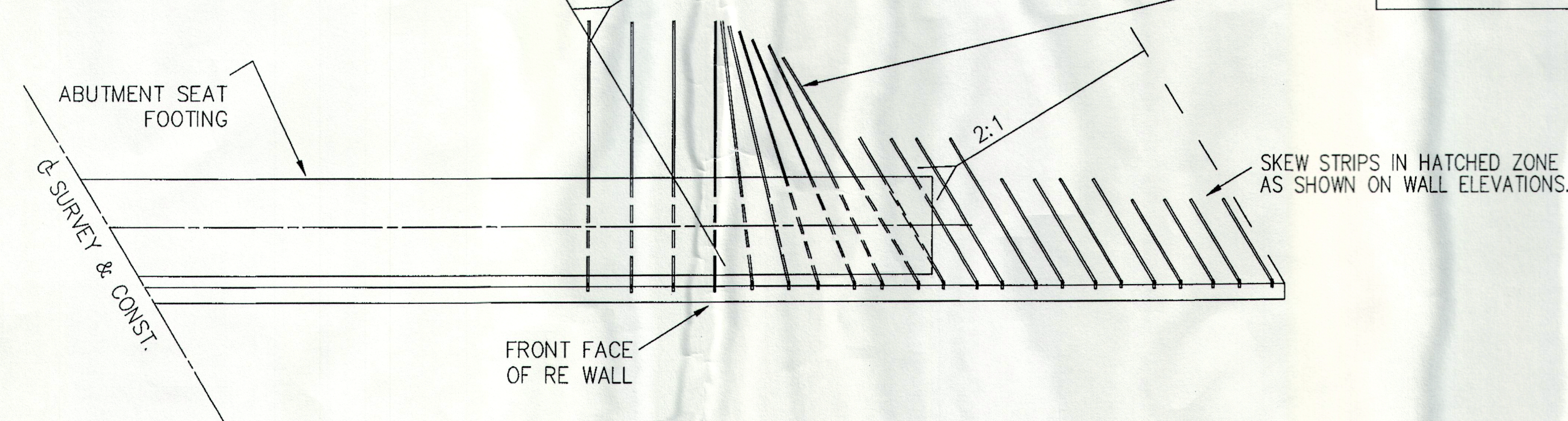




TYPICAL SECTION WITH COPING

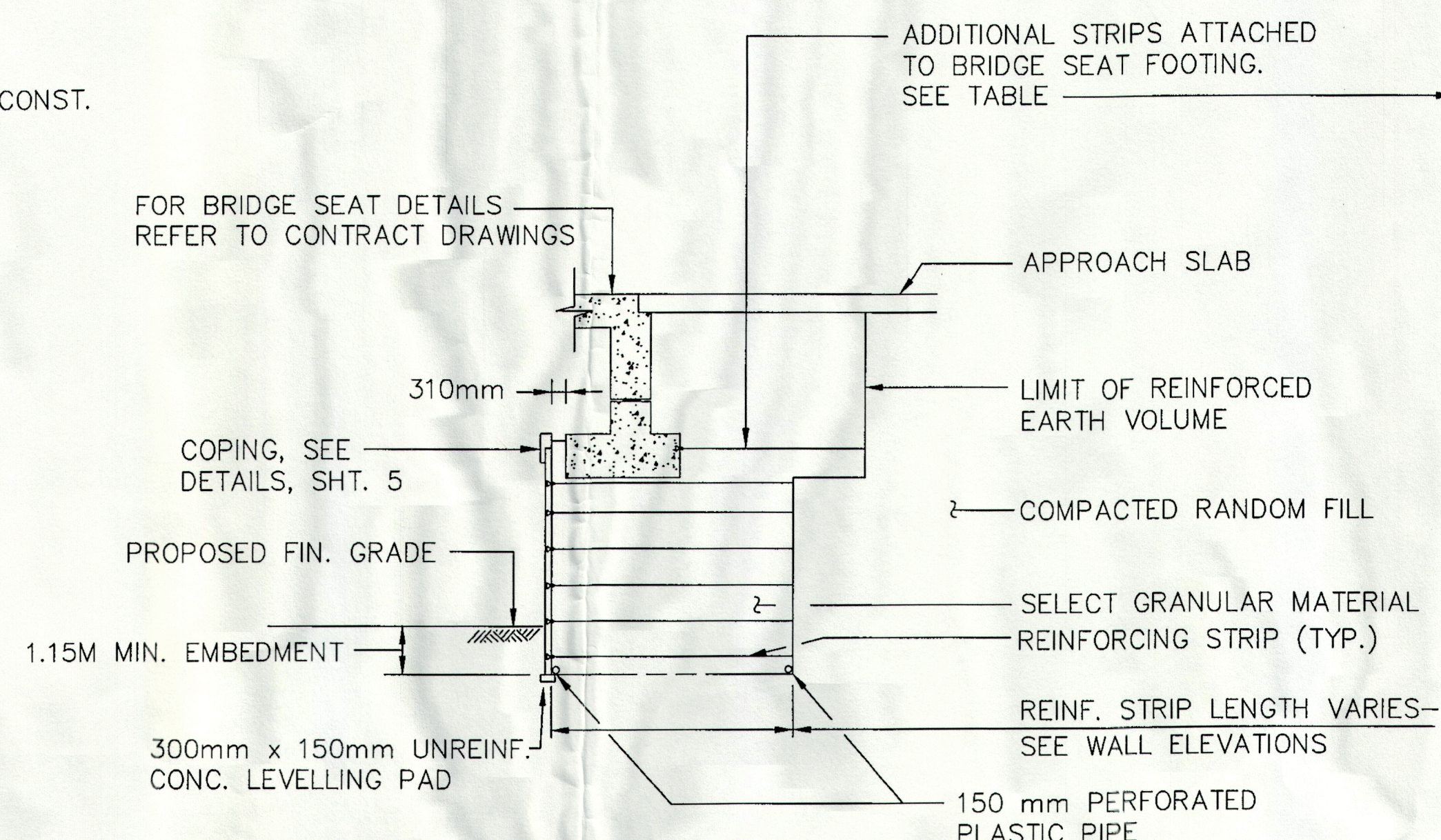
SCALE: NONE

NOTE:  
SKEW STRIPS PARALLEL TO ROADWAY ABOVE AS SHOWN TO PROVIDE UNIFORM GROUND COVER.



SKEWED REINF. STRIPS AT FWD ABUT RIGHT BRIDGE

SCALE: NONE

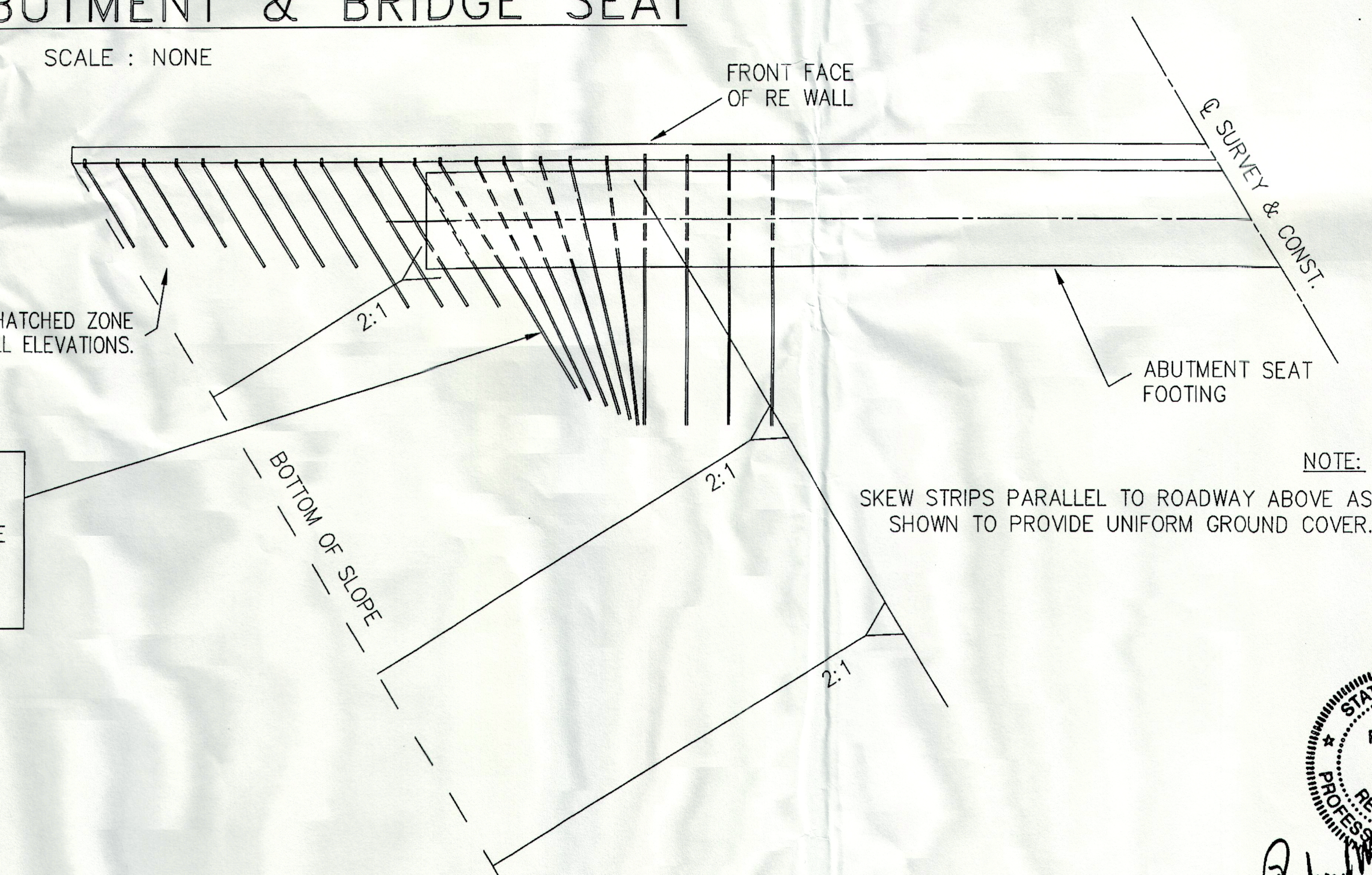


SECTION AT ABUTMENT & BRIDGE SEAT

SCALE: NONE

SKEW STRIPS IN HATCHED ZONE AS SHOWN ON WALL ELEVATIONS.

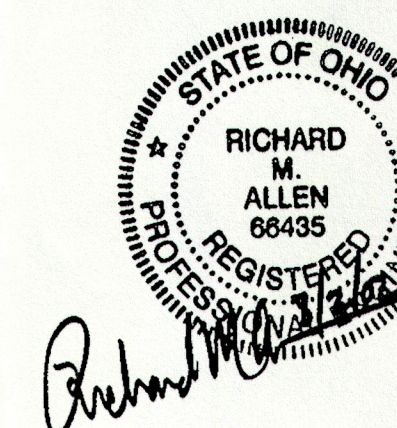
GRADUALLY REDUCE SKEW OF REINFORCING STRIPS UNTIL PERPENDICULAR TO BACK FACE OF PANELS WHILE MAINTAINING ADEQUATE BACKFILL COVER OVER STRIPS.



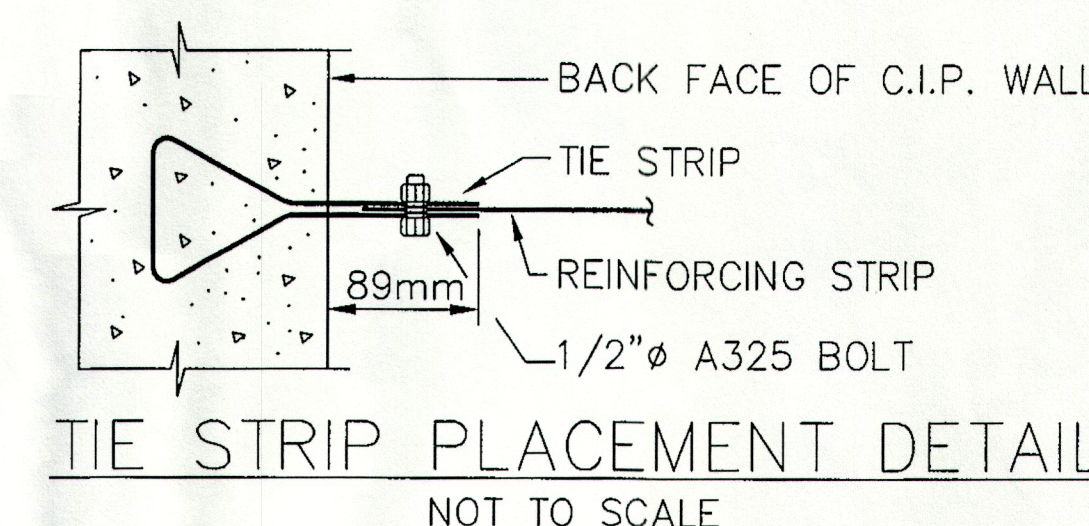
SKEWED REINF. STRIPS AT REAR ABUT LEFT BRIDGE

SCALE: NONE

NOTE:  
SKEW STRIPS PARALLEL TO ROADWAY ABOVE AS SHOWN TO PROVIDE UNIFORM GROUND COVER.



| ABUTMENT REINFORCING STRIP DATA:     |          |           |
|--------------------------------------|----------|-----------|
|                                      | FWD ABUT | REAR ABUT |
| TIE STRIP QUANTITY IN ROW:           | 135      | 147       |
| TIE STRIP HORIZONTAL O.C. SPACING:   | 440 mm   | 430 mm    |
| TIE STRIP CLEAR. FROM BENT ENDS (±): | 380 mm   | 380 mm    |
| HEIGHT OF STRIPS ABOVE BOT. OF ABUT. | 350 mm   | 350 mm    |
| REINFORCING STRIP LENGTH:            | 6.0 M    | 6.0 M     |



This drawing contains information proprietary to The Reinforced Earth Company, and is being furnished for the use of The Ohio Department of Transportation only in connection with this project, and the information contained is not to be transmitted to any other organization unless specifically authorized in writing by The Reinforced Earth Company. The Reinforced Earth Company is exclusive licensee in the United States under patents issued to Henri Vidal, and the furnishing of this drawing does not constitute an expressed or implied license under the Vidal patents.

The design contained on these drawings is based on information provided by the owner. On the basis of this information, The Reinforced Earth Company has designed, and is responsible for the internal stability of the structure only. External stability, including foundation and slope stability, is the responsibility of the owner.

The Reinforced Earth Company  
8614 Westwood Center Drive  
Suite 1100 Vienna, Virginia 22182  
(703) 821-1175 FAX-(703) 821-1815

DATE 08/2002  
REVIEWED RMA  
DRAWN RCM  
DESIGNED RCM  
CHECKED FC

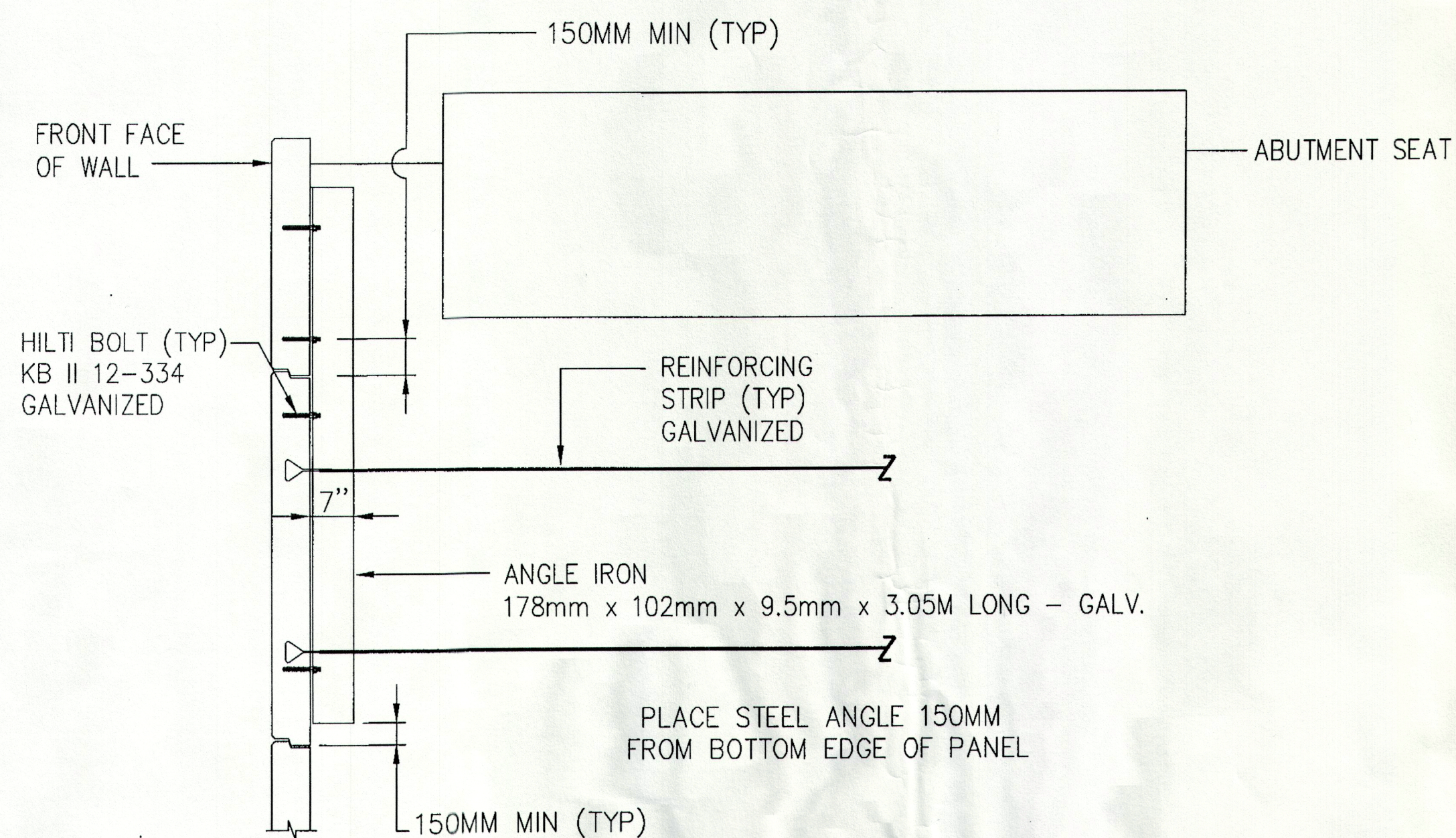
SECTIONS & SKEW DETAILS  
BRIDGE NO. JAC-32-1712 L & R  
S.R. 32 OVER S.R. 327

JAC-32-27.631

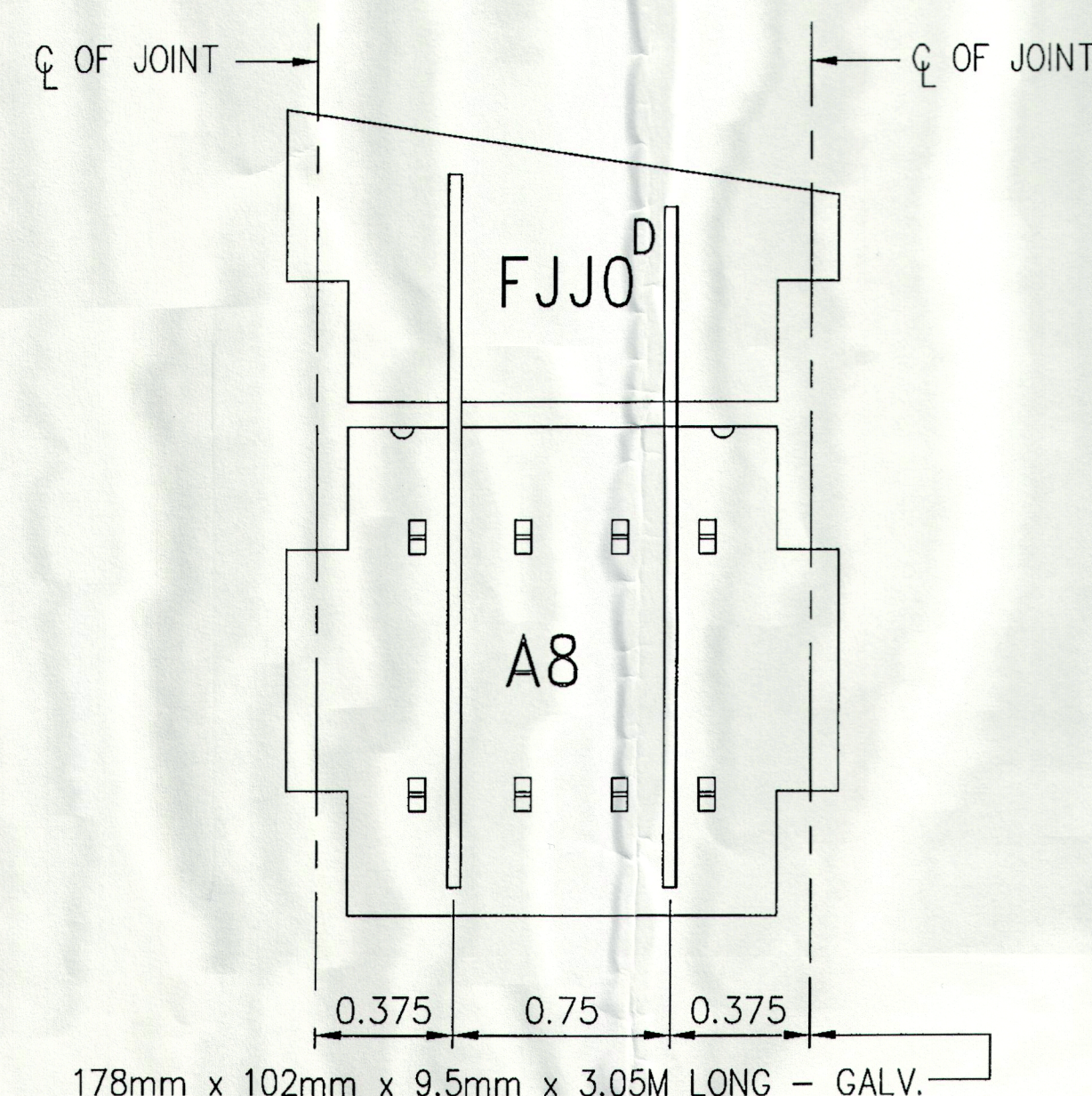
4 / 6

RE 13273

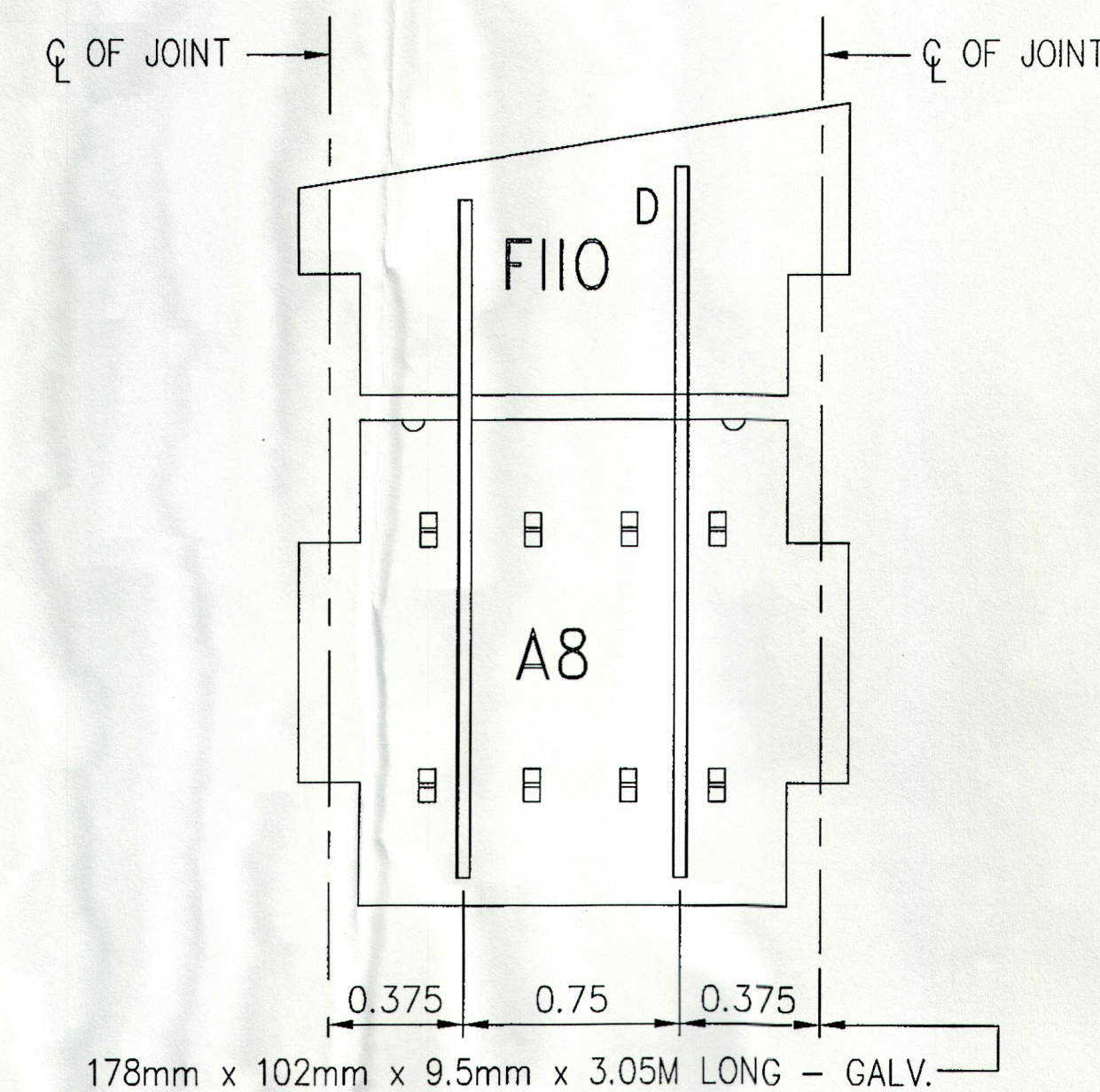




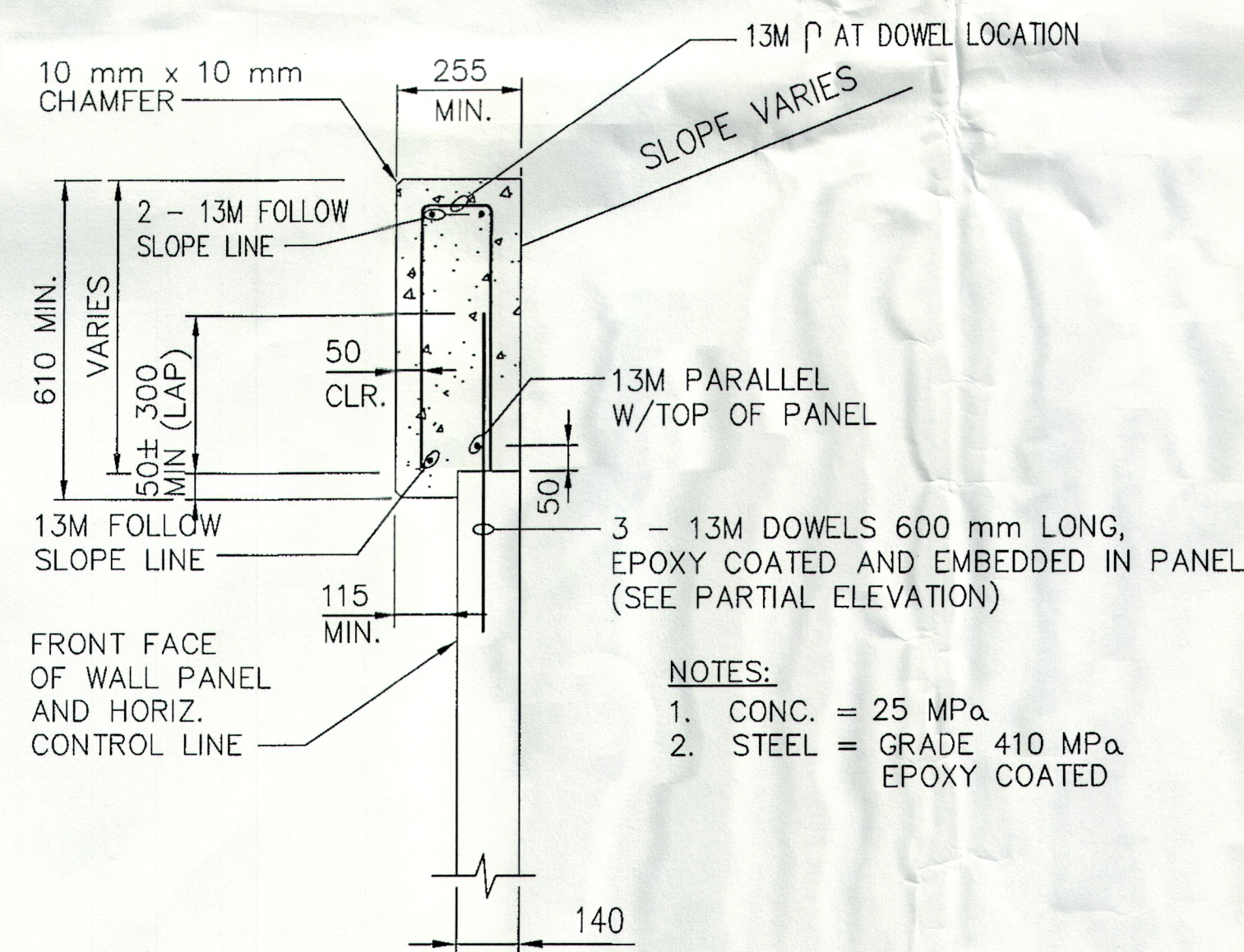
TYPICAL SECTION @ ANGLE IRON LOCATION  
NOT TO SCALE



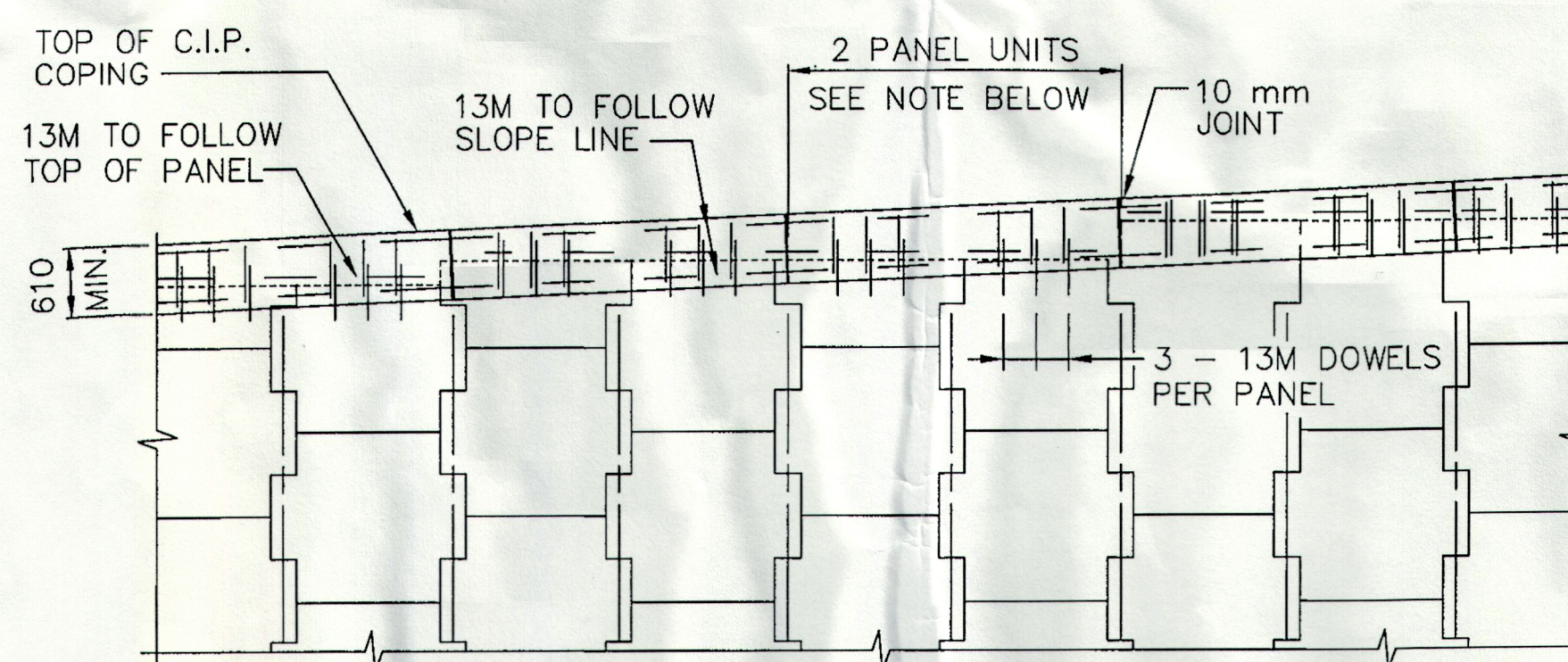
FWD ABUTMENT - A8 PANEL  
TYPICAL PLACEMENT OF ANGLE IRON  
NOT TO SCALE



REAR ABUTMENT - A8 PANEL  
TYPICAL PLACEMENT OF ANGLE IRON  
NOT TO SCALE

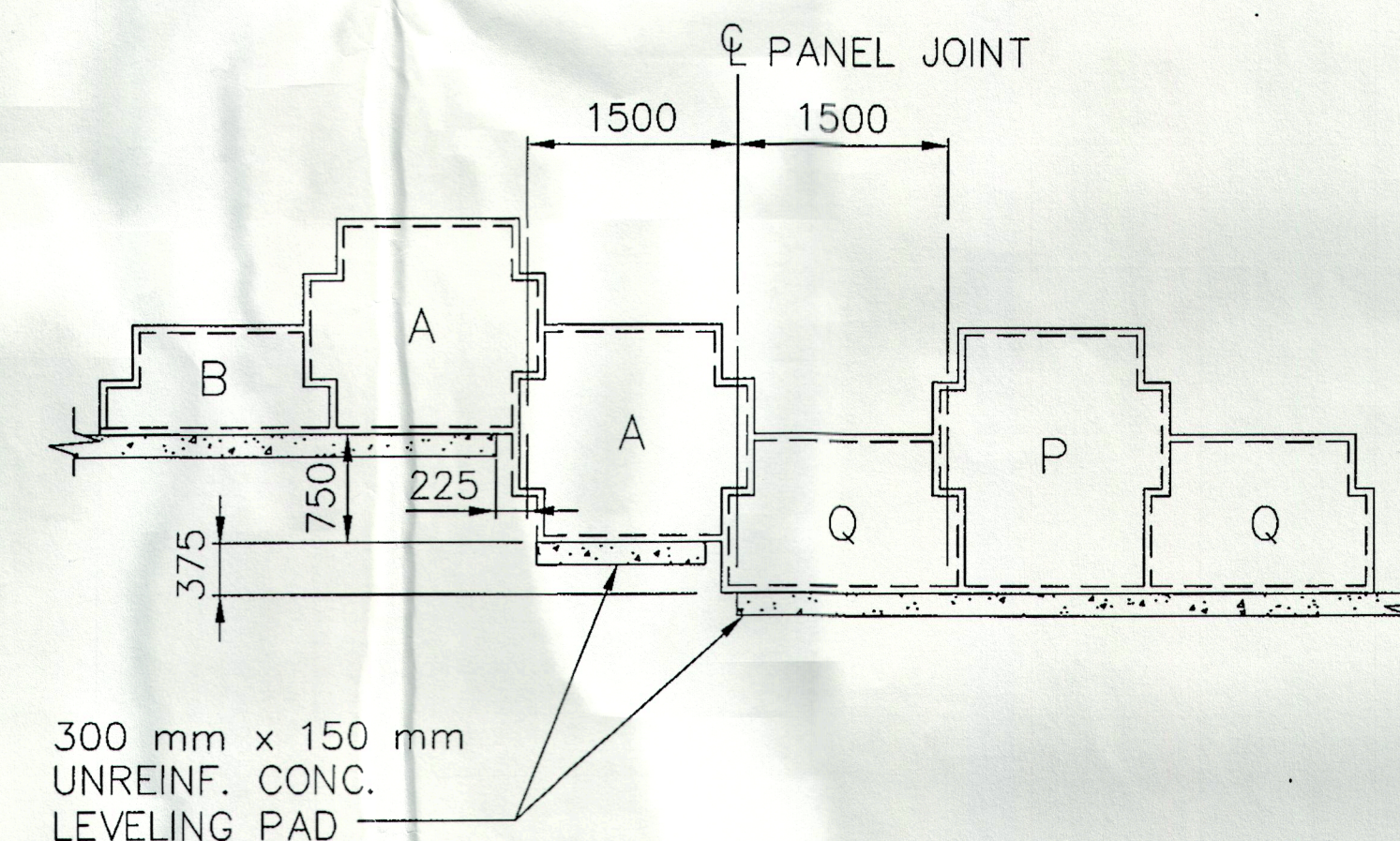


C.I.P. CONC. COPING  
SCALE 1:10



C.I.P. COPING - PARTIAL ELEVATION  
SCALE 1:50

NOTE:  
JOINTS IN COPING SHALL BE AT 2 PANEL INTERVALS AND COINCIDE APPROXIMATELY WITH Q OF ALIGNMENT DEVICE. REINFORCING STEEL SHALL BE STOPPED 50mm SHORT OF EITHER SIDE OF THE JOINTS.

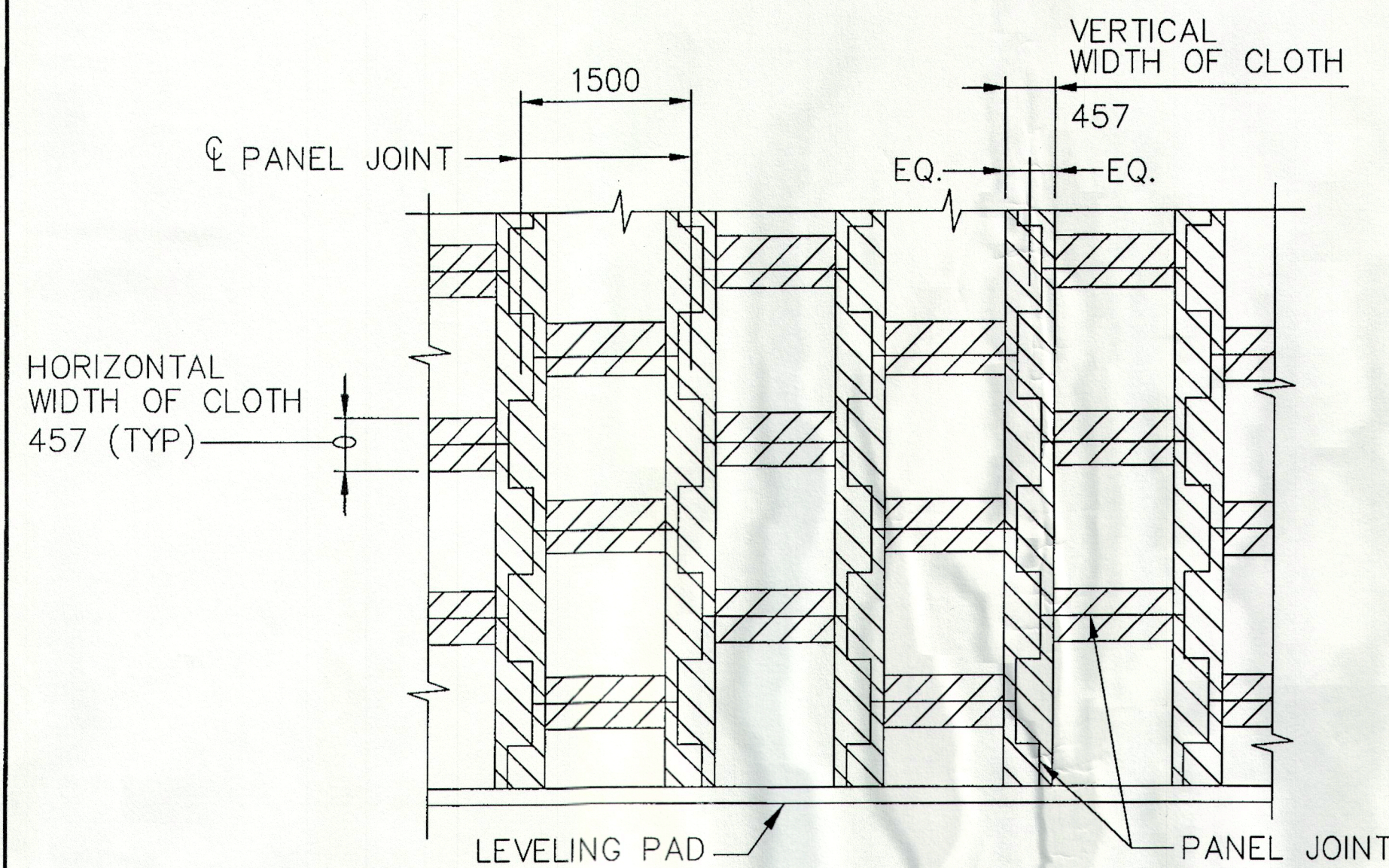


TYPICAL LEVELING PAD STEP DETAIL  
SCALE 1:50

This drawing contains information proprietary to The Reinforced Earth Company, and is being furnished for the use of The Ohio Department of Transportation only in connection with this project, and the information contained is not to be transmitted to any other organization unless specifically authorized in writing by The Reinforced Earth Company. The Reinforced Earth Company is exclusive licensee in the United States under patents issued to Henri Vidal, and the furnishing of this drawing does not constitute an expressed or implied license under the Vidal patents.

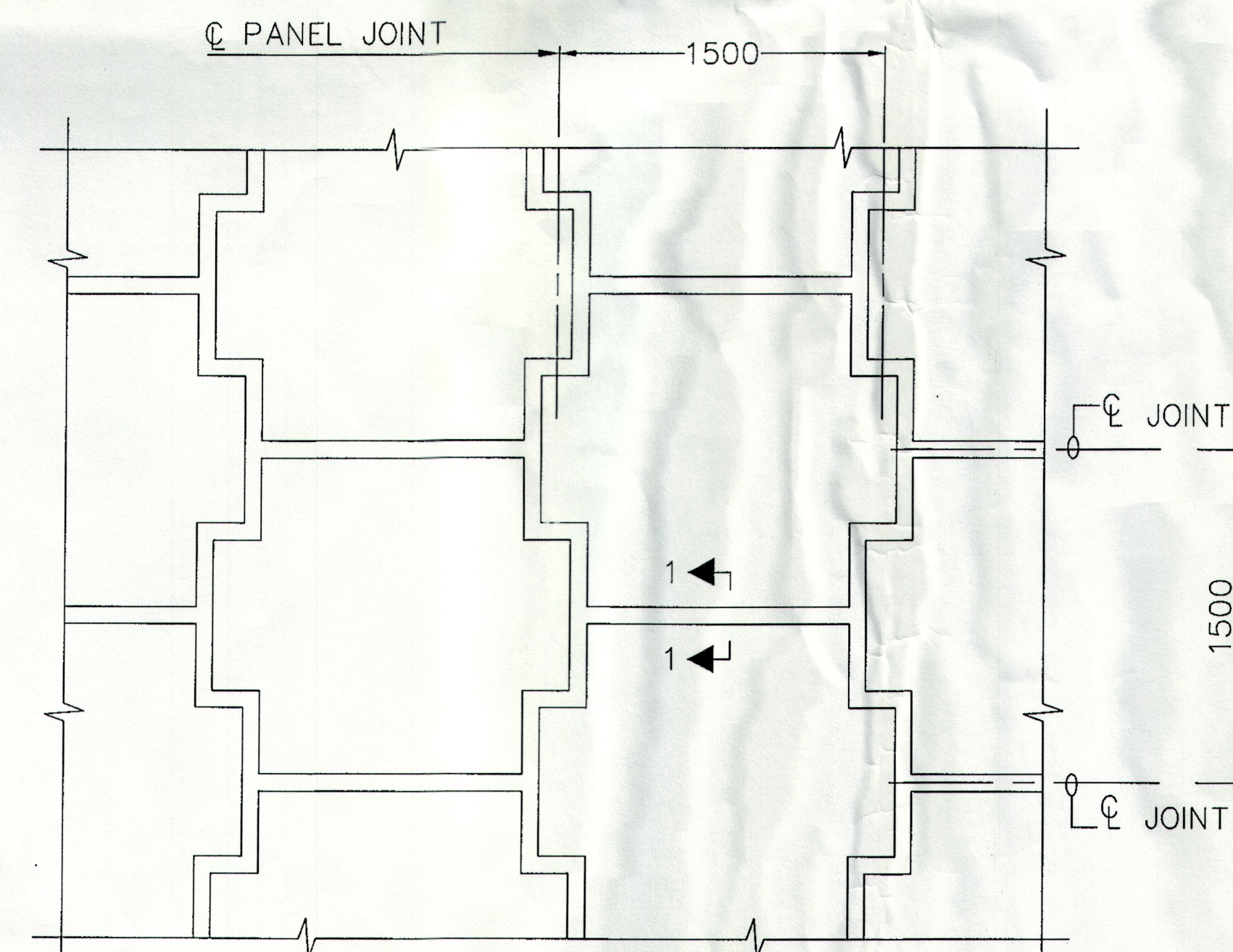
The design contained on these drawings is based on information provided by the owner. On the basis of this information, The Reinforced Earth Company has designed, and is responsible for the internal stability of the structure only. External stability, including foundation and slope stability, is the responsibility of the owner.



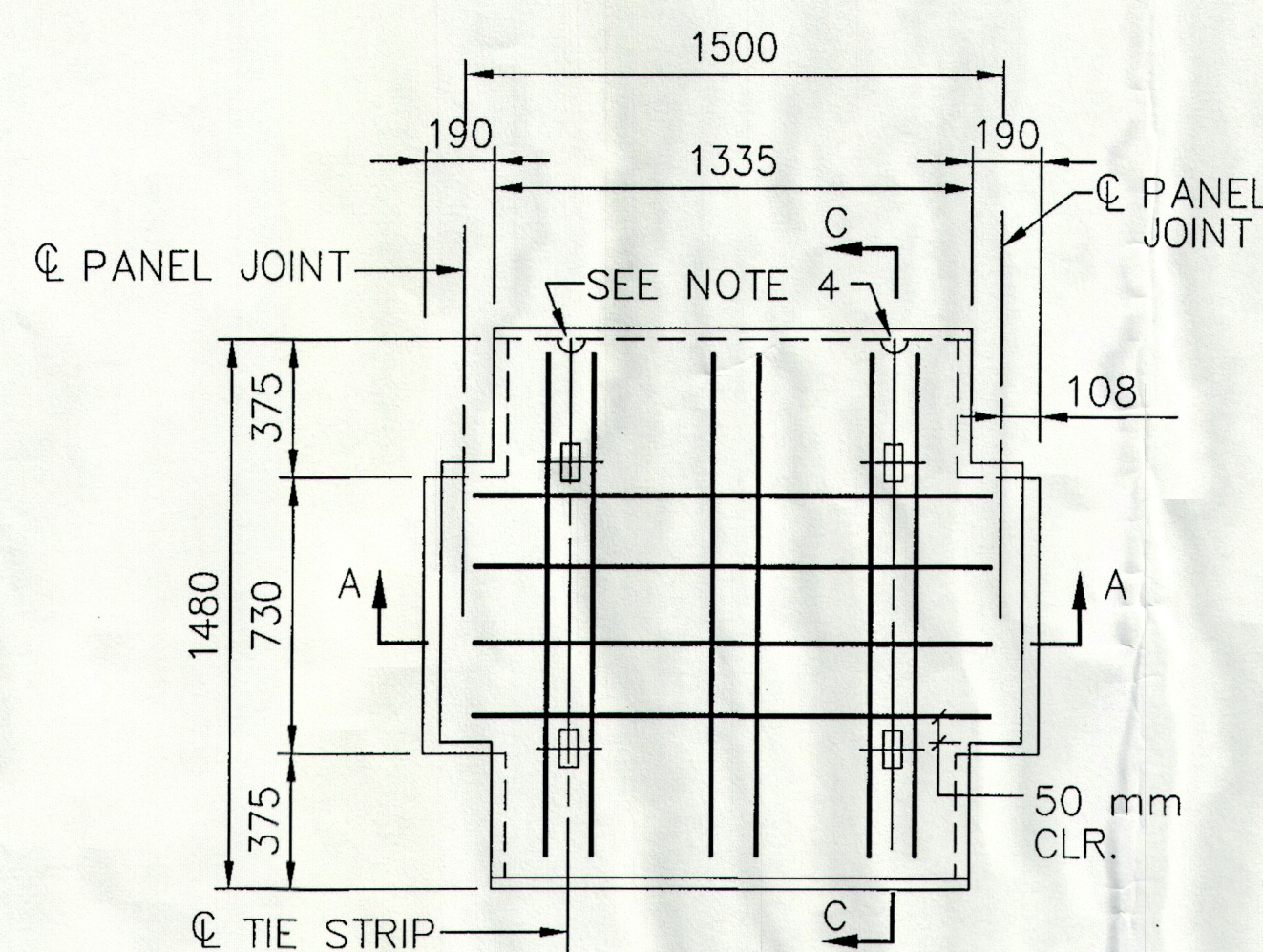


NOTE:  
STRIPS OF FILTER CLOTH SHALL BE PLACED ON BACK FACE OF PANEL, OVER PANEL JOINTS. FILTER CLOTH SHALL BE ADHERED TO BACK FACE OF PANELS USING AN ADHESIVE COMPOUND SUPPLIED BY THE REINFORCED EARTH COMPANY.

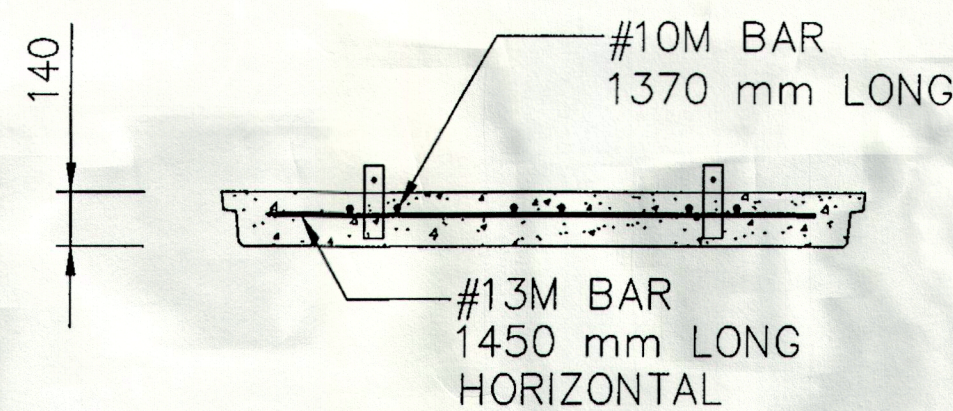
**FILTER CLOTH DETAIL**  
**PARTIAL ELEVATION - BACK FACE:**  
SCALE 1:50



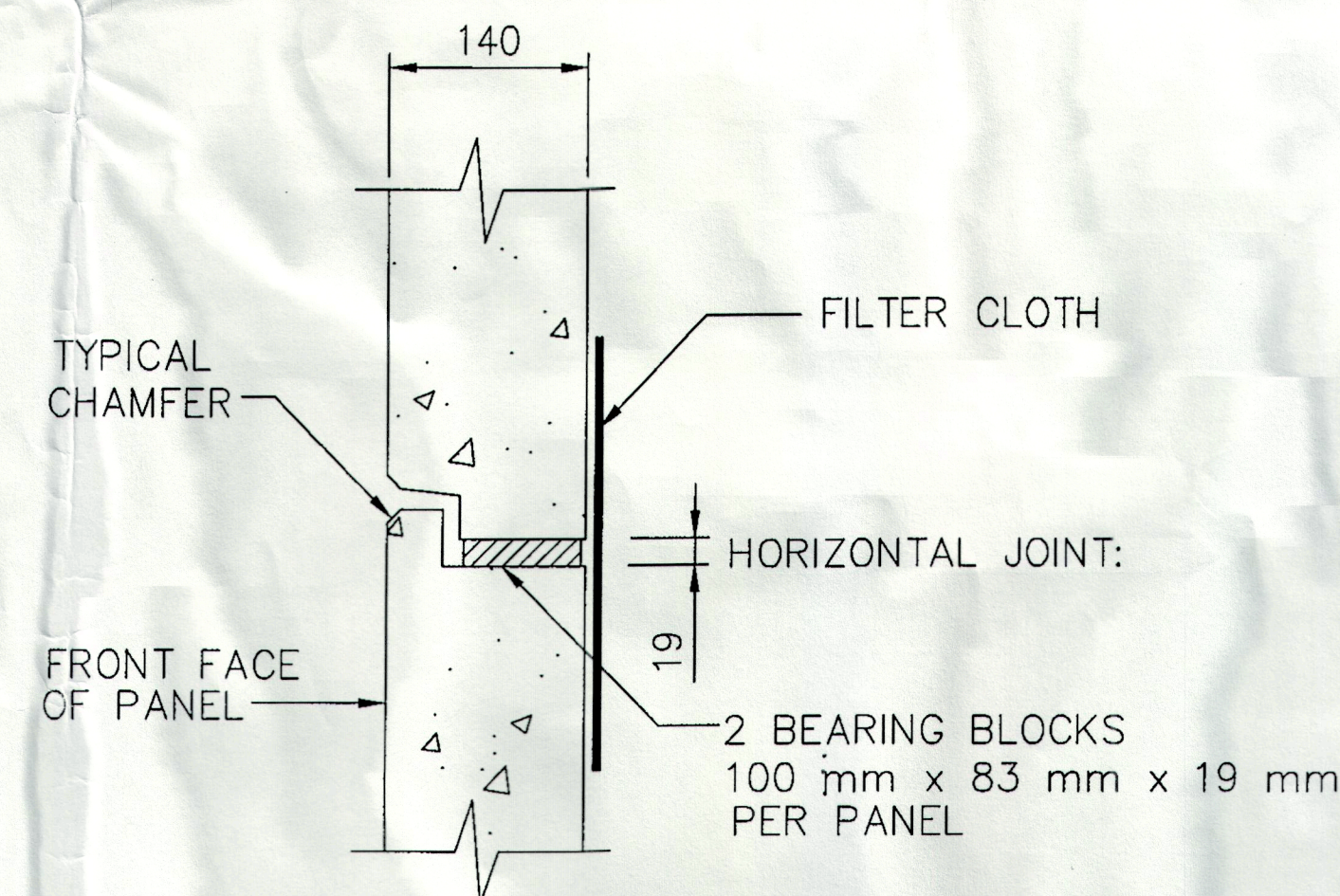
**TYPICAL PANEL LAYOUT**  
**PARTIAL ELEVATION - FRONT FACE**  
SCALE 1:25



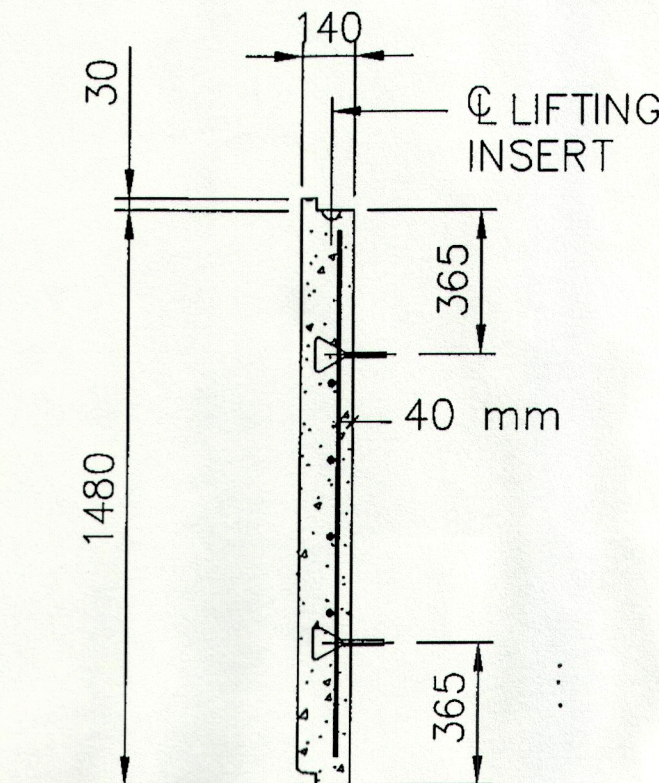
**PANEL TYPE "A"**  
**WITH R6 REINFORCEMENT**  
**FRONT VIEW**  
SCALE 1:20



**SECTION A-A**  
SCALE 1:20



**SECTION 1-1**  
SCALE 1:5

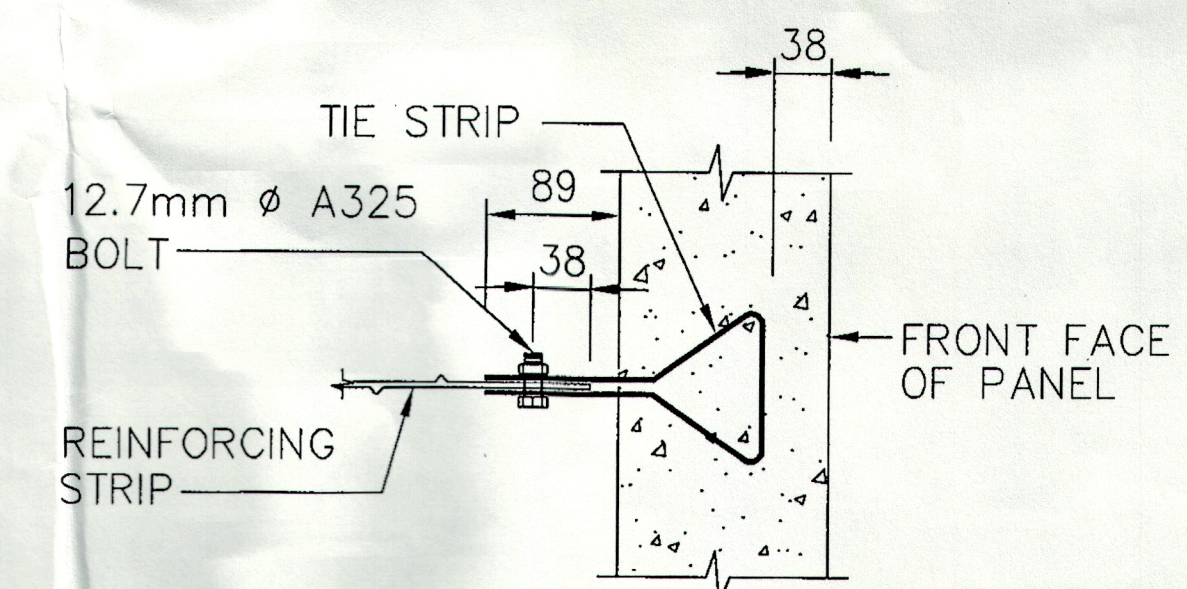


**SECTION C-C**  
SCALE 1:20

| PANEL THICKNESS | REINFORCEMENT DESIGNATION | PANEL REINFORCEMENT                               | MAXIMUM ALLOWABLE HORIZONTAL STRESS AT FACING (KPa) |
|-----------------|---------------------------|---|---|
| 140             | R5                        | 6-10M(#3) $\phi$ VERT.<br>4-13M(#4) $\phi$ HORIZ. | 28.7  |
| 140             | R6                        | 6-10M(#3) $\phi$ VERT.<br>4-13M(#4) $\phi$ HORIZ. | 76.6  |
| 140             | R7                        | 6-13M(#3) $\phi$ VERT.<br>4-19M(#6) $\phi$ HORIZ. | 122.1   |

**NOTES:**

1. REINFORCING STEEL TO BE A615M GRADE 60.(EPOXY COATED)
2. 10 mm x 10 mm CHAMFER SHALL BE PROVIDED ON ALL EXPOSED EDGES (FRONT FACE ONLY).
3. ALL PANEL TYPES AND OTHER RELATED ELEMENTS WILL BE DETAILED ON SHOP DRAWINGS.
4. ALL PANELS SHALL HAVE TWO LIFTING INSERTS OF ONE TON CAPACITY EACH.
5. PANEL DESIGN THICKNESS IS 140 mm. THICKNESS OF CONCRETE MUST INCREASE TO ACCOMMODATE ANY ARCHITECTURAL FINISH THAT MAY BE SPECIFIED.
6. ACTUAL PANEL REINFORCEMENT FOR ALL PANEL TYPES ON THIS PROJECT IS DESIGNATED ABOVE. R6 ILLUSTRATED FOR INFORMATION ONLY.



**CONNECTION DETAIL**  
SCALE 1:5



ALL DIMENSIONS ARE IN MILLIMETERS  
UNLESS NOTED OTHERWISE

This drawing contains information proprietary to The Reinforced Earth Company, and is being furnished for the use of The Ohio Department of Transportation only in connection with this project, and the information contained is not to be transmitted to any other organization unless specifically authorized in writing by The Reinforced Earth Company. The Reinforced Earth Company is exclusive licensee in the United States under patents issued to Henri Vidal, and the furnishing of this drawing does not constitute an expressed or implied license under the Vidal patents.

The design contained on these drawings is based on information provided by the owner. On the basis of this information, The Reinforced Earth Company has designed, and is responsible for the internal stability of the structure only. External stability, including foundation and slope stability, is the responsibility of the owner.

**The Reinforced Earth Company**  
8614 Westwood Center Drive  
Suite 1100 Vienna, Virginia 22182  
(703) 821-1175 FAX-(703) 821-1815

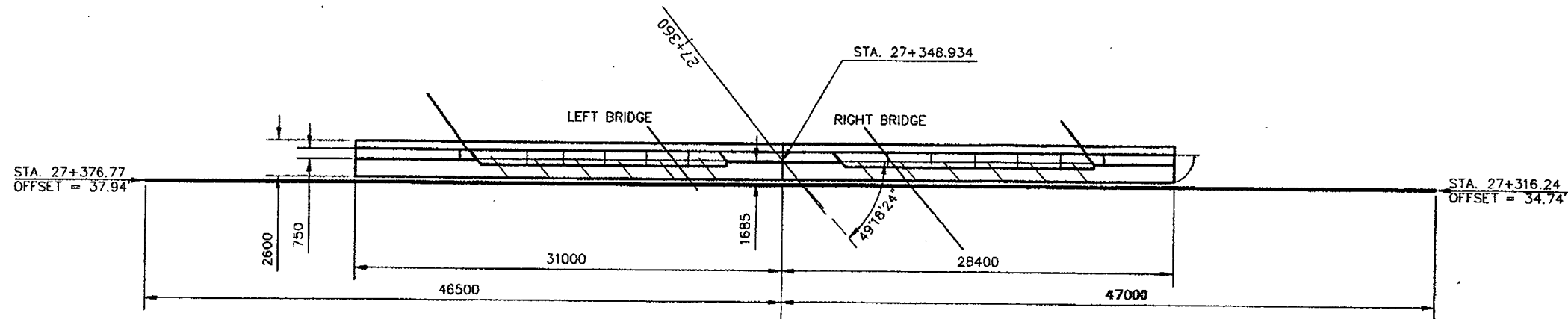
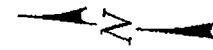
DESIGNED RCM  
CHECKED FC  
DRAWN RCM  
REVIEWED RCM  
DATE 08/2002  
STRUCTURE FILE NO.

STANDARD PANEL DETAILS  
BRIDGE NO. JAC-32-1712 L & R  
S.R. 32 OVER S.R. 327

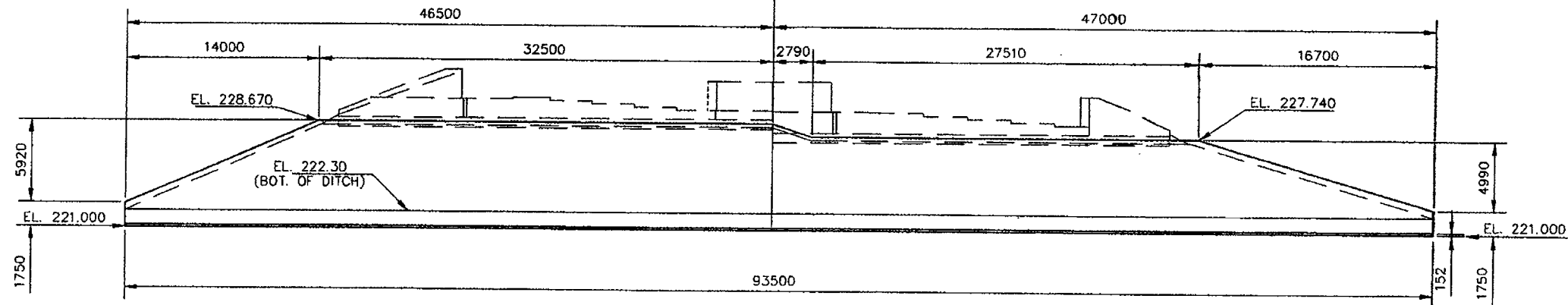
JAC-32-27.631

6 / 6

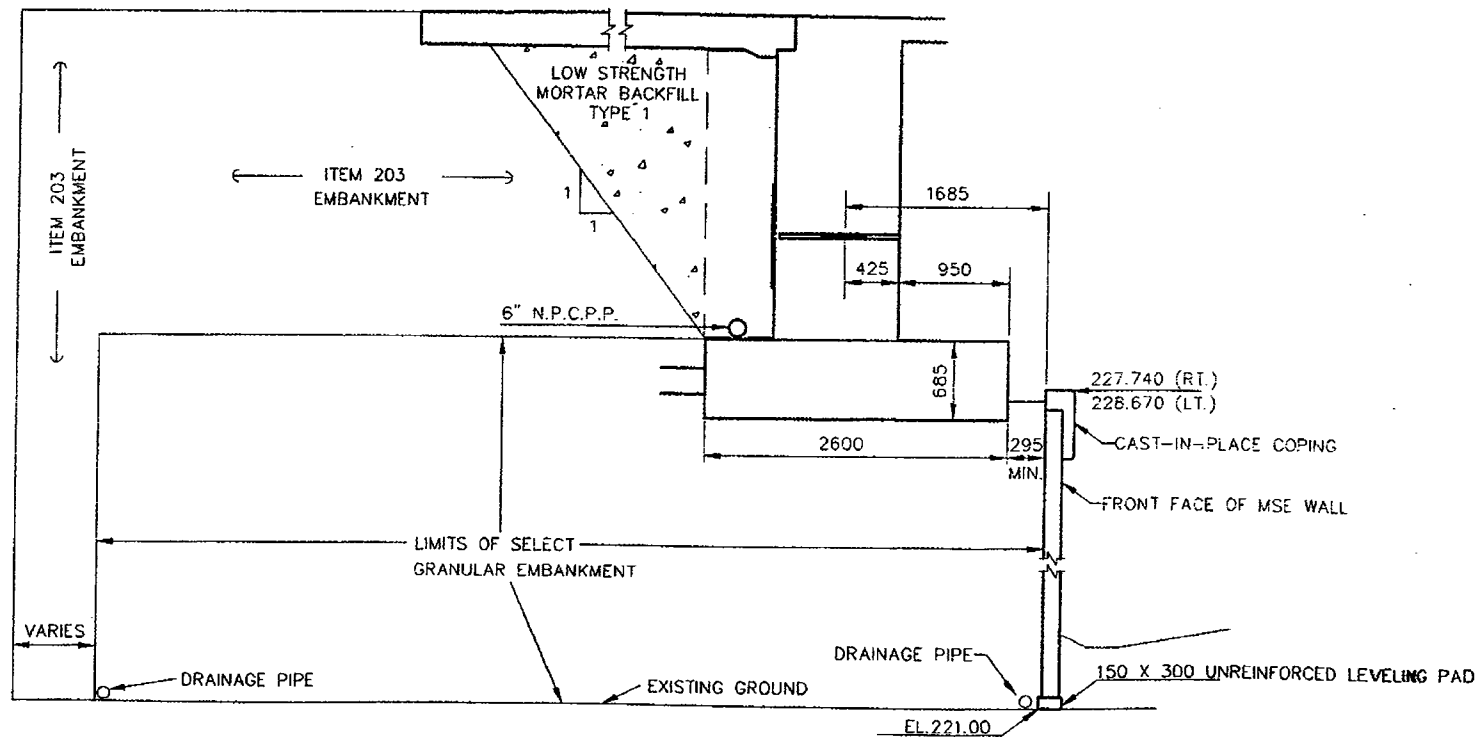




PLAN



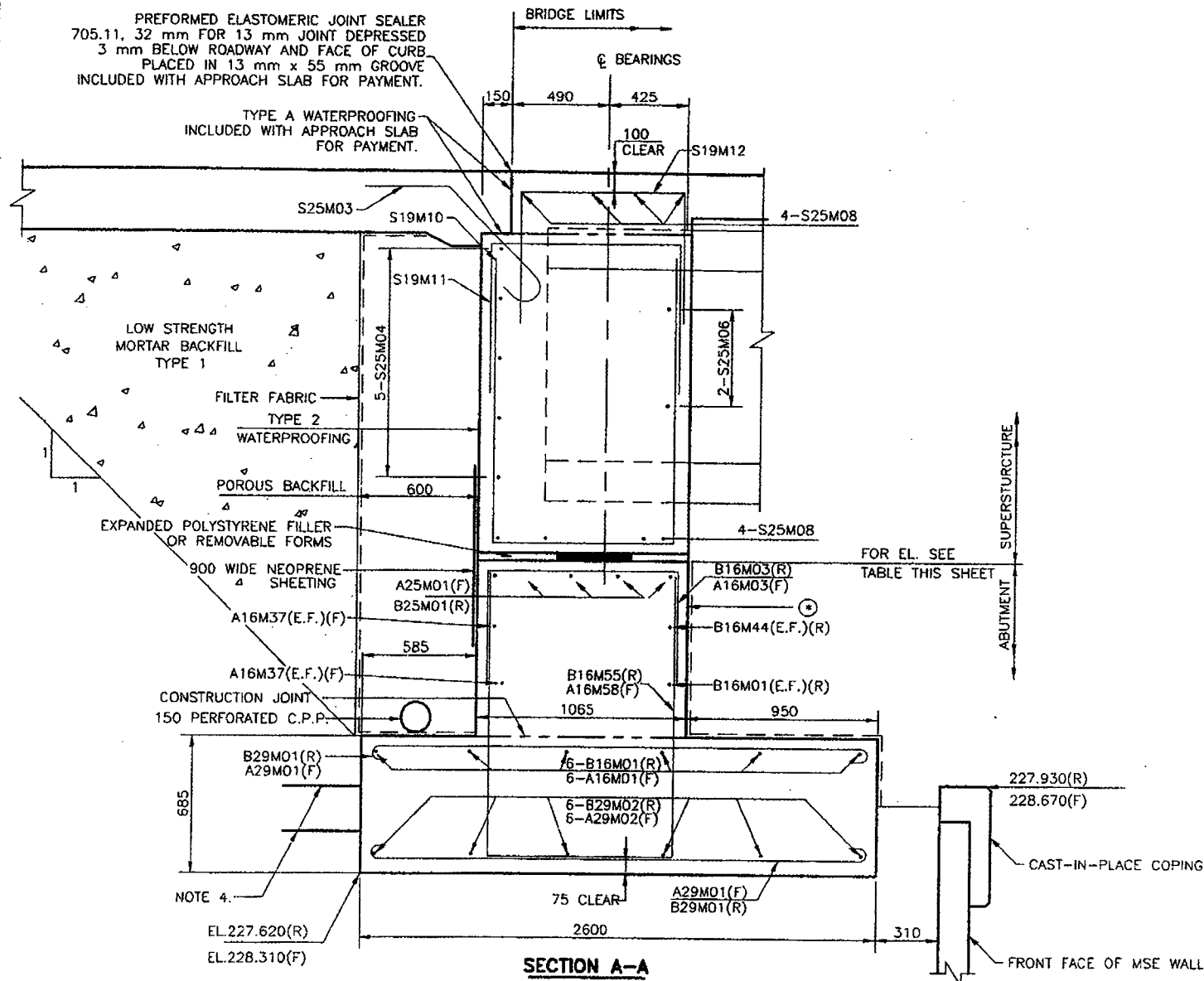
ELEVATION (MSE)



SECTION A-A

|                         |  |                              |  |                            |  |                          |  |                  |  |
|-------------------------|--|------------------------------|--|----------------------------|--|--------------------------|--|------------------|--|
| DESIGN AGENCY           |  | CIVILTECH                    |  | CONSULTING ENGINEERS, INC. |  | 6041 HEATHER BLUFF DRIVE |  | DUBLIN, OH 43016 |  |
| DATE                    |  | 7-25-02                      |  | A.Y.Z.                     |  | 4002243 L                |  | 4002243 R        |  |
| DRAWN                   |  | S.F.W.                       |  | REVIEWED                   |  | G.G.N.                   |  | K.K.H.           |  |
| FORWARD MSE WALL LAYOUT |  | BRIDGE NO. JAC-32-1712 L & R |  | S.R.32 OVER S.R.327        |  | JAC-32-27.631            |  | 6 / 34           |  |





**NOTES:**

**1. POROUS BACKFILL**

POROUS BACKFILL WITH FILTER FABRIC SHALL EXTEND UPWARD TO THE PLANE OF THE SUBGRADE, TO 300 mm BELOW THE EMBANKMENT SURFACE, AND Laterally TO THE ENDS OF THE WINGWALLS. FILTER FABRIC SHALL CONFORM WITH 712.09, TYPE A. FILTER FABRIC IS INCLUDED WITH POROUS BACKFILL FOR PAYMENT.

**2. ABUTMENT DIAPHRAGM CONCRETE**

CONCRETE ENCASING THE PRESTRESSED I BEAM STRUCTURAL MEMBERS IN SEMI-INTEGRAL TYPE ABUTMENTS MAY BE PLACED AT LEAST 48 HOURS BEFORE THE ACTUAL DECK CONCRETE IS PLACED

**3. FOR ADDITIONAL DETAILS, REFER TO STANDARD DWG. SICD-1-96M.**

4. SEE MANUFACTURER'S MSE WALL PLANS FOR ADDITIONAL STRAPS ATTACHED TO ABUTMENT FOOTING.

5. SEE SHEET 4 & 5 OF 34 FOR MSE WALL DETAILS.

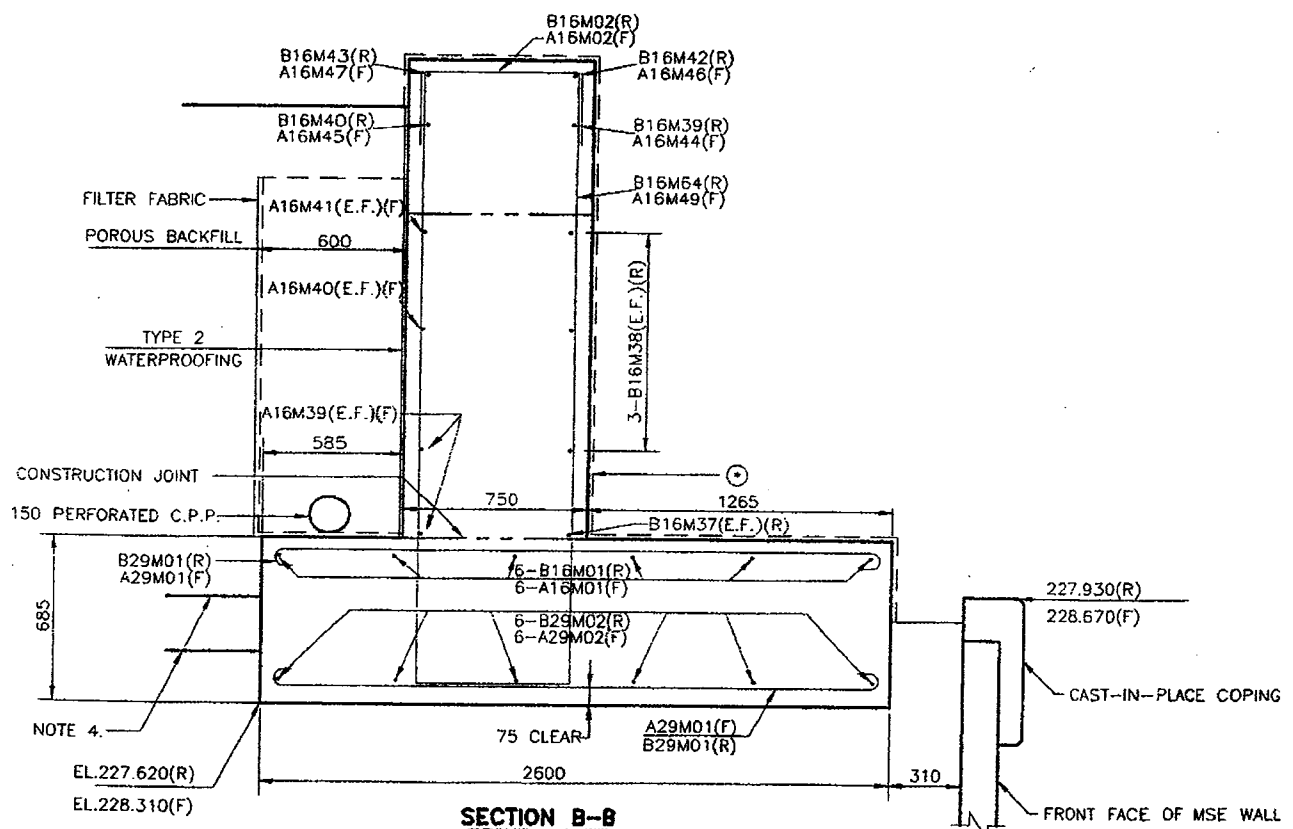
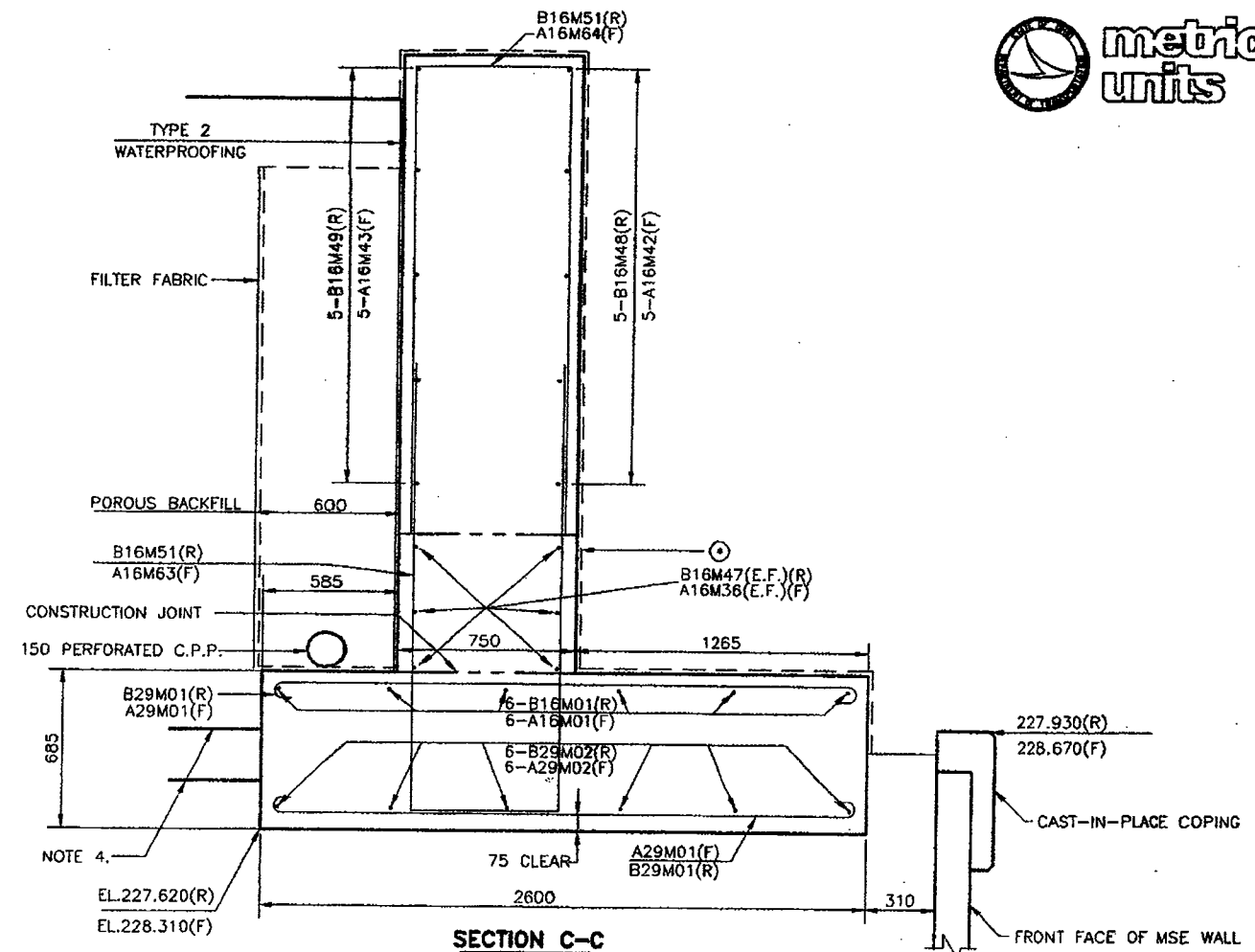
6. ABUTMENT BACKFILL ABOVE THE BRIDGE SEAT SHALL NOT BE PLACED UNTIL AFTER THE CONCRETE DECK SLAB HAS CURED FOR AT LEAST 48 HOURS.

**LEGEND**

(R) = REAR

(F) = FORWARD

⊙ = SEALING OF CONCRETE SURFACES



ALL DIMENSIONS ARE IN MILLIMETERS.  
ALL ELEVATIONS AND STATIONS ARE IN METERS.