

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74 (I-74)	*	PEORIA	45	1

JOB NO. D-94-068-07 \* D4 I-74 NOISE WALL 2008

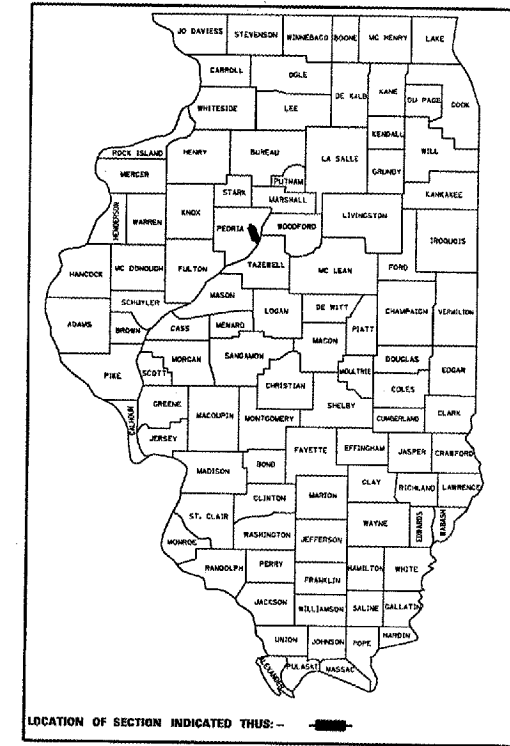
FOR INDEX OF SHEETS, SEE SHEET NO. 2  
FOR LIST OF STANDARDS, SEE SHEET NO. 2

SURVEY BOOK NOS.

I-74 RAMP A2 NOISEWALL BOOK 1

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
**PLAN FOR PROPOSED  
HIGHWAY IMPROVEMENT  
FEDERAL AID INTERSTATE**

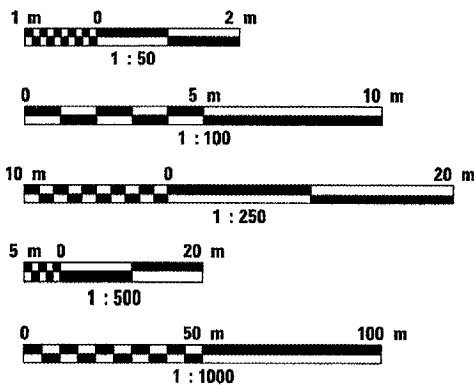
F.A.I. ROUTE 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PROJECT IM-074-4(235)087  
PEORIA COUNTY  
C-94-104-07



PROJECT ENGINEER: RICH DOTSON (309) 671-3455

LIAISON ENGINEER: CHRISTOPHER MAUSHARD (309) 671-3464

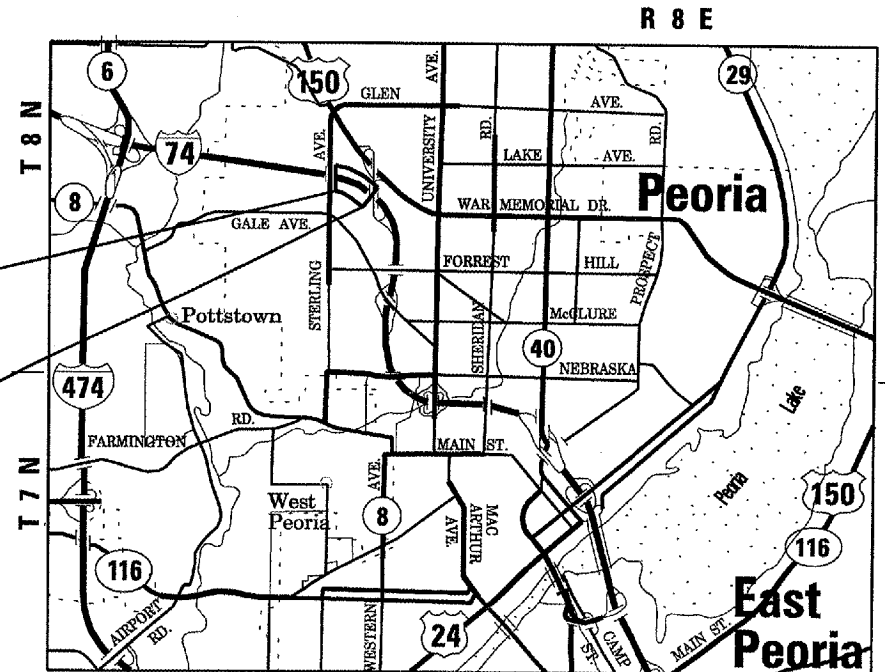
METRIC RATIOS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

CALL J.U.L.I.E. 48 HOURS BEFORE YOU DIG 1-800-892-0123

CATALOG NOS. - 031087-58D  
CONTRACT NO. - 68736



GROSS LENGTH OF IMPROVEMENT = 387.15 METERS (0.24 MILES)  
LATITUDE = 40°  
LONGITUDE = 89°



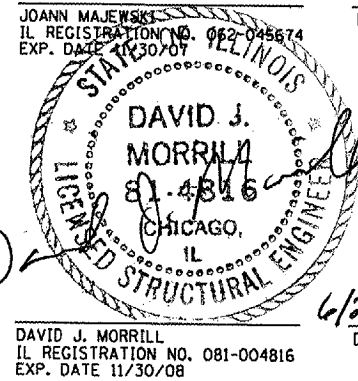
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED June 29, 07

Joann M. Majewski  
DISTRICT ENGINEER

August 19, 2007  
Eric E. Horn  
INTERIM ENGINEER OF DESIGN AND ENVIRONMENT

August 17, 2007  
Milton R. Sees, P.E.  
DIRECTOR, DIVISION OF HIGHWAYS



NOISE ABATEMENT WALL

DESIGNED BY:  
**benesch**  
alfred benesch & company  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-585-0450  
JOB NO. 3573

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# GENERAL NOTES

## AVAILABILITY OF ELECTRONIC FILES

MICROSTATION AND GEOPAK FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES. THE CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH USING THE ELECTRONIC FILES AND SHALL HOLD THE DEPARTMENT HARMLESS FOR ANY ERRORS OR OMISSIONS IN THE ELECTRONIC FILES AND THE DATE CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN ANY EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE THE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.

## UTILITIES - LOCATIONS/INFORMATION ON PLANS

THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. UNLESS ELEVATIONS ARE SHOWN - ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTH SUPPLIED BY THE UTILITY COMPANY. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

## PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM

ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.

## TREE REMOVAL

THE DISTRICT FOUR TREE COMMITTEE SHOULD BE CONTACTED AND PRIOR APPROVAL OBTAINED FOR ANY TREE REMOVAL BEYOND THE LIMITS/LOCATIONS INCLUDED IN THE PLANS.

## ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- SIGNED PROPERTY OWNER AGREEMENT FORM - D4 P10100
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA.
- BORROW AREA ENTRY AGREEMENT FORM - D4 P10101

PLEASE NOTE THAT A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES.

## ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

## EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES

IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS, THE CONNECTING OF EXISTING DRAIN TILES, PIPE CULVERTS, OR STORM SEWERS TO THE PROPOSED DRAINAGE SYSTEM STRUCTURES WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED AS INCLUDED IN THE PAY ITEMS PROVIDED.

## ENGINEERS FIELD OFFICE

ALL OF THE TELEPHONE LINES PROVIDED SHALL HAVE UNPUBLISHED NUMBERS.

## COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN PERMISSION OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

NO COMMITMENTS HAVE BEEN INCURRED ON THIS PROJECT.

## INDEX OF SHEETS

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5	SCHEDULES OF QUANTITIES
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10	TRAFFIC CONTROL AND PROTECTION (SPECIAL)
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12	DRAINAGE & GRADING PLAN
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23	SOIL BORINGS
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39	HIGHWAY STANDARD 280001-03 (2 OF 2)
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41	HIGHWAY STANDARD 602401-01
42	HIGHWAY STANDARD 604001-02
43	HIGHWAY STANDARD 664001-01 (1 OF 3)
44	HIGHWAY STANDARD 664001-01 (2 OF 3)
45	HIGHWAY STANDARD 664001-01 (3 OF 3)

## DISTRICT STANDARDS

STANDARD NO.	DESCRIPTION
205001-D4	SLOPE STEPS DETAIL
542016-D4	PIPE CULVERT EXTENSION COLLAR (WITHOUT END SECTION)

## HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
280001-03	TEMPORARY EROSION CONTROL SYSTEMS
542301-01	PRECAST REINFORCED CONCRETE FLARED END SECTION
602401-01	MANHOLE TYPE A
604001-02	FRAME AND LIDS TYPE 1
664001-01	CHAIN LINKED FENCE

ROUTE NO.	SECTION	COUNTY	SHEET	SHEET NO. 2
F.A.I.	*	Peoria	2	15 SHEETS
I-74				
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

Contract # 68736 \* D4 I-74 Noise Wall 2008

REVISIONS	
NAME	DATE

**benesch**

alfred benesch & company  
 Engineers • Surveyors • Planners  
 225 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-565-0450  
 JOB NO. 3573

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 INDEX, GENERAL NOTES & COMMITMENTS  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

SUMMARY OF QUANTITIES					URBAN	
					IM	
					90% FED 10% STATE	
					CONSTRUCTION TYPE CODE	
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	NOISE WALLS Y220		
51500100	NAME PLATES	EACH	1	1		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	10	10		
67100100	MOBILIZATION	L SUM	1	1		
70101800	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	1		
M2021200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU M	60	60		
M2040800	FURNISHED EXCAVATION	CU M	1,485	1,485		
M2113100	TOPSOIL FURNISH AND PLACE, 100MM	SO M	1,080	1,080		
M2500200	SEEDING, CLASS 2	HA	0.2	0.2		
M2500400	NITROGEN FERTILIZER NUTRIENT	KG	22.3	22.3		
M2500500	PHOSPHORUS FERTILIZER NUTRIENT	KG	22.3	22.3		
M2500600	POTASSIUM FERTILIZER NUTRIENT	KG	22.3	22.3		
M2510115	MULCH, METHOD 2	HA	0.2	0.2		
M2800400	PERIMETER EROSION BARRIER	METER	407	407		
M2810807	STONE DUMPED RIPRAP, CLASS A4	M TON	22	22		
M2820200	FILTER FABRIC	SO M	30	30		
M5429910	CONCRETE COLLAR	CU M	0.5	0.5		
M542E128	PRECAST REINFORCED CONCRETE FLARED END SECTION 600MM	EACH	1	1		
M5500420	STORM SEWERS, CLASS A, TYPE 2, 200MM	METER	6.0	6.0		
M5500465	STORM SEWERS, CLASS A, TYPE 2, 600MM	METER	6.0	6.0		
M5503090	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III, 600MM	METER	20.0	20.0		
M6021605	MANHOLES, TYPE A, 1.5M DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	1		
M6640100	CHAIN LINK FENCE, 1.2 METER	METER	8	8		
M6641920	CHAIN LINK FENCE REMOVAL	METER	285	285		
MX030126	NOISE ABATEMENT WALL, GROUND MOUNTED (PRECAST CONCRETE)	SO M	1,772	1,772		
X2010510	CLEARING AND GRUBBING	L SUM	1	1		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1	1		

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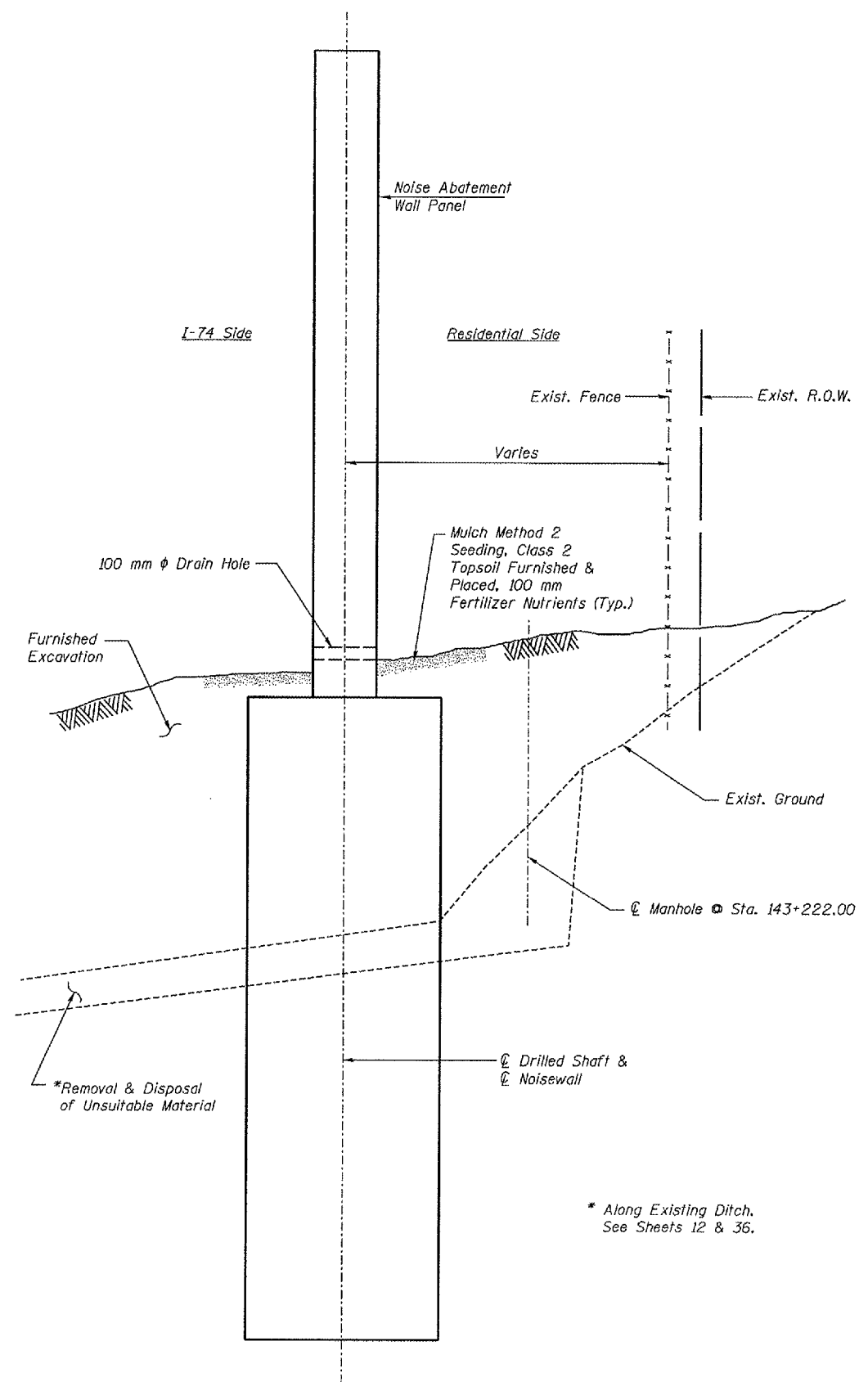
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REVISIONS	
NAME	DATE

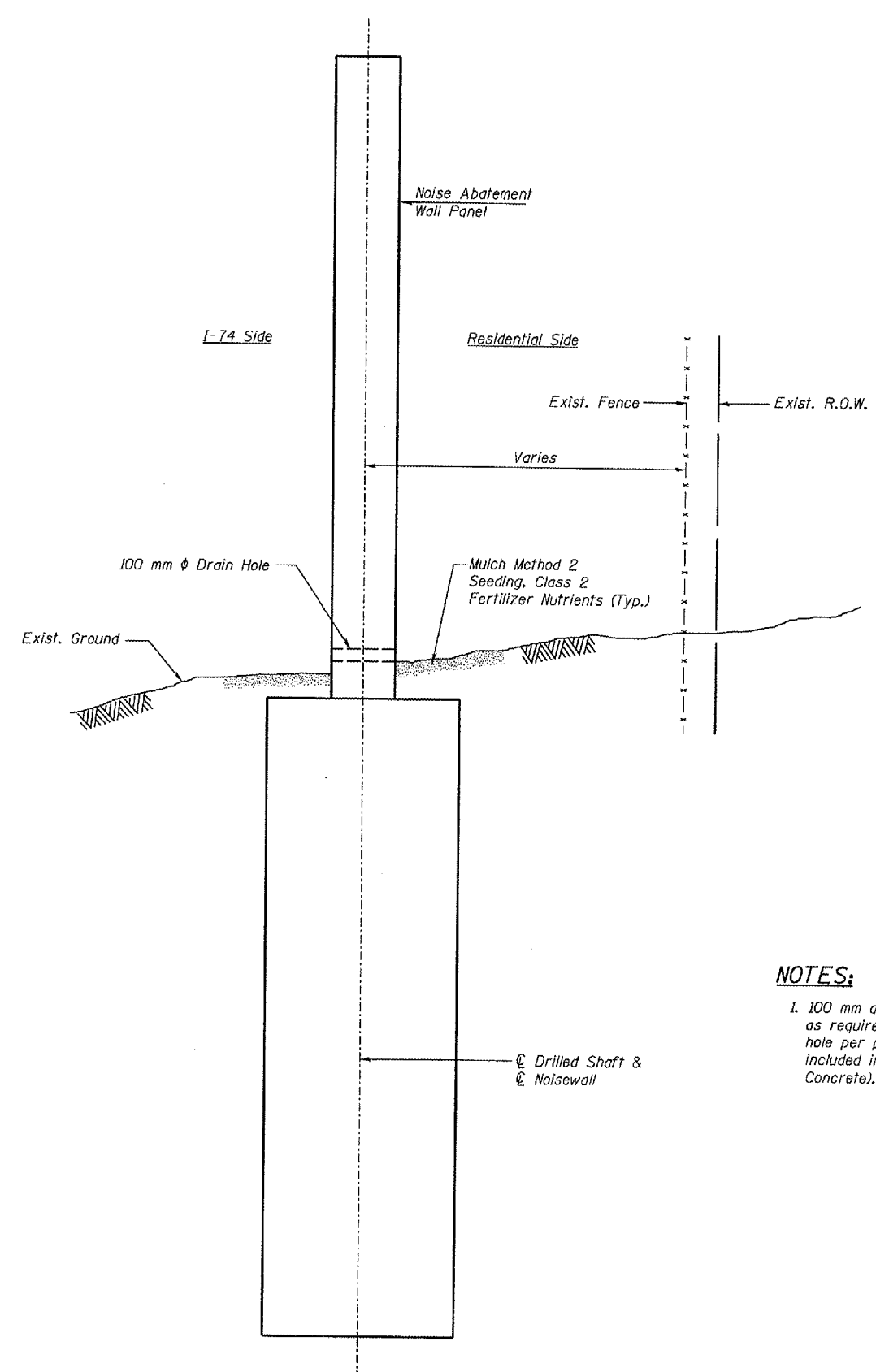
ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SUMMARY OF QUANTITIES  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. I-74	#	Peoria		4
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		
Contract # 68736			* D4 I-74 Noise Wall 2008	

SHEET NO. 4  
45 SHEETS



**TYPICAL CROSS SECTION**  
(Sta. 143+210.00 to Sta. 143+250.00)



**TYPICAL CROSS SECTION**

**NOTES:**

1. 100 mm drainage holes shall be field drilled through wall panels as required to facilitate surface drainage with a maximum of one hole per panel. Location to be determined by the engineer. Cost included in Noise Abatement Wall Ground Mounted (Precast Concrete).

\* Along Existing Ditch.  
See Sheets 12 & 36.

REVISIONS	
NAME	DATE

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312-565-0450  
JOB NO. 3973

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**TYPICAL SECTIONS**  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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MOBILIZATION SCHEDULE	
LOCATION	MOBILIZATION
	L SUM
JOB SITE	1
PROJECT TOTALS	1

CONSTRUCTION LAYOUT SCHEDULE	
LOCATION	CONSTRUCTION LAYOUT
	L SUM
JOB SITE	1
PROJECT TOTALS	1

ENGINEER'S FIELD OFFICE SCHEDULE	
LOCATION	ENGINEER'S FIELD OFFICE, TYPE A
	CAL MO
JOB SITE	10
PROJECT TOTALS	10

TRAFFIC CONTROL & PROTECTION SCHEDULE	
LOCATION	TRAFFIC CONTROL & PROTECTION (SPECIAL)
	L SUM
I-74, STERLING, RAMP A2	1
PROJECT TOTALS	1

LOCATION STATION TO STATION	EARTH EXCAVATION	REMOVAL & DISPOSAL OF UNSUITABLE MATERIAL	EXCAVATION ADJUSTED FOR SHRINKAGE	EMBANKMENT	EXCAVATION REQUIRED TO COMPLETE**	EARTHWORK BALANCE WASTE (+) OR SURPLUS (-)	TOPSOIL EXCAVATION*	TOPSOIL FURNISH & PLACEMENT 100MM
	CU M	CU M	CU M	CU M	CU M	CU M	CU M	SQ M
I-74 STA. 143+210.000 TO STA. 143+250.000	0	0	0	1,130	1,410	-1,410	109	1,080
I-74 STA. 143+251.000 (EXIST DITCH)	0	60	0	60	75	-75	0	0
PROJECT TOTALS	0	60	0	1,190	1,485	-1,485	109	1,080

\* TOPSOIL EXCAVATION QUANTITY IS ESTIMATED - SEE CROSS SECTIONS FOR LIMITS  
 \*\* AVERAGE SHRINKAGE FACTOR - 1.25

CLEARING AND GRUBBING SCHEDULE	
LOCATION STATION	CLEARING AND GRUBBING
	L SUM
I-74 STA. 142+916.640 TO STA. 143+287.690	1
PROJECT TOTALS	1

LOCATION STATION TO STATION	PRECAST REINFORCED CONCRETE END SECTION 600MM	CONCRETE COLLAR	MANHOLES, TYPE A, 1.5M DIAMETER, TYPE 1 FRAME, CLOSED LID
	EACH	CU M	EACH
STA. 143+234.000 30.4MRT.	1		
STA. 143+222.000 48.5MRT.			1
STA. 143+220.400 50.6MRT.		0.5	
PROJECT TOTALS	1	0.5	1.0

FENCE REMOVAL SCHEDULE	
LOCATION STATION TO STATION	FENCE REMOVAL
	M
I-74 STA. 142+916.640 TO STA. 143+029.180	113
I-74 STA. 143+116.000 TO STA. 143+164.000	48
I-74 STA. 143+164.000 TO STA. 143+288.000	124
PROJECT TOTALS	285

LOCATION STATION TO STATION	STORM SEWERS, CLASS A, TYPE 2, 200MM	STORM SEWERS, CLASS A, TYPE 2, 600MM	STORM SEWERS, TYPE 2, REINFORCED CONCRETE CULVERT, STORM DRAIN, AND SEWER PIPE, CLASS III, 600MM
	M	M	M
EXIST 200MM TO MH 1	6.0		
EXIST 600MM TO MH 1		6.0	
MH 1 TO END SECTION			20.0
PROJECT TOTALS	6.0	6.0	20.0

LOCATION STATION TO STATION	PERIMETER EROSION BARRIER	STONE DUMPED RIPRAP, CLASS A4	FILTER FABRIC
	M	M TON	SQ M
I-74 STA. 142+916.000 TO STA. 143+205.000	289		
I-74 STA. 143+205.000 TO STA. 143+255.000	85		
I-74 STA. 143+255.000 TO STA. 143+288.000	33		
I-74 STA. 143+266.000		22	30
PROJECT TOTALS	407	22	30

FENCE SCHEDULE	
LOCATION STATION	CHAIN LINKED FENCE, 1.2M
	M
I-74 STA. 142+916.640	3
I-74 STA. 143+287.690	5
PROJECT TOTALS	8

LOCATION STATION TO STATION	SEEDING, CLASS 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT	MULCH METHOD 2
	HA	KG	KG	KG	HA
I-74 STA. 142+916.000 TO STA. 143+205.000	0.106	10.6	10.6	10.6	0.106
I-74 STA. 143+205.000 TO STA. 143+255.000	0.105	10.5	10.5	10.5	0.105
I-74 STA. 143+255.000 TO STA. 143+288.000	0.012	1.2	1.2	1.2	0.012
PROJECT TOTALS	0.2	22.3	22.3	22.3	0.2

REVISIONS	
NAME	DATE

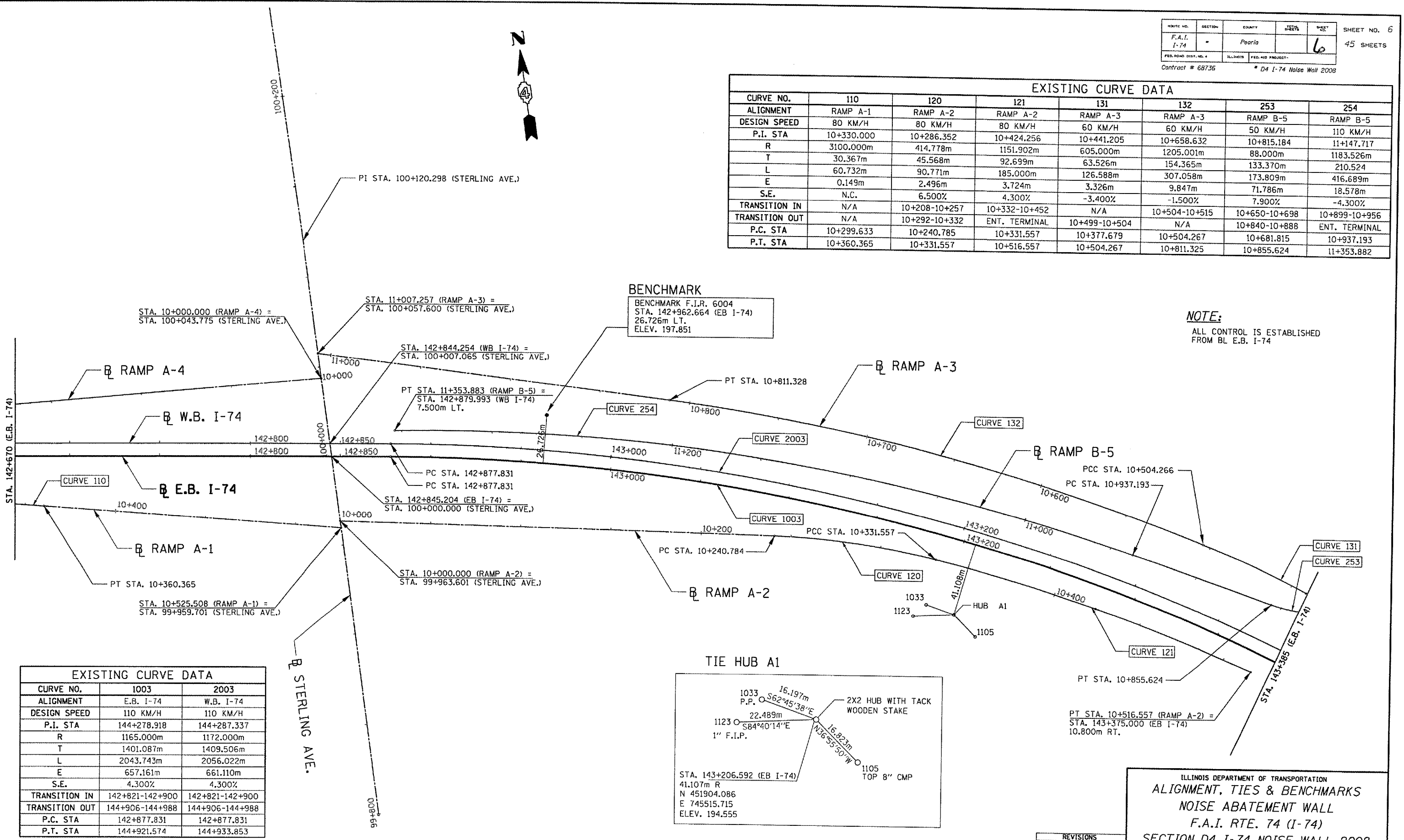
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 205 North Michigan Avenue, Suite 2400  
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 312-565-0450  
 JOB NO. 3573

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SCHEDULES OF QUANTITIES  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

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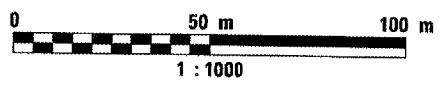
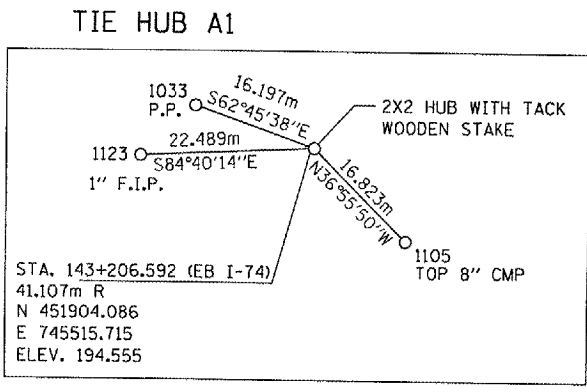
CURVE NO.	110	120	121	131	132	253	254
ALIGNMENT	RAMP A-1	RAMP A-2	RAMP A-2	RAMP A-3	RAMP A-3	RAMP B-5	RAMP B-5
DESIGN SPEED	80 KM/H	80 KM/H	80 KM/H	60 KM/H	60 KM/H	50 KM/H	110 KM/H
P.I. STA	10+330.000	10+286.352	10+424.256	10+441.205	10+658.632	10+815.184	11+147.717
R	3100.000m	414.778m	1151.902m	605.000m	1205.001m	88.000m	1183.526m
T	30.367m	45.568m	92.699m	63.526m	154.365m	133.370m	210.524
L	60.732m	90.771m	185.000m	126.588m	307.058m	173.809m	416.689m
E	0.149m	2.496m	3.724m	3.326m	9.847m	71.786m	18.578m
S.E.	N.C.	6.500%	4.300%	-3.400%	-1.500%	7.900%	-4.300%
TRANSITION IN	N/A	10+208-10+257	10+332-10+452	N/A	10+504-10+515	10+650-10+698	10+899-10+956
TRANSITION OUT	N/A	10+292-10+332	ENT. TERMINAL	10+499-10+504	N/A	10+840-10+888	ENT. TERMINAL
P.C. STA	10+299.633	10+240.785	10+331.557	10+377.679	10+504.267	10+681.815	10+937.193
P.T. STA	10+360.365	10+331.557	10+516.557	10+504.267	10+811.325	10+855.624	11+353.882

**NOTE:**  
ALL CONTROL IS ESTABLISHED FROM BL E.B. I-74



**BENCHMARK**  
BENCHMARK F.I.R. 6004  
STA. 142+962.664 (EB I-74)  
26.726m LT.  
ELEV. 197.851

CURVE NO.	1003	2003
ALIGNMENT	E.B. I-74	W.B. I-74
DESIGN SPEED	110 KM/H	110 KM/H
P.I. STA	144+278.918	144+287.337
R	1165.000m	1172.000m
T	1401.087m	1409.506m
L	2043.743m	2056.022m
E	657.161m	661.110m
S.E.	4.300%	4.300%
TRANSITION IN	142+821-142+900	142+821-142+900
TRANSITION OUT	144+906-144+988	144+906-144+988
P.C. STA	142+877.831	142+877.831
P.T. STA	144+921.574	144+933.853



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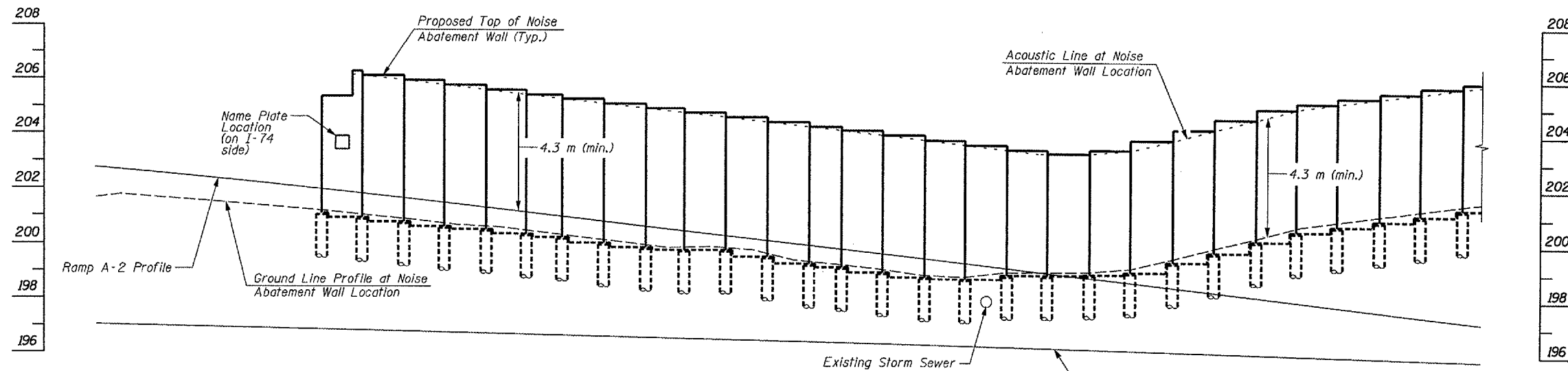
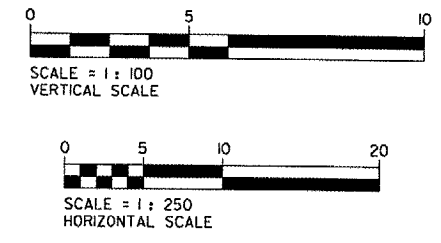
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**ALIGNMENT, TIES & BENCHMARKS**  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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6/22/2007 12:13:34 PM c:\projects\dat\031573\noise\walla2\plans\35173nw\_gp.el.dgn

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET
F.A.I.	I-74	Peoria	7	45 SHEETS
FED. ROAD DIST. NO. *		ILLINOIS FED. AID PROJECT *		
Contract # 68736		* D4 I-74 Noise Wall 2008		

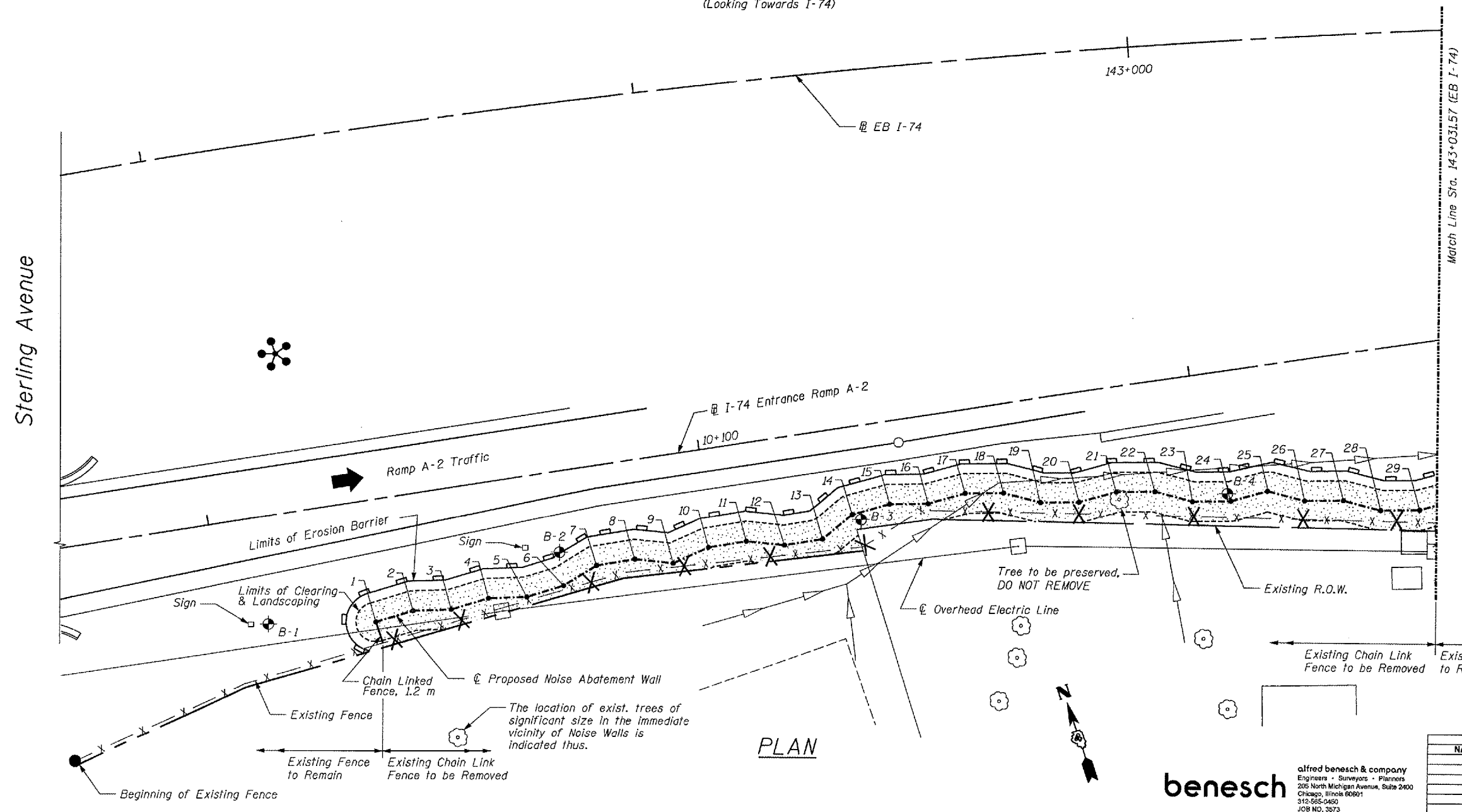


**ELEVATION**  
(Looking Towards I-74)

- NOTES:**
1. The Contractor has the option to clear the trees within a width of 4 m centered about the centerline of the Noise Abatement Wall. The groundline in this area shall be restored to the original elevation after the construction of the wall.
  2. Any tree removal outside the 4 m width mentioned in Note 1, can be done only after written approval by the Engineer.
  3. 100 mm  $\phi$  Drainage Holes shall be field drilled through wall panels as required to facilitate surface drainage with a maximum of one hole per panel. Location to be determined by the Engineer. (See sheet 16).

**LEGEND**

- Existing Tree Line
- Existing Individual Tree ( $\phi > 150$  mm)
- Existing Fence
- Existing Storm Sewer
- Boring Location
- Limits of Erosion Barrier
- Limits of Clearing & Landscaping
- Drilled Shaft Center
- Existing Right of Way
- Chain Link Fence Removal
- Existing Electric Pole
- High Mast Light Pole
- Seeding, Class 2



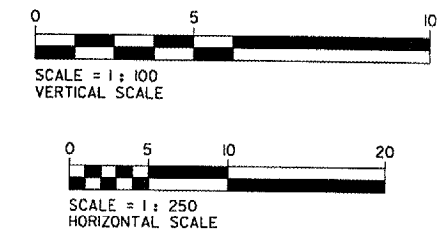
**PLAN**

REVISIONS	
NAME	DATE

**benesch**  
alfred benesch & company  
Engineers - Surveyors - Planners  
206 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450  
JOB NO. 3673

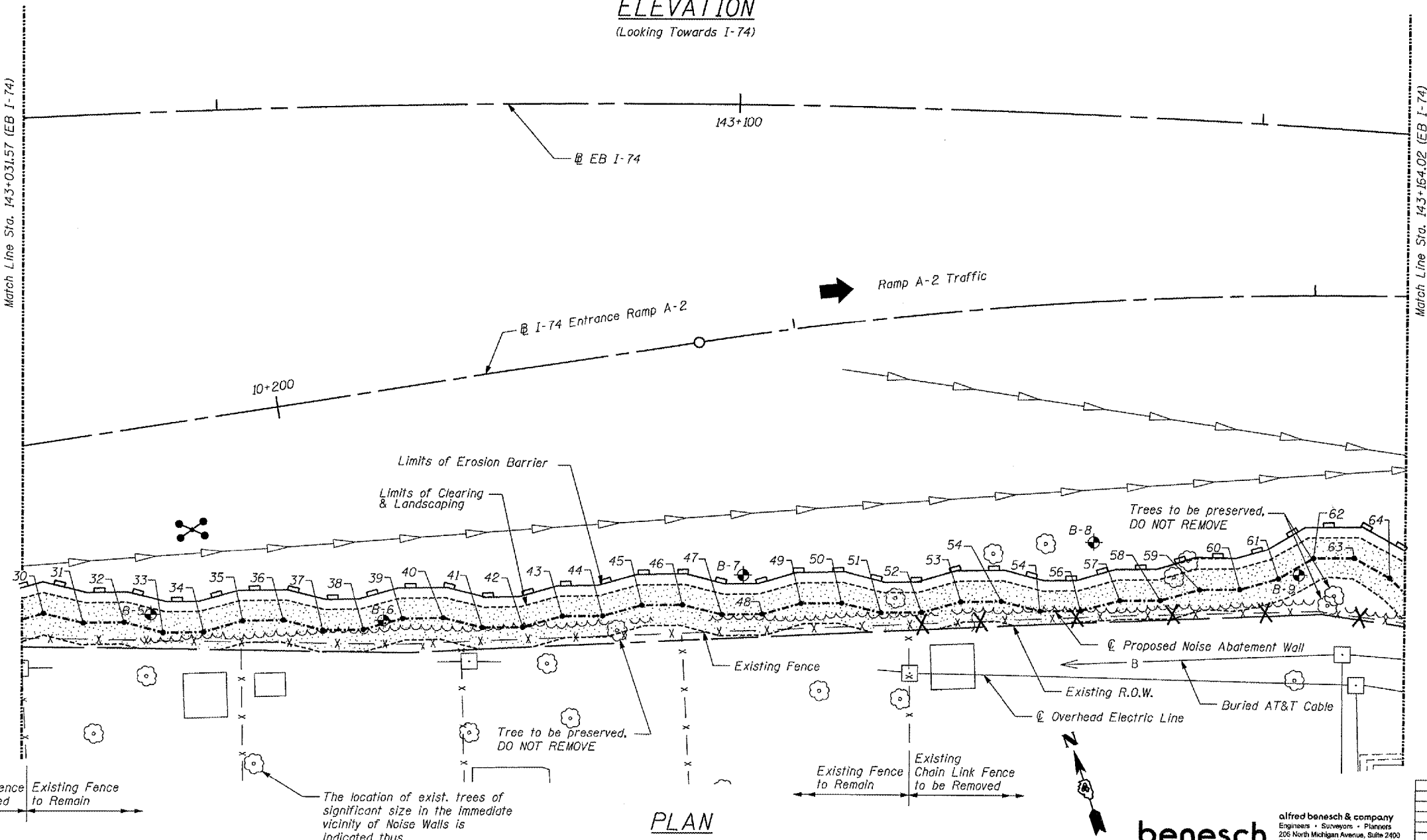
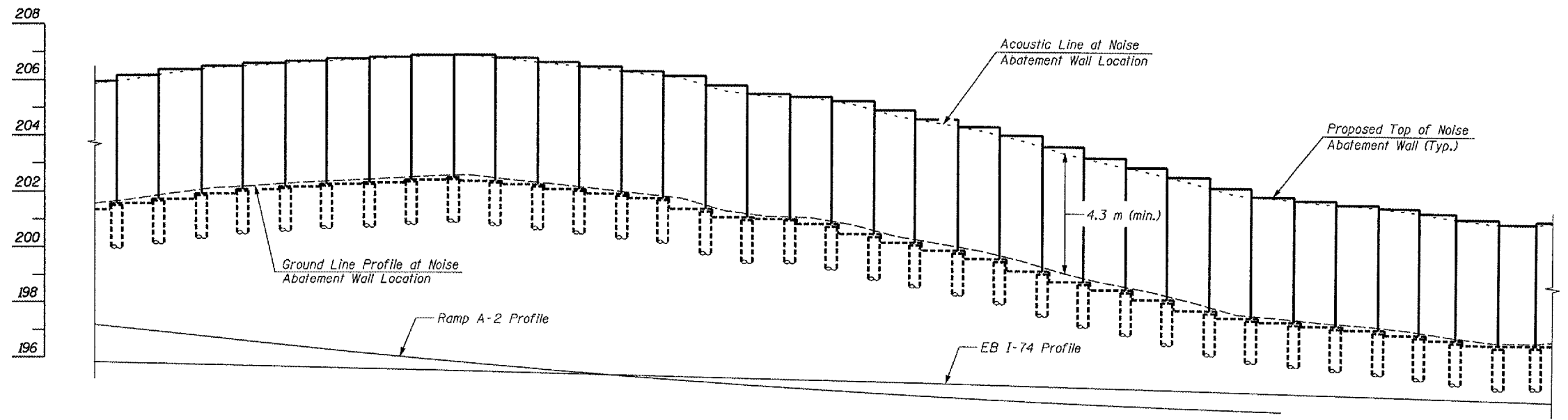
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL PLAN & ELEVATION 1**  
**NOISE ABATEMENT WALL**  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. I-74	#	Peoria	8	45 SHEETS
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
Contract # 68736		* D4 I-74 Noise Wall 2008		



- NOTES:**
- The Contractor has the option to clear the trees within a width of 4 m centered about the centerline of the Noise Abatement Wall. The groundline in this area shall be restored to the original elevation after the construction of the wall.
  - Any tree removal outside the 4 m width mentioned in Note 1, can be done only after written approval by the Engineer.
  - 100 mm  $\phi$  Drainage Holes shall be field drilled through wall panels as required to facilitate surface drainage with a maximum of one hole per panel. Location to be determined by the Engineer. (See sheet 16).

- LEGEND**
- Existing Tree Line
  - Existing Individual Tree ( $\phi > 150$  mm)
  - Existing Fence
  - Existing Storm Sewer
  - Boring Location
  - Limits of Erosion Barrier
  - Limits of Clearing & Landscaping
  - Drilled Shaft Center
  - Existing Right of Way
  - Chain Link Fence Removal
  - Existing Electric Pole
  - High Mast Light Pole
  - Seeding, Class 2



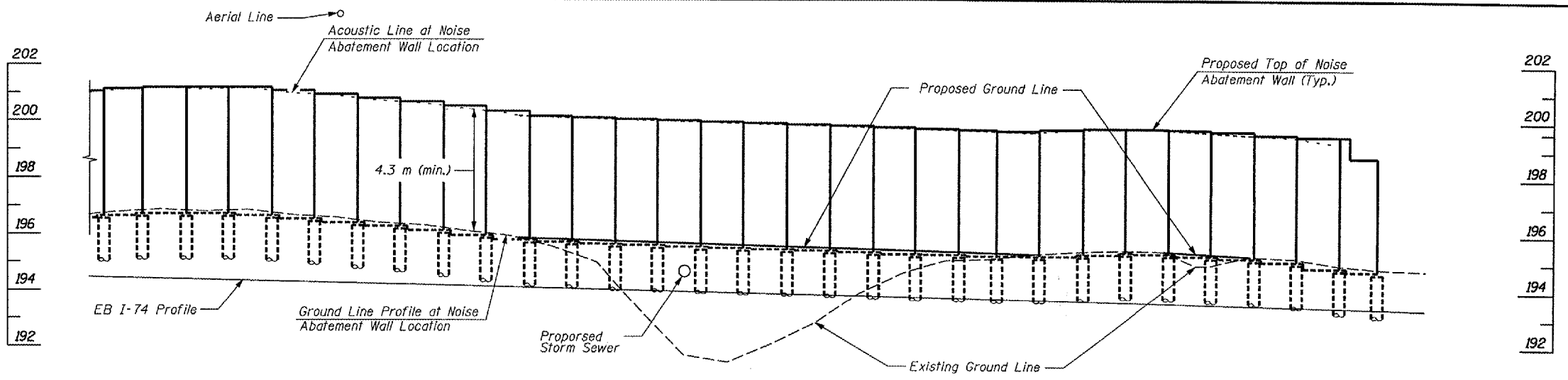
REVISIONS	
NAME	DATE

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 Engineers • Surveyors • Planners  
 205 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-566-0460  
 JOB NO. 3573

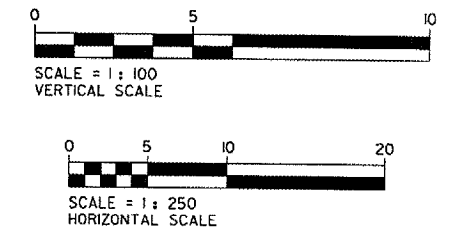
ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL PLAN & ELEVATION 2**  
**NOISE ABATEMENT WALL**  
 F.A.I. RTE. 74 (I-74)  
**SECTION D4 I-74 NOISE WALL 2008**  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

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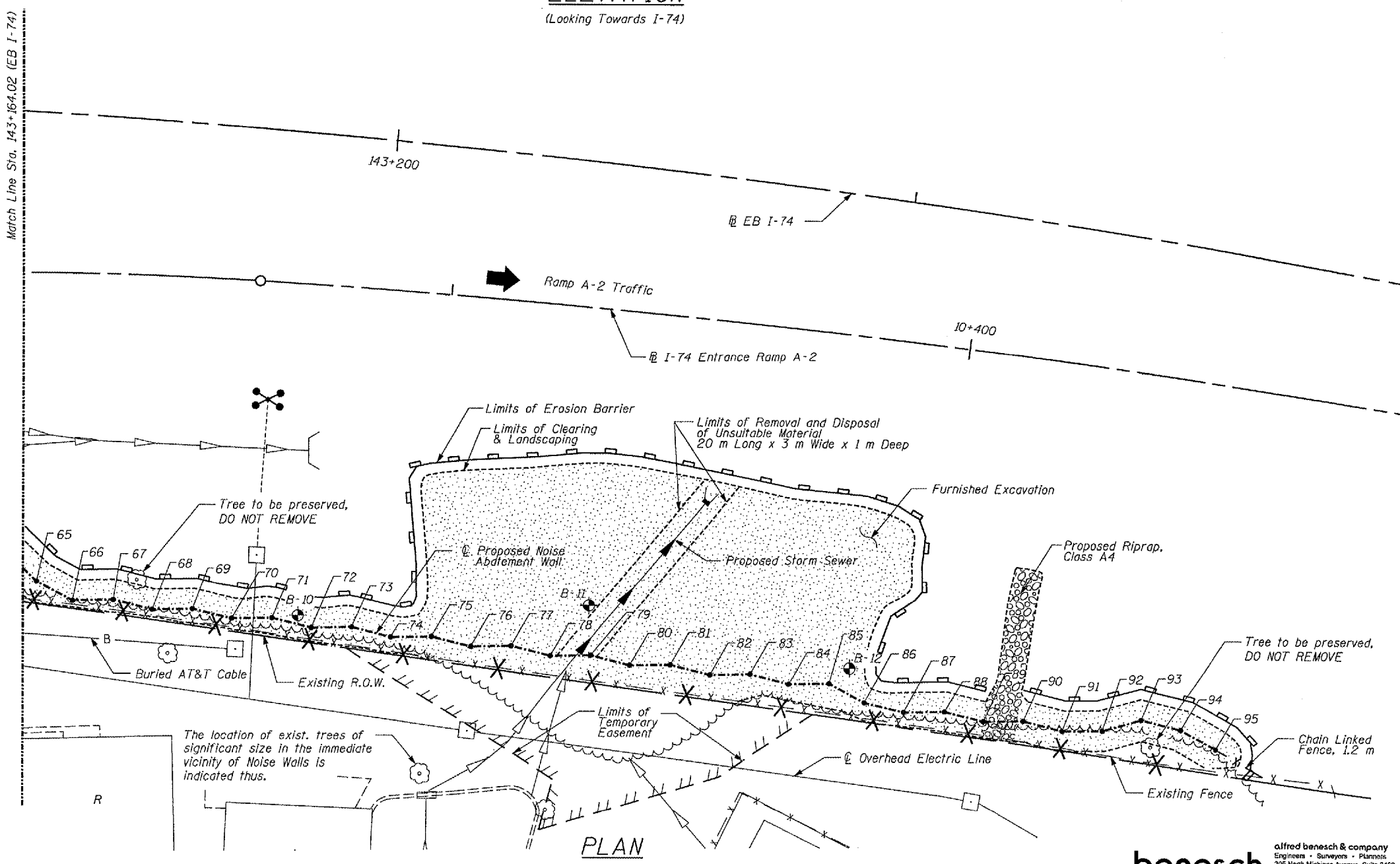
**ELEVATION**  
(Looking Towards I-74)



- NOTES:**
1. The Contractor has the option to clear the trees within a width of 4 m centered about the centerline of the Noise Abatement Wall. The groundline in this area shall be restored to the original elevation after the construction of the wall.
  2. Any tree removal outside the 4 m width mentioned in Note 1, can be done only after written approval by the Engineer.
  3. 100 mm  $\phi$  Drainage Holes shall be field drilled through wall panels as required to facilitate surface drainage with a maximum of one hole per panel. Location to be determined by the Engineer. (See sheet 16).
  4. For Proposed Storm Sewer, see sheet 12.

**LEGEND**

- Existing Tree Line
- Existing Individual Tree ( $\phi > 150$  mm)
- Existing Fence
- Existing Storm Sewer
- Boring Location
- Limits of Erosion Barrier
- Limits of Clearing & Landscaping
- Drilled Shaft Center
- Existing Right of Way
- Chain Link Fence Removal
- Existing Electric Pole
- High Mast Light Pole
- Seeding, Class 2
- Temporary Easement



**PLAN**



REVISIONS	
NAME	DATE

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alfred benesch & company  
Engineers - Surveyors - Planners  
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Chicago, Illinois 60601  
312-585-0450  
JOB NO. 3573

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**GENERAL PLAN & ELEVATION 3**  
**NOISE ABATEMENT WALL**  
F.A.I. RTE. 74 (I-74)  
**SECTION D4 I-74 NOISE WALL 2008**  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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RAMP NARROWS  
W5-4(48)

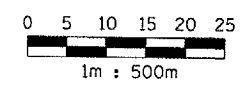
ROAD CONSTRUCTION AHEAD  
ON RAMP  
W20-1(48)  
W13-4

ROAD CONSTRUCTION AHEAD  
ON RAMP  
W20-1(48)  
W13-4

ROAD CONSTRUCTION AHEAD  
ON RAMP  
W20-1(48)  
W13-4

RAMP NARROWS  
W5-4(48)

LEGEND  
CONE ○  
SIGN ─



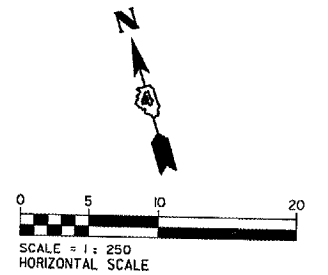
**benesch**  
alfred benesch & company  
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205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-555-0450  
JOB NO. 3573

REVISIONS	
NAME	DATE

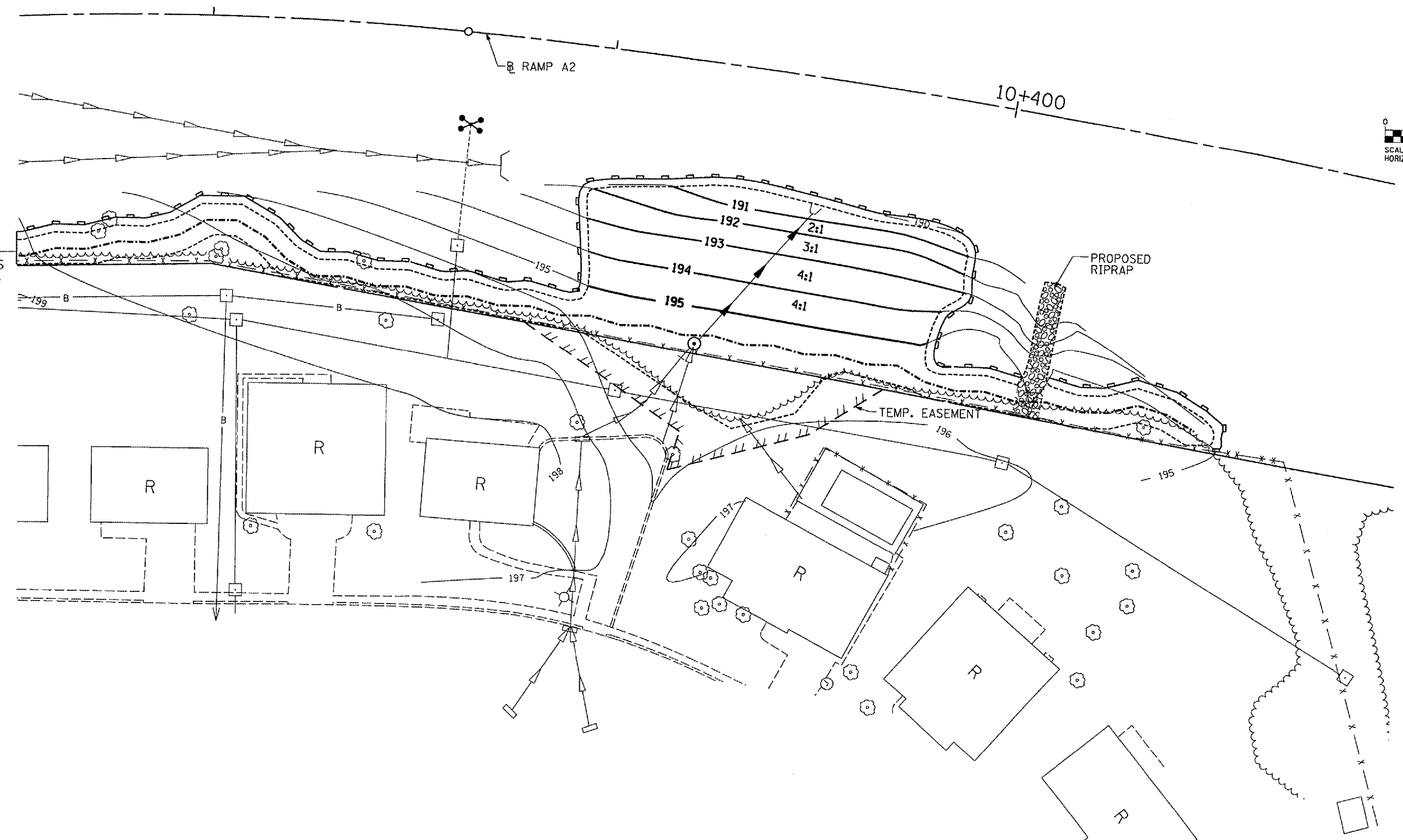
ILLINOIS DEPARTMENT OF TRANSPORTATION  
TRAFFIC CONTROL AND PROTECTION (SPECIAL)  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. I-74	#	Peoria	45	11
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	
Contract # 68736		# D4 I-74 Noise Wall 2008		



NOTE:  
PERIMETER EROSION  
BARRIER LIMIT EXTENDS  
TO WEST END OF WALL.



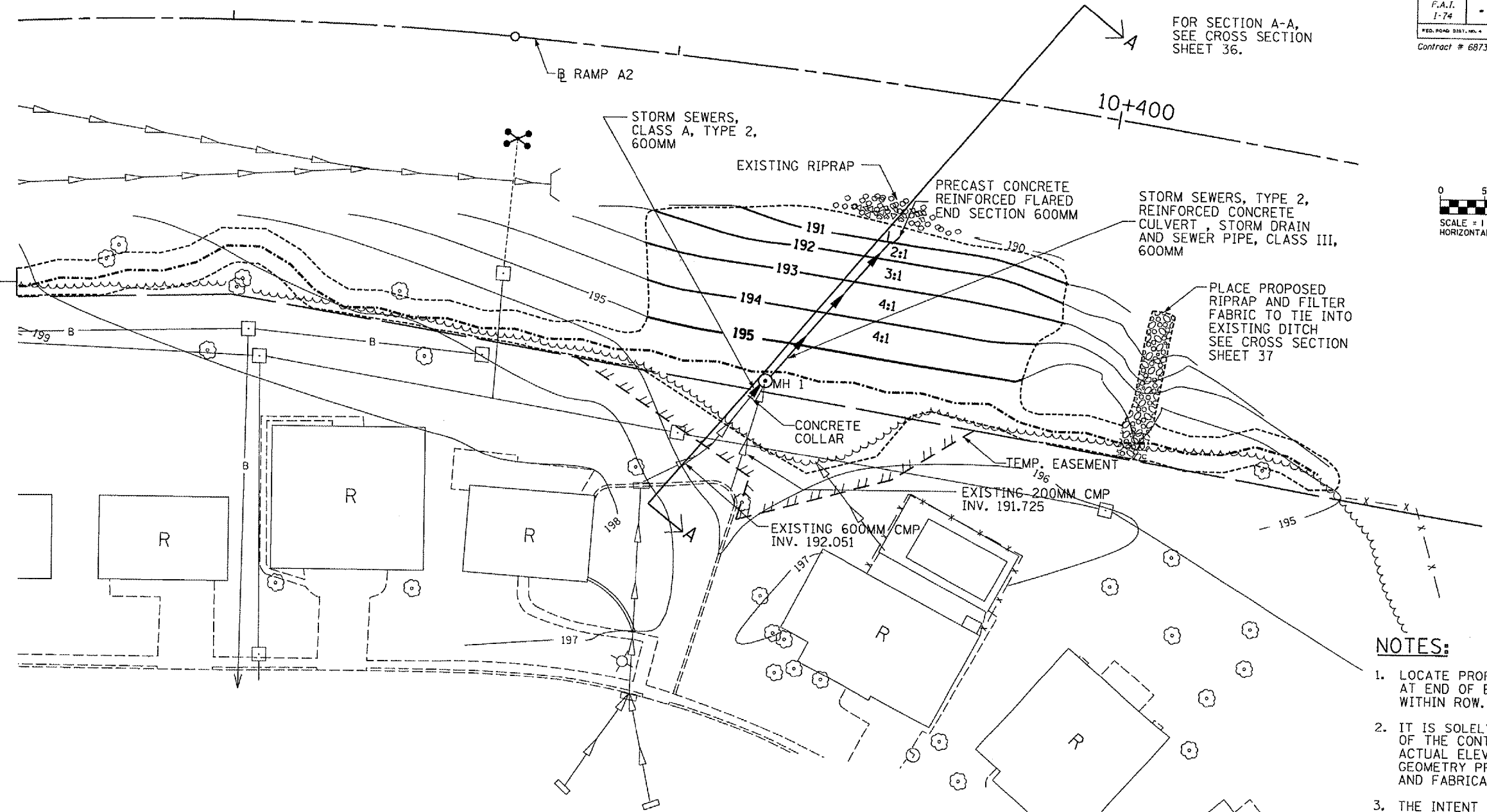
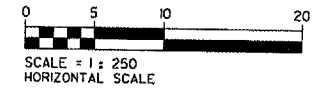
- LEGEND:**
- PERIMETER EROSION BARRIER
  - CONSTRUCTION LIMITS
  - PROPOSED NOISE WALL
  - TEMPORARY EASEMENT

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Chicago, Illinois 60601  
312-565-0450  
JOB NO. 3575

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
EROSION CONTROL PLAN  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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NOTE:  
CLEARING LIMIT EXTENDS  
TO WEST END OF WALL.

**NOTES:**

1. LOCATE PROPOSED MANHOLE AT END OF EXISTING 200MM PIPE WITHIN ROW.
2. IT IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ACTUAL ELEVATIONS AND MANHOLE GEOMETRY PRIOR TO ORDERING AND FABRICATION OF MANHOLE.
3. THE INTENT OF THE DESIGN IS FOR THE FLOW LINE ELEVATION OF THE END SECTION TO MEET THE EXISTING DITCH FLOW LINE.
4. FOR EXISTING 200MM AND 600MM PIPES, REMOVE EXISTING LENGTH OF PIPE AS REQUIRED AND REPLACE WITH STORM SEWERS, CLASS A, TYPE 2, 200MM AND STORM SEWERS, CLASS A, TYPE 2, 600MM, RESPECTIVELY.
5. FOR DETAIL OF CONCRETE COLLAR, SEE SHEET 30.

**LEGEND:**

- PROPOSED NOISE WALL
- x - x - x - x - EXISTING FENCE
- >--- EXISTING STORM SEWER
- CONSTRUCTION LIMITS
- EXISTING R.O.W.
- 195--- EXISTING CONTOUR
- 195--- PROPOSED CONTOUR
- >--- PROPOSED STORM SEWER
- ⊙ PROPOSED MANHOLE
- /// /// /// /// TEMPORARY EASEMENT

STRUCTURE	RIM	INVERTS	
MH 1 STA. 143+222.000 48.5M RT. (EB I-74)	195.5	EXIST. 200MM CMP PROP. 600MM	191.725 192.000 191.000
END SECTION STA. 143+234.000 30.4M RT. (EB I-74)			190.500

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JOB NO. 3573

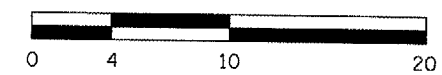
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**DRAINAGE & GRADING PLAN**  
**NOISE ABATEMENT WALL**  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. I-74	#	Peoria		13
FED. ROAD DIST. NO. 4	ILLINOIS	FED. ROAD PROJECT		
			Contract # 68736 * D4 I-74 Noise Wall 2008	

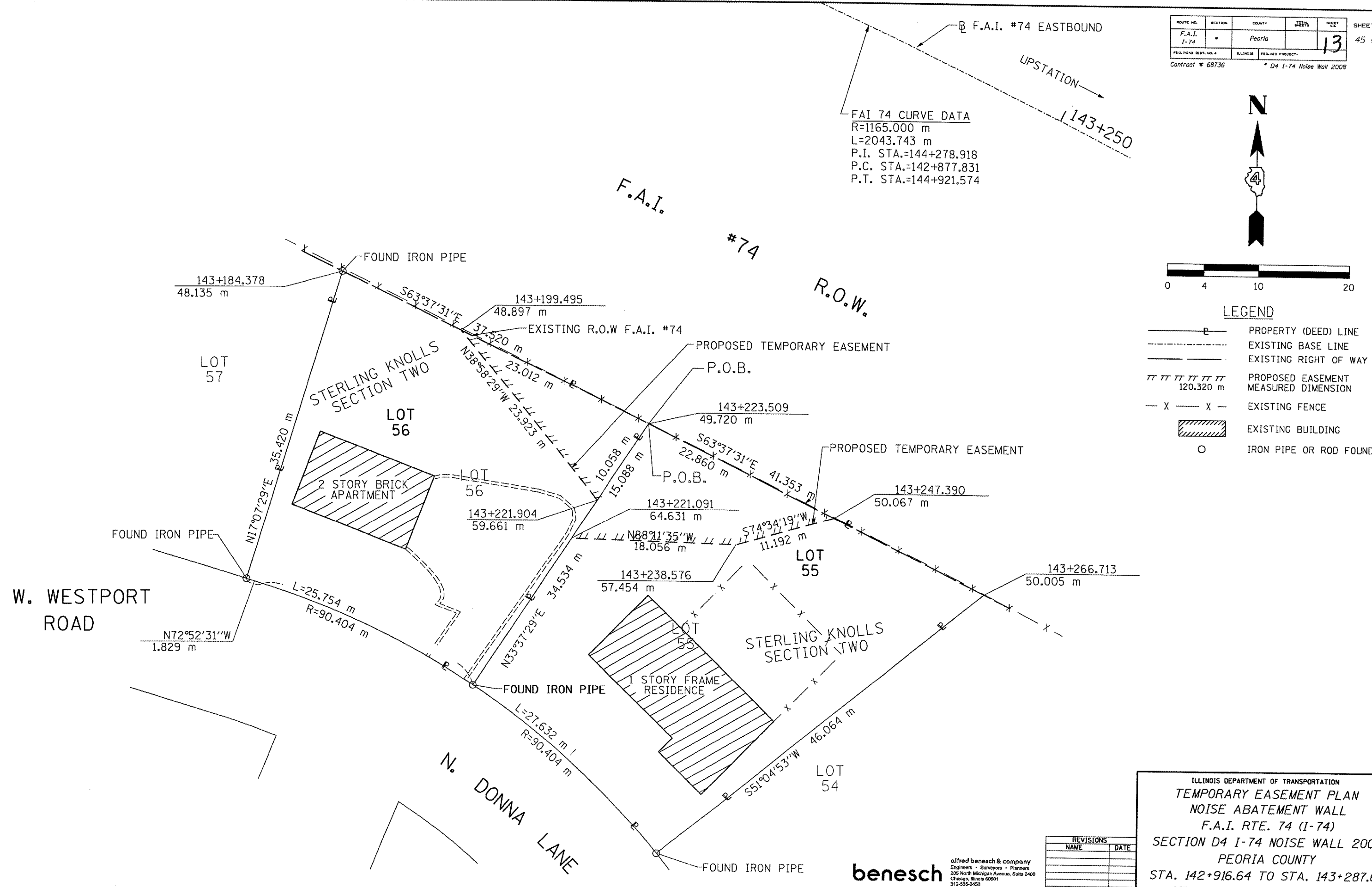
SHEET NO. 13  
45 SHEETS



**LEGEND**

- PROPERTY (DEED) LINE
- EXISTING BASE LINE
- EXISTING RIGHT OF WAY LINE
- PROPOSED EASEMENT MEASURED DIMENSION
- EXISTING FENCE
- EXISTING BUILDING
- IRON PIPE OR ROD FOUND

FAI 74 CURVE DATA  
 R=1165.000 m  
 L=2043.743 m  
 P.I. STA.=144+278.918  
 P.C. STA.=142+877.831  
 P.T. STA.=144+921.574



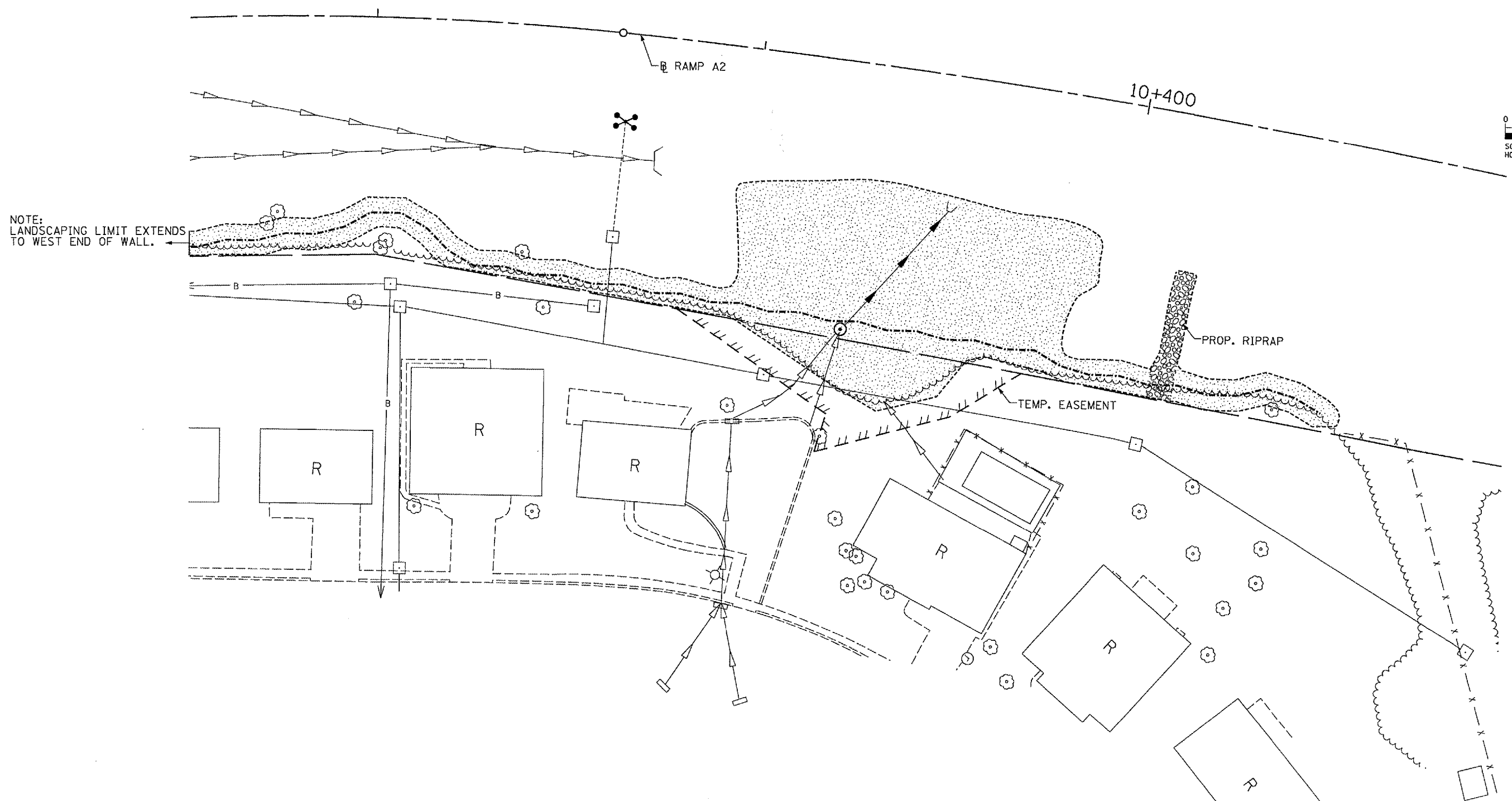
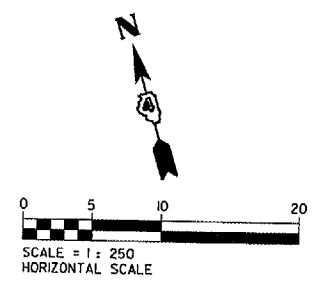
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REVISIONS	
NAME	DATE

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 Engineers • Surveyors • Planners  
 208 North Michigan Avenue, Suite 2400  
 Chicago, Illinois 60601  
 312-555-0450  
 JOB NO. 3573

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 TEMPORARY EASEMENT PLAN  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	SHEET NO. 14
F.A.I. I-74	#	Peoria		14	45 SHEETS
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-			
Contract # 68736		# D4 I-74 Noise Wall 2008			



- LEGEND:**
- SEEDING, CLASS 2, NITROGEN, PHOSPHORUS, POTASSIUM FERTILIZER NUTRIENTS & MULCH METHOD 2
  - PROPOSED NOISE WALL
  - CONSTRUCTION LIMITS
  - TEMPORARY EASEMENT

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 Chicago, Illinois 60601  
 312-585-0450  
 JOB NO. 3573

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 LANDSCAPING PLAN  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

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B.M. #100: Chisled "LJ" on north headwall north of Westbound lane of I-74, west of median cross-over, west of Sterling Avenue. Elevation 200.372

ROUTE NO.	SECTION	COUNTY	SHEETS	SHEET NO.
F.A.I. I-74	#	Peoria	15	45 SHEETS
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		
Contract # 68736		* D4 I-74 Noise Wall 2008		

### GENERAL STRUCTURAL NOTES

1. Reinforcement bars shall conform to the requirements of AASHTO M31M or M322M Grade 400.
2. All dimensions are in millimeters (mm) except as noted.
3. Welded Wire Fabric shall be according to AASHTO M221.
4. The stresses developed in the Precast Panels and Posts during shipping, storage, transportation and erection are not accounted for in the details shown. It is the responsibility of the Contractor to provide additional reinforcement or bracing if necessary to address these items as suitable to his operations subject to approval by the Engineer. Cost included in the item "Noise Abatement Wall Ground Mounted (Precast Concrete)".

### ADDITIONAL DESIGN CRITERIA

1. Limiting factor for distributing of flexural reinforcement,  $z = 80$  kips/in (crack control).
2. The architectural rendering to an extent of the maximum groove depth on each face of the Panel and I-74 side of the Post is considered structurally ineffective and are not considered for strength except when checking for crack control.
3. (a) Post Base Plate and connection to Drill Shaft are to be designed for strength for both erection loads and loads that occur in service.  
 (b) Shop or field welding of reinforcement bars is not allowed.  
 (c) Grouted pockets in the Post on Panel shall be considered ineffective for strength or serviceability design.  
 (d) The coefficient of friction between steel and grout is 0.35.

### DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications  
 1989 Guide Specifications for Structural Design of  
 Sound Barriers with 1992 and 2002 Interims

### LOADING

Wind = 1.2 kPa (Ground Mounted)  
 Ice = 0.14 kPa

### SEISMIC DATA

Seismic Performance Category (SPC) = A  
 Acceleration Coefficient (A) = 0.043g  
 Site Coefficient (S) = 1.0

### DESIGN STRESSES

#### FIELD UNITS

$f'_c = 24$  MPa  
 $f'_c = 24$  MPa (Drilled Shafts)  
 $f_y = 400$  MPa (Reinf.)

#### PRECAST UNITS

$f'_c = 30$  MPa  
 $f_y = 400$  MPa (Reinf.)  
 $f_y = 450$  MPa (Welded Wire Fabric)  
 $f_y = 345$  MPa (Structural Steel) (M270 Grade 345)

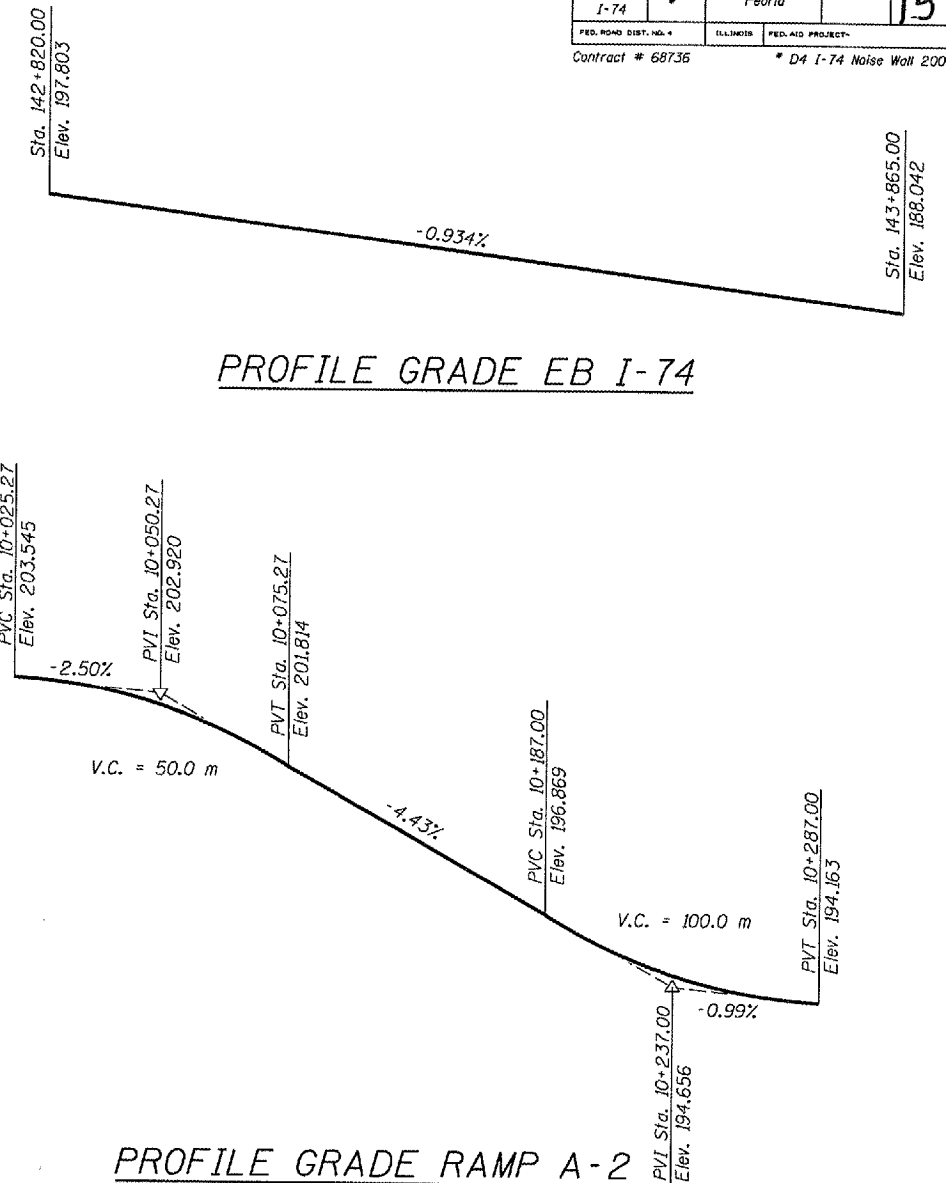
### STRUCTURAL BILL OF MATERIAL

Item	Unit	Total
Name Plate	Each	1
Noise Abatement Wall, Ground Mounted (Precast Concrete)	Sq. m	1.772

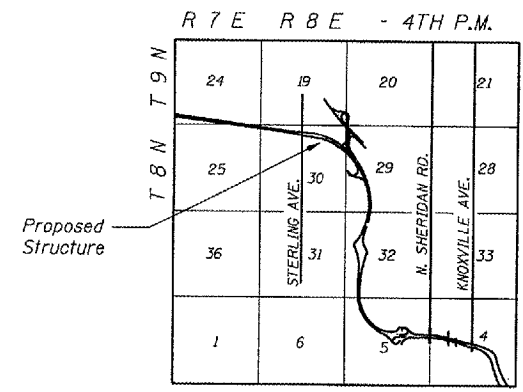
Note: For the method of measurement of Noise Abatement Wall Ground Mounted (Precast Concrete) see sheet 19 and Special Provision.

### CURVE DATA

EB I-74 (Curve 1003)		RAMP A-2 (Curve 120)	
$\Delta = 100^\circ-30'-48"$	$R = 1,165.000$ m	$\Delta = 12^\circ-32'-21"$	$R = 414.778$ m
$T = 1,401.087$ m	$L = 2,043.743$ m	$T = 45.568$ m	$L = 90.771$ m
$E = 657.161$ m	$PC = 142+877.831$	$E = 2.496$ m	$PC = 10+240.785$
$PI = 144+278.918$	$PT = 144+921.574$	$PI = 10+286.352$	$PT = 10+331.557$
$SE = 4.300\%$		$SE = 6.5\%$	
Transition in: 142+821 to 142+900	Transition out: 144+906 to 144+988	Transition in: 10+208 to 10+257	Transition out: 10+292 to 10+332



### PROFILE GRADE RAMP A-2



LOCATION SKETCH

STATION 142+900.54 TO 143+287.69  
 BUILT 200 BY  
 STATE OF ILLINOIS  
 FAI RTE 74  
 SECTION D4 I-74 NOISE WALL 2008  
 STR. NO. 072-8554

### NAME PLATE

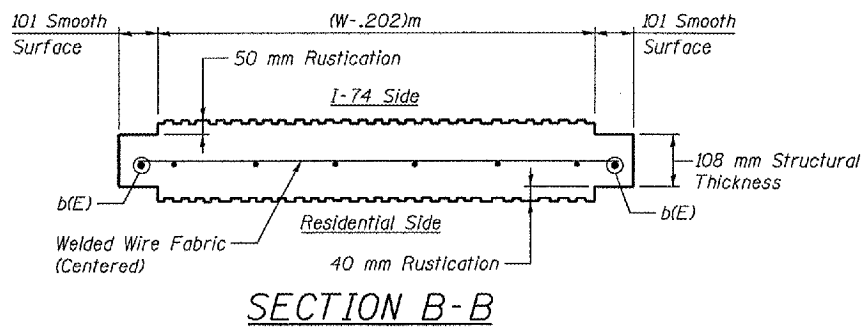
See Std. 515001

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 Chicago, Illinois 60601  
 312-585-0450  
 JOB NO. 3573

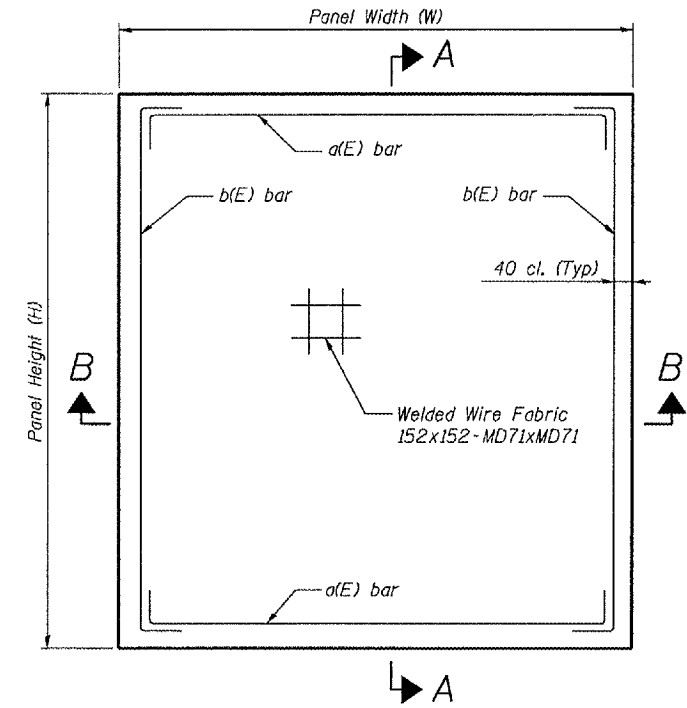
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**STRUCTURAL NOTES**  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554

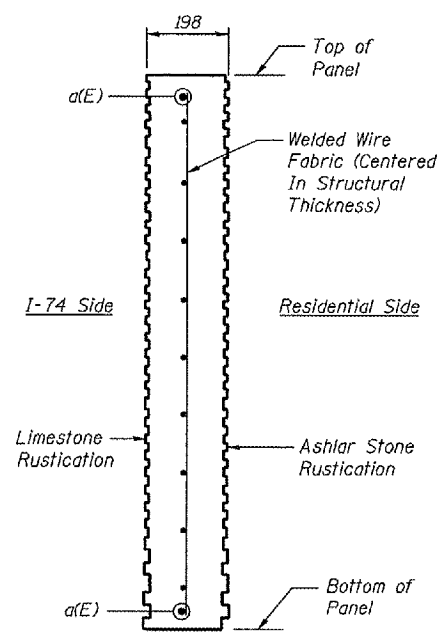
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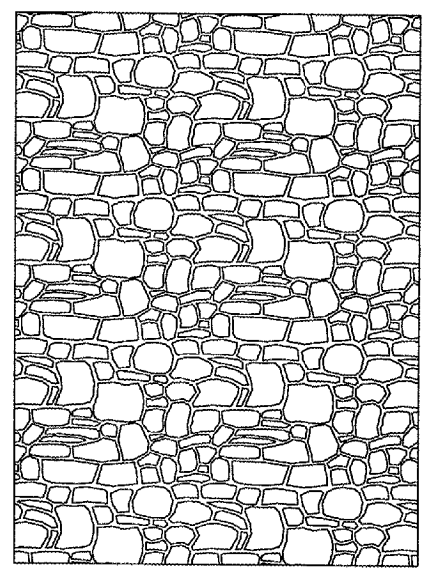
**SECTION B-B**



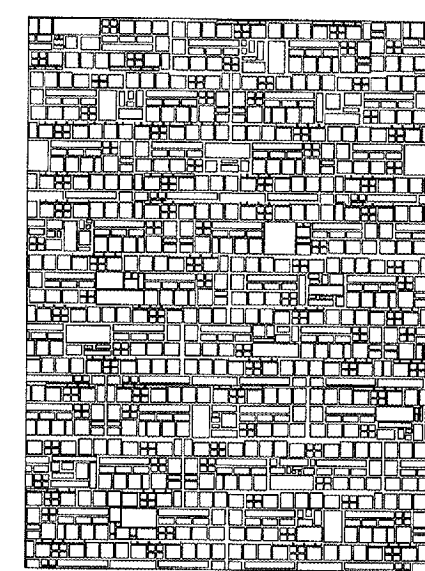
**TYPICAL INTERIOR PANEL**  
I-74 Side



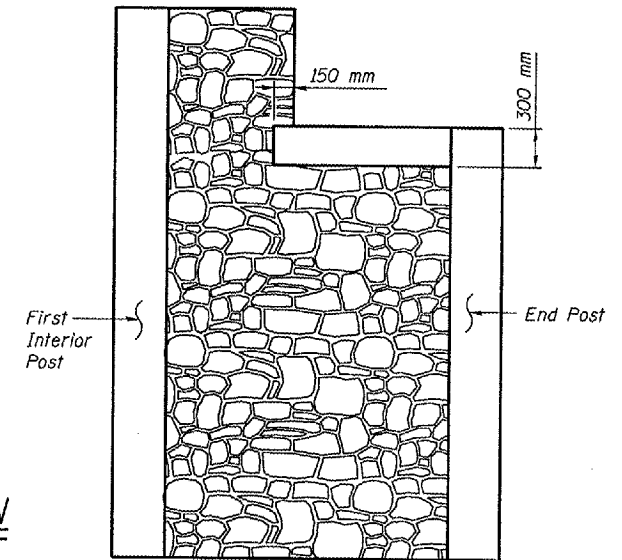
**SECTION A-A**



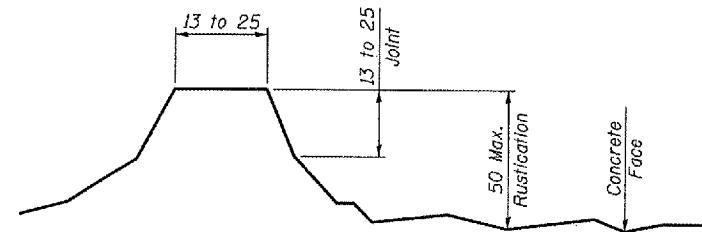
**LIMESTONE RUSTICATION ARCHITECTURAL TREATMENT**  
(I-74 Side)



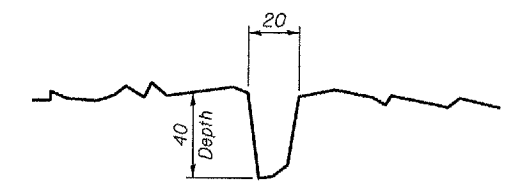
**ASHLAR STONE RUSTICATION ARCHITECTURAL TREATMENT**  
(Residential Side)



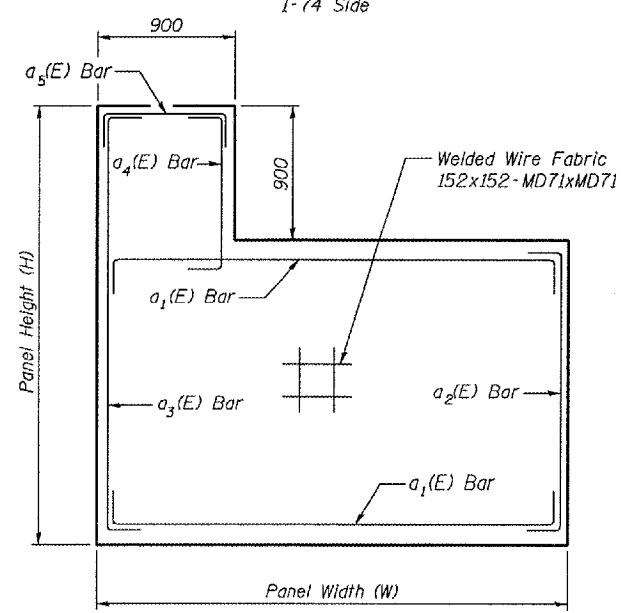
**END PANEL (WITH POSTS)**  
(Limestone rustication shown, Ashlar Stone rustication similar.)



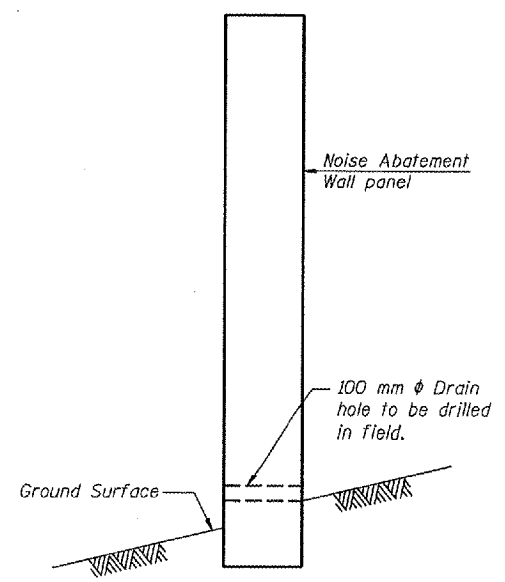
**LIMESTONE RUSTICATION DETAIL**  
(I-74 Side)



**ASHLAR STONE RUSTICATION DETAIL**  
(Residential Side)



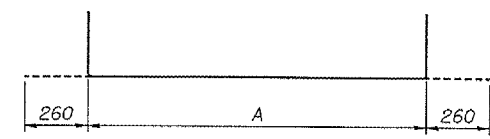
**TYPICAL END PANEL**



**DRAIN HOLE DETAIL**

**TABLE OF DIMENSIONS**

MARK	A (m)	SIZE	LENGTH (m)	SHAPE
<b>Interior Panel</b>				
a(E)	(W-0.1)	#15	(W+0.42)	┌───┐
b(E)	(H-0.08)	#15	(H+0.44)	└───┘
Welded Wire Fabric	as Noted	as Noted	as Noted	Grid
<b>End Panel</b>				
a1(E)	(W-0.1)	#15	(W+0.42)	┌───┐
a2(E)	(H-0.98)	#15	(H-0.46)	└───┘
a3(E)	(H-0.1)	#15	(H+0.42)	┌───┐
a4(E)	0.90	#15	1.42	┌───┐
a5(E)	0.82	#15	1.34	┌───┐
Welded Wire Fabric	as Noted	as Noted	as Noted	Grid



**BAR DETAIL**  
(See Table of Dimensions)

**NOTES:**

- All Reinforcement including the Welded Wire Fabric shall be Epoxy Coated.
- 100 mm drainage holes shall be field drilled through wall panels as required to facilitate surface drainage with a maximum of one hole per panel. Location to be determined by the engineer. Cost included in Noise Abatement Wall Ground Mounted (Precast Concrete).
- Work this sheet with sheet 17.

REVISIONS	
NAME	DATE

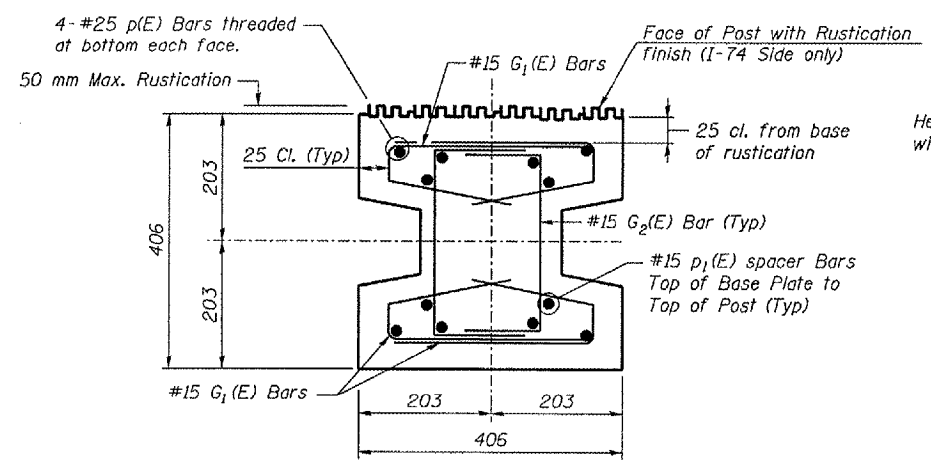
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205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0450  
JOB NO. 3573

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**PANEL DETAILS**  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

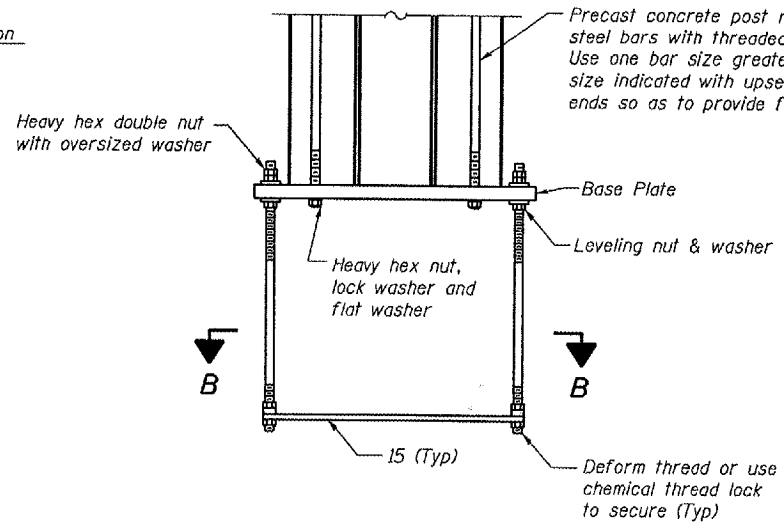
6/22/2007 12:38 PM c:\projects\data3573\noisewalls\wall2\plans\3573nw\_panel.dgn



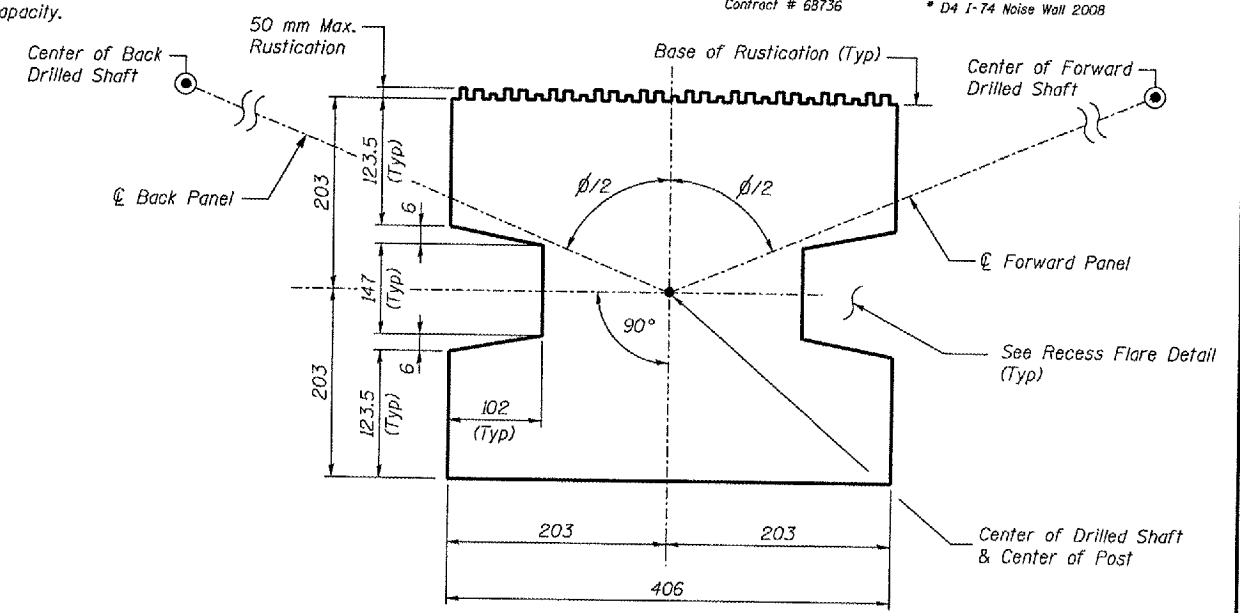




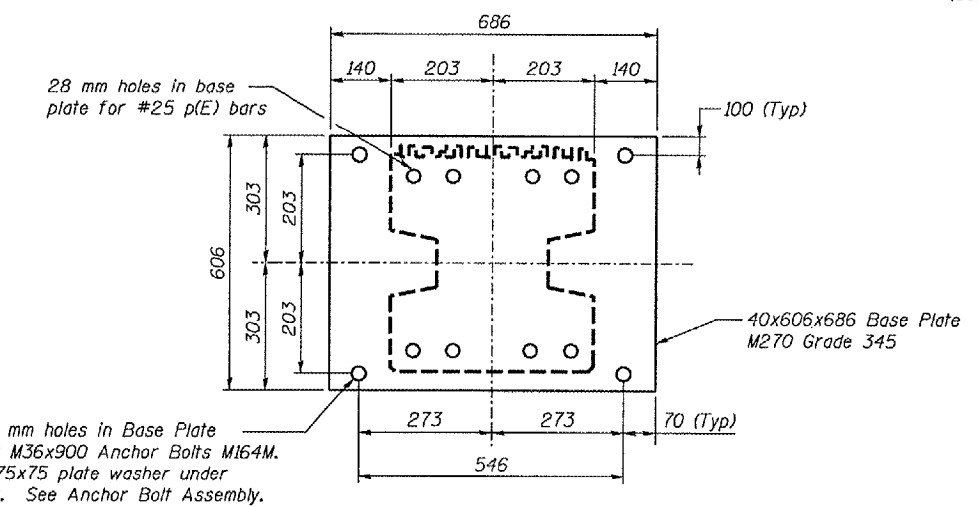
**SECTION A-A**  
**PRECAST CONCRETE INTERIOR POST**  
(Ground Mounted)



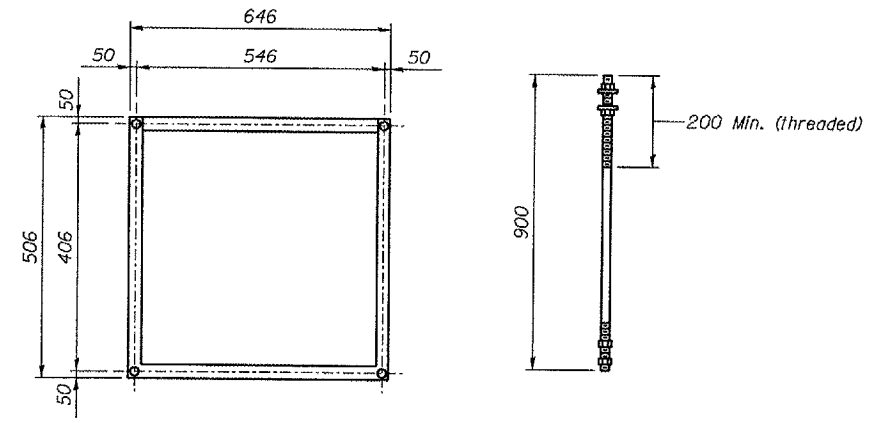
**ANCHOR BOLT ASSEMBLY**  
(Precast concrete post base plate connection to top of drilled shaft)  
(Cost included in Noise Abatement Wall Ground Mounted (Precast Concrete))



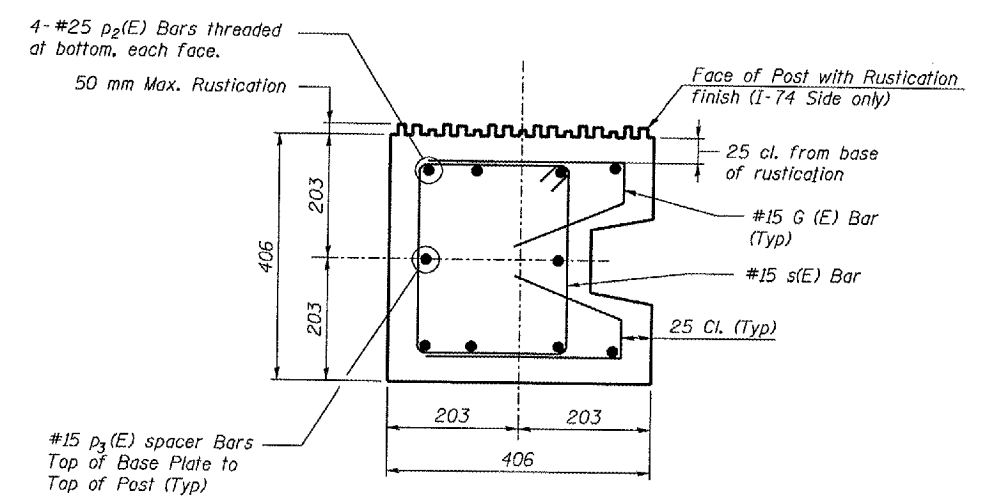
**TYPICAL POST CROSS SECTION**  
**SHOWING RECESS DETAIL**



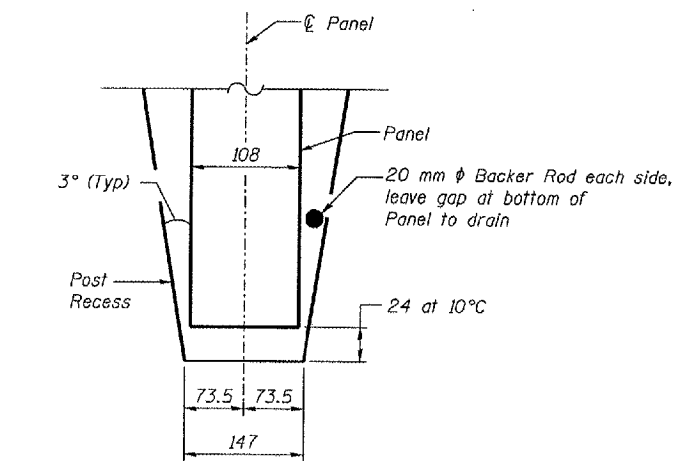
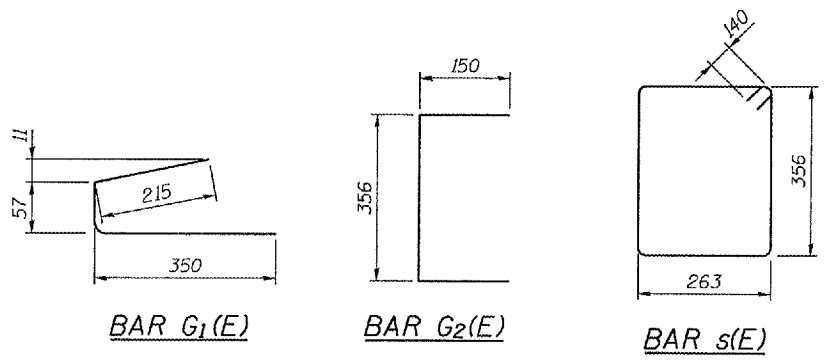
**BASE PLATE (406x406 POST)**  
(Interior Post shown)



**SECTION B-B**  
**ANCHOR BOLT**



**SECTION A-A**  
**PRECAST CONCRETE 406x406 END POST**



**PLAN**  
**RECESS FLARE DETAIL**

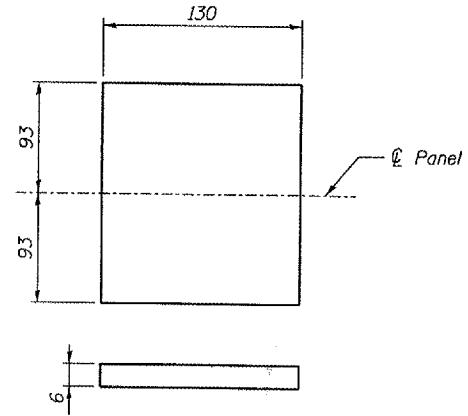
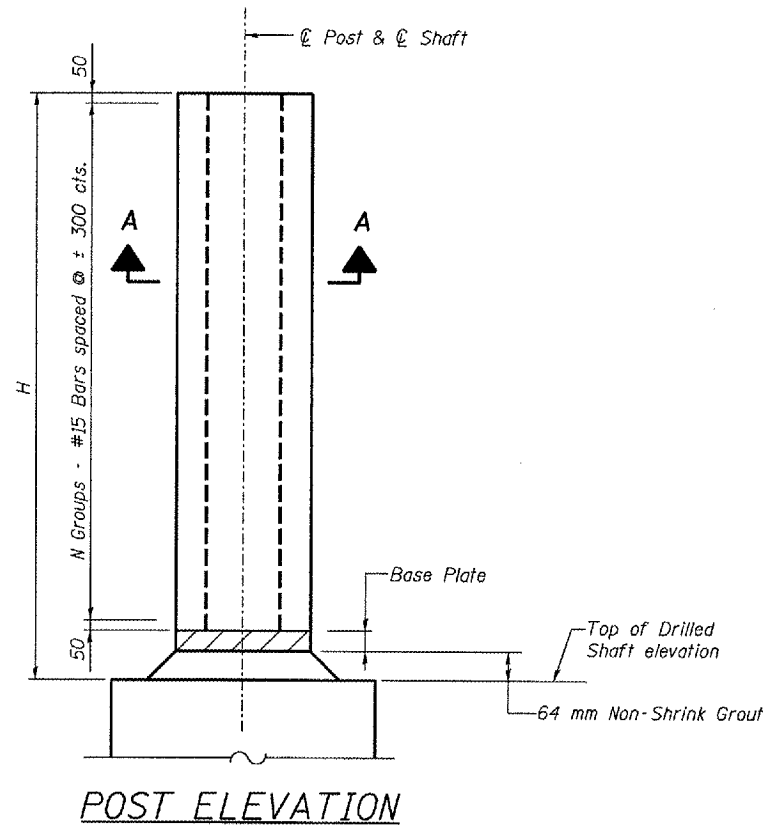
- NOTES:**
- All edges shall have 15 mm chamfer.
  - All steel hardware and base plates shall be galvanized after shop fabrication according to AASHTO M111 and ASTM A385.
  - All nuts, washers and anchor bolts shall be galvanized according to AASHTO M232.
  - All Reinforcement shall be epoxy coated.
  - Work this sheet with sheets 19 and 20.

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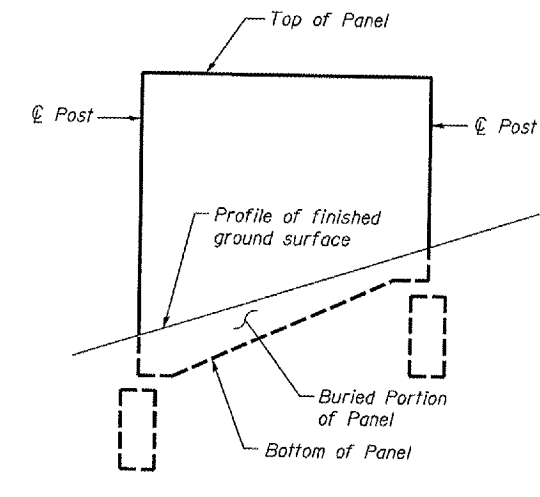
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**POST DETAILS I**  
**NOISE ABATEMENT WALL**  
F.A.I. RTE. 74 (I-74)  
**SECTION D4 I-74 NOISE WALL 2008**  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

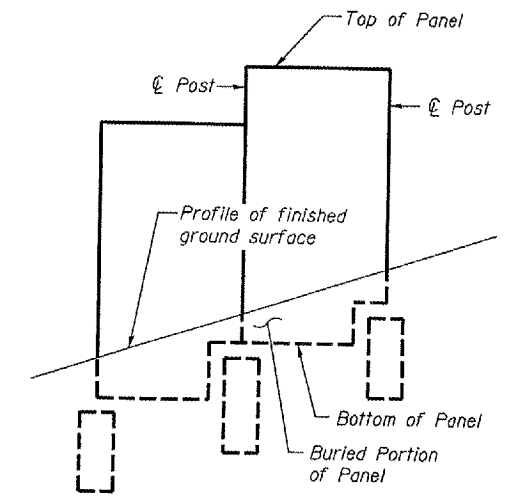
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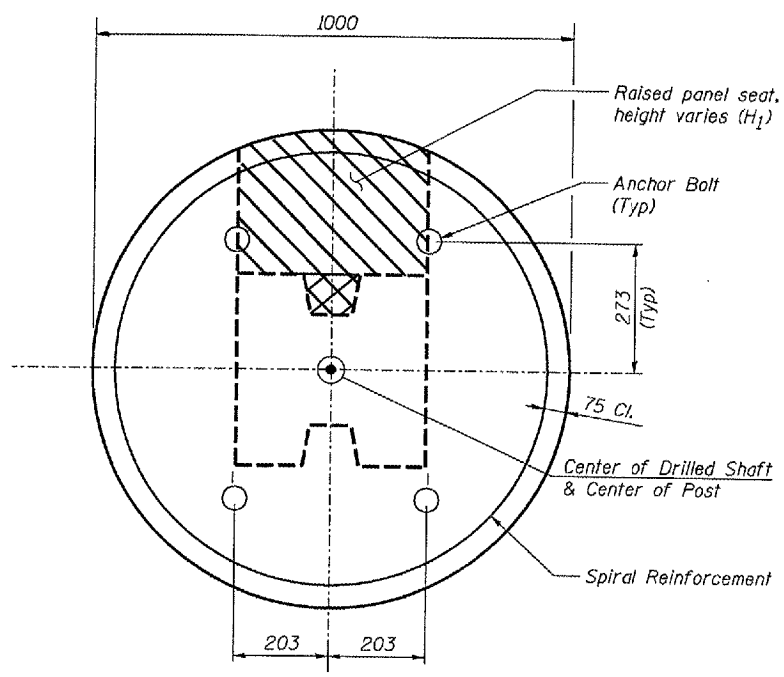
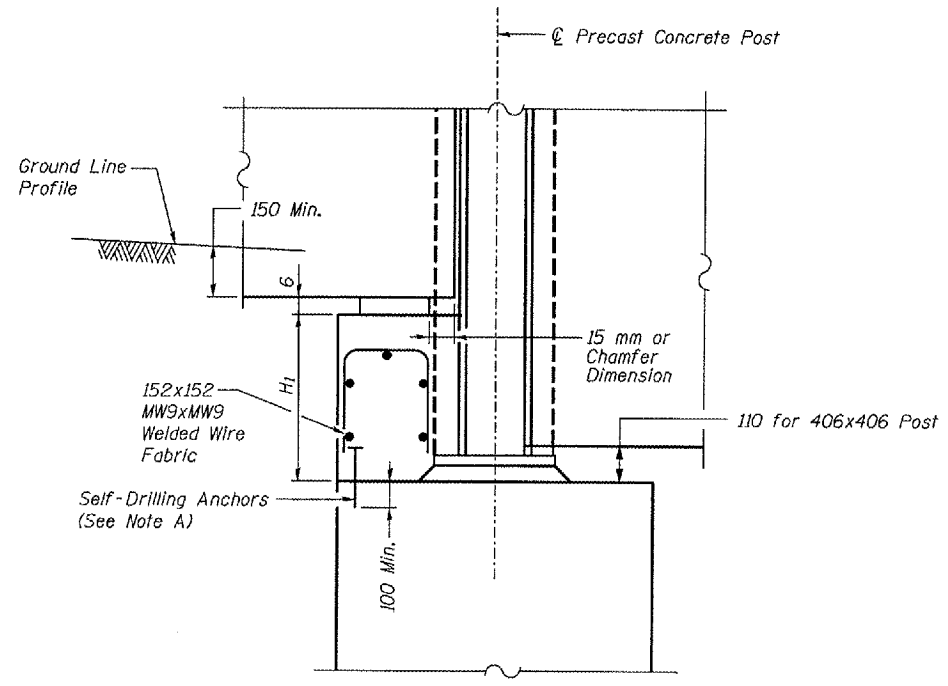
**FABRIC BEARING PADS**  
(Cost included in Noise Abatement Wall Ground Mounted (Precast Concrete))  
(Clip the pad area projecting beyond the base plate area in the field. Cross-hatched area in drilled shaft detail represents the bearing pad shape.)



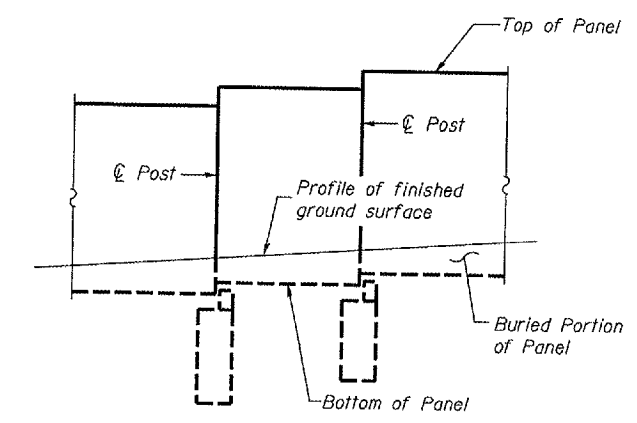
ALTERNATE DETAIL 1



ALTERNATE DETAIL 2



DRILLED SHAFT



METHOD OF MEASUREMENT OF WALL AREA FOR GROUND MOUNTED WALL

The Method of Measurement of quantity of Noise Abatement Wall is based on the cumulative area of Panels in Elevation View bounded by the Posts, Top of Panel & Bottom of Panel. Alternates 1 and 2 apply to the contract options. See Special Provisions.

**\*RAISED PANEL SEAT ELEVATION**

Note A: Use 13 mm  $\phi$  x  $H_1$  self drilling anchors, Welded Wire Fabric and concrete structures to raise the panel seat. Cost of materials in the raised panel seat is included in Noise Abatement Wall Ground Mounted (Precast Concrete).

\* The Contractor has the option to use a level seat for adjacent panels by sloping or stepping the panel bottom as long as the minimum embedment of panel below the groundline profile is maintained. See Special Provisions.

- NOTES:**
- All Reinforcement including the Welded Wire Fabric shall be Epoxy Coated.
  - Work this sheet with sheets 18 and 20.

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NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
**POST DETAILS 2**  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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TABLE SHOWING RECESS DETAIL AND CROSS SECTION

Post No.	Post Size (mm)	H (Meters)	H <sub>1</sub> (mm)	φ (Degrees)	Rebars Epoxy Coated (kg)	Structural Steel (kg)	Concrete Volume (Cu. m)	Remarks
1	406x406	4.547	122	180	232	131	0.646	End Post
2	406x406	5.576	125	195	291	131	0.792	Interior Post
3	406x406	5.581	159	165	291	131	0.793	Interior Post
4	406x406	5.555	134	195	291	131	0.789	Interior Post
5	406x406	5.565	174	165	291	131	0.790	Interior Post
6	406x406	5.462	64	166	291	131	0.776	Interior Post
7	406x406	5.471	175	203	291	131	0.777	Interior Post
8	406x406	5.501	184	195	291	131	0.781	Interior Post
9	406x406	5.501	168	150	291	131	0.781	Interior Post
10	406x406	5.520	182	195	291	131	0.784	Interior Post
11	406x406	5.354	0	195	291	131	0.760	Interior Post
12	406x406	5.251	65	165	291	131	0.746	Interior Post
13	406x406	5.463	374	150	291	131	0.776	Interior Post
14	406x406	5.441	146	204	291	131	0.773	Interior Post
15	406x406	5.449	152	195	291	131	0.774	Interior Post
16	406x406	5.493	211	165	291	131	0.780	Interior Post
17	406x406	5.391	64	195	291	131	0.765	Interior Post
18	406x406	5.220	0	195	291	131	0.741	Interior Post
19	406x406	5.050	179	165	291	131	0.717	Interior Post
20	406x406	4.708	0	165	291	131	0.669	Interior Post
21	406x406	4.998	13	195	291	131	0.710	Interior Post
22	406x406	5.274	127	195	291	131	0.749	Interior Post
23	406x406	5.442	369	165	291	131	0.773	Interior Post
24	406x406	5.350	405	165	291	131	0.760	Interior Post
25	406x406	5.233	377	210	291	131	0.743	Interior Post
26	406x406	5.059	398	165	291	131	0.718	Interior Post
27	406x406	4.860	203	195	291	131	0.690	Interior Post
28	406x406	4.851	199	165	291	131	0.689	Interior Post
29	406x406	4.855	194	165	291	131	0.689	Interior Post
30	406x406	4.827	203	210	291	131	0.685	Interior Post
31	406x406	4.847	166	165	291	131	0.688	Interior Post
32	406x406	4.883	223	195	291	131	0.693	Interior Post
33	406x406	4.744	202	165	291	131	0.674	Interior Post
34	406x406	4.649	84	165	291	131	0.660	Interior Post
35	406x406	4.635	107	195	291	131	0.658	Interior Post
36	406x406	4.598	70	195	291	131	0.653	Interior Post
37	406x406	4.610	70	165	291	131	0.655	Interior Post
38	406x406	4.587	82	165	291	131	0.651	Interior Post
39	406x406	4.612	107	195	291	131	0.655	Interior Post
40	406x406	4.756	140	195	291	131	0.675	Interior Post
41	406x406	4.758	160	165	291	131	0.676	Interior Post
42	406x406	4.780	162	165	291	131	0.679	Interior Post
43	406x406	4.778	158	195	291	131	0.678	Interior Post
44	406x406	5.066	450	165	291	131	0.719	Interior Post
45	406x406	5.099	191	195	291	131	0.724	Interior Post
46	406x406	4.843	34	195	291	131	0.688	Interior Post
47	406x406	4.797	245	165	291	131	0.681	Interior Post
48	406x406	5.109	406	165	291	131	0.725	Interior Post
49	406x406	5.109	245	195	291	131	0.725	Interior Post
50	406x406	5.079	266	195	291	131	0.721	Interior Post
51	406x406	5.138	354	165	291	131	0.730	Interior Post
52	406x406	5.289	447	165	291	131	0.751	Interior Post
53	406x406	5.353	358	195	291	131	0.760	Interior Post
54	406x406	5.343	287	195	291	131	0.759	Interior Post
55	406x406	5.400	355	165	291	131	0.767	Interior Post
56	406x406	5.522	409	165	291	131	0.784	Interior Post
57	406x406	5.341	114	195	291	131	0.758	Interior Post
58	406x406	5.196	154	165	291	131	0.738	Interior Post
59	406x406	5.000	98	195	291	131	0.710	Interior Post
60	406x406	4.961	155	165	291	131	0.704	Interior Post
61	406x406	4.890	227	165	291	131	0.694	Interior Post
62	406x406	4.863	178	210	291	131	0.691	Interior Post
63	406x406	4.632	0	210	291	131	0.658	Interior Post

TABLE SHOWING RECESS DETAIL AND CROSS SECTION

Post No.	Post Size (mm)	H (Meters)	H <sub>1</sub> (mm)	φ (Degrees)	Rebars Epoxy Coated (kg)	Structural Steel (kg)	Concrete Volume (Cu. m)	Remarks
64	406x406	4.597	0	195	291	131	0.653	Interior Post
65	406x406	4.678	139	165	291	131	0.664	Interior Post
66	406x406	4.535	1	150	291	131	0.644	Interior Post
67	406x406	4.530	0	195	291	131	0.643	Interior Post
68	406x406	4.635	123	165	291	131	0.658	Interior Post
69	406x406	4.720	81	195	291	131	0.670	Interior Post
70	406x406	4.723	184	165	291	131	0.671	Interior Post
71	406x406	4.723	81	195	291	131	0.671	Interior Post
72	406x406	4.736	197	165	291	131	0.673	Interior Post
73	406x406	4.821	166	195	291	131	0.685	Interior Post
74	406x406	4.706	82	165	291	131	0.668	Interior Post
75	406x406	4.623	82	195	291	131	0.656	Interior Post
76	406x406	4.623	82	165	291	131	0.656	Interior Post
77	406x406	4.623	82	195	291	131	0.656	Interior Post
78	406x406	4.623	82	165	291	131	0.656	Interior Post
79	406x406	4.623	82	195	291	131	0.656	Interior Post
80	406x406	4.623	82	165	291	131	0.656	Interior Post
81	406x406	4.623	82	195	291	131	0.656	Interior Post
82	406x406	4.623	82	165	291	131	0.656	Interior Post
83	406x406	4.623	82	195	291	131	0.656	Interior Post
84	406x406	4.536	0	165	291	131	0.644	Interior Post
85	406x406	4.681	45	210	291	131	0.665	Interior Post
86	406x406	4.725	178	165	291	131	0.671	Interior Post
87	406x406	4.596	89	165	291	131	0.653	Interior Post
88	406x406	4.503	23	195	291	131	0.639	Interior Post
89	406x406	4.673	193	165	291	131	0.664	Interior Post
90	406x406	4.647	0	195	291	131	0.660	Interior Post
91	406x406	4.515	38	165	291	131	0.641	Interior Post
92	406x406	4.756	237	165	291	131	0.675	Interior Post
93	406x406	4.811	116	210	291	131	0.683	Interior Post
94	406x406	4.622	48	195	291	131	0.656	Interior Post
95	406x406	3.602	0	180	200	131	0.511	End Post

NOTES:

- Quantities in Table are for information only.
- Work this sheet with sheets 18 and 19.

REVISIONS	
NAME	DATE

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ILLINOIS DEPARTMENT OF TRANSPORTATION  
 POST DATA  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554





# SOIL BORING LOG

Page 1 of 1

Date 4/23/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
 SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
 COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO.	DEPTH	BULGE	UCS	MOIST	Surface Water Elev.	DEPTH	BULGE	UCS	MOIST
Station	(m)	(mm)	(kPa)	(%)	(m)	(m)	(mm)	(kPa)	(%)
B-01 142+905.427 48.08m R 201.73 m	2				200.81	2			
	3	431	18.8			3			
	4	P				4	287	31.9	
	7	P				8	438	12.5	
200.05	2				198.53	2			
	4	59	29.4			4	221	14.2	
	4	B				6	B		
	1					7	214	13.9	
198.53	2				192.58	2			
	4	221	14.2			4	268	13.9	
	6	B				6	B		
	7	214	13.9			9	B		
-6.0	1				-12.0	1			
	2	47	25.7			2			
	3	B				3			
	12	395	12.5			12			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Page 1 of 1

Date 4/25/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
 SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
 COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO.	DEPTH	BULGE	UCS	MOIST	Surface Water Elev.	DEPTH	BULGE	UCS	MOIST
Station	(m)	(mm)	(kPa)	(%)	(m)	(m)	(mm)	(kPa)	(%)
B-02 142+936.760 45.09m R 200.75 m	2				199.84	2			
	3					3			
	4	328	15.1			4	52	36.2	
	5	B				5	B		
199.08	1				197.55	1			
	2	43	25.6			2	264	14.1	
	2	B				5	B		
	1					3			
-3.0	3	95	24.9		-12.0	3			
	4	B				5	257	14.7	
	4					9	B		
	4					11	B		
-6.0	4				-12.0	4			
	8	316	12.4			6	292	13.3	
	8					11	B		
	8					12			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. I-74		Peoria	45	22
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT-		
Contract # 68736		* D4 I-74 Noise Wall 2008		

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6/20/2007

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 Chicago, Illinois 60601  
 312-565-4450  
 JOB NO. 3573

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SOIL BORINGS  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 I-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554



Illinois Department of Transportation  
Division of Highways  
1001

SOIL BORING LOG

Page 1 of 1

Date 4/25/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI

SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E

COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station MAINLINE STATIONING  
BORING NO. B-03  
Station 142+968.578  
Offset 45.30m R  
Ground Surface Elev. 199.43 m

DEPTH (m)	BLOW COUNT (N)	UCS (kPa)	UCS (%)	DEPTH (m)	BLOW COUNT (N)	UCS (kPa)	UCS (%)
SILTY CLAY: Brown and gray (A-7) Boring collapse measured at the ground surface approximately 24 hours after drilling was completed.				CLAY LOAM: Brown, trace gravel (A-7) (continued)			
1				11	B		
2	71	31.1		4			
2	B			6	300	11.9	
				11	B		
2				3			
2	63	24.8		8	277	13.2	
3	B			9	B		
-1.5				-7.5			
197.76				2			
CLAY LOAM: Brown, trace gravel (A-7)				CLAY LOAM: Brown, trace gravel (A-7) (continued)			
				2			
	225	15.5		7	335	11.5	
	B			10	B		
				7			
	237	14.2		9	331	12.2	
-3.0	B			13	B		
				-9.0			
				198.29			
End of Boring				End of Boring			
				2			
	257	12.7					
	B						
				3			
	237	13.5		5	177	11.5	
-4.5	B			8	B		
				-10.5			
				2			
	221	13.0		4	209	13.5	
	B			6	B		
				2			
	292	12.4		5	197	11.8	
-6.0				-5.0			
				-12.0			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, Form 137 (Rev. 8-99)



Illinois Department of Transportation  
Division of Highways  
1001

SOIL BORING LOG

Page 1 of 1

Date 4/25/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI

SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E

COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station MAINLINE STATIONING  
BORING NO. B-04  
Station 143+007.167  
Offset 45.67m R  
Ground Surface Elev. 199.98 m

DEPTH (m)	BLOW COUNT (N)	UCS (kPa)	UCS (%)	DEPTH (m)	BLOW COUNT (N)	UCS (kPa)	UCS (%)
SILTY CLAY LOAM: Brown (A-6)				CLAY LOAM: Brown, trace gravel (A-7) (continued)			
199.67				9	B		
	5						
	2			2			
	3			6	225	12.3	
				7	B		
				1			
198.76				3			
	1	39	29.9				
	2	B		6	237	11.4	
-1.5				9	B		
				-7.5			
				2			
				3	99	25.8	
				4			
197.69				6	245	11.9	
				9	B		
				-9.0			
				3			
				6	225	13.7	
				10	B		
-3.0				-9.0			
				198.03			
End of Boring				End of Boring			
				2			
	6	166	12.3				
	6	B					
				3			
	5	177	11.5				
-4.5				8	B		
				-10.5			
				2			
	4	209	13.5				
	6	B					
				2			
	5	197	11.8				
-5.0				-12.0			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, Form 137 (Rev. 8-99)

ROUTE NO. F.A.I. I-74	SECTION #	COUNTY Peoria	SHEET NO. 23	SHEET NO. 23
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT # D4 I-74 Noise Wall 2008		45 SHEETS

alfred benesch & company  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-566-0460  
JOB NO. 3573

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

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Illinois Department of Transportation  
Division of Highways  
1007

# SOIL BORING LOG

Page 1 of 1

Date 4/25/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O D E S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O D E S T	Groundwater Elev.: First Encounter Upon Completion After 24 Hrs.	D E P T H	B L O W S	U C S	M O D E S T
SILTY CLAY LOAM: Brown (A-6) 201.70														
	1													
	2	138	28.6											
CLAY: Brown (A-7) 201.89	3	B												
	3													
SILTY CLAY: Brown and gray (A-6) 200.32	1													
	1	0.25	29.1											
CLAY LOAM: Brown, trace gravel (A-7)	2													
	4	316	14.4											
Boring collapse measured at approximately 2.5 meters below the ground surface approximately 24 hours after drilling was completed.	7	B												
	3													
End of Boring 192.86	5	312	14.2											
	7	B												
	2													
	3	197	16.4											
	6	B												
	2													
	4	285	15.1											
	7	B												
	3													
	4	355	14.0											
	8	B												
	2													
	5	197	13.4											
	5													

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation  
Division of Highways  
1007

# SOIL BORING LOG

Page 1 of 1

Date 4/25/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O D E S T	Surface Water Elev. Stream Bed Elev.	D E P T H	B L O W S	U C S	M O D E S T	Groundwater Elev.: First Encounter Upon Completion After 24 Hrs.	D E P T H	B L O W S	U C S	M O D E S T
CLAY: Brown (A-7) 201.69														
	1													
	3	281	24.8											
SILTY CLAY: Brown and gray (A-6) 200.92	3	B												
	6	415	12.5											
SILTY LOAM: Brown and gray (A-4) 200.16	8	B												
	2													
CLAY LOAM: Brown, trace gravel (A-7)	5	335	18.6											
	9	P												
End of Boring 193.46	7	240	13.2											
	7	B												
	3													
	5	217	14.0											
	7	B												
	3													
	5	197	13.5											
	8	B												
	6													
	14	431	7.8											
	14	P												
	4													
	7	481	12.9											
	13	S												
	5													
	11	568	12.4											
	15	B												
	4													
	10	533	12.3											
	10													

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

ROUTE NO. F.A.I. I-74	SECTION #	COUNTY Peoria	SHEET NO. 24	SHEET NO. 24 45 SHEETS
FED. ROAD DIST. NO. #		ILLINOIS	FED. AID PROJECT #	Contract # 68736 * D4 I-74 Noise Wall 2008

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312-585-0450  
JOB NO. 3573

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554





Illinois Department of Transportation  
Division of Highways  
1001

# SOIL BORING LOG

Page 1 of 1

Date 4/23/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S	M D I S T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H S	B L O W S	U C S	M D I S T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H S	B L O W S	U C S	M D I S T		
																			First Encounter _____ m	Upon Completion _____ m
BORING NO. <u>B-07</u> Station <u>143+100.900</u> Offset <u>44.99m R</u> Ground Surface Elev. <u>199.74</u> m							CLAY LOAM: Brown, trace gravel (A-7)													
		2					CLAY LOAM: Brown, trace gravel (A-7) (continued) Cobble encountered during drilling at approximately 6.1 meters below the ground surface. Boring collapse measured at approximately 6.2 meters below the ground surface approximately 24 hours after drilling was completed.													
		4	277	11.2																
		5	B																	
		3																		
		5	285	11.9																
		-1.5	6	B					Coarse gravel in middle of SPT sampler.											
		3																		
		6	304	11.7																
		9	B																	
		3																		
		6	335	10.4																
		-3.0	10	B																
		2																		
		5	201	11.2																
	7	B																		
	2																			
	3	221	14.1																	
	-4.5	6	B																	
	2																			
	3	201	14.4																	
	5	B																		
	2																			
	3	205	13.6																	
	-6.0	3																		

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



Illinois Department of Transportation  
Division of Highways  
1001

# SOIL BORING LOG

Page 1 of 1

Date 4/24/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H S	B L O W S	U C S	M D I S T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H S	B L O W S	U C S	M D I S T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H S	B L O W S	U C S	M D I S T		
																			First Encounter _____ m	Upon Completion _____ m
BORING NO. <u>B-08</u> Station <u>143+135.729</u> Offset <u>40.79m R</u> Ground Surface Elev. <u>197.45</u> m							CLAY: Brown (A-7)													
							CLAY LOAM: Brown (A-7) (continued) Boring collapse measured at approximately 1.2 meters below the ground surface approximately 24 hours after drilling was completed.													

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. I-74	#	Peoria		25
SHEET NO. 25 45 SHEETS				
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	
Contract # 68736		* D4 I-74 Noise Wall 2008		

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JOB NO. 3373

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554



# SOIL BORING LOG

Page 1 of 1

Date 4/24/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
 SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
 COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O D E	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.: First Encounter _____ m Upon Completion _____ m After 24 Hrs. _____ m	D E P T H	B L O W S	U C S	M O D E
CLAY LOAM: Brown, trace gravel (A-7)  Tree roots encountered during drilling from approximately 0.3 to 0.9 meters below the ground surface.  Boring collapse measured at approximately 1.1 meters below the ground surface approximately 24 hours after drilling was completed.           Cobble encountered during drilling at approximately 4.6 to 4.7 meters below the ground surface.											
		2						7	B		
		3	168	15.8				2			
		5	P					4	264	12.8	
								7	B		
		4						2			
		6	328	13.7				4	182	13.6	
		10	B					7	B		
		-1.5									
		3						2			
		7	387	12.9				5	194	13.4	
		9	B					6	B		
		2						3			
		7	180	12.2				6	225	13.3	
		9	S					8	B		
	-3.0										
	3										
	7	277	12.5								
	11	B									
	3										
	6	312	14.1								
	8	B									
	-4.5										
	2										
	4	264	12.7								
	7	B									
	2										
	5	253	13.2								
	-6.0										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)



# SOIL BORING LOG

Page 1 of 1

Date 4/24/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
 SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
 COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S	M O D E	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.: First Encounter _____ m Upon Completion _____ m After 24 Hrs. _____ m	D E P T H	B L O W S	U C S	M O D E
SILTY CLAY LOAM: Brown (A-6) CLAY LOAM: Brown, trace gravel (A-7)  Boring collapse measured at approximately 1.5 meters below the ground surface approximately 24 hours after drilling was completed.  Coarse gravel in bottom of SPT sampler.											
		195.88						10	B		
		2						3			
		3	194	21.8				5	245	12.9	
		4	S					8	B		
		2						3			
		5	411	14.3				5	264	13.2	
		9	B					9	B		
		-1.5									
		3						2			
		6	395	14.8				4	221	13.2	
		11	B					6	B		
		4						3			
		9	474	13.5				3			
		13	B					4	201	13.0	
	-3.0										
	3										
	8	493	13.5								
	14	B									
	3										
	8	395	14.6								
	12	B									
	-4.5										
	3										
	9	331	13.0								
	10	B									
	3										
	6	229	12.6								
	-6.0										

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
 The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 1-74		Peoria		26
SHEET NO. 26 45 SHEETS				
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		
		D4 1-74 Noise Wall 2008		

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REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
 SOIL BORINGS  
 NOISE ABATEMENT WALL  
 F.A.I. RTE. 74 (I-74)  
 SECTION D4 1-74 NOISE WALL 2008  
 PEORIA COUNTY  
 STA. 142+916.64 TO STA. 143+287.69  
 STRUCTURE NUMBER 072-8554



Illinois Department of Transportation  
Division of Highways  
DOT

SOIL BORING LOG

Page 1 of 2

Date 4/24/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S  Qu	M O D E L S  T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H	B L O W S	U C S	M O D E L S  T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H	B L O W S	U C S	M O D E L S  T
SOFT SOIL and SAND SEDIMENTS 191.10	13	B			CLAY LOAM: Brown, trace gravel (A-7) (continued)													
	2																	
	3	71	28.8															
	4	B																
	2																	
	2	150	23.3															
	4	B																
	2																	
	5	644	12.1															
	10	B																
	8	573	13.5															
	12	B																
	4																	
6	462	14.0																
11	B																	
3																		
7	308	12.9																
10	B																	
2																		
6		11.4																
7																		
6																		
10	298	12.5																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, From 137 (Rev. 8-99)



Illinois Department of Transportation  
Division of Highways  
DOT

SOIL BORING LOG

Page 2 of 2

Date 4/24/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave along Ramp A LOGGED BY SCI  
SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E  
COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. Station	D E P T H	B L O W S	U C S  Qu	M O D E L S  T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H	B L O W S	U C S	M O D E L S  T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H	B L O W S	U C S	M O D E L S  T
CLAY LOAM: Brown, trace gravel End of Boring	13	B			179.14													
	13	B																

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, From 137 (Rev. 8-99)

ROUTE NO. F.A.I. I-74	SECTION #	COUNTY Peoria	SHEETS 27	SHEET NO. 27
FED. ROAD DIST. NO. 4				ILLINOIS
CONTRACT # 68736				FED. AID PROJECT # D4 I-74 Noise Wall 2008

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Engineers - Surveyors - Planners  
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312-585-0450  
JOB NO. 3573

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554



Illinois Department  
of Transportation  
Division of Highways  
IDOT

# SOIL BORING LOG

Page 1 of 1

Date 4/24/07

ROUTE FAI-74 DESCRIPTION Noise Wall East of Sterling Ave. along Ramp A LOGGED BY SCI

SECTION 72-6,7,8,9-1,90-11,12,13,14 LOCATION Peoria, Illinois, SEC. 30, TWP. 9N, RNG. 7E

COUNTY Peoria DRILLING METHOD CME 750 HAMMER TYPE Automatic

STRUCT. NO. \_\_\_\_\_  
Station MAINLINE STATIONING

BORING NO. B-12  
Station 143+250.114  
Offset 45.29m R  
Ground Surface Elev. 195.28 m

D E P T H  H	B L O W S  S	U C S  Qu	M O I S T  T	Surface Water Elev. _____ m	Stream Bed Elev. _____ m	Groundwater Elev.:	D E P T H  H	B L O W S  S	U C S  Qu	M O I S T  T
						CLAY LOAM: Brown, trace gravel (A-7) (continued)		9	B	
								2		
								5	296	12.7
								5	B	
								3		
								5	272	12.2
								10	B	
								2		
								5	300	12.6
								8	B	
								4		
								7	201	13.0
								9	B	
						End of Boring				
								3		
								9	422	13.5
								12	B	
								4		
								12	376	13.2
								14	B	
								3		
								5	245	12.0
								10	B	
								4		
								6	264	13.2
								6		

Boring collapse measured at approximately 4.7 meters below the ground surface approximately 24 hours after drilling was completed.

Coarse gravel in bottom of SPT sampler.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)  
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

ROUTE NO.	SECTION	COUNTY	SHEET NO.	SHEET NO.
F.A.I. I-74		Peoria	28	45 SHEETS
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		
Contract # 68736		* D4 I-74 Noise Wall 2008		

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312-565-0450  
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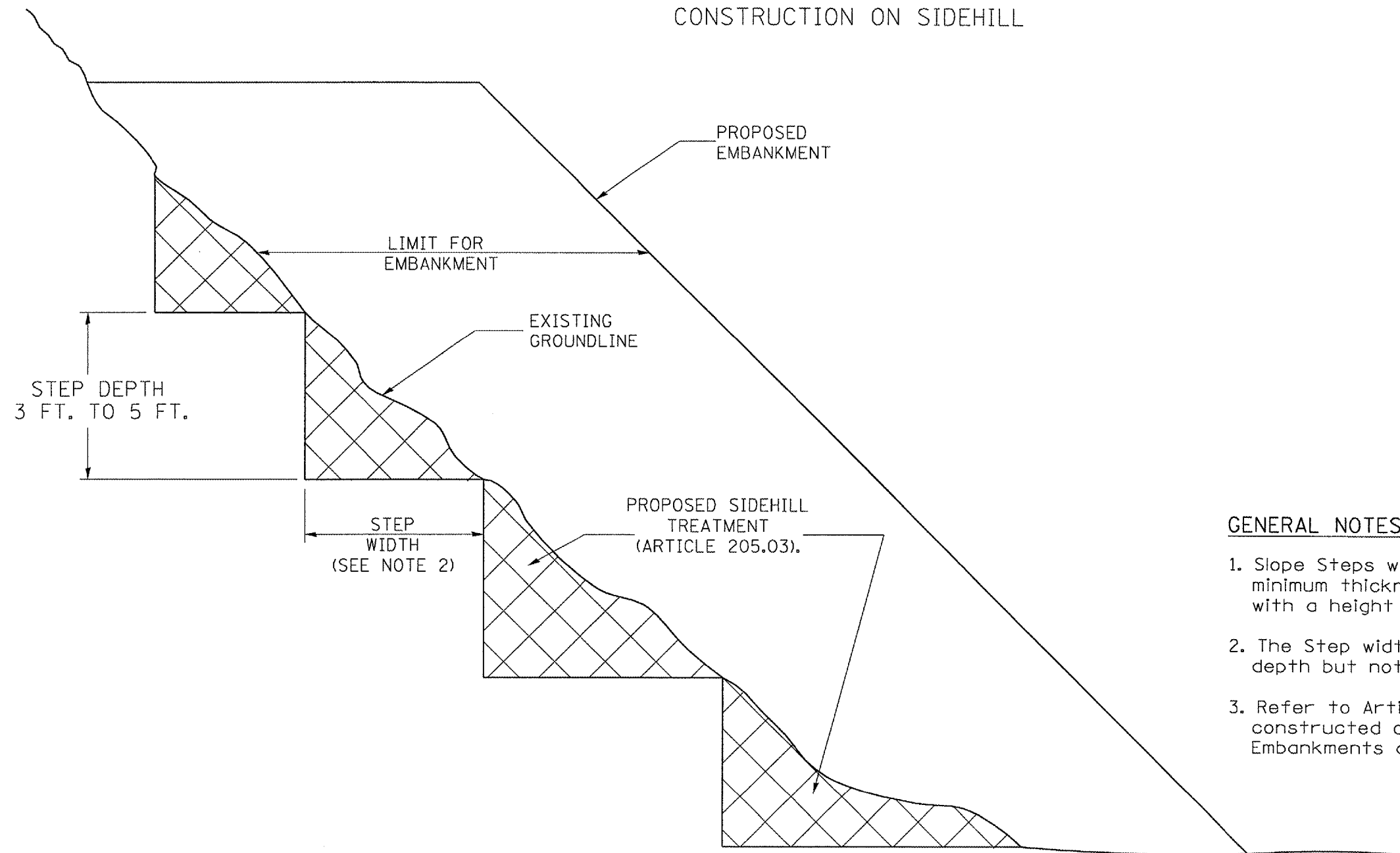
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION  
SOIL BORINGS  
NOISE ABATEMENT WALL  
F.A.I. RTE. 74 (I-74)  
SECTION D4 I-74 NOISE WALL 2008  
PEORIA COUNTY  
STA. 142+916.64 TO STA. 143+287.69  
STRUCTURE NUMBER 072-8554

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-74	*	PEORIA	45	29
STA. 142+916.64		TO STA. 143+287.69		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

\* D4 1-74 NOISE WALL 2008

### SLOPE STEPS DETAIL TYPICAL CROSS-SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL



**GENERAL NOTES:**

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

All dimensions are in Inches (millimeters) unless otherwise noted.

**REPLACEMENT MATERIAL:**



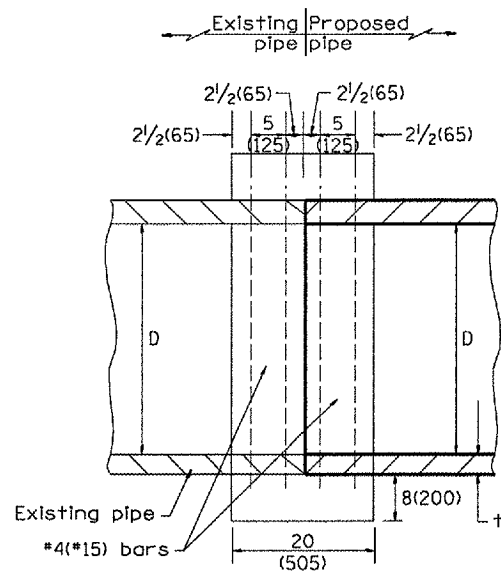
STANDARD EMBANKMENT  
(IN ACCORDANCE WITH  
205 OF THE STANDARD SPECIFICATION).

DATE	REVISIONS	BY
1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE BOX, REVISED GENERAL NOTES.	T.P.
10-16-06	REVISED TO 2007 SPEC.	M.A.

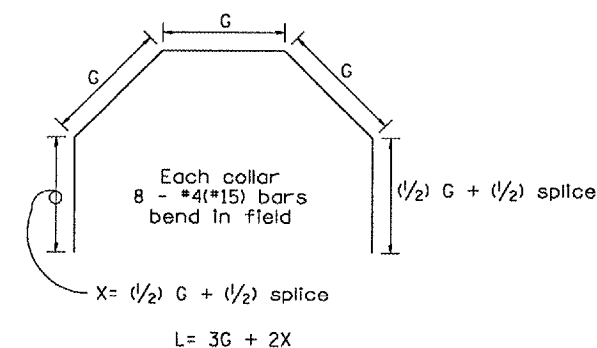
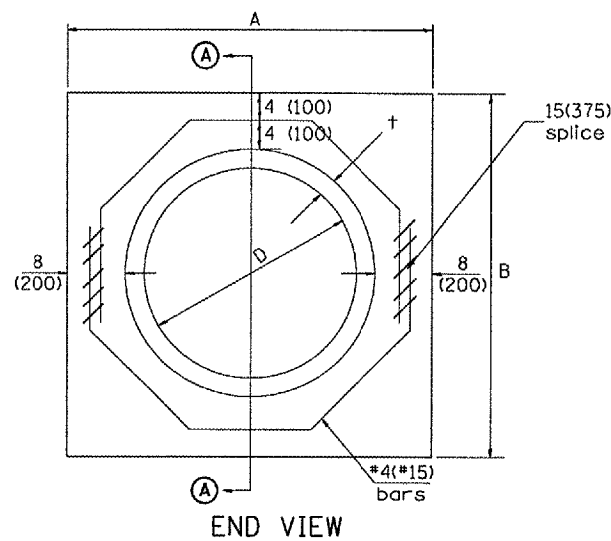
ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
<b>SLOPE STEPS DETAIL</b>	
CADD STD. NO. 205001-D4 SCALE: NOT DRAWN TO SCALE	DRAWN BY CADD CHECKED BY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-74	*	PEORIA	45	30
STA. 142+916.64		TO STA. 143+287.69		
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	

• D4 I-74 NOISE WALL 2008



SECTION A - A



D		t		A		B		Each Collar	
								Reinforcement Bars	
In (mm)	In (mm)	ft (m)	ft (m)	ft (m)	ft (m)	G In (mm)	X In (mm)	L ft (m)	Weight lb (kg)
12 (300)	2.00 (51)	2.67 (0.814)	2.67 (0.814)	0.4 (0.270)	9 15/16 (253)	12 7/16 (317)	4.57 (1.393)	24 (11)	
15 (375)	2.25 (57)	2.96 (0.902)	2.96 (0.902)	0.4 (0.315)	11 3/8 (290)	13 3/16 (335)	5.05 (1.541)	27 (12)	
18 (450)	2.50 (64)	3.25 (0.991)	3.25 (0.991)	0.5 (0.362)	12 13/16 (327)	13 7/8 (354)	5.54 (1.689)	30 (14)	
21 (525)	2.75 (70)	3.54 (1.079)	3.54 (1.079)	0.5 (0.411)	14 1/4 (364)	14 5/8 (372)	6.02 (1.836)	32 (15)	
24 (600)	3.00 (76)	3.83 (1.167)	3.84 (1.167)	0.6 (0.460)	15 11/16 (401)	15 5/16 (391)	6.51 (1.984)	35 (16)	
27 (675)	3.25 (83)	4.13 (1.259)	4.13 (1.259)	0.7 (0.516)	17 1/4 (438)	16 1/16 (409)	6.99 (2.131)	37 (17)	
30 (750)	3.50 (89)	4.42 (1.347)	4.42 (1.347)	0.7 (0.570)	18 11/16 (475)	16 3/4 (428)	7.48 (2.279)	40 (18)	
33 (825)	3.75 (95)	4.71 (1.436)	4.71 (1.436)	0.8 (0.624)	20 1/8 (512)	17 1/2 (446)	7.96 (2.426)	43 (19)	
36 (900)	4.00 (102)	5.00 (1.524)	5.00 (1.524)	0.9 (0.682)	21 9/16 (549)	18 3/16 (465)	8.44 (2.574)	45 (20)	
42 (1050)	4.50 (114)	5.58 (1.701)	5.58 (1.701)	1.0 (.800)	24 7/16 (622)	19 3/4 (501)	9.41 (2.869)	50 (23)	
48 (1200)	5.00 (127)	6.17 (1.881)	6.17 (1.881)	1.2 (0.930)	27 5/16 (696)	21 3/16 (538)	10.38 (3.164)	55 (25)	

GENERAL NOTES

1. THE COLLAR SHALL BE CONSTRUCTED ENTIRELY OF CLASS SI CONCRETE IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF SECTION 503 OF THE STANDARD SPECIFICATIONS. REINFORCEMENT BARS SHALL CONFORM TO SECTION 508.

All dimensions are in inches (millimeters) unless otherwise noted.

QUANTITIES	
CALC. BY: R. J. D.	2-2-98
CHECKED BY: R. D. H.	2-6-98
DATE:	DATE:

QUANTITY CALCULATIONS ARE ON FILE AT THE DISTRICT 4 OFFICE; BUREAU OF PROJECT IMPLEMENTATION; DOCUMENTATION SECTION

DATE	REVISIONS	BY
1-1-97	RENUM. B-8.03, NEW REVISION BOX ADDED QUANTITY CALCULATION BOX, REVISED TITLE BOX	T.P.
4-1-97	CORRECT BAR	J.A.
2-10-98	REVISE QUANTITIES	J.A.
9-1-00	CORRECT WEIGHT	J.A.
10-16-06	REV. TO 2007 SPEC., CORRECT mm UNITS	M.A.

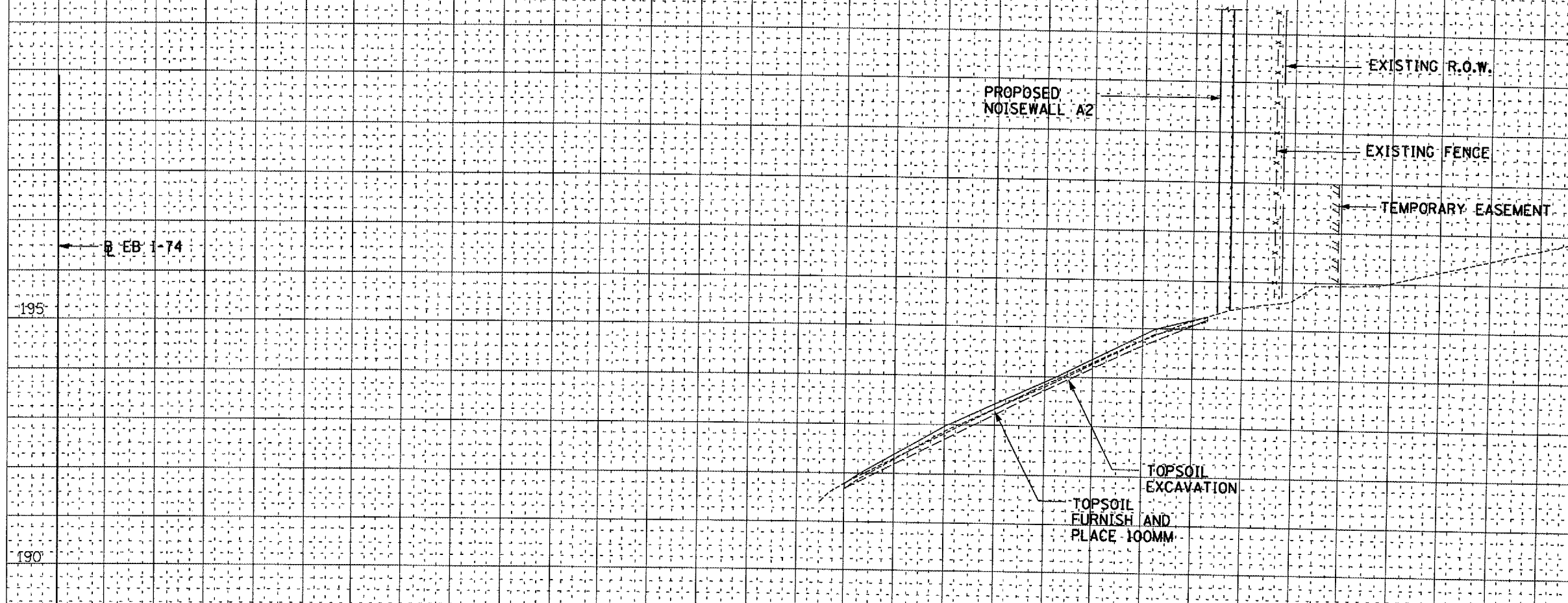
ILLINOIS DEPARTMENT OF TRANSPORTATION	
DISTRICT CADD STANDARD	
PIPE CULVERT EXTENSION COLLAR (WITHOUT END SECTION)	
CADD STANDARD 542016-D4	SCALE: NOT DRAWN TO SCALE
DATE:	DRAWN BY: CADD CHECKED BY:

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-74	#	Peoria	45	31
STA. 142+916.640		TO STA. 143+287.690		
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	
Contract # 68736		# D4 I-74 Noise Wall 2008		

HORIZONTAL SCALE: 1:2  
 VERTICAL SCALE: 1:1

DATE
BY
SURVEYED
PLOTTED
TEMPLATE
NOTE BOOK
AREAS CHECKED
NO.

DATE
BY
SURVEYED
PLOTTED
TEMPLATE
NOTE BOOK
AREAS CHECKED
NO.



SEE SLOPE STEPS DETAIL SHEET

TOPSOIL EXC.	1.40 SQ. M.
TOPSOIL PLACE.	1.75 SQ. M.
CUT	0.00 SQ. M.
FILL	1.40 SQ. M.

143+210.000

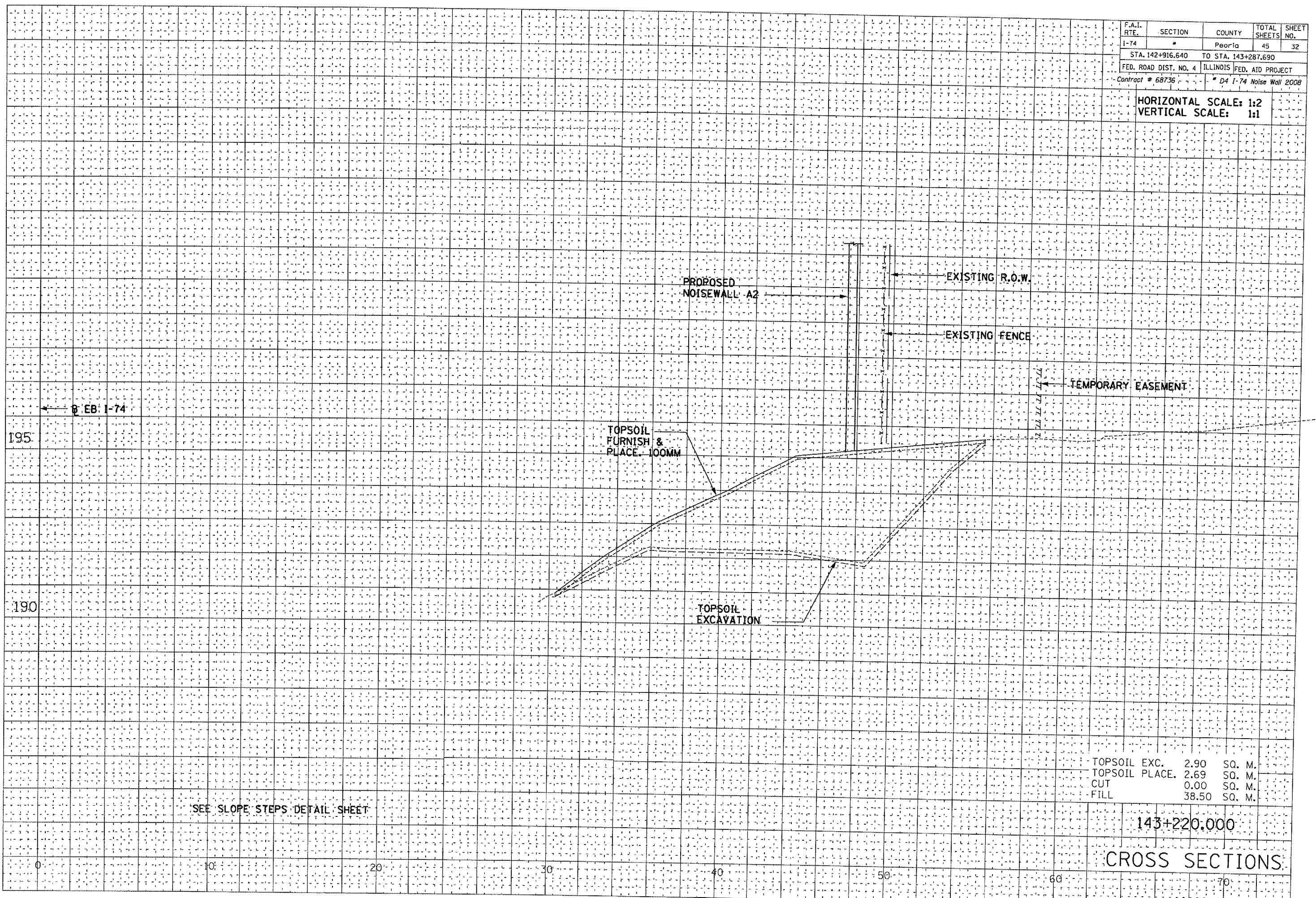
CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-74	*	Peoria	45	32
STA. 142+916.640		TO STA. 143+287.690		
FED. ROAD DIST. NO. 4		ILLINOIS		FED. AID PROJECT
Contract # 68736		D4 I-74 Noise Wall 2008		

HORIZONTAL SCALE: 1:2  
VERTICAL SCALE: 1:1

DATE	
BY	
REVIEWED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
REVIEWED	
PLOTTED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



TOPSOIL EXC.	2.90	SQ. M.
TOPSOIL PLACE.	2.69	SQ. M.
CUT	0.00	SQ. M.
FILL	38.50	SQ. M.

SEE SLOPE STEPS DETAIL SHEET

143+220.000

CROSS SECTIONS

0                      10                      20                      30                      40                      50                      60                      70

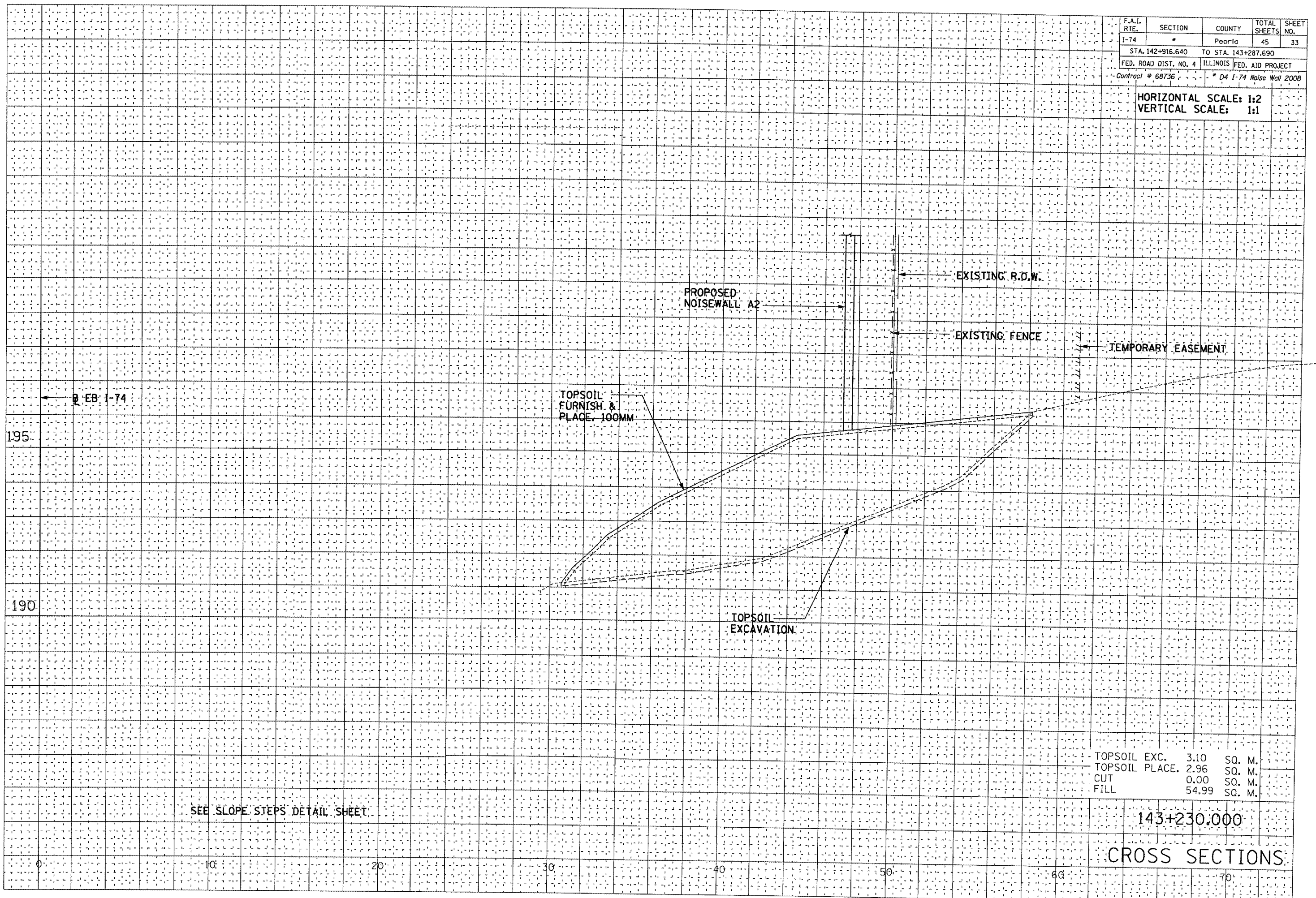


F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-74	#	Peoria	45	33
STA. 142+916.640 TO STA. 143+287.690				
FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT				
Contract # 68736 * D4 I-74 Noise Wall 2008				

HORIZONTAL SCALE: 1:2  
VERTICAL SCALE: 1:1

BY	DATE

BY	DATE



TOPSOIL EXC.	3.10	SQ. M.
TOPSOIL PLACE.	2.96	SQ. M.
CUT	0.00	SQ. M.
FILL	54.99	SQ. M.

143+230.000

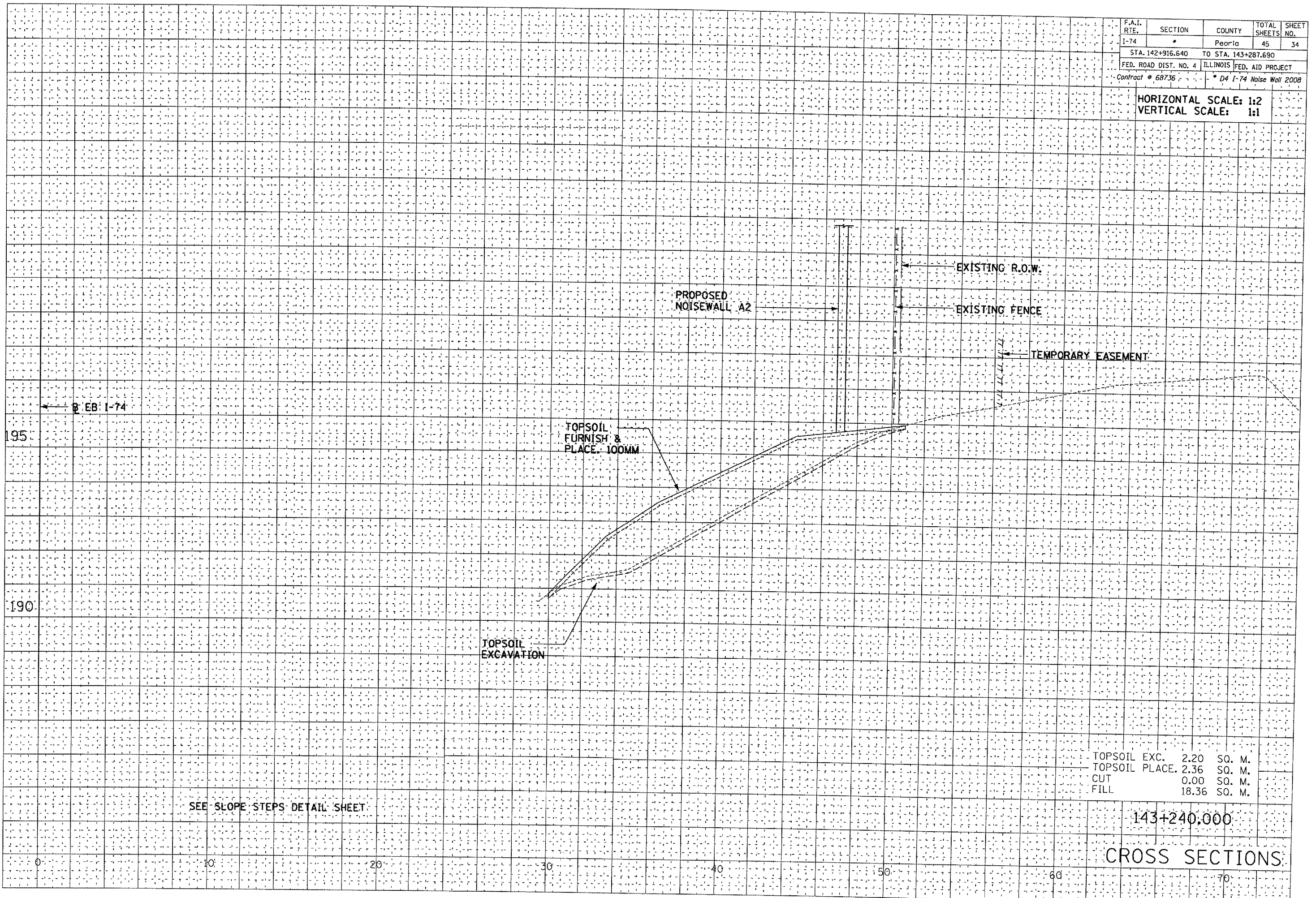
CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-74	*	Peoria	45	34
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FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		
Contract # 68736		* D4 I-74 Noise Wall 2008		

HORIZONTAL SCALE: 1:2  
 VERTICAL SCALE: 1:1

DATE	BY	SUPERVISED	PLOTTED
		NOTE BOOK	TEMPLATE
		AREAS CHECKED	AREAS CHECKED

DATE	BY	SAVED	PLOTTED
		NOTE BOOK	TEMPLATE
		AREAS CHECKED	AREAS CHECKED



TOPSOIL EXC.	2.20	SQ. M.
TOPSOIL PLACE.	2.36	SQ. M.
CUT	0.00	SQ. M.
FILL	18.36	SQ. M.

SEE SLOPE STEPS DETAIL SHEET

143+240.000

CROSS SECTIONS:

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-74	*	Peoria	45	35
STA. 142+916.640		TO STA. 143+287.690		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		
Contract # 68736		D4 I-74 Noise Wall 2008		

HORIZONTAL SCALE: 1:2  
 VERTICAL SCALE: 1:1

DATE	BY	REVISIONS

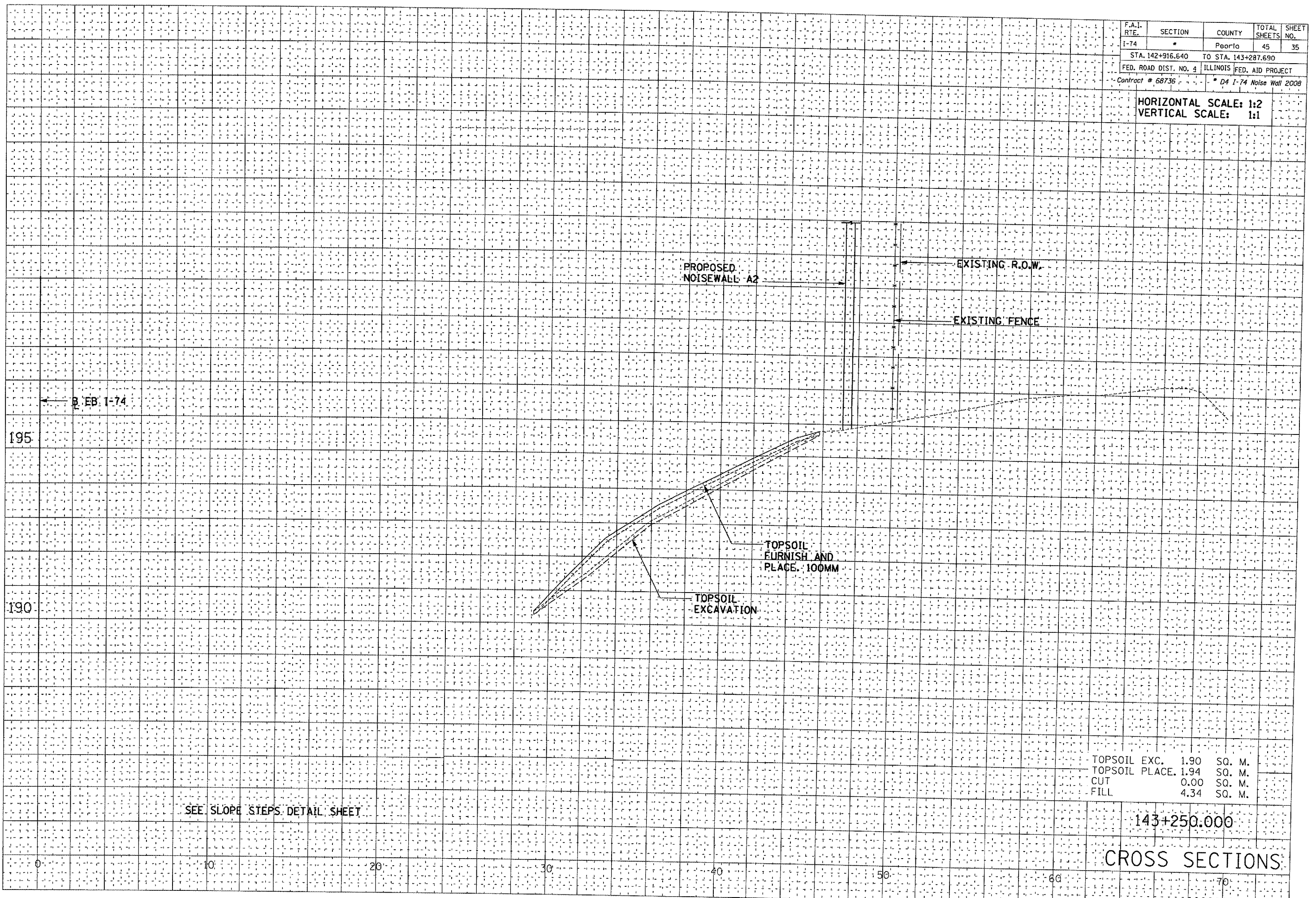
  

FINAL SURVEY	REVIEWED
NOTE BOOK	PLOTTED
NO.	TEMPERATURE
	AREAS CHECKED

DATE	BY	REVISIONS

ORIGINAL SURVEY	REVIEWED
NOTE BOOK	PLOTTED
NO.	TEMPERATURE
	AREAS CHECKED



TOPSOIL EXC.	1.90	SQ. M.
TOPSOIL PLACE	1.94	SQ. M.
CUT	0.00	SQ. M.
FILL	4.34	SQ. M.

SEE SLOPE STEPS DETAIL SHEET

143+250.000

CROSS SECTIONS

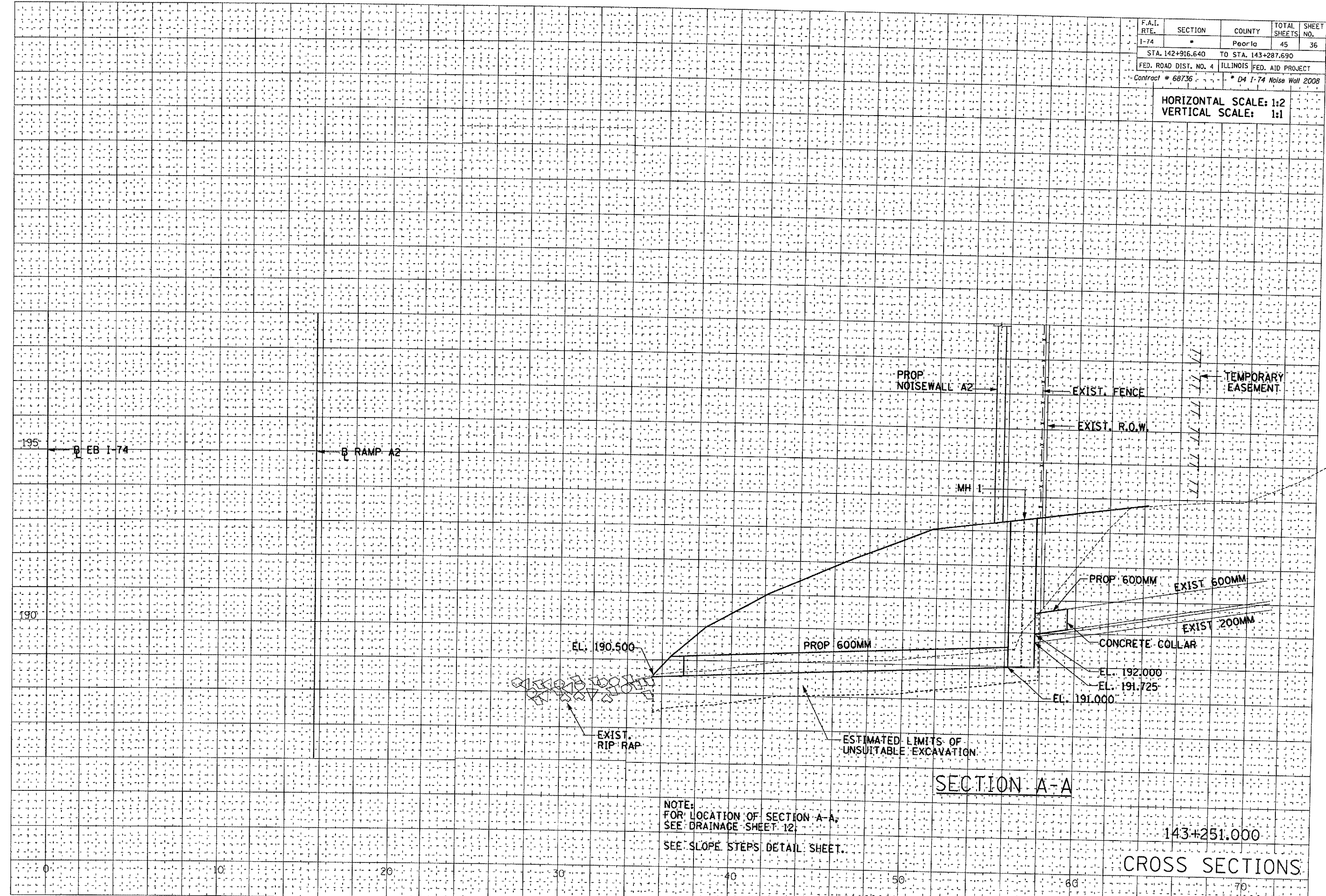
0      10      20      30      40      50      60      70

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1-74		Peoria	45	36
STA. 142+916.640		TO STA. 143+287.690		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		
Contract # 68736		D4 1-74 Noise Wall 2008		

HORIZONTAL SCALE: 1:2  
VERTICAL SCALE: 1:1

DATE	BY

DATE	BY



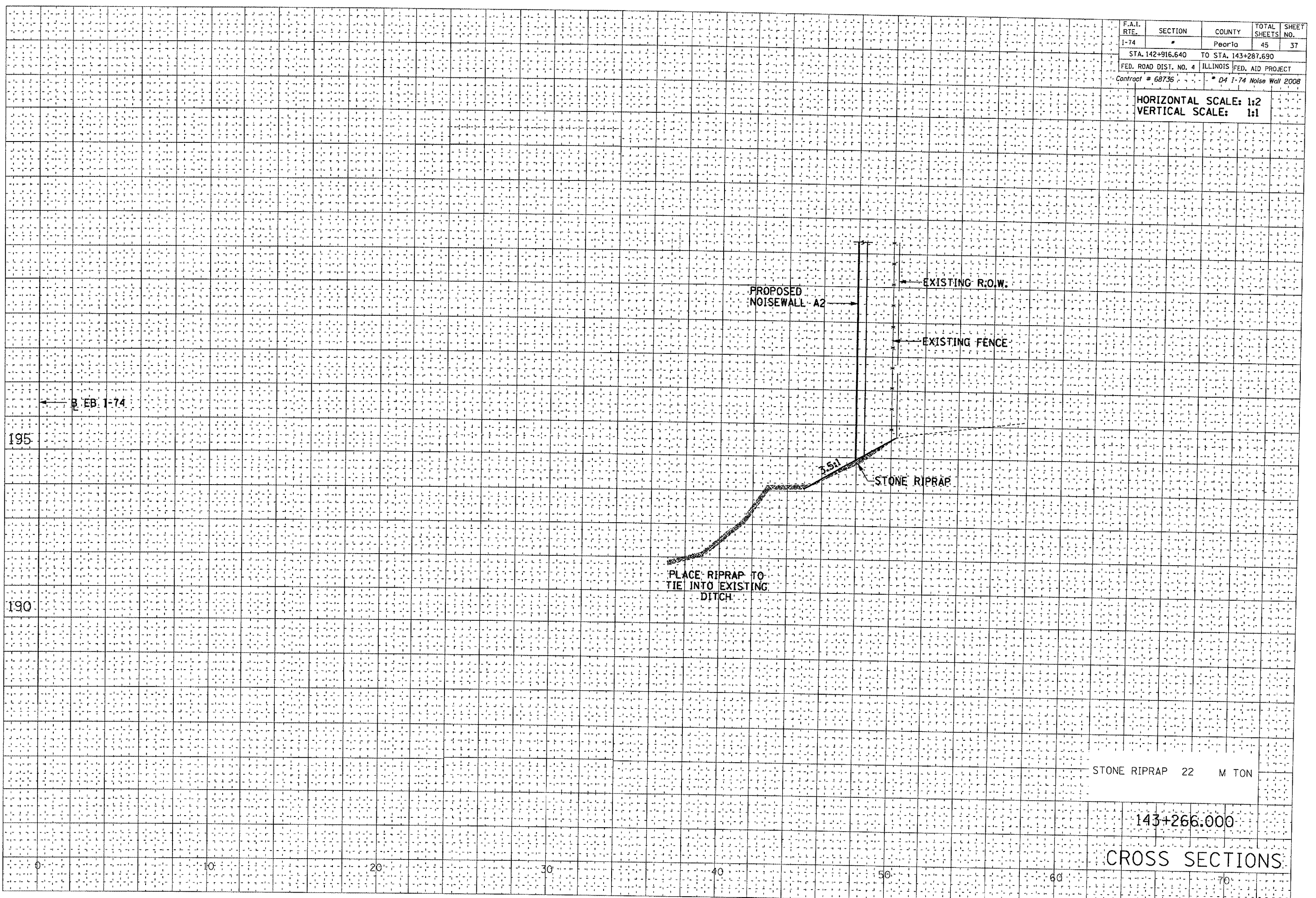
### CROSS SECTIONS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
I-74		Peoria	45	37
STA. 142+916.640		TO STA. 143+287.690		
FED. ROAD DIST. NO. 4		ILLINOIS	FED. AID PROJECT	
Contract # 68736		D4 I-74 Noise Wall 2008		

HORIZONTAL SCALE: 1:2  
 VERTICAL SCALE: 1:1

BY	DATE
FINAL SURVEY	
NOTE BOOK	
NO.	

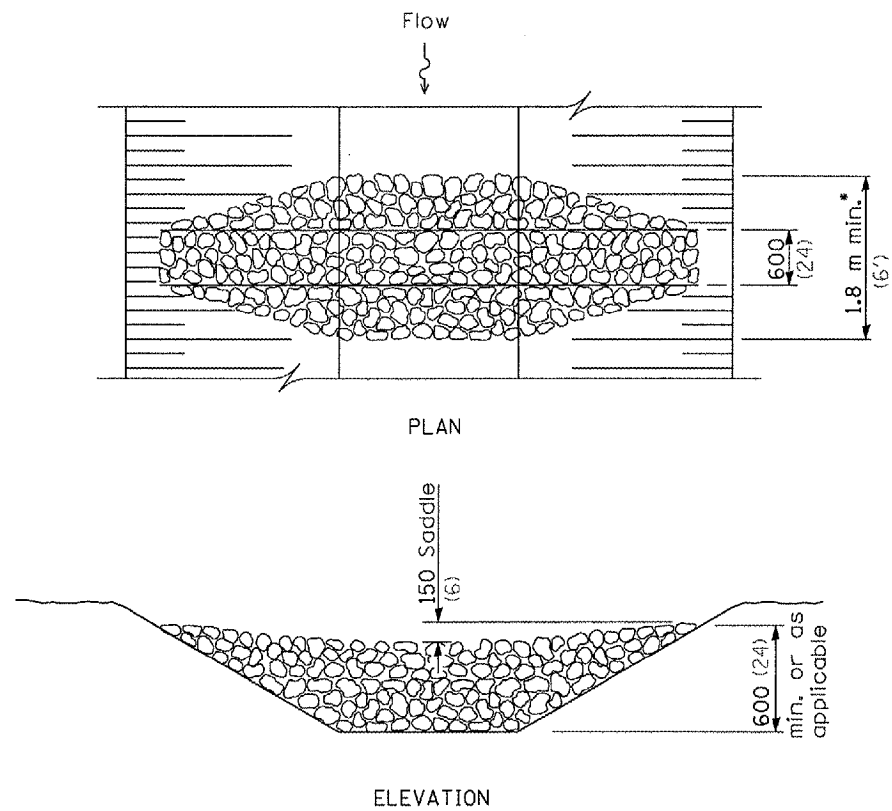
BY	DATE
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



STONE RIPRAP 22 M TON

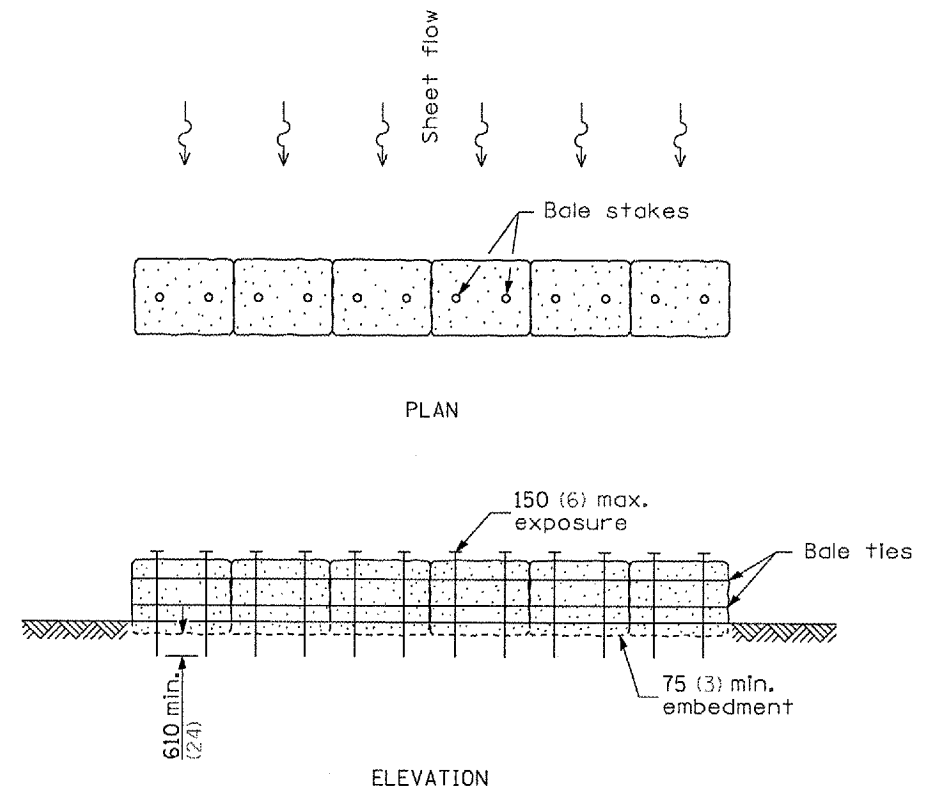
143+266.000

CROSS SECTIONS

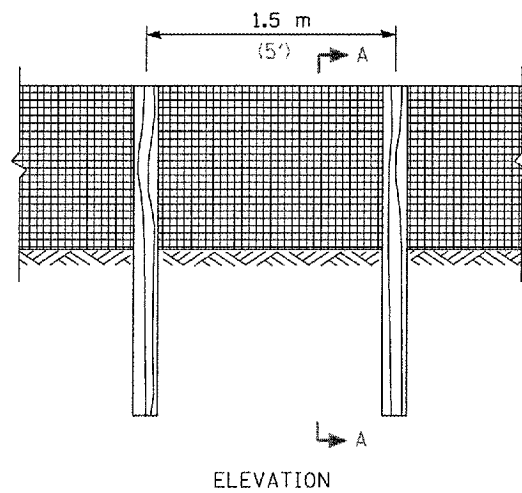


\* When the ditch check is within the clear zone and the road is open to traffic, the traffic approach slope of the aggregate shall be 1:4 (V:H).

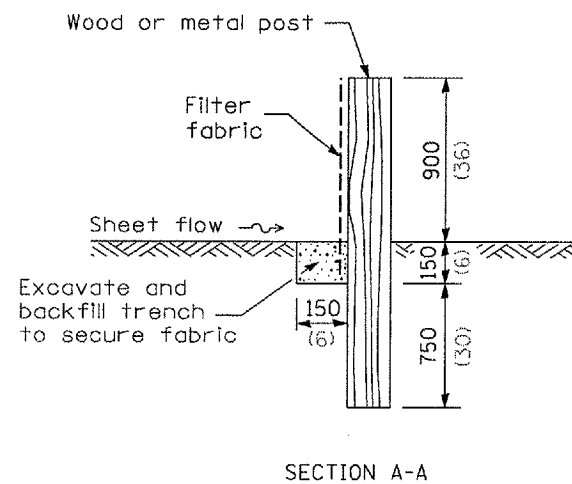
AGGREGATE DITCH CHECK



HAY OR STRAW BALES AS A PERIMETER EROSION BARRIER



SILT FILTER FENCE AS A PERIMETER EROSION BARRIER



GENERAL NOTES

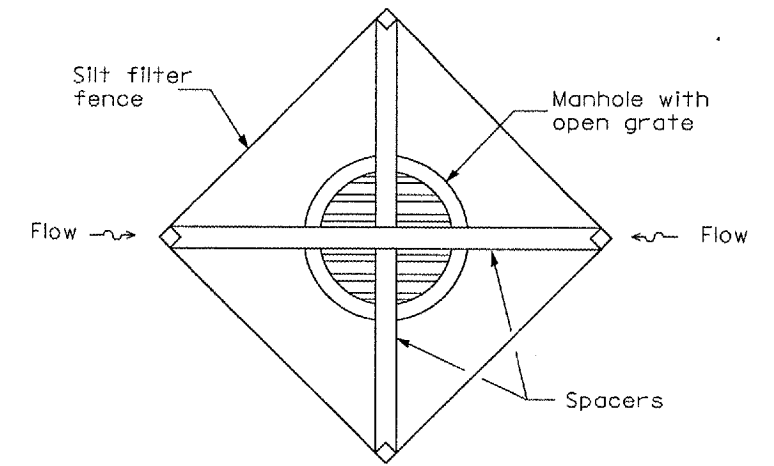
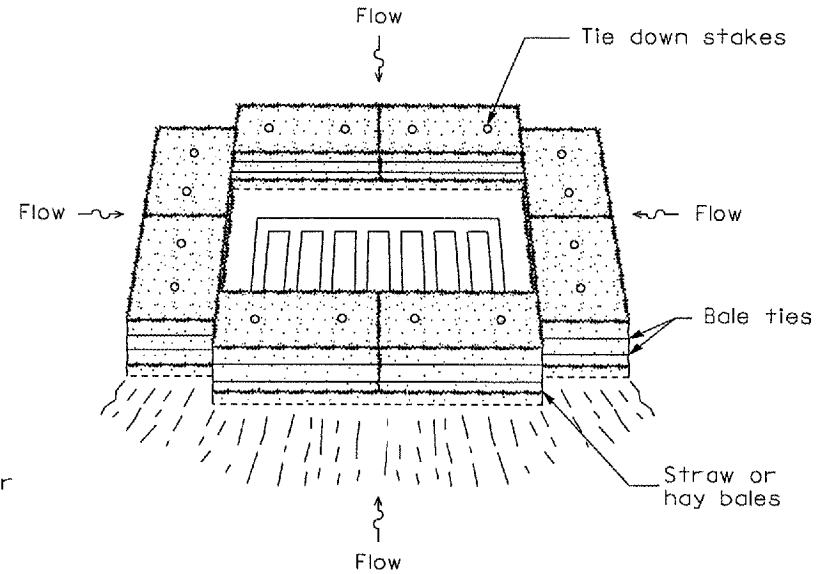
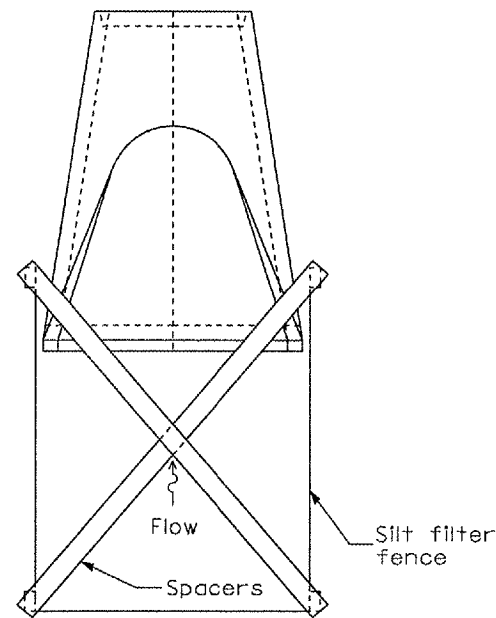
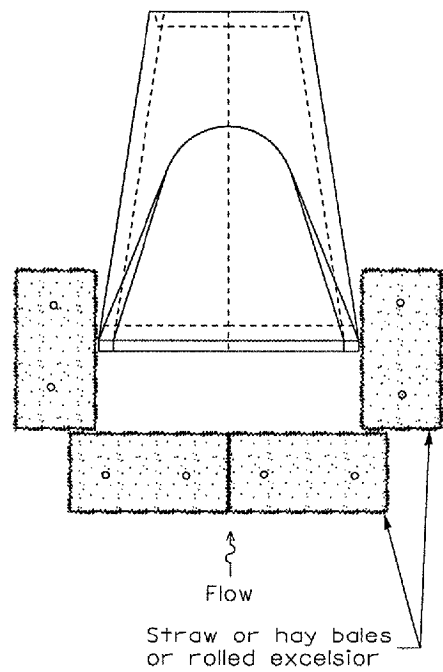
The installation details and dimensions shown for perimeter erosion barriers shall also apply for inlet and pipe protection.

All dimensions are in millimeters (inches) unless otherwise shown.

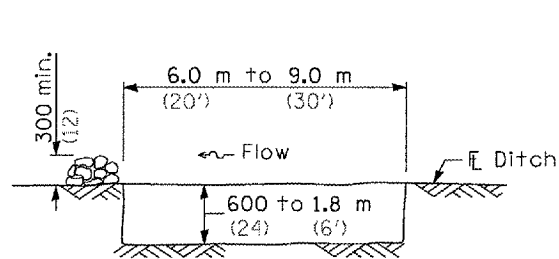
TEMPORARY EROSION CONTROL SYSTEMS

(Sheet 1 of 2)

**STANDARD 280001-03**

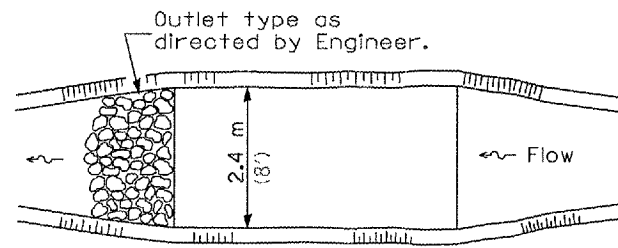


INLET AND PIPE PROTECTION



The performance of the basin will improve if put into a series.

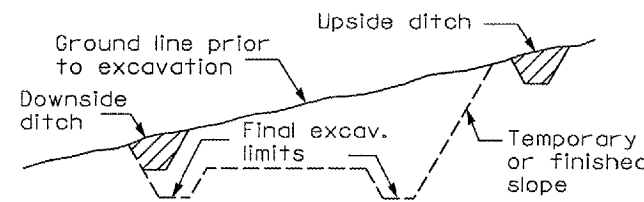
ELEVATION



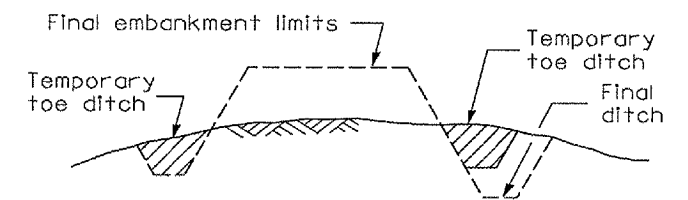
The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed anytime the basins become 75% filled.

PLAN

SEDIMENT BASIN



TYPICAL CUT CROSS SECTION



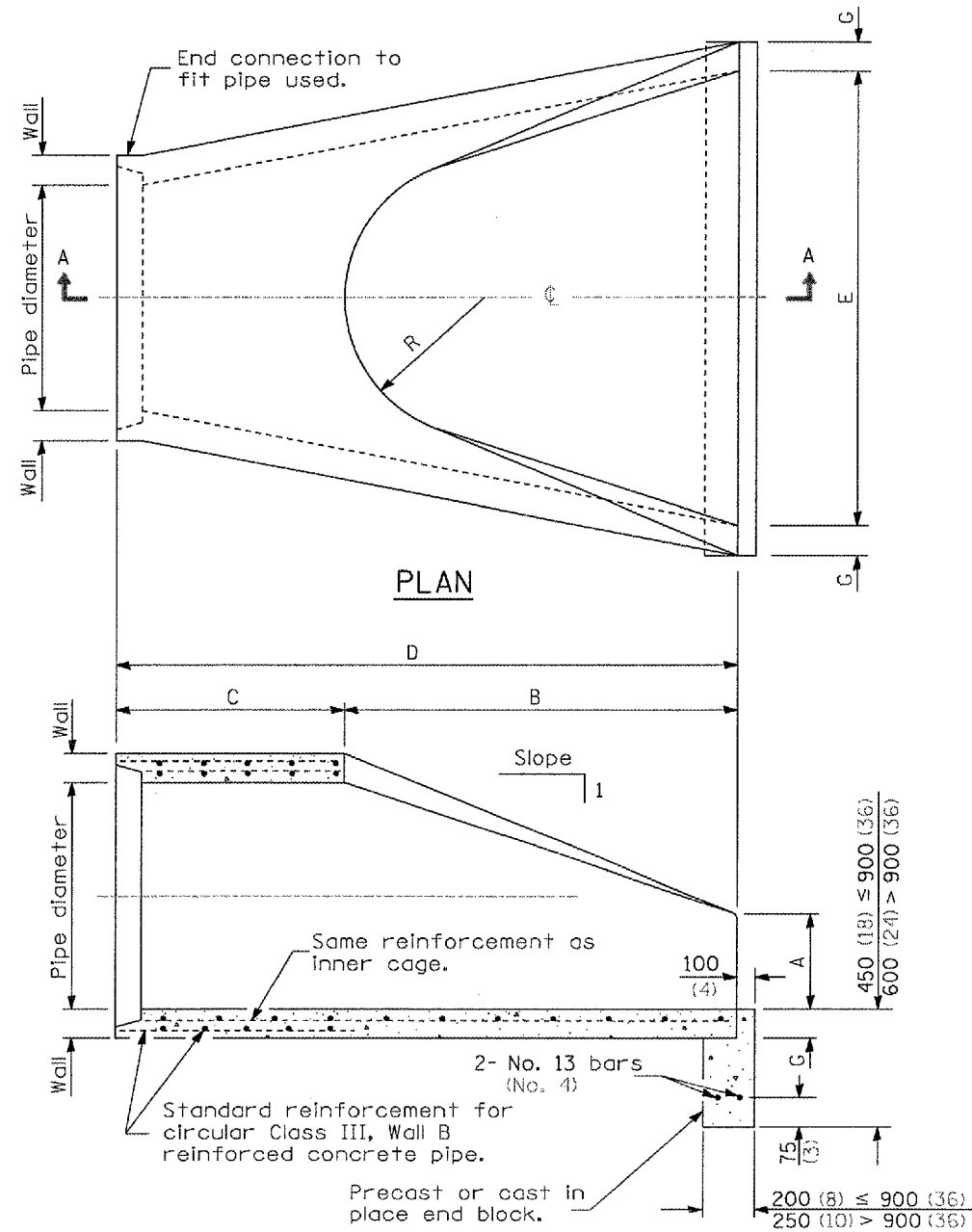
TYPICAL FILL CROSS SECTION

TEMPORARY DITCHES FOR CUT & FILL SECTIONS

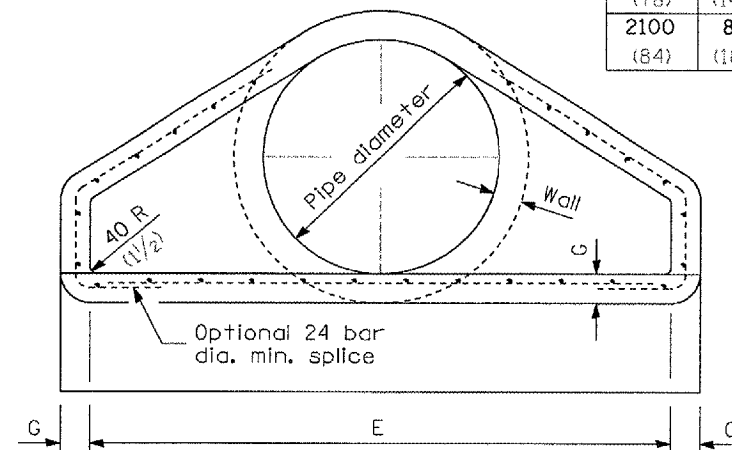
TEMPORARY EROSION CONTROL SYSTEMS

(Sheet 2 of 2)

**STANDARD 280001-03**



SECTION A-A



END VIEW

PIPE DIA.	APPROX. QTY. kg (lbs)	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
300 (12)	240 (530)	51 (2)	102 (4)	610 (24)	1.241 m (4'-0 7/8")	1.851 m (6'-0 7/8")	610 (24)	51 (2)	229 (9)	1:2.4
375 (15)	335 (740)	57 (2 1/4)	152 (6)	686 (27)	1.168 m (3'-10")	1.854 m (6'-1")	762 (30)	57 (2 1/4)	280 (11)	1:2.4
450 (18)	450 (990)	64 (2 1/2)	229 (9)	686 (27)	1.168 m (3'-10")	1.854 m (6'-1")	914 (36)	64 (2 1/2)	305 (12)	1:2.4
525 (21)	580 (1280)	70 (2 3/4)	229 (9)	889 (35)	965 (38)	1.854 m (6'-1")	1.067 m (3'-6")	70 (2 3/4)	330 (13)	1:2.4
600 (24)	690 (1520)	76 (3)	241 (9 1/2)	1.105 m (3'-7 1/2")	762 (30)	1.867 m (6'-1 1/2")	1.219 m (4'-0")	76 (3)	356 (14)	1:2.5
675 (27)	875 (1930)	83 (3 1/4)	267 (10 1/2)	1.219 m (4'-0")	648 (25 1/2)	1.867 m (6'-1 1/2")	1.372 m (4'-6")	83 (3 1/4)	368 (14 1/2)	1:2.4
750 (30)	995 (2190)	89 (3 1/2)	305 (12)	1.375 m (4'-6")	502 (19 3/4)	1.874 m (6'-1 3/4")	1.524 m (5'-0")	89 (3 1/2)	381 (15)	1:2.5
825 (33)	1450 (3200)	95 (3 3/4)	343 (13 1/2)	1.486 m (4'-10 1/2")	997 (39 1/4)	2.483 m (8'-1 3/4")	1.676 m (5'-6")	95 (3 3/4)	445 (17 1/2)	1:2.5
900 (36)	1860 (4100)	102 (4)	381 (15)	1.6 m (5'-3")	883 (34 3/4)	2.483 m (8'-1 3/4")	1.829 m (6'-0")	102 (4)	508 (20)	1:2.5
1050 (42)	2440 (5380)	114 (4 1/2)	533 (21)	1.6 m (5'-3")	889 (35)	2.489 m (8'-2")	1.981 m (6'-6")	114 (4 1/2)	559 (22)	1:2.5
1200 (48)	2970 (6550)	127 (5)	610 (24)	1.829 m (6'-0")	660 (26)	2.489 m (8'-2")	2.134 m (7'-0")	127 (5)	559 (22)	1:2.5
1350 (54)	3740 (8240)	140 (5 1/2)	686 (27)	1.651 m (5'-5")	889 (35)	2.54 m (8'-4")	2.286 m (7'-6")	140 (5 1/2)	610 (24)	1:2.0
1500 (60)	3960 (8730)	152 (6)	889 (35)	1.524 m (5'-0")	991 (39)	2.515 m (8'-3")	2.438 m (8'-0")	127 (5)	*	1:1.9
1650 (66)	4860 (10710)	165 (6 1/2)	762 (30)	1.829 m (6'-0")	686 (27)	2.515 m (8'-3")	2.591 m (8'-6")	140 (5 1/2)	*	1:1.7
1800 (72)	5680 (12520)	178 (7)	914 (36)	1.981 m (6'-6")	533 (21)	2.514 m (8'-3")	2.743 m (9'-0")	152 (6)	*	1:1.8
1950 (78)	6700 (14770)	191 (7 1/2)	914 (36)	2.286 m (7'-6")	533 (21)	2.819 m (9'-3")	2.896 m (9'-6")	165 (6 1/2)	*	1:1.8
2100 (84)	8240 (18160)	203 (8)	914 (36)	2.299 m (7'-6 1/2")	533 (21)	2.832 m (9'-3 1/2")	3.048 m (10'-0")	165 (6 1/2)	*	1:1.6

\* Radius as furnished by manufacturer

GENERAL NOTES

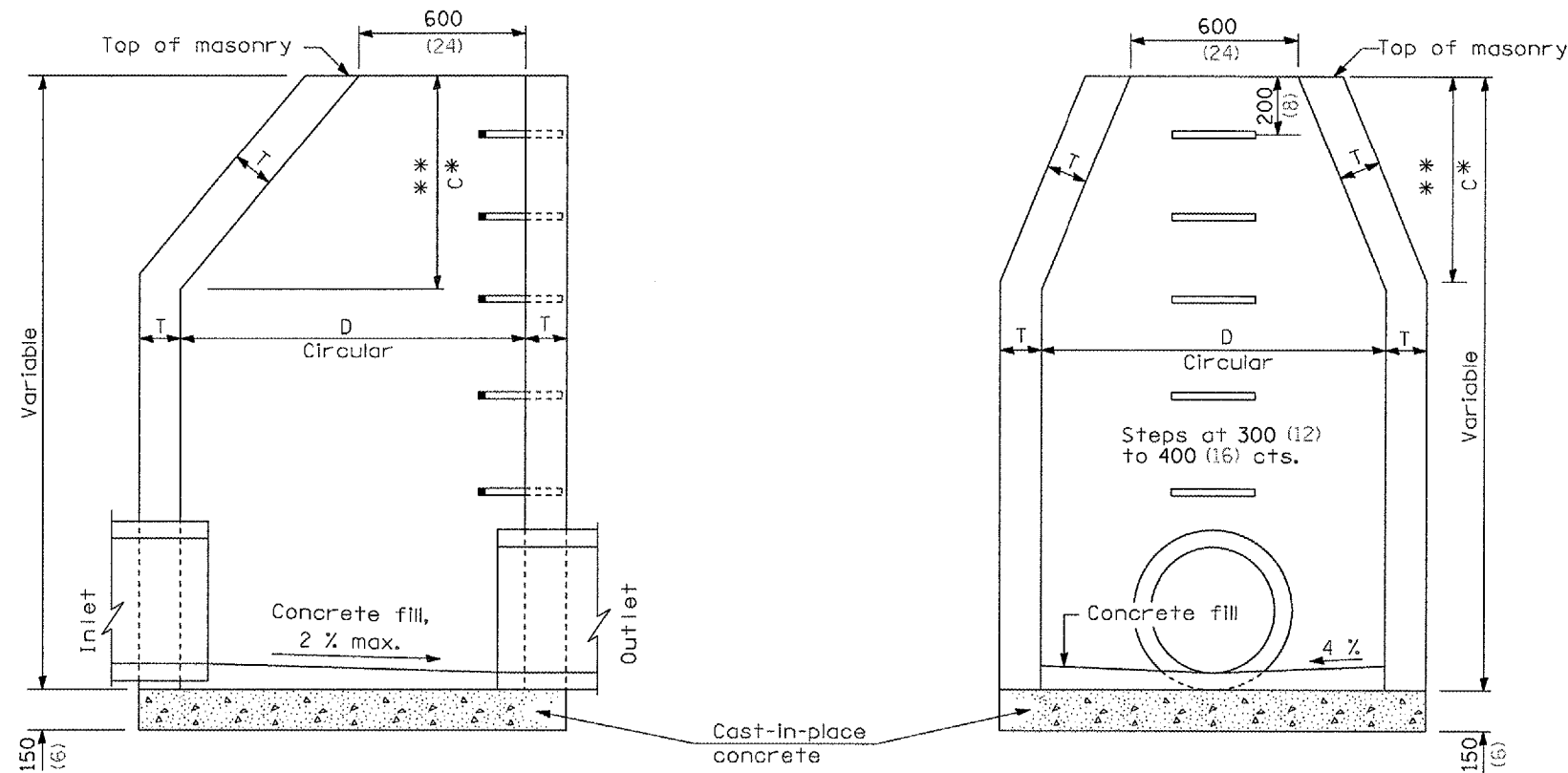
All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in millimeters (inches) unless otherwise shown.

PRECAST REINFORCED  
CONCRETE FLARED  
END SECTION

STANDARD 542301-01

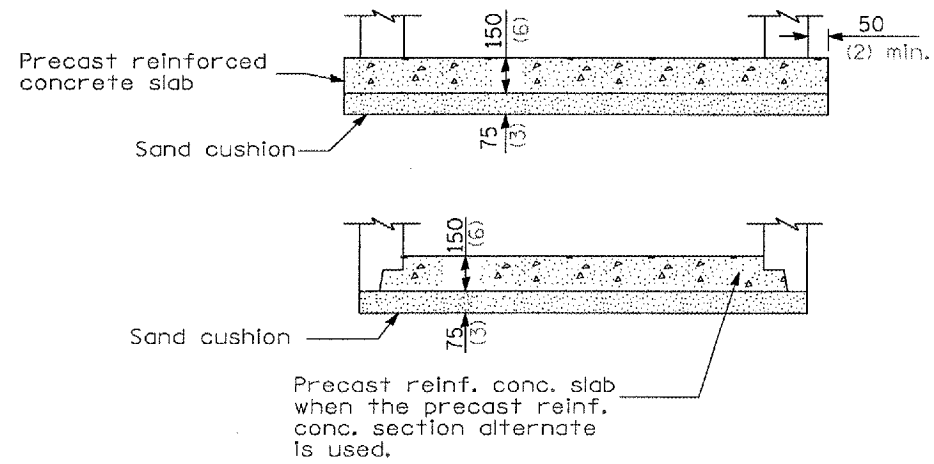




ELEVATION - ECCENTRIC

ELEVATION - CONCENTRIC

ALTERNATE MATERIALS FOR WALLS	D	C	T (min.)
Concrete Masonry Unit	1.2 m (4'-0")	750 (30)	125 (5)
	1.5 m (5'-0")	1.15 m (3'-9")	125 (5)
Brick Masonry	1.2 m (4'-0")	750 (30)	200 (8)
	1.5 m (5'-0")	1.15 m (3'-9")	200 (8)
Precast Reinforced Concrete Section	1.2 m (4'-0")	750 (30)	100 (4)
	1.5 m (5'-0")	1.15 m (3'-9")	125 (5)
Cast-in-place Concrete	1.2 m (4'-0")	750 (30)	150 (6)
	1.5 m (5'-0")	1.15 m (3'-9")	150 (6)



ALTERNATE BOTTOM SLAB

GENERAL NOTES

See Standard 602701 for details of steps.

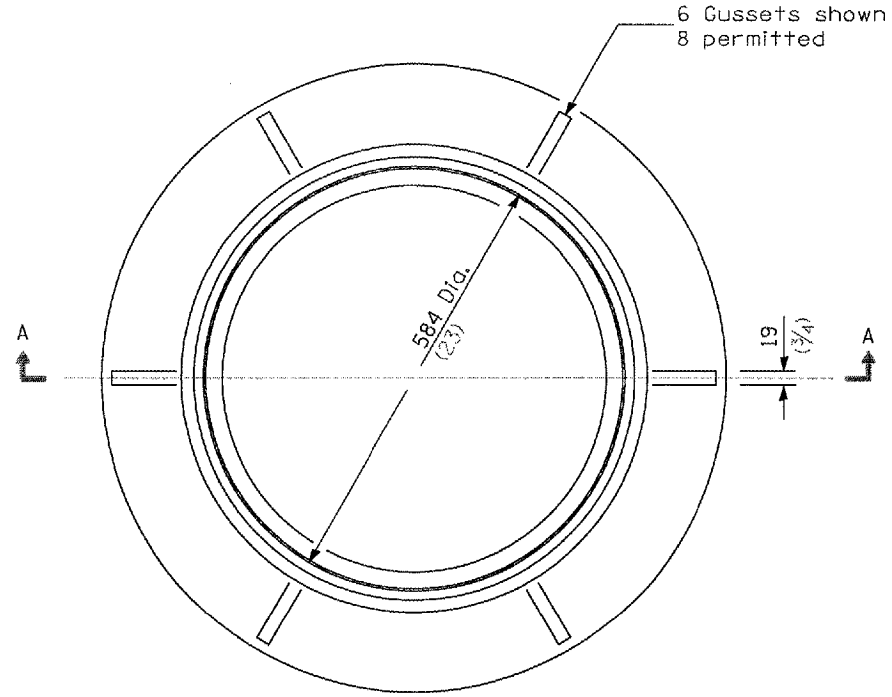
\* Dimension "C" for Precast Reinforced Concrete Sections may vary from the dimension given to plus 150 mm (6").

\*\* See Standard 602601 for Optional Precast Reinforced Concrete Flat Slab Top.

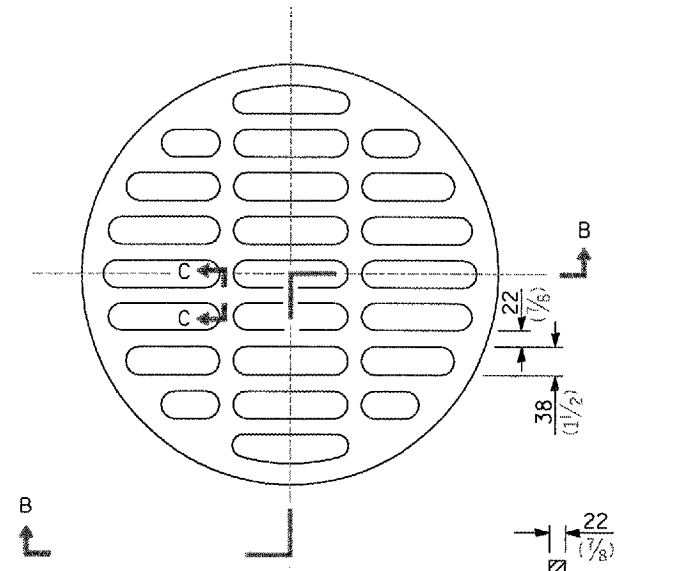
All dimensions are in millimeters (inches) unless otherwise shown.

MANHOLE TYPE A

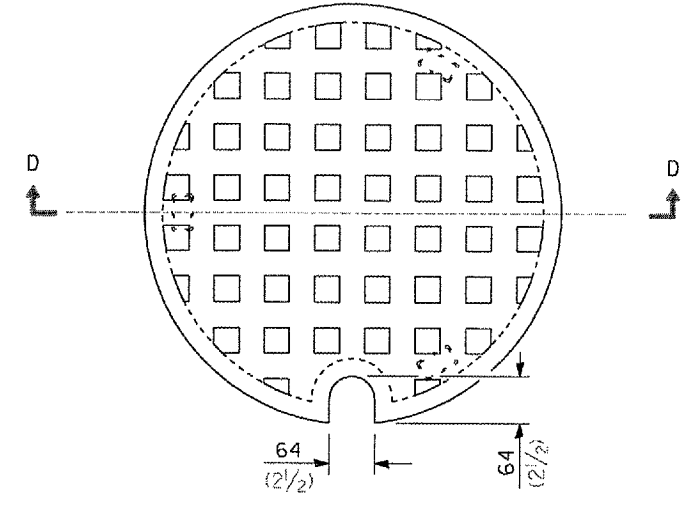
STANDARD 602401-01



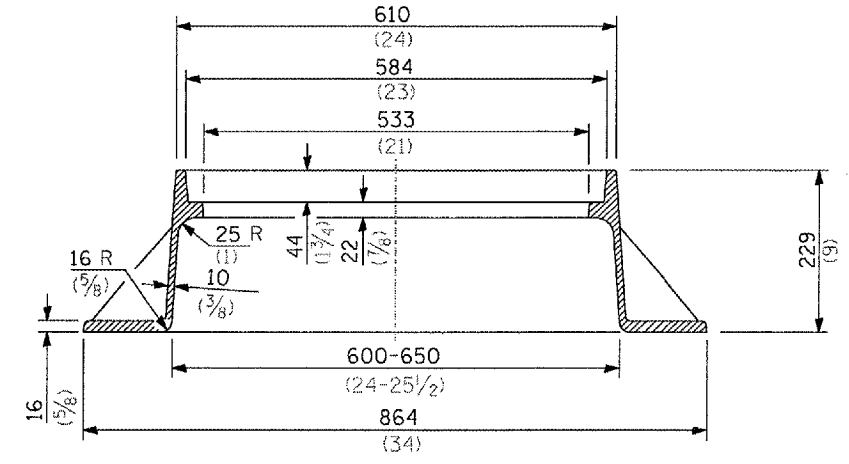
CAST FRAME



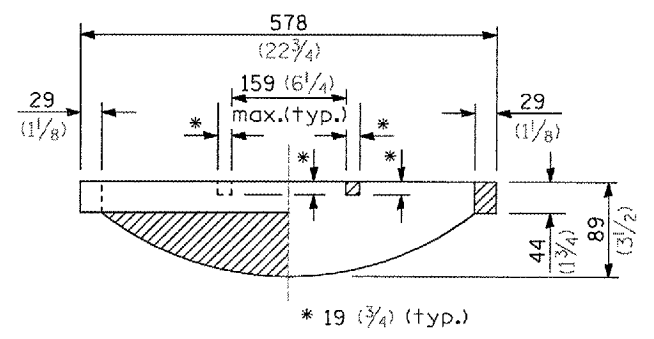
SECTION C-C



SECTION D-D

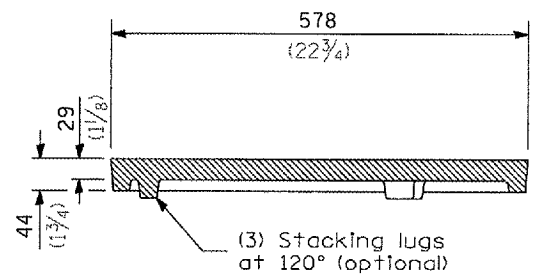


SECTION A-A  
Gray Iron



SECTION B-B

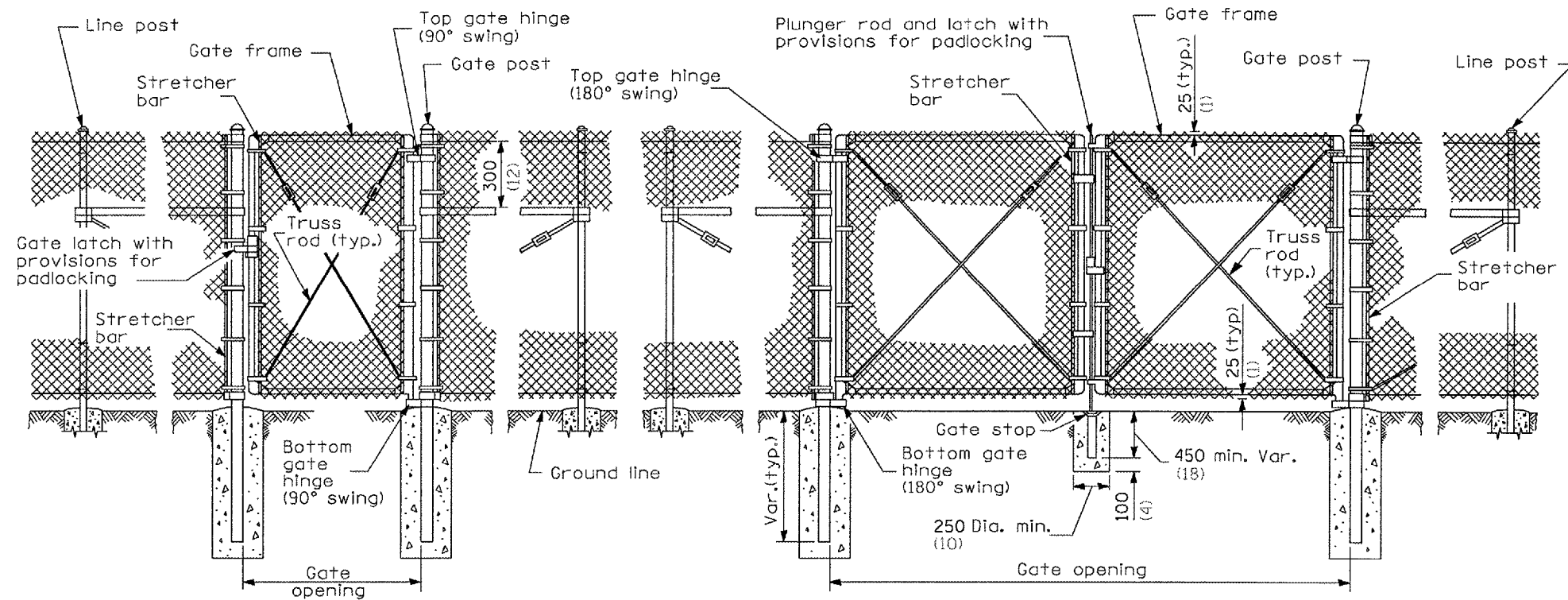
CAST OPEN LID



CAST CLOSED LID  
Gray Iron Lid

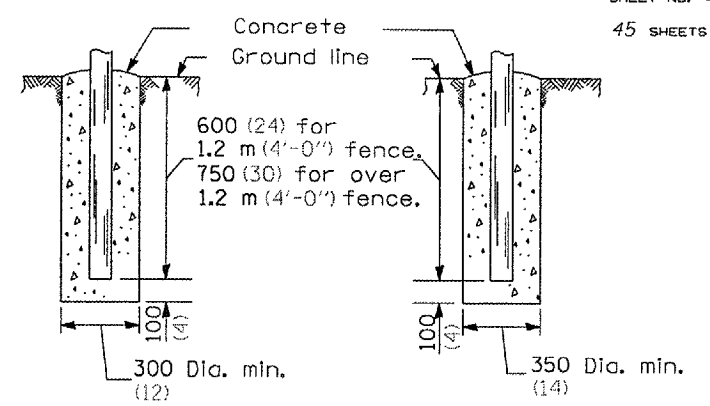
All dimensions are in millimeters (inches) unless otherwise shown.

<p>FRAME AND LIDS TYPE 1</p>
<p><b>STANDARD 604001-02</b></p>



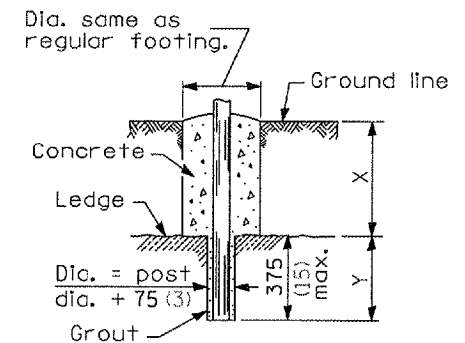
**PEDESTRIAN GATE ARRANGEMENT**

**VEHICLE GATE ARRANGEMENT**

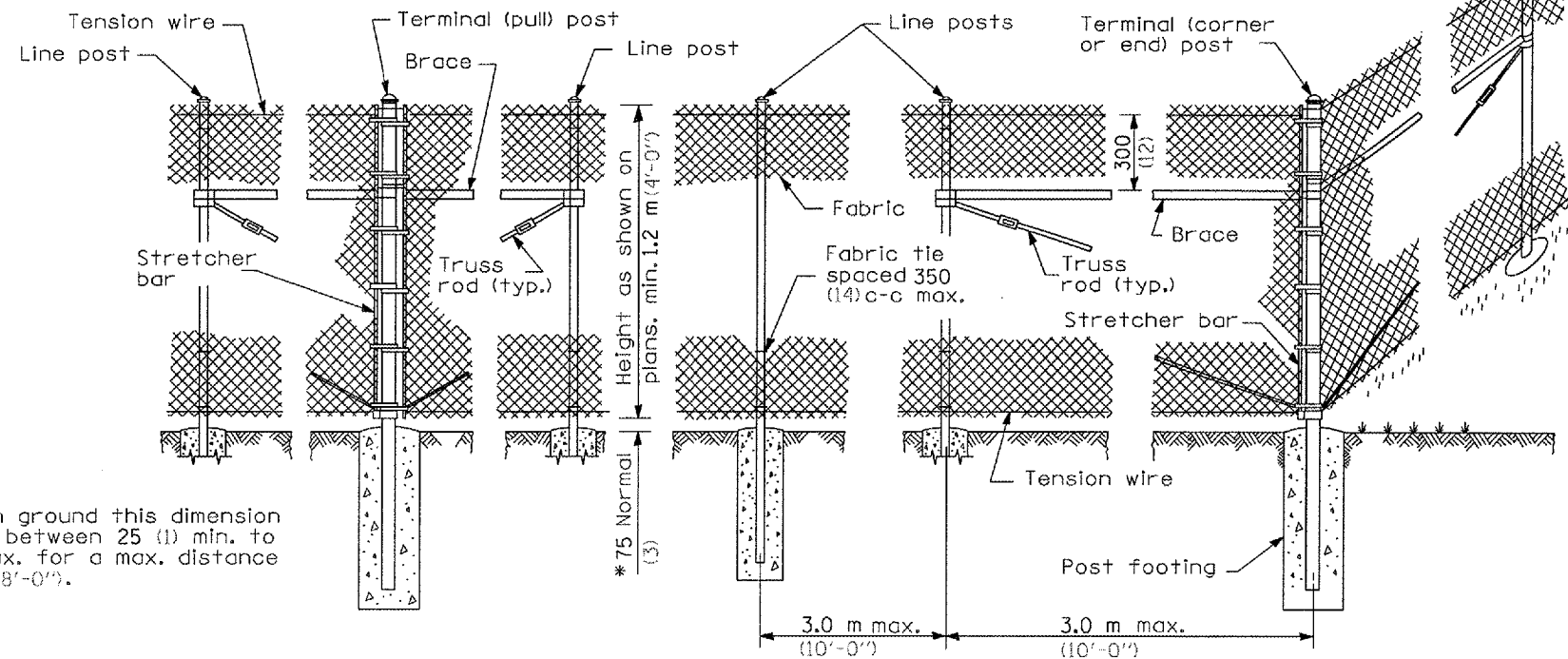


**FOOTING FOR LINE POST**

**FOOTING FOR GATE & TERMINAL POST**



**FOOTING FOR POST IN ROCK LEDGE**



**PULL POST ARRANGEMENT**

**LINE POST ARRANGEMENT**

**CORNER OR END POST ARRANGEMENT**

\* On uneven ground this dimension may vary between 25 (1) min. to 125 (5) max. for a max. distance of 2.4 m (8'-0").

**GENERAL NOTES**

Pull posts shall be placed at locations determined by the Engineer. They shall be placed at 200 m (660') intervals between posts to which the ends of the fabric are clamped or midway between such posts when the distance is less than 400 m (1320') and greater than 200 m (660').

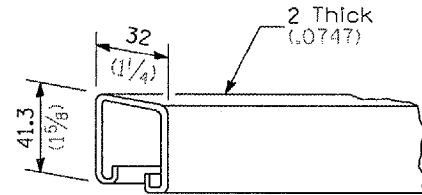
X + Y shall not exceed 600 mm (24"), 750 mm (30") or 900 mm (36"), as applicable. When X is 0 (0) to 225 mm (9"), 380 mm (15"), or 525 mm (21"), Y = 375 mm (15"), and the post shall be shortened as required. When X exceeds 225 mm (9"), 380 mm (15"), or 525 mm (21"), Y shall be decreased correspondingly.

All dimensions are in millimeters (inches) unless otherwise shown.

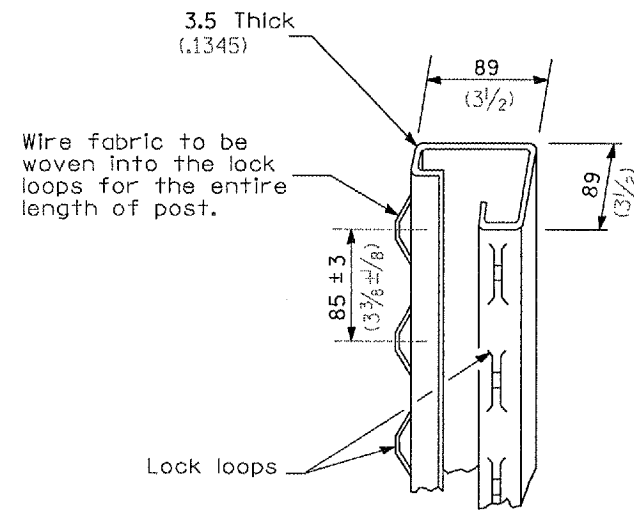
**CHAIN LINK FENCE**

(Sheet 1 of 3)

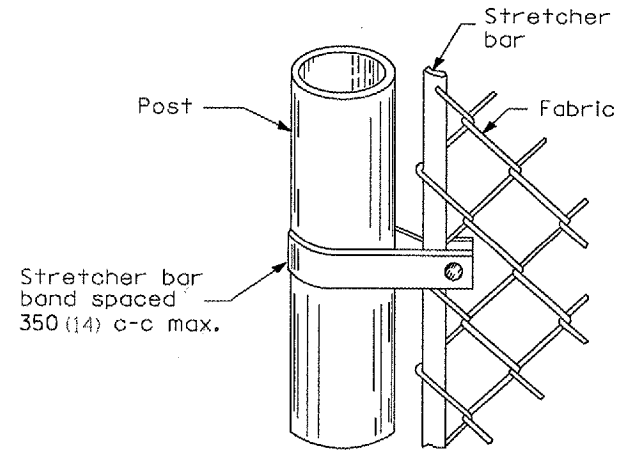
**STANDARD 664001-01**



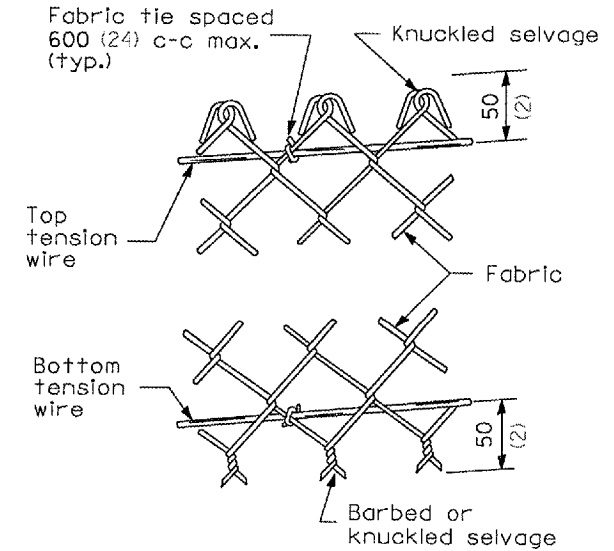
ROLL FORMED SECTION OF BRACE



ROLL FORMED SECTION OF TERMINAL & GATE POST



METHOD OF FASTENING STRETCHER BAR TO POST



METHOD OF TYING FABRIC TO TENSION WIRES

LINE POST		
Section		kg/m (lbs./ft.)
Pipe Type A	48.3 O.D. (1.90)	4.05 (2.72)
Pipe Type B	48.3 O.D. (1.90)	3.39 (2.28)
Pipe Type C	48.3 O.D. (1.90)	3.36 (2.26)
H	47.6x41.3 (1.875x1.625)	4.05 (2.72)
	□	2.38 (1.60)
	I	3.42 (2.30)

TERMINAL POST		
Section		kg/m (lbs./ft.)
Pipe Type A	60.3 O.D. (2.375)	5.43 (3.65)
Pipe Type B	60.3 O.D. (2.375)	4.63 (3.11)
Pipe Type C	60.3 O.D. (2.375)	4.60 (3.09)
Roll Formed	89.0x89.0 (3 1/2 x 3 1/2)	See detail
Sq. Tubing	63.5x63.5 (2 1/2 x 2 1/2)	6.43 (4.32)

HORIZONTAL BRACES		
Section		kg/m (lbs./ft.)
Pipe Type A	42.2 O.D. (1.66)	3.38 (2.27)
Pipe Type B	42.2 O.D. (1.66)	2.72 (1.83)
Pipe Type C	42.2 O.D. (1.66)	2.71 (1.82)
H	33.3x38.1 (1.31x1.5)	3.35 (2.25)
Roll Formed	41.3x31.8 (1 5/8 x 1 1/4)	See detail

GATE FRAMES		
Section		kg/m (lbs./ft.)
Pipe Type A	42.2 O.D. (1.66)	3.38 (2.27)
Pipe Type B	42.2 O.D. (1.66)	2.72 (1.83)
Pipe Type C	42.2 O.D. (1.66)	2.71 (1.82)

GATE POSTS *							
Gate Opening * m (ft.)		Pipe Type A		Sq. Tubing		Pipe Type B	
Single	Double	Size (O.D.)	kg/m (lbs./ft.)	Size	kg/m (lbs./ft.)	Size (O.D.)	kg/m (lbs./ft.)
Up to 1.2 (4)	Up to 2.5 (8)	60.3 (2.375)	5.43 (3.65)	63.5 (2 1/2)	6.43 (4.32)	60.3 (2.375)	4.63 (3.11)
Over 1.2 to 2.5 (4) (8)	Over 2.5 to 5.0 (8) (16)	73.0 (2.875)	8.62 (5.79)	76.2 (3)	8.60 (5.78)	73.0 (2.875)	6.91 (4.64)
Over 2.5 to 3.6 (8) (12)	Over 5.0 to 7.4 (16) (24)	89.0 (3.5)	11.28 (7.58)	76.2 (3)	13.10 (8.80)	89.0 (3.5)	8.49 (5.707)

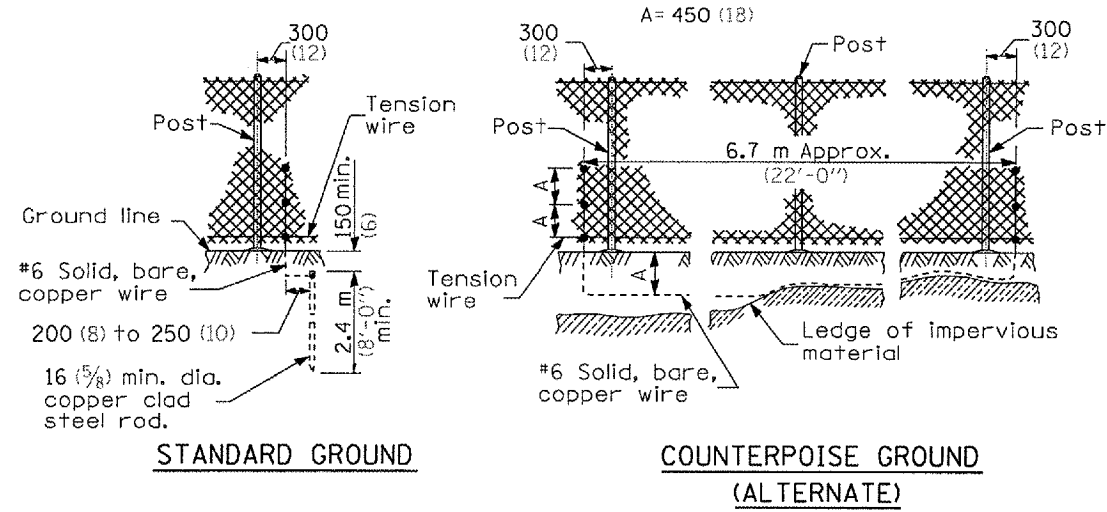
\* The 89.0 x 89.0 (3 1/2 x 3 1/2) roll formed section as detailed may be used as gate posts for single gate up to 1.8 m (6') and double gate up to 3.6 m (12').

All dimensions are in millimeters (inches) unless otherwise shown.

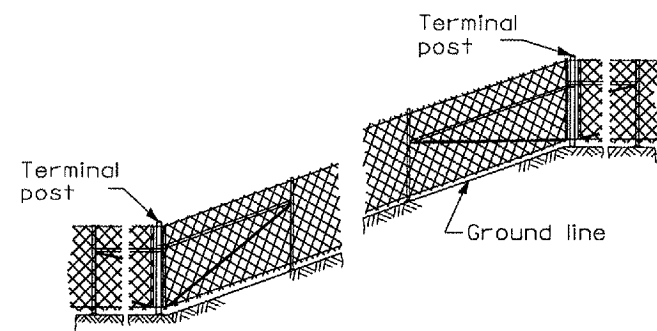
CHAIN LINK FENCE

(Sheet 2 of 3)

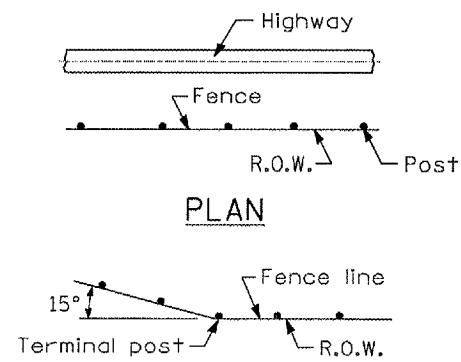
STANDARD 664001-01



PROTECTIVE ELECTRICAL GROUNDS

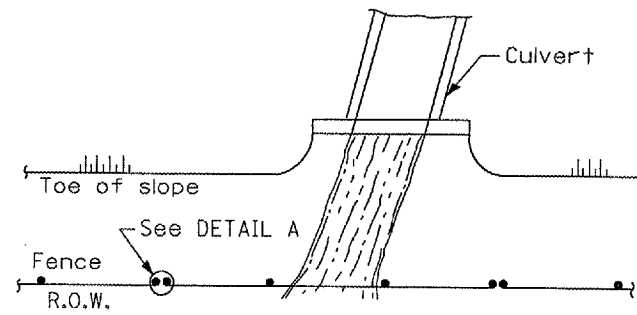


INSTALLATION ON SLOPES

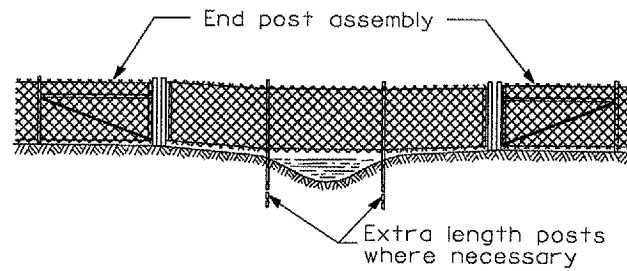


When fence line has a change in direction of 15° or more, a terminal post shall be placed as shown above.  
 Where angle is less than 15° and existing conditions require a terminal post, they shall be placed as directed by the Engineer.

INSTALLATION AT CORNERS

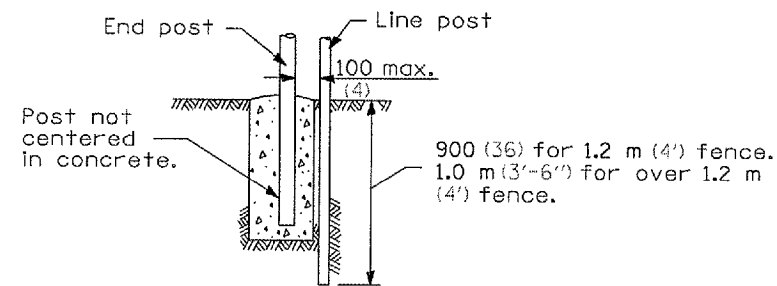


PLAN AT STREAM CROSSING

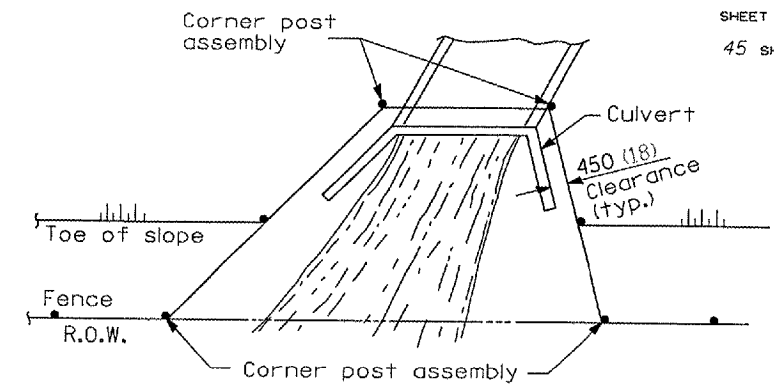


The chain link fabric shall be replaced by barbed wire strands at 300 (12) maximum centers between the double posts shown on DETAIL A when shown on the plans.

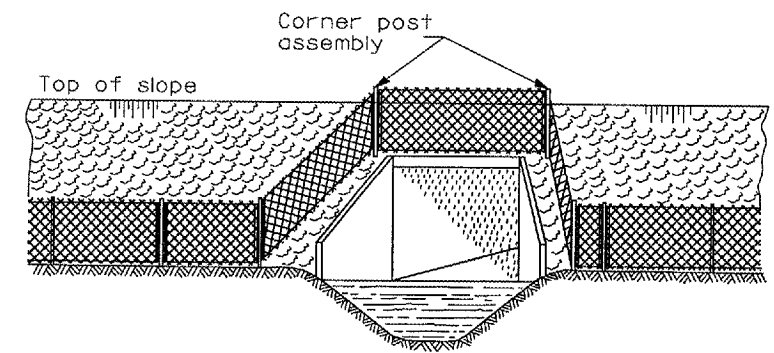
ELEVATION INSTALLATION OVER STREAM



DETAIL A



PLAN AT HEADWALL



When the width of the culvert makes it necessary to anchor a post to the top of the culvert, a cast iron shoe or other device approved by the Engineer shall be used.

ELEVATION INSTALLATION AROUND HEADWALL

All dimensions are in millimeters (inches) unless otherwise shown.

CHAIN LINK FENCE

(Sheet 3 of 3)

STANDARD 664001-01