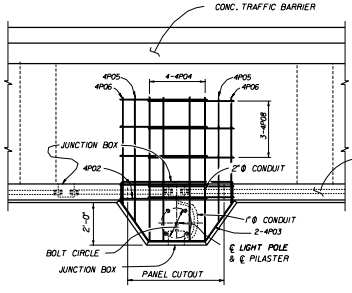
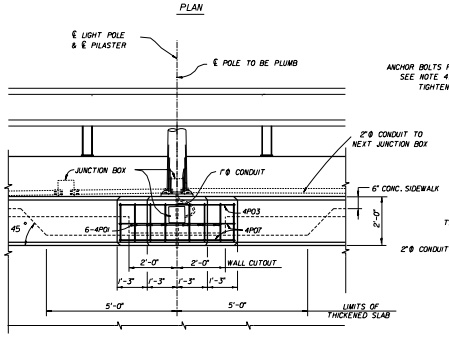


PLAN



LIGHT PILASTER DETAIL

NOTES

1. ADDITIONAL CONCRETE AND REINFORCING STEEL REQUIRED FOR THE CONSTRUCTION OF THE PILASTER SHALL MEET THE SAME REQUIREMENTS AS THAT OF THE PARAPET WALL.

2. TOP OF PILASTER SHALL BE FINISHED TO A TRULY LEVEL AREA.

3. LIGHT POLE PILASTER IS DESIGNED TO RESIST WORKING LOADS (IN ANY DIRECTION) FROM THE LIGHT POLE APPLIED AT THE TOP OF THE PILASTER AS FOLLOWS:

LONGITUDINAL MOMENT	=	30,000 FT. POUND
TRANSVERSE MOMENT	=	6,000 FT. POUND
LONGITUDINAL SHEAR	=	1,000 POUND
TRANSVERSE SHEAR	=	200 POUND
TORSION	=	3,000 FT. POUNDS
AXIAL	=	400 POUNDS

IF THE LIGHT POLE PROVIDED APPLIES LOADS THAT ARE IN EXCESS OF THOSE SHOWN ABOVE, THE CONTRACTOR SHALL REDESIGN THE PILASTER AND SUBMIT HIS DESIGN TO THE DEPARTMENT FOR REVIEW. THE CONTRACTOR'S REDESIGN SHALL BE PREPARED, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA, AND QUALIFIED TO PERFORM THE WORK.

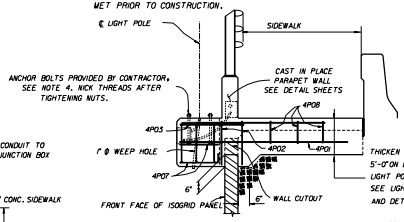
4. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANCHOR BOLTS THAT EFFECTIVELY TRANSMIT THE LIGHT POLE LOADS TO THE PILASTER AND THAT FIT THE REINFORCING CAGE. CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA SHALL BE SUBMITTED BY THE CONTRACTOR TO THE DEPARTMENT FOR REVIEW AND APPROVAL SHOWING THAT THESE REQUIREMENTS HAVE BEEN MET PRIOR TO CONSTRUCTION.

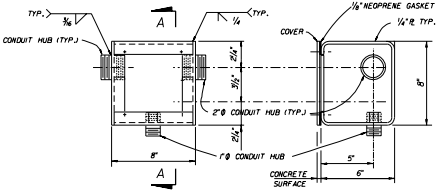
5. STEEL FOR JUNCTION BOXES SHALL CONFORM WITH ASTM-A36. THE BOXES SHALL BE HOT DIP GALVANIZED AFTER FABRICATION. IN LIEU OF STEEL BOXES THE CONTRACTOR MAY SUBMIT FOR APPROVAL MOLDED P.V.C. BOXES (SCHEDULE 80).

6. ALL CONDUITS SHALL BE RIGID GALVANIZED STEEL OR SCHEDULE 80 P.V.C.

7. THE COST OF ANCHOR BOLTS SHALL BE INCLUDED IN THE BID PRICE FOR LIGHT POLES.

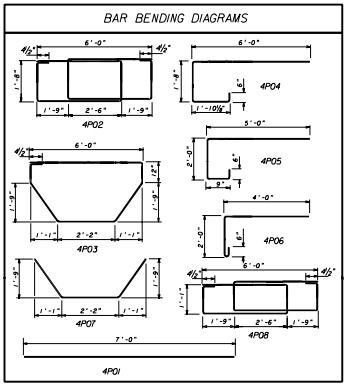
8. PAYMENT: THE COST OF ALL LABOR, CONCRETE AND REINFORCING STEEL REQUIRED FOR THE CONSTRUCTION OF THE PILASTERS AND ALL CONDUITS. EXPANSION COUPLINGS, JUNCTION BOXES AND MISCELLANEOUS HARDWARE REQUIRED FOR COMPLETION OF THE ELECTRICAL INSTALLATION WITHIN THE LIMITS SHOWN ON THIS SHEET, SHALL BE INCLUDED IN THE CONTRACTOR'S BID PRICE FOR THE MSE WALLS.





FRONT VIEW OF
JUNCTION BOX
(COVER REMOVED)

SECTION A-A



BILL OF REINFORCING STEEL

MARK	SIZE	NO. REQ'D	LENGTH
4P01	4	6	7'-0"
4P02	4	2	24'-5"
4P03	4	1	14'-9"
4P04	4	4	9'-8"
4P05	4	2	7'-11"
4P06	4	2	6'-2"
4P07	4	2	6'-4"
4P08	4	3	22'-1"

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11443 32nd STREET
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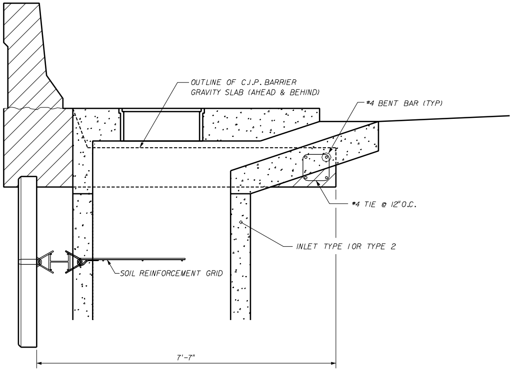
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

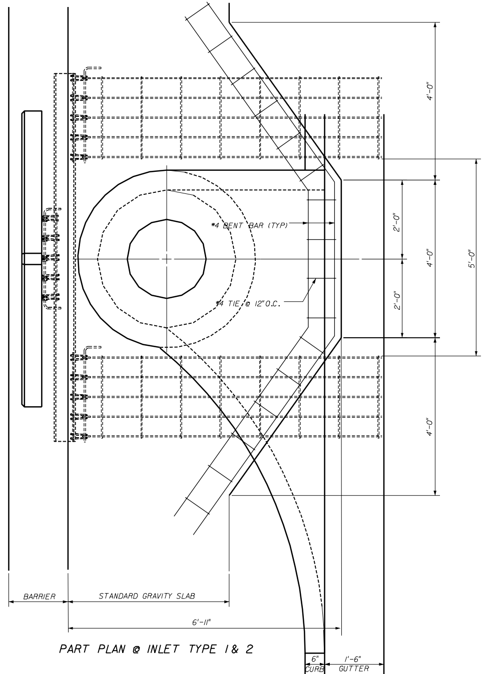
	Names	Dates	Approved By
Designed By	JMC	10/01/98	State Structures Design Engineer
Drawn By	CAA	10/01/98	Revision / Sheet No. / Index No.
Checked By	JMC	10/01/98	00 / 11 of 20 / 5012

\$\$\$\$\$\$\$\$CADSPECIFICATIONS\$\$\$\$\$\$\$\$
\$\$\$\$\$\$\$\$TMC\$\$\$\$\$\$\$\$



PART SECTION @ INLET TYPE 1& 2

NOTE: GRID RELOCATION HARDWARE, SEE SHEET 13 OF 20 FOR DETAILS



PART PLAN @ INLET TYPE 1& 2

GRAVITY SLAB AT INLET TYPE 1& 2

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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

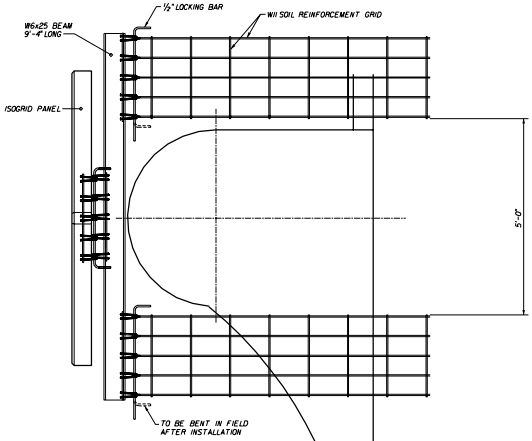
RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

	Names	Dates
Designed By	JMC	10/01/98
Drawn By	CAA	10/01/98
Checked By	JMC	10/01/98

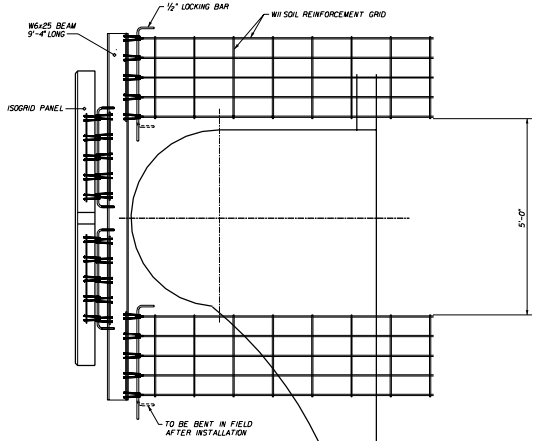
Approved By [signature]
State Structures Design Engineer

Revision	Sheet No.	Index No.
00	12 of 20	5012

$$$$$$$DGNSPECIFICATION$$$$$$$$
$$$$$$SYTIME$$$$$$

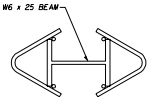


SOIL GRID RELOCATION HARDWARE
FOR SINGLE GRID PANEL
(2 ea. REQUIRED)

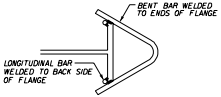


SOIL GRID RELOCATION HARDWARE
FOR DOUBLE GRID PANEL
(3 ea. REQUIRED)

NOTES:
1. WELDING:
   #CONNECTION INSERTS TO BE WELDED TO W6 x 25 BEAM.
2. GALVANIZATION:
   #AFTER FABRICATION, BEAM/INSERT ASSEMBLY TO BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 (AASHTO M111-80)



SECTION THRU BEAM
(NO SCALE)



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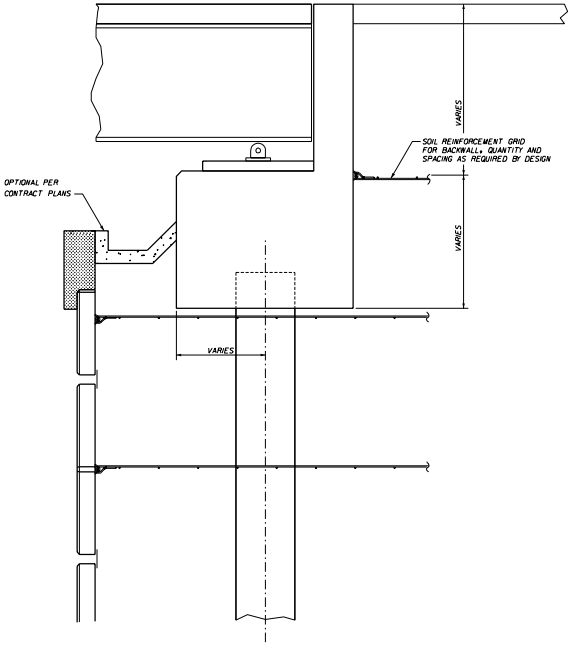
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

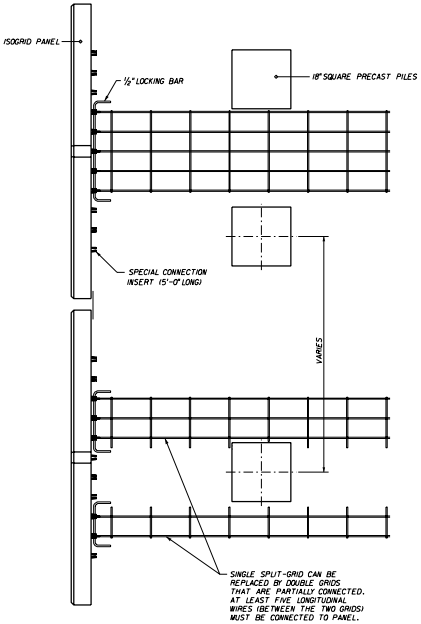
RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

	Names	Dates	Approved By
Designed By	JMC	10/01/98	State Structures Design Engineer
Drawn By	CAA	10/01/98	Revision: 00 · Sheet No.: 13 of 20 · Index No.: 5012
Checked By	JMC	10/01/98	

$$$$$$$ODNSPECIFICATION$$$$$$$
$$$$$$SYTMEC$$$$$$



SECTION THRU ABUTMENT



PLAN VIEW OF GRID/PILE ARRANGEMENT

DESIGNER:
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8320 B TOWNSHIP LANE
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

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THE NEEL COMPANY ISOGRID

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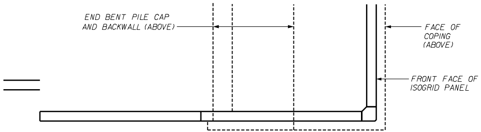
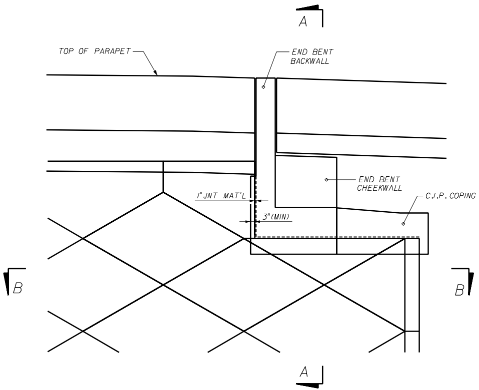
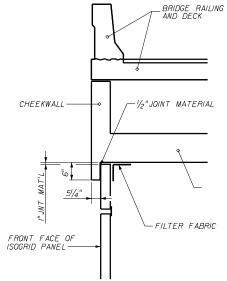
Drawn By	CAA	10/01/98	Revision: 00 · Sheet No.: 14 of 20 · Index No.: 5012
Checked By	JMC	10/01/98	



SECTION B-B
STEM / END BENT PILE INTERFACE



PART ELEVATION SHOWING
WINGWALL / END BENT INTERFACE



SECTION A-A
SECTION THRU PILE CAP

DESIGNER:
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

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Designed By	JMC	10/01/98	State Structures Design Engineer
Drawn By	CAA	10/01/98	Revision: 00 / Sheet No.: 15 of 20 / Index No.: 5012
Checked By	JMC	10/01/98	

$$$$$$$DGNSPECIFICATION$$$$$$$
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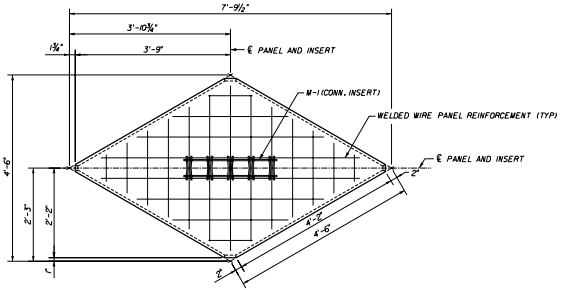
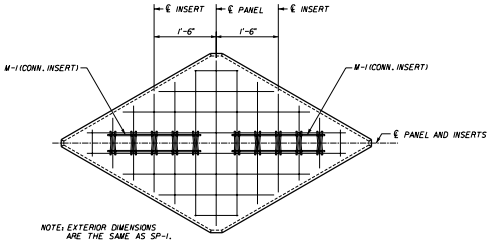
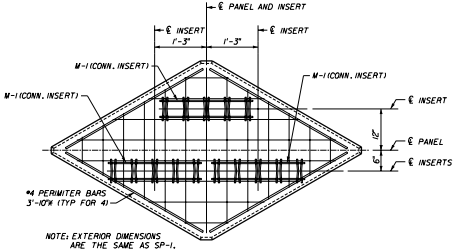


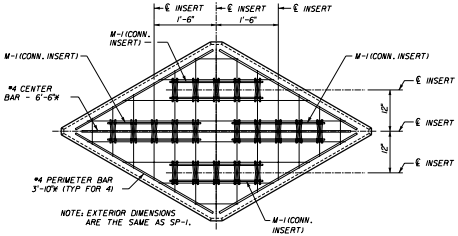
SP-1
FULL-SIZE PANEL - ONE GRID
ELEVATION (REAR FACE)



SP-2
FULL-SIZE PANEL - TWO GRIDS
ELEVATION (REAR FACE)



SP-3
FULL-SIZE PANEL - THREE GRIDS
ELEVATION (REAR FACE)



SP-4
FULL-SIZE PANEL - FOUR GRIDS
ELEVATION (REAR FACE)

NOTE: FOR MATERIALS NOTES, SEE SHEET 2.

DESIGNER:
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PRECASTER:
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

	Names	Dates	Approved By		
Designed By	JMC	10/01/98	State Structures Design Engineer		
Drawn By	CAA	10/01/98	Revision	Sheet No.	Index No.
Checked By	JMC	10/01/98	00	16 of 20	5012

$$$$$$$DGNSPECIFICATION$$$$$$$
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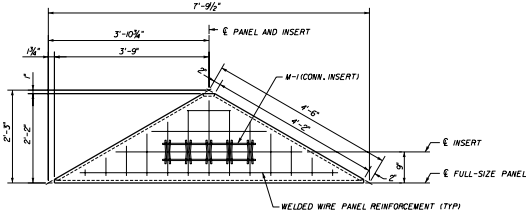
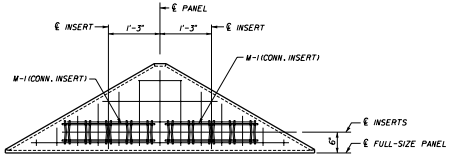
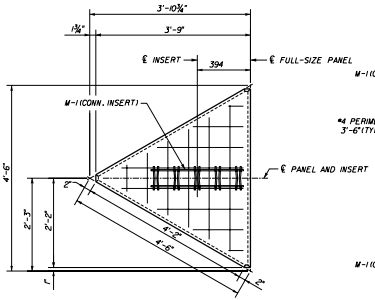


HH-1
HORIZ.-HALF PANEL - ONE GRID
ELEVATION (REAR FACE)

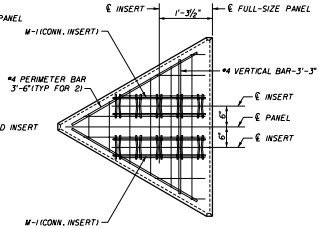


NOTE:
*EXTERIOR DIMENSIONS
ARE THE SAME AS HH-1

HH-2
HORIZ.-HALF PANEL - TWO GRIDS
ELEVATION (REAR FACE)

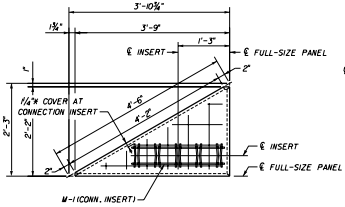


VH-1
VERT.-HALF PANEL - ONE GRID
ELEVATION (REAR FACE)

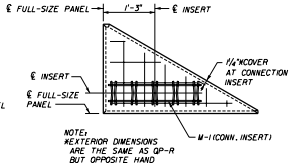


NOTE:
*EXTERIOR DIMENSIONS
ARE THE SAME AS VH-1

VH-2
VERT.-HALF PANEL - TWO GRIDS
ELEVATION (REAR FACE)



QP-R
TOP RIGHT / BOTTOM LEFT
QUARTER PANEL - ONE GRID
ELEVATION (REAR FACE)



NOTE:
*EXTERIOR DIMENSIONS
ARE THE SAME AS QP-R
BUT OPPOSITE HAND

QP-L
TOP LEFT / BOTTOM RIGHT
QUARTER PANEL - ONE GRID
ELEVATION (REAR FACE)

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11643 LEWIS STREET
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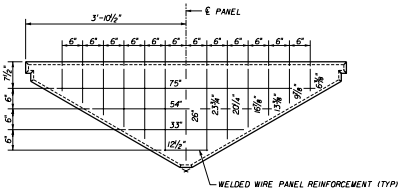
NOTE: FOR MATERIALS NOTES, SEE SHEET 2.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

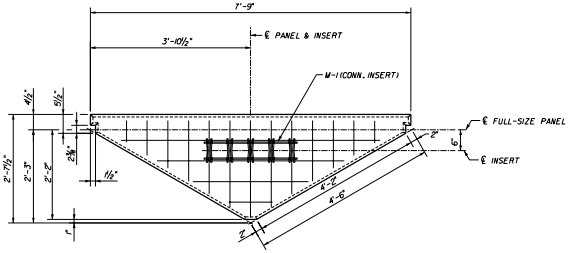
RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

	Names	Dates	Approved By
Designed By	JNC	10/01/98	State Structures Design Engineer
Drawn By	CAA	03/29/98	Revision: 00 · Sheet No.: 17 of 20 · Index No.: 5012
Checked By	JNC	10/01/98	

$$$$$$$$DGNSPECIFICATION$$$$$$$$
$$$$$$$$SYTIME$$$$$$$$

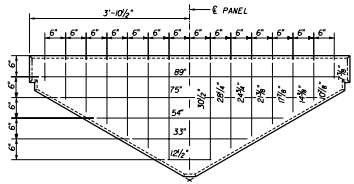


WELDED WIRE MESH PANEL REINFORCEMENT - X-1 PANEL
ELEVATION (REAR FACE)

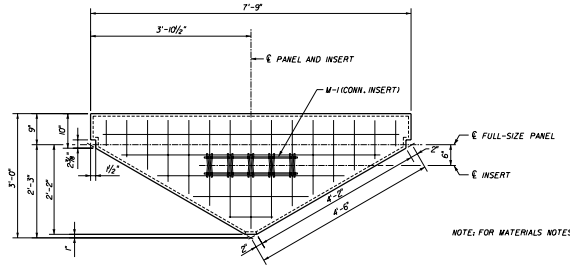


X-1
4½" RISER - ONE GRID

ELEVATION (REAR FACE)



WELDED WIRE MESH PANEL REINFORCEMENT - X-2 PANEL
ELEVATION (REAR FACE)



NOTE: FOR MATERIALS NOTES, SEE SHEET 2.

X-2
9" RISER PANEL - ONE GRID
ELEVATION (REAR FACE)

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8220 D TRAFORD LANE
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PRECASTER:
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11043 13ZHW STREET
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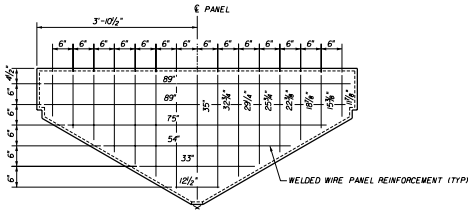
STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

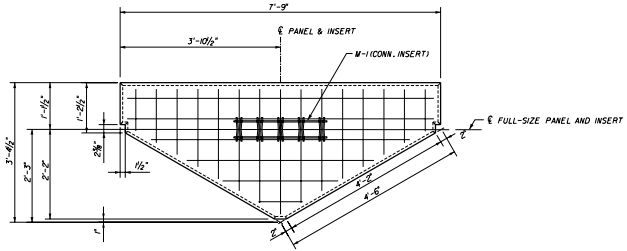
	Names	Dates	Approved By
Designed By	JMC	10/01/98	State Structures Design Engineer
Drawn By	CAA	10/01/98	Revision / Sheet No. / Index No.
Checked By	JMC	10/01/98	00 / 18 of 20 / 5012

SSSSSSCONSPECIFICATIONSSSSSSS
SSSSSSITMESSSSSS



WELDED WIRE MESH PANEL REINFORCEMENT - X-3 AND X-3(2) PANELS

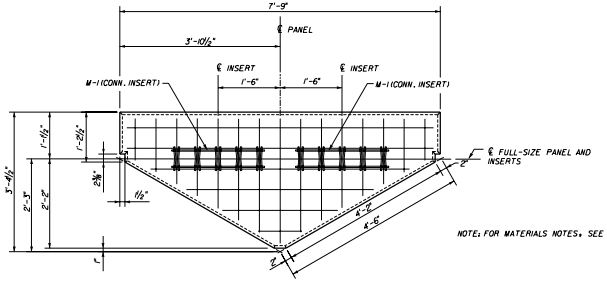
ELEVATION (REAR FACE)



X-3

13 1/2" RISER - ONE GRID

ELEVATION (REAR FACE)



NOTE: FOR MATERIALS NOTES, SEE SHEET 2.

X-3 (2)

13 1/2" RISER - TWO GRIDS

ELEVATION (REAR FACE)

DESIGNER:

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PRECASTER:

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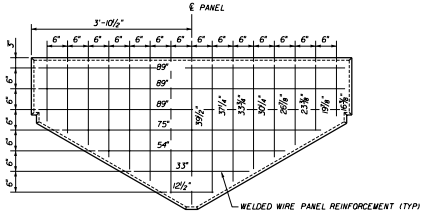
11643 103rd STREET
JACKSONVILLE, FL 32210
PH: (904) 778-2990
FX: (904) 778-2992

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

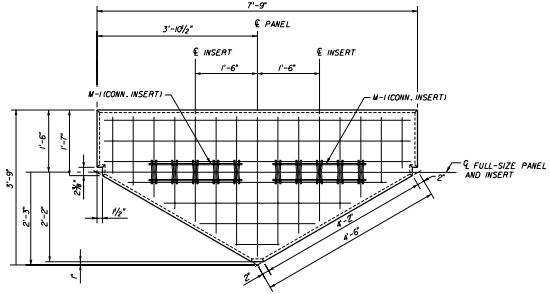
RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

	Names	Dates	Approved By
Designed By	JMC	10/01/98	State Structures Design Engineer
Drawn By	CAA	10/01/98	Revision / Sheet No. / Index No.
Checked By	JMC	10/01/98	00 / 19 of 20 / 5012

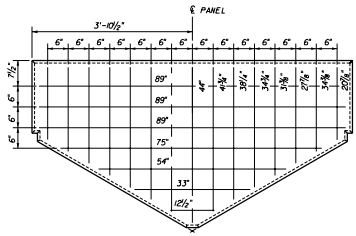
\#\#\#\#\#\#CODESPECIFICAN\#\#\#\#\#\#\#\#
\#\#\#\#\#\#SYTNEE\#\#\#\#\#\#



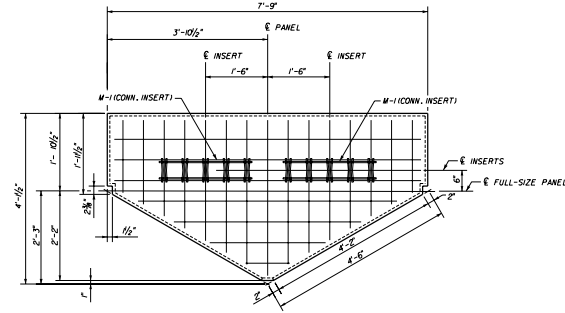
WELDED WIRE MESH PANEL REINFORCEMENT - X-4 PANEL
ELEVATION (REAR FACE)



X-4
18" RISER - TWO GRIDS
ELEVATION (REAR FACE)



WELEDE WIRE MESH PANEL REINFORCEMENT - X-5 PANEL
ELEVATION (REAR FACE)



X-5
22½" RISER - TWO GRIDS
ELEVATION (REAR FACE)

DESIGNER:
THE NEEL COMPANY
8326-D TRAFORD LANE
SPRINGFIELD, VIRGINIA 22152
PH: (703) 913-7858
FX: (703) 913-7859

PRECASTER:
OLDCASTLE PRECAST, INC
11643 103rd STREET
JACKSONVILLE, FL 32210
PH: (804) 778-2990
FX: (804) 778-2992

NOTE: FOR MATERIALS NOTES, SEE SHEET 2.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
ROAD DESIGN

RETAINING WALL SYSTEM
THE NEEL COMPANY ISOGRID

	Names	Dates	Approved By
Designed By	JMC	10/01/98	State Structures Design Engineer
Drawn By	CAA	10/01/98	Revision: 00 · Sheet No.: 20 of 20 · Index No.: 5012
Checked By	JMC	10/01/98	

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