PROJECT	DESIGNATION
IM-465-4(382)	9829512
CONTRACT	
IB-30026	

INDIANA DEPARTMENT OF TRANSPORTATION

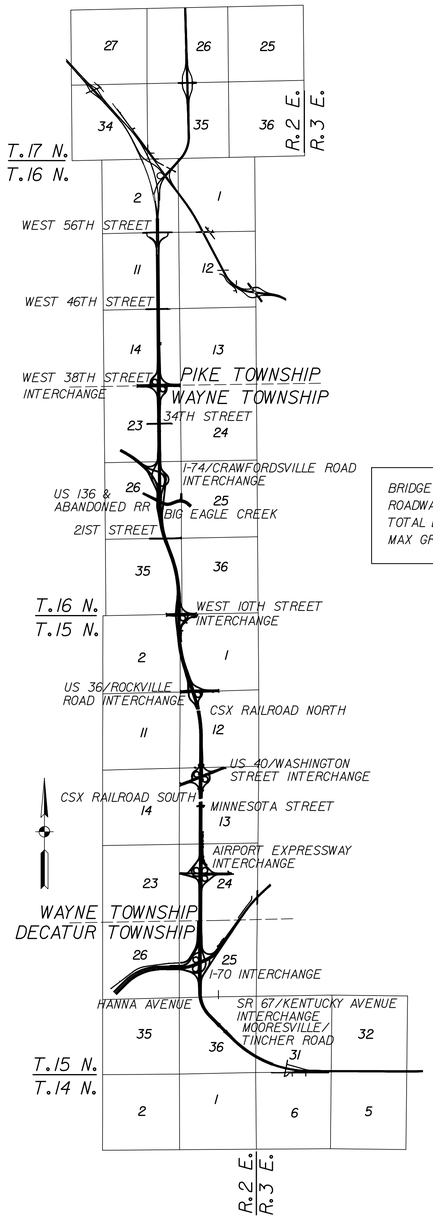
BRIDGE PLANS

FOR SPANS OVER 20 FEET ON 21ST STREET OVER I-465 AT RP 14+98

PROJECT NO. IM-465-4 (382) P.E.
PROJECT NO. IM-465-4 (382) R/W
PROJECT NO. IM-465-4 (382) CONST.

BRIDGE REPLACEMENT ON 21ST STREET OVER I-465 FOR STRUCTURE NO. I-465-149-8974, LOCATED 0.817 MILES S OF THE I-74 INTERCHANGE, IN SECTIONS 26 AND 35, T-16-N, R-2-E, WAYNE TOWNSHIP, MARION COUNTY, INDIANA.
LATITUDE: N39° 47' 38" LONGITUDE: W86° 16' 25"

BRIDGE LENGTH :	0.042 mi.
ROADWAY LENGTH :	0.375 mi.
TOTAL LENGTH :	0.417 mi.
MAX GRADE :	3.994 %

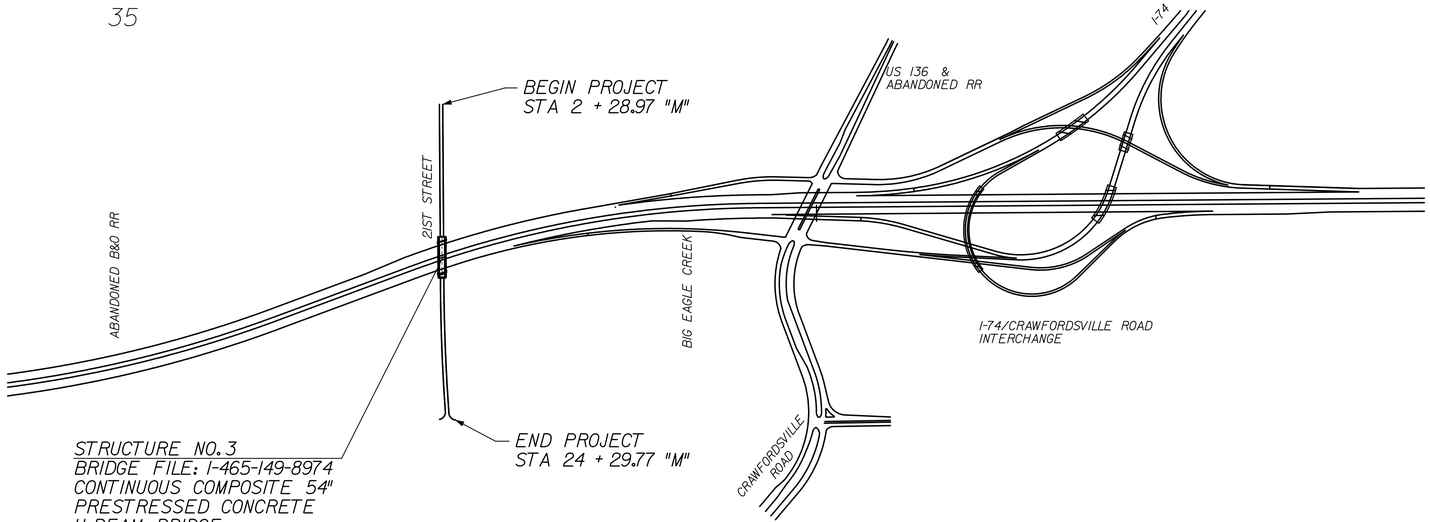


PROJECT MAP

SCALE: 1" = 5000'

35

26

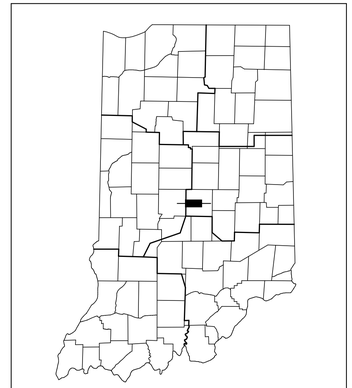


STRUCTURE NO. 3
BRIDGE FILE: I-465-149-8974
CONTINUOUS COMPOSITE 54" PRESTRESSED CONCRETE U-BEAM BRIDGE
2 SPANS @ 116'-0" AND 116'-0"
18°00'00" SKEW LT

LOCATION MAP

SCALE: 1" = 500'

NOTE: FOR INDEX OF SHEET NUMBERS AND TRAFFIC DATA, SEE SHEET 2.



PROJECT LOCATION SHOWN BY

FINAL PLANS PREPARED BY:

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Fax (317) 917-5211

PARSONS
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Indianapolis, IN 46204
Bus (317) 616-1000
Fax (317) 616-1033
I-465 Project Office (317) 917-5356

(INDIANA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS DATED 2008 TO BE USED WITH THESE PLANS)

FEDERAL HIGHWAY ADMINISTRATION
U.S. DEPT. OF TRANSPORTATION
APPROVED: _____ DATE
DIVISION ADMINISTRATOR

PLANS PREPARED BY: STEPHEN J. CHRISTIAN, P.E.
REGISTERED ENGINEER NO. 20379
STATE OF INDIANA
CERTIFIED BY: Stephen J. Christian 10-15-2007
STEPHEN J. CHRISTIAN, P.E. DATE
APPROVED FOR LETTING: _____
DIRECTOR, PRODUCTION MANAGEMENT DATE

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

BRIDGE FILE	
I-465-149-8974	
DESIGNATION	
9829512	
	SHEET NO.
	1 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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INDEX

STRUCTURE	TYPE	SPAN & SKEW	OVER	STATION
I-465-149-8974	CONTINUOUS PRESTRESSED CONCRETE U-BEAM BRIDGE	2 SPANS: 116' & 116' SKEW: 18°00'00" LT	I-465	℄ STRUCTURE STA. 794+55.55 LINE "PR-HH"

SHEET NO.	SUBJECT
1	TITLE SHEET
2	INFORMATION SHEET
3	UTILITY INFORMATION
4-5	TYPICAL CROSS SECTIONS
6-7	MAINTENANCE OF TRAFFIC
8	SUBSURFACE UTILITY INFORMATION SHEET
9	GEOMETRIC LAYOUT SHEET
10-11	PLAN SHEETS
12-13	PROFILE SHEETS
14-17	CONSTRUCTION DETAILS
18-19	EROSION CONTROL PLANS
20-25	MSE WALL DETAILS
26-30	MOMENT SLAB DETAILS
31-33	SIDEWALK ARCHITECTURAL TREATMENT
34	ELECTRICAL AND INSTRUMENTATION DETAILS
35-36	SIGNING & PAVEMENT MARKING
37-38	SOIL BORINGS
39	LAYOUT
40-41	GENERAL PLAN
42-43	BENT NO.1 & NO.3 DETAILS
44-47	BENT NO.2 DETAILS
48-53	BEAM DETAILS
54	BEARING DETAILS
55-62	SUPERSTRUCTURE DETAILS
63	DELETED
64-73	MONUMENT DETAILS
74	R.C. APPROACH SLAB DETAILS
75	BRIDGE SUMMARY
76-77	APPROACH TABLES
78	PIPE MATERIAL DATA SHEETS
79-108	CROSS SECTIONS

TRAFFIC DATA	21ST STREET	I-465 SB	I-465 NB
A.A.D.T. (2006)	22,000 VPD	83290 V.P.D.	85420 V.P.D.
A.A.D.T. (2026)	28,000 VPD	105405 V.P.D.	112880 V.P.D.
D.H.V. (2026)	3,100 VPH	9785 V.P.H.	9560 V.P.H.
DIRECTIONAL DISTRIBUTION	50 %	NO DATA	NO DATA
D.H.V. (TRUCKS)	4 %	7 %	8 %
A.A.D.T. (TRUCKS)	4 %	10 %	10 %
DESIGN DATA			
DESIGN SPEED	45 MPH	70 MPH	70 MPH
PROJECT DESIGN CRITERIA	RECONSTRUCTION (NON FREEWAY)	COMPLETE RECONSTRUCTION (FREEWAYS)	COMPLETE RECONSTRUCTION (FREEWAYS)
FUNCTIONAL CLASSIFICATION	LOCAL AGENCY COLLECTOR	INTERSTATE FREEWAY	INTERSTATE FREEWAY
RURAL/URBAN	URBAN (INTERMEDIATE)	URBAN (INTERMEDIATE)	URBAN (INTERMEDIATE)
TERRAIN	LEVEL	LEVEL	LEVEL
ACCESS CONTROL	PARTIAL	FULL	FULL

LEGEND

RETAINING WALL

NOISE BARRIER WALL

FLOW ARROW

SWALE BLOCK

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: SG CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

INFORMATION SHEET

HORIZONTAL SCALE	BRIDGE FILE
NTS	I-465-149-8974
VERTICAL SCALE	DESIGNATION
NTS	9829512
SURVEY BOOK	SHEET NO. 2 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: AJE
CHECKED: AEO CHECKED: SG

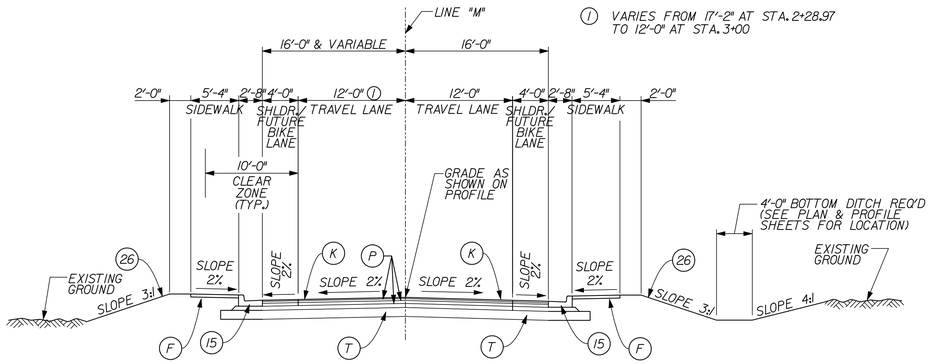
INDIANA
DEPARTMENT OF TRANSPORTATION

UTILITY INFORMATION SHEET

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VERTICAL SCALE	DESIGNATION
N/A	9829512

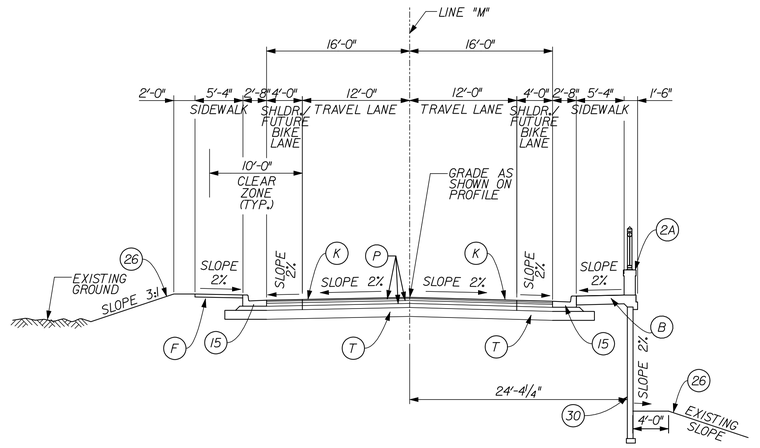
SURVEY BOOK	SHEET NO.
	3 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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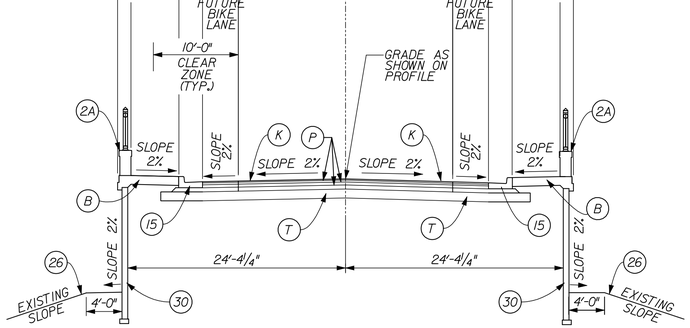
TYPICAL SECTION 21ST STREET

STA. 2+28.97 "M" TO STA. 4+50.00 "M"



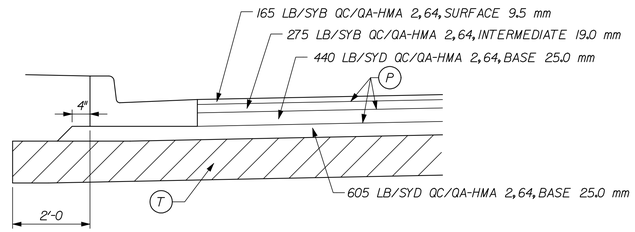
TYPICAL SECTION 21ST STREET

STA. 4+50.00 "M" TO STA. 7+00.00 "M"



TYPICAL SECTION 21ST STREET

STA. 7+00.00 "M" TO STA. 11+56.68 "M"



PAVEMENT DETAIL

No Scale

LEGEND

- (B) MOMENT SLAB
- (F) CONCRETE SIDEWALK, 4"
- (K) PAVEMENT
  - 165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5 mm ON
  - 275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0 mm ON
  - 1045 LBS/SYS QC/QA-HMA, 2, 64, BASE 25.0 mm
- (P) TACK COAT
- (T) SUBGRADE TREATMENT, TYPE IV
- (2A) CONCRETE RAILING, C, MODIFIED
- (15) COMBINED CONCRETE CURB AND GUTTER, TYPE C
- (26) NURSERY SODDING
- (30) MSE WALL

LIMITS OF PAVEMENT EXCEPTION AT BRIDGE STRUCTURE

STRUCTURE NO. 3

STA. 11+56.68 "M" TO STA. 14+43.48 "M"

NOTE:
SEE MSE WALL DETAILS FOR STRUCTURE BACKFILL AND B-BORROW LIMITS.

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: AEO CHECKED: SJC

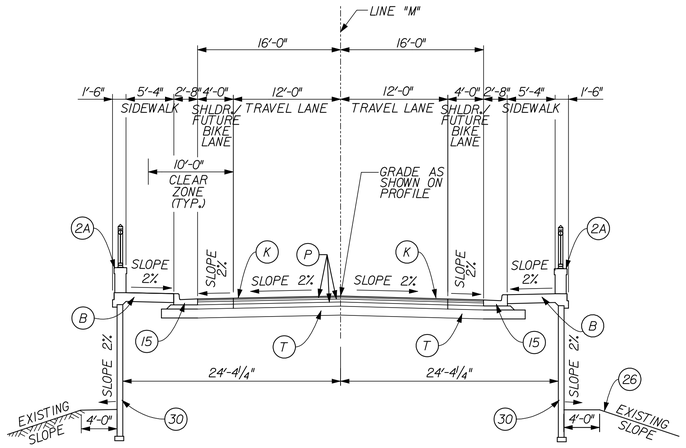
INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

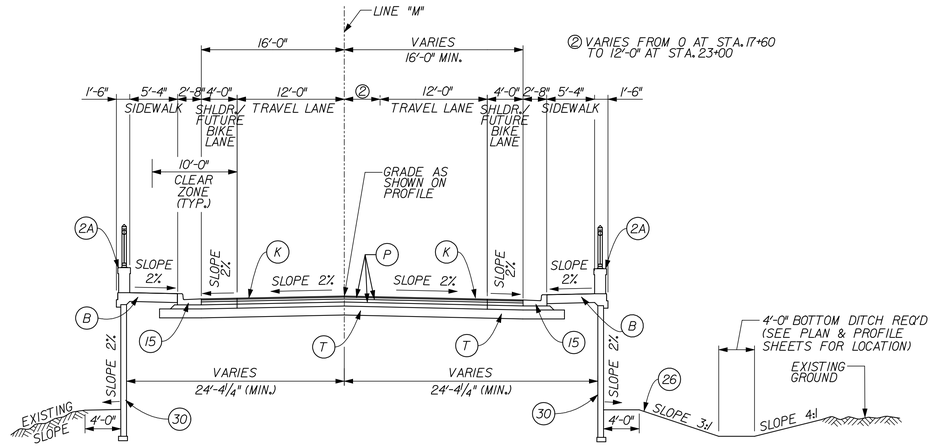
SURVEY BOOK		SHEET NO.
		4 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

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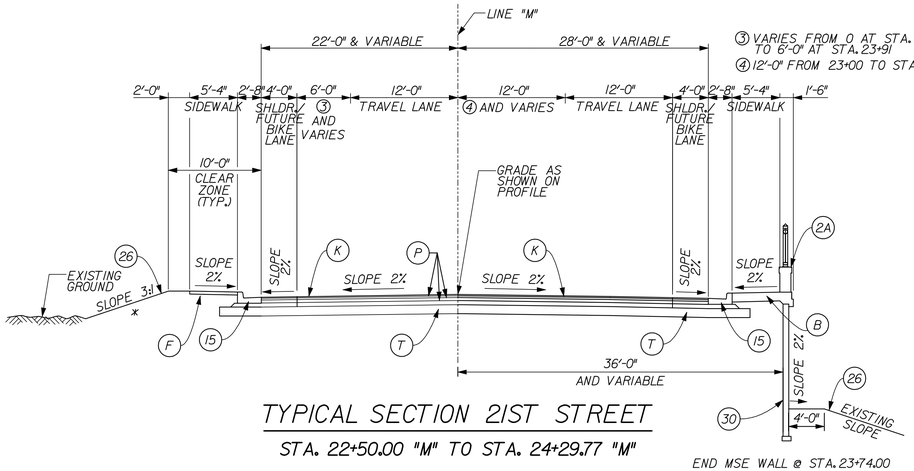
TYPICAL SECTION 21ST STREET

STA. 14+43.48 "M" TO STA. 17+60.00 "M"



TYPICAL SECTION 21ST STREET

STA. 17+60.00 "M" TO STA. 22+50.00 "M"

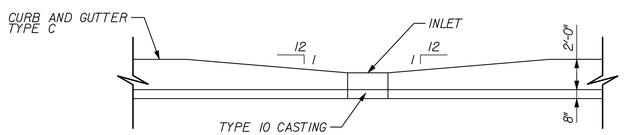


TYPICAL SECTION 21ST STREET

STA. 22+50.00 "M" TO STA. 24+29.77 "M"

END MSE WALL @ STA. 23+74.00

NOTE: * 2:1 SLOPE FROM STA. 23+70.00 TO 24+29.77 "M" RT.



TYPICAL GUTTER TAPER AT CASTING PLAN

NOT TO SCALE

LEGEND

- (B) MOMENT SLAB
- (F) CONCRETE SIDEWALK, 4"
- (K) PAVEMENT

  165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5 mm ON
  275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0 mm ON
  1045 LBS/SYS QC/QA-HMA, 2, 64, BASE 25.0 mm
- (P) TACK COAT
- (T) SUBGRADE TREATMENT, TYPE IV
- (2A) CONCRETE RAILING, C, MODIFIED
- (15) COMBINED CONCRETE CURB AND GUTTER, TYPE C
- (26) NURSERY SODDING
- (30) MSE WALL

NOTE:
SEE MSE WALL DETAILS FOR STRUCTURE BACKFILL AND B-BORROW LIMITS.

LIMITS OF PAVEMENT EXCEPTION AT BRIDGE STRUCTURE

STRUCTURE NO. 3
STA. 11+56.68 "M" TO STA. 14+43.48 "M"

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: AEO CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

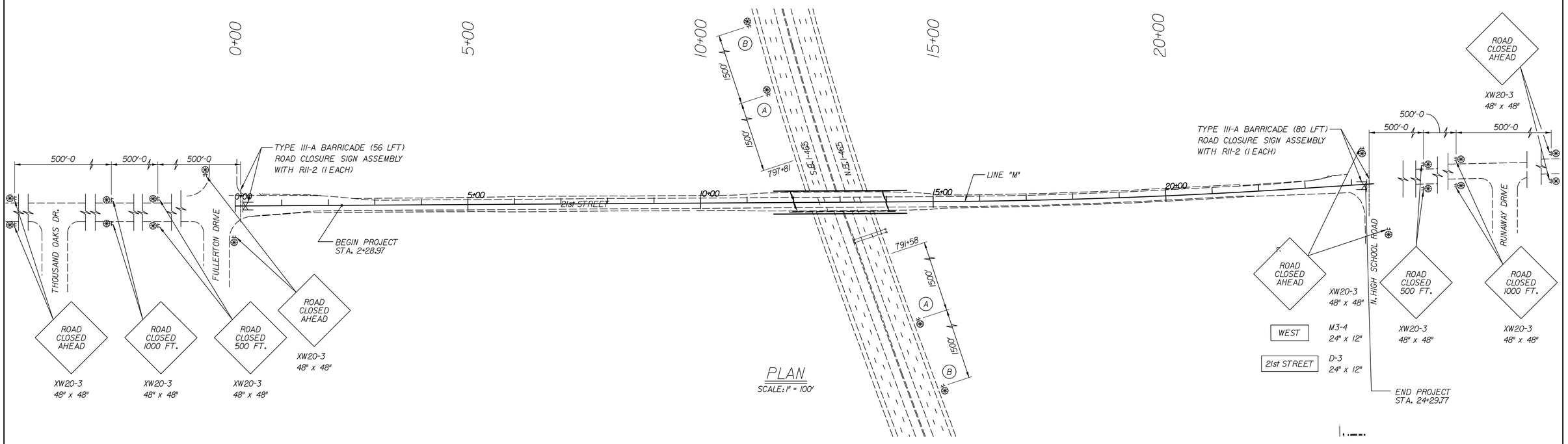
TYPICAL CROSS SECTIONS

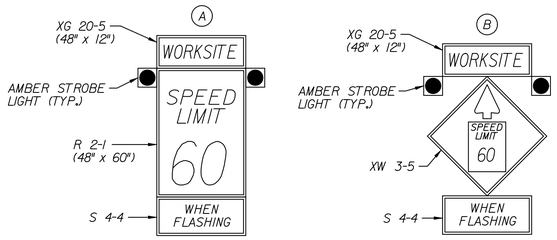
HORIZONTAL SCALE	BRIDGE FILE
1/8" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		5 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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ESTIMATED QUANTITIES		
ITEM	UNIT	TOTAL
① CONSTRUCTION SIGN, A	EACH	59
CONSTRUCTION SIGN, B	EACH	4
TYPE III-A BARRICADE	LFT	136
ROAD CLOSURE SIGN ASSEMBLY	EACH	2
TEMPORARY CHANGEABLE MESSAGE SIGN	EACH	4
TEMPORARY TRAFFIC BARRIER, TYPE 2, ANCHORED	LFT	1180
TEMPORARY SHEET PILING	SFT	3300
MAINTAINING TRAFFIC	LSUM	1
② FLASHING ARROW SIGN	DAYS	25
TEMPORARY TRAFFIC BARRIER, TYPE 2, ANCHORED, LEAVE IN PLACE	LFT	832
CONSTRUCTION SIGN, C	EACH	2
③ DETOUR ROUTE MARKER ASSEMBLY	EACH	16
TEMPORARY WORKSITE SPEED LIMIT SIGN ASSEMBLY	EACH	4





LEGEND

- LOW INTENSITY CONSTRUCTION WARNING LIGHT TYPE "A"
- CONSTRUCTION SIGN AND SUPPORTS
- ROAD CLOSURE SIGN ASSEMBLY
- HIGH INTENSITY CONSTRUCTION WARNING LIGHT TYPE "B"

NOTE:

① INCLUDES 20 SIGNS FOR TEMPORARY CLOSURE FOR OVERHEAD BRIDGE DEMOLITION AND CONSTRUCTION AND 5 SIGNS FOR LOCATIONS AS ILLUSTRATED IN THE SPECIAL PROVISIONS' DETOUR SIGNING PLAN.

② INCLUDES 25 DAYS FOR TEMPORARY CLOSURES OF I-465 FOR BRIDGE CONSTRUCTION

③ SEE SPECIAL PROVISIONS FOR LOCATIONS ON THE DETOUR SIGNING PLAN.

DETOUR ROUTE SIGNAGE WILL NOT BE PROVIDED, SINCE MOST TRAFFIC IS LOCAL. CHANGEABLE MESSAGE SIGNS WILL BE UTILIZED AT EACH END OF THE PROJECT TO ALERT MOTORISTS AND DISPLAY APPROPRIATE DETOUR ROUTE.

SEE SHEET 7 FOR TRAFFIC MAINTENANCE DETAILS ON I-465.

TWO ROAD CLOSURE NOTICE SIGNS
XG20 - 5 REQUIRED (ONE SIGN AT EACH END)

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: AJE
CHECKED: AJE CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE	BRIDGE FILE
1"= 100'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	6 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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ROAD CONSTRUCTION AHEAD
XW20-1
48" x 48"

SHOULDER WORK
XW20-3
48" x 48"

END CONSTRUCTION
XG20-2
60" x 24"

SHOULDER CLOSED AHEAD
XW21-5-A
48" x 48"

SPEEDING MAX. $1000 RECKLESS DRIVING MAX. 8 YEARS
XG20-7

REMOVE CONCRETE MEDIAN BARRIER (380 LFT)
STA. 790+67 TO STA. 794+47

416'-0" LFT OF TEMPORARY CONCRETE BARRIER, TYPE 2, ANCHORED, LEAVE IN PLACE
(MOVE TCB EASTWARD TO 10' FROM EDGE OF PAVEMENT, CHANGE TAPER AFTER CONSTRUCTION COMPLETE)

347'-6" LFT TEMPORARY TRAFFIC BARRIER, TYPE 2, ANCHORED
(INCLUDES 37'-6" ALLOWANCE FOR ENERGY ABSORBING TERMINAL)

423'-0" LFT OF TEMPORARY CONCRETE BARRIER, TYPE 2, ANCHORED, LEAVE IN PLACE
(MOVE TCB WESTWARD TO 10'-0" FROM EDGE OF PAVEMENT, CHANGE TAPER AFTER CONSTRUCTION COMPLETE)

REMOVE CONCRETE MEDIAN BARRIER (372 LFT)
STA. 794+64 TO STA. 798+36

EXISTING GUARDRAIL TO REMAIN

TEMP. SHEET PILING

C.L. MEDIAN

I-465 SOUTHBOUND LANES

I-465 NORTHBOUND LANES

21ST STREET

790+00

795+00

794+20

795+16

796+47

797+68

797+81

798+36

793+95

791+68

96'-0" STRAIGHT

361'-0"

333'-0"

TAPER 16:1

200' TAPER BARRICADES

100' 1000' 500'

35'-6"

12' 12' 12' 2' 2' 8'

PLAN
TRAFFIC MAINTENANCE ALONG I-465
SCALE: 1" = 30'-0"

C.L. PIER NO. 2 & MEDIAN

18'-0" 36'-0" ROADWAY
10'-0"
13'-0" 2'-0" 2'-0" 12'-0" LANE 12'-0" LANE 12'-0" LANE 8'-0" (1) 2'-0" (1)

LOCATION OF TCB AFTER CONSTRUCTION COMPLETE

TEMPORARY TRAFFIC BARRIER, TYPE 2, ANCHORED

EXISTING PAVEMENT ASPHALT OVER CONCRETE

TEMPORARY TRAFFIC BARRIER, (1) TYPE 2, ANCHORED

7'-0" 1'-6"

TOP OF NEW FOOTING ELEV. 733.50

TOP OF FOOTING ELEV. 732.10

BOTTOM OF FOOTING ELEV. 730.10

BOTTOM OF NEW FOOTING ELEV. 730.00

TEMPORARY SHEET PILING REQUIRED

SECTION M-M
SCALE: 1/4" = 1'-0"

(1) SOUTHBOUND LANE ONLY.

LEGEND

- LOW INTENSITY CONSTRUCTION WARNING LIGHT TYPE "A"
- CONSTRUCTION SIGN AND SUPPORTS
- ROAD CLOSURE SIGN ASSEMBLY
- CHANNELIZING DEVICES
- ENERGY ABSORBING TERMINAL, CZ, TL-3
- EXISTING PIER REMOVAL

CONSTRUCTION ZONE DESIGN SPEED IS 60 MPH

STEPHEN J. CHRISTIAN REGISTERED NO 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: GAH DRAWN: GAH
CHECKED: SJC CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		7 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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TH #99
12" PETROLEUM PRODUCTS
PIPELINE (TEPPCO)
5.38' CUT DEPTH
735.78' EX. GROUND EL.
728.90' INVERT EL.
STA. 11+82.26 "M"
82.84' LT.

TH #100
12" PETROLEUM PRODUCTS
PIPELINE (TEPPCO)
5.31' CUT DEPTH
735.05' EX. GROUND EL.
728.24' INVERT EL.
STA. 13+71.65 "M"
83.04' LT.

TH #95
2" TELEPHONE
5.74' CUT DEPTH
737.25' EX. GROUND EL.
731.34' INVERT EL.
STA. 12+44.70 "M"
78.28' RT.

TH #97
2" TELEPHONE
10.9' CUT DEPTH
735.36' EX. GROUND EL.
724.29' INVERT EL.
STA. 14+14.61 "M"
81.05' RT.

LINE "M"

5+00 10+00 15+00 20+00

795+00

790+00

NOTE:
ALL UTILITY TEST HOLES SUE QUALITY "A".

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 — DATE

DESIGNED: SG | DRAWN: MAB
CHECKED: SJC | CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

SUBSURFACE
UTILITY INFORMATION

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	8 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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P.I. Sta. 804+60.33 "PR-HH"
N: 59820.123
E: 42355.731

P.I. Sta. 398+57.66 "L"
N: 59820.123
E: 42355.731

LINE "PR-HH" N 2°02'26" W

0+00

7+95.00

LINE "PR-HH"

N. Line Sec. 35, T16N, R2E

0+00 5+00 10+00 15+00 20+00 N86°15'56"E

N89°38'39"E

LINE "S-2-L" & LINE "M"

N86°15'56"E

N89°38'39"E

700 P.O.T. Sta. 0+00.00 "S-2-L"
=P.O.T. Sta. 0+00.00 "M"
N: 58871.629
E: 41409.717

725 P.O.T. Sta. 6+00.00 "S-2-L"
=P.O.T. Sta. 6+00.00 "M"
N: 58875.354
E: 42009.705

1433 P.O.T. Sta. 11+00.26 "S-2-L"
=P.O.T. Sta. 11+00.26 "M"
Monument Found
N: 58878.461
E: 42509.952

715 P.O.C. Sta. 388+52.87 "L"
= P.O.T. Sta. 13+00.05 "S-2-L"
= P.O.T. Sta. 13+00.05 "M"
= P.O.C. Sta. 794+55.55 "PR-HH"
N: 58879.701
E: 42709.740

702 P.T. Sta. 22+89.03 "S-2-L"
= P.T. Sta. 22+89.03 "M"
N: 58909.226
E: 43698.098

1428 P.C. Sta. 14+95.60 "S-2-L"
= P.C. Sta. 14+95.60 "M"
Monument Found
N: 58880.915
E: 42905.288

1434 P.O.T. Sta. 24+47.34 "S-2-L"
=P.O.T. Sta. 24+47.34 "M"
#5 Rebar Fnd. 2" Below Surface
N: 58919.537
E: 43856.072

N.E. Cor. Sec. 35, T16N, R2E
0.P.O.T. Sta. 24+46.29 "S-2-L", 11.05' Rt.

701 P.I. Sta. 18+92.43 "S-2-L"
= P.I. Sta. 18+92.43 "M"
N: 58883.379
E: 43302.110

EQUATION:
P.C. Sta. 792+02.08 "PR-HH"
= P.C. Sta. 385+86.15 "L" (Back)
= P.C. Sta. 385+99.40 "L" (Ahead)
N: 58640.570
E: 42793.757

7+85.00

7+00.00

CURVE DATA
PJ. STA. 398+57.66 "L"
Δ = 19°55'43" RT. Per L.C.R.S. (19°55'49" Computed)
D = 0°48'00"
R = 7161.97'
T = 1258.26'
L = 2491.09'
E = 109.69'

CURVE DATA
PJ. STA. 804+60.33 "PR-HH"
Δ = 19°55'44" RT.
D = 0°48'00"
R = 7161.97'
T = 1258.26'
L = 2491.09'
E = 109.69'
SE = 2.94%

CURVE DATA
PJ. STA. 18+92.43 "M"
Δ = 3°22'33" LT.
R = 13,454.91'
T = 396.83'
L = 793.43'
E = 5.85'
SE = N.C.

CURVE DATA
PJ. STA. 18+92.43 "S-2-L"
Δ = 3°22'33" LT.
R = 13,454.91'
T = 396.83'
L = 793.43'
E = 5.85'
SE = N.C.

700 — N: 58871.6289 E: 41409.7167
S.E. COR. STREET SIGN
21ST ST.
LINE 'S-2-L' N2°02'26"W 92.65'
S.E. COR. STREET SIGN
53.55' AZ=130°
EQUATION W/ CAP SET N.E. FACE OF PWP=414.453-B
P.O.T. STA. 0+00.00 LINE 'S-2-L' BOAT SPIKE SET FLUSH
P.O.T. STA. 0+00.00 LINE 'M'

701 — N: 58883.3791 E: 43302.1102
S.W. COR. GUARD RAIL POST
LINE 'S-2-L' 21ST ST.
N.W. COR. 6TH GUARD RAIL POST FROM EAST
N.E. COR. 5TH GUARD RAIL POST FROM EAST
P.I. STA. 18+92.43 LINE 'S-2-L' BOAT SPIKE SET FLUSH
P.O.T. STA. 18+92.43 LINE 'M'

702 — N: 58909.2257 E: 43698.0976
S.W. COR. 4TH BRICK FENCE PILLAR
S.E. COR. 3RD BRICK FENCE PILLAR
LINE 'S-2-L' 21ST ST.
P.K. W/ CAP S. FACE PWP=16453B
P.T. STA. 22+89.03 LINE 'S-2-L' BOAT SPIKE SET FLUSH
P.O.T. STA. 22+89.03 LINE 'M'

715 — N: 58879.7010 E: 42709.7399
'X' CUT IN TOP OF CURB (TYP.)
21ST ST.
LINE 'S-2-L'
P.O.T. STA. 13+00.05 LINE 'S-2-L'
P.O.C. STA. 388+52.87 LINE 'L'
P.K. SET FLUSH IN CONC.
P.O.T. STA. 13+00.05 LINE 'M'

725 — N: 58875.3543 E: 42009.7051
S.W. COR. 3RD GUARD RAIL POST
21ST ST.
LINE 'S-2-L'
N.W. COR. 1ST GUARD RAIL POST
N.E. COR. 3RD GUARD RAIL POST
P.O.T. STA. 6+00.00 LINE 'S-2-L'
BOAT SPIKE SET FLUSH
P.O.T. STA. 6+00.00 LINE 'M'

1428 — N: 58880.9152 E: 42905.2878
CONTROL POINT #133 REBAR W/CAP
LINE 'S-2-L' 21ST ST.
N.W. COR. OF 5TH FROM E. END OF GUARDRAIL POST FOR BRIDGE
N.E. COR. OF E. GUARD RAIL POST FOR BRIDGE
P.C. STA. 14+95.60 LINE 'S-2-L'
INDIANAPOLIS CENTERLINE MONUMENT FOUND
P.O.T. STA. 14+95.60 LINE 'M'

1433 — N: 58878.4605 E: 42509.9523
S.W. COR. OF W. GUARD RAIL POST FOR BRIDGE
LINE 'S-2-L' 21ST ST.
N.W. COR. OF W. GUARD RAIL POST FOR BRIDGE
N.E. COR. OF 5TH FROM W. END OF GUARDRAIL POST FOR BRIDGE
P.O.T. STA. 11+00.26 LINE 'S-2-L'
INDIANAPOLIS CENTERLINE MONUMENT FOUND
P.O.T. STA. 11+00.26 LINE 'M'

1434 — N: 58919.5369 E: 43856.0717
S.W. COR. CONC. BASE FOR OVERHEAD SIGNAL SUPPORT
S.W. COR. CONC. BASE FOR OVERHEAD SIGNAL SUPPORT
LINE 'S-2-L' 21ST ST.
MAG NAIL SET IN N. FACE OF PWP. #214-454-B
MAG NAIL SET IN N. FACE OF PWP. #416-453-B
HIGH SCHOOL ROAD
10.98', AZ=198° HARRISON MON.
P.O.T. STA. 24+47.34 LINE 'S-2-L'
+5 REBAR FOUND 2" BELOW SURFACE
P.O.T. STA. 24+47.34 LINE 'M'

SECTION CORNER REFERENCE
MARION COUNTY
CUT "x" FND IN SW BOLT, SIGNAL POLE BASE NAZ 323° 71.36' (CO. TIE 71.38')
GRLS SCHOOL ROAD
PK NAIL FND IN NW SIDE, PWP NAZ 33° 67.42' (CO. TIE 67.72')
21ST STREET
N LINE NW 1/4 SEC. 35
N LINE NE 1/4 SEC. 35
W LINE NW 1/4 SEC. 35
CUT "x" SW BOLT, SIGNAL POLE BASE NAZ 148° 70.85' (CO. TIE 70.88')
NORTH NOT TO SCALE
217
NW CORNER SEC. 35-T 16 N-R 2 E
HARRISON MONUMENT FOUND FLUSH WITH SURFACE
NORTHING = 58832.579
EASTING = 38549.829

SECTION CORNER REFERENCE
MARION COUNTY
DARBY COURT APTS.
COPPER WELD FOUND NAZ 7° 11.00' (CO. TIE 10.90')
21ST STREET
N LINE NE 1/4 SEC. 35
TREE LINE
MAG NAIL SET IN N. SIDE OF PWP #416-453B NAZ 254° 58.49' (CO. TIE N/A)
E LINE NE 1/4 SEC. 35 HIGH SCHOOL ROAD
PK NAIL SET IN N. SIDE OF PWP #214-454B NAZ 119° 39.35' (CO. TIE 39.40')
NORTH NOT TO SCALE
218
NE CORNER SEC. 35-T 16 N-R 2 E
HARRISON MONUMENT FOUND FLUSH WITH SURFACE
NORTHING = 58908.447
EASTING = 43855.788

SECTION CORNER REFERENCE
MARION COUNTY
PK NAIL FND IN W. SIDE OF PWP #221-453-A NAZ 319° 83.73' (CO. TIE 83.76')
WOOD FENCE
21ST STREET
N LINE NW 1/4 SEC. 35
WOOD FENCE
NE CORNER OF BRICK COLUMN NAZ 234° 59.27' (CO. TIE 59.27')
E LINE NW 1/4 SEC. 35
TOP OF FIRE HYDRANT NAZ 172° 41.29' (CO. TIE 41.24')
NORTH NOT TO SCALE
219
N 1/4 CORNER SEC. 35-T 16 N-R 2 E
HARRISON MONUMENT FOUND FLUSH WITH SURFACE
NORTHING = 58869.466
EASTING = 41209.566
Z=-999.00'

CENTERLINE MONUMENT REFERENCE
MARION COUNTY
NORTH NOT TO SCALE
5/8" REBAR STAMPED "INDOT" (TSC 133) NAZ 34° 18.97' (CO. TIE N/A)
MAG NAIL FOUND IN ASPHALT NAZ 81° 41.07' (CO. TIE N/A)
N LINE NE 1/4 SEC. 35
21ST STREET
GUARD RAIL (TYP)
I 465 SOUTH
I 465 NORTH
MAG NAIL FOUND IN ASPHALT NAZ 306° 21.74' (CO. TIE N/A)
25
HARRISON MONUMENT FOUND STAMPED "CENTERLINE" ON 21ST STREET OVERPASS, FLUSH WITH SURFACE
NORTHING = 58880.912
EASTING = 42905.180

CENTERLINE MONUMENT REFERENCE
MARION COUNTY
NORTH NOT TO SCALE
MAG NAIL SET IN ASPHALT NAZ 69° 25.12' (CO. TIE N/A)
MAG NAIL SET IN ASPHALT NAZ 303° 21.64' (CO. TIE N/A)
TREES
N LINE NE 1/4 SEC. 35
21ST STREET
I 465 SOUTH
I 465 NORTH
MAG NAIL SET IN ASPHALT NAZ 183° 11.00' (CO. TIE N/A)
26
HARRISON MONUMENT FOUND STAMPED "CENTERLINE" ON 21ST STREET OVERPASS FLUSH WITH SURFACE
NORTHING = 58878.574
EASTING = 42509.844

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: MAB
CHECKED: SJC CHECKED: SG

INDIANA DEPARTMENT OF TRANSPORTATION

GEOMETRIC LAYOUT SHEET

HORIZONTAL SCALE	BRIDGE FILE
1" = 100'	I-465-149-8374
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	9 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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GRADISON DRIVE
LOT 79
LOT 80
LOT 78
LOT 86
PARC ESTATES NORTH
GRADISON COURT
LOT 81
LOT 77
BEGIN PROJECT
STA. 2+28.97
MONUMENT TYPE "B" REQUIRED
LOT 85
LOT 76
LOT 84
LOT 82
LOT 83
LOT 75
LOT 75
LOT 74
LOT 70
LOT 72
LOT 71
LOT 73
SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY
NAPA CIRCLE
PARC ESTATES NORTH
100' MARATHON GAS PIPELINE ESMT.
VARIABLE DRAINAGE EASEMENT
BLOCK "B"
MSE WALL & ACC.
40' L.A. R/W, ACC. & C.L.F. W/ G.P. POST
EXIST. L.A. R/W & ACC.
LINE "PR-HH"
(CONC. MED. BARRIER)
I-465 (SOUTHBOUND LANES)
(BITUM. OVER CONC.)
I-465 (NORTHBOUND LANES)
(BITUM. OVER CONC.)
(ASPH.)
(12" RCP)
HOUSE BARRIER & ACC.
RETAINING WALL
180' L.A. R/W
SEXTON DARBY II, LLC.
P.O.T. STA. 13+00.05 "M"=
P.O.C. STA. 794+55.55 "PR-HH"
+60 "M" STR. NO. 4639
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
+50 "PR-HH"
180'
L.A. R/W
P.C. STA. 14+95.60 "M"
STA. 16+00.00
MONUMENT TYPE "B"
REQUIRED
℄ & L.A. R/W
50' TEXAS EASTERN TRANSMISSION PIPELINE ESMT.
CONSTR. LIMITS
(GUARDRAIL)
MSE WALL
LINE "M"
21ST STREET
N89°38'39"E
APP. SECTION LINE
(BRUSH)
(TREES)
(C.L. FENCE)
(GRASS)
(HOUSE)
(SDWK.)
(CONC.)
APP. ℄
25' D. & U. ESMT.
15' D. ESMT.
10' D. & U. ESMT.
7.5' D. & U. ESMT.
5' U. ESMT.
7.5' U. ESMT.
20' D. & U. ESMT.
25' D. U. & S.S. ESMT.
L.A. R/W & EXIST. ℄
CONSTR. LIMITS
+00 "M" STR. NO. 4614
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
+78 "M" STR. NO. 4609
INLET, TYPE "B-15" AND
31 LFT. OF 12" PIPE REQ'D.
+78 "M" STR. NO. 4619
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
+95 "PR-HH"
140'
+℄ (+44.28) "PR-HH"
℄ (358.67')
+21.59 "PR-HH"
188'
+℄ (+33.62)
℄ (74.34')
+41 "M" STR. NO. 4629
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
+41 "M" STR. NO. 4630
MODIFIED INLET, TYPE "J-10"
AND 359 LFT. OF 12" PIPE REQ'D.
STA. 10+00.00
MONUMENT TYPE "B" REQUIRED
+78 "M" STR. NO. 4620
MODIFIED DROP MAN HOLE "C-10"
AND 20 LFT. OF 15" PIPE AND
52 LFT. OF 8" DROP PIPE REQ'D.
+℄ (+40.80)
℄ (53.04')
+℄ (+26.88) "PR-HH"
219'
+53 "PR-HH"
150'
+P.C. (+02.08) "PR-HH"
150'
COMMON AREA NO. 1
EXIST. DITCH TO REMAIN
EXISTING SANITARY SEWER PUMP STATION TO REMAIN
PARC ESTATES HOMEOWNER'S ASSOCIATION, INC.
+78 "M" STR. NO. 4610
MODIFIED INLET, TYPE "C-15"
AND 18 LFT. OF 18" PIPE REQ'D.
+00 "M" STR. NO. 4615
MODIFIED INLET, TYPE "J-10"
AND 118 LFT. OF 12" PIPE REQ'D.
HOLLYWOOD TRAIL
PARC ESTATES, SECTION I
PAMONA DRIVE
GLENDORA DRIVE
10' D. ESMT.
7.5' D. ESMT.
LOT 64
LOT 63
LOT 65
LOT 62
LOT 61
LOT 45
LOT 44
LOT 43
LOT 42
LOT 41
LOT 40
LOT 39
LOT 46
LOT 47
LOT 50
LOT 51
LOT 38
LOT 37
LOT 21
LOT 22
LOT 20
LOT 19
LOT 18
LOT 17
LOT 16
LOT 15
LOT 5
LOT 6
LOT 7
LOT 8
LOT 9
LOT 10
LOT 11
LOT 12
LOT 13
LOT 14
DIANA J. & KENNETH R. TEGARDEN
HARDY A. & FREIDA A. HILL
EDWIN C. & JULIE LORAYES
KIRBY D. GAMBER
GUY E. & SABRINA J. LOVELL
DEVENDRA, JR. & DEEPALI J. JANI
KATHY L. PURCELL
SEXTON LF PROPERTIES, L.P.
(BLDG.)
(CONC. CURB & GUTTER)
SAN. SEWER ESMT. IN FAVOR OF DS-W.
8" PVC FORCE MAIN
(18" PVC FORCE MAIN)
(27" RCP)
(30" RCP)
(27" X 18" CMP)
(18" x 36" CMP)
(ASPH. PARKING)
(SDWK.)
+00 ℄ (57.44')
STORM & LANDSCAPE ESMT.
+00 "M" STR. NO. 4640
MODIFIED CATCH BASIN, TYPE "K-10"
AND 360 LFT. OF 12" PIPE REQ'D.
+00 ℄ (77.59')
+85 "PR-HH"
180'
+70 "PR-HH"
125'
+P.C. (+02.08) "PR-HH"
150'
R/W LEGEND
B BEGIN L.A. R/W
E END L.A. R/W
SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY
"ALL R/W ON THIS SHEET TO BE AS SHOWN."
"LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED."
"ALL R/W ON THIS SHEET DESCRIBED FROM LINE "M" EXCEPT AS SHOWN."
10
15

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: AEO CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	10 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SEXTON DARBY II, LLC.

SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEC. 25, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEC. 36, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEXTON LF
PROPERTIES, L.P.

CURVE DATA
P.I. 18+92.43 "M"
Δ = 3°22'33" LT.
R = 13,454.91'
T = 396.83'
L = 793.43'
E = 5.85'
SE = N.C.

APP. ℄

20

+53 "M" STR. NO. 4660
INLET, TYPE "B-15" AND
47 LFT. OF 12" PIPE REQ'D.

P.T. STA. 22+89.03 "M"

+78 "M" STR. NO. 4658
66 LFT. OF 30" PIPE AND
2 END SECTIONS REQ'D.

+24 "M" STR. NO. 4649
INLET, TYPE "J-10" AND
33 LFT. OF 12" PIPE REQ'D.

+00 "M" STR. NO. 4651
INLET, TYPE "J-10" AND
36 LFT. OF 12" PIPE REQ'D.

+00 "M" STR. NO. 4654
INLET, TYPE "J-10" AND
42 LFT. OF 12" PIPE REQ'D.

APP. SECTION LINE

HIGH SCHOOL RD.
(BITUM. OVER CONC.)

℄ & L.A. R/W

50' TEXAS EASTERN
TRANSMISSION
PIPELINE ESMT.

(BRUSH)

CONSTR. LIMITS

MSE WALL

(GUARDRAIL)

20+00

N86°15'56"E

21ST STREET

(BITUMINOUS)

LINE "M"

N89°38'39"E

21ST STREET ℄

(8" PVC FORCE MAIN)

SAN. SEWER ESMT.
IN FAVOR OF DPW

L.A. R/W

(IO" PVC)

+90
℄ (159.81')

(BLDG.)

+00
℄ (77.59')

(CONC. CURB & GUTTER)

(ASPH. PARKING)

(SDWK.)

+00
℄ (55')

(CONC. CURB & GUTTER)

(TREES)

(POND)

(GRASS)

+℄ (+96.52)
℄ (55.70')

+℄ (+56.42)
℄ (42.68')

B

E

50' PIPELINE EASEMENT
IN FAVOR OF TEXAS EASTERN
TRANSMISSION CORP.

(12" RCP)

(15" RCP)

(27" RCP)

P.I. STA. 18+92.43 "M"
Δ = 3°22'43" LT.

+24 "M" STR. NO. 4650
MODIFIED CATCH BASIN, TYPE "K-10"
AND 172 LFT. OF 12" PIPE REQ'D.

+00 "M" STR. NO. 4655
MODIFIED CATCH BASIN, TYPE "J-10",
11 LFT. OF 18" PIPE, AND
ONE END SECTION REQ'D.

+53 "M" STR. NO. 4659
MODIFIED INLET, TYPE "C-15"
AND 148 LFT. OF 15" PIPE REQ'D.

+00 "M" STR. NO. 4652
MODIFIED DROP MANHOLE, TYPE
"C-10", 15 LFT. OF 15" PIPE, AND
24 LFT. OF 8" DROP PIPE WITH
ONE END SECTION REQ'D.

END PROJECT
STA. 24+29.77 "M"
MONUMENT TYPE "B"
REQUIRED

R/W LEGEND

B	BEGIN L.A. R/W
E	END L.A. R/W

"ALL R/W ON THIS SHEET TO BE AS SHOWN."
"LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED."
"ALL R/W ON THIS SHEET DESCRIBED FROM LINE "M" EXCEPT AS SHOWN."

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: AEO CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	11 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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P.V.I. @ 5+50.00
ELEV. 745.76
400' V.C.

P.V.I. @ 13+00.00
ELEV. 773.72
600' V.C.

480.83 LFT OF MSE WALL REQ'D LT.(WALL NO.54)

+00.0

+80.83

+03.50

PAVING EXCEPTION

+56.69

+43.48

+3.728%

-3.994%

PROFILE GRADE ALONG LINE "M"

ELEV.762.18

359 LFT 12" PIPE @ 3.34 %

EXISTING GROUND ALONG LINE "M"

STR.NO.4630

ELEV.758.74

360 LFT 12" PIPE @ 2.85%

STR.NO.4640

BEGIN PROJECT
P.O.T. STA. 2+28.97
LINE "M"
ELEV. 746.72

LOW POINT
STA. 3+78.00
ELEV. 746.32

-0.300%

+3.728%

ELEV.750.18

ELEV.742.33

ELEV.742.71

+50.00
742.50

-0.50%

+79%

118 LFT 12" PIPE @ 0.32 %

+50.00
743.00

GRADE OF SPECIAL
4' BOTTOM DITCH
REQ'D RT.

+78.00
742.00

+1.14%

+00.00
741.75

-2.00%

+75.00
740.25

STR.NO.4610

STR.NO.4615

8" DROP PIPE

ELEV.736.15

STR.NO.4620

LIMITS OF SEEDED
DITCH RIGHT

LIMITS OF SODDING
DITCH RIGHT

EXISTING GAS LINE LT.

+50.0

746.66 LFT OF MSE WALL REQ'D RT.(WALL NO.55)

+96.66

+19.33

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
747.19	746.89	746.52 746.66	746.19 746.51	746.06 746.36	745.87 746.33	745.63 746.56	745.33 747.04	745.30 747.77	745.32 748.75	745.85 749.99	746.83 751.48	748.17 753.21	749.94 755.08	752.71 756.94	754.71 758.81	756.92 760.67
758.87 762.53	760.42 764.24	761.69 765.62	762.82 766.68	763.30 767.42	763.43 767.83	763.37 767.93	762.85 767.70	763.28 767.15	762.48 766.28	761.60 765.09	760.33 763.57	758.70 761.74	756.77 759.74	754.63		

795	790	785	780	775	770	765	760	755	750	745	740	735	730	725	720	715	710	705

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: MAB	DRAWN: MAB
CHECKED: SJC	CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1" = 5'	9829512
SURVEY BOOK	SHEET NO.
	12 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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P.V.I. @ 22+00.00
ELEV. 737.77
400' V.C.

846.5 LFT OF MSE WALL REQ'D LT.(WALL NO.56)

+5.00

ELEV.748.48

ELEV.746.23

172 LFT 18" PIPE @ 2.17%

-3.99%

PROFILE GRADE ALONG LINE "M"

ELEV.741.46

STR. NO.4650

LOW POINT
STA. 23+53.50
ELEV.738.84

+0.490%

END CONSTRUCTION
P.O.T. STA. 24+29.77
LINE "M"
ELEV. 738.89

ELEV.733.40

148 LFT 15" PIPE @ 0.53 %

ELEV.734.19

8" DROP PIPE

EXISTING GROUND ALONG LINE "M"

STR. NO.4659

+00.00
729.50

-0.867%

+75.00
728.85

0.520 %

+00.00
729.50

STR. NO.4658

STR. NO.4652

STR. NO.4655

EXISTING 8" PVC
FORCE MAIN RT.

EXISTING GAS LINE LT.

GRADE OF SPECIAL
4' DITCH REQ'D RT.

+14.00

954.67 LFT OF MSE WALL REQ'D RT.(WALL NO.57)

LIMITS OF SEEDED DITCH RIGHT

759.74	754.63	752.23	749.55	747.07	744.71	742.42	740.74	739.58	738.74	738.16	737.83	737.81
757.74	755.75	753.75	751.75	749.75	747.76	745.76	743.90	742.32	741.03	740.01	739.28	738.82

737.86	738.07	738.52
738.64	738.75	

17 18 19 20 21 22 23 24

795 790 785 780 775 770 765 760 755 750 745 740 735 730 725 720 715 710 705

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: MAB DRAWN: MAB
CHECKED: SJC CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

ROADWAY PROFILE

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1" = 5'	9829512

SURVEY BOOK		SHEET NO.
		13 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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"ALL R/W ON THIS SHEET TO BE AS SHOWN."
"LIMITED ACCESS PROVISIONS TO APPLY WHERE INDICATED."
"ALL R/W ON THIS SHEET DESCRIBED FROM LINE "M" EXCEPT AS SHOWN."

SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

LEGEND

PARC ESTATES NORTH

- (K) PAVEMENT
  165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5 mm ON
  275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0 mm ON
  1045 LBS/SYS QC/QA-HMA, 2, 64, BASE 25.0 mm
- (B) MOMENT SLAB
- (F) CONCRETE SIDEWALK, 4"
- (I) IMPACT ATTENUATOR, RI, W-I, TL-2
- (2A) RAILING, CONCRETE "C", MODIFIED
- (15) COMBINED CONCRETE CURB AND GUTTER, TYPE "C"
- (26) NURSERY SODDING
- (30) MSE WALL
- (K) CURB RAMP TYPE "K"

LOT 82 · LOT 83 · LOT 75 · LOT 73 · LOT 74

(GRASS) · (HOUSE) · (TREES) · (BRUSH) · (BITUMINOUS)

APP. ℄ · (C.L. FENCE) · OHP · 5' U. ESMT. · 100' MARATHON GAS PIPELINE ESMT. · 25' D. U. & S.S. ESMT. · L.A. R/W · CONSTR. LIMITS

+78 "M" STR. NO. 4609 · +78 "M" STR. NO. 4610 · +78 "M" STR. NO. 4619 · +78 "M" STR. NO. 4620
+00 "M" STR. NO. 4614 · +00 "M" STR. NO. 4615

LINE "M" · APP. SECTION LINE · N 89°38'39" E · 21ST STREET

BEGIN PROJECT
STA. 2 + 28.97 "M"

(GUARDRAIL TO BE REMOVED) · MSE WALL · EXIST. R/W · LA. R/W & EXIST. ℄

20' D. & U. ESMT. · 20' D. U. & S.S. ESMT. · 7.5' U. ESMT.

EXISTING SANITARY SEWER PUMP STATION TO REMAIN

LOT 6 · LOT 7 · LOT 8 · LOT 9 · LOT 10 · LOT 11 · LOT 12 · LOT 13 · LOT 14 · LOT 15 · LOT 16

DIANA J. & KENNETH R. TEGARDEN
HARDY A. & FREIDA A. HILL
EDWIN C. & JULIE LORAYES
KIRBY D. GAMBER
GUY E. & SABRINA J. LOVELL
DEVENDRA, JR. & DEEPALI J. JANI
KATHY L. PURCELL

SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

PARC ESTATES, SECTION 1

R/W LEGEND

- B BEGIN L.A. R/W
- E END L.A. R/W

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC · DRAWN: MAB
CHECKED: AEO · CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	14 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

LEGEND

- (K) PAVEMENT
  165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5 mm ON
  275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0 mm ON
  1045 LBS/SYS QC/QA-HMA, 2, 64, BASE 25.0 mm
- (B) MOMENT SLAB
- (2A) RAILING, CONCRETE "C", MODIFIED
- (2B) REMOVE CONCRETE MEDIAN BARRIER,
  STA.790+67 "PR-HH" TO STA.794+47 "PR-HH", 380 FT
- (2C) REMOVE CONCRETE MEDIAN BARRIER,
  STA.794+64 PR-HH TO STA.798+36 PR-HH, 372 FT
- (14) INTEGRAL CONCRETE CURB, TYPE "C"
- (15) COMBINED CONCRETE CURB AND GUTTER, TYPE "C"
- (26) NURSERY SODDING
- (30) MSE WALL
- (D2) HMA FOR APPROACHES
  165 LBS/SYS HMA TYPE A, SURFACE 9.5 mm ON
  495 LBS/SYS HMA TYPE A, BASE 19.0 mm ON
  9" COMPACTED AGGREGATE, NO.53, BASE

PARC ESTATES NORTH
LOT 73
(GRASS)
APP. ℄
15' D. ESMT.
PARC ESTATES NORTH HOMEOWNER'S ASSOCIATION, INC. BLOCK "B"
L.A. R/W
EXIST. L.A. R/W & A.C.L.
25' D.U. & S.S. EASEMENT
(CL. FENCE)
12" G
+41 "M" STR. NO. 4629
50' TEXAS EASTERN TRANSMISSION PIPELINE ESMT.
(BRUSH)
CONSTR. LIMITS
MSE WALL
(GUARDRAIL TO BE REMOVED)
APP. SECTION LINE
N 89°38'39" E
21ST STREET
10+00
19'-0"
LINE "M"
PAVING EXCEPTION
SEXTON DARBY II, LLC.
(18" x 36" CMP)
(12" RCP)
P.O.T. STA.13+00.05 "M"
P.O.C. STA.794+55.55 "PR-HH"
LIMITS OF MULCHED SEEDING
SLOPE FROM EXISTING EDGE OF SHOULDER TO ELEV.744.00 AT WALL
+91.0
+20.0
794+00
10' 10'
(12" CMP)
SLOPE FROM EXISTING EDGE OF SHOULDER TO ELEV.741.40 AT WALL
LA. R/W & EXIST. ℄
+41 "M" STR. NO. 4630
20' D. U. & S.S. ESMT.
(8" PVC FORCE MAIN)
REMOVE SIGN STRUCTURE, RESET USING TEMPORARY MOUNTING ON WOOD SUPPORTS (SEE SHEET 35 FOR DETAILS
LINE "PR-HH"
(27" x 18" CMP)
I-465 (SOUTHBOUND LANES)
I-465 (NORTHBOUND LANES)
EXIST. L.A. R/W
(30" RCP)
PARC ESTATES HOMEOWNER'S ASSOCIATION, INC.
SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY
LOT 16
LOT 17
APP. ℄

NOTE: THIS SHEET REFLECTS THE PROPOSED CONSTRUCTION ON 21ST STREET AND THE CONDITIONS ON I-465 UPON COMPLETION OF THIS CONTRACT. SLOPES IN THE VICINITY OF I-465 TO BE GRADED TO THE CONTOURS SHOWN ON THIS SHEET. FOR FINAL CONDITIONS ON I-465 AFTER THE COMPLETION OF THE MAINLINE ACCELERATE I-465 PROJECT, REFER TO SHEET 39 (LAYOUT SHEET) AND SHEET 40 (GENERAL PLAN).

SEE SHEET 7 (MAINTENANCE OF TRAFFIC) FOR TEMPORARY CONCRETE BARRIER PLACEMENT IN MEDIAN.

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: AEO CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	15 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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15 16 17 18 19 20

(GRASS)

SEXTON DARBY II, LLC

LEGEND

- (K) PAVEMENT
  165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5 mm ON
  275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0 mm ON
  1045 LBS/SYS QC/QA-HMA, 2, 64, BASE 25.0 mm
- (B) MOMENT SLAB
- (2A) RAILING, CONCRETE "C", MODIFIED
- (15) COMBINED CONCRETE CURB AND GUTTER, TYPE "C"
- (26) NURSERY SODDING
- (30) MSE WALL

SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

L.A. R/W
+60 "M" STR. NO. 4639
P.C STA. 14+95.06 "M"
℄ & L.A. R/W
(12" RCP)
12" G
50' TEXAS EASTERN TRANSMISSION PIPELINE ESMT.
+24 "M" STR. NO. 4649
+00 "M" STR. NO. 4651
+78 "M" STR. NO. 4658
30' EDGE OF PAVEMENT TAPER BEGINS
MSE WALL
CONSTR. LIMITS
(GUARDRAIL TO BE REMOVED)
(BRUSH)
(BITUMINOUS)
LINE "M"
15+00
20+00
APP. SECTION LINE
21ST STREET
N 89° 38' 39" E
N 89° 15' 56" E
16'-0"
22'-0"
8'-0"
12"
(8" PVC)
(10" PVC)
(8" PVC FORCE MAIN)
SAN. SEWER ESMT. IN FAVOR OF D.P.W.
+00 "M" STR. NO. 4652
SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY
(BLDG.)
(CONC. CURB & GUTTER)
P.I. 18+92.43 "M"
+60 "M" STR. NO. 4640
+24 "M" STR NO. 4650
(ASPH. PARKING)
(SDWK.)
(27" RCP)
SEXTON LP PROPERTIES, L.P.

CURVE DATA

P.I. STA 18 + 92.43 "M"
Δ = 3 ° 22' 43" LT
D = 0 ° 25' 33" LT
R = 13454.9'
T = 396.83'
L = 793.43'
E = 5.85'
SE = NC

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: AEO CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		16 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEXTON DARBY, LLC

SEC. 25, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

LEGEND

- (K) PAVEMENT
  165 LBS/SYS QC/QA-HMA, 2, 64, SURFACE 9.5 mm ON
  275 LBS/SYS QC/QA-HMA, 2, 64, INTERMEDIATE 19.0 mm ON
  1045 LBS/SYS QC/QA-HMA, 2, 64, BASE 25.0 mm
- (B) MOMENT SLAB
- (F) CONCRETE SIDEWALK, 4"
- (I) IMPACT ATTENUATOR, RI, W-I, TL-2
- (2A) RAILING, CONCRETE "C", MODIFIED
- (15) COMBINED CONCRETE CURB AND GUTTER, TYPE "C"
- (26) NURSERY SODDING
- (30) MSE WALL
- (H) CURB RAMP TYPE "H"

(POND)

+53 "M" STR. NO. 4660

+53 "M" STR. NO. 4659

(GRASS)

APP. SECTION LINE

HIGH SCHOOL RD.

(BITUM. OVER CONC.)

STA. 24+22.85
OFFSET 30.55'

+℄ (+96.52)
℄ (55.70')

+℄ (+56.42)
℄ (42.68')

℄ & L.A. R/W

MSE WALL

CONSTR. LIMITS

+91 EDGE PAVEMENT TAPER BEGINS

90' TAPER ENDS

STA. 24+32.08
OFFSET 30.00'

END PROJECT
STA. 24 + 29.77 "M"

(GUARDRAIL TO BE REMOVED)

50' PIPELINE EASEMENT
IN FAVOR OF TEXAS EASTERN
TRANSMISSION CORP.

LINE "M"
N 86° 15' 56" E

21ST STREET

(BITUM. OVER CONC.)

(8" PVC FORCE MAIN)

(10" PVC)

L.A. R/W

+℄ (+00)
℄ (55')

P.T. STA 22 + 89.03 "M"

PAVEMENT TAPER ENDS +00

+90
℄ (159.81')

STA. 24+17.50
OFFSET 69.85'

STA. 24+24.38
OFFSET 70.15'

(BLDG.)

(CONC. CURB & GUTTER)

+00 "M" STR. NO. 4654

+00 "M" STR. NO. 4655

(ASPH. PARKING)

(12" RCP)

(15" RCP)

(TREES)

SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEXTON LF
PROPERTIES, L.P.

APP. ℄

SEC. 36, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SJC | DRAWN: MAB

CHECKED: AEO | CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 20'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	17 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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GRADISON DRIVE
GRADISON COURT
NAPA CIRCLE
LOT 71
SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY
100' MARATHON GAS PIPELINE ESMT.
VARIABLE DRAINAGE EASEMENT
40' L.A. R/W, A.C.L. & C.L.T.F. W/ GROUP I POST
EXIST. L.A. R/W & A.C.L.
LINE "RR-HH"
I-465 (SOUTHBOUND LANES)
I-465 (NORTHBOUND LANES)
EXIST. L.A. R/W
180' L.A. R/W
(12" RCP)
(18" x 36" CMP)
+60 "M" STR. NO. 4639
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
L.A. R/W
REMOVE EXIST. INLET AND PIPE
50' TEXAS EASTERN TRANSMISSION PIPELINE ESMT.
CONSTR. LIMITS
APP. SECTION LINE
LINE "M"
21ST STREET
+00 "M" STR. NO. 4614
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
+78 "M" STR. NO. 4609
INLET, TYPE "B-15" AND
31 LFT. OF 12" PIPE REQ'D.
+78 "M" STR. NO. 4619
INLET, TYPE "J-10" AND
32 LFT. OF 12" PIPE REQ'D.
+41 "M" STR. NO. 4629
INLET, TYPE "J-10" AND
35 LFT. OF 12" PIPE REQ'D.
+41 "M" STR. NO. 4630
INLET, TYPE "M-10" AND
363 LFT. OF 12" PIPE REQ'D.
+78 "M" STR. NO. 4620
MODIFIED DROP MAN HOLE, "C-10"
AND 20 LFT. OF 15" PIPE AND
52 LFT. OF 8" DROP PIPE REQ'D.
+78 "M" STR. NO. 4610
MODIFIED INLET, TYPE "C-15"
AND 18 LFT. OF 18" PIPE REQ'D.
+00 "M" STR. NO. 4615
MODIFIED INLET, TYPE "J-10"
AND 118 LFT. OF 12" PIPE REQ'D.
L.A. R/W, A.C.L. & C.L.T.F. W/ GROUP I POSTS
EXIST. DITCH TO REMAIN
(8" PVC FORCE MAIN)
(27" x 18" CMP)
(30" RCP)
7.5' D. ESMT.
+60 "M" STR. NO. 4640
MODIFIED INLET, TYPE "J-10"
AND 364 LFT. OF 12" PIPE REQ'D.
(27" RCP)
(12" RCP)
(12" CURB)
18" PVC FORCE MAIN
12" L.A. R/W
(SDMK)
(BLDG.)
HOLLYWOOD TRAIL
PAMONA DRIVE
GLENDORA DRIVE
SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY
LOT 37
(CONC.)
(TREES)
(BRUSH)
(CL. FENCE)
(GRASS)
(HOUSE)
APP. ℄
E
RR
SB
SP

CI CURB INLET PROTECTION
SP SPLASH PAD, 2'x2'
SB SILT FENCE
RR CHECK DAM - REVETMENT RIPRAP
VEGETATIVE FILTER STRIP

NOTES:
ANY AREAS IN ADDITION TO THOSE CALLED OUT, LEFT UNDISTURBED FOR A PERIOD EXCEEDING 15 DAYS SHALL BE REQUIRED TO HAVE TEMPORARY SEEDING.
1. UPON COMPLETION OF PIPE INSTALLATION, OUTLET PROTECTION SPECIFIED ON ROAD PLANS SHALL BE IMPLEMENTED.
2. ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED IN ACCORDANCE WITH INDOT STANDARD SPECIFICATIONS AS SOON AS POSSIBLE UPON COMPLETION OF WORK IN THAT AREA.
3. UPON COMPLETION OF DITCH GRADING, PERMANENT EROSION CONTROL MEASURES SPECIFIED ON ROAD PLANS SHALL BE IMPLEMENTED.

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: MAB
CHECKED: AEO CHECKED: AEO

INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	18 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SEC. 26, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEC. 25, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEC. 35, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

SEC. 36, T-16-N, R-2-E
WAYNE TOWNSHIP
MARION COUNTY

APP. ℄

APP. SECTION LINE

HIGH SCHOOL RD.

+24 "M" STR. NO. 4649
INLET, TYPE "J-10" AND
33 LFT. OF 12" PIPE REQ'D.

+78 "M" STR. NO. 4658
66 LFT. OF 24" PIPE REQ'D.

+00 "M" STR. NO. 4651
INLET, TYPE "J-10" AND
36 LFT. OF 12" PIPE REQ'D.

+00 "M" STR. NO. 4654
INLET, TYPE "J-10" AND
42 LFT. OF 12" PIPE REQ'D.

+53 "M" STR. NO. 4660
INLET, TYPE "B-15" AND
47 LFT. OF 12" PIPE REQ'D.

(POND)

(GRASS)

CONSTR. LIMITS

℄ & L.A. R/W

50' TEXAS EASTERN
TRANSMISSION
PIPELINE ESMT.

50' PIPELINE EASEMENT
IN FAVOR OF TEXAS EASTERN
TRANSMISSION CORP.

LINE "M"

21ST STREET

(8" PVC FORCE MAIN)

8" PVC FORCE MAIN

(10" PVC)

L.A. R/W

SAN. SEWER ESMT.
IN FAVOR OF DPW

(BLDG.)

(CONC. CURB & GUTTER)

(TREES)

(12" RCP)

(15" RCP)

(27" RCP)

+00 "M" STR. NO. 4655
MODIFIED CATCH BASIN, TYPE "J-10",
19 LFT. OF 18" PIPE, AND
ONE END SECTION REQ'D.

+24 "M" STR. NO. 4650
MODIFIED CATCH BASIN, TYPE "K-10"
AND 172 LFT. OF 12" PIPE REQ'D.

+58 "M" STR. NO. 4659
MODIFIED INLET, TYPE "C-15"
AND 148 LFT. OF 15" PIPE REQ'D.

+00 "M" STR. NO. 4652
MODIFIED DROP MANHOLE, TYPE
"C-10", 15 LFT. OF 15" PIPE AND
24 LFT. OF 8" DROP PIPE WITH
ONE END SECTION REQ'D.

CI — CURB INLET PROTECTION

SP — SPLASH PAD, 2'x2'

SB — SILT FENCE

RR — CHECK DAM - REVETMENT RIPRAP

VEGETATIVE FILTER STRIP

NOTES:
ANY AREAS IN ADDITION TO THOSE CALLED OUT, LEFT UNDISTURBED FOR A PERIOD EXCEEDING 15 DAYS SHALL BE REQUIRED TO HAVE TEMPORARY SEEDING.
1. UPON COMPLETION OF PIPE INSTALLATION, OUTLET PROTECTION SPECIFIED ON ROAD PLANS SHALL BE IMPLEMENTED.
2. ALL DISTURBED AREAS SHALL BE PERMANENTLY SEEDED IN ACCORDANCE WITH INDOT STANDARD SPECIFICATIONS AS SOON AS POSSIBLE UPON COMPLETION OF WORK IN THAT AREA.
3. UPON COMPLETION OF DITCH GRADING, PERMANENT EROSION CONTROL MEASURES SPECIFIED ON ROAD PLANS SHALL BE IMPLEMENTED.

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF
INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: MAB
CHECKED: AEO CHECKED: AEO

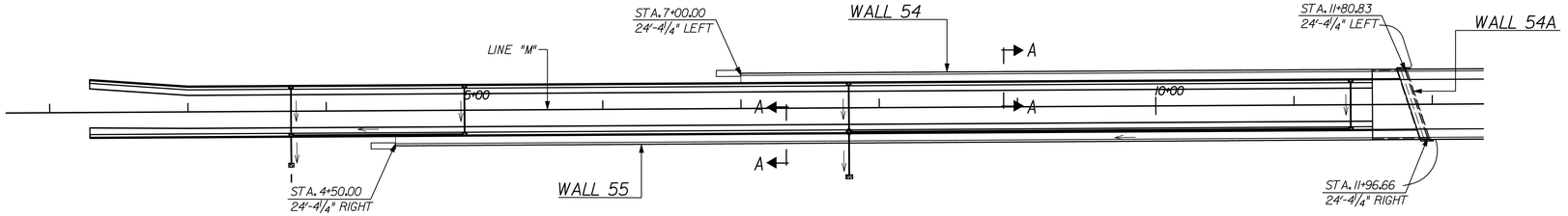
INDIANA
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 50'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

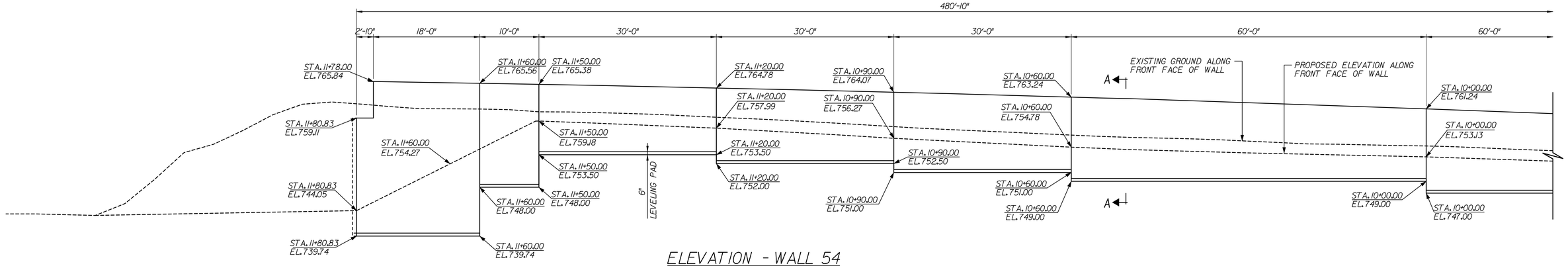
SURVEY BOOK		SHEET NO.
		19 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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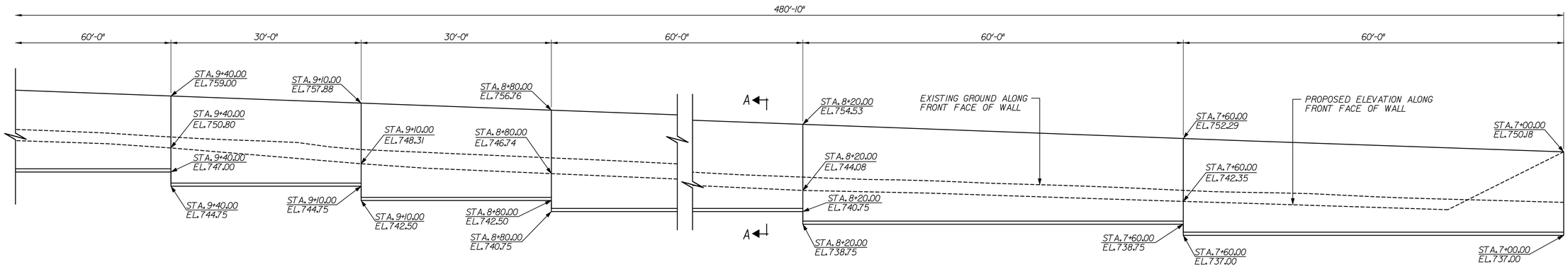
PLAN

SCALE: 1" = 50'



ELEVATION - WALL 54

SCALE: 1/8" = 1'-0"



ELEVATION - WALL 54

SCALE: 1/8" = 1'-0"

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian, DESIGN ENGINEER — 10-15-2007, DATE

DESIGNED: MAB | DRAWN: MAB

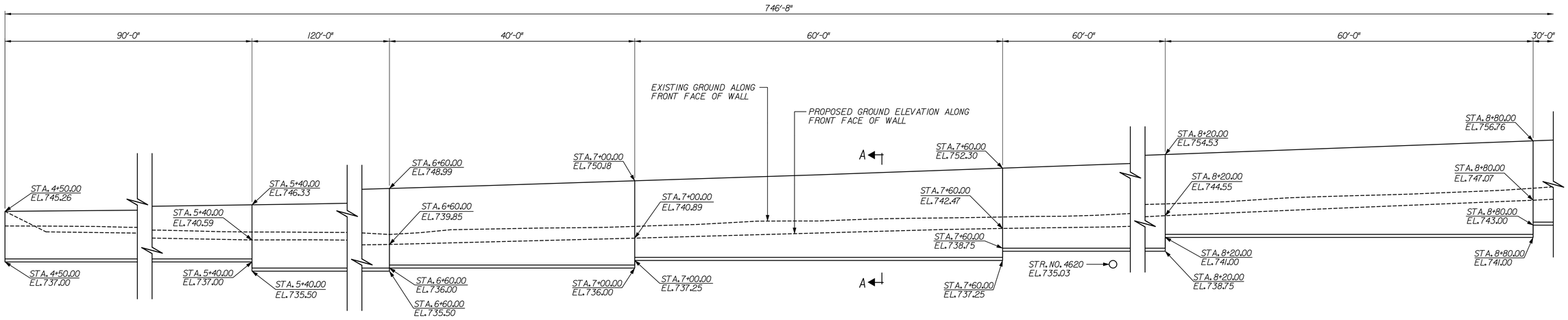
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INDIANA DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS

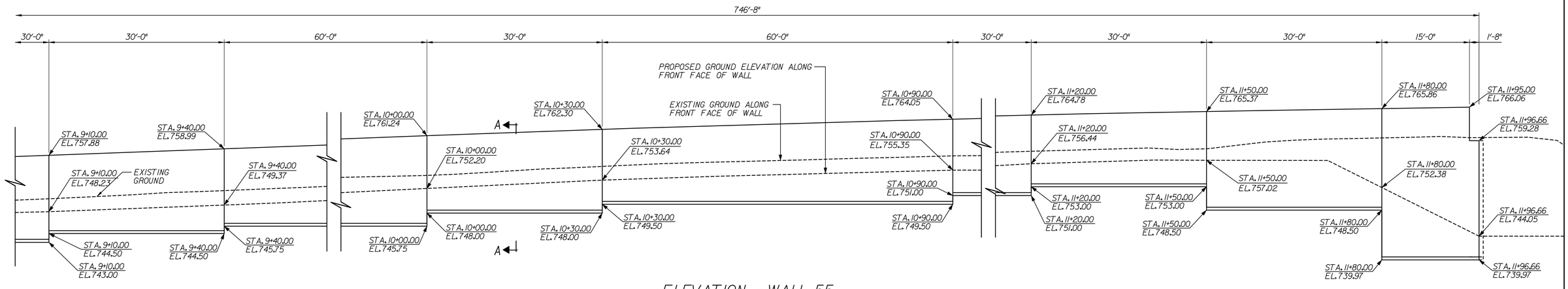
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	20 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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ELEVATION - WALL 55

SCALE: 1/8" = 1'-0"



ELEVATION - WALL 55

SCALE: 1/8" = 1'-0"

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: MAB DRAWN: MAB
CHECKED: SJC CHECKED: SJC

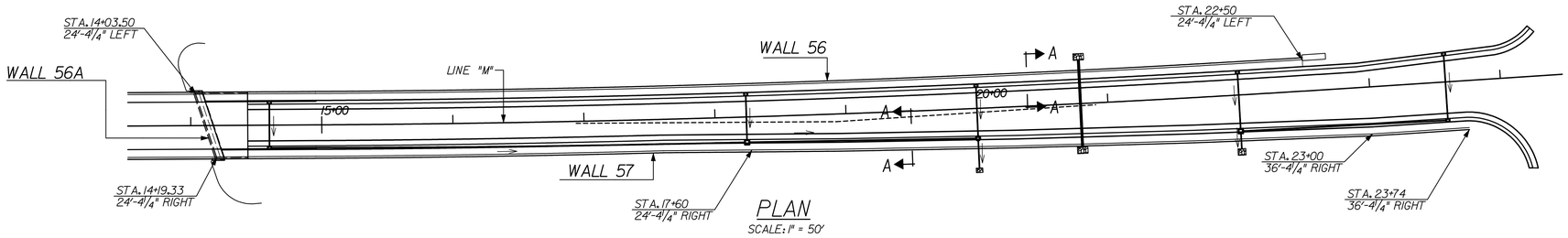
INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

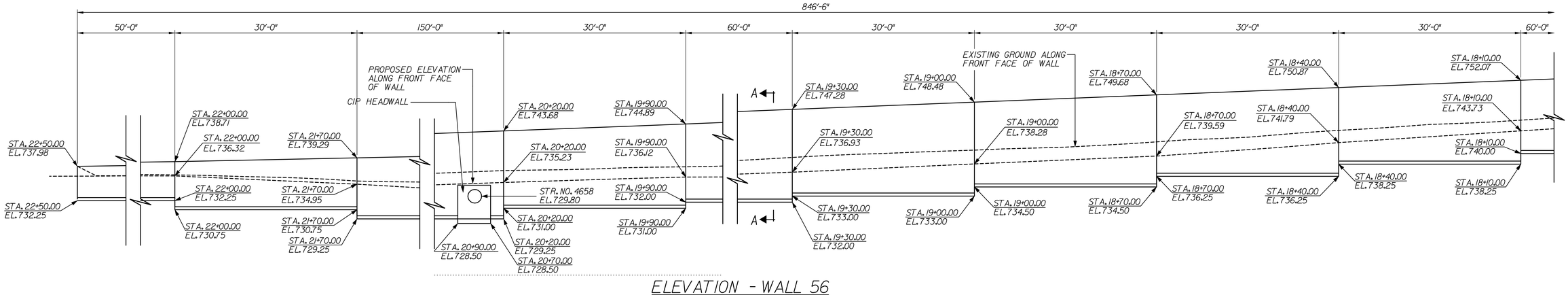
SURVEY BOOK	SHEET NO.
	21 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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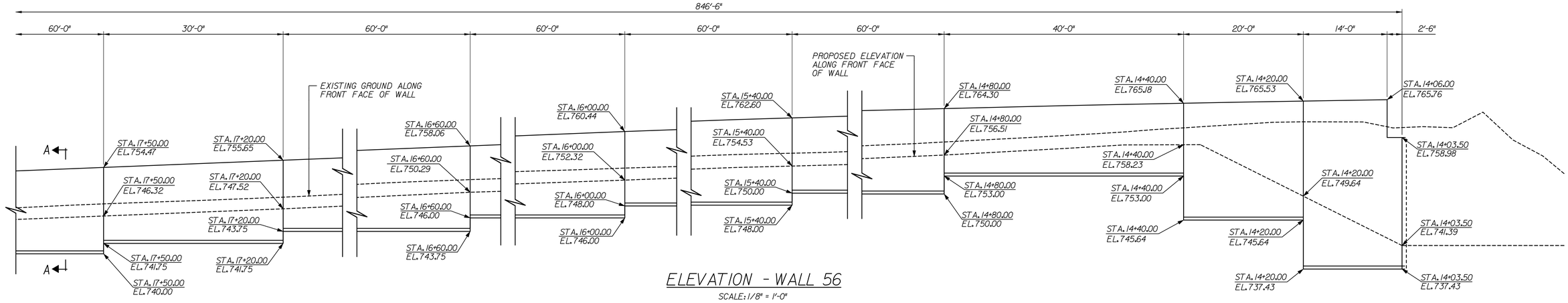
PLAN

SCALE: 1" = 50'



ELEVATION - WALL 56

SCALE: 1/8" = 1'-0"



ELEVATION - WALL 56

SCALE: 1/8" = 1'-0"

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

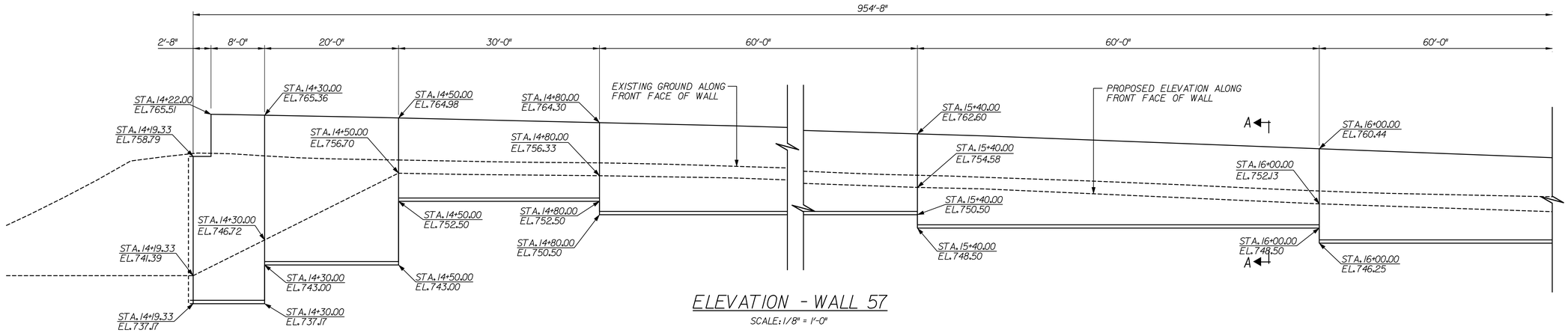
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CHECKED: SJC CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS

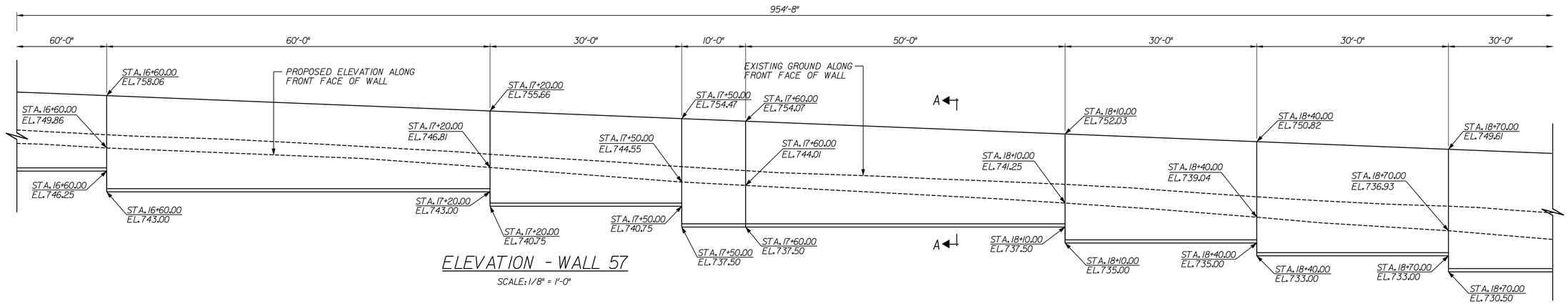
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AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	22 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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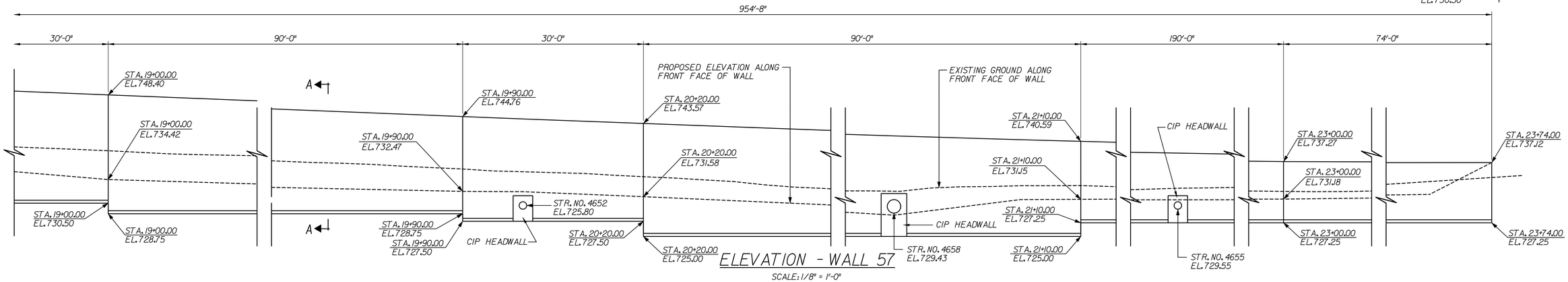
ELEVATION - WALL 57

SCALE: 1/8" = 1'-0"



ELEVATION - WALL 57

SCALE: 1/8" = 1'-0"



ELEVATION - WALL 57

SCALE: 1/8" = 1'-0"

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian, DESIGN ENGINEER — 10-15-2007, DATE

DESIGNED: MAB | DRAWN: MAB

CHECKED: SJC | CHECKED: SJC

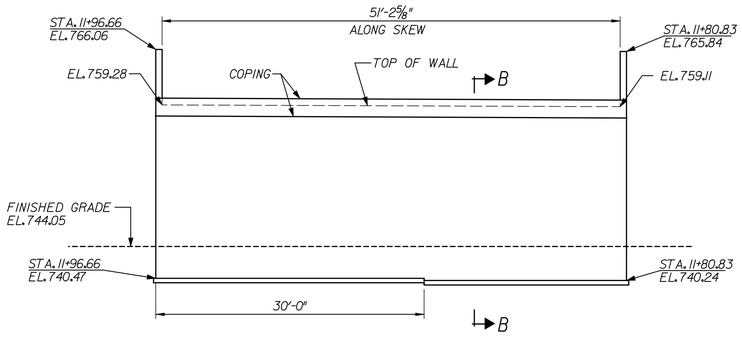
INDIANA
DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

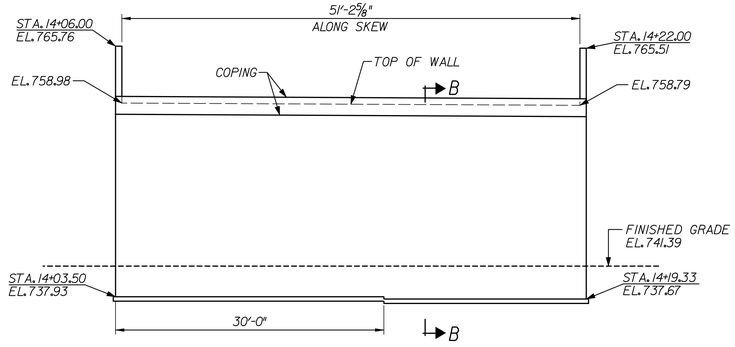
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CONTRACT	PROJECT
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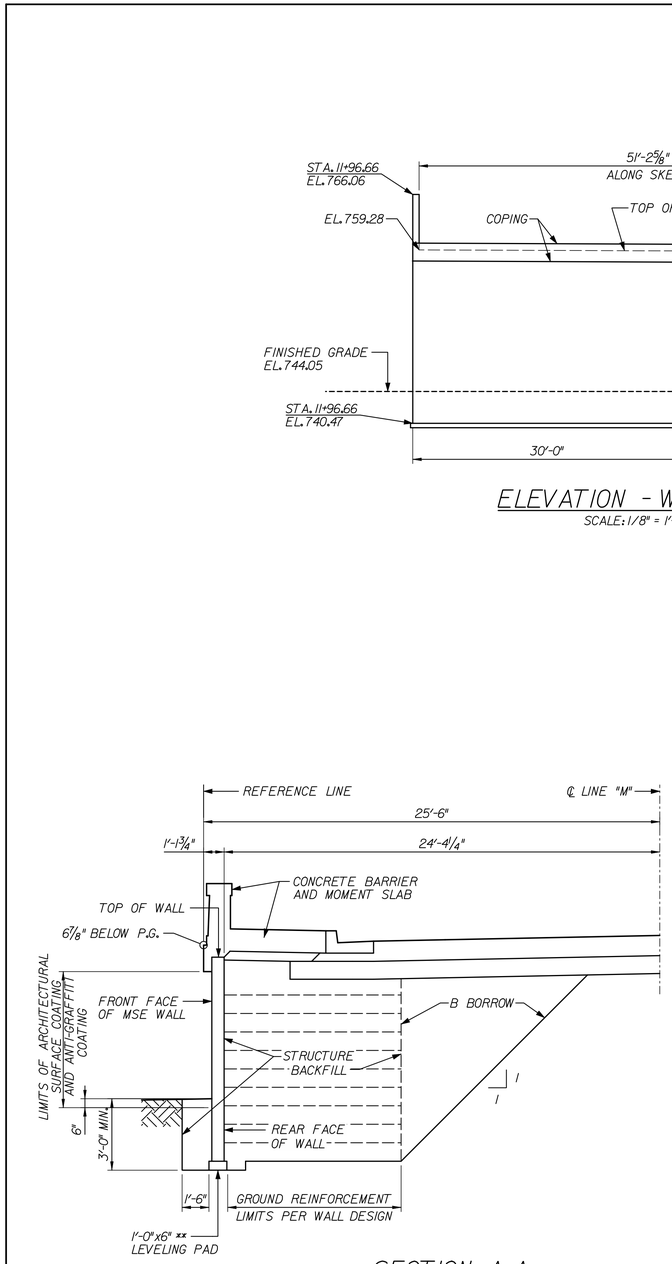
ELEVATION - WALL 54A

SCALE: 1/8" = 1'-0"



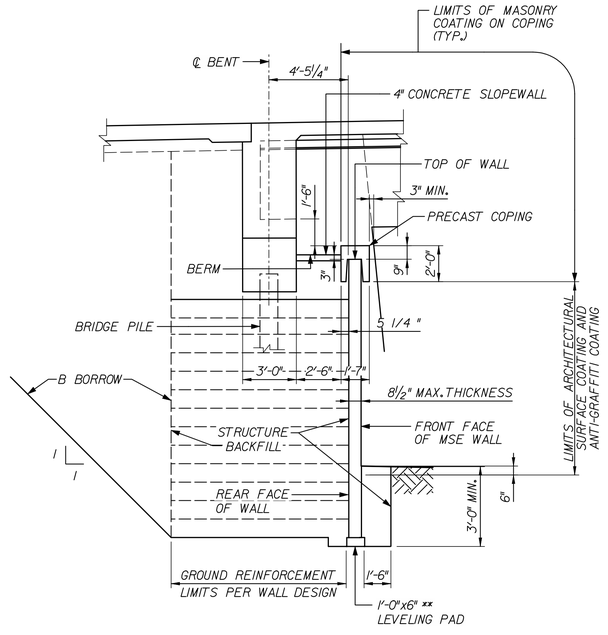
ELEVATION - WALL 56A

SCALE: 1/8" = 1'-0"



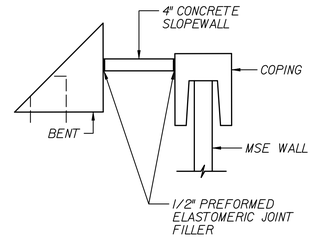
SECTION A-A

SCALE: 1/4" = 1'-0"



SECTION B-B

SCALE: 1/4" = 1'-0"



SLOPEWALL DETAIL

SCALE: 1/2" = 1'-0"

NOTES:
** LEVELING PAD SIZE SHALL BE PER MANUFACTURER'S RECOMMENDATIONS (1'-0" x 6" MINIMUM SIZE)

ALL STATIONS AND OFFSETS GIVEN FOR WALL LOCATIONS ARE AT THE REAR FACE OF WALL UNLESS OTHERWISE NOTED.

ARCHITECTURAL SURFACE COATING ON MSE WALL SHALL MEET FEDERAL COLOR STANDARD 595B, COLOR NO. 36586.

MASONRY COATING ON PRECAST COPING SHALL MEET FEDERAL COLOR STANDARD 595B, COLOR NO. 37722

CIP HEADWALLS TO BE DETAILED IN SHOP DRAWINGS

MSE WALLS SHALL BE DESIGNED FOR 100 YEAR DESIGN LIFE BETWEEN STA 11+50 AND 14+50.

PIPE INVERT ELEVATIONS DESIGNATED AT EXTERIOR FACE OF WALL.

MAXIMUM NET ALLOWABLE BEARING PRESSURE

WALL 54, 55 - 4000 PSF
WALL 56, 57 - 3500 PSF
WALL 54A, 56A - 5000 PSF

TABLE OF WALL QUANTITIES

	FACE PANELS, CONCRETE (SFT)	WALL ERECTION (SFT)	LEVELING PAD, CONCRETE (LFT)	STRUCTURE BACKFILL (CYS)	B-BORROW (CYS)	ARCHITECTURAL SURFACE COATING (SFT)	ANTI-GRAFFITI COATING (SFT)	MASONRY COATING (SFT)
WALL 54	6620	6620	481	2933	1966	3370	3370	
WALL 55	9662	9662	747	3675	2355	5373	5373	
WALL 54A	965	965	51	406	0	802	802	184
WALL 56	10530	10530	847	3851	2296	5527	5527	
WALL 57	13929	13929	995	5688	4155	7953	7953	
WALL 56A	1080	1080	51	782	0	923	923	184
TOTAL	42786	42786	3172	17337	10772	23948	23948	368

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

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DESIGN ENGINEER DATE

DESIGNED: MAB DRAWN: MAB/TMT
CHECKED: AEO CHECKED: AEO

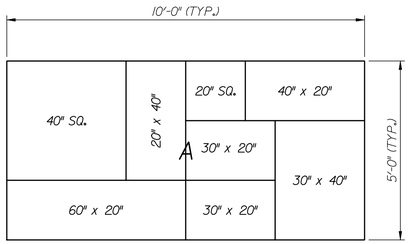
INDIANA DEPARTMENT OF TRANSPORTATION

MSE WALL DETAILS

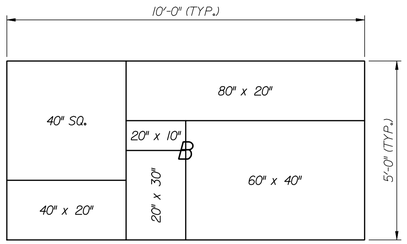
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512

SURVEY BOOK	SHEET NO.
	24 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

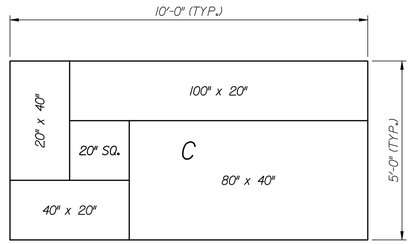
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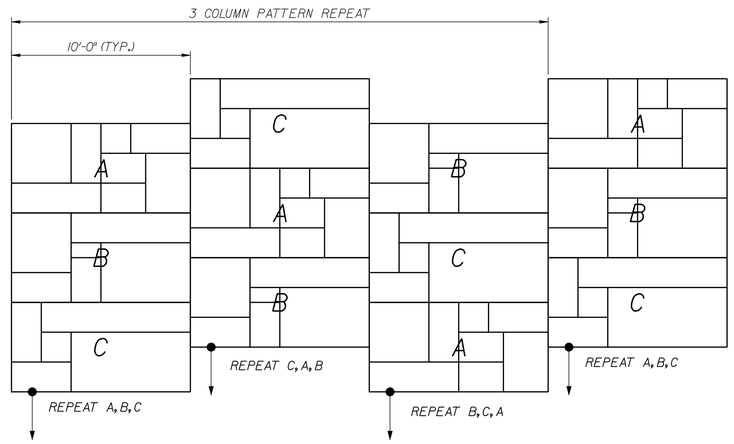
ELEVATION
SCALE: 1/2" = 1'-0"



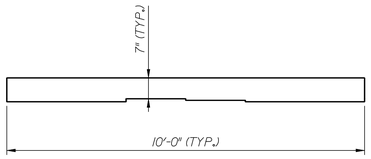
ELEVATION
SCALE: 1/2" = 1'-0"



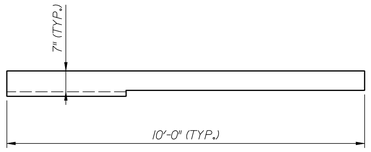
ELEVATION
SCALE: 1/2" = 1'-0"



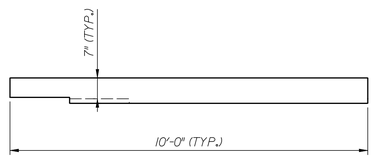
TYPICAL ELEVATION
SCALE: 1/4" = 1'-0"



PLAN
SCALE: 1/2" = 1'-0"



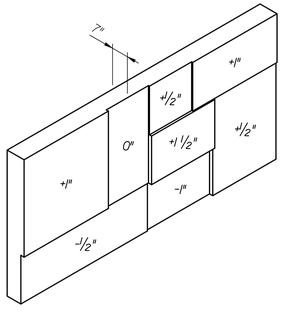
PLAN
SCALE: 1/2" = 1'-0"



PLAN
SCALE: 1/2" = 1'-0"

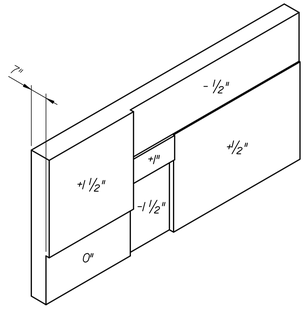


TYPICAL PLAN
SCALE: 1/4" = 1'-0"



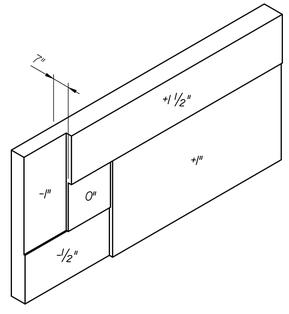
ISOMETRIC
SCALE: 1/2" = 1'-0"

PANEL A



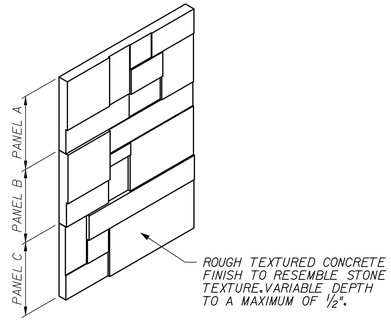
ISOMETRIC
SCALE: 1/2" = 1'-0"

PANEL B



ISOMETRIC
SCALE: 1/2" = 1'-0"

PANEL C



TYPICAL ISOMETRIC
SCALE: 1/4" = 1'-0"

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 — DATE

DESIGNED: MAB | DRAWN: MAB

CHECKED: SJC | CHECKED: SJC

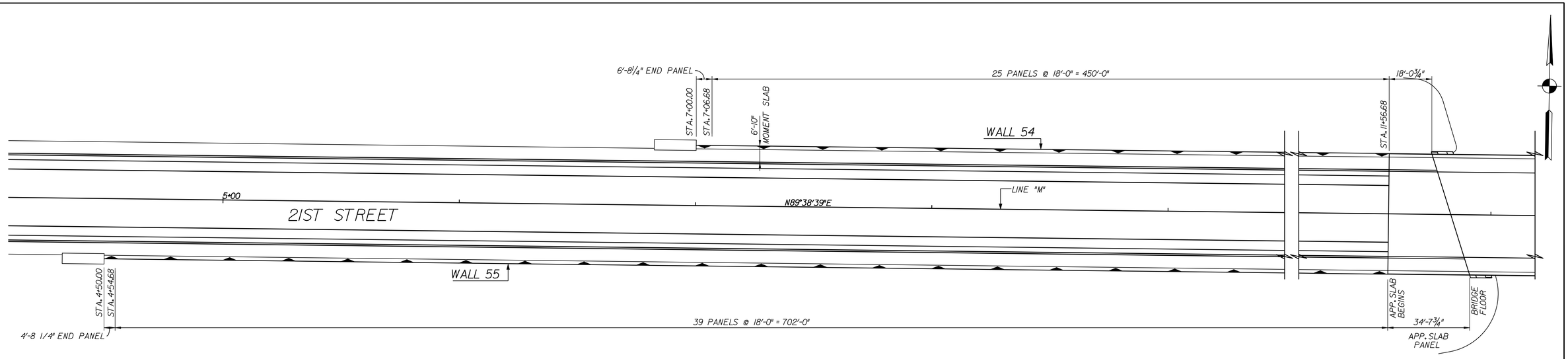
INDIANA
DEPARTMENT OF TRANSPORTATION

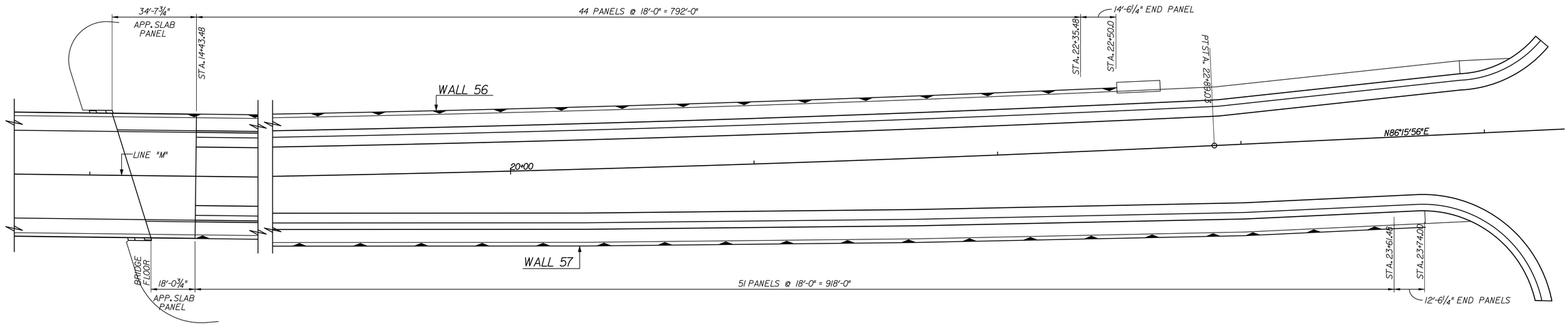
MSE WALL DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512

SURVEY BOOK	SHEET NO.
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CONTRACT	PROJECT
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MOMENT SLAB PANEL LAYOUT

SCALE: 1" = 20'-0

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

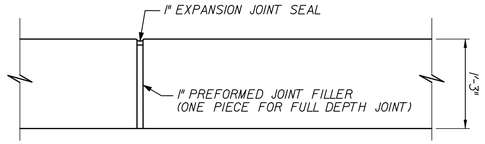
DESIGNED: SG DRAWN: TMT
CHECKED: AEO CHECKED: AEO

INDIANA DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS

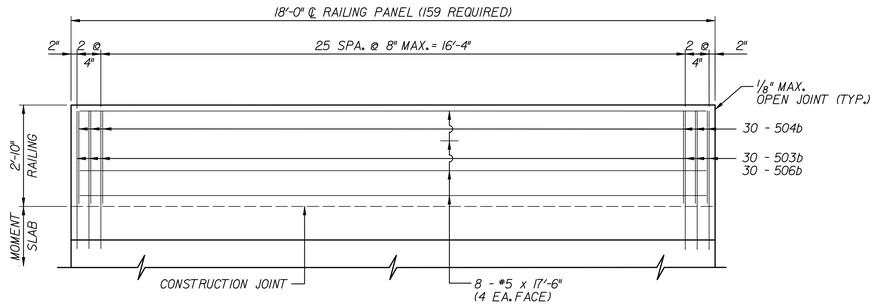
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AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	26 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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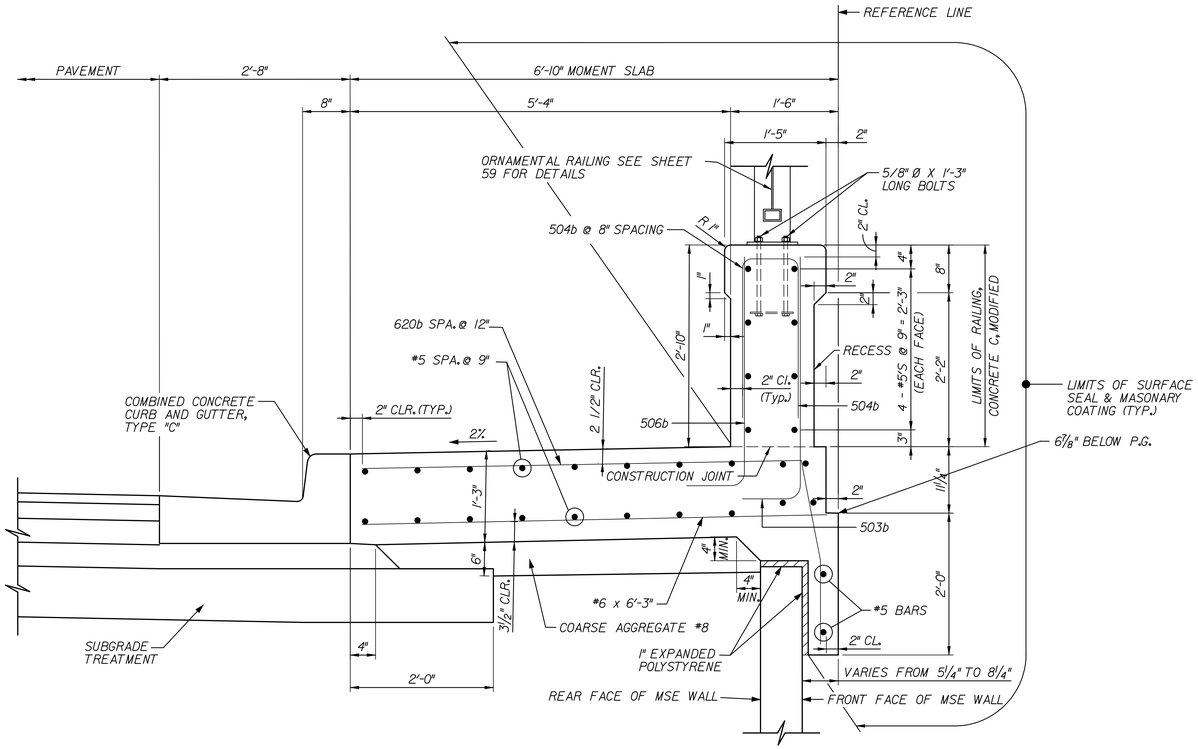
SECTION THROUGH 1" EXPANSION JOINT

SCALE: 1"= 1'-0"



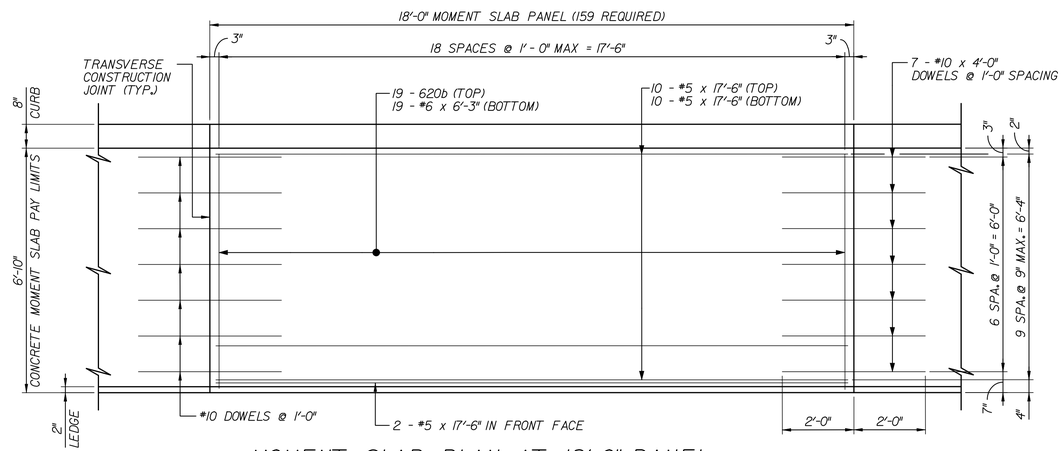
RAILING ELEVATION AT 18'-0" PANEL

SCALE: 1/2" = 1'-0"



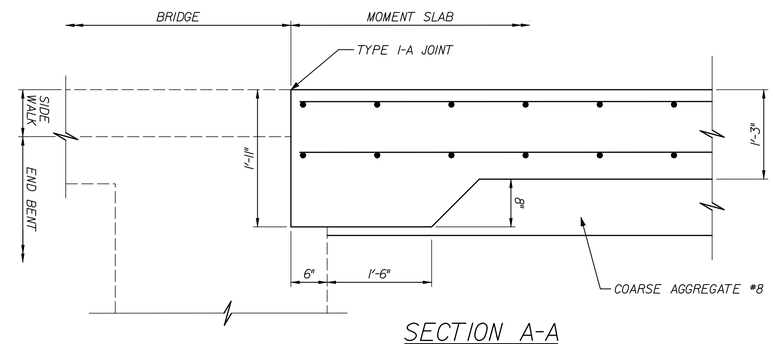
MOMENT SLAB SECTION AT PAVEMENT & RAILING

SCALE: 1"= 1'-0"



MOMENT SLAB PLAN AT 18'-0" PANEL

SCALE: 1/2"= 1'-0"



SECTION A-A

SCALE: 1"= 1'-0"

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DESIGNED: SG | DRAWN: MAB

CHECKED: AEO | CHECKED: AEO

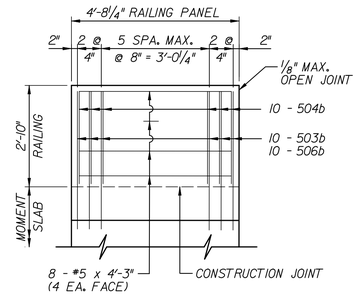
INDIANA DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512

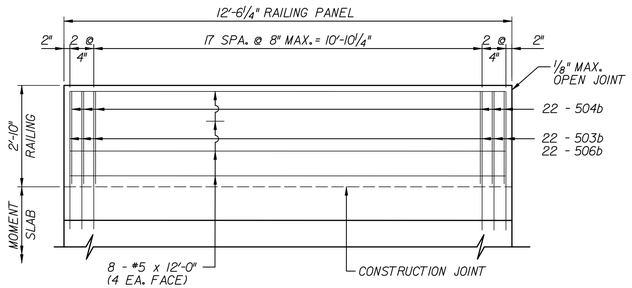
SURVEY BOOK	SHEET NO.
	27 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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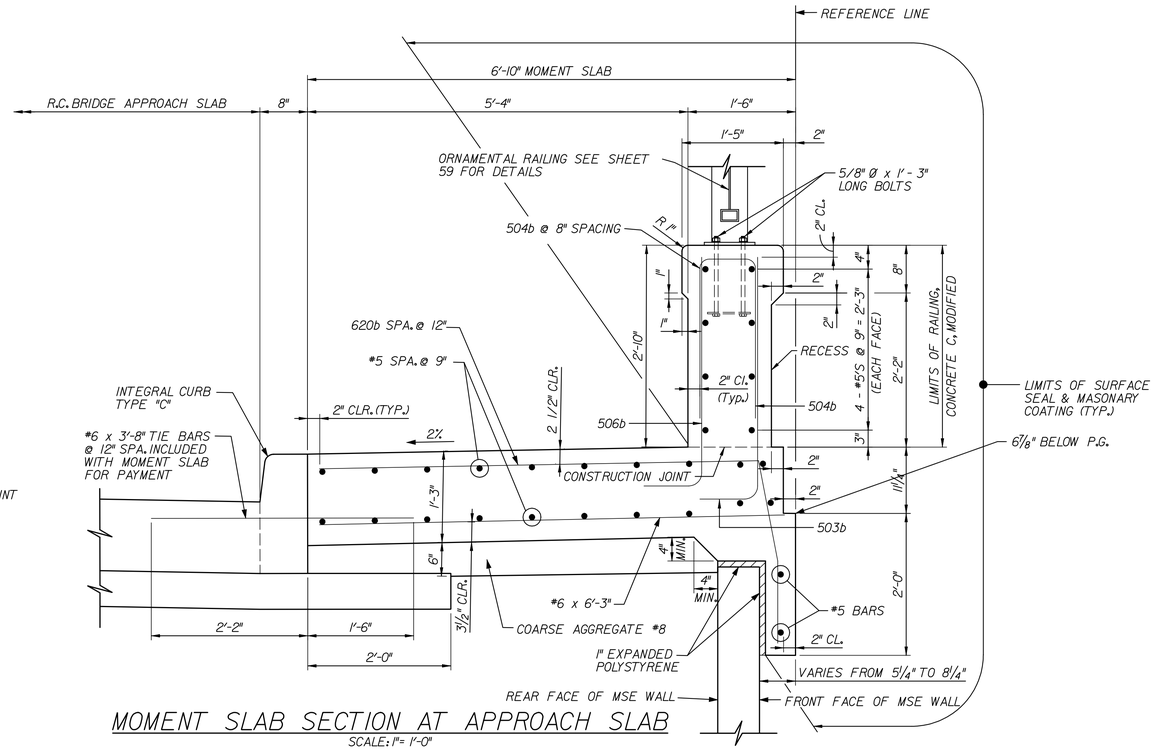
RAILING ELEVATION AT 4'-8 1/4" PANEL

SCALE: 1/2" = 1'-0 (1 REQUIRED)



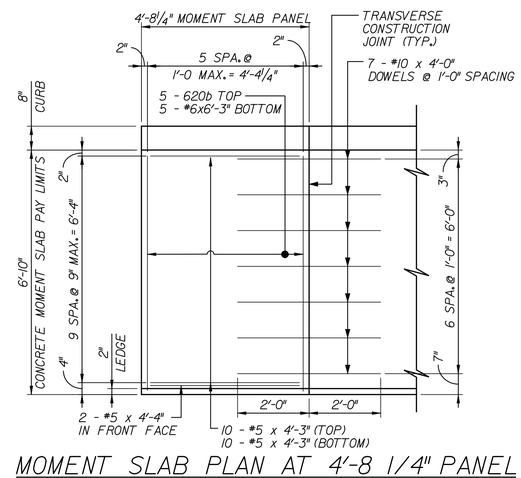
RAILING ELEVATION AT 12'-6 1/4" PANEL

SCALE: 1/2" = 1'-0 (1 REQUIRED)



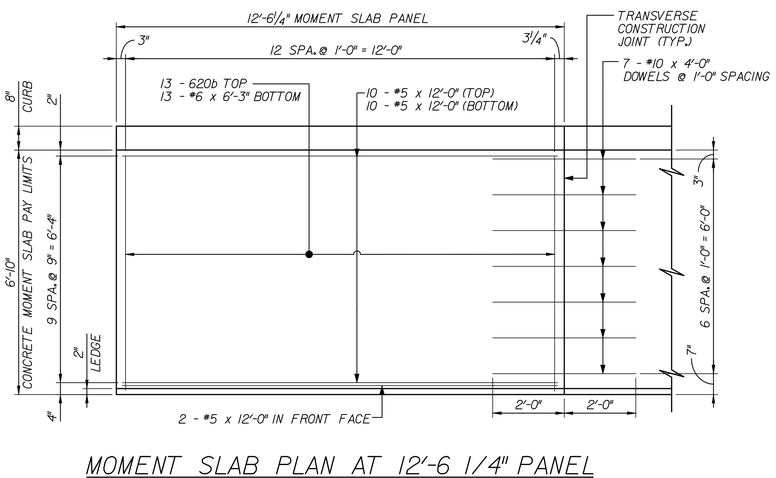
MOMENT SLAB SECTION AT APPROACH SLAB

SCALE: 1" = 1'-0"



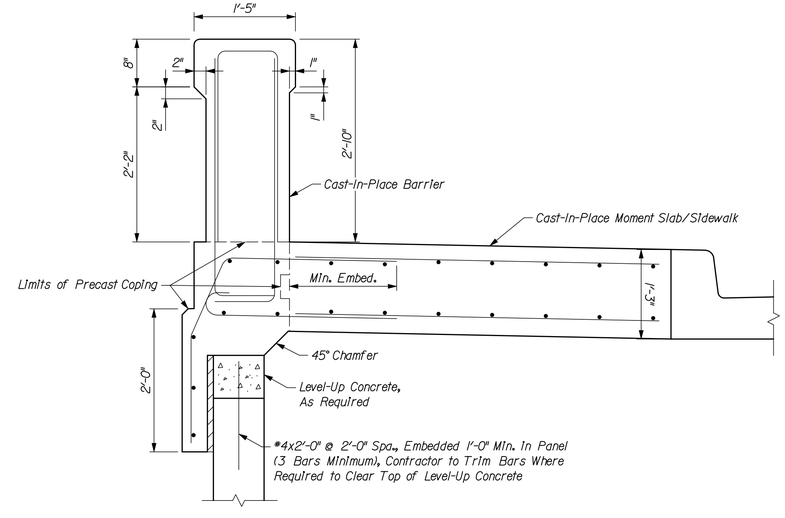
MOMENT SLAB PLAN AT 4'-8 1/4" PANEL

SCALE: 1/2"= 1'-0" (1 REQUIRED)



MOMENT SLAB PLAN AT 12'-6 1/4" PANEL

SCALE: 1/2" = 1'-0 (1 REQUIRED)



ALTERNATE PRECAST COPING DETAIL

Scale: 1" = 1'-0"

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

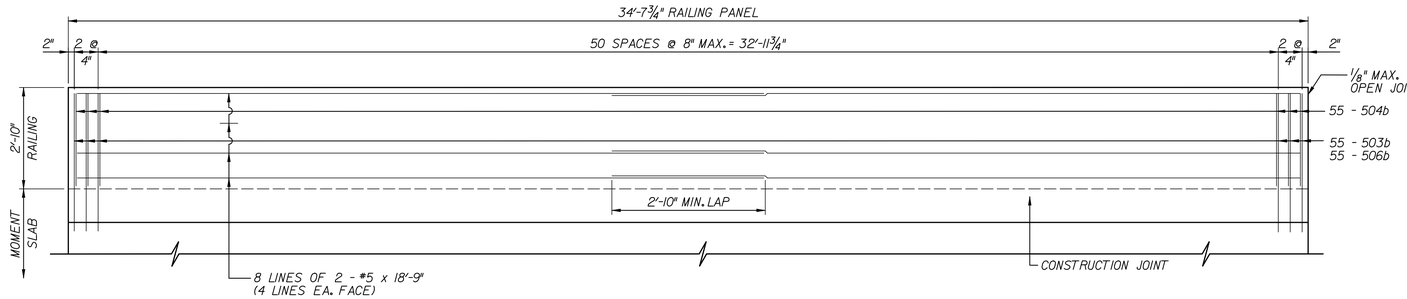
DESIGNED: SG DRAWN: TMT
CHECKED: AEO CHECKED: AEO

INDIANA DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS

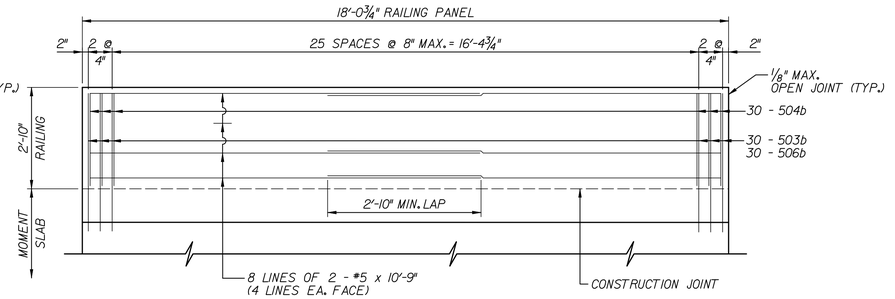
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	28 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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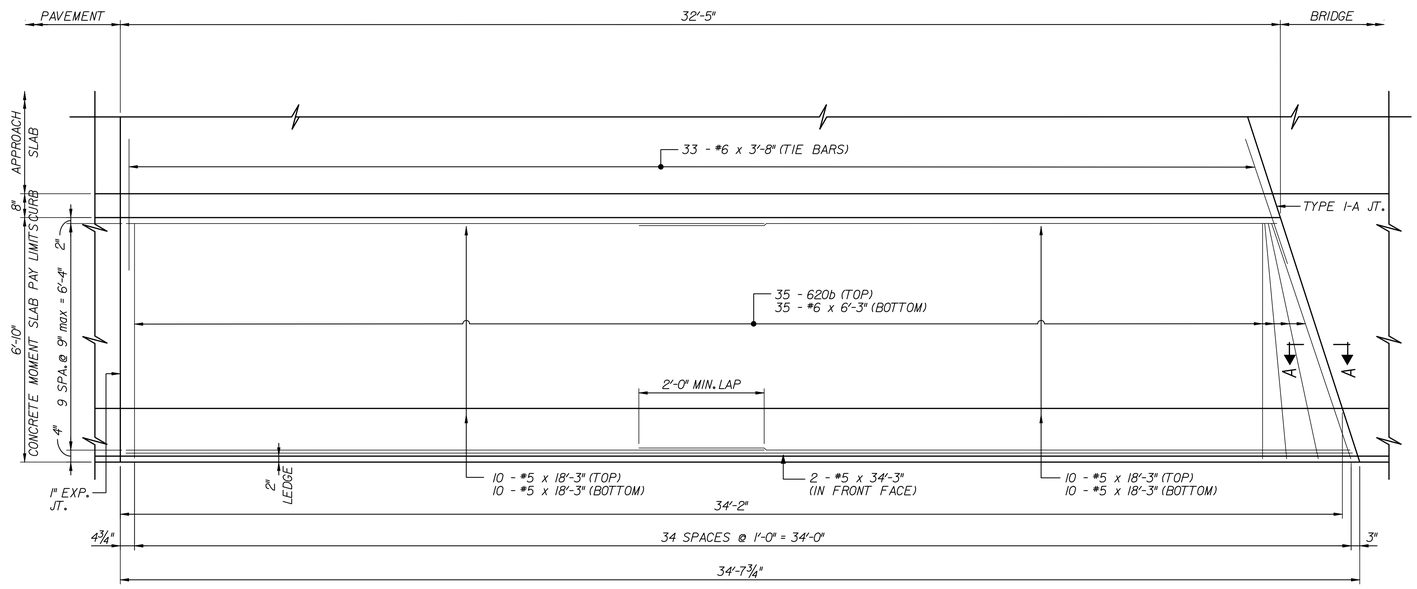
RAILING ELEVATION AT 34'-7 3/4" PANEL

SCALE: 1/2" = 1'-0 (2 REQUIRED)



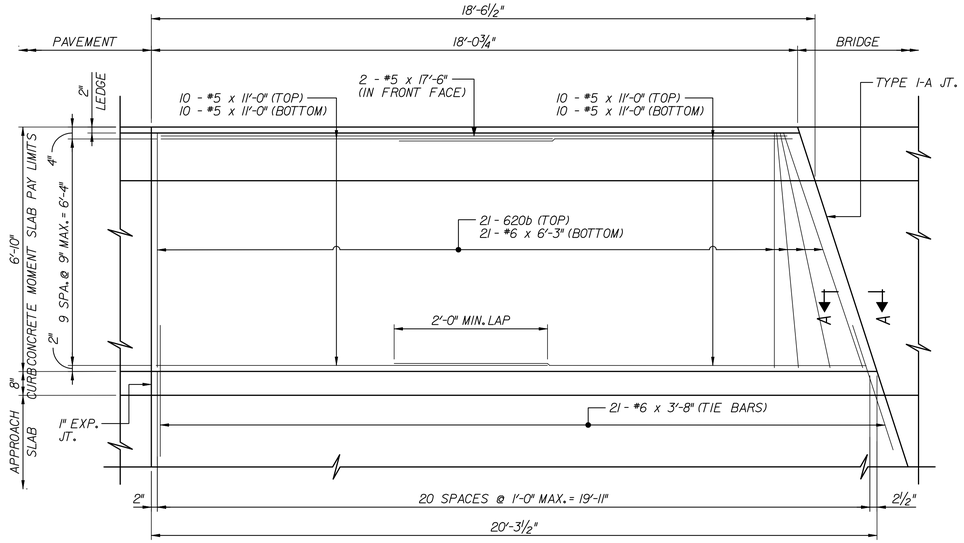
RAILING ELEVATION AT 18'-0 3/4" PANEL

SCALE: 1/2" = 1'-0 (2 REQUIRED)



PLAN, MOMENT SLAB PANEL AT APPROACH SLAB

SCALE: 1/2"= 1'-0" (TWO REQUIRED)



PLAN, MOMENT SLAB PANEL AT APPROACH SLAB

SCALE: 1/2"= 1'-0" (TWO REQUIRED)

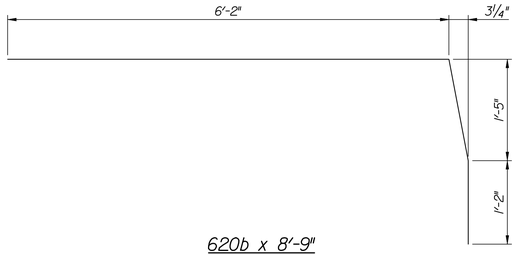
NOTE:
SEE SHEET 27 FOR 1" EXP. JOINT DETAILS AND SECTION A-A

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

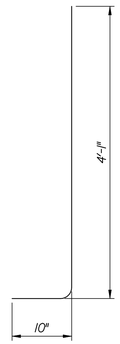
RECOMMENDED FOR APPROVAL	Stephen J. Christian — DESIGN ENGINEER	10-15-2007 — DATE	INDIANA DEPARTMENT OF TRANSPORTATION
DESIGNED: SG	DRAWN: TMT	CHECKED: AEO	CHECKED: AEO	MOMENT SLAB DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	29 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

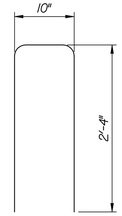
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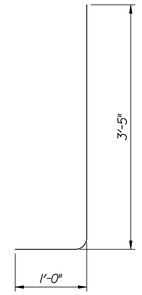
620b x 8'-9"



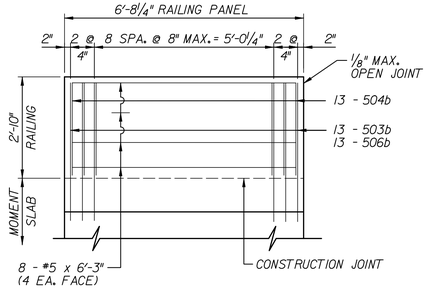
503b x 4'-11"



504b x 5'-6"

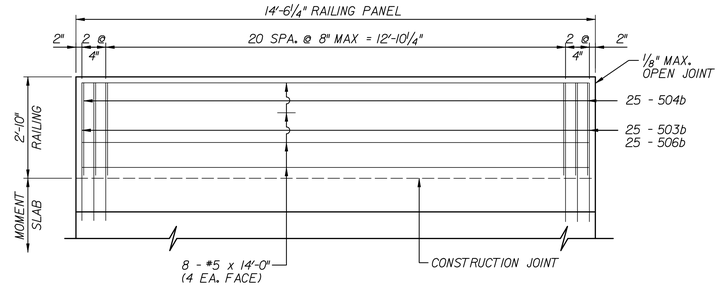


506b x 4'-5"



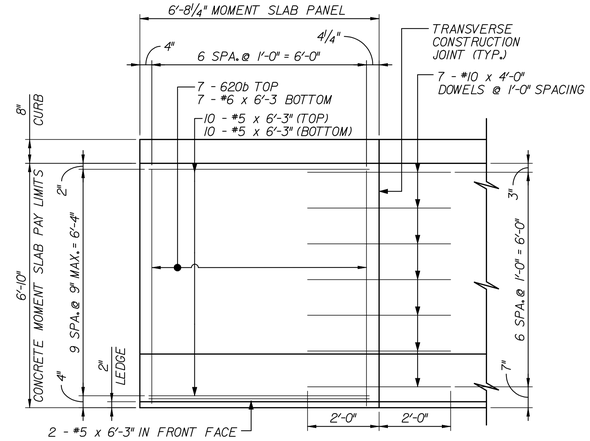
RAILING ELEVATION AT 6'-8 1/4" PANEL

SCALE: 1/2" = 1'-0 (1 REQUIRED)



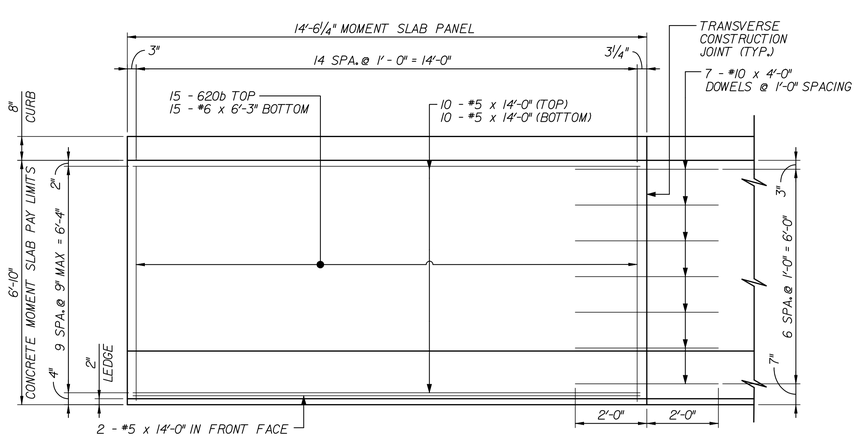
RAILING ELEVATION AT 14'-6 1/4" PANEL

SCALE: 1/2" = 1'-0 (1 REQUIRED)



MOMENT SLAB PLAN AT 6'-8 1/4" PANEL

SCALE: 1/2"= 1'-0" (1 REQUIRED)



MOMENT SLAB PLAN AT 14'-6 1/4" PANEL

SCALE: 1/2"= 1'-0" (1 REQUIRED)

BILL OF MATERIALS MOMENT SLAB & APPROACH CONCRETE RAIL

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
503b	5010	4'-11"	
504b	5010	5'-6"	
506b	5010	4'-5"	
#5	32	18'-9"	
#5	1272	17'-6"	
#5	8	14'-0"	
#5	8	12'-0"	
#5	32	10'-9"	
#5	8	6'-3"	
#5	8	4'-3"	
TOTAL #5			10201?
TOTAL EPOXY COATED REINFORCING			10201?
RAILING, CONCRETE, C, MODIFIED			
34'-7 3/4" PANEL (4.45 CYS x 2)			8.9 CYS
18'-0 3/4" PANEL (2.3 CYS x 2)			4.6 CYS
18'-0" PANEL (2.31 CYS x 159)			368.0 CYS
14'-6 1/4" PANEL (1.9 CYS x 1)			1.9 CYS
6'-8 1/4" PANEL (0.9 CYS x 1)			0.9 CYS
12'-6 1/4" PANEL (1.6 CYS x 1)			1.6 CYS
4'-8 1/4" PANEL (0.6 CYS x 1)			0.6 CYS
RAILING, CONCRETE, C, MODIFIED			386.5 CYS
MISCELLANEOUS			
RAILING, STEEL, ORNAMENTAL			3002.0 LFT
REINFORCED CONCRETE MOMENT SLAB, 15 IN.			2282 SYS
SURFACE SEAL (33,328 SFT)			1 LSUM
MASONRY COATING (33,328 SFT)			1 LSUM

NOTES:
ALL REINFORCING IN RAILING AND MOMENT SLAB SHALL BE EPOXY COATED.

REINFORCING STEEL IN MOMENT SLAB IS INCLUDED IN THE PAY ITEM "REINFORCED CONCRETE MOMENT SLAB, 15 IN."

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DESIGNED: SG | DRAWN: TMT

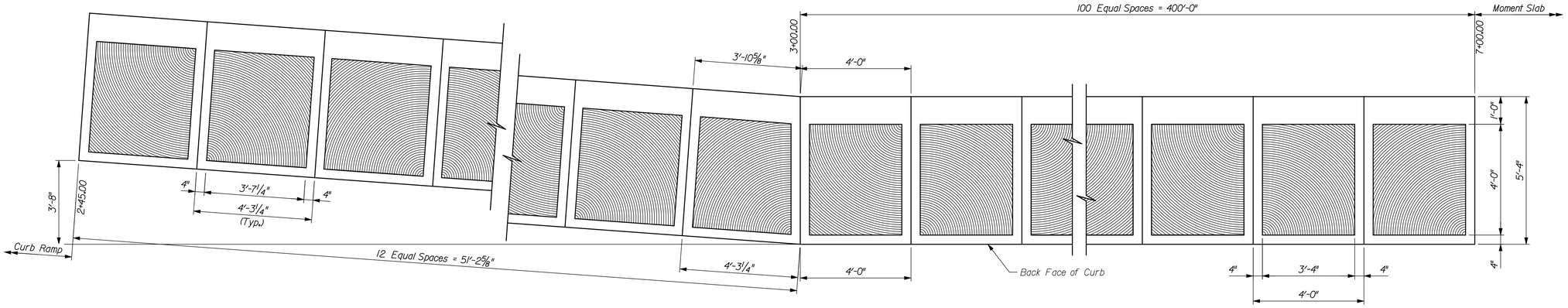
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INDIANA DEPARTMENT OF TRANSPORTATION

MOMENT SLAB DETAILS

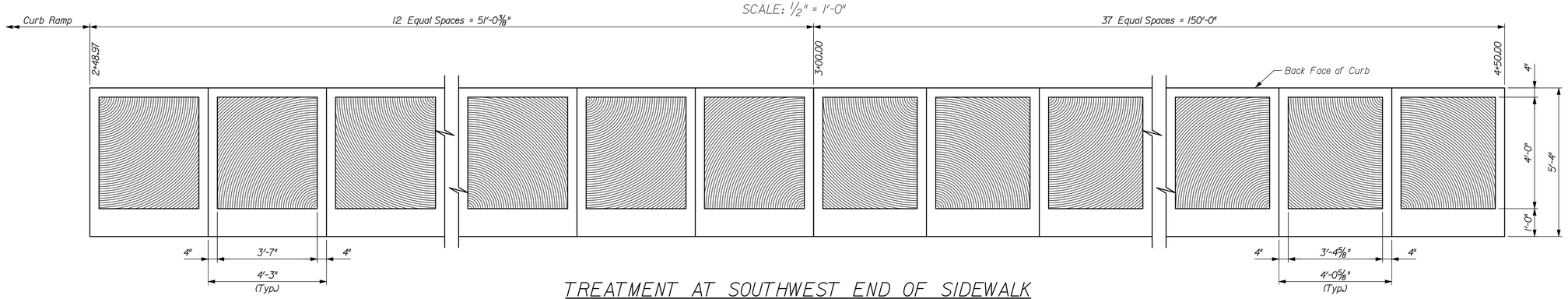
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	30 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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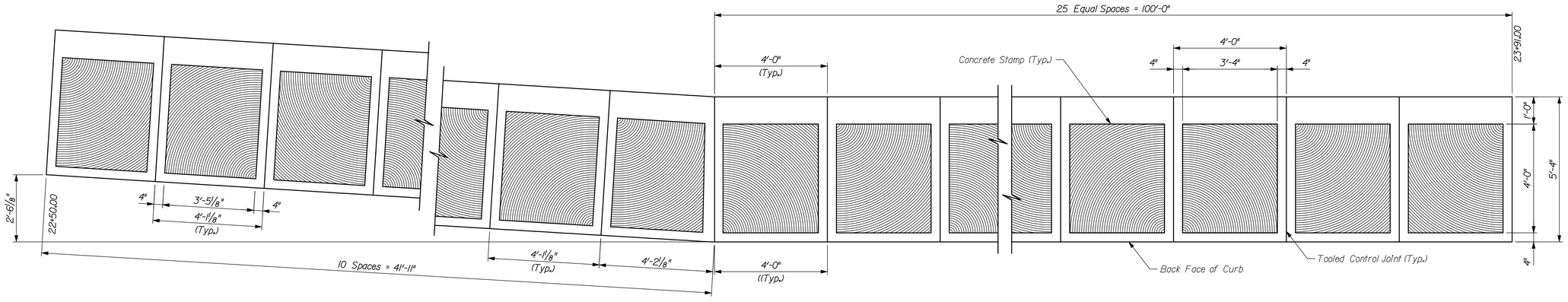
TREATMENT AT NORTHWEST END OF SIDEWALK

SCALE: ½" = 1'-0"



TREATMENT AT SOUTHWEST END OF SIDEWALK

SCALE: ½" = 1'-0"



TREATMENT AT NORTHEAST END OF SIDEWALK

SCALE: ½" = 1'-0"

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DESIGNED: SG — DRAWN: MAB

CHECKED: AEO — CHECKED: AEO

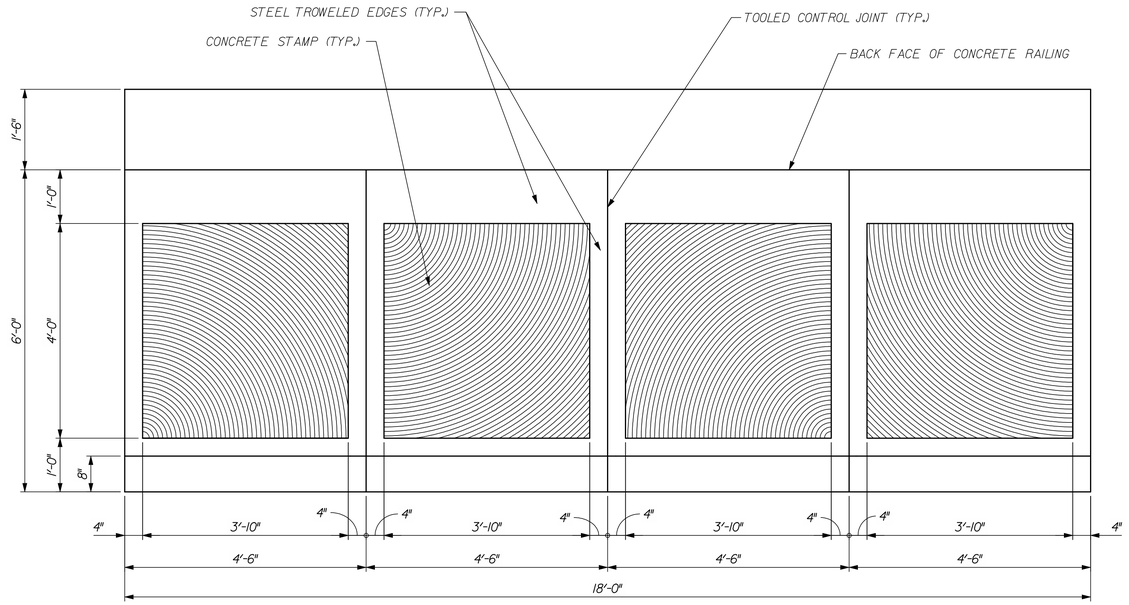
INDIANA DEPARTMENT OF TRANSPORTATION

SIDEWALK ARCHITECTURAL TREATMENT

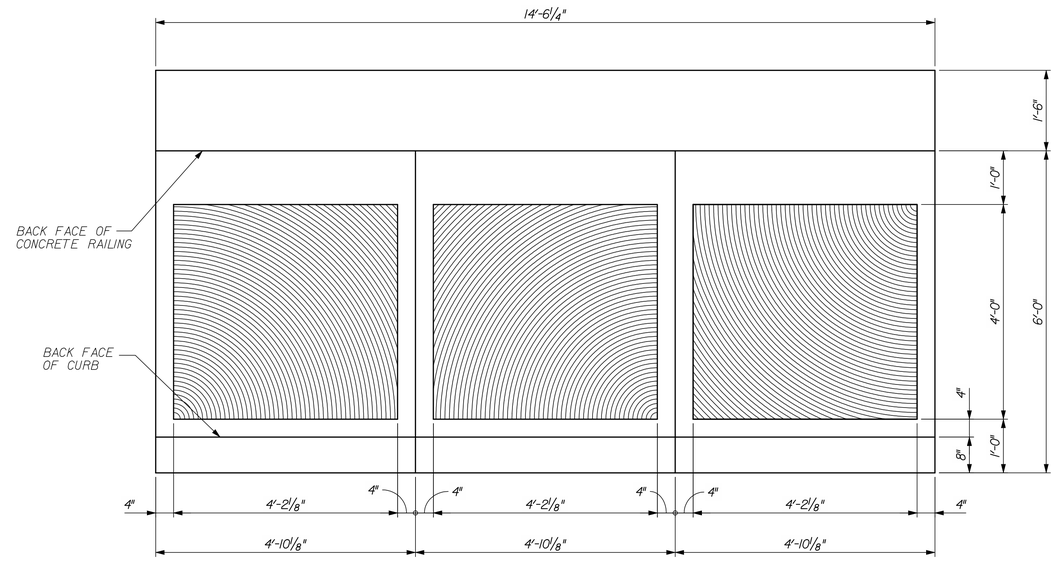
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		31 of 108
CONTRACT		PROJECT
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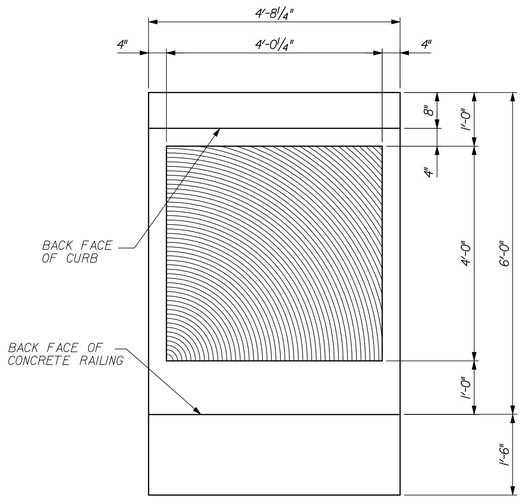
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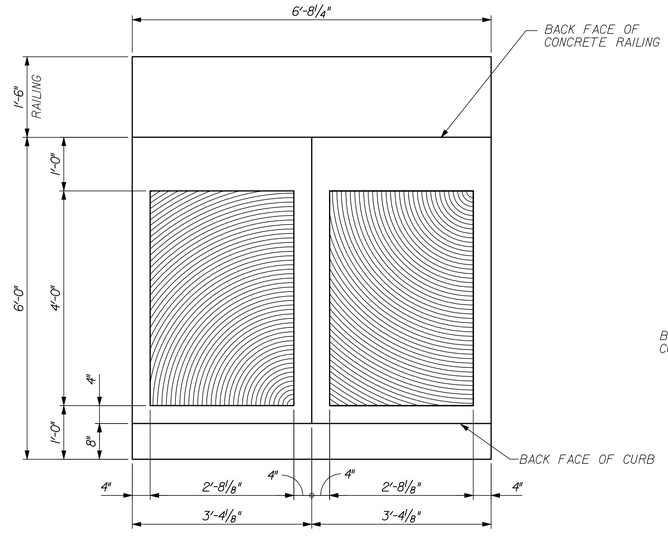
TREATMENT AT MOMENT SLAB



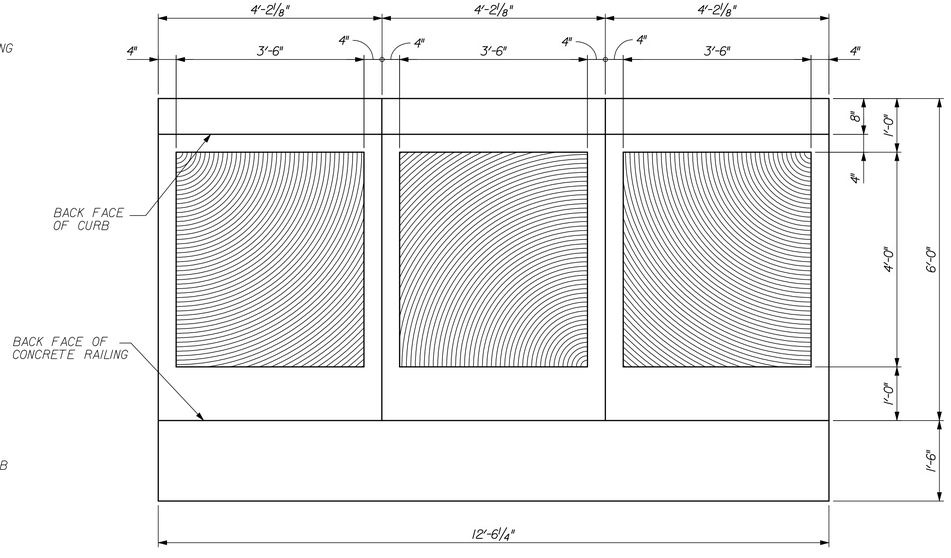
TYPICAL TREATMENT AT 14'-6 1/4" PANEL



TYPICAL TREATMENT AT 4' - 8 1/4" PANEL



TYPICAL TREATMENT AT 6' - 8 1/4" PANEL



TYPICAL TREATMENT AT 12' - 6 1/4" PANEL

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: MAB
CHECKED: AEO CHECKED: AEO

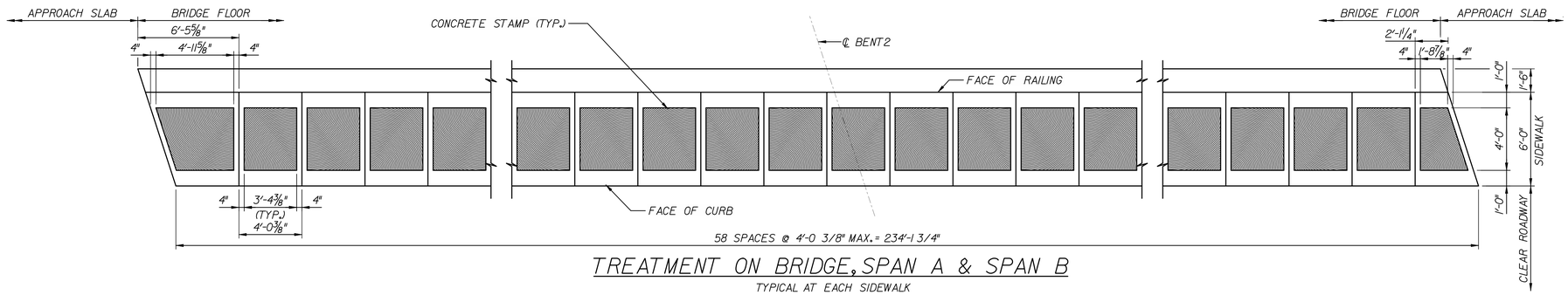
INDIANA DEPARTMENT OF TRANSPORTATION

SIDEWALK ARCHITECTURAL TREATMENT

HORIZONTAL SCALE	BRIDGE FILE
3/4" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	32 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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TREATMENT ON BRIDGE, SPAN A & SPAN B

TYPICAL AT EACH SIDEWALK

SCALE: 1/4" = 1'-0"

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12/4/2007
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STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 — DATE

DESIGNED: SG | DRAWN: TMT

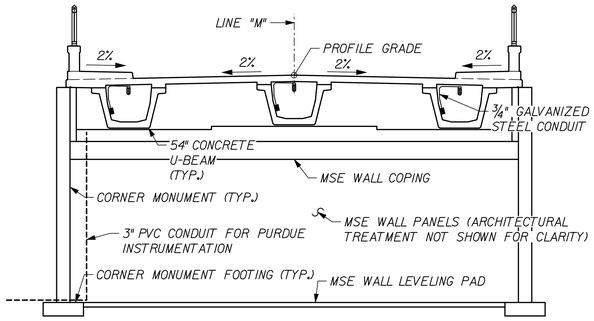
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INDIANA
DEPARTMENT OF TRANSPORTATION

SIDEWALK ARCHITECTURAL TREATMENT

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

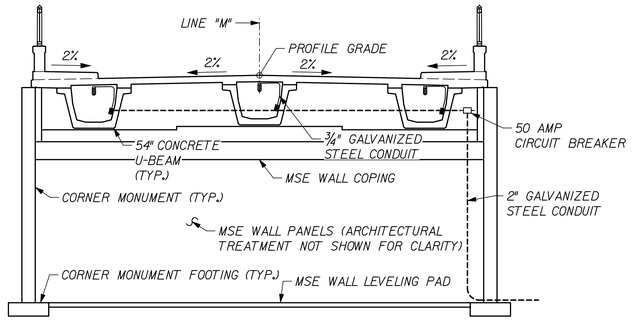
SURVEY BOOK		SHEET NO.
		33 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	



END BENT NO. 1 ELEVATION

(LOOKING BACK STATION)

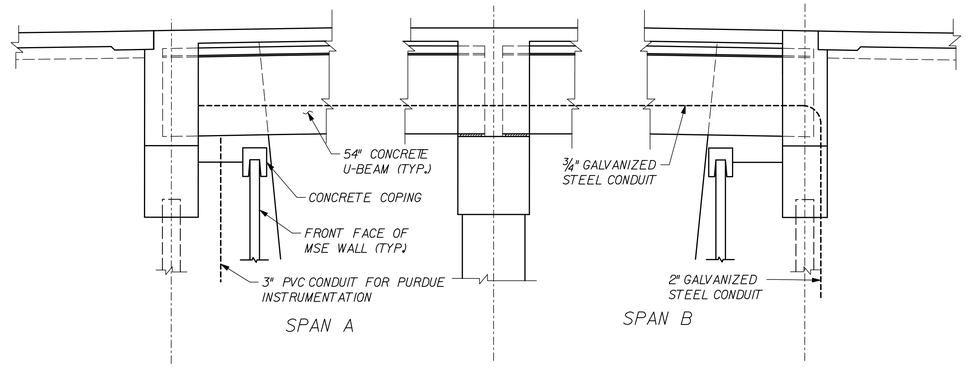
SCALE: 1/8" = 1'-0"



END BENT NO. 3 ELEVATION

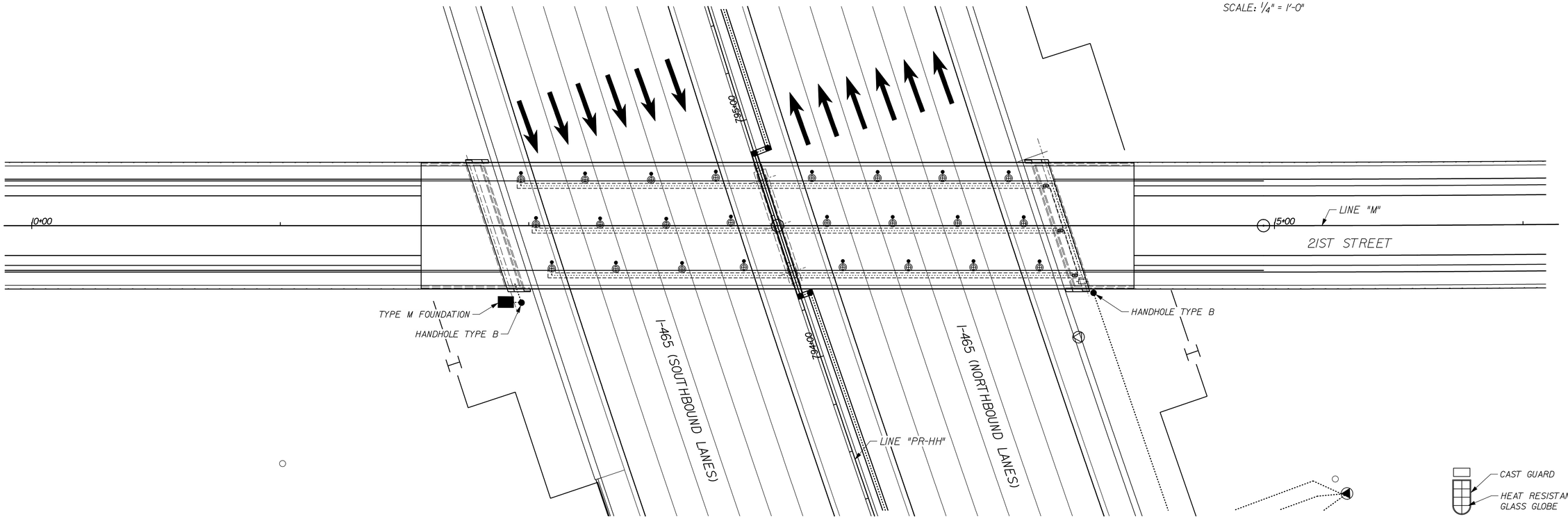
(LOOKING AHEAD STATION)

SCALE: 1/8" = 1'-0"

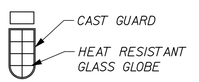


LONGITUDINAL SECTION

SCALE: 1/4" = 1'-0"



21ST STREET INTERIOR U-BEAM LIGHTING CONDUIT & PURDUE INSTRUMENTATION CONDUIT



TYPICAL CEILING MOUNTED 120 VOLT NON-METALIC COMPACT FLUORESCENT WATER-PROOF FIXTURE WITH 18 WATT COMPACT FLUORESCENT LAMPS

LEGEND

- ¾" CONDUIT CLAMPED AT 4' SPACING
- 4-1CNO 4 CU CONDUCTOR IN 2" GALVANIZED STEEL CONDUIT
- 4-1CNO 4 CU CONDUCTOR IN PLASTIC DUCT IN TRENCH
- PROPOSED SERVICE POINT, TYPE II
- EXISTING SERVICE POINT
- CONTROLLER CABINET FOR PURDUE UNIVERSITY TESTING
- TYPICAL 120V GFI TYPE DUPLEX RECEPTACLE IN WEATHERPROOF ENCLOSURE
- 12/240V, 1PH, 3W LOAD CENTER WITH 50A MAIN CIRCUIT BREAKER IN NEMA 3R ENCLOSURE MOUNT TO DIAPHRAM WALL
- ON/OFF SWITCH (TYP.)
- FLUORESCENT LIGHT

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SNM DRAWN: DH
CHECKED: GCV CHECKED: SNM

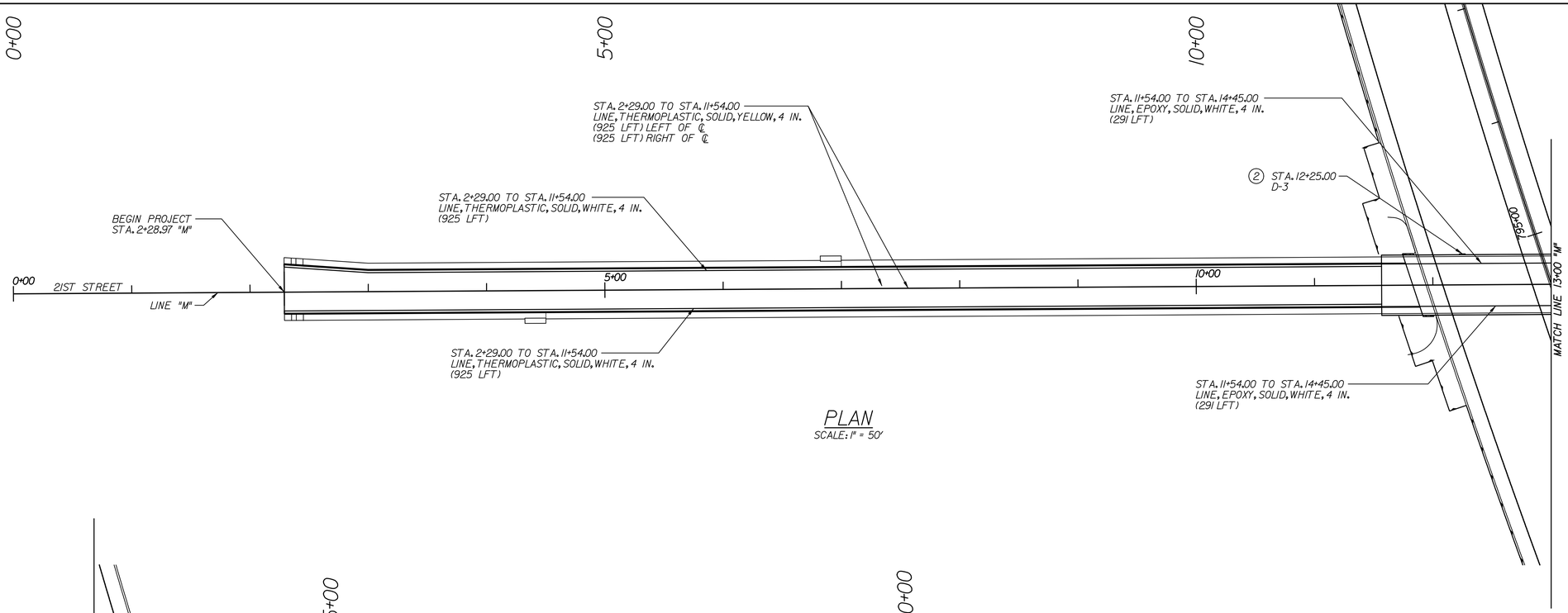
INDIANA DEPARTMENT OF TRANSPORTATION

ELECTRICAL AND INSTRUMENTATION DETAILS

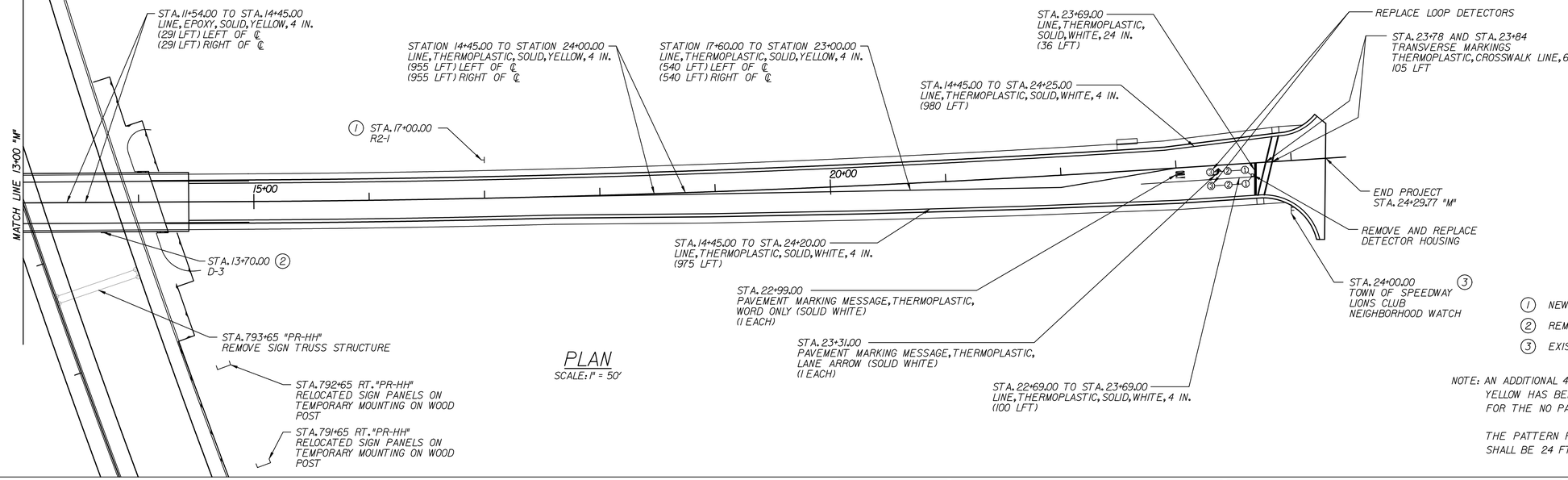
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1" = 20'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
	MD-001E	34 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

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PLAN
SCALE: 1" = 50'



PLAN
SCALE: 1" = 50'

LEGEND

1. NEW SIGN ON NEW SUPPORTS
2. REMOVE EXISTING SIGN AND SUPPORTS
3. EXISTING SIGN AND SUPPORTS

NOTE: AN ADDITIONAL 458 LFT LINE, THERMOPLASTIC, SOLID, YELLOW HAS BEEN INCLUDED AS AN UNDISTRIBUTED QUANTITY FOR THE NO PASSING ZONE BEYOND THE PROJECT LIMITS.

THE PATTERN FOR THERMOPLASTIC SOLID EDGE LINES SHALL BE 24 FT OF LINE WITH 1'-0" BREAK.

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: AJE | DRAWN: AJE
CHECKED: SJC | CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

SIGNING AND
PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK	SHEET NO.
	35 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SHEET SIGN AND POST SUMMARY

SIGN								POST															
												SQUARE											
												2" x 2" x 12 GAGE						2 1/4 " x 2 1/4 " x 12 GAGE					
												REINFORCED			UNREINFORCED			REINFORCED			UNREINFORCED		
LINE	LOCATION	SIGN CODE	SIGN SIZE	DESCRIPTION	ENCAPSULATED LENS REFLECTIVE SHEETING			TEMPORARY PANEL SIGN SUPPORTS				POST LENGTH (FT.)			POST LENGTH (FT.)			POST LENGTH (FT.)			POST LENGTH (FT.)		REMARKS
					PANEL SIGN AREA (SFT)			POST LENGTH (FT.)															
			(IN. x IN.)		0.080	0.100	0.080	1	2	3	TOTAL	1	2	TOTAL	1	2	TOTAL	1	2	TOTAL	1	TOTAL	
"M"	12+25 LT.	D-3	EXISTING SIGN	21ST ST.																			REMOVE EXISTING SIGN AND SUPPORTS
"M"	13+70 RT.	D-3	EXISTING SIGN	21ST ST.																			REMOVE EXISTING SIGN AND SUPPORTS
"M"	17+00 LT.	R2-1	EXISTING SIGN	SPEED LIMIT 40	5.0													10.7		10.7			NEW SIGN ON NEW POST
"M"	24+00 RT.		EXISTING SIGN	TOWN OF SPEEDWAY...														11.2	11.2	22.4			EXISTING SIGN ON NEW POSTS
"M"	24+00 RT.		EXISTING SIGN	LIONS CLUB																			EXIST. SIGN ON NEW POSTS WITH NEIGHBORHOOD WATCH & LIONS CLUB SIGNS
"M"	24+00 RT.		EXISTING SIGN	NEIGHBORHOOD WATCH																			EXIST. SIGN ON NEW POSTS WITH TOWN OF SPEEDWAY & LIONS CLUB SIGNS
PR-HH	793+65 RT.																						REMOVE EXISTING BOX TRUSS, SIGNS AND CIRCUITRY
																							REINSTALL SIGN PANELS ON TEMPORARY PANEL SIGN SUPPORTS
PR-HH	792+65 RT.		EXISTING SIGN	PEORIA, IL, SECOND RIGHT				22.5	22.5		45.0												RELOCATE EXISTING SIGN ON TEMPORARY SUPPORTS
PR-HH	791+65 RT.		EXISTING SIGN	CRAWFORDSVILLE ROAD,				22.5	22.5	22.5	67.50												RELOCATE EXISTING SIGN ON TEMPORARY SUPPORTS
				NEXT RIGHT																			
TOTALS					5.0						112.5									33.1			

STEPHEN J. CHRISTIAN
REGISTERED
NO. 20379
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: GAH DRAWN: MAB
CHECKED: SG CHECKED: SG

INDIANA
DEPARTMENT OF TRANSPORTATION

SIGNING AND PAVEMENT MARKING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	36 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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LOG OF TEST BORING

Project: Accelerate 465, DES. No. 9910900
Location: Indianapolis, Indiana
Client: INDOT, Geotechnical Section
4105 West 99th Street Carmel, Indiana 46032
317-875-7040/317-870-0314(Fax)

Boring No. S138
Surface Elevation 742.6
Proj. # IM-465-4 ( )
AW Proj. # 04IN0085
Sheet 2 of 2

Str. No. Br @21st St. | Station 794+85 | Offset 0 | Line PR-HH
Datum USGS | Weather Rain | Temperature 62 F | Inspector D. Harness

SAMPLE No.	Type	Rec (%)	N	Depth	DESCRIPTION/CLASSIFICATION and REMARKS	qu (qp) (tsf)	γ (pcf)	W (%)	LL (%)	PL (%)	PI (%)
13SS	X	40	29-50/4	55	Gray, Moist, Hard to Very Stiff, Clay Loam A-4 Test 04						
14SS	X	60	20-7-15	60							
15SS	X	30	40-50/4	65	Gray, Wet, Very Dense, Sandy Loam A-4 Test 03						
16SS	X	80	40-50-50/3	70							
17SS	X	70	41-50/3	75	Gray, Moist, Hard, Clay Loam A-4 Test 04		117.4	15.2			
				80	Boring Terminated at 75.0 feet						
				85							
				90							
				95							
				100							
				105							
				110							

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

LOG OF TEST BORING

Project: Accelerate 465, DES. No. 9910900
Location: Indianapolis, Indiana
Client: INDOT, Geotechnical Section
4105 West 99th Street Carmel, Indiana 46032
317-875-7040/317-870-0314(Fax)

Boring No. S139
Surface Elevation 762.5
Proj. # IM-465-4 ( )
AW Proj. # 04IN0085
Sheet 1 of 2

Str. No. Br @21st St. | Station 794+80 | Offset 135 Ft Lt | Line PR-HH
Datum USGS | Weather Cloudy | Temperature 62 F | Inspector D. Harness

SAMPLE No.	Type	Rec (%)	N	Depth	DESCRIPTION/CLASSIFICATION and REMARKS	qu (qp) (tsf)	γ (pcf)	W (%)	LL (%)	PL (%)	PI (%)
1SS	X	30	18-10-10		Asphalt (Visual)						
2SS	X	20	12-14-18	5	2 Attempts at 3.5 to 5.0 feet (Sample 2SS) Brown, Dry, Medium Dense to Dense, Sandy Loam A-4 Test 03			9.8			
3SS	X	20	6-4-5								
4SS	X	40	4-17-7	10							
					Brown, Dry, Medium Dense, Sandy Loam A-4 Test 03						
5SS	X	20	4-11-14	15	2 Attempts at 13.5 to 15.0 feet (Sample 5SS)						
					Gray, Very Moist, Very Dense to Medium Dense, Sandy Loam A-4 Test 01			10.2			
6SS	X	10	10-29-31	20	2 Attempts at 18.5 to 20.0 feet (Sample 6SS)						
7SS	X	5	4-11-9		2 Attempts at 23.5 to 25.0 feet (Sample 7SS)						
8SS	X	80	6-7-7	25		1.5	115.6	11.6			
					Brown, Very Moist, Medium Dense, Sandy Loam and Gravel A-2-4 Test 06						
9SS	X	70	6-13-15	30	Brown, Very Moist, Very Stiff, Loam A-4 Test 05						
10SS	X	70	7-10-14	35							
					Brown, Moist, Very Stiff, Clay with Rock Fragments A-4 Test 02			19.8			
11SS	X	100	6-7-12	40			109.8				
					Brown, Wet, Very Dense, Sandy Loam A-4 Test 03						
12SS	X	100	13-38-38	45							
				50							

Continued Next Page

WATER LEVEL OBSERVATIONS

While Drilling ▽ 34.5 Ft. | Upon Completion of Drilling ▼ 30.0 Ft.
Time After Drilling 1 Hr | ▽ | ▽ | ▽
Depth to Water ▽ | ▽ | ▽ | ▽
Depth to Cave in 32.0 Ft.

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 4/19/04 End 4/19/04 Rig B-59
Driller Cramer/Eric Editor K. Cho
Remarks Boring backfilled upon completion. Flag crew required.

LOG OF TEST BORING

Project: Accelerate 465, DES. No. 9910900
Location: Indianapolis, Indiana
Client: INDOT, Geotechnical Section
4105 West 99th Street Carmel, Indiana 46032
317-875-7040/317-870-0314(Fax)

Boring No. S139
Surface Elevation 762.5
Proj. # IM-465-4 ( )
AW Proj. # 04IN0085
Sheet 2 of 2

Str. No. Br @21st St. | Station 794+80 | Offset 135 Ft Lt | Line PR-HH
Datum USGS | Weather Cloudy | Temperature 62 F | Inspector D. Harness

SAMPLE No.	Type	Rec (%)	N	Depth	DESCRIPTION/CLASSIFICATION and REMARKS	qu (qp) (tsf)	γ (pcf)	W (%)	LL (%)	PL (%)	PI (%)
13SS	X	100	30-50/4	55							
14SS	X	70	25-50/3	60	Brown and Gray, Wet, Very Dense, Sandy Loam A-4 Test 03						
15SS	X	30	37-50/3	65							
16SS	X	80	32-50/4	70							
17SS	X	100	24-50/4	75							
18SS	X	90	27-50/4	80	Gray, Moist, Hard, Clay Loam with Occasional Sand Seams A-4 Test 04		133.6	8.3			
19SS	X	50	20-50/4	85		1.5	118.4	15.4			
20SS	X	70	36-50/4	90	Gray, Moist, Very Dense, Sandy Loam A-4 Test 03 Boring Terminated at 90.0 feet						
				95							
				100							
				105							
				110							

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG | DRAWN: TMT
CHECKED: SJC | CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

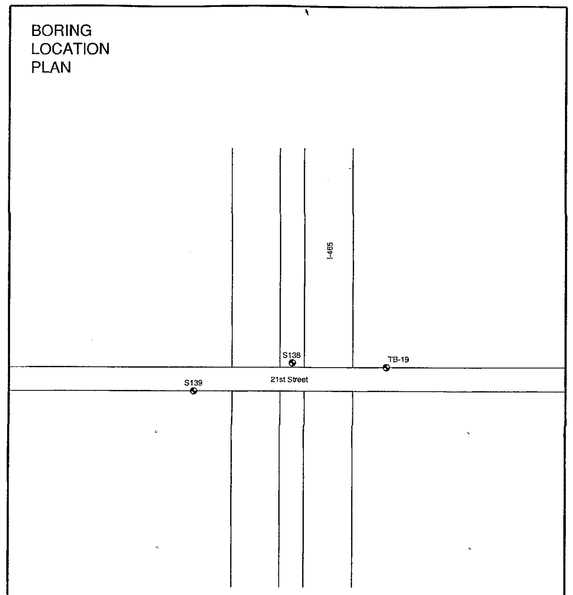
SOIL BORINGS

HORIZONTAL SCALE	BRIDGE FILE
1"= 100'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		37 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

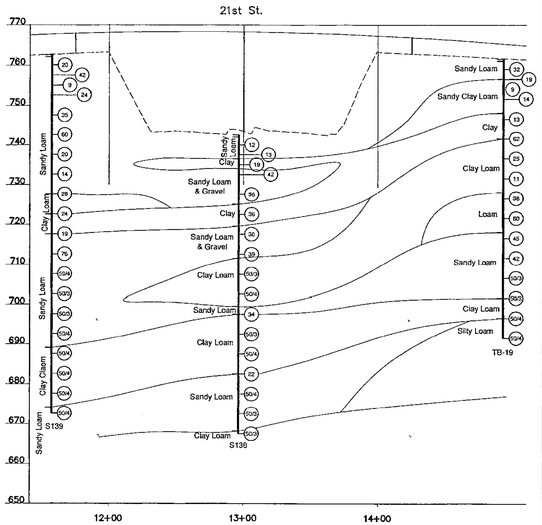
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BORING
LOCATION
PLAN



Prepared For: INDOT		Prepared By: Alt & Witzig Engineering, Inc.	
Project Name: Accelerate 465		Project No: 04IN0085	Date: 6/04

SUBSURFACE PROFILE



Scale
Horizontal : 1" = 60'
Vertical: 1" = 20'
(300) N-Value

Prepared For: INDOT		Prepared By: Alt & Witzig Engineering, Inc.	
Project Name: Accelerate 465		Project No: 04IN0085	Date: 6/04

LOG OF TEST BORING

Project: Accelerate 465, DES. No. 9910900
Location: Indianapolis, Indiana
Client: INDOT, Geotechnical Section
4105 West 99th Street Carmel, Indiana 46032
317-875-7040/317-870-0314(Fax)

Boring No. S138
Surface Elevation 742.6
Proj. # IM-465-4 ( )
AW Proj. # 04IN0085
Sheet 1 of 2

Str. No. Br @21st St. | Station 794+85 | Offset 0 | Line PR-HH
Datum USGS | Weather Rain | Temperature 62 F | Inspector D. Harness

SAMPLE No.	Type	Rec (%)	N	Depth	DESCRIPTION/CLASSIFICATION and REMARKS	qu (qp) (tsf)	γ (pcf)	W (%)	LL (%)	PL (%)	PI (%)
					Asphalt (Visual)						
1SS	X	40	3-5-7		Brown, Moist, Medium Dense, Sandy Loam A-4 Test 01			12.6			
2SS	X	20	4-6-7	5							
3SS	X	30	6-7-12		Brown, Very Moist, Very Stiff, Clay A-4 Test 02			11.6			
4SS	X	60	12-24-18	10	Brown, Very Moist, Dense to Very Dense, Sandy Loam and Gravel A-2-4 Test 06						
5SS	X	40	2-6-50	15							
6SS	X	20	6-13-23		Brown, Moist, Hard, Clay A-4 Test 02			14.8			
7SS	X	60	1-10-20	20	Brown, Wet, Medium Dense to Dense, Sandy Loam and Gravel A-2-4 Test 06						
8SS	X	60	7-21-17	25							
9SS	X	50	16-50/3	30	Gray, Moist, Hard, Clay Loam A-4 Test 04			9.9			
10SS	X	90	4-50/4	35							
11SS	X	90	0-1-33	40	Brown, Wet, Dense, Sandy Loam A-4 Test 03						
12SS	X	50	28-50/3	45							
				50							

Continued Next Page

WATER LEVEL OBSERVATIONS

While Drilling ▽ 23.0 Ft. Upon Completion of Drilling ● 11.0 Ft.
Time After Drilling 1 Hr
Depth to Water ▽ ▼ ▽ ▽
Depth to Cave in 15.0 Ft.
The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 4/20/04 End 4/21/04 Rig B-57
Driller Ken/Sean Editor K. Cho
Remarks Boring backfilled upon completion. Traffic control required, United.

PILE LOADING FOR GEOTECHNICAL TESTING

BENT NO.	BENT NO.1	BENT NO.2	BENT NO.3
DESIGN LOAD	110 TONS	8000 psf	110 TONS
FACTOR OF SAFETY	2.0	N/A	2.0
FACTORED DESIGN LOAD	220 TONS	N/A	220 TONS
FRICTION IN SCOUR ZONE	0 TONS	0 TONS	0 TONS
DOWN DRAG FRICTION	0 TONS	0 TONS	0 TONS
ULTIMATE LOAD	220 TONS	N/A	220 TONS
TESTING METHOD	BY PDA, STANDARD SPECS. 701.06(c)		

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG | DRAWN: TMT
CHECKED: SJC | CHECKED: SJC

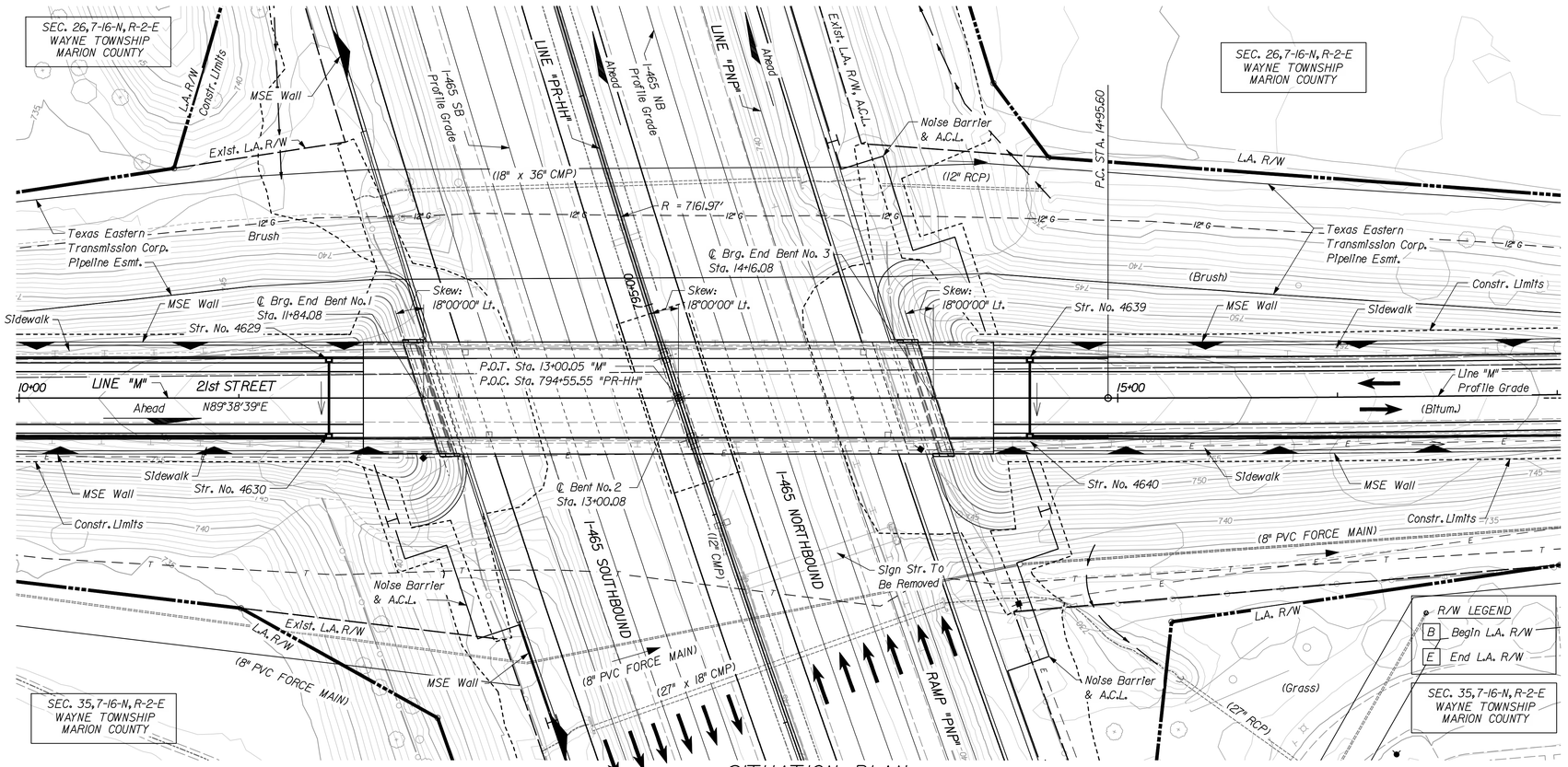
INDIANA
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

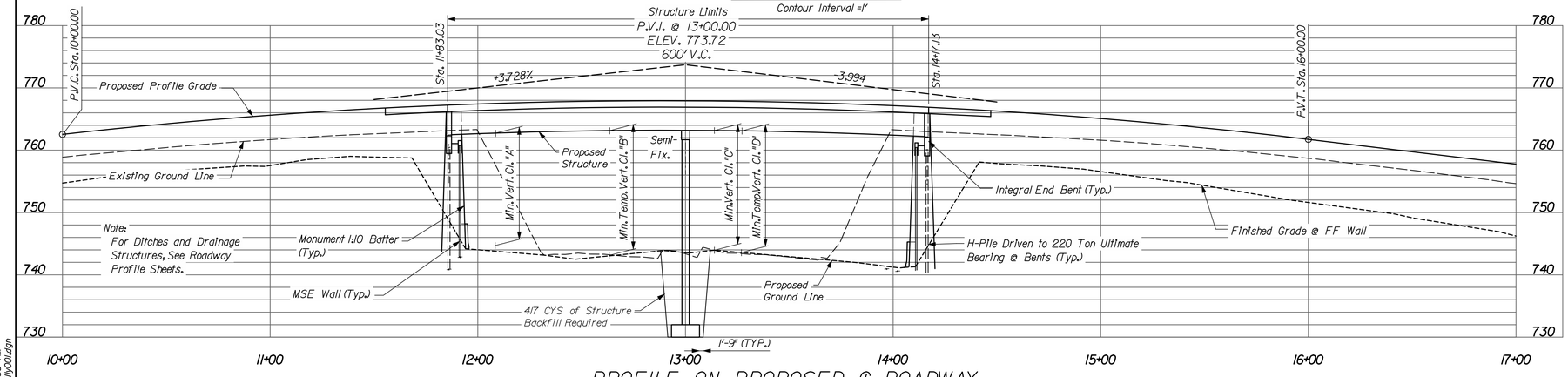
HORIZONTAL SCALE	BRIDGE FILE
1"= 100'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		38 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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SITUATION PLAN



PROFILE ON PROPOSED ℄ ROADWAY

PRESENT STRUCTURE

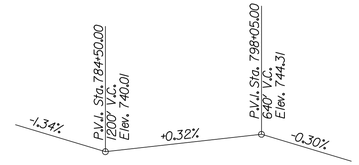
The present structure over I-465 is a two-span rolled steel girder bridge built in 1968. Plans are on file with the Bridge Department of the Indiana Department of Transportation. Present structure is to be removed.

UTILITIES

See Sheet 3

LINE "M"	LINE "PR-HH"	LINE "PNP"
P.I. Sta. 18+92.43	P.I. Sta. 804+60.34	P.I. Sta. 1793+98.68
R = 13,454.91'	R = 7161.97'	R = 7074.72'
Δ = 03°-22'-43" Left	Δ = 19°-55'-44" Right	Δ = 3°-11'-01" Right
Dc = 00°-25'-33"	Dc = 00°-48'-00"	Dc = 00°-48'-36"
L = 793.43'	L = 2491.09'	L = 393.11'
T = 396.83'	T = 1258.26'	T = 196.61'
M = 793.29'	M = 108.03'	M = 106.72'
E = 5.85'	E = 109.69'	E = 2.73'
e = NC	e = 2.94% Max.	e = 3.00% Max.

HORIZONTAL CURVE DATA



PROFILE GRADE DATA

LINE "PR-HH"

MINIMUM VERTICAL CLEARANCE		
Location	Required	Provided
"A"	16'-6"	16'-11½"
"B"	16-0"	18'-2"
"C"	16'-6"	18'-2"
"D"	16'-0"	18'-4½"

EARTHWORK SUMMARY

Fill +20%	5290 CYS
Common Excavation	21628 CYS
Waste	16779 CYS
Dry Excavation	441 CYS
Benching	413 CYS

* Benching will not be paid for directly Cost of benching is to be included in Common Excavation

This sheet shows final condition after I-465 construction is complete. See details, sheet 15, for completed condition required for this contract.

LAYOUT

PRESTRESSED CONCRETE U-BEAM BRIDGE

2 SPANS AT 116'-0" AND 116'-0"
SKEW: 18°00'00" LT
36'-0" CLEAR ROADWAY ON
21st STREET OVER I-465

TBM "I": CUT "X", N. MOST BOLT TOP OF FLANGE F. HYDRANT, S. SIDE 21ST STREET AND ±125' W. OF FULLERTON DRIVE WEST OF P.O.T. STA. 0+00.00 LINE "S-2-L" ELEV. = 749.30

TBM "J": BOLT SPIKE N. FACE PWP #119-453-B, S. SIDE 21ST STREET, 4TH PWP E. OF FULLERTON DRIVE STA. 4+04.6, 24.1' RT. LINE "S-2-L" ELEV. = 744.71

TBM "K": CUT SQUARE, N.E. COR. OF N.E. WINGWALL 21ST STREET BRIDGE OVER I-465 STA. 14+06.7, 24.5' LT. LINE "S-2-L" ELEV. = 763.53

TBM "L": CUT SQUARE, S.W. COR. TRAFFIC SIGNAL POLE BASE @ N.E. COR. OF 21ST STREET & HIGH SCHOOL ROAD STA. 24+82.9, 42.3' LT. LINE "S-2-L" ELEV. = 737.79

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RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

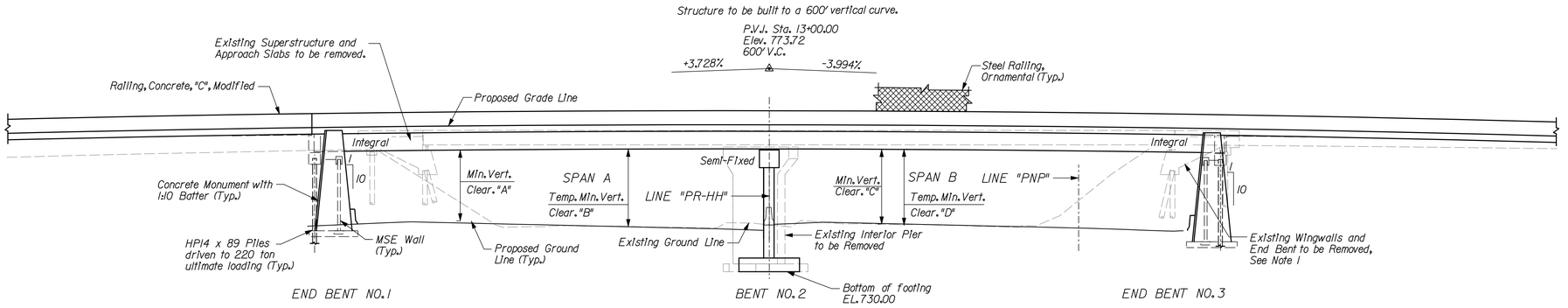
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CHECKED: SG CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

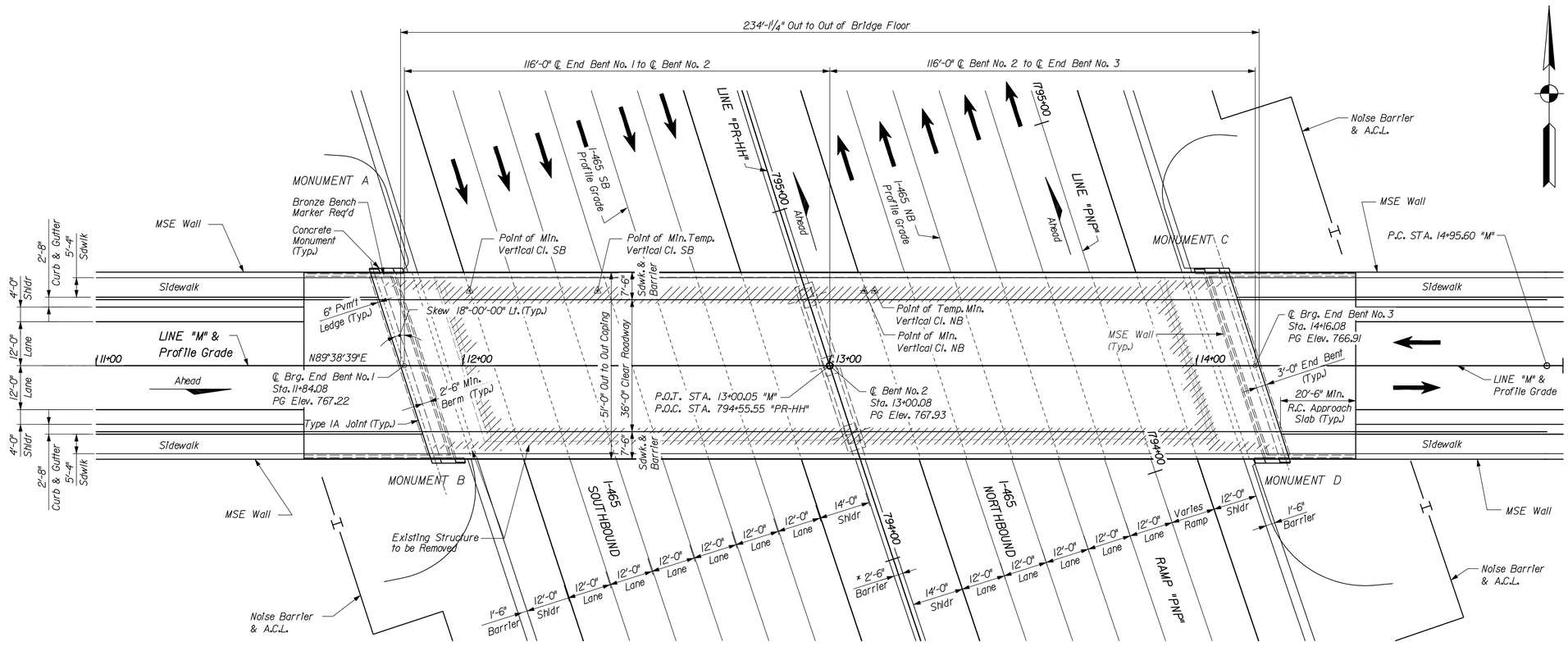
LAYOUT

HORIZONTAL SCALE	BRIDGE FILE
1" = 30'	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1" = 10'	9829512
SURVEY BOOK	SHEET NO.
	39 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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ELEVATION



PLAN

MINIMUM VERTICAL CLEARANCE		
Location	Required	Provided
"A"	16'-6"	16'-11½"
"B"	16-0"	18'-2"
"C"	16'-6"	18'-2"
"D"	16'-0"	18'-4½"

LEGEND:

x - Barrier transitions to 4'-6" maximum at Bent.

Indicates Limits of Removal

NOTES:

1. Existing piles to be cut off 2' min. below finish grade or 2' min. from where they interfere with proposed structure.
2. For Typical Bridge Section, see sheet 41
3. For Typical Section, see sheets 4 - 5
4. Plan View shows final conditions after I-465 construction is complete. See details sheet 15 for completed condition required for this contract.

GENERAL PLAN

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE U-BEAM BRIDGE

2 SPANS AT 116'-0" AND 116'-0"
SKEW: 18°00'00" LT
36'-0" CLEAR ROADWAY ON
21st STREET OVER I-465

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 10-15-2007 DATE

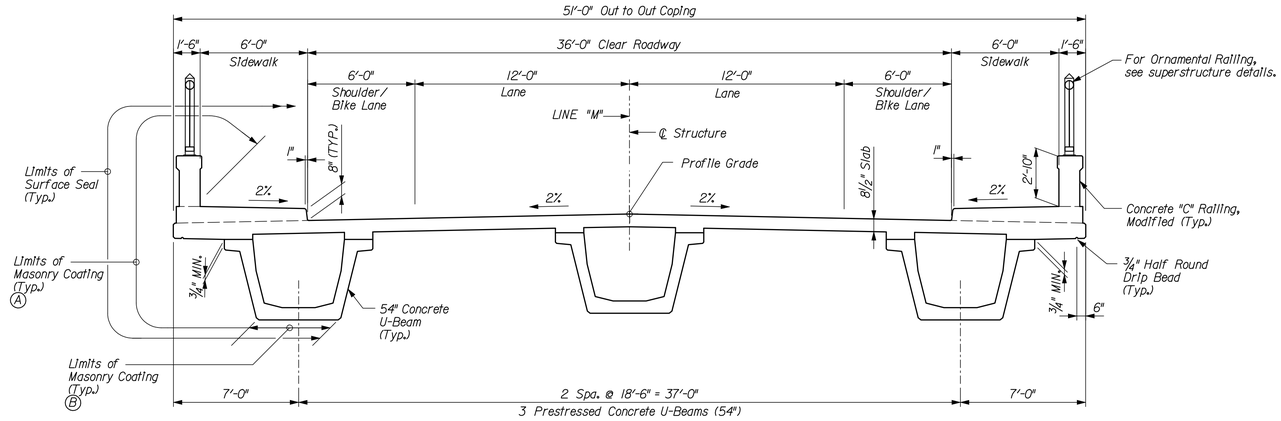
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CHECKED: SG | CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/16" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1/16" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	40 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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TYPICAL SECTION

(LOOKING AHEAD STATION)

LONGITUDINAL SECTION

GENERAL NOTES

Reinforcing steel cover to be 2.5 inches in top and 1 inch in bottom of floor slabs, 3 inches in footing except bottom steel which shall be 4 inches, and 2 inches in all other parts unless noted.

All dimensions and elevations are in feet (ft) unless otherwise noted.

See the Special Provisions for the Geotechnical Report and Pile Driving Criteria.

Concrete in floor slab to be High Performance Concrete and concrete in barrier and sidewalk to be Class "C". Reinforcing steel in superstructure and substructure above footings to be epoxy coated.

The exposed faces of the End Bents and monuments, the exposed faces of the interior bent, the top of the deck, all exposed faces of the barrier, the face of the deck coping, the underside of the deck from the coping to the face of exterior beam and the outside face of the exterior beam shall be sealed with a penetrating epoxy sealer. All surface seal will be paid for as a Lump Sum.

The exposed faces of the End Bents and monuments, the exposed faces of the interior bent, the barrier, the face of the deck coping, the underside of the deck from the coping to the face of exterior beam and the outside face of the exterior beam shall receive Masonry Coating. Masonry Coating will be paid for as a Lump Sum.

See sheet 58 for notes regarding Ⓐ and Ⓑ

DESIGN DATA

Allowable Design Stresses:

High Performance Concrete (Beam)	f'c = 10,000 psi
High Performance Concrete (Slab)	f'c = 4000 psi
Class C Concrete	f'c = 4000 psi
Class A Concrete	f'c = 3500 psi
Class B Concrete	f'c = 3000 psi
Reinforcing Steel	fy = 60,000 psi

Live Load

HL - 93 loading with Impact and distribution in accordance with 2004 AASHTO LRFD Specifications, 13rd Edition with Interims through 2006.

HS25 live load in accordance with the AASHTO standards specifications, 17th edition for the design of piles and the sizing of spread footings

Dead Load

Floor slab designed with an 8 inch structural depth and 0.5 inch integral wearing surface.

Actual weight plus 35 psf (composite) for future wearing surface and 15 psf (non-composite) for permanent metal deck forms.

Transformed Section

A transformed section was used for design of the beams.

SUMMARY OF QUANTITIES

Excavation, Dry	= 349.0 yd3

GENERAL PLAN

CONTINUOUS COMPOSITE PRESTRESSED CONCRETE U-BEAM BRIDGE

2 SPANS AT 116'-0" AND 116'-0"
SKEW: 18°-00'-00" LT
36'-0" CLEAR ROADWAY ON
21st STREET OVER I-465

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

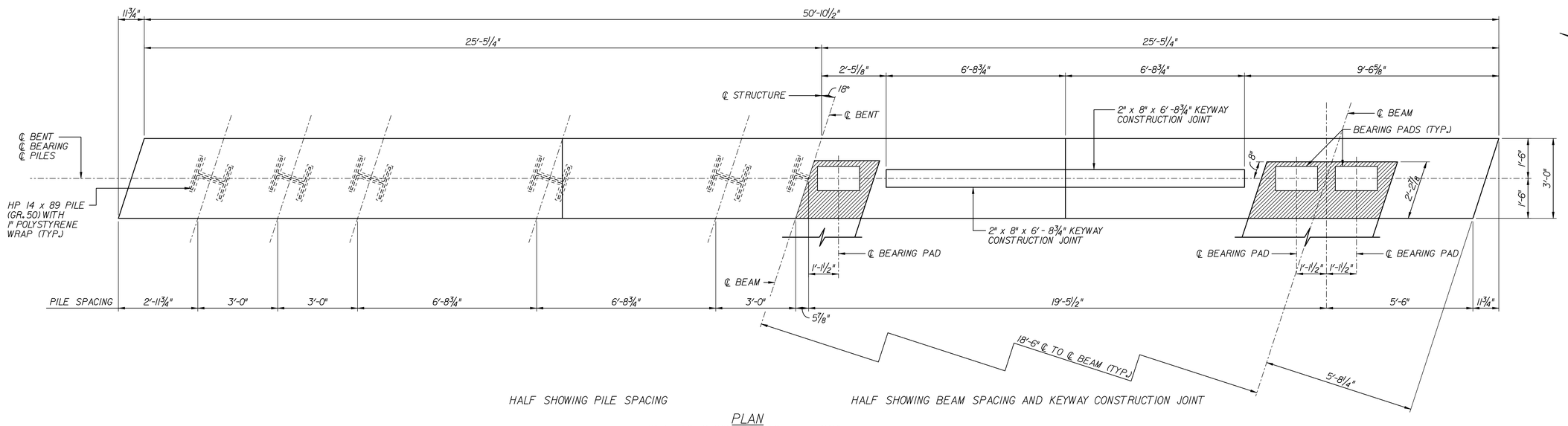
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INDIANA DEPARTMENT OF TRANSPORTATION

GENERAL PLAN

HORIZONTAL SCALE	BRIDGE FILE
1/4" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1/4" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	41 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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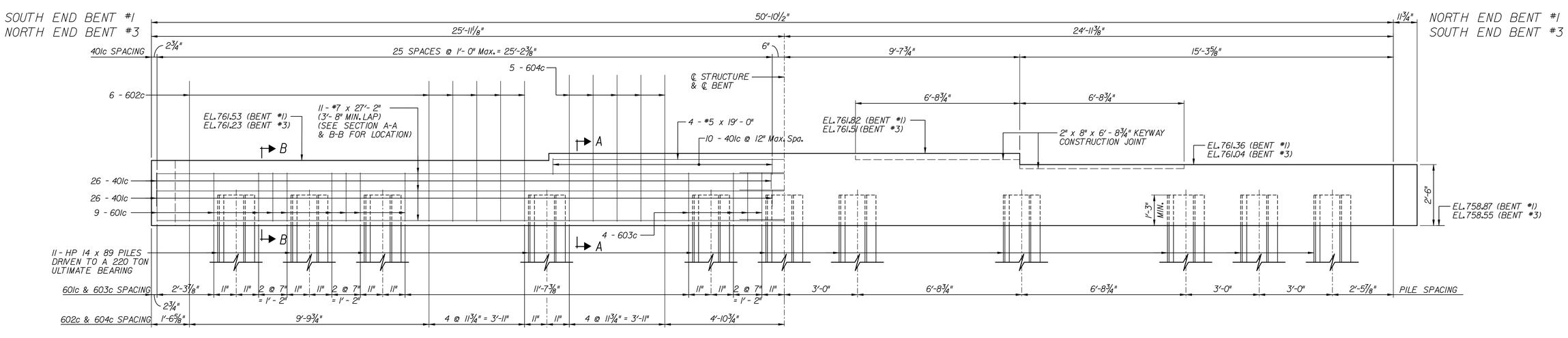
HALF SHOWING PILE SPACING

HALF SHOWING BEAM SPACING AND KEYWAY CONSTRUCTION JOINT

PLAN

(BENT NO.1 SHOWN. BENT NO.3 THE SAME)
SCALE: 1/2" = 1'-0"

INDICATES LIMITS OF ⅞" PREFORMED JOINT MATERIAL TYPICAL AT EACH BEAM



HALF SHOWING REINFORCING

HALF SHOWING PILE SPACING

ELEVATION

SCALE: 1/2" = 1'-0"

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

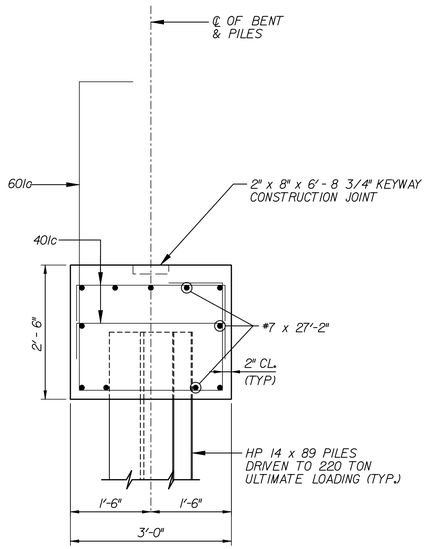
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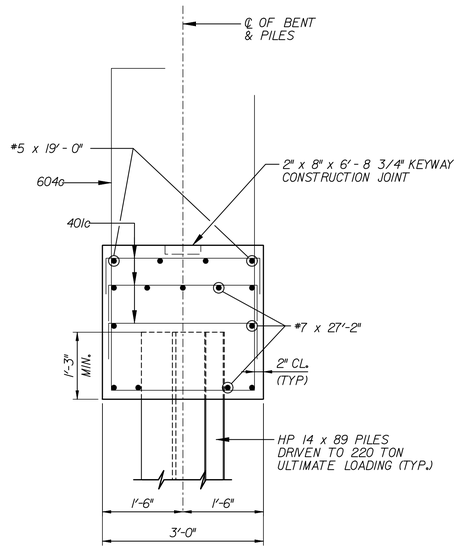
BENT NO.1 & NO.3 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512
SURVEY BOOK	SHEET NO.
	42 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

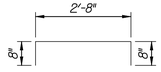
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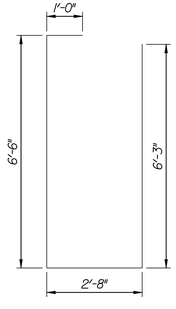
SECTION B-B
SCALE: 3/4" = 1'-0"



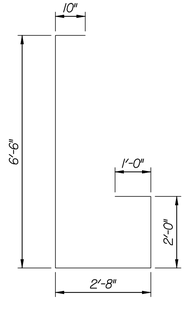
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SCALE: 3/4" = 1'-0"



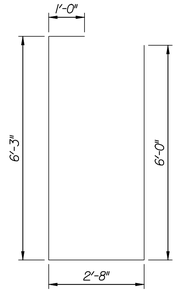
401c x 4'-0"



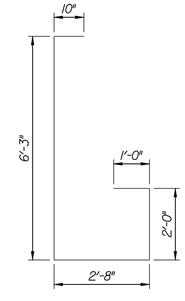
604c x 16'-5"



603c x 13'-0"



602c x 15'-11"



601c x 12'-9"

BILL OF MATERIALS
BENT NO.1
(BENT NO.3 THE SAME)

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
7	22	27'-2"	
TOTAL #7			1222
601c	18	12'-9"	
602c	12	15'-11"	
603c	8	13'-0"	
604c	10	16'-5"	
TOTAL #6			1084
#5	4	19'-0"	
TOTAL #5			79
401c	124	4'-0"	
TOTAL #4			331
TOTAL E.C. REINFORCING STEEL			2666
CONCRETE			
CONCRETE, A, SUBSTRUCTURE			15.5 CYS
MISCELLANEOUS			
PILE STEEL H, HP 14X89 (11 x 54') *			594 LFT *
PILE TIP, STEEL H			11 EA.

* BENT #3 (11 x 55' = 605 LFT)

SHERLY GEORGE
REGISTERED
No. 19600508
STATE OF INDIANA
PROFESSIONAL ENGINEER

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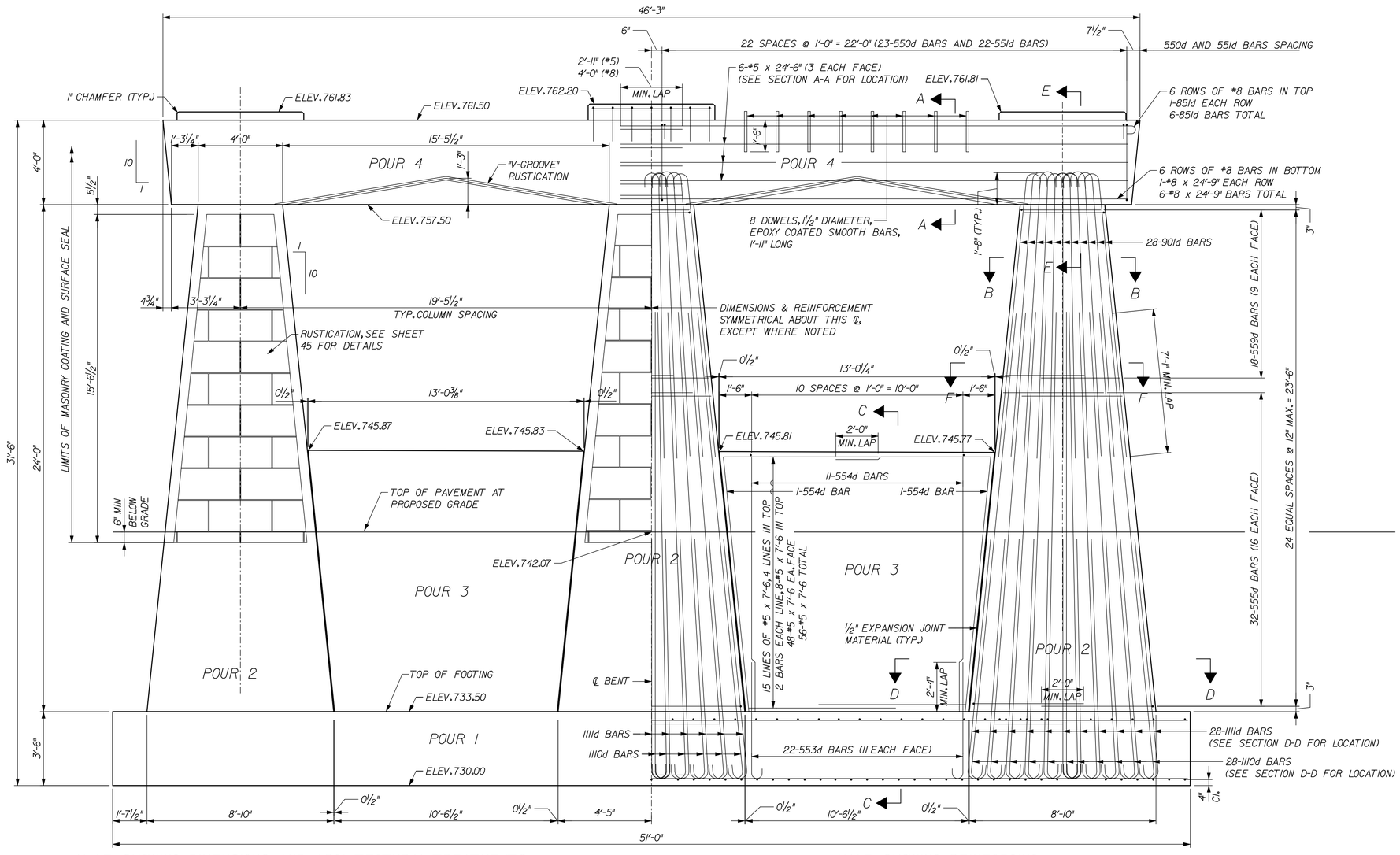
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CHECKED: AEO | CHECKED: SG/JLH

INDIANA
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BENT NO.1 & NO.3 DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512
SURVEY BOOK	SHEET NO.
	43 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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HALF SHOWING DIMENSIONS AND ARCHITECTURAL TREATMENTS

ELEVATION

HALF SHOWING REINFORCING

NOTES:

1. SEE SHEET 45 & 46 FOR SECTION A-A THRU F-F.
2. SEE SHEET 45 FOR ARCHITECTURAL TREATMENT DETAILS.
3. SEE SHEET 47 FOR BAR BENDING DETAILS.
4. ALL REINFORCING ABOVE FOOTING TO BE EPOXY COATED AND ALL REINFORCING IN FOOTING TO BE PLAIN REINFORCING.
5. MAXIMUM NET SOIL PRESSURE = 4700 PSF
   MAXIMUM NET ALLOWABLE SOIL PRESSURE = 8000 PSF
6. ALL EXPOSED SURFACE, EXCEPT THE AREA BELOW V-GROOVE RUSTICATION ON PIER CAP, SHALL BE MASONRY COATED TO MEET THE FEDERAL COLOR STANDARD 595B, COLOR NO. 37722.
7. THE AREA BELOW "V-GROOVE" RUSTICATION ON PIER CAP SHALL BE MASONRY COATED TO MEET THE FEDERAL COLOR STANDARD 595B, COLOR NO. 36586.

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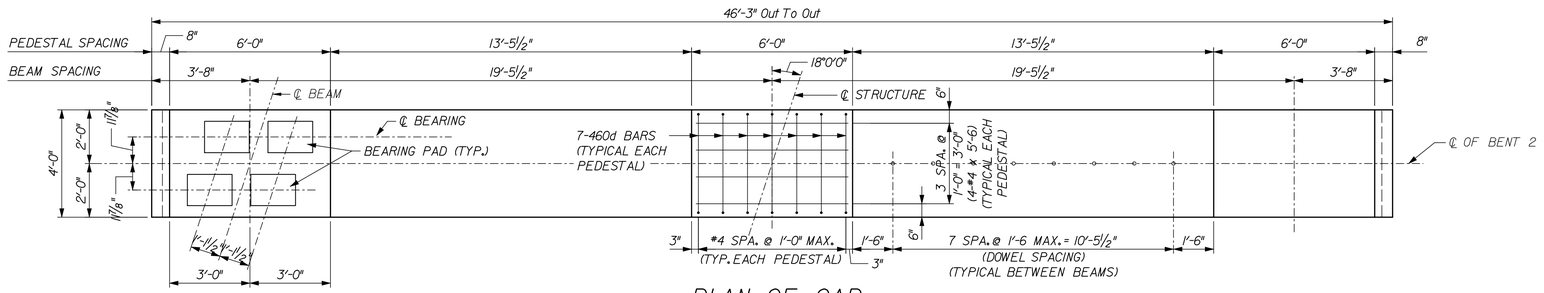
INDIANA DEPARTMENT OF TRANSPORTATION

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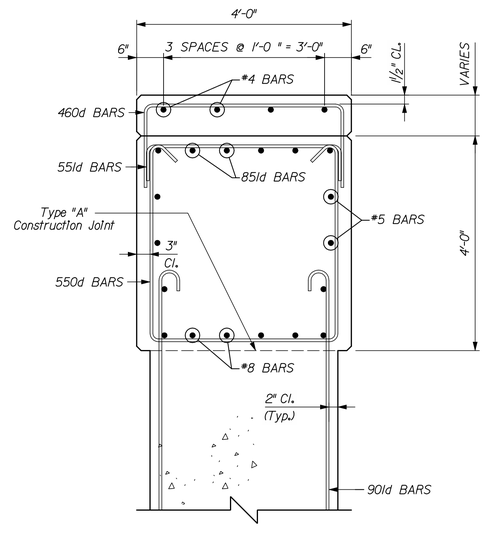
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⅜" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
⅜" = 1'-0"	9829512

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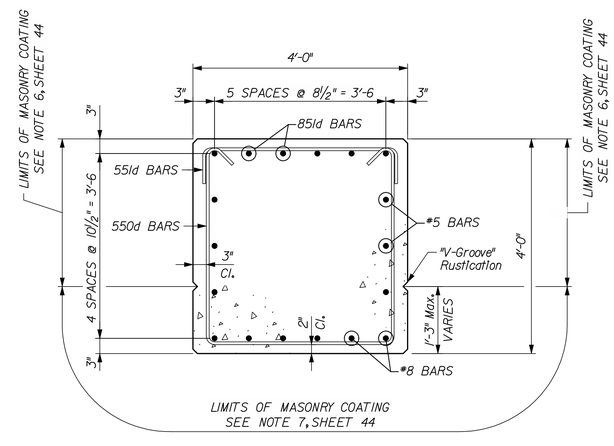


PLAN OF CAP



SECTION E-E

Scale: ¾" = 1'-0"



SECTION A-A

Scale: ¾" = 1'-0"

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DESIGNED: SG | DRAWN: MAB

CHECKED: AEO | CHECKED: AEO/JLH

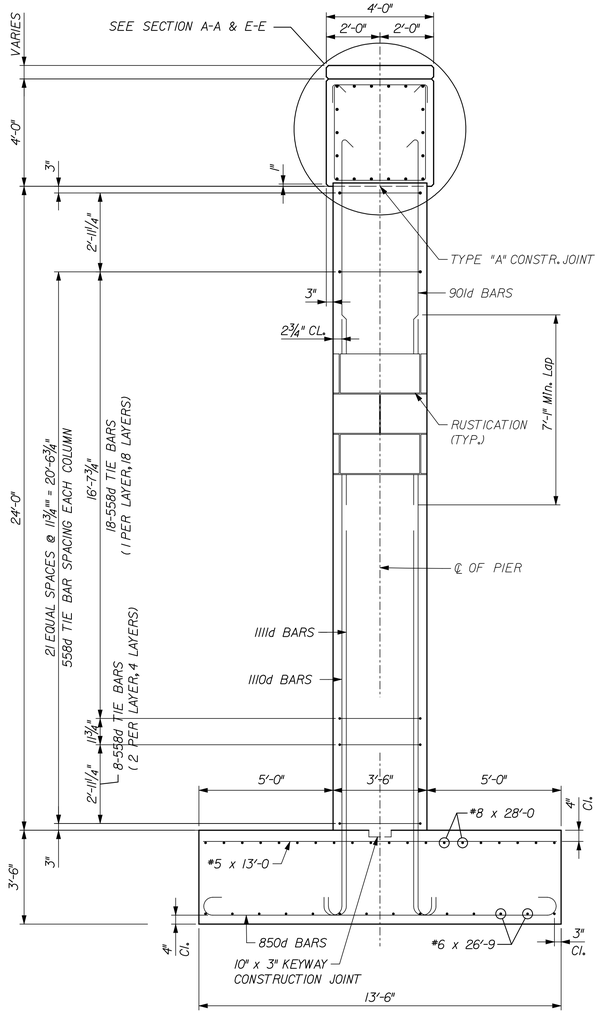
INDIANA
DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

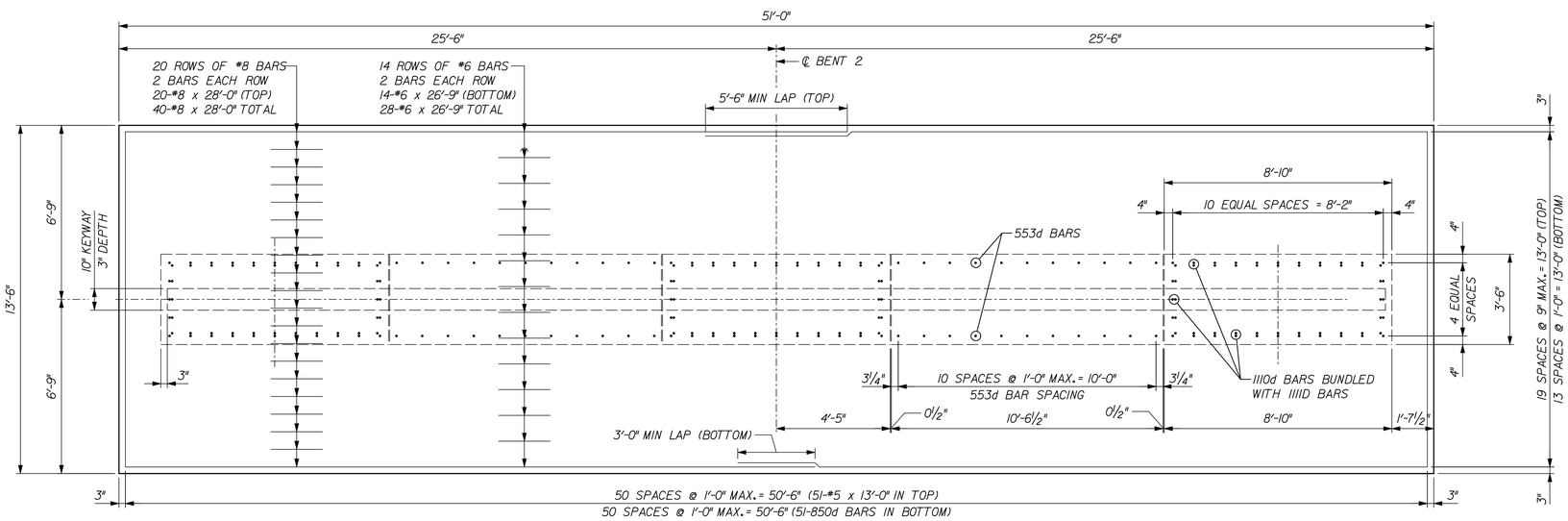
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET NO.
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CONTRACT	PROJECT
IB-30026	IM-465-4(382)

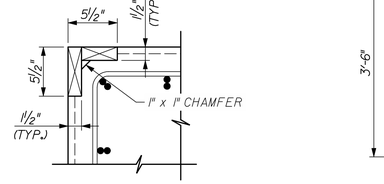
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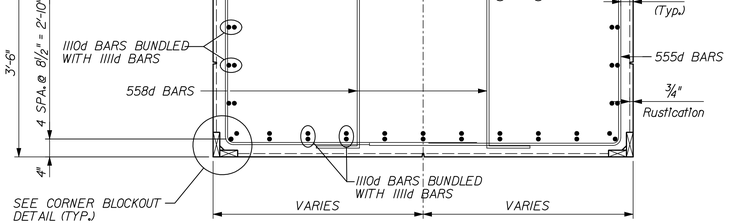


FOOTING PLAN



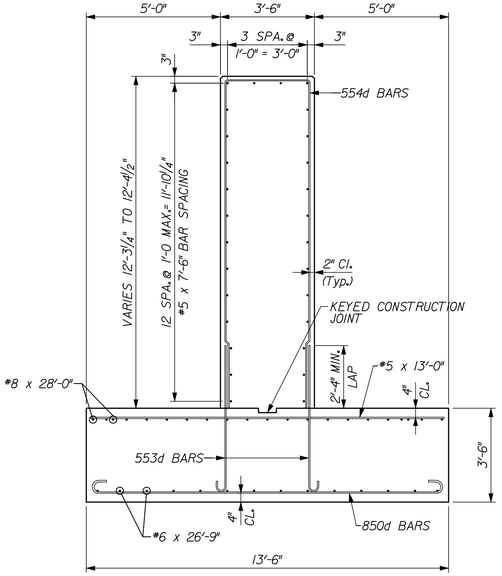
CORNER BLOCKOUT DETAIL

SCALE: 1½" = 1'-0"

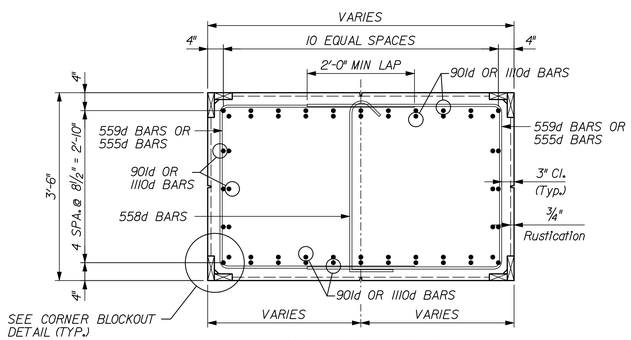


SECTION D-D

Scale: ¾" = 1'-0"

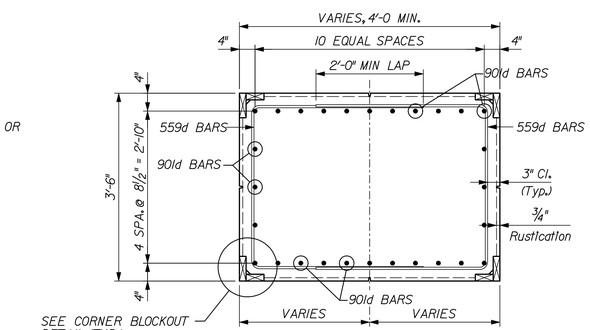


SECTION C-C



SECTION F-F

Scale: ¾" = 1'-0"



SECTION B-B

Scale: ¾" = 1'-0"

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RECOMMENDED FOR APPROVAL Sherly George 10-19-2007
DESIGN ENGINEER DATE

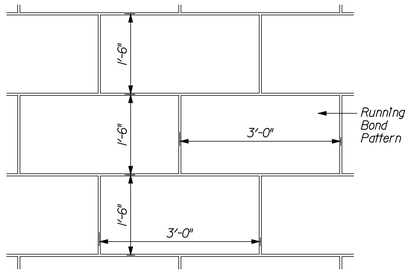
DESIGNED: SG DRAWN: MAB
CHECKED: AEO CHECKED: AEO/JLH

INDIANA DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

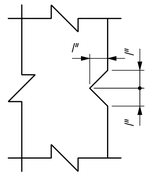
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	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	46 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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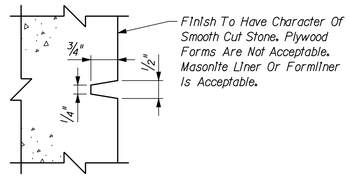
RUSTICATION DETAIL

Scale: 3/4" = 1'-0"



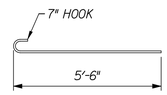
"V-GROOVE" RUSTICATION DETAIL

Scale: 3" = 1'-0"

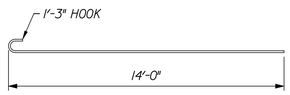


SECTION THRU RUSTICATION

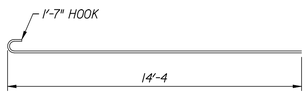
Scale: 6" = 1'-0"



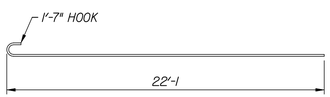
553 x 6'-1"



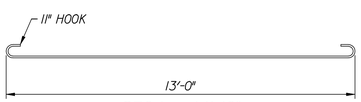
901d x 15'-3"



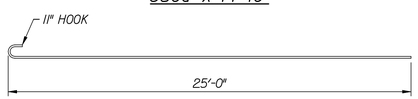
1111d x 15'-11"



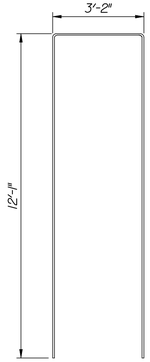
1110d x 23'-8"



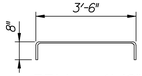
850d x 14'-10"



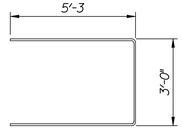
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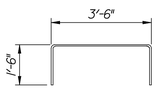
554d x 27'-4"



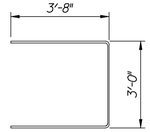
551d x 4'-10"



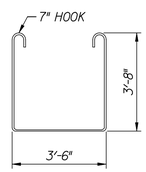
555d x 13'-6"



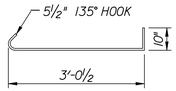
460d x 6'-6"



559d x 10'-4"



550d x 12'-0"



558d x 4'-4"



401d x 1'-4"

BILL OF MATERIALS
BENT NO. 2

REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
850d	51	14'-10"	
#8	40	28'-0"	
TOTAL #8			5010
#6	28	26'-9"	
TOTAL #6			1125
#5	51	13'-0"	
TOTAL #5			692
TOTAL REINFORCING			6827
EPOXY COATED REINFORCING STEEL			
1110d	84	23'-8"	
1111d	84	15'-11"	
TOTAL #11			17666
901d	84	15'-3"	
TOTAL #9			4355
851d	12	25'-11"	
#8	12	24'-9"	
TOTAL #8			1623
550d	46	12'-0"	
551d	46	4'-10"	
553d	44	6'-1"	
554d	26	27'-4"	
555d	96	13'-6"	
558d	78	4'-4"	
559d	54	10'-4"	
#5	12	24'-6"	
#5	112	7'-6"	
TOTAL #5			5297
401d	24	1'-4"	
460d	21	6'-6"	
#4	12	5'-6"	
TOTAL #4			157
TOTAL EPOXY COATED REINFORCING			29098
CONCRETE			
POUR NO.1			88.9 CYS
CONCRETE CLASS "B" IN FOOTINGS			88.9 CYS
POUR NO.2			60.1 CYS
POUR NO.3			37.8 CYS
POUR NO.4			28.4 CYS
CONCRETE CLASS "A" SUBSTRUCTURE			126.3 CYS
MISCELLANEOUS			
SURFACE SEAL (1440 SFT)			1 LSUM
MASONRY COATING (1440 SFT)			1 LSUM
STRUCTURE BACKFILL			213 CYS

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George, DESIGN ENGINEER — 10-19-2007, DATE

DESIGNED: SG | DRAWN: MAB

CHECKED: AEO | CHECKED: AEO/JLH

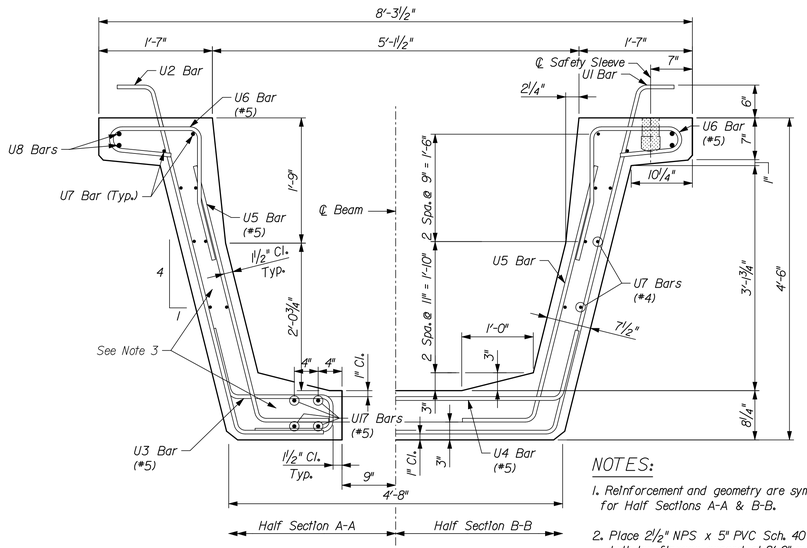
INDIANA DEPARTMENT OF TRANSPORTATION

BENT NO. 2 DETAILS

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AS NOTED	I-465-149-8374
VERTICAL SCALE	DESIGNATION
	9829512

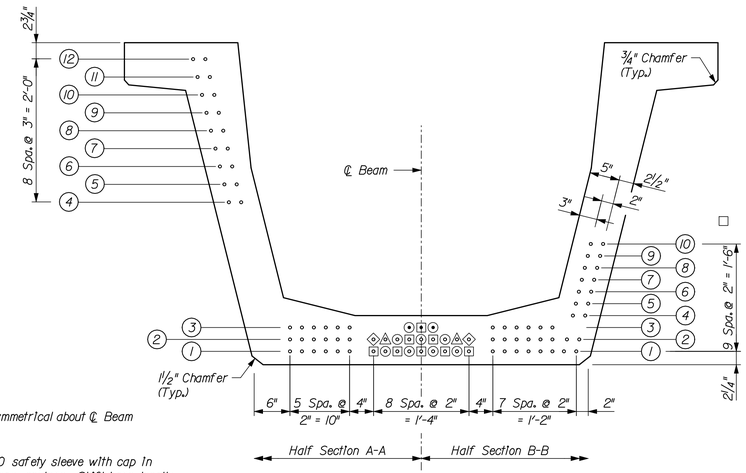
SURVEY BOOK		SHEET NO.
		47 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

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REINFORCEMENT SECTION

Scale: 1" = 1'-0"



NOTES:

1. Reinforcement and geometry are symmetrical about ℄ Beam for Half Sections A-A & B-B.
2. Place 2½" NPS x 5" PVC Sch. 40 safety sleeve with cap in both top flanges spaced at 8'-0" max. centers. Shift bars locally to allow placement. Holes shall be free of debris and water prior to casting deck.
3. See Purdue Instrumentation Special Provision for information on conduits required.
4. See sheet 34 for conduit requirements for lighting.

SPAN A & SPAN B

STRAND PATTERN SECTION

Scale: 1" = 1'-0"

DEBONDING LEGEND:

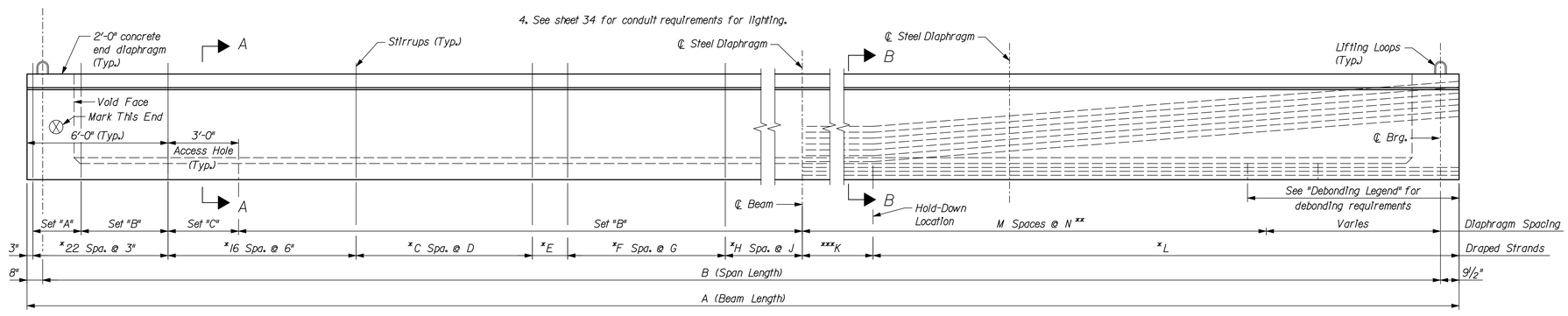
- ○ - Fully bonded strands.
- ▣ - Strands debonded 9'-0" from end of beam.
- ◎ - Strands debonded 12'-0" from end of beam.
- ◬ - Strands debonded 15'-0" from end of beam.
- ◈ - Strands debonded 18'-0" from end of beam.
- ⊡ - Strands debonded 21'-0" from end of beam.
- ⊙ - Strands debonded 24'-0" from end of beam.

NOTES:

1. The maximum number of strands debonded shall be 50% per row and 25% total.
2. Strand protection at access hole cut-off location shall consist of a 2" deep recess formed around all strands or strand groups. After detensioning, cut strands ½" from recessed surface and fill recess with a Type F-2 epoxy compound in accordance with the Specifications.

GENERAL NOTES

1. Prestressed beam concrete shall be in accordance with these plans and the Specifications.
2. For prestressed beams: Fy = 60,000 psi F's = 270,000 psi
3. Strands shall be 0.6" diameter (0.217 sq.in.), uncoated seven-wire, low-relaxation conforming to AASHTO M203, Grade 270.
4. Pretension all beams. Concrete shall attain f'ci (shown in table) in standard test cylinders that are made and cured identically with the beams without bond stresses being transferred to the concrete or releasing the end anchors. Attain f'c (shown in table) at or prior to 28 days. Apply an initial force of 43,900 lbs. per low-relaxation strand to develop a stress of 202,500 psi. No beam will be accepted that is honeycombed to the extent that strength of the beam or resistance to deterioration has been affected. An allowance of 0.0005L is made for shortening of beams due to shrinkage and elastic change. Show a detensioning plan by sequential numbering of the strand pattern on the shop plans.
5. Detail lifting devices on the shop plans. Loads are to be distributed equally to each device.
6. Reinforcing steel shall have 1" min. clear cover unless noted otherwise.
7. All acute corners shall be chamfered for skews greater than 15 degrees. Any corner of the beam noted with "chamfer" shall be chamfered ¾" or rounded to a 1⅜" radius. Optional chamfers, if used shall likewise conform.
8. Horizontal construction joints (seams) will not be permitted.
9. Fabrication tolerances shall be as required for the item, "Precast and Prestressed Concrete Structural Members" in the Standard Specifications.
10. Stay-in-place metal deck forms shall be used inside the beams. All construction materials and debris shall be removed from the interior of the U-Beams prior to the placement of deck forms.
11. Top face of flange shall be intentionally roughened to an amplitude of ¼".
12. Number of transformed strands: 93 (Span A & B) Final prestress force loss, excluding elastic shortening - 12.82 ksi.



END BENT END

BENT #2 END

STIRRUP LEGEND

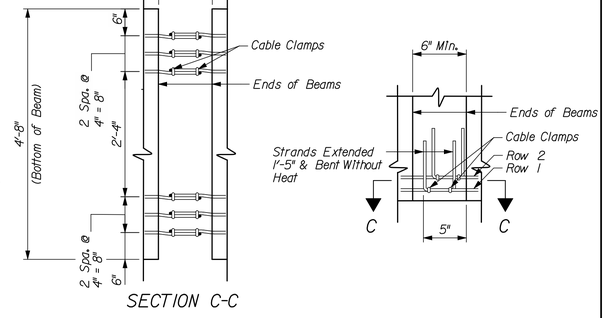
Set "A" = U1, U5, & U16
Set "B" = U1, U4, U5 & U6
Set "C" = U2, U3, U5 & U6

LEGEND

x - Stirrup spacing is symmetrical about ℄ beam.
xx - Diaphragm spacing is symmetrical about ℄ beam.
xxx - Strand geometry is symmetrical about ℄ beam.

ELEVATION

Scale: ⅜" = 1'-0"



SECTION C-C

STRAND SPLICE DETAIL

Scale: ¾" = 1'-0"

MARK	CONCRETE STRENGTHS (psi)		BEAM DATA (Measured Along Centerline)															STRAND DATA WITH NUMBER INDICATED IN ROWS																									REINFORCING STEEL (NO. OF BARS)																	
	RELEASE f'ci	28 DAY f'c	TOTAL NO.	DIMENSIONS A	B	C	D	E	F	G	H	J	K	L	M	N	APPROX. WEIGHT (lbs)	END (SECTION A-A) ①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	MIDSPAN (SECTION B-B) ①	②	③	④	⑤	⑥	⑦	⑧	⑨	⑩	TOTAL NO.	HOLD-DOWN CAPACITY (lbs)	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15	U16	U17	U18
B1	8,000	10,000	6	116'-5"	114'-11½"	34	6"	5½"	16	9"	10	18"	11'-8½"	46'-6"	2	20'-0"	182,295	21	21	15	4	4	4	4	4	4	4	4	4	25	25	15	4	4	4	4	4	4	4	93	38,800	364	28	28	157	396	360	64	16	20	40	12	28	28	12	32	54	16	32

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: TMT
CHECKED: AEO CHECKED: SG/SJC

INDIANA DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS SHOWN	9829512

SURVEY BOOK		SHEET NO.
		48 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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BEAM CAMBER DETAILS

	SPAN A Exterior Beam	SPAN A Interior Beam	SPAN B Exterior Beam	SPAN B Interior Beam
Anticipated Beam Camber, in	10 5/8"	10 5/8"	10 5/8"	10 5/8"
Dead Load deflection, in	-12 1/4"	-13 1/4"	-12 1/4"	-13 1/4"
Residual Camber, in	-2 3/8"	-3 3/8"	-2 3/8"	-3 3/8"

(Positive value indicate upward deflection)

LEGEND

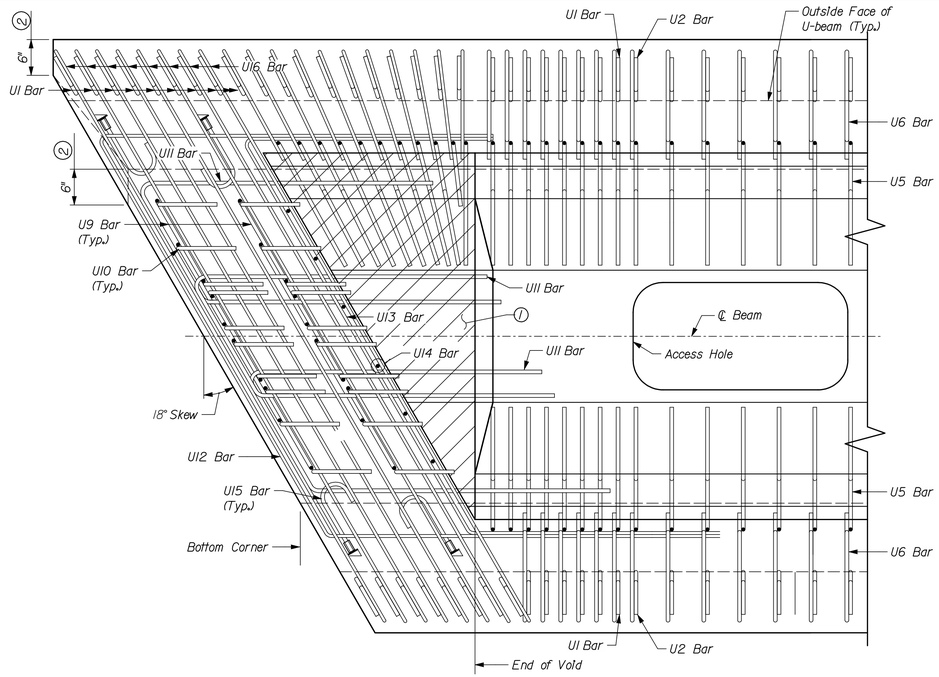
(1) Fabricator has the option of using polystyrene to form the cross-hatched area as shown. If this option is used, U14 Bars shall be adjusted in location and U13 Bars shall be adjusted in shape and location for the skew. These details shall be shown on the shop plans for approval.

(2) For skews greater than 15 degrees, top flange and bottom flange shall have 6" breakback, with smooth transition from top flange to bottom flange. Adjust shape of U11 Bars as necessary to maintain 1" min. cover to face of breakback.

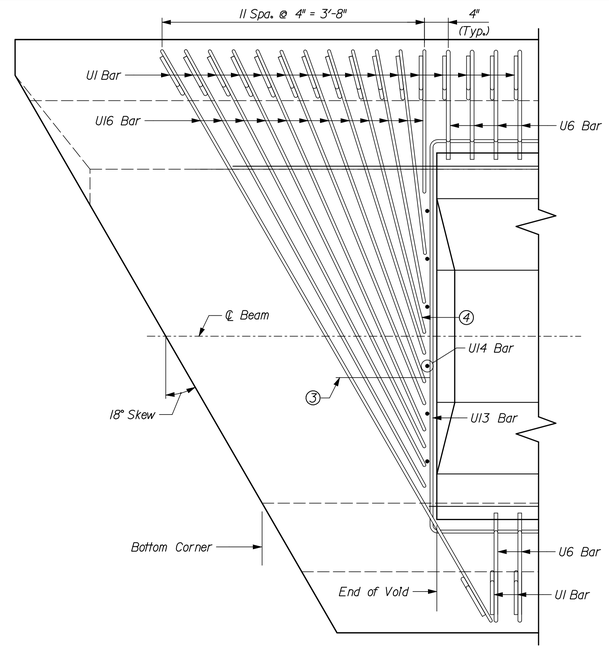
(3) Add support bars for U16 Bars as necessary.

(4) Cut U1 Bars and U16 Bars as required to obtain 1" min. clear between bars.

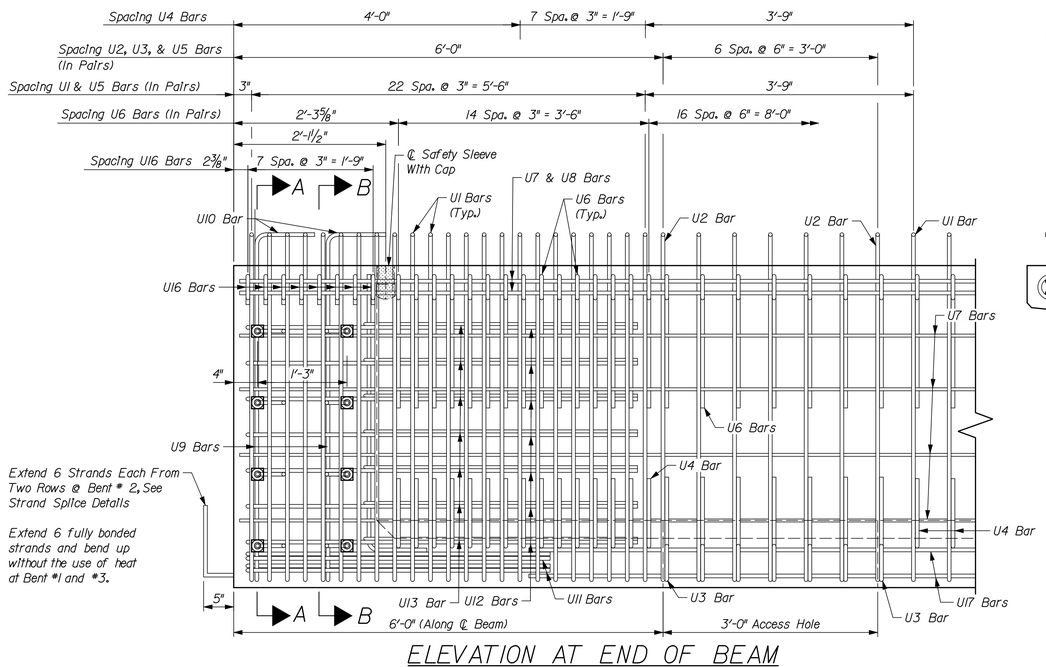
(5) Threaded tie bar assembly.



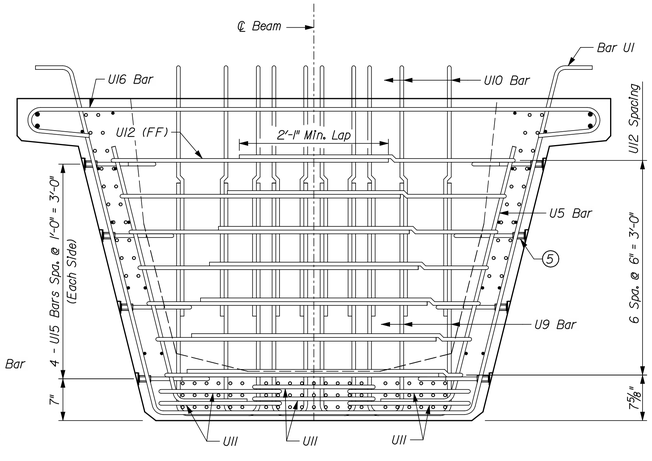
PLAN - SKEWED ENDBLOCK
(Polystyrene case)



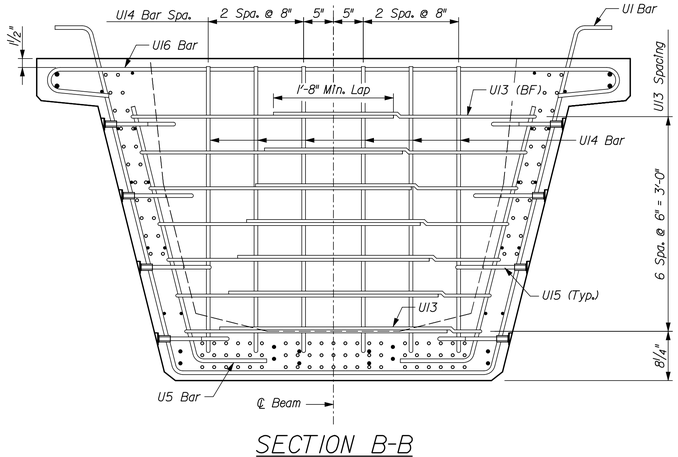
PLAN - SKEWED ENDBLOCK
(Solid case)



ELEVATION AT END OF BEAM



SECTION A-A



SECTION B-B

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

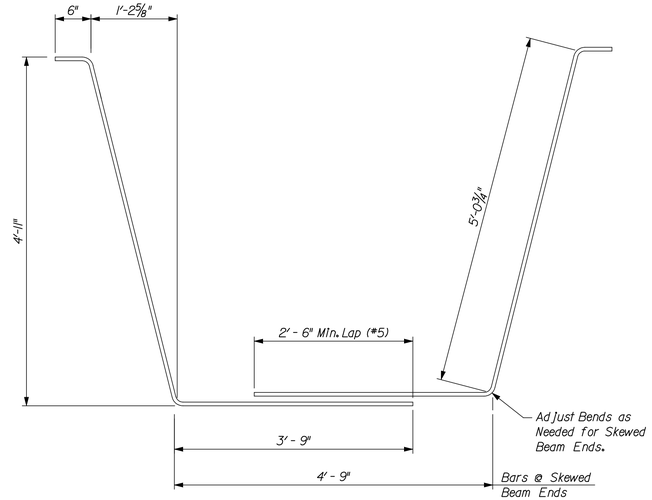
DESIGNED: SG DRAWN: TMT
CHECKED: AEO CHECKED: SG/SJC

INDIANA DEPARTMENT OF TRANSPORTATION

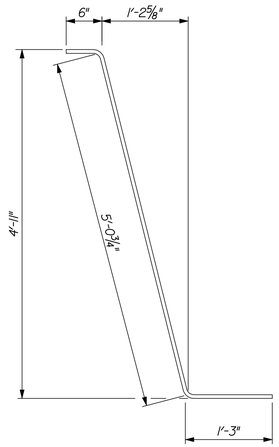
BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
1" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	49 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

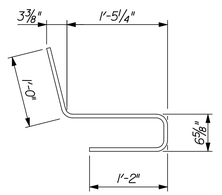
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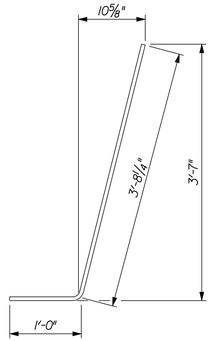
U1 BARS #5



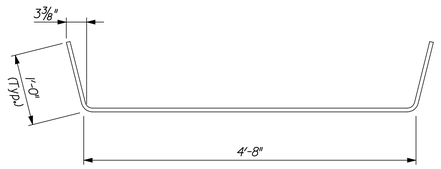
U2 BARS #5



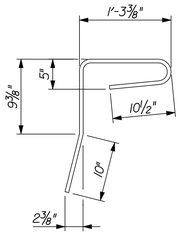
U3 BARS #5



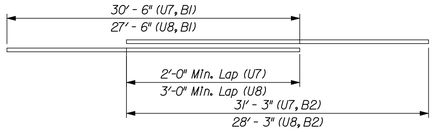
U5 BARS #5



U4 BARS #5

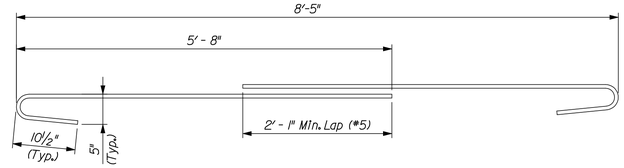


U6 BARS #5

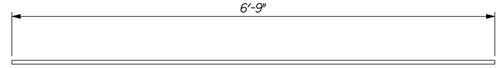


U7 BARS (#4) & U8 BARS (#6)

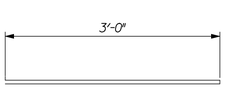
4 BARS PER LINE



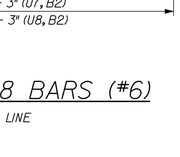
U16 BARS #5



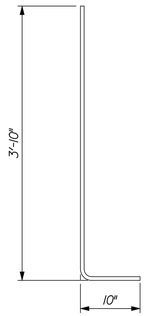
U17 BARS (#5)



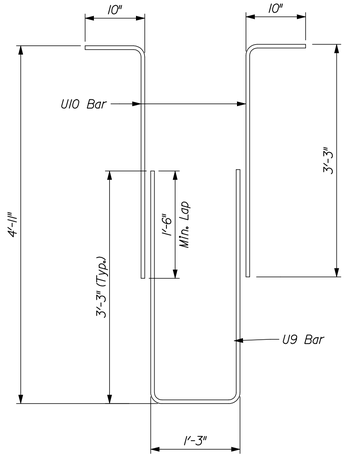
U18 BARS (#5)



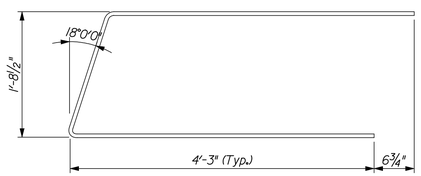
U15 BARS (#5)



U14 BARS (#5)



U9 BARS (#5) & U10 BARS (#5)

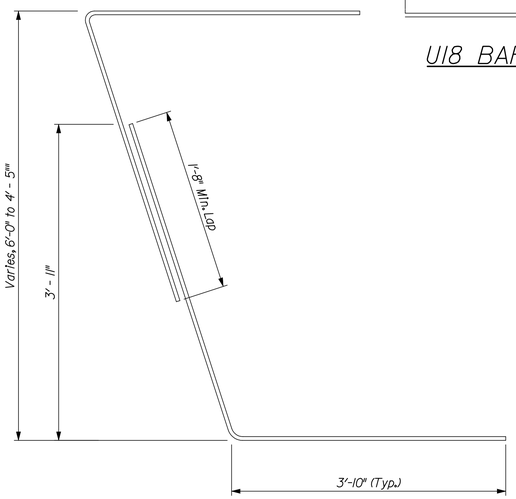


U11 BARS (#5)

(IF SKEWED)



U12 BARS (#5)



U13 BARS (#4)

Note: All reinforcement shall be epoxy-coated.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

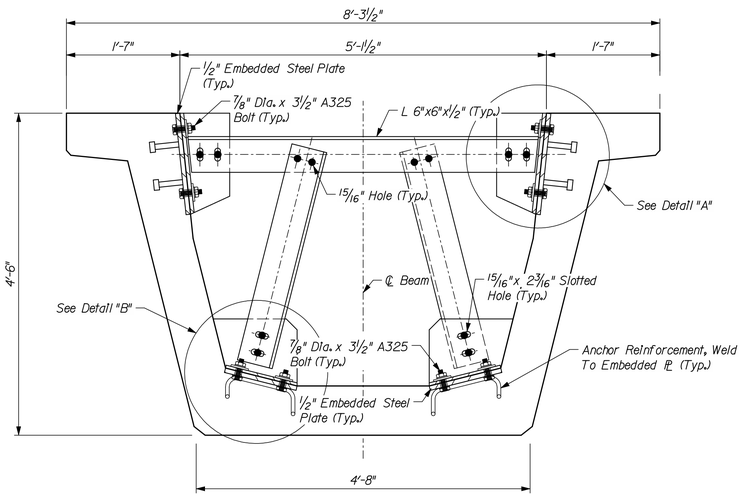
DESIGNED: SG DRAWN: TMT
CHECKED: AEO CHECKED: SG/SJC

INDIANA DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

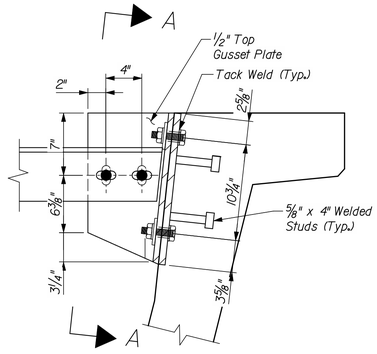
HORIZONTAL SCALE	BRIDGE FILE
1" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	50 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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12/4/2007
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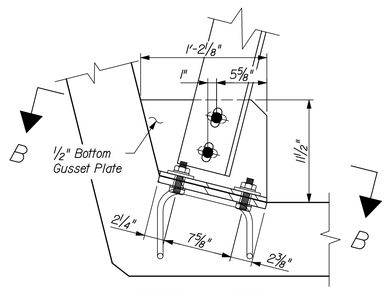
INTERMEDIATE STEEL DIAPHRAGM DETAIL

Scale: 1" = 1'-0"



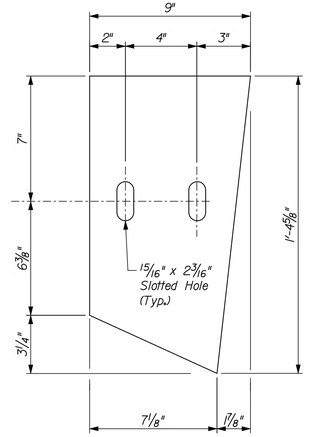
DETAIL "A"

Scale: 1½" = 1'-0"



DETAIL "B"

Scale: 1½" = 1'-0"

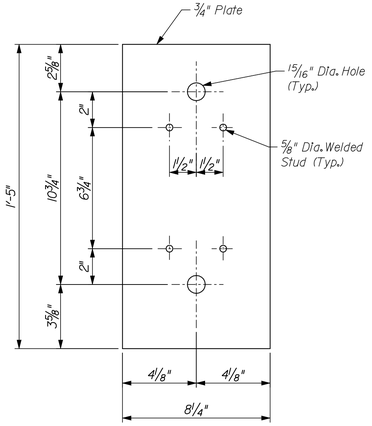


TOP GUSSET PLATE

Scale: 3" = 1'-0"

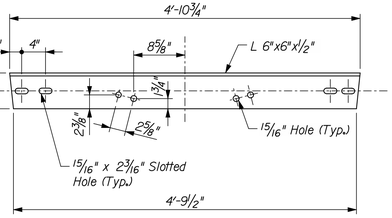
INTERMEDIATE STEEL DIAPHRAGM NOTES

1. All steel shall be ASTM A36 or A572, unless otherwise noted. Galvanize angles and plates after fabrication per ASTM A123.
2. Welding per AWS D1.5-02.
3. Ensure all bolted connections are ASTM A325, ⅞" diameter high strength bolts, nuts, and washers, mechanically zinc coated in accordance with AASHTO M298, for Class 50. Galvanize hardware per ASTM A153.
4. Assemble diaphragms and tighten all connections prior to beams being moved from casting bed.
5. All material for diaphragms to be included in the price bid for "Structural Members, Concrete U-Beam, 54Inch".



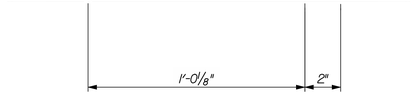
TOP EMBEDDED PLATE

Scale: 3" = 1'-0"



TOP ANGLE

Scale: 1" = 1'-0"



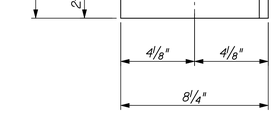
BOTTOM GUSSET PLATE

Scale: 3" = 1'-0"



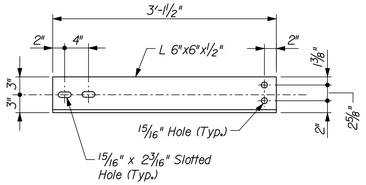
SECTION A-A

Scale: 3" = 1'-0"



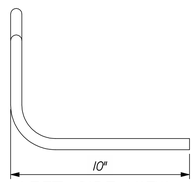
SECTION B-B

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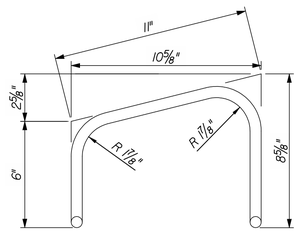


CROSS ANGLES

Scale: 1" = 1'-0"



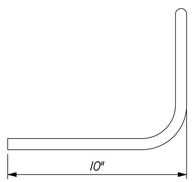
LEFT SIDE VIEW



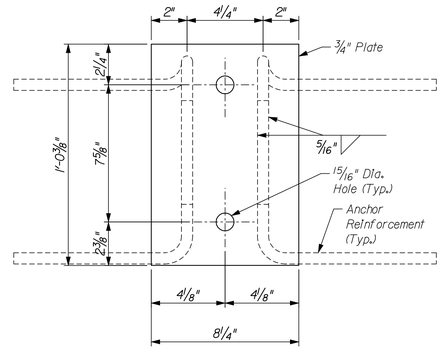
FRONT VIEW

BOTTOM PLATE ANCHOR REINFORCEMENT (#5 BAR)

Scale: 3" = 1'-0"



RIGHT SIDE VIEW



BOTTOM EMBEDDED PLATE

Scale: 3" = 1'-0"

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SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

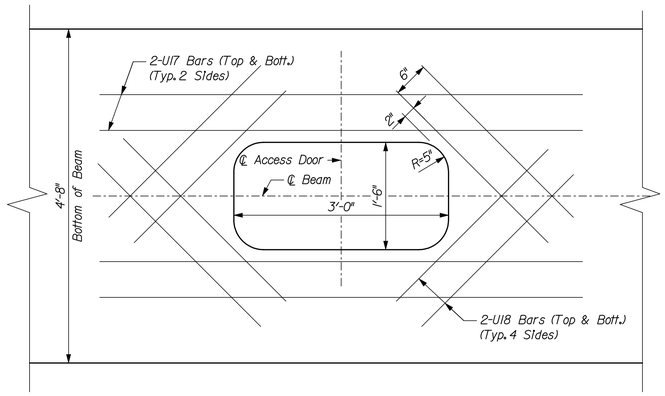
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INDIANA DEPARTMENT OF TRANSPORTATION

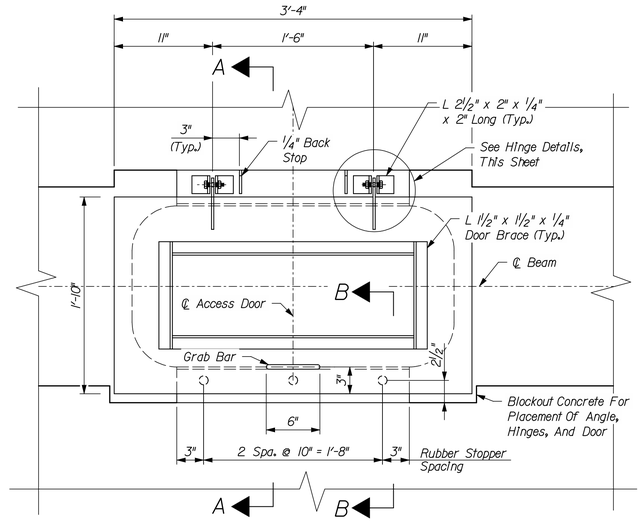
BEAM DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS SHOWN	9829512
SURVEY BOOK	SHEET NO. 51 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)



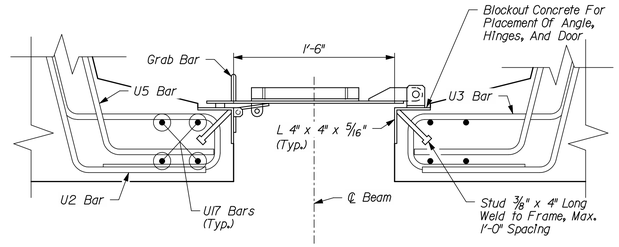
ACCESS DOOR REINFORCING

Scale: 1" = 1'-0"



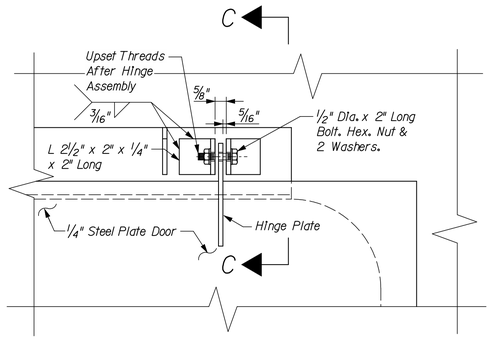
ACCESS DOOR PLAN

Scale: 1½" = 1'-0"



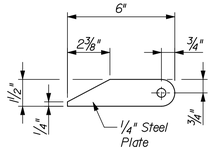
SECTION A-A

Scale: 1½" = 1'-0"



HINGE DETAILS

Scale: 3" = 1'-0"

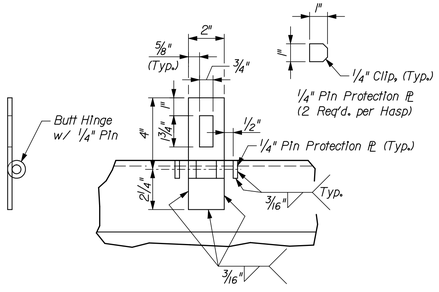


HINGE PLATE DETAIL

Scale: 3" = 1'-0"

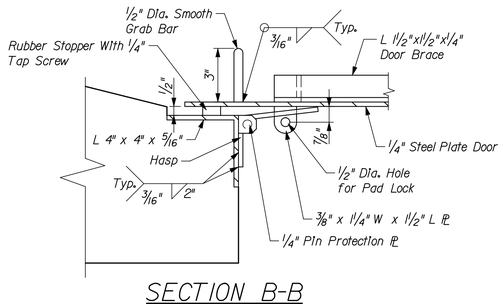
ACCESS DOOR NOTES

1. All steel shall be ASTM A36 or A572, unless otherwise noted.
2. Welding per AWS D1.5-02.
3. Galvanize hardware per ASTM A153. Galvanize structural shapes after fabrication per ASTM A123.
4. Door and frame to be flat after fabrication.
5. All material for the access door to be included in the unit price bid for "Structural Members, Concrete U-Beams, 54inch".



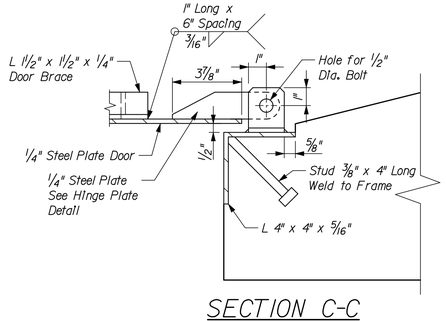
HASP DETAIL

Scale: 3" = 1'-0"



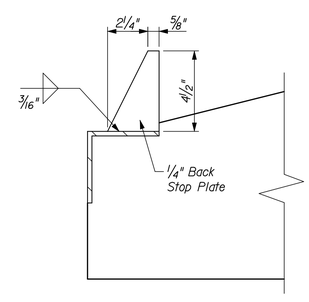
SECTION B-B

Scale: 3" = 1'-0"



SECTION C-C

Scale: 3" = 1'-0"



BACK STOP DETAILS

Scale: 3" = 1'-0"

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG — DRAWN: TMT

CHECKED: SJC — CHECKED: SG/SJC

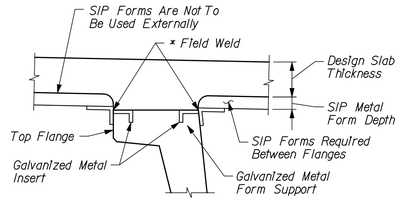
INDIANA
DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

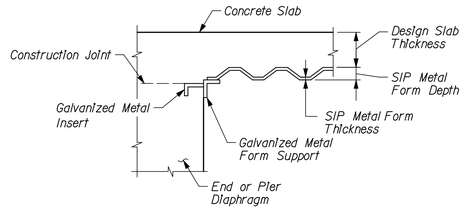
HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS SHOWN	9829512

SURVEY BOOK		SHEET NO.
		52 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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TOP FLANGE DETAIL



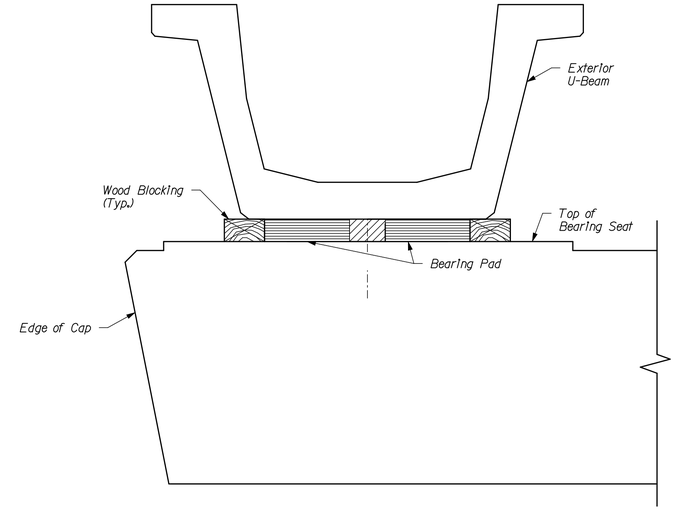
PARTIAL SECTION THRU DIAPHRAGM

STAY-IN-PLACE (SIP) METAL DECK FORM DETAILS

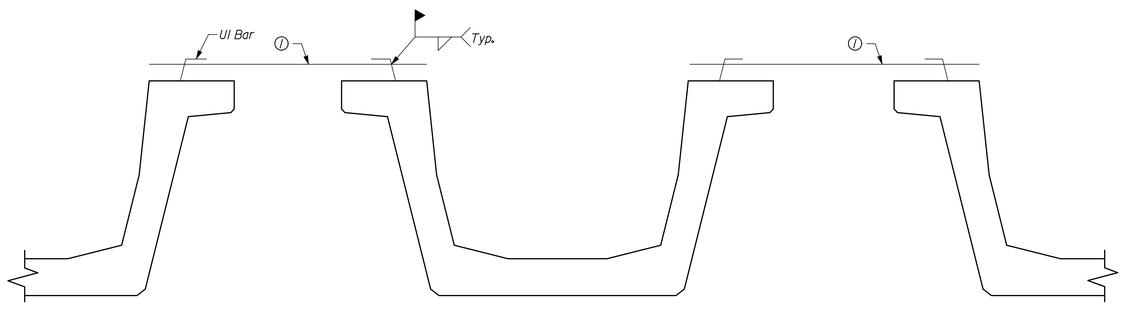
LEGEND:

① Two No. 5 bars at each end of each beam shall be welded to UI bars between all U-Beams immediately after erection.

x - Electrical grounding to reinforcing steel is prohibited.



TEMPORARY BLOCKING OF U-BEAM ENDS



MINIMUM BEAM BRACING

BRACING NOTES

1. Systems equal to or better than those shown may be used provided details of such systems are submitted to and approved by the Engineer prior to erection.
2. Use of these systems and/or details does not relieve the Contractor of the responsibility for the adequacy of the bracing and the safety of the structure.
3. The reinforcement for minimum beam bracing shall not be required when permanent metal deck forms are used.
4. The Contractor shall evaluate the need for temporary bracing between U-Beams, based on the selected deck forming system and concrete placement sequence. In addition, timber blocking shall be placed beneath the exterior face of the webs at both ends of all beams, prior to deck casting. Blocking shall be left in place for at least 4 days after deck casting and afterwards removed at the Contractor's convenience.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

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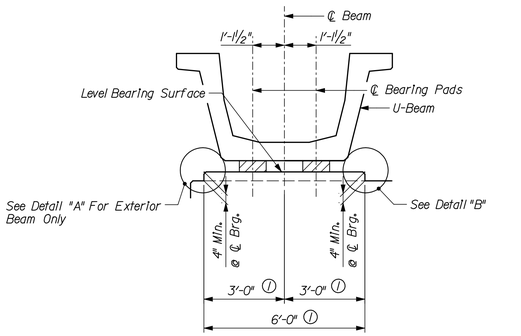
DESIGNED: SG DRAWN: MAB
CHECKED: AEO CHECKED: SG/SJC

INDIANA DEPARTMENT OF TRANSPORTATION

BEAM DETAILS

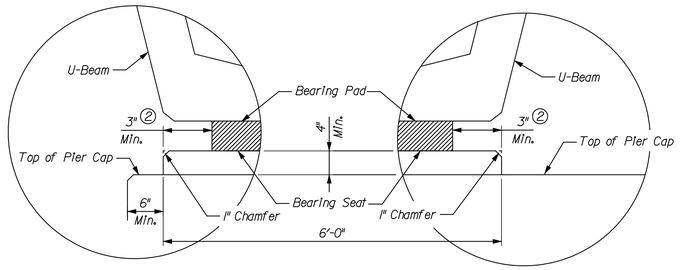
HORIZONTAL SCALE	BRIDGE FILE
3/4" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
3/4" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	53 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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VIEW OF BEARING SEAT BUILD-UP

Scale: 3/8" = 1'-0"



DETAIL "A"

For Exterior Beam Only

DETAIL "B"

BENT #2 BEARING PAD DIMENSIONS (In)

One - Pad						Two - Pad					
T	W	L	E	N	I	T	W	L	E	N	I
						4 1/2	14	20	1/8	8	1/2

END BENT BEARING PAD DIMENSIONS (In)

One - Pad						Two - Pad					
T	W	L	E	N	I	T	W	L	E	N	I
						13/16	11	19	3/16	2	3/16

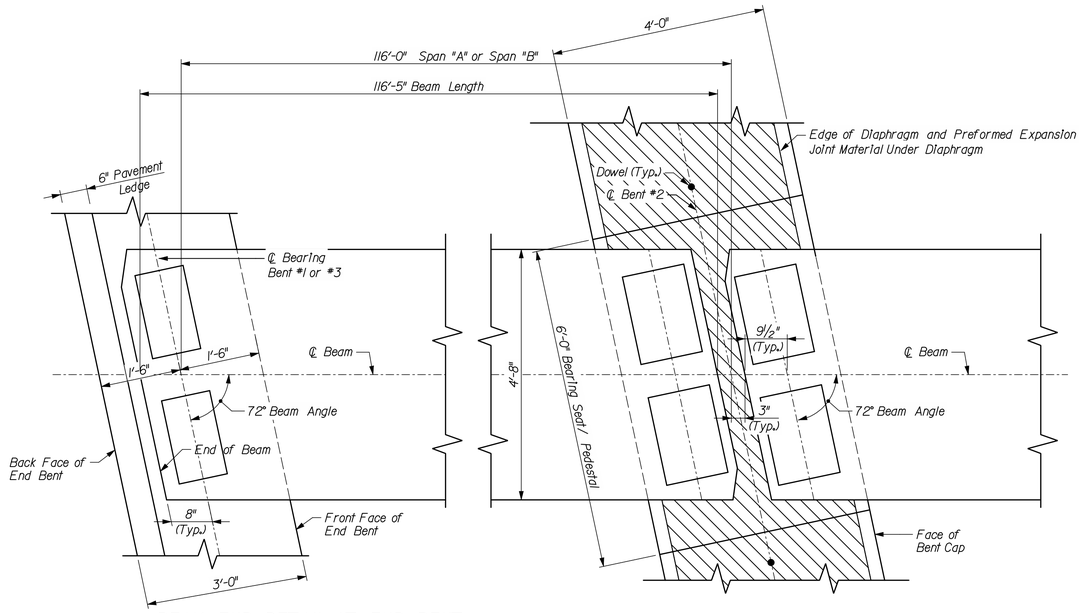
LEGEND:

① Measured along ℄ of Bearing. It should not conflict with minimum edge distances shown on Details "A" and "B".

② Parallel to ℄ bearing

BEARING NOTES

1. Fabricate the elastomeric bearing pads to the design and dimensions as shown on these plans.
2. Finish bearing surface shall be clean and free of all loose material before placing Bearing Pads.

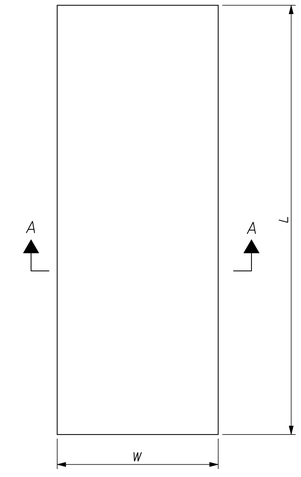


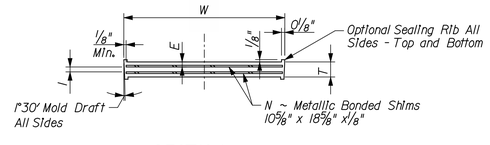
BEAM END DETAIL AT END BENT

BEAM END DETAIL AT BENT #2

BEARING DIMENSIONS AND BEAM END DETAILS

Scale: 3/4" = 1'-0"

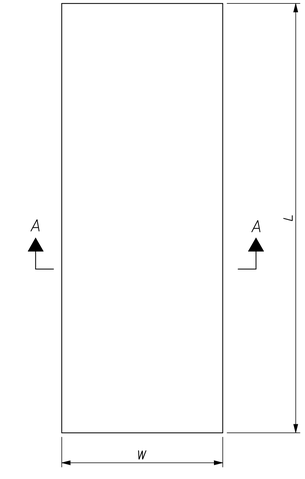


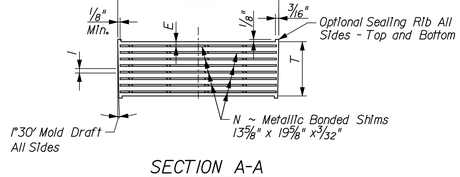


SECTION A-A

END BENT ELASTOMERIC BEARING PAD

Scale: 3" = 1'-0"





SECTION A-A

BENT #2 ELASTOMERIC BEARING PAD

Scale: 3" = 1'-0"

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George DESIGN ENGINEER 10-15-2007 DATE

DESIGNED: SG DRAWN: TMT

CHECKED: AEO CHECKED: SG

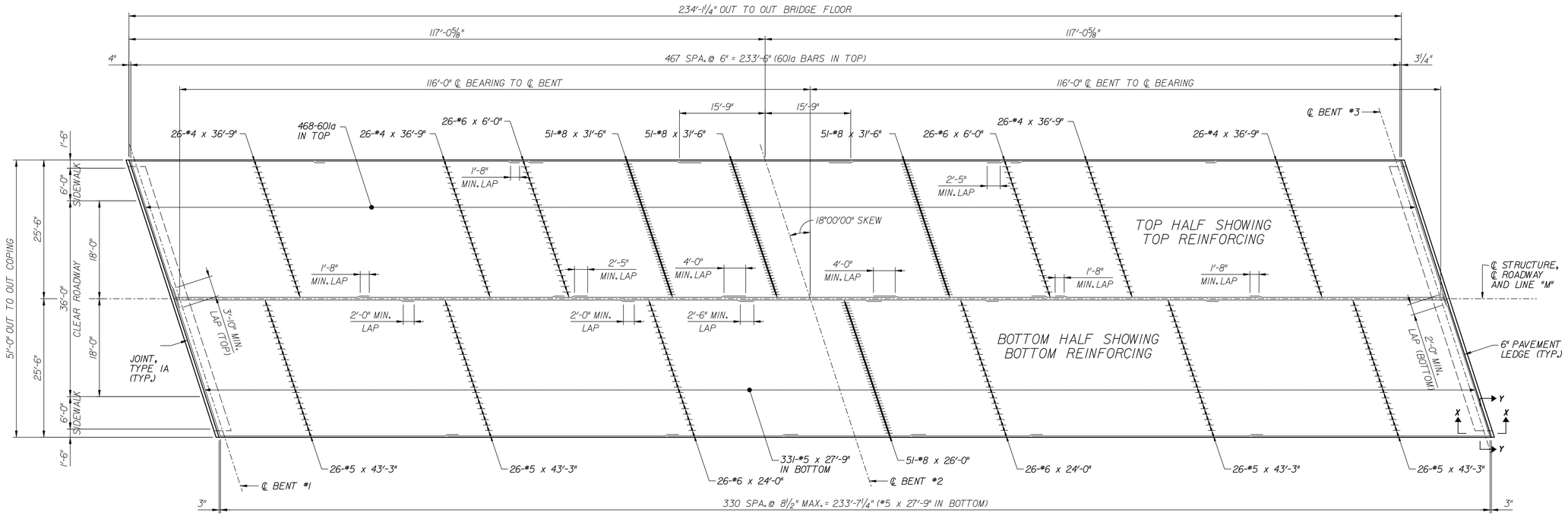
INDIANA DEPARTMENT OF TRANSPORTATION

BEARING DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS SHOWN	9829512

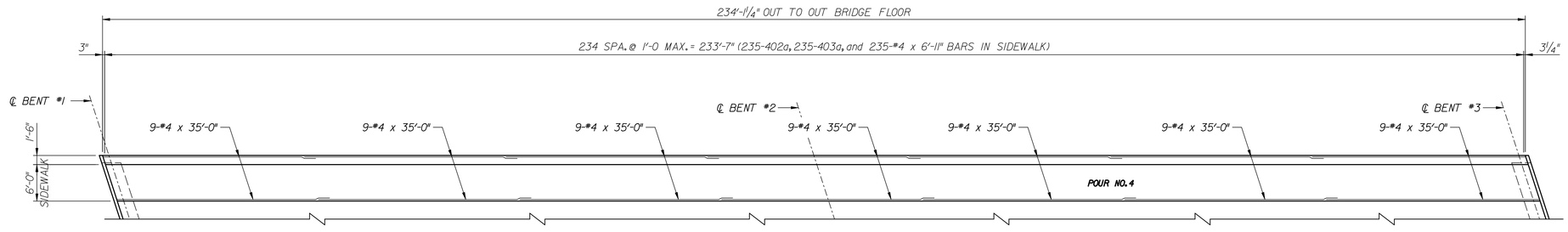
SURVEY BOOK	SHEET NO.
	54 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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FLOOR PLAN

SCALE: 1" = 10'



PLAN AT SIDEWALK (2 REQ'D)

SCALE: 1" = 10'

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: MAB
CHECKED: AEO CHECKED: SG/SJC

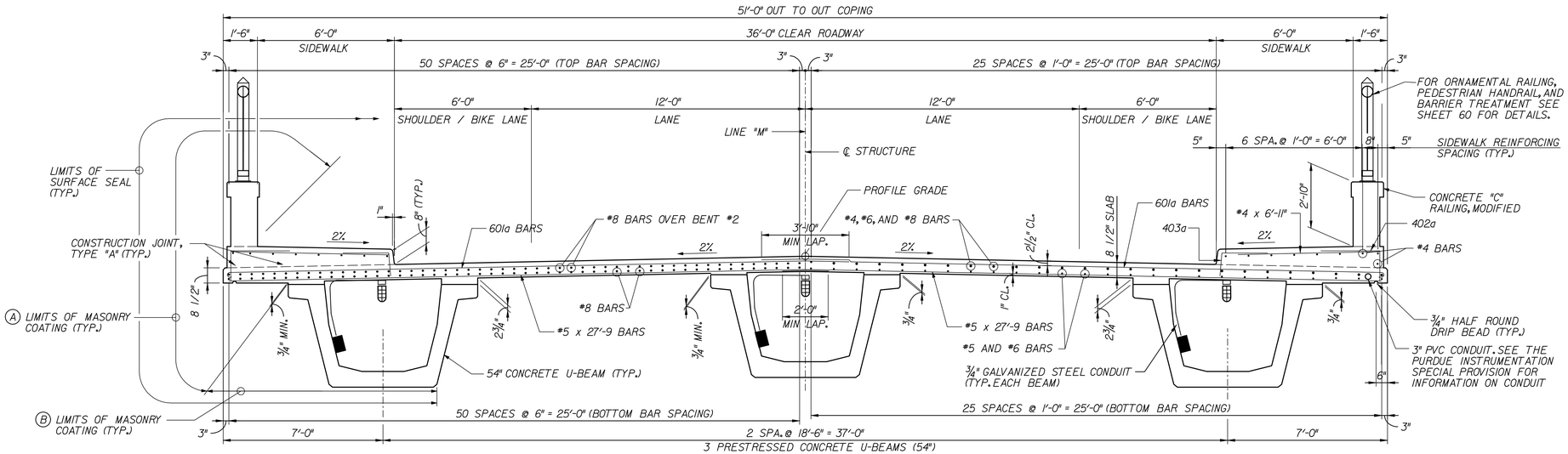
INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512

SURVEY BOOK	SHEET NO.
	55 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SEE SHEET 58 FOR NOTES REGARDING Ⓐ AND Ⓑ

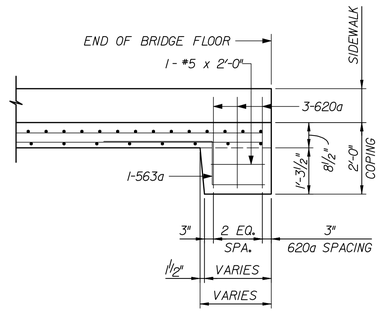
HALF SHOWING REINFORCING OVER BENT #2

TYPICAL SECTION

SCALE: 3/8" = 1'-0"

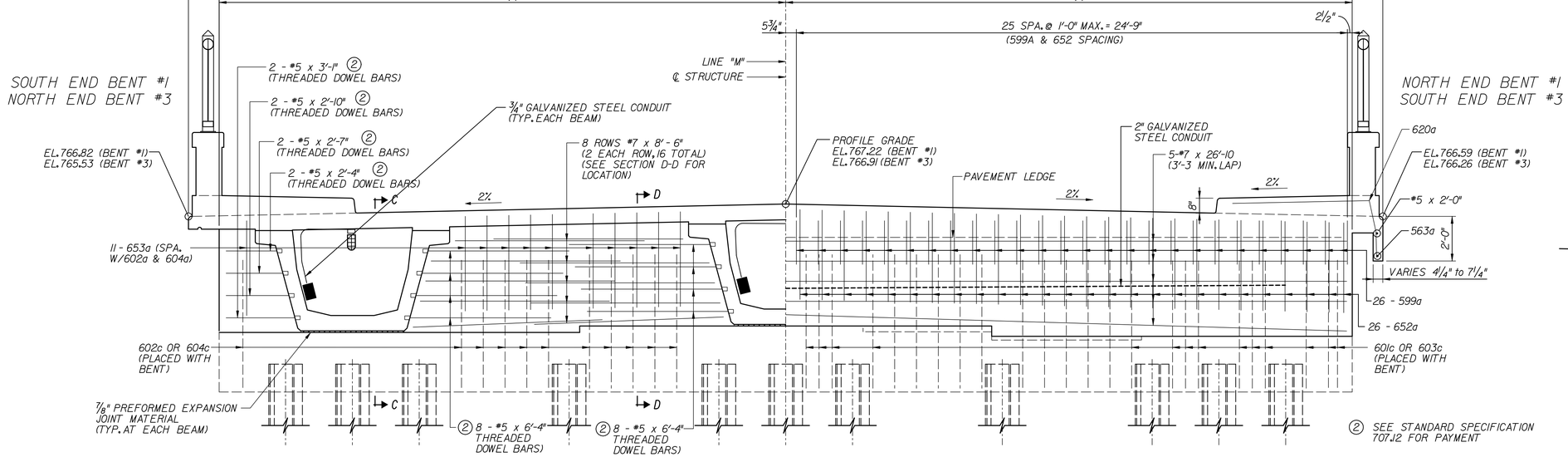
HALF SHOWING REINFORCING AT MID-SPAN

NOTE: BEAM FILLET DIMENSIONS ARE NOMINAL AND WILL VARY DUE TO BEAM CAMBER IRREGULARITIES.



SECTION X-X

SCALE: 1/2" = 1'-0"

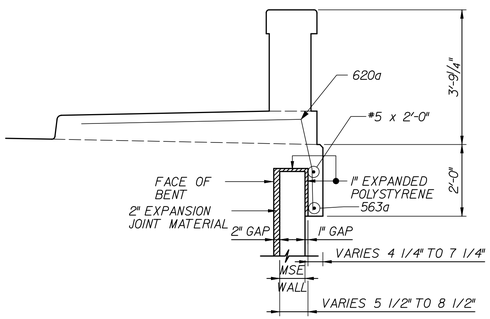


HALF SHOWING REINFORCING IN FRONT FACE

TYPICAL SECTION AT BENTS #1 & #3

SCALE: 3/8" = 1'-0"

HALF SHOWING REINFORCING IN REAR FACE



SECTION Y-Y

SCALE: 1/2" = 1'-0"

NOTE: SEE SHEET 58 FOR SECTIONS C-C & D-D

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG — DRAWN: AJE — CHECKED: AEO — CHECKED: SG/SJC

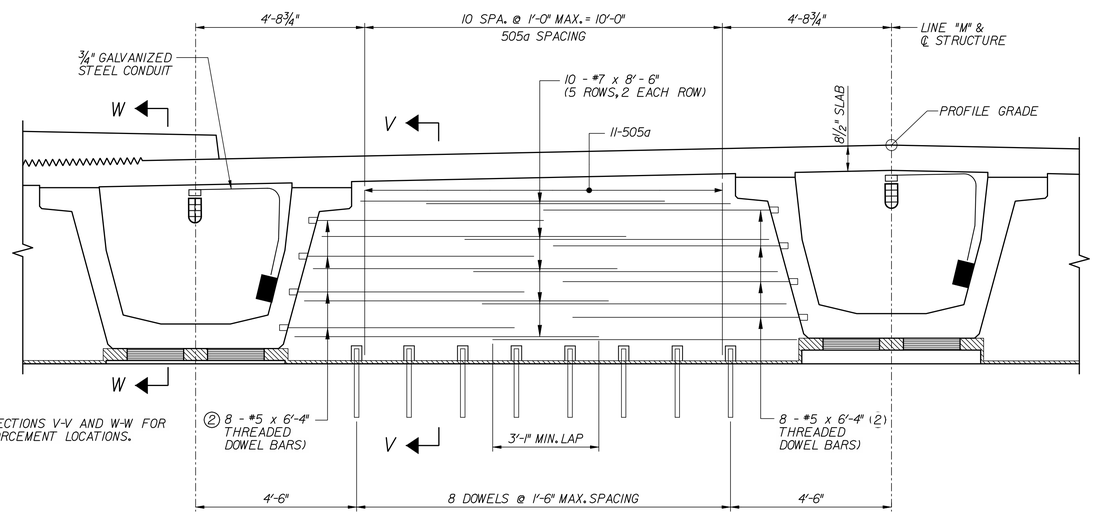
INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

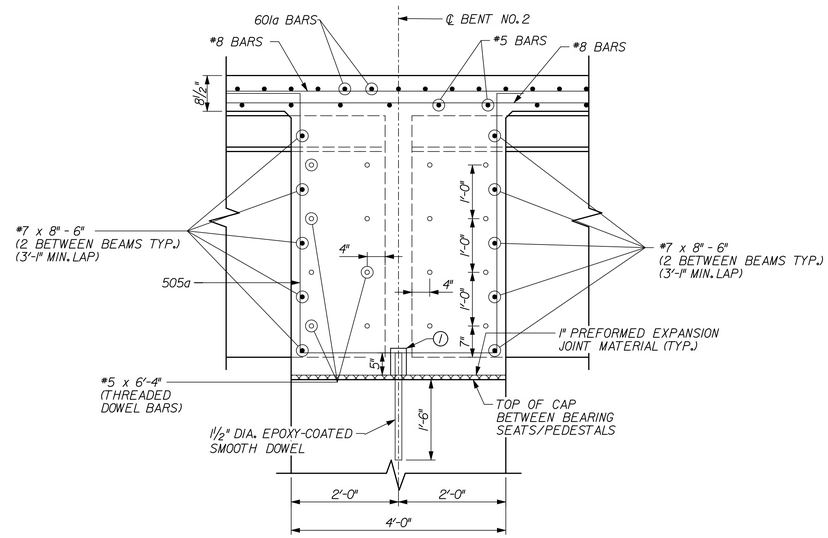
SURVEY BOOK		SHEET NO.
		56 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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TYPICAL SECTION @ BENT #2 DIAPHRAGM (ALONG SKEW)

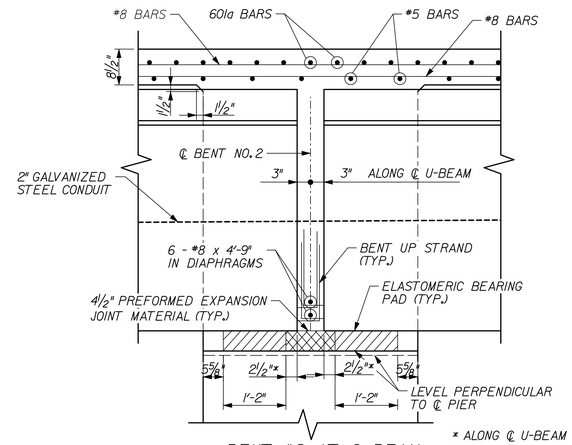
SCALE: 1/2" = 1' - 0"



SECTION THRU BENT #2 DIAPHRAGM

SECTION V-V

SCALE: ¾" = 1'-0"



BENT #2 AT ℄ BEAM

SECTION W-W

SCALE: ¾" = 1'-0"

① STANDARD WEIGHT COMMERCIAL PIPE SLEEVE 5" LONG AND CLOSED AT ONE END. SECURE PIPE SLEEVE TO PREVENT FLOATING WHILE PLACING CONCRETE. SLEEVE IS TO SIT ON PREFORMED EXPANSION JOINT MATERIAL. PIPE SLEEVE IS TO BE INCIDENTAL TO DIAPHRAGM CONCRETE.

② SEE STANDARD SPECIFICATION 707.12 FOR PAYMENT

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: AJE
CHECKED: AEO CHECKED: SG/SJC

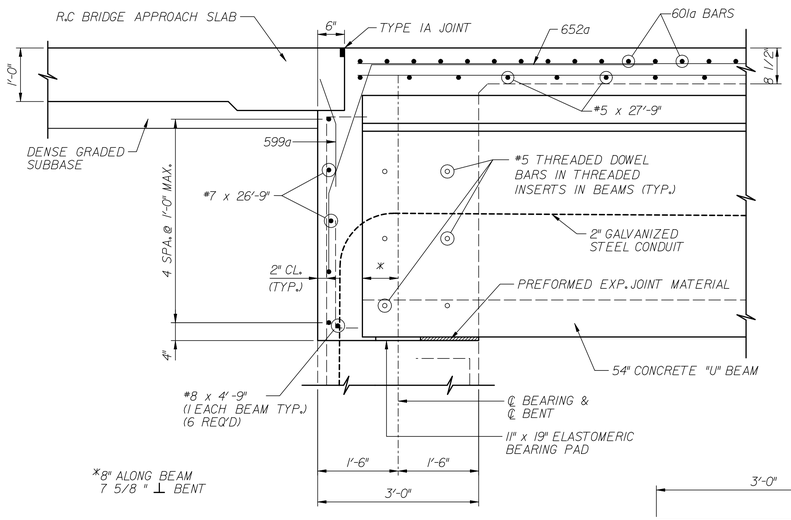
INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

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	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

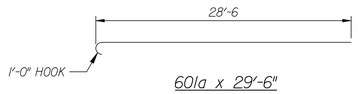
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		57 of 108
CONTRACT	PROJECT	
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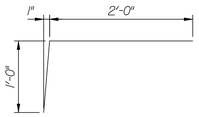


SECTION C-C

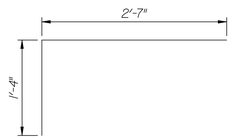
SCALE: 3/4" = 1'-0"



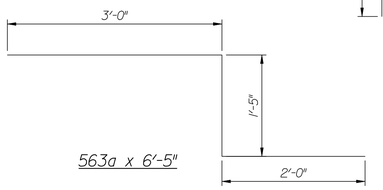
601a x 29'-6"



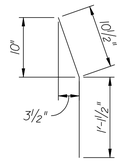
403a x 3'-0"



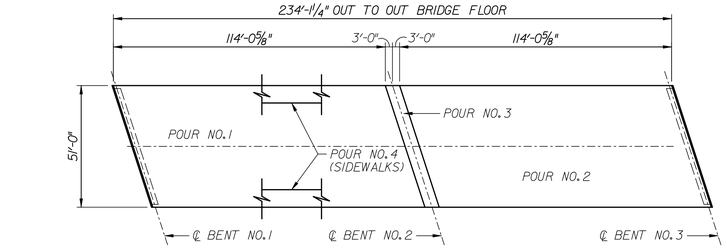
402a x 3'-11"



563a x 6'-5"

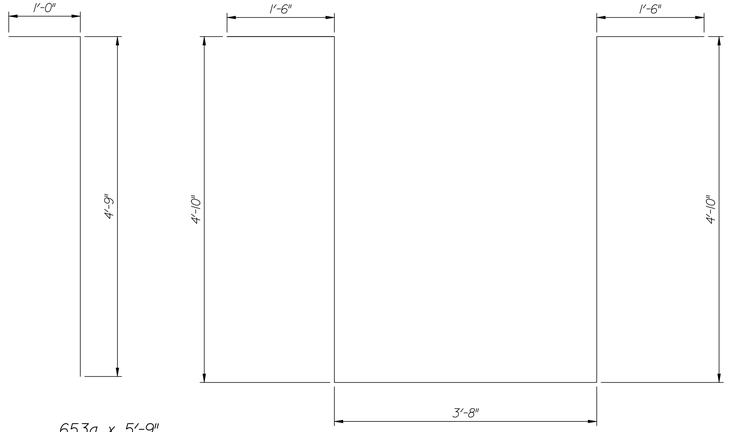


599a x 2'-0"



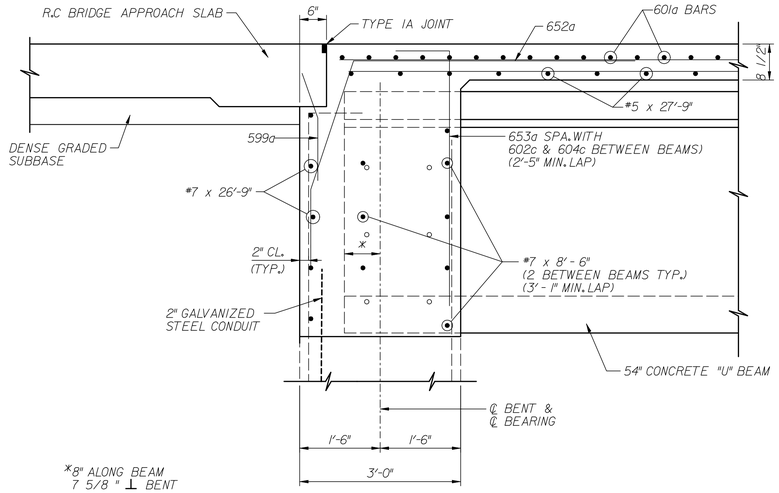
POUR DIAGRAM

SCALE: 1" = 30'-0"



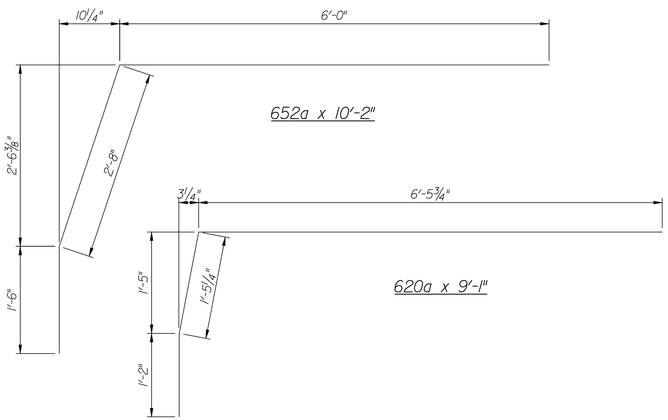
653a x 5'-9"

505a x 16'-4"



SECTION D-D

SCALE: 3/4" = 1'-0"



652a x 10'-2"

620a x 9'-1"

NOTES:

FOR TYPICAL SECTIONS, SEE SHEET 56.

FOR REINFORCING BAR NOTES, SEE STANDARD DRAWING E703-BRST-01.

REINFORCING STEEL COVERING SHALL BE 2 1/2" MIN. IN TOP AND 1" MIN. IN BOTTOM OF FLOOR SLAB, AND 2" MIN. IN ALL OTHER PARTS, UNLESS NOTED.

FOR 54" CONCRETE "U" BEAM DETAILS, SEE SHEETS 48-53.

SCREED DATA WILL BE FURNISHED ON REQUEST.

THE TOP REINFORCING IN THE DECK SHALL BE SECURELY TIED DOWN TO THE DECK FOMS AND/OR THE BEAMS TO PREVENT LIFTING DURING CONCRETE PLACEMENT.

SUITABLE RESTRAINT SHALL BE PROVIDED TO PREVENT THE ROTATION OF THE OUTSIDE BEAMS FROM CONSTRUCTION LOAD SUCH AS FINISHING MACHINE, FORMS, ETC.

(A) MASONRY COATING OF CONCRETE BARRIER AND COPING SHALL MEET FEDERAL COLOR STANDARD 595B, COLOR NO. 37722

(B) MASONRY COATING OF OUTSIDE FACE AND BOTTOM OF EXTERIOR BEAMS SHALL MEET FADERAL COLOR STANDARDS 595B, COLOR NO. 30045.

BILL OF MATERIALS SUPERSTRUCTURE

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
#8	306	31'-6"	
#8	102	26'-0"	
#8	9	4'-9"	
TOTAL #8			32931
#7	20	26'-10"	
#7	84	8'-6"	
TOTAL #7			2566
601a	936	29'-6"	
620a	12	9'-1"	
652a	104	10'-2"	
653a	44	5'-9"	
#6	104	24'-0"	
#6	104	6'-0"	
TOTAL #6			48291
503a	1404	4'-11"	
504a	702	5'-10"	
505a	22	16'-4"	
563a	4	6'-5"	
599a	104	2'-0"	
#5	208	43'-3"	
#5	662	27'-9"	
#5	112	35'-3"	
#5	4	2'-0"	
TOTAL #5			44756
402a	470	3'-11"	
403a	470	3'-0"	
#4	208	36'-9"	
#4	126	35'-0"	
#4	470	6'-11"	
TOTAL #4			12395
TOTAL EPOXY COATED REINFORCING			140929
QC/QA CONCRETE, SUPERSTRUCTURE, MODIFIED			
POUR NO. 1			176.5 CYS
POUR NO. 2			177.7 CYS
POUR NO. 3			28.1 CYS
TOTAL QC/QA CONCRETE, MODIFIED, SUPERSTRUCTURE			382.3 CYS
CONCRETE, C, SUPERSTRUCTURE			
POUR NO. 4			102.0 CYS
TOTAL CONCRETE, C, SUPERSTRUCTURE			102.0 CYS
CONCRETE, C, RAILING, MODIFIED			
NORTH RAILING			30.2 CYS
SOUTH RAILING			30.2 CYS
TOTAL CONCRETE, C, RAILING, MODIFIED			60.4 CYS
MISCELLANEOUS			
STRUCTURAL MEMBER, CONCRETE U-BEAM, 54"			698.5 LFT
SURFACE SEAL (21900 SFT)			1 LSUM
MASONRY COATING (10270 SFT)			1 LSUM
STEEL RAILING, ORNAMENTAL			468.2 LFT

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

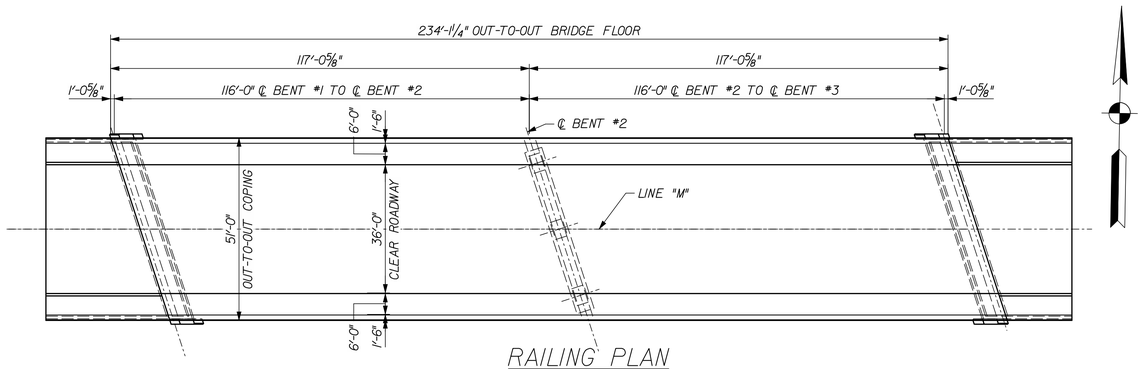
DESIGNED: SG | DRAWN: AJE | CHECKED: AEO | CHECKED: SG/SJC

INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

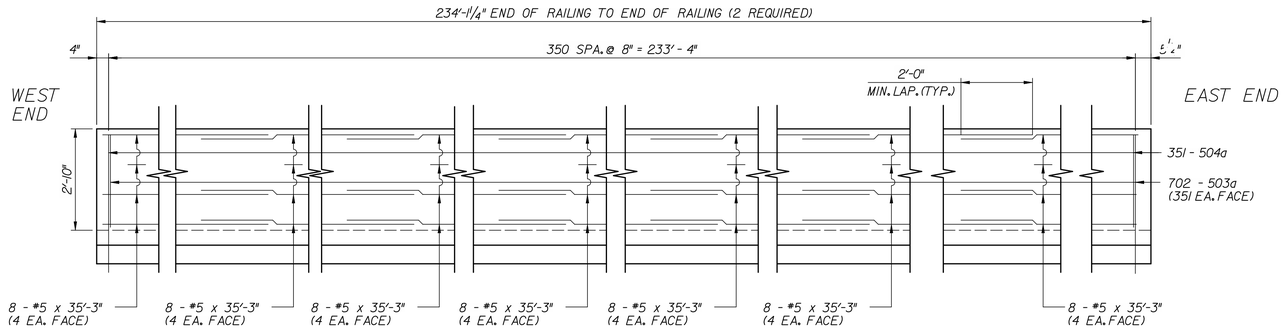
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AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
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SURVEY BOOK	SHEET NO. 58 of 108
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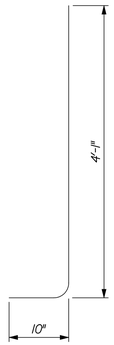
RAILING PLAN

SCALE: 1" = 20'-0

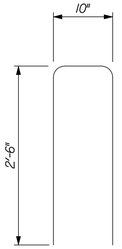


ELEVATION-PANEL "A"

SCALE: 1/2" = 1'-0



503a x 4'-11"



504a x 5'-10"

GENERAL NOTES

RAIL IS COMPRISED OF THE FOLLOWING PARTS: RAIL MEMBERS, POSTS, WIRE MESH, ORNAMENTAL STEEL GRAPHICS, AND ALL ANCHORAGE PROVISIONS INCLUDING BOLTS, NUTS, AND WASHERS.

ALL OPEN ENDS OF THE RAIL SHALL BE CAPPED.

ALL STEEL COMPONENTS SHALL BE GALVANIZED UNLESS OTHERWISE SHOWN ON PLANS.

ANCHOR BOLTS SHALL BE 5/8" DIA. ASTM A325 BOLTS (OR A321 THREADED RODS WITH ONE TACK WELDED HEX NUT EACH) WITH ONE HEX NUT AND ONE 2" O.D. WASHER PLUS ONE HARDENED STEEL WASHER AT EACH BOLT. NUTS SHALL CONFORM TO A563 REQUIREMENTS. THE UNTAPPED BLANKS SHALL BE GALVANIZED PRIOR TO CUTTING THE THREADS. THREADS FOR BOLTS AND NUTS SHALL HAVE CLASS 2A AND 2B FIT TOLERANCES IN ACCORDANCE WITH ANSI B1.

FACE OF RAIL, POSTS AND BARRIER SHALL BE VERTICAL TRANSVERSELY UNLESS OTHERWISE APPROVED BY THE CONTRACTING OFFICER. RAIL POSTS SHALL BE PERPENDICULAR TO TOP OF ADJACENT CONCRETE BARRIER GRADE. GROUT MAY BE USED UNDER RAIL POST BASE PLATES IF NECESSARY.

RAIL MEMBER SECTIONS SHALL INCLUDE NOT LESS THAN TWO POSTS NOR MORE THAN FOUR (EXCEPT AT END BENTS).

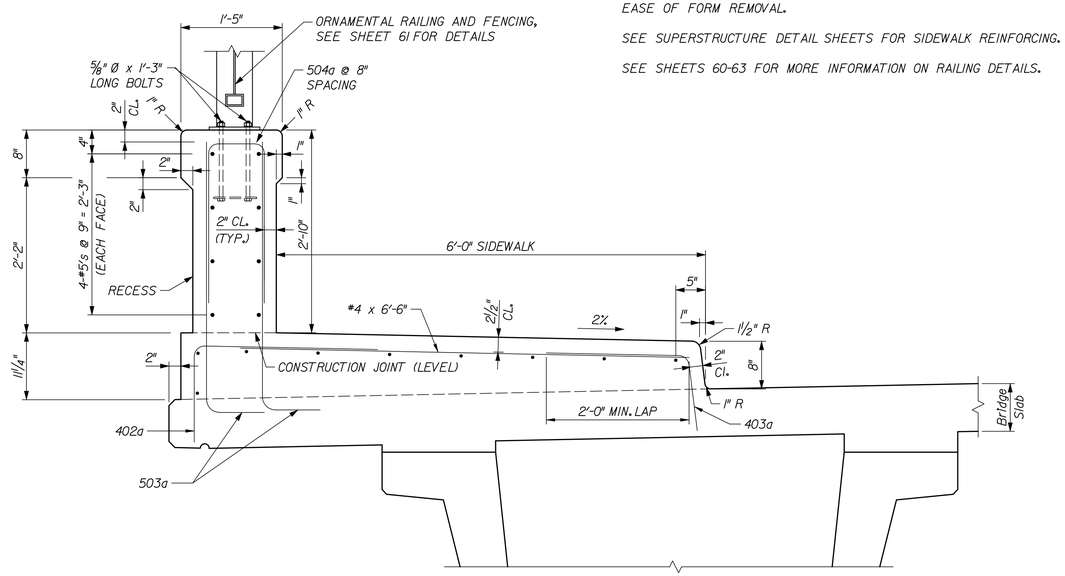
EXPOSED EDGES OF RAIL MEMBER AND RAIL POSTS SHALL BE ROUNDED OR CHAMFERED TO APPROXIMATELY 1/16" BY GRINDING.

SHOP DRAWINGS SHOWING RAIL MEMBER SECTION LENGTHS, POST SPACING, AND ANCHOR BOLT SETTING SHALL BE SUBMITTED TO THE CONTRACTING OFFICER FOR APPROVAL, AS PER THE SPECIFICATIONS.

PROVIDE MINIMUM 1/2" DRAFT AT TOP AND BOTTOM OF RECESS FOR EASE OF FORM REMOVAL.

SEE SUPERSTRUCTURE DETAIL SHEETS FOR SIDEWALK REINFORCING.

SEE SHEETS 60-63 FOR MORE INFORMATION ON RAILING DETAILS.



TYPICAL SECTION BARRIER DETAILS

SCALE: 1" = 1'-0"

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

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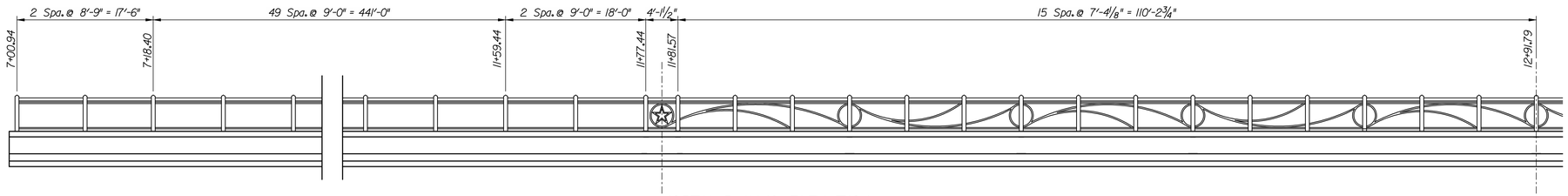
INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

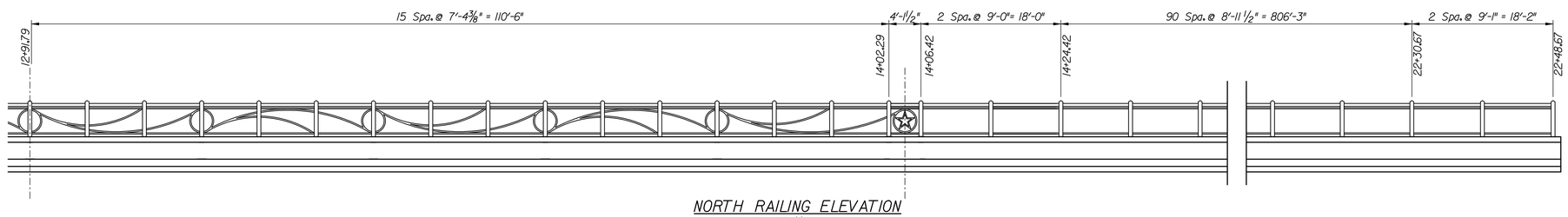
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AS SHOWN	9829512

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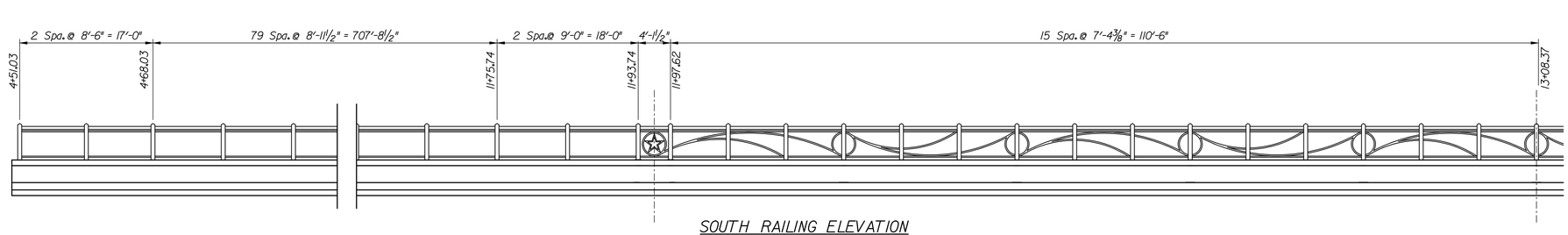
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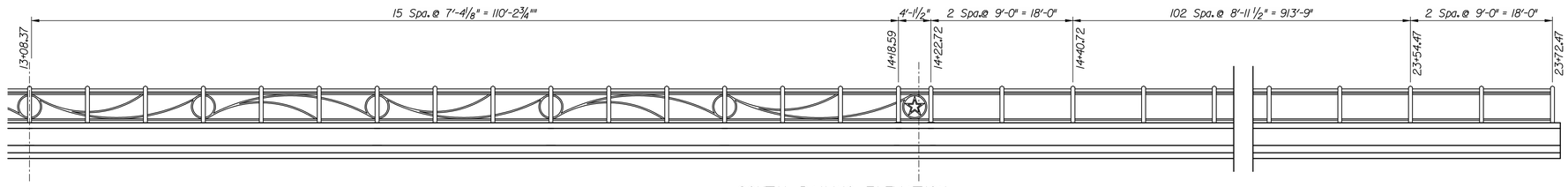
NORTH RAILING ELEVATION
SCALE: 1/8" = 1'-0"



NORTH RAILING ELEVATION
SCALE: 1/8" = 1'-0"



SOUTH RAILING ELEVATION
SCALE: 1/8" = 1'-0"



SOUTH RAILING ELEVATION
SCALE: 1/8" = 1'-0"

NOTE: STEEL PICKETS ARE NOT SHOWN FOR CLARITY

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SG DRAWN: TMT
CHECKED: SJC CHECKED: SG

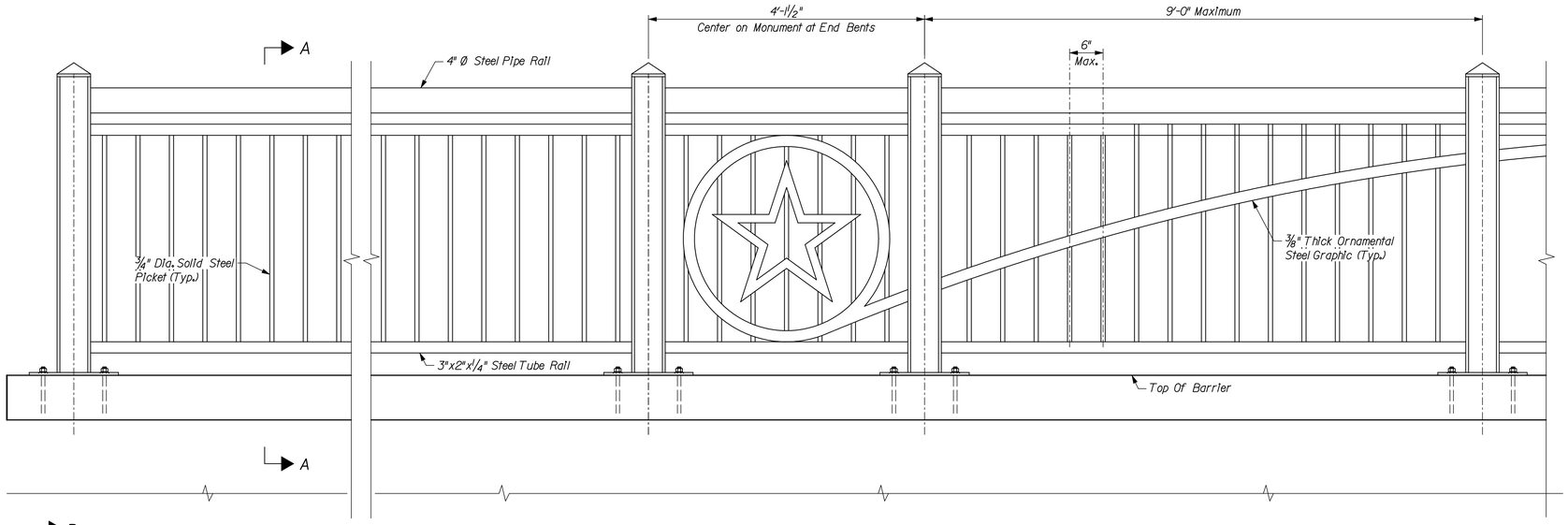
INDIANA DEPARTMENT OF TRANSPORTATION

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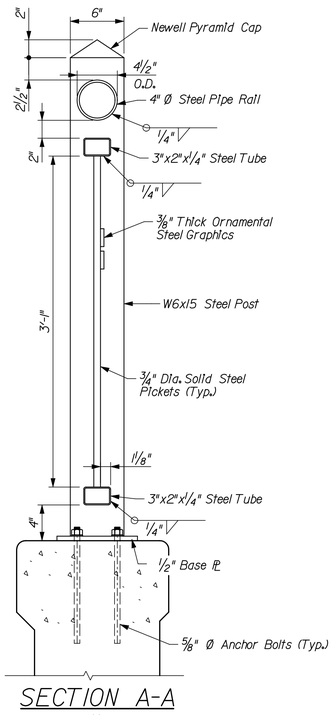
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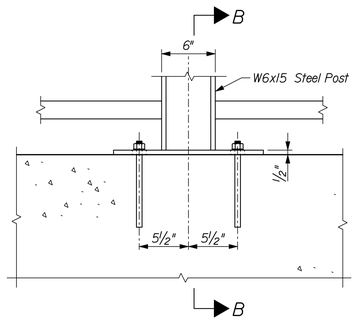
SIDEWALK ELEVATION OF RAILING

Scale: 1" = 1'-0"

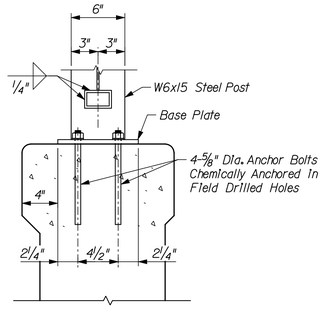


SECTION A-A

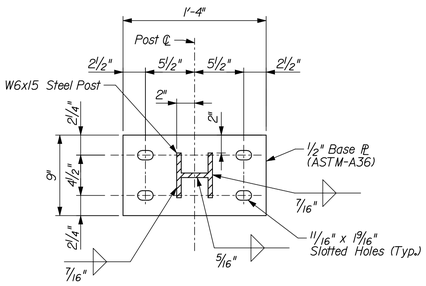
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ELEVATION



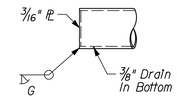
SECTION B-B



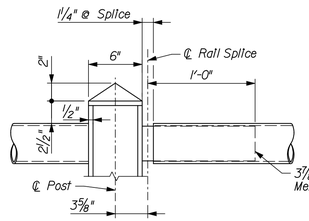
BASE PLATE DETAIL

BASE PLATE AND ANCHOR BOLT DETAILS

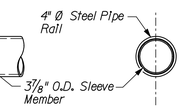
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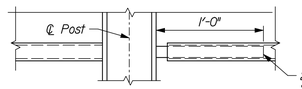
AT ENDS OF RAILING



SPLICE AT TOP STEEL PIPE RAIL



SECTION THRU SPLICE



SPLICE AT TOP & BOTTOM TUBE STEEL RAILS



SECTION THRU SPLICE

Note: The difference between the outside dimensions of the sleeve and the inside dimensions of the railing shall not exceed 1/8" along either axis.

RAILING MEMBER DETAILS

Scale: 1 1/2" = 1'-0"

NOTES:

1. The rail splices shall be placed at 20'-0" maximum intervals.
2. All steel shall be A709-36 galvanized.
3. All bolts shall be A-325 galvanized.
4. Paint color of ornamental steel railing shall be in accordance with Federal Color Standard 595B, Color Number 16081.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: SG CHECKED: SG

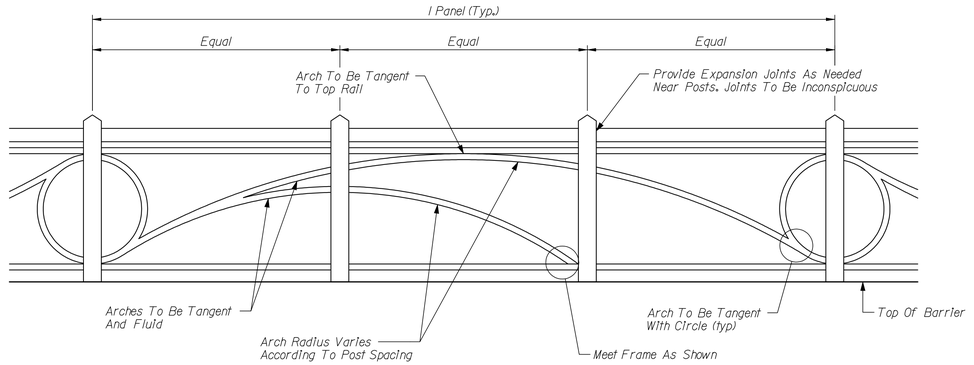
INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS SHOWN	9829512

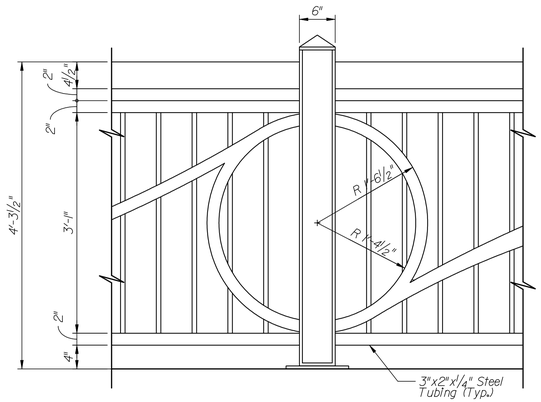
SURVEY BOOK		SHEET NO.
		61 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

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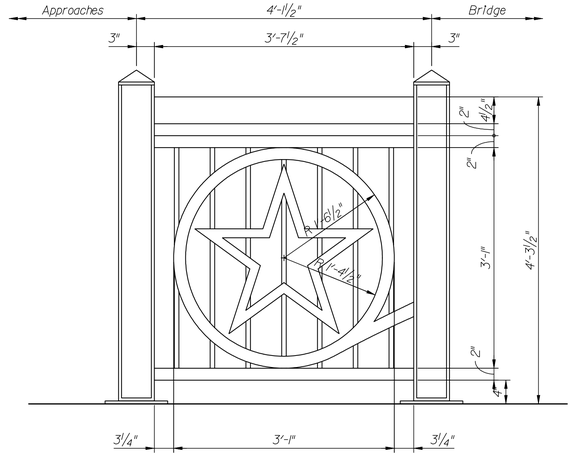
ELEVATION DETAIL ON BRIDGE

SCALE: 1/2" = 1'-0"



TYPICAL ORNAMENTAL DETAIL

SCALE: 1" = 1'-0"



END BENT MONUMENT ORNAMENTAL DETAIL

SCALE: 1" = 1'-0"

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG | DRAWN: TMT

CHECKED: SJC | CHECKED: SG

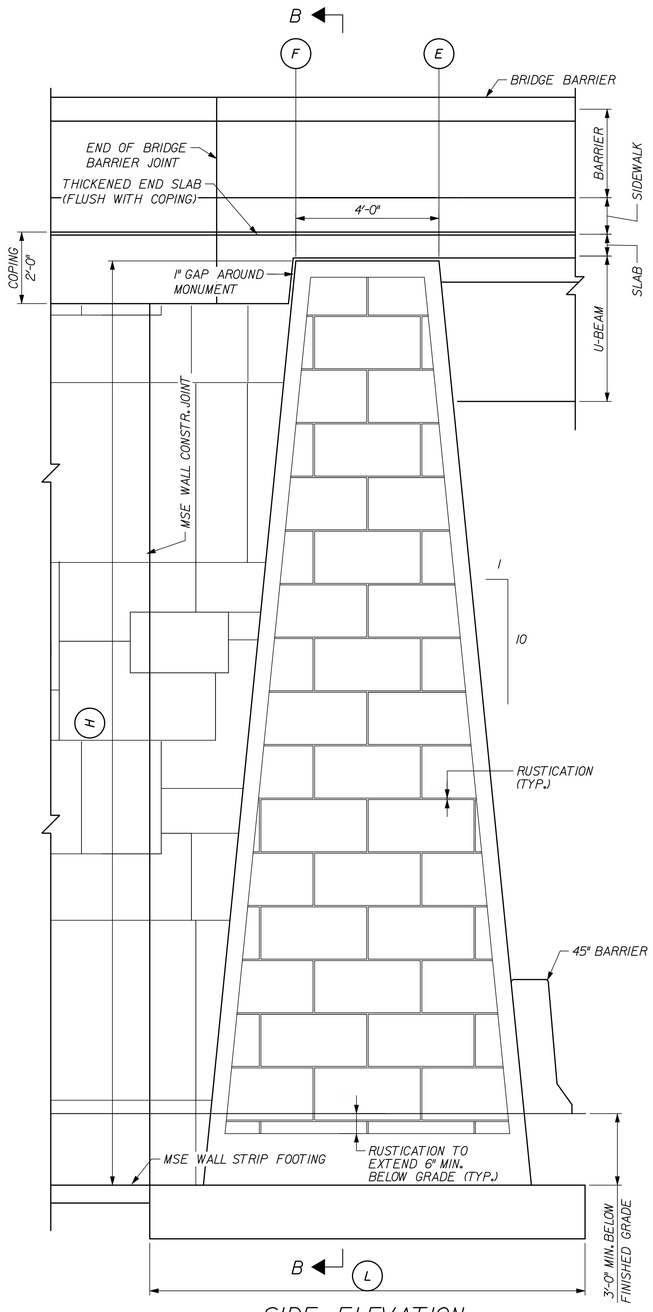
INDIANA DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS

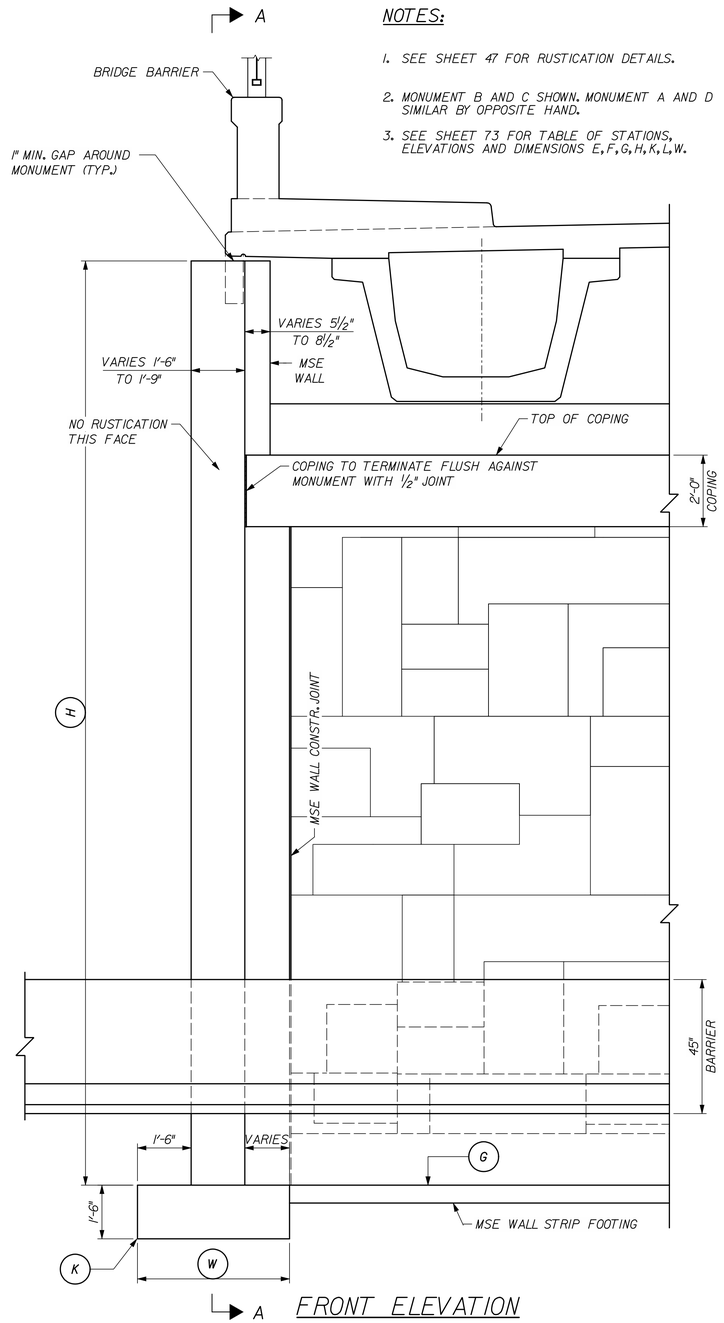
HORIZONTAL SCALE	BRIDGE FILE
AS SHOWN	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS SHOWN	9829512

SURVEY BOOK		SHEET NO.
		62 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

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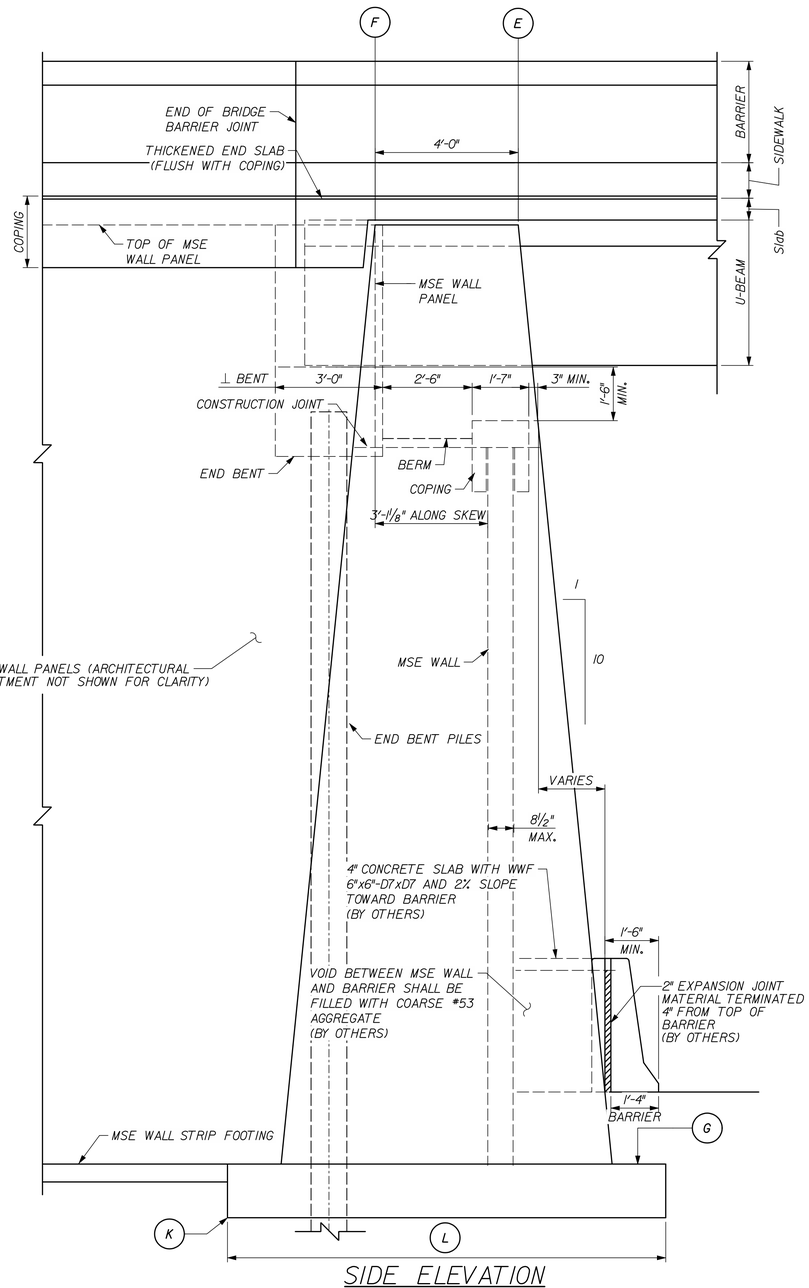
SIDE ELEVATION



FRONT ELEVATION

NOTES:

1. SEE SHEET 47 FOR RUSTICATION DETAILS.
2. MONUMENT B AND C SHOWN. MONUMENT A AND D SIMILAR BY OPPOSITE HAND.
3. SEE SHEET 73 FOR TABLE OF STATIONS, ELEVATIONS AND DIMENSIONS E,F,G,H,K,L,W.



SIDE ELEVATION

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG/GAH — DRAWN: JLH

CHECKED: SJC — CHECKED: SG

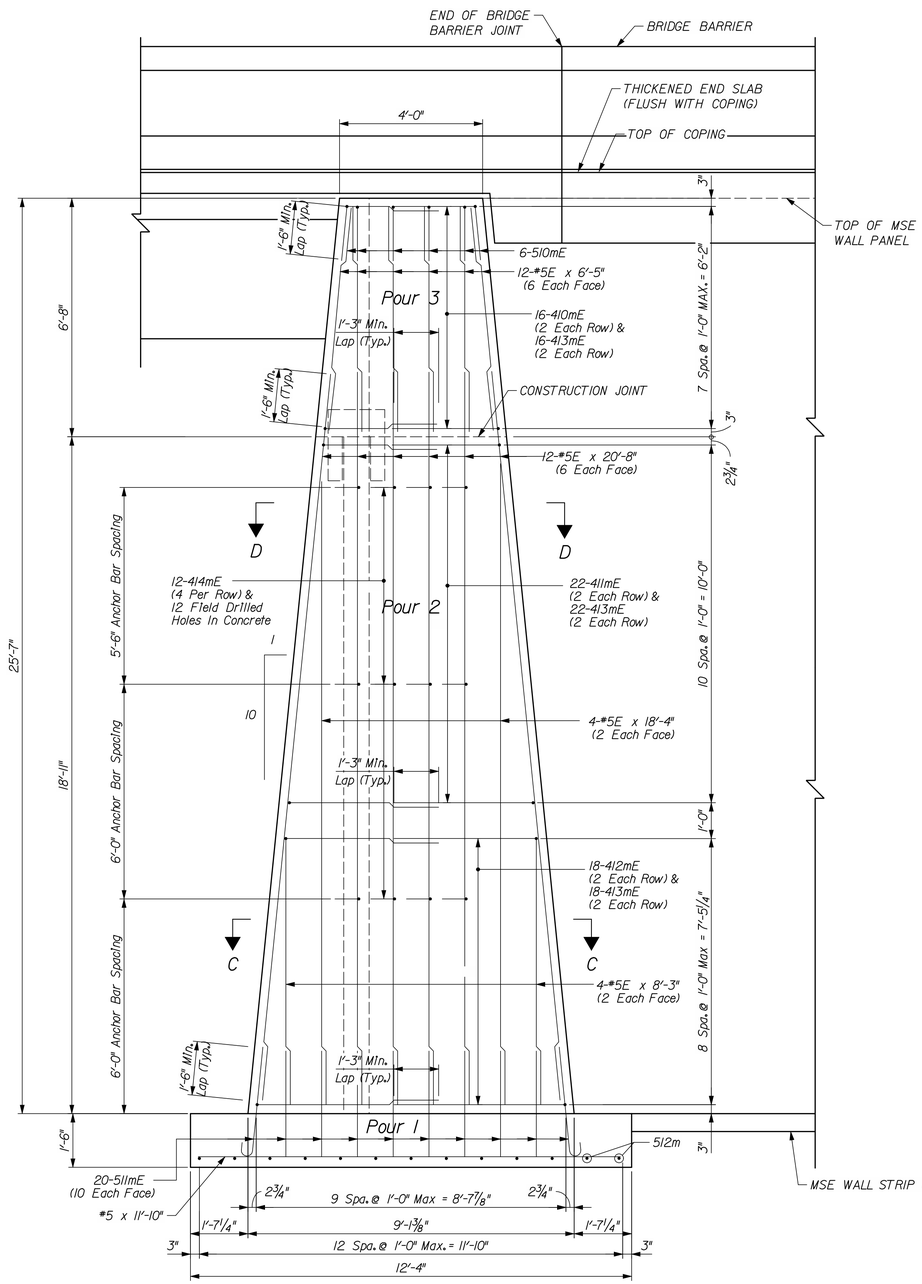
INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

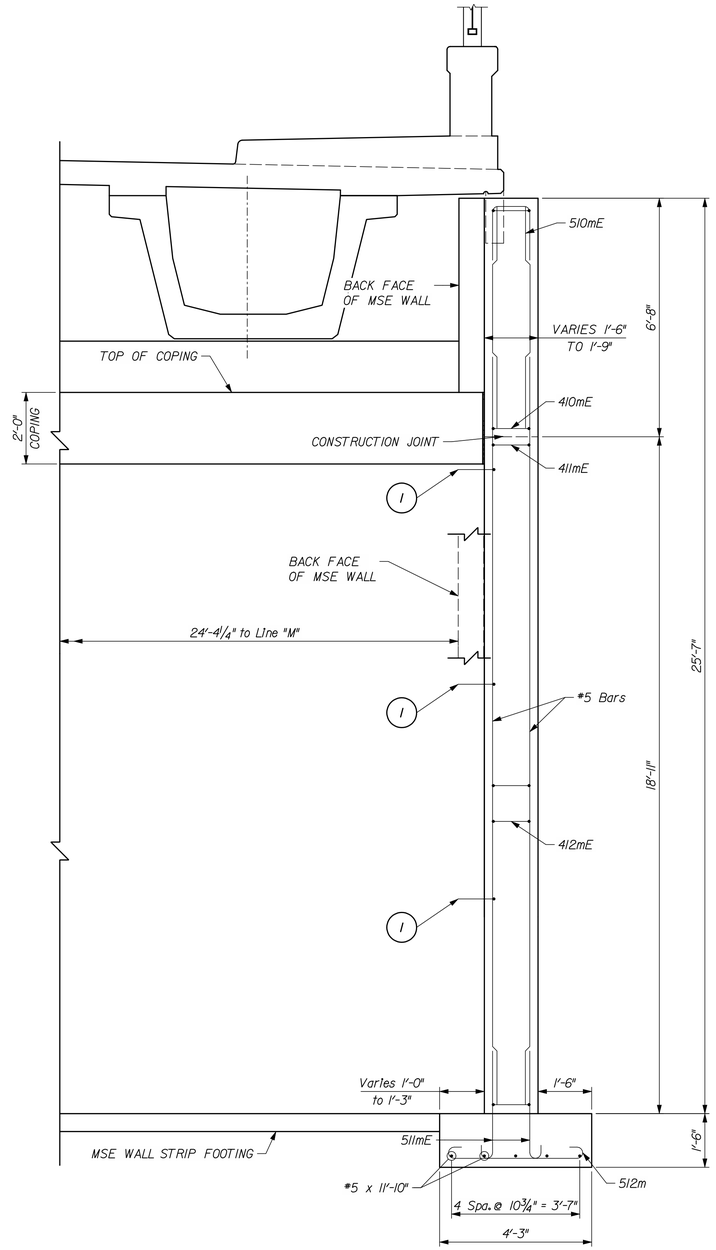
HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I-465-149-8374
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	9829512

SURVEY BOOK	SHEET NO.
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CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SECTION A-A, MONUMENT A



SECTION B-B, MONUMENT A

LEGEND

(1) 414mE bars to be chemically anchored in Field Drilled Holes in MSE Wall. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pullout strength of 12 kips.

NOTES:

1. See Sheet 66 for Sections C-C thru. D-D
2. See Sheet 73 for Bar Details.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — DATE: 10-15-2007

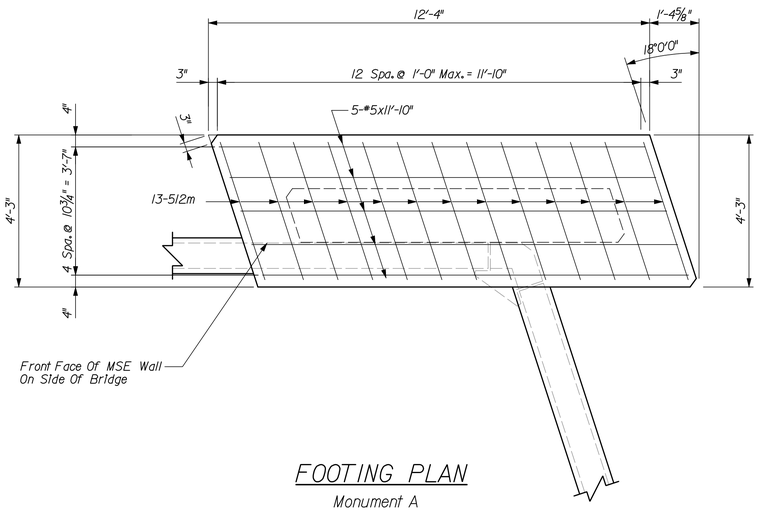
DESIGNED: SG/GAH | DRAWN: JLH | CHECKED: AEO | CHECKED: SG

INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I-465-149-8374
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
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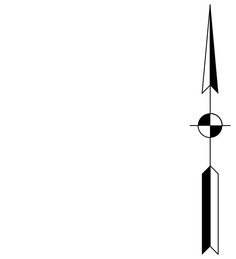
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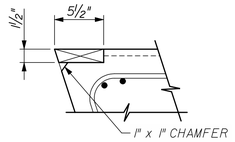


FOOTING PLAN

Monument A

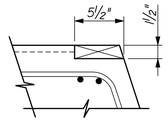
SCALE: 1/2" = 1'-0"





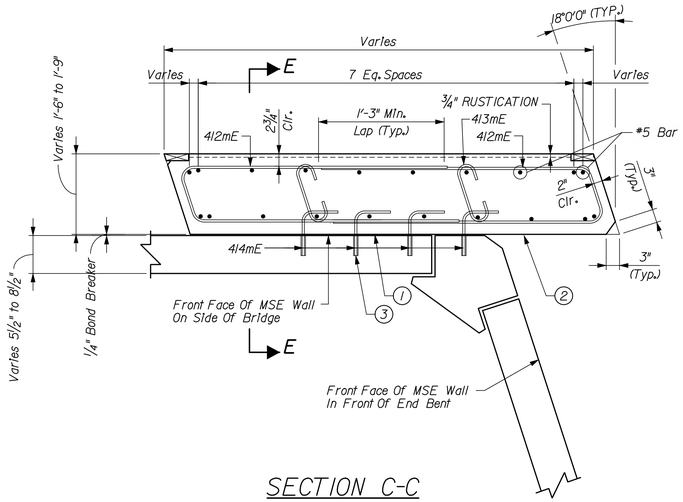
ACUTE CORNER BLOCKOUT DETAIL

SCALE: 1 1/2" = 1'-0"



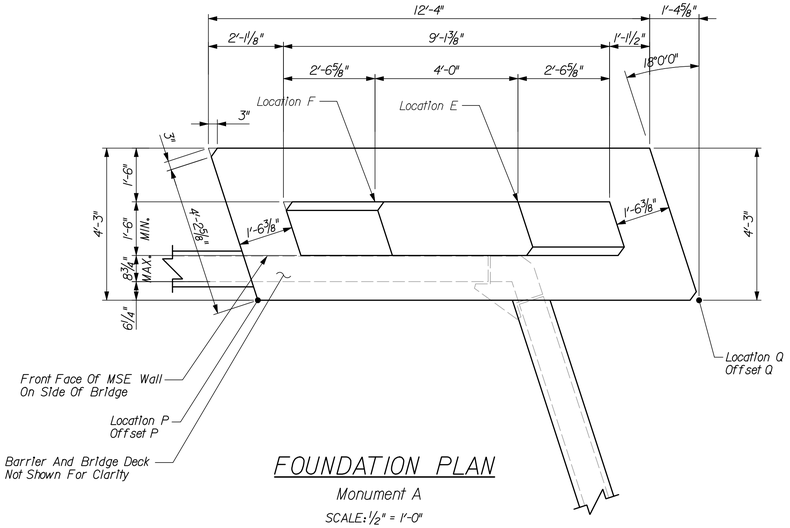
OBTUSE CORNER BLOCKOUT DETAIL

SCALE: 1 1/2" = 1'-0"



SECTION C-C

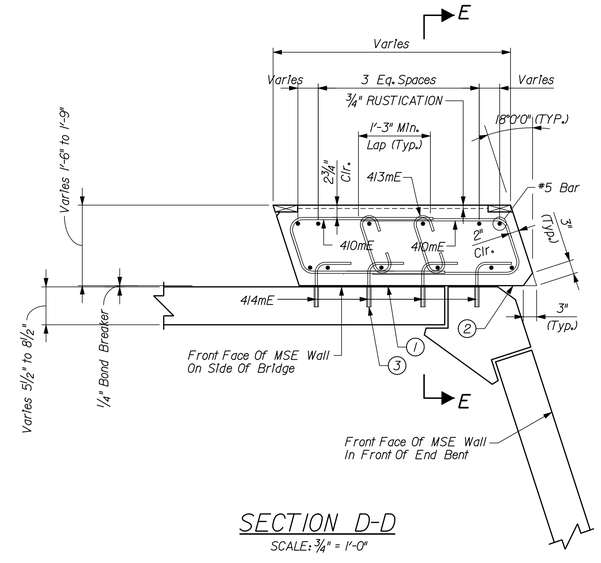
SCALE: 3/4" = 1'-0"



FOUNDATION PLAN

Monument A

SCALE: 1/2" = 1'-0"



SECTION D-D

SCALE: 3/4" = 1'-0"

MONUMENT A DETAILS

BILL OF MATERIALS

MONUMENT A

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
5 10mE	6	4'-2"	
5 11mE	20	3'-4"	
#5E	12	6'-5"	
#5E	12	20'-8"	
#5E	4	18'-4"	
#5E	4	8'-3"	
TOTAL #5E			545
4 10mE	16	7'-3"	
4 11mE	22	9'-5"	
4 12mE	18	11'-7"	
4 13mE	56	2'-2"	
4 14mE	12	1'-8"	
TOTAL #4E			450
TOTAL EPOXY COATED REINFORCING			995
REINFORCING STEEL			
5 12m	13	5'-1"	
#5	5	11'-10"	
TOTAL #5			131
TOTAL REINFORCING STEEL			131
CONCRETE			
CONCRETE, CLASS A, SUBSTRUCTURE			
POUR NO. 2			8.2 CYS
POUR NO. 3			1.9 CYS
TOTAL CONCRETE, CLASS A, SUBSTRUCTURE			10.1 CYS
CONCRETE, CLASS B, FOOTING			
POUR NO. 1			2.9 CYS
TOTAL CONCRETE, CLASS B, FOOTING			2.9 CYS
MISCELLANEOUS			
SURFACE SEAL (270 SFT)			1 LSUM
MASONRY COATING (270 SFT)			1 LSUM
FIELD DRILLED HOLES IN CONCRETE			12 EACH

LEGEND:

(1) Bond breaking material to be applied to all exposed faces between MSE wall and monument. Thickness of bond breaking material to be 1/4" minimum thickness.

(2) Exposed interior faces to have same finish as exterior faces without rustication.

(3) 4 14mE Bars at MSE wall shall have field drilled holes for chemically anchored bars. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pulloutstrength of 12 kips.

NOTES:

1. All Exposed Surface of the Monument Shall Be Coated With Surface Seal And Masonry Coating. Masonry Coating Shall Meet Federal Color Standard 595B, Color No. 37722.
2. Reinforcing Steel Above Footing Shall Be Epoxy Coated & Reinforcing In Footing Shall Be Plain.
3. End bent not shown in all sections for clarity.
4. See Sheet 73 for Section E-E.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George, DESIGN ENGINEER — 10-15-2007, DATE

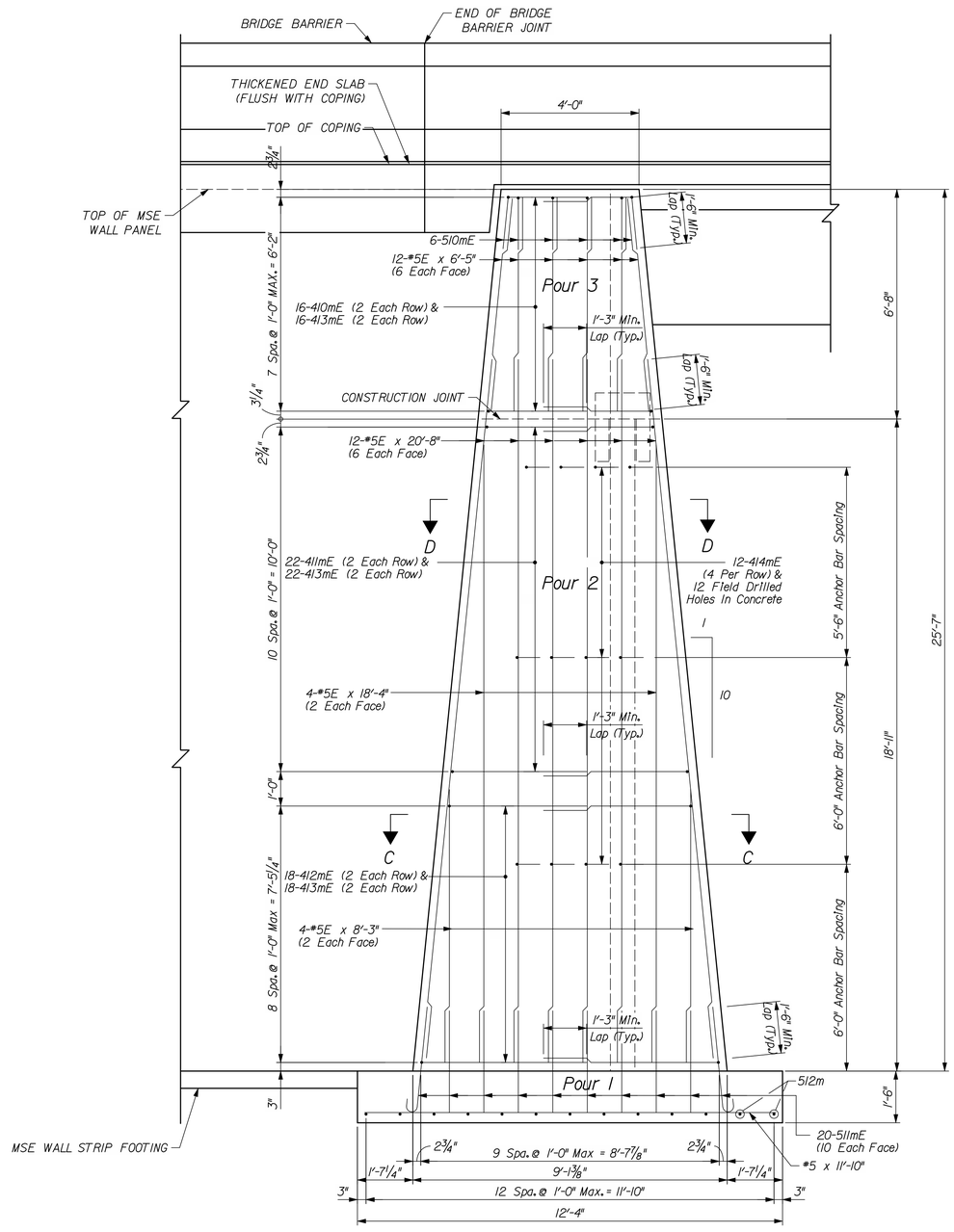
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INDIANA DEPARTMENT OF TRANSPORTATION

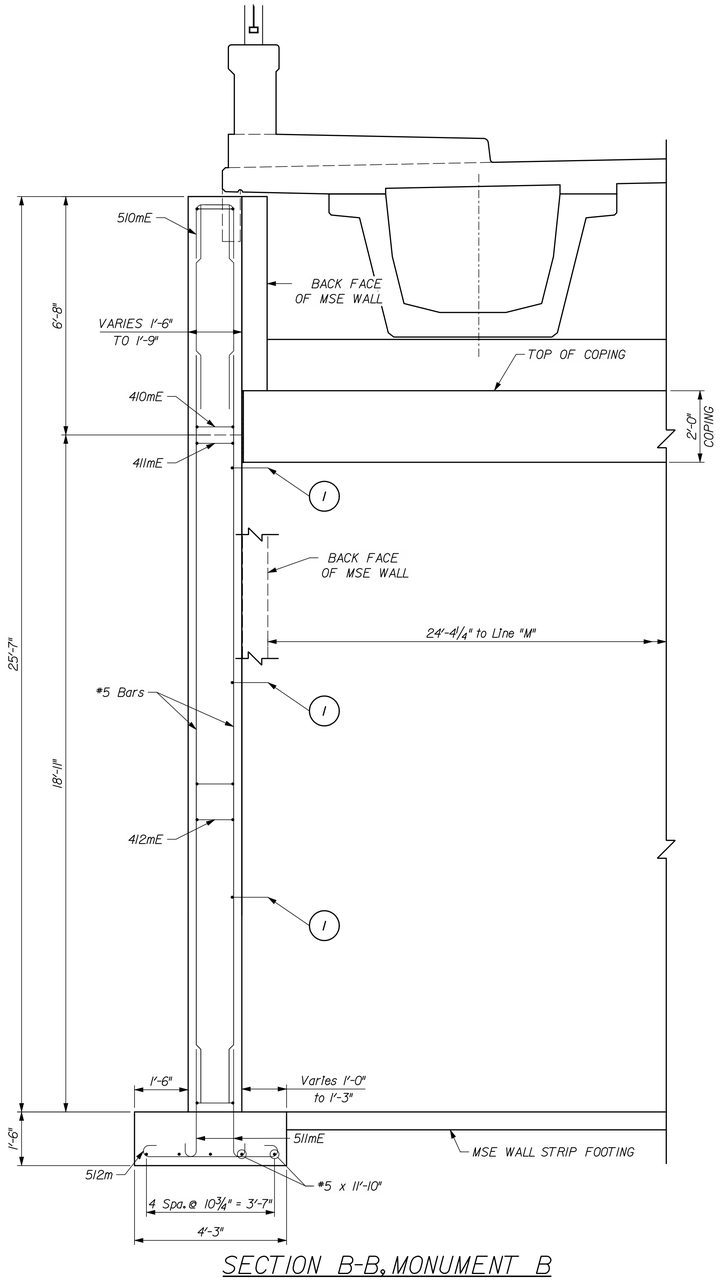
MONUMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512
SURVEY BOOK	SHEET NO.
	66 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SECTION A-A, MONUMENT B



SECTION B-B, MONUMENT B

LEGEND

(1) 414mE bars to be chemically anchored in Field Drilled Holes in MSE Wall. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pullout strength of 12 kips.

NOTES:

1. See Sheet 68 for Sections C-C thru D-D.
2. See Sheet 73 for Bar Details.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George DESIGN ENGINEER 10-15-2007 DATE

DESIGNED: SG/GAH DRAWN: JLH

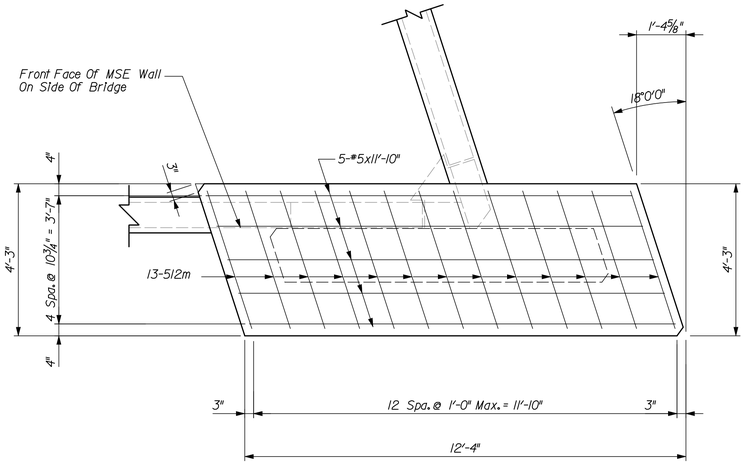
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INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	67 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

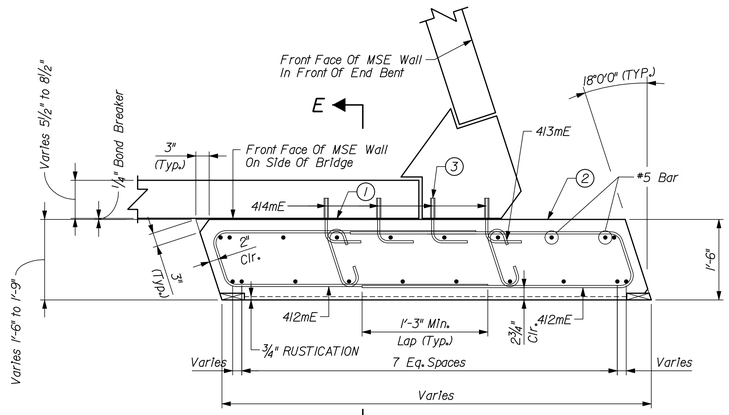
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FOOTING PLAN

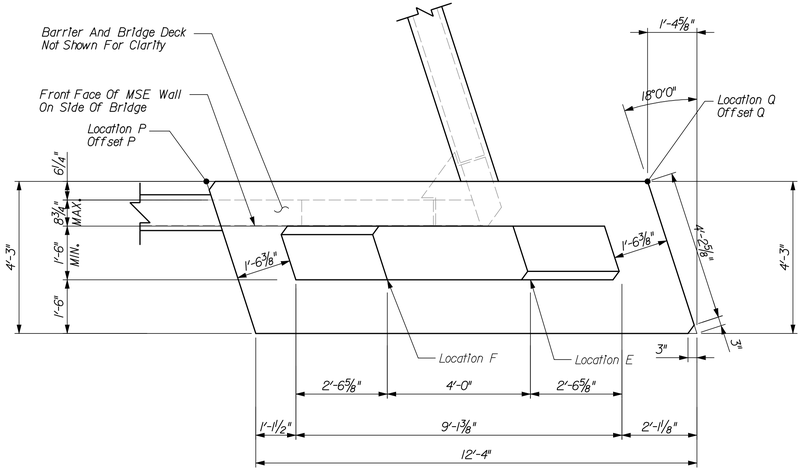
Monument B

SCALE: ½" = 1'-0"



SECTION C-C

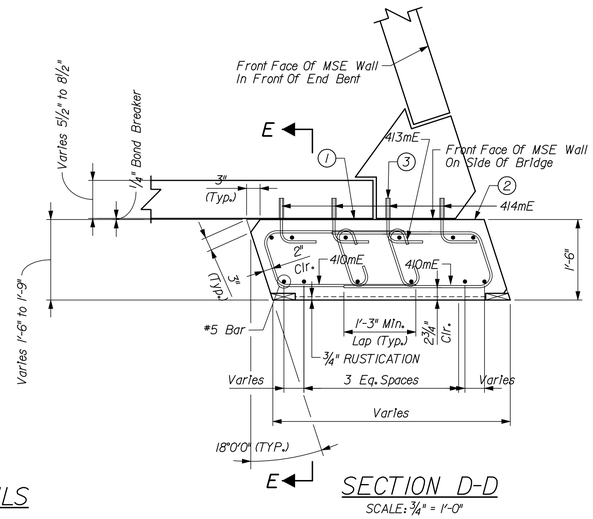
SCALE: ¾" = 1'-0"



FOUNDATION PLAN

Monument B

SCALE: ½" = 1'-0"



SECTION D-D

SCALE: ¾" = 1'-0"

MONUMENT B DETAILS

LEGEND:

(1) Bond breaking material to be applied to all exposed faces between MSE wall and monument. Thickness of bond breaking material to be ¼" minimum thickness.

(2) Exposed interior faces to have same finish as exterior faces without rustication.

(3) 414mE Bars at MSE wall shall have field drilled holes for chemically anchored bars. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pulloutstrength of 12 kips.

NOTES:

1. All Exposed Surface of the Monument Shall Be Coated With Surface Seal And Masonry Coating. Masonry Coating Shall Meet Federal Color Standard 595B, Color No. 37722.
2. Reinforcing Steel Above Footing Shall Be Epoxy Coated & Reinforcing In Footing Shall Be Plain.
3. End bent not shown in all sections for clarity.
4. See Sheet 73 for Section E-E.

BILL OF MATERIALS

MONUMENT B

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
510mE	6	4'-2"	
511mE	20	3'-4"	
#5E	12	6'-5"	
#5E	12	20'-8"	
#5E	4	18'-4"	
#5E	4	8'-3"	
TOTAL #5E			545
410mE	16	7'-3"	
411mE	22	9'-5"	
412mE	18	11'-7"	
413mE	56	2'-2"	
414mE	12	1'-8"	
TOTAL #4E			450
TOTAL EPOXY COATED REINFORCING			995
REINFORCING STEEL			
5l2m	13	5'-1"	
#5	5	11'-10"	
TOTAL #5			131
TOTAL REINFORCING STEEL			131
CONCRETE			
CONCRETE, CLASS A, SUBSTRUCTURE			
POUR NO. 2			8.2 CYS
POUR NO. 3			1.9 CYS
TOTAL CONCRETE, CLASS A, SUBSTRUCTURE			10.1 CYS
CONCRETE, CLASS B, FOOTING			
POUR NO. 1			2.9 CYS
TOTAL CONCRETE, CLASS B, FOOTING			2.9 CYS
MISCELLANEOUS			
SURFACE SEAL (270 SFT)			1 LSUM
MASONRY COATING (270 SFT)			1 LSUM
FIELD DRILLED HOLES IN CONCRETE			12 EACH

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG/GAH | DRAWN: JLH

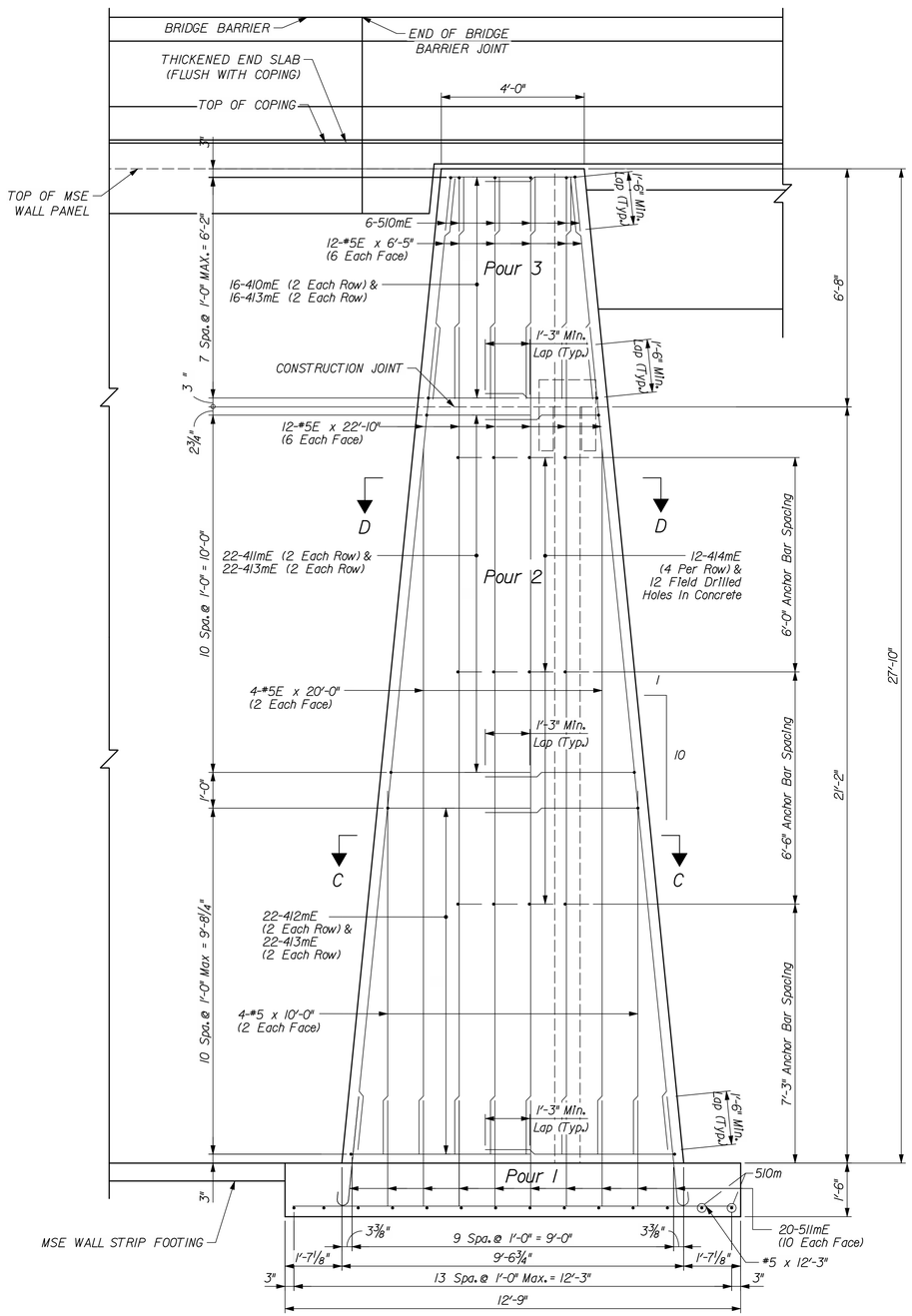
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INDIANA DEPARTMENT OF TRANSPORTATION

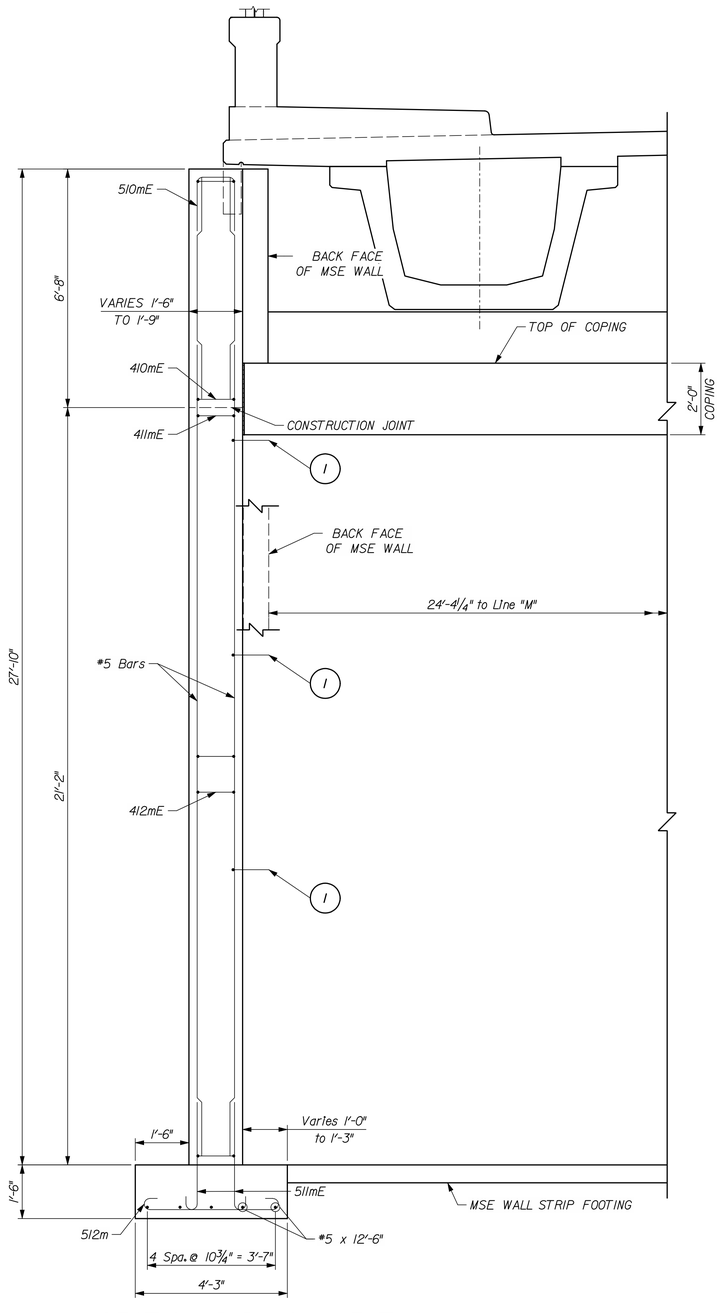
MONUMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512
SURVEY BOOK	SHEET NO. 68 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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SECTION A-A, MONUMENT C



SECTION B-B, MONUMENT C

LEGEND

(I) 4I4mE bars to be chemically anchored In Field Drilled Holes In MSE Wall. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pullout strength of I2 kips.

NOTES:

1. See Sheet I0 for Sections C-C thru D-D.
2. See Sheet I3 for Bar Details.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG/GAH | DRAWN: JLH

CHECKED: AEO | CHECKED: SG

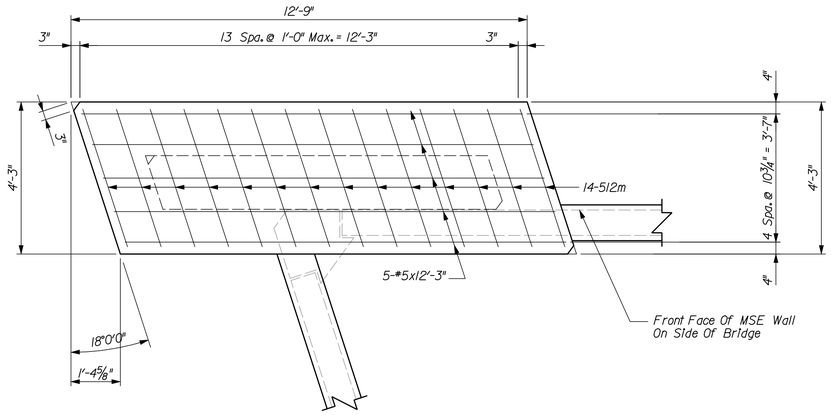
INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I-465-I49-8974
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	9829512

SURVEY BOOK		SHEET NO.
		69 of I08
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

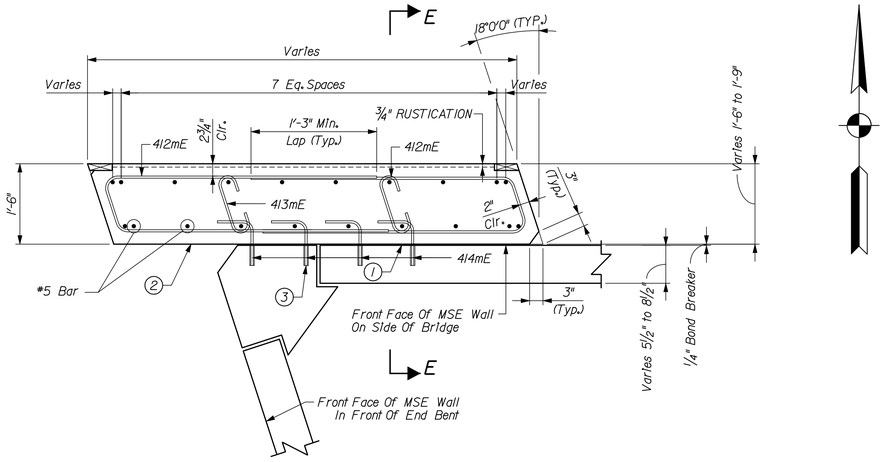
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FOOTING PLAN

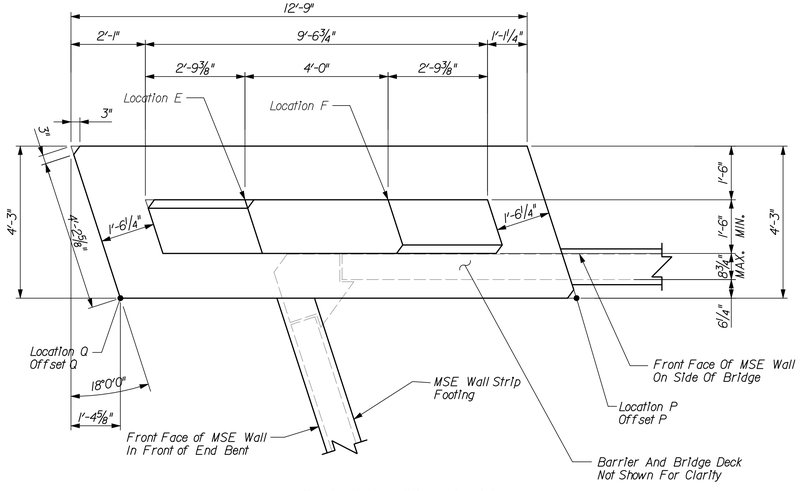
Monument C

SCALE: 1/2" = 1'-0"



SECTION C-C

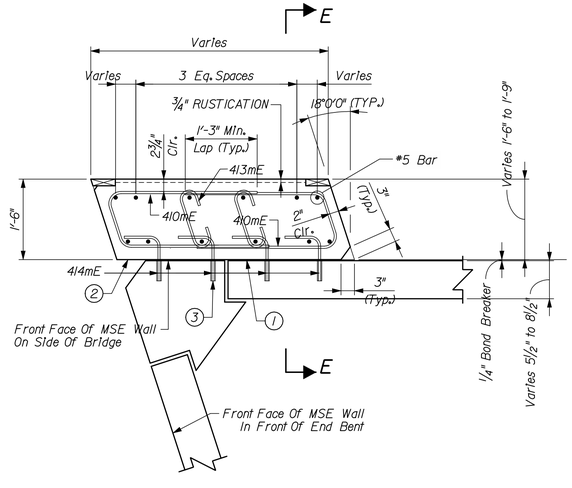
SCALE: 3/4" = 1'-0"



FOUNDATION PLAN

Monument C

SCALE: 1/2" = 1'-0"



SECTION D-D

SCALE: 3/4" = 1'-0"

MONUMENT C DETAILS

BILL OF MATERIALS

MONUMENT C

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
510mE	6	4'-2"	
511mE	20	3'-4"	
#5E	12	6'-5"	
#5E	12	22'-10"	
#5E	4	20'-0"	
#5E	4	10'-0"	
TOTAL #5E			587
410mE	16	7'-3"	
411mE	22	9'-5"	
412mE	22	11'-7"	
413mE	60	2'-2"	
414mE	12	1'-8"	
TOTAL #4E			486
TOTAL EPOXY COATED REINFORCING			1073
REINFORCING STEEL			
512m	14	5'-1"	
#5	5	12'-3"	
TOTAL #5			138
TOTAL REINFORCING STEEL			138
CONCRETE			
CONCRETE, CLASS A, SUBSTRUCTURE			
POUR NO. 2			9.5 CYS
POUR NO. 3			1.9 CYS
TOTAL CONCRETE, CLASS A, SUBSTRUCTURE			11.4 CYS
CONCRETE, CLASS B, FOOTING			
POUR NO. 1			3.0 CYS
TOTAL CONCRETE, CLASS B, FOOTING			3.0 CYS
MISCELLANEOUS			
SURFACE SEAL (290 SFT)			1 LSUM
MASONRY COATING (290 SFT)			1 LSUM
FIELD DRILLED HOLES IN CONCRETE			12 EACH

LEGEND:

(1) Bond breaking material to be applied to all exposed faces between MSE wall and monument. Thickness of bond breaking material to be 1/4" minimum thickness.

(2) Exposed interior faces to have same finish as exterior faces without rustication.

(3) 414mE Bars at MSE wall shall have field drilled holes for chemically anchored bars. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pulloutstrength of 12 kips.

NOTES:

1. All Exposed Surface of the Monument Shall Be Coated With Surface Seal And Masonry Coating. Masonry Coating Shall Meet Federal Color Standard 595B, Color No. 37722.
2. Reinforcing Steel Above Footing Shall Be Epoxy Coated & Reinforcing In Footing Shall Be Plain.
3. End bent not shown in all sections for clarity.
4. See Sheet 73 for Section E-E.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG/GAH | DRAWN: JLH

CHECKED: AEO | CHECKED: SG

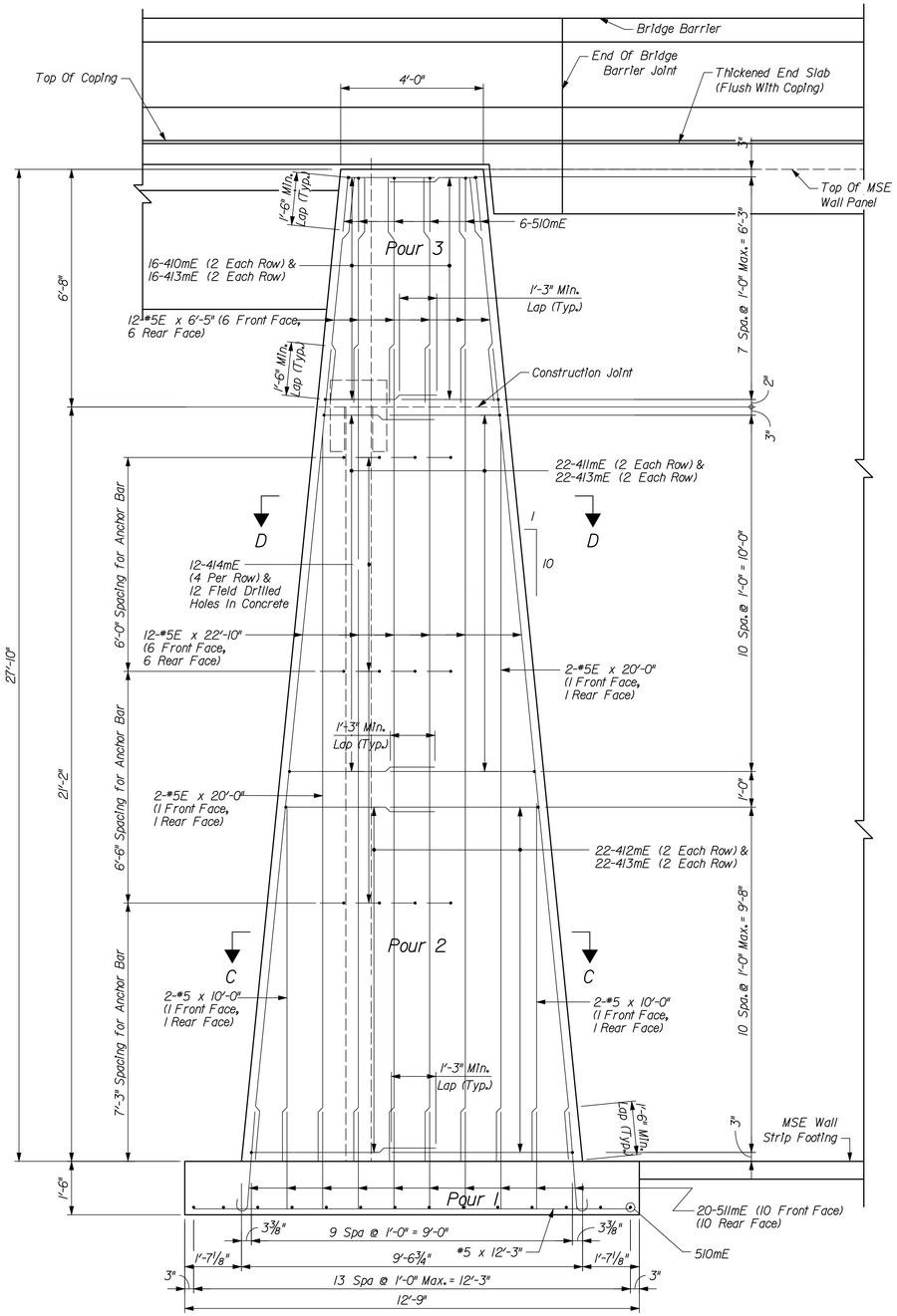
INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

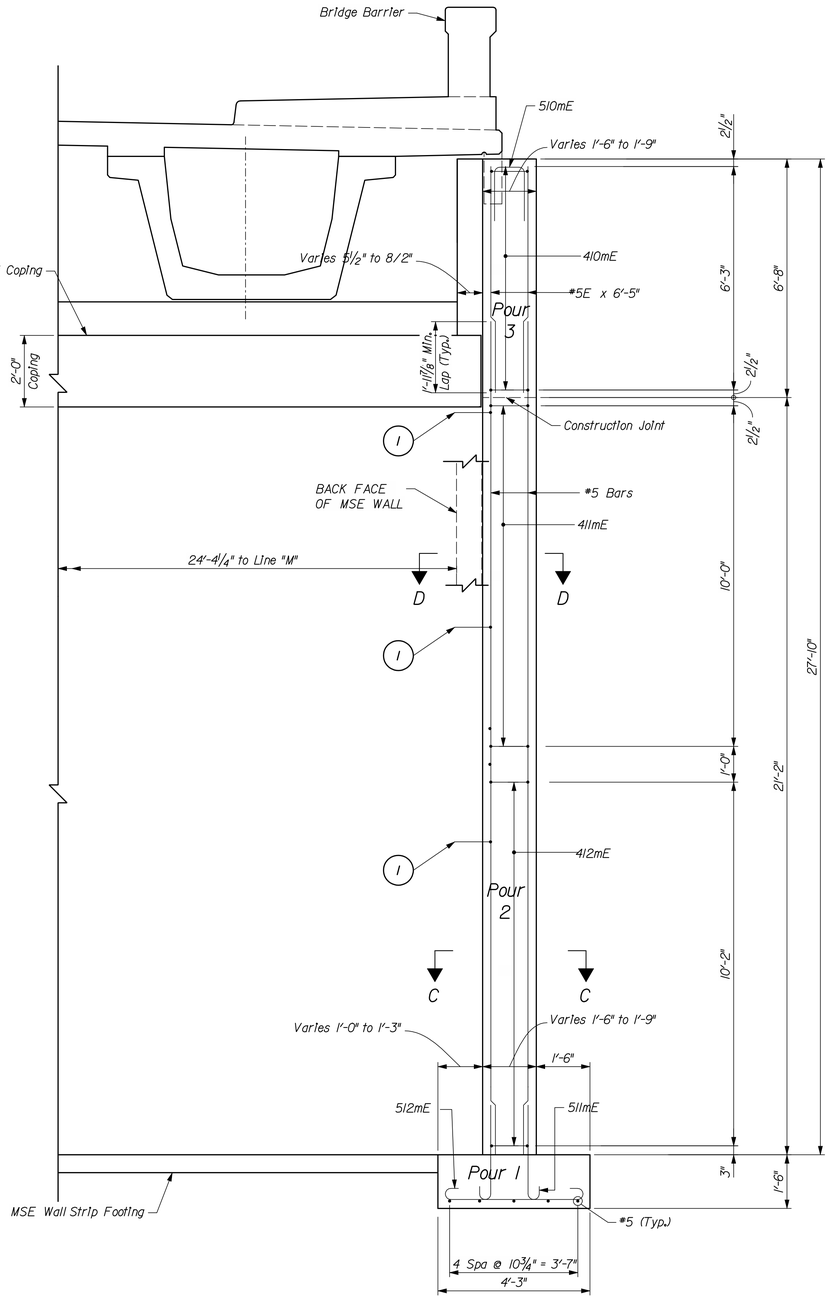
HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512

SURVEY BOOK		SHEET NO.
		70 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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SIDE ELEVATION SHOWING REINFORCING, MONUMENT D



FRONT ELEVATION SHOWING REINFORCING, MONUMENT D

LEGEND

(1) 4l4mE bars to be chemically anchored In Field Drilled Holes In MSE Wall. Anchors shall have a minimum embedment of 5" with a 6" minimum edge distance per panel and a minimum pullout strength of l2 kips.

NOTES:

1. See Sheet 72 for Sections C-C thru D-D.
2. See Sheet 73 for Bar Details.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL — DESIGN ENGINEER — 10-15-2007 DATE

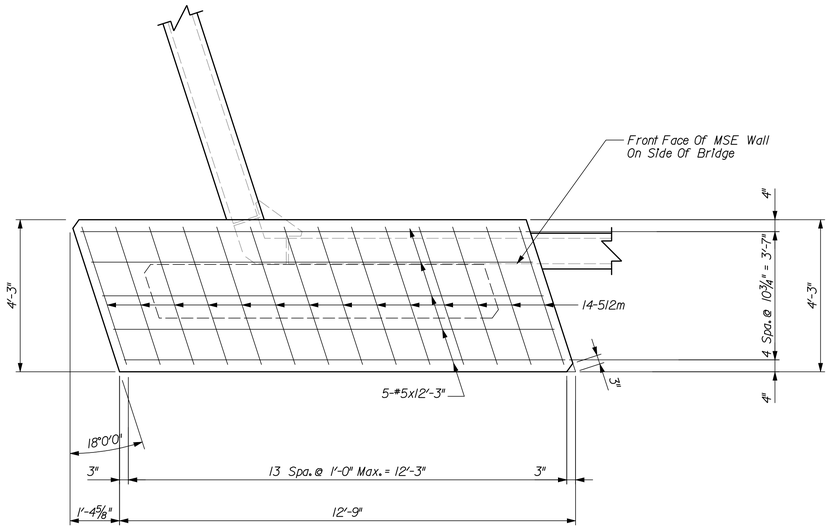
INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

DESIGNED: SG/GAH	DRAWN: GAH
CHECKED: AEO	CHECKED: SG

HORIZONTAL SCALE	BRIDGE FILE
1/2" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
1/2" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	71 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

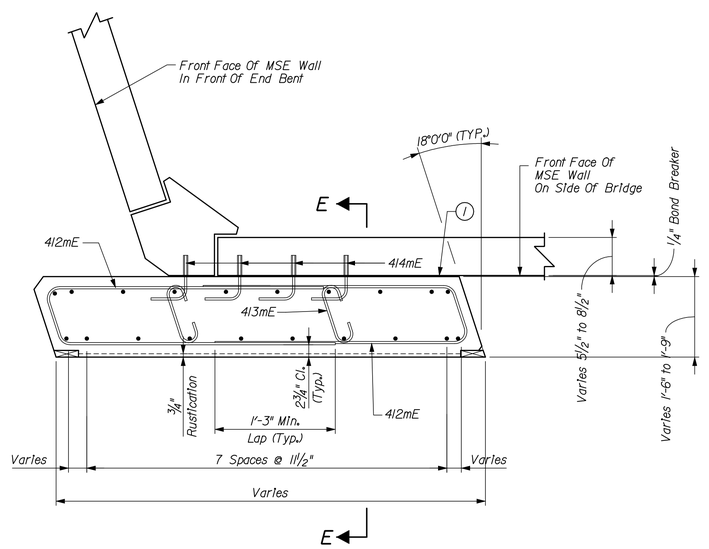
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FOOTING PLAN

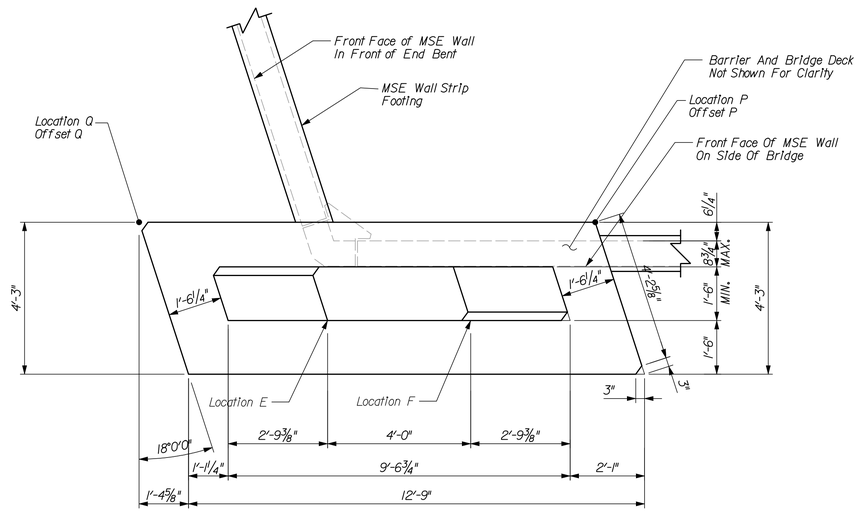
Monument D

SCALE: ½" = 1'-0"



SECTION C-C

SCALE: ¾" = 1'-0"

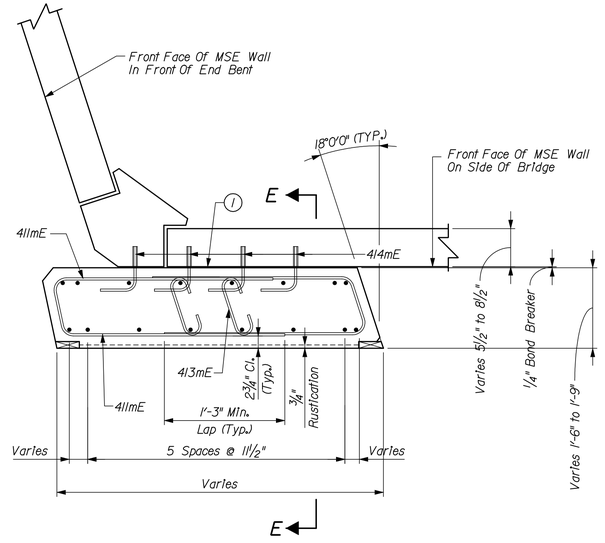


FOUNDATION PLAN

Monument D

SCALE: ½" = 1'-0"

MONUMENT D DETAILS



SECTION D-D

SCALE: ¾" = 1'-0"

BILL OF MATERIALS

MONUMENT D

EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
510mE	6	4'-2"	
511mE	20	3'-4"	
#5E	12	6'-5"	
#5E	12	22'-10"	
#5E	4	20'-0"	
#5E	4	10'-0"	
TOTAL #5E			587
410mE	16	7'-3"	
411mE	22	9'-5"	
412mE	22	11'-7"	
413mE	60	2'-2"	
414mE	12	1'-8"	
TOTAL #4E			486
TOTAL EPOXY COATED REINFORCING			1 073
REINFORCING STEEL			
512m	14	5'-1"	
#5	5	12'-3"	
TOTAL #5			138
TOTAL REINFORCING STEEL			138
CONCRETE			
CONCRETE, CLASS A, SUBSTRUCTURE			
POUR NO. 2			9.5 CYS
POUR NO. 3			1.9 CYS
TOTAL CONCRETE, CLASS A, SUBSTRUCTURE			11.4 CYS
CONCRETE, CLASS B, FOOTING			
POUR NO. 1			3.0 CYS
TOTAL CONCRETE, CLASS B, FOOTING			3.0 CYS
MISCELLANEOUS			
SURFACE SEAL (290 SFT)			1 LSUM
MASONRY COATING (290 SFT)			1 LSUM
FIELD DRILLED HOLES IN CONCRETE			12 EACH

LEGEND:

(1) Bond breaking material to be applied to all exposed faces between MSE wall and monument. Thickness of ¼" minimum thickness.

(2) 3"x3" chamfer to be used on all acute monument angles when skew exceeds 15°. All 90° concrete angles to have standard 1"x1" chamfer.

NOTES:

1. End bent not shown in all sections for clarity.
2. See Sheet 73 for Section E-E.

Notes:

(1) All Exposed Surface of the Monument Shall Be Coated With Surface Seal And Masonry Coating. Masonry Coating Shall Meet Federal Color Standard 595B, Color No. 37722.

(2) Reinforcing Steel Above Footing Shall Be Epoxy Coated & Reinforcing In Footing Shall Be Plain.

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG/GAH | DRAWN: GAH

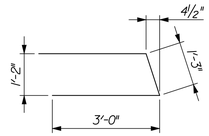
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INDIANA DEPARTMENT OF TRANSPORTATION

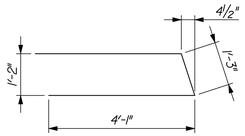
MONUMENT DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
AS NOTED	9829512
SURVEY BOOK	SHEET NO.
	72 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

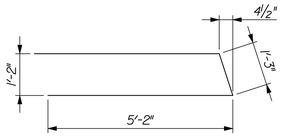
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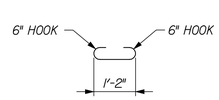
410mE x 7'-3"



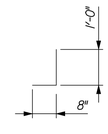
411mE x 9'-5"



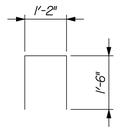
412mE x 11'-7"



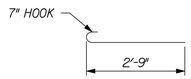
413mE x 2'-2"



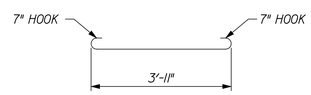
414mE x 1'-8"



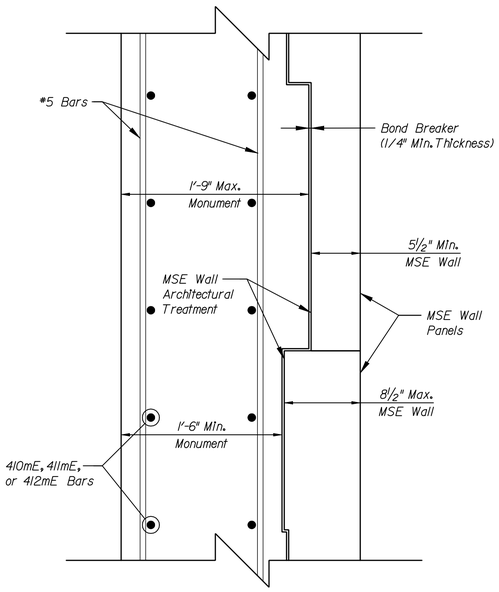
510mE x 4'-2"



511mE x 3'-4"



512m x 5'-1"



SECTION E-E

SCALE: 1½" = 1'-0"

TABLE OF MONUMENT STATIONS, ELEVATIONS AND DIMENSIONS

	Monument A	Monument B	Monument C	Monument D
Station E	11 + 76.98	11 + 94.24	14 + 05.92	14 + 23.18
Elevation E	765.83	766.05	765.76	765.50
Station F	11 + 80.98	11 + 98.24	14 + 01.92	14 + 19.18
Elevation F	765.83	766.05	765.76	765.50
Elevation G	740.25	740.47	737.93	737.67
Elevation K	738.75	738.97	736.43	736.17
H	25' - 7"	25' - 7"	27' - 10"	27' - 10"
L	12'-4"	12'-4"	12'-9"	12'-9"
W	4'-3"	4'-3"	4'-3"	4'-3"
Station I	11 + 81.47	11 + 97.75	14 + 02.41	14 + 18.69
Elevation I	765.83	766.05	765.76	765.50

Note: See General Plan sheet for the locations of each monument

Stations E and F are at front face of monument.

MONUMENT FOOTING OFFSET TABLE

	Bent # 1		Bent # 3	
	Monument A	Monument B	Monument C	Monument D
Station P	11 + 73.70	11 + 89.20	14 + 11.18	14 + 26.66
Offset from line "M"	23' - 10"	23' - 10"	23' - 10"	23' - 10"
Station Q	11 + 86.03	12 + 01.53	13 + 98.43	14 + 13.91
Offset from line "M"	23' - 10"	23' - 10"	23' - 10"	23' - 10"

SHERLY GEORGE
REGISTERED
No. 19600508
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Shirly George 10-15-2007

DESIGN ENGINEER DATE

DESIGNED: SG/GAH DRAWN: GAH

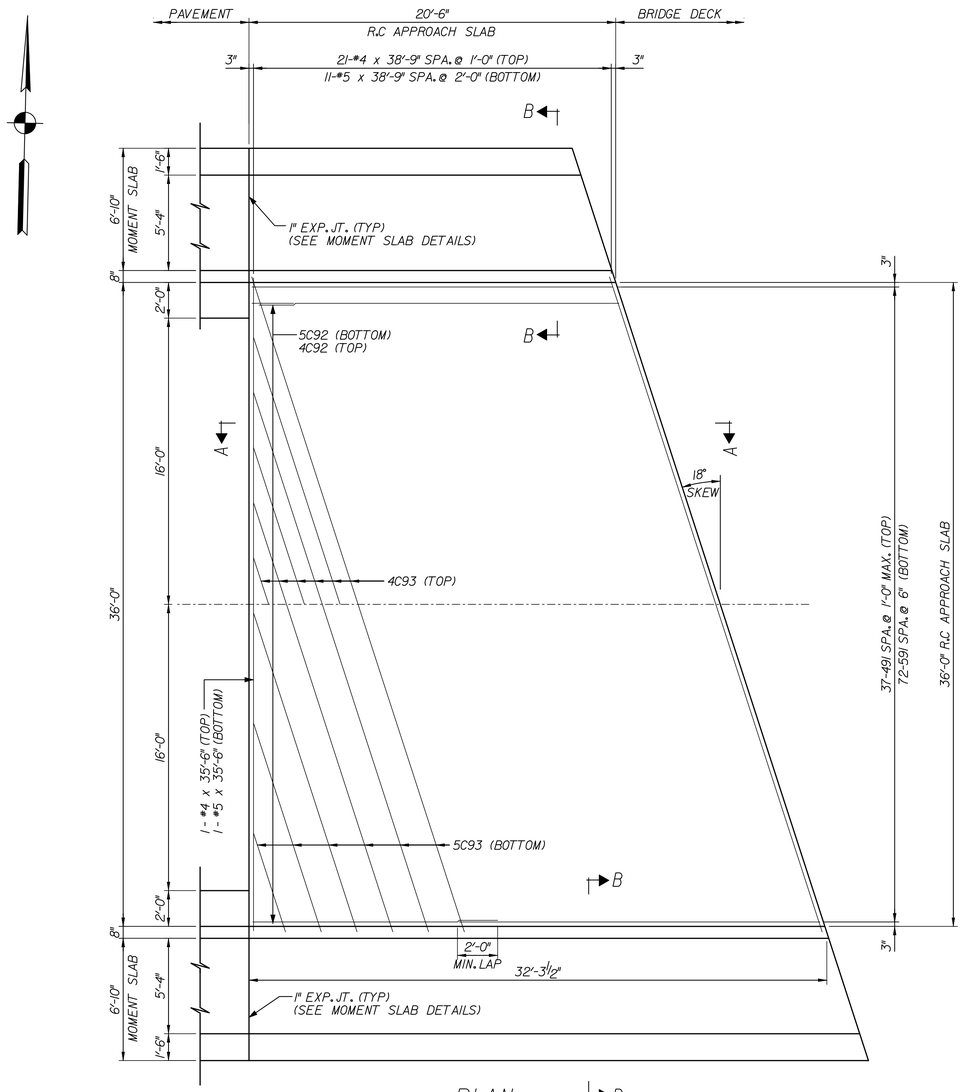
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INDIANA DEPARTMENT OF TRANSPORTATION

MONUMENT DETAILS

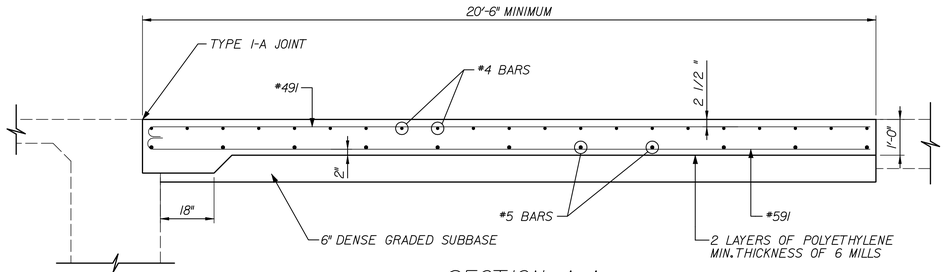
HORIZONTAL SCALE	BRIDGE FILE
½" = 1'-0"	I-465-149-8974
VERTICAL SCALE	DESIGNATION
½" = 1'-0"	9829512
SURVEY BOOK	SHEET NO.
	73 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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PLAN

WEST APPROACH SHOWN, EAST APPROACH SIMILIAR EXCEPT ROTATED 180°
SCALE: 1/4"= 1'-0"

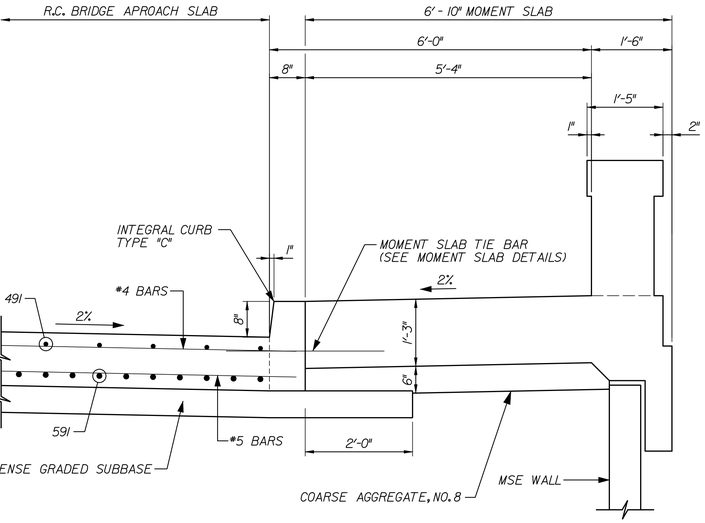


SECTION A-A

SCALE: 1/2"= 1'-0"

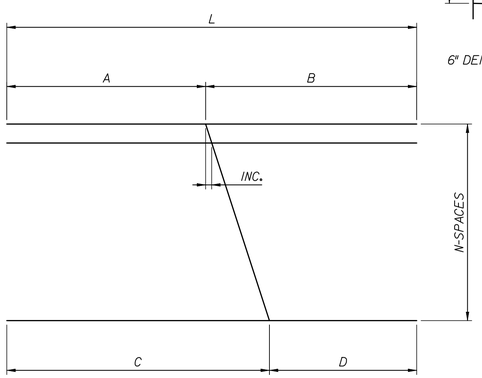
BILL OF MATERIALS
R.C BRIDGE APPROACH
WEST APPROACH
(EAST APPROACH SAME)

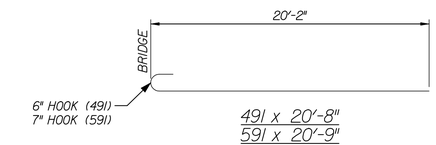
EPOXY COATED REINFORCING STEEL			
SIZE OR MARK	NUMBER OF BARS	LENGTH (FT)	WEIGHT (LB)
59I	72	20'-9"	
5C92	35.5	15'-8"	
5C93	2.5	37'-2"	
5	II	38'-9"	
5	I	35'-6"	
TOTAL #5			2717
49I	37	20'-8"	
4C92	18	15'-8"	
4C93	5	37'-2"	
4	21	38'-9"	
4	I	35'-6"	
TOTAL #4			1391
TOTAL EPOXY COATED REINFORCING			4108
MISCELLANEOUS			
REINFORCED CONCRETE BRIDGE APPROACH, 12 IN.			106 SYS
DENSE GRADED SUBBASE			18.5 CYS
INTEGRAL CONCRETE CURB, TYPE C			52.5 LFT



SECTION B-B

SCALE: 3/4"= 1'-0"





491 x 20'-8"
591 x 20'-9"

MARK	L	A	B	C	D	INC.	N	DESCRIPTION
4C92	15'-8"	2'-0"	13'-8"	13'-8"	2'-0"	4"	35	36 - #4 X 15'-8" CUTS 72 BARS FOR BOTH APPROACHES
5C92	15'-8"	2'-0"	13'-8"	13'-8"	2'-0"	2"	70	71 - #5 X 15'-8" CUTS 142 BARS FOR BOTH APPROACHES
4C93	37'-2"	2'-4"	34'-10"	34'-10"	2'-4"	3'-3"	10	10 - #4 X 37'-2" CUTS 20 BARS FOR BOTH APPROACHES
5C93	37'-2"	2'-4"	34'-10"	34'-10"	2'-4"	6'-6"	5	5 - #5 X 37'-2" CUTS 10 BARS FOR BOTH APPROACHES

SHERLY GEORGE
REGISTERED
No. 19600508
STATE OF INDIANA
PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Sherly George — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: SG | DRAWN: MAB
CHECKED: SJC | CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

R.C. APPROACH SLAB DETAILS

HORIZONTAL SCALE	BRIDGE FILE
AS NOTED	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	74 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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STRUCTURE QUANTITIES

ITEM	CONCRETE									REINFORCING STEEL	EPOXY COATED REINFORCING STEEL	CONDUIT, GALVANIZED STEEL, 2"	PILES						STRUCTURAL MEMBERS CONCRETE U-BEAM, 54"		AP-1 ANCHOR PLATE	DRAIN PIPE, CAST IRON, 6 In. Dia.	DRAIN PIPE, STEEL, 6 In. Dia.	GRATES, BASINS, & FITTINGS, DUCTILE IRON	PIPE, END BENT DRAIN, 6 In.	PIPE, UNDERDRAIN C.P. PERF. 6 In.		EXCAVATION, DRY	EXCAVATION, WATERWAY	GEOTEXTILES	RIPRAP, REVETMENT	AGGREGATE FOR END BENT BACKFILL	SURFACE SEAL *	MASONRY COATING *	MEMBRANE WATERPROOFING	6" DENSE GRADED SUBBASE	COARSE AGGREGATE #8 FOR MOMENT SLAB	BARRIER DELINEATOR	FIELD DRILLED HOLES IN CONCRETE	
	CLASS "C" SUPERSTRUCTURE	QC/QA - CONCRETE SUPERSTRUCTURE MODIFIED	CLASS "C" RAILING, MODIFIED	CLASS "A" SUBSTRUCTURE	CLASS "B" ABOVE FOOTING	CLASS "B" IN FOOTING	SLOPEWALL	ORNAMENTAL RAIL	REINFORCED CONCRETE BRIDGE APPROACH, 12"				STEEL ENCASED CONCRETE (0.203 In. WALL), 14 In.			REINFORCED CONCRETE MOMENT SLAB, 15 IN.	STEEL H BEARING (HP 14 x 89)		PILE TIPS																								
	(cyd)	(cyd)	(cyd)	(cyd)	(cyd)	(cyd)	(cyd)	(lft)	(sys)	(lb)	(lb)	(lb)	(No.)	(ft)			(sys)	(No.)	(lft.)	(EACH)	(ft)		(EACH)	(lb)	(ft)	(lb)	(ft)	(ft)		(cyd)	(cyd)	(sys)	(ton)	(sys)	(sft)	(sft)	(sys)	(cyd)	(ton)	(EACH)	(EACH)	
APPROACH BARRIER			386.5					3002			102017						2282																		33328	33328			604			
END BENT NO.1				15.5							2666							11	594	11															120	120						
BENT NO.2				126.3		88.9				6827	29098																			349					1440	1440						
END BENT NO.3				15.5							2666							11	605	11															120	120						
SUPERSTRUCTURE	102	382.3	60.4					468.2			140929										698.5														21900	10270						
R.C. BRIDGE APPR.: E. APPR.									106		4108																											18.5				
R.C. BRIDGE APPR.: W. APPR.									106		4108																											18.5				
MONUMENT A				10.1		2.9				131	995																			19					270	270					12	
MONUMENT B				10.1		2.9				131	995																			19					270	270					12	
MONUMENT C				11.4		3.0				138	1073																			27					290	290					12	
MONUMENT D				11.4		3.0				138	1073																			27					290	290					12	
TOTALS	102	382.3	446.9	200.3		100.7		3470.2	212.0	7365	289728						2282		1199	22	698.5									441					58028	46766 (1)		37.0	604		48	

(1) INCLUDES 368 SFT FOR MSE WALLS 54A AND 56A

* DENOTES LUMP SUM ITEMS

SHERLY GEORGE REGISTERED No. 19600508 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Sherly George 10-19-2007
DESIGN ENGINEER DATE

DESIGNED: SJC DRAWN: MAB
CHECKED: SG CHECKED: SJC

INDIANA
DEPARTMENT OF TRANSPORTATION

BRIDGE SUMMARY

HORIZONTAL SCALE	BRIDGE FILE
NTS	I-465-149-8974
VERTICAL SCALE	DESIGNATION
NTS	9829512

SURVEY BOOK		SHEET NO.
		75 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-4(382)	

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APPROACH TABLE

LOCATION		DESCRIPTION (APPROACH TYPE OR CLASS)	WIDTH	LENGTH	RADII	DISTANCE BEYOND R/W LINE	SURFACE BEYOND R/W LINE			GRADE		EXCAVATION		CLEAR ZONE AT DRIVE	HMA FOR APPROACHES TYPE A	HMA FOR STRUCTURE INSTALLATION,	PCCP FOR APPROACHES	QC/QA-HMA MATERIALS									HMA MATERIALS				SEAL COAT TYPE 2	SEAL COAT TYPE 5	ASPHALT MATERIAL FOR	COMPACTED AGGREGATE FOR BASE NO.53				COMPACTED AGGREGATE FOR SURFACE NO.73		REMARKS
							COMPACTED AGGREGATE BASE	HMA	CONCRETE									2,64, SURFACE 9.5 mm	3,76, INTERMD. 19.0 mm	2,64, INTERMD. 19.0 mm	3,76, INTERMD. 19.0 mm	3,76, INTERMD. 19.0 mm	5,76, INTERMD. 06/9.0 mm	2,64, BASE 25.0 mm	3,64, BASE 19.0 mm	2,64, BASE 25.0 mm	SURFACE TYPE A		BASE TYPE A									
															LBS./SYS.		SYS.	LBS./SYS.								LBS./SYS.							DEPTH				DEPTH		
															660	990	6	165	220	275	385	VARIABLE	255	440	330	605	165		495					6	8"	4				
FROM STATION	TO STATION		FT.	FT.	FT.	FT.	FT.	FT.	FT.	%	%	CYS	CYS	FT.	TONS	TONS	IN.	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	SYS.	SYS.		SYS	IN.	TONS	IN.	IN.	IN.	IN.	
2 + 28.97	3 + 00.00	LINE "M"	34.6	71.0													23		38				60		98								819						
3 + 00.00	11 + 56.68	LINE "M"	32.0	856.7													251		419				670		1107								9138						
14 + 43.48	17 + 60.00	LINE "M"	32.0	316.5													93		155				248		409								3376						
17 + 60.00	22 + 91.00	LINE "M"	38.0	531.0													185		308				493		794								6726						
22 + 91.00	23 + 74.00	LINE "M"	46.5	83.0													35		59				94		148								1286						
23 + 74.00	24 + 29.77	LINE "M"	VARIES	55.8													36		59				95		141								1292						
794 + 55.55		LINE "PR-HH"													122																		369		178				
TOTALS															122			623		1038				1660		2697								23006		178				

① 23006 SYS X 0.000252 T/SY= 5.8 TONS

STRUCTURE DATA

CASTING TYPE	STRUCTURE NUMBER	LOCATION	LEFT	CROSS	RIGHT	SIZE	PIPE TYPE	MANHOLE, INLET, CATCH BASIN, OR SPECIALTY STRUCTURE	LENGTH	SKEW	COVER	FLOW LINE		SERVICE LIFE	SITE DESIGNATION	pH	BACKFILL METHOD	STRUCTURE BACKFILL	CONCRETE "A"	REVETMENT RIPRAP	GEOTEXTILE	PIPE END SECTION	SAFETY METAL END SECTION			CONNECT TO STRUCTURE	REMARKS
		STATION										UP STREAM	DOWN STREAM										TYPE	SLOPE	EA.		
						IN.			FT.		FT.	ELEV.	ELEV.	YR.				CYS.	CYS.	TONS	SYS	EA.					
15	4609	3+78 "M"	X			12	2	INLET "B-15"	31			742.57	742.24	50		7.0	I	3								4610	
15	4610	3+78 "M"			X	18	2	MODIFIED INLET "C-15"	18			742.08	742.00	50		7.0	I	3		1.1	5.0	1.0				-	I ADDITIONAL INCOMING PIPE
10	4614	5+00 "M"	X			12	2	INLET "J-10"	32			743.30	742.96	50		7.0	I	3								4615	
10	4615	5+00 "M"			X	12	2	MODIFIED INLET "J-10"	118			742.71	742.33	50		7.0	I	17								4610	JUNCTION AT RIGHT ANGLE
10	4619	7+78 "M"	X			12	2	INLET "J-10"	32			750.52	750.18	50		7.0	I	3								4620	
10	4620	7+78 "M"			X	15	2	MODIFIED DROP MH, "C-10"	20			736.15	736.00	50		7.0	I	33	12	1.3	5.0	1.0				-	MOD. TO FIT TYPE 10 INLET CASTING 52 LF OF 8" DROP PIPE REQUIRED LENGTH INCLUDES 2-45° Y, 2-45° ELBOW, 2-90° BEND
10	4629	11+41 "M"	X			12	2	INLET "J-10"	32			762.77	762.43	50		7.0	I	3								4630	
10	4630	11+41 "M"			X	12	2	MODIFIED INLET "J-10"	359			762.18	750.18	50		7.0	I	218								4620	DEPTH INCREASED 0.59' AND JUNCTION AT RIGHT ANGLE
10	4639	14+60 "M"	X			12	2	INLET "J-10"	32			762.33	761.99	50		7.0	I	3								4640	
10	4640	14+60 "M"			X	12	2	MOD. CATCH BASIN "K-10"	360			758.74	748.48	50		7.0	I	299								4650	JUNCTION AT RIGHT ANGLE
10	4649	18+24 "M"	X			12	2	INLET "J-10"	33			749.05	748.73	50		7.0	I	3								4650	
10	4650	18+24 "M"			X	12	2	MOD. CATCH BASIN "K-10"	172			746.23	741.46	50		7.0	I	82								4652	2 ADDITIONAL INCOMING PIPES
10	4651	20+00 "M"	X			12	2	INLET "J-10"	36			742.02	741.71	50		7.0	I	3								4652	
10	4652	20+00 "M"			X	15	2	MODIFIED DROP MH, "C-10"	15			729.63	729.50	50		7.0	I	20	14	1.3	5.0	1.0				-	MOD. TO FIT TYPE 10 INLET CASTING 48 LF OF 8" DROP PIPE REQUIRED LENGTH INCLUDES 2-45° Y, 2-45° ELBOW, 2-90° BEND
10	4654	22+00 "M"	X			12	2	INLET "J-10"	42			736.27	735.93	50		7.0	I	5								4655	
10	4655	22+00 "M"			X	18	2	MOD. CATCH BASIN "J-10"	11			729.61	729.50	50		7.0	I	8		1.6	1.0	1.0				-	I ADDITIONAL INCOMING PIPE
10	4658	20+78 "M"		X		30	1		66			729.80	728.90	50		7.0	I	96		7.0	20.0	2.0				-	
15	4659	23+53 "M"			X	15	2	MODIFIED INLET "C-15"	148			734.19	733.40	50		7.0	I	26								4655	JUNCTION AT RIGHT ANGLE
15	4660	23+53 "M"	X			12	2	INLET "B-15"	47			734.82	734.44	50		7.0	I	5								4659	

TEMPORARY EROSION CONTROL

LOCATION				TEMPORARY CHECK DAM	TEMPORARY EROSION CONTROL SIDE DITCH PROTECTION	TEMPORARY INLET PROTECTION	TEMPORARY SILT FENCE	SPLASH PAD	SEDIMENT REMOVE	LOCATION				TEMPORARY CHECK DAM	TEMPORARY EROSION CONTROL SIDE DITCH PROTECTION	TEMPORARY INLET PROTECTION	TEMPORARY SILT FENCE	SPLASH PAD	SEDIMENT REMOVE
FROM STATION	TO STATION	LEFT	RIGHT	REVET. RIPRAP	STRAW BALES					FROM STATION	TO STATION	LEFT	RIGHT	REVET. RIPRAP	STRAW BALES				
				TON	FT.	EACH	FT.	TON	CYS					TON	FT.	EACH	FT.	TON	CYS
2+29 "M"	12+07 "M"	X					1017			13+56 "M"	24+23 "M"	X							1095
2+50 "M"			X	6.8						13+91 "M"	20+00 "M"		X						638
3+75 "M"		X				1			0.5	14+60 "M"			X			1			0.5
3+75 "M"			X			1			0.5	14+60 "M"			X			1			0.5
3+75 "M"			X					3.3		18+24 "M"			X			1			0.1
3+75 "M"			X	6.8						18+24 "M"			X			1			0.1
4+75 "M"			X	6.8						20+00 "M"			X			1			0.1
4+75 "M"	12+38 "M"		X				846			20+00 "M"			X			1			0.1
5+00 "M"		X				1			1.0	20+00 "M"			X	6.8					
5+00 "M"			X			1			0.3	20+00 "M"			X					3.3	
7+78 "M"		X				1			0.5	20+78 "M"			X					3.3	
7+78 "M"			X			1			0.2	21+00 "M"			X	6.8					
7+78 "M"			X					3.3		22+00 "M"			X			1			0.5
11+41 "M"		X				1			0.5	22+00 "M"	24+17 "M"		X				230		
11+41 "M"			X			1			0.5	22+00 "M"			X			1			0.5
										22+00 "M"			X	6.8					
										22+00 "M"			X					3.3	
										23+58 "M"			X			1			0.5
										23+58 "M"			X			1			0.1
TOTAL				20.4		8	1863	6.6	4.0	TOTAL				20.4		10	1963	9.9	3.0

GUARDRAIL SUMMARY TABLE

FROM STATION	TO STATION	LEFT/RIGHT	STANDARD POST AT 6'-3" SPACING	STANDARD POST AT 3'-2" SPACING	STANDARD POST AT 1'-7" SPACING	IMPACT ATTENUATOR, RI, W-I, TL-2	GUARDRAIL FLARE RATE	GUARDRAIL TRANSITION TYPE TGB	GUARDRAIL TRANSITION TYPE WGB	GUARDRAIL TRANSITION TYPE GP	GUARDRAIL TRANSITION TYPE VH	GUARDRAIL END TREATMENT MS	GUARDRAIL END TREATMENT OS	GUARDRAIL END TREATMENT TYPE I	GUARDRAIL REMOVE	GUARDRAIL RESET	REMARKS
			LFT	LFT	LFT	EACH		EACH	EACH	EACH	EACH	EACH	EACH	EACH	LFT	LFT	
4+50		RT				1											
5+60	12+23	LT													663		
5+84	12+34	RT													650		
7+00		LT				1											
13+92	21+67	LT													775		
14+03	19+79	RT													576		
20+30	21+89	RT													159		
22+50		LT				1											
TOTALS						3									2823		

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian DESIGN ENGINEER 10-15-2007 DATE

DESIGNED: GAH DRAWN: MAB CHECKED: AEO CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

APPROACH TABLES

HORIZONTAL SCALE	BRIDGE FILE
	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512
SURVEY BOOK	SHEET NO.
	76 of 108
CONTRACT	PROJECT
IB-30026	IM-465-4(382)

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PAVED DITCH & SODDING SUMMARY

LT. OR RT.	STATION TO STATION	PAVED SIDE DITCH (ft)							SODDING (sys)			
		TYPE	PAY LENGTH	NO. OF LUGS	PAY LENGTH	CUT OFF WALLS	PAY LENGTH	TOTAL PAY LENGTH	FOR PSD	FOR DITCHES	SHOULDERS	NURSERY SODDING
LT.	2+29 TO 3+00 "M"											32
RT.	2+29 TO 3+50 "M"											134
LT.	3+00 TO 3+75 "M"											67
RT.	3+50 TO 3+75 "M"											25
LT.	3+75 TO 4+50 "M"											183
RT.	3+75 TO 4+50 "M"											117
LT.	4+50 TO 7+00 "M"											1028
RT.	4+50 TO 5+00 "M"											78
RT.	5+00 TO 11+57 "M"											336
LT.	7+00 TO 11+57 "M"											234
LT.	NW BRIDGE CONE											97
RT.	SW BRIDGE CONE											120
LT.	NE BRIDGE CONE											150
RT.	SE BRIDGE CONE											128
LT.	14+42 TO 22+50 "M"											413
RT.	14+52 TO 23+56 "M"											462
RT.	19+90 TO 20+00 "M"											9
RT.	20+00 TO 22+00 "M"											222
RT.	22+00 TO 22+56 "M"											25
LT.	22+50 TO 24+22 "M"											172
RT.	22+56 TO 24+17 "M"											250
	3+50 TO 5+00 "M"									217		
	TOTALS									217		4282

R/W MARKER TABLE

LT/RT	STATION	OFFSET (FT.)
RT.	792+85.00 "PR-HH"	180.00'
LT.	794+26.88 "PR-HH"	219.00'
RT.	795+09.11 "PR-HH"	194.00'
LT.	796+21.59 "PR-HH"	188.00'
LT.	796+44.28 "PR-HH"	358.67'
RT.	2+28.97 "M"	57.44'
LT.	2+28.97 "M"	72.81'
RT.	7+40.80 "M"	53.04'
RT.	17+00.00 "M"	77.59'
RT.	21+00.00 "M"	55.00'
LT.	21+56.42 "M"	42.68'
RT.	23+90.00 "M"	50.00'
LT.	23+96.52 "M"	55.70'

MONUMENT TABLE

LOCATION	TYPE	DESCRIPTION
2+28.97 "M"	MOUNMENT, TYPE "B"	P.O.T BEGIN PROJECT
10+00.00 "M"	MOUNMENT, TYPE "B"	P.O.T
16+00.00 "M"	MOUNMENT, TYPE "B"	P.O.T
24+29.77 "M"	MOUNMENT, TYPE "B"	P.O.T END PROJECT

FENCE TABLE

FROM	TO	RIGHT	LEFT	CHAINLINK TYPE FENCE, 42", LFT	REMOVAL OF FENCE, LFT
793+13.00	793+88.00	X		78	
793+13.00	793+84.00	X			74
793+78.00	794+63.00		X		88
793+78.00	794+65.00		X	90	
794+48.00	795+39.00	X		95	
794+50.00	795+39.00	X			92
795+22.00	796+14.00		X	95	
795+25.00	796+14.00		X		92
			TOTAL	358	346

SUBGRADE TREATMENT TYPE IV SUMMARY

FROM STATION	TO STATION	LT./RT.	AREA FOR SUBGRADE TREATMENT (SYS)
2+28.97 "M"	3+00.00 "M"	LT. & RT.	347
3+00.00 "M"	11+56.68 "M"	LT. & RT.	3934
14+43.48 "M"	17+60.00 "M"	LT. & RT.	1454
17+60.00 "M"	22+91.00 "M"	LT. & RT.	2793
22+91.00 "M"	23+74.00 "M"	LT. & RT.	515
23+74.00 "M"	24+29.77 "M"	LT. & RT.	494
TOTALS			9536

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL Stephen J. Christian 10-15-2007
DESIGN ENGINEER DATE

DESIGNED: GAH DRAWN: GAH
CHECKED: SJC CHECKED: SJC

INDIANA DEPARTMENT OF TRANSPORTATION

APPROACH TABLES

HORIZONTAL SCALE	BRIDGE FILE
	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		77 of 108
CONTRACT	PROJECT	
IB-30026	IM-465-(4382)	

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		STRUCTURE NUMBER																						
		4609	4610	4614	4615	4619	4620	4629	4630	4639	4640	4649	4650	4651	4652	4654	4655	4658	4659	4660				
PIPE GROUP		2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	2 / CIR	1 / CIR	2 / CIR	2 / CIR				
SMOOTH PIPE SIZE		12 IN	18 IN	12 IN	12 IN	12 IN	15 IN	12 IN	12 IN	12 IN	12 IN	12 IN	12 IN	12 IN	15 IN	12 IN	18 IN	30 IN	15 IN	12 IN				
CORRUGATED PIPE SIZE		12 IN	18 IN	12 IN	12 IN	12 IN	15 IN	12 IN	12 IN	12 IN	12 IN	12 IN	12 IN	12 IN	15 IN	12 IN	18 IN	30 IN	15 IN	12 IN				
RCP/ RCHEP (S)	CLASS	II	II	II	III	II	III	III	II	II	II	II	II	II	III	II	II	II	II	II				
	D 0.01 RATING	1250	1000	1250	1500	1250	1500	1500	1000	1250	1000	1250	1000	1250	1350	1250	1000	1000	1000	1250				
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)			OK						OK		OK		OK				OK	OK	OK					
CORRUGATED PE PIPE, TYPE S (S)																	OK	OK						
RIBBED PE PIPE (S)																	OK	OK						
SMOOTH WALL PE PIPE (S)/ MAXIMUM DR = 26.00							OK								OK		OK	OK						
PROFILE WALL PVC PIPE (S)							OK								OK		OK	OK						
SMOOTH WALL PVC PIPE (S)							OK								OK		OK							
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)		OK	OK	OK		OK			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK				
CORRUGATED STEEL PIPE/ PIPE-ARCH: FULLY BIT. COATED & LINED (CXLSXR)	CORR. PROFILE	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"	2 2/3" x 1/2"		2 2/3" x 1/2"	2 2/3" x 1/2"				
	THICKNESS	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"	0.064"		0.064"	0.064"				
ZINC COATED (C) (LS) (R)	CORR. PROFILE																							
	THICKNESS																							
ZINC COATED W/ BPI (C) (LS) (R)	CORR. PROFILE																	2 2/3" x 1/2"						
	THICKNESS																	0.109"						
ALUM. COATED TYPE 2 (C) (LS) (R)	CORR. PROFILE																							
	THICKNESS																							
ALUM. COATED TYPE 2 W/ BPI (C) (LS) (R)	CORR. PROFILE																	2 2/3" x 1/2"						
	THICKNESS																	0.064"						
POLYMER PRECOATED GALVANIZED (C) (LS) (R)	CORR. PROFILE		2 2/3" x 1/2"														2 2/3" x 1/2"	2 2/3" x 1/2"						
	THICKNESS		0.064"														0.064"	0.064"						
POLYMER PRECOATED GALVANIZED W/ BPI (C) (LS) (R)	CORR. PROFILE																							
	THICKNESS																							
FIBER BONDED BITUMINOUS COATED (C) (LS) (R)	CORR. PROFILE																							
	THICKNESS																							
FIBER BONDED BITUMINOUS COATED W/ BPI (C) (LS) (R)	CORR. PROFILE																							
	THICKNESS																							
CORRUGATED ALUM. ALLOY PIPE W/ BPI (C) (LS) OR (R)	CORR. PROFILE																	3" x 1"						
	THICKNESS																	0.060"						
CORRUGATED ALUM. ALLOY PIPE W/ BPI (C) (LS) OR (R)	CORR. PROFILE																	2 2/3" x 1/2"						
	THICKNESS																	0.060"						
STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE																							
	THICKNESS																							
STR. PLATE ALUMINUM ALLOY PIPE W/ CFP (C)	CORR. PROFILE																							
	THICKNESS																							
STR. PLATE STEEL PIPE (C)	CORR. PROFILE																							
	THICKNESS **																							
STR. PLATE STEEL PIPE W/ CFP (C)	CORR. PROFILE																							
	THICKNESS **																							

	STRUCTURE NUMBER																							
PIPE GROUP																								
SMOOTH PIPE SIZE																								
CORRUGATED PIPE SIZE																								
RCP/ RCHEP (S)	CLASS																							
	D 0.01 RATING																							
NON-REINFORCED CONCRETE PIPE, CLASS 3 (S)																								
CORRUGATED PE PIPE, TYPE S (S)																								
RIBBED PE PIPE (S)																								
SMOOTH WALL PE PIPE (S)/ MAXIMUM DR = 26.00																								
PROFILE WALL PVC PIPE (S)																								
SMOOTH WALL PVC PIPE (S)																								
VITRIFIED CLAY PIPE, EXTRA STRENGTH (S)																								
CORRUGATED STEEL PIPE/ PIPE-ARCH: FULLY BIT. COATED & LINED (CXLSXR)	CORR. PROFILE																							
	THICKNESS																							
FULLY BIT. COATED & LINED (CXLS)	CORR. PROFILE																							
	THICKNESS																							
ZINC COATED W/ BPI (C)	CORR. PROFILE																							
	THICKNESS																							
ALUM. COATED TYPE 2 (C)	CORR. PROFILE																							
	THICKNESS																							
ALUM. COATED TYPE 2 W/ BPI (C)	CORR. PROFILE																							
	THICKNESS																							
POLYMER PRECOATED GALVANIZED (C)	CORR. PROFILE																							
	THICKNESS																							
POLYMER PRECOATED GALVANIZED W/ BPI (C)	CORR. PROFILE																							
	THICKNESS																							
FIBER BONDED BITUMINOUS COATED (C)	CORR. PROFILE																							
	THICKNESS																							
FIBER BONDED BITUMINOUS COATED W/ BPI (C)	CORR. PROFILE																							
	THICKNESS																							
CORRUGATED ALUM. ALLOY PIPE (C)	CORR. PROFILE																							
	THICKNESS																							
CORRUGATED ALUM. ALLOY PIPE W/ BPI (C)	CORR. PROFILE																							
	THICKNESS																							
STR. PLATE ALUMINUM ALLOY PIPE (C)	CORR. PROFILE																							
	THICKNESS																							
STR. PLATE ALUMINUM ALLOY PIPE W/ CFP (C)	CORR. PROFILE																							
	THICKNESS																							
STR. PLATE STEEL PIPE (C)	CORR. PROFILE																							
	THICKNESS **																							
STR. PLATE STEEL PIPE W/ CFP (C)	CORR. PROFILE																							
	THICKNESS **																							

LEGEND

RCP-	REINFORCED CONCRETE PIPE
RCHEP-	REINFORCED CONCRETE HORIZONTAL ELLIPTICAL PIPE
PE-	POLYETHYLENE
DR-	DIMENSION RATIO
PVC-	POLYVINYL CHLORIDE
BIT-	BITUMINOUS
CORR-	CORRUGATION
BPI-	BITUMINOUS PAVED INVERT
ALUM-	ALUMINUM
STR-	STRUCTURAL
CFP-	CONCRETE FIELD PAVING
(S)-	SMOOTH PIPE MATERIAL
(C)-	CORRUGATED PIPE MATERIAL
OK-	ACCEPTABLE FOR USE
(LS)-	LOCK SEAM PIPE REQUIRED
(R)-	RIVETED PIPE REQUIRED
**	TABULATED THICKNESS REFERS TO TOP & SIDE PLATES. BOTTOM PLATES SHALL BE OF NEXT GREATER AVAILABLE THICKNESS.

STEPHEN J. CHRISTIAN REGISTERED NO. 20379 STATE OF INDIANA PROFESSIONAL ENGINEER

RECOMMENDED FOR APPROVAL: Stephen J. Christian — DESIGN ENGINEER — 10-15-2007 DATE

DESIGNED: MAB | DRAWN: MAB

CHECKED: SG | CHECKED: SG

INDIANA DEPARTMENT OF TRANSPORTATION

PIPE MATERIAL SHEET

HORIZONTAL SCALE	BRIDGE FILE
	I-465-149-8974
VERTICAL SCALE	DESIGNATION
	9829512

SURVEY BOOK		SHEET NO.
		78 of 108
CONTRACT		PROJECT
IB-30026		IM-465-4(382)

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