

1-18-13 LETTING ITEM 090

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PLANS for PROPOSED
FEDERAL AID HIGHWAY

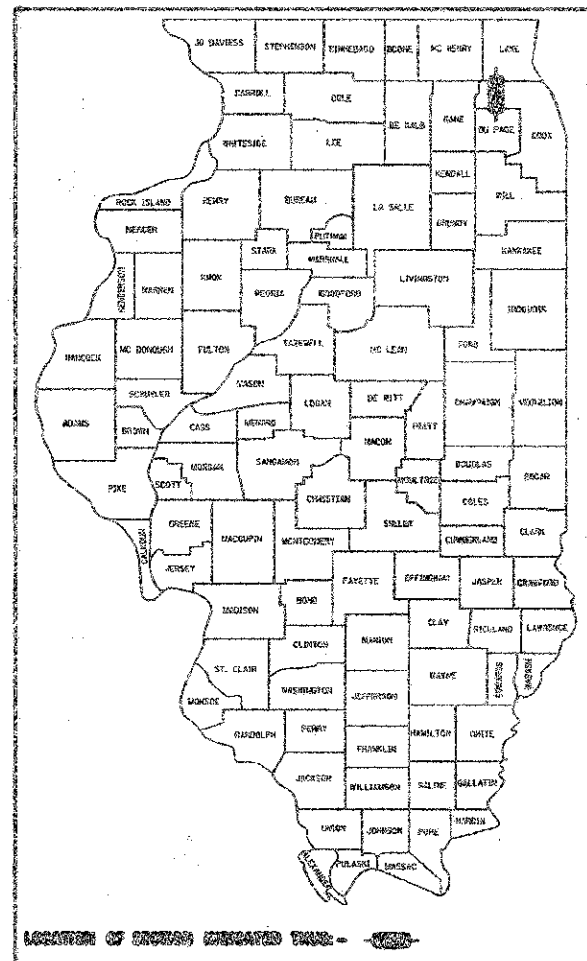
LONGMEADOW LANE
at WEST BRANCH of DUPAGE RIVER
BOX CULVERT REPLACEMENT
SECTION 10-0009-00-BR
PROJECT BRN-9083(725)
VILLAGE OF HANOVER PARK
COOK COUNTY

F.A. ATE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-0009-00-BR	10-0009-00-BR	COOK	88	8
HANOVER PARK ILLINOIS		CONTRACT NO. 83754		

LIST OF SHEETS

- COVER SHEET
- HIGHWAY STANDARDS, GENERAL NOTES, & COMMITMENTS
- SUMMARY OF QUANTITIES
- TYPICAL SECTIONS
- ALIGNMENT, TIES, & BENCHMARKS
- DEMOLITION PLAN
- PLAN & PROFILE
- DETOUR PLAN
- EROSION & SEDIMENT CONTROL PLAN
- EROSION & SEDIMENT CONTROL DETAILS
- S.N. 016-6046 GENERAL PLAN & ELEVATION
- S.N. 016-6046 CPE DETAILS & GENERAL NOTES
- S.N. 016-6046 TYPE 2399 RAILING DETAILS
- SOIL BORING LOGS
- DETAILS & W. BRANCH OF DUPAGE RIVER PROFILE
- CROSS SECTIONS STA. 770+00 TO 771+00
- CROSS SECTIONS STA. 771+13.50 TO 772+00
- CROSS SECTIONS STA. 772+40
- WEST BRANCH DUPAGE RIVER STA. 58.960 TO 58.973
- WEST BRANCH DUPAGE RIVER STA. 58.976 TO 58.981

FOR HIGHWAY STANDARDS, SEE SHEET NO. 2



FUNCTIONAL CLASSIFICATION
LOCAL STREET (URBAN)
2012 AADT = 972
POSTED SPEED = 20 MPH
DESIGN SPEED = 20 MPH

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

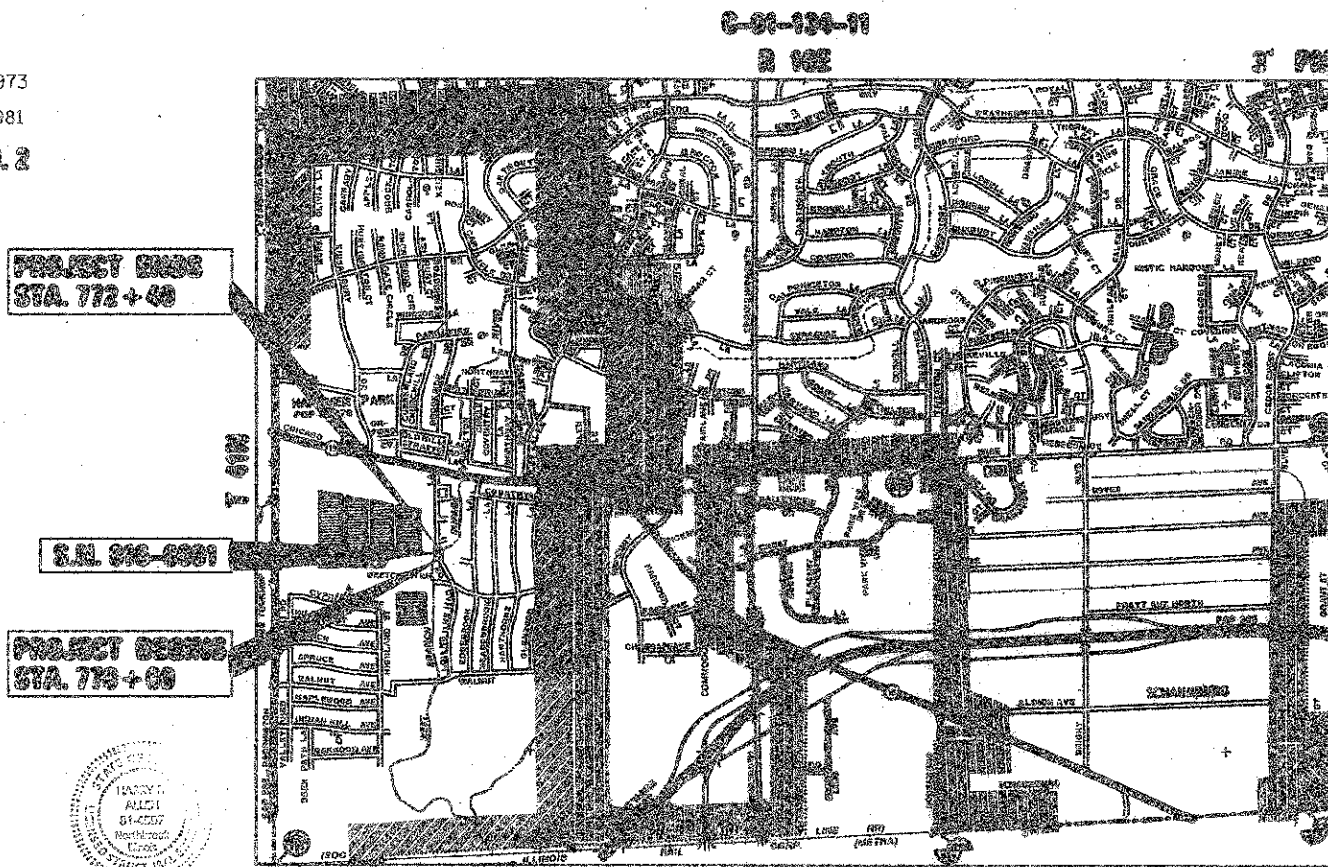
APPROVED: *[Signature]* 11/13/12
VILLAGE OF HANOVER PARK, ILL. AS FINANCIAL OFFICER

ORDERED: November 13, 2012
[Signature] C. J. HOET
MAYOR & MEMBER OF BOARD OF VILLAGE & OFFICER

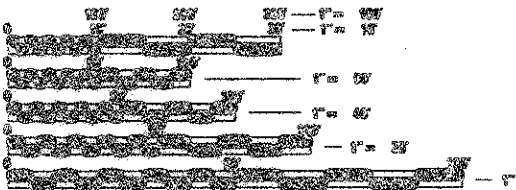
DESIGNED FOR AND
CHECKED BY: *[Signature]*
DATE: November 13, 2012
[Signature]
SENIOR PROJECT ENGINEER & SUPERVISOR

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

DESIGN AND CIVIL ENGINEER: CHARLES F. MOORE, P.E. 697-782-0600 SCHAEFER, R.



NOTE:
JUST OFFSET LOCATIONS INDICATED FOR CLARIFICATION
1-100-000-0100
00 001



ALL THE PLANS HAVE BEEN PREPARED USING STANDARD
CONVENTIONS. REVISIONS TO THESE PLANS WILL NOT
CONFORM TO STANDARD CONVENTIONS. IN MAKING REVISIONS
ON REVISION PLANS, THE ABOVE CONVENTIONS WILL BE USED.

PM Pavis-Marting & Co.
910 W. Lake St.
Marechal, IL 60172
630-425-0000 Fax: 630-424-4910
Design Firm Professional Registration No. 010-000276

PROJECT ENGINEER: ALEN WISNOLIL, P.E.
PROJECT MANAGER: DALE MARTING, JR., P.E.

CONTRACT NO. 83754



[Signature]
HARRY R. ALLEN DATE
No. 91-4597
EXPIRES 11/30/12

ORDER LENGTH = 20.00 FT. (6.71 M)
NET LENGTH = 20.00 FT. (6.10 M)

[Signature]
DALE V. MARTING, P.E. DATE
No. 062-25264
EXPIRES 11/30/13



CODE NO.	ITEM	UNIT	0011	0042	HBRP FUNDED	HANOVER PARK FUNDED
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	8	0	8	0
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	24	0	24	0
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	216	0	216	0
20400800	FURNISHED EXCAVATION	CU YD	290	0	290	0
20800150	TRENCH BACKFILL	CU YD	220	0	70	150
21101615	TOPSOIL FURNISH AND PLACE, 4"	SQ YD	600	0	600	0
25000210	SEEDING, CLASS 2A	ACRE	0.13	0	0.13	0
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	11	0	11	0
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	11	0	11	0
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	11	0	11	0
25100630	EROSION CONTROL BLANKET	SQ YD	227	0	227	0
25200200	SUPPLEMENTAL WATERING	UNIT	2	0	2	0
28000400	PERIMETER EROSION BARRIER	FOOT	520	0	520	0
28000500	INLET AND PIPE PROTECTION	EACH	10	0	10	0
28100105	STONE RIPRAP, CLASS A3	SQ YD	48	0	48	0
28200200	FILTER FABRIC	SQ YD	48	0	48	0
31102000	SUBBASE GRANULAR MATERIAL, TYPE C	CU YD	6	0	6	0
35101100	AGGREGATE BASE COURSE, TYPE A, 12"	SQ YD	570	0	570	0
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	73	0	73	0
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	78	0	78	0
42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	758	0	758	0
44000100	PAVEMENT REMOVAL	SQ YD	540	0	540	0
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	399	0	399	0
44000600	SIDEWALK REMOVAL	SQ FT	943	0	943	0
48203005	HOT-MIX ASPHALT SHOULDERS, 2"	SQ YD	99	0	99	0
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	40915	0	40915	0
50900200	STEEL RAILING, TYPE 2399 *	FOOT	27	0	27	0
51500100	NAME PLATES	EACH	1	0	1	0
54003000	CONCRETE BOX CULVERTS	CU YD	238	0	238	0
550A0050	STORM SEWERS, CLASS A, TYPE 1, 12"	FOOT	258	0	258	0
56100600	WATER MAIN 6" *	FOOT	45	0	0	45
60201105	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	4	0	4	0
60218300	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	1	0	1	0

CODE NO.	ITEM	UNIT	0011	0042	HBRP FUNDED	HANOVER PARK FUNDED
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	0	1	0
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	2	0	2	0
60255500	MANHOLES TO BE ADJUSTED	EACH	2	0	2	0
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	425	0	425	0
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A *	EACH	2	0	2	0
66400305	CHAIN LINK FENCE, 6' *	FOOT	70	0	70	0
67100100	MOBILIZATION	L SUM	1	0	1	0
70102640	TRAFFIC CONTROL AND PROTECTION, 701801	L SUM	1	0	1	0
78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4" *	FOOT	60	0	60	0
78200410	GUARDRAIL MARKERS, TYPE A *	EACH	4	0	4	0
78201000	TERMINAL MARKER - DIRECT APPLIED *	EACH	2	0	2	0
X0322494	CURB CUT	FOOT	25	0	25	0
X0325318	LIGHTWEIGHT CELLULAR CONCRETE FILL	CU YD	91	0	91	0
X2130010	EXPLORATION TRENCH, SPECIAL	FOOT	20	0	20	0
X5010205	REMOVAL OF EXISTING STRUCTURE, SPECIAL	EACH	1	0	1	0
X5021510	COFFERDAMS (SPECIAL)	EACH	2	0	2	0
X6026055	SANITARY MANHOLE, SPECIAL *	EACH	1	0	0	1
X6640300	CHAIN LINK FENCE REMOVAL	FOOT	84	0	84	0
Z0047500	PUMPING *	CAL DA	22	0	0	22
Z0057100	SANITARY SEWER 12" *	FOOT	70	0	0	70
Z0058000	SANITARY SEWER SPECIAL *	FOOT	34	0	0	34
Z0067700	STEEL CASINGS 20" *	FOOT	34	0	0	34
Z0076600	TRAINEES	HOUR	0	500	500	0
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	0	500	500	0
LR631020	TRAFFIC BARRIER TERMINAL, TYPE 1 *	EACH	2	0	2	0
X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	362	0	362	0
X5610004	DUCTILE IRON WATER MAIN FITTINGS *	POUND	332	0	0	332
XX006119	TRAFFIC CONTROL AND PROTECTION (DETOUR)	L SUM	1	0	1	0
XX006947	HOT-MIX ASPHALT DRIVEWAY REMOVAL AND REPLACEMENT	SQ YD	36	0	36	0
XX008745	REMOVE AND REPAIR EXISTING GABIONS	CU YD	14	0	14	0
XX008746	VALVE WITH VALVE BOX, 6" *	EACH	1	0	0	1

* SPECIALITY ITEMS

Nov 09, 2012 - 9:33am \\pvt\mnt\cod\02841.DS\02841DS-03 - Sub.dwg

DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.

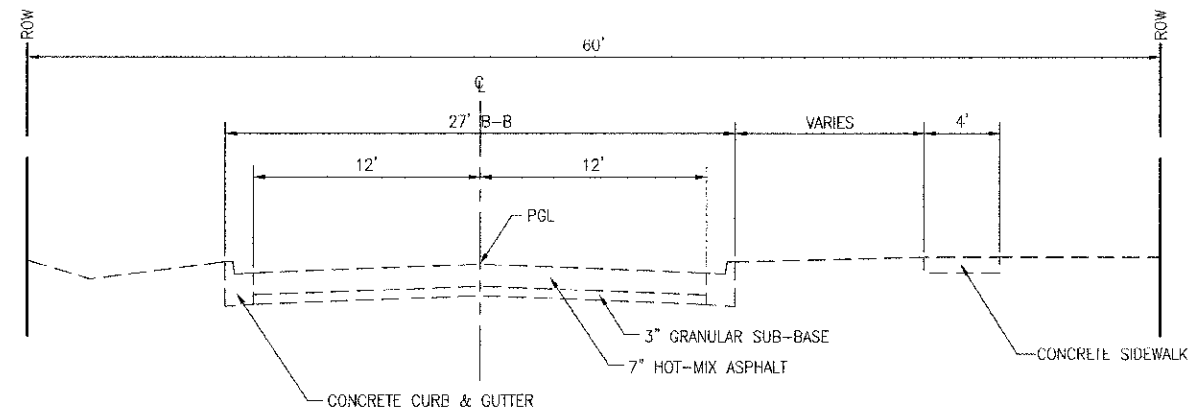
DATE	BY	DESCRIPTION

PLOTTED BY:	AMT
CHECKED BY:	JR
DRAWN BY:	AMT
CHECKED BY:	JR
APPROVED BY:	DHT

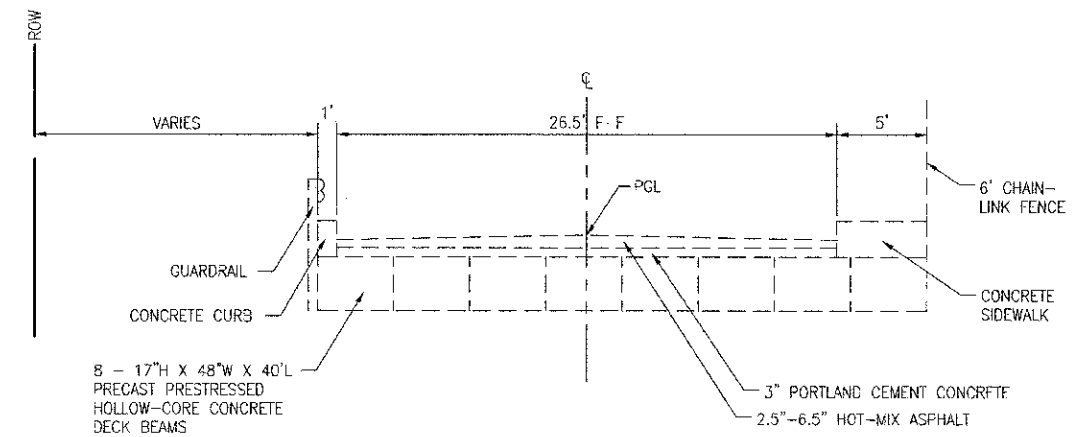
PMA Engineers
Pavia-Marting & Co.
 910 W. Lake St.
 Roselle, IL 60172
 630-529-8000 fax: 630-834-6910
 Design Firm Professional Registration #184066336

TITLE: **LONGMEADOW LANE BOX CULVERT REPLACEMENT**
HANOVER PARK, IL
SUMMARY OF QUANTITIES

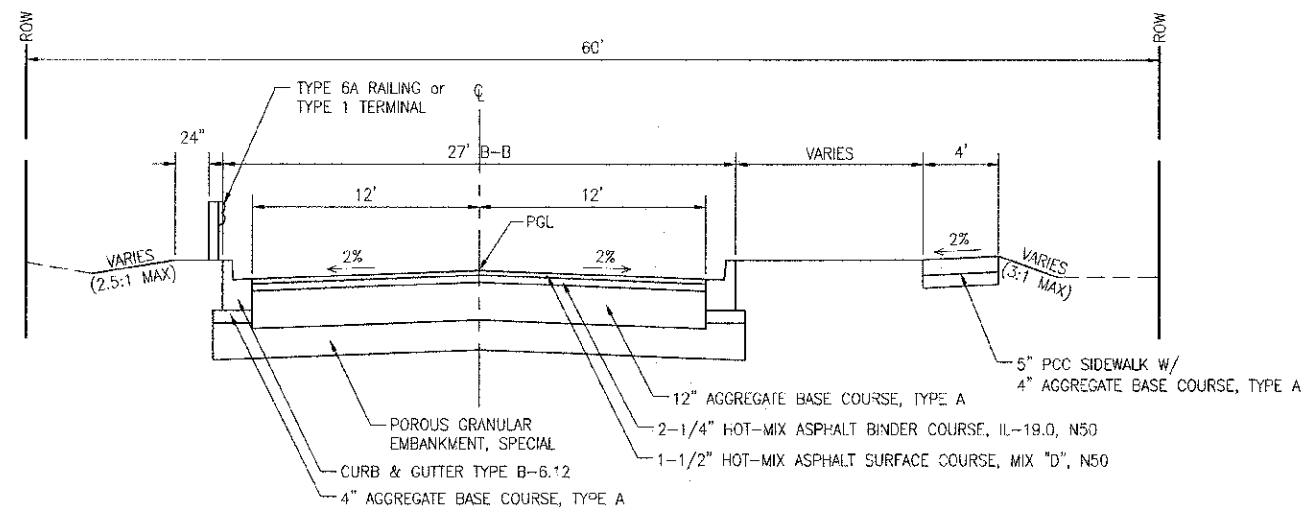
SCALE: NONE
 DATE: 8/6/2012
 JOB NO: 02841.DS
 SHEET 3 OF 20



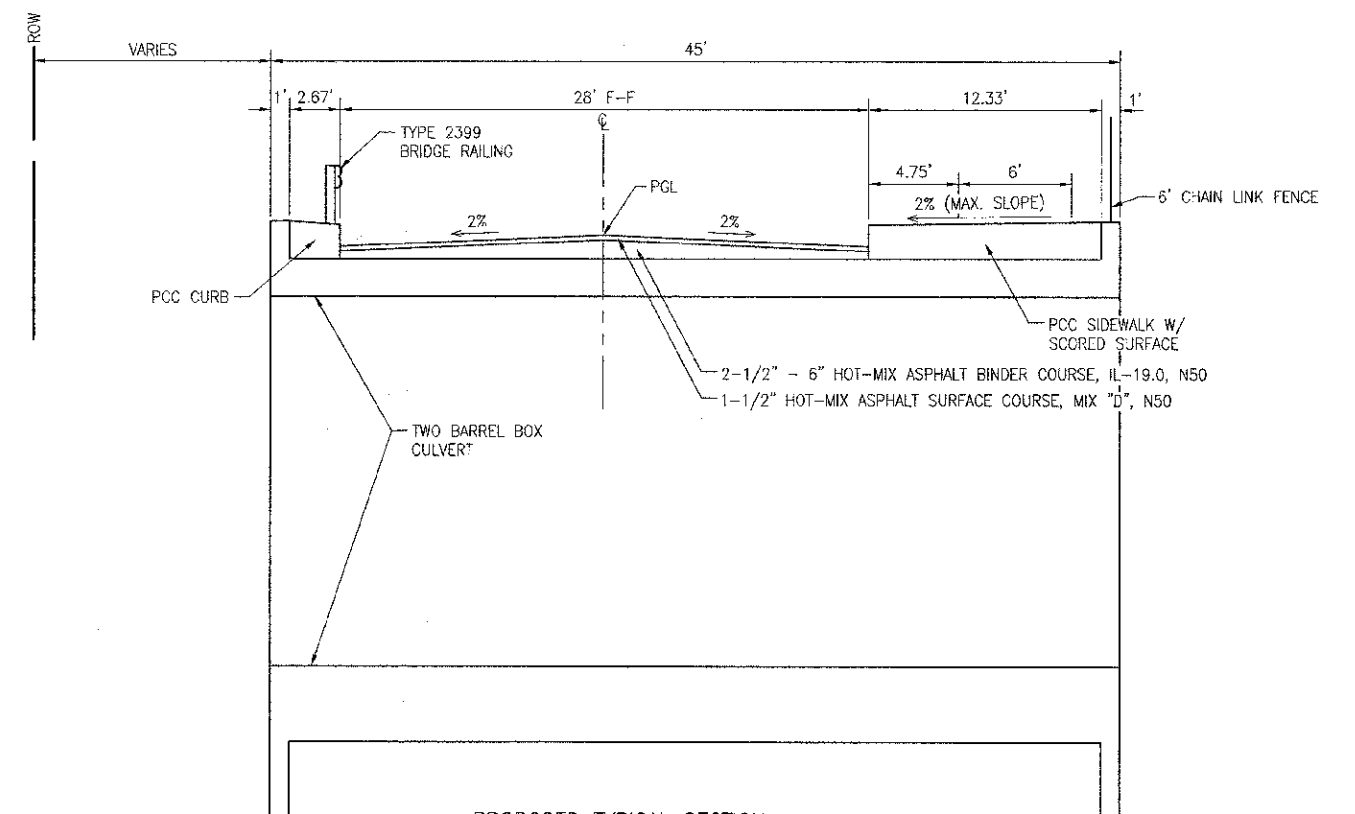
EXISTING TYPICAL SECTION
STA. 770+00 TO SOUTH OF BRIDGE
NORTH OF BRIDGE TO STA. 772+40



EXISTING TYPICAL SECTION
LONGMEADOW LANE BRIDGE
STA. 770+86.50 TO STA. 771+13.50



PROPOSED TYPICAL SECTION
STA. 770+00 TO SOUTH OF BOX CULVERT
NORTH OF BOX CULVERT TO STA. 772+40



PROPOSED TYPICAL SECTION
LONGMEADOW LANE BOX CULVERT
STA. 770+86.50 TO 771+13.50

HOT-MIX ASPHALT MIXTURES REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 1-1/2"	4% @ 50 Gyr.
HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50; 2-1/4"	4% @ 50 Gyr.
DRIVEWAYS	
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (IL 9.5 mm); 2"	4% @ 50 Gyr.

THE UNIT WEIGHT USED TO CALCULATE ALL HMA SURFACE MIXTURE QUANTITIES IS 112 LBS/SQ. YD./IN.

THE "AC TYPE" FOR NON-POLYMERIZED HMA MIXES SHALL BE "PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS FOR PERCENT OF RAP. SEE SPECIAL PROVISIONS.

Nov 08, 2012 - 4:17pm \\system\Cor\2841.DS\028+10S-04 - Typical Sections.dwg

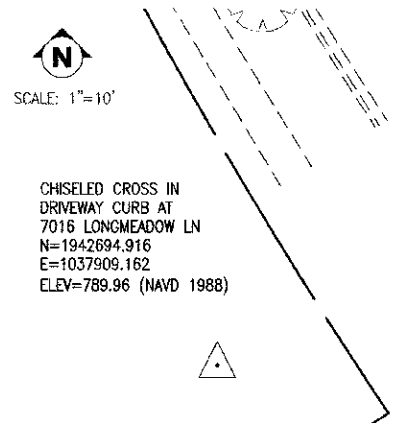
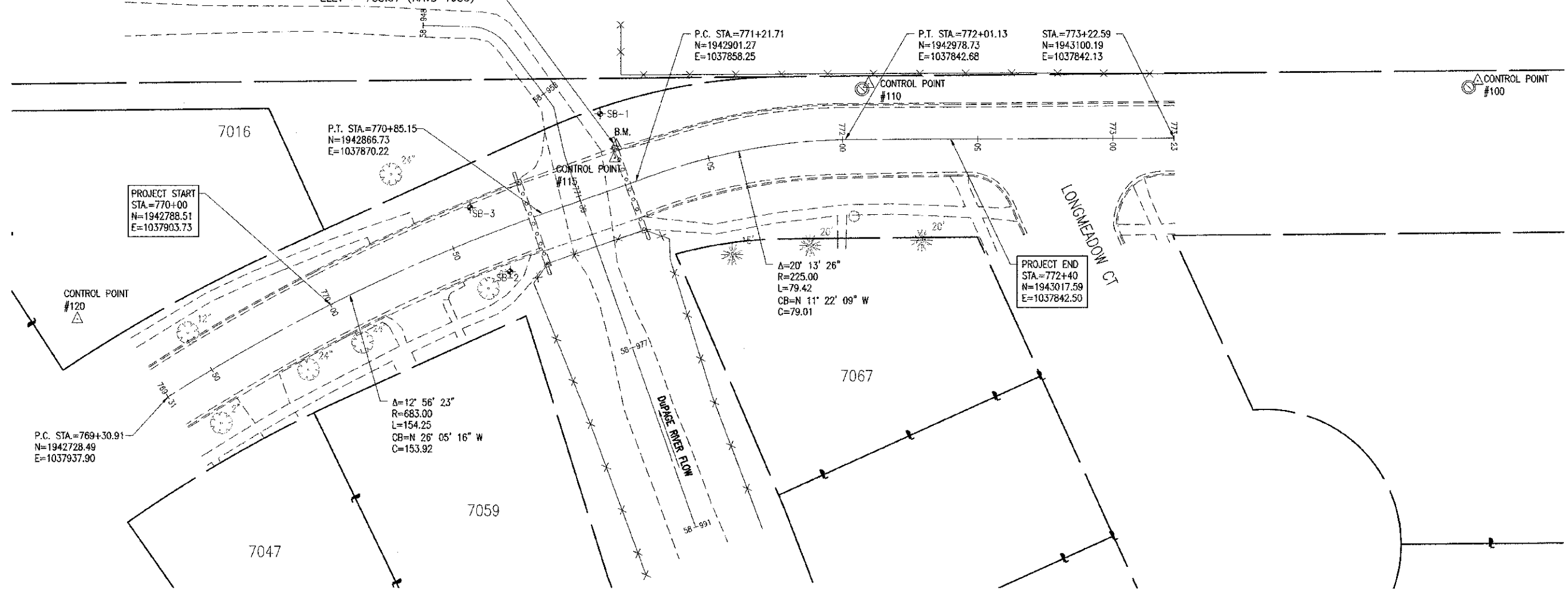
F.A. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MWD 1770	10-00059-00-ER	COOK	20	5
HANOVER PARK		BLINDS	CONTRACT NO. 63754	



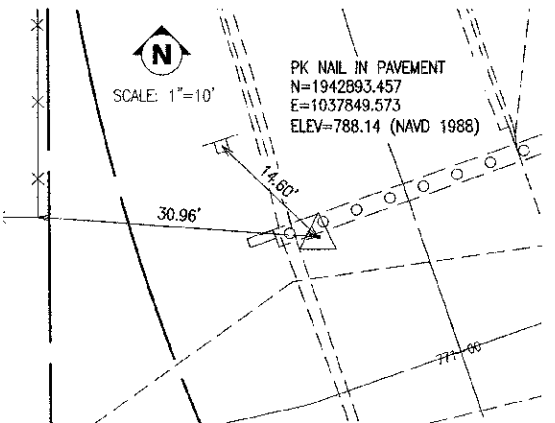
SCALE: 1"=20'

PROJECT DATUMS:
 HORIZONTAL DATUM - NAD 83
 VERTICAL DATUM - NAVD 88

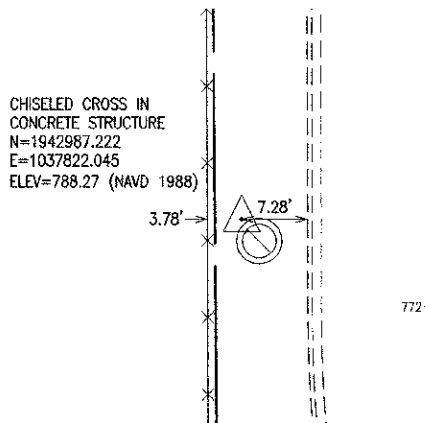
BENCHMARK:
 BM-12
 CHISELED SQUARE ON
 NORTHWEST WINGWALL
 OF CONCRETE BRIDGE
 ELEV = 788.84 (NGVD 1929)
 ELEV = 788.57 (NAVD 1988)



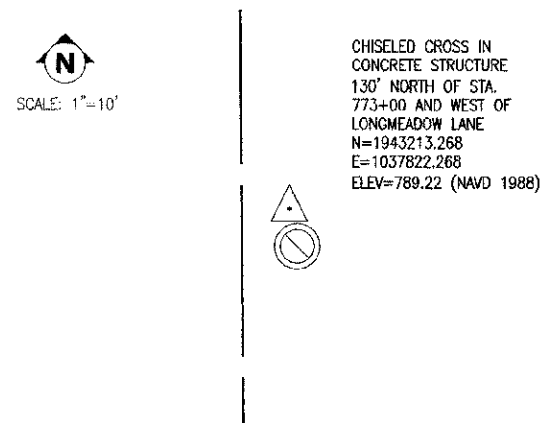
CONTROL POINT #120



CONTROL POINT #115



CONTROL POINT #110

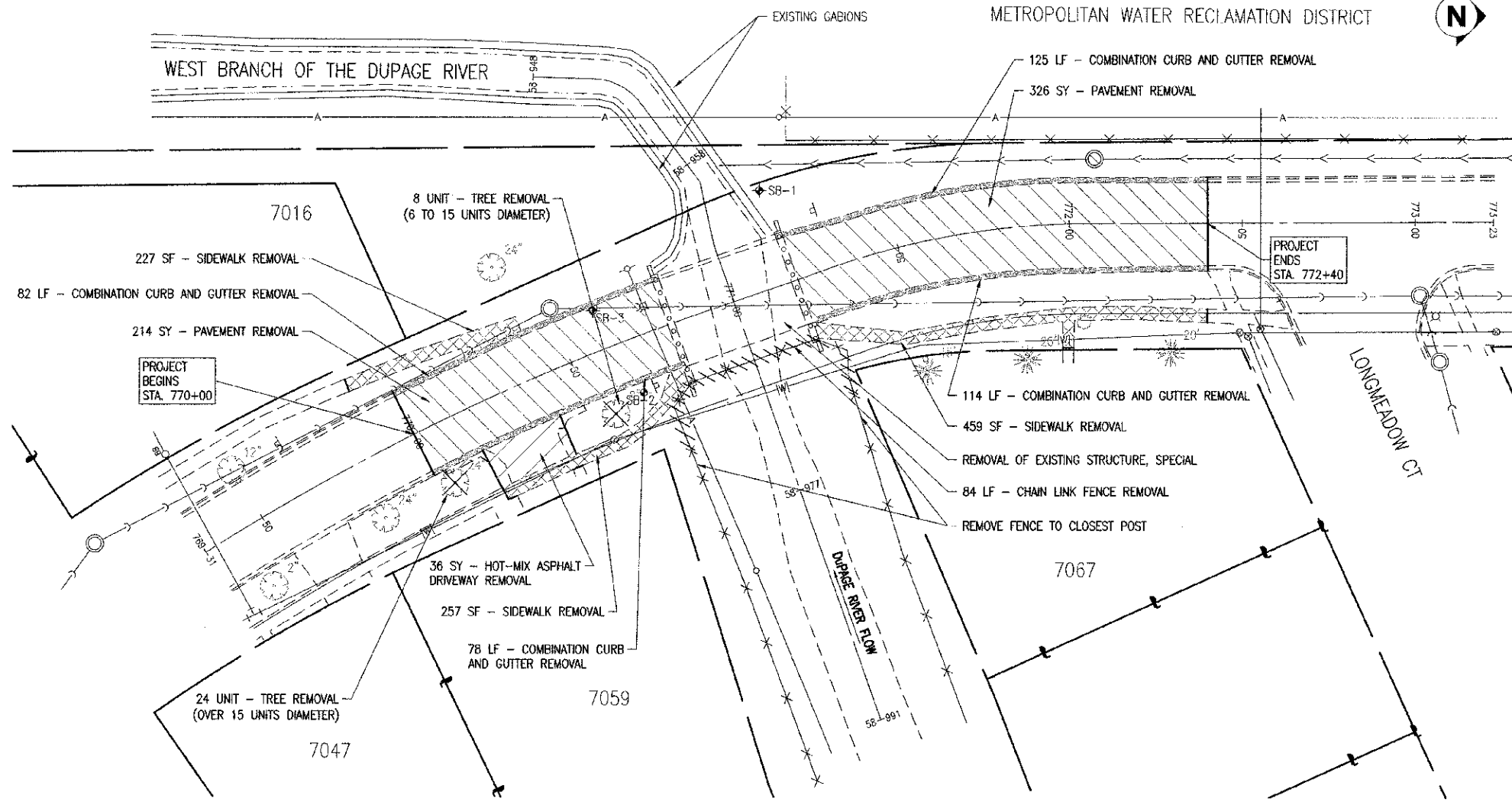


CONTROL POINT #100

Nov 05, 2012 4:18pm \\systems\jod\02841.DS\02841.DS-05 - Alignment Ties & Benchmarks.dwg

REVISIONS: DATE BY DESCRIPTION 10-22-12 JR REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD. 11-08-12 JR REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.		DATE BY DESCRIPTION		PLOTTED BY: AMR CHECKED BY: JR DRAWN BY: AMR CHECKED BY: JR APPROVED BY: DNM		Pavia-Marting & Co. 910 W. Lake St. Roselle, IL 60172 630-529-8000 fax: 630-894-4910 Design Firm Professional Registration #18402276		TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT HANOVER PARK, IL ALIGNMENT, TIES, & BENCHMARKS		SCALE: AS NOTED DATE: 8/6/2012 JOB NO: 02841.DS SHEET 5 OF 20	
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F.A.U. R.T.E. NO. 1726	SECTION 10-00059-00-BR	COUNTY COOK	TOTAL SHEETS 20	SHEET NO. 6
HANOVER PARK		ILLINOIS	CONTRACT NO. 63754	



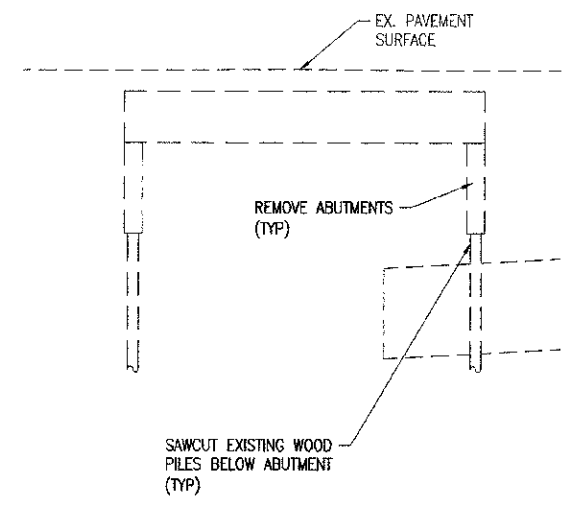
DEMOLITION PLAN
SCALE: 1"=20'

LEGEND

- PAVEMENT REMOVAL
- SIDEWALK REMOVAL
- CURB & GUTTER REMOVAL
- DRIVEWAY PAVEMENT REMOVAL
- TREE REMOVAL
- REMOVE ITEM
- SAWCUTTING

DEMOLITION NOTES

1. ALL ITEMS RELATED TO THE REMOVAL OF THE EXISTING BRIDGE STRUCTURE, INCLUDING THE DECK BEAM REMOVAL, ABUTMENT REMOVAL, SAW CUTTING OF PILES, GUARDRAIL REMOVAL, AND WINGWALL REMOVAL, SHALL BE PAID FOR AS REMOVAL OF EXISTING STRUCTURE, SPECIAL.
2. THE REMOVAL OF THE PAVEMENT AND SIDEWALK OVER THE BRIDGE STRUCTURE, FROM ABUTMENT TO ABUTMENT, SHALL NOT BE PAID FOR SEPARATELY AS PAVEMENT REMOVAL OR SIDEWALK REMOVAL, BUT SHALL BE INCLUDED IN THE PAY ITEM 'REMOVAL OF EXISTING STRUCTURE, SPECIAL'.
3. SAWCUTS TO SEPARATE REMOVED PORTIONS OF AN ITEM FROM THE REMAINING PORTION OF AN ITEM SHALL BE COMPLETELY THROUGH SAID ITEM. THE CONTRACTOR SHALL DETERMINE IF AN ITEM CONTAINS REINFORCING STEEL AND SHALL MAKE THE APPROPRIATE ACCOMMODATIONS TO SAW THROUGH THE STEEL. THE COST FOR SAWCUTTING SHALL BE INCLUDED IN THE UNIT PRICE OF THE ITEM SAWED.



SECTION VIEW THROUGH BRIDGE CENTER
SCALE: 1"=10'

Nov 08, 2012 - 4:19pm \\systems\cod\02841.DS\02841.DS-06 - Demolition Plan.dwg

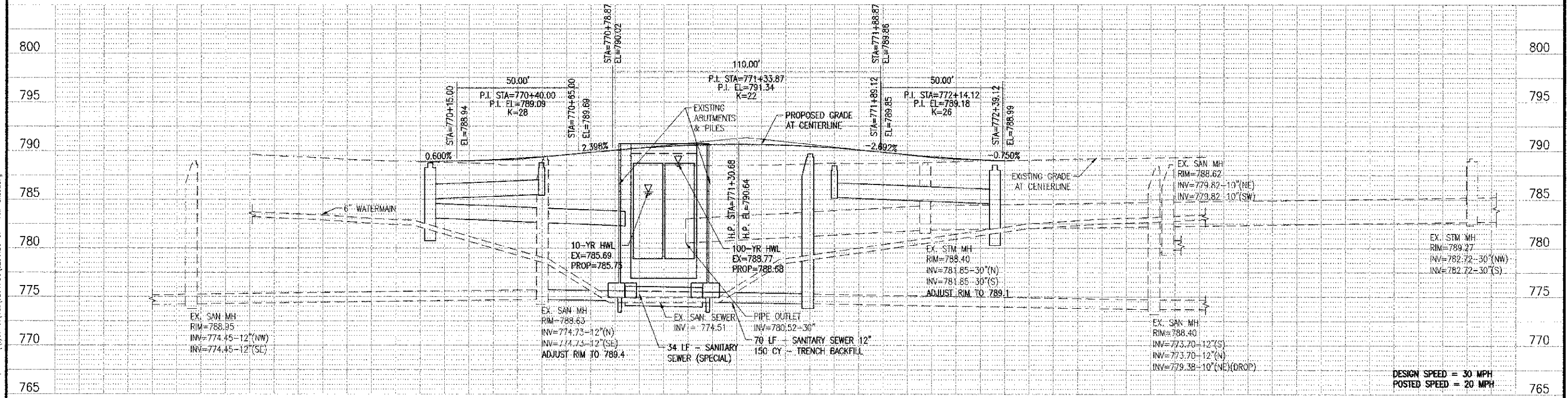
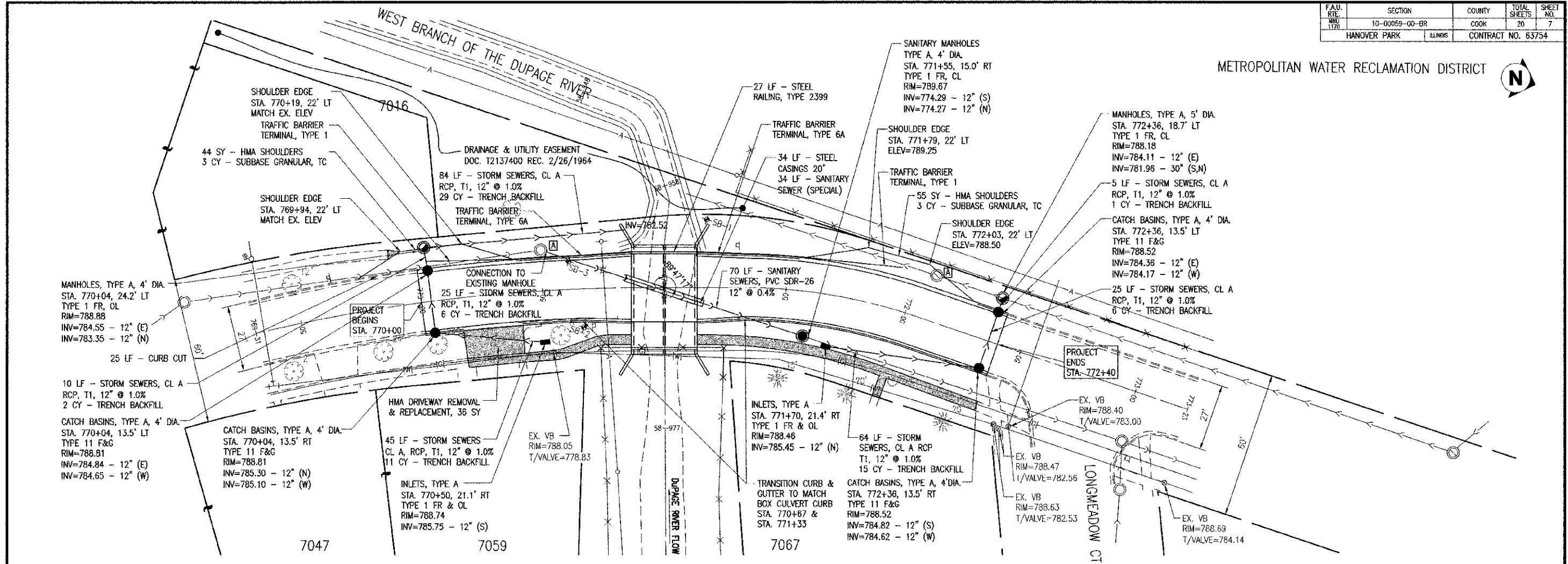
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

PLOTTED BY: AMR		Pavia-Marting & Co. 910 W. Lake St. Roselle, IL 60172 630-529-8090 fax 630-894-4910 <small>Design Firm Professional Registration #194702374</small>
CHECKED BY: JP		
DRAWN BY: AMR		
APPROVED BY: DM		

TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT HANOVER PARK, IL DEMOLITION PLAN	SCALE: AS NOTED
	DATE: 8/6/2012
	JOB NO: 02841.DS
	SHEET 6 OF 20

F.A.U. RIE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1170	10-00059-00-BR	COOK	20	7
HANOVER PARK		ILLINOIS	CONTRACT NO. 63754	

METROPOLITAN WATER RECLAMATION DISTRICT



DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.

DATE	BY	DESCRIPTION

PLOTTED BY:	AMR
CHECKED BY:	JR
DRAWN BY:	AMR
CHECKED BY:	JR
APPROVED BY:	DWM

pma Professional
Pavia-Marting & Co.
 910 W. Lake St.
 Roselle, IL 60172
 630-529-8000 Fax: 630-894-4910
Illinois Professional Registration #184602378

LONGMEADOW LANE BOX CULVERT REPLACEMENT
 HANOVER PARK, IL
PLAN & PROFILE

SCALE:	H:1"=20', V:1"=5'
DATE:	8/6/2012
JOB NO.:	02841.DS
SHEET:	7 OF 20

Nov 08, 2012 - 4:21 pm \\systemx\cad\02841.DS\02841.DS-07 - PnP Sheet.dwg



SIGN LEGEND

- | | | | |
|---|---|---|--|
| ① | ROAD CLOSED TO THRU TRAFFIC
R11-4
60 X 30
(MOUNTED ABOVE TYPE III BARRICADE) | ⑫ | ROAD CLOSED 500 FT
W20-3
48 X 48 |
| ③ | LONGMEADOW LANE NORTH | ⑬ | DETOUR
30 X 24 |
| ④ | LONGMEADOW LANE SOUTH | ⑭ | DETOUR
30 X 24 |
| ⑤ | DETOUR
M4-9
30 X 24 | ⑮ | DETOUR
30 X 24 |
| ⑥ | BRIDGE OUT
R11-2
48 X 30
(MOUNTED ABOVE TYPE III BARRICADE) | ⑯ | DETOUR
30 X 24 |
| ⑦ | END DETOUR
M4-8a
24 X 18 | ⑰ | LONGMEADOW LANE |
| ⑧ | ROAD CLOSED AHEAD
W20-3
48 X 48 | ⑱ | NORTH
M3-1
24 X 12 |
| ⑨ | DETOUR AHEAD
W20-2
48 X 48 | ⑲ | SOUTH
M3-3
24 X 12 |
| ⑩ | DETOUR
M4-10R
48 X 18 | | |
| ⑪ | DETOUR
M4-10L
48 X 18 | | |

LEGEND

- WORK ZONE
- DETOUR ROUTE
- TEMPORARY TRAFFIC ADVISORY SIGN
- SIGN COMBINATION
- TYPE III BARRICADE
- W/TWO (2) FLASHING LIGHTS

Nov 05, 2012 - 4:22pm \\system\cad\02841.DWG\02841.DS\02841.DS-08 - Detour Plan.dwg

REVISIONS		DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-22-12	JR			REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
11-08-12	JR			REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

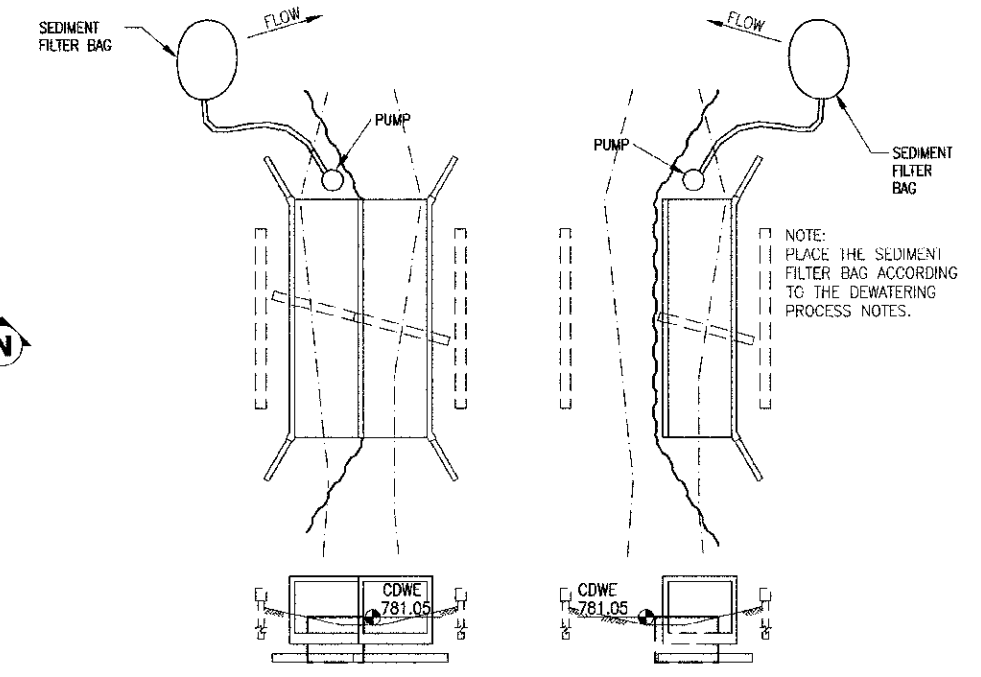
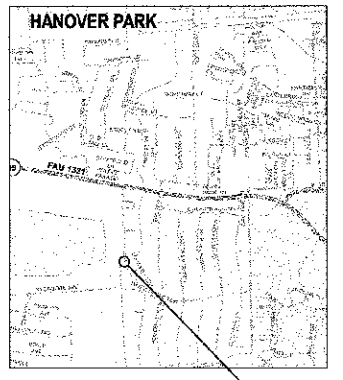
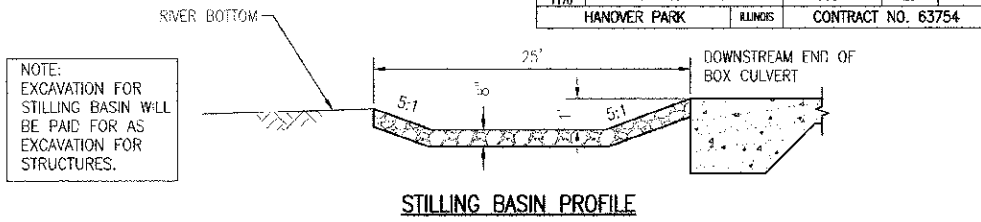
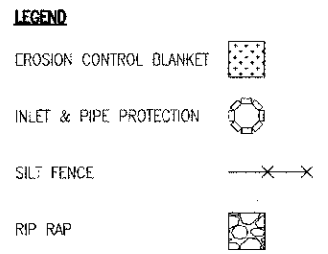
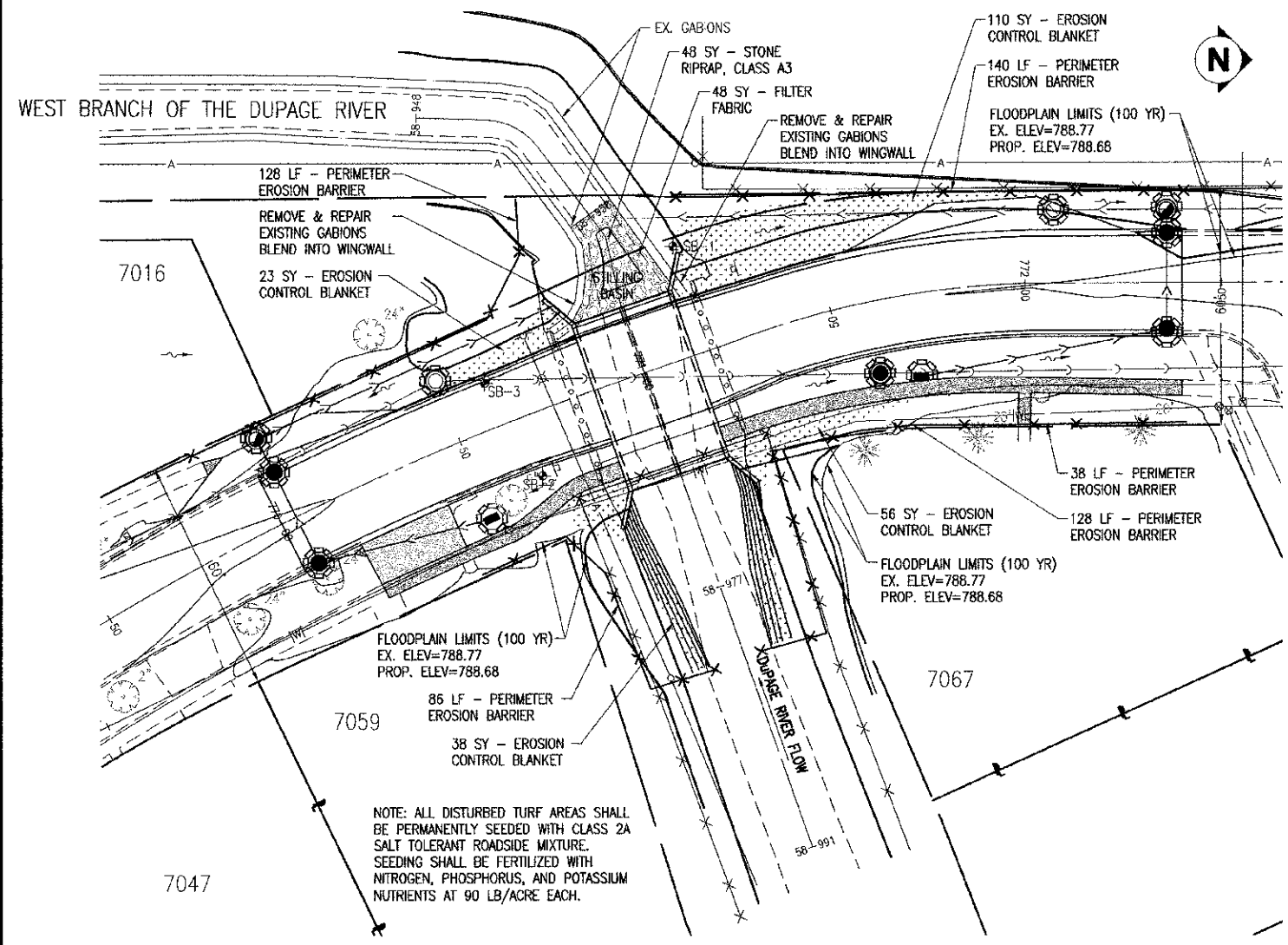
PLOTTED BY:	AMR
CHECKED BY:	JR
DRAWN BY:	AMR
CHECKED BY:	JR
APPROVED BY:	DJM

pma Engineers
Pavia-Marting & Co.
 910 W. Lake St.
 Roselle, IL 60172
 630-529-8000 Fax: 630-894-4910
 Design: P.E.'s Professional Registration #184002174

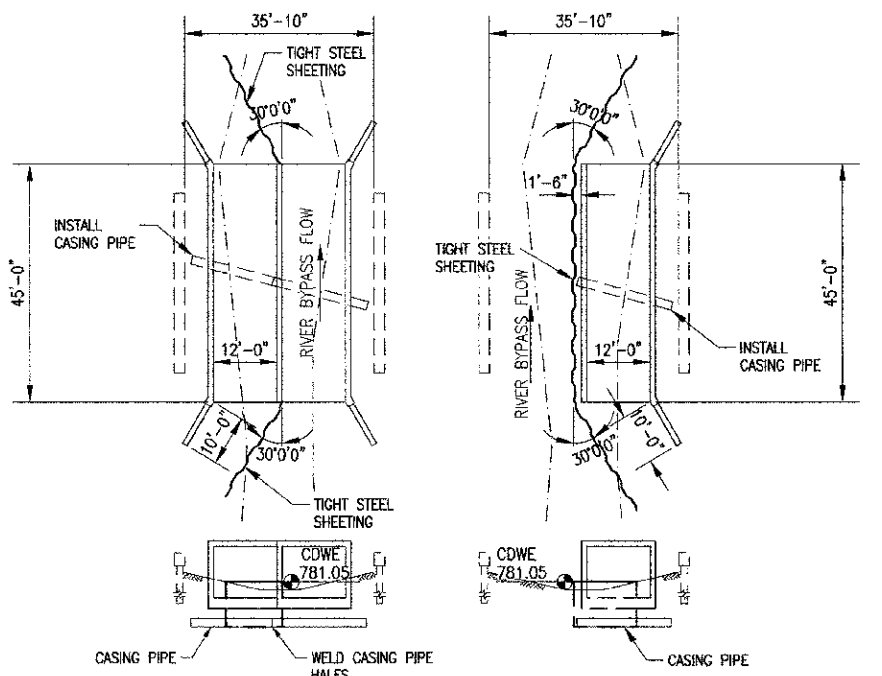
TITLE: **LONGMEADOW LANE BOX CULVERT REPLACEMENT
 HANOVER PARK, IL
 DETOUR PLAN**

SCALE:	NONE
DATE:	8/6/2012
JOB NO.:	02841.DS
SHEET	8 OF 20

F.A.U. RITE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
MAINT	10-00069-00-BR	COOK	20	9
1710	HANOVER PARK	BLDG	CONTRACT NO. 63754	



(COFFERDAM DESIGN WATER ELEVATION = CDWE)
DEWATERING DETAIL
SCALE: NONE



(COFFERDAM DESIGN WATER ELEVATION = CDWE)
COFFERDAM DETAIL
SCALE: NONE

EROSION CONTROL NOTES

1. IN AREAS WHERE WORK IS COMPLETE, PERMANENT STABILIZATION SHALL OCCUR WITHIN 7 DAYS OF COMPLETION, AND IN AREAS WHERE WORK HAS TEMPORARILY CEASED FOR 21 DAYS OR MORE, TEMPORARY STABILIZATION SHALL OCCUR BY THE 14TH DAY AFTER WORK HAS CEASED.
2. STOCKPILES OF SOIL AND OTHER BUILDING MATERIALS TO REMAIN IN PLACE MORE THAN THREE DAYS SHALL BE FURNISHED WITH EROSION AND SEDIMENT CONTROL MEASURES (I.E. PERIMETER SILT FENCE). STOCKPILES TO REMAIN IN PLACE FOR 30 DAYS OR MORE SHALL RECEIVE TEMPORARY SEEDING.
3. ALL ADJACENT STREETS MUST BE KEPT CLEAR OF DEBRIS, INSPECTED DAILY, AND CLEANED WHEN NECESSARY.
4. ALL EROSION CONTROL MEASURES MUST BE INSPECTED WEEKLY AND AFTER EACH 1/2" RAIN EVENT.
5. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO SEDIMENT BASINS OR SILT TRAPS. DEWATERING INTO DRAIN TILES IS STRICTLY PROHIBITED. WATER MUST HAVE SEDIMENT REMOVED BEFORE BEING RETURNED TO THE RIVER.
6. ALL DISTURBED AREAS AND WORK AREAS MUST BE ISOLATED FROM CREEK FLOWS AT ALL TIMES. NO WORK SHALL BE PERFORMED IN FLOWING WATER. THE DIVERSION/ISOLATION OF THE CREEK FLOWS MUST BE CONSTRUCTED FROM NON-ERODIBLE MATERIALS.
7. ALL STORM DRAINS AND INLETS WITHIN AND ADJACENT TO THE SITE MUST HAVE AN INLET PROTECTION FILTER OR SEDIMENT TRAPPING DEVICE INSTALLED DURING CONSTRUCTION.
8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL STABILIZATION IS ACHIEVED. TRAPPED SEDIMENT IN INLETS, CATCH BASINS, AND OTHER TEMPORARY MEASURES SHALL BE PROPERLY DISPOSED OF AND THE AREA PERMANENTLY STABILIZED.

INSPECTION AND MAINTENANCE SCHEDULE

ALL EROSION CONTROL MEASURES SHALL BE INSPECTED WEEKLY AND AFTER ALL RAIN EVENTS OF 1/2" OR GREATER FOR THE DURATION OF THE PROJECT. A FINAL INSPECTION SHALL TAKE PLACE 30 DAYS AFTER PROJECT COMPLETION. THE INSTALLATION AND MAINTENANCE OF EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE INSPECTION OF EROSION CONTROL MEASURES SHALL BE THE RESPONSIBILITY OF THE VILLAGE OF HANOVER PARK OR THEIR DULY AUTHORIZED CONSULTANT.

DEWATERING PRACTICES

IF THE CONTRACTOR IS REQUIRED TO DEWATER THE SITE AFTER A LARGE RAIN EVENT OR BY LEAKS IN THE COFFERDAM, THE CONTRACTOR IS REQUIRED TO PUMP THEIR DISCHARGE THROUGH A SEDIMENT FILTER BAG. THE SEDIMENT FILTER BAG SHALL BE PLACED AT THE TOP OF THE EMBANKMENT ON VEGETATED GROUND. THE WATER DISCHARGED FROM THE SEDIMENT FILTER BAG SHALL DISCHARGE ONTO THE VEGETATED GROUND OR INTO THE EXISTING GABIONS. THE FILTER BAG SHALL BE DISPOSED OF IN AN ACCEPTABLE MANNER. THE DEWATERING PROCESS WILL BE INCLUDED IN THE COST FOR COFFERDAMS (SPECIAL).

INSTALLATION SCHEDULE

1. INSTALL PERIMETER EROSION BARRIER AND INLET AND PIPE PROTECTION.
2. REMOVE DECKING, SUPERSTRUCTURE, AND ALL CORRESPONDING APPURTENANCES.
3. LOCATE WATER MAIN AND GAS MAIN WITH EXPLORATORY TRENCHES.
4. INSTALL SANITARY MANHOLE AND SANITARY SEWER BYPASS PUMP AND PIPING TO THE EXISTING SANITARY MANHOLE AT THE NORTHEAST QUADRANT OF LONGMEADOW LANE AND LONGMEADOW COURT INTERSECTION. PIPING

5. MUST BE PROTECTED FROM TRAFFIC IN AND OUT OF LONGMEADOW COURT. INSTALL WATERTIGHT STEEL COFFERDAM. LEAVE EXISTING ABUTMENT, WINGWALLS, AND SHEETING ON SOUTH SIDE OF CREEK TO ACT AS EROSION CONTROL. INSTALL NEW SANITARY MANHOLE AT THE SAME TIME AS INSTALLING COFFERDAM.
6. REMOVE NORTH ABUTMENT AND CUT DOWN PIERS.
7. RELOCATE DISCHARGE OF PIPING FOR PUMPING TO NEW SANITARY MANHOLE AFTER THE NEW MANHOLE HAS BEEN APPROVED. THE SOUTH INVERT OF THE NEW MANHOLE MUST BE TEMPORARY BLOCKED WHILE INSTALLING THE NEW SANITARY SEWER.
8. INSTALL NORTH HALF OF CASING PIPE WITHIN THE COFFERDAM ONLY.
9. CONSTRUCT NORTH HALF OF BOX CULVERT. AT THE SAME TIME INSTALL THE NEW SANITARY SEWER FROM THE NEW MANHOLE TO THE STEEL CASING PIPE.
10. MAKE NECESSARY ADJUSTMENTS TO GABIONS AND PERFORM CHANNEL GRADING ON NORTH SIDE OF THE RIVER. INSTALL EROSION CONTROL BLANKET.
11. SWITCH TO SOUTH SIDE.
12. INSTALL WATERTIGHT STEEL COFFERDAM.
13. REMOVE SOUTH ABUTMENT AND CUT DOWN PIERS.
14. INSTALL REMAINING HALF OF CASING PIPE.
15. CONSTRUCT REMAINING HALF OF BOX CULVERT. AT THE SAME TIME INSTALL THE SANITARY SEWER INTO THE STEEL CASING PIPE AND FINISH INSTALLING THE SANITARY SEWER TO THE EXISTING MANHOLE AT STA. 770+50. GET SEWER TESTED AND INSPECTED BEFORE OPENING IT FOR OPERATION.
16. MAKE NECESSARY ADJUSTMENTS TO GABIONS AND PERFORM CHANNEL GRADING ON THE SOUTH SIDE OF THE RIVER. INSTALL EROSION CONTROL BLANKET.
17. PLACE FILL BETWEEN BOX CULVERT AND EMBANKMENTS.
18. INSTALL RIP RAP MATERIAL DOWNSTREAM OF BOX CULVERT.

Nov 09, 2012 - 4:23pm \\sylvan\cadd\02841.DWG (02841.DWG) - Erosion & Sediment Control Plan.dwg

REVISIONS:	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
	10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
	11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

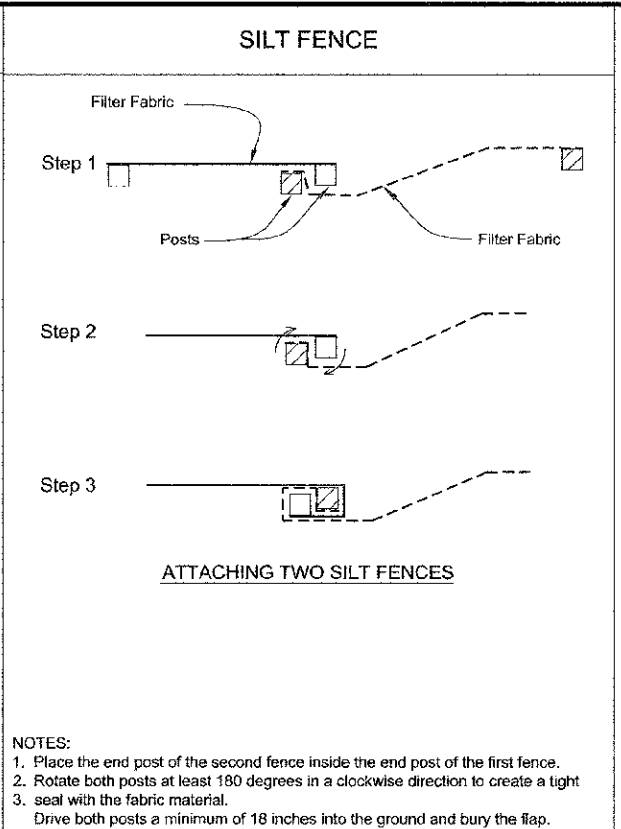
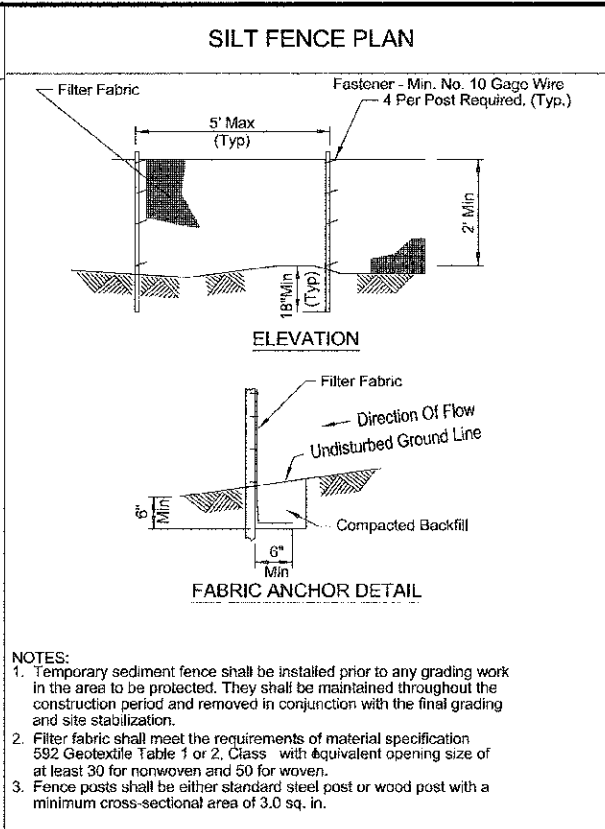
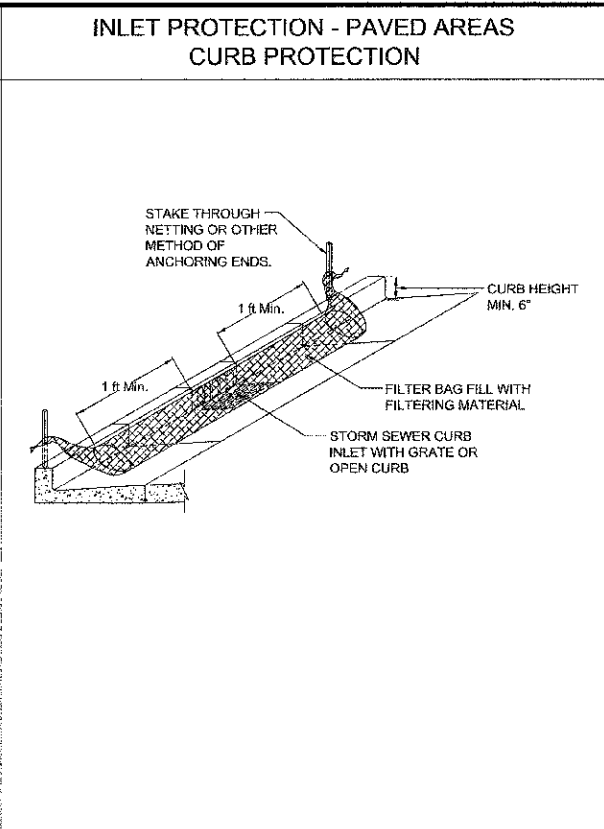
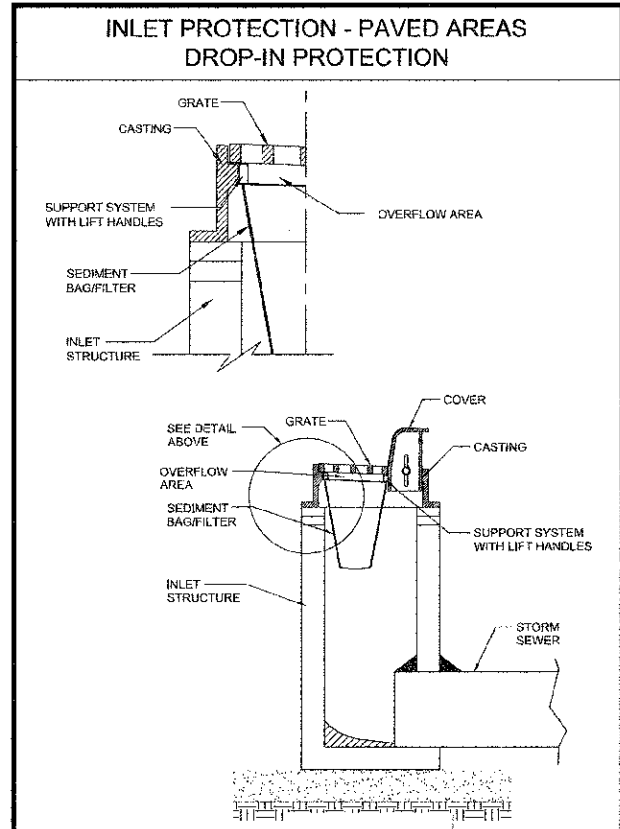
PLOTTED BY:	AMR
CHECKED BY:	JR
DRAWN BY:	AMR
CHECKED BY:	JR
APPROVED BY:	DAM

pma
Pavia-Marting & Co.
910 W. Lake St.
Roselle, IL 60172
630-529-8000 Fax: 630-894-4910
Design Firm Professional Registration #18402876

**LONGMEADOW LANE BOX CULVERT REPLACEMENT
HANOVER PARK, IL
EROSION & SEDIMENT CONTROL PLAN**

SCALE:	1"=20'
DATE:	8/6/2012
JOB NO.:	02841.05
SHEET	9 OF 20

F.A.U. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
172B	10-00059-00-BR	COOK	20	10
HANOVER PARK		ILLINOIS	CONTRACT NO. 63754	

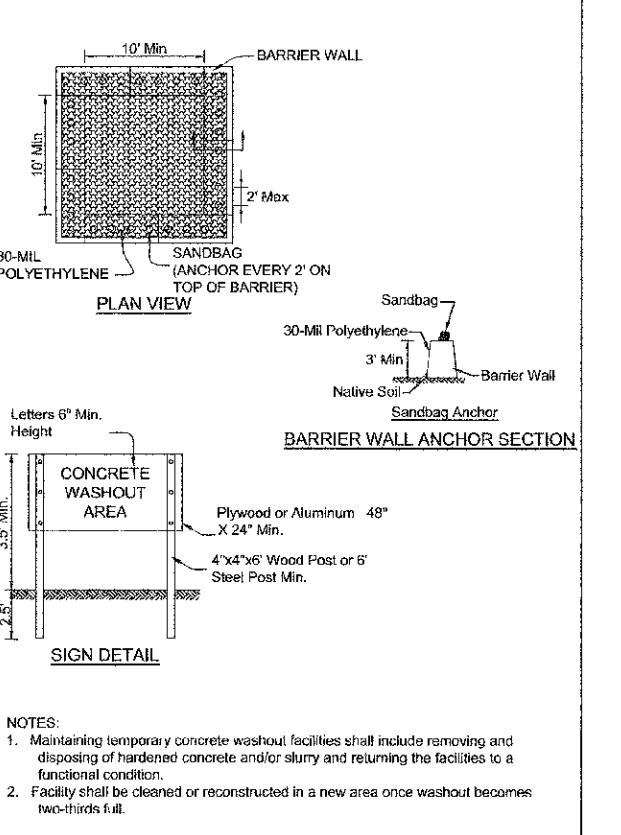
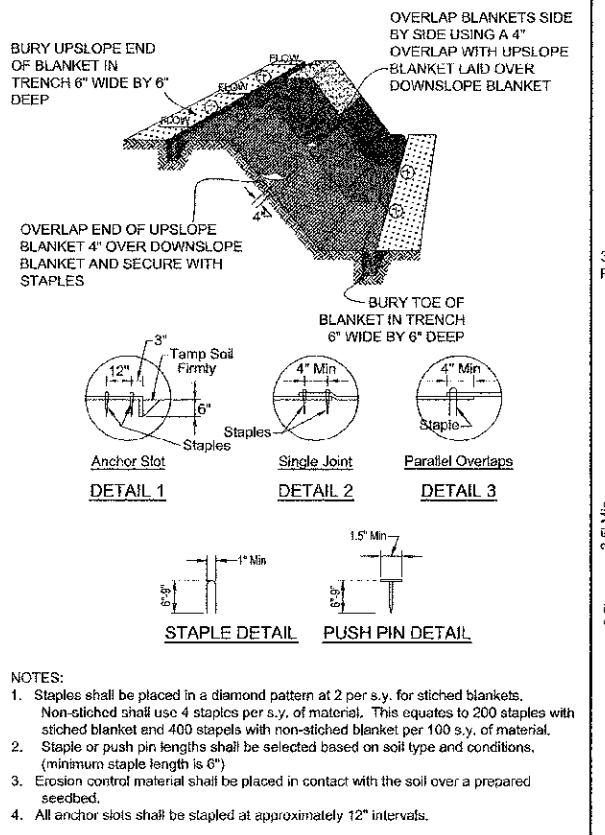
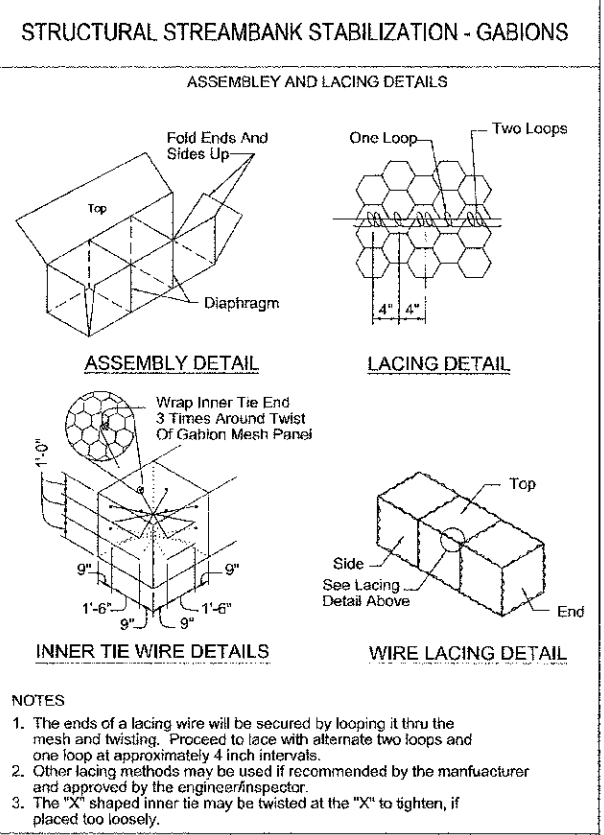
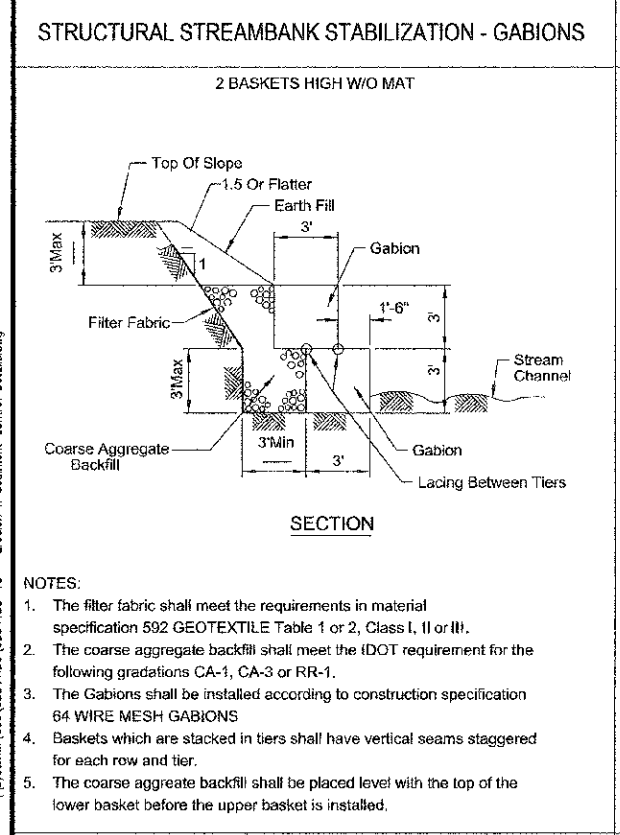


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Designed: _____	SHEET 1 OF 1
Checked: _____	DATE: 01-11-11
Approved: _____	

REFERENCE Project: _____	STANDARD DWG. NO. IUM-561C
Designed: _____	SHEET 1 OF 1
Checked: _____	DATE: 01-11-11
Approved: _____	

REFERENCE Project: _____	STANDARD DWG. NO. IL-620
Designed: _____	SHEET 1 OF 2
Checked: _____	DATE: 11-29-01
Approved: _____	

REFERENCE Project: _____	STANDARD DWG. NO. IL-620(W)
Designed: _____	SHEET 1 OF 2
Checked: _____	DATE: 12-28-01
Approved: _____	



REFERENCE Project: _____	STANDARD DWG. NO. IL-641
Designed: _____	SHEET 1 OF 1
Checked: _____	DATE: 5-16-04
Approved: _____	

REFERENCE Project: _____	STANDARD DWG. NO. IL-645
Designed: _____	SHEET 1 OF 1
Checked: _____	DATE: 5-16-04
Approved: _____	

REFERENCE Project: _____	STANDARD DWG. NO. IL-645
Designed: _____	SHEET 1 OF 1
Checked: _____	DATE: 5-16-04
Approved: _____	

REFERENCE Project: _____	STANDARD DWG. NO. IL-645
Designed: _____	SHEET 1 OF 1
Checked: _____	DATE: 5-16-04
Approved: _____	

DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.

DATE	BY	DESCRIPTION

DESIGNED BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
DRAWN BY: _____	DATE: _____
CHECKED BY: _____	DATE: _____
APPROVED BY: _____	DATE: _____

LONGMEADOW LANE BOX CULVERT REPLACEMENT
HANOVER PARK, IL
EROSION & SEDIMENT CONTROL DETAILS

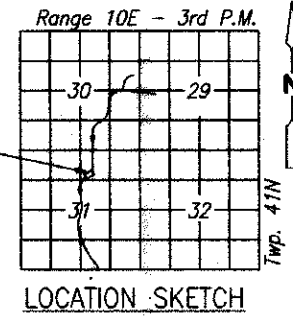
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 DATE: 10/16/2012
 JOB NO: 02841.DS
 SHEET 10 OF 20

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BENCHMARK: BM-12 CHISELED SQUARE ON NORTHWEST WINGWALL OF CONCRETE BRIDGE. ELEV = 788.84 (NGVD 1929) / ELEV = 788.57 (NAVD 1988)

EXISTING STRUCTURE: S.N. 016-6091 BUILT IN THE MID 1960's. THE VILLAGE IS NOT IN POSSESSION OF THE ORIGINAL DESIGN PLANS. 38'-0" SIMPLE SPAN PRE-CAST, PRE-STRESSED CONCRETE DECK BEAMS, 39'-10" BACK TO BACK ABUTMENTS, SUPPORTED ON UNTREATED TIMBER PILES. EXISTING BRIDGE IS TO BE REMOVED AND REPLACED WITH A CAST-IN-PLACE DOUBLE BOX CULVERT WITH CAST-IN-PLACE WINGWALLS. EXISTING TIMBER PILES ARE TO BE CUT AT OR BELOW THE BOTTOM OF THE PROPOSED BOX CULVERT. TRAFFIC IS TO BE DETOURED DURING CONSTRUCTION. ALL ELEVATIONS ARE SHOWN IN NAVD 88 DATUM.

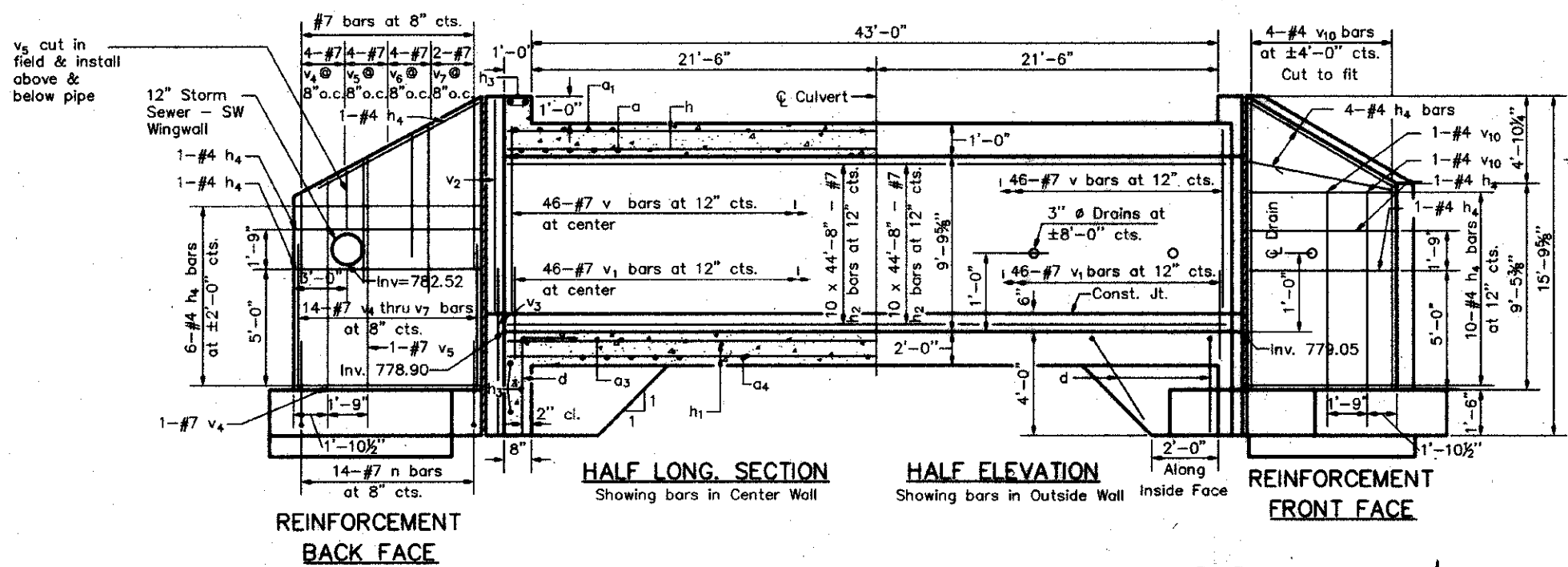
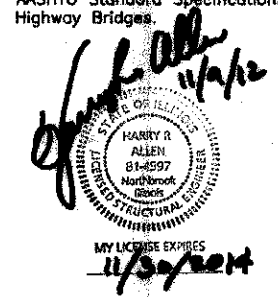
SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
10-00059-00-BR	COOK	11	9
HANOVER PARK		CONTRACT NO. 63754	



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a	180	#8	16'-8"	
a1	90	#8	14'-2"	
a2	48	#4	9'-0"	
a3	48	#7	15'-8"	
a4	46	#7	7'-0"	
a5	46	#7	12'-8"	
a6	46	#7	4'-0"	
d	70	#4	5'-6"	
h	88 @ 20'-0"	#7	44'-8"	
	44 @ 14'-8"	#7	44'-8"	
h1	114 @ 20'-0"	#7	44'-8"	
	57 @ 14'-8"	#7	44'-8"	
h2	60 @ 20'-0"	#7	44'-8"	
	30 @ 14'-8"	#7	44'-8"	
h3	10 @ 20'-0"	#7	26'-8"	
	10 @ 11'-4"	#7	26'-8"	
h4	88	#4	8'-10"	
h6	6 @ 20'-0"	#4	26'-8"	
	6 @ 8'-4"	#4	26'-8"	
n	56	#7	8'-0"	
t	84	#7	7'-6"	
v	138	#7	9'-1 1/2"	
v1	138	#7	7'-0"	
v2	8	#5	11'-7 1/2"	
v3	8	#5	6'-4"	
v4	17	#7	9'-3"	
v5	17	#7	9'-11"	
v6	16	#7	11'-4"	
v7	8	#7	12'-9"	
v8	57	#4	4'-2"	
v9	56	#5	3'-4"	
v10	18	#4	12'-9"	
w	24	#5	8'-10"	
w1	8	#5	8'-10"	
couplers	92	#7	8"	
Concrete Box Culverts			Cu. Yd.	238.0
Reinforcement Bars, Epoxy Coated			Pound	40,915

I certify that to the best of knowledge, information and belief, this bridge/box culvert design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.



DESIGN STRESSES

FIELD UNITS
 $f_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

LOADING HL93

No Load Allowance for future wearing surface.

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 5th Edition

HIGHWAY CLASSIFICATION

Longmeadow Lane
 ADT: 1200
 Functional Class: Local Street
 Design Speed: 35 mph

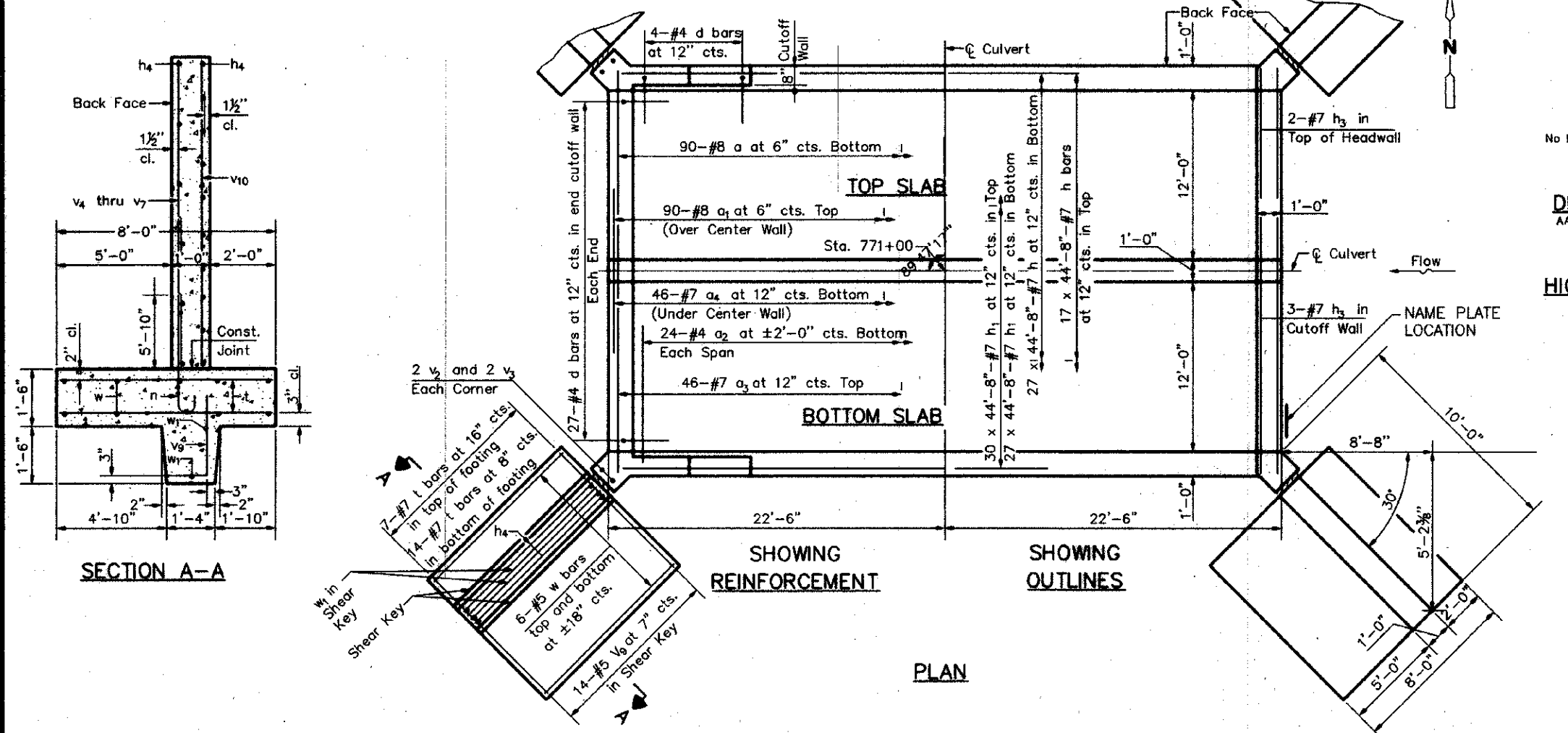
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft)	Upstream		Downstream	
	775.05	774.90		

WATERWAY INFORMATION

Drainage Area = 4.4 sq. mi. Low Grade Elev. 788.46 @ Sta. 770+80.6

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	346	120.5	160.8	785.78	-0.09	-0.03	785.69	785.75
	30	540	176.8	195.8	787.25	-0.06	-0.04	787.19	787.21
	50	639	201.7	209.8	787.83	-0.05	-0.04	787.78	787.79
Base	100	820	221.8	231.1	788.74	0.03	-0.06	788.77	788.68
Max. Calc.	500	1,220	221.8	235.2	792.17	-0.08	0.13	792.09	792.30



BUILT 2013 BY
VILLAGE OF HANOVER PARK
 LONGMEADOW LANE
 SEC. 10-00059-00-BR
 LOADING HL93
 STR. NO. 016-6046

NAME PLATE FOR BRIDGES LETTERING
 See Std. 315001

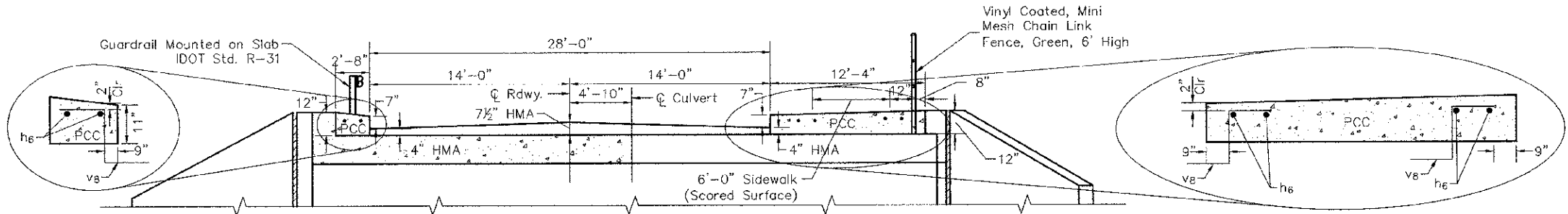
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11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.

DATE	BY	DESCRIPTION
	DRD	PLOTTED BY
	RTP	CHECKED BY
	DRD	DRAWN BY
	RTP	CHECKED BY
	DM	APPROVED BY

LONGMEADOW LANE BOX CULVERT REPLACEMENT
 HANOVER PARK, IL
 S.N. 016-6046 GENERAL PLAN & ELEVATION

SCALE: NONE
 DATE: 8/6/2012
 JOB NO: 02841.DS
 SHEET: 11 OF 20

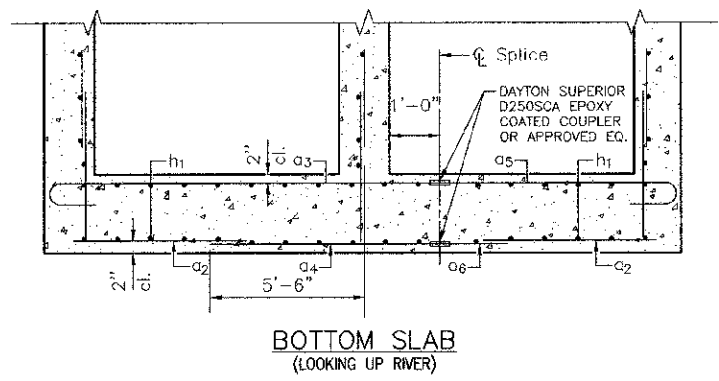
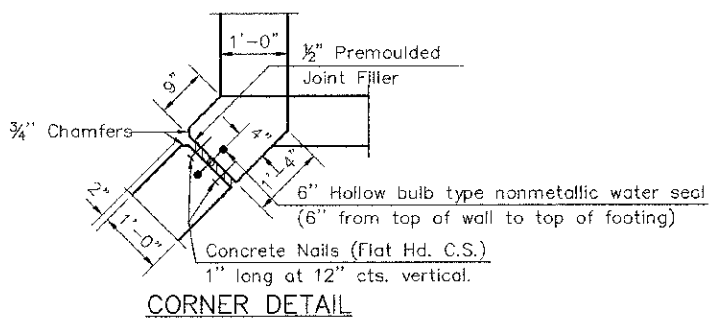
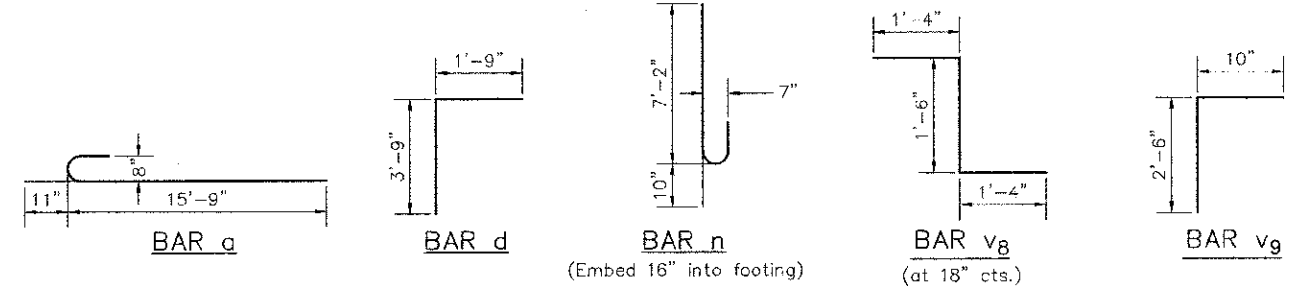
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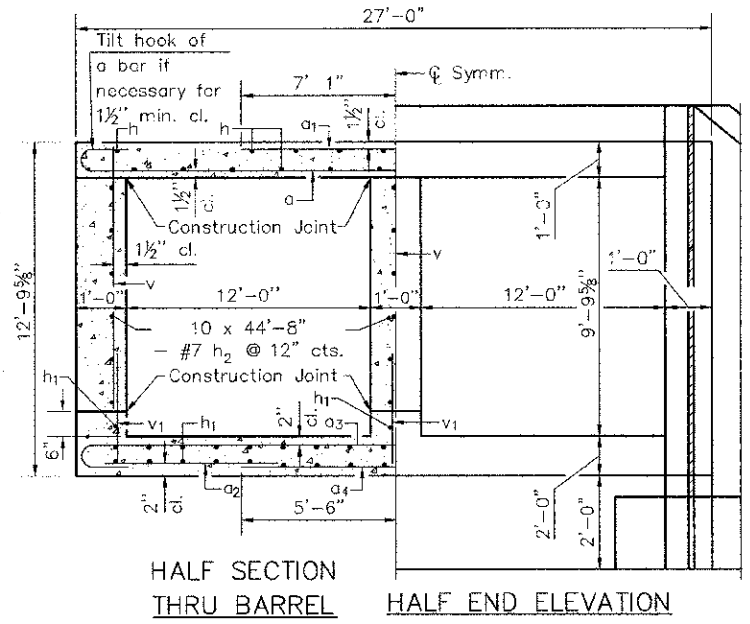
TOP OF CULVERT DETAILING

GENERAL NOTES

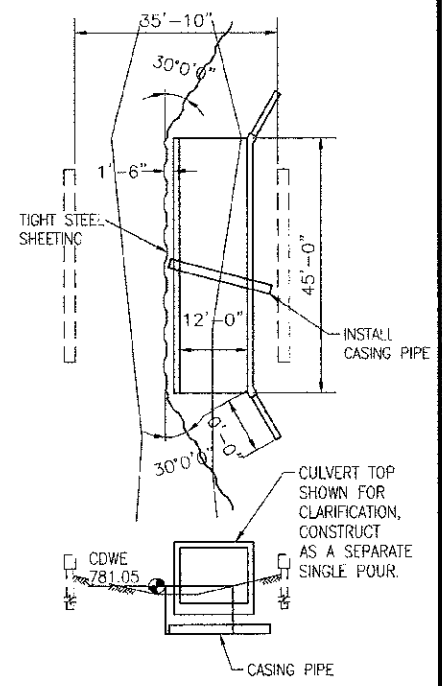
- FASTENERS SHALL BE ASTM A325 TYPE 1, MECHANICALLY GALVANIZED BOLTS (IN PAINTED AREAS AND ASTM A325 TYPE 3 IN UNPAINTED AREAS). BOLTS 3/4 IN. DIA., HOLES 1 1/8 IN. DIA., UNLESS OTHERWISE NOTED.
- NO FIELD WELDING IS PERMITTED EXCEPT AS SPECIFIED IN THE CONTRACT DOCUMENTS.
- REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.
- IF THE CONTRACTOR ELECTS TO USE CANTILEVER FORMING BRACKETS ON THE EXTERIOR BEAMS OR GIRDERS, THE BRACKETS SHALL BE PLACED AT THE SAME LOCATIONS AS REQUIRED FOR THE HARDWOOD BLOCKS IN ARTICLE 503.06(B) OF THE STANDARD SPECIFICATIONS. IF ADDITIONAL CANTILEVER FORMING BRACKETS ARE REQUIRED, HARDWOOD BLOCKING SHALL BE WEDGED BETWEEN THE EXTERIOR AND FIRST INTERIOR BEAM AT EACH OF THESE ADDITIONAL BRACKET LOCATIONS.
- PROTECTIVE COAT SHALL NOT BE APPLIED TO SURFACES TO WHICH WATERPROOFING MEMBRANE SYSTEM IS APPLIED.
- CONCRETE SEALER SHALL BE APPLIED TO THE DESIGNATED AREAS OF THE TOP SURFACE OF THE BOX CULVERT.
- THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.
- LAYOUT OF THE SLOPE PROTECTION SYSTEM MAY BE VARIED TO SUIT GROUND CONDITIONS IN THE FIELD AS DIRECTED BY THE ENGINEER.
- THE EMBANKMENT CONFIGURATION SHOWN SHALL BE THE MINIMUM THAT MUST BE PLACED AND COMPACTED PRIOR TO CONSTRUCTION OF THE ABUTMENTS.
- THE CONTRACTOR SHALL OBTAIN A CONSTRUCTION PERMIT FROM THE ILLINOIS DEPARTMENT OF NATURAL RESOURCES (IDNR), OFFICE OF WATER RESOURCES FOR ANY TEMPORARY CONSTRUCTION ACTIVITY PLACED IN THE WATER EXCEPT COFFERDAMS. THIS SHALL INCLUDE THE PLACEMENT OF MATERIAL FOR RUN-AROUNDS, CAUSEWAYS, ETC. ANY PERMIT APPLICATION BY THE CONTRACTOR SHALL REFER TO THE IDNR 3704 FLOODWAY CONSTRUCTION PERMIT NUMBER ALLOWING PERMANENT CONSTRUCTION AS SHOWN IN THE CONTRACT PLANS.
- EXCAVATION BEHIND EXISTING ABUTMENT WALLS SHALL BE PERFORMED TO BALANCE FRONT AND BACK SOIL PRESSURE BEFORE REMOVING THE EXISTING SUPERSTRUCTURE. THE CONTRACTOR SHALL SAWCUT THE UPPER PORTION OF THE EXISTING ABUTMENT AT THE STAGE REMOVAL LINE BEFORE STAGE 1 REMOVAL TO ENSURE THE REMAINING PORTION WILL NOT BE PREMATURELY DAMAGED.
- THE CONTRACTOR SHALL CONNECT THE FIRST SHEET TO THE EXISTING ABUTMENT WALL TO ENSURE STABILITY OF SHEETS DRIVEN TO THE TOP OF THE EXISTING FOOTING. THIS CONNECTION SHALL BE REVIEWED AND ACCEPTED BY THE ENGINEER AND INCLUDED IN THE COST FOR TEMPORARY SHEET PILING.
- THE FOUNDATION DESIGN IS BASED ON THE FOLLOWING MAXIMUM REACTIONS APPLIED AT THE TOP OF THE FOOTING/PEDESTAL WALL:
 EXTERIOR FOOTINGS: (WINGWALLS) 16782 lbs/ft (VERTICAL)
 6933 lbs/ft (HORIZONTAL)
 INTERIOR FOOTINGS: (CTR. WALL BOX CULVERT) 46214 lbs/ft (VERTICAL)
 THE CONTRACTOR SHALL VERIFY THAT THE SELECTED STRUCTURE MEETS THESE DESIGN PARAMETERS. IF THE DESIGN PARAMETERS ARE EXCEEDED, A COMPLETE FOUNDATION DESIGN WITH CALCULATIONS, DETAILS, AND THE REQUIRED SEALS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL.



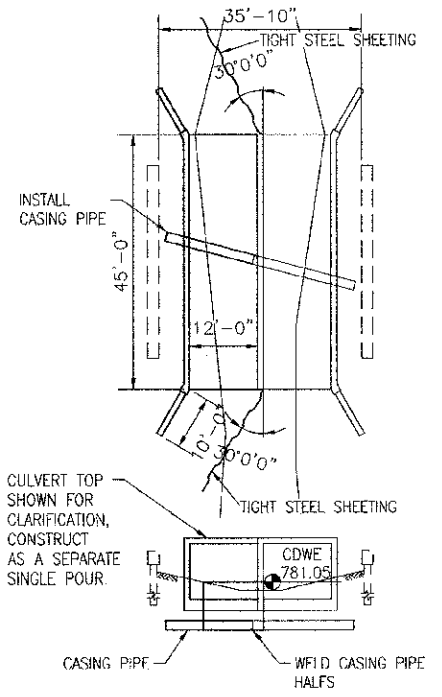
BOTTOM SLAB (LOOKING UP RIVER)



HALF SECTION THRU BARREL



COFFERDAM DETAIL CONSTRUCT NORTH BARREL SCALE: NONE

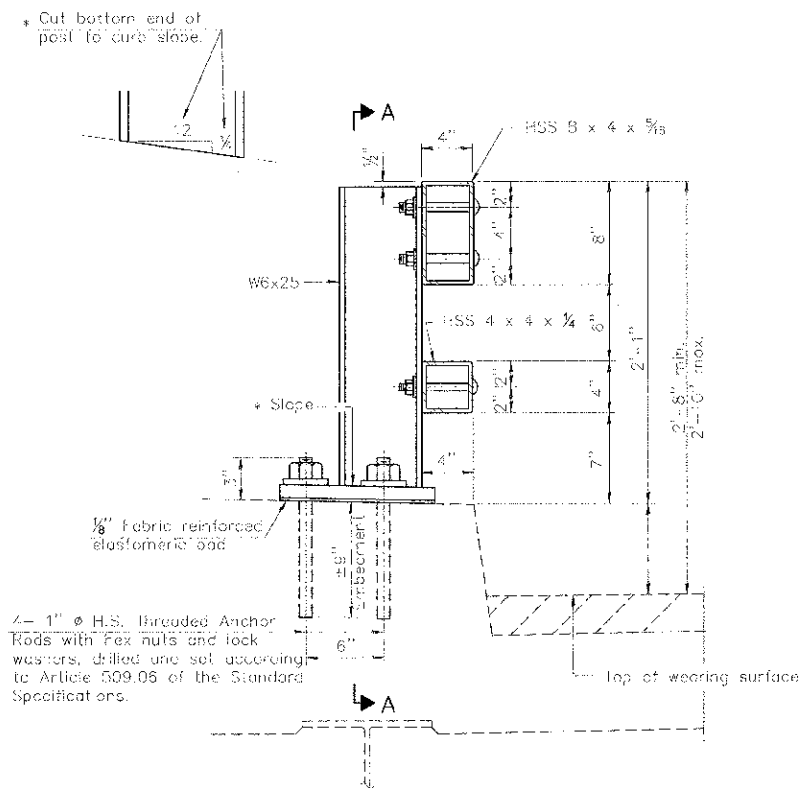


COFFERDAM DETAIL CONSTRUCT SOUTH BARREL SCALE: NONE

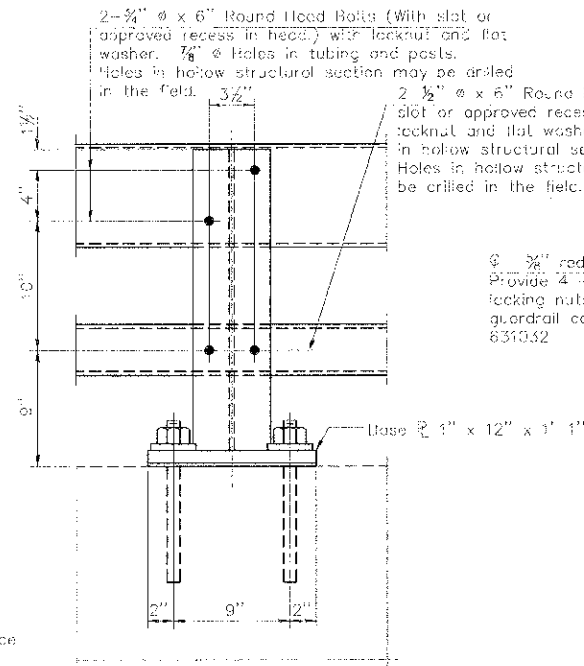
- Notes:
- All reinforcement bars shall be epoxy coated.
 - a & a3 lap is 58"; h, h1, h2 & h3 lap is 60"; h6 lap is 20"; All other laps are 24 bar diameter.

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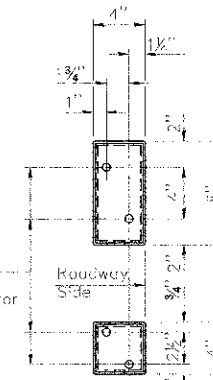
REVISIONS: 10-22-12 JR REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD. 11-08-12 JR REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.				PLOTTED BY: DRD CHECKED BY: RFP DRAWN BY: DRD CHECKED BY: RFP APPROVED BY: DAW				PMO Engineers Pavia-Marting & Co. 910 W. Lake St. Roselle, IL 60172 630-529-8000 Fax: 630-894-4910 Design Firm Professional Registration #18/0002376	TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT HANOVER PARK, IL S.N. 016-6046 GPE DETAILS & GEN. NOTES	SCALE: NONE DATE: 10/15/2012 JOB NO: 02841.05 SHEET: 12 OF 20
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION					



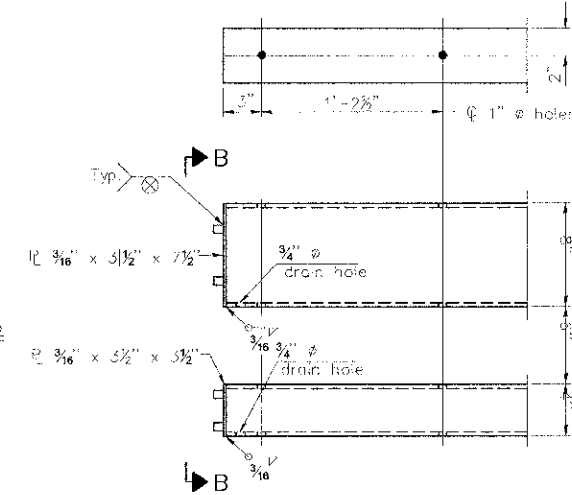
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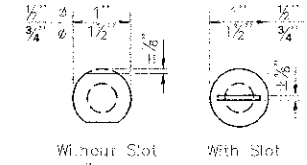
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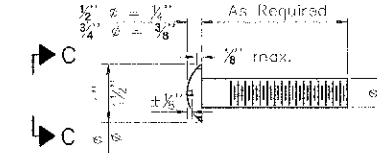
VIEW B-B



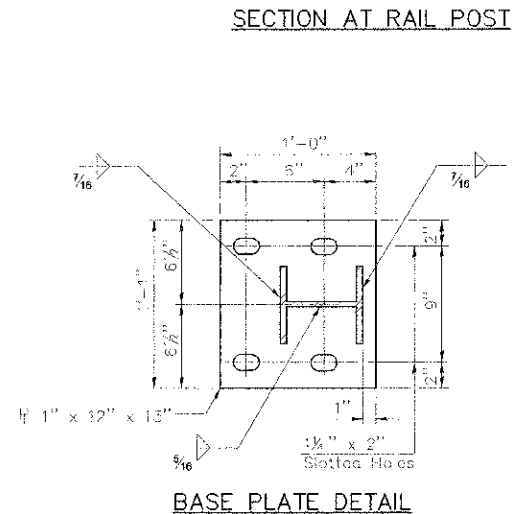
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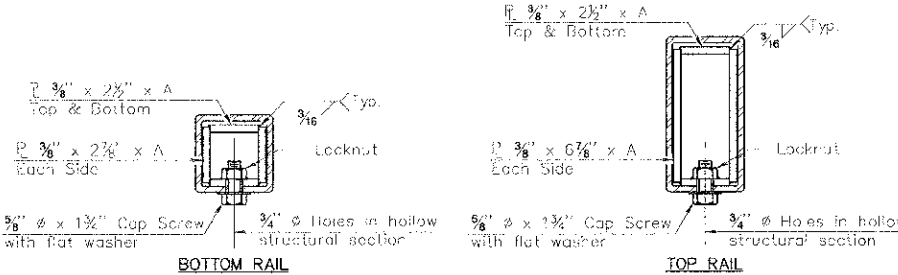
VIEW C-C



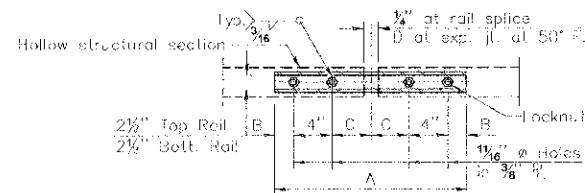
DETAIL OF 1/2" & 3/4" ROUND HEAD BOLTS



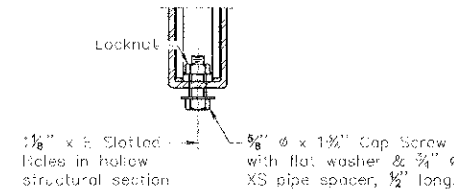
BASE PLATE DETAIL



SECTIONS AT RAIL SPLICE



PLAN-BOTT. SPLICE TYPICAL



RAIL SPLICE CONNECTION AT EXPANSION JT.

Notes:
 All field drilled holes shall be coated with an approved zinc rich paint before erection.
 Posts shall not be located closer than 1'-5" to an existing bridge expansion joint or end of bridge.
 Steel Bridge Rail expansion joint shall be provided between any two (2) posts which span a bridge expansion joint. Bolts located at expansion joint shall be provided with locknuts and shall be tightened only to a point that will allow railing movement.
 Provide one 3/8" and two 1/8" steel shims for 25% of the posts. Shims shall be similar to base plates in size and holes.
 All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

SPLICE DIMENSIONS

T	D	A	B	C	F
≤ 4'	2 1/2"	1'-8"	2"	4"	2 1/2"
> 4' ≤ 6 1/2'	3 3/4"	2'-0"	2 1/2"	5 1/2"	3 3/4"
> 6 1/2' ≤ 9'	5"	2'-4"	3 1/2"	8 1/2"	5"
> 9' ≤ 15'	7"	2'-10"	4 1/2"	8 1/2"	11"
Rail Splice	2"	1'-8"	2"	4"	2 1/2"

T = Total movement at expansion joint as shown on the design plans

BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type 2399	Foot	27.0

R-31

7-1-10

(6'-3" Maximum Post Spacing)

STEEL RAILING, TYPE 2399
 STRUCTURE NO. 016-6046

Nov 08, 2012 - 9:13pm \\systems\cod\02841\CS\0284105-13 - Railing Details.dwg

REVISIONS:	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
	10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
	11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

PLOTTED BY:	PLC
CHECKED BY:	PLC/CHK
DRAWN BY:	DRW
CHECKED BY:	DRW/CHK
APPROVED BY:	APPROVED

Pavia-Marting & Co.
 910 W. Lake St.
 Roselle, IL 60172
 630-529-5000 Fax: 630-894-4910
 Design Firm Professional Registration #08408236

TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT
 HANOVER PARK, IL
 S.N. 016-6046 TYPE 2399 RAILING DETAILS

SCALE:	NONE
DATE:	10/17/12
JOB NO.:	02841.DS
SHEET:	13 OF 20

CLAUDE H. HURLEY COMPANY BORING LOG

PROJECT NO. 5-037-D BORING NO. SB-1

PROJECT BRIDGE REPLACEMENT WITH BOX CULVERT SNO16-6091

LOCATION 7706L 27'2" LONGMEADOW LANE HANOVER PARK, ILLINOIS

DRILLING CONTRACTOR GEO SERVICES, INC.

DATE OF DRILLING: STARTED 10-1-10 COMPLETED 10-1-10 SURFACE ELEVATION 781.9

DRILLED BY D. ROSEH LOGGED BY E. MUELLER

Elev	CLASSIFICATION	Depth	GROUNDWATER DATA				DRILLING METHOD
			DATE	DEPTH	HOUR	RIG TYPE	
785.9	TOPSOIL FILL: DK BR & BLK ORGANIC SILTY CLAY, A-7-5	0	10-1	9.0	-	MOBILE B-57	
785.9	FILL: DK BR, BLK, BR & GR SILTY CLAY, A-6	4	10-1	17.0	0	MOBILE B-57	
784.0	FILL: DK GR, LT GR & RD BR SILTY CLAY, A-6	1	10-2	8.0	24	MOBILE B-57	
782.4	FILL: BR GRAVELLY SAND, A-1-3	7	10-2	8.0	24	MOBILE B-57	
779.9	GR SILTY CLAY, A-6	4	10-2	8.0	24	MOBILE B-57	
777.4	GR CLAY, A-6	5	10-2	8.0	24	MOBILE B-57	
774.9	GR SILTY CLAY, A-6	1	10-2	8.0	24	MOBILE B-57	
772.4	GR SILTY CLAY, A-6	5	10-2	8.0	24	MOBILE B-57	
767.4	GR CLAY, A-6	8	10-2	8.0	24	MOBILE B-57	

CLAUDE H. HURLEY COMPANY BORING LOG

PROJECT NO. 5-037-D BORING NO. SB-2

PROJECT BRIDGE REPLACEMENT WITH BOX CULVERT SNO16-6091

LOCATION 77143 15'1" LONGMEADOW LANE HANOVER PARK, ILLINOIS

DRILLING CONTRACTOR GEO SERVICES, INC.

DATE OF DRILLING: STARTED 10-1-10 COMPLETED 10-1-10 SURFACE ELEVATION 788.6

DRILLED BY D. ROSEH LOGGED BY E. MUELLER

Elev	CLASSIFICATION	Depth	GROUNDWATER DATA				DRILLING METHOD
			DATE	DEPTH	HOUR	RIG TYPE	
787.6	TOPSOIL FILL: BLK & DK GR SILTY CLAY, A-7-6	0	10-1	16.0	-	MOBILE B-57	
787.6	FILL: BR, RD BR & GR SILTY CLAY, A-6	4	10-1	11.0	0	MOBILE B-57	
785.6	FILL: GR SILTY CLAY, A-6	6	10-2	9.0	24	MOBILE B-57	
783.1	FILL: RD BR & BR SILTY CLAY, A-6	6	10-2	9.0	24	MOBILE B-57	
781.6	FILL: RD BR & BR GRAVELLY SAND, A-1-3	11	10-2	9.0	24	MOBILE B-57	
780.6	GR SILTY CLAY, A-6	5	10-2	9.0	24	MOBILE B-57	
775.1	GR CLAY, A-6	4	10-2	9.0	24	MOBILE B-57	
770.6	GR SILTY CLAY, A-6	8	10-2	9.0	24	MOBILE B-57	
768.1	GR CLAY, A-6	4	10-2	9.0	24	MOBILE B-57	
765.6	GR CLAY, A-6	4	10-2	9.0	24	MOBILE B-57	

CLAUDE H. HURLEY COMPANY BORING LOG

PROJECT NO. 5-037-D BORING NO. SB-3

PROJECT BRIDGE REPLACEMENT WITH BOX CULVERT SNO16-6091

LOCATION 77140 12'1" LONGMEADOW LANE HANOVER PARK, ILLINOIS

DRILLING CONTRACTOR GEO SERVICES, INC.

DATE OF DRILLING: STARTED 10-1-10 COMPLETED 10-1-10 SURFACE ELEVATION 288.5

DRILLED BY D. ROSEH LOGGED BY E. MUELLER

Elev	CLASSIFICATION	Depth	GROUNDWATER DATA				DRILLING METHOD
			DATE	DEPTH	HOUR	RIG TYPE	
787.7	7.0 IN. RC SURFACE-BASE 3.0 IN. GRANULAR SUB-BASE	0	10-1	16.0	-	MOBILE B-57	
787.7	TRENCH BACKFILL: BLK, DK GR & RD BR CLAY, A-7-6	1	10-1	16.0	-	MOBILE B-57	
785.5	TRENCH BACKFILL: GR, GRN GR & BR CLAY, A-7-6	2	10-1	16.0	-	MOBILE B-57	
780.5	TRENCH BACKFILL: GR SILTY CLAY, A-6	1	10-1	16.0	-	MOBILE B-57	
770.5	END OF BORING	10	10-1	16.0	-	MOBILE B-57	

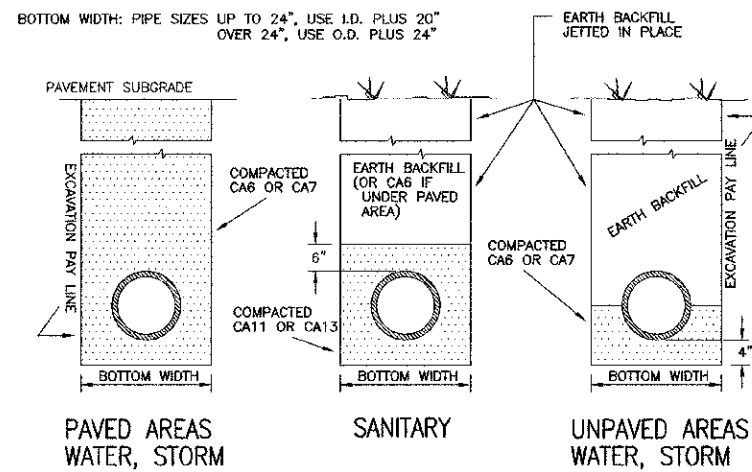
New 08:2012 - 9:16pm \\system\A\cod\02841.DS\02841.DS-14 - Soil Borings.dwg

REVISIONS: DATE BY DESCRIPTION 10-22-12 JR REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD. 11-08-12 JR REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.		PLOTTED BY: PLOT CHECKED BY: PLOTCHK DRAWN BY: DRAWN CHECKED BY: DRAWNCHK APPROVED BY: APPROVED		SCALE: NONE DATE: 10/21/12 JOB NO.: 02841.DS SHEET: 14 OF 20
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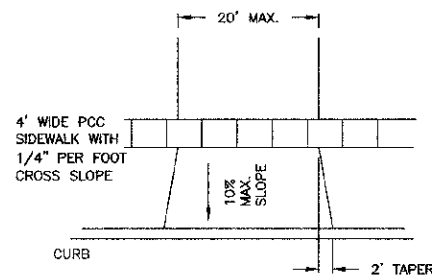
pmo Pavia-Marting & Co.
 910 W. Lake St.
 Roselle, IL 60172
 630-529-8800 Fax: 630-894-4910
 Chicago Area Professional Engineering Firm

TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT
 HANOVER PARK, IL
 SOIL BORING LOGS

STANDARD TRENCH SECTIONS



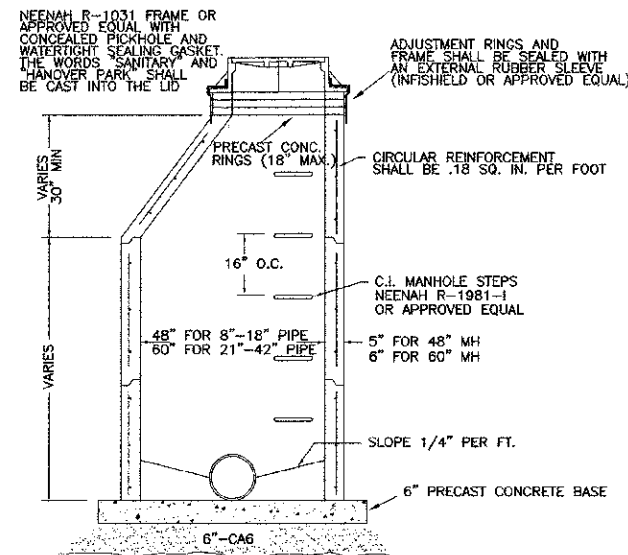
RESIDENTIAL DRIVEWAY AND SIDEWALK DETAIL



BITUMINOUS DRIVEWAYS TO BE 6" STONE AND 2" ASPHALT OR 5" CLASS SI NONREINFORCED CONCRETE OVER 2" COMPACTED GRANULAR SUBBASE

SIDEWALK TO BE 5" CLASS SI CONCRETE (6" AT DRIVEWAYS) OVER 4" COMPACTED GRANULAR SUBBASE. CONSTRUCTION JOINTS TO BE 4' ON CENTER, EXPANSION JOINTS 50'

SANITARY SEWER MANHOLE



NEENAH R-1031 FRAME OR APPROVED EQUAL WITH CONCEALED PICKHOLE AND WATER-TIGHT SEALING GASKET. THE WORDS "SANITARY" AND "HANOVER PARK" SHALL BE CAST INTO THE LID

ADJUSTMENT RINGS AND FRAME SHALL BE SEALED WITH AN EXTERNAL RUBBER SLEEVE (INFISHIELD OR APPROVED EQUAL)

PRECAST CONC. RINGS (18" MAX.)

CIRCULAR REINFORCEMENT SHALL BE .18 SQ. IN. PER FOOT

NEENAH R-1981-1 OR APPROVED EQUAL

16" O.C.

48" FOR 8"-18" PIPE
60" FOR 21"-42" PIPE

5" FOR 48" MH
6" FOR 60" MH

SLOPE 1/4" PER FT.

6" PRECAST CONCRETE BASE

VARIES 30" MIN

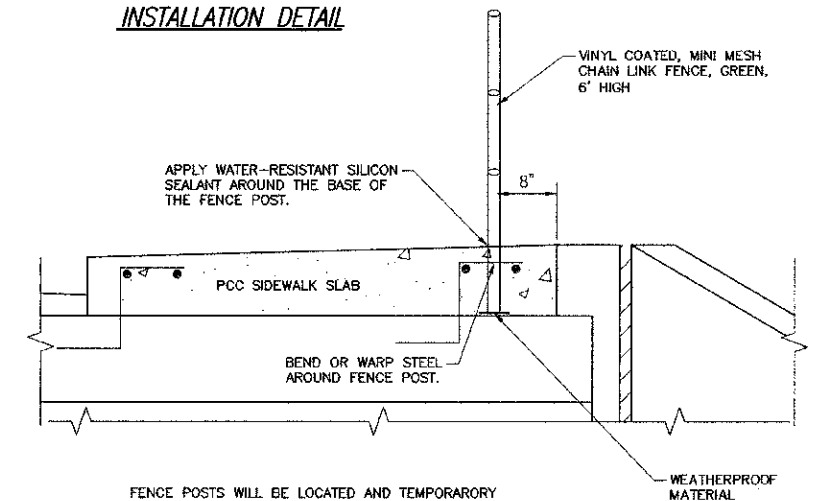
VARIES

PRE-CAST REINFORCED CONCRETE RISER RINGS AND DOMES SHALL COMPLY WITH ASTM C-39.

ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT.

ALL SANITARY SEWER MANHOLES SHALL BE CONSTRUCTED WITH FLEXIBLE MANHOLE COUPLINGS.

FENCE IN CULVERT'S SIDEWALK INSTALLATION DETAIL



APPLY WATER-RESISTANT SILICON SEALANT AROUND THE BASE OF THE FENCE POST.

VINYL COATED, MINI MESH CHAIN LINK FENCE, GREEN, 6' HIGH

8"

PCC SIDEWALK SLAB

BEND OR WARP STEEL AROUND FENCE POST.

WEATHERPROOF MATERIAL

FENCE POSTS WILL BE LOCATED AND TEMPORARILY SECURED PRIOR TO POUR THE CONCRETE FOR THE PCC SIDEWALK SLAB OVER THE CULVERT.

A WEATHERPROOF MATERIAL WILL BE PLACED AT EACH POST LOCATION FOR THE POST TO REST ON.

THE FENCE POSTS ARE NOT TO BE PERMANENTLY MOUNTED TO OR SECURED IN ANY WAY TO THE BOX CULVERT.

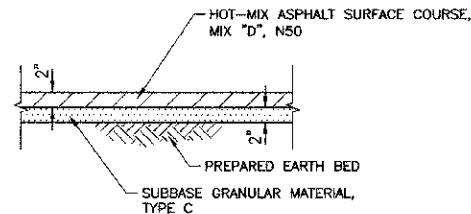
THE FENCE POSTS SHOULD BE LOCATED 8" FROM THE RIGHT EDGE OF THE PROPOSED PCC SIDEWALK SLAB.

WHERE A FENCE POST CONFLICTS WITH ANY REINFORCING STEEL, BEND OR WARP THE STEEL AROUND THE FENCE POST.

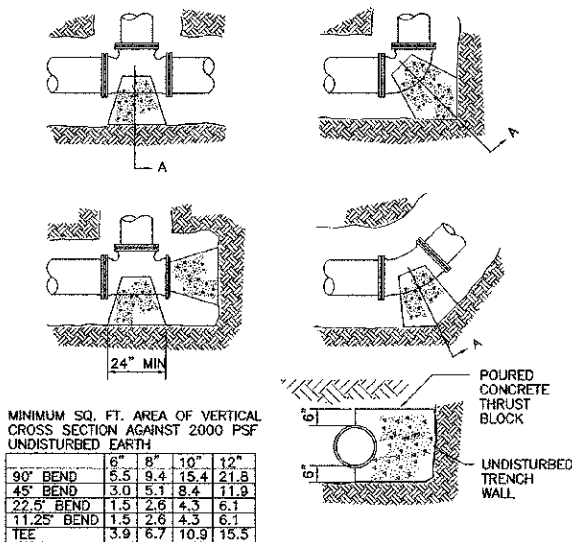
A WATER-RESISTANT SILICON SEALANT SHALL BE APPLIED AT THE BASE OF THE POST AROUND EACH POST LOCATION IN THE PCC SIDEWALK SLAB.

THE WORK AND MATERIALS DESCRIBED IN THIS DETAIL ARE INCLUDED IN THE COST IF THE FENCE ITEM.

HOT-MIX ASPHALT SHOULDERS

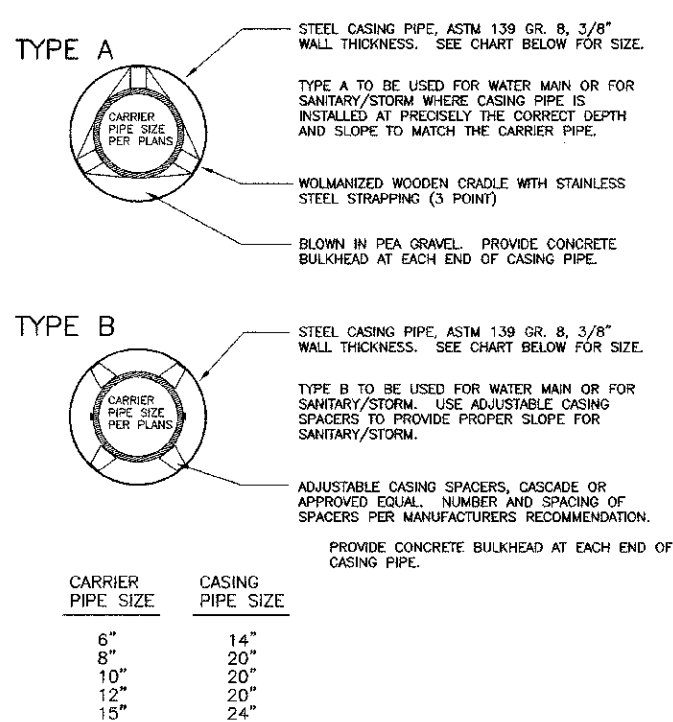


THRUST BLOCK INSTALLATION

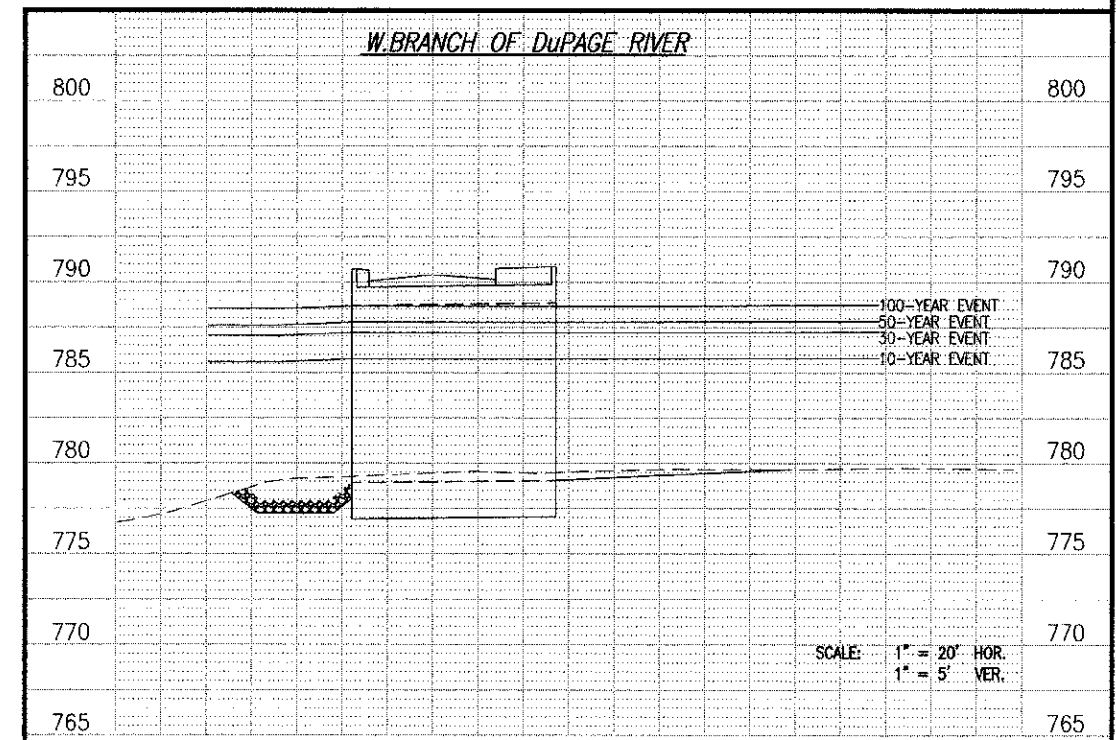
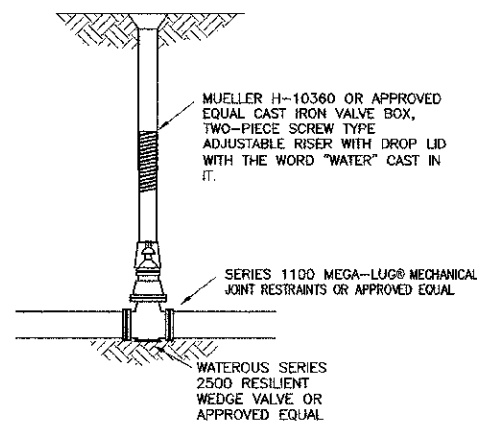


THRUST BLOCKING TO PREVENT MOVEMENT OF LINES UNDER PRESSURE AT BENDS, TEES, CAPS, VALVES, HYDRANTS AND AT POINTS SPECIFIED BY THE ENGINEER SHALL BE CLASS "SI" CONCRETE, A MINIMUM OF 12" THICK, PLACED BETWEEN SOLID GROUND AND FITTING, AND SHALL BE ANCHORED IN SUCH A MANNER THAT PIPE AND FITTING WILL BE ACCESSIBLE FOR REPAIRS. THRUST BLOCKS SHALL BE PLACED AT BENDS OF 11-1/4 DEGREES OR MORE. RETAINER GLANDS MAY BE USED IN PLACE OF THRUST BLOCKS. THE COST OF THRUST BLOCKS OR RETAINER GLANDS SHALL BE INCLUDED IN THE COST OF THE FITTING.

AUGER/CASING DETAIL



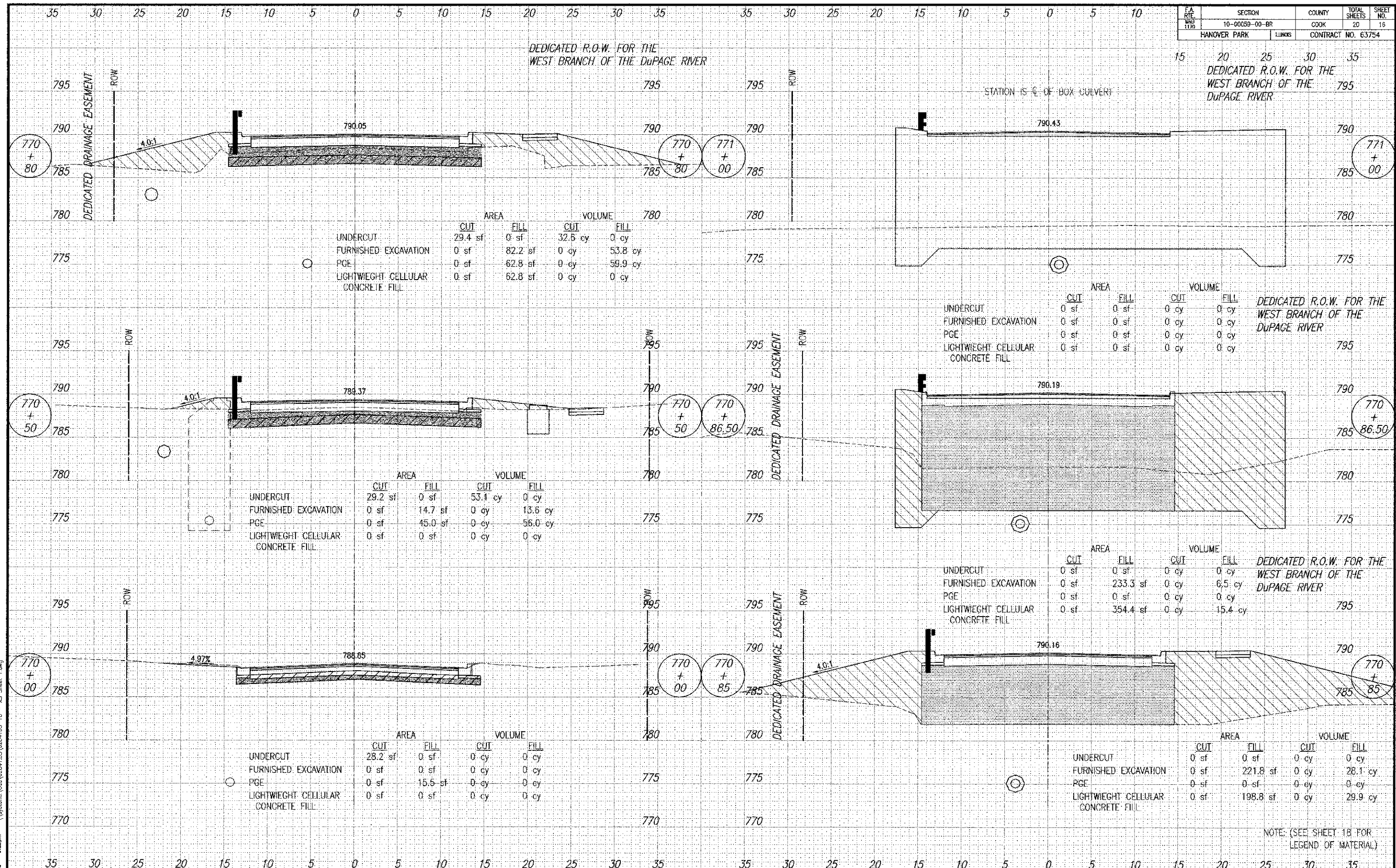
VALVE BOX



Nov 09, 2012 - 8:08am \\server\cadd\02841.DS\02841.DS-15 - Details.dwg

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

PLOTTED BY: AMR CHECKED BY: JP DRAWN BY: AMR CHECKED BY: JR APPROVED BY: DM	pma Engineers Pavia-Marting & Co. 910 W. Lake St. Roselle, IL 60172 630-529-8000 Fax: 630-894-4910 <small>Design Firm: Professional Registration # 034-002374</small>	TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT HANOVER PARK, IL DETAILS & W. BRANCH OF DUPAGE RIVER PROFILE	SCALE: NONE DATE: 8/6/2012 JOB NO: 02841.DS SHEET 15 OF 20
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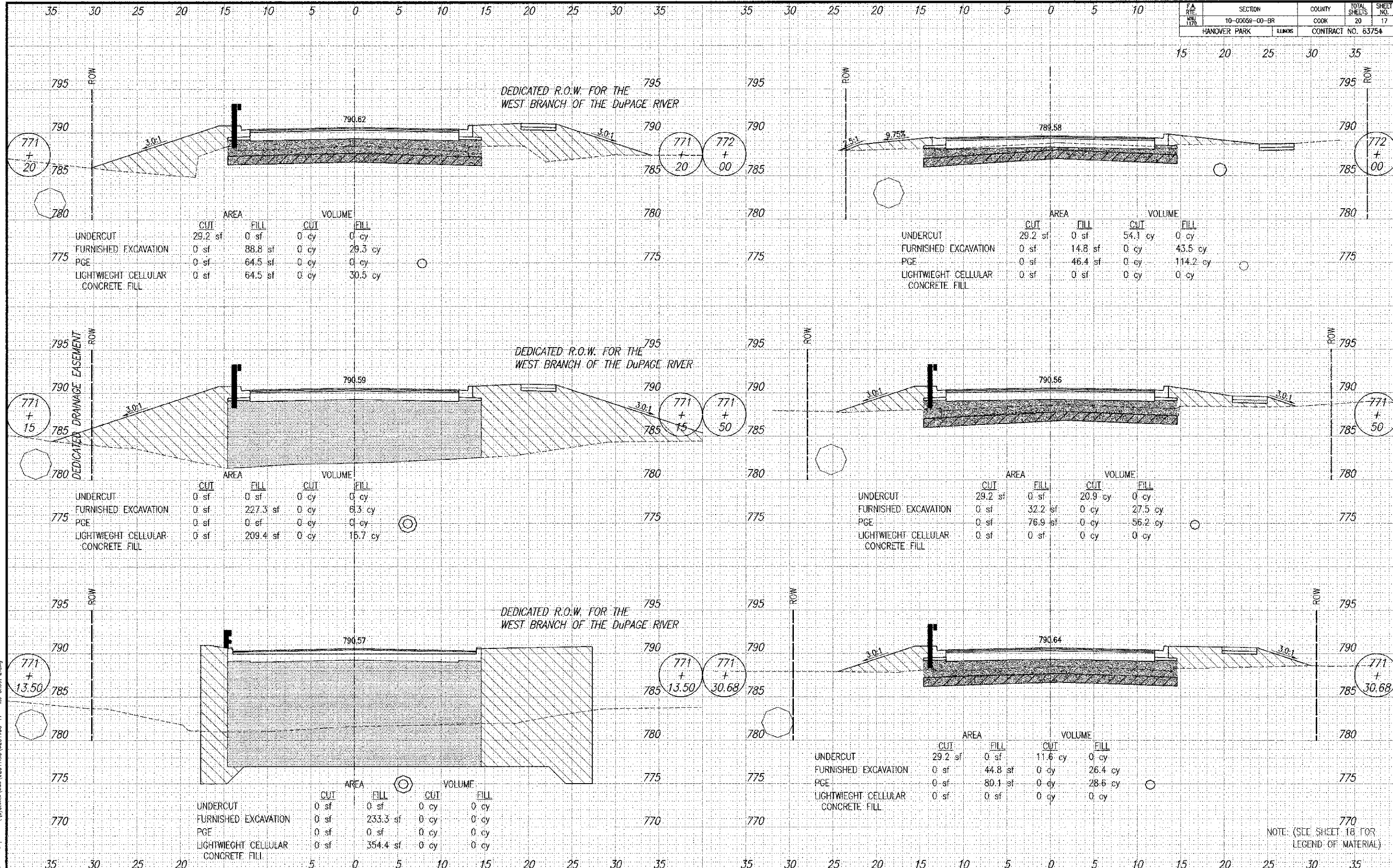


NOTE: (SEE SHEET 18 FOR LEGEND OF MATERIAL)

Nov 08, 2012 - 9:22pm \\systems\cod\02841.DS\02841.DS-16 - XS Sheet 1.dwg

REVISIONS:		DESCRIPTION		DATE		BY		DESCRIPTION	
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.							
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.							

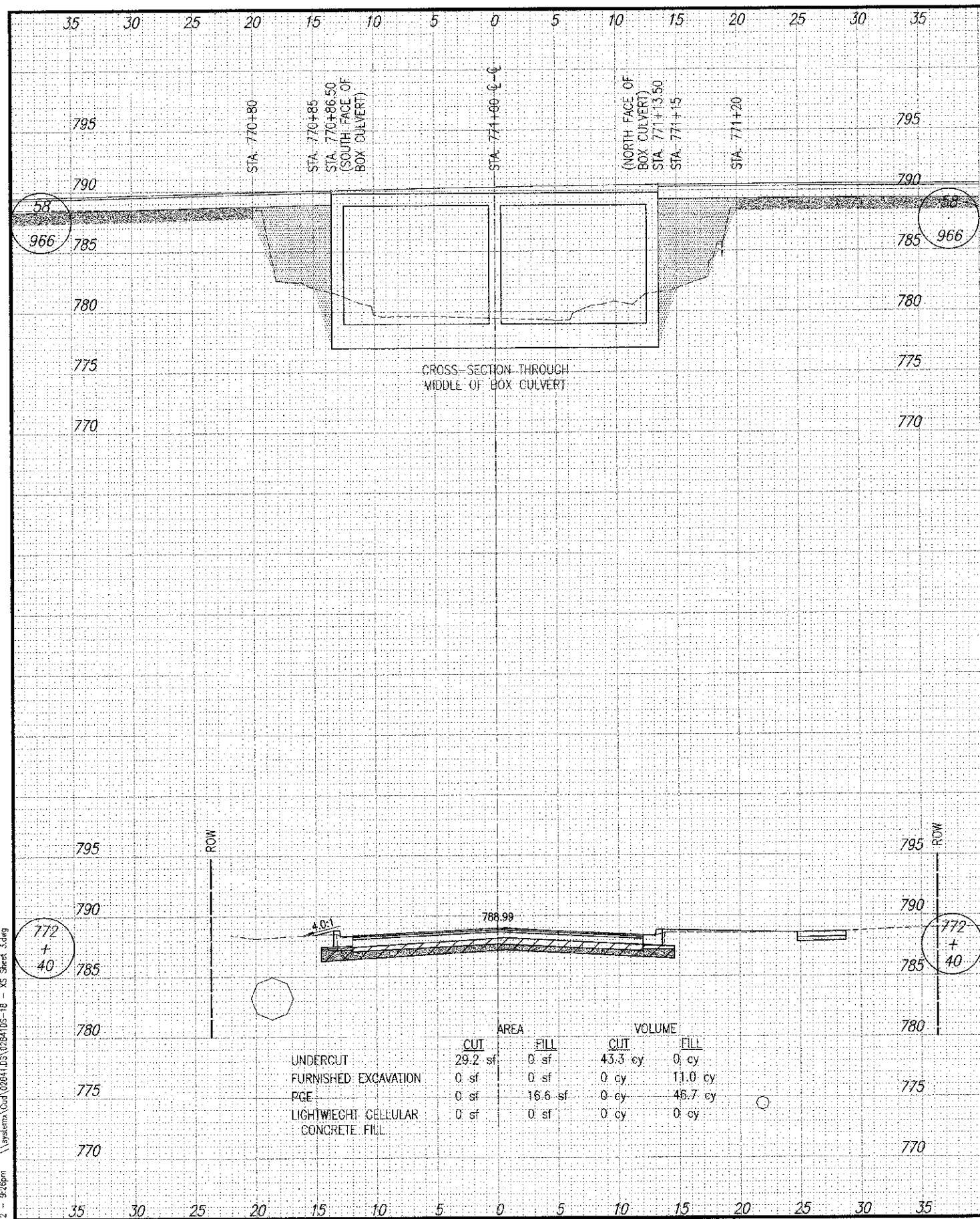
PLOTTED BY: AMR CHECKED BY: JF DRAWN BY: AMR CHECKED BY: JF APPROVED BY: DM		Pavia-Marting & Co. 910 W. Lake St. Roselle, IL 60172 630-529-9000 Fax: 630-894-6910 <small>Design Firm Professional Registration #38409254</small>	LONGMEADOW LANE BOX CULVERT REPLACEMENT CROSS SECTIONS STA. 770+00 TO 771+00	SCALE: 1"=5'; 1"=5' DATE: 8/6/2012 JOB NO: 02841.DS SHEET 16 OF 20
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NOTE: (SEE SHEET 18 FOR LEGEND OF MATERIAL)

Nov 08 2012 - 9:24pm \\systema\conf\02841.DS\02841DS-17 - XS Sheet 2.dwg

FA RIE NO. 1170	SECTION 10-00059-00-BR	COUNTY COOK	TOTAL SHEETS 20	SHEET NO. 18
HANOVER PARK		ELINDS	CONTRACT NO. 63754	



	AREA		VOLUME	
	CUT	FILL	CUT	FILL
UNDERCUT	29.2 sf	0 sf	43.3 cy	0 cy
FURNISHED EXCAVATION	0 sf	0 sf	0 cy	11.0 cy
PGE	0 sf	16.6 sf	0 cy	46.7 cy
LIGHTWEIGHT CELLULAR CONCRETE FILL	0 sf	0 sf	0 cy	0 cy

MATERIAL LEGEND:

- UNDERCUT (PAID FOR AS REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL) (NO SHRINKAGE FACTOR)
- FURNISHED EXCAVATION (NO SHRINKAGE FACTOR)
- PUROLS GRANULAR EMBANKMENT (SPECIAL) (PGE) (NO SHRINKAGE FACTOR)
- LIGHTWEIGHT CELLULAR CONCRETE FILL

Nov 08, 2012 - 9:26pm \\systema\cad\02844.DS\02844105-18 - MS Sheet 3.dwg

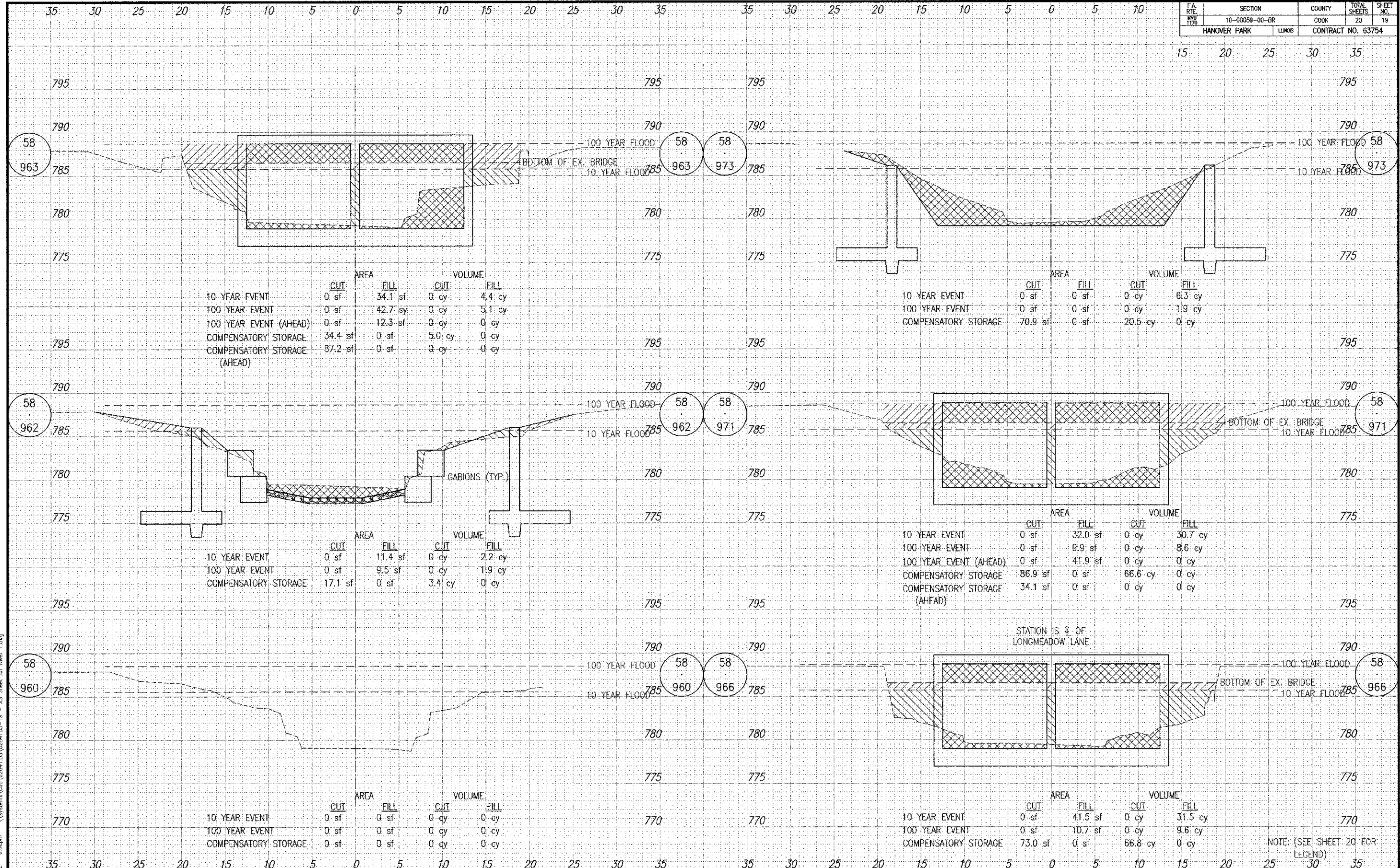
REVISIONS:					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

PLOTTED BY:	AMT
CHECKED BY:	JR
DRAWN BY:	AMT
CHECKED BY:	JR
APPROVED BY:	DVM

pmo Pavia-Marting & Co.
910 W. Lake St.
Roselle, IL 60172
630-529-8000 Fax: 630-894-4910
Professional Engineer No. 018-000276

TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT
CROSS SECTIONS
STA. 772+40

SCALE: 1"=5'H, 1"=5'V
DATE: 8/6/2012
JOB NO: 02841.DS
SHEET 18 OF 20



Nov 08, 2012 - 9:32pm \\system\Conf\02841.DS\02841.DS-19 - XS Sheet for River 1.dwg

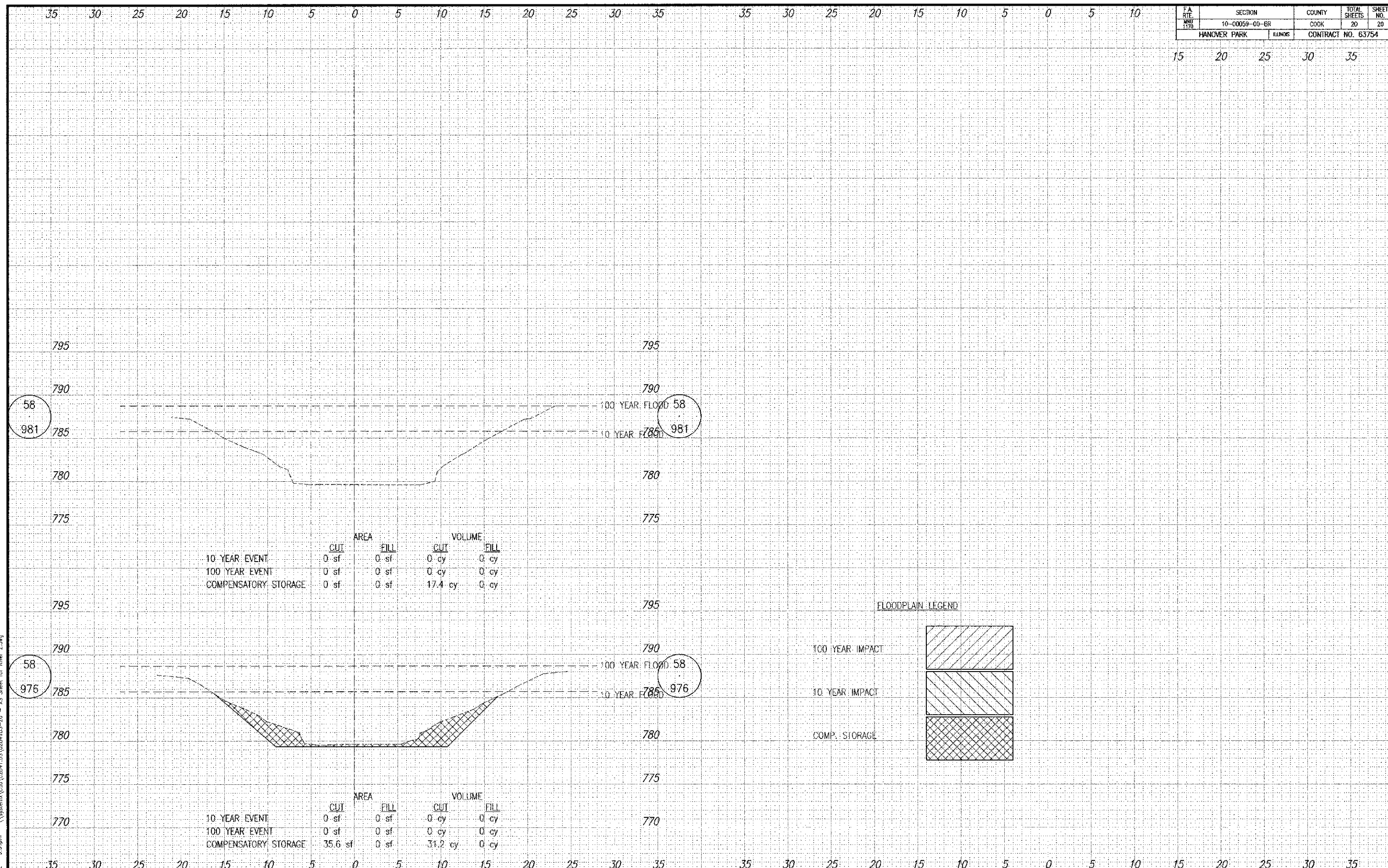
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
10-22-12	JR	REVISED PLANS PER COMMENTS FROM IDOT, HANOVER PARK, & NORTH COOK SWCD.			
11-08-12	JR	REVISED PLANS PER COMMENTS FROM IDOT DATED 11-02-12.			

PLOTTED BY:	AMR
CHECKED BY:	JR
DRAWN BY:	AMR
CHECKED BY:	JR
APPROVED BY:	DM

pma Engineers
Pavia-Marting & Co.
 910 W. Lake St.
 Roselle, IL 60172
 630-529-8000 Fax: 630-894-4910
 Design Firm Professional Registration: 618402376

**TITLE: LONGMEADOW LANE BOX CULVERT REPLACEMENT
 WEST BRANCH DUPAGE RIVER
 STA. 58.960 TO 58.973**

SCALE: 1"=5'; 1"=5'
 DATE: 8/6/2012
 JOB NO: 02841.DS
 SHEET 19 OF 20



	AREA		VOLUME	
	CUT	FILL	CUT	FILL
10-YEAR EVENT	0 sf	0 sf	0 cy	0 cy
100-YEAR EVENT	0 sf	0 sf	0 cy	0 cy
COMPENSATORY STORAGE	0 sf	0 sf	17.4 cy	0 cy

	AREA		VOLUME	
	CUT	FILL	CUT	FILL
10-YEAR EVENT	0 sf	0 sf	0 cy	0 cy
100-YEAR EVENT	0 sf	0 sf	0 cy	0 cy
COMPENSATORY STORAGE	35.6 sf	0 sf	31.2 cy	0 cy

FLOODPLAIN LEGEND

100 YEAR IMPACT	
10 YEAR IMPACT	
COMP. STORAGE	

Nov 08, 2012 - 9:34pm \\systems\cadd\22841\05\2284105-20 - XS Sheet for River 2.dwg