



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

May 16, 2006

SUBJECT: FAI Route 94

Project IM-NHI-094-3(402)061

Section (1516.1, 1717 & 1818)R-4

Cook County

Contract No. 62304

Item No. 3X, 5/26/2006 Letting

Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

1. Revised the Entire Schedule of Prices.
2. Revised the Recurring Special Provision Check Sheet
3. Revised the Table of Contents to the Special Provisions.
4. Revised pages 2, 4, 124 – 132, 138, 139, 187-191 of the Special Provisions
5. Added page 301 - 331 to the Special Provisions.
6. Revised sheets 1, 2, 8-24, 40, 44, 46, 49-52, 75, 86, 100-102, 156, 187-189, 194, 196, 201, 204, 211, 214, 218C, 231, 235, 236, 241, 244, 245, 249, 251, 255, 256, 287, 289, 291-293, 314, 322, 323, 328-330, 333-335, 337-339, 345, 350, 359, 364-366, 369, 370, 376-384, 384A, 385-387, 388A, 452, 454-456, 562-577, 581, 606, 633, 634, 636, 688 & 689 of the Plans.
7. Added sheets 199A, 199B, 258A, 562A, 572A, 573A, 575A-575K & 651A – 651J to the Plans.

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Michael L. Hine
Engineer of Design
and Environment

A handwritten signature in black ink, appearing to read "Ted B. Walschleger P.E.", with a stylized flourish at the end.

By: Ted B. Walschleger, P. E.
Engineer of Project Management

cc: Diane O'Keefe, Region 1, District 1; N. R. Stoner; E. E. Harm; Roger Driskell; R. E. Anderson; Estimates; Design & Environment File

MS/sar

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER - 62304

State Job # - C-91-421-01
 PPS NBR - 1-74823-0500
 County Name - COOK- -
 Code - 31 - -
 District - 1 - -
 Section Number - (1516.1,1717,&1818)R-4

Project Number
 IM-NHI-943-4/020/61

Route
 FAI 94

* COMPLETE NEW SCHEDULE

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
C2C05818	S-RHUS AROMA GRO 18C	EACH	105.000				
E20200G1	V-PARTHEN QUINQ 1G	EACH	712.000				
E20220G1	V-PARTHEN TRICUSP 1G	EACH	516.000				
K0030400	PERENNIAL PLANT DAYLI	UNIT	11.000				
XX001854	STAB SUB-BASE 6	SQ YD	175,338.000				
XX003515	P P CONC DK BM 42 DP	SQ FT	11,265.000				
XX004200	PCC PVT 14 JOINTED	SQ YD	1,239.000				
XX004201	PAVT REINFORCEMENT 14	SQ YD	127,554.000				
X0300057	MAN TA 6D T1FCL R-PLT	EACH	11.000				
X0320333	ROADWAY CLEANING SPL	EACH	28.000				
X0320622	FIELD MEASUREMENTS	L SUM	1.000				
X0320870	BRACED EXCAVATION	CU YD	8.000				
X0321027	DRILL GROUT HOLES	FOOT	960.000				
X0321430	BR APP PVT CON PCC SP	SQ YD	849.000				
X0321866	RM STOR & RE-E SN PAN	SQ FT	866.000				

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X0322256	TEMP INFO SIGNING	SQ FT	1,612.000				
X0322434	LT TOWER SERV PAD SPL	EACH	1.000				
X0322671	STAB CONSTR ENTRANCE	SQ YD	3,360.000				
X0322859	WEED CONTR PRE-EM GRN	POUND	17.000				
X0322932	SILICONE JT SEAL 1.5"	FOOT	300.000				
X0323426	SED CONT DR ST INL CL	EACH	58.000				
X0323830	DRAINAGE SCUPPR DS-11	EACH	1.000				
X0323907	COMMUNICATIONS VAULT	EACH	1.000				
X0323973	SED CONT SILT FENCE	FOOT	17,897.000				
X0323974	SED CONT SILT FN MAIN	FOOT	4,516.000				
X0323988	TEMP SOIL RETEN SYSTM	SQ FT	12,957.000				
X0324112	BARRIER BASE	FOOT	22,725.000				
X0324455	DRILL/SET SOLD P SOIL	CU FT	10,237.000				
X0324469	CON EN RC 2-4 CNC	FOOT	124.000				
X0324471	CON EN RC 4-4 CNC	FOOT	373.000				

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X0324646	CON EN RC 6-4 CNC	FOOT	927.000				
X0324697	SOIL STABILIZERS	POUND	170,000.000				
X0324698	APPLY DUST SUP AGENTS	UNIT	147.000				
X0324980	C EN RC 3-4CNC 1-2CNC	FOOT	65.000				
X0325082	CTA BAR REM	FOOT	8,152.000				
X0325083	CTA FENCE	FOOT	8,295.000				
X0325084	CTA GATES	EACH	11.000				
X0325088	PLAC OF CEMENT GROUT	CU FT	2,400.000				
X0325089	CONN TO GROUT HOLE	EACH	64.000				
X0325095	MAIN DRAIN CLEANING	FOOT	4,809.000				
X0325132	SHAP & GRAD HM LT TWR	SQ YD	23.000				
X0325305	STR REP CON DP = < 5	SQ FT	10.000				
X0325314	LUG SYSTEM COMPL 38	EACH	2.000				
X0325315	CERC 6-4, 2-2CNC	FOOT	140.000				
X0325316	CON T 2 CNC	FOOT	92.000				

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X0325317	TEMP SOIL RTN SYS BR	SQ FT	13,038.000				
X0325318	LT WT CELL CONC FILL	CU YD	968.000				
X0325369	REM EXSUPSTR CTA TUNL	EACH	1.000				
X0325387	REM EXSUPSTR I TUNNEL	EACH	1.000				
X0325416	TRAF CONT/PROT DETOUR	L SUM	1.000				
X0712400	TEMP PAVEMENT	SQ YD	12,125.000				
X2500322	SEEDING CL 5A MOD	ACRE	4.500				
X3540580	PC IN GROUT	CU FT	800.000				
X4066426	BC SC SUPER "D" N70	TON	261.000				
X4066550	P BCSC SUPER "F" N105	TON	1,248.000				
X4066660	P BCBC SUP IL19 N105	TON	892.000				
X4409400	BIT SURF REM 1 3/4	SQ YD	5,249.000				
X4834090	PCC SHOULDERS 14	SQ YD	35,370.000				
X6061001	COMB CC&G TM4.48	FOOT	2,896.000				
X6063600	COMB CC&G TM4.24	FOOT	12,017.000				

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X6370910	CONC BAR 1F 32HT	FOOT	13,677.000				
X6370912	CONC BAR 1F 32HT SPL	FOOT	238.000				
X6370925	CONC BAR 1F 42 SPL	FOOT	7,994.000				
X6370935	CONC BAR 1F 32 MOD	FOOT	882.000				
X6370940	CONC BAR 2F 42HT	FOOT	20.000				
X6640210	TEMP CH LK FENCE PORT	FOOT	1,885.000				
X6643310	CH LK FN REM/RE-E CTA	FOOT	23.000				
X6700410	ENGR FLD OFF A SPL	CAL MO	24.000				
X7011015	TR C-PROT EXPRESSWAYS	L SUM	1.000				
X7013820	TR CONT SURVEIL EXPWY	CAL DA	457.000				
X7015000	CHANGEABLE MESSAGE SN	CAL MO	160.000				
Z0001900	ASB BEARING PAD REMOV	EACH	872.000				
Z0002400	BALLAST	TON	1,890.000				
Z0002600	BAR SPLICERS	EACH	1,028.000				
Z0013798	CONSTRUCTION LAYOUT	L SUM	1.000				

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Z0013825	CONTR LOW-STRENG MATL	CU YD	503.000				
Z0018800	DRAINAGE SYSTEM	L SUM	1.000				
Z0022800	FENCE REMOVAL	FOOT	477.000				
Z0030250	IMP ATTN TEMP NRD TL3	EACH	12.000				
Z0030350	IMP ATTN REL NRD TL3	EACH	34.000				
Z0040530	PIPE UNDERDRAIN REMOV	FOOT	43,100.000				
Z0047300	PROTECTIVE SHIELD	SQ YD	445.000				
Z0048665	RR PROT LIABILITY INS	L SUM	1.000				
Z0056220	SAND MOD IMP ATT REM	EACH	11.000				
Z0068400	STEEL CASINGS 42	FOOT	45.000				
Z0076600	TRAINEES	HOOR	1,500.000		0.800		1,200.000
20100110	TREE REMOV 6-15	UNIT	1,208.000				
20100210	TREE REMOV OVER 15	UNIT	366.000				
20101000	TEMPORARY FENCE	FOOT	4,456.000				
20200100	EARTH EXCAVATION	CU YD	152,089.000				

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20200410	EARTH EXCAVATION SPL	CU YD	725.000				
20201200	REM & DISP UNS MATL	CU YD	13,770.000				
20700220	POROUS GRAN EMBANK	CU YD	195.000				
20700400	POROUS GRAN EMB SPEC	CU YD	1,463.000				
20700420	POROUS GRAN EMB SUBGR	CU YD	2,899.000				
20800150	TRENCH BACKFILL	CU YD	7,050.000				
21001000	GEOTECH FAB F/GR STAB	SQ YD	178,227.000				
21101615	TOPSOIL F & P 4	SQ YD	54,955.000				
21101630	TOPSOIL F & P 8	SQ YD	4,837.000				
21101645	TOPSOIL F & P 12	SQ YD	37,509.000				
21101825	COMPOST F & P 6	SQ YD	39,748.000				
25000210	SEEDING CL 2A	ACRE	13.000				
25000400	NITROGEN FERT NUTR	POUND	1,234.000				
25000500	PHOSPHORUS FERT NUTR	POUND	1,228.000				
25000600	POTASSIUM FERT NUTR	POUND	1,225.000				

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25000750	MOWING	ACRE	43.250				
25001800	SEEDING CL 4 MOD	ACRE	4.500				
25001820	SEEDING CL 5 MOD	ACRE	3.250				
25002014	SEEDING CL 4A MOD	ACRE	3.250				
25100630	EROSION CONTR BLANKET	SQ YD	96,485.000				
25200200	SUPPLE WATERING	UNIT	4,981.000				
28000200	EARTH EXC - EROS CONT	CU YD	45.000				
28000250	TEMP EROS CONTR SEED	POUND	1,954.000				
28000300	TEMP DITCH CHECKS	EACH	61.000				
28000510	INLET FILTERS	EACH	29.000				
28001000	AGGREGATE - EROS CONT	TON	2.000				
31101400	SUB GRAN MAT B 6	SQ YD	1,974.000				
31101810	SUB GRAN MAT B 12	SQ YD	2,986.000				
31101860	SUB GRAN MAT B 24	SQ YD	179,673.000				
31102300	SUB GRAN MAT C 6	SQ YD	828.000				

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35300720	PCC BSE CSE 13	SQ YD	754.000				
40600200	BIT MATLS PR CT	TON	9.100				
40600300	AGG PR CT	TON	46.000				
40600895	CONSTRUC TEST STRIP	EACH	2.000				
40601000	BIT REPL OVER PATCH	TON	56.000				
42000501	PCC PVT 10 JOINTED	SQ YD	2,757.000				
42001300	PROTECTIVE COAT	SQ YD	195,113.000				
42001400	BR APPROACH PAVT SPL	SQ YD	391.000				
42100380	CONT REINF PCC PVT 14	SQ YD	127,554.000				
42101426	LUG SYSTEM COMPL 26	EACH	3.000				
42101436	LUG SYSTEM COMPL 36	EACH	1.000				
44000004	BIT SURF REM 1	SQ YD	17,684.000				
44000006	BIT SURF REM 1 1/2	SQ YD	3,107.000				
44000011	BIT SURF REM 4	SQ YD	6,733.000				
44000100	PAVEMENT REM	SQ YD	120,254.000				

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44000106	BIT RM OV PATCH 1 1/2	SQ YD	669.000				
44000500	COMB CURB GUTTER REM	FOOT	17,884.000				
44001980	CONC BARRIER REMOV	FOOT	13,112.000				
44003510	MEDIAN REMOVAL (PD)	SQ FT	4,918.000				
44004250	PAVED SHLD REMOVAL	SQ YD	42,464.000				
44004260	PAVED SHLD REMOVAL SP	SQ YD	2,044.000				
44004400	PAVT REMOVAL SPL	SQ YD	4,372.000				
44201427	CL C PATCH T2 16	SQ YD	134.000				
44201431	CL C PATCH T3 16	SQ YD	148.000				
44201433	CL C PATCH T4 16	SQ YD	422.000				
44300200	STRIP REF CR CON TR	FOOT	11,709.000				
48101200	AGGREGATE SHLDS B	TON	379.000				
48300400	PCC SHOULDERS 9	SQ YD	325.000				
48300800	PCC SHOULDERS 13	SQ YD	912.000				
50100200	REM EXIST STRUCT	L SUM	1.000				

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50102400	CONC REM	CU YD	29.000				
50200100	STRUCTURE EXCAVATION	CU YD	5,950.000				
50300150	NEOPRENE EXPAN JT 2	FOOT	242.000				
50300225	CONC STRUCT	CU YD	2,505.000				
50300255	CONC SUP-STR	CU YD	318.000				
50300260	BR DECK GROOVING	SQ YD	716.000				
50300300	PROTECTIVE COAT	SQ YD	4,822.000				
50300440	ERECT ELAS BRG ASY T1	EACH	8.000				
50400605	P P CONC DK BM 33 DP	SQ FT	8,087.000				
50500305	ERECT STRUCT STEEL	L SUM	1.000				
50500405	F & E STRUCT STEEL	POUND	300.000				
50500505	STUD SHEAR CONNECTORS	EACH	3,558.000				
50700209	UNTREATED TIMBER LAG	SQ FT	2,980.000				
50700211	FUR SOLDIER PILES HP	FOOT	3,816.000				
50800205	REINF BARS, EPOXY CTD	POUND	295,010.000				

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50900805	PEDESTRIAN RAIL	FOOT	690.000				
51500100	NAME PLATES	EACH	1.000				
550A0340	STORM SEW CL A 2 12	FOOT	7,755.000				
550A0360	STORM SEW CL A 2 15	FOOT	5,715.000				
550A0380	STORM SEW CL A 2 18	FOOT	933.000				
550A0400	STORM SEW CL A 2 21	FOOT	63.000				
550A0410	STORM SEW CL A 2 24	FOOT	985.000				
550A0420	STORM SEW CL A 2 27	FOOT	317.000				
550A0430	STORM SEW CL A 2 30	FOOT	709.000				
550A0450	STORM SEW CL A 2 36	FOOT	376.000				
550A0470	STORM SEW CL A 2 42	FOOT	47.000				
550A0480	STORM SEW CL A 2 48	FOOT	96.000				
550A0660	STORM SEW CL A 3 15	FOOT	409.000				
550A0680	STORM SEW CL A 3 18	FOOT	595.000				
550A0700	STORM SEW CL A 3 21	FOOT	312.000				

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550A0710	STORM SEW CL A 3 24	FOOT	1,122.000				
550A0720	STORM SEW CL A 3 27	FOOT	285.000				
550A0730	STORM SEW CL A 3 30	FOOT	165.000				
550A0750	STORM SEW CL A 3 36	FOOT	238.000				
550A0780	STORM SEW CL A 3 48	FOOT	367.000				
550A0940	STORM SEW CL A 4 12	FOOT	45.000				
550A0980	STORM SEW CL A 4 18	FOOT	183.000				
550A1010	STORM SEW CL A 4 24	FOOT	126.000				
550A1030	STORM SEW CL A 4 30	FOOT	443.000				
550A1080	STORM SEW CL A 4 48	FOOT	317.000				
550A1350	STORM SEW CL A 5 48	FOOT	252.000				
550A1860	STORM SEW CL A 7 18	FOOT	147.000				
55035800	SS 2 RCEP S53 R34	FOOT	509.000				
55100300	STORM SEWER REM 8	FOOT	3.000				
55100400	STORM SEWER REM 10	FOOT	3,653.000				

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55100500	STORM SEWER REM 12	FOOT	6,764.000				
55100700	STORM SEWER REM 15	FOOT	1,437.000				
55100900	STORM SEWER REM 18	FOOT	1,931.000				
55101100	STORM SEWER REM 21	FOOT	27.000				
55101200	STORM SEWER REM 24	FOOT	1,098.000				
55101400	STORM SEWER REM 30	FOOT	16.000				
55101600	STORM SEWER REM 36	FOOT	56.000				
552A0900	SS JKD CL A 24	FOOT	45.000				
58000110	MEMBRANE WATERPRF SPL	SQ FT	22,173.000				
58300100	PC MORTAR FAIRING CSE	FOOT	500.000				
58700200	BRIDGE SEAT SEALER	SQ FT	643.000				
59000100	EPOXY CRACK SEALING	FOOT	100.000				
59100100	GEOCOMPOSITE WALL DR	SQ YD	1,163.000				
60107700	PIPE UNDERDRAINS 6	FOOT	43,160.000				
60108200	PIPE UNDERDRAIN 6 SP	FOOT	1,026.000				

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60109582	P UNDR FOR STRUCT 6	FOOT	596.000				
60200105	CB TA 4 DIA T1F OL	EACH	5.000				
60201310	CB TA 4 DIA T20F&G	EACH	328.000				
60206120	CB TA SPEC 5D T20F&G	EACH	1.000				
60206905	CB TC T1F OL	EACH	39.000				
60208210	CB TC T20F&G	EACH	2.000				
60218400	MAN TA 4 DIA T1F CL	EACH	16.000				
60221100	MAN TA 5 DIA T1F CL	EACH	41.000				
60223800	MAN TA 6 DIA T1F CL	EACH	13.000				
60226730	MAN DT 6 DIA T1F CL	EACH	2.000				
60237420	INLETS TA T20F&G	EACH	11.000				
60247800	JUNCTION CHAMBER	EACH	3.000				
60250200	CB ADJUST	EACH	44.000				
60252800	CB RECONST	EACH	1.000				
60255500	MAN ADJUST	EACH	98.000				

ILLINOIS DEPARTMENT OF TRANSPORTATION
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State Job # - C-91-421-01
 PPS NBR - 1-74823-0500
 County Name - COOK - -
 Code - 31 - -
 District - 1 - -
 Section Number - (1516.1,1717,&1818)R-4

Project Number
 IM-NHI-943-4/020/61

Route
 FAI 94

* COMPLETE NEW SCHEDULE

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
60257900	MAN RECONST	EACH	11.000				
60500040	REMOV MANHOLES	EACH	97.000				
60500050	REMOV CATCH BAS	EACH	207.000				
60500060	REMOV INLETS	EACH	74.000				
60500105	FILL MANHOLES	EACH	8.000				
60500205	FILL CATCH BAS	EACH	7.000				
60608521	COMB CC&G TM2.24	FOOT	369.000				
60618300	CONC MEDIAN SURF 4	SQ FT	28,111.000				
60618324	CONC MEDIAN SURF 6 SP	SQ FT	9,143.000				
63100085	TRAF BAR TERM T6	EACH	14.000				
63100167	TR BAR TRM T1 SPL TAN	EACH	14.000				
63700400	CONC BAR DBL FACE SPL	FOOT	225.000				
63700805	CONC BAR TRANS	FOOT	571.000				
64200105	SHOULDER RUMBLE STRIP	FOOT	44,757.000				
66400560	CH LK FENCE 6 SPL	FOOT	8,889.000				

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Route
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* COMPLETE NEW SCHEDULE

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
66402900	CH LK GATE 6X6 SINGL	EACH	11.000				
66410300	CH LK FENCE REMOV	FOOT	378.000				
66900200	NON SPL WASTE DISPOSL	CU YD	16,565.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	2.000				
67000600	ENGR FIELD LAB	CAL MO	15.000				
67100100	MOBILIZATION	L SUM	1.000				
70102550	TR CONT-PROT TEMP DET	EACH	2.000				
70300240	TEMP PVT MK LINE 6	FOOT	66,110.000				
70300520	PAVT MARK TAPE T3 4	FOOT	96,811.000				
70300530	PAVT MARK TAPE T3 5	FOOT	8,161.000				
70300550	PAVT MARK TAPE T3 8	FOOT	27,911.000				
70300560	PAVT MARK TAPE T3 12	FOOT	4,304.000				
70301000	WORK ZONE PAVT MK REM	SQ FT	145,581.000				
70400100	TEMP CONC BARRIER	FOOT	38,840.000				

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Route
 FAI 94

* COMPLETE NEW SCHEDULE

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70400200	REL TEMP CONC BARRIER	FOOT	72,070.000				
72000100	SIGN PANEL T1	SQ FT	63.000				
72000200	SIGN PANEL T2	SQ FT	175.000				
72000300	SIGN PANEL T3	SQ FT	790.000				
72300100	INSTALL EX SIGN PANEL	SQ FT	242.000				
72400310	REMOV SIGN PANEL T1	SQ FT	12.000				
72400330	REMOV SIGN PANEL T3	SQ FT	28.000				
72400720	RELOC SIGN PANEL T2	SQ FT	12.000				
72400730	RELOC SIGN PANEL T3	SQ FT	300.000				
72800100	TELES STL SIN SUPPORT	FOOT	99.000				
73000100	WOOD SIN SUPPORT	FOOT	500.000				
73300100	OVHD SIN STR-SPAN T1A	FOOT	181.000				
73301000	OVHD SIN STR-SPAN SPL	FOOT	96.000				
73305000	OVHD SIN STR WALKWAY	FOOT	86.000				
73400200	DRILL SHAFT CONC FDN	CU YD	45.000				

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* COMPLETE NEW SCHEDULE

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
73600100	REMOV OH SIN STR-SPAN	EACH	3.000				
73700300	REM CONC FDN-OVHD	EACH	9.000				
78000100	THPL PVT MK LTR & SYM	SQ FT	110.000				
78000200	THPL PVT MK LINE 4	FOOT	12,356.000				
78000500	THPL PVT MK LINE 8	FOOT	1,682.000				
78000600	THPL PVT MK LINE 12	FOOT	726.000				
78003120	PREF PL PM TB LINE 5	FOOT	1,128.000				
78003140	PREF PL PM TB LINE 8	FOOT	201.000				
78005110	EPOXY PVT MK LINE 4	FOOT	122,857.000				
78005120	EPOXY PVT MK LINE 5	FOOT	15,924.000				
78005140	EPOXY PVT MK LINE 8	FOOT	25,335.000				
78005150	EPOXY PVT MK LINE 12	FOOT	4,278.000				
78008210	POLYUREA PM T1 LN 4	FOOT	36,368.000				
78008220	POLYUREA PM T1 LN 5	FOOT	16,123.000				
78008240	POLYUREA PM T1 LN 8	FOOT	15,580.000				

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Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78008250	POLYUREA PM T1 LN 12	FOOT	3,022.000				
78008270	POLYUREA PM T1 LN 24	FOOT	16.000				
78100100	RAISED REFL PAVT MKR	EACH	1,862.000				
78100105	RAISED REF PVT MKR BR	EACH	16.000				
78200100	MONODIR PRIS BAR REFL	EACH	5,394.000				
78200410	GUARDRAIL MKR TYPE A	EACH	56.000				
78200530	BAR WALL MKR TYPE C	EACH	287.000				
78201000	TERMINAL MARKER - DA	EACH	14.000				
78300100	PAVT MARKING REMOVAL	SQ FT	25,500.000				
80700140	GROUND ROD 5/8 X 10	EACH	15.000				
81000600	CON T 2 GALVS	FOOT	1,227.000				
81000800	CON T 3 GALVS	FOOT	250.000				
81001000	CON T 4 GALVS	FOOT	272.000				
81023750	CON ENC C 3 PVC	FOOT	663.000				
81400200	HD HANDHOLE	EACH	25.000				

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Route
 FAI 94

* COMPLETE NEW SCHEDULE

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81400205	HD HANDHOLE SPL	EACH	2.000				
81500200	TR & BKFIL F ELECT WK	FOOT	3,043.000				
83600200	LIGHT POLE FDN 24D	FOOT	135.000				
84200705	LIGHTING FDN REM PART	EACH	130.000				
87900200	DRILL EX HANDHOLE	EACH	8.000				
89502385	REMOV EX CONC FDN	EACH	2.000				

RECURRING SPECIAL PROVISIONS

The following RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

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MAINTENANCE OF ROADWAYS

Effective: September 30, 1985

Revised: November 1, 1996

Beginning on the date that work begins on this project, the Contractor shall assume responsibility for normal maintenance of all existing roadways within the limits of the improvement. This normal maintenance shall include all repair work deemed necessary by the Engineer, but shall not include snow removal operations. Traffic control and protection for maintenance of roadways will be provided by the Contractor as required by the Engineer.

If items of work have not been provided in the contract, or otherwise specified for payment, such items, including the accompanying traffic control and protection required by the Engineer, will be paid for in accordance with Article 109.04 of the Standard Specifications.

CONTRACTOR COOPERATION

The Contractor's attention is directed to the fact that other separate contracts may be under construction during the duration of this Contract and that the Contractor will be governed by Article 105.08 of the Standard Specifications.

The Contractor will coordinate proposed project start dates and sequence of construction with the Engineer and other Contractors to present an effective and timely schedule for successful completion of the project.

No additional compensation will be allowed the Contractor for the above requirements or for any delays or inconvenience resulting from the activities of other contractors.

START OF WORK

It is anticipated that the start of work for this contract will be August 1, 2006. The Contractor will not be allowed to proceed with any operations on the pavement which may require any lane closures prior to August 1, 2006.

Revised 5/16/06

F.A.I. Route 94 (Dan Ryan Expressway)
Section (1516.1, 1717, &1818) R-4
Cook County
Contract 62304 (20)

SBC	18 MTD	Near 92 nd Street Sta. 2226+97	Relocated and encased by SBC during advanced Contract work. No conflict anticipated. Contractor to use caution when excavating.
SBC	12 MTD	South of 95 th Street Sta. 2204+56	SBC abandoned in place. No conflict anticipated.
SBC	24 MTD	State Street Sta. 2028+57	No conflict anticipated. Contractor to use caution when excavating.
SBC	24 MTD	State Street WB Conn. Sta. 325+57	Duct crosses re-surfacing section. No conflict anticipated.
SBC	27 MTD	83 rd Street Sta. 2286+21	SBC and TBE to verify conflict. Adjustment completed by June 1, 2006.
SBC	6 MTD	81 st Street	SBC has abandoned duct. IDOT investigating presence of cables from other utilities.
COM ED	3H, 3W DUCT	STATE STREET STA. 2028+55	Com Ed to adjust/protect in place. Protection is required to be closely coordinated with the Resident Engineer and the Contractor. Contact Mr. Don Ries (773) 838-2905 for information.
COM ED	3H, 3W DUCT	State Street WB Conn. Sta. 325+47	Duct crosses re-surfacing section. No conflict anticipated.
CTA*	Misc. Electrical Ducts	North of 95 th St. Bridge Sta. 2210+00 to Sta. 2217+00	Several track feeds for the CTA's interlocking system are within close proximity to the installation of the proposed CTA barrier wall. Extreme caution will be required.
CTA*	Misc. Electrical Ducts	87 th St. Sta. 2247+00 to Sta. 2253+00	Extreme caution will be required for the installation of the proposed CTA barrier wall.

The above represents the best information available to the Department and is included for the convenience of the bidder. The applicable portions of Articles 105.07 and 107.31 of the Standard Specifications shall apply.

*CTA Electrical Duct locations are approximate and were obtained from the CTA. Minor conflicts are expected for the installation of the proposed CTA barrier wall and adjacent proposed drainage structures at various locations throughout the length of the project. Close coordination between the Contractor and CTA is required per the “**CTA Coordination**” Special Provision to allow for relocations during construction. A Subsurface utility Engineering study for the areas identified in the above “**Status of Utilities to be Adjusted**” Special Provision will be provided to the Contractor at the Pre-Construction Meeting.

Revised 5/16/2006

723.02 General. Add the following sub-paragraphs:

“Pick Up and Delivery. The Contractor shall take delivery of the signs at the Bishop Ford Expressway Maintenance Yard located at 159th & Pulaski (Phone: 1-708-331-4339; Fax: 1-708-331-9641) and at that time of transfer shall become fully responsible for the condition of the signs until final acceptance by the Department. The Contractor is solely responsible for the loading, transportation to the job site, unloading, storage, and installation during this time.

Signs To Be Furnished. The signs to be furnished by Contract 62694 include two (2) Sign Panel, Type 3’s and one (1) Sign Panel, Type 2.”

Revised 5/16/2006

Bridge Approach Pavement (Special)

Description: This work consists of the construction of the bridge approach pavements in accordance with the applicable portions of Section 420 of the Standard Specifications and as detailed in the plans.

Method of Measurement: BRIDGE APPROACH PAVEMENT (SPECIAL) will be measured for payment in square yards according to the pay limits indicated on the plan details.

Basis of Payment: This work will be paid for at the contract unit price per square yard for BRIDGE APPROACH PAVEMENT (SPECIAL) which price includes payment in full for tie bars, preformed joint seal, bond breaker, reinforcement bars, grade beam (including reinforcement and excavation), sub-base and improved sub-grade.

BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), SPECIAL

Description: This work consists of the construction of the bridge approach pavement connector in accordance with the applicable portions of Section 420 of the Standard Specifications and as detailed in the plans.

Method of Measurement: BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), SPECIAL will be measured for payment in square yards according to the pay limits indicated on the plan details.

Basis of Payment: This work will be paid for at the contract unit price per square yard for BRIDGE APPROACH PAVEMENT CONNECTOR (PCC), SPECIAL which price includes payment in full for tie bars, preformed joint seal, bond breaker, reinforcement bars, grade beam (including reinforcement and excavation), stabilized subbase, aggregate subbase and geotechnical fabric.

governed by the range of temperature for which the material is to be used. The bonding compound shall be supplied as an unfilled, clear resin system.

Revised 5/16/2006

MEMBRANE WATERPROOFING (SPECIAL)

Description. This work shall consist of furnishing, transporting, preparing and placing all materials required to construct a membrane waterproofing system in accordance with applicable portions of Section 580 of the Standards Specifications and as specified in these Special Provisions. This work shall also include removal and disposal of the existing membrane waterproofing system. The proposed membrane waterproofing shall be a butyl rubber type.

Construction Requirements. Removal, preparation and installation will be as specified in Articles 580.03, 580.04(b), and 580.05 of the Standards Specifications and as shown on the plans and as directed by the Engineer.

Prior to installing the new Membrane Waterproofing:

- a. The existing waterproofing system asphalt planks and loose and de-bonded areas of the existing membrane waterproofing system shall be removed utilizing had method which will not damage the deck beams. The hand method used by the Contractor to remove the loose and de-bonded areas shall be approved by the Engineer. And,
- b. Grinding or roto-milling the existing waterproofing membrane will not be allowed. And,
- c. The tops of the proposed concrete deck beams will be cleaned with high pressure air hoses prior to installation of the new membrane waterproofing. Water blasting of concrete deck beams will not be allowed. And,
- d. New fillets will be cast at the locations shown on the plans using Class SI concrete.

Method of Measurement. Removal of existing waterproofing membrane system will not be measured for payment. Membrane waterproofing will be measured in accordance with Article 580.06 of the Standard Specifications.

Basis of Payment. This work will be paid for at the contract unit price per square foot for MEMBRANE WATERPROOFING (SPECIAL).

The cost of removal and disposal of the existing waterproofing membrane system is included in the cost of MEMBRANE WATERPROOFING (SPECIAL).

Revised 5/16/2006

FURNISHING STRUCTURAL STEEL AND ELASTOMERIC BEARINGS (FOR INFORMATION ONLY)

Description: This work consists of furnishing, fabricating, shop painting, storing and delivering all structural steel, fixed steel bearings and elastomeric bearing assemblies to the jobsite, as shown on the plans, according to the requirements of Sections 505, 506 and 1083 and applicable articles of Section 503 of the Standard Specifications and as specified in these Special Provisions. The Contractor for this work shall hereinafter be referred to as the Fabrication Contractor. The items furnished under this item will be erected by an Erection Contractor under a separate Contract.

This work shall include the furnishing of all materials including but not limited to, plate girders, diaphragms, cross frames, elastomeric and fixed steel bearing assemblies, and all shop and field fasteners for structural steel. The steel retainers, shim plates and neoprene pads for all bearings shall be furnished under the pay item for Furnishing Structural Steel. Anchor Bolts and Stud Shear Connectors will be furnished and installed by an Erection Contractor under a separate Contract.

Delivery of Structural Steel and Bearings: For bidding purposes only, it is anticipated that the delivery of the structural steel and bearings will be required on the scheduled delivery dates for each stage of construction as follows:

<i>Construction Stage</i>	<i>Scheduled Delivery Date</i>
Stage I	August 31, 2006
Stage II	May 16, 2007

Delivery of structural steel and bearings to the jobsite shall be coordinated with the Erection Contractor to permit the erection of the steel in stages without delaying the progress of the Erection Contractor. It shall be the Fabrication Contractor's responsibility to deliver the structural steel and bearings on time in accordance with Article 505.09 of the Standard Specifications.

Revised 5/16/2006

EROSION CONTROL BLANKET

This Special Provision revises Section 251 of the Standard Specifications for Road and Bridge Construction to eliminate the use of Excelsior Blanket for Erosion Control Blanket.

Delete Article 251.04(a) Excelsior Blanket.

EARTH EXCAVATION (SPECIAL)

This work shall consist of the excavation of bench cuts within the existing embankment as detailed and shown in the plans or directed by the Engineer. The bench cuts into the existing embankment shall not exceed **two (2) feet** in depth. This work shall be according to Section 202 of the Standard Specifications.

This work will be measured and for payment according Article 202.07 of the Standard Specifications.

This work will be paid for at the contract unit price per cubic yard for EARTH EXCAVATION (SPECIAL).

Revised 5/16/2006

- (c) The Contractor shall maintain a record of payments for work performed to the DBE participants. The records shall be made available to the Department for inspection upon request. After the performance of the final item of work or delivery of material by a DBE and final payment therefor to the DBE by the Contractor, but not later than thirty (30) calendar days after payment has been made by the Department to the Contractor for such work or material, the Contractor shall submit a DBE Payment Report on Department form SBE 2115 to the Regional Engineer. If full and final payment has not been made to the DBE, the Report shall indicate whether a disagreement as to the payment required exists between the Contractor and the DBE or if the Contractor believes that the work has not been satisfactorily completed. If the Contractor does not have the full amount of work indicated in the Utilization Plan performed by the DBE companies indicated in the Plan, the Department will deduct from contract payments to the Contractor the amount of the goal not achieved as liquidated and ascertained damages.
- (d) The Department reserves the right to withhold payment to the Contractor to enforce the provisions of this Special Provision. Final payment shall not be made on the contract until such time as the Contractor submits sufficient documentation demonstrating achievement of the goal in accordance with this Special Provision or after liquidated damages have been determined and collected.
- (e) Notwithstanding any other provision of the contract, including but not limited to Article 109.09 of the Standard Specifications, the Contractor may request administrative reconsideration of a decision to deduct the amount of the goal not achieved as liquidated damages. A request to reconsider shall be delivered to the Contract Compliance Section and shall be handled and considered in the same manner as set forth in paragraph (c) of "Good Faith Effort Procedures" of this Special Provision, except a final decision that a good faith effort was not made during contract performance to achieve the goal agreed to in the Utilization Plan shall be the final administrative decision of the Department.

Revised 5/16/06

Revised 5/16/06

ASBESTOS BEARING PAD REMOVAL (BDE)

Effective: November 1, 2003

Description. This work shall consist of the removal and disposal of existing asbestos bearing pads.

The Contractor is advised that the existing bearing pads contain asbestos. All necessary precautions shall be taken in removing, handling, transporting and disposing of the bearing pads. Work shall be in conformance with all governing laws, codes, ordinances or other regulations except that, by agreement with IEPA, it shall not be necessary to notify IEPA or to have a person trained in the asbestos requirements on-site for removal and disposal of asbestos bearing pads.

Documentation. The Engineer will keep records of the removal, handling, transportation and disposal site.

CONSTRUCTION REQUIREMENTS

General. Prior to removal, the asbestos bearing pads shall be thoroughly wetted.

During handling and transportation, the pads shall be covered with an approved wetting material or contained in such a way as to prevent dust or debris from entering the atmosphere.

The asbestos bearing pads shall be hauled to an approved landfill disposal site.

Basis of Payment. This work will be paid for at the contract unit price per each for ASBESTOS BEARING PAD REMOVAL.

80108

TEMPORARY EROSION CONTROL (BDE)

Effective: November 1, 2002

Revise the fifth sentence of the third paragraph of Article 280.04(a) of the Standard Specifications to read:

“This work may be constructed of hay or straw bales, extruded UV resistant high density polyethylene panels, erosion control blanket, mulch barrier, aggregate barriers, excavation, seeding, or mulch used separately or in combination, as approved, by the Engineer.”

Add the following paragraphs after the fifth paragraph of Article 280.04(a) of the Standard Specifications.

Added 5/16/2006

“A ditch check constructed of extruded, UV resistant, high density polyethylene panels, “M” pins and erosion control blanket shall consist of the following materials:

Extruded, UV resistant, high density polyethylene panels shall have a minimum height of 250 mm (10 in.) and minimum length of 1.0 m (39.4 in.). The panels shall have a 51 mm (2 in.) lip along the bottom of the panel. Each panel shall have a single rib thickness of 4 mm (5/32 in.) with a 12 mm (1/2 in.) distance between the ribs. The panels shall have an average apparent opening size equal to 4.75 mm (No. 4) sieve, with an average of 30 percent open area. The tensile strength of each panel shall be 26.27 kN/m (1800 lb/ft) in the machine direction and 7.3 kN/m (500 lb/ft) in the transverse direction when tested according to ASTM D 4595.

“M” pins shall be at least 76 mm (3 in.) by 686 mm (27 in.), constructed out of deformed grade C1008 D3.5 rod (0.211 in. diameter). The rod shall have a minimum tensile strength of 55 MPa (8000 psi).

Erosion control blanket shall conform to Article 251.04.

A section of erosion control blanket shall be placed transverse to the flowline direction of the ditch prior to the construction of the polyethylene ditch check. The length of the section shall extend from the top of one side of the ditch to the top of the opposite side of the ditch, while the width of the section shall be one roll width of the blanket. The upstream edge of the erosion control blanket shall be secured in a 100 mm (4 in.) trench. The blanket shall be secured in the trench with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge before the trench is backfilled. Once the upstream edge of the blanket is secured, the downstream edge shall be secured with 200 mm (8 in.) staples placed at 300 mm (1 ft) intervals along the edge. The polyethylene ditch check shall be installed in the middle of the erosion control blanket, with the lip of each panel facing outward.

The ditch check shall consist of two panels placed back to back forming a single row. Placement of the first two panels shall be at the toe of the backslope or sideslope, with the panels extending across the bottom of the ditch. Subsequent panels shall extend both across the bottom of the ditch and up the opposite sideslope, as well as up the original backslope or sideslope at the distance determined by the Engineer.

The M pins shall be driven through the panel lips to secure the panels to the ground. M pins shall be installed in the center of the panels with adjacent panels overlapping the ends a minimum of 50 mm (2 in.). The pins shall be placed through both sets of panels at each overlap. They shall be installed at an interval of three M pins per one meter (39 in.) length of ditch check. The panels shall be wedged into the M pins at the top to ensure firm contact between the entire bottom of the panels and the soil.”

80087 Added 5/16/2006

TRAINING SPECIAL PROVISIONS

This Training Special Provision supersedes Section 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140(a).

As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on-the-job training aimed at developing full journeyman in the type of trade or job classification involved. The number of trainees to be trained under this contract will be 3. In the event the contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided however, that the contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The contractor shall also insure that this Training Special Provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within the reasonable area of recruitment. Prior to commencing construction, the contractor shall submit to the Illinois Department of Transportation for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the contractor shall specify the starting time for training in each of the classifications. The contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeyman status is a primary objective of this Training Special Provision. Accordingly, the contractor shall make every effort to enroll minority trainees and women (e.g. by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. The contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a journeyman. The contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the contractor's records should document the findings in each case.

Added 5/16/2006

The minimum length and type of training for each classification will be as established in the training program selected by the contractor and approved by the Illinois Department of Transportation and the Federal Highway Administration. The Illinois Department of Transportation and the Federal Highway Administration shall approve a program, if it is reasonably calculated to meet the equal employment opportunity obligations of the contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved by not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Illinois Department of Transportation and the Federal Highway Administration. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the Engineer, reimbursement will be made for training of persons in excess of the number specified herein. This reimbursement will be made even though the contractor receives additional training program funds from other sources, provided such other source does not specifically prohibit the contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the contractor and evidences a lack of good faith on the part of the contractor in meeting the requirement of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program.

It is not required that all trainees be on board for the entire length of the contract. A contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Added 5/16/2006

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The contractor shall furnish the trainee a copy of the program he will follow in providing the training. The contractor shall provide each trainee with a certification showing the type and length of training satisfactorily complete.

The contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.

METHOD OF MEASUREMENT The unit of measurement is in hours.

BASIS OF PAYMENT This work will be paid for at the contract unit price of 80 cents per hour for TRAINEES. The estimated total number of hours, unit price and total price have been included in the schedule of prices.

20338

NON-SPECIAL WASTE WORKING CONDITIONS

This work shall be according to Article 669 of the Standard Specifications for Road and Bridge Construction adopted January 1, 2002 and the following:

Qualifications. The term environmental firm shall mean an environmental firm with at least five (5) documented leaking underground storage tank (LUST) cleanups or that is pre-qualified in hazardous waste by the Department. Documentation includes but not limited to verifying remediation and special waste operations for sites contaminated with gasoline, diesel, or waste oil in accordance with all Federal, State, or local regulatory requirements and shall be provided to the Engineer for approval. The environmental firm selected shall not be a former or current consultant or have any ties with any of the properties contained within and/or adjacent to this construction project.

General. Implementation of this Special Provision will likely require the Contractor to subcontract for the execution of certain activities. It will be the Contractor's responsibility to assess the working conditions and adjust anticipated production rates accordingly.

The Contractor shall manage all contaminated materials as non-special waste as previously identified. This work shall include monitoring and potential sampling, analytical testing, and management of material contaminated by regulated substances.

Added 5/16/2006

The Contractor shall excavate and dispose of any soil classified as a non-special waste as directed by this project or the Engineer. Any excavation or disposal beyond what is required by this project or the Engineer shall be at the Contractor's expense. The preliminary site investigation (PSI) report, available through the District's Environmental Studies Unit, estimated the excavation quantity of non-special waste at the following location. The information available at the time of plan preparation determined the limits of the contamination and the quantities estimated were based on soil excavation for construction purposes only. The lateral distance is measured from centerline and the farthest distance is the offset distance or construction limit which ever is less. The Environmental Firm shall continuously monitor for worker protection and the Contractor shall manage and dispose of all soils excavated within the following areas as classified below. Any soil samples or analysis without the approval of the Engineer shall be at the Contractor's expense.

14. Station 199+15 to Station 202+60 (NB Halsted Street Entrance Ramp) 0 to 30 feet RT 0 to 55 feet LT – non-special waste. Contaminants of concern sampling parameters: PNAs and Arsenic.
15. Station 2217+30 to Station 2217+90 (NB 95th Street Entrance Ramp) 0 to 80 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: Arsenic.
16. Station 2221+50 to Station 2222+50 (NB 95th Street Entrance Ramp) 0 to 80 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: TCLP Lead.
17. Station 2226+50 to Station 2228+50 (NB 95th Street Entrance Ramp) 0 to 120 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: PNAs and TCLP Lead.
18. Station 2229+50 to Station 2230+50 (NB 95th Street Entrance Ramp) 0 to 120 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: PNAs.
19. Station 2242+60 to Station 2244+60 (NB 87th Street Exit Ramp) 0 to 90 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: Lead and TCLP Lead.
20. Station 2245+55 to Station 2246+75 (NB 87th Street Exit Ramp) 0 to 90 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: PNAs, Lead, and TCLP Lead.
21. Station 2248+50 to Station 2250+00 (NB 87th Street Exit Ramp) 0 to 90 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: Arsenic.
22. Station 2255+40 to Station 2257+30 (NB 87th Street Exit Ramp) 0 to 90 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: TCLP Lead.
23. Station 2266+20 to Station 2267+70 (NB 87th Street Entrance Ramp) 0 to 140 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: PNAs, Lead, and TCLP Lead.
24. Station 2271+80 to Station 2275+50 (NB 87th Street Entrance Ramp) 0 to 100 feet RT 0 to 6 feet LT – non-special waste. Contaminants of concern sampling parameters: Lead and TCLP Lead.
25. Station 2277+00 to Station 2278+50 (NB 87th Street Entrance Ramp) 0 to 100 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: Lead and TCLP Lead.
26. Station 2315+50 to Station 2316+00 (NB 79th Street C-D Ramp) 0 to 110 feet RT 0 to 15 feet LT – non-special waste. Contaminants of concern sampling parameters: TCLP Lead.

Added 5/16/2006

All excavated soils that are not determined to be a non-special waste and they cannot be utilized on-site as fill, shall be managed off-site as uncontaminated soil to the following location. The specific site utilized will be determined in construction by the Engineer and it will be based on the type of soil being excavated and capacity needed at these sites. Additional sites may be added during construction.

3. Paxton Landfill (Cluster Sites) at 116th Street & Paxton Avenue in Chicago Clays and Sands

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 rev May 18, 2006

STRUCTURAL REPAIR OF CONCRETE

Effective: March 15, 2006

Description. This work shall consist of structurally repairing concrete.

Materials. Materials shall be according to the following.

Item	Article/Section
(a) Portland Cement Concrete (Note 1)	1020
(b) R1 Mortar (Note2)	
(c) Normal Weight Concrete (Note 3)	
(d) Shotcrete (High Performance) (Note 4)	
(e) Reinforcement Bars	1006.10
(f) Anchor Bolts	1006.09
(g) Water	1002
(h) Curing Compound (Type I)	1022
(i) Cotton Mats	1020.13 (a) (5)
(j) Protective Coat	1023.01
(k) Epoxy (Note 5)	1025.03

Added 5/16/2006

(I) Mechanical Bar Splicers (Note 6)

Note 1. The concrete shall be Class SI, except the cement factor shall be a minimum 395 kg/cu m (6.65 cwt/cu yd), the coarse aggregate shall be a CA 16, and the strength shall be a minimum 27,500 kPa (4000 psi) compressive or 4650 kPa (675 psi) flexural at 14 days. A high range water-reducing admixture shall be used to obtain a 125-175 mm (5-7 in.) slump, but the cement factor shall not be reduced. This cement factor restriction shall also apply if a water-reducing admixture is used.

Note 2. The R1 Mortar shall be from the Department's approved list of Packaged, Dry, Rapid Hardening, Cementitious Materials for Concrete Repairs with coarse aggregate added. The amount of coarse aggregate added to the R1 Mortar shall be per the manufacturer's recommendations. The coarse aggregate gradation shall be CA 16 from an Aggregate Gradation Control System source or a packaged aggregate meeting Article 1004.02 with a maximum size of 12.5 mm (1/2 in.). The R1 Mortar and coarse aggregate mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 125-175 mm (5-7 in.) slump.

Note 3. The packaged concrete mixture shall be from the Department's approved list of Packaged, Dry, Formed, Concrete Repair Mixtures. The materials and preparation of aggregate shall be according to ASTM C 387. Proportioning shall be according to ASTM C 387, except the minimum cement factor shall be 395 kg/cu m (6.65 cwt/cu yd). Cement replacement with fly ash or ground granulated blast-furnace slag shall be according to Section 1020. The coarse aggregate shall be a maximum size of 12.5 mm (1/2 in.). The packaged concrete mixture shall comply with the air content and strength requirements for Class SI concrete as indicated in Note 1. Mixing shall be per the manufacturer's recommendations, except the water/cement ratio shall not exceed the value specified for Class SI concrete as indicated in Note 1. A high range water-reducing admixture shall be used to obtain a 125-175 mm (5-7 in.) slump.

Note 4. A packaged, pre-blended, and dry combination of materials, for the wet-mix shotcrete method shall be provided according to ASTM C 1480. An accelerator is prohibited, except the shotcrete may be modified at the nozzle with a non-chloride accelerator for overhead applications. The shotcrete shall be Type FA, Grade FR, and Class I. The fibers shall be Type III synthetic according to ASTM C 1116.

The 7 and 28 day compressive strength requirements in ASTM C 1480 shall not apply. Instead the shotcrete shall obtain a minimum compressive strength of 27,500 kPa (4000 psi) at 14 days.

The packaged shotcrete shall be limited to the following proportions:

Added 5/16/2006

The cement and finely divided minerals shall be 360 kg/cu m (6.05 cwt/c.y.) to 445 kg/cu m (7.50 cwt/c.y.), and the cement shall not be below 279 kg/cu m (4.70 cwt/c.y.).

Class F fly ash is optional and the maximum shall be 15 percent by mass (weight) of cement.

Class C fly ash is optional and the maximum shall be 20 percent by mass (weight) of cement.

Ground granulated blast-furnace slag is optional and the maximum shall be 25 percent by mass (weight) of cement.

Microsilica is required and shall be a minimum of 5 percent by mass (weight) of cement, and a maximum of 10 percent. As an alternative to microsilica, high-reactivity metakaolin may be used at a minimum of 5 percent by mass (weight) of cement, and a maximum of 10 percent.

Fly ash shall not be used in combination with ground granulated blast-furnace slag. Class F fly ash shall not be used in combination with Class C fly ash. Microsilica shall not be used in combination with high-reactivity metakaolin. A finely divided mineral shall not be used in combination with a blended hydraulic cement, except for microsilica or high-reactivity metakaolin.

The water/cement ratio shall be a maximum of 0.42.

The air content as shot shall be 4.0 – 8.0 percent.

Note 5. In addition ASTM C 881, Type IV, Grade 2 or 3, Class A, B, or C may be used.

Note 6. Mechanical bar splicers shall be from the approved list of Mechanical Reinforcing Bar Splicers / Coupler Systems, and shall be capable of developing in tension at least 125 percent of the yield strength of the existing reinforcement bar.

Equipment. Equipment shall be according to Article 503.03 and the following.

Chipping Hammer – The chipping hammer for removing concrete shall be a light-duty pneumatic or electric tool with a 7 kg (15 lb) maximum class or less.

Blast Cleaning Equipment – Blast cleaning equipment for concrete surface preparation shall be the abrasive type, and the equipment shall have oil traps.

Hydrodemolition Equipment – Hydrodemolition equipment for removing concrete shall be calibrated, and shall use water according to Section 1002.

High Performance Shotcrete Equipment – The batching, mixing, pumping, hose, nozzle, and auxiliary equipment shall be for the wet-mix shotcrete method, and shall meet the requirements of ACI 506R.

Added 5/16/2006

Construction Requirements

General. The repair methods shall be either formed concrete repair or shotcrete. The repair method shall be selected by the Contractor with the following rules.

(a) Rule 1. For formed concrete repair, a subsequent patch to repair the placement point after initial concrete placement will not be allowed. As an example, this may occur in a vertical location located at the top of the repair.

(b) Rule 2. Formed concrete repair shall not be used for overhead applications.

(c) Rule 3. Shotcrete shall not be used for column repairs greater than 100 mm (4 in.) in depth, or any repair location greater than 205 mm (8 in.) in depth. The only exception to this rule would be for a horizontal application, where the shotcrete may be placed from above in one lift.

(d) Rule 4. If formed concrete repair is used for locations that have reinforcement with less than 19 mm (0.75 in.) of concrete cover, the concrete mixture shall contain fly ash or ground granulated blast-furnace slag at the maximum cement replacement allowed.

Temporary Shoring or Cribbing. When a temporary shoring or cribbing support system is required, the Contractor shall provide details and computations, prepared and sealed by an Illinois licensed Structural Engineer, to the Department for review and approval. When ever possible the support system shall be installed prior to starting the associated concrete removal. If no system is specified, but during the course of removal the need for temporary shoring or cribbing becomes apparent or is directed by the Engineer due to a structural concern, the Contractor shall not proceed with any further removal work until an appropriate and approved support system is installed.

Concrete Removal. The Contractor shall provide ladders or other appropriate equipment for the Engineer to mark the removal areas. Repair configurations will be kept simple, and squared corners will be preferred. The repair perimeter shall be sawed a depth of 13 mm (1/2 in.) or less, as required to avoid cutting the reinforcement. If the concrete is broken or removed beyond the limits of the initial saw cut, the new repair perimeter shall be recut. The areas to be repaired shall have all loose, unsound concrete removed completely by the use of chipping hammers, hydrodemolition equipment, or other methods approved by the Engineer. The concrete removal shall extend along the reinforcement bar until the reinforcement is free of bond inhibiting corrosion. The outermost layer of reinforcement bar within the repair area shall be undercut to a depth of 19 mm (3/4 in.) or the diameter of the reinforcement bar, whichever value is larger. The underlying transverse reinforcement bar shall also be undercut as previously described, unless the reinforcement is not corroded, and the reinforcement bar is encased and well bonded to the surrounding concrete.

If sound concrete is encountered before existing reinforcement bars are exposed, further removal of concrete shall not be performed unless the minimum repair depth is not met.

The repair depth shall be a minimum of 25 mm (1 in.). The substrate profile shall be ± 1.5 mm ($\pm 1/16$ in.). The perimeter of the repair area shall have a vertical face.

Added 5/16/2006

If a repair is located at the ground line, any excavation required below the ground line to complete the repair shall be included in this work.

The Contractor shall have a maximum of 14 calendar days to complete each repair location with concrete or shotcrete, once concrete removal has started for the repair.

The Engineer shall be notified of concrete removal that exceeds 150 mm (6 in.) in depth, one fourth the cross section of a structural member, more than half the vertical column reinforcement is exposed in a cross section, more than 6 consecutive reinforcement bars are exposed in any direction, within 38 mm (1.5 in.) of a bearing area, or other structural concern. Excessive deterioration or removal may require further evaluation of the structure or installation of temporary shoring and cribbing support system.

Surface Preparation. Prior to placing the concrete or shotcrete, the Contractor shall prepare the repair area and exposed reinforcement by blast cleaning. The blast cleaning shall provide a surface that is free of oil, dirt, and loose material.

If a succeeding layer of shotcrete is to be applied, the initial shotcrete surface and remaining exposed reinforcement shall be free of curing compound, oil, dirt, loose material, rebound (i.e. shotcrete material leaner than the original mixture which ricochets off the receiving surface), and overspray. Preparation may be by lightly brushing or blast cleaning if the previous shotcrete surface is less than 36 hours old. If more than 36 hours old, the surface shall be prepared by blast cleaning.

The repair area and perimeter vertical face shall have a rough surface. Care shall be taken to ensure the perimeter sawcut is roughened. Just prior to concrete or shotcrete placement, saturate the repair area with water to a saturated surface-dry condition. Any standing water shall be removed.

Concrete or shotcrete placement shall be done within 3 calendar days of the surface preparation or the repair area shall be prepared again.

Reinforcement. Exposed reinforcement bars shall be cleaned of concrete and corrosion by blast cleaning. After cleaning, all exposed reinforcement shall be carefully evaluated to determine if replacement or additional reinforcement bars are required.

Reinforcing bars that have been cut or have lost 25 percent or more of their original cross sectional area shall be supplemented by new in kind reinforcement bars. New bars shall be lapped a minimum of 32 bar diameters to existing bars. A mechanical bar splicer shall be used when it is not feasible to provide the minimum bar lap. No welding of bars shall be performed.

Intersecting reinforcement bars shall be tightly secured to each other using 1.6 mm (0.006 in.) or heavier gauge tie wire, and shall be adequately supported to minimize vibration during concrete placement or application of shotcrete.

Added 5/16/2006

For reinforcement bar locations with less than 19 mm (0.75 in.) of cover, protective coat shall be applied to the completed repair. The application of the protective coat shall be according to Article 503.19, 2nd paragraph, except blast cleaning shall be performed to remove curing compound.

The Contractor shall anchor the new concrete to the existing concrete with 19 mm (3/4 in.) diameter hook bolts for all repair areas where the depth of concrete removal is greater than 205 mm (8 in.) and there is no existing reinforcement extending into the repair area. The hook bolts shall be spaced at 380 mm (15 in.) maximum centers both vertically and horizontally, and shall be a minimum of 305 mm (12 in.) away from the perimeter of the repair. The hook bolts shall be installed according to Section 584.

Repair Methods. All repair areas shall be inspected and approved by the Engineer prior to placement of the concrete or application of the shotcrete.

- (a) Formed Concrete Repair. Falsework shall be according to Article 503.05. Forms shall be according to Article 503.06. Formwork shall provide a smooth and uniform concrete finish, and shall approximately match the existing concrete structure. Formwork shall be mortar tight and closely fitted where they adjoin the existing concrete surface to prevent leakage. Air vents may be provided to reduce voids and improve surface appearance. The Contractor may use exterior mechanical vibration, as approved by the Engineer, to release air pockets that may be entrapped.

The concrete for formed concrete repair shall be a Class SI Concrete, or a packaged R1 Mortar with coarse aggregate added, or a package Normal Weight Concrete at the Contractor's option. The concrete shall be placed and consolidated according to Article 503.07. The concrete shall not be placed when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 4 °C (40 °F). All repaired members shall be restored as close as practicable to their original dimensions.

Curing shall be done according to Article 1020.13.

If temperatures below 7 °C (45 °F) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(e)(1), or Protection Method II according to Article 1020.13(e)(2) shall be used during the curing period.

The surfaces of the completed repair shall be finished according to Article 503.16.

- (b) Shotcrete. Shotcrete shall be tested by the Engineer for air content according to Illinois Modified AASHTO T 152. Obtain the sample in a damp, non-absorbent container from the discharge end of the nozzle.

Added 5/16/2006

For compressive strength of shotcrete, a 457 x 457 x 89 mm (18 x 18 x 3.5 in.) test panel shall be shot by the Contractor for testing by the Engineer. A steel form test panel shall have a minimum thickness of 5 mm (3/16 in.) for the bottom and sides. A wood form test panel shall have a minimum 19 mm (3/4 in.) thick bottom, and a minimum 38 mm (1.5 in.) thickness for the sides. The test panel shall be cured according to Article 1020.13 (a) (3) or (5) while stored at the jobsite and during delivery to the laboratory. After delivery to the laboratory for testing, curing and testing shall be according to ASTM C 1140.

The method of alignment control (i.e. ground wires, guide strips, depth gages, depth probes, and formwork) to ensure the specified shotcrete thickness and reinforcing bar cover is obtained shall be according to ACI 506R. Ground wires shall be removed after completion of cutting operations. Guide strips and formwork shall be of dimensions and a configuration that do not prevent proper application of shotcrete. Metal depth gauges shall be cut 6 mm (1/4 in.) below the finished surface. All repaired members shall be restored as close as practicable to their original dimensions.

The shotcrete shall not be applied when the air temperature is below 7 °C (45 °F) and falling or below 4 °C (40 °F). Shotcrete shall not be applied when the air temperature is greater than 32 °C (90 °F). The applied shotcrete shall have a minimum temperature of 10 °C (50 °F) and a maximum temperature of 32 °C (90 °F). The shotcrete shall not be applied during periods of rain unless protective covers or enclosures are installed. The shotcrete shall not be applied when frost is present on the surface of the repair area, or the surface temperature of the repair area is less than 4 °C (40 °F). If necessary, lighting shall be provided to provide a clear view of the shooting area.

The shotcrete shall be applied according to ACI 506R, and shall be done in a manner that does not result in cold joints, laminations, sandy areas, voids, sags, or separations. In addition, the shotcrete shall be applied in a manner that results in maximum densification of the shotcrete. Shotcrete which is identified as being unacceptable while still plastic shall be removed and re-applied.

The nozzle shall normally be at a distance of 0.6-1.5 m (2-5 ft) from the receiving surface, and shall be oriented at right angles to the receiving surface. Exceptions to this requirement will be permitted to fill corners, encase large diameter reinforcing bars, or as approved by the Engineer. For any exception, the nozzle shall never be oriented more than 45 degrees from the surface. Care shall be taken to keep the front face of the reinforcement bar clean during shooting operations. Shotcrete shall be built up from behind the reinforcement bar. Accumulations of rebound and overspray shall be continuously removed prior to application of new shotcrete. Rebound material shall not be incorporated in the work.

Whenever possible, shotcrete shall be applied to the full thickness in a single layer. The maximum thickness shall be 100 mm (4 in.) unless the shotcrete is applied from above on a horizontal surface, or a thicker application is approved by the Engineer. When two or more layers are required, the minimum number shall be used and shall be done in a manner without sagging or separation. A flash coat (i.e. a thin layer of up to 6 mm (1/4 in.) applied shotcrete) may be used as the final lift for overhead applications.

Added 5/16/2006

Prior to application of a succeeding layer of shotcrete, the initial layer of shotcrete shall be prepared according to the surface preparation and reinforcement bar cleaning requirements. Upon completion of the surface preparation and reinforcement bar treatment, water shall be applied according to the surface preparation requirements unless the surface is moist. The second layer of shotcrete shall then be applied within 30 minutes.

Shotcrete shall be cut back to line and grade using trowels, cutting rods, screeds or other suitable devices. The shotcrete shall be allowed to stiffen sufficiently before cutting. Cutting shall not cause cracks or delaminations in the shotcrete. For depressions, cut material may be used for small areas. Rebound material shall not be incorporated in the work. For the final finish, a wood float shall be used to approximately match the existing concrete texture. All repaired members shall be restored as close as practicable to their original dimensions.

Cotton mats shall be applied to the exposed layer of shotcrete within 10 minutes after finishing, and wet curing shall begin immediately. As an alternative, Type I curing compound shall be applied within 10 minutes and moist curing with cotton mats shall begin within 3 hours.

When a shotcrete layer is to be covered by a succeeding shotcrete layer within 36 hours, the repair area shall be protected with intermittent hand fogging, or wet curing with either burlap or cotton mats shall begin within 10 minutes. Intermittent hand fogging may be used only for the first hour. Thereafter, wet curing with burlap or cotton mats shall be used until the succeeding shotcrete layer is applied. Intermittent hand fogging may be extended to the first hour and a half if the succeeding shotcrete layer is applied by the end of this time.

The curing period shall be for 7 days, except when there is a succeeding layer of shotcrete. In this instance, the initial shotcrete layer shall be cured until the surface preparation and reinforcement bar treatment is started.

If temperatures below 7 °C (45 °F) are forecast during the curing period, protection methods shall be used. Protection Method I according to Article 1020.13(e)(1), or Protection Method II according to Article 1020.13(e)(2) shall be used during the curing period

Inspection of Completed Work. The Contractor shall provide ladders or other appropriate equipment for the Engineer to inspect the repaired areas. After curing but no sooner than 28 days after placement of concrete or shooting of shotcrete, the repair shall be examined for conformance with original dimensions, cracks, voids, and delaminations. Sounding for delaminations will be done with a hammer or by other methods determined by the Engineer.

The repaired area shall be removed and replaced, as determined by the Engineer, for nonconformance with original dimensions, surface cracks greater than 0.25 mm (0.01 in.) in width, map cracking with a crack spacing in any direction of 0.45 m (18 in.) or less, voids, or delaminations.

Added 5/16/2006

If a nonconforming repair is allowed to remain in place, cracks 0.25 mm (0.01 in.) or less shall be repaired with epoxy according to Section 590. For cracks less than 2 mm (0.007 in.), the epoxy may be applied to the surface of the crack. Voids shall be repaired according to Article 503.16.

Publications and Personnel Requirements. The Contractor shall provide a current copy of ACI 506R to the Engineer a minimum of one week prior to start of construction.

The shotcrete crew foreman shall have current American Concrete Institute (ACI) nozzle men certification for vertical wet and overhead wet applications. A copy of the certificate shall be given to the Engineer. An exception to this requirement will be allowed until January 1, 2007, if it can be shown that the individual is in the process of obtaining nozzle men certification.

Method of Measurement. This work will be measured for payment in place and the area computed in square meters (square feet). For a repair at a corner, both sides will be measured.

Basis of Payment. This work will be paid for at the contract unit price per square meter (square foot) for STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 125 MM (5 IN.)), STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 125 MM (5 IN.)).

When there is no pay item for temporary shoring or cribbing, the work to design, install, and remove the temporary shoring and cribbing will be paid for according to Article 109.04.

The furnishing and installation of supplemental reinforcement bars, mechanical bar splicers, hook bolts, and protective coat will be paid according to Article 109.04.

Added 5/16/2006

PIPE UNDERDRAIN REMOVAL

Description. This work consists of the removal and satisfactory disposal of existing pipe underdrain, at the locations shown on the plans or as directed by the Engineer. This work shall be performed in accordance with the applicable portions of Section 202 of the Standard Specifications, the existing typical sections in the plans and as herein specified.

Should the removal of the pipe underdrain create a trench below the top of finished subgrade for the proposed pavement section, this trench shall be backfilled with suitable subgrade materials in accordance with the applicable portions of Section 202 of the Standard Specifications.

General Requirements. Disposal of pipe and other unsuitable material shall be according to Article 202.03.

Method of Measurement. Pipe Underdrain Removal of the existing various diameters will be measured for payment in feet, as removed.

Basis of Payment. This work shall be paid for at the contract unit price per foot for PIPE UNDERDRAIN REMOVAL, which shall be payment in full for excavating, removing and properly disposing of the existing pipe underdrain. The contract unit price shall also include payment for any backfilling of the existing trench, should this become necessary as described above.

(TYLI - 05/08/06)

Added 5/16/2006

PIPE UNDERDRAIN 6"

This work shall be constructed according to Section 601 of the Standard Specifications and Standard 601001 except CA 16 shall be used in lieu of FA 1 or FA 2 for backfilling of the trench. The CA 16 shall be according to Article 1004.06 and Article 1004.01 of the Standard Specifications except in the table, Coarse Aggregate Gradations, the percent passing the 1.18 mm (No. 16) sieve shall be 4% +/- 4%. The pipe shall be wrapped using a Fabric Envelope (sock) meeting the requirements of Section 1080.01 of the Standard Specifications.

Added 5/16/2006

TRAFFIC CONTROL REQUIREMENTS FOR STRUCTURE # 016-0073 PCC BOX BEAMS REPLACEMENT

Added 5/16/2006

During Stages 2 and 3, full expressway closures may be needed for extended periods of time (more than 15 minutes) on SB I-94 to remove/erect the PCC box beams for Structure #016-0073 (NB I-57 over SB I-94 and the CTA tracks). The closure or closures shall be scheduled within the allowable full expressway closure hours as noted in the Special Provision "Keeping the Expressway Open to Traffic" and as approved by the Engineer. Thirty days prior to full closures, the Contractor shall submit for the Engineer's review and approval, the amount of time required for each closure. This submittal shall include the removal/erection plan and procedures and shall include the beams involved, description of staging areas, and the detailed detour signing plan if different than shown on the plans.

The suggested detour of SB I-94 to the Bishop Ford Freeway is to detour mainline traffic onto SB I-57, to the Halsted Street exit ramp, across I-57 on the Halsted Street Bridge, to NB I-57 using the Halsted Street entrance ramp, to EB I-94 (Bishop Ford Freeway) using the EB connector roadway as shown on the plans.

The Contractor shall coordinate the sequence of work such that the Halsted Entrance Ramp and mainline terminal are completed and open before implementation of the detour.

The recommended signing for the detour is shown on the plans. Portable changeable message signs shall be placed 1.0 mile and 0.5 mile in advance of the full closure. An additional two portable changeable message signs shall be placed north of the Skyway interchange on each side of the SB lanes, at a location determined by the Engineer, to warn motorists of the closure and recommend alternatives.

As shown on the plans, one person will be required to direct traffic at the Halsted Street/98th Place intersection and one person will be required to direct traffic at the Halsted Street/99th Street intersection. Additional traffic control may be necessary as determined by the Engineer. The traffic signals at each of these intersections shall be changed to flashing red for all legs while the detour is in operation.

Close coordination and cooperation will be required with Contract 62593 before and during the implementation of this detour.

Should the Contractor fail to complete the work and reopen traffic lanes within the specified time for the full expressway closure period stated in the "Keeping the Expressway Open to Traffic" Special Provision, the Contractor shall be liable to the Department for liquidated damages as noted under the Special Provision, "Failure to Open Traffic Lanes to Traffic."

Method of Measurement:

The cost for all required detour signing (including furnishing, installing, maintaining, replacing, relocating, covering when not in use, and removing traffic control devices), coordination, and the required submittals for the full removal and replacement of the PCC Box Beams for Structure 016-0073 will be measured on a lump sum basis irrespective of the number of times the detour signing, submittals or coordination are required as specified herein and as approved by the Engineer. All Traffic Control and Protection required for the I-94 SB closure under Highway Standards upstream of the closure will also be included with this pay item.

Basis of Payment:

This work shall be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION FOR DETOUR ROUTE. This price shall be payment in full for all labor including personnel to direct traffic at the two intersections, materials, transportation, handling, and incidental work necessary to furnish, install, maintain, replace, cover, relocate and remove all traffic control devices as submitted by the Contractor to remove/erect the PCC Box Beams for Structure #016-0073 as specified herein and as approved by the Engineer.

Added 5/16/2006

CONCRETE BARRIER

Revise Section 637 of the Standard Specifications to read:

“SECTION 637. CONCRETE BARRIER

637.01 Description. This work shall consist of constructing a concrete barrier and its base to the lines, grades and details shown in the plans.

637.02 Materials. Materials for concrete barrier and concrete base shall conform to the requirements of the following Articles of Section 1000 -- Materials: Except as follows: add the following to the coarse aggregate gradation Table of Standard Specification.

In the Coarse Aggregate Gradation table of Article 1004.01(c) of the Standard Specifications, revise the percent passing the 12.5 mm (1/2 inch) sieve for CA7 to a minimum of 45% and CA11 to a minimum of 45%.

The Contractor may combine two or more similar types of Coarse Aggregate sizes consisting of CA7, CA11, CA13, CA14, CA16, provided a CA7 or CA11 is included in the blend.

The Coarse Aggregate used to produce the concrete barrier and base, if poured monolithically with the barrier, shall conform to the superstructure requirements concerning deleterious materials or substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete.

Item	Article/Section
a) Portland Cement Concrete	1020
b) Tie Bars (Note 1)	1006.10 (a) (b)
c) Dowel Bars	1006.11 (b)
d) Protective Coat	1023
e) Non-Shrink Grout	1024
f) Chemical Adhesive	1027
g) Preformed Expansion Joint Fillers	1051.01 – 1051.08
h) Reinforcement Bars	508

Note 1. Tie bars shall be Grade 400 (Grade 60).

Materials for bituminous concrete base shall conform to the requirements to Article 356.02.

Added 5/16/2006

637.03 Equipment. Equipment for concrete barrier shall conform to the requirements of the following Articles of Section 1100 – Equipment.

Item	Article/Section
a) Hand vibrator	1103.17 (a)
b) 3 m (10 ft) Straightedge	1103.17 (h)

Equipment for Portland cement concrete base shall conform to the requirements of Article 483.03.

Equipment for bituminous concrete base shall conform to the requirements of Article 356.03

CONSTRUCTION REQUIREMENTS

637.04 Barrier Base. The base may be constructed separately or poured monolithically with the barrier. When constructed separately, Portland cement concrete base shall be constructed according to Article 483.04 – 483.06, except the surface shall be finished according to Article 503.09 (a). Bituminous concrete base shall be constructed according to Articles 356.05 and 356.06.

637.05 Anchoring. Barrier shall be anchored to the base by the methods shown on the plans. When tie bars are used, they shall be installed in preformed or drilled holes with a non-shrink grout or chemical adhesive.

637.06 Barrier Construction. Concrete barrier shall be constructed according to the applicable portions of Articles 503.06 and 503.07. Where the horizontal alignment of the concrete barrier is curved, the barrier shall be constructed either on the curved alignment or on chords not more than 3m (10 ft) in length.

When slip formed, the vertical centerline of the barrier shall not vary from the proposed centerline by more than 75 mm (3 in.) nor by more than 13 mm in 3 m (1/2 in. in 10 ft). All surfaces shall be checked with a 3 m (10 ft) straightedge as the concrete exits the slip form mold. Surface irregularities greater than 10 mm in 3 m (3/8 in. in 10 ft) shall be corrected immediately. Continued variations in the barrier surface exceeding 6 mm in 3 m (1/4 in. in 10 ft) will not be permitted and remedial action shall immediately be taken to correct the problem. Any deformations or bulges remaining after the initial set shall be removed by grinding after the concrete has hardened. All holes and honeycombs shall be patched immediately.

637.07 Barrier Transitions. Transitions between barriers of different design shall be constructed according to the details shown on the plans.

Added 5/16/2006

637.08 Joints. Joints shall be constructed as shown on the plans and as follows:

- a) **Construction Joints.** Construction joints shall be constructed in the barrier whenever there is an interruption in the pour of more than 30 minutes.
- b) **Expansion Joints.** Expansion joints shall be constructed in the barrier and the base in line with expansion joints in the adjacent pavement or shoulder. Expansion joints shall also be constructed at locations where the barrier abuts a rigid structure.

Prior to placing concrete, a light coating of oil shall be uniformly applied to the dowel bars.

- c) **Contraction Joints.** Contraction joints shall be constructed in the barrier at uniform intervals with a maximum spacing of 6 m (20 ft) or in line with contraction joints in the adjacent pavement or shoulder. Contraction joints shall be formed by a groove 3 mm (1/8 in.) wide by 50 mm (2 in.) deep either formed in the plastic concrete or sawed after the concrete has set.
- d) Barrier joints shall match the adjacent shoulder joints

637.09 Finishing. The surface of concrete barrier shall be finished according to Article 503.16 (a).

637.10 Protective Coat. When required, the exposed top and exposed vertical surfaces of the barrier exposed to traffic shall receive a protective coat application per the requirements of the Standard Specifications. The application of the protective coat shall be according to Article 420.21.

637.11 Method of Measurement. This work will be measured as follows:

- a) **Contract Quantities.** The requirements for the use of contract quantities shall be according to Article 202.07 (a).
- b) **Measured Quantities.** New barrier base, both separate and monolithic, will be measured for payment in meters (feet) in place, along the centerline of the base or barrier. The width of the base will be defined as the width of the barrier.

Concrete barrier will be measured for payment in meters (feet) in place, along the centerline of the barrier.

Barrier transitions will be measured for payment in meters (feet) in place, along the centerline of the transition.

Added 5/16/2006

Protective coat will be measured for payment according to Article 420.22 (b).

Reinforcement bars and other necessary appurtenances such as ties, splicers/lap bars, etc... shall not be measured for payment.

637.12 Basis of Payment. This work will be paid for at the contract unit price per meter (foot) for BARRIER BASE; CONCRETE BARRIER, DOUBLE FACE, of the height specified; CONCRETE BARRIER, DOUBLE FACE (SPECIAL); CONCRETE BARRIER, SINGLE FACE, of the height specified; CONCRETE BARRIER, SINGLE FACE (SPECIAL) of the height specified; CONCRETE BARRIER, SINGLE FACE (MODIFIED) of the height specified; and CONCRETE BARRIER TRANSITION, which price shall include all necessary reinforcement bars and other necessary appurtenances to provide a complete installation as shown on the plans and as described above.

Protective coat will be paid for according to Article 420.23.”

Added 5/16/2006

**REMOVAL OF EXISTING SUPERSTRUCTURES, I-94 TUNNEL
REMOVAL OF EXISTING SUPERSTRUCTURES, CTA TUNNEL**

Description. This item of work shall consist of furnishing all necessary labor, tools, equipment, materials and incidentals to safely remove and legally dispose of existing Precast Prestressed Concrete Deck Beams and Cast-in-Place Portal Beams crossing over I-94 and the CTA railroad tracks as indicated on the Plans and as directed by the Engineer.

All work shall conform to the applicable requirements of Section 501 of the Standard Specifications and as specified herein.

The removal work under this item shall include, but is not limited to, 33-inch and 42-inch P.P.C. Deck Beams, 33-inch and 42-inch Cast-in-Place Portal Beams and any other members, bituminous materials, appurtenances or incidentals requiring removal or modification for the installation of new P.P.C. Deck Beams, as shown on the Plans and as specified herein.

Original drawings of the structures to be removed are available from the Department. It is the Contractor's responsibility to verify all dimensions and conditions affecting the work at the site. The Department assumes no responsibility for actual condition of the structures to be removed.

The removal and reconstruction of the tunnel structures shall be accomplished in such a manner that the remaining portions of the viaduct are safe for their intended use and in accordance with the staging shown in the Maintenance of Traffic.

Submittals. The Contractor shall prepare and submit to the Department his plan for removal of the structures. The submittal shall show his procedures, equipment, haul routes, disposal site, sequence of removal and stockpile locations of excavated soil and any related surcharges. This submittal shall be made to the Department for review and approval at least 30 days prior to beginning the removal work. The removal of existing structures shall not commence without the Engineer's approval. The superstructure removal shall be coordinated with and reflect the approved construction schedule and roadway staging.

The submittal shall include a written description of the proposed sequence of removal and the methods to be employed in the removal operations. Further, the submittal shall include calculations, drawings and details of the sequence of removal of the existing structures and locations of any temporary supports, bracing, equipment and the anticipated loads and the step-by-step removal procedure. The submittal shall also identify the location of disposal of the items removed as well as temporary soil retention systems and temporary drainage measures necessary to prevent runoff from the existing or proposed structures onto the roadway or railroad tracks located below. The Contractor shall be responsible to ensure that the removal procedure results in a safe and stable structure and to comply with safety requirements as

Added 5/16/2006

required by state and federal laws, codes or other regulations. This submittal shall be sealed by an Illinois Licensed Structural Engineer.

Removal Requirements. The existing deck beams shall be removed in the areas indicated on the Plans, as required to install new deck beams.

The Contractor is alerted to the fact that the existing Portal Beams at each end of the respective tunnels are not prismatic in shape and have been cast with tapered dimensions to provide a flush surface with the headwalls. Prior to removal of the existing deck beams, the Contractor shall obtain adequate field measurements and survey as required to adjust the alignments of the proposed deck beams to ensure that the new portal beams at the south ends of the tunnels are flush with the existing headwalls. The Contractor is solely responsible for any adjustments to the dimensions for fabrication of the proposed deck beams to accommodate adjustments to the alignments of the beams during erection to satisfy this criteria.

The Contractor shall coordinate the complete or partial removal of the deck beams with the erection of their replacement members. The Contractor shall make provisions to ensure that there is no falling debris or free falling water from either the partially completed proposed structures or the existing structures which remain in place during the staged construction. The Contractor shall make provisions to ensure that prior to discontinuing deck beam removal operations and restoring traffic below the completed or partial sections of the existing or proposed structures, that deck beams are adequately secured to adjacent deck beams through positive means of anchorage. Such anchorages may incorporate existing or proposed tie-rods.

Subsequent to removal of the existing deck beams and prior to erection of the proposed deck beams, the Contractor shall clean and remove all bituminous materials, grout, bearing pads, existing dowels, dirt and debris from the abutment bearing seats and backwalls immediately adjacent to removed beams. Prior to installation of the new deck beams, the bearing seats and adjacent inside faces of backwalls shall be air-blast cleaned to expose the concrete surfaces. The bearing seats shall be restored to a uniform level surface adequate to receive the new bearing pads and deck beams as accepted by the Engineer.

Where existing equipment, conduits, and other accessories exist that are to remain in place, either permanently or temporarily, the Contractor shall provide temporary support and protective shielding to protect these facilities from damage at no additional cost to the Department. This work shall be done in accordance with the Special Provisions for PROTECT AND MAINTAIN EXISTING IDOT TUNNEL LIGHTING SYSTEM or PROTECT AND MAINTAIN EXISTING CTA TUNNEL LIGHTING SYSTEM.

Materials removed shall become the property of the Contractor and shall be disposed of by the Contractor off-site in a lawful manner satisfactory to the Engineer. It is possible that the fabric pads under the existing deck beams contain asbestos materials. For this reason, it shall be assumed that all existing bearing pads contain asbestos materials and that removal, disposal and

Added 5/16/2006

payment for this item shall be in accordance with the Special Provisions for ASBESTOS BEARING PAD REMOVAL.

Removal, disposal and payment of the existing membrane waterproofing membrane shall be in accordance with the Special Provision for MEMBRANE WATERPROOFING (SPECIAL). Removal and payment of existing fill on tops of structures shall be in accordance with the Standard Specifications for EARTH EXCAVATION.

Method of Measurement. Removal of existing superstructures will be measured for payment in units of each at the location designated on the plans. Blast cleaning of the bearing seats, removal and disposal of tie-rods, existing dowels, grout, bituminous materials, concrete fillets and other components associated with the removal of the deck beams will not be measured for payment but are included in the cost of REMOVAL OF EXISTING SUPERSTRUCTURES, at the location indicated.

Basis of Payment. The work under this item shall be paid for at the contract unit price each for REMOVAL OF EXISTING SUPERSTRUCTURES, I-94 TUNNEL and REMOVAL OF EXISTING SUPERSTRUCTURES, CTA TUNNEL.

Price shall be payment in full for all materials, labor, tools, equipment and incidentals for this work.

(Teng & Assoc., Inc. 05/06)

Added 5/16/2006

FIELD MEASUREMENTS

Description: This work shall consist of field measuring the existing structural elements that will support the new Precast Prestressed Concrete Deck Beams and Portal Beams crossing over I-94 and the CTA railroad tracks as indicated on the Plans. This work shall include all appurtenant work as required to correctly detail and fabricate the new Precast Prestressed Concrete Deck Beams and Portal Beams for Structure Number 016-0073.

All pertinent dimensions shall be field verified prior to final preparation and submittal of shop drawings. The Engineer shall be provided with copies of field notes to facilitate the checking of shop drawings, and original field notes shall become the property of the Department at the end of the contract. The Contractor shall be responsible for correcting the improper fit of new Precast Prestressed Concrete Deck Beams and Portal Beams that is attributable to inadequate field measurements.

The following is a list of the major elements³ requiring field measurements. However, the Contractor shall obtain all measurements required to accurately detail and fabricate materials. Spacing, orientation and limits of existing substructure units to be incorporated into the support of new Precast Prestressed Concrete Deck Beams and Portal Beams.

Any requests for a temporarily partial closure of NB I-57 or SB I-94 to facilitate field measurements shall be submitted to the Engineer for review and/or approval prior to the beginning of the work. Partial closures for interstate traffic will only be permitted in strict compliance with the Engineer's requirements. Traffic control for such closures, including all signing, flaggers and construction zone safety requirements, shall satisfy Department requirements and shall be the Contractor's responsibility.

Any requests for access to the CTA property to facilitate field measurements must be in accordance with the Special Provision for CTA COORDINATION.

Basis of Payment: This work shall be paid for at the contract lump sum price for FIELD MEASUREMENTS, which price shall be payment in full for measuring existing structural elements for both the I-94 and the CTA tunnels, including all appurtenant work and necessary equipment including, but not limited to survey tools, lift trucks or platforms, flatbeds, flaggers, barriers and other traffic control devices. No separate payment shall be made for Traffic Control which is considered included in the cost of FIELD MEASUREMENTS.

(Teng & Assoc., Inc. 05/06)

Added 5/16/2006

LIGHTWEIGHT CELLULAR CONCRETE FILL

Description

This work consists of providing lightweight cellular concrete fill consisting of light weight, cellular concrete at the location shown in the plans in accordance with the details in the plans and these special provisions.

Quality Assurance

The subcontractor that does this work must provide documentation that he/she has satisfactorily completed at least five other installations of cellular concrete of no less than 2000 cubic meters (2600 cubic yards) each.

The specialized batching, mixing and placing equipment shall be automated. The batch plant scales shall be inspected and calibrated by a reputable scale servicing company. Bulk cement shall be weighed on a scale which shall operate within a tolerance of 1-1/2 percent of the weight of the cement per batch.

Submittals

Within 15 calendar days after execution of the contract the Contractor shall submit the following:

Manufacturer's specifications, catalog cuts, and other engineering data needed to demonstrate compliance with specified requirements. These shall include test reports by test laboratories.

Written approval of the subcontractor and equipment by the manufacturer of the lightweight cellular concrete fill.

Materials

The materials shall meet the following requirements:

Cement: The Portland cement shall comply with Article 1001.01 - 1001.06 of the Standard Specifications. Pozzolans and other cementitious materials may only be used when specifically approved by the manufacturer of the Lightweight cellular concrete fill and the Engineer.

Water: Water shall be potable and shall meet the requirements of Section 1002 of the Standard Specifications.

Concrete Admixtures: Concrete admixtures may be used only when approved by the manufacturer of the lightweight cellular concrete fill and the Engineer. The concrete admixtures shall meet the requirements of Article 1021.01 - 1021.04 of the Standard Specifications.

Added 5/16/2006

Lightweight cellular concrete fill: The lightweight cellular concrete fill shall have the following properties:

	<u>Class II</u>	<u>Class IV</u>
Cast Density ASTM C138	384-480 kg/m ³ (24-30pcf)	577-673 kg/m ³ (36-42 pcf)
Minimum Compressive Strength @28 days ASTM C495-Modified	276 kpa (40 psi)	827 kpa (120 psi)
Freeze-Thaw Resistance (min. cycles @ relative E=70%)per ASTM C666 - Modified	n/a	300 cycles
Coefficient of Permeability (cm/sec) per ASTM D2434 @ 17 kpa (2.5 psi)	1.3 x10 ⁻³	4.4x10 ⁻⁶
@ 124 kpa (18 psi)	1.2x10 ⁻⁴	3.1 x10 ⁻⁷
Water Absorption long term immersion as % of cast density (120) days per ASTM C796-Modified	20% max.	14% max.

Prior to installation of the lightweight cellular concrete fill the ground surface shall be cleared of debris, sharp objects and trees. Tree stumps shall be either removed or cut to the level of the ground surface. All wheel tracks or ruts in excess of 76 millimeters (3 inches) in depth shall be graded smooth or otherwise filled with soil to provide a reasonable smooth surface.

If required in the plans, a geotechnical fabric for ground stabilization shall be placed in accordance with section 210 of the standard specifications.

If a geomembrane liner is required in the plans this work shall be done in accordance with the special provision for "Geomembrane Impermeable Liner".

Installation

The lightweight cellular concrete fill shall be placed in accordance with the installation procedures provided by the manufacturer of the lightweight cellular concrete fill. Each lift of the Type II lightweight cellular concrete fill shall be placed to a maximum depth of 0.6 meter (2 feet) and the Type IV lightweight cellular concrete fill shall be placed to a maximum depth of 0.6 meter (2 feet).

Added 5/16/2006

There shall be no standing water in the area to be filled. If necessary, dewatering shall be continuous during the time the lightweight cellular concrete fill is constructed.

Lightweight cellular concrete fill shall not be placed during periods of precipitation unless placed in an enclosed, covered area.

If any items are to be encased in the fill, the items shall be set to the final location both horizontally and vertically prior to installation of the lightweight cellular concrete fill.

Mixing of the lightweight cellular concrete fill and placing shall be done as follows:

Only automated proportioning, mixing and placing equipment approved by the manufacturer of the lightweight cellular concrete fill shall be used. After mixing the materials shall be promptly placed in the final location.

The plant shall be equipped with an automatic batch counter and automatic timer to account for the foam in the mixer.

The lightweight cellular concrete fill shall be placed in lifts as recommended by the manufacturer. The material shall be placed to prevent segregation. Intermediate lifts may be placed horizontal. Only the top lift shall be sloped to grade.

The final surface elevation of the lightweight cellular concrete fill shall be within 30±mm (0.1±foot) of the plan elevation. The final surface of the lightweight cellular concrete fill shall be primed with an asphalt primer.

Temperature Requirements. The air temperature shall not be less than 1.7° C (35° F) at the time of placement. The temperature of the lightweight cellular concrete fill mixture at the point of discharge shall not be below 7.2° C (45° F) nor greater than 35° C (95° F).

Testing

During placement of the initial batches, the density shall be checked and adjustments made to obtain the specified cast density at the point of placement. Density of the mix shall only be adjusted by increasing or decreasing the foam.

Four strength test specimens shall be obtained for each 230 cubic meter (300 cubic yards) of lightweight cellular concrete fill placed or for each four hours of placing.

The specimens shall be tested in accordance with ASTM C495 except:

The test specimens shall be 152mm x 305mm (6" x 12") cylinders. The specimens shall be covered immediately to prevent damage and loss of moisture.

Added 5/16/2006

The specimens shall be moist cured for 7 days prior to a 28-day compressive strength test. Do not oven dry test specimens.

Specimens may be tested at any age to monitor the compressive strength. At least 2 specimens from each series should be tested at 28 days. The manufacturer may require special handling and testing techniques of the lightweight cellular concrete fill.

Method of Measurement

Contract quantities: When the project is constructed essentially to the lines, grades or dimensions shown on the plans and the Contractor and the Engineer have agreed in writing the plan quantities are accurate, no further measurement will be required and payment will be made for the quantities shown in the contract for the various items involved except that if errors are discovered after work has been started, appropriate adjustments will be made.

When the plans have been altered or when disagreement exists between the Contractor and the Engineer as to the accuracy of the plan quantities, either party shall, before any work is started which would affect the measurement, have the right to request in writing and thereby cause the quantities involved to be measured as hereinafter specified.

Measured Quantities: Lightweight cellular concrete fill will be measured in its final position and the volume in cubic meters (cubic yards) computed by method of average end areas. The dimensions used in calculating the average end areas shall not exceed the neat lines shown in the plans unless ordered in writing by the Engineer.

Basis of Payment

This work will be paid for at the contract unit price per cubic meter (cubic yards) for LIGHTWEIGHT CELLULAR CONCRETE FILL of the class specified.

Geotechnical fabric and geomembrane, if specified, shall be paid for separately.

Added 5/16/2006