



**Illinois Department of Transportation**

**Local Public Agency  
Formal Contract**

PROPOSAL SUBMITTED BY		
ORANGE CRUSH, LLC		
Contractor's Name		
321 CENTER STREET		
Street	P.O. Box	
HILLSIDE	IL	60162
City	State	Zip Code

STATE OF ILLINOIS

COUNTY DuPage

Village of Villa Park

(Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE North Princeton Avenue

SECTION NO. N/A

TYPES OF FUNDS Local

- SPECIFICATIONS (required)       PLANS (required)       CONTRACT BOND (when required)

**For Municipal Projects**  
Submitted/Approved/Passed

Mayor  President of Board of Trustees  Municipal Official

\_\_\_\_\_

Date

**Department of Transportation**

Concurrence in approval of award

\_\_\_\_\_

Regional Engineer

\_\_\_\_\_

Date

**For County and Road District Projects**  
Submitted/Approved

\_\_\_\_\_

Highway Commissioner

\_\_\_\_\_

Date

Submitted/Approved

\_\_\_\_\_

County Engineer/Superintendent of Highways

\_\_\_\_\_

Date



County DuPage  
 Local Public Agency Villa Park  
 Section Number N/A  
 Route N Princeton Avenue

1. THIS AGREEMENT, made and concluded the 6TH day of JUNE, 2016,  
Month and Year  
 between the VILLAGE of VILLA PARK  
 acting by and through its BOARD OF TRUSTEES known as the party of the first part, and  
ORANGE CRUSH, LLC his/their executors, administrators, successors or assigns,  
 known as the party of the second part.

2. Witnesseth: That for and in consideration of the payments and agreements mentioned in the Proposal hereto attached, to be made and performed by the party of the first part, and according to the terms expressed in the Bond referring to these presents, the party of the second part agrees with said party of the first part at his/their own proper cost and expense to do all the work, furnish all materials and all labor necessary to complete the work in accordance with the plans and specifications hereinafter described, and in full compliance with all of the terms of this agreement and the requirements of the Engineer under it.

3. And it is also understood and agreed that the LPA Formal Contract Proposal, Special Provisions, Affidavit of Illinois Business Office, Apprenticeship or Training Program Certification, and Contract Bond hereto attached, and the Plans for Section PRINCETON AVE., in THE VILLAGE OF VILLA PARK, approved by the Illinois Department of Transportation on \_\_\_\_\_, are essential documents of this contract and are a part hereof.  
Date

4. IN WITNESS WHEREOF, The said parties have executed these presents on the date above mentioned.

Attest:  
[Signature] Clerk  
 (Seal)



The VILLAGE of VILLA PARK  
 By [Signature] Party of the First Part  
 (If a Corporation)

Corporate Name ORANGE CRUSH, LLC  
 By [Signature] Vice President James Behrends Party of the Second Part  
 (If a Co-Partnership)

Attest:  
[Signature]  
 Secretary Paul R. Ventch

Partners doing Business under the firm name of

Party of the Second Part

(If an individual)

Party of the Second Part





Issued in Three Original Counterparts

Route N. Princeton Avenue  
County DuPage  
Local Agency Villa Park  
Section N/A  
Bond No. 09220807

We, Orange Crush, L.L.C

321 Center Street, Hillside, IL 60162

a/an)  Individual  Co-partnership  Corporation organized under the laws of the State of Illinois,

as PRINCIPAL, and Fidelity and Deposit Company of Maryland

300 South Riverside Plaza, Ste. 2100, Chicago, IL 60606 as SURETY,

are held and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of Nine Hundred Ninety Eight Thousand Eight Hundred Ninety Eight Dollars and 00/100

Dollars ( \$998,898.00 ), lawful money of the United States, well and truly to be paid unto said LA, for the payment of which we bind ourselves, our heirs, executors, administrators, successors, jointly to pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said Principal has entered into a written contract with the LA acting through its awarding authority for the construction of work on the above section, which contract is hereby referred to and made a part hereof, as if written herein at length, and whereby the said Principal has promised and agreed to perform said work in accordance with the terms of said contract, and has promised to pay all sums of money due for any labor, materials, apparatus, fixtures or machinery furnished to such Principal for the purpose of performing such work and has further agreed to pay all direct and indirect damages to any person, firm, company or corporation suffered or sustained on account of the performance of such work during the time thereof and until such work is completed and accepted; and has further agreed that this bond shall inure to the benefit of any person, firm, company or corporation to whom any money may be due from the Principal, subcontractor or otherwise for any such labor, materials, apparatus, fixtures or machinery so furnished and that suit may be maintained on such bond by any such person, firm, company or corporation for the recovery of any such money.

NOW THEREFORE, if the said Principal shall well and truly perform said work in accordance with the terms of said contract, and shall pay all sums of money due or to become due for any labor, materials, apparatus, fixtures or machinery furnished to him for the purpose of constructing such work, and shall commence and complete the work within the time prescribed in said contract, and shall pay and discharge all damages, direct and indirect, that may be suffered or sustained on account of such work during the time of the performance thereof and until the said work shall have been accepted, and shall hold the LA and its awarding authority harmless on account of any such damages and shall in all respects fully and faithfully comply with all the provisions, conditions and requirements of said contract, then this obligation to be void; otherwise to remain in full force and effect.



IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 25th day of May A.D. 2016

**PRINCIPAL**

Orange Crush, L.L.C  
(Company Name)

\_\_\_\_\_  
(Company Name)

By: James Behrends (Signature & Title) Vice President

By: \_\_\_\_\_  
(Signature & Title)

Attest: Paul R. Veatch (Signature & Title) Corporate Secretary

Attest: \_\_\_\_\_  
(Signature & Title)

(If PRINCIPAL is a joint venture of two or more contractors, the company names and authorized signature of each contractor must be affixed.)

STATE OF Illinois  
COUNTY OF DuPage

I, Tariese M. Pisciotto, a Notary Public in and for said county, do hereby certify that

James Behrends

Paul R. Veatch

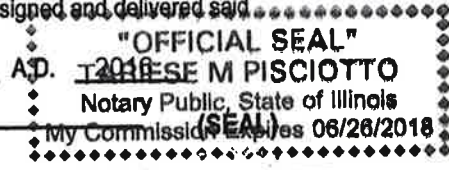
(Insert names of individuals signing on behalf or PRINCIPAL)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 25th day of May A.D. 2016

My commission expires June 26, 2018

Tariese M. Pisciotto  
Notary Public



**SURETY**

Fidelity and Deposit Company of Maryland  
(Name of Surety)

By: Bonnie Kruse (Signature of Attorney-in-Charge)



STATE OF Illinois  
COUNTY OF DuPage

I, Tariese M. Pisciotto, a Notary Public in and for said county, do hereby certify that

Bonnie Kruse

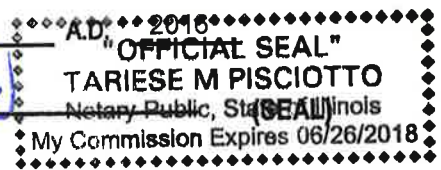
(Insert names of individuals signing on behalf or SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instrument as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 25th day of May A.D. 2016

My commission expires June 26, 2018

Tariese M. Pisciotto  
Notary Public



Approved this 6TH day of JUNE, A.D. 2016

Attest: Sharon Prymak  
Village



Orville  
(Awarding Authority)  
Village President  
(Chairman/Mayor/President)



Bond Number 09220807

Obligee: Village of Villa Park

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by **Michael P. Bond, Vice President**, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint **Bonnie Kruse**, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: **any and all bonds and undertakings**, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 22<sup>nd</sup> day of July, A.D. 2015.

ATTEST:  
ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND



By: *Michael P. Bond*  
Vice President



By: *Eric D. Barnes*  
Secretary



State of Maryland  
County of Baltimore

On this 22nd day of July, A.D. 2015, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Michael P. Bond, Vice President and Eric D. Barnes, Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, deposeth and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

*Constance A. Dunn*

Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2019





**EXTRACT FROM BY-LAWS OF THE COMPANIES**

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

**CERTIFICATE**

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 25th day of May, 2016.



*Thomas O. McClellan*

Thomas O. McClellan, Vice President



**ADVERTISEMENT FOR BIDS  
VILLAGE OF VILLA PARK  
FRIDAY, APRIL 22, 2016**

**PROJECT: 2016 NORTH PRINCETON AVENUE IMPROVEMENT PROJECT**

This project consists of the reconstruction of Princeton Avenue from Terrace Street to Ridge Road and the replacement of the existing water main from Plymouth Street to Ridge Road in the Village of Villa Park for an approximate length of 2,200 feet. The scope of work includes pavement removal, earth excavation, aggregate subgrade improvements, structure adjustments, drainage improvements, water main replacement, hot-mix asphalt paving, combination concrete curb and gutter installation, driveway restoration, parkway restoration, sidewalk removal and replacement, and other related and incidental work efforts.

**BID DEADLINE: TUESDAY, MAY 10, 2016 , 10:00 A.M. LOCAL TIME**

The Village reserves the right to extend the Bid Deadline from this date and time to accept Bids submitted after the Bid Deadline, as the Village, in its sole discretion, determines is in the best interest of the Village.

**NOTICE:** Separate, sealed proposals for the **2016 NORTH PRINCETON AVENUE IMPROVEMENT PROJECT** will be received by the Village of Villa Park, Illinois, at the reception desk of the Public Works Department, 11 West Home Avenue, Villa Park, Illinois, 60181, until the Bid Deadline. Immediately thereafter, the proposals will be publicly opened and read aloud at the offices of the Public Works Department. Notwithstanding the foregoing, the Village reserves the right to defer, postpone, delay, or reschedule the Bid Opening for such time and to such date as the Village, in its sole discretion, determines is in the best interest of the Village.

Proposals shall be submitted in accordance with the Bidding Documents prepared by Baxter & Woodman, Inc., 8678 Ridgefield Road, Crystal Lake, Illinois 60012.

**BIDDER QUALIFICATIONS:** Bidders, in submitting a Bid, shall comply with all applicable Federal, State and Local laws and requirements; shall provide documentation of that compliance in accordance with the requirements of the Contract Documents or as requested by the Village; and, in submitting a Bid, Bidders affirm that they are qualified under all applicable laws and requirements to do so, and agree to be bound by the determination of the Village as to Bidder's compliance and qualifications.

**BID SECURITY:** Bid security in the amount of not less than five percent (5%) of the Bid shall accompany each Bid in accordance with the Bidding Documents.

**CONTRACT SECURITY:** The Bidder to whom a Contract is awarded shall be required to furnish both a Performance Bond and a Payment Bond acceptable to the Village for one-hundred percent (100%) of the Contract Price, in accordance with the requirements of the Contract Documents.

**RIGHTS RESERVED:** The Village will select the lowest, most responsible bidder. The Village reserves the right to reject any and all Bids, to waive any informalities or technicalities in bidding, and to accept the Bid which best serves the interests of the Village. The Village shall, in its sole discretion, determine what does or does not constitute an informality or technicality, and, in submitting a Bid, Bidder agrees to be bound by that determination.


The Village may make such investigations as it deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Village all such information and data for this purpose as the Village may request. The Village reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Village that such Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein.

**WAGE RATES:** All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the PROJECT shall apply to the contract throughout.

**CONTRACT DOCUMENTS:** The Bidding Documents are on file for inspection at the office of the Village of Villa Park Public Works Department, 11 West Home Avenue, Villa Park, Illinois, 60181, and may also be obtained from the Village of Villa Park Public Works Department at the address listed above for a non-refundable fee of twenty dollars (\$20.00).

**PUBLISHED BY AUTHORITY OF THE VILLAGE OF VILLA PARK, DUPAGE COUNTY, ILLINOIS.**

BY:

  
Vydas Juskejs, P.E.

Director of Public Works



**Illinois Department of Transportation**

**Local Public Agency  
Formal Contract  
Proposal**

PROPOSAL SUBMITTED BY		
Orange Cwsh, LLC		
Contractor's Name		
321 Center St.		
Street	P.O. Box	
Htside	IL	60162
City	State	Zip Code

STATE OF ILLINOIS

COUNTY OF DuPage  
Village of Villa Park  
 (Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE NO. N Princeton Avenue  
 SECTION NO. N/A  
 TYPES OF FUNDS Local

SPECIFICATIONS (required)

PLANS (required)

**For Municipal Projects**  
 Submitted/Approved/Passed

Mayor  President of Board of Trustees  Municipal Official

Date

**Department of Transportation**  
 Released for bid based on limited review

Regional Engineer

Date

**For County and Road District Projects**  
 Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

**Note:** All proposal documents, including Proposal Guaranty Checks or Proposal Bid Bonds, should be stapled together to prevent loss when bids are processed.



**NOTICE TO BIDDERS**

County DuPage  
 Local Public Agency Village of Villa Park  
 Section Number N/A  
 Route North Princeton Avenue

Sealed proposals for the improvement described below will be received at the office of The Public Works Director of  
Villa Park, 11 West Home Avenue, Villa Park, IL 60181 until 10:00 am on May 10, 2016  
 Address Time Date

Sealed proposals will be opened and read publicly at the office of The Public Works Director Of Villa Park  
11 West Home Avenue, Villa Park, IL 60181 at 10:00 am on May 10, 2016  
 Address Time Date

**DESCRIPTION OF WORK**

Name North Princeton Avenue Improvement Project Length: 2,182 feet ( 0.41 miles)  
 Location Princeton Avenue, between Terrace Street and Ridge Road  
 Proposed Improvement Pavement, sidewalk, and curb and gutter removal and replacement, installation of 8" water main and appurtenances, parkway restoration, and other miscellaneous items of work.

1. Plans and proposal forms will be available in the office of Villa Park Public Works, 11 West Home Avenue, Villa Park, IL  
 for a fee of \$20.00 (non-refundable). For information on bidding proposals contact the Village of Villa Park at 630-834-8505.  
 Address

2.  Prequalification

If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.

3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.

4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:

- a. BLR 12200: Local Public Agency Formal Contract Proposal
- b. BLR 12200a Schedule of Prices
- c. BLR 12230: Proposal Bid Bond (if applicable)
- d. BLR 12325: Apprenticeship or Training Program Certification (**do not use for federally funded projects**)
- e. BLR 12326: Affidavit of Illinois Business Office

5. The quantities appearing in the bid schedule are approximate and are prepared for the comparison of bids. Payment to the Contractor will be made only for the actual quantities of work performed and accepted or materials furnished according to the contract. The scheduled quantities of work to be done and materials to be furnished may be increased, decreased or omitted as hereinafter provided.

6. Submission of a bid shall be conclusive assurance and warranty the bidder has examined the plans and understands all requirements for the performance of work. The bidder will be responsible for all errors in the proposal resulting from failure or neglect to conduct an in depth examination. The Awarding Authority will, in no case be responsible for any costs, expenses, losses or changes in anticipated profits resulting from such failure or neglect of the bidder.

7. The bidder shall take no advantage of any error or omission in the proposal and advertised contract.

8. If a special envelope is supplied by the Awarding Authority, each proposal should be submitted in that envelope furnished by the Awarding Agency and the blank spaces on the envelope shall be filled in correctly to clearly indicate its contents. When an envelope other than the special one furnished by the Awarding Authority is used, it shall be marked to clearly indicate its contents. When sent by mail, the sealed proposal shall be addressed to the Awarding Authority at the address and in care of the official in whose office the bids are to be received. All proposals shall be filed prior to the time and at the place specified in the Notice to Bidders. Proposals received after the time specified will be returned to the bidder unopened.

9. Permission will be given to a bidder to withdraw a proposal if the bidder makes the request in writing or in person before the time for opening proposals.









# Illinois Department of Transportation

## SCHEDULE OF PRICES

County DuPage  
 Local Public Agency Village of Villa Park  
 Section N/A  
 Route North Princeton Avenue

### Schedule for Multiple Bids

Combination Letter	Sections Included in Combinations	Total

### Schedule for Single Bid

(For complete information covering these items, see plans and specifications)

Bidder's Proposal for making Entire Improvements 998,898.00

Item No.	Items	Unit	Quantity	Unit Price	Total
1	TREE TRUNK PROTECTION	EACH	50	80.00	4000.00
2	TREE ROOT PRUNING	EACH	50	50.00	2500.00
3	EARTH EXCAVATION	CU YD	1,653	25.00	41325.00
4	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	1,238	25.00	30950.00
5	TRENCH BACKFILL	CU YD	1,291	5.00	6455.00
6	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	6,841	1.25	8551.25
7	PARKWAY RESTORATION	SQ YD	3,322	14.00	46508.00
8	PERIMETER EROSION BARRIER	FOOT	50	2.00	100.00
9	INLET FILTERS	EACH	11	200.00	2200.00
10	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	721	30.00	21630.00
11	AGGREGATE BASE COURSE, TYPE B 4"	SQ YD	1,580	5.50	8690.00
12	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	7,746	7.00	54222.00
13	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1,574	60.00	94440.00
14	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	777	68.00	52836.00
15	BITUMINOUS MATERIALS (TACK COAT)	POUND	16,940	.01	169.40
16	WELDED WIRE REINFORCEMENT	SQ YD	135	6.00	810.00



Bidder's Proposal for making Entire Improvements

998,398.00

Item No.	Items	Unit	Quantity	Unit Price	Total
17	PROTECTIVE COAT	SQ YD	1,580	1.00	1580.00
18	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	230	60.00	13800.00
19	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	3,497	6.00	20982.00
20	DETECTABLE WARNINGS	SQ FT	150	25.00	3750.00
21	PAVEMENT REMOVAL	SQ YD	7,404	8.00	59232.00
22	DRIVEWAY PAVEMENT REMOVAL	SQ YD	971	12.00	11652.00
23	SIDEWALK REMOVAL	SQ FT	3,508	1.50	5262.00
24	CLASS B PATCHES, 6 INCH	SQ YD	135	85.00	11475.00
25	DOWEL BARS 1 1/2"	EACH	110	16.50	1815.00
26	SAW CUTS	FOOT	288	5.00	1440.00
27	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1, 12"	FOOT	29	75.00	2175.00
28	FIRE HYDRANTS TO BE REMOVED	EACH	2	250.00	500.00
29	CATCH BASINS, TYPE A, 4'-DIAMETER, TYPE 11 FRAME AND GRATE	EACH	1	2250.00	2250.00
30	CATCH BASINS, TYPE C, TYPE 11 FRAME AND GRATE	EACH	1	1250.00	1250.00
31	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	5250.00	5250.00
32	INLETS, TYPE A, TYPE 11 FRAME AND GRATE	EACH	1	1000.00	1000.00
33	VALVE VAULTS, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	1300.00	1300.00
34	FRAMES AND GRATES, TYPE 11	EACH	1	375.00	375.00
35	FRAMES AND GRATES (SPECIAL)	EACH	1	475.00	475.00
36	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	1	325.00	325.00
37	DUCTILE IRON WATER MAIN, OPEN CUT, 6"	FOOT	35	100.00	3500.00
38	DUCTILE IRON WATER MAIN, OPEN CUT, 8"	FOOT	772	125.00	96500.00
39	DUCTILE IRON WATER MAIN, OPEN CUT, RESTRAINED JOINT TYPE, 8"	FOOT	148	125.00	18500.00
40	DUCTILE IRON WATER MAIN, OPEN CUT, RESTRAINED JOINT TYPE, 10"	FOOT	66	140.00	9240.00
41	CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE), 4"	EACH	1	3000.00	3000.00

1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9
10	10	10	10
11	11	11	11
12	12	12	12
13	13	13	13
14	14	14	14
15	15	15	15
16	16	16	16
17	17	17	17
18	18	18	18
19	19	19	19
20	20	20	20
21	21	21	21
22	22	22	22
23	23	23	23
24	24	24	24
25	25	25	25
26	26	26	26
27	27	27	27
28	28	28	28
29	29	29	29
30	30	30	30
31	31	31	31
32	32	32	32
33	33	33	33
34	34	34	34
35	35	35	35
36	36	36	36
37	37	37	37
38	38	38	38
39	39	39	39
40	40	40	40
41	41	41	41
42	42	42	42
43	43	43	43
44	44	44	44
45	45	45	45
46	46	46	46
47	47	47	47
48	48	48	48
49	49	49	49
50	50	50	50
51	51	51	51
52	52	52	52
53	53	53	53
54	54	54	54
55	55	55	55
56	56	56	56
57	57	57	57
58	58	58	58
59	59	59	59
60	60	60	60
61	61	61	61
62	62	62	62
63	63	63	63
64	64	64	64
65	65	65	65
66	66	66	66
67	67	67	67
68	68	68	68
69	69	69	69
70	70	70	70
71	71	71	71
72	72	72	72
73	73	73	73
74	74	74	74
75	75	75	75
76	76	76	76
77	77	77	77
78	78	78	78
79	79	79	79
80	80	80	80
81	81	81	81
82	82	82	82
83	83	83	83
84	84	84	84
85	85	85	85
86	86	86	86
87	87	87	87
88	88	88	88
89	89	89	89
90	90	90	90
91	91	91	91
92	92	92	92
93	93	93	93
94	94	94	94
95	95	95	95
96	96	96	96
97	97	97	97
98	98	98	98
99	99	99	99
100	100	100	100

Bidder's Proposal for making Entire Improvements

998,898.00

Item No.	Items	Unit	Quantity	Unit Price	Total
42	CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE), 8"	EACH	1	3250.00	3250.00
43	CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE), 10"	EACH	1	3750.00	3750.00
44	WATER VALVE, 8"	EACH	1	1800.00	1800.00
45	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	4	7000.00	28000.00
46	WATER SERVICE REPLACEMENT, 1" LONG	EACH	16	1900.00	30400.00
47	WATER SERVICE REPLACEMENT, 1" SHORT	EACH	17	1400.00	23800.00
48	WATER MAIN ABANDONMENT	EACH	2	1400.00	2800.00
49	VALVE BOXES TO BE REMOVED	EACH	1	225.00	225.00
50	SANITARY SEWER SERVICE CONNECTION	EACH	10	240.00	2400.00
51	SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241, 6"	FOOT	214	24.00	5136.00
52	SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241, 10"	FOOT	50	75.00	3750.00
53	SANITARY SEWER MANHOLES, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	2	9000.00	18000.00
54	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	3,349	22.00	73678.00
55	NON-SPECIAL WASTE DISPOSAL	CU YD	50	95.00	4750.00
56	SOIL DISPOSAL ANALYSIS	EACH	1	2000.00	2000.00
57	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	278	2.00	556.00
58	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	120	5.00	600.00
59	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	77	10.00	770.00
60	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4"	SQ YD	905	50.00	45250.00
61	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	67	40.00	2680.00
62	CONSTRUCTION LAYOUT	L SUM	1	15000.00	15000.00







**CONTRACTOR CERTIFICATIONS**

County	DuPage
Local Public Agency	Village of Villa Park
Section Number	N/A
Route	North Princeton Avenue

The certifications hereinafter made by the bidder are each a material representation of fact upon which reliance is placed should the Department enter into the contract with the bidder.

1. **Debt Delinquency.** The bidder or contractor or subcontractor, respectively, certifies that it is not delinquent in the payment of any tax administered by the Department of Revenue unless the individual or other entity is contesting, in accordance with the procedures established by the appropriate revenue Act, its liability for the tax or the amount of tax. Making a false statement voids the contract and allows the Department to recover all amounts paid to the individual or entity under the contract in a civil action.

2. **Bld-Rigging or Bld Rotating.** The bidder or contractor or subcontractor, respectively, certifies that it is not barred from contracting with the Department by reason of a violation of either 720 ILCS 5/33E-3 or 720 ILCS 5/33E-4.

A violation of Section 33E-3 would be represented by a conviction of the crime of bid-rigging which, in addition to Class 3 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be barred for 5 years from the date of conviction from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

A violation of Section 33E-4 would be represented by a conviction of the crime of bid-rotating which, in addition to Class 2 felony sentencing, provides that any person convicted of this offense or any similar offense of any state or the United States which contains the same elements as this offense shall be permanently barred from contracting with any unit of State or local government. No corporation shall be barred from contracting with any unit of State or local government as a result of a conviction under this Section of any employee or agent of such corporation if the employee so convicted is no longer employed by the corporation and: (1) it has been finally adjudicated not guilty or (2) if it demonstrates to the governmental entity with which it seeks to contract and that entity finds that the commission of the offense was neither authorized, requested, commanded, nor performed by a director, officer or a high managerial agent in behalf of the corporation.

3. **Bribery.** The bidder or contractor or subcontractor, respectively, certifies that it has not been convicted of bribery or attempting to bribe an officer or employee of the State of Illinois or any unit of local government, nor has the firm made an admission of guilt of such conduct which is a matter of record, nor has an official, agent, or employee of the firm committed bribery or attempted bribery on behalf of the firm and pursuant to the direction or authorization of a responsible official of the firm.

4. **Interim Suspension or Suspension.** The bidder or contractor or subcontractor, respectively, certifies that it is not currently under a suspension as defined in Subpart I of Title 44 Subtitle A Chapter III Part 6 of the Illinois Administrative Code. Furthermore, if suspended prior to completion of this work, the contract or contracts executed for the completion of this work may be cancelled.



**SIGNATURES**

County DuPage  
 Local Public Agency Village of Villa Park  
 Section Number N/A  
 Route North Princeton Avenue

(If an individual)

Signature of Bidder \_\_\_\_\_  
 Business Address \_\_\_\_\_  
 \_\_\_\_\_

(If a partnership)

Firm Name \_\_\_\_\_  
 Signed By \_\_\_\_\_  
 Business Address \_\_\_\_\_  
 \_\_\_\_\_

Inset Names and Addressed of All Partners



(If a corporation)

Corporate Name Orange Crush, LLC  
 Signed By *James Behrens*  
James Behrens Vice-President  
 Business Address 321 Center St.  
HAlsider, IL 60162

Insert Names of Officers

President Samuel S. Palumbo  
 Secretary Paul R. Veetch  
 Treasurer Samuel S. Palumbo Jr.

Attest:

*Paul R. Veetch*  
 Secretary  
Paul R. Veetch





Bureau of Construction  
2300 South Dirksen Parkway/Room 322  
Springfield, Illinois 62764

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be face Project issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

Part I. Work Under Contract

5069

5072

5102

5070 / 5081

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show NONE.

	1	2	3	4	Awards Pending	
County and Section Number	GLOBAL 1 2015 PAVT REPAIR	PEARL ST RELOCATION	DUNNE PARK REC CENTER	LPC WIDE SPAN CRANWAY	CIP CONTRACT B	
Contract With	UNION PACIFIC RAILROAD	VILLAGE OF ROSEMONT	VILLAGE OF ROSEMONT	BNSF RAILROAD	CITY OF DES PLAINES	
Estimated Completion Date	09-30-2016	6-30-2016	6-30-2016	11-30-2016	10-30-16	
Total Contract Price	2,738,721.50	3,293,566.50	189,916.50	37,007,928.00	4,872,729.50	Accumulated Totals
Uncompleted Dollar Value If Firm Is the Prime Contractor	1,737,297.50	326,658.40	165,860.00	26,900,858.59	4,872,729.50	34,003,403.99
Uncompleted Dollar Value If Firm Is the Subcontractor						0.00
			<b>Total Value of All Work</b>	<b>Total Value of All Work</b>		<b>34,003,403.99</b>

Part II. Awards Pending and Uncompleted Work to be done with your own forces.

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show NONE.

	1	2	3	4		Accumulated Totals
Earthwork	574,770.00			2,334,884.50	751,216.00	3,660,872.50
Portland Cement Concrete Paving	836,840.00			6,101,055.00		6,936,895.00
FMA Plant Mix	39,000.00	105,295.00	82,285.00	448,010.00	656,207.50	1,330,797.50
HMA Paving & HMA Patching	116,000.00	0.00		37,662.42	48,200.00	200,862.42
Clean & Seal Cracks/Joints						0.00
Aggregate Bases & Surfaces	145,900.00		48,225.00	1,786,242.00	801,445.00	2,781,812.00
Highway, R.R. and Waterway Structures				672,343.00		672,343.00
Drainage					0.00	0.00
Electrical						0.00
Seal Coats						0.00
Concrete Construction		44,323.00		162,316.31	0.00	206,639.31
Landscaping					0.00	0.00
Fencing						0.00
Guardrail						0.00
Painting						0.00
Signing						0.00
Gravel Milling, Planning & Rotomilling		112,368.00	27,850.00	0.00	72,450.00	212,668.00
Demolition						0.00
Pavement Markings (Paint)		26,400.00				26,400.00
Other Const (List)		36,772.40				36,772.40
Traffic Control	26,787.50	2,500.00	7,500.00	27,000.00	158,000.00	221,787.50
Blank List						0.00
Totals	1,737,297.50	326,658.40	165,860.00	11,569,613.23	2,487,520.50	16,286,849.63

Disclosure of this information is REQUIRED to accomplish the statutory purpose as outlined in the "Illinois Procurement Code". Failure to comply will result in non-issuance of an "Authorization to Bid". This form has been approved by the State Forms Management Center.



Part III. Work Subcontracted to Others

5072

5102

5070 / 5081

For each contract described in Part I, list all the work you have subcontracted to others.

	1	2	3	4	Awards Pending
Subcontractor	NONE	NONE	NONE	STALWORTH	JOHN NERI CONST
Type of Work				STEEL PILING	DRAINAGE
Subcontract Price	0.00	0.00		2,184,660.00	1,621,526.00
Amount Uncompleted	0.00	0.00	0.00	63,768.00	1,621,526.00
Subcontractor				RAILWORKS	DIGIOIA BROS
Type of Work				RAIL ROAD	CONCRERE
Subcontract Price		0.00		8,245,638.85	534,094.00
Amount Uncompleted		0.00		6,308,811.35	534,094.00
Subcontractor				BUILDERS CONCRETE	PEREZ LANDSAPE
Type of Work				PCC FOUNDATION	LANDSCAPING
Subcontract Price		0.00		4,032,000.00	229,590.00
Amount Uncompleted		0.00		2,367,630.00	229,590.00
Subcontractor				RAY EDWARDS	
Type of Work				DRAINAGE	
Subcontract Price				1,127,328.80	
Amount Uncompleted				716,426.45	
Subcontractor				ALLIED LANDSCAPE	
Type of Work				LANDSCAPING	
Subcontract Price				216,136.00	
Amount Uncompleted				216,135.00	
Subcontractor				LYONS / PINNER	
Type of Work				ELECTRICAL	
Subcontract Price				6,023,881.80	
Amount Uncompleted				5,669,584.66	
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted	0.00	0.00	0.00	15,331,346.36	2,386,209.00

I, the undersigned, being duly sworn, do hereby declare this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and State work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates

1

Subscribed and sworn to before me

on the 29th day of April, 2016

*Rosalia Godinez*  
Notary Public

My commission expires: 04-21-17

Type or Print Name James Behrends, Vice-President  
Officer or Director

Signed *James Behrends*  
Company ORANGE CRUSH, LLC.

Address 321 Center Street

Hillside, Illinois 60161 (708) 544-9440



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100



**Illinois Department of Transportation**

Bureau of Construction  
2300 South Dirksen Parkway/Room 322  
Springfield, Illinois 62764

**CONTRACT**  
Affidavit of Availability

For the Letting of \_\_\_\_\_

(Letting date)

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

**Part I. Work Under Contract**

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show NONE.

	5	6	7	8	Awards Pending	
County and Section Number	2016 CIP CONTRACT A	2016 SSA ROADWAY IMP	2016 PATCHING & RESURFACING	2016 PARKING REHAB		
Contract With	CITY OF DES PLAINES	CLARENDON HILLS	VILLAGE OF WHEELING	HIGHLAND LAKES CONDO		
Estimated Completion Date	10-30-2016	09-30-2016	8-01-16	6-15-16		
Total Contract Price	3,471,986.50	2,222,000.00	500,004.00	583,590.00		Accumulated Totals
Uncompleted Dollar Value If Firm Is the Prime Contractor	3,471,986.50	2,222,000.00	500,004.00	583,590.00	0.00	40,780,984.49
Uncompleted Dollar Value if Firm is the Subcontractor						0.00
						40,780,984.49

**Part II. Awards Pending and Uncompleted Work to be done with your own forces.**

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show NONE.

						Accumulated Totals
Asphaltwork	692,590.00	287,613.35		182,160.00		4,823,235.86
Portland Cement Concrete Paving				38,320.00		6,975,215.00
HMA Plant Mix	396,272.00	388,615.59	398,498.00	217,125.00		2,731,308.09
HMA Paving & HMA Patching	33,460.00	297,467.00				531,789.42
Clean & Seal Cracks/Joints						0.00
Aggregate Bases & Surfaces	503,205.00	48,300.00	0.00	96,985.00		3,430,302.00
Highway, R.R. and Waterway Structures						672,343.00
Drainage						0.00
Electrical						0.00
Cover and Seal Coats						0.00
Concrete Construction						206,639.31
Landscaping						0.00
Fencing						0.00
Guardrail						0.00
Painting						0.00
Signing						0.00
Cold Milling, Planning & Rotomilling	21,825.00	52,104.00	97,588.25	49,000.00		433,185.25
Demolition						0.00
Pavement Markings (Paint)						25,400.00
Other Const (List)	23,852.00	49,241.81				109,866.21
Traffic Control	110,000.00	95,000.00	3,917.75			430,705.25
Punch List						0.00
Totals	1,781,204.00	1,218,341.75	500,004.00	583,590.00	0.00	20,369,989.38

Disclosure of this information is REQUIRED to accomplish the statutory purpose as outlined in the "Illinois Procurement Code". Failure to comply will result in non-issuance of an "Authorization To Bid." This form has been approved by the State Forms Management Center.

Faint vertical text on the right edge of the page, possibly a page number or document identifier.

**OWNER COPY**

**CONTRACT**

Part III. Work Subcontracted to Others

For each contract described in Part I, list all the work you have subcontracted to others.

	5	6	7	8	PENDING
Subcontractor	MAURO S&W	GALAXY SEWER	NONE	NONE	
Type of Work	DRAINAGE	DRAINAGE			
Subcontract Price	1,126,625.00	347,457.00			
Amount Uncompleted	1,126,625.00	347,457.00			0.00
Subcontractor	PEREZA LANDSCAPE	G & M CEMENT			
Type of Work	LANDSCAPING	CONCRETE			
Subcontract Price	188,100.00	449,229.25			
Amount Uncompleted	188,100.00	449,229.25			0.00
Subcontractor	MAINTENANCE CTS	FREDY'S LANDSCAPE			
Type of Work	THPL PAVT MK	LANDSCAPING			
Subcontract Price	8,100.00	206,972.00			
Amount Uncompleted	8,100.00	206,972.00			
Subcontractor	DIGIOIA BROS				
Type of Work	CONCRETE				
Subcontract Price	367,957.50				
Amount Uncompleted	367,957.50	0.00			
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted		0.00			
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted		0.00			
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted	1,690,782.50	1,003,658.25	0.00	0.00	0.00

I, being duly sworn, do hereby declare this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates

2

Subscribed and sworn to before me

is 29th day of April, 2016

*Rosalia Godinez*  
 Notary Public

My commission expires: 04-21-17

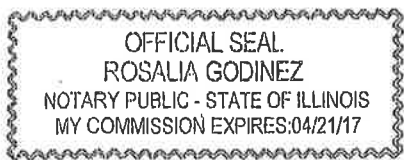
Type or Print Name James Behrends, Vice-President  
 Officer or Director

Signed *James Behrends*  
 Company ORANGE CRUSH, LLC.

Address 321 Center Street

Hillside, Illinois 60161 (708) 544-9440

2







**Illinois Department of Transportation**

Bureau of Construction  
2300 South Dirksen Parkway/Room 322  
Springfield, Illinois 62764

**CONTRACT**  
Affidavit of Availability

For the Letting of \_\_\_\_\_

(Letting date)

Instructions: Complete this form by either typing or using black ink. "Authorization to Bid" will not be issued unless both sides of this form are completed in detail. Use additional forms as needed to list all work.

**Part I. Work Under Contract**

List below all work you have under contract as either a prime contractor or a subcontractor. It is required to include all pending low bids not yet awarded or rejected. In a joint venture, list only that portion of the work which is the responsibility of your company. The uncompleted dollar value is to be based upon the most recent engineer's or owners estimate, and must include work subcontracted to others. If no work is contracted, show NONE.

	9	10	11	12	Awards Pending	
County and Section Number	EAGLE HTS SOUTH ST IMP	2016 NEIGHBOR STREETS	PEARL STREET STATION			
Contract With	CITY OF ELGIN	CITY OF ELGIN	VILLAGE OF ROSEMONT			
Estimated Completion Date	10-01-2016	10-01-2016	11-15-2016			
Total Contract Price	3,528,000.00	4,415,444.27	2,676,095.00			Accumulated Totals
Uncompleted Dollar Value If Firm Is the Prime Contractor	3,528,300.00	4,415,444.27	2,676,095.00	0.00	0.00	51,400,823.76
Uncompleted Dollar Value If Firm Is the Subcontractor						0.00
						51,400,823.76

**Part II. Awards Pending and Uncompleted Work to be done with your own forces.**

List below the uncompleted dollar value of work for each contract and awards pending to be completed with your own forces. All work subcontracted to others will be listed on the reverse of this form. In a joint venture, list only that portion of the work to be done by your company. If no work is contracted, show NONE.

					Accumulated Totals	
Asphaltwork	618,286.50		1,249,116.50		6,690,638.85	
Portland Cement Concrete Paving					6,975,216.00	
Hot Mix Plant Mix	709,755.00	2,471,408.35	600,334.50		6,512,805.94	
Hot Mix Paving & HMA Patching	108,088.50	169,810.00			809,687.92	
Clean & Seal Cracks/Joints					0.00	
Aggregate Bases & Surfaces	524,787.00	118,814.50	318,300.00		4,392,203.50	
Highway, R.R. and Waterway Structures					672,343.00	
Drainage					0.00	
Electrical					0.00	
Cover and Seal Coats					0.00	
Concrete Construction					206,639.31	
Landscaping					0.00	
Fencing					0.00	
Guardrail					0.00	
Painting					0.00	
Signaling					0.00	
Cold Milling, Planning & Rotomilling	25,875.00	490,598.92	36,482.00		986,141.17	
Demolition					0.00	
Pavement Markings (Paint)					25,400.00	
Other Const (List)					109,866.21	
Traffic Control		124,907.00	26,000.00		581,612.25	
Punch List					0.00	
Totals	1,986,792.00	3,375,538.77	2,230,233.00	0.00	0.00	27,962,553.15

Disclosure of this information is REQUIRED to accomplish the statutory purpose as outlined in the "Illinois Procurement Code". Failure to comply will result in non-issuance of an "Authorization to Bid." This form has been approved by the State Forms Management Center.



**OWNER COPY**

**CONTRACT**

**Part III. Work Subcontracted to Others**

For each contract described in Part I, list all the work you have subcontracted to others.

	9	10	11	12	Awards Pending
Subcontractor	ARCON CONST	J & T SERVICES	PEREZ LANDSAPE	NONE	NONE
Type of Work	DRAINAGE	DRAINAGE	LANDSCAPING		
Subcontract Price	402,460.00	298,450.00	47,595.00		
Amount Uncompleted	402,460.00	298,450.00	47,595.00		
Subcontractor	DIGIOIA BROS	G & M CEMENT	DIGIOIA BROS		
Type of Work	CONCRETE	CONCRETE	CONCRETE		
Subcontract Price	906,916.00	658,887.50	296,635.00		
Amount Uncompleted	906,916.00	658,887.50	296,635.00		
Subcontractor	RELIABLE LANDSCAPE	MAINT COATINGS	LPS PAVT		
Type of Work	LANDSCAPING	THPL PAVT MK	BRICK PAVERS		
Subcontract Price	184,026.00	13,892.00	101,632.00		
Amount Uncompleted	184,026.00	13,892.00	101,632.00		
Subcontractor	TRAFFIC CONTROL CO	RELIABLE LANDSCAPE			
Type of Work	TRAFFIC CONTROL CO	LANDSCAPING			
Subcontract Price	17,621.00	38,676.00			
Amount Uncompleted	17,621.00	68,676.00			
Subcontractor	MACKIE CONSULT				
Type of Work	CONST LAYOUT				
Subcontract Price	26,350.00				
Amount Uncompleted	26,350.00				
Subcontractor	MAINTENANCE CTS				
Type of Work	THPL PAVT MK				
Subcontract Price	4,135.00				
Amount Uncompleted	4,135.00				
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted	1,541,508.00	1,039,905.50	446,862.00	0.00	0.00

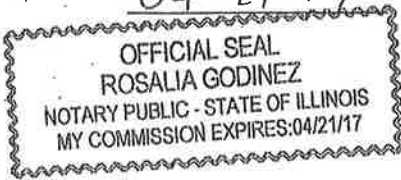
I, being duly sworn, do hereby declare this affidavit is a true and correct statement relating to ALL uncompleted contracts of the undersigned for Federal, State, County, City and private work, including ALL subcontract work, ALL pending low bids not yet awarded or rejected and ALL estimated completion dates

Subscribed and sworn to before me

's 29h day of April, 2016

*Rosalie Godinez*  
 Notary Public

My commission expires: 04-21-17



Type or Print Name James Behrends Vice-President  
 Officer or Director Title

Signed *James Behrends*  
 Company Orange Crush, LLC.

Address 321 Center Street  
Hillside, Illinois 60162





**Illinois Department of Transportation**

**Apprenticeship or Training Program Certification**

**Return with Bid**

Route	<u>N Princeton Ave</u>
County	<u>DuPage</u>
Local Agency	<u>Village of Villa Park</u>
Section	<u>N/A</u>

**All contractors are required to complete the following certification:**

For this contract proposal or for all groups in this deliver and install proposal.

For the following deliver and install groups in this material proposal:

Village of Villa Park - 2016 North Princeton Ave  
Improvement Project

Illinois Department of Transportation policy, adopted in accordance with the provisions of the Illinois Highway Code, requires this contract to be awarded to the lowest responsive and responsible bidder. The award decision is subject to approval by the Department. In addition to all other responsibility factors, this contract or deliver and install proposal requires all bidders and all bidders' subcontractors to disclose participation in apprenticeship or training programs that are (1) approved by and registered with the United States Department of Labor's Bureau of Apprenticeship and Training, and (2) applicable to the work of the above indicated proposals or groups. Therefore, all bidders are required to complete the following certification:

- I. Except as provided in paragraph IV below, the undersigned bidder certifies that it is a participant, either as an individual or as part of a group program, in an approved apprenticeship or training program applicable to each type of work or craft that the bidder will perform with its own employees.
- II. The undersigned bidder further certifies for work to be performed by subcontract that each of its subcontractors submitted for approval either (A) is, at the time of such bid, participating in an approved, applicable apprenticeship or training program; or (B) will, prior to commencement of performance of work pursuant to this contract, establish participation in an approved apprenticeship or training program applicable to the work of the subcontract.
- III. The undersigned bidder, by inclusion in the list in the space below, certifies the official name of each program sponsor holding the Certificate of Registration for all of the types of work or crafts in which the bidder is a participant and that will be performed with the bidder's employees. Types of work or craft that will be subcontracted shall be included and listed as subcontract work. The list shall also indicate any type of work or craft job category for which there is no applicable apprenticeship or training program available.

Operators Local 150

Teamsters Local 731

Laborers Local 076/096/1001/582

OWNER COPY

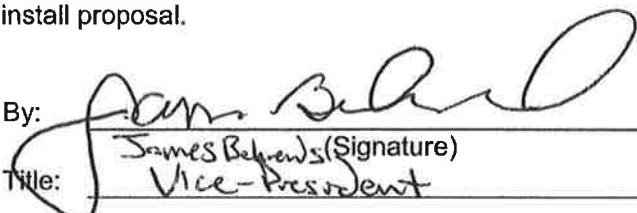
CONTRACT

IV. Except for any work identified above, any bidder or subcontractor that shall perform all or part of the work of the contract or deliver and install proposal solely by individual owners, partners or members and not by employees to whom the payment of prevailing rates of wages would be required, check the following box, and identify the owner/operator workforce and positions of ownership.

N/A

The requirements of this certification and disclosure are a material part of the contract, and the contractor shall require this certification provision to be included in all approved subcontracts. The bidder is responsible for making a complete report and shall make certain that each type of work or craft job category that will be utilized on the project is accounted for and listed. The Department at any time before or after award may require the production of a copy of each applicable Certificate of Registration issued by the United States Department of Labor evidencing such participation by the contractor and any or all of its subcontractors. In order to fulfill the participation requirement, it shall not be necessary that any applicable program sponsor be currently taking or that it will take applications for apprenticeship, training or employment during the performance of the work of this contract or deliver and install proposal.

Bidder: Orange Crush, LLC  
Address: 321 Center St., Hillside, IL

By:   
Title: James Behrens (Signature)  
Vice-President



RETURN WITH BID



Illinois Department of Transportation

Affidavit of Illinois Business Office

County DuPage
Local Public Agency Village of Villa Park
Section Number N/A
Route North Princeton Avenue

State of Illinois )
County of DuPage ) ss.

I, James Behrens of Hillside, Illinois,
(Name of Affiant) (City of Affiant) (State of Affiant)

being first duly sworn upon oath, states as follows:

- 1. That I am the Vice President of Orange Crush, LLC bidder
2. That I have personal knowledge of the facts herein stated.
3. That, if selected under this proposal, Orange Crush, LLC (bidder), will maintain a business office in the State of Illinois which will be located in Cook County, Illinois.
4. That this business office will serve as the primary place of employment for any persons employed in the construction contemplated by this proposal.
5. That this Affidavit is given as a requirement of state law as provided in Section 30-22(8) of the Illinois Procurement Code.

James Behrens (Signature)
James Behrens - VA (Print Name of Affiant)

This instrument was acknowledged before me on May 10, 2016 day of



(SEAL)

Daniel P. Ahern (Signature of Notary Public)





**Illinois Department  
of Transportation**

Route N. Princeton Avenue  
County DuPage  
Local Agency Village of Villa Park  
Section N/A

**RETURN WITH BID**

**PAPER BID BOND**

WE Orange Crush, L.L.C 321 Center Street, Hillside, IL 60162 as PRINCIPAL,  
and Fidelity and Deposit Company of Maryland 300 South Riverside Plaza, Ste. 2100, Chicago, IL 60606 as SURETY,

are held jointly, severally and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of 5% of the total bid price, or for the amount specified in the proposal documents in effect on the date of invitation for bids whichever is the lesser sum. We bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly pay to the LA this sum under the conditions of this instrument.

WHEREAS THE CONDITION OF THE FOREGOING OBLIGATION IS SUCH that, the said PRINCIPAL is submitting a written proposal to the LA acting through its awarding authority for the construction of the work designated as the above section.

THEREFORE If the proposal is accepted and a contract awarded to the PRINCIPAL by the LA for the above designated section and the PRINCIPAL shall within fifteen (15) days after award enter into a formal contract, furnish surety guaranteeing the faithful performance of the work, and furnish evidence of the required insurance coverage, all as provided in the "Standard Specifications for Road and Bridge Construction" and applicable Supplemental Specifications, then this obligation shall become void; otherwise it shall remain in full force and effect.

IN THE EVENT the LA determines the PRINCIPAL has failed to enter into a formal contract in compliance with any requirements set forth in the preceding paragraph, then the LA acting through its awarding authority shall immediately be entitled to recover the full penal sum set out above, together with all court costs, all attorney fees, and any other expense of recovery.

IN TESTIMONY WHEREOF, the said PRINCIPAL and the said SURETY have caused this instrument to be signed by their respective officers this 10th day of May, 2016

**Principal**

Orange Crush, L.L.C  
(Company Name)  
By: James Behrends Vice President (Signature and Title)

\_\_\_\_\_  
(Company Name)  
By: \_\_\_\_\_  
(Signature and Title)

(If PRINCIPLE is a joint venture of two or more contractors, the company names, and authorized signatures of each contractor must be affixed)

Fidelity and Deposit Company of Maryland  
(Name of Surety)

Surety  
By: Bonnie Kruse  
Signature of Attorney-in-Fact



STATE OF Illinois  
COUNTY OF Du Page

I, Tariese M. Pisciotto, a Notary Public in and for said county,  
do hereby certify that James Behrends and Bonnie Kruse

(Insert names of individuals signing on behalf of PRINCIPAL & SURETY)

who are each personally known to me to be the same persons whose names are subscribed to the foregoing instrument on behalf of PRINCIPAL and SURETY, appeared before me this day in person and acknowledged respectively, that they signed and delivered said instruments as their free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 10th day of May, 2016

My commission expires June 26, 2018

Tariese M. Pisciotto (Notary Public)  
**"OFFICIAL SEAL"**  
**TARIESE M. PISCIOOTTO**  
Notary Public, State of Illinois  
Commission Expires 06/26/2018

**ELECTRONIC BID**

Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)  
The Principal may submit an electronic bid bond, in lieu of completing the above section of the Proposal Bid Bond Form, by providing an electronic bid bond ID code and signing below, the Principal is ensuring the identified electronic bid bond has been executed and the Principal and Surety are firmly bound unto the LA under the conditions of the bid bond as shown above. (If PRINCIPAL is a joint venture of two or more contractors, an electronic bid bond ID code, company/Bidder name title and date must be affixed for each contractor in the venture.)

\_\_\_\_\_  
Electronic Bid Bond ID Code

\_\_\_\_\_  
(Company/Bidder Name)

\_\_\_\_\_  
(Signature and Title)

\_\_\_\_\_  
Date

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100

Bond Number Bid Bond

Obligee: Village of Villa Park

**ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND  
POWER OF ATTORNEY**

KNOW ALL MEN BY THESE PRESENTS: That the ZURICH AMERICAN INSURANCE COMPANY, a corporation of the State of New York, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, a corporation of the State of Maryland, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND a corporation of the State of Maryland (herein collectively called the "Companies"), by Michael P. Bond, Vice President, in pursuance of authority granted by Article V, Section 8, of the By-Laws of said Companies, which are set forth on the reverse side hereof and are hereby certified to be in full force and effect on the date hereof, do hereby nominate, constitute, and appoint Bonnie Kruse, its true and lawful agent and Attorney-in-Fact, to make, execute, seal and deliver, for, and on its behalf as surety, and as its act and deed: any and all bonds and undertakings, and the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Companies, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the ZURICH AMERICAN INSURANCE COMPANY at its office in New York, New York., the regularly elected officers of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at its office in Owings Mills, Maryland., and the regularly elected officers of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at its office in Owings Mills, Maryland., in their own proper persons.

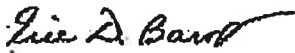
The said Vice President does hereby certify that the extract set forth on the reverse side hereof is a true copy of Article V, Section 8, of the By-Laws of said Companies, and is now in force.

IN WITNESS WHEREOF, the said Vice-President has hereunto subscribed his/her names and affixed the Corporate Seals of the said ZURICH AMERICAN INSURANCE COMPANY, COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and FIDELITY AND DEPOSIT COMPANY OF MARYLAND, this 22<sup>nd</sup> day of July, A.D. 2015.

ATTEST:  
ZURICH AMERICAN INSURANCE COMPANY  
COLONIAL AMERICAN CASUALTY AND SURETY COMPANY  
FIDELITY AND DEPOSIT COMPANY OF MARYLAND



By: Michael P. Bond  
Vice President



By: Eric D. Barnes  
Secretary

State of Maryland  
County of Baltimore

On this 22nd day of July, A.D. 2015, before the subscriber, a Notary Public of the State of Maryland, duly commissioned and qualified, Michael P. Bond, Vice President and Eric D. Barnes, Secretary of the Companies, to me personally known to be the individuals and officers described in and who executed the preceding instrument, and acknowledged the execution of same, and being by me duly sworn, depose and saith, that he/she is the said officer of the Company aforesaid, and that the seals affixed to the preceding instrument are the Corporate Seals of said Companies, and that the said Corporate Seals and the signature as such officer were duly affixed and subscribed to the said instrument by the authority and direction of the said Corporations.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my Official Seal the day and year first above written.

Constance A. Dunn  
Constance A. Dunn, Notary Public  
My Commission Expires: July 9, 2019





## EXTRACT FROM BY-LAWS OF THE COMPANIES

"Article V, Section 8, Attorneys-in-Fact. The Chief Executive Officer, the President, or any Executive Vice President or Vice President may, by written instrument under the attested corporate seal, appoint attorneys-in-fact with authority to execute bonds, policies, recognizances, stipulations, undertakings, or other like instruments on behalf of the Company, and may authorize any officer or any such attorney-in-fact to affix the corporate seal thereto; and may with or without cause modify or revoke any such appointment or authority at any time."

## CERTIFICATE

I, the undersigned, Vice President of the ZURICH AMERICAN INSURANCE COMPANY, the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY, and the FIDELITY AND DEPOSIT COMPANY OF MARYLAND, do hereby certify that the foregoing Power of Attorney is still in full force and effect on the date of this certificate; and I do further certify that Article V, Section 8, of the By-Laws of the Companies is still in force.

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the ZURICH AMERICAN INSURANCE COMPANY at a meeting duly called and held on the 15th day of December 1998.

RESOLVED: "That the signature of the President or a Vice President and the attesting signature of a Secretary or an Assistant Secretary and the Seal of the Company may be affixed by facsimile on any Power of Attorney...Any such Power or any certificate thereof bearing such facsimile signature and seal shall be valid and binding on the Company."

This Power of Attorney and Certificate may be signed by facsimile under and by authority of the following resolution of the Board of Directors of the COLONIAL AMERICAN CASUALTY AND SURETY COMPANY at a meeting duly called and held on the 5th day of May, 1994, and the following resolution of the Board of Directors of the FIDELITY AND DEPOSIT COMPANY OF MARYLAND at a meeting duly called and held on the 10th day of May, 1990.

RESOLVED: "That the facsimile or mechanically reproduced seal of the company and facsimile or mechanically reproduced signature of any Vice-President, Secretary, or Assistant Secretary of the Company, whether made heretofore or hereafter, wherever appearing upon a certified copy of any power of attorney issued by the Company, shall be valid and binding upon the Company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seals of the said Companies, this 10th day of May, 2016.



*Thomas O. McClellan*

Thomas O. McClellan, Vice President



ADDENDUM NO. 1

DATE: April 27, 2016

FROM: Baxter & Woodman, Inc. Consulting Engineers

TO: Planholders of record for the Work titled

VILLAGE OF VILLA PARK, ILLINOIS  
2016 NORTH PRINCETON AVENUE IMPROVEMENT PROJECT


The Bidding Documents are amended as follows:

1. SPECIAL PROVISIONS

- A. **Delete** the existing SCHEDULE OF PRICES (BLR 12200a) in its entirety from the CONTRACT DOCUMENTS and **insert** the attached SCHEDULE OF PRICES.

Nothing in this Addendum shall be construed as changing other requirements of the Bidding Documents. **Each Bidder shall acknowledge receipt of this Addendum by signing this form and including it in the Contract Proposal returned to the Village.**

Bidder Acknowledges Receipt of Addendum No. 1

  
 \_\_\_\_\_  
 Chad Tira  
 \_\_\_\_\_  
 Project Manager

Date: May 3, 2016

END OF ADDENDUM NO. 1



INDEX  
FOR  
SUPPLEMENTAL SPECIFICATIONS  
AND RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

This index contains a listing of SUPPLEMENTAL SPECIFICATIONS, frequently used RECURRING SPECIAL PROVISIONS, and LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS.

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.



CHECK SHEET  
FOR  
RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

<u>CHECK SHEET #</u>	<u>RECURRING SPECIAL PROVISIONS</u>	<u>PAGE NO.</u>
1	<input type="checkbox"/> Additional State Requirements for Federal-Aid Construction Contracts	1
2	<input type="checkbox"/> Subletting of Contracts (Federal-Aid Contracts)	4
3	<input type="checkbox"/> EEO	5
4	<input type="checkbox"/> Specific EEO Responsibilities Non Federal-Aid Contracts	15
5	<input type="checkbox"/> Required Provisions - State Contracts	20
6	<input type="checkbox"/> Asbestos Bearing Pad Removal	26
7	<input type="checkbox"/> Asbestos Waterproofing Membrane and Asbestos Hot-Mix Asphalt Surface Removal	27
8	<input type="checkbox"/> Temporary Stream Crossings and In-Stream Work Pads	28
9	<input type="checkbox"/> Construction Layout Stakes Except for Bridges	29
10	<input checked="" type="checkbox"/> Construction Layout Stakes	32
11	<input type="checkbox"/> Use of Geotextile Fabric for Railroad Crossing	35
12	<input type="checkbox"/> Subsealing of Concrete Pavements	37
13	<input type="checkbox"/> Hot-Mix Asphalt Surface Correction	41
14	<input type="checkbox"/> Pavement and Shoulder Resurfacing	43
15	<input type="checkbox"/> Patching with Hot-Mix Asphalt Overlay Removal	44
16	<input type="checkbox"/> Polymer Concrete	45
17	<input type="checkbox"/> PVC Pipeliner	47
18	<input type="checkbox"/> Bicycle Racks	48
19	<input type="checkbox"/> Temporary Portable Bridge Traffic Signals	50
20	<input type="checkbox"/> Work Zone Public Information Signs	52
21	<input type="checkbox"/> Nighttime Inspection of Roadway Lighting	53
22	<input type="checkbox"/> English Substitution of Metric Bolts	54
23	<input type="checkbox"/> Calcium Chloride Accelerator for Portland Cement Concrete	55
24	<input type="checkbox"/> Quality Control of Concrete Mixtures at the Plant	56
25	<input checked="" type="checkbox"/> Quality Control/Quality Assurance of Concrete Mixtures	64
26	<input type="checkbox"/> Digital Terrain Modeling for Earthwork Calculations	80
27	<input type="checkbox"/> Pavement Marking Removal	82
28	<input type="checkbox"/> Preventive Maintenance – Bituminous Surface Treatment	83
29	<input type="checkbox"/> Preventive Maintenance – Cape Seal	89
30	<input type="checkbox"/> Preventive Maintenance – Micro-Surfacing	104
31	<input type="checkbox"/> Preventive Maintenance – Slurry Seal	115
32	<input type="checkbox"/> Temporary Raised Pavement Markers	125
33	<input type="checkbox"/> Restoring Bridge Approach Pavements Using High-Density Foam	126



CHECK SHEET  
FOR  
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
LRS 1	<b>Reserved</b> .....	130
LRS 2	<input type="checkbox"/> Furnished Excavation .....	131
LRS 3	<input checked="" type="checkbox"/> Work Zone Traffic Control Surveillance .....	132
LRS 4	<input checked="" type="checkbox"/> Flaggers in Work Zones .....	133
LRS 5	<input checked="" type="checkbox"/> Contract Claims .....	134
LRS 6	<input checked="" type="checkbox"/> Bidding Requirements and Conditions for Contract Proposals .....	135
LRS 7	<input type="checkbox"/> Bidding Requirements and Conditions for Material Proposals .....	141
LRS 8	<b>Reserved</b> .....	147
LRS 9	<input type="checkbox"/> Bituminous Surface Treatments .....	148
LRS 10	<b>Reserved</b> .....	149
LRS 11	<input checked="" type="checkbox"/> Employment Practices .....	150
LRS 12	<input checked="" type="checkbox"/> Wages of Employees on Public Works .....	152
LRS 13	<input checked="" type="checkbox"/> Selection of Labor .....	154
LRS 14	<input checked="" type="checkbox"/> Paving Brick and Concrete Paver Pavements and Sidewalks .....	155
LRS 15	<input checked="" type="checkbox"/> Partial Payments .....	158
LRS 16	<input checked="" type="checkbox"/> Protests on Local Lettings .....	159
LRS 17	<input checked="" type="checkbox"/> Substance Abuse Prevention Program .....	160
LRS 18	<input type="checkbox"/> Multigrade Cold Mix Asphalt .....	161



INDEX OF SPECIAL PROVISIONS

	<u>PAGE NO.</u>
DEFINITIONS .....	1
QUALIFICATIONS OF BIDDERS.....	1
INCREASED OR DECREASED QUANTITIES.....	4
WORKING HOURS .....	4
HOLIDAYS.....	5
INSURANCE.....	5
MOBILIZATION.....	5
LOCATION OF PROJECT .....	6
DESCRIPTION OF WORK.....	6
MAINTENANCE OF ROADWAYS .....	6
CONSTRUCTION DEBRIS .....	6
STATUS OF UTILITIES TO BE ADJUSTED .....	7
MAINTENANCE GUARANTEE.....	8
SUBCONTRACTORS .....	8
APPLICATION FOR PAYMENT.....	8
LIMITATIONS ON ENGINEER'S AUTHORITY AND RESPONSIBILITIES.....	9
USE OF FIRE HYDRANTS .....	9
ITEM #2 - TREE ROOT PRUNING .....	10
ITEM #5 - TRENCHING, BACKFILLING AND COMPACTING FOR SANITARY SEWER, STORM SEWER, AND WATER MAIN .....	11
ITEM #7 - PARKWAY RESTORATION.....	16
ITEM #9 - INLET FILTERS.....	17
ITEM #10 - AGGREGATE SUBGRADE IMPROVEMENT ( <del>D-1</del> ).....	17
ITEM #28 - CLASS B PATCHES .....	20
ITEM #29 - FIRE HYDRANTS TO BE REMOVED .....	20
ITEM #33 - VALVE VAULTS.....	21
ITEM #35 - FRAMES AND GRATES (SPECIAL).....	21
WATER DISTRIBUTION SYSTEM .....	21
ITEMS #37 - #40 - DUCTILE IRON WATER MAIN, OPEN CUT .....	32
ITEMS #41 - #43 - CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE) .....	33

## INDEX OF SPECIAL PROVISIONS (CONT.)

	<u>PAGE NO.</u>
ITEM #44 - WATER VALVE .....	34
ITEM #45 - FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX .....	34
ITEMS #46 & #47 WATER SERVICE REPLACEMENT .....	34
ITEM #48 - WATER MAIN ABANDONMENT .....	35
ITEM #49 - VALVE BOX TO BE REMOVED .....	35
ITEM #50 - SANITARY SEWER SERVICE CONNECTION .....	36
ITEMS #51 & #52 - SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241 .....	37
ITEM #53 - SANITARY SEWER MANHOLES .....	37
ITEM #54 - COMBINATION CONCRETE CURB AND GUTTER (SPECIAL) .....	38
ITEM #60 - HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4" .....	39
ITEM #63 - DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED .....	40
ITEM #64 - DUST CONTROL WATERING .....	41
ITEM #65 - STORM SEWERS (WATER MAIN REQUIREMENTS) .....	42
ITEM #66 - REMOVE AND REINSTALL BRICK PAVER .....	42
ITEM #67 - EXPLORATION TRENCH, SPECIAL .....	43
ITEMS #68 & #69 - TEMPORARY ACCESS .....	43
ITEM #70 - SANITARY MANHOLES TO BE ADJUSTED .....	45
ITEM #71 - VALVE VAULT TO BE REMOVED .....	46
ITEM #72 - TRAFFIC CONTROL AND PROTECTION .....	46
ITEM #73 - PRECONSTRUCTION VIDEO RECORDING .....	47
ITEM #74 - PVC PIPE DRAINS SDR 26 ASTM D-2241 .....	50
ITEM #75 - CONTINGENCY ALLOWANCE .....	50
HMA MIXTURE DESIGN REQUIREMENTS (D-1) .....	52
FRICTION SURFACE AGGREGATE (D-1) .....	60
RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1) .....	64
DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D 1) .....	75
GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1) .....	77

LR 107-4

BDE SPECIAL PROVISIONS

INDEX OF SPECIAL PROVISIONS (CONT.)

**PAGE NO.**

HIGHWAY STANDARDS

APPENDIX A: PAVEMENT AND SOIL BORING LOGS

APPENDIX B: VILLAGE ORDINANCE

APPENDIX C: IRMA GUIDELINES



Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

STATE OF ILLINOIS  
SPECIAL PROVISIONS

The following Special Provisions supplement the "Standard Specifications for Road and Bridge Construction", adopted April 1, 2016, the latest edition of the "Manual on Uniform Traffic Control Devices for Streets and Highways", and the "Manual of Test Procedures for Materials" in effect on the date of invitation for bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included herein which apply to and govern the construction of North Princeton Avenue, and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

**DEFINITIONS:**

Contractor. The individual, firm, partnership, joint venture, or corporation contracting with the Village of Villa Park for performance of prescribed work.

Department, Owner or Village. The Village of Villa Park, DuPage County, Illinois.

Engineer. The Resident Engineer who is the authorized representative of the Village of Villa Park in immediate charge of the engineering details of a construction project.

**QUALIFICATIONS OF BIDDERS:**

Bidders will comply with all applicable federal, state and local laws and requirements, and will further meet the qualifications prescribed in this and other applicable portions of these provisions. Bidder, in submitting a Bid, certifies that Bidder is in compliance with all applicable federal, state and local laws and requirements, and that Bidder further meets the qualifications prescribed in this and other applicable portions of these provisions. Owner's determination as to the compliance and qualifications of the Bidder will be final, and Bidder, in submitting a Bid, agrees to be bound by that determination.

Bidder, in submitting a Bid, certifies that Bidder is in compliance with the following requirements and qualifications. Bidder further certifies that Bidder is able to provide written evidence of Bidder's compliance with the following requirements and qualifications. Bidder shall, upon request by Engineer, submit such written evidence within five (5) calendar days of the Engineer's request, as well as any other written evidence which Engineer may deem necessary for the purpose of evaluating Bidder's qualifications.

- (a) Bidder shall be qualified to do business in the State of Illinois.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (b) Bidder shall possess either a valid Federal Employer Tax Identification Number (FEIN) or a valid Social Security Number (SSN).
- (c) Bidder shall be able to provide a street address and description of the Bidder's place of business, and the mailing address of the business, if different from the street address.
- (d) Bidder shall be able to provide the number of years Bidder has been engaged in the contracting business under the present firm name, and the name of the state where incorporated.
- (e) Bidder shall be able to provide a list of the property and equipment available to the Bidder.
- (f) Bidder shall be able to provide a financial statement demonstrating that the Bidder has the financial resources to meet all obligations related to the Work.
- (g) Bidder shall maintain insurance policies with the coverages required by the Contract, and with the minimum limits of coverage required by the Contract. Bidder shall be able to provide current certificate(s) of insurance for the insurance policies held by Bidder, demonstrating that Bidder holds insurance policies with the coverages required by the contract, and with the minimum limits of coverage required by the Contract.
- (h) Bidder shall have constructed a minimum of three (3) projects of a similar nature in the immediate past five (5) years. Bidder shall be able to provide a list of all projects of a similar nature constructed by Bidder in the immediate past five (5) years, which list shall contain the minimum of three (3) such projects, which list shall provide a description and the location(s) of all such projects, and shall contain the Bidder's performance record and references, as well as the names and current contact information, including addresses and telephone numbers, of persons who acted as owners' representatives for those projects and who have knowledge of those projects, and whom Bidder agrees the Village may contact for the purpose of verifying Bidder's performance and references.
- (i) Bidder shall be able to provide a list of three (3) references (names, addresses and telephone numbers) with knowledge of the integrity and business practices of the bidder. Such references may not be persons who have been owners or officers of the firm, or have been employed by Bidder as employees.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (j) Bidder shall be able to provide a list of projects presently under Contract, the awarded Contract amount of each, the approximate adjusted Contract amount of each (if applicable), and the dollar amount or percent of completion of each.
- (k) Bidder shall be able to provide a list of Contracts which have resulted in lawsuits, whether against Bidder as a prime contractor, against Bidder as a subcontractor, or against Bidder as a party in any other capacity; or against subcontractors or suppliers performing work for Bidder or under Contract held by Bidder.
- (l) Bidder shall be able to provide a list of Contracts defaulted.
- (m) Bidder shall be able to provide a statement indicating whether or not Bidder has ever filed bankruptcy.
- (n) Bidder shall be able to provide a list of all owners and officers of the firm, which list shall also indicate those owners and officers who, while in the employ of the firm or in the employ of previous firms, were associated with Contracts which resulted in lawsuits, Contracts defaulted, or firms which filed for bankruptcy.
- (o) Bidder shall maintain personnel guaranteed to be employed in the responsible charge of the Work, which personnel possess sufficient technical experience to ensure the satisfactory completion of the Work. Bidder shall be able to provide the names and technical experience of such personnel, as well as statements as to whether the personnel have or have not performed satisfactorily on other contracts of like nature and magnitude or comparable difficulty at similar rate of progress.
- (p) Bidder shall be able to provide a list of subcontractors and suppliers anticipated to be employed by Bidder for the purpose of completing the Work, including the firm name, street address and description of place of business; mailing address of business (if different); phone, fax and e-mail contact information of business; name of primary contact; and a list of any projects or contracts for which Bidder currently owes monies to said firm, which list shall include a description of the project or contract, the amount currently due to said firm, the period of time for which those monies have been owed, and the expected date of payment of those monies.
- (q) Bidder shall participate in active apprenticeship and training programs approved by and registered with the United States Department of Labor Bureau of Apprenticeship and Training for each of the trades of work contemplated under the Contract. Bidder shall be able to provide evidence of Bidder's participation in such apprenticeship and training programs.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (r) Bidder shall only employ subcontractors who meet the requirements prescribed in this section and other sections of these specifications.
- (s) Bidder shall be able to provide such other information as may assist Owner in determining whether the Bidder is adequately prepared to fulfill the Contract.

These requirements and qualifications are not intended to discourage bidding, to make it difficult for qualified Bidders to submit Bids, or to discourage beginning contractors. The purpose of these requirements and qualifications is to allow Owner to obtain sufficient information about Bidder's financial state, available equipment, personnel, and previous work experience so that Owner may mitigate the hazards involved in awarding contracts to parties who may not be qualified to perform the Work as specified.

A copy of Village of Villa Park Ordinance No. 3733, amending the requirements of bidders for construction projects, is provided as Appendix A.

**INCREASED OR DECREASED QUANTITIES:**

The Village reserves the right to increase or decrease the amount of work shown in the plans in accordance with Section 109 of the Standard Specifications.

**WORKING HOURS:**

Working hours will be between 7:00 A.M. and 5:00 P.M., Monday through Friday, excluding legal holidays as designated by the Contract.

Contractor will not permit the performance of Work outside these working hours without Owner's written consent, which may be given after prior written request to Engineer, except as otherwise required for the safety of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents.

If Contractor permits the performance of Work outside these working hours, Contractor will compensate Owner for the costs of inspection and other services provided by Engineer. Owner will determine the rates at which such inspection and other services are to be compensated. Owner will determine the interval or intervals at which billing will take place, and may, at Owner's discretion, submit invoices for payment to Contractor, or deduct the costs from any monies due or to become due to the Contractor from Owner.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**HOLIDAYS:**

Revise the list of legal holidays in Article 107.09 of the Standard Specifications to read:

New Year's Day	Thanksgiving Day
Easter	<u>Thanksgiving Friday</u>
Memorial Day	<u>Christmas Eve</u>
Independence Day	Christmas Day
Labor Day	<u>New Year's Eve</u>

**INSURANCE:**

Insurance and indemnification shall be according to applicable sections of the Standard Specifications, and shall also be according to the "IRMA Contractual Insurance Guidelines", incorporated herein as Appendix B. If a conflict is determined to exist between the requirements prescribed in the Standard Specifications and the requirements prescribed in the IRMA Contractual Insurance Guidelines, such conflict will be resolved as follows:

- a. If a particular type of insurance coverage is required by one standard but not by both, that type of insurance coverage will be required.
- b. If the minimum limits of insurance coverage required by one standard differ from those required by the other standard, the higher minimum limits of insurance coverage will prevail.
- c. If any other conflicts are determined to exist between the requirements prescribed in the two standards, the stricter of the two requirements will prevail. Owner will make the final determination as to what constitutes a stricter requirement.

**MOBILIZATION:**

Mobilization will be according to Section 671 of the Standard Specifications except as modified herein.

Revise Article 671.02, Basis of Payment, to read:

**"671.02 Basis of Payment.** Mobilization will not be paid for separately but rather shall be included in the cost of the items for which this work applies."

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**LOCATION OF PROJECT:**

The project is located on North Princeton Avenue from West Terrace Street to Ridge Road in the Village of Villa Park, DuPage County, Illinois. A location map is shown on the cover of the Plans.

**DESCRIPTION OF WORK:**

The work consists of furnishing all labor, materials, equipment, and other incidentals necessary for the completion of installation of water main; hot-mix asphalt pavement reconstruction; curb and gutter construction; sidewalk removal and replacement; parkway restoration; and other incidental and miscellaneous items of work in accordance with the Plans, Standard Specifications, and these Special Provisions.

**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.

**CONSTRUCTION DEBRIS:**

Add the following to the third paragraph of Article 202.03 of the Standard Specifications:

“The Contractor shall not conduct any generation, transportation, or recycling of construction or demolition debris, clean or general or uncontaminated soil generated during construction, remodeling, repair, and demolition of utilities, structures, and roads that is not commingled with any waste, without the maintenance of documentation identifying the hauler, generator, place of origin of the debris or soil, the weight or volume of the debris or soil, and the location, owner, and operator of the facility where the debris or soil was transferred, disposed, recycled or treated. This documentation must be maintained by the Contractor for 3 years.”

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**STATUS OF UTILITIES TO BE ADJUSTED:**

Utilities companies involved in this project have provided the following estimated durations:

<b>NAME OF UTILITY</b>	<b>TYPE</b>	<b>LOCATION</b>	<b>Estimated Duration of Time for the Completion of Relocation or Adjustments</b>
Comcast 688 Industrial Drive Elmhurst, IL 60126 Martha Gieras 630.288.7637	Aerial cable TV	Along ComEd Utility Poles	No conflicts anticipated.
Nicor Gas 1844 Ferry Road Naperville, IL 60563 Bruce Koppang 630.388.3830	Gas mains and services	Located under the west Parkway, crossing at intersections	There are shallow service lines (less than 2'-4" deep) throughout the length of the project, to be adjusted.
AT&T 1000 Commerce Drive Oak Brook, IL 60523 Janet Ahern 630.573.6414	Buried Cable	Along the South Parkway of Plymouth Street	No conflicts anticipated.
ComEd 25000 Governors Hwy. University Park, IL 60466	Aerial cable	Located Perpendicula r to ROW of N. Princeton Avenue	No conflicts anticipated.
DuPage Water Commission 600 E Butterfield Rd Elmhurst, IL 60126 Michael Schweizer 630.834.0100	Water Main	Located under the southbound lane of N. Princeton Avenue	No conflicts anticipated.

The above represents the best information available to the Village 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.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**MAINTENANCE GUARANTEE:**

The Contractor shall execute and deliver to the Village of Villa Park, before final payment will be issued, a written warranty, in a form satisfactory to the Village, which guarantees that the work is in accordance with the Contract Documents and will not be defective. This warranty shall guarantee this work for a period of 1-year from the date of acceptance of the work and final payment by the Village of Villa Park.

If within this guarantee period, any work is found to be defective, as determined by the Village, the Contractor shall promptly, without cost to the Village of Villa Park, correct or repair such defective work, or remove and replace the defective work in accordance with the Special Provisions for the items in question.

The Contractor shall furnish a warranty bond in an amount equal to five percent (10%) of the contract amount, or \$100,000, whichever is greater, by a surety satisfactory to the Village to guarantee Contractor's warranty to repair defective work.

**SUBCONTRACTORS:**

Add the following to the end of Section 108.01 of the Standard Specifications.

"The apparent low Bidder shall submit to the office of Engineer within ten (10) days after the receipt of bids, a list of the names of Bidder's proposed subcontractors along with a description of the work to be performed by each."

**APPLICATION FOR PAYMENT:**

Add the following to the end of Section 109.07 (a) of the Standard Specifications.

"The Contractor shall procure from each subcontractor and supplier of material or labor a waiver of any claim which they may have under the mechanics lien laws of the state in which the Work is located, to insure the Municipality immunity from mechanics liens on subcontractors in carrying out the contract and any work orders for additions thereto, all as a condition of any payment by the Municipality. Any payments made by the Municipality without requiring compliance with this paragraph shall not be construed as a waiver by the Municipality of the right to require compliance with this paragraph as a condition to later payments.

The Contractor shall submit Partial Waivers of Lien from all subcontractors and suppliers with each partial payment estimate and Contractor's Affidavit for subcontractors and suppliers with

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

second payment request for the previous payment estimates and then with all subsequent payment estimates.”

Add the following to the end of Section 109.08 of the Standard Specifications.

“The Contractor shall furnish with his final application for payment a complete release of all liens arising out of this contract, or receipts in full in lieu thereof and an affidavit that the releases and receipts include all labor and material for which a lien could be filed.”

**LIMITATIONS ON ENGINEER'S AUTHORITY AND RESPONSIBILITIES:**

The authority and duties of Resident Engineer in Article 105.10 of the Standard Specifications are hereby deleted. The authority of Engineer is amended as follows.

“The Engineer will be the Municipality's representative during the construction period. The Engineer will furnish a Resident Project Representative (RPR) to assist the Engineer in providing job-site observation of the Contractor's Work. The RPR will provide base lines, benchmarks and reference points, assist the Contractor with interpretation of the Plans and Specifications, observe in general if the Contractor's Work is in conformity with the Contract Documents, and monitor the Contractor's progress as related to the date of completion. The Engineer will not supervise, direct, control or have authority over or be responsible for the Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. The Engineer will not be responsible for the Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

The Engineer will not be responsible for the acts or omissions of the Contractor or any subcontractor, any supplier, or of any other person or organization performing or furnishing any of the Work.

These limitations on authority and responsibility set forth herein shall also apply to the Engineer's Consultants, Resident Project Representative and assistants.”

**USE OF FIRE HYDRANTS:**

Revise Article 107.18 of the Standard Specifications to read:

“**107.18** Use of Fire Hydrants. If Contractor requires water for the completion of construction operations, and desires to obtain water from Owner, Contractor shall make application to Engineer accordingly. If such application is approved by Engineer, Contractor shall

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

obtain water from the fire hydrant located at 100 West Home Avenue, adjacent to the Village of Villa Park Fleet Maintenance Garage. Contractor's use of said hydrant and methods of obtaining water shall be in compliance with all applicable local ordinances, rules, and regulations concerning such use. Contractor shall furnish all labor and equipment necessary to make a connection to said hydrant, and to obtain and transport water. Contractor, in obtaining water from said hydrant, shall either:

- (a) Make application to Engineer for temporary use of a hydrant meter, comply with all conditions requisite for use of said meter if such application is approved, and use said hydrant meter when obtaining water from hydrant; or
- (b) Make record of the quantity of water obtained from said hydrant along with the date and time obtained, and report such information after each use to the Village of Villa Park Public Works Department, 11 West Home Avenue, or, if such use takes place outside of the normal working hours of the Public Works Department, report such information after the next use which takes place during normal working hours.

Contractor shall not use, operate or obtain water from any hydrants other than the one prescribed. Contractor shall not obtain water from Owner for construction operations or activities not under contract with Owner.

Contractor shall compensate Owner for water obtained by Contractor at the current rate charged to commercial customers by Owner, which rate may also include any administrative fees, overhead, or other costs which are typically charged to commercial customers. The actual quantity of water obtained by Contractor may, at Owner's discretion, be rounded up to the next 1,000 gallon increment so as to coincide with standard units of measure on which water billing rates are based. Owner will determine the interval or intervals at which billing will take place, and may, at Owner's discretion, submit invoices for payment to Contractor, or deduct the cost of water from any monies due or to become due to the Contractor from Owner."

**ITEM #2 - TREE ROOT PRUNING:**

Tree root pruning shall be performed in accordance with Section 201 of the Standard Specifications except as modified herein.

Fertilizer nutrients and supplemental watering will not be paid for separately, but will be included in the cost of TREE ROOT PRUNING.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**ITEM # 5 - TRENCHING, BACKFILLING AND COMPACTING FOR SANITARY SEWER, STORM SEWER, AND WATER MAIN:**

SUMMARY: Trench, backfill, and compact shown on the plans, as specified herein and as needed for installation of water main and sanitary sewer in accordance with the "Standard Specification for Water and Sewer Main Construction in Illinois".

QUALITY ASSURANCE: Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

Use equipment adequate in size, capacity, and numbers to accomplish the work in a timely manner.

Comply with requirements of governmental agencies having jurisdiction.

GRANULAR PIPE BEDDING AND COVERING MATERIALS: Provide well graded, washed, mixture of gravel or crushed stone aggregate free of clay, loam, dirt, calcareous or other foreign matter conforming to the IDOT "Standard Specifications" gradation No. CA 7, or the Standard Specifications for Water and Sewer Construction in Illinois, with the following gradation:

<u>Sieve Size</u>	<u>Percent Passing</u>
1 1/2-inch	100%
1-inch	90 -100%
1/2-inch	30 - 60%
No. 4	0 -10%

1. For flexible thermoplastic pipes including sewer pipes, sewage force mains, and water mains: Comply with ASTM D2321, Class I or II as modified below.
  - a. Exclude sharp angular granular materials.
  - b. Limit maximum particle size to 1/2-inch (IDOT CA 15 or CA 16).
  - c. Do not use Class II materials in wet conditions.
2. For rigid pipes comply with ASTM C12, Bedding Class B.

EXCAVATED BACKFILL MATERIALS IN NON-PAVED AREAS: Provide soil materials free from organic matter, rubble, or frozen material, containing no rocks or lumps over 6 inches, and with not more than 15 percent of the rocks or lumps larger than 2 inches.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**GRANULAR BACKFILL MATERIALS:** Provide granular backfill materials.

Granular Material: Use 100% crushed stone or gravel, virgin material, complying with Section 1004 in the IDOT Standard Specifications for gradation No. CA-6.

**GEOTECHNICAL FABRIC:** Provide geotechnical fabric for separation of granular material and native soil in areas where trench is over excavated to remove unsuitable materials.

1. Acceptable manufacturers:
  - a. Mirafi: 160N.
  - b. Synthetic Industries: 601.
  - c. Amaco: 4551.
  - d. Or approved equal.

**GENERAL CONSTRUCTION REQUIREMENTS:**

1. Protection of existing facilities:
  - a. Unless shown to be removed, protect existing structures, conduits, active utility lines and all other facilities shown on the Plans or otherwise made known to the Contractor. If damaged, repair, replace, or restore to a condition equal to or better than the original condition at no additional cost to the Contract.
  - b. Notify all persons, firms, corporations, or agencies owning or using any existing structures, conduits, or utilities which may be affected by the Work prior to the start of construction.
  - c. Make arrangements to locate, maintain, protect, and/or relocate facilities in order to complete the Work.
  - d. Make such exploration as is necessary to determine the exact location of underground utilities.
  - e. Exercise care during the progress of work in the area to prevent damage to the utilities.
  - f. Whenever it becomes necessary to relocate underground gas mains, telephone conduit, or electrical lines or support or relocate utility poles, the utility company involved will make such relocation or provide pole support. Notify the utility company promptly.
  - g. Whenever it becomes necessary to relocate water or other pipes or conduits in direct conflict with the proposed pipe (exclusive of culverts) which are not shown on the Plans, obtain the direction from the Engineer for the relocation. Compensation will be allowed only for such quantities as determined by the Engineer.
  - h. Do not obstruct accessibility of fire hydrants.
  - i. Maintain access to driveways at all times except when actual trench construction is crossing a driveway.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

TRENCHING:

1. Do not advance trench excavation more than 50 feet ahead of completed pipe installation except as approved by the Engineer.
2. Provide and maintain sheeting, shoring, and bracing necessary for protection of the Work, adjacent property, and for the safety of personnel.
  - a. Remove temporary sheeting and bracing after backfilling to an elevation which will prohibit caving of exposed sidebanks.
  - b. Fill voids left by the withdrawal of sheeting with compacted sand.
  - c. The Engineer may direct that supports in trenches be cut off at any specific elevation to protect adjacent facilities or property. Compensation for support left in place will be negotiated.
  - d. No extra payment will be made for the supports left in place without the direction of the Engineer.
  - e. Do not leave supports within 4 feet of the ground or pavement surface in place without the permission of the Engineer.
3. Provide pumping, bailing, wellpointing, and construct ditches and dikes required to dewater and drain ground water, sewage, or stormwater to keep the excavation and site dry for the completion of the Work.
4. Excavation:
  - a. Excavate by open cut unless otherwise indicated on the Plans.
  - b. Excavate trenches to the depths and grades necessary for the pipelines with allowances for bedding material.
  - c. Over excavate organic, soft, spongy, or otherwise unsuitable soils found at or below the bottom of the trench to meet firm subsoil or as determined by the Engineer.
  - d. Comply with IDOT maximum widths for trench backfill.
  - e. If the Contractor elects to perform any non-open cut installation, the Contractor will be responsible for any damage to existing utilities.

EXCAVATION FOR APPURTENANCES:

1. Excavate for manholes and similar structures to the depths as shown on the Plans and to a distance sufficient to leave at least 12 inches clear between outer surfaces and the embankment or shoring that may be used to hold and protect the banks.
2. Over depth excavation beyond depths indicated on the Plans that has not been directed will be considered unauthorized. Fill with sand, gravel, or lean concrete as determined by the Engineer, and at no additional cost to the Contract.

BEDDING AND COVERING OF PIPE: Bedding is defined as the shaped and tamped material which supports the pipes. Covering is defined as the compacted material which protects and

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

covers the pipes. Provide continuous bedding and covering for underground pipelines, except where concrete encasement, concrete cradles, boring or jacking are indicated.

Pipe bedding:

1. Provide compacted granular pipe bedding and covering material with a minimum thickness of 4 inches under pipe barrels and 2 inches under bells.
2. Wherever the trench is over-excavated due to removal of unsuitable material, refill the trench bottom to the bottom of the pipe bedding with granular material conforming to the IDOT "Standard Specifications" gradation No. CA 1 as determined by the Engineer.
  - a. Unless otherwise specified to be paid for, removal and replacement of material, or unsuitable material, to a depth of one foot below pipe barrel outside diameter is considered incidental to installation of the pipe.
3. Wherever the trench is over excavated to remove unsuitable material, install geotechnical fabric between native soil and granular material:
  - a. Install fabric to cover bottom and sides of trench to heights as follows:
    - (1) For all flexible pipe and rigid pipe 24-inch and smaller: to envelop entire bedding and covering material and overlap 1-foot at the top.
    - (2) For rigid pipe 27-inch and larger: to cover bedding material and from sides of trench to edge of pipe.
    - (3) Where undercut is of a depth that requires more than one piece of fabric to provide envelope, provide sewn seams between sections of fabric.
4. Wherever two or more pipes or conduits are placed in the same trench or excavated area, backfill the trench with granular pipe bedding and covering material to support the uppermost pipe or conduit.

Pipe covering:

1. Following placement of pipe and inspection of joints, provide compacted granular pipe bedding and covering material for the full width of the trench to 12 inches above the top of pipe.
2. Place granular pipe bedding and covering material in uniform loose layers not exceeding 8 inches thick.
  - a. Compact each layer firmly by ramming or tamping with tools approved by the Engineer in such a manner as not to disturb or injure the pipe to yield a minimum density of 95 percent of maximum dry density as determined according to ASTM D1557 or AASHTO-T180.
3. Where trench is widened by installation of structures or jacking pits, extend bedding and covering materials to total width of excavations.

TRENCH BACKFILLING AND COMPACTING: Backfill trench from the top of pipe cover to topsoil, paving subgrade, or foundation level.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

For trench in lawns, parkways, and other improved areas not subject to vehicular traffic:

1. Backfill with excavated materials in uniform loose layer not exceeding 12 inches thick.
2. Compact each layer of trench backfill materials to yield a minimum of 85 percent of maximum dry density as determined according to ASTM D1557 or AASHTO-T180.

For trench in streets, parking areas, driveways, sidewalks, curb and gutter, or within 2 feet of any proposed curb and gutter, sidewalk, or other paved areas:

1. Backfilling with granular backfill materials:
  - a. Place in uniform loose layer not exceeding 12 inches thick and compact with vibrating roller or equivalent.
  - b. Water jetting may not be used in lieu of vibratory compaction.
  - c. Fill the top of trenches with temporary aggregate pavement material to the depth(s) required to provide aggregate base and pavement base, binder and surface courses of the depths shown on the Plans. Installation and removal is paid for as TRENCH BACKFILL.
2. Compacting requirements:
  - a. Compact each layer of trench backfill materials to yield a minimum density of 90 percent of maximum dry density as determined according to ASTM D1557 or AASHTO T-180.
  - b. The Engineer has the authority to request the services of an independent testing laboratory for the density tests at the Contractor's expense.
3. Maintain temporary pavement level with adjoining pavement surfaces until the permanent pavement is placed.

BACKFILL AND BEDDING FOR APPURTENANCES:

1. Provide 4 inches of granular bedding material unless otherwise shown on the Plans.
2. Do not backfill until new concrete has properly cured, and any required tests have been accepted.
3. Backfill in lawns and landscaped areas with excavated materials.
4. Backfill in pavement around manholes, catch basins, inlets, valve vaults, and other structures as determined by the Engineer with granular backfill materials.

FINISH GRADING:

1. Provide finish grading and filling to achieve the lines and grades.
2. Slope grades to drain away from structures.
3. Replace culverts damaged during the construction with new culverts. Temporary culverts may be provided if drainage improvements are part of the Contract.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

4. Except where mounding over trenches is specified, grade smooth areas of the Work including previously grassed areas that have been disturbed, and adjacent transition areas.
5. Fill and compact depressions from settlement and round tops of embankments and breaks in grade.
6. Protect newly graded areas from traffic and erosion. Repair settlement or washing away that may occur prior to surface restoration and re-establish grades to the required elevations at no additional cost to the Contract.
7. Remove unsuitable and surplus excavated materials not used for backfilling from the project site.
8. Do not deposit on public or private property without written permission from property owner or authorized representative of appropriate public agency.

**ITEM #7 - PARKWAY RESTORATION:**

This work shall be done in accordance with Sections 211 and 252 of the Standard Specifications and the Details provided in the Plans, except where modified herein.

Description. The purpose of this work is to restore the areas disturbed by construction and/or to provide proper drainage in the parkways.

This work shall include restoring disturbed areas within the construction limits, removing excess backfill material, furnishing and placing topsoil in accordance with Section 211, compacting and grading to maintain positive slope, and sodding the areas in accordance with Section 252. Care should be taken to insure proper compaction as the Contractor will be responsible for repair of any areas where settlement occurs.”

211.02 Materials. Add the following to the end of the Article:

“Topsoil shall be a loamy mixture of black dirt having at least 90 percent passing a No. 10 sieve, and shall be free of large roots, brush, sticks, weeds, stones larger than 1/2-inch in diameter and any other litter. Topsoil, pH shall not be lower than 4.5 nor higher than 8.5 as determined in accordance with ASTM procedures for soil testing. Sod shall be salt tolerant.”

211.04 Placing Topsoil and Compost. Add the following to the end of the Article:

“The topsoil shall be spread to a smooth, compacted uniform thickness of not less than 4 inches.”

252.03 Ground Preparation. Add the following to the end of the Article:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

"The removal of any excess backfill material shall be included in the pay item for PARKWAY RESTORATION.

Fertilizer nutrients shall be applied in accordance with Section 252.03 of the Standard Specifications and shall be included in the pay item for PARKWAY RESTORATION."

252.06 Placing Sod. Add the following to the end of the Article:

"The Contractor shall provide subsequent resodding until a satisfactory growth of grass is produced or if settlement occurs."

211.07 and 252.12 Method of Measurement. Delete the final paragraph of Article 252.12, Replace Article 211.07 and the first paragraph of 252.12 with the following:

**"Method of Measurement.** This work will be measured for payment in place, and the area computed in square yards. To be acceptable for final payment, the sod shall be growing in place for a minimum of 30 days in a live, healthy condition."

211.08 and 252.13 Basis of Payment. Delete the final paragraph of Article 252.13, Replace Article 211.08 and the first three paragraphs of 252.13 with the following:

**"Basis of Payment.** This work will be paid for at the contract unit price per square yard for PARKWAY RESTORATION."

**ITEM #9 - INLET FILTERS:**

Inlet filters shall be provided and installed in accordance with Section 280 of the Standard Specifications except as modified herein.

Inspect and clean filters weekly and after every rainfall. Perform maintenance as needed. Dispose of debris removed at an approved location. Remove the filter assembly as directed by the Engineer. Maintenance and cleaning of the inlet filters will not be paid for separately, but will be included in the cost of the INLET FILTER.

**ITEM #10 - AGGREGATE SUBGRADE IMPROVEMENT (D-1)**

~~Effective: February 22, 2012~~

~~Revised: April 1, 2016~~

Add the following Section to the Standard Specifications:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**“SECTION 303. AGGREGATE SUBGRADE IMPROVEMENT**

**303.01 Description.** This work shall consist of constructing an aggregate subgrade improvement.

**303.02 Materials.** Materials shall be according to the following.

Item	Article/Section
(a) Coarse Aggregate .....	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3) .....	1034

~~— Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradation CS 01 but shall not exceed 40 percent by weight of the total product. The top size of the Coarse RAP shall be less than 4 in. (100 mm) and well graded.~~

~~— Note 2. RAP having 100 percent passing the 1 1/2 in (37.5 mm) sieve and being well graded, may be used as capping aggregate in the top 3 in. (75 mm) when aggregate gradation CS 01 is used in lower lifts. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders. The final product shall not contain more than 40 percent by weight of RAP.~~

~~— Note 3. The RAP used for aggregate subgrade improvement shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Pavement (RAP) for Aggregate Applications”.~~

**303.03 Equipment.** The vibratory machine shall be according to Article 1101.01, or as approved by the Engineer. The calibration for the mechanical feeders shall have an accuracy of ± 2.0 percent of the actual quantity of material delivered.

**303.04 Soil Preparation.** The stability of the soil shall be according to the Department’s Subgrade Stability Manual for the aggregate thickness specified.

**303.05 Placing Aggregate.** The maximum nominal lift thickness of aggregate gradation CS 01 shall be 24 in. (600 mm).

**303.06 Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. ~~When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not~~

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

~~be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.~~

**303.07 Compaction.** All aggregate lifts shall be compacted to the satisfaction of the Engineer. If the moisture content of the material is such that compaction cannot be obtained, sufficient water shall be added so that satisfactory compaction can be obtained.

**303.08 Finishing and Maintenance of Aggregate Subgrade Improvement.** The aggregate subgrade improvement shall be finished to the lines, grades, and cross sections shown on the plans, or as directed by the Engineer. The aggregate subgrade improvement shall be maintained in a smooth and compacted condition.

**303.09 Method of Measurement.** This work will be measured for payment according to Article 311.08.

**303.10 Basis of Payment.** This work will be paid for at the contract unit price per cubic yard (cubic meter) for AGGREGATE SUBGRADE IMPROVEMENT ~~or at the contract unit price per square yard (square meter) for AGGREGATE SUBGRADE IMPROVEMENT~~, of the thickness specified.

Add the following to Section 1004 of the Standard Specifications:

**"1004.07 Coarse Aggregate for Aggregate Subgrade Improvement.** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate shall be crushed gravel, crushed stone, or crushed concrete. ~~The top 12 inches of the aggregate subgrade improvement shall be 3 inches of capping material and 9 inches of crushed gravel, crushed stone or crushed concrete.~~ In applications where greater than 36 inches of subgrade material is required, rounded gravel, meeting the CS01 gradation, may be used beginning at a depth of 12 inches below the bottom of pavement.
- (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials. ~~Non-mechanically blended RAP may be allowed up to a maximum of 5.0 percent.~~
- (c) Gradation.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (1) The coarse aggregate gradation for total subgrade thicknesses of 12 in. (300 mm) or greater shall be CS 01.

Grad No.	COARSE AGGREGATE SUBGRADE GRADATIONS				
	Sieve Size and Percent Passing				
	8"	6"	4"	2"	#4
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

Grad No.	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
	Sieve Size and Percent Passing				
	200 mm	150 mm	100 mm	50 mm	4.75 mm
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20

- (2) The 3 in. (75 mm) capping aggregate shall be gradation CA 6 or CA 10.

**ITEM #24 - CLASS B PATCHES:**

This work shall be done in accordance with Section 442 of the Standard Specifications except as modified herein.

442.01 Description. Delete all reference to a specified "type" in this Article.

442.05 Pavement Removal. In the last sentence in the first paragraph of subsection (b) reference to "Only full lane width patches will be permitted" shall be replaced by "Only patches greater than four feet in width will be permitted".

442.11 Basis of Payment. Revise the second paragraph of this Article to Read:

"This work will be paid for at the contract unit price per square yard for CLASS B PATCHES, of the thickness specified."

**ITEM #28 FIRE HYDRANTS TO BE REMOVED:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and shall consist of the abandonment of existing fire hydrants. This work shall include pavement removal and disposal; excavation; cutting fire hydrant lead between auxiliary valve and water main; removing entire fire hydrant and auxiliary valve assembly;

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

installing a cap on the hydrant lead; and backfilling to proposed subgrade elevation with mechanically compacted granular backfill.

Basis of Payment. This work will be paid for at the contract unit price per each for FIRE HYDRANT TO BE REMOVED.

**ITEM #33 - VALVE VAULTS:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of installing valve vaults complete in place, including ASTM C-923 mechanical boot connection as shown in the detail on the Plans. This work shall include excavation; removal and disposal of waste excavated materials; protection, repair, or replacement of utilities; frames and lids; final adjustment of the frame to meet finished grade; joint protection; trench dewatering; erosion and siltation control methods and devices to protect the environment; backfilling with and compacting trench backfill material around the new vault; finish grading.

Basis of Payment. This work will be paid for at the contract unit price per each for VALVE VAULTS, of the valve vault size and frame and lid type indicated.

**ITEM #35 – FRAMES AND GRATES (SPECIAL):**

This work shall be done in accordance with Section 604 of the Standard Specifications except as modified herein.

The frame and grate shall be installed in a depressed B-6.12 gutter at a sidewalk ramp and shall be ADA compliant. Frame and grate must be approved by the Village before ordering.

604.05 Basis of Payment. Revise this Article to Read:

"This work will be paid for at the contract unit price per each for FRAMES AND GRATES (SPECIAL)"

**WATER DISTRIBUTION SYSTEM:**

SUMMARY: Provide the water distribution system as shown on the Plans, specified herein, and needed for a complete and proper installation, and in accordance with the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", except as revised herein.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Provide labor, materials, tools, chemicals and equipment necessary to perform the pressure and leakage tests and disinfection.

SUBMITTALS: Furnish two (2) copies of bacteriological test reports.

IRON AND STEEL MATERIALS: All iron and steel materials used on this project shall be domestically manufactured or produced and fabricated in accordance with Article 106.01 of the Standard Specifications.

BRASS AND BRONZE ALLOYS: All brass and bronze alloys supplied with the products shall contain less than 15 percent zinc, unless otherwise specified.

1. Brass that will come in contact with potable water shall contain no more than 0.25% lead.
  - a. Brass fittings shall be marked with industry standard marking to indicate the amount of lead (no lead, low lead, etc.) in the brass.
  - b. Brass for service saddles may contain more than 0.25% lead to improve ductility of the saddles.

PIPE AND FITTINGS: Provide ductile iron pipe materials in size 4-inch through 10-inch unless otherwise indicated on the Plans.

Ductile Iron Pipe: Provide ductile iron pipe complying with ANSI A21.51, special thickness Class 52, with joints complying with ANSI A21.11. Use cement lining complying with ANSI/AWWA, C104/A21.4 standard thickness.

1. Provide restrained joint pipe system, where indicated on the Plans, that utilizes one of the following methods:
  - a. Lock rings welded into place around pipe barrel.
  - b. Bolted rings installed around pipe barrels that fit inside pipe bells.
  - c. Gaskets which include stainless steel locking segments vulcanized into the gasket.
  - d. Mechanical joint retainer gland systems that provide locking segments shaped to pipe barrel that do not create stress points on pipe barrel.
    - (1) Do not use setpoint type retainer glands.
  - e. Acceptable products:
    - (1) American Fastite, Flex-ring, Lok-ring, and MJ coupled joint.
    - (2) Clow Tyton Joint – Type A or Type B, and Super-Lock.
    - (3) U.S. Pipe TR-Flex Gripper.
    - (4) Griffin Bolt Lok or Snap Lok.
    - (5) Field Lok or Fast Grip Gasket Systems.
    - (6) Meg-A-Lug System.
      1. Series 1100 Megalug for MJ to pipe
      2. Series 1700 Megalug Harness for push on joint.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

(7) Or approved equal.

2. Fittings:

- a. Use ductile iron fittings with mechanical joint complying with ANSI A21.10 or A21.53.
- b. Use cement lining complying with ANSI A-21.4, standard thickness.
- c. Bolts and nuts:
  - (1) Use Cor-blue bolts and nuts,
- d. Provide restrained joint type fittings compatible with pipe system utilized, as specified by the pipe manufacturer.
- e. Mechanical joint retainer gland systems that provide locking segments shaped to pipe barrel that do not create stress points on pipe barrel.
  - (1) Acceptable products:
    1. Meg-A-Lug System.
      - a. Series 2000PV Megalug for MJ to Pipe (C-900).
      - b. Series 1500 Megalug Harness for push on joint (C-900).
      - c. Series 1900 Megalug for MJ to Pipe (C-909).
      - d. Series 1900 Harness for push on joint (C-909).

3. Conductivity appurtenances:

- a. Provide wedges of serrated silicon bronze or #10-copper cable and tapping devices specifically designed for this purpose.
- b. Use devices provided by the pipe manufacturer.
- c. Standard mechanical joints, field lok, or meg-a-lug are not acceptable for the purpose of conductivity.

VALVES: Provide gate valves with clockwise closing direction.

1. Design in accordance with AWWA C509 (cast iron body), or AWWA C515 (ductile iron body) bronze fitted, resilient wedge and seat type with non-rising stem and O-ring packing.
2. Provide ANSI Class 125 flange ends or mechanical joint ends for valves installed in vaults as indicated on the Plans.
  - a. Provide restrained type joints for all mechanical joint end valves.
3. Acceptable valve manufacturers:
  - a. Waterous Model 2500
4. Acceptable valve box manufacturer:
  - a. Tyler 664-S

VALVE VAULTS:

1. Provide precast reinforced concrete manhole sections, bottoms, and flat top slabs complying with ASTM C478 unless otherwise indicated on the Plans.
2. Provide concentric cone section unless otherwise indicated on the Plans.
3. Provide precast reinforced concrete monolithic or separate base.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

4. Design flat slab tops for AASHTO HS20-44 wheel loading.
5. Provide 4,000 psi concrete using Type I Portland Cement complying with ASTM C150.
6. Mortar: Mix one part Portland Cement to three parts fine aggregate.
  
7. Provide joints of either flexible watertight rubber gaskets or preformed bituminous plastic gaskets consisting of a homogeneous blend of refined hydrocarbon resins and plasticizing compound reinforced with inert mineral filler.
  - a. Acceptable preformed gasket products:
    - (1) K.T. Snyder Co., RAM-NEK.
    - (2) Concrete Sealants, Type CS-208.
    - (3) Or approved equal.
8. Frames and covers: Provide cast iron frames and covers with heavy duty, indented top with solid self-sealing lids and machined bearing surfaces, stamped with the words "VILLAGE OF VILLA PARK" and "WATER".
  - a. Acceptable products:
    - (1) Neenah R-1713;
    - (2) East Jordan 1050 EXHD;
    - (3) Or approved equal.
9. Flexible pipe connectors: Provide flexible rubber gasket collar for connecting pipe to the manhole.
  - a. Comply with ASTM C-923
  - b. Use PSX gasket system by Press-Seal Gasket Corporation.

FIRE HYDRANTS:

1. Comply with AWWA C502.
2. Factory painted red.
3. Match the hydrants generally installed in the Municipality's water system.
  - a. Acceptable manufacturers:
    - (1) Waterous Pacer Model WB 67-250
    - (2) Or approved equal.
4. Hydrant shall have a five and one half foot bury depth.
5. Provide compression type with a 5-1/4-inch and minimum size main valve assembly, O-ring seals, two 2-1/2-inch hose nozzles, and a 4-1/2-inch pumper nozzle with National Standard threads, a National Standard operating nut, and an above-ground break flange.
6. Provide a 6-inch auxiliary resilient seat type gate valve with restrained type joints or bituminous coated metal tie rods between the valves and the tee fittings.
7. Provide valve boxes with cover marked with the word "WATER".
  - a. Bituminous coated carbon steel valve extension stems and 2-inch square operating nuts 2 inches below cover.
8. Provide valve box stabilizers on all hydrant auxiliary valves.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- a. Acceptable manufacturers:
  - (1) BLR Enterprises, Inc.
  - (2) Or approved equal.

WATER SERVICES:

1. Provide service saddles, corporation stops, curb stops, service boxes, and water service tubing. Comply with the most recent edition of AWWA C800 (or NSF/ANSI 372) for service lines and service line appurtenances.
  - a. Service lines: 1-inch Type K soft temper seamless copper water tubing complying with ASTM B-88.
  - b. Service saddles: direct tap all water services to the new water main, no service saddles will be used.
  - c. Corporation stops: Mueller No. H15000 with AWWA taper thread inlet and copper flare straight connection outlet.
  - d. Curb stops: Mueller No. H15154, Minneapolis pattern.
  - e. Service boxes: Extension type with stationary rods, No. H10302 Minneapolis pattern.
  - f. Unless otherwise specified, all fittings shall be no-lead brass.

TAPPING SLEEVES AND VALVES:

1. Tapping Sleeves:
  - a. Use two-piece bolted sleeve ductile iron or stainless steel type with mechanical joints.
  - b. Provide joint accessories.
  - c. Measure existing water main outside diameter to determine proper tapping sleeve size
  - d. Acceptable manufacturers:
    - (1) Ductile iron: Clow F-5205, or approved equal.
    - (2) Stainless steel: Cascade CST extra heavy duty.
    - (3) Or approved equal.
2. Tapping valves:
  - a. Use fully ported gate valves complying with AWWA C500.
  - b. Use mechanical joints type, Clow F-5093, or approved equal.

RESTRAINED FLANGE ADAPTOR:

1. Provide a ductile iron flange adaptor dual ring system with bolt circles compatible with 125#/Class 150 bolt pattern.
  - a. Provide adaptor with individual actuated gripping wedges that utilize torque limiting screws to insure proper initial set.
  - b. Set screw "only" restraining adaptors are not acceptable.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- c. Provide system that allows joint deflection of up to 5°.
  - d. Provide a fluoropolymer coating to the wedge and wedge assembly and powder coating to the restraint body.
2. Acceptable Manufacturers:
  - a. Series 2100 Megaflange by Ebaa Iron;
  - b. Or approved equal.

WATER MAIN REPAIR:

1. Repair water main or water services damaged during construction utilizing products of type and manufacturers as approved by the Owner.
2. Pipe couplings for joining of sections of cut water main where a section of new pipe is used to replace a broken pipe.
  - a. Acceptable manufacturers:
    - (1) Hymax.
3. Repair clamps for broken or cracked pipe and sealing of existing corporation stop opening.
  - a. Use full-circle single band all stainless steel clamps.
  - b. Acceptable manufacturers:
    - (1) Smith-Blair 261.
    - (2) Or approved equal.
  - c. Replace damaged service corporation stops by installation of full-circle single band all stainless steel clamps, with service outlet, matching manufacturer's and styles used for repair of a cracked pipe.
4. Whenever existing water mains or water service pipes are damaged during construction, stop the pipe installation work and immediately repair the damaged portion of the existing piping.
5. Contact the Engineer and Owner immediately to report the location and extent of the damage.
6. Repair the water main with methods complying with the "Standards for Water and Sewer Main Construction In Illinois", and any additional requirements required by the Owner.
7. Utilize only materials of repair as noted in the products section of this specification or as dictated by the Owner.
8. Where water services have been stripped or pulled from the water main, replace the corporation stop as instructed by the Engineer, and replace the water service pipe to a point as determined by the Engineer.
9. Comply with disinfection requirements as dictated by the Owner.
10. Do not cover the repair until work is inspected and approved by Engineer.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

### CONSTRUCTION REQUIREMENTS

PIPE INSPECTION, HANDLING, STORAGE, AND INSTALLATION: Install in accordance with pipe manufacturer's recommendations.

1. Ductile iron water mains and appurtenances:
  - a. Comply with AWWA C-600.
  - b. Install conductivity through joints by use of conductivity wedges or copper cable and taps.
    - (1) Use two wedges per joint.
    - (2) Use number of copper cable connectors per joint as recommended by the pipe manufacturer.

OPERATION OF APPURTENANCES: Village of Villa Park Public Works Department employees only shall operate any existing water distribution appurtenances (i.e. water valves, hydrants, etc.).

WATER DISRUPTIONS: A minimum seventy-two (72) hours advance notice to the Owner's Public Works Department is required for any water disruptions.

DEPTH OF PIPE COVER: Lay water mains and water service lines with a minimum depth of cover of five and one half feet below finished grade ground level unless otherwise indicated on the Plans.

1. Where new mains cross existing mains, install new main below existing main unless otherwise indicated on the Plans.

### CONNECTIONS TO EXISTING WATER MAINS:

1. Make connections to existing mains.
2. Use non-pressure connections, except where pressure connections are shown on the Plans or as directed by the Engineer.
3. Make one connection at a time except as approved by the Engineer.

### PIPE RESTRAINING SYSTEMS:

1. Provide protection from movement of water main piping, plugs, caps, tees, valves, hydrants, and bends of 11-1/4 degrees or greater.
2. Provide concrete thrust blocks at all locations unless restrained joint type fittings are utilized.
3. Where restrained joint type fittings are called for on the Plans, but cannot be utilized, provide concrete thrust blocks.
4. Concrete thrust blocks:
  - a. Provide precast or cast-in-place concrete thrust blocking with a compressive strength of 3000 psi in 28 days.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- b. Locate thrust blocking between solid ground and the fitting to be anchored.
  - c. Unless otherwise shown or directed by the Engineer, place the base and thrust bearing sides of thrust blocking directly against undisturbed earth.
  - d. Sides of thrust blocking not subject to thrust may be placed against forms.
  - e. Place thrust blocking so the fitting joints will be accessible for repair.
  - f. When conditions prevent the use of concrete thrust blocks, use restrained joints of an approved type.
  - g. Minimum width of thrust block shall be 12 inches.
5. Restrained type pipe, fittings, and valves:
- a. Provide restrained system as outlined in this Section or utilize metal tie rods, clamps, and lugs to prevent pipe and appurtenances from movement.
  - b. Protect tie rods and clamps with epoxy or bituminous paint.
  - c. Only restrained joint pipe indicated on the Plans will be paid for as a separate Pay Item.
    - i. Restraining gaskets or locking systems utilized on straight runs of push pipe are not considered as fittings, and are paid for as part of the Pay Item for restrained joint type pipe.

**SEWER CROSSING:** Separate water mains and water service lines from sanitary sewer, storm sewers, combined sewers, house sewer service connections, and drains in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois".

**VALVE VAULTS:**

1. Install pipe through valve vault as shown on the Detail.
2. Make vault watertight with use of flexible manhole connectors as per the Detail.
3. Jointing:
  - a. Use flexible watertight gaskets for each joint.
  - b. Trim smooth and free from surplus gaskets.
4. Frames and covers: Unless otherwise shown on the Plans or as determined by the Engineer, set frames and covers:
  - a. In paved areas: So that the top of the solid cover will be flush with the finished pavement; or
  - b. In unpaved areas: To drain away from the valve vault.
  - c. With flexible watertight gaskets.
  - d. With grade rings not to exceed 12 inches.

**HYDRANT INSTALLATION:**

1. Install hydrants plumb with the lowest hose connection at least 18 inches but not more than 24 inches above the finished grade ground level. Set hydrant bases and auxiliary valve on a precast concrete block to provide firm support for the base.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

2. Brace the bases with solid concrete blocking between the base and undisturbed trench wall to counteract the reaction thrust of water pressure at the base. Provide mechanical joint anchoring fittings or approved restrained joints.
3. Brace the hydrant barrels during backfilling. Do not block the drain hole in hydrant.
4. Place a minimum of 1 cubic yards of washed coarse stone at and around the base for proper drainage. Cover stone with plastic before backfilling.
5. Place and compact backfill materials in 6-inch layers around the hydrant and auxiliary gate valve.
6. Cover new hydrant with plastic bag until new system is in service.

WATER SERVICE CONNECTION:

1. Make service connections at locations shown on the Plans or determined by the Engineer at the time of construction.
2. Install water service pipe, corporation stop, curb stop, and service box as shown on the water service installation detail in the Plans.
3. Set curb stop on a precast concrete block.
4. Do not splice the water service pipe.
5. See TESTING AND INSPECTING for sequence of service line construction.
6. Service boxes:
  - a. Install service box over curb stop in a truly vertical position.
  - b. Set the top of box flush with the surrounding finished grade.

TUNNELING:

1. This work applies to tree tunneling and service line installation for open-cut water main construction only.
2. Use boring auger with a diameter at least 6 inches larger than the outside diameter of the bell of the pipe to be installed.
  - a. Place a 3-inch sand cushion in the bored hole before installing the pipe.
  - b. Push the pipe carefully into place so as not to disturb the bore hole.
  - c. Fill the void space around the pipe with sand.
3. Water main may be tunneled by hydro-boring or other directional boring method in lieu of method outlined above.
  - a. Method must be approved by Engineer at pre-construction meeting.
  - b. No additional compensation will be allowed. If alternate method proves to be unsuccessful, and Contractor will complete installation as outlined above at no addition to Contract.

TESTING AND INSPECTING:

Sequence of installation: Install new water main but do not install corporation stops, services lines, curb stops, or service boxes until after: conducting pressure test, leakage test, disinfection

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

of new water main, flush main, and acceptance for putting new main into service. Finish by installing corporation stops, service lines, curb stops and service boxes, and test and disinfect prior to connection to existing service lines.

1. Hydrostatic tests:
  - a. Devise a method for disposal of waste water from hydrostatic tests, and for disinfection, as approved in advance by the Engineer.
2. Pressure tests:
  - a. Subject the new water mains, including valves and hydrants, to a hydrostatic pressure of 150 psi.
  - b. Hold the test pressure for a duration of two hours without pressure loss or further pressure application.
  - c. Carefully examine exposed pipe, joints, fittings, and valves.
  - d. Replace or remake joints showing visible leakage.
  - e. Remove cracked pipe, defective pipe, and cracked or defective joints, fittings and valves. Replace with sound material and repeat the test until results are satisfactory.
  - f. Make repair and replacement without additional cost to the Village.
3. Leakage test:
  - a. Conduct a metered leakage test after the pressure test has been satisfactorily completed.
  - b. Duration of each leakage test: At least 24 hours.
  - c. During the test, subject water lines to a normal water pressure of the Municipality's water system.
  - d. Install water meter approved by the Engineer. Provide double check valve assembly between water meter and existing water main.
  - e. Maximum allowable leakage: As recorded by a meter approved by the Engineer, with leakage to not exceed the number of gallons per hour (gph) as determined by the following formula:

$$\text{gph} = LD (P^{1/2})/133,200$$

in which: L = Length of pipe tested, in feet  
D = Diameter of water main, in inches  
P = Average pressure, in pounds per square inch (gage)

Should any test of pipe disclose leakage greater than the maximum allowable amount, locate and repair the defective joint or joints and then repeat the 24-hour metered leakage test until the leakage is within the specified allowance, and at no additional cost to the Contract.

4. Time for making test:
  - a. Except for joint material setting and curing time for thrust blocks, pipelines jointed with rubber gaskets, mechanical, or push-on joints, or couplings may be subjected

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- to hydrostatic pressure, inspected, and tested for leakage any time after partial completion of backfill.
- b. Perform the pressure and leakage tests satisfactorily prior to requesting the Engineer to witness the official tests.
  - c. Notify the Engineer at least 48 hours prior to the time of the requested official tests.
  - d. Depending on traffic conditions, public hazard, or other reasons, the Engineer may direct when to conduct the tests, and may order the tests to be made in relatively short sections of water mains.

**PRELIMINARY FLUSHING:**

1. Prior to disinfection, flush main as thoroughly as possible.
  - a. Flush main until water runs clear.
  - b. Provide a minimum flushing velocity of 2.5 fps in the water main.
2. Coordinate time of flushing with Owner and Engineer, at least 72 hours in advance of flushing.
  - a. Do not initiate flush without Owner's permission.

**DISINFECTION:** After the water main work has been satisfactorily completed and tested, disinfect the work in accordance with AWWA C651, and "Standard Specifications for Water and Sewer Main Construction in Illinois".

1. Forms of applied chlorine:
  - a. Apply chlorine by gas feed or solution feed chlorinator, as approved by the Owner.
  - b. Provide effective diffusion of the gas or solution into the water within the water main.
  - c. Provide means for preventing the backflow of water into the feeder.
2. Requirement of chlorine:
  - a. Initial chlorine solution in pipe: At least 50 mg/l, but not more than 100 mg/l.
  - b. Retain the disinfecting solutions in the work for at least 24 hours
  - c. Chlorine residual after the retention period: At least 25 mg/l.
3. Flushing and testing:
  - a. Following chlorination, flush treated water thoroughly from the water mains until the chlorine concentration in the water flowing from the main is no higher than generally prevailing in the Municipality's system, or less than 1 mg/l.
  - b. After flushing, collect two water samples on successive days at least 24 hours apart in sterile bottles treated with sodium thiosulfate. Notify the Engineer and the Owner to witness sample collection.
  - c. Deliver the samples to a State approved laboratory for bacteriological analysis.
  - d. Should the initial disinfection result in an unsatisfactory bacterial test, repeat the chlorination procedure until satisfactory results are obtained.
  - e. The Owner will provide the water for initial flushing and testing only.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- f. Compensate the Owner for water used in subsequent flushing and testing.
4. Swabbing:
  - a. Flush and swab the piping, valves, and fittings that must be placed in service immediately and cannot be disinfected by the above specified methods, with 5 percent solution of calcium hypochlorite prior to assembly.
  - b. Secure the Engineer's approval before applying this method of disinfection.

#### DECHLORINATION

1. Comply with AWWA C651-05 requirements to neutralize the residual chlorine in new water mains.
2. After new water mains have passed disinfection requirements, utilize portable diffusing dechlorinators that utilize sulfur dioxide or other chemicals listed in Appendix C of AWWA C651 to lower chlorine residuals prior to discharge to the drainage system. Lower concentration to 1 mg/l or less.

#### ABANDONMENT OF EXISTING WATER MAINS AND APPURTENANCES:

1. Abandon water mains indicated on the Drawings as "to be abandoned" only after all requirements for testing and disinfection have been satisfied and all existing services have been connected to new water mains.
2. Provide ductile iron plugs or caps to abandon water main pipes.
3. Provide ductile iron plugs, caps, or other necessary fittings, and thrust blocking, on ends of portions of existing water mains that are to remain in service.
4. Close existing water valves only with the permission of the Engineer.
5. Deliver valves, valve boxes, fire hydrants, and frames and grates to the Municipality's Public Works Department. Contractor to dispose offsite any abandoned materials the Village does not want to keep.
6. Removal of existing water mains that are being replaced by new water mains in the same location is considered incidental to the installation of the new water main and no additional compensation will be allowed.

#### **ITEMS #37 - #40 - DUCTILE IRON WATER MAIN, OPEN CUT:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and "TRENCHING BACKFILLING AND COMPACTING FOR SANITARY SEWERS AND WATER MAIN", and shall consist of water main pipe complete in place, including excavation; removal and disposal of waste excavated materials; protection, replacement, or repair of utilities; trench dewatering, including erosion and siltation control methods and devices to provide protection to environment from all pumping operations; installation of pipe and pipe fittings; bracing; **furnishing and installing all required restrained joint type ductile iron water main fittings**; furnishing and installing concrete thrust blocks at all

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

connections to existing pipe and at all bends, wyes, and tees; bedding and covering of pipe; trench backfilling with and compaction of excavated materials; testing; disinfection, finish grading; but not including backfilling with trench backfill material.

Installing new mains in excess of five and one half feet of cover in order to cross existing mains, provide for future improvements or cross below sewer lines is included in the cost of installation of the water main, and no addition to the contract will be allowed.

Method of Measurement. This work will be measured in lineal feet along the centerline of the pipe, and the measurement shall extend through fittings and valves.

Basis of Payment. This work will be paid for at the contract unit price per lineal foot for DUCTILE IRON WATER MAIN (OPEN CUT), of the pipe sizes and joint type, regardless of depth. Hydrant leader pipe shall be paid for as DUCTILE IRON WATER MAIN (OPEN CUT): 6".

Trench backfill with granular materials shall be paid for separately as TRENCH BACKFILL.

**ITEMS #41 - #43 - CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE):**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of non-pressure connections to existing water mains or force mains complete in place, including sawcutting, and removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; trench dewatering, including erosion and siltation control for discharge resulting from all pumping operations; protection, replacement, or repair of utilities; removal of existing plugs or caps; cutting and removal of the pipe if necessary; bracing; bedding and covering of pipe; testing; disinfection; finish grading; including backfilling and compacting excavated material or trench backfill material, but not including the valve vault.

The maximum time allowable per each non-pressure connection is two (2) hours. Each connection must be made within two (2) hours. Contractor should expect the flows in the water mains that are shut off for the non-pressure connections to be no more than 1/3 pipe diameter; a complete shutdown of all flow in the water mains should not be expected.

Basis of Payment. This work will be paid for at The Contract unit price for each CONNECTION TO EXISTING WATER MAIN (NON-PRESSURE), of the size noted, and shall include coordination with the Village.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**ITEM #44 - WATER VALVE:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of the installation of a gate valve, complete in place, installed as a part of the water main installation, at locations indicated on the Plans. This work shall include excavation; removal and disposal of waste excavated materials; protection, repair, or replacement of utilities; trench dewatering, erosion and sedimentation control methods and devices to protect the environment; backfilling with and compacting with trench backfill material around the new box; and finish grading.

Basis of Payment. This work will be paid for at the Contract unit price per each for WATER VALVE of the size indicated.

Fire hydrant auxiliary valves will be paid for separately as part of the pay item for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX.

**ITEM #45 - FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX:**

Description. The work of this pay item shall be in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of furnishing and installing fire hydrants with auxiliary valve and valve box complete in place at the locations shown on the drawings, including sawcutting, removal and disposal of existing pavements; excavation; removal and disposal of waste excavated materials; trench dewatering; thrust blocking; hydrant barrel drain washed stone pocket; support; testing; disinfection; and backfilling with and compacting of trench backfill material.

Method of measurement. This work will be measured for payment for each fire hydrant installed. Hydrant leader pipe will be paid for as DUCTILE IRON WATER MAIN, OPEN CUT, 6".

Basis of Payment. This work will be paid for at the contract unit price per each for FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX.

**ITEMS #46 & #47 - WATER SERVICE REPLACEMENT:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM" and shall consist of providing and installing new 1-inch copper water service pipes by horizontal directional drilling method or open cut method ("long side" services) and open cut method ("short side" services) from the right of way line and terminate at the connection to the water main. Any damage caused by directional drilling methods shall be repaired by contractor at contractor's expense. This work also includes connecting water service

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

lines to the new main and to the existing water service pipes complete in place, corporation stops; curb stops, and service boxes. This work also includes all required fittings or adaptors necessary to connect to existing service lines, and backfilling with and compacting of trench backfill material. This work also includes removal and disposal of existing service boxes. Water service pipes must be installed by trenchless methods at locations where open cut would damage trees or tree roots.

Method of Measurement. Water service connections will be measured as a per each item.

Basis of Payment. This work will be paid for at the contract unit price per each for WATER SERVICE REPLACEMENT of the size and type indicated.

**ITEM #48 - WATER MAIN ABANDONMENT:**

Description. This work shall be in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and shall consist of the disconnection and abandonment of existing water main. The work shall include providing and installing caps and/or plugs on existing mains where portions of the existing main are to be abandoned after the new main is in service, including coordination of shut-down of mains with the Owner and Engineer; re-excavation of locations; removal and disposal of waste excavated materials; cutting of mains; removal of valve and delivery to Owner's Public Works Department; installation of plug or caps; concrete thrust blocks; backfilling and compaction of excavated materials or granular trench backfill material in pavements; and clean-up. All tees or crosses on mains to remain in service shall be cut out and a solid piece installed. All pipes, sleeves and fittings shall be included in this item. All sleeves to be Hymax.

Basis of Payment. The work will be paid for at the contract unit price per each for WATER MAIN ABANDONMENT.

**ITEM #49 - VALVE BOX TO BE REMOVED:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and shall consist of the abandonment of existing water valve and valve boxes. This work shall include turning off the valve, removal of valve box extension, and backfilling to the top of proposed subgrade with mechanically compacted granular backfill.

Basis of Payment. This work will be paid for at the contract unit price for VALVE BOX TO BE REMOVED.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**ITEM #50 - SANITARY SEWER SERVICE CONNECTION:**

Description. This work shall consist of removing and replacing the existing sanitary sewer service tee/wye connection fittings at locations shown on the drawings or at other locations as deemed necessary by the Engineer. This work shall be done in accordance with the details included as part of the contract plans. The work shall be done in accordance with applicable portions of Section 563 of the Standard Specifications and the Sanitary Sewer System Specifications. Locations of the repair will be provided by the Village prior to construction.

The Contractor shall install a new polyvinyl chloride wye fitting at the location of the connection on the mainline sanitary sewer. The services shall be replaced from the new wye at the mainline sanitary sewer to the existing service pipe, using PVC pipe of the same diameter as the existing connection.

The Contractor is to coordinate with the Village 48 hours prior to disconnecting the existing sanitary sewer service. During this time, the Contractor is to ensure the residences are notified of any potential interruption in services. This work is incidental to this item. After the sanitary connection has been installed the Contractor shall be responsible for locating said sanitary connection lines for the remainder of the construction. The Village will not locate sanitary connections placed by the Contractor for the duration of the project. Any damage to the sanitary connection by the Contractor caused by the Contractor's failure to properly locate the sanitary connection shall be repaired by the Contractor at his own expense to the satisfaction of the Engineer.

563.02 Materials. The materials shall be in accordance with the applicable portions of Section 550 and 563 and the Sanitary Sewer System Specifications with the following exceptions:

Replacement sewer service material shall be Polyvinyl Chloride (PVC) pipe conforming to ASTM D-2241 with gasket joints conforming to ASTM D-3212 and a Standard Dimension Ratio (SDR) equal to 26. The wye fittings to be installed on the main shall be fabricated to fit the mainline pipe that conforms to ASTM D-2241 (fittings conforming to ASTM D-3034 will only be permitted if fittings conforming to ASTM D-2241 are not available) and the branch service pipe that conforms to ASTM D-2241. All supplied pipes must be from the same manufacturer. All connections to existing pipes shall be made with "FERNCO" RC Series" or "MISSON Flex -Seal" adjustable non-shear repair couplings equipped with stainless steel bands. Additional fittings and labor required to connect the new 6-inch sanitary service pipe to existing service pipes that are a size other than six inches is incidental to this item.

Basis of Payment. This work will be paid for at the contract unit price for each SANITARY SEWER SERVICE CONNECTION which price is to include all labor, equipment, excavation, sawcutting

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

of pavement, materials, removal of existing connection, bypass pumping, removal of spoils, and reconnection of new pipe to existing pipe. If the sanitary sewer main or service pipe is required to be replaced as determined in the field by Engineer, the pipe will be paid for per linear foot as SANITARY SEWER PIPE, PVC SDR 26, ASTM D-2241 of the size specified.

**ITEMS #51 & #52 - SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241**

Description. The work of this pay item shall consist of the removal and replacement of sections of sanitary main sewers and also the removal and replacement of sanitary sewer service pipe including providing and installing pipe, fittings and couplings; connections to manholes; all material and equipment; sawcutting; excavation; sheeting, shoring, and dewatering; by-pass pumping; removal and disposal of excavated material; bedding and covering of pipe; making connections between different pipe materials; backfilling with granular trench backfill material; and any other labor and/or materials required to complete the work as specified herein. Locations of the repair will be provided by the Village prior to construction.

If required, bypass pumping may be accomplished by supplying sufficient pumping equipment to bypass the sewage flow around the construction area to the downstream sanitary sewer. Before leaving the construction site each day, the Contractor shall connect the new sewer to the existing sewer to allow sewage flow by gravity.

The sanitary sewers shall be replaced with PVC SDR 26 ASTM D-2241 pipe and the sanitary sewer main pipe diameter shall be of the same diameter as the existing pipe and sanitary sewer service pipe shall be 6" diameter. Fittings shall meet the requirements of ASTM D-3212 and ASTM F477. The above pipe and fittings shall be furnished with elastomeric gasket joints conforming to ASTM D-3139. Connections to existing sewer mains and services shall be made with No-Shear Flex Couplings with two stainless steel bands at a point where the coupling cannot shift. Bedding material shall conform to IDOT gradations CA-7 and backfill material shall conform to IDOT gradations CA-6.

This work shall be measured and paid for at the contract unit price per lineal foot as SANITARY SEWER PIPE, PVC SDR 26 ASTM D-2241 of the size specified.

**ITEM #53 - SANITARY SEWER MANHOLES:**

Description. The work of this pay item shall be completed in accordance with the Special Provisions for "TRENCHING, BACKFILLING AND COMPACTING FOR SANITARY SEWER, STORM SEWER, AND WATER MAIN", these Special Provisions and the detail on the Plans and shall consist of the installation of sanitary sewer manholes complete in place, including excavation in excess of that required for sanitary sewer; trenching; bracing, sheeting and shoring; dewatering,

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

including erosion and siltation control methods and devices to provide protection to the environment from all pumping operation; backfilling with and compaction of excavated material or trench backfill materials; sanitary sewer manhole, including base, risers, cone, adjusting rings, steps, chimney seals, and frames and covers; watertight flexible connectors to match pipe; new pipe required to connect to manhole, connection to existing pipe, and non-shear mission couplings; poured inverts and benches; final adjustment of frame to final grade at time of surface restoration; finish grading; removal and disposal of waste excavated material; location, protection, and repair or replacement of existing structures, pipelines and utilities; and all other work necessary for a complete sanitary sewer manhole installation.

Basis of Payment. This work will be paid for at the contract unit price each for SANITARY SEWER MANHOLES of the diameter indicated.

Trench backfill shall be used where the sanitary sewer manhole is within 2-feet of existing or proposed sidewalks, driveways, or pavements, and shall be included in this item.

**ITEM #54 - COMBINATION CONCRETE CURB AND GUTTER (SPECIAL):**

This work shall be performed in accordance with Section 606 of the Standard Specifications, except as modified herein.

606.01 Description. Revise the Article to read:

**"606.01 Description.** This work shall consist of constructing combination concrete curb and gutter; which shall include all sawcutting; pavement removal for forming purposes; excavating for a 4-inch CA-6 granular subbase; backfilling behind the curb with sand or suitable excavated material; and dowel bars at construction and expansion joints."

606.04 Excavation. Add the following paragraphs to the end of this Article:

"A 4-inch thick CA-6 granular subbase shall be placed and compacted under the proposed curb and gutter as shown on the Detail provided in the Plans and shall be paid for separately as AGGREGATE BASE COURSE, TYPE B – 4".

Driveways removed for forming shall be backfilled with an approved granular material as temporary pavement.

606.07 Concrete Gutter, Curb, and Curb and Gutter. Add the following to the fourth paragraph of this Article:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

"Tooled contraction joints shall be provided at uniform intervals not to exceed 15 feet. All tooled joints shall be sawcut within 24 hours of installation. Construction joints with dowel bars shall be provided at the end of a day's work. Expansion joints shall be 1-inch thick with two No. 6 (3/4") smooth epoxy coated bars with greased cap and shall be constructed at intervals not to exceed 100 feet, and within 5 feet of any structure. Dowel bars will be drilled into the existing curb and gutter at the transition to new curb and gutter.

606.13 Backfill. Revise this Article to read:

"After the concrete has obtained the specified strength or as determined by the Engineer, the space in back of the construction shall be backfilled to the top of the proposed curb with sand or other material approved by the Engineer, and neatly graded to the satisfaction of the Engineer. Excess sand behind the curb shall be removed just prior to parkway restoration work."

606.15 Basis of Payment. Revise the first paragraph of this Article to read:

**"606.15 Basis of Payment.** This work will be paid for at the contract unit price per foot for COMBINATION CONCRETE CURB AND GUTTER (SPECIAL), of the type specified. The cost of over cutting and filling behind the curb and gutter shall also be included in this contract unit price.

Removal of excess backfill material before parkway restoration work shall be included in the cost of PARKWAY RESTORATION."

**ITEM #60 - HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4":**

This work shall be performed in accordance with Articles 406.02, 406.03, 406.05, 406.06, 406.07, and 406.12 of the Standard Specifications, and the detail shown on the Plans, except as modified herein. This work shall consist of placing 1.5" HMA Surface Course, Mix "D" N50, and a minimum of 2.5" of Hot-Mix Asphalt Binder Course, IL-19.0, N50 to a minimum total thickness of 4 inches, or to match the existing HMA thickness, whichever is greater.

Method of Measurement. This work shall be measured for payment in place and the area computed in square yards.

Basis of Payment. This work will be paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 4".

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**ITEM #63 - DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED:**

This work shall be done in accordance with Section 602 of the Standard Specifications except as modified herein.

602.01 Description. Revise this Article to read:

**"602.01 Description.** This work shall consist of adjusting existing catch basins, manholes, inlets, or valve vaults."

602.02 Materials.

Remove Note 2 and replace with:

Note 2: No HDPE Rings shall be used on this project.

Revise Note 3 at the end of this Article to read:

Note 3. Riser rings fabricated from recycled rubber must be used to adjust the frames and grates of drainage and utility structures up to a maximum of 50 mm (2 in.). They shall be installed and sealed underneath the frames according to the manufacturer's specifications.

Recycled rubber products shall consist of no less than 80 percent by weight recycled rubber. The riser shall meet or exceed the following when maintained at  $23 \pm 2^{\circ}\text{C}$  ( $73 \pm 3^{\circ}\text{F}$ ) for at least 24 hours prior to and during testing.

Physical Property	Test Standard	Value
Density	ASTM C 642-90	$1.10 \pm 0.034$ g/cu cm ( $68.63 \pm 2.11$ lb/cu ft)
Durometer Hardness	ASTM D 2240-97 Shore A	$72 \pm 6^1$
Compression Deformation under 1000 kPa (145 psi)	ASTM D 575 – Test Method B Test of Specified Force	$9 \pm 4$ %
Compression Set	ASTM D 395 – Illinois Modified Test Method B Compression Set under Constant Deflection in Air	$5 \pm 3$ % <sup>2</sup>
Weathering (70 hrs at	ASTM D 573	98 %, minimum

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

70 °C (158 °F)) Hardness retained		
Freeze/thaw when exposed to deicing chemicals	ASTM C 672-91	3 % loss, maximum

<sup>1</sup> Average of three tests over a 28 mm (1.12") diameter sample.

<sup>2</sup> Samples compressed to 75 percent of initial height.

Recycled rubber adjusting rings shall have no void areas, cracks, or tears, and have no effects due to exposure to ultraviolet light. The actual diameter or length shall not vary more than 3 mm (0.125") from the specified diameter or length. Variations in height are limited to ± 1.6 mm (0.063") for parts up to 50 mm (2")."

602.11 Furnishing and Placing Castings. Revise the last three sentences of the second paragraph of part (c) of this Article to read:

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class SI concrete to the elevation of the surface of the base course or binder course. The Class SI concrete shall be cured for a period of 72 hours. HMA materials will not be allowed to backfill around an adjusted casting."

602.16 Basis of Payment. Revise the second paragraph of this Article to read:

"This work shall be paid for at the contract unit price per each for DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED, which price shall include the adjustment of existing catch basins, manholes, inlets or valve vaults, resetting the frame and grate or lid, and excavation and backfilling."

**ITEM #64 - DUST CONTROL WATERING:**

This work shall consist of the control of dust resulting from construction operations by the uniform application of sprinkled water. DUST CONTROL WATERING shall be performed when directed by the Engineer. All equipment used for this work shall be approved by the Engineer prior to beginning the work and shall be equipped with adequate measuring devices for metering the exact amount of water discharged.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Method of Measurement. Dust Control Watering will be measured for payment in units of 1000 gallons of water applied. All water used shall be properly documented by ticket or other approved means.

Basis of Payment. This work will be paid for at the contract unit price per unit for DUST CONTROL WATERING.

**ITEM #65 - STORM SEWERS (WATER MAIN REQUIREMENTS):**

This work shall be done in accordance with Section 550 of the Standard Specifications except as modified herein.

550.02 Materials. Revise this Article to read:

**“550.02 Materials.** The storm sewer pipe shall be water main quality pipe meeting the requirements of sections 40 and 41 – 2.01 of the “Standard Specifications for Water and Sewer Main Construction in Illinois”. PVC (SDR 26) pipe shall be used in accordance with ASTM D-2241, with joints conforming to ASTM D-3139 and flexible elastomeric gaskets meeting ASTM F-477 criteria.”

550.10 Basis of Payment. Revise the first paragraph of this Article to read:

**“550.10 Basis of Payment.** This work will be paid for at the contract unit price per foot for STORM SEWERS (WATER MAIN REQUIREMENTS), of the diameter specified, which price shall also include connections to existing storm sewer structures and existing storm sewers and removal of existing storm pipe.”

**ITEM #66 - REMOVE AND REINSTALL BRICK PAVER**

This work shall consist of removing existing brick driveway pavement to the limits as determined by the Engineer and in accordance with Section 440, except as modified herein. Installation shall be in accordance with the included Local Roads Recurring Special Provision Check Sheet #14 except as modified herein. This work shall include the installation of a minimum 8 inches of Aggregate Base Course, Type B, in accordance with Section 351 of the Standard Specifications. This work shall also include installing edge restraints, spreading, compacting and leveling (with a screed) 1-inch of bedding sand, installing the bricks, filling and brushing the joints with fine sand, and compacting the brick pavers with a vibrating plate compactor.

The layout and pattern shall match that of existing driveway apron. The Contractor shall make record of the existing layout and pattern prior to the removal of the existing driveway apron to ensure that the replaced apron can be replaced to match the existing apron prior to

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

construction. Salvaged bricks from the brick driveway pavement removal shall be used to reinstall the brick driveway; however any necessary replacement bricks shall match the color and shape of the brick paving units of the existing driveway pavement. After removal the contractor shall safely store all bricks until they are installed. Any replacement bricks shall be included in the cost of this work.

New paving brick shall meet the requirements for ASTM C902, "Standard Specification for Pedestrian and Light Traffic Paving Brick".

Edge restraints shall match the existing edge restraints in type and dimensions. If the existing edge restraints encountered on this job are concrete, the edge restraints shall be cast-in-place to existing dimensions and properly cured before replacing the brick driveway. The edge restraints shall be included in the cost of this item regardless of the type of edge restraint used.

Basis of Payment. This work shall be paid for at the contract unit price per square foot for REMOVE AND REINSTALL BRICK PAVER.

**ITEM #67 - EXPLORATION TRENCH, SPECIAL:**

This work shall consist of constructing a trench for the purpose of verifying clearances and locations of existing private and public utilities and storm sewers prior to constructing proposed utilities. The exploration trench shall be constructed at the locations as directed by the Engineer and in accordance with Article 213.02 of the Standard Specifications, except as modified herein.

The depth of the trench shall be variable, but shall be deep enough to locate all potential conflicts. The width of the trench shall be sufficient to allow proper investigation of the entire trench.

Method of Measurement. This work will be measured for payment per each of actual trench constructed.

Basis of Payment. This work will be paid for at the contract unit price each for EXPLORATION TRENCH, SPECIAL, regardless of depth.

**ITEMS #68 & #69 - TEMPORARY ACCESS:**

This work shall consist of furnishing and placing aggregate for use as temporary access in accordance with section 402 of the Standard Specifications, except as modified herein.

Revise Article 402.10 of the Standard Specifications to read:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**"402.10 For Temporary Access.** The contractor shall construct and maintain aggregate surface course for temporary access to private entrances, commercial entrances and roads according to Article 402.07 and as determined by the Engineer.

The aggregate surface course shall be constructed using CA-6 aggregate to the dimensions and grades specified below, except as modified by the plans or as determined by the Engineer.

- (a) Private Entrance. The minimum width shall be 12 ft. The minimum compacted thickness shall be 6 in. The maximum grade shall be eight percent, except as required to match the existing grade.
- (b) Commercial Entrance. The minimum width shall be 24 ft. The minimum compacted thickness shall be 9 in. The maximum grade shall be six percent, except as required to match the existing grade.
- (c) Road. The minimum width shall be 24 ft. The minimum compacted thickness shall be 9 in. The grade and elevation shall be the same as the removed pavement, except as required to meet the grade of any new pavement constructed.

Maintaining the temporary access shall include relocating and/or regrading the aggregate surface course for any operation that may disturb or remove the temporary access. The same type and gradation of material (CA-6) used to construct the temporary access shall be used to maintain it.

When use of the temporary access is discontinued, the aggregate shall be removed and utilized in the permanent construction at the discretion of the Engineer or disposed of according to Article 202.03".

402.12 Method of Measurement. Add the following to this article:

"Aggregate surface Course for temporary access will be measured for payment as each for every private entrance, commercial entrance or road constructed for the purpose of temporary access. If a residential drive, commercial entrance, or road is to be constructed under multiple stages, the aggregate needed to construct the second or subsequent stages will not be measured for payment but shall be included in the cost per each of the type specified".

402.13 Basis of Payment. Revise the second paragraph of this Article to read:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

"Aggregate surface course for temporary access will be paid for at the contract unit price per each for TEMPORARY ACCESS (PRIVATE ENTRANCE), or TEMPORARY ACCESS (ROAD).

Partial payment of the each amount bid for temporary access, of the type specified, will be paid according to the following schedule:

- (a) Upon construction of the temporary access, sixty percent of the contract unit price per each, of the type constructed, will be paid.
- (b) Subject to the approval of the Engineer for the adequate maintenance and removal of the temporary access, the remaining forty percent of the pay item will be paid upon the permanent removal of the temporary access".

**ITEM #70 - SANITARY MANHOLES TO BE ADJUSTED:**

This work shall be done in accordance with Section 602 of the Standard Specifications and shall consist of the adjustment of sanitary manholes. Non-hardening butyl rubber mastic sealant; minimum thickness ¼-inch, shall be used between adjusting rings in place of mortar, or as required by the Owner of the Sanitary Sewer. Install new external frame seal in all locations. The installation of the external frame seal will not be paid for separately and will be considered included in this pay item.

The External Frame seal shall consist of the following:

- A. Provide frame seals consisting of a flexible external rubber sleeve and extension and stainless steel compression bands.
- B. Rubber sleeve and extension:
  1. Provide rubber sleeve and extension complying with ASTM C923.
  2. Comply with a minimum 1500 psi tensile strength, maximum 18 percent compression set and a hardness (durameter) of 48±5.
  3. Provide sleeve with a minimum thickness of 3/16-inch and unexpanded vertical heights of 6 or 9 inches.
- C. Provide extension having a minimum thickness of 3/16-inch.
- D. Compression band:
  1. Provide compression band to compress the sleeve against the manhole.
  2. Use 16 gauge stainless steel conforming to ASTM A240 Type 304 with no welded attachments and having a minimum width of 1-inch.
  3. Make a watertight seal having a minimum adjustment range of 2 diameter inches.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

4. Provide stainless steel screws, bolts, and nuts conforming to ASTM F593 and 594, Type 304.
- E. Acceptable products:
  1. Cretex Specialty Products.
  2. Or equal.
- F. Or as required by the Owner of the sanitary sewer system.

The External Frame Seal shall be installed as follows:

- A. Install external rubber gasket on the manhole frame and chimney.
  1. Provide watertight gasket to eliminate leakage between the frame and each adjusting ring down to and including cone section.
- B. Clean surface and prepare the lower 2 inches of the manhole frame and exterior of all adjusting rings and cone section/corbel surfaces.
  1. Realign frame on adjusting rings or corbel as required.
- C. Repair and apply mortar grout to the adjusting rings as required to provide a smooth, circular surface for the rubber gasket.
- D. Install rubber gasket in accordance with manufacturer's recommendations.
  1. Field verify for suitable dimensions and layout before installation.
  2. Utilize sealing caulk where required.
- E. Or as required by the Owner of the sanitary sewer system.

Basis of Payment. This work will be paid for at the contract unit price per each for SANITARY MANHOLES TO BE ADJUSTED, which price shall include all of the above.

**ITEM #71 - VALVE VAULT TO BE REMOVED:**

Description. This work shall be done in accordance with the Special Provision for "WATER DISTRIBUTION SYSTEM", and shall consist of the abandonment of existing water valve and valve vaults. This work shall include removal of cone section, turning valve off, and backfilling to proposed subgrade elevation with mechanically compacted granular backfill.

Basis of Payment. This work will be paid for at the contract unit price per each for VALVE VAULT TO BE REMOVED.

**ITEM #72 - TRAFFIC CONTROL AND PROTECTION:**

This work shall be done in accordance with applicable portions of Section 701 of the Standard Specifications, the Supplemental Specifications, the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", and any details and Highway Standards contained in the

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Plans and Special Provisions, and the Special Provisions contained herein, except as modified herein. This work shall cost no more than 5% of the awardable contract value.

Special Attention is called to Article 107.09 of the Standard Specifications and the following Highway Standards, Details, Recurring Local Roads and Streets Special Provisions, and Special Provisions contained herein, relating to traffic control.

HIGHWAY STANDARDS: 701301, 701311, 701501, 701801, 701901

SPECIAL PROVISIONS (Included in these Special Provisions):

Maintenance of Roadways  
Work Zone Traffic Control Surveillance (LRS 3)  
Flaggers in Work Zones (LRS 4)

The Contractor shall contact the Village at least 72 hours in advance of beginning work. Construction operations shall be conducted in a manner such that streets will be open to emergency traffic and accessible as required to local traffic. Advanced notice shall be provided to residents, police, fire, school districts and trash haulers when access to any street will be temporarily closed or limited. Removal and replacement of curb and gutter and driveways shall be planned so as to cause a minimum of inconvenience to the abutting property owners. The work shall be accomplished such that the streets will be left open to local traffic at the end of each working day.

701.19 Method of Measurement. Revise this Article to read:

**“701.19 Method of Measurement.** Traffic control and protection will be measured for payment on a lump sum basis.”

701.20 Basis of Payment. Revise this Article to read:

**“701.20 Basis of Payment.** Traffic control and protection will be paid for at the contract lump sum price for TRAFFIC CONTROL AND PROTECTION, which price shall include all of the above listed details, standards, and special provisions.”

**ITEM #73 - PRECONSTRUCTION VIDEO RECORDING:**

Description. This work consists of performing color video and audio recording of the project area and other areas which may be impacted by construction.

Preconstruction video recordings will include coverage of the project area and all other areas which may be impacted by construction. Video recordings will also include construction

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

easements when applicable. Video recordings will provide a visual record of all physical features within those areas, including, but not limited to, roadways, pavements, curbs, gutters, driveways, driveway aprons, sidewalks, carriage walks, parkways, trees, landscaping, shrubbery, plantings, landscaping walls, retaining walls, signs, sign posts, fences, utility poles, light poles, utilities, equipment, manholes, b-boxes, cleanouts, valves, curb structures, pipelines, buildings, mailboxes, and any other features located within the project area.

Video recordings will begin with an audio narrative which provides the current date and time, the name of Owner and name of project, and a description of both the starting location and the location or locations to be recorded, including street name or names, street addresses, and any additional information which may be necessary to describe the location and subject of viewing. Video recordings will maintain viewer orientation by means of an audio commentary in the audio track of each video recording which provides an explanation of what is being viewed; and by videotaping landmarks and readily identifiable objects (property addresses, street signs, etc.) at appropriate intervals.

Preconstruction video recordings will be recorded at a rate of travel not exceeding 48 feet per minute, and zooming and panning rates will be controlled to provide clarity of features during playback. The finished product will be provided with bright, clear pictures and accurate colors free from distortion, tearing, rolls, or other forms of picture imperfection. The audio will have proper volume and clarity. All recordings will be performed at times of satisfactory visibility, and when no more than ten percent of ground is obscured by snow, leaves, or other cover.

If any element within or portion of the project area is not adequately documented by the preconstruction video recording so as to definitively demonstrate its condition prior to the start of construction, Contractor will assume responsibility for the repair, restoration or replacement of that element or portion of the project area. Such repair, restoration or replacement will be to equal or better condition than previously existing, and will further comply with all standards and provisions which govern the work in question.

Schedule. Preconstruction video recording will be performed according to the following schedule:

- (a) Preconstruction video recording will take place after a Notice to Proceed has been issued.
- (b) Preconstruction video recording will take place after the Joint Utility Locating Information for Excavators (JULIE) request for the project area has cleared.
- (c) Preconstruction video recording will take place before any equipment, materials, or other items are delivered to the site.
- (d) Preconstruction video recording will take place no more than seven (7) chargeable days prior to the start of construction.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (e) Preconstruction video recording will take place, the required pre-construction video recording deliverables will be submitted to the Engineer, and the Engineer will review and issue written approval of the video before any activity other than utility locating will be permitted to start. Such activity will include, but not be limited to, delivery of materials and equipment, installation of traffic control and erosion control, and completion of construction layout and tree protection. No days will be charged against the contract time while the video is under review by the Engineer, including the day the deliverables are submitted and the day a response is provided. If the video or any portions thereof are rejected, the contract time will commence to run until revisions are submitted.
- (f) The recording will be submitted to Engineer for review prior to commencement of any construction, and receive acceptance of recordings prior to commencement of construction. Any areas found not acceptable to the Owner will be re-filmed at no additional cost to the contract.

Deliverables. Video will be high-definition, with a minimum resolution of 1280 x 720 pixels per frame. Video will be filmed in a landscape aspect ratio. Video filmed in a portrait aspect ratio will be considered unacceptable and will be rejected.

Preconstruction video recordings will be provided as electronic files of .avi, .mp4, .m4v, .mkv, .wmv, or .mpg file format, or of such other file format as may be approved by Engineer. Preconstruction video recordings will be provided as independent digital container format files, which container files will include all video, audio, and other electronic information necessary to view the preconstruction video recording as intended.

Video DVD will be considered an unacceptable format for providing preconstruction video recordings, and will be rejected.

Preconstruction video recording electronic files will be provided on a portable electronic media device or devices of one of the following types: USB flash drive, SD flash memory card, CF flash memory card, data DVD, external hard drive, or such other portable electronic media device as may be approved by Engineer. Preconstruction video recording electronic files may also be provided via online file sharing, cloud storage, File Transfer Protocol (FTP), or other online or network file transfer methods if approved by Engineer.

Preconstruction video recording electronic files will be accompanied by corresponding logs which document the dates, times, and locations covered by each preconstruction video recording electronic file.

Contractor shall maintain copies of all items submitted to Engineer for Contractor's own use and record.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Method of Measurement. This work will be measured for payment on a lump sum basis. No measurement will be made of the individual components of this effort.

Basis of Payment. Preconstruction video recording will be paid for at the contract lump sum price for PRECONSTRUCTION VIDEO RECORDING.

**ITEM #74 - PVC PIPE DRAINS SDR 26 ASTM D-2241**

This work shall be done in accordance with Section 601 of the Standard Specifications except as modified herein.

601.01 Description. Add the following to the first paragraph of this Article:

“This pay item is intended to connect existing roof drains and sump pump lines to the existing or proposed storm sewer or pipe underdrains. This work shall be constructed in accordance with the Details provided in the Plans, and shall include sump pump line, roof downspout or PVC Drain connections; connections to existing or proposed drainage structures or pipes; excavation and trench backfill; all necessary pipe, fittings, connectors, transition couplings, bends, saddles, and tees to connect the pipe drain to existing pipes, drainage structures, sump pump lines, or roof downspouts; and a PVC clean-out plug with an adaptor.”

601.02 Materials. Revise this Article to read:

**ITEM #75 - CONTINGENCY ALLOWANCE:**

A contingency allowance pay item is provided as a part of this contract for the purpose of facilitating the completion of unforeseen or additional work not included in the contract as awarded, and which is determined by the Engineer to be necessary and germane to the contract.

Use of the contingency allowance will be at the discretion of the Engineer. The Engineer may, at his/her discretion, use the contingency allowance for any of the following reasons:

- (a) Facilitate a temporary payment allowance to the Contractor for work completed under existing contract pay items and for which completed quantities exceed contract quantities;
- (b) Facilitate a temporary payment allowance to the Contractor for work completed beyond the scope of existing contract pay items; or

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (c) Facilitate a temporary payment allowance to the Contractor for the purchase of equipment, materials or such other requisition as Engineer determines to be necessary for the completion of the Work.

Such use of the CONTINGENCY ALLOWANCE will be further subject to approval by Owner. Owner's decision with regard to use of the CONTINGENCY ALLOWANCE will be final.

- A. Any payments made to Contractor under the CONTINGENCY ALLOWANCE will be considered temporary, and will only be retained by Contractor until such time that an authorization of contract changes can be approved and incorporated into the contract.
- B. Contractor, in accepting payments made under the CONTINGENCY ALLOWANCE, agrees to the terms of this and other applicable special provisions. Contractor agrees to relinquish any monies and any claim to monies paid under the CONTINGENCY ALLOWANCE upon approval of an authorization of contract changes and payment for any work for which payment was previously made under the CONTINGENCY ALLOWANCE. Contractor further agrees to return any monies previously paid thereunder.
- C. The CONTINGENCY ALLOWANCE pay item for this contract has been established with a unit of measurement in dollars, a quantity of 30,000.00, and a contract unit price of one dollar (\$1.00), for a total CONTINGENCY ALLOWANCE contract price of thirty thousand dollars and no cents (\$30,000.00). Bidder, in submitting a bid, accepts the quantity, unit price, and total contract price of the CONTINGENCY ALLOWANCE.

Basis of Payment. This work will be paid for at the contract unit price per dollar for CONTINGENCY ALLOWANCE. The total bid amount for this item will be \$30,000.00.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**HMA MIXTURE DESIGN REQUIREMENTS (D-1):**

Effective: January 1, 2013

Revised: April 1, 2016

**1) Design Composition and Volumetric Requirements**

Revise the table in Article 406.06(d) of the Standard Specifications to read:

"MINIMUM COMPACTED LIFT THICKNESS	
Mixture Composition	Thickness, in. (mm)
IL-4.75	3/4 (19)
SMA-9.5, IL-9.5, IL-9.5L	1 1/2 (38)
SMA-12.5	2 (50)
IL-19.0, IL-19.0L	2 1/4 (57)"

Revise the table in Article 1004.03(c) of the Standard Specifications to read:

"Use	Size/Application	Gradation No.
Class A-1, 2, & 3	3/8 in. (10 mm) Seal	CA 16
Class A-1	1/2 in. (13 mm) Seal	CA 15
Class A-2 & 3	Cover	CA 14
HMA High ESAL	IL-19.0 IL-9.5	CA 11 <sup>1/</sup> CA 16, CA 13 <sup>3/</sup>
HMA Low ESAL	IL-19.0L IL-9.5L Stabilized Subbase or Shoulders	CA 11 <sup>1/</sup> CA 16
SMA <sup>2/</sup>	1/2 in. (12.5mm) Binder & Surface IL 9.5 Surface	CA13 <sup>3/</sup> , CA14 or CA16  CA16, CA 13 <sup>3/</sup>

- 1/ CA 16 or CA 13 may be blended with the gradations listed.  
2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

Revise Article 1004.03(e) of the Supplemental Specifications to read:

“(e) Absorption. For SMA the coarse aggregate shall also have water absorption  $\leq$  2.0 percent.”

Revise the last paragraph of Article 1102.01 (a) (5) of the Standard Specifications to read:

“IL-4.75 and Stone Matrix Asphalt (SMA) mixtures which contain aggregate having absorptions greater than or equal to 2.0 percent, or which contain steel slag sand, shall have minimum surge bin storage plus haul time of 1.5 hours.”

Revise the nomenclature table in Article 1030.01 of the Standard Specifications to read:

“High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) <sup>1/</sup> ; HMA Shoulders <sup>2/</sup>

1/ Uses 19.0L binder mix.

2/ Uses 19.0L for lower lifts and 9.5L for surface lift.”

Revise Article 1030.02 of the Standard Specifications and Supplemental Specifications to read:

“**1030.02 Materials.** Materials shall be according to the following.

Item.....	Article/Section
(a) Coarse Aggregate .....	1004.03
(b) Fine Aggregate .....	1003.03
(c) RAP Material .....	1031
(d) Mineral Filler .....	1011
(e) Hydrated Lime .....	1012.01
(f) Slaked Quicklime (Note 1)	
(g) Performance Graded Asphalt Binder (Note 2) .....	1032
(h) Fibers (Note 3)	
(i) Warm Mix Asphalt (WMA) Technologies (Note 4)	

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Note 1. Slaked quicklime shall be according to ASTM C 5.

Note 2. The asphalt binder shall be an SBS PG 76-28 when the SMA is used on a full-depth asphalt pavement and SBS PG 76-22 when used as an overlay, except where modified herein. The asphalt binder shall be an Elvaloy or SBS PG 76-22 for IL-4.75, except where modified herein. The elastic recovery shall be a minimum of 80.

Note 3. A stabilizing additive such as cellulose or mineral fiber shall be added to the SMA mixture according to Illinois Modified AASHTO M 325. The stabilizing additive shall meet the Fiber Quality Requirements listed in Illinois Modified AASHTO M 325. Prior to approval and use of fibers, the Contractor shall submit a notarized certification by the producer of these materials stating they meet these requirements. Reclaimed Asphalt Shingles (RAS) may be used in Stone Matrix Asphalt (SMA) mixtures designed with an SBA polymer modifier as a fiber additive if the mix design with RAS included meets AASHTO T305 requirements. The RAS shall be from a certified source that produces either Type 1 or Type 2. Material shall meet requirements noted herein and the actual dosage rate will be determined by the Engineer.

Note 4. Warm mix additives or foaming processes shall be selected from the current Bureau of Materials and Physical Research Approved List, "Warm Mix Asphalt Technologies".

Revise Article 1030.04(a)(1) of the Standard Specifications and the Supplemental Specifications to read:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

“(1) High ESAL Mixtures. The Job Mix Formula (JMF) shall fall within the following limits.

High ESAL, MIXTURE COMPOSITION (% PASSING) <sup>1/</sup>										
Sieve Size	IL-19.0 mm		SMA <sup>4/</sup> IL-12.5 mm		SMA <sup>4/</sup> IL-9.5 mm		IL-9.5 mm		IL-4.75 mm	
	min	max	min	max	min	max	min	max	min	max
1 1/2 in. (37.5 mm)										
1 in. (25 mm)		100								
3/4 in. (19 mm)	90	100		100						
1/2 in. (12.5 mm)	75	89	80	100		100		100		100
3/8 in. (9.5 mm)				65	90	100	90	100		100
#4 (4.75 mm)	40	60	20	30	36	50	34	69	90	100
#8 (2.36 mm)	20	42	16	24 <sup>5/</sup>	16	32 <sup>5/</sup>	34 <sup>6/</sup>	52 <sup>2/</sup>	70	90
#16 (1.18 mm)	15	30					10	32	50	65
#30 (600 μm)			12	16	12	18				
#50 (300 μm)	6	15					4	15	15	30
#100 (150 μm)	4	9					3	10	10	18
#200 (75 μm)	3	6	7.0	9.0 <sup>3/</sup>	7.5	9.5 <sup>3/</sup>	4	6	7	9 <sup>3/</sup>
Ratio Dust/Asphalt Binder		1.0		1.5		1.5		1.0		1.0

- 1/ Based on percent of total aggregate weight.
- 2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with N<sub>design</sub> = 90.
- 3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.
- 4/ The maximum percent passing the #635 (20 μm) sieve shall be ≤ 3 percent.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above the percentage stated on the table.
- 6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

Revise Article 1030.04(b)(1) of the Standard Specifications to read:

“(1) High ESAL Mixtures. The target value for the air voids of the HMA shall be 4.0 percent and for IL-4.75 it shall be 3.5 percent at the design number of gyrations. The VMA and VFA of the HMA design shall be based on the nominal maximum size of the aggregate in the mix, and shall conform to the following requirements.

VOLUMETRIC REQUIREMENTS				
High ESAL				
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
Ndesign	IL-19.0	IL-9.5	IL-4.75 <sup>1/</sup>	
50	13.5	15.0	18.5	65 – 78 <sup>2/</sup>
70				
90				

1/ Maximum Draindown for IL-4.75 shall be 0.3 percent

2/ VFA for IL-4.75 shall be 72-85 percent”

Replace Article 1030.04(b)(3) of the Standard Specifications with the following:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

“(3) SMA Mixtures.

Volumetric Requirements SMA <sup>1/</sup>			
Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
80 <sup>4/</sup>	3.5	17.0 <sup>2/</sup>	75 - 83
		16.0 <sup>3/</sup>	

- 1/ Maximum draindown shall be 0.3 percent. The draindown shall be determined at the JMF asphalt binder content at the mixing temperature plus 30 °F.
- 2/ Applies when specific gravity of coarse aggregate is ≥ 2.760.
- 3/ Applies when specific gravity of coarse aggregate is < 2.760.
- 4/ Blending of different types of aggregate will not be permitted. For surface course, the coarse aggregate can be crushed steel slag, crystalline crushed stone or crushed sandstone. For binder course, coarse aggregate shall be crushed stone (dolomite), crushed gravel, crystalline crushed stone, or crushed sandstone.

Add to the end of Article 1030.05 (d) (2) a. of the Standard Specifications:

“During production, the Contractor shall test SMA mixtures for draindown according to AASHTO T305 at a frequency of 1 per day of production.”

Delete last sentence of the second paragraph of Article 1102.01(a) (4) b. 2.

Add to the end of Article 1102.01 (a) (4) b. 2.:

“As an option, collected dust (baghouse) may be used in lieu of manufactured mineral filler according to the following:

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

(b.) A mix design was prepared based on collected dust (baghouse).

**2) Design Verification and Production**

Revise Article 1030.04 (d) of the Standard Specifications to read:

“(d) Verification Testing. High ESAL, IL-4.75, and SMA mix designs submitted for verification will be tested to ensure that the resulting mix designs will pass the required criteria for the Hamburg Wheel Test (IL mod AASHTO T-324) and the Tensile Strength Test (IL mod AASHTO T-283). The Department will perform a verification test on gyratory specimens compacted by the Contractor. If the mix fails the Department’s verification test, the Contractor shall make the necessary changes to the mix and resubmit compacted specimens to the Department for verification. If the mix fails again, the mix design will be rejected.

All new and renewal mix designs will be required to be tested, prior to submittal for Department verification and shall meet the following requirements:

(1) Hamburg Wheel Test criteria. The maximum allowable rut depth shall be 0.5 in. (12.5 mm). The minimum number of wheel passes at the 0.5 in. (12.5 mm) rut depth criteria shall be based on the high temperature binder grade of the mix as specified in the mix requirements table of the plans.

Illinois Modified AASHTO T 324 Requirements <sup>1/</sup>

Asphalt Binder Grade	# Repetitions	Max Rut Depth (mm)
PG 70 -XX (or higher)	20,000	12.5
PG 64 -XX (or lower)	10,000	12.5

1/ When produced at temperatures of 275 ± 5 °F (135 ± 3 °C) or less, loose Warm Mix Asphalt shall be oven aged at 270 ± 5 °F (132 ± 3 °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.

Note: For SMA Designs (N-80) the maximum rut depth is 6.0 mm at 20,000 repetitions.  
For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (2) Tensile Strength Criteria. The minimum allowable conditioned tensile strength shall be 60 psi (415 kPa) for non-polymer modified performance graded (PG) asphalt binder and 80 psi (550 kPa) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

Production Testing. Revise first paragraph of Article 1030.06(a) of the Standard Specifications to read:

- "(a) High ESAL, IL-4.75, WMA, and SMA Mixtures. For each contract, a 300 ton (275 metric tons) test strip, except for SMA mixtures it will be 400 ton (363 metric ton), will be required at the beginning of HMA production for each mixture with a quantity of 3000 tons (2750 metric tons) or more according to the Manual of Test Procedures for Materials "Hot Mix Asphalt Test Strip Procedures".

Add the following after the sixth paragraph in Article 1030.06 (a) of the Standard Specifications:

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.  
If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

Method of Measurement:

Add the following after the fourth paragraph of Article 406.13 (b):

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G<sub>mb</sub>."

Basis of Payment.

Replace the fourth paragraph of Article 406.14 of the Standard Specifications with the following:

"Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified.”

**FRICITION SURFACE AGGREGATE (D-1):**

Effective: January 1, 2011

Revised: July 24, 2015

Revise Article 1004.01(a)(4) of the Standard Specifications to read:

- “(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.
- a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).
  - b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase.”

Revise Article 1004.03(a) of the Standard Specifications to read:

**“1004.03 Coarse Aggregate for Hot-Mix Asphalt (HMA).** The aggregate shall be according to Article 1004.01 and the following.

- (a) Description. The coarse aggregate for HMA shall be according to the following table.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>1/</sup> Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L  SMA Binder	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete <sup>3/</sup>
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> : Crushed Gravel Carbonate Crushed Stone <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Use	Mixture	Aggregates Allowed	
HMA High ESAL	D Surface and Leveling Binder IL-9.5  SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> :	
		Crushed Gravel Carbonate Crushed Stone (other than Limestone) <sup>2/</sup> Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag <sup>4/</sup> Crushed Concrete <sup>3/</sup>	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
		25% Limestone	Dolomite
50% Limestone	Any Mixture D aggregate other than Dolomite		
75% Limestone	Crushed Slag (ACBF) or Crushed Sandstone		
HMA High ESAL	E Surface IL-9.5  SMA Ndesign 80 Surface	<u>Allowed Alone or in Combination</u> <sup>5/</sup> :	
		Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag  No Limestone.	
		<u>Other Combinations Allowed:</u>	
		<i>Up to...</i>	<i>With...</i>
50% Dolomite <sup>2/</sup>	Any Mixture E aggregate		

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Use	Mixture	Aggregates Allowed					
		75% Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone				
		75% Crushed Gravel <sup>2/</sup> or Crushed Concrete <sup>3/</sup>	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag				
HMA High ESAL	F Surface IL-9.5  SMA Ndesign 80 Surface	<p><u>Allowed Alone or in Combination</u> <sup>5/</sup>:</p> <p>Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.</p> <p><u>Other Combinations Allowed:</u></p> <table border="1"> <thead> <tr> <th><i>Up to...</i></th> <th><i>With...</i></th> </tr> </thead> <tbody> <tr> <td>50% Crushed Gravel<sup>2/</sup>, Crushed Concrete<sup>3/</sup>, or Dolomite<sup>2/</sup></td> <td>Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone</td> </tr> </tbody> </table>		<i>Up to...</i>	<i>With...</i>	50% Crushed Gravel <sup>2/</sup> , Crushed Concrete <sup>3/</sup> , or Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone
<i>Up to...</i>	<i>With...</i>						
50% Crushed Gravel <sup>2/</sup> , Crushed Concrete <sup>3/</sup> , or Dolomite <sup>2/</sup>	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone						

- 1/ Crushed steel slag allowed in shoulder surface only.
- 2/ Carbonate crushed stone and/or crushed gravel shall not be used in SMA Ndesign 80. In SMA Ndesign 50, carbonate crushed stone shall not be blended with any of the other aggregates allowed alone in Ndesign 50 SMA binder or Ndesign 50 SMA surface.
- 3/ Crushed concrete will not be permitted in SMA mixes.
- 4/ Crushed steel slag shall not be used as leveling binder.
- 5/ When combinations of aggregates are used, the blend percent measurements shall be by volume."

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (D-1) :**

Effective: November 1, 2012

Revise: April 2, 2016

Revise Section 1031 of the Standard Specifications to read:

**“SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES**

**1031.01 Description.** Reclaimed asphalt pavement and reclaimed asphalt shingles shall be according to the following.

- (a) Reclaimed Asphalt Pavement (RAP). RAP is the material resulting from cold milling or crushing an existing hot-mix asphalt (HMA) pavement. RAP will be considered processed FRAP after completion of both crushing and screening to size. The Contractor shall supply written documentation that the RAP originated from routes or airfields under federal, state, or local agency jurisdiction.
- (b) Reclaimed Asphalt Shingles (RAS). Reclaimed asphalt shingles (RAS). RAS is from the processing and grinding of preconsumer or post-consumer shingles. RAS shall be a clean and uniform material with a maximum of 0.5 percent unacceptable material, as defined in Bureau of Materials and Physical Research Policy Memorandum, “Reclaimed Asphalt Shingle (RAS) Sources”, by weight of RAS. All RAS used shall come from a Bureau of Materials and Physical Research approved processing facility where it shall be ground and processed to 100 percent passing the 3/8 in. (9.5 mm) sieve and 90 percent passing the #4 (4.75 mm) sieve. RAS shall meet the testing requirements specified herein. In addition, RAS shall meet the following Type 1 or Type 2 requirements.
  - (1) Type 1. Type 1 RAS shall be processed, preconsumer asphalt shingles salvaged from the manufacture of residential asphalt roofing shingles.
  - (2) Type 2. Type 2 RAS shall be processed post-consumer shingles only, salvaged from residential, or four unit or less dwellings not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP).

**1031.02 Stockpiles.** RAP and RAS stockpiles shall be according to the following.

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP -#4 or Type 2 RAS", etc...).

- (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
- (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

RAP or FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, plant cleanout etc., will be unacceptable unless the contaminants are removed to the satisfaction of the Engineer. Sheet asphalt shall be stockpiled separately.

- (b) RAS Stockpiles. Type 1 and Type 2 RAS shall be stockpiled separately and shall be sufficiently separated to prevent intermingling at the base. Each stockpile shall be signed indicating what type of RAS is present.

However, a RAS source may submit a written request to the Department for approval to blend mechanically a specified ratio of Type 1 RAS with Type 2 RAS. The source will not be permitted to change the ratio of the blend without the Department prior written approval. The Engineer's written approval will be required, to mechanically blend RAS with any fine aggregate produced under the AGCS, up to an equal weight of RAS, to improve workability. The fine aggregate shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The fine aggregate shall be one that is approved for use in the HMA mixture and accounted for in the mix design and during HMA production.

Records identifying the shingle processing facility supplying the RAS, RAS type, and lot number shall be maintained by project contract number and kept for a minimum of three years.

**1031.03 Testing.** FRAP and RAS testing shall be according to the following.

- (a) FRAP Testing. When used in HMA, the FRAP shall be sampled and tested either during processing or after stockpiling. It shall also be sampled during HMA production.
- (1) During Stockpiling. For testing during stockpiling, washed extraction samples shall be run at the minimum frequency of one sample per 500 tons (450 metric tons) for the first 2000 tons (1800 metric tons) and one sample per 2000 tons (1800 metric tons) thereafter. A minimum of five tests shall be required for stockpiles less than 4000 tons (3600 metric tons).
  - (2) Incoming Material. For testing as incoming material, washed extraction samples shall be run at a minimum frequency of one sample per 2000 tons (1800 metric tons) or once per week, whichever comes first.
  - (3) After Stockpiling. For testing after stockpiling, the Contractor shall submit a plan for approval to the District proposing a satisfactory method of sampling and testing the RAP/FRAP pile either in-situ or by restockpiling. The sampling plan shall meet the

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Before extraction, each field sample of FRAP, shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedure. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

- (b) RAS Testing. RAS shall be sampled and tested during stockpiling according to Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Sources". The Contractor shall also sample as incoming material at the HMA plant.
- (1) During Stockpiling. Washed extraction and testing for unacceptable materials shall be run at the minimum frequency of one sample per 200 tons (180 metric tons) for the first 1000 tons (900 metric tons) and one sample per 1000 tons (900 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a  $\leq 1000$  ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS shall be in a separate working pile as designated in the Quality Control plan and only added to the sealed stockpile when the test results of the working pile are complete and are found to meet the tolerances specified herein for the original sealed RAS stockpile.
- (2) Incoming Material. For testing as incoming material at the HMA plant, washed extraction shall be run at the minimum frequency of one sample per 250 tons (227 metric tons). A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). The incoming material test results shall meet the tolerances specified herein.

The Contractor shall obtain and make available all test results from start of the initial stockpile sampled and tested at the shingle processing facility in accordance with the facility's QC Plan.

Before extraction, each field sample shall be split to obtain two samples of test sample size. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall extract the other test sample according to Department procedures. The Engineer reserves the right to test any sample (split or Department-taken) to verify Contractor test results.

**1031.04 Evaluation of Tests.** Evaluation of test results shall be according to the following.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (a) Evaluation of FRAP Test Results. All test results shall be compiled to include asphalt binder content, gradation and, when applicable (for slag),  $G_{mm}$ . A five test average of results from the original pile will be used in the mix designs. Individual extraction test results run thereafter, shall be compared to the average used for the mix design, and will be accepted if within the tolerances listed below.

Parameter	FRAP
No. 4 (4.75 mm)	$\pm 6 \%$
No. 8 (2.36 mm)	$\pm 5 \%$
No. 30 (600 $\mu\text{m}$ )	$\pm 5 \%$
No. 200 (75 $\mu\text{m}$ )	$\pm 2.0 \%$
Asphalt Binder	$\pm 0.3 \%$
$G_{mm}$	$\pm 0.03$ <sup>1/</sup>

- 1/ For stockpile with slag or steel slag present as determined in the current Manual of Test Procedures Appendix B 21, "Determination of Reclaimed Asphalt Pavement Aggregate Bulk Specific Gravity".

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the FRAP stockpile shall not be used in Hot-Mix Asphalt unless the FRAP representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

The Contractor shall maintain a representative moving average of five tests to be used for Hot-Mix Asphalt production.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the ITP, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)" or Illinois Modified AASHTO T-164-11, Test Method A.

- (b) Evaluation of RAS Test Results. All of the test results, with the exception of percent unacceptable materials, shall be compiled and averaged for asphalt binder content and gradation. A five test average of results from the original pile will be used in the mix designs. Individual test results run thereafter, when compared to the average used for the mix design, will be accepted if within the tolerances listed below.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 µm)	± 4 %
No. 200 (75 µm)	± 2.5 %
Asphalt Binder Content	± 2.0 %

If any individual sieve and/or asphalt binder content tests are out of the above tolerances when compared to the average used for the mix design, the RAS shall not be used in Hot-Mix Asphalt unless the RAS representing those tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

- (c) Quality Assurance by the Engineer. The Engineer may witness the sampling and splitting conduct assurance tests on split samples taken by the Contractor for quality control testing a minimum of once a month.

The overall testing frequency will be performed over the entire range of Contractor samples for asphalt binder content and gradation. The Engineer may select any or all split samples for assurance testing. The test results will be made available to the Contractor as soon as they become available.

The Engineer will notify the Contractor of observed deficiencies.

Differences between the Contractor's and the Engineer's split sample test results will be considered acceptable if within the following limits.

Test Parameter	Acceptable Limits of Precision	
	FRAP	RAS
% Passing: <sup>1/</sup>		
1/2 in.	5.0%	
No. 4	5.0%	
No. 8	3.0%	4.0%
No. 30	2.0%	3.0%
No. 200	2.2%	2.5%
Asphalt Binder Content	0.3%	1.0%
G <sub>mm</sub>	0.030	

1/ Based on washed extraction.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

In the event comparisons are outside the above acceptable limits of precision, the Engineer will immediately investigate.

- (d) Acceptance by the Engineer. Acceptable of the material will be based on the validation of the Contractor's quality control by the assurance process.

**1031.05 Quality Designation of Aggregate in RAP and FRAP.**

- (a) RAP. The aggregate quality of the RAP for homogeneous, conglomerate, and conglomerate "D" quality stockpiles shall be set by the lowest quality of coarse aggregate in the RAP stockpile and are designated as follows.
- (1) RAP from Class I, Superpave/HMA (High ESAL), or (Low ESAL) IL-9.5L surface mixtures are designated as containing Class B quality coarse aggregate.
  - (2) RAP from Superpave/HMA (Low ESAL) IL-19.0L binder mixture is designated as Class D quality coarse aggregate.
  - (3) RAP from Class I, Superpave/HMA (High ESAL) binder mixtures, bituminous base course mixtures, and bituminous base course widening mixtures are designated as containing Class C quality coarse aggregate.
  - (4) RAP from bituminous stabilized subbase and BAM shoulders are designated as containing Class D quality coarse aggregate.
- (b) FRAP. If the Engineer has documentation of the quality of the FRAP aggregate, the Contractor shall use the assigned quality provided by the Engineer.

If the quality is not known, the quality shall be determined as follows. Fractionated RAP stockpiles containing plus #4 (4.75 mm) sieve coarse aggregate shall have a maximum tonnage of 5,000 tons (4,500 metric tons). The Contractor shall obtain a representative sample witnessed by the Engineer. The sample shall be a minimum of 50 lb (25 kg). The sample shall be extracted according to Illinois Modified AASHTO T 164 by a consultant laboratory prequalified by the Department for the specified testing. The consultant laboratory shall submit the test results along with the recovered aggregate to the District Office. The cost for this testing shall be paid by the Contractor. The District will forward the sample to the Bureau of Materials and Physical Research Aggregate Lab for MicroDeval Testing, according to ITP 327. A maximum loss of 15.0 percent will be applied for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

**1031.06 Use of FRAP and/or RAS in HMA.** The use of FRAP and/or RAS shall be the Contractor's option when constructing HMA in all contracts.

(a) FRAP. The use of FRAP in HMA shall be as follows.

- (1) Coarse Aggregate Size (after extraction). The coarse aggregate in all FRAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
- (2) Steel Slag Stockpiles. FRAP stockpiles containing steel slag or other expansive material, as determined by the Department, shall be homogeneous and will be approved for use in HMA (High ESAL and Low ESAL) mixtures regardless of lift or mix type.
- (3) Use in HMA Surface Mixtures (High and Low ESAL). FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall have coarse aggregate that is Class B quality or better. FRAP shall be considered equivalent to limestone for frictional considerations unless produced/screened to minus 3/8 inch.
- (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP in which the coarse aggregate is Class C quality or better.
- (5) Use in Shoulders and Subbase. FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, Restricted FRAP, conglomerate, or conglomerate DQ.

(b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.

(c) FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with FRAP in HMA mixtures up to a maximum of 5.0 percent by weight of the total mix.

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

asphalt binder replacement (ABR) shall not exceed the amounts indicated in the table below for a given N Design.

Max Asphalt Binder Replacement for FRAP with RAS Combination

HMA Mixtures <sup>1/ 2/ 4/</sup>	Maximum % ABR		
	Binder/Leveling Binder	Surface	Polymer Modified <sup>3/</sup>
30L	50	40	30
50	40	35	30
70	40	30	30
90	40	30	30
4.75 mm N-50			40
SMA N-80			30

- 1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.
- 2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.
- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

**1031.07 HMA Mix Designs.** At the Contractor's option, HMA mixtures may be constructed utilizing RAP/FRAP and/or RAS material meeting the detailed requirements specified herein.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- (a) FRAP and/or RAS. FRAP and /or RAS mix designs shall be submitted for verification. If additional FRAP or RAS stockpiles are tested and found to be within tolerance, as defined under "Evaluation of Tests" herein, and meet all requirements herein, the additional FRAP or RAS stockpiles may be used in the original design at the percent previously verified.
- (b) RAS. Type 1 and Type 2 RAS are not interchangeable in a mix design. A RAS stone bulk specific gravity (Gsb) of 2.300 shall be used for mix design purposes.

**1031.08 HMA Production.** HMA production utilizing FRAP and/or RAS shall be as follows.

To remove or reduce agglomerated material, a scalping screen, gator, crushing unit, or comparable sizing device approved by the Engineer shall be used in the RAS and FRAP feed system to remove or reduce oversized material. If material passing the sizing device adversely affects the mix production or quality of the mix, the sizing device shall be set at a size specified by the Engineer.

If during mix production, corrective actions fail to maintain FRAP, RAS or QC/QA test results within control tolerances or the requirements listed herein the Contractor shall cease production of the mixture containing FRAP or RAS and conduct an investigation that may require a new mix design.

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within  $\pm 0.5$  percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.
  - (1) Dryer Drum Plants.
    - a. Date, month, year, and time to the nearest minute for each print.
    - b. HMA mix number assigned by the Department.
    - c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

- d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
  - e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
  - f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
  - g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
  - h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)
  - i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
  - j. Accumulated mixture tonnage.
  - k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))
- (2) Batch Plants.
- a. Date, month, year, and time to the nearest minute for each print.
  - b. HMA mix number assigned by the Department.
  - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
  - d. Mineral filler weight to the nearest pound (kilogram).
  - f. RAS and FRAP weight to the nearest pound (kilogram).
  - g. Virgin asphalt binder weight to the nearest pound (kilogram).
  - h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

The printouts shall be maintained in a file at the plant for a minimum of one year or as directed by the Engineer and shall be made available upon request. The printing system will be inspected by the Engineer prior to production and verified at the beginning of each construction season thereafter.

**1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B.**

The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

- (a) Stockpiles and Testing. RAP stockpiles may be any of those listed in Article 1031.02, except "Non-Quality" and "FRAP". The testing requirements of Article 1031.03 shall not apply. RAP used shall be according to the current Bureau of Materials and Physical Research Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. The RAP material shall meet the gradation requirements for CA 6 according to Article 1004.01(c), except the requirements for the minus No. 200 (75 µm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

**DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (D-1):**

Effective: April 1, 2011  
Revised: April 2, 2011

Add the following to Article 603.02 of the Standard Specifications:

- "(i) Temporary Hot-Mix Asphalt (HMA) Ramp (Note 1) ..... 1030
- (j) Temporary Rubber Ramps (Note 2)

Note 1. The HMA shall have maximum aggregate size of 3/8 in. (95 mm).

Note 2. The rubber material shall be according to the following.

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Brittleness, °F (°C)	ASTM D 746	-40 (-40)"
----------------------	------------	------------

Revise Article 603.07 of the Standard Specifications to read:

**“603.07 Protection Under Traffic.** After the casting has been adjusted and the Class PP concrete has been placed, the work shall be protected by a barricade and two lights according to Article 701.17(e)(3)b.

When castings are under traffic before the final surfacing operation has been started, properly sized temporary ramps shall be placed around the drainage and/or utility castings according to the following methods.

- (a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.
- (b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

Dimension	Requirement
Inside Opening	Outside dimensions of casting + 1 in. (25 mm)
Thickness at inside edge	Height of casting ± 1/4 in. (6 mm)
Thickness at outside edge	1/4 in. (6 mm) max.
Width, measured from inside opening to outside edge	8 1/2 in. (215 mm) min

Placement shall be according to the manufacturer’s specifications.

Temporary ramps for castings shall remain in place until surfacing operations are undertaken within the immediate area of the structure. Prior to placing the surface course, the temporary ramp shall be removed. Excess material shall be disposed of according to Article 202.03.”

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

**GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1):**

Effective: June 26, 2006

Revised: April 1, 2016

Add the following to the end of article 1032.05 of the Standard Specifications:

“(c) Ground Tire Rubber (GTR) Modified Asphalt Binder. A quantity of 10.0 to 14.0 percent GTR (Note 1) shall be blended by dry unit weight with a PG 64-28 to make a GTR 70-28 or a PG 58-28 to make a GTR 64-28. The base PG 64-28 and PG 58-28 asphalt binders shall meet the requirements of Article 1032.05(a). Compatible polymers may be added during production. The GTR modified asphalt binder shall meet the requirements of the following table.

<b>Test</b>	<b>Asphalt Grade GTR 70-28</b>	<b>Asphalt Grade GTR 64-28</b>
Flash Point (C.O.C.), AASHTO T 48, °F (°C), min.	450 (232)	450 (232)
Rotational Viscosity, AASHTO T 316 @ 275 °F (135 °C), Poises, Pa·s, max.	30 (3)	30 (3)
Softening Point, AASHTO T 53, °F (°C), min.	135 (57)	130 (54)
Elastic Recovery, ASTM D 6084, Procedure A (sieve waived) @ 77 °F, (25 °C), aged, ss, 100 mm elongation, 5 cm/min., cut immediately, %, min.	65	65

Note 1. GTR shall be produced from processing automobile and/or light truck tires by the ambient grinding method. GTR shall not exceed 1/16 in. (2 mm) in any dimension and shall contain no free metal particles or other materials. A mineral powder (such as talc) meeting the requirements of AASHTO M 17 may be added, up to a maximum of four percent by weight of GTR to reduce sticking and caking of the GTR particles. When tested in accordance with Illinois modified AASHTO T 27, a 50 g sample of the GTR shall conform to the following gradation requirements:

Special Provisions  
141151.41

Village of Villa Park  
North Princeton Avenue  
County: DuPage

Sieve Size	Percent Passing
No. 16 (1.18 mm)	100
No. 30 (600 μm)	95 ± 5
No. 50 (300 μm)	> 20

Add the following to the end of Note 1. of article 1030.03 of the Standard Specifications:

“A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent.”

Revise 1030.02(c) of the Standard Specifications to read:

“(c) RAP Materials (Note 5) .....1031”

Add the following note to 1030.02 of the Standard Specifications:

Note 5. When using reclaimed asphalt pavement and/or reclaimed asphalt shingles, the maximum asphalt binder replacement percentage shall be according to the most recent special provision for recycled materials.

State of Illinois  
Department of Transportation  
Bureau of Local Roads and Streets

SPECIAL PROVISION  
FOR  
INSURANCE

Effective: February 1, 2007  
Revised: August 1, 2007

All references to Sections or Articles in this specification shall be construed to mean specific Section or Article of the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation.

The Contractor shall name the following entities as additional insured under the Contractor's general liability insurance policy in accordance with Article 107.27:

Village of Villa Park (Municipality)

---

Baxter & Woodman, Inc. (Engineer)

---

Engineer's Consultants

---

---

---

---

---

---

The entities listed above and their officers, employees, and agents shall be indemnified and held harmless in accordance with Article 107.26.



BDE SPECIAL PROVISIONS  
For the April 22 and June 10, 2016 Lettings

The following special provisions indicated by an "x" are applicable to this contract and will be included by the Project Development and Implementation Section of the BD&E. An \* indicates a new or revised special provision for the letting.

File Name	#	Special Provision Title	Effective	Revised
80099	1	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
* 80274	2	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192	3	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241	5	Bridge Demolition Debris	July 1, 2009	
50261	6	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50481	7	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50491	8	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
50531	9	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
80360	10	✓ Coarse Aggregate Quality	July 1, 2015	
80198	11	Completion Date (via calendar days)	April 1, 2008	
80199	12	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
80293	13	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2015
* 80311	14	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
* 80277	15	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	16	✓ Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
* 80029	17	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2016
* 80363	18	Engineer's Field Office	April 1, 2016	
80358	19	Equal Employment Opportunity	April 1, 2015	
* 80364	20	✓ Errata for the 2016 Standard Specifications	April 1, 2016	
80229	21	Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80304	22	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
* 80246	23	✓ Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
* 80347	24	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	April 1, 2016
* 80336	25	Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
80045	26	Material Transfer Device	June 15, 1999	Aug. 1, 2014
* 80342	27	Mechanical Side Tie Bar Inserter	Aug. 1, 2014	April 1, 2016
80165	28	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
* 80361	29	Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	April 1, 2016
* 80349	30	Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
* 80298	31	Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
* 80365	32	Pedestrian Push-Button	April 1, 2016	
* 80359	33	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	April 1, 2016
* 80353	34	Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2016
* 80338	35	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
* 80300	36	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	37	✓ Progress Payments	Nov. 2, 2013	
34261	38	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	39	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
* 80306	40	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
* 80340	41	Speed Display Trailer	April 2, 2014	April 1, 2016
80127	42	Steel Cost Adjustment	April 2, 2004	July 1, 2015
80362	43	Steel Slag in Trench Backfill	Jan. 1, 2016	
* 80317	44	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80355	45	Temporary Concrete Barrier	Jan. 1, 2015	July 1, 2015
20338	46	Training Special Provisions	Oct. 15, 1975	
80318	47	Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
* 80288	48	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	49	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289	50	Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	51	Working Days	Jan. 1, 2002	

The following special provisions and recurring special provisions are in the 2016 Standard Specifications.

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80240	Above Grade Inlet Protection	Articles 280.02, 280.04, and 1081.15	July 1, 2009	Jan. 1, 2012
80310	Coated Galvanized Steel Conduit	Article 811.03	Jan. 1, 2013	Jan. 1, 2015
80341	Coilable Nonmetallic Conduit	Article 1088.01	Aug. 1, 2014	Jan. 1, 2015
80294	Concrete Box Culverts with Skews $\leq$ 30 Degrees Regardless of Design Fill and Skews $>$ 30 Degrees with Design Fills $>$ 5 Feet	Article 540.04	April 1, 2012	April 1, 2014
80334	Concrete Gutter, Curb, Median, and Paved Ditch	Articles 606.02, 606.07, and 1050.04	April 1, 2014	Aug. 1, 2014
80335	Contract Claims	Article 109.09	April 1, 2014	
Chk Sht #27	English Substitution of Metric Reinforcement Bars	Article 508.09	April 1, 1996	Jan. 1, 2011
80265	Friction Aggregate	Articles 1004.01 and 1004.03	Jan. 1, 2011	Nov. 1, 2014
80329	Glare Screen	Sections 638 and 1085	Jan. 1, 2014	
Chk Sht #20	Guardrail and Barrier Wall Delineation	Sections 635, 725, 782, and 1097	Dec. 15, 1993	Jan. 1, 2012
80322	Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Sections 312, 355, 406, 407, 442, 482, 601, 1003, 1004, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80323	Hot-Mix Asphalt – Mixture Design Verification and Production	Sections 406, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80348	Hot-Mix Asphalt – Prime Coat	Sections 403, 406, 407, 408, 1032, and 1102	Nov. 1, 2014	
80315	Insertion Lining of Culverts	Sections 543 and 1029	Jan. 1, 2013	Nov. 1, 2013
80351	Light Tower	Article 1069.08	Jan. 1, 2015	
80324	LRFD Pipe Culvert Burial Tables	Sections 542 and 1040	Nov. 1, 2013	April 1, 2015
80325	LRFD Storm Sewer Burial Tables	Sections 550 and 1040	Nov. 1, 2013	April 1, 2015
80337	Paved Shoulder Removal	Article 440.07	April 1, 2014	
80254	Pavement Patching	Article 701.17	Jan. 1, 2010	
80352	Pavement Striping - Symbols	Article 780.14	Jan. 1, 2015	
Chk Sht #19	Pipe Underdrains	Section 601 and Articles 1003.01, 1003.04, 1004.05, 1040.06, and 1080.05	Sept. 9, 1987	Jan. 1, 2007
80343	Precast Concrete Handhole	Articles 814.02, 814.03, and 1042.17	Aug. 1, 2014	
80350	Retroreflective Sheeting for Highway Signs	Article 1091.03	Nov. 1, 2014	
80327	Reinforcement Bars	Section 508 and Articles 421.04, 442.06, 1006.10	Nov. 1, 2013	
80344	Rigid Metal Conduit	Article 1088.01	Aug. 1, 2014	
80354	Sidewalk, Corner, or Crosswalk Closure	Article 1106.02	Jan. 1, 2015	April 1, 2015
80301	Tracking the Use of Pesticides	Article 107.23	Aug. 1, 2012	
80356	Traffic Barrier Terminals Type 6 or 6B	Article 631.02	Jan. 1, 2015	
80345	Underpass Luminaire	Articles 821.06 and 1067.04	Aug. 1, 2014	April 1, 2015

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80357	Urban Half Road Closure with Mountable Median	Articles 701.18, 701.19, and 701.20	Jan. 1, 2015	July 1, 2015
80346	Waterway Obstruction Warning Luminaire	Article 1067.07	Aug. 1, 2014	April 1, 2015

The following special provisions require additional information from the designer. The additional information needs to be included in a separate document attached to this check sheet. The Project Development and Implementation section will then include the information in the applicable special provision. The Special Provisions are:

- Bridge Demolition Debris
- Building Removal-Case I
- Building Removal-Case II
- Building Removal-Case III
- Building Removal-Case IV
- Completion Date
- Completion Date Plus Working Days
- DBE Participation
- Material Transfer Device
- Railroad Protective Liability Insurance
- Training Special Provisions
- Working Days



**COARSE AGGREGATE QUALITY (BDE)**

Effective: July 1, 2015

Revise Article 1004.01(b) of the Standard Specifications to read:

"(b) Quality. The coarse aggregate shall be according to the quality standards listed in the following table.

COARSE AGGREGATE QUALITY				
QUALITY TEST	CLASS			
	A	B	C	D
Na <sub>2</sub> SO <sub>4</sub> Soundness 5 Cycle, ITP 104 <sup>1/</sup> , % Loss max.	15	15	20	25 <sup>2/</sup>
Los Angeles Abrasion, ITP 96 <sup>11/</sup> , % Loss max.	40 <sup>3/</sup>	40 <sup>4/</sup>	40 <sup>5/</sup>	45
Minus No. 200 (75 µm) Sieve Material, ITP 11	1.0 <sup>6/</sup>	---	2.5 <sup>7/</sup>	---
Deleterious Materials <sup>10/</sup>				
Shale, % max.	1.0	2.0	4.0 <sup>8/</sup>	---
Clay Lumps, % max.	0.25	0.5	0.5 <sup>8/</sup>	---
Coal & Lignite, % max.	0.25	---	---	---
Soft & Unsound Fragments, % max.	4.0	6.0	8.0 <sup>8/</sup>	---
Other Deleterious, % max.	4.0 <sup>9/</sup>	2.0	2.0 <sup>8/</sup>	---
Total Deleterious, % max.	5.0	6.0	10.0 <sup>8/</sup>	---
Oil-Stained Aggregate <sup>10/</sup> , % max	5.0	---	---	

1/ Does not apply to crushed concrete.

2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.

3/ For portland cement concrete, the maximum percent loss shall be 45.

4/ Does not apply to crushed slag or crushed steel slag.

5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.

6/ For crushed aggregate, if the material finer than the No. 200 (75 µm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.

- 7/ Does not apply to aggregates for HMA binder mixtures.
- 8/ Does not apply to Class A seal and cover coats.
- 9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.
- 10/ Test shall be run according to ITP 203.
- 11/ Does not apply to crushed slag.

All varieties of chert contained in gravel coarse aggregate for portland cement concrete, whether crushed or uncrushed, pure or impure, and irrespective of color, will be classed as chert and shall not be present in the total aggregate in excess of 25 percent by weight (mass).

Aggregates used in Class BS concrete (except when poured on subgrade), Class PS concrete, and Class PC concrete (bridge superstructure products only, excluding the approach slab) shall contain no more than two percent by weight (mass) of deleterious materials. Deleterious materials shall include substances whose disintegration is accompanied by an increase in volume which may cause spalling of the concrete."

**CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)**

Effective: June 1, 2010

Revised: November 1, 2014

The reduction of emissions of particulate matter (PM) for off-road equipment shall be accomplished by installing retrofit emission control devices. The term "equipment" refers to diesel fuel powered devices rated at 50 hp and above, to be used on the jobsite in excess of seven calendar days over the course of the construction period on the jobsite (including rental equipment).

Contractor and subcontractor diesel powered off-road equipment assigned to the contract shall be retrofitted using the phased in approach shown below. Equipment that is of a model year older than the year given for that equipment's respective horsepower range shall be retrofitted:

Effective Dates	Horsepower Range	Model Year
June 1, 2010 <sup>1/</sup>	600-749	2002
	750 and up	2006
June 1, 2011 <sup>2/</sup>	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006
June 1, 2012 <sup>2/</sup>	50-99	2004
	100-299	2003
	300-599	2001
	600-749	2002
	750 and up	2006

1/ Effective dates apply to Contractor diesel powered off-road equipment assigned to the contract.

2/ Effective dates apply to Contractor and subcontractor diesel powered off-road equipment assigned to the contract.

The retrofit emission control devices shall achieve a minimum PM emission reduction of 50 percent and shall be:

- a) Included on the U.S. Environmental Protection Agency (USEPA) *Verified Retrofit Technology List* (<http://www.epa.gov/cleandiesel/verification/verif-list.htm>), or verified by the California Air Resources Board (CARB) (<http://www.arb.ca.gov/diesel/verdev/vt/cvt.htm>); or
- b) Retrofitted with a non-verified diesel retrofit emission control device if verified retrofit emission control devices are not available for equipment proposed to be used on the project, and if the Contractor has obtained a performance certification from the retrofit

device manufacturer that the emission control device provides a minimum PM emission reduction of 50 percent.

Note: Large cranes (Crawler mounted cranes) which are responsible for critical lift operations are exempt from installing retrofit emission control devices if such devices adversely affect equipment operation.

Diesel powered off-road equipment with engine ratings of 50 hp and above, which are unable to be retrofitted with verified emission control devices or if performance certifications are not available which will achieve a minimum 50 percent PM reduction, may be granted a waiver by the Department if documentation is provided showing good faith efforts were made by the Contractor to retrofit the equipment.

Construction shall not proceed until the Contractor submits a certified list of the diesel powered off-road equipment that will be used, and as necessary, retrofitted with emission control devices. The list(s) shall include (1) the equipment number, type, make, Contractor/rental company name; and (2) the emission control devices make, model, USEPA or CARB verification number, or performance certification from the retrofit device manufacturer. Equipment reported as fitted with emissions control devices shall be made available to the Engineer for visual inspection of the device installation, prior to being used on the jobsite.

The Contractor shall submit an updated list of retrofitted off-road construction equipment as retrofitted equipment changes or comes on to the jobsite. The addition or deletion of any diesel powered equipment shall be included on the updated list.

If any diesel powered off-road equipment is found to be in non-compliance with any portion of this special provision, the Engineer will issue the Contractor a diesel retrofit deficiency deduction.

Any costs associated with retrofitting any diesel powered off-road equipment with emission control devices shall be considered as included in the contract unit prices bid for the various items of work involved and no additional compensation will be allowed. The Contractor's compliance with this notice and any associated regulations shall not be grounds for a claim.

### **Diesel Retrofit Deficiency Deduction**

When the Engineer determines that a diesel retrofit deficiency exists, a daily monetary deduction will be imposed for each calendar day or fraction thereof the deficiency continues to exist. The calendar day(s) will begin when the time period for correction is exceeded and end with the Engineer's written acceptance of the correction. The daily monetary deduction will be \$1,000.00 for each deficiency identified.

The deficiency will be based on lack of diesel retrofit emissions control.

If a Contractor accumulates three diesel retrofit deficiency deductions for the same piece of equipment in a contract period, the Contractor will be shutdown until the deficiency is corrected.

Such a shutdown will not be grounds for any extension of the contract time, waiver of penalties, or be grounds for any claim.

80261

**ERRATA FOR THE 2016 STANDARD SPECIFICATIONS (BDE)**

Effective: April 1, 2016

- Page 84 Article 204.02. In the seventh line of the first paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 90 Article 205.06. In the first sentence of the third paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 91 Article 205.06. In the first sentence of the fourth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 91 Article 205.06. In the second line of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 91 Article 205.06. In the sixth line of the eighth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 148 Article 302.09. In the second sentence of the fifth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 152 Article 310.09. In the second sentence of the second paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 99" to "Illinois Modified AASHTO T 99".
- Page 155 Article 311.05(a). In the first sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the second sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 155 Article 311.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 163 Article 351.05(a). In the second sentence of the fifth paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)", and in the third sentence change "AASHTO T 224" to "Illinois Modified AASHTO T 99 (Annex A1)".
- Page 163 Article 351.05(a). In the second line of the sixth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191".
- Page 169 Article 352.11. In the second sentence of the fourth paragraph change "AASHTO T 191" to "Illinois Modified AASHTO T 191", and in the third sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 169 Article 352.12. In the first sentence of the first paragraph change "AASHTO T 22" to "Illinois Modified AASHTO T 22", and in the second sentence change "AASHTO T 134 (Method B)" to "Illinois Modified AASHTO T 134 (Method B)".

Page 196 Article 406.07(a). After the footnotes in Table 1 - Minimum Roller Requirements for HMA add the following:

"EQUIPMENT DEFINITION

- V<sub>s</sub> - Vibratory roller, static mode, minimum 125 lb/in. (2.2 kg/mm) of roller width. Maximum speed = 3 mph (5 km/h) or 264 ft/min (80 m/min). If the vibratory roller does not eliminate roller marks, its use shall be discontinued and a tandem roller, adequately ballasted to remove roller marks, shall be used.
- V<sub>D</sub> - Vibratory roller, dynamic mode, operated at a speed to produce not less than 10 impacts/ft (30 impacts/m).
- P - Pneumatic-tired roller, max. speed 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min). The pneumatic-tired roller shall have a minimum tire pressure of 80 psi (550 kPa) and shall be equipped with heat retention shields. The self-propelled pneumatic-tired roller shall develop a compression of not less than 300 lb (53 N) nor more than 500 lb (88 N) per in. (mm) of width of the tire tread in contact with the HMA surface.
- T<sub>B</sub> - Tandem roller for breakdown rolling, 8 to 12 tons (7 to 11 metric tons), 250 to 400 lb/in. (44 to 70 N/mm) of roller width, max. speed = 3 1/2 mph (5.5 km/h) or 308 ft/min (92 m/min).
- T<sub>F</sub> - Tandem roller for final rolling, 200 to 400 lb/in. (35 to 70 N/mm) of roller width with minimum roller width of 50 in. (1.25 m). Ballast shall be increased if roller marks are not eliminated. Ballast shall be decreased if the mat shoves or distorts.
- 3W- Three wheel roller, max. speed = 3 mph (5 km/h) or 264 ft/min (80 m/min), 300 to 400 lb/in. (53 to 70 N/mm) of roller width. The three-wheel roller shall weigh 10 to 12 tons (9 to 11 metric tons)."

Page 331 Article 505.04(p). Under Range of Clearance in the first table change "in. x 10<sup>-6</sup>" to "in. x 10<sup>-3</sup>".

Page 444 Article 542.03. In the Notes in Table IIIB add "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".

- Page 445 Article 542.03. In the fourth column in Table IIIB (metric) change the heading for Type 5 pipe from "CPE" to "CPP".
- Page 445 Article 542.03. In the Notes in Table IIIB (metric) change "PE Polyethylene (PE) pipe with a smooth interior" to "CPP Corrugated Polypropylene (CPP) pipe with smooth interior".
- Page 449 Article 542.04(f)(2). In the third line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 544 Article 639.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 546 Article 640.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 548 Article 641.03. In the first sentence of the first paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaire and Traffic Signals," to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals,"".
- Page 621 Article 727.03. In the first sentence of the third paragraph change "AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 629 Article 734.03(a). In the fourth line of the second paragraph change "AASHTO T 99 (Method C)" to "Illinois Modified AASHTO T 99 (Method C)".
- Page 649 Article 801.02. In the first sentence of the first paragraph change "AASHTO's Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 742 Article 1003.04(c). Under Gradation in the table change "(see Article 1003.02(c))" to "(see Article 1003.01(c))".
- Page 755 Article 1004.03(b). Revise the third sentence of the first paragraph to read "For Class A (seal or cover coat), and other binder courses, the coarse aggregate shall be Class C quality or better."

- Page 809 Article 1020.04(e). In the third line of the first paragraph change "ITP SCC-3" to "ITP SCC-4".
- Page 945 Article 1069.05. In the first sentence of the tenth paragraph change "'Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals'" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 961 Article 1070.04(b)(1). In the third sentence of the first paragraph change "'Standard Specifications of Structural Supports for Highway Signs, Luminaires and Traffic Signals" published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 989 Article 1077.01. In the second sentence of the first paragraph change "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as published by AASHTO" to "AASHTO "LRFD Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals"".
- Page 1121 Article 1103.13(a). In the first line of the first paragraph change "Bridge Deck Approach Slabs." to "Bridge Deck and Approach Slabs.".

80364

**HOT-MIX ASPHALT - DENSITY TESTING OF LONGITUDINAL JOINTS (BDE)**

Effective: January 1, 2010

Revised: April 1, 2016

**Description.** This work shall consist of testing the density of longitudinal joints as part of the quality control/quality assurance (QC/QA) of hot-mix asphalt (HMA). Work shall be according to Section 1030 of the Standard Specifications except as follows.

**Quality Control/Quality Assurance (QC/QA).** Delete the second and third sentence of the third paragraph of Article 1030.05(d)(3) of the Standard Specifications.

Add the following paragraphs to the end of Article 1030.05(d)(3) of the Standard Specifications:

"Longitudinal joint density testing shall be performed at each random density test location. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4 in. (100 mm), from each pavement edge. (i.e. for a 5 in. (125 mm) lift the near edge of the density gauge or core barrel shall be within 5 in. (125 mm) from the edge of pavement.) Longitudinal joint density testing shall be performed using either a correlated nuclear gauge or cores.

- a. **Confined Edge.** Each confined edge density shall be represented by a one-minute nuclear density reading or a core density and shall be included in the average of density readings or core densities taken across the mat which represents the Individual Test.
- b. **Unconfined Edge.** Each unconfined edge joint density shall be represented by an average of three one-minute density readings or a single core density at the given density test location and shall meet the density requirements specified herein. The three one-minute readings shall be spaced 10 ft (3 m) apart longitudinally along the unconfined pavement edge and centered at the random density test location."

Revise the Density Control Limits table in Article 1030.05(d)(4) of the Standard Specifications to read:

"Mixture Composition	Parameter	Individual Test (includes confined edges)	Unconfined Edge Joint Density Minimum
IL-4.75	Ndesign = 50	93.0 – 97.4% <sup>1/</sup>	91.0%
IL-9.5	Ndesign = 90	92.0 – 96.0%	90.0%
IL-9.5,IL-9.5L	Ndesign < 90	92.5 – 97.4%	90.0%
IL-19.0	Ndesign = 90	93.0 – 96.0%	90.0%
IL-19.0, IL-19.0L	Ndesign < 90	93.0 <sup>2/</sup> – 97.4%	90.0%
SMA	Ndesign = 50 & 80	93.5 – 97.4%	91.0%"

**PROGRESS PAYMENTS (BDE)**

Effective: November 2, 2013

Revise Article 109.07(a) of the Standard Specifications to read:

“(a) Progress Payments. At least once each month, the Engineer will make a written estimate of the quantity of work performed in accordance with the contract, and the value thereof at the contract unit prices. The amount of the estimate approved as due for payment will be vouchered by the Department and presented to the State Comptroller for payment. No amount less than \$1000.00 will be approved for payment other than the final payment.

Progress payments may be reduced by liens filed pursuant to Section 23(c) of the Mechanics' Lien Act, 770 ILCS 60/23(c).

If a Contractor or subcontractor has defaulted on a loan issued under the Department's Disadvantaged Business Revolving Loan Program (20 ILCS 2705/2705-610), progress payments may be reduced pursuant to the terms of that loan agreement. In such cases, the amount of the estimate related to the work performed by the Contractor or subcontractor, in default of the loan agreement, will be offset, in whole or in part, and vouchered by the Department to the Working Capital Revolving Fund or designated escrow account. Payment for the work shall be considered as issued and received by the Contractor or subcontractor on the date of the offset voucher. Further, the amount of the offset voucher shall be a credit against the Department's obligation to pay the Contractor, the Contractor's obligation to pay the subcontractor, and the Contractor's or subcontractor's total loan indebtedness to the Department. The offset shall continue until such time as the entire loan indebtedness is satisfied. The Department will notify the Contractor and Fund Control Agent in a timely manner of such offset. The Contractor or subcontractor shall not be entitled to additional payment in consideration of the offset.

The failure to perform any requirement, obligation, or term of the contract by the Contractor shall be reason for withholding any progress payments until the Department determines that compliance has been achieved.”

**WARM MIX ASPHALT (BDE)**

Effective: January 1, 2012

Revised: April 1, 2016

Description. This work shall consist of designing, producing and constructing Warm Mix Asphalt (WMA) in lieu of Hot Mix Asphalt (HMA) at the Contractor's option. Work shall be according to Sections 406, 407, 408, 1030, and 1102 of the Standard Specifications, except as modified herein. In addition, any references to HMA in the Standard Specifications, or the special provisions shall be construed to include WMA.

WMA is an asphalt mixture which can be produced at temperatures lower than allowed for HMA utilizing approved WMA technologies. WMA technologies are defined as the use of additives or processes which allow a reduction in the temperatures at which HMA mixes are produced and placed. WMA is produced by the use of additives, a water foaming process, or combination of both. Additives include minerals, chemicals or organics incorporated into the asphalt binder stream in a dedicated delivery system. The process of foaming injects water into the asphalt binder stream, just prior to incorporation of the asphalt binder with the aggregate.

Approved WMA technologies may also be used in HMA provided all the requirements specified herein, with the exception of temperature, are met. However, asphalt mixtures produced at temperatures in excess of 275 °F (135 °C) will not be considered WMA when determining the grade reduction of the virgin asphalt binder grade.

Equipment.

Revise the first paragraph of Article 1102.01 of the Standard Specifications to read:

**1102.01 Hot-Mix Asphalt Plant.** The hot-mix asphalt (HMA) plant shall be the batch-type, continuous-type, or dryer drum plant. The plants shall be evaluated for prequalification rating and approval to produce HMA according to the current Bureau of Materials and Physical Research Policy Memorandum, "Approval of Hot-Mix Asphalt Plants and Equipment". Once approved, the Contractor shall notify the Bureau of Materials and Physical Research to obtain approval of all plant modifications. The plants shall not be used to produce mixtures concurrently for more than one project or for private work unless permission is granted in writing by the Engineer. The plant units shall be so designed, coordinated and operated that they will function properly and produce HMA having uniform temperatures and compositions within the tolerances specified. The plant units shall meet the following requirements."

Add the following to Article 1102.01(a) of the Standard Specifications.

"(11) Equipment for Warm Mix Technologies.

- a. Foaming. Metering equipment for foamed asphalt shall have an accuracy of  $\pm 2$  percent of the actual water metered. The foaming control system shall be electronically interfaced with the asphalt binder meter.

- b. Additives. Additives shall be introduced into the plant according to the supplier's recommendations and shall be approved by the Engineer. The system for introducing the WMA additive shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes."

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

- (1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.
- (2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

Revise the second paragraph of Article 406.06(b)(1) of the Standard Specifications to read:

"The HMA shall be delivered at a temperature of 250 to 350 °F (120 to 175 °C). WMA shall be delivered at a minimum temperature of 215 °F (102 °C)."

Basis of Payment.

This work will be paid at the contract unit price bid for the HMA pay items involved. Anti-strip will not be paid for separately, but shall be considered as included in the cost of the work.

80288





Storm Water Pollution Prevention Plan



Route	Marked Route	Section
	North Princeton Avneue	
Project Number	County	Contract Number
	DuPage	

This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issues by the Illinois Environmental Protection Agency (IEPA) for storm water discharges from construction site activities.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name	Title	Agency
VYDAS JUSKELIS	PUBLIC WORKS DIRECTOR	VILLAGE OF VILLA PARK
Signature		Date
<i>Vydias Juskelis</i>		04/21/2016

I. Site Description

- A. Provide a description of the project location (include latitude and longitude):  
North Princeton Avenue from W Terrace Street to W Ridge Road, 41°53'58.49"N, 87°58'49.70"W
- B. Provide a description of the construction activity which is subject of this plan:  
Roadway reconstruction, storm sewer repairs and water main installation.
- C. Provide the estimated duration of this project:  
4 months
- D. The total area of the construction site is estimated to be 3.6 acres.  
The total area of the site estimated to be disturbed by excavation, grading or other activities is 3.1 acres.
- E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:  
0.61
- F. List all soils found within project boundaries. Include map unit name, slope information and erosivity:  
Markham-Ashkum-Beecher complex, 1 to 6 percent slopes, moderate erosivity.
- G. Provide an aerial extent of wetland acreage at the site:  
No wetlands are located within the project limits.
- H. Provide a description of potentially erosive areas associated with this project:  
Excavations and parkways.
- I. The following is a description of soil disturbing activities by stages, their locations, and their erosive factors (e.g. steepness of slopes, length of scopes, etc.):

After Removing the existing pavement and excavating for water main construction, the exposed soil will be susceptible to erosion from storm events. Foreslopes that drain away from the road are slopes of 10:1 or flatter to the ROW.

J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage patterns, approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent off site sediment tracking (to be added after contractor identifies locations), areas of soil disturbance, the location of major structural and non-structural controls identified in the plan, the location of areas where stabilization practices are expected to occur, surface waters (including wetlands) and locations where storm water is discharged to surface water including wetlands.

K. Identify who owns the drainage system (municipality or agency) this project will drain into:

Village of Villa Park

L. The following is a list of General NPDES ILR40 permittees within whose reporting jurisdiction this project is located.

M. The following is a list of receiving water(s) and the ultimate receiving water(s) for this site. The location of the receiving waters can be found on the erosion and sediment control plans:

The project directly discharges to existing municipal storm sewers, which ultimately discharge to Salt Creek.

N. Describe areas of the site that are to be protected or remain undisturbed. These areas may include steep slopes, highly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.

None

O. The following sensitive environmental resources are associated with this project, and may have the potential to be impacted by the proposed development:

- Floodplain
- Wetland Riparian
- Threatened and Endangered Species
- Historic Preservation
- 303(d) Listed receiving waters for suspended solids, turbidity, or siltation
- Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity, or siltation
- Applicable Federal, Tribal, State or Local Programs
- Other

1. 303(d) Listed receiving waters (fill out this section if checked above):

a. The name(s) of the listed water body, and identification of all pollutants causing impairment:

b. Provide a description of how erosion and sediment control practices will prevent a discharge of sediment resulting from a storm event equal to or greater than a twenty-five (25) year, twenty-four (24) hour rainfall event:

c. Provide a description of the location(s) of direct discharge from the project site to the 303(d) water body:

d. Provide a description of the location(s) of any dewatering discharges to the MS4 and/or water body:

2. TMDL (fill out this section if checked above)

a. The name(s) of the listed water body:

b. Provide a description of the erosion and sediment control strategy that will be incorporated into the site design that is consistent with the assumptions and requirements of the TMDL:

[Empty text box for erosion and sediment control strategy]

c. If a specific numeric waste load allocation has been established that would apply to the project's discharges, provide a description of the necessary steps to meet the allocation:

[Empty text box for waste load allocation description]

P. The following pollutants of concern will be associated with this construction project:

- Soil Sediment
- Concrete
- Concrete Truck waste
- Concrete Curing Compounds
- Solid waste Debris
- Paints
- Solvents
- Fertilizers / Pesticides
- Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids)
- Antifreeze / Coolants
- Waste water from cleaning construction equipment
- Other (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

II. Controls

This section of the plan addresses the controls that will be implemented for each of the major construction activities described in I.C. above and for all use areas, borrow sites, and waste sites. For each measure discussed, the Contractor will be responsible for its implementation as indicated. The Contractor shall provide to the Resident Engineer a plan for the implementation of the measures indicated. The Contractor and subcontractors, will notify the Resident Engineer of any proposed changes, maintenance, or modifications to keep construction activities compliant with the Permit ILR10. Each such Contractor has signed the required certification on forms which are attached to, and are a part of, this plan:

A. Erosion and Sediment Controls: At a minimum, controls must be coordinated, installed, and maintained to:

1. Minimize the amount of soil exposed during construction activity;
2. Minimize the disturbance of steep slopes;
3. Maintain natural buffers around surface waters, direct storm water to vegetated areas to increase sediment removal and maximize storm water infiltration, unless infeasible;
4. Minimize soil compaction and, unless infeasible, preserve topsoil.

B. Stabilization Practices: Provided below is a description of interim and permanent stabilization practices, including site- specific scheduling of the implementation of the practices. Site plans will ensure that existing vegetation is preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices may include but are not limited to: temporary seeding, permanent seeding, mulching, geotextiles, sodding, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures. Except as provided below in II(B)(1) and II(B)(2), stabilization measures shall be initiated **immediately** where construction activities have temporarily or permanently ceased, but in no case more than **one (1) day** after the construction activity in that portion of the site has temporarily or permanently ceases on all disturbed portions of the site where construction will not occur for a period of fourteen (14) or more calendar days.

1. Where the initiation of stabilization measures is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
2. On areas where construction activity has temporarily ceased and will resume after fourteen (14) days, a temporary stabilization method can be used.

The following stabilization practices will be used for this project:

- Preservation of Mature Vegetation
- Vegetated Buffer Strips
- Protection of Trees
- Temporary Erosion Control Seeding
- Erosion Control Blanket / Mulching
- Sodding
- Geotextiles
- Other (specify) \_\_\_\_\_

- Temporary Turf (Seeding, Class 7)       Other (specify) \_\_\_\_\_
- Temporary Mulching                       Other (specify) \_\_\_\_\_
- Permanent Seeding                           Other (specify) \_\_\_\_\_

Describe how the stabilization practices listed above will be utilized during construction:

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

C. **Structural Practices:** Provided below is a description of structural practices that will be implemented, to the degree attainable, to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site. Such practices may include but are not limited to: perimeter erosion barrier, earth dikes, drainage swales, sediment traps, ditch checks, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. The installation of these devices may be subject to Section 404 of the Clean Water Act.

The following stabilization practices will be used for this project:

- Perimeter Erosion Barrier                       Rock Outlet Protection
- Temporary Ditch Check                           Riprap
- Storm Drain Inlet Protection                       Gabions
- Sediment Trap                                       Slope Mattress
- Temporary Pipe Slope Drain                       Retaining Walls
- Temporary Sediment Basin                       Slope Walls
- Temporary Stream Crossing                       Concrete Revetment Mats
- Stabilized Construction Exits                       Level Spreaders
- Turf Reinforcement Mats                           Other (specify) \_\_\_\_\_
- Permanent Check Dams                           Other (specify) \_\_\_\_\_
- Permanent Sediment Basin                       Other (specify) \_\_\_\_\_
- Aggregate Ditch                                   Other (specify) \_\_\_\_\_
- Paved Ditch     Other (specify) \_\_\_\_\_

Describe how the structural practices listed above will be utilized during construction:

Perimeter Erosion Barrier will be placed along all areas that slope away from the project. Parkway structures and curb structures with open grates will be protected with inlet filters.

Describe how the structural practices listed above will be utilized after construction activities have been completed:

All structural practices listed above will remain in place until the permanent sod has established as stabilized vegetation.

D. **Treatment Chemicals**

Will polymer flocculents or treatment chemicals be utilized on this project:  Yes  No

If yes above, identify where and how polymer flocculents or treatment chemicals will be utilized on this project.

E. **Permanent Storm Water Management Controls:** Provided below is a description of measures that will be installed during the construction process to control volume and pollutants in storm water discharges that will occur after construction operations have been completed. The installation of these devices may be subject to Section 404 of the Clean Water act.

1. Such practices may include but are not limited to: storm water detention structures (including wet ponds), storm water retention structures, flow attenuation by use of open vegetated swales and natural depressions, infiltration of runoff on site, and sequential systems (which combine several practices).

The practices selected for implementation were determined on the basis of the technical guidance in Chapter 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design & Environment Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if practices are applied to situations different from those covered in Chapter 41, the technical basis for such decisions will be explained below.

2. Velocity dissipation devices will be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. maintenance of hydrologic conditions such as the hydroperiod and hydrodynamics present prior to the initiation of construction activities).

Description of permanent storm water management controls:

Runoff will be directed to existing and proposed storm sewer structures which will be protected with Inlet Filters. There are no outfall structures requiring velocity dissipation along this project.

- F. Approved State or Local Laws:** The management practices, controls, and provisions contained in this plan will be in accordance with IDOT specifications, which are at least as protective as the requirements contained in the Illinois Environmental Protection Agency's Illinois Urban Manual. Procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials shall be described or incorporated by reference in the space provided below. Requirements specified in sediment and erosion site plans, site permits, storm water management site plans or site permits approved by local officials that are applicable to protecting surface water resources are, upon submittal of an NOI, to be authorized to discharge under the Permit ILR10 incorporated by reference and are enforceable under this permit even if they are not specifically included in the plan.

Description of procedures and requirements specified in applicable sediment and erosion site plans or storm water management plans approved by local officials:

All management practices, controls, and other provisions provided in this plan are in accordance with IDOT Standard Specifications for Road and Bridge Construction.

- G. Contractor Required Submittals:** Prior to conducting any professional services at the site covered by this plan, the Contractor and each subcontractor responsible for compliance with the permit shall submit to the Resident Engineer a Contractor Certification Statement, BDE 2342a.
1. The Contractor shall provide a construction schedule containing an adequate level of detail to show major activities with implementation of pollution prevention BMPs, including the following items:
    - Approximate duration of the project, including each stage of the project
    - Rainy season, dry season, and winter shutdown dates
    - Temporary stabilization measures to be employed by contract phases
    - Mobilization time frame
    - Mass clearing and grubbing/roadside clearing dates
    - Deployment of Erosion Control Practices
    - Deployment of Sediment Control Practices (including stabilized construction entrances/exits)
    - Deployment of Construction Site Management Practices (including concrete washout facilities, chemical storage, refueling locations, etc.)
    - Paving, saw-cutting, and any other pavement related operations
    - Major planned stockpiling operations
    - Time frame for other significant long-term operations or activities that may plan non-storm water discharges such as dewatering, grinding, etc.
    - Permanent stabilization activities for each area of the project
  2. The Contractor and each subcontractor shall provide, as an attachment to their signed Contractor Certification Statement, a discussion of how they will comply with the requirements of the permit in regard to the following items and provide a graphical representation showing location and type of BMPs to be used when applicable:

- Vehicle Entrances and Exits - Identify type and location of stabilized construction entrances and exits to be used and how they will be maintained.
- Material delivery, Storage, and Use - Discuss where and how materials including chemicals, concrete curing compounds, petroleum products, etc. will be stored for this project.
- Stockpile Management - Identify the location of both on-site and off-site stockpiles. Discuss what BMPs will be used to prevent pollution of storm water from stockpiles.
- Waste Disposal - Discuss methods of waste disposal that will be used for this project.
- Spill Prevention and Control - Discuss steps that will be taken in the event of a material spill (chemicals, concrete curing compounds, petroleum, etc.).
- Concrete Residuals and Washout Wastes - Discuss the location and type of concrete washout facilities to be used on this project and how they will be signed and maintained.
- Litter Management - Discuss how litter will be maintained for this project (education of employees, number of dumpsters, frequency of dumpster pick-up, etc.).
- Vehicle and Equipment Cleaning and Maintenance - Identify where equipment cleaning and maintenance locations for this project and what BMPs will be used to ensure containment and spill prevention.
- Dewatering Activities - Identify the controls which will be used during dewatering operations to ensure sediments will not leave the construction site.
- Polymer Flocculants and Treatment Chemicals - Identify the use and dosage of treatment chemicals and provide the Resident Engineer with Material Safety Data Sheets. Describe procedures on how the chemicals will be used and identify who will be responsible for the use and application of these chemicals. The selected individual must be trained on the established procedures.
- Additional measures indicated in the plan.

### III. Maintenance

When requested by the Contractor, the Resident Engineer will provide general maintenance guides to the Contractor for the practices associated with this project. The following additional procedures will be used to maintain, in good and effective operating conditions, the vegetation, erosion and sediment control measures and other protective measures identified in this plan. It will be Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

All erosion and sediment control measures should be checked weekly and after each significant rainfall, 0.5 inch or greater in a 24 hour period, or equivalent snowfall. Additionally, during winter months, all measures should be checked after each additional snowmelt. All erosion and sediment control measures should be included in the list of items to be inspected. All maintenance of erosion control systems is the responsibility of the contractor, and is a requirement of the contract.

### IV. Inspections

Qualified personnel shall inspect disturbed areas of the construction site which have not yet been finally stabilized, structural control measures, and locations where vehicles and equipment enter and exit the site using IDOT Storm Water Pollution Prevention Plan Erosion Control Inspection Report (BC 2259). Such inspections shall be conducted at least once every seven (7) calendar days and within twenty-four (24) hours of the end of a storm or by the end of the following business or work day that is 0.5 inch or greater or equivalent snowfall.

Inspections may be reduced to once per month when construction activities have ceased due to frozen conditions. Weekly inspections will recommence when construction activities are conducted, or if there is 0.5" or greater rain event, or a discharge due to snowmelt occurs.

If any violation of the provisions of this plan is identified during the conduct of the construction work covered by this plan, the Resident Engineer shall notify the appropriate IEPA Field Operations Section office by e-mail at: [epa.swnoncomp@illinois.gov](mailto:epa.swnoncomp@illinois.gov), telephone or fax within twenty-four (24) hours of the incident. The Resident Engineer shall then complete and submit an "Incidence of Non-Compliance" (ION) report for the identified violation within five (5) days of the incident. The Resident Engineer shall use forms provided by IEPA and shall include specific information on the cause of noncompliance, actions which were taken to prevent any further causes of noncompliance, and a statement detailing any environmental impact which may have resulted from the noncompliance. All reports of non-compliance shall be signed by a responsible authority in accordance with Part VI. G of the Permit ILR10.

The Incidence of Non-Compliance shall be mailed to the following address:

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Compliance Assurance Section  
1021 North Grand East  
Post Office Box 19276  
Springfield, Illinois 62794-9276

Additional Inspections Required:

**V. Failure to Comply**

Failure to comply with any provisions of this Storm Water Pollution Prevention Plan will result in the implementation of a National Pollutant Discharge Elimination System/Erosion and Sediment Control Deficiency Deduction against the Contractor and/or penalties under the Permit ILR10 which could be passed on to the Contractor.



### Contractor Certification Statement

Prior to conducting any professional services at the site covered by this contract, the Contractor and every subcontractor must complete and return to the Resident Engineer the following certification. A separate certification must be submitted by each firm. Attach to this certification all items required by Section II.G of the Storm Water Pollution Prevention Plan (SWPPP) which will be handled by the Contractors/subcontractor completing this form.

Route	Marked Route	Section
<input type="text"/>	North Princeton Avenue	<input type="text"/>
Project Number	County	Contract Number
<input type="text"/>	DuPage	<input type="text"/>

This certification statement is a part of SWPPP for the project described above, in accordance with the General NPDES Permit No. ILR10 issued by the Illinois Environmental Protection Agency.

I certify under penalty of law that I understand the terms of the Permit No. ILR10 that authorizes the storm water discharges associated with industrial activity from the construction site identified as part of this certification.

In addition, I have read and understand all of the information and requirements stated in SWPPP for the above mentioned project; I have received copies of all appropriate maintenance procedures; and, I have provided all documentation required to be in compliance with the Permit ILR10 and SWPPP and will provide timely updates to these documents as necessary.

- Contractor
- Sub-Contractor

Print Name	Signature
<input type="text"/>	<input type="text"/>
Title	Date
<input type="text"/>	<input type="text"/>
Name of Firm	Telephone
<input type="text"/>	<input type="text"/>
Street Address	City/State/Zip
<input type="text"/>	<input type="text"/>

Items which the Contractor/subcontractor will be responsible for as required in Section II.G. of SWPPP:





# Illinois Environmental Protection Agency

Bureau of Water • 1021 North Grand Avenue East • P.O. Box 19276 • Springfield • Illinois • 62794-9276

## Division of Water Pollution Control Notice of Intent (NOI) for General Permit to Discharge Storm Water Associated with Construction Site Activities

*This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at the above address.*

For Office Use Only

### OWNER INFORMATION

Permit No. ILR10 \_\_\_\_\_

Company/Owner Name: Village of Villa Park

Mailing Address: 20 South Ardmore Phone: 630-834-8505

City: Villa Park State: IL Zip: 60181 Fax: 630-834-8509

Contact Person: Vydas Juskelis E-mail: juskelis@invillapark.com

Owner Type (select one) City

### CONTRACTOR INFORMATION

MS4 Community:  Yes  No

Contractor Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_ Phone: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ Fax: \_\_\_\_\_

### CONSTRUCTION SITE INFORMATION

Select One:  New  Change of information for: ILR10 \_\_\_\_\_

Project Name: North Princeton Avenue Improvement Project County: DuPage

Street Address: N. Princeton, Terrace to Ridge City: Villa Park IL Zip: 60181

Latitude: 41 53 58.49 Longitude: 87 58 49.70 4 36N 11E  
(Deg) (Min) (Sec) (Deg) (Min) (Sec) Section Township Range

Approximate Construction Start Date Jun 1, 2016 Approximate Construction End Date Oct 1, 2016

Total size of construction site in acres: 3.6

If less than 1 acre, is the site part of a larger common plan of development?

Yes  No

Fee Schedule for Construction Sites:  
Less than 5 acres - \$250  
5 or more acres - \$750

### STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Has the SWPPP been submitted to the Agency?  Yes  No

(Submit SWPPP electronically to: [epa.constilr10swppp@illinois.gov](mailto:epa.constilr10swppp@illinois.gov))

Location of SWPPP for viewing: Address: 20 South Ardmore City: Villa Park

SWPPP contact information:

Inspector qualifications:

Contact Name: Vydas Juskelis P.E.

Phone: 630-834-8505 Fax: 630-834-8509 E-mail: juskelis@invillapark.com

Project inspector, if different from above Inspector qualifications:

Inspector's Name: \_\_\_\_\_

Phone: \_\_\_\_\_ Fax: \_\_\_\_\_ E-mail: \_\_\_\_\_

**TYPE OF CONSTRUCTION (select one)**

Construction Type Transportation

SIC Code: \_\_\_\_\_

Type a detailed description of the project:

The project includes pavement removal, earth excavation, storm sewer repairs, water main installation, aggregate base course, curb and gutter, HMA binder and surface courses, parkway restoration, and other miscellaneous items.

The project is located on North Princeton Avenue from West Terrace St to West Ridge Rd, in the Village of Villa Park, Illinois.

**HISTORIC PRESERVATION AND ENDANGERED SPECIES COMPLIANCE**

Has the project been submitted to the following state agencies to satisfy applicable requirements for compliance with Illinois law on:

Historic Preservation Agency     Yes     No

Endangered Species             Yes     No

**RECEIVING WATER INFORMATION**

Does your storm water discharge directly to:     Waters of the State    or     Storm Sewer

Owner of storm sewer system: Village of Villa Park

Name of closest receiving water body to which you discharge: Salt Creek

Mail completed form to: Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Attn: Permit Section  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
or call (217) 782-0610  
FAX: (217) 782-9891

Or submit electronically to: [epa.constilr10swppp@illinois.gov](mailto:epa.constilr10swppp@illinois.gov)

I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of the permit, including the development and implementation of a storm water pollution prevention plan and a monitoring program plan, will be complied with.

**Any person who knowingly makes a false, fictitious, or fraudulent material statement, orally or in writing, to the Illinois EPA commits a Class 4 felony. A second or subsequent offense after conviction is a Class 3 felony. (415 ILCS 5/44(h))**

  
Owner Signature:

04/21/2016

Date:

VYDAS JUSKELIS  
Printed Name:

PUBLIC WORKS DIRECTOR  
Title:

**INSTRUCTIONS FOR COMPLETION OF CONSTRUCTION ACTIVITY NOTICE OF INTENT (NOI) FORM**

Submit original, electronic or facsimile copies. Facsimile and/or electronic copies should be followed-up with submission of an original signature copy as soon as possible. Please write "copy" under the "For Office Use Only" box in the upper right hand corner of the first page.

***This fillable form may be completed online, a copy saved locally, printed and signed before it is submitted to the Permit Section at:***

Illinois Environmental Protection Agency  
Division of Water Pollution Control  
Permit Section  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
or call (217) 782-0610  
FAX: (217) 782-9891

Or submit electronically to: [epa.constilr10swppp@illinois.gov](mailto:epa.constilr10swppp@illinois.gov)

**Reports must be typed or printed legibly and signed.**

Any facility that is not presently covered by the General NPDES Permit for Storm Water Discharges From Construction Site Activities is considered a new facility.

If this is a change in your facility information, renewal, etc., please fill in your permit number on the appropriate line, changes of information or permit renewal notifications do not require a fee.

**NOTE: FACILITY LOCATION IS NOT NECESSARILY THE FACILITY MAILING ADDRESS, BUT SHOULD DESCRIBE WHERE THE FACILITY IS LOCATED.**

Use the formats given in the following examples for correct form completion.

	Example	Format
Section	12	1 or 2 numerical digits
Township	12N	1 or 2 numerical digits followed by "N" or "S"
Range	12W	1 or 2 numerical digits followed by "E" or "W"

For the Name of Closest Receiving Waters, do not use terms such as ditch or channel. For unnamed tributaries, use terms which include at least a named main tributary such as "Unnamed Tributary to Sugar Creek to Sangamon River."

Submission of initial fee and an electronic submission of Storm Water Pollution Prevention Plan (SWPPP) for Initial Permit prior to the Notice of Intent being considered complete for coverage by the ILR10 General Permits. Please make checks payable to: Illinois EPA at the above address.

Construction sites with less than 5 acres of land disturbance - fee is \$250.

Construction sites with 5 or more acres of land disturbance - fee is \$750.

SWPPP should be submitted electronically to: [epa.constilr10swppp@illinois.gov](mailto:epa.constilr10swppp@illinois.gov) When submitting electronically, use Project Name and City as indicated on NOI form.





ADJUSTMENT ITEMS	EX	PR	ALIGNMENT ITEMS	EX	PR	BOUNDARIES ITEMS	EX	PR	CONTOUR ITEMS	EX	PR
Structure To Be Adjusted		ADJ	Baseline			Dashed Property Line			Approx. Index Line		
Structure To Be Cleaned		C	Centerline			Solid Property/Lot Line			Approx. Intermediate Line		
Main Structure To Be Filled		FM	Centerline Break Circle			Section/Grant Line			Index Contour		
Structure To Be Filled		F	Baseline Symbol			Quarter Sect on Line			Intermediate Contour		
Structure To Be Filled Special		FSP	Centerline Symbol			Quarter/Quarter Section Line			Channel or Stream Line		
Structure To Be Removed		R	PI Indicator			County/Township Line			Culvert Line		
Structure To Be Reconstructed		REC	Point Indicator			State Line			Grading & Shaping Ditches		
Structure To Be Reconstructed Special		RSP	Horizontal Curve Data (Half Size)			Iron Pipe Found			Drainage Boundary Line		
Frame and Gate To Be Adjusted		A				Iron Pipe Set			Paved Ditch		
Frame and Lid To Be Adjusted		A				Survey Marker			Aggregate Ditch		
Domestic Service Box To Be Adjusted		A				Property Line Symbol			Pipe Underdrain		
Valve Vault To Be Adjusted		A				Some Ownership Symbol (Half Size)			Storm Sewer		
Special Adjustment		SP				Northwest Quarter Corner (Half Size)			Flow line		
Item To Be Abandoned		AB				Section Corner (Half Size)			Ditch Check		
Item To Be Moved		M				Southeast Quarter Corner (Half Size)			Ditch		
Item To Be Relocated		REL							Headwall		
Pavement Removal and Replacement									Inlet		

Illinois Department of Transportation  
 January 11, 2011  
 PASSED: *[Signature]*  
 ENGINEER OF PUBLIC WORKS  
 Approved: *[Signature]*  
 SUPERVISOR OF HIGHWAYS  
 1-1-97

**STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS**  
 (Sheet 2 of 8)  
 STANDARD 000001-06

EROSION & SEDIMENT CONTROL ITEMS	EX	PR	NON-HIGHWAY IMPROVEMENT ITEMS	EX	PR	EXISTING LANDSCAPING ITEMS (cont'd.)	EX	PR
Cleaning & Grading Limits			Noise Attn./Levee			Seeding Class 5		
Dike			Field Line			Seeding Class 7		
Erosion Control Fence			Fence			Seedlings Type 1		
Perimeter Erosion Barrier			Base of Levee			Seedlings Type 2		
Temporary Fence			Mulch			Sodding		
Ditch Check Temporary			Multiple Mailboxes			Mowstoke w/Sign		
Ditch Check Permanent			Poy Telephone			Tree Trunk Protection		
Inlet & Pipe Protection			Advertising Sign			Evergreen Tree		
Sediment Basin			<b>LANDSCAPING ITEMS</b>			Shade Tree		
Erosion Control Blanket			Contour Mounding Line			<b>LIGHTING</b>		
Fabric Formed Concrete Retement Mat			Fence			Duct		
Turf Reinforcement Mat			Fence Post			Conduit		
Mulch Temporary			Shrubs			Electrical Aerial Cable		
Mulch Method 1			Mowline			Electrical Buried Cable		
Mulch Method 2 Stabilized			Perennial Plants			Controller		
Mulch Method 3 Hydraulic			Seeding Class 2			Underpass Luminaire		
			Seeding Class 2A			Power Pole		
			Seeding Class 4					
			Seeding Class 4 & 5 Combined					

Linda Department of Transportation  
 PROJECT No. \_\_\_\_\_ 2011  
 ENGINEER *Michael R. [Signature]*  
 APPROVED *[Signature]* 2011  
 SHEET NO. *1-1-97*

**STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS**  
 Sheet 3 of 8  
 STANDARD 000001-06

LIGHTING (contd.)	EX	PR	PAVEMENT MARKINGS	EX	PR
Pull Point			Bike Lane Symbol		
Handhole			Bike Lane Text		
Heavy Duty Handhole			Handicap Symbol		
Junction Box			RR Crossing		
Light Unit Comb.			Raised Marker Amber 1 Way		
Electrical Ground			Raised Marker Amber 2 Way		
Traffic Flow Arrow			Raised Marker Crystal 1 Way		
High Mast Pole (Hdft Size)			Two Way Turn Left		
Light Unit-1			Shoulder Diag. Pattern		
<b>PAVEMENT (MISC.)</b>					
Keyed Long Joint			Skip-Dash White		
Keyed Long Joint w/Tie Bars			Skip-Dash Yellow		
Sowed Long Joint w/Tie Bars			Stop Line		
Bituminous Shoulder			Solid Line		
Bituminous Taper			Double Centerline		
Stabilized Driveway			Dotted Lines		
Widening			CL 2Ln 2Wg/ RRPM 12.2 m (40') o.c.		

Illinois Department of Transportation  
 PASSED: *Maria Rodriguez* 301  
 ENGINEER OF TRAVEL REQUIREMENTS  
 APPROVED: *Maria Rodriguez* 301  
 PROJECT: *1-1-97*  
 TECHNICAL SERVICES AND EQUIPMENT

**STANDARD SYMBOLS,  
 ABBREVIATIONS  
 AND PATTERNS**  
 STANDARD 000001-06  
 (Sheet 4 of 8)

**PAVEMENT MARKINGS**  
**(contd.)**

	EX	PR
Urban Combination Left		
Urban Combination Right		
Urban Left Turn Arrow		
Urban Right Turn Arrow		
Urban Left Turn Only		
Urban Right Turn Only		
Urban Thru Only		
Urban U-Turn		
Urban Combined U-Turn		
Rural Combination Left		
Rural Combination Right		
Rural Left Turn Arrow		
Rural Right Turn Arrow		
Rural Left Turn Only		
Rural Right Turn Only		
Rural Thru Only		

**RAILROAD ITEMS**

	EX	PR
Abandoned Railroad		
Railroad		
Railroad Point		
Control Box		
Crossing Gate		
Fishing Signal		
Railroad Cant, Mast Arm		
Crossbuck		

**REMOVAL ITEMS**

	EX	PR
Removal Tic		
Bituminous Removal		
Hotch Pattern		
Tree Removal Single		

**RIGHT OF WAY ITEMS**

	EX	PR
Future ROW Corner Monument		
ROW Marker		
ROW Line		
Easement		
Temporary Easement		

Illinois Department of Transportation  
 PASSED \_\_\_\_\_ 2011  
 AUTHORITY OF ILLINOIS COMMISSIONERS  
 APPROVED \_\_\_\_\_ 2011  
 CHIEF OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

**STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS**  
 STANDARD 000001-06  
 (Sheet 5 of 8)

RIGHT OF WAY ITEMS <i>(cont'd)</i>	ROADWAY PROFILES	SIGNING ITEMS <i>(cont'd)</i>
EX	EX	EX
PR	PR	PR
Access Control Line AC	F.L. Indicator ▲	Reverse Left W1-4L (Half Size)
Access Control Line & ROW with Fence AR	Earthworks Balance Point ○	Reverse Right W1-4R (Half Size)
Excess ROW Line XS	Begin Point ◐	Two Way Traffic Sign W6-3 (Half Size)
<b>ROADWAY PLAN ITEMS</b>	Vert. Curve Data VPI = ELEV = E =	De-lour Ahead W20-2(0) (Half Size)
Cable Barrier	Ditch Profile Left Side .....	Left Lane Closed Ahead W20-5L(0) (Half Size)
Concrete Barrier	Roadway Profile Right Side .....	Right Lane Closed Ahead W20-5R(0) (Half Size)
Edge of Pavement	Storm Sewer Profile Left Side .....	Road Closed Ahead W20-3(0) (Half Size)
Bit Shoulders, Medians and C&G Line	Storm Sewer Profile Right Side .....	Road Construction Ahead W20-1(0) (Half Size)
Aggregate Shoulder	<b>SIGNING ITEMS</b>	Single Lane Ahead (Half Size)
Sidewalks, Driveways	Cone, Drum or Barricade ○	Transition Left W4-2L (Half Size)
Guardrail	Barricade Type II ▨	Transition Right W4-2R (Half Size)
Guardrail Post	Barricade Type III TT	
Traffic Sign	Barricade with Edge Line ○	
Corrugated Median	Flashing Light Sign ○	
Impact Attenuator	Panel I ▨	
North Arrow with District Office (Half Size)	Panel II ▨	
Match Line STA. 45+00	Direction of Traffic ➡	
Slope Limit Line -----	Sign Flag (Half Size) ◇	
Typical Cross-Section Line -----		

Illinois Department of Transportation  
 PASSED: January 11, 2011  
 ENGINEER OF PROJECT AND PROVISIONS: [Signature]  
 APPROVED: [Signature]  
 ISSUED: 1-11-97

**STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS**  
 (Sheet 6 of 8)  
 STANDARD 000001-06

SIGNING ITEMS (Contd.)	EX	PR	STRUCTURES ITEMS	EX	PR
One Way Arrow L-g, W1-6-(0) (Half Size)			Box Culvert Barrel		
Two Way Arrow Large W1-7-(0) (Half Size)			Box Culvert Headwall		
Detour M4-10L-(0) (Half Size)			Bridge Pier		
Detour M4-10R-(0) (Half Size)			Bridge		
One Way Left R6-1L (Half Size)			Retaining Wall		
One Way Right R6-1R (Half Size)			Temporary Sheet Piling		
Left Turn Lane R3-1100L (Half Size)					
Keep Left R4-7AL (Half Size)					
Keep Left R4-7BL (Half Size)					
Keep Right R4-7AR (Half Size)					
Keep Right R4-7BR (Half Size)					
Stop Here On Red R10-6-AL (Half Size)					
Stop Here On Red R10-6-AR (Half Size)					
No Left Turn R3-2 (Half Size)					
No Right Turn R3-1 (Half Size)					
Road Closed R11-2 (Half Size)					
Road Closed Thru Traffic R11-2 (Half Size)					

TRAFFIC SHEET ITEMS	EX	PR
Cable Number		
Left Turn Green		
Left Turn Yellow		
Signal Backplate		
Signal Section 8" (200 mm)		
Signal Section 12" (300 mm)		
Walk/Don't Walk Letters		
Walk/Don't Walk Symbols		

TRAFFIC SIGNAL ITEMS	EX	PR
Cov. Steel Conduit		
Underground Cable		
Detector Loop Line		
Detector Loop Large		
Detector Loop Small		
Detector Loop Quadruple		

**STANDARD SYMBOLS,  
ABBREVIATIONS  
AND PATTERNS**

Sheet 7 of 8

STANDARD 000001-06

Illinois Department of Transportation  
 January 1, 2011  
 PASSED BY *Michael R. Pridemore*  
 ENGINEER OF POLICE AND INSPECTIONS  
 APPROVED *Michael R. Pridemore*  
 January 1, 2011  
 REGISTERED PROFESSIONAL ENGINEER

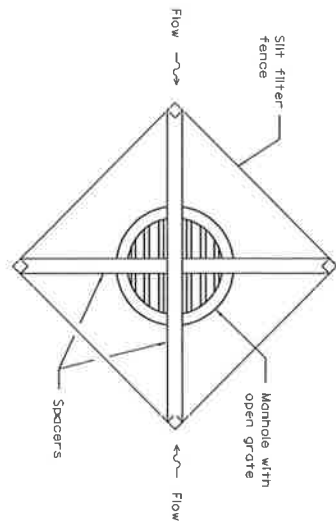
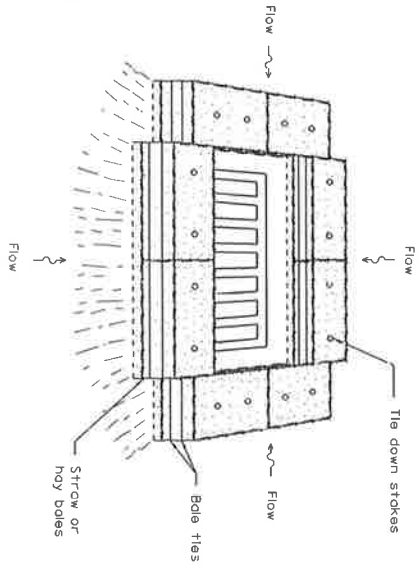
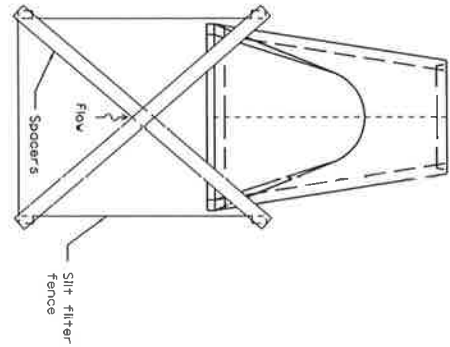
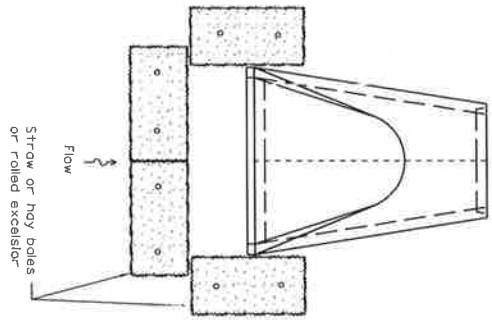
ISSUED 11-1-99

TRAFFIC SIGNAL ITEMS (cont'd.)		EX	PR	UNDERGROUND UTILITY ITEMS		EX	PR	ABANDONED	UTILITY ITEMS (cont'd.)		EX	PR		
Detector Raceway				Cable TV		CTV	CTV	CTV	Traffic Signal					
Aluminum Mast Arm				Electric Cable		E	E	E	Traffic Signal Control Box					
Steel Mast Arm				Fiber Optic		FO	FO	FO	Warner Meter					
Ven. Detector Magnetic				Gas Pipe		G	G	G	Warner Meter Valve Box					
Conduit Splice				Oil Pipe		O	O	O	Profile Line					
Controller				Sanitary Sewer		SS	SS	SS	Aerial Power Line					
Guirbox Junction				Telephone Cable		T	T	T	<b>VEGETATION ITEMS</b>					
Wood Pole				Water Pipe		W	W	W	Deciduous Tree					
Temp. Signal Head				<b>UTILITIES ITEMS</b>			Controller				Bush or Shrub			
Handhole				Double Handhole					Evergreen Tree					
Double Handhole				Fire Hydrant					S-Jump					
Heavy Duty Handhole				GuyWire or Deadman Anchor					Orchard/Nursery Line					
Junction Box				Handhole					Vegetation Line					
Ped. Pushbutton Detector				Heavy Duty Handhole					Woods & Bush Line					
Ped. Signal Head				Junction Box					<b>WATER FEATURE ITEMS</b>					
Power Pole Service				Light Pole					S--eom or Dr--dodge Ditch					
Priority Veh. Detector				Mornole					Warfs Edge					
Signal Head				Pipeline Warning Sign					Water Surface Indicator					
Signal Head w/Backplate				Power Pole					Water Point					
Signal Post				Power Pole with Light					Disappearing Ditch					
Closed Circuit TV				Sanitary Sewer Cleanout					Marsh					
Video Detector System				Splice Box Above Ground					Marsh/Swamp Boundary					
				Telephone Splice Box Above Ground										
				Telephone Pole										

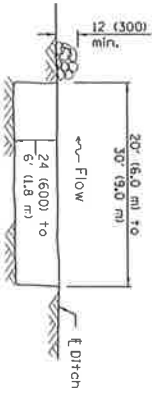
Illinois Department of Transportation  
 PASSED January 11, 2011  
 ENGINEER OF TRAFFIC AND PROCEEDINGS  
 APPROVED [Signature] January 11, 2011  
 ISSUED 1-11-97

**STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS**  
 (Sheet 8 of 8)  
 STANDARD 000001-06



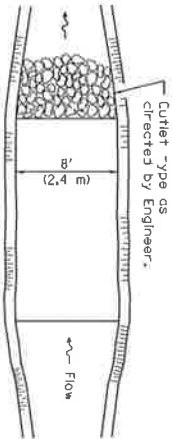


**INLET AND PIPE PROTECTION**



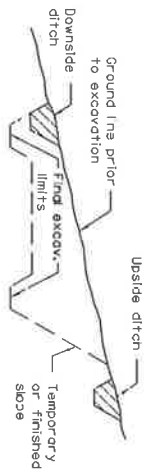
The performance of the basin will improve if put into a series.

**ELEVATION**

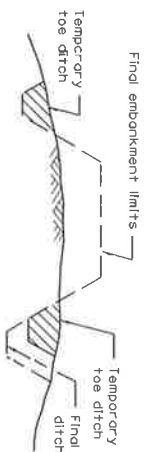


The long dimension should be parallel with the direction of the flow. Accumulated silt shall be removed anytime the basins become 75% filled.

**PLAN**



**TYPICAL CUT CROSS-SECTION**



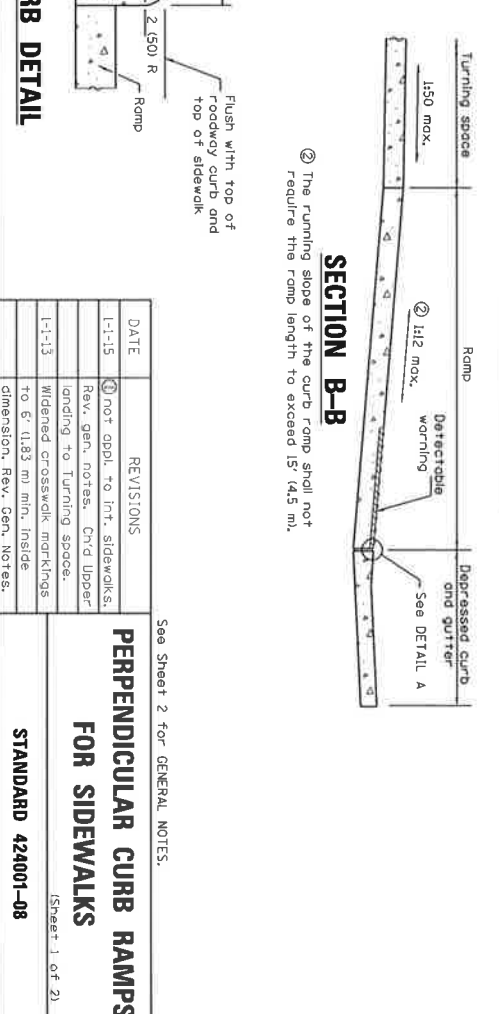
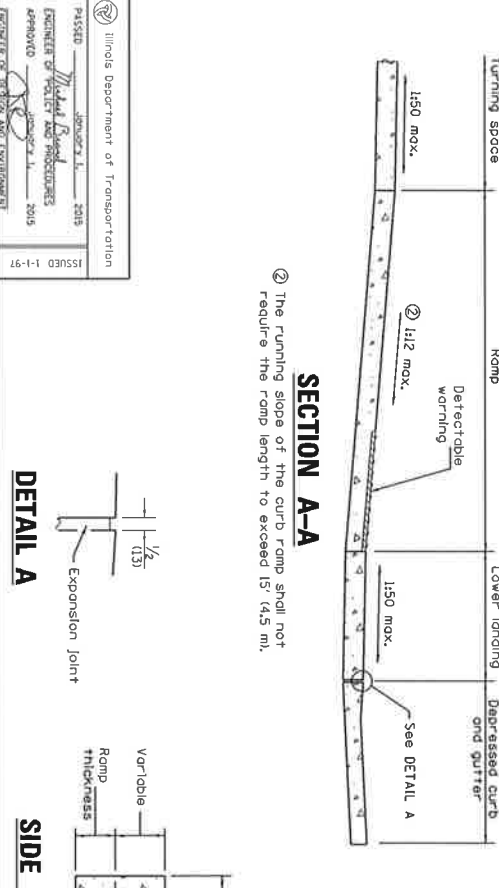
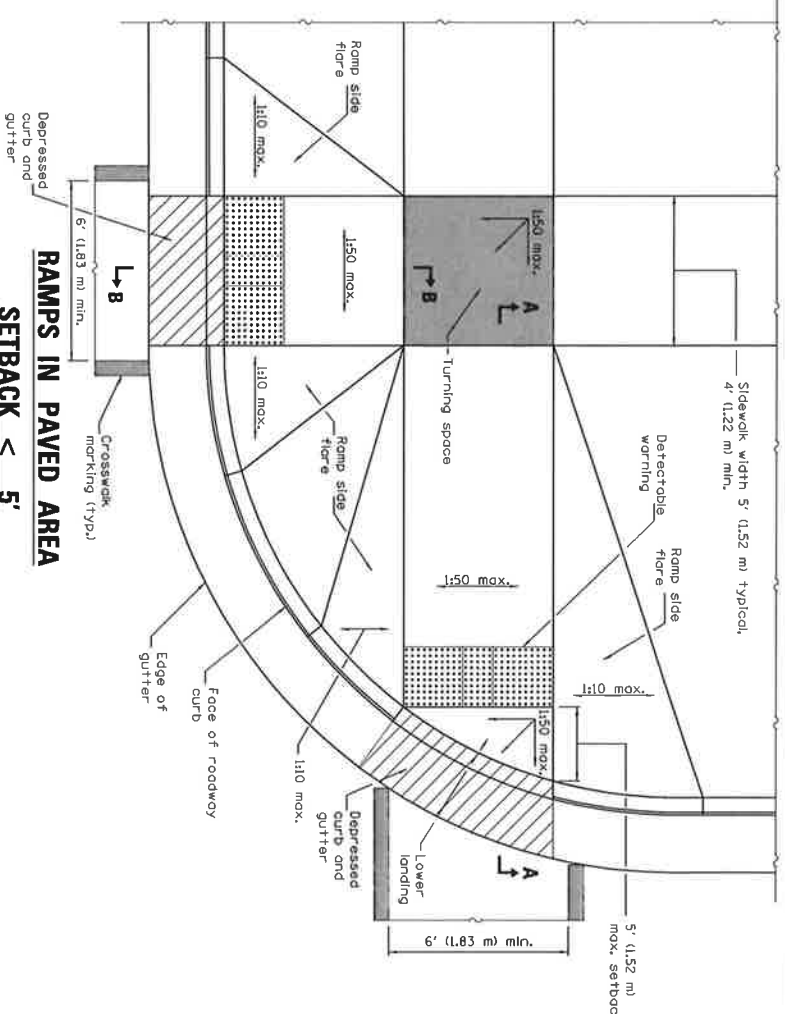
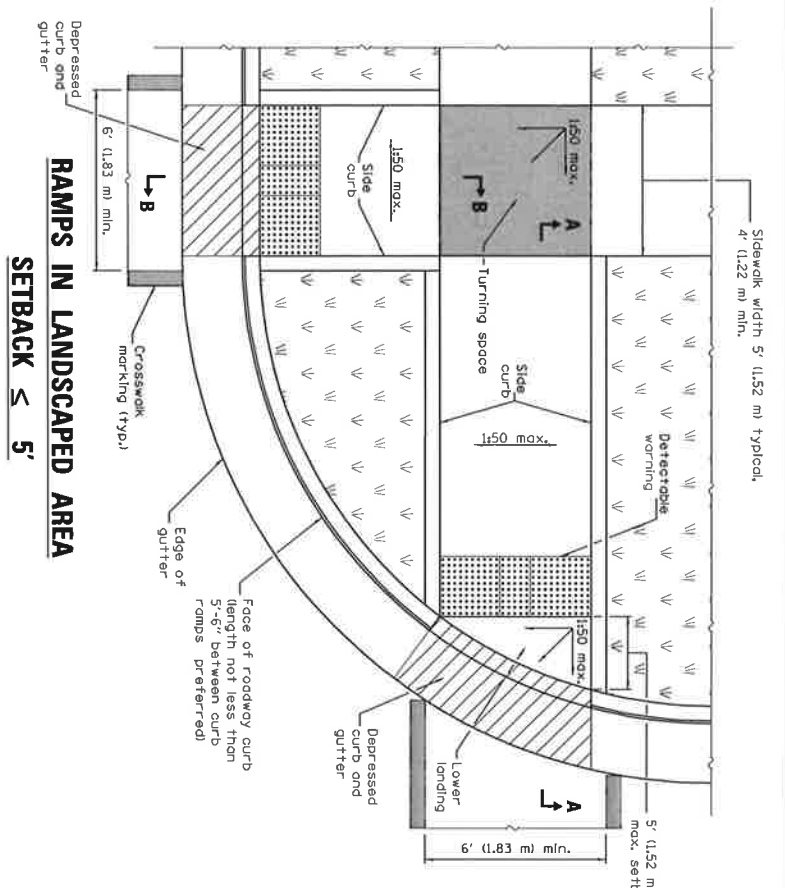
**TYPICAL FILL CROSS-SECTION**

**TEMPORARY DITCHES FOR CUT & FILL SECTIONS**

**SEDIMENT BASIN**

Illinois Department of Transportation  
 PASSED January 1, 2013  
 ENGINEER Michael S. Bond  
 APPROVED [Signature] January 1, 2013  
 SUPERVISOR OF DESIGN AND ENVIRONMENT  
 ISSUED 1-1-97

**TEMPORARY EROSION CONTROL SYSTEMS**  
 STANDARD 280001-37  
 (Sheet 2 of 2)



Illinois Department of Transportation  
 January 1, 2015  
 PROJECT: *Madison*  
 ENGINEER OF RECORD: *Michael R. ...*  
 APPROVED: *[Signature]*  
 DATE: *...*  
 ISSUED: 1-1-97

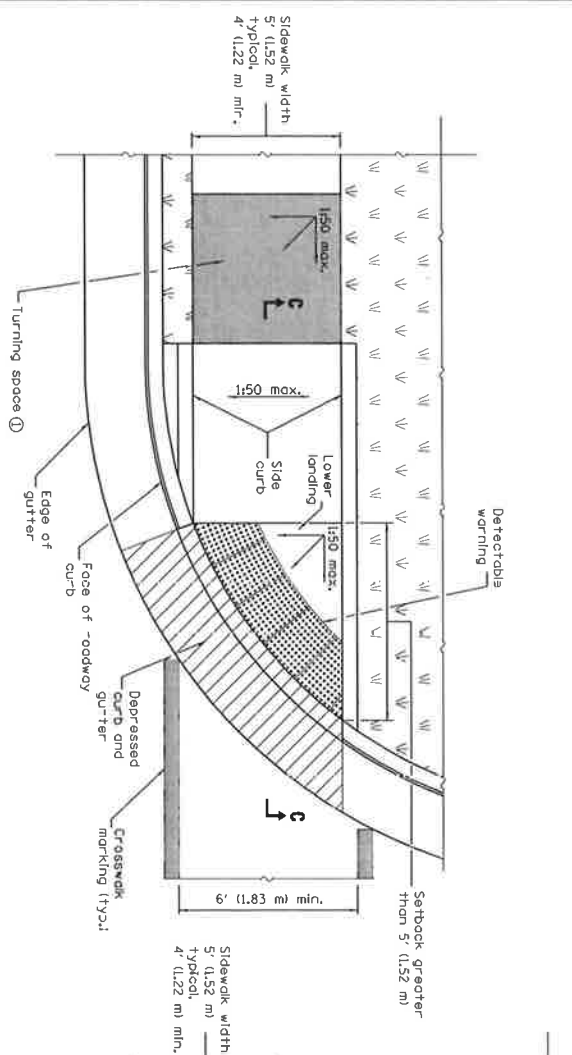
Variable Ramp thickness  
 1/2" Expansion Joint  
 1:12 R  
 1:50 R

Flush with top of roadway curb and top of sidewalk  
 1:12 R  
 1:50 R

DATE	REVISIONS
1-1-15	① not appl. to int. sidewalks. Rev. gen. notes. CVD Upper ending to Turning space.
1-1-13	Widened crosswalk markings to 6' (1.83 m) min. inside dimension. Rev. gen. notes.

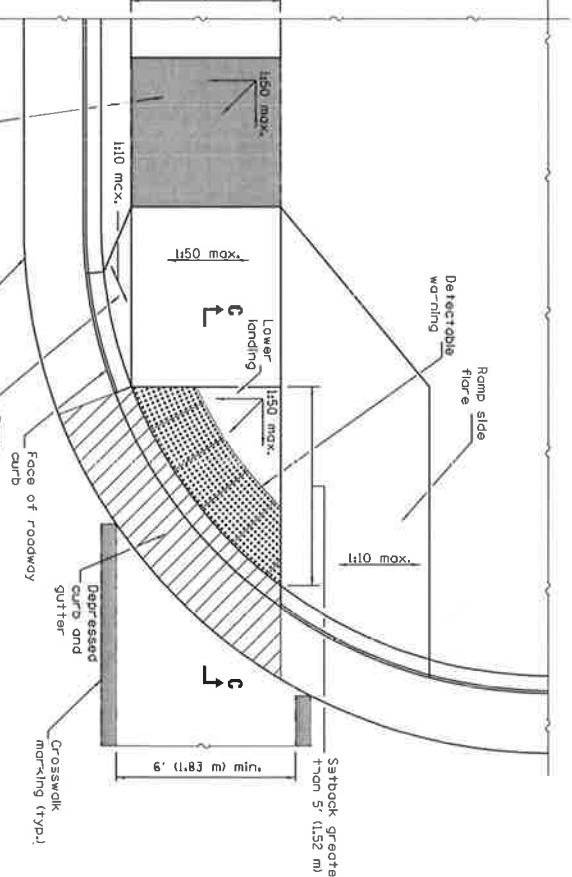
See Sheet 2 for GENERAL NOTES.  
**PERPENDICULAR CURB RAMPS FOR SIDEWALKS**  
**STANDARD 424001-08**  
 (Sheet 1 of 2)

Illinois Department of Transportation  
 PASSED APPROVED 11/11/2015  
 ENGINEER OF PUBLIC WORKS  
 APPROVED 11/11/2015  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 ISSUED 1-1-97



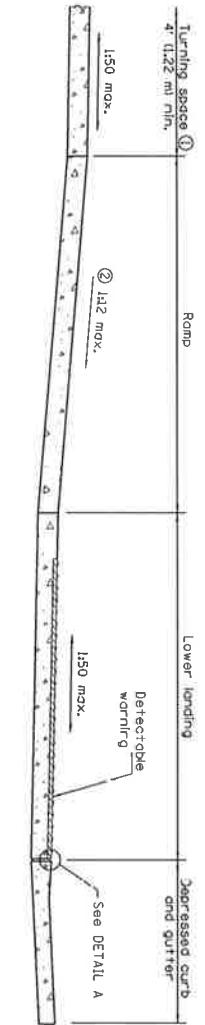
**RAMP IN LANDSCAPED AREA**

**SETBACK > 5'**



**RAMP IN PAVED AREA**

**SETBACK > 5'**



**SECTION C-C**

- ① Turning space not required for ramp slopes flatter than 1:20.
- ② The running slope of the curb ramp shall not require the ramp length to exceed 15 (4.5 m).

**GENERAL NOTES**

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

Where the turning space is constructed on a side opposite a ramp, the minimum length of the turning space in the direction of the ramp-run shall be 5' (1.52 m).

Where 1:50 maximum slope is shown, 1:54 is preferred.

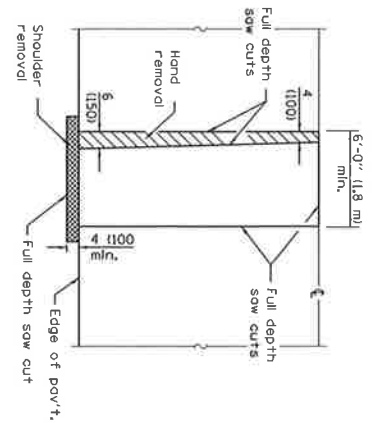
See Standard 605001 for details of depressed curb adjacent to curb ramp.

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

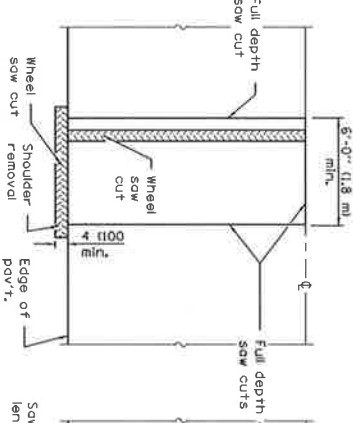
**PERPENDICULAR CURB RAMPS FOR SIDEWALKS**

STANDARD 424001-08

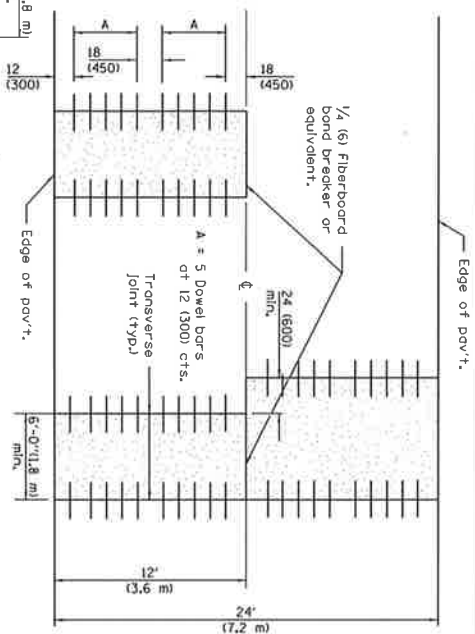
(Sheet 2 of 2)



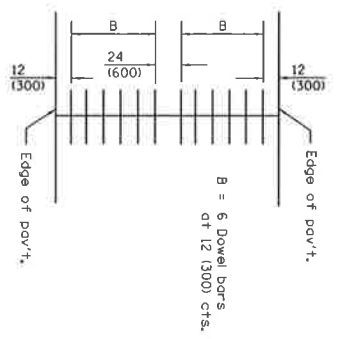
**PAVEMENT SAWING DETAIL**  
(HMA SHOULDER)



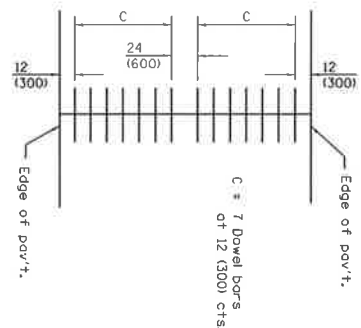
**ALTERNATE SAWING DETAIL**  
(HMA SHOULDER)



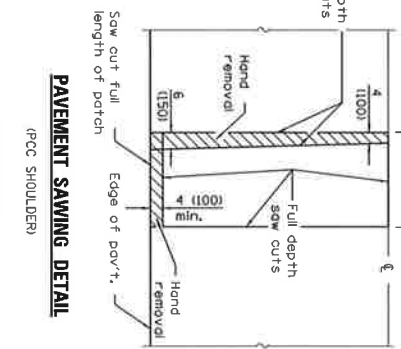
**12' (3.6 m) WIDE LANES**



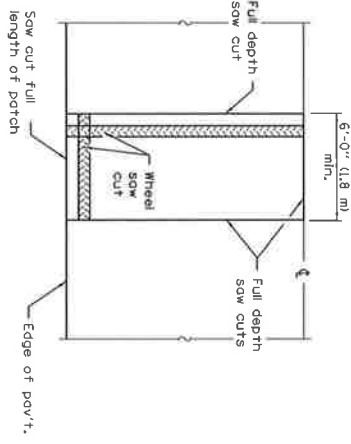
**14' (4.2 m) WIDE RAMP**



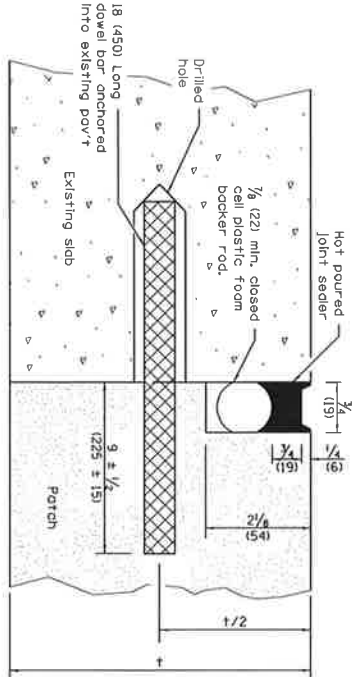
**16' (4.8 m) WIDE RAMP**



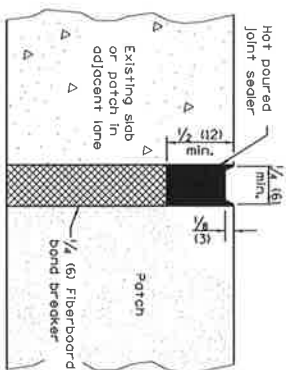
**PAVEMENT SAWING DETAIL**  
(PCC SHOULDER)



**ALTERNATE SAWING DETAIL**  
(PCC SHOULDER)



**TRANSVERSE JOINT**



**CENTERLINE JOINT**

DOWEL BAR TABLE			
PAVEMENT THICKNESS	DOWEL BAR DIAMETER	HOLE DIAMETER	PAVEMENT THICKNESS
8 (200) or greater	1 1/2 (38)	1 3/4 (41)	8 (200) or greater
7 (180) thru 7.99 (199)	1 1/4 (32)	1 3/8 (35)	7 (180) thru 7.99 (199)
Less than 7 (180)	1 (25)	1 1/8 (29)	Less than 7 (180)

**GENERAL NOTES**

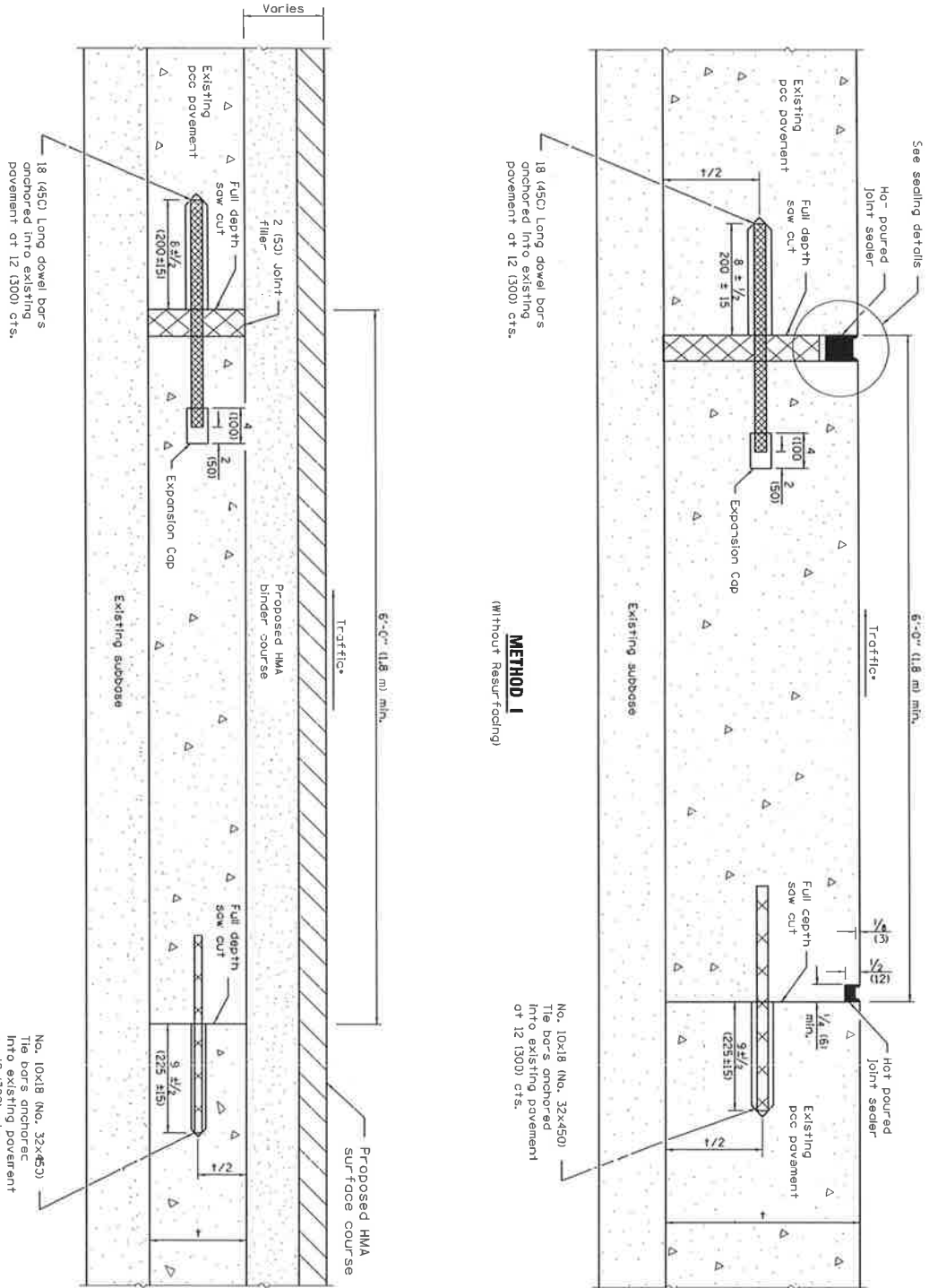
The transverse joints for Class B patches shall align with joints or cracks in the adjacent lane whenever possible.  
See Standard 420701 for details of pavement fabric.  
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation  
 PASSED: January 1, 2008  
 ENGINEER OF PUBLIC AND PROCEEDINGS: [Signature]  
 APPROVED: [Signature]  
 ENGINEER OF DESIGN AND SURVEILLANCE: [Signature]  
 ISSUED: 1-1-97

DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised General Notes.

**CLASS B PATCHES**  
 STANDARD 442101-07  
 (Sheet 1 of 2)

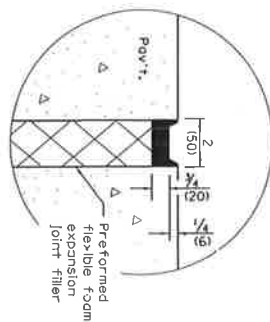
Illinois Department of Transportation  
 PASSED: JACQUELYN L. JACQUELYN L. 2008  
 ENGINEER OF POLICE AND PROCEDURES  
 APPROVED: [Signature] 2008  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 ISSUED: 1-1-97



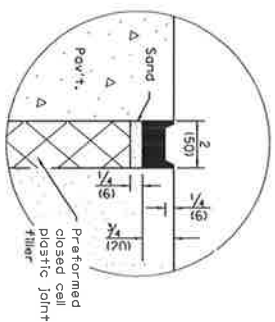
**METHOD II**  
 (With Resurfacing)

**METHOD I**  
 (Without Resurfacing)

**TRANSVERSE EXPANSION JOINTS**



**SEALING DETAIL**



**SEALING DETAIL**

**NOTE**

- When re-establishing a transverse expansion joint on a two-lane, two-way road, reverse the orientation of the dowel bars with respect to traffic for one of the patches such that the joint will be continuous across both lanes.

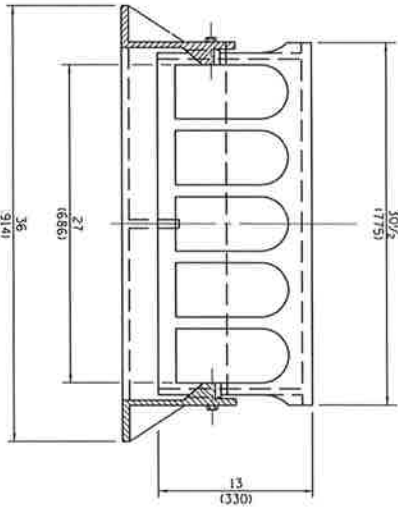
**CLASS B PATCHES**

STANDARD 442101-07

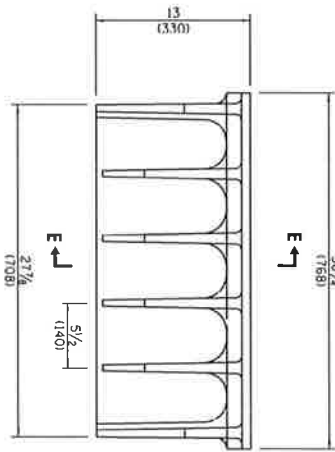
(Sheet 2 of 2)



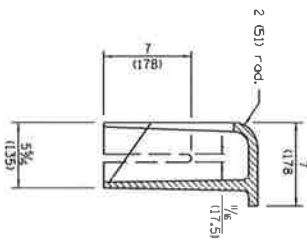
Illinois Department of Transportation  
 PASSED \_\_\_\_\_ SPECIAL L. 2015  
 ENGINEER OF PUBLIC WORKS AND PROCEDURES  
 APPROVED \_\_\_\_\_ 2015  
 DIVISION OF DESIGN AND ESTIMATION  
 ISSUED 1-1-97



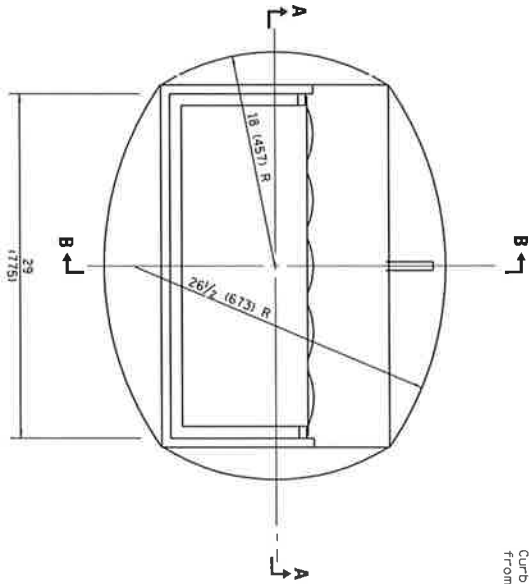
**SECTION A-A**



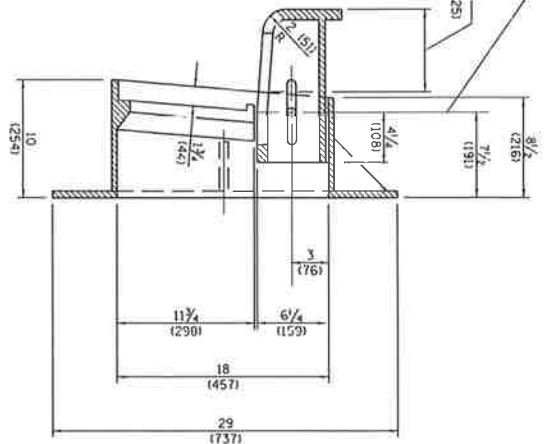
**ALTERNATE CURB BOX**



**SECTION E-E**

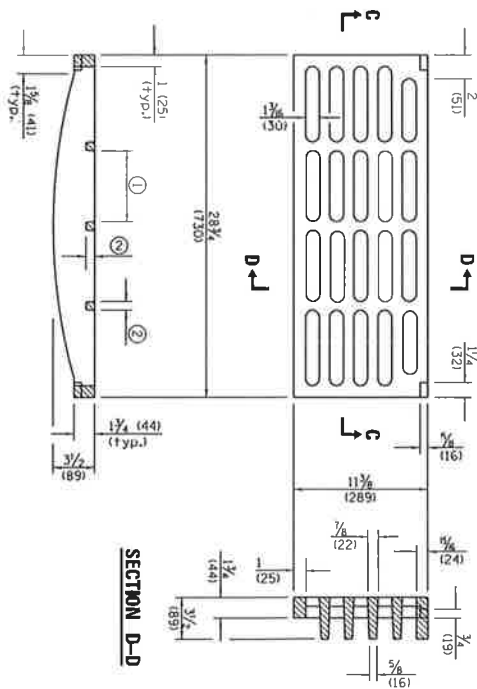


**CAST FRAME**



**SECTION B-B**

1/2 Dia. hole and 3/8x5/2 (16x140) slotted hole for galvanized 1/2 (M12) bolt, nut, and washer.  
 Curb box adjustable from 4 1/2 (115) to 9 (225)



**SECTION C-C**

**CAST GRATE**

- ① = 6/4 (159) max. (typ.)
- ② = 3/4 (19) min. (typ.)

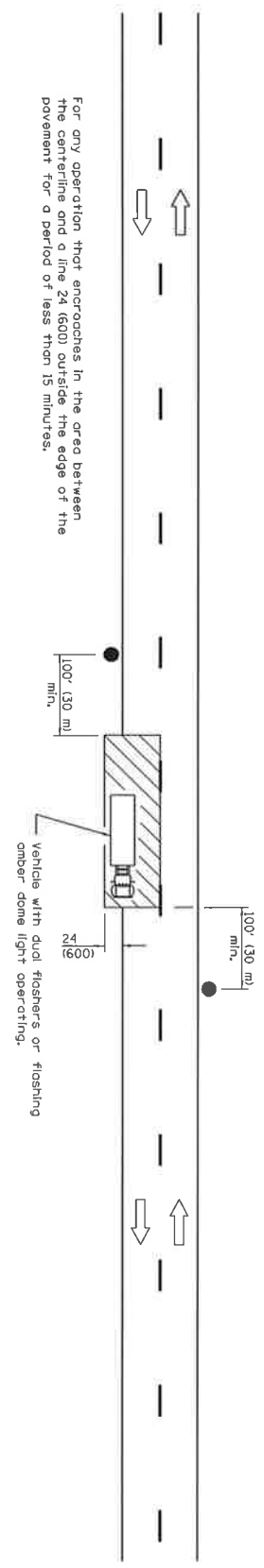
DATE	REVISIONS
1-1-15	Revised dimensions of frame and alternate curb box.
4-1-03	Switched units to English metric.

STANDARD 604051-04

**FRAME AND GRATE  
 TYPE 11**

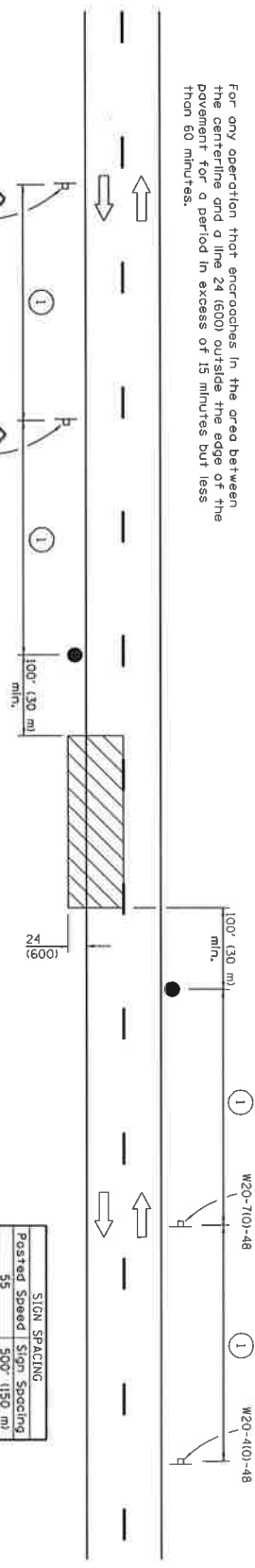
All dimensions are in inches (millimeters) unless otherwise shown.

Illinois Department of Transportation  
 APPROVED: [Signature] PROJECT 1-2011  
 ENGINEER OF SURVEYING: [Signature]  
 APPROVED: [Signature] PROJECT 1-2011  
 ISSUED 1-1-97  
 ENGINEER OF DESIGN AND ENVIRONMENT



For any operation that encroaches in the area between the centerline and a line 24 (600) outside the edge of the pavement for a period of less than 15 minutes.

For any operation that is more than 24 (600) outside the edge of the pavement for a period of less than 60 minutes.



For any operation that encroaches in the area between the centerline and a line 24 (600) outside the edge of the pavement for a period in excess of 15 minutes but less than 60 minutes.

**TYPICAL APPLICATIONS**

- Working patches
- Field survey
- String line
- Utility operations
- Cleaning up debris on pavement

**SYMBOLS**

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

POSTED SPEED	SIGN SPACING
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

1 = Refer to SIGN SPACING table for distances.

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

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-03	Switched units to English (metric).

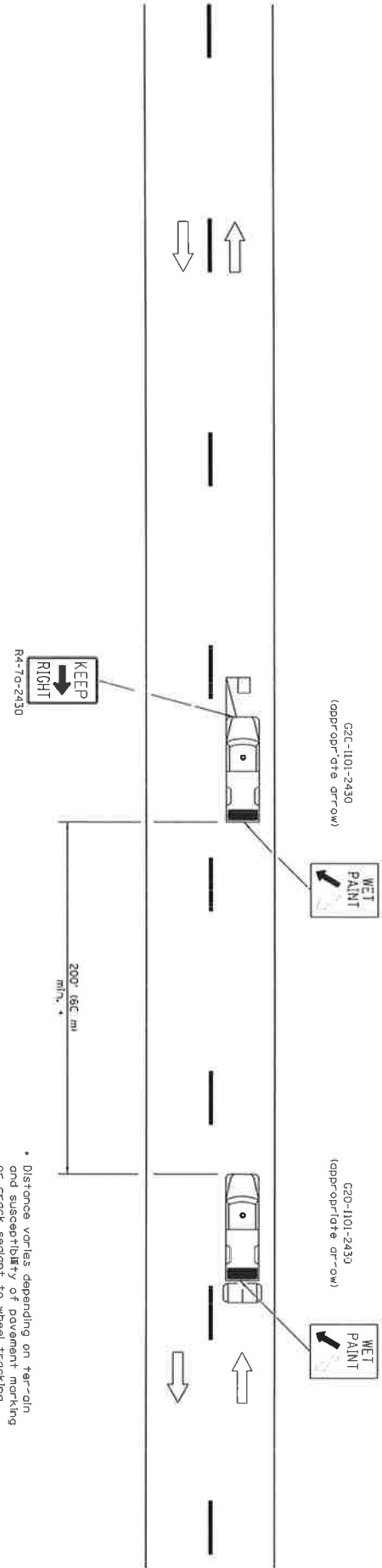
**LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS**

STANDARD 701301-04

Illinois Department of Transportation APPROVED _____ 2009 ENGINEER OF DESIGN SERVICES APPROVED _____ 2009 ENGINEER OF DESIGN SERVICES	ISSUED 1-1-97
---	---------------

**TYPICAL APPLICATIONS**

- Landscape work
- Utility work
- Pavement marking
- Weed spraying
- Rodometer measurements
- Debris cleanup
- Crack sealing



**SYMBOLS**

- Arrow board (Hazard Mode only)
- Truck with headlights, emergency flashers and flashing amber light, (visible from all directions)
- 18 x 8 (450x450) min. orange flag (use when guide wheel is used)
- Truck mounted attenuator

**GENERAL NOTES**

This Standard is used where any vehicle, equipment, workers or their activities will require a continuous moving operation where the average speed is greater than 3 mph (5 km/h).

For shoulder operations not encroaching on the pavement, use DETAIL A, Standard T01426, unless otherwise shown.

DATE	REVISIONS
1-1-08	Switched units to English metric. Omitted Pass With Care sign.
1-1-00	Elim. speed restrictions in Standard title.

**LANE CLOSURE 2L, 2W  
MOVING OPERATIONS--  
DAY ONLY**

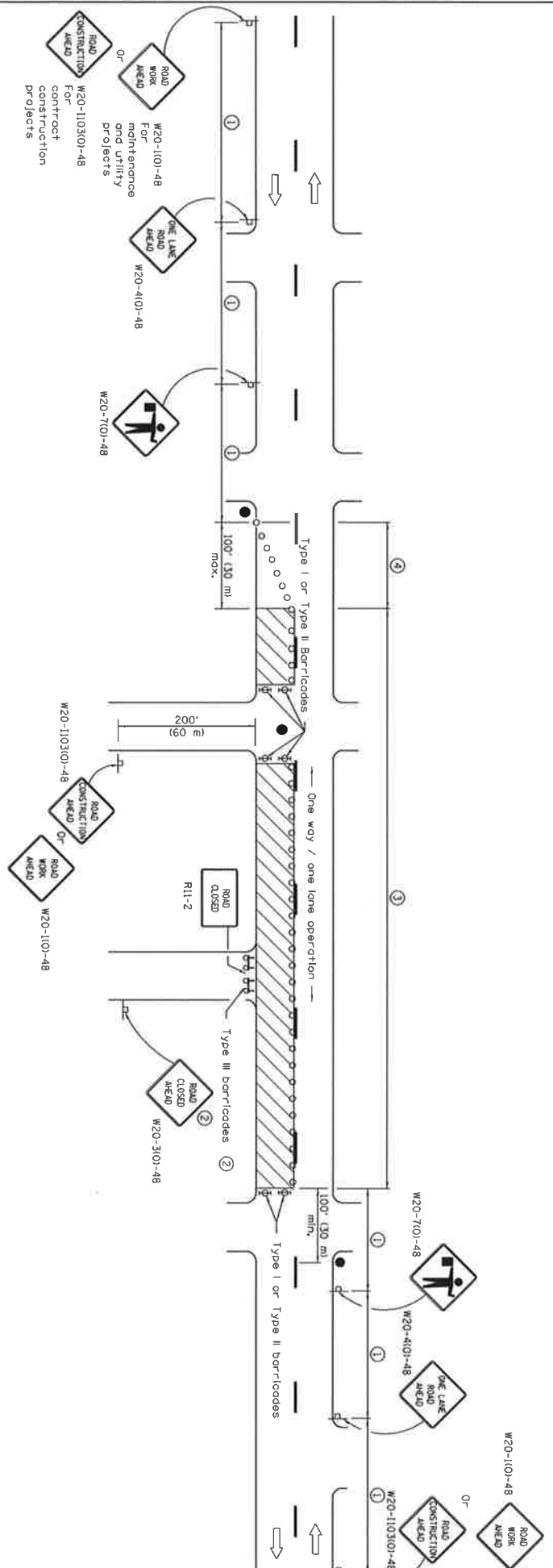
**STANDARD 701311-43**

Illinois Department of Transportation  
 APPROVED January 11, 2011  
 ENGINEER OF TRAFFIC AND SIGNALS  
 APPROVED [Signature] PROJECT 11-2011  
 DIRECTOR OF TRAFFIC AND SIGNALS  
 ISSUED 1-1-97

Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

**SYMBOLS**

- Work area
  - Cones, drum or barricade not required for moving operations
  - Sign on portable or permanent support
  - Flagger with traffic control sign
  - Barricade or drum with flashing light
  - Type III barricade with flashing lights
- Refer to SIGN SPACING TABLE for distances.
  - For approved sideroad closures.
  - Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
  - Cones, drums or barricades at 20' (6 m) centers.



**GENERAL NOTES**

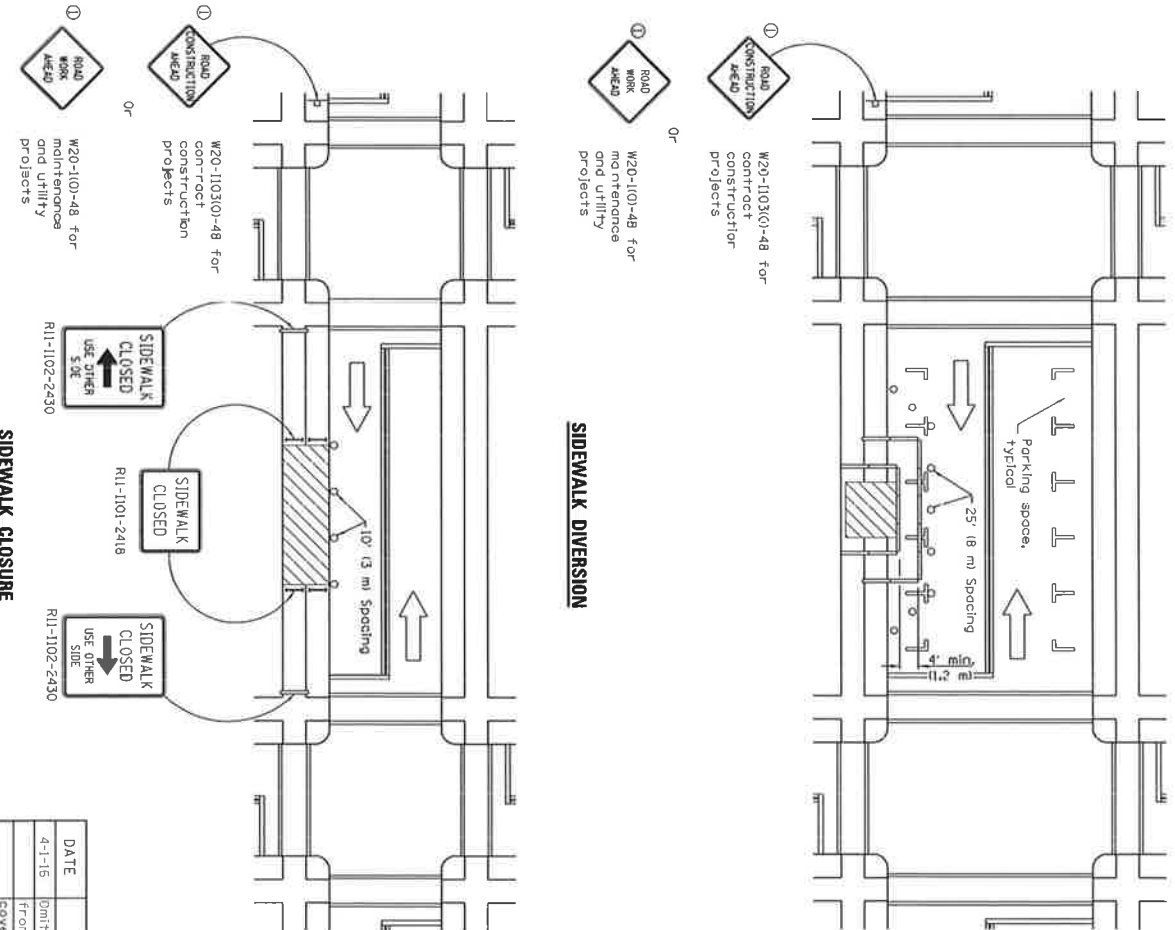
This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area. All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).
	Corrected sign No.'s.

**URBAN LANE CLOSURE,  
 2L, 2W, UNDIVIDED**  
 STANDARD 701501-06

Missouri Department of Transportation  
 Project 1  
 2018  
 APPROVED: [Signature]  
 ENGINEER OF SAFETY ENGINEERING  
 APPROVED: [Signature]  
 ENGINEER OF SAFETY AND SURVEILLANCE  
 ISSUED 1-1-97

- SYMBOLS**
- Work area
  - Sign on portable or permanent support
  - Barricade or drum
  - Cone, drum or barricade
  - Type III barricade
  - Detectable pedestrian channelizing barricade



**SIDEWALK DIVERSION**

**SIDEWALK CLOSURE**

① Omit whenever duplicated by road work traffic control.

**GENERAL NOTES**

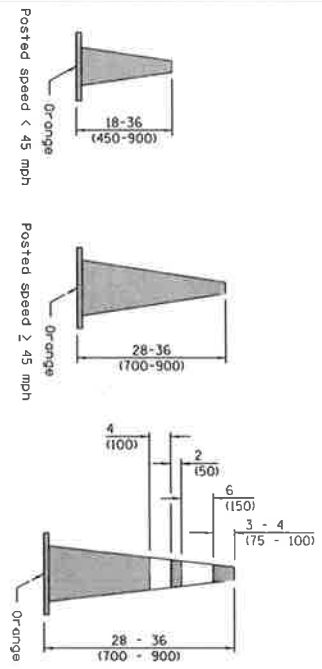
This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.  
 This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.  
 Temporary facilities shall be detectable and accessible.  
 The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.  
 The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corner's across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.  
 Type III barricades and R11-2-4830 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701901.  
 All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
4-1-16	Omitted orange safety fence from Standard as this is covered in the STD. spec.
1-1-12	Added SIDEWALK DIVERSION, Modified appearance of Plan Views, Renamed Std.

**SIDEWALK, CORNER OR CROSSWALK CLOSURE**  
 STANDARD 701801-06  
 (Sheet 1 of 2)



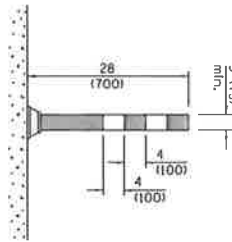
Illinois Department of Transportation  
 APPROVED: APR 1, 2014  
 ENGINEER OF DESIGN: [Signature]  
 APPROVED: APR 1, 2014  
 CHIEF OF DESIGN AND ENVIRONMENT  
 ISSUED: 1-1-97



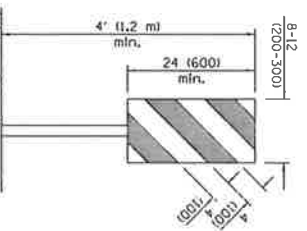
**CONE FOR DAYTIME**

**REFLECTORIZED CONE FOR NIGHTTIME**

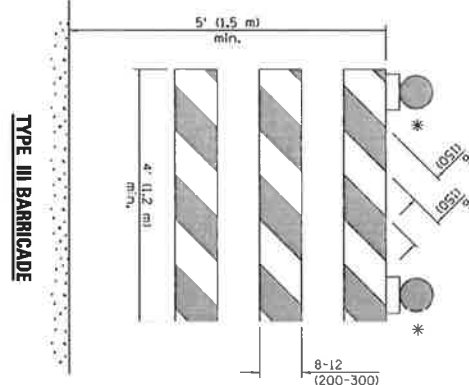
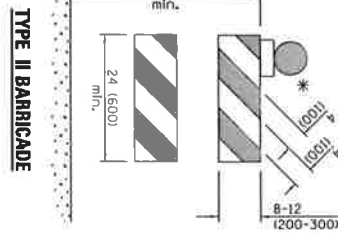
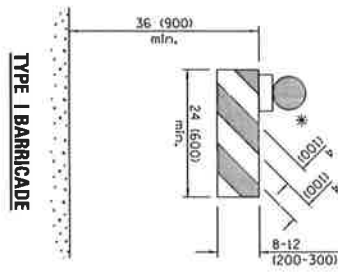
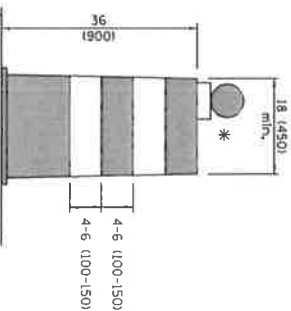
**FLEXIBLE DELINEATOR**



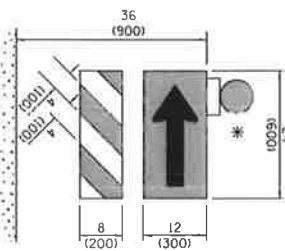
**VERTICAL PANEL POST MOUNTED**



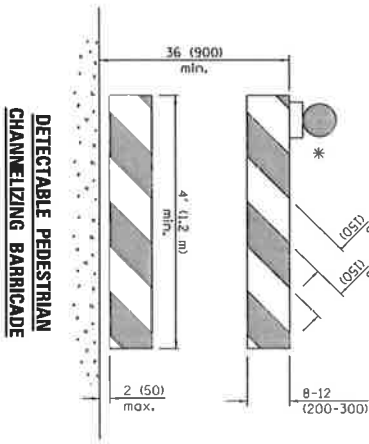
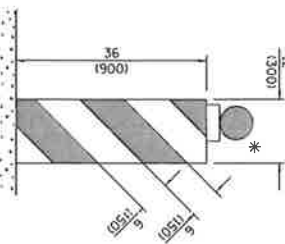
**DRUM**



**DIRECTION INDICATOR BARRICADE**



**VERTICAL BARRICADE**



\* Warning lights (if required)

**GENERAL NOTES**

All heights shown shall be measured above the pavement surface.  
 All dimensions are in inches (millimeters) unless otherwise shown.

**TRAFFIC CONTROL DEVICES**

DATE	REVISIONS
1-1-16	Add d't's to barricades. Rev note for post mnt. signs.
1-1-15	Rev. cone d't's. Add W12-1103. Revised two sign numbers on sheet 2. Added note reg. PHOTO ENFORCED plaque.

STANDARD 701901-05

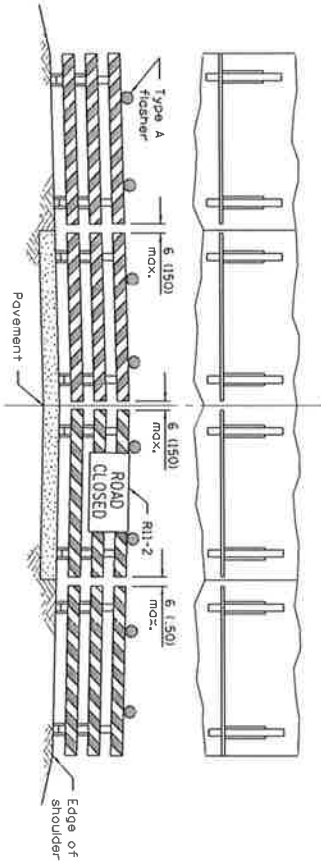
(Sheet 1 of 3)



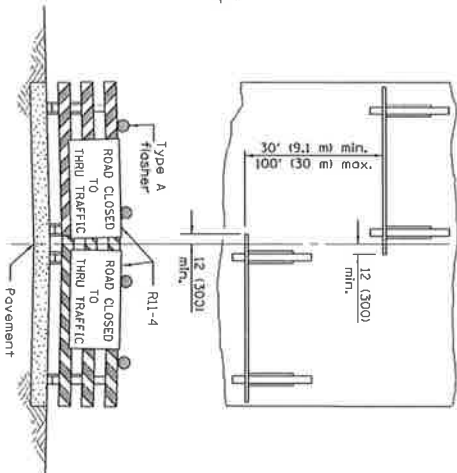
Illinois Department of Transportation  
 APPROVED: APR 1, 2014  
 ENGINEER: [Signature]  
 APPROVED: APR 1, 2014  
 PROJECT: [Signature]  
 ILLINOIS DEPARTMENT OF TRANSPORTATION  
 1550ED 1-1-97

**TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD**

ReflectORIZED striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.



ReflectORIZED striping shall appear on both sides of the barricade if a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

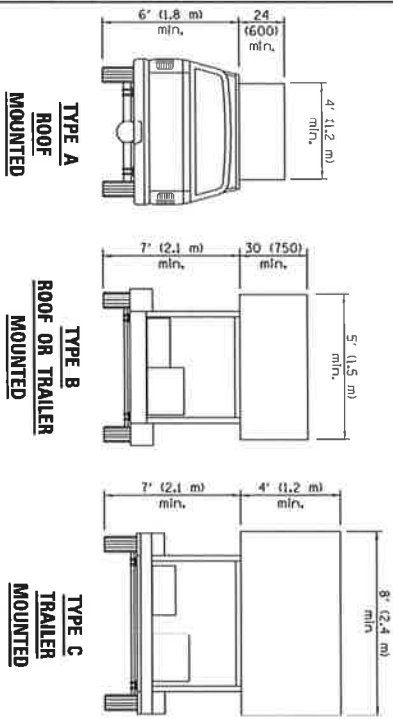
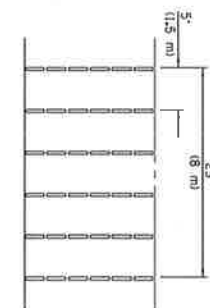


**SECTION A-A**

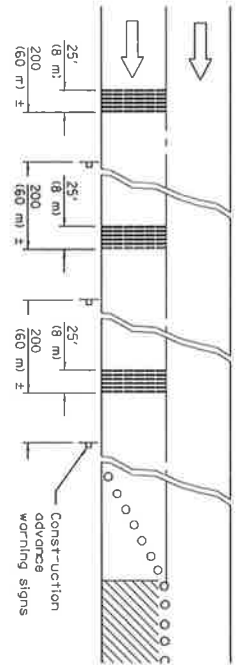
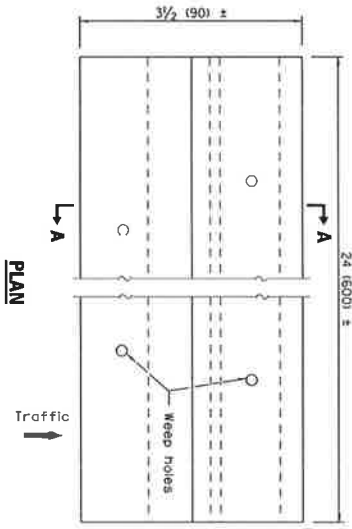


**TEMPORARY RUMBLE STRIPS**

**TYPICAL INSTALLATION**



**PLAN**



**TRAFFIC CONTROL DEVICES**

STANDARD 701901-25

(Sheet 3 of 3)



office: 1-847-870-0544  
fax: 1-847-870-0661  
www.soilandmaterialconsultants.com  
us@soilandmaterialconsultants.com

September 22, 2015  
File No. 22292

Mr. Kevin Mantels  
Village of Villa Park  
20 S. Ardmore Avenue  
Villa Park, IL 60181

Re: Pavement Investigation  
North Princeton Avenue  
Villa Park, Illinois

Dear Mr. Mantels:

The following is our report of findings for the pavement investigation completed on North Princeton Avenue in the Village of Villa Park, Illinois.

The investigation was requested to determine existing pavement sections and subgrade soil support conditions for use in determination of a viable reconstruction solution.

#### SCOPE OF THE INVESTIGATION

A total of 8 test locations were established as shown on the enclosed location sketches. Surface elevations were determined using plan and profile sheets with the elevations rounded to the nearest 0.5 ft. The pavement section was cored to determine material types and thicknesses. The supporting soils were visually and texturally classified in the field to depths of 15.0 feet. Soil samples were obtained using a split barrel sampler advanced utilizing an automatic SPT hammer.

Pavement materials and soil samples obtained during the field investigation were returned to our laboratory for review and testing. Soil testing included determination of moisture content. Cohesive soils obtained by split barrel sampling were further tested to determine dry unit weight and unconfined compressive strength. The results of all field and laboratory testing are included in summary with this report.

#### RESULTS OF THE INVESTIGATION

Enclosed are the core and boring logs indicating pavement and soil conditions encountered at each location. The summary table below indicates pavement materials and thicknesses encountered at each location. Please refer to the individual core logs for more detailed information.

File No. 22292  
 Re: North Princeton Avenue  
 Villa Park, Illinois

Page 2

<u>Core</u>	<u>Concrete (in.)</u>	<u>Granular Base (in.)</u>	<u>Total Pavement (in.)</u>
1	6.50		6.50
2	6.50		6.50
3	6.25	2.75	9.00
4	7.00	10.00	17.00
5	5.00	6.00	11.00
6	6.25		6.25
7	6.50		6.50
8	6.25		6.25

Buried topsoil was discovered directly beneath the concrete pavement at borings B-1, B-2, B-6, B-7, and B-8. The topsoil consisted of black silt/clay mixtures with traces of roots and was found extending to depths of 1.0 to 1.5 feet.

Underlying natural soil conditions include the presence of cohesive soils. These are classified as tough to hard clay/silt mixtures with lesser portions of sand and gravel. Non-cohesive soils were also encountered as indicated consisting of silt/sand mixtures. The non-cohesive soil is often in a damp to saturated condition. Cobbles and boulders may be present within the site soils at any elevation, although none were encountered while drilling.

#### SUBGRADE PREPARATION

We understand North Princeton Avenue is planned to be reconstructed from West Terrace Street to West Ridge Road due to the extensive amount of pavement deterioration that has occurred combined with the amount of patching that may be needed.

Subgrade preparation should include the removal of unsuitable surface conditions including pavement materials, topsoil, significant debris and other deleterious conditions which may be encountered. The existing concrete pavement could be properly crushed, stockpiled and re-used as granular base material. Any unsuitable soil should be removed to a distance of at least 1.0 foot behind the curb. An increased width of soil removal may be necessary when subgrade supported improvements such as sidewalks, drives or paved shoulders are planned. The soils in cut areas should be excavated to establish design subgrade elevations. After removal has been completed the exposed subgrade soils should be proof-rolled in the presence of the Soil Engineer.

When proof-rolling reveals unstable soil conditions due to high moisture content these soils should be aerated or removed. Discing and aeration of the soil can be effective to depths of up to 1.0 foot depending upon the equipment used. If the high moisture content condition extends to depths greater than the effective depth of discing then removal of the unstable soils will be necessary.

Any undercut areas would be replaced with crushed aggregate, possibly in conjunction with the use of an appropriate geotextile fabric. The new aggregate base would then be placed and

File No. 22292  
Re: North Princeton Avenue  
Villa Park, Illinois

Page 3

compacted followed by the placement of the designed thickness of HMA Binder and HMA Surface courses.

#### UNDERGROUND UTILITIES SUPPORT

The soils encountered at the anticipated bedding elevations for underground utility improvements should provide adequate support for the pipes. The pipe bedding can be supported on the undisturbed natural soils located below all topsoil, low strength soils and other unsuitable conditions which may be encountered.

Trench backfill should be placed in lifts not to exceed 12.0 inches when uncompacted. Each lift should exceed minimum compaction requirements prior to placement of the next lift. We recommend a minimum of 95% compaction based on the standard Proctor test, ASTM D-698, be achieved beneath pavements and sidewalks.

#### DEWATERING

Excavations may require dewatering due to subsurface water seepage and/or surface precipitation. This water can be removed by standard sump and pump operations. Soils exposed at support elevations should not be permitted to become saturated. Loss of bearing strength and stability may occur, requiring additional soil excavation.

Cohesive soils, non-cohesive soils and others can be unstable when saturated. These soils tend to cave or run when submerged or disturbed. The stability of exposed embankments is minimal to non-existent as confining soil pressures are removed. Proper drainage within excavations is necessary at all times, particularly when excavations extend below anticipated water levels and below saturated soils.

The contractor should be made responsible for designing and constructing stable temporary excavations. Also, the contractor should shore, slope, bench or restrain the sides of the excavations as required to maintain stability of both the excavation sides and bottom. In no case, should the slope, slope heights, or excavation depth exceed those in the local, state, and federal safety regulations.

#### CONCLUSION

The information within this report is intended to provide initial information concerning subsurface soil and water conditions on the site. Variations in subsurface conditions are expected to be present between boring locations due to naturally changing soil and fill conditions.

Our understanding of the proposed improvements is based on limited information available to us at the writing of this report. The findings of the investigation and the recommendations presented are not considered applicable to significant changes in the scope of the improvements or applicable to alternate site uses. We recommend that proposed pavement

File No. 22292  
Re: North Princeton Avenue  
Villa Park, Illinois

Page 4

and grading plans be reviewed by our office to determine if additional considerations are necessary to address anticipated subsurface conditions.

The soils exposed at subgrade elevations should be evaluated for suitability prior to placement of granular base, as previously indicated in this report. Soils and aggregates placed as structural fill should be tested as the work progresses to verify that minimum compaction requirements have been met.

If you have any questions concerning the findings or recommendations presented in this report, please let me know.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.



Reid T. Steinbach, E.I.T  
Project Engineer

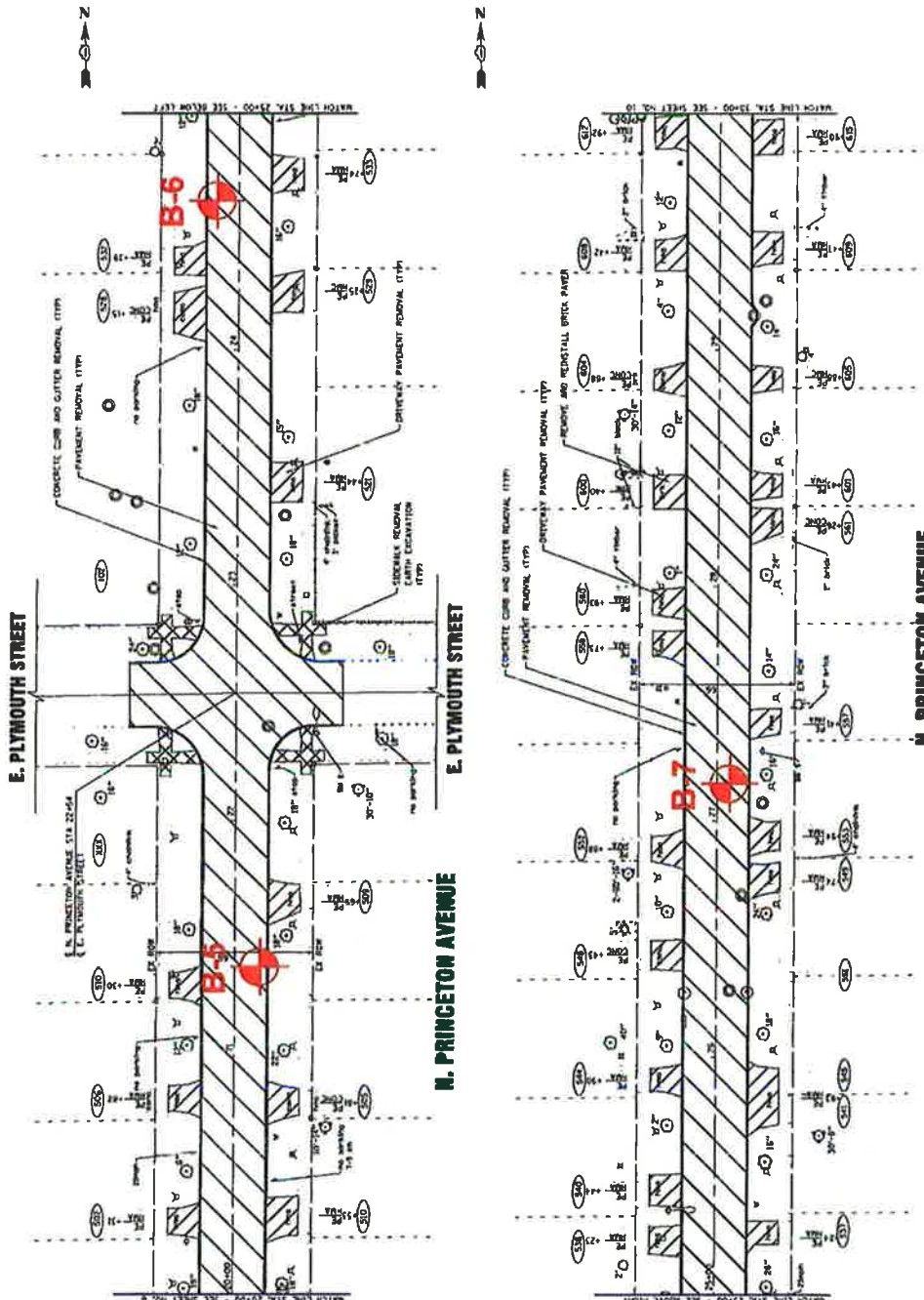


Thomas P. Johnson, P.E.  
President

Enc.RTS/TPJ

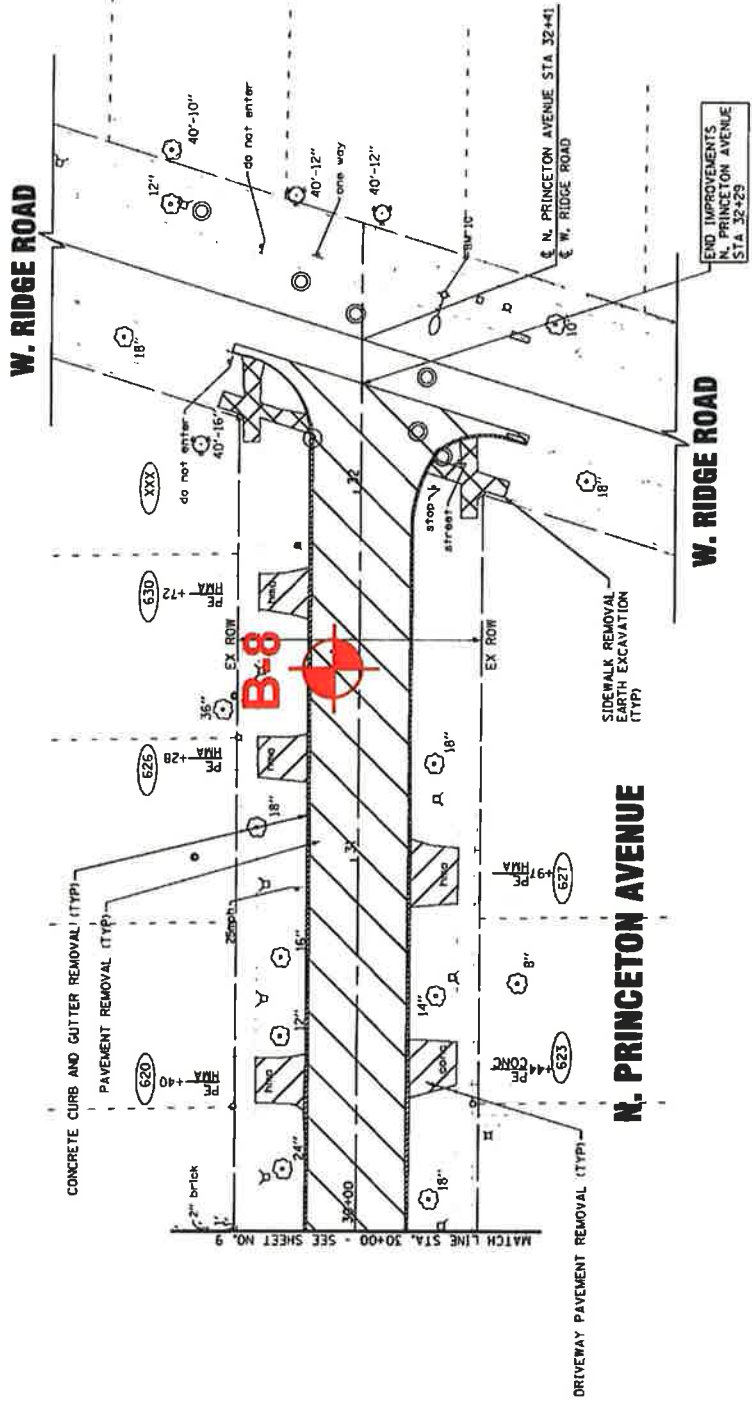
cc: Mr. Thomas M. Slattery – Baxter & Woodman, Inc.



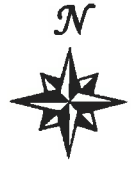


<b>SMC</b>	<b>SOIL AND MATERIAL CONSULTANTS, INC.</b>	<b>LOCATION SKETCH</b>
Client:	VILLAGE OF VILLA PARK	
Project:	NORTH PRINCETON AVE.	
Location:	VILLA PARK, ILLINOIS	
File No.	22292	Date: 9-14-15
		Scale: 1" = 50'





<b>SMC</b>	<b>SOIL AND MATERIAL CONSULTANTS, INC.</b>	<b>LOCATION SKETCH</b>
	VILLAGE OF VILLA PARK	
	NORTH PRINCETON AVE.	
	VILLA PARK, ILLINOIS	
File No. 22292	Date: 9-14-15	Scale: 1" = 50'



**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-1 Work Done By: AC & DB

Location of Core: 333 N. Princeton Ave., 8' E. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 --		
1 --		
2 --		
3 --	6-1/2" Concrete	Full
4 --		
5 --		
6 --	Total 6-1/2"	
7 --	E.O.C.	
8 --		
9 --		
10 --		
11 --		
12 --		
13 --		
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --		

**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-2 Work Done By: AC & DB

Location of Core: 416 N. Princeton Ave., 6' W. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 --		
1 --		
2 --		
3 --	6-1/2" Concrete	Full
4 --		
5 --		
6 --	Total 6-1/2"	
7 --	E.O.C.	
8 --		
9 --		
10 --		
11 --		
12 --		
13 --		
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --		

**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
 ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-3 Work Done By: AC & DB

Location of Core: 429 N. Princeton Ave., 9' E. of CL

Comments: \_\_\_\_\_

(Depth, In.)	<u>Type of Material</u>	<u>Recovery</u>
0 --		
1 --		
2 --		
3 --	6-1/4" Concrete	Full
4 --		
5 --		
6 --		
7 --		
8 --	2-3/4" Crushed limestone with fines	Partial
9 --	Total 9-0"	
10 --	E.O.C.	
11 --		
12 --		
13 --		
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --		

**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0861

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-4 Work Done By: AC & DB

Location of Core: 450 N. Princeton Ave., 9' W. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 -		
1 -		
2 -		
3 -		
4 -	7-0" Concrete	Full
5 -		
6 -		
7 -		
8 -		
9 -		
10 -		
11 -	10-0" Crushed limestone with fines	Partial
12 -		
13 -		
14 -		
15 -		
16 -		
17 -	Total 17-0"	
18 -	E.O.C.	
19 -		
20 -		

**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
 ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-5 Work Done By: AC & DB

Location of Core: 509 N. Princeton Ave., 6' E. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 —		
1 —		
2 —	5-0" Concrete	Full
3 —		
4 —		
5 —		
6 —		
7 —		
8 —	6-0" Crushed limestone with fines	Partial
9 —		
10 —		
11 —	Total 11-0"	
12 —	E.O.C.	
13 —		
14 —		
15 —		
16 —		
17 —		
18 —		
19 —		
20 —		

**SOIL AND MATERIAL CONSULTANTS, INC.**

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

Date: 9/11/15  
File No.: 22292

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-6 Work Done By: AC & DB

Location of Core: 532 N. Princeton Ave., 8' W. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0--		
1--		
2--		
3--	6-1/4" Concrete	Full
4--		
5--		
6--	Total 6-1/4"	
7--	E.O.C.	
8--		
9--		
10--		
11--		
12--		
13--		
14--		
15--		
16--		
17--		
18--		
19--		
20--		

**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0661

**CORE LOG**

Client: Village of Villa Park Reference: N. Princeton Ave., Villa Park, IL

Core No: C-7 Work Done By: AC & DB

Location of Core: 553 N. Princeton Ave., 3' E. of CL

Comments: \_\_\_\_\_

(Depth, In.)	Type of Material	Recovery
0 --		
1 --		
2 --		
3 --		
4 --	6-1/2" Concrete	Full
5 --		
6 --		
7 --	Total 6-1/2"	
8 --	E.O.C.	
9 --		
10 --		
11 --		
12 --		
13 --		
14 --		
15 --		
16 --		
17 --		
18 --		
19 --		
20 --		

**SOIL AND MATERIAL CONSULTANTS, INC.**

Date: 9/11/15

File No.: 22292

8 WEST COLLEGE DRIVE OFFICE: (847) 870-0544  
ARLINGTON HEIGHTS, IL 60004 FAX: (847) 870-0861

**CORE LOG**

Client: Village of Villa Park Reference N. Princeton Ave., Villa Park, IL

Core No: C-8 Work Done By: AC & DB

Location of Core: 630 N. Princeton Ave., 5' W. of CL

Comments: \_\_\_\_\_

(Depth, In.)	<u>Type of Material</u>	<u>Recovery</u>
0		
1		
2		
3		
4		
5		
6	6-1/4" Concrete	Full
7	Total 6-1/4"	
7	E.O.C.	
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		



Arlington Heights, Illinois (847) 870-0544

**SOIL BORING LOG** B-1

Logged By: DBA

Page: 1 of 1

Client: Village of Villa Park

File No. 22292

Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 333 N. Princeton Ave., 8' E. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 694.0' Existing Surface

(SEE CORE LOG)

(a) see below

Dark brown to brown-gray clay, some silt, trace sand & gravel, damp, very tough to tough

Brown-gray clay & silt, trace fine sand & gravel, very damp-damp, very tough

Brown-gray clay, some silt, trace sand & gravel, damp, hard

Gray clay, some silt, trace sand & gravel, damp, very tough

End of Boring

(a) Black silt, some clay, trace sand & roots, damp (topsoil)

depth, ft	standard penetration	moisture content	dry unit weight lbs./cu. ft.	unconfined compressive strength	unconfined compressive strength, tons/sq. ft.	penetrometer reading, tons/sq. ft.
	X	Δ	γ	○	1.0 2.0 3.0 4.0	1.0 2.0 3.0 4.0
					X	Δ
9		27.7 24.4	100.3	3.5	X	○
6		21.4	103.8	1.8	X ● ○ Δ	
8		14.8	118.5	3.1	X Δ ● ○	
15		16.7	115.6	5.4	X Δ ○	
14		12.1	128.3	3.3	X Δ ● ○	
12		16.9	117.5	3.5	X Δ ● ○	

Water encountered at dry feet during drilling operations (W.D.).  
 Water recorded at dry feet on completion of drilling operations (A.D.).  
 Water recorded at feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

**SOIL BORING LOG** B-2

Logged By: DB

Page: 1 of 1

Client: Village of Villa Park

File No. 22292

Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 416 N. Princeton Ave., 6' W. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 697.5' Existing Surface

(SEE CORE LOG)

(a) see below

Dark brown-brown clay, some silt, trace s  
sand & gravel, damp, very tough

5 Brown-gray clay, some silt, trace sand &  
gravel, damp, hard

10 18 13.9 118.4 5.6

Gray clay, some silt, trace sand & gravel,  
damp, very tough

15 End of Boring

(a) Black silt, some clay, trace sand &  
roots, damp (topsoil)

depth, ft	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.	penetrometer reading, tons/sq.ft.	standard penetration "N", blows/ft.	moisture content, %
	X	Δ	γ	○	○	●	X	Δ
					1.0	2.0	3.0	4.0
							10	20
							30	40
9		22.3 25.8	97.6	2.9				
11		18.4	114.2	6.7				
11		19.0	111.8	5.2				
18		13.9	118.4	5.6				
21		16.3	115.6	6.9				
17		17.4	112.5	3.7				

Water encountered at feet during drilling operations (W.D.).  
Water recorded at dry feet on completion of drilling operations (A.D.).  
Water recorded at feet hours after completion of drilling operations (A.D.).



**SOIL AND MATERIAL CONSULTANTS, INC.**

Arlington Heights, Illinois

(847) 870-0544

**SOIL BORING LOG** B-3

Logged By: DB

Page: 1 of 1

Client: Village of Villa Park

File No. 22292

Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 429 N. Princeton Ave., 9' E. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 699.5' Existing Surface  
(SEE CORE LOG)

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.				
					1.0	2.0	3.0	4.0	
	X	Δ	γ	○	X standard penetration "N", blows/ft. Δ moisture content, %				
					10	20	30	40	
	7	19.4	108.5	2.8	X	Δ	○		
5	7	20.5	105.8	2.2	X	●	Δ		
	7	20.7	108.3	1.7	X	●	Δ		
10	15	18.9	110.6	5.1		X	Δ		Δ
	10	17.4	115.2	3.8	X	Δ		●	○
15	9	17.6	118.2	3.5	X	Δ		●	○
20									
25									
30									
35									
40									

Brown-gray clay, some silt, trace sand & gravel, damp, very tough

Brown-gray clay, some silt, trace sand & gravel, damp, tough to hard

Gray clay, some silt, trace sand & gravel, damp, very tough

End of Boring

Water encountered at dry feet during drilling operations (W.D.).  
 Water recorded at dry feet on completion of drilling operations (A.D.).  
 Water recorded at feet hours after completion of drilling operations (A.D.).



**SOIL BORING LOG** B-4

Logged By: DB

Page: 1 of 1

Client: Village of Villa Park

File No. 22292

Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 450 N. Princeton Ave., 9' W. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 700.5' Existing Surface

(SEE CORE LOG)

Brown-gray clay, some silt, trace sand & gravel, damp, very tough to hard

Gray clay, some silt, trace sand & gravel, damp, very tough

End of Boring

depth, ft	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.	penetrometer reading, tons/sq.ft.	standard penetration "N", blows/ft.	moisture content, %
	X	Δ	δ	○	1.0 2.0 3.0 4.0	●	10 20 30 40	○
5								
5								
10								
10								
15								
15								
20								
20								
25								
25								
30								
30								
35								
35								
40								
40								

Water encountered at dry feet during drilling operations (W.D.).  
 Water recorded at dry feet on completion of drilling operations (A.D.).  
 Water recorded at feet hours after completion of drilling operations (A.D.).



**SOIL BORING LOG** B-5

Logged By: DB

Page: 1 of 1

Client: Village of Villa Park

File No. 22292

Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 509 N. Princeton Ave., 6' E. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 701.5' Existing Surface

(SEE CORE LOG)

Brown-gray clay, some silt, trace sand & gravel, damp, very tough to hard

Gray clay, some silt, trace sand & gravel, damp, very tough to hard

End of Boring

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 X standard penetration "N", blows/ft. △ moisture content, % 10 20 30 40			
	X	△	⊗	○				
8					X	△	○	●
9					X	△	○	●
13					X	△		●
17					X	△		●
17						△		●
14					X	△		●

Water encountered at dry feet during drilling operations (W.D.).  
 Water recorded at dry feet on completion of drilling operations (A.D.).  
 Water recorded at feet hours after completion of drilling operations (A.D.).



Arlington Heights, Illinois (847) 870-0544

**SOIL BORING LOG** B-6

Logged By: DB

Page: 1 of 1

Client: Village of Villa Park

File No. 22292

Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 532 N. Princeton Ave., 8' W. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 696.0' Existing Surface  
(SEE CORE LOG)  
(a) see below

Brown-gray clay, some silt, trace sand & gravel, damp, tough to hard

7 21.0 109.3 2.8

13 20.6 111.4 3.6

19 18.1 114.9 5.7

Brown-gray clay, some silt, trace sand & gravel, damp, very tough

13 17.6 114.6 3.8

Gray clay, some silt, trace sand & gravel, damp, very tough

14 16.4 119.6 2.8

End of Boring

(a) Black silt, some clay, trace sand & roots, damp (topsoil)

(b) Gray silt & sand, trace clay & gravel, damp-saturated

20

25

30

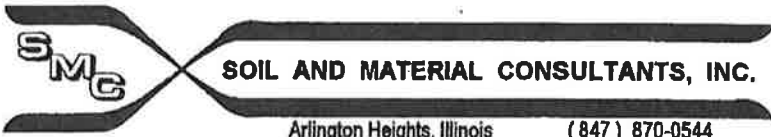
35

40

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	○ unconfined compressive strength, tons/sq.ft. ● penetrometer reading, tons/sq.ft. 1.0 2.0 3.0 4.0 X standard penetration "N", blows/ft. Δ moisture content, % 10 20 30 40			
	X	Δ	γ	○				
		21.9					Δ	
	8	23.9	95.2	1.8	X	○	●	Δ
5	7	21.0	109.3	2.8	X		●	Δ
	13	20.6	111.4	3.6	X		Δ	●
10	19	18.1	114.9	5.7			Δ	○
	13	17.6	114.6	3.8	X	Δ	●	○
		18.5				Δ		
15	14	16.4	119.6	2.8	X	Δ	○	●

Water encountered at 13.0 feet during drilling operations (W.D.).  
 Water recorded at dry feet on completion of drilling operations (A.D.).  
 Water recorded at feet hours after completion of drilling operations (A.D.).





Arlington Heights, Illinois (847) 870-0544

**SOIL BORING LOG** B-8

Logged By: DB Page: 1 of 1

Client: Village of Villa Park

File No. 22292 Date Drilled: 9/14/15

Reference: N. Princeton Avenue  
Villa Park, IL

Comments: 630 N. Princeton Ave., 5' W. of CL

Equipment:  CME 45B  CME 55  Hand Auger  Other

**CLASSIFICATION**

Elevation 696.5' Existing Surface  
(SEE CORE LOG)

(a) see below

Dark brown to brown-gray clay, some silt,  
trace sand & gravel, damp, very tough to  
hard

Gray clay, some silt, trace sand & gravel,  
damp, hard to very tough

End of Boring

(a) Black silt, some clay, trace sand &  
roots, damp (topsoil)

depth, ft.	standard penetration	moisture content	dry unit weight lbs./cu.ft.	unconfined compressive strength	unconfined compressive strength, tons/sq.ft.	penetrometer reading, tons/sq.ft.	standard penetration "N", blows/ft.	moisture content, %
	X	Δ	γ	○	○	●	○	Δ
					1.0 2.0 3.0 4.0		10 20 30 40	
8		26.2						
8		20.4	109.1	2.1				
12	X	18.1	113.0	4.9				4.9
12	X	18.9	111.8	4.3				
17		17.9	113.8	5.8				5.8
17		16.7	118.1	5.3				5.3
14	X	18.4	115.6	3.1				

Water encountered at \_\_\_\_\_ feet during drilling operations (W.D.).  
 Water recorded at \_\_\_\_\_ feet on completion of drilling operations (A.D.).  
 Water recorded at \_\_\_\_\_ feet \_\_\_\_\_ hours after completion of drilling operations (A.D.).



# General Notes

## SAMPLE CLASSIFICATION

Soil sample classification is based on the Unified Soil Classification System, the Standard Practice for Description and Identification of Soils (Visual-Manual Procedure), ASTM D-2488, the Standard Test Method for Classification of Soils for Engineering Purposes, ASTM D-2487 (when applicable), and the modifiers noted below.

## CONSISTENCY OF COHESIVE SOILS

<u>Term</u>	<u>Qu -tons/sq. ft.</u>	<u>N (unreliable)</u>
Very Soft	0.00 - 0.25	0 - 2
Soft	0.26 - 0.49	3 - 4
Stiff	0.50 - 0.99	5 - 8
Tough	1.00 - 1.99	9 - 15
Very Tough	2.00 - 3.99	16 - 30
Hard	4.00 - 7.99	30 +
Very Hard	8.00 +	

## RELATIVE DENSITY OF GRANULAR SOILS

<u>Term</u>	<u>N - blows/foot</u>
Very Loose	0 - 4
Loose	5 - 9
Medium Dense	10 - 29
Dense	30 - 49
Very Dense	50 +

## IDENTIFICATION AND TERMINOLOGY

<u>Term</u>	<u>Size Range</u>
Boulder	over 8 in.
Cobble	3 in. to 8 in.
Gravel	1 in. to 3 in.
-coarse	3/8 in. to 1 in.
-medium	#4 sieve to 3/8 in.
-fine	#10 sieve to #4 sieve
Sand	#40 sieve to #10 sieve
-coarse	#200 sieve to #40 sieve
-medium	0.002 mm to #200 sieve
-fine	smaller than 0.002 mm
Silt	
Clay	

<u>Modifying Term</u>	<u>Percent by Weight</u>
Trace	1 - 10
Little	11 - 20
Some	21 - 35
And	36 - 50

### Moisture Condition

Dry  
Damp  
Very Damp  
Saturated

## DRILLING, SAMPLING & SOIL PROPERTY SYMBOLS

CF	- Continuous Flight Auger
HS	- Hollow Stem Auger
HA	- Hand Auger
RD	- Rotary Drilling
AX	- Rock Core, 1-3/16 in. diameter
BX	- Rock Core, 1-5/8 in. diameter
NX	- Rock Core, 2-1/8 in. diameter
S	- Sample Number
T	- Type of Sample
J	- Jar
AS	- Auger Sample
SS	- Split-spoon (2 in. O.D. with 1-3/8 in. I.D.)
ST	- Shelby Tube (2 in. O.D. with 1-7/8 in. I.D.)
R	- Recovery Length, in.
B	- Blows/ 6 in. interval, Standard Penetration Test (SPT)
N	- Blows/ foot to drive 2 in. O.D. split-spoon sampler with 140 lb. hammer falling 30 in., (STP)
Pen.	- Pocket Penetrometer reading, tons/ sq. ft.
W	- Water Content, % of dry weight
Uw	- Dry Unit Weight of soil, lbs./ cu. ft.
Qu	- Unconfined Compressive Strength, tons/ sq. ft.
Str	- % Strain at Qu.
WL	- Water Level
WD	- While Drilling
AD	- After Drilling
DCI	- Dry Cave-in
WCI	- Wet Cave-in
LL	- Liquid Limit, %
PL	- Plastic Limit, %
PI	- Plasticity Index (LL-PL)
LI	- Liquidity Index [(W-PL)/PI]

**Ordinance No. 3733****AN ORDINANCE OF THE VILLAGE OF VILLA PARK, DUPAGE COUNTY, ILLINOIS AMENDING THE REQUIREMENTS OF BIDDERS FOR CONSTRUCTION PROJECTS**

**WHEREAS**, the Village of Villa Park (the "*Village*") is a duly organized and validly existing non home-rule municipality created in accordance with the Constitution of the State of Illinois of 1970 and the laws of the State; and,

**WHEREAS**, section 8-9-1 of the Illinois Municipal Code (65 ILCS 5/8-9-2) allows the Village to require competitive bidding after advertising for bids in the manner prescribed by ordinance; and,

**WHEREAS**, the President and Board of Trustees desire to adopt purchasing procedures to provide for additional requirements of bidders for construction projects to have active apprenticeship and training programs approved and registered with the United States Department of Labor's Bureau of Apprenticeship and Training and to have bidders show three similar projects they constructed within the last five years.

**NOW, THEREFORE, BE IT ORDAINED** by the President and Board of Trustees of the Village of Villa Park, DuPage County, Illinois, as follows:

**Section 1.** That Section 2-219 of the Villa Park Municipal Code, as amended, be and is hereby amended by placing the existing text as subsection A. and adding a new subsection B. to read as follows:

"B. A responsible bidder for the construction of public works projects shall meet and submit evidence of compliance with the following requirements:

- (1) All applicable laws prerequisite to doing business in the State of Illinois,
- (2) A federal employer tax identification number or social security number,
- (3) Provision of Section 2000(e) of Chapter 21, Title 42 of the United States Code and Federal Executive Order No. 11246 as amended by Executive Order No. 11375 (known as the Equal Opportunity Employer provisions),
- (4) Certificates of insurance indicating the following coverage's: general liability, worker's compensation, completed operations, automobile, hazardous occupation and product liability
- (5) Compliance with all provisions of the Illinois Prevailing Wage Act, including wages, medical and hospitalization insurance and retirement for those trades covered in the Act,
- (6) The bidder and all bidder's sub-contractors must participate in active apprenticeship and training programs approved and registered with the United States Department of Labor's Bureau of Apprenticeship and Training for each of the trades of work contemplated under the proposed contract,
- (7) All contractors and sub-contractors are required to file certified payrolls as specified in Illinois Pubic Act 94-0515, and follow all provisions of the Employee Classification Act (820 ILCS 185/1 et seq.), and

(8) All bidders must provide three (3) projects of a similar nature constructed in the immediate past five (5) years with the name, address and telephone number of the contact person having knowledge of the project along with three (3) references (name, address, and telephone number) with knowledge of the integrity and business practices of the bidder.”

**Section 2.** This Ordinance shall be in full force and effect upon its passage, approval, and publication as provided by law.

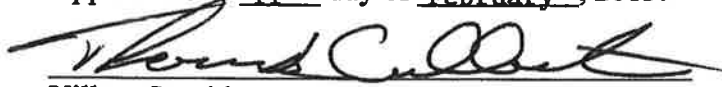
Passed this 11 day of February, 2013.


AYES: ALL

NAYS: Aiello Bulhuis

ABSENT: \_\_\_\_\_

Approved this 11 day of February, 2013.

  
Village President

Attest:  
  
Village Clerk



Published in pamphlet form:

2-11, 2013

## IRMA CONTRACTUAL INSURANCE GUIDELINES

### I. INSURANCE REQUIREMENTS

Contractor shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

#### MINIMUM SCOPE OF INSURANCE

Coverage shall be at least as broad as:

- A. Insurance Services Office Commercial General Liability occurrence form CG 0001 with the member named as additional insured, on a form at least as broad as the attached sample endorsement including ISO Additional Insured Endorsement CG 2010 (Exhibit A), CG 2026 (Exhibit B).

#### **CG2037 - Completed Operations – (Exhibit C)**

**Required if box is checked**  ; and

- B. Owners and Contractors Protective Liability (OCP) policy with the member as insured  
**Required if box is checked**  ; and
- C. Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."
- D. Workers' Compensation as required by the Workers' Compensation Act of the State of Illinois and Employers' Liability insurance.  
**Coverage required for employee exposure to lead, if box is checked**
- E. Builder Risk Property Coverage with member as loss payee  
**Required if box is checked** .
- F. Environmental Impairment/Pollution Liability Coverage for pollution incidents as a result of a claim for bodily injury, property damage or remediation costs from an incident at, on or migrating beyond the contracted work site. Coverage shall be extended to Non-Owned Disposal sites resulting from a pollution incident at, on or mitigating beyond the site; and also provide coverage for incidents occurring during transportation of pollutants.  
**Required if box is checked** .

#### MINIMUM LIMITS OF INSURANCE

Contractor shall maintain limits no less than the following, **if required under above scope**:

- A. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, and property damage and \$1,000,000 per occurrence for personal injury. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$2,000,000 or a project/contract

specific aggregate of \$1,000,000.

- B. Owners and Contractors Protective Liability (OCP): \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
- C. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- D. Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.
- E. Builder's Risk: Shall insure against "All Risk" of physical damage, including water damage (flood and hydrostatic pressure not excluded), on a completed replacement cost basis.
- F. Environmental Impairment/Pollution Liability: \$1,000,000 combined single limit per occurrence for bodily injury, property damage and remediation costs.

### **DEDUCTIBLES AND SELF-INSURED RETENTIONS**

Any deductibles or self-insured retentions must be declared to and approved by the member. At the option of the member, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the member, its officials, employees, agents and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

### **OTHER INSURANCE PROVISIONS**

The policies are to contain, or be endorsed to contain, the following provisions:

#### **A. General Liability and Automobile Liability Coverages**

1. The member, its officials, agents, employees and volunteers are to be covered as additional insureds as respects: liability arising out of the Contractor's work, including activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the member, its officials, agents, employees and volunteers.
2. The Contractor's insurance coverage shall be primary as respects the member, its officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the member, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.
3. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the member, its officials, employees, agents and volunteers.
4. The Contractor's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Contractor's insurance shall apply

separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

5. If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Contractor shall be required to name the member, its officials, employees, agents and volunteers as additional insureds.
6. All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
7. The contractor and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by member. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding.

**B. Workers' Compensation and Employers' Liability Coverage**

The insurer shall agree to waive all rights of subrogation against the member, its officials, employees, agents and volunteers for losses arising from work performed by Contractor for the municipality.

1. NCCI Alternate Employer Endorsement (WC 000301) in place to insure that workers' compensation coverage applies under contractor's coverage rather than member's if the member is borrowing, leasing or in day to day control of contractor's employee.

**Required if box is checked .**

**C. Professional Liability (Required if box is checked )**

1. Professional liability insurance with limits not less than \$1,000,00 each claim with respect to negligent acts, errors and omissions in connection with professional services to be provided under the contract, with a deductible not-to-exceed \$50,000 without prior written approval.
2. If the policy is written on a claims-made form, the retroactive date must be equal to or preceding the effective date of the contract. In the event the policy is cancelled, non-renewed or switched to an occurrence form, the Contractor shall be required to purchase supplemental extending reporting period coverage for a period of not less than three (3) years.
3. Provide a certified copy of actual policy for review.
4. Recommended Required Coverage (architect, engineer, surveyor, consultant): Professional liability insurance that provides indemnification and defense for injury or damage arising out of acts, errors, or omissions in providing the following professional services, but not limited to the following:
  - a. Preparing, approving or failure to prepare or approve maps, drawings, opinions, report, surveys, change orders, designs or specifications;
  - b. Providing direction, instruction, supervision, inspection, engineering

services or failing to provide them, if that is the primary cause of injury or damage.

**D. All Coverages**

Each insurance policy required shall have the member expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

**ACCEPTABILITY OF INSURERS**

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

**VERIFICATION OF COVERAGE**

Contractor shall furnish the member with certificates of insurance naming the member, its officials, employees, agents and volunteers as additional insureds (Exhibit D), and with original endorsements affecting coverage required by this clause. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the member before any work commences. The following additional insured endorsements may be utilized: ISO Additional Insured Endorsements CG 2010 (Exhibit A) or CG 2026 (Exhibit B), and CG 2037 (Exhibit C) – Completed Operations, where required. The member reserves the right to request full certified copies of the insurance policies and endorsements.

**SUBCONTRACTORS**

Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein.

**ASSUMPTION OF LIABILITY**

The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any sub-contractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to this agreement.

**II. INDEMNITY/HOLD HARMLESS PROVISION**

To the fullest extent permitted by law, the Contractor hereby agrees to defend, indemnify and hold harmless the member, its officials, employees and agents against all injuries, deaths, loss, damages, claims, patent claims, suits, liabilities, judgments, cost and expenses, which may in anywise accrue against the member, its officials, agents and employees, arising in whole or in part or in consequence of the performance of this work by the Contractor, its employees, or subcontractors, or which may in anywise result therefore, except that arising out of the sole legal cause of the member, its employees or agents, the Contractor shall, at its own expense, appear, defend and pay all charges of attorneys and all costs and other expenses arising therefore or incurred in connections

therewith, and, if any judgment shall be rendered against the member, its officials, employees and agents, in any such action, the Contractor shall, at its own expense, satisfy and discharge the same.

Contractor expressly understands and agrees that any performance bond or insurance policies required by this contract, or otherwise provided by the Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the member, its officials, employees and agents as herein provided.

The Contractor further agrees that to the extent that money is due the Contractor by virtue of this contract as shall be considered necessary in the judgment of the member, may be retained by the member to protect itself against said loss until such claims, suits, or judgments shall have been settled or discharged and/or evidence to that effect shall have been furnished to the satisfaction of the member.

### III. **SAFETY/LOSS PREVENTION**

#### **Safety/Loss Prevention Program Requirements**

- Successful bidder will provide written confirmation that a safety/loss prevention program was in place at least 90 days prior to submitting the bid proposal.
- Evidence of completed employee safety training can be provided.

#### **Regulatory Requirements**

- Successful bidder must comply with all applicable laws, regulations, and rules promulgated by any Federal, State, County, Municipal and/or other governmental unit or regulatory body now in effect or which may be in effect during the performance of the work. Included within the scope of the laws, regulations, and rules referred to in this paragraph but in no way to operate as a limitation, are Occupational Safety & Health Act (OSHA), Illinois Department of Labor (IDOL), Department of Transportation, all forms of traffic regulations, public utility, Intrastate and Interstate Commerce Commission regulations, Workers' Compensation Laws, Prevailing Wage Laws, the Social Security Act of the Federal Government and any of its titles, the Illinois Department of Human Rights, Human Rights Commission, or EEOC statutory provisions and rules and regulations.
- Evidence of specific regulatory compliance will be provided by bidder, if required by owner.

EXHIBIT A

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY  
CG 20 10 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – SCHEDULED PERSON OR  
ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location(s) Of Covered Operations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

**A. Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury," "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or
2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

**B.** With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
2. That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

EXHIBIT B

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY  
CG 20 26 07 04

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

**ADDITIONAL INSURED – DESIGNATED  
PERSON OR ORGANIZATION**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)
<p>EXAMPLE</p>
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

**Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your acts or omissions or the acts or omissions of those acting on your behalf:

- A. In the performance of your ongoing operations; or
- B. In connection with your premises owned by or rented to you.

EXHIBIT  
C

POLICY NUMBER:

COMMERCIAL GENERAL LIABILITY  
CG 20 37 07 04

**THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.**

**ADDITIONAL INSURED – OWNERS, LESSEES OR  
CONTRACTORS – COMPLETED OPERATIONS**

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s):	Location And Description Of Completed Operations
<p style="font-size: 48px; opacity: 0.5; transform: rotate(-45deg);">SAMPLE</p>	
<p>Information required to complete this Schedule, if not shown above, will be shown in the Declarations.</p>	

**Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

Exhibit D (Example)



**CERTIFICATE OF LIABILITY INSURANCE**

DATE (MM/DD/YYYY)

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER  Name of Insurance Broker	CONTACT NAME: Producer/Ins. Broker Contact Info.	
	PHONE (A/C, No, Ext):	FAX (A/C, No):
E-MAIL ADDRESS:		
INSURER(S) AFFORDING COVERAGE		NAIC #
INSURER A:	Name of Insurance Company	Completed
INSURER B:	Name of Insurance Company	Completed
INSURER C:		
INSURER D:		
INSURER E:		
INSURER F:		

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR Owners & Cont. Prot. (OCP) if requested GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PROJ <input type="checkbox"/> LOC	Y	Y	Policy Number Inserted	Policy Start Date	Policy Start Date	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 50,000 MED EXP (Any one person) \$ 5,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/PROP AGG \$ 1,000,000	
	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS			Policy Number Inserted	Policy Start Date	Policy Start Date	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$	
	<input checked="" type="checkbox"/> UMBRELLA LIAB <input type="checkbox"/> EXCESS LIAB DED RETENTION \$	<input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS-MADE	Y	Y	Policy Number Inserted	Policy Start Date	Policy Start Date	EACH OCCURRENCE \$ Per Request AGGREGATE \$ Per Request
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Professional Liability (other specialty coverages as requested)	Y/N N	N/A	Y	Policy Number Inserted	Policy Start Date	Policy Start Date	<input checked="" type="checkbox"/> WC STATUTORY LIMITS <input type="checkbox"/> OTHER E.L. EACH ACCIDENT \$ 500,000 E.L. DISEASE - EA EMPLOYEE \$ 500,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
	Professional Liability (other specialty coverages as requested)			Policy Number Inserted	Policy Start Date	Policy Start Date	\$1,000,000 per occurrence or as requested	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

List project number, location and description.

No additional endorsements limit coverage to additional insured beyond terms of actual additional insured endorsement (CG 2010 or CG 2026). Coverage to additional insured is primary. Additional Insured: Member, its officials, employees, agents and volunteers.  
\* Member named as cancellation notice recipient.

CERTIFICATE HOLDER  Name of Member	CANCELLATION  SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. *
	AUTHORIZED REPRESENTATIVE  Signature of authorized insurance company representative

© 1988-2010 ACORD CORPORATION. All rights reserved.

OWNER COPY

CONTRACT