SUBMITTED BY:

R. A. Cullinan & Son, a Div. of UCM, Inc.

CONTRACTOR'S NAME

P.O. Box 166

CONTRACTOR'S ADDRESS

Tremont, IL 61568

CITY, STATE, ZIP

STATE OF ILLINOIS
CITY OF PEORIA
COUNTY OF PEORIA

SPECIFICATIONS, PLANS, QUANTITIES AND CONTRACT PROPOSAL

FOR

ALLEN ROAD/ALTA ROAD INTERSECTION IMPROVEMENT FAU 6585/6641 SECTION 14-00347-01-PW

TO BE CONSTRUCTED UNDER THE PROVISIONS OF THE CITY OF PEORIA



BID OPENING: Wednesday, April 1, 2015, 11:00 A.M.

Scott D. Reeise, P.E., City Engineer

				County	Peoria
			Loca	Public Agency	City of Peoria
			5	Section Number	14-00347-01-PW
				Route	FAU 6585/6641
1.	THIS AGREEMENT, made and concluded the	day	of	April,	2015
		<u> </u>	-	Me	onth and Year
	between the CITY OF PEORIA	of _	PEOR1	A, ILLINOIS	
	acting by and through its	CITY MANAG	ER	known a	is the party of the first part, and
	R.A. CULLINAN & SON, INC., a Div. of	UCM, his/	their ex	ecutors, administr	ators, successors or assigns,
	known as the party of the second part.				
2.	Witnesseth: That for and in consideration of the part be made and performed by the party of the first part presents, the party of the second part agrees with sall the work, furnish all materials and all labor specifications hereinafter described, and in full come the Engineer under it.	irt, and accord said party of the necessary to	ding to the first process complete comp	he terms express part at his/their ow ete the work in a	ed in the Bond referring to these in proper cost and expense to do accordance with the plans and
3.	And it is also understood and agreed that the LF Business Office, Apprenticeship or Training Program Section 14-00347-01-PW , in	PA Formal Common Common Control Contro	i, and C	ontract Bond here	Provisions, Affidavit of Illinois to attached, and the Plans for
	approved by City Engineer Scott Reeise	PEn <u>Marcl</u>	n 6, 2 Date	014 , are e	ssential documents of this
\	contract and are a part hereof.				
<u>4</u> .	IN WITNESS WHEREOF, The said parties have exe	cuted these p	resents	on the date above	e mentioned.
Att	est: Buttall City Clerk	The CITY	the	of <u>PEORIA</u>	
(C)	eal)	City N	lanage	r Party of the Fire	st Part
•	VIEWED AND APPROVED:	Corporate Na	me	(If a Corp R.A. A DIVISION OF UNITI	oration) CULLINAN & SON ED CONTRACTORS MIDWEST, INC
	Donald V. Felds		/	. I.O.XX	2
	corporation counser	By VICE Pr	esident	uar //	Party of the Second Part
Att	est:			(If a Co-Pa	rtnership)
	Secretary		Destas	. data Data	
			Partnei	s doing Business	under the firm name of
				Party of the S	econd Part
				(If an ind	ividual)
)		<u></u>		Party of the S	econd Part

Contract Bond

Route Peoria
County City of Peoria
Local Agency <u>City of Peoria</u>
Section 14-00347-01-PW
In Re: ALLEN ROAD/ALTA ROAD INTERSECTION IMPROVEMENT (FAU 6585/6641)
We, R.A. CULLINAN & SON, INC. a Division of UCM, Inc.
a/an) Individual Co-partnership Corporation organized under the laws of the State of Delaware
as PRINCIPAL, and Travelers Casualty & Surety Company of America
as SURETY,
are held and firmly bound unto the above Local Agency (hereafter referred to as "LA") in the penal sum of FOUR MILLION ONE HUNDRED FORTY TWO THOUSAND EIGHT HUNDRED NINETY SIX AND 80/100-
Dollars (\$4,142,896.80), 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.

	SURETY have caused this instrument to be ay of April A.D. 2015
R.A. Cullinan & Son, A Division of United	PRINCIPAL
Contractors Midwest, Inc.	
(Company Name)	(Company Name)
By: Maria, Kowell	By:
Ronald L. Rowe (S) Inature & Title) Vice-President	(Signature & Title)
Attest: Jeff Sinn (Signature & Title) Asst. Secretary	Attest: (Signature & Title)
(If PRINCIPAL is a joint venture of two or more contractors, affixed.)	the company names and authorized signature of each contractor must be
STATE OF ILLINOIS,	
COUNTY OF Tazewell	
I, Amy E. Ries	, a Notary Public in and for said county, do hereby certify that
Ronald L. Rowell and Jeff	Sinn
(Insert names of individ	duals signing on behalf or PRINCIPAL)
who are each personally known to me to be the same	s persons whose names are subscribed to the foregoing instrument on behalf
of PRINCIPAL, appeared before me this day in person instrument as their free and voluntary-act for the uses	on and acknowledged respectively, that they signed and delivered said
	A.D. 2015
My commission expires 10/28/2017 AM	Y E. RIES (SEAL)
(NOTARY PUBLI MY COMMISSIO	C-STATEOFILANOISNITARY Public (SEAL) ON EXPIRES 10-28-2017
Travelers Casualty & Surety Company of America	SURETY By:
(Name of Surety)	Afton Booth (Signature of Attorney-In-Fact) Attorney-in-Fac
STATE OF ILLINOIS.	(SEAL)
COUNTY OF Tazewell	· · · · ·
I, Amy E. Ries	, a Notary Public in and for said county, do hereby certify that
Afton Booth	
(Insert names of Indiv	iduals signing on behalf or SURETY)
of SURETY, appeared before me this day in person a instrument as their free and voluntary act for the uses Given under my hand and notarial seal this 15th	April A.D. 2015
My commission expires 10/28/2017 OFFICIALS	UEO (E., S (2.)
NOTARY PUBLIC - STA	TE OF HAINOBE Notary Public
Assessed the	
Approved this day of	, A.D
Attest:	A, 20 ~
- B (10 B 2)	(aty of (excepting Authority)
Lew all 1, h	1 AT 1 Lt
Clerk	(Chairman Mayor/President)

Page 2 of 2 Printed on 5/29/2013 8:16:01 AM

APPROVED

LEGAL DEPARTMENT

BY: Donald O. Level



POWER OF ATTORNEY

Farmington Casualty Company
Fidelity and Guaranty Insurance Company
Fidelity and Guaranty Insurance Underwriters, Inc.
St. Paul Fire and Marine Insurance Company
St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America United States Fidelity and Guaranty Company

Attorney-In Fact No.

226368

Certificate No. 005978143

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Afton Booth, Patrick J. Taphorn, and Kathy Betteridge

of the City of			, State of					ul Attorney(s)-in-Fact,
other writings ob	oligatory in the na		alf of the Compar	nies in their busin	ess of guaranteeir	ng the fidelity of p	ersons, guaranteei	ional undertakings and ng the performance of
			a Line de Maria de la companya					
IN WITNESS W	HEREOF, the C	Companies have cause 2014	sed this instrumen	t to be signed and	their corporate se	als to be hereto aff	ixed, this	10th
		Farmington Casu Fidelity and Guar Fidelity and Guar St. Paul Fire and St. Paul Guardiar	ranty Insurance (ranty Insurance (Marine Insuranc	Inderwriters, Ind e Company	Tra . Tra	Paul Mercury Ins velers Casualty a velers Casualty a ited States Fidelit	nd Surety Compa nd Surety Compa	nny nny of America
1982	1977	MCORPORATED STATES	THE STANCE OF TH	SEALS	ORPORAJE CO SEAL 3	CONN.	WIN SURFICE OF THE PROPERTY OF	SELITY AND
State of Connect City of Hartford					Ву:	Robert L. Rane	by, Senior Vice Presid	lent
be the Senior Vic	Insurance Compa	mington Casualty C ny, St. Paul Guardia	an Insurance Comp	and Guaranty Inst Dany, St. Paul Mei	rance Company, rcury Insurance Co	mpany, Travelers	ity Insurance Under Casualty and Sure	knowledged himself to erwriters, Inc., St. Paul ty Company, Travelers executed the foregoing

In Witness Whereof, I hereunto set my hand and official seal. My Commission expires the 30th day of June, 2016.



Marie C. Tetreault, Notary Public

WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, and Vi President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.



















To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.

Proposal Continued

RETURN WITH BID	Route County Local Agency Section	FAU 6585/6641 Peoria City of Peoria 14-00347-01-PW	
-----------------	--	--	--

EMPLOYEE/EMPLOYMENT RESTRICTIONS - THE CONTRACTOR: 13.

THE CONTRACTOR. (hereinafter referred to as "SERVICE PROVIDER") agrees, as a condition of accepting this contract with the City of Peoria, that, for a period of one (1) year following completion of this contract, it shall be prohibited from hiring, directly or indirectly, any City employee or official who was involved, directly or indirectly in: (1) the selection and/or recommendation to select the SERVICE PROVIDER for performance of this contract; (2) coordinating the efforts of the SERVICE PROVIDER in the consummation or completion of this contract; or (3) monitoring or determining the performance of the SERVICE PROVIDER. The SERVICE PROVIDER further acknowledges and agrees that, upon the City's determination that a violation of this provision has occurred, the penalty imposed, at the sole discretion of the City, may include one or more of the following: (1) cancellation of any other contract(s) between the City of Peoria and the SERVICE PROVIDER; (2) disqualification of the SERVICE PROVIDER from bidding or being awarded future contracts with the City of Peoria for a period of two [2] years; and/or (3) payment of liquidated damages to the City of Peoria in the amount of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00).

14.		EEO CERTIFICATION* (Check one):
		_We are presently applying for the EEO Certification. Employer Report Form (Form CC-1) is completed and enclosed.
	X	Presently, we have the Employer Report Form (Form CC-1) on file with the City of Peoria, Office of Equal Opportunity and have a current Certificate of Compliance Number.
		Certificate of Compliance Number: 00676-150331

*Please note there is a \$50.00 processing fee for new and renewal certification requests.

ALLEN ROAD/ALTA ROAD INTERSECTION IMPROVEMENT

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APPENDIX A

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Directions

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Monthly Workforce Analysis

Notification of Change in Participation

MISCELLANEOUS

Construction Debris Manifest

Substance Abuse Prevention Program Certification

Final Payment Request

Sample Contract

Sample Contract Bond

City of Peoria Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW Peoria County

PART 1 PROPOSAL ITEMS

		County	Peoria		
NOTICE TO BIDDERS	Local F	Public Agency	City of Peoria		
NOTICE TO BIBBERO	Se	ction Number	14-0034	14-00347-01-PW	
		Route	FAU 65	85/6641	
Sealed proposals for the improvement described below will be received	ved at the of	fice of the (City Engine	eer,	
Public Works Facility; 3505 N. Dries Lane; Peoria, IL 61604	until	_11:00 AM	on	April 1, 2015	
Address		Time		Date	
Sealed proposals will be opened and read publicly at the office of _	the City Eng	ineer			
Public Works Facility; 3505 N. Dries Lane; Peoria, IL 61604	at	11:00 AM	on	April 1, 2015	
Address		Time		Date	
DESCRIPTION OF	WORK				
Name Allen Road/ Alta Road Intersection Improvement	Len	gth: 5262	.00 feet	(1.0 miles)	
Location Intersection of Allen Road and Alta Road in the City of Peoria				,	
Proposed Improvement Construction of a single lane modern round	dabout cons	isting of earth	work, two	culvert extensions,	
HMA multi-use path, concrete sidewalk, street lighting, landscaping,	and other co	ollateral work t	o comple	te the project.	
Plans and proposal forms will be available in the office ofthe C.					
Peoria, IL 61604, by calling 309-494-8800 to req. electronic in	nformation or	r by emailing p	wdropbox(@peoriagov.org	

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.

Address

- 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.

PROPOSAL

County Peoria

Local Public Agency City of Peoria

Section Number 14-00347-01-PW

	Section Number 14-00347-01-PW
	Route FAU 6585/6641
1.	Proposal of R. A. Cullinan & Son, a Division of United Contractors Midwest, Inc.
	for the improvement of the above section by the construction of
	a total distance of <u>5262.00</u> feet, of which a distance of <u>5262.00</u> feet, (1.000 miles) are to be improved.
2.	The plans for the proposed work are those prepared by Maurer-Stutz, Inc.; 3116 N. Dries Ln; Ste 100; Peoria
	and approved by the Department of Transportation on N/A
3.	The specifications referred to herein are those prepared by the Department of Transportation and designated as "Standard Specifications for Road and Bridge Construction" and the "Supplemental Specifications and Recurring Special Provisions" thereto, adopted and in effect on the date of invitation for bids.
4.	The undersigned agrees to accept, as part of the contract, the applicable Special Provisions indicated on the "Check Sheet for Recurring Special Provisions" contained in this proposal.
5.	The undersigned agrees to complete the work within 100 working days or by unless additional time is granted in accordance with the specifications.
6.	A proposal guaranty in the proper amount, as specified in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals, will be required. Bid Bonds will be allowed as a proposal guaranty. Accompanying this proposal is either a bid bond if allowed, on Department form BLR 12230 or a proposal guaranty check, complying with the specifications, made payable to:
	Treasurer of
	The amount of the check is (a bid bond) ().
7.	In the event that one proposal guaranty check is intended to cover two or more proposals, the amount must be equal to the sum of the proposal guaranties, which would be required for each individual proposal. If the proposal guaranty check is placed in another proposal, it will be found in the proposal for: Section Number
8.	The successful bidder at the time of execution of the contract will be required to deposit a contract bond for the full amount of the award. When a contract bond is not required, the proposal guaranty check will be held in lieu thereof. If this proposal is accepted and the undersigned fails to execute a contract and contract bond as required, it is hereby agreed that the Bid Bond or check shall be forfeited to the Awarding Authority.
9.	Each pay item should have a unit price and a total price. If no total price is shown or if there is a discrepancy between the product of the unit price multiplied by the quantity, the unit price shall govern. If a unit price is omitted, the total price will be divided by the quantity in order to establish a unit price.
10.	A bid will be declared unacceptable if neither a unit price nor a total price is shown.
11.	The undersigned submits herewith the schedule of prices on BLR 12200a covering the work to be performed under this contract.
12.	The undersigned further agrees that if awarded the contract for the sections contained in the combinations on

specified in the Schedule for Multiple Bids below.

BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid

CONTEXCTOR NUMBER

1284

CONTRACTOR NAME

R.A. Cullinan & Son, a Division of UCM, Inc.

ITEM NUMBER

CONTRACT NUMBER

Allen Road / Alta Road Intersection Improvement

\$4,142,896.80

NOTES:

1. Each PAY ITEM should have a UNIT PRICE and TOTAL PRICE.

2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.

3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.

4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

ADDITIONAL NOTES WHICH APPLY FOR THE COMPUTER GENERATED (IDOTCBID) SCHEDULE OF PRICES:

- 5. Pay item numbers (PIN), descriptions, unit of measure (U of M), quantities, and Department supplied unit prices MUST BE CORRECT and CORRESPOND to the latest schedule of prices issued by the Department or the bid may be declared UNACCEPTABLE.
- 6. Insert this computer generated schedule of prices into the bidding proposal directly in front of the Department issued schedule of prices.

1284

\$2,480.63

CONTRACTOR NAME====> R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)======> Peoria

SECTION=======> 14-00347-01-PW

LETTING DATE====> April 01, 2015

ITEM NUMBER=====>

	• • • • • • • • • • • • • • • • • • •						
Allen F	Road / Alta F <====CONTRACT NUMBER		TOTAL QUANTITY 178,220.650	PAY I	TEMS 136	TOTAL	BID \$4,142,896.80
PIN	PAY ITEM DESCRIPTION	U OF M	QUANTITY	Х	UNIT PRICE	=	TOTAL PRICE
20100110	TREE REMOV 6-15	UNIT	36.000		30.45		\$1,096.20
20100210	TREE REMOV OVER 15	UNIT	60.000		35.70		\$2,142.00
20200100	EARTH EXCAVATION	CU Y	11,690.000		14.88		\$173,947.20
20201200	REM & DISP UNS MATL	CU Y	98.000		24.15		\$2,366.70
20700220	POROUS GRAN EMBANK	CU Y	435.000		83.57		\$36,352.95
20800150	TRENCH BACKFILL	CU Y	1,243.000		21.00		\$26,103.00
21001000	GEOTECH FAB F/GR STAB	SQ Y	1,647.000		1.57		\$2,585.79
21101615	TOPSOIL F & P 4	SQ Y	16,359.000		3.33		\$54,475.47
21101695	TOPSOIL F & P 30	SQ Y	896.000		18.35		\$16,441.60
25000200	SEEDING, CLASS 2	ACRE	3.500		1,181.25		\$4,134.38
25000300	SEEDING, CLASS 3	ACRE	0.250		5,250.00		\$1,312.50
25000400	NITROGEN FERT NUTR	POUN	315.000		1.58		\$497.70
25000500	PHOSPHORUS FERT NUTR	POUN	315.000		1.58		\$497.70
25000600	POTASSIUM FERT NUTR	POUN	315.000		1.58		\$497.70
25100115	MULCH, METHOD 2	ACRE	3.500		708.75		\$2,480.63

BLANK PRICES

0

<====CONTRACTOR NUMBER

R.A. Cullinan & Son, a Division of UCM, Inc.

CONTRACTOR NAME===> COUNTY(IES)=====>

Peoria

SECTION=======>

14-00347-01-PW

LETTING DATE====>

Allen Road / Alta F <====CONTRACT NUMBER

April 01, 2015

ITEM NUMBER=====>

BLANK PRICES 0

PAY ITEMS

\$4,142,896.80

Allen F	Road / Alta F <====CONTRACT NUMBER		TOTAL QUANTITY 178,220.650	PAY ITE	EMS 136	TOTAL	BID \$4,142,	,896.8
PIN	PAY ITEM DESCRIPTION	UOFM	QUANTITY	X	UNIT PRICE	=	TOTAL PRICE	
25100635	HD EROS CONTR BLANKET	SQ Y	265.000		3.41		\$903.6	4
25100900	TURF REINFORCEMENT MAT	SQ Y	143.000		7.88		\$1,126.8	
28000250	TEMP EROS CONTR SEED	POUN	3,380.000		1.46		\$4,934.8	
28000305	TEMPORARY DITCH CHECKS	FOOT	430.000		14.05		\$6,041.5	
28000400	PERIMETER EROS BAR	FOOT	2,701.000		2.78		\$7,508.7	
28000500	INLET & PIPE PROTECT	EACH	48.000		139.91		\$6,715.6	
28000510	INLET FILTERS	EACH	33.000		352.04		\$11,617.3	
28100107	STONE RIPRAP, CLASS A4	SQ Y	41.000		89.25		\$3,659.2	
28100111	STONE RIPRAP, CLASS A6	SQ Y	256.000		126.00		\$32,256.0	
28200200	FILTER FABRIC	SQ Y	317.000		4.73		\$1,499.4	
30300001	AGG SUBGRADE IMPROVE	CU Y	1,104.000		46.54		\$51,380.1	
30300106	AGG SUBGRADE IMPR 6	SQ Y	3,664.000		13.75		\$50,380.0	
30300112	AGG SUBGRADE IMPR 12	SQ Y	20,002.000		15.87		\$317,431.7	
35100900	AGG BASE CSE A 10	SQ Y	227.000		17.37		\$3,942.9	
40200500	AGG SURF CSE A 6	SQ Y	185.000		22.45		\$4,153.2	

1284

<====CONTRACTOR NUMBER

CONTRACTOR NAME====> R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)=====> Peoria

SECTION=======> 14-00347-01-PW

LETTING DATE=====> April 01, 2015

ITEM NUMBER======> BLANK PRICES 0

Allen R	oad / Alta F <====CONTRACT NUMBER		TOTAL QUANTITY 178,220.650	PAY IT	EMS 136	TOTA	L BID \$4,142,896.80
PIN	PAY ITEM DESCRIPTION	U OF M	QUANTITY	Х	UNIT PRICE	=	TOTAL PRICE
40201000	AGGREGATE-TEMP ACCESS	TON	495.000		0.01		\$4.95
40600275	BIT MATLS PR CT	POUN	8,084.000		1.37		\$11,075.08
40600990	TEMPORARY RAMP	SQ Y	593.000		17.74		\$10,519.82
40603305	HMA SC "C" N30	TON	615.000		137.58		\$84,611.70
42000301	PCC PVT 8 JOINTED	SQ Y	14,540.000		57.86		\$841,284.40
42300400	PCC DRIVEWAY PAVT 8	SQ Y	141.000		73.80		\$10,405.80
42400100	PC CONC SIDEWALK 4	SQ F	6,026.000		6.03		\$36,336.78
42400300	PC CONC SIDEWALK 6	SQ F	3,071.000		6.64		\$20,391.44
42400800	DETECTABLE WARNINGS	SQ F	400.000		40.72		\$16,288.00
44000100	PAVEMENT REMOVAL	SQ Y	11,410.000		10.27		\$117,180.70
44000200	DRIVE PAVEMENT REM	SQ Y	278.000		14.24		\$3,958.72
44000500	COMB CURB GUTTER REM	FOOT	728.000		8.73		\$6,355.44
44004000	PAVED DITCH REMOVAL	FOOT	14.000		20.21		\$282.94
48100700	AGGREGATE SHLDS A 8	SQ Y	236.000		28.47		\$6,718.92
48300100	PCC SHOULDERS 6	SQ Y	61.000		67.63		\$4,125.43

<====CONTRACTOR NUMBER

R.A. Cullinan & Son, a Division of UCM, Inc.

TOTAL QUANTITY

CONTRACTOR NAME====>
COUNTY(IES)=======>

Peoria

SECTION=======>

14-00347-01-PW

LETTING DATE====>

April 01, 2015

ITEM NUMBER=====>

Allen Road / Alta F <====CONTRACT NUMBER

BLANK PRICES 0

PAY ITEMS 1

136 TOTAL BID

\$4,142,896.80

			178,220.650				ψ ,, , , , , , , , , , , , , , , , , ,
PIN	PAY ITEM DESCRIPTION	U OF M	QUANTITY	X	UNIT PRICE	=	TOTAL PRICE
50105220	PIPE CULVERT REMOVAL	FOOT	788.000		19.16		\$15,098.08
50102400	CONCRETE REMOVAL	CU Y	2.100		892.50		\$1,874.25
50104400	CONC HDWL REM	EACH	1.000		2,993.03		\$2,993.03
0500405	F & E STRUCT STEEL	POUN	7,790.000		8.14		\$63,410.60
50800105	REINFORCEMENT BARS	POUN	17,770.000		1.47		\$26,121.90
51500100	NAME PLATES	EACH	1.000		525.00		\$525.00
54002020	EXPANSION BOLTS 3/4 INCH	EACH	58.000		26.25		\$1,522.50
54001001	BOX CUL END SEC C1	EACH	1.000		27,300.00		\$27,300.00
⁻ 4003000	CONCRETE BOX CULVERTS	CU Y	125.300		892.50		\$111,830.25
54011006	PCBC 10X6	FOOT	24.000		1,260.00		\$30,240.00
54213657	PRC FLAR END SEC 12	EACH	3.000 -		702.45		\$2,107.35
54213660	PRC FLAR END SEC 15	EACH	1.000		774.90		\$774.90
F4213675	PRC FLAR END SEC 30	EACH	1.000		1,384.95		\$1,384.95
54213681	PRC FLAR END SEC 36	EACH	1.000		1,601.25		\$1,601.25
4248510	CONCRETE COLLAR	CU Y	7.400		1,102.50		\$8,158.50



<====CONTRACTOR NUMBER

CONTRACTOR NAME====>

R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)======>

Peoria

SECTION======>>

14-00347-01-PW

LETTING DATE====>

April 01, 2015

ITEM NUMBER=====>

BLANK PRICES 0

Allen Road / Alta F <====CONTRACT NUMBER

TOTAL QUANTITY PAY ITEMS 136 TOTAL BID \$4,142,896.80

•		178,220.650				,
PAY ITEM DESCRIPTION	U OF M	QUANTITY	X	UNIT PRICE	=	TOTAL PRICE
WETAL END SECTIONS 15"	EACH	6.000		209.48		\$1,256.88
P CUL CL C 1 15	FOOT	205.000		45.41		\$9,309.05
STORM SEW CL A 1 12	FOOT	1,254.000		47.25		\$59,251.50
STORM SEW CL A 1 15	FOOT	369.000		51.45		\$18,985.05
STORM SEW CL A 1 24	FOOT	224.000		74.55		\$16,699.20
STORM SEW CL A 1 30	FOOT	161.000		95.55		\$15,383.55
STORM SEW CL A 3 36	FOOT	498.000		100.54		\$50,068.92
STORM SEWER REM 12	FOOT	45.000		23.10		\$1,039.50
WATER VALVES ADJUST	EACH	8.000		311.85		\$2,494.80
WAN TA 4 DIA T1F CL	EACH	1.000		2,215.50		\$2,215.50
WAN TA 5 DIA T1F CL	EACH	3.000		2,852.85		\$8,558.55
INLETS TO BE ADJUSTED	EACH	1.000		897.75		\$897.75
REMOVING INLETS	EACH	1.000		850.50		\$850.50
CLASS SI CONC OUTLET	CU Y	7.600		1,000.19		\$7,601,44
COMB CC & G, TB6.18	FOOT	458.000		34.05		\$15,594.90
	METAL END SECTIONS 15" P CUL CL C 1 15 STORM SEW CL A 1 12 STORM SEW CL A 1 15 STORM SEW CL A 1 24 STORM SEW CL A 1 30 STORM SEW CL A 3 36 STORM SEW CL A 3 36 STORM SEWER REM 12 WATER VALVES ADJUST WAN TA 4 DIA T1F CL WAN TA 5 DIA T1F CL INLETS TO BE ADJUSTED REMOVING INLETS CLASS SI CONC OUTLET	METAL END SECTIONS 15" P CUL CL C 1 15 FOOT STORM SEW CL A 1 12 FOOT STORM SEW CL A 1 15 FOOT STORM SEW CL A 1 24 FOOT STORM SEW CL A 1 30 FOOT STORM SEW CL A 3 36 FOOT STORM SEW CL A 3 36 FOOT WATER VALVES ADJUST WAN TA 4 DIA T1F CL WAN TA 5 DIA T1F CL EACH INLETS TO BE ADJUSTED REMOVING INLETS CLASS SI CONC OUTLET EACH CU Y	PAY ITEM DESCRIPTION U OF M QUANTITY IMETAL END SECTIONS 15" EACH 6.000 P CUL CL C 1 15 FOOT 205.000 STORM SEW CL A 1 12 FOOT 1,254.000 STORM SEW CL A 1 15 FOOT 369.000 STORM SEW CL A 1 24 FOOT 224.000 STORM SEW CL A 1 30 FOOT 161.000 STORM SEW CL A 3 36 FOOT 498.000 STORM SEWER REM 12 FOOT 45.000 WATER VALVES ADJUST EACH 1.000 IVIAN TA 4 DIA T1F CL EACH 1.000 IVIAN TA 5 DIA T1F CL EACH 1.000 INLETS TO BE ADJUSTED EACH 1.000 REMOVING INLETS EACH 1.000 CLASS SI CONC OUTLET CU Y 7.600	PAY ITEM DESCRIPTION U OF M QUANTITY X WIETAL END SECTIONS 15" EACH 6.000 P CUL CL C 1 15 FOOT 205.000 STORM SEW CL A 1 12 FOOT 1,254.000 STORM SEW CL A 1 15 FOOT 369.000 STORM SEW CL A 1 24 FOOT 224.000 STORM SEW CL A 3 30 FOOT 498.000 STORM SEW CL A 3 36 FOOT 45.000 STORM SEWER REM 12 FOOT 45.000 WATER VALVES ADJUST EACH 1.000 IVIAN TA 4 DIA T1F CL EACH 1.000 IVIAN TA 5 DIA T1F CL EACH 1.000 INLETS TO BE ADJUSTED EACH 1.000 REMOVING INLETS EACH 1.000 CLASS SI CONC OUTLET CU Y 7.600	PAY ITEM DESCRIPTION U OF M QUANTITY X UNIT PRICE IMETAL END SECTIONS 15" EACH 6.000 209.48 P CUL CL C 1 15 FOOT 205.000 45.41 STORM SEW CL A 1 12 FOOT 1,254.000 47.25 STORM SEW CL A 1 15 FOOT 369.000 51.45 STORM SEW CL A 1 24 FOOT 224.000 74.55 STORM SEW CL A 3 30 FOOT 161.000 95.55 STORM SEW CL A 3 36 FOOT 498.000 100.54 STORM SEWER REM 12 FOOT 45.000 23.10 WATER VALVES ADJUST EACH 1.000 2,215.50 IVIAN TA 4 DIA TIF CL EACH 1.000 2,852.85 INLETS TO BE ADJUSTED EACH 1.000 897.75 REMOVING INLETS EACH 1.000 850.50 CLASS SI CONC OUTLET CU Y 7.600 1,000.19	PAY ITEM DESCRIPTION U OF M QUANTITY X UNIT PRICE = IMETAL END SECTIONS 15" EACH 6.000 209.48 P CUL CL C 1 15 FOOT 205.000 45.41 STORM SEW CL A 1 12 FOOT 1,254.000 47.25 STORM SEW CL A 1 15 FOOT 369.000 51.45 STORM SEW CL A 1 24 FOOT 224.000 74.55 STORM SEW CL A 1 30 FOOT 161.000 95.55 STORM SEW CL A 3 36 FOOT 498.000 100.54 STORM SEWER REM 12 FOOT 45.000 23.10 WATER VALVES ADJUST EACH 1.000 2,215.50 IVIAN TA 5 DIA T1F CL EACH 1.000 2,852.85 INLETS TO BE ADJUSTED EACH 1.000 897.75 REMOVING INLETS EACH 1.000 850.50 CLASS SI CONC OUTLET CU Y 7.600 1,000.19

PIN

XX008872

Z0004522

Z0013798

Z0022800

Z0046304

Z0054400

Z0055905

Z0056648

Z0056650

Z0056672

Z0056678

Z0068200

<====CONTRACTOR NUMBER

R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)=====>

Peoria

SECTION=======>

CONTRACTOR NAME====>

14-00347-01-PW

LETTING DATE====>

April 01, 2015

EACH

ITEM NUMBER=====>>

BLANK PRICES 0

Allen Road / Alta F <====CONTRACT NUMBER

SLR-PWR PED CSS COMP

CONSTRUCTION LAYOUT

P UNDR FOR STRUCT 4

TEMP CONSTR FENCE

HMA DRIVEWAY PVT 6

FENCE REMOVAL

SS 1 WAT MN 12

SS 1 WAT MN 15

SS 2 WAT MN 24

SS 2 WAT MN 36

TIE RODS, 1 1/2"

STEEL CASINGS 30"

DRVWY PVMNT SPL PERM

GRADING & SHAPING SPL

ROCK FILL

PAY ITEM DESCRIPTION

TOTAL QUANTITY PAY ITEMS 136 **TOTAL BID** \$4,142,896.80 178,220.650 U OF M Χ TOTAL PRICE QUANTITY **UNIT PRICE** = **EACH** 1.000 \$74,907.00 74,907.00 SQ Y 24.000 76.68 \$1,840.32 41,737.50 L SU 1.000 \$41,737.50 **FOOT** 249.000 14.11 \$3,513.39 **FOOT** 225.000 40.59 \$9,132.75 CU Y 368.000 65.10 \$23,956.80 **FOOT** 1,411.000 4.61 \$6,504.71 63.000 51.98 \$3,274.74 **FOOT FOOT** 125.000 68.25 \$8,531.25 92.000 106.05 \$9,756.60 **FOOT** 238.000 177.45 \$42,233.10 **FOOT FOOT** 40.000 250.95 \$10,038.00 86.000 97.65 \$8,397.90 SQ Y SQ Y 143.000 8.78 \$1,255.54

1,575.00

\$31,500.00

20.000

CONTRACTOR NAME====>

R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)=====>

Peoria

SECTION=======>

14-00347-01-PW

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April 01, 2015

ITEM NUMBER=====>

TOTAL QUANTITY PAY ITEMS

BLANK PRICES

0

136

Allen Road / Alta F <====CONTRACT NUMBER

178 220 650

TOTAL BID

\$4,142,896.80

			178,220.650				
PIN	PAY ITEM DESCRIPTION	U OF M	QUANTITY	X	UNIT PRICE	=	TOTAL PRICE
60605000	COMB CC & G TB6.24	FOOT	7,949.000		26.72		\$212,397.28
60608582	COMB CC & G TM4.24	FOOT	289.000		39.94		\$11,542.66
60618390	CONC MED SUR CORR	SQ F	2,580.000		11.57		\$29,850.60
61100500	EXPLOR TRENCH 52	FOOT	102.000		19.61		\$2,000.22
63200310	GUARDRAIL REMOVAL	FOOT	349.000		5.42		\$1,891.58
64100120	SIGHT SCRN (WF) TP 8	FOOT	204.000		53.50		\$10,914.00
66600105	FUR ERECT ROW MARKERS	EACH	15.000		231.32		\$3,469.80
67100100	MOBILIZATION	L SU	1.000		195,001.00		\$195,001.00
81028350	UNDRGRD C PVC 2	FOOT	1,529.000		5.47		\$8,363.63
81400100	HANDHOLE	EACH	10.000		1,324.59		\$13,245.90
82500360	LT CONT BASEM 480V100	EACH	1.000		6,189.75		\$6,189.75
83600300	LIGHT POLE FDN 30D	FOOT	72.000		147.04		\$10,586.88
C20154G5	S-JUNIP VIRG BM 5G	EACH	36.000		56.70		\$2,041.20
K0012990	P PL ORNAMENT T GAL P	UNIT	3,400.000		13.39		\$45,526.00
K0012992	P PL ORNAMENT T 2G P	UNIT	55.000		29.93		\$1,646.15

PIN

K1005481

X0321837

X0323265

X0323443

X0326304

X0326407

X0327301

X2810112

X4200409

X5121800

X6020065

X6021065

X6021824

X6021825

X6021844

<====CONTRACTOR NUMBER

CONTRACTOR NAME====> R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)=====> Peoria

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SECTION=======>

14-00347-01-PW

LETTING DATE=====>

April 01, 2015

ITEM NUMBER=====>

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Allen Road / Alta F	<====CONTRA	CT NUMBER

PAY ITEM DESCRIPTION

SHREDDED BARK MULCH 3"

REMOVE EXISTING RIPRAP

WOOD GATE ASSEMBL SPL

STONE RIPRAP CL A6 SP

PERM STEEL SHT PILING

INLETS, TYPE G-1, SPECIAL

INLETS TG-1 DBL SPL

INL-MN G-1 4D SPL

INL-MN G-1 5D SPL

INL-MN G-1 4D DBL SPL

RELOCATE EXISTING MAILBOX

REMOVE SHEET PILING

PREC MOD RET WALL

SCOURSTOP

PCC PVT 9 SPL

	TOTAL QUANTITY 178,220.650	PAY ITEN	/IS 136	TOTA	L BID	\$4,142,896.80
U OF M	QUANTITY	X	UNIT PRICE	=	тот	AL PRICE
SQ Y	966.000		3.41		***	\$3,294.06
L SU	1.000		9,450.00			\$9,450.00
SQ Y	243.000		23.10			\$5,613.30
SQ F	921.000		35.70			\$32,879.70
EACH	50.000		446.25			\$22,312.50
EACH	1.000		955.11			\$955.11
EACH	5.000		220.93			\$1,104.65
SQ Y	20.000		241.50			\$4,830.00
SQ Y	305.000		145.17			\$44,276.85
SQ F	8,155.000		44.10			\$359,635.50
EACH	4.000		4,340.77			\$17,363.08
EACH	9.000		3,158.38			\$28,425.42
EACH	1.000		3,645.68			\$3,645.68
EACH	2.000		4,130.79			\$8,261.58
EACH	2.000		5,239.59			\$10,479.18

BLANK PRICES

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<====CONTRACTOR NUMBER

CONTRACTOR NAME====> R.A

R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)======>

Peoria

SECTION=======>

14-00347-01-PW

LETTING DATE=====>

April 01, 2015

ITEM NUMBER=====>

BLANK PRICES

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Allen Road / Alta F <====CONTRACT NUMBER TOTAL QUANTITY PAY ITEMS 136 TOTAL BID \$4,142,896.80 178,220,650

			170,220.000				
PIN	PAY ITEM DESCRIPTION	U OF M	QUANTITY	X	UNIT PRICE	=	TOTAL PRICE
X6021845	INL-MN G-1 5D DBL SPL	EACH	4.000		6,538.42		\$26,153.68
X6022230	MAN TA 4 DIA SPL F&G	EACH	1.000		1,908.90		\$1,908.90
X6023508	INLETS TA W/SPL F&G	EACH	3.000		909.30		\$2,727.90
X6024502	INLETS TB W/SPL F&G	EACH	4.000		1,525.65		\$6,102.60
X6061310	CONC MEDIAN SURF 4 SP	SQ F	2,471.000		11.00		\$27,181.00
X7010216	TRAF CONT & PROT SPL	L SU	1.000		9,329.44		\$9,329.44
X8040102	ELECT SERV INSTALL SP	EACH	1.000		3,719.65		\$3,719.65
XX001249	ORNAMENTAL FENCE	FOOT	392.000		59.34		\$23,261.28
XX003120	YARD HYDRANT (FP)	EACH	1.000		850.50		\$850.50
XX003614	REC (GFI) WEATHER CVR	EACH	1.000		1,781.14		\$1,781.14
XX005721	WATER METER ADJUSTED	EACH	3.000		162.75		\$488.25
XX007039	ST LIGHT ASSEM COM F1	EACH	9.000		11,045.60		\$99,410.40
XX007040	ST LIGHT ASSEM COMP F2	EACII	1.000		12,400.67		\$12,400.67
XX007041	ST LIGHT ASSEM COM F3	EACH	2.000		10,924.24		\$21,848.48
XX007585	EC C XLP 2C#6 1C#6 GR	FOOT	2,237.000		3.47		\$7,762.39
							. ,

1284

PIN



<====CONTRACTOR NUMBER

CONTRACTOR NAME====>

R.A. Cullinan & Son, a Division of UCM, Inc.

COUNTY(IES)=====>

Peoria

SECTION======>

14-00347-01-PW

LETTING DATE====>

April 01, 2015

EACH

ITEM NUMBER====>>

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TOTAL QUANTITY 178,220.650 BLANK PRICES
PAY ITEMS

136 TOTAL BID

\$4,142,896.80

Allen Road / Alta F <====CONTRACT NUMBER

PAY ITEM DESCRIPTION

U OF M

QUANTITY

7.000

X UNIT PRICE

1,575.00

TOTAL PRICE

\$11,025.00

PREC ENER DISSIPATORS





County Peoria
Local Public Agency City of Peoria
Section 14-00347-01-PW
Route FAU 6585/6641

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)

				L i.b.	T = + 1.1
Item No.	Items	Unit	Quantity	Unit Price	Total
	TREE REMOV 6-15	UNIT	36		
	TREE REMOV OVER 15	UNIT	60		
20200100	EARTH EXCAVATION	CU YD	11690		
20201200	REM & DISP UNS MATL	CU YD	98		
20700220	POROUS GRAN EMBANK	ÇU YD	435		
20800150	TRENCH BACKFILL	CU YD	1243		
21001000	GEOTECH FAB F/GR STAB	SQ YD	1647		
21101615	TOPSOIL F & P 4	SQ YD	16359		
21101695	TOPSOIL F & P 30	SQ YD	896		
25000200	SEEDING, CLASS 2	ACRE	3.5		
25000300	SEEDING, CLASS 3	ACRE	0.25		
25000400	NITROGEN FERT NUTR	POUND	315		
25000500	PHOSPHORUS FERT NUTR	POUND	315		
25000600	POTASSIUM FERT NUTR	POUND	315		
25100115	MULCH, METHOD 2	ACRE	3.5		
	HD EROS CONTR BLANKET	SQ YD	265		
25100900	TURF REINFORCEMENT MAT	SQ YD	143		
28000250	TEMP EROS CONTR SEED	POUND	3380		
28000305	TEMPORARY DITCH CHECKS	FOOT	430		
28000400	PERIMETER EROS BAR	FOOT	2701		
28000500	INLET & PIPE PROTECT	EACH	48		
	INLET FILTERS	EACH	33		
1	STONE RIPRAP, CLASS A4	SQ YD	41		
	STONE RIPRAP, CLASS A6	SQ YD	256		
	FILTER FABRIC	SQ YD	317		
	AGG SUBGRADE IMPROVE	CU YD	1104		

Item No. Items	Unit	Quantity	Unit Price	Total
30300106 AGG SUBGRADE IMPR 6	SQ YD	3664		
30300112 AGG SUBGRADE IMPR 12	SQ YD	20002		
35100900 AGG BASE CSE A 10	SQ YD	227		
40200500 AGG SURF CSE A 6	SQ YD	185		
40201000 AGGREGATE-TEMP ACCESS	TON	495		
40600275 BIT MATLS PR CT	POUND	8084		
40600990 TEMPORARY RAMP	SQ YD	593		
40603305 HMA SC "C" N30	TON	615		
42000301 PCC PVT 8 JOINTED	SQ YD	14540		
42300400 PCC DRIVEWAY PAVT 8	SQ YD	141		
42400100 PC CONC SIDEWALK 4	SQ FT	6026		
42400300 PC CONC SIDEWALK 6	SQ FT	3071		
42400800 DETECTABLE WARNINGS	SQ FT	400		
44000100 PAVEMENT REMOVAL	SQ YD	11410		
44000200 DRIVE PAVEMENT REM	SQ YD	278		
44000500 COMB CURB GUTTER REM	FOOT	728		
44004000 PAVED DITCH REMOVAL	FOOT	14		
48100700 AGGREGATE SHLDS A 8	SQ YD	236		
48300100 PCC SHOULDERS 6	SQ YD	61		
50105220 PIPE CULVERT REMOVAL	FOOT	788		
50102400 CONCRETE REMOVAL	CUYD	2.1		
D104400 CONC HDWL REM	EACH	1		
50500405 F & E STRUCT STEEL	POUND	7790		
50800105 REINFORCEMENT BARS	POUND	17770		
51500100 NAME PLATES	EACH	1		
54002020 EXPANSION BOLTS 3/4 INCH	EACH	58		
54001001 BOX CUL END SEC C1	EACH	1		
54003000 CONCRETE BOX CULVERTS	CUYD	125.3		
54011006 PCBC 10X6	FOOT	24		
54213657 PRC FLAR END SEC 12	EACH	3		
54213660 PRC FLAR END SEC 15	EACH	1		
54213675 PRC FLAR END SEC 30	EACH	1		
54213681 PRC FLAR END SEC 36	EACH	1 7.4		
54248510 CONCRETE COLLAR	CU YD	7.4		
54215550 METAL END SECTIONS 15"	EACH	6		
542C0220 P CUL CL C 1 15	FOOT	205		
550A0050 STORM SEW CL A 1 12	FOOT	1254		
550A0070 STORM SEW CL A 1 15	FOOT	369		
550A0120 STORM SEW CL A 1 24	FOOT	224		
550A0140 STORM SEW CL A 1 30	FOOT	161		
550A0750 STORM SEW CL A 3 36	FOOT	498 45		
55100500 STORM SEWER REM 12 56109210 WATER VALVES ADJUST	EACH	8		
0218400 MAN TA 4 DIA T1F CL	EACH	1		
0218400 MAN TA 4 DIA TTF CL	EACH	3		
60260100 INLETS TO BE ADJUSTED	EACH	1		
PONTON INTELS TO BE ADJUSTED	EAUT	1		

Item No.	Items	Unit	Quantity	Unit Price	Total	
60500060	REMOVING INLETS	EACH	1			
60600095	CLASS SI CONC OUTLET	CU YD	7.6			
60604400	COMB CC & G, TB6.18	FOOT	458			
60605000	COMB CC & G TB6.24	FOOT	7949			
60608582	COMB CC & G TM4.24	FOOT	289			
60618390	CONC MED SUR CORR	SQ FT	2580			
61100500	EXPLOR TRENCH 52	FOOT	102			
63200310	GUARDRAIL REMOVAL	FOOT	349			
64100120	SIGHT SCRN (WF) TP 8	FOOT	204			
66600105	FUR ERECT ROW MARKERS	EACH	15			
67100100	MOBILIZATION	LSUM	1			
81028350	UNDRGRD C PVC 2	FOOT	1529			
81400100	HANDHOLE	EACH	10			
82500360	LT CONT BASEM 480V100	EACH	1			
83600300	LIGHT POLE FDN 30D	FOOT	72			
87800200	CONC FDN TY D	FOOT	3			
C20154G5	S-JUNIP VIRG BM 5G	EACH	36			
K0012990	P PL ORNAMENT T GAL P	UNIT	3400			
K0012992	P PL ORNAMENT T 2G P	UNIT	55			
K1005481	SHREDDED BARK MULCH 3"	SQ YD	966			
X0321837	REMOVE SHEET PILING	LSUM	1			
X0323265	REMOVE EXISTING RIPRAP	SQ YD	243			
X0323443	PREC MOD RET WALL	SQ FT	921			
X0326304	SCOURSTOP	EACH	50			
X0326407	WOOD GATE ASSEMBL SPL	EACH	1			
X0327301	RELOCATE EXISTING MAILBOX	EACH	5			
X2810112	STONE RIPRAP CL A6 SP	SQ YD	20			
X4200408	PCC PVT 8 SPL	SQ YD	305			
X5121800	PERM STEEL SHT PILING	SQ FT	8155			
X6020065	INLETS TG-1 DBL SPL	EACH	4			
X6021065	INLETS, TYPE G-1, SPECIAL	EACH	9			
X6021824	INL-MN G-1 4D SPL	EACH	1			
X6021825	INL-MN G-1 5D SPL	EACH	2			
X6021844	INL-MN G-1 4D DBL SPL	EACH	2			
X6021845	INL-MN G-1 5D DBL SPL	EACH	4			
X6022230	MAN TA 4 DIA SPL F&G	EACH	1			
X6023508	INLETS TA W/SPL F&G	EACH	3			
X6024502	INLETS TB W/SPL F&G	EACH	4			
X6061310	CONC MEDIAN SURF 4 SP	SQ FT	2471			
X7010216	TRAF CONT & PROT SPL	L SUM	1			
	ELECT SERV INSTALL SP	EACH	1			
	ORNAMENTAL FENCE	FOOT	392			
	YARD HYDRANT (FP)	EACH	1			
	REC (GFI) WEATHER CVR	EACH	1			
	WATER METER ADJUSTED	EACH	3			-
	ST LIGHT ASSEM COM F1	EACH	9			

item No.	Items	Unit	Quantity	Unit Price	Total
XX007040	ST LIGHT ASSEM COMP F2	EACH	1		
XX007041	ST LIGHT ASSEM COM F3	EACH	2		
XX007585	EC C XLP 2C#6 1C#6 GR	FOOT	2237		
XX008872	SLR-PWR PED CSS COMP	EACH	1		
Z0004522	HMA DRIVEWAY PVT 6	SQ YD	24		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		
Z0022800	FENCE REMOVAL	FOOT	249		
Z0046304	P UNDR FOR STRUCT 4	FOOT	225		
Z0054400	ROCK FILL	CU YD	368		
Z0055905	TEMP CONSTR FENCE	FOOT	1411		
Z0056648	SS 1 WAT MN 12	FOOT	63		
Z0056650	SS 1 WAT MN 15	FOOT	125		
Z0056672	SS 2 WAT MN 24	FOOT	92		
Z0056678	SS 2 WAT MN 36	FOOT	238		
Z0068200	STEEL CASINGS 30"	FOOT	40		
	DRVWY PVMNT SPL PERM	SQ YD	86		
	GRADING & SHAPING SPL	SQ YD	143		
	TIE RODS, 1 1/2"	EACH	20		
	PREC ENER DISSIPATORS	EACH	7		



CONTRACTOR CERTIFICATIONS

County	Peoria	
Local Public Agency	City of Peoria	4
Section Number	14-00347-01-PW	
Route	FAU 6585/6641	

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 Deliquency.** 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. **Bid-Rigging or Bid 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 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.

U

BLR 12200 (01/08/14)

	County	Peoria
SIGNATURES	Local Public Agency	City of Peoria
OIGHAT GIVE	Section Number	14-00347-01-PW
	Route	FAU 6585/6641
If an individual)		
Signature of Bidder _		
D. vivosa Address		
Business Address _		
-		
f a partnership)		
Firm Name _		
6. 15		
Signed By _		
Rusines Address		
Dusiliess Address _		
) .		
Inset Names and Addressed of All Partners		
If a corporation)		
	R.A. Cullinan & Sor	, a Diy. of UCM, Inc.
Signed By _	Toweld .	Towell
D : A11	Vice P	esident
	121 W. Park St., P.	O. Box 166
-	Tremont, IL 61568	
Insert Names of Officers Secretary Treasurer		
Insert Names of Officers Secretary Treasurer	James P. Bruner Alan D. Cullinan Kenton W. Day	m Acknowla



Local Agency Proposal Bid Bond

(V) of Tr	ansport	ation		Route	Allen Rd: Alta Rd Intersection Improvement Rt.FAU 658566
	•				Peoria
		RETU	RN WITH BID	Local Agency	City of Peoria
				Section	14-00347-01-PW
			PAPER BID BOND		
WE	R.A. (Cullinan & Son, /	A Division of United Contr	actors Midwest, Inc.	as PRINCIPAL,
		Terrelon Con	ualty & Surety Company o	f America	as SURETY,
e amount specified in the	nd firmly bound ur	nto the above Loc	al Agency (hereafter referr	ed to as "LA") in the penal sur	n of 5% of the total bid price, or for sum. We bind ourselves, our heirs,
WHEREAS THE CO rough its awarding author	NDITION OF THE	FOREGOING O	BLIGATION IS SUCH that, t k designated as the above	the said PRINCIPAL is submitti section.	ng a written proposal to the LA acting
nall within fifteen (15) days	s after award ente	er into a formal co provided in the "	intract, furnish surety quara	anteeing the faithful performan or Road and Bridge Construc	signated section and the PRINCIPAL ce of the work, and furnish evidence tion" and applicable Supplemental
IN THE EVENT the receding paragraph, then the all court costs, all attor	LA acting through	gh its awarding a	uthority shall immediately	nal contract in compliance with be entitled to recover the full	any requirements as set forth in the penal sum set out above, together
IN TESTIMONY WI respective officers this _	HEREOF, the sai	d PRINCIPAL ar day of	nd the said SURETY have April 2015	caused this instrument to be	signed by their
			PRINCIPAL		
R.A. Cullinan & Son, A		d Contractors M	lidwest, Inc.	(O	
(CC	ompany Name	- 10	, _	(Company Name	
By:	inature & Title)	well	By:	(Signature & Title	
Ron	ald L. Rowell, Vi	ce President			//)/
(IF PRINCIPAL is a	joint venture of tv	vo or more contro	actors, the company name	s, and authorized signatures	of each contract must be affixed.)
				// -	
			SURETY	A TELL	
Travelers Casualty & Su		f America	By:	(Signature of Attorne)	(in Edit)
•	Name of Surety)				•
STATE OF ILLINOIS, COUNTY OF	Tazewell			Patrick J. Taphon	n, Attorney-in-Fact
				Alice O DESCRIPTION	* #
l,	Amy	E. Ries		, a Notary Public in and for sa	id county,
do hereby certify that		(Insert names of it	Ronald L. Rowell a ndividuals signing on behalf of	nd Patrick J. Taphorn PRINCIPAL and SURETY)	
who are each personally	known to me to	ha the same ner	sons whose names are su	bscribed to the foregoing instr	ument on behalf of PRINCIPAL and
SURETY, appeared before voluntary act for the use	ore me this day ir	n person and aç	knowledged respectively,	that they signed and delivere	d said instruments as their free and
Given	under my hand				5
My commission exp	oires		NOTARY PUBLIC - STATE MY COMMIGSION EXPIR) [ary Public)
			ELECTRONIC BID BON		
The Principal may sur an electronic bid bond the Principal and Sure	bmit an electro ID code and by ety are firmly bo e contractors,	nic bid bond, it is signing below the L	e checked by LA if election lieu of completing the the Principal is ensuring A under the conditions	ctronic bid bond is allow the above section of the Property of the identified electronic loof the bid bond as shown a	ed) oposal Bid Form. By providing bid bond has been executed and above. (If PRINCIPAL is a joint d date must be affixed for each
COMMISSION IN THE VEHI		 -		(Company/Riddor Namo)	
	1 1 1	!!!	· ·	(Company/Bidder Name)	

(Signature and Title)

Page 1 of 1 Printed on 5/25/2006 8:51:20 AM

Electronic Bid Bond ID Code

Date



POWER OF ATTORNEY

Farmington Casualty Company Fidelity and Guaranty Insurance Company Fidelity and Guaranty Insurance Underwriters, Inc. St. Paul Fire and Marine Insurance Company St. Paul Guardian Insurance Company

St. Paul Mercury Insurance Company Travelers Casualty and Surety Company Travelers Casualty and Surety Company of America United States Fidelity and Guaranty Company

Attorney-In Fact No.

226368

Certificate No. 005978124

KNOW ALL MEN BY THESE PRESENTS: That Farmington Casualty Company, St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company are corporations duly organized under the laws of the State of Connecticut, that Fidelity and Guaranty Insurance Company is a corporation duly organized under the laws of the State of Iowa, and that Fidelity and Guaranty Insurance Underwriters, Inc., is a corporation duly organized under the laws of the State of Wisconsin (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint

Afton Booth, Patrick J. Ta	phorn, and Kathy Better	ridge					
of the City of Pekin each in their separate capacity in	f more than one is named a	State of bove, to sign,	execute, seal and	acknowledge any	and all bonds, rec	ognizances, condit	ful Attomey(s)-in-Fact, ional undertakings and
other writings obligatory in the contracts and executing or guara	nature thereof on behalf c	or the Compar kings required	nes in their busin d or permitted in a	ess of guaranteein	g the fidelity of p	ersons, guaranteei oy law.	ng the performance of
IN WITNESS WHEREOF, the	e Companies have caused to 2014.	his instrumen	t to be signed and	their corporate sea	als to be hereto af	fixed, this	10th
	Farmington Casualty Fidelity and Guaranty Fidelity and Guaranty St. Paul Fire and Mar St. Paul Guardian Ins	Insurance C Insurance U ine Insurance	Inderwriters, Inc e Company	Trav . Trav	velers Casualty a velers Casualty a	surance Company nd Surety Compa nd Surety Compa y and Guaranty (any any of America
1982 0 1977	MCORPORATED SE	FIRE	SEAL S	SEAL S	HARTFORD, ON LAND OF THE PROPERTY OF THE PROPE	HARTOGO E CONN. C	SI WOODSHIED EN 1896
State of Connecticut City of Hartford ss.				Ву:	Robert L. Rane	y, Senior Vice Presid	ent
On this the 10th be the Senior Vice President of F Fire and Marine Insurance Comp Casualty and Surety Company of instrument for the purposes there	pany, St. Paul Guardian Ins f America, and United Stat	surance Comp tes Fidelity ar	and Guaranty Insu any, St. Paul Merc Id Guaranty Comp	rance Company, France Cor cury Insurance Cor cany, and that he.	idelity and Guarar mpany, Travelers (as such, being aut	ity Insurance Unde Casualty and Suret	v Company Travelers
n Witness Whereof, I hereunto My Commission expires the 30th		eal.	TETRE DIANA		Man	in C. J	<u>itreault</u>



WARNING: THIS POWER OF ATTORNEY IS INVALID WITHOUT THE RED BORDER

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behavior of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, Kevin E. Hughes, the undersigned, Assistant Secretary, of Farmington Casualty Company, Fidelity and Guaranty Insurance Company, Fidelity and Guaranty Insurance Underwriters, Inc., St. Paul Fire and Marine Insurance Company, St. Paul Guardian Insurance Company, St. Paul Mercury Insurance Company, Travelers Casualty and Surety Company, Travelers Casualty and Surety Company of America, and United States Fidelity and Guaranty Company do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which is in full force and effect and has not been revoked.



















To verify the authenticity of this Power of Attorney, call 1-800-421-3880 or contact us at www.travelersbond.com. Please refer to the Attorney-In-Fact number, the above-named individuals and the details of the bond to which the power is attached.



Apprenticeship or Training Program Certification

		Route	FAU 6585/6641		
	Return with Bid	County	Peoria		
		Local Agency	City of Peoria		
		Section	14-00347-01-PW		
All d	contractors are required to complete	the following certificati	ion:		
⊠F	or this contract proposal or for all groups in	this deliver and install propo	osal.		
□ Fo	or the following deliver and install groups in	this material proposal:			
requi appro requi (1) ap (2) ap	oproved by and registered with the United S	st responsive and responsib ther responsibility factors, the ors to disclose participation States Department of Labor'	ole bidder. The award decision is subject to		
1.	Except as provided in paragraph IV belowindividual or as part of a group program, type of work or craft that the bidder will provided the statement of the stat	in an approved apprentices	certifies that it is a participant, either as an ship or training program applicable to each ees.		
II.	submitted for approval either (A) is, at th	e time of such bid, participa ommencement of performa	v subcontract that each of its subcontractors ating in an approved, applicable apprenticeship note of work pursuant to this contract, establish licable to the work of the subcontract.		
III.	sponsor holding the Certificate of Regist participant and that will be performed with	ration for all of the types of th the bidder's employees. ed as subcontract work. The	Types of work or craft that will be e list shall also indicate any type of work or		
	See Attached				

IV.	Except for any work identified above, any bidder or s contract or deliver and install proposal solely by indivendent whom the payment of prevailing rates of wages wou owner/operator workforce and positions of ownership	vidual owne ld be requir	ers, partners or members and not by employees 🚁
certification and shallisted. Certification and any applications	quirements of this certification and disclosure are a mation provision to be included in all approved subcontral make certain that each type of work or craft job cate. The Department at any time before or after award mate of Registration issued by the United States Depart or all of its subcontractors. In order to fulfill the particle program sponsor be currently taking or that it will the performance of the work of this contract or deliver	acts. The taggory that was require the ment of Lacipation recall the ment of t	pidder is responsible for making a complete report will be utilized on the project is accounted for and the production of a copy of each applicable bor evidencing such participation by the contractor quirement, it shall not be necessary that any ations for apprenticeship, training or employment
Bidder:	P.O. Box 166, 121 W. Park St.	By: Title:	(Signature) Vice President



P.O. Box 166 Tremont, IL 61568 Ph: (309) 925-2711 Fax: (309) 925-7131

RE: Certificate of Registration for Apprenticeship and Training Programs

R. A. Cullinan & Son; Illinois Valley Paving; Freesen; Rowe Construction; Gunther Construction; Gunther Underground: State Highway Construction Corp., Inc.; and River City Supply, Inc. are Companies and Divisions of United Contractors Midwest, Inc. participating in one or more of the following Apprenticeship and Training Programs:

- 1) Apprenticeship & Skill Improvement Local 150 Operating Engineers
- Operating Engineers Local 318 Joint Apprenticeship and Training Program
- 3) Operating Engineers Local 520 Apprenticeship Program
- 4) Operating Engineers Local 649 Apprenticeship Fund
- 5) IUOE Local 841 Apprenticeship & Training
- 6) Local 965 Operating Engineer Improvement Committee for Central Illinois
- 7) Illinois Laborers' and Contractor's Training Trust Fund
- 8) Mid-Central Illinois Dist. Council of Carpenters Joint Apprenticeship Training Committee

Local 16	Local 183	Local 347	Local 742
Local 44	Local 189	Local 644	Local 904
Local 63	Local 269	Local 725	Local 1051

- 9) Southern Illinois Dist. Council of Carpenters Joint Apprenticeship Training Committee
- 10) Operative Plasterers and Cement Mason #143 Joint Apprenticeship Training Committee
- 11) Operative Plasterers and Cement Mason #18 Joint Apprenticeship Training Committee
- 12) Operative Plasterers and Cement Mason #539 Joint Apprenticeship Training Committee
- 13) Peoria Ironworkers Joint Apprenticeship Committee
- 14) Bridge, Structural, Ornamental & Reinforcing Ironworkers Local Union No. 112
- 15) Ironworkers Local 48 Joint Apprenticeship Committee Program
- 16) Teamsters Joint Council No. 25 Apprenticeship Program

UCM SUBCONTRACTED WORK TYPE LISTED PER PARAGRAPH "K"

Pavement Striping Bridge Cleaning & Painting Electrical Lime Stabilization Construction Layout Material Testing Engineering Demolition

Environmental Traffic Control Hydro Demolition Asbestos Removal Drilled Shafts Underground Utilities

Dredging. Landscaping

Hazardous Waste Removal Waterproof Membrane System Guardrail & Fence Reflective Crack Control Treatment Saw & Sealing Joints Wall Tieback System

Hauling

(Revised 012413)



ORG. 5/08 REV 3/11

M/WBE PARTICIPATION WAIVER REQUEST

PRIME CONTRACTOR	PROJECT
Name:	Name:
Address:	
Phone:	
Contact Person:	
with non-M/WBEs or self-perform all work for the	BE participation goals on the above named project and subcontract following reason(s). The firm further affirms that the stated reasons id not misleading: (CHECK ALL THAT APPLY. SPECIFIC SUBMITTED WHERE INDICATED.)
1 No MBEs/WBEs responded to our invitation	n to bid.
2. No subcontracting opportunities exist. (Atta	ch explanation)
3. The award of subcontract(s) is impracticable	e. (Attach explanation)
SIGNED: (Company Official)	DATE:
FOR	OFFICE USE ONLY
APPROVED DISA	APPROVED
REVIEWED BY	DATE



CITY OF PEORIA SUBCONTRACTOR UTILIZATION STATEMENT

Section II				
PRIME CONTRACTOR R.A. CUI	LINAN & SON		PROJECT	
A DIV. OF UNITED CON	NTRACTORS MII 6 121 W. PARK S		λτ <i>Δ</i>	11/ 1/4 ~ 4 ~ 0
TREMON	, IL 61568-0166		Name:	t Value: \$ 4, 142 896.862
Address:			Total Contrac	et Value: 8 4, 142 896.86
Phone: 309-174-43	43			·
Contact Person: Kevin w	alkur			
Email: Kevin. Walker	QUCH. B.	12		
Ownership Status: MBE	WBE	M/WBE 1	Non-M/WBE	X
			_	
Section III: Selected Subcontracto	ams.			
Subcontractor Name	MBE,	Amount	% of	Same of World
	WBE or	1 minount	Total	Scope of Work
	Non		Contract	
	M/WBE			
Aurdel esons	Non HWBE		.7 %.	Tree Remove
J.C. Dillon Central IL Consulting	Non MWBE	\$ 381,602.00	9%	Storm Sewer
Central IL Consulting	WBt	8 39,750, €	170	Lay out
CJL	WBE	8 96,150.00 \$ 7,890.00	2 7.	Seeding Permeable Pavex
Midwest Const Serv	WBE	\$ 7,890.00	. 27.	Traffic Cantrol
Beer Bros	NOW W MBE	824,154.00	.590	Pot Segline
Hohulin Fence	Non WMBI	\$ 32,544.0	1770	Ornamenta / Fence
OTALS If more than seven firms are utilized		\$ 579,174.00		
ection IV: Subcontractors that su				
Subcontractor Name		Scope of Wo	rk Bid	Denial Reason
			···	·



For Office Use Only Reviewed by:

CITY OF PEORIA SUBCONTRACTOR UTILIZATION STATEMENT

Section I (select all that apply) MBE/WBE Subcontractor(s) w Non MBE/WBE Subcontractor				
Name: A DIV. OF UNITED COM	121 W. PARX S , IL 61568-0166 (43 hur B) 40 M. A	81. 812		Len Alta Intersection Impo : Value: \$\f\ 4, 142, 896. 80
Section III: Selected Subcontractor	'S			
Subcontractor Name	MBE, WBE or Non M/WBE	Amount	% of Total Contract	Scope of Work
Alexander Bros	MIBE	\$ 277000.00	4.770	Trucking
Laser Electric .	, , , , , , , , , , , , , , , , , , ,	\$ 78,400,00	1.870	DRE Electric Supply
Laser Electric		\$ 194.57.00		Lighting
Ordaz Construction	WBE	\$ 78. 489.00	1,970	Priveways & Sidewalks
Pavidson Const. Supply	4) BE	\$ 60,407.0	1,490	Put ACL-ssories
Aupperle Const !!		\$ 65,000.00	1,570	Stamped Concrete
Flw Lawn Care		\$ 36, 580,00	. 870	beginsented Block Will
TOTALS		\$ 792 1.43.0	1970	
*If more than seven firms are utilized, Section IV: Subcontractors that sub				only)
Subcontractor Name		Scope of Wo	rk Bid	Denial Reason,
Millenia Professione	1500	Layout		404 Competetive
*If more than seven firms submitted qu	intes please co	ny the form and a	ttach the additi	onal information

Section V: Subcontractors Contacted (M/WBE Only)

Subcontractor Name	Method of Contact	Contact Outcome
Alexande Bros	phone	Recieval quot e
Ordaz Ourstruction	E. Meil	Recieved quote
Central IL Consulting	E-Mail	Recievedquote
CJL	E-Mail	Recieved agotie
Midwest Const Serv	£-M4;)	Recieved quota
Millemine Prof Serv	E-Mal	Recievedante
1,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>U</i>	NEC'E DEL GUI

^{*}If more than seven firms were contacted, please copy the form and attach the additional information.

Section VI

The City of Peoria is committed to promoting equal opportunity and has established the following subcontractor utilization goals for city funded construction projects: 10% MBE and 5% WBE. Prime Contractors have an obligation to make a good faith effort to advance the city's commitment to increase diversity among the firms working on city construction projects.

This form must be completed and submitted with bid proposals. ALL subcontractors intended for use on this project shall be listed in Section III above; along with the total amount to be paid to the subcontractors; percentage of total contract; and scope of work. If for whatever reason the prime contractor has to utilize a subcontractor not listed above, they must submit a Notification of Change in Participation.

The undersigned certifies that the information included herein is true and correct; the subcontractors listed above have agreed to perform the scope of work described. The undersigned further certifies that it has no controlling, dominating or conflict of interest in any of the listed subcontractors.

Signature of Prime Contractor

<u>4///5</u>

Org.: May 2008 Revised: Feb. 2011



ADDENDUM NO. 1 CITY OF PEORIA Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW March 26, 2015 Letting: April 1, 2015 at 11:00 AM

RE: <u>Addendum No. 1</u> for Bid Package, Allen Road/Alta Road (FAU 6585/6641), Section 14-00347-01-PW, Peoria, IL

The pre-bid meeting minutes, pre-bid meeting attendee record, and plan holders list is enclosed with this Addendum. A revised BLR 12200a-Schedule of Prices in Microsoft Office Excel format is also available for download as part of this Addendum.

The following shall be considered part of the Contract Documents for the subject project and shall apply to all construction there under:

REVISED BID DOCUMENT (Issued with this Addendum):

- 1) Part 1 Proposal Items Page 1 Cross out item e. under Part 4 BLR 12326: Affidavit of Illinois Business Office. This form is not required to be included in the contractor's bid package.
- 2) Part 1 Proposal Items Page 6 Delete pay item 87800200 CONC FDN TY D.
- 3) Part 1 Proposal Items Page 6 Change pay item X4200408 PCC PVT 8 SPL to X4200409 PCC PVT 9 SPL.
- 4) Part 3 Special Provisions Page 34 Change title of special provision Portland Cement Concrete Pavement 8", Special to Portland Cement Concrete Pavement 9", Special.
- 5) Part 3 Special Provisions Page 35 Change the last sentence of the third paragraph to state, "The cost of mock-up slab samples, coloring, stamping, sawing and sealing joints will not be paid for separately but shall be included in the contract unit price per square yard for PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL and no additional compensation will be allowed."
- 6) Plan Sheet 4 Delete pay item number 87800200 CONCRETE FOUNDATION, TYPE D. This pay item is included in the cost of pay item 82500360 LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP per Section 825 of the Standard Specifications.



- 7) Plan Sheet 5 Change pay item X4200408 PORTLAND CEMENT CONCRETE PAVEMENT 8", SPECIAL to pay item X4200409 PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL.
- 8) Plan Sheet 10 Delete schedule of quantity for pay item 87800200 CONCRETE FOUNDATION, TYPE D.
- 9) Plan Sheet 10 Change schedule of quantity pay item number X4200408 PORTLAND CEMENT CONCRETE 8", SPECIAL to pay item number X4200409 PORTLAND CEMENT CONCRETE 9", SPECIAL.
- 10) Plan Sheet 18 Proposed Roundabout Typical Section Sta. 75+00.00 to Sta. 79+58.65. Change call out PORTLAND CONCRETE CEMENT PAVEMENT 8", (SPECIAL) (TYP.) to PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL (TYP.).
- 11) Plan Sheet 33 Change call out PORTLAND CEMENT CONCRETE PAVEMENT 8", (SPECIAL) to PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL.
- 12) <u>Plan Sheet 33</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item CONCRETE FOUNDATION, TYPE A Quantity from 39 Feet to 51 Feet.
- 13) <u>Plan Sheet 33</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item PEDESTRIAN ACTIVATED CROSSWALK WARNING SYSTEM Quantity 3 Each to 4 Each.
- 14) <u>Plan Sheet 33</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item TRAFFIC SIGNAL POST, BLACK POWDER COATED, 13 FEET Quantity 13 Each to 17 Each.
- 15) <u>Plan Sheet 33</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item PEDESTRIAN PUSH BUTTON POST Quantity 6 Each to 8 Each.
- 16) <u>Plan Sheet 35</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item CONCRETE FOUNDATION, TYPE A Quantity from 18 Feet to 6 Feet.
- 17) <u>Plan Sheet 35</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item PEDESTRIAN ACTIVATED CROSSWALK WARNING SYSTEM Quantity 2 Each to 1 Each.
- 18) <u>Plan Sheet 35</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item TRAFFIC SIGNAL POST, BLACK POWDER COATED, 13 FEET Quantity 6 Each to 2 Each.



- 19) <u>Plan Sheet 35</u> Revise Solar Powered Pedestrian Crossing Signal System Complete Bill of Materials Item PEDESTRIAN PUSH BUTTON POST Quantity 4 Each to 2 Each.
- 20) Plan Sheet 67 Change call out PCC PAVEMENT 8", (SPECIAL) to PCC PAVEMENT 9", SPECIAL.

Bidders shall acknowledge receipt of this addendum by inserting its number on Bid Form. Failure to do so may subject Bidder to Disqualification.

This Addendum consists of eighteen (18) pages.

Sincerely,

Scott D. Reeise, P.E., City Engineer



3116 N. Dries Lane, Suite 100 Peoria, IL 61604

TEL 309-693-7615 FAX 309-693-7616 PROJECT: Allen Rd/Alta Rd Intersection Improvement

PROJECT NO.: 23714005

BY: JDS

TO:

Addendum No. 1

MEMORANDUM

() Telephone Conversation

SUBJECT: Pre-Bid Meeting

- (X) Meeting Discussion
- () Decision Made
- () Response Requested
- () Information

NOTES:

A pre-bid meeting for the Allen Road and Alta Road Intersection Improvement project was held on March 25, 2015 in the City of Peoria Public Works Department's large conference room at 11:00 AM. Please see the attached meeting attendance record and plan holders list for the Allen Road and Alta Road Intersection Improvement project.

Jane Gerdes opened the meeting with a couple of general remarks regarding the schedule of the project and the desire of the City to place this project and several others on the agenda for the April 14th council meeting.

Dave Watkins then discussed critical items regarding EEO compliance. Mr. Watkins stated all forms should be completed fully so the review process of contractor's bid is not slowed. Mr. Watkins stated in the past the subcontractor utilization form has not always been complete. Mr. Watkins also stated that if any prime contractors are not using any subcontractors the subcontractor waiver form should be completely filled out including the reason or reasons why no subcontractors are not used.

Jane Gerdes then reminded all in attendance that a current EEO certification needed to be on file with the City and encouraged those in attendance to begin the renewal process now if their certification has expired.

Jeff Spiller then explained several questions he has received from various contractors regarding the plans. Jeff explained that an addendum would be issued on Thursday, March 26 for the following items.

- Pay Item No. 87800200 Concrete Foundation, Type D will be removed from the contract plans as this item is included in pay item 82500360 Lighting Controller, Base Mounted, 480Volt, 100AMP per Section 825 of the Standard Specifications.

-Pay Item No. X4200408 Portland Cement Concrete Pavement, 8" Special will be changed to pay item X4200409 Portland Cement Concrete Pavement, 9" Special to obtain a nominal pavement thickness of 8" after the pavement is stamped with the cobble stone pattern required by the special provisions.

Jeff then clarified the special provision for pay item X4200409 Portland Cement Concrete Pavement, 9" Special Jeff stated the intent of the special provision is to have the final finish of the cobble stone pattern appear to be grouted. There is no requirements for physically routing and grouting the joints between the cobble stones. Jeff also stated that BLR form 12326 Affidivait of Illinois Business Office is not required with the contractor's bid and will not disqualify a contractor's bid if this form is not included. Jane thanked everyone for attending and adjorned the meeting.

M ■ M A U R E R - S T U T Z

EUGINEERS SURVEYORS

SUBJECT				
	SUBJECT:			

ALLEN RS/ALTA RS INTERSECTION IMPROVEMENT PRE-BIS MEETING ATTENDANCE BECORD

MARCH 25, 2015

PEURN PUBLIC WORKS

NAME
Jeff Spiller
Ryan Mattes
Adom Watson
JEREMY LIVENHOUS
Gene Grebner
Mark Horst
Mike FEHE
Mike Snyden
Mandy Modsery
Jame Gerdes
Scott Reebe
Steve Letsky

BEPRESENTING

Macrer-Stutz

Oberlander Electric

OTTO BAUM COMPANY, INC.

STARK EXMUNITABLE MC.

R.A. Cullings / Son CUCM)

R.A. Cullings / UCM

T.Z. CIVI

LUSCH ELECTRIC INC.

MPS

POP

11

E-MAIL

Aspiller & mstutz. Cir

contes@ oberlander electric.com

estimating @ otlobaum.com

jivengaxdesturkcompanies.com

gene.grebner DucM. Liz

mark. horst @ ucm. biz

Mtehr & ILCINIZ. GX

mile. Snyder elaserelectric me-con

mmoderry @mps-il.com



Plan Holders List ALLEN ROAD AND ALTA ROAD INTERSECTION IMPROVEMENT PROJECT

11:00 a.m. Wednesday APRIL 1 2015 Engineer's Estimate: \$3,727,568.26

updated: 03/26/15 10:15 am

	Company Name	Contact Name	E-mail	Office Phone	Cell Phone	Fax
1	Stark Companies	Makenzi Peyton	mpayton@starkcompanies.com	309- 828-5034 EXT. 263		829-3897
2	Central Illinois Plan Room		plans@ciplanroom.com	217-679-1077		217-544-6570
3	Oberlander Electric	Chris Nelson	cnelson@oberlanderelectric.com	694-1468		699-9108
4	R.A. Cullinan and Son	Tom Wall	tom.wall@ucm.biz	925-2721	309-212-7403	925-7131
5	Illinois Civil Contractors, Inc	Sally Lowe	slowe@ilcivil.com	309-694-4224		309-694-5676
6	Millennia Professional Services	Rod Weaver	rweaver@mps-il.com	309-321-8141	309-303-1945	309-321-8142
7	Laser Electric, Inc.	Michael Snyder	mike.snyder@laserelectricinc.com	309-693-2400		(309)676-7732
8	Illinois Civil Contractors, Inc.	Michael L. Fehr	mfehr@ilcivil.com	309-694-4224	309-208-7281	309-694-5676
9	Bodine Electric of Decatur	Contact: Duane Turner	jday@BodineMail.com	217-420-4260		
10	BidTool	Jeremie Fletcher	plans@bidtool.net	512-634-5985		630-214-3924
11	iSqFt	Nefertiti Brady	nbrady@isqft.com	800-364-2059 x 7172		866-570-8187
12	Landscape Architects	Terry Miller	tmiller@fwlawncare.com	309-664-2666		309)662-6264
13	RA Cullinan/UCM	Troy Saunders	troy.saunders@ucm.biz		309-657-7878	925-7131
14	Otto Baum Company, Inc	Terri Tesdall	territesdall@ottobaum.com	309-266-7114	Direct 309-284-1721	
15	Klingner & Assoc PC	LeAnn Esters	lesters@klingner.com	309-342-4042		309-341-3781
16	Buddy's Grounds Maint., Inc.	Dexter Davis	dexterdavis2@aol.com	309-824-9211		
17	Midwest Construction Products	Craig Bergman	cbergman@midwestconstruct.com	Office: 217-744-3394	Cell: 217-280-0331	Fax: 217-744-3395
18	CityLink	Joe Alexander	jalexander@ridecitylink.org			
19	PA Atherton Construction	John Rudd	j.rudd83@yahoo.com	309-822-8575	309-208-5142	309-822-8782
20	Advanced Electric	Janice Oatman	advelec@aol.com	Ph: 647-4463		FAX: 647-4458
21	Hoerr Construction Inc	David Steffen	dsteffen@hoerr.com	309-691-6653	309-303-4258	309-691-6739
22	CJL Landscaping	Dan Kelch; Lindsey; Jamie Doering	irdoering@att.net; sodbusterman@sbcglobal.net	309-691-9200	309-696-6686	
23	PA Atherton Construction	Tim Gillette	tgillette@mediacombb.net	309-822-8575		309-822-8782
24	Millennia Professional Services	Mandy Mooberry	mmooberry@mps-il.com	309-321-8141	309-208-0620	309-321-8142
25	Win Aupperle & Sons	Bill Aupperle	bill@aupperle.com	266-7460	(309) 303-1821	263-2223
26	RA Cullinan/UCM	Mark Horst	marxmail@gmail.com	925-2721	309-696-0509	925-7131
27	Graybar Electric Co. Outside Sales	Randy Stookey	Randy.Stookey@graybar.com		309-265-8181	

Note: Several interested residents and the homeowners' Associations in the area of the project have been given access to these plans & specs.



County	Peoria
Local Public Agency	City of Peoria
Section Number	14-00347-01-PW
Route	FAU 6585/6641

NOTICE TO BIDDERS	Local P	ublic Agency	City of	f Peoria
NOTICE TO BIDDERS	Sec	ction Number	14-003	347-01-PW
		Route	FAU 6	5585/6641
Sealed proposals for the improvement described below will be recei	ved at the off	ice of the C	ity Engi	neer,
Public Works Facility; 3505 N. Dries Lane; Peoria, IL 61604	until	11:00 AM	on	April 1, 2015
Address		Time		Date
Sealed proposals will be opened and read publicly at the office of	the City Engi	neer		
Public Works Facility; 3505 N. Dries Lane; Peoria, IL 61604	at	11:00 AM	on _	April 1, 2015
Address		Time		Date
DESCRIPTION O	F WORK			
Name Allen Road/ Alta Road Intersection Improvement	Leng	gth: 5262.	.00 fee	et (1.0 miles)
Location Intersection of Allen Road and Alta Road in the City of Peoria	1			, <u>———</u>
Proposed Improvement Construction of a single lane modern roun	ndabout consi	sting of earth	work, tw	o culvert extensions,
HMA multi-use path, concrete sidewalk, street lighting, landscaping,	and other co	llateral work t	o compl	lete the project.
Plans and proposal forms will be available in the office ofthe C	City of Peoria,	Public Works I	Fac.; 350	5 N. Dries Ln
Peoria, IL 61604, by calling 309-494-8800 to req. electronic	information or	by emailing p	wdropbo	x@peoriagov.org
Addres	s			

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.

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
- 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.

Item No.	Items	Unit	Quantity	Unit Price	Total
60500060	REMOVING INLETS	EACH	1		
60600095	CLASS SI CONC OUTLET	CU YD	7.6		
60604400	COMB CC & G, TB6.18	FOOT	458		
60605000	COMB CC & G TB6.24	FOOT	7949		
60608582	COMB CC & G TM4.24	FOOT	289		
60618390	CONC MED SUR CORR	SQ FT	2580		
61100500	EXPLOR TRENCH 52	FOOT	102		
63200310	GUARDRAIL REMOVAL	FOOT	349		
64100120	SIGHT SCRN (WF) TP 8	FOOT	204		
66600105	FUR ERECT ROW MARKERS	EACH	15		
67100100	MOBILIZATION	LSUM	1		
81028350	UNDRGRD C PVC 2	FOOT	1529		
81400100	HANDHOLE	EACH	10		
82500360	LT CONT BASEM 480V100	EACH	1		
83600300	LIGHT POLE FDN 30D	FOOT	72		
C20154G5	S-JUNIP VIRG BM 5G	EACH	36		
K0012990	P PL ORNAMENT T GAL P	UNIT	3400		
K0012992	P PL ORNAMENT T 2G P	UNIT	55		
K1005481	SHREDDED BARK MULCH 3"	SQ YD	966		
X0321837	REMOVE SHEET PILING	LSUM	1		
X0323265	REMOVE EXISTING RIPRAP	SQ YD	243		
X0323443	PREC MOD RET WALL	SQ FT	921		
	SCOURSTOP	EACH	50		
	WOOD GATE ASSEMBL SPL	EACH	1		
X0327301	RELOCATE EXISTING MAILBOX	EACH	5		
X2810112	STONE RIPRAP CL A6 SP	SQ YD	20		
X4200409	PCC PVT 9 SPL	SQ YD	305		
X5121800	PERM STEEL SHT PILING	SQ FT	8155		
X6020065	INLETS TG-1 DBL SPL	EACH	4		
	INLETS, TYPE G-1, SPECIAL	EACH	9		
X6021824	INL-MN G-1 4D SPL	EACH	1		
	INL-MN G-1 5D SPL	EACH	2		
	INL-MN G-1 4D DBL SPL	EACH	2		
X6021845	INL-MN G-1 5D DBL SPL	EACH	4		
X6022230	MAN TA 4 DIA SPL F&G	EACH	1		
	INLETS TA W/SPL F&G	EACH	3		
	INLETS TB W/SPL F&G	EACH	4		
	CONC MEDIAN SURF 4 SP	SQ FT	2471		
	TRAF CONT & PROT SPL	LSUM	1		
	ELECT SERV INSTALL SP	EACH	1		
	ORNAMENTAL FENCE	FOOT	392		
	YARD HYDRANT (FP)	EACH	1		
	REC (GFI) WEATHER CVR	EACH	1		
	WATER METER ADJUSTED	EACH	3		
	ST LIGHT ASSEM COM F1	EACH	9		

City of Peoria Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW Peoria County

The grout shall consist of a mixture of Portland Cement, sand, 5/8 inch (maximum size) pea gravel and water so proportioned and mixed to provide readily workable slurry with a slump within a range of 3 to 6 inches. A stiffer mix or other measures may be required for steeper slope application. The hardened grout shall have a minimum compressive strength of 3,500 pounds per square inch at 28 days.

Method of Measurement: This work will be measured in place for payment, and the area computed in square yards. Riprap placed outside the specified limits shown on the plan or approved by the Engineer will not be paid for, and the Engineer may require the Contractor to remove and dispose of the excess riprap and grout at the Contractor's expense.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per square yard for STONE RIPRAP, of the class (stone quality and gradation) specified (SPECIAL). The price shall include all items including excavation, stone, grout, dewatering, and labor necessary to complete the work.

PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL

<u>Description:</u> This work shall consist of constructing a Portland cement concrete pavement for the truck apron at the central island per the dimensions shown in the plans and according to Section 420 of the Standard Specifications with the following requirements:

<u>Submittals:</u> The Contractor shall construct and finish a mock-up slab sample (approximate area equivalent to 6'x6') for review and approval by the Engineer prior to construction. The mock-up slab shall represent the final work in material and finish and shall be constructed under similar job site conditions including radial layout. If the mock-up slab sample is denied by the Engineer, the Contractor will be required to repeat the mock-up sample process until approved by the Engineer. The mock-up slab shall remain in place until the final work is completed and accepted by the Engineer. Upon completion of the work, the Contractor shall remove and dispose of the mock-up slab.

<u>Color Requirements:</u> The Portland Cement concrete pavement shall be integrally colored using Dry Pigment Ready Mix Color No. 417 – Brick Red as produced by Solomon Colors, 4050 Color Plant Road, Springfield, Illinois 62702, or approved equal.

It shall be the responsibility of the Contractor to protect the adjacent concrete items from any discoloration as a result of contact with the coloring agent.

Final Finish: The final finish of the concrete pavement shall be stamped with a cobble stone pattern as approved by the Engineer. The individual cobble stone sizes shall

City of Peoria Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW Peoria County

range from approximately 6"x4" to 6"x10" and all joints shall have a grouted appearance.

The concrete pavement shall be cured using a membrane curing compound for integrally colored concrete. The curing compound shall be a transparent type such as "Kure-N-Seal" as manufactured by ChemRex Inc. or approved equal.

<u>Transverse Contraction Joints:</u> Sawed transverse contraction joints shall be placed at locations shown on the plans in accordance with Standard 420001 and as directed by the Engineer. The joints shall extend across the proposed pavements and curb and gutters.

<u>Expansion Joints:</u> All expansion joints adjacent or in the concrete pavement shall be cleaned and sealed with Sonneborn, Type SL-1 or NP-1, Color - Redwood Tan (Red) or approved equal.

Measurement and Payment: This work will be measured and paid for in accordance with Articles 420.19 and 420.20 of the Standard Specifications with the following exceptions. The cost of mock-up slab samples, coloring, stamping, sawing and sealing joints will not be paid for separately but shall be included in the contract unit price per square yard for PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL and no additional compensation will be allowed.

PERMANENT STEEL SHEET PILING (LRFD)

Effective: January 31, 2012 Revised: August 17, 2012

<u>Description:</u> This work shall consist of furnishing and installing the permanent sheet piling to the limits and tolerances shown on the plans according to Section 512 of the Standard Specifications.

<u>Material</u>: The sheet piling shall be made of steel and shall be new material. Unless otherwise specified the sheeting shall have a minimum yield strength of 50 ksi (345 MPa) according to ASTM A 572. The sheeting shall be identifiable and free of bends and other structural defects. The Contractor shall furnish a copy of the published sheet pile section properties to the Engineer for verification purposes. The Engineer's approval will be required prior to driving any sheeting. All driven sheeting not approved by the Engineer shall be removed at the Contractor's expense.

The Contractor shall furnish a sheet pile section, to be used for each wall section, with a published section modulus and a published moment of inertia equal to or larger than that specified on the plans.

The selection of the sheet pile section shall not relieve the Contractor of the responsibility to satisfy all details including minimum clearances, cover, reinforcement,

			CONSTR. CODE
			ROADWAY 0028
ITEM CODE	ITEM	UNIT	TOTAL QUANTITY
50102400	CONCRETE REMOVAL	CUYD	2.1
50104400	CONCRETE HEADWALL REMOVAL	EACH	1
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	7790
50800105	REINFORCEMENT BARS	POUND	17770
51500100	NAME PLATES	EACH	1
54002020	EXPANSION BOLTS 3/4 INCH	EACH	58
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	1
54003000	CONCRETE BOX CULVERTS	CUYD	125.3
54011006	PRECAST CONCRETE BOX CULVERTS 10'X 6'	FOOT	24
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	3
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1
54213675	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 30"	EACH	1
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	1
54248510	CONCRETE COLLAR	CU YD	7.4
54215550	METAL END SECTIONS 15"	EACH	6
542C0220	PIPE CULVERTS, CLASS C, TYPE 1 15"	FOOT	205
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	1254
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	369
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	224
550A0140	STORM SEWERS, CLASS A, TYPE 1 30"	FOOT	161
550A0750	STORM SEWERS, CLASS A, TYPE 3 36"	FOOT	498
55100500	STORM SEWER REMOVAL 12"	FOOT	45
56109210	WATER VALVES TO BE ADJUSTED	EACH	8

			CONSTR. CODE
			ROADWAY 0028
ITEM CODE	ITEM	UNIT	TOTAL QUANTITY
60218400	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1
60221100	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	3
60260100	INLETS TO BE ADJUSTED	EACH	1
60500060	REMOVING INLETS	EACH	1
60600095	CLASS SI CONCRETE (OUTLET)	CUYD	7.6
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	458
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	7949
60608582	COMBINATION CONCRETE CURB AND GUTTER, TYPE M-4.24	FOOT	289
60618390	CONCRETE MEDIAN SURFACE, CORRUGATED	SQFT	2580
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	102
63200310	GUARDRAIL REMOVAL	FOOT	349
64100120	SIGHT SCREEN (WOODEN FENCE), TYPE P 8'	FOOT	204
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	15
67100100	MOBILIZATION	L SUM	1
81028350	UNDERGROUND CONDUIT, PVC, 2" DIA.	FOOT	1529
81400100	HANDHOLE	EACH	10
82500360	LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP	EACH	1
83600300	LIGHT POLE FOUNDATION, 30" DIAMETER	FOOT	72
· ·	······································	~~~	~~~
C20154G5	SHRUB, JUNIPERUS VIRGINIANA BLUE MOUNTAIN, (BLUE MOUNTAIN JUNIPER), 5-GALLON	EACH	36
K0012990	PERENNIAL PLANTS, ORNAMENTAL TYPE, GALLON POT	UNIT	3400
K0012992	PERENNIAL PLANTS, ORNAMENTAL TYPE, 2-GALLON POT	UNIT	55
K1005481	SHREDDED BARK MULCH 3"	SO YD	966

	USER NAME = wilewis	DESIGNED -	REVISED - 3/26/15 JDS
MAURER-STUTZ		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 '/ in.	CHECKED -	REVISED -
	PLOT DATE = 3/24/2015 3:13:17 PM	DATE -	REVISED -



CITY OF PEORIA

			CONSTR
		•	ROADWA' 0028
ITEM CODE	ITEM	UNIT	TOTAL QUANTIT
X0321837	REMOVE SHEET PILING	L SUM	1
X0323265	REMOVE EXISTING RIPRAP	SQ YD	243
X0323443	PRECAST MODULAR RETAINING WALL	SQFT	921
X0326304	SCOURSTOP	EACH	50
X0326407	WOOD GATE ASSEMBLY SPECIAL	EACH	1
X0327301	RELOCATE EXISTING MAILBOX	EACH	5
X2810112	STONE RIPRAP, CLASS A6 (SPECIAL)	SQYD	20
X4200409	PORTLAND CEMENT CONCRETE PAVEMENT 9", SPECIAL	SQ YD	305
X5121800	PERMANENT STEEL SHEET PILING	SQFT	8155
X6020065	INLETS, TYPE G-1, DOUBLE (SPECIAL)	EACH	4
X6021065	INLETS, TYPE G-1, SPECIAL	EACH	9
X6021824	INLET-MANHOLE, TYPE G-1, 4' DIAMETER, SPECIAL	EACH	1
X6021825	INLET-MANHOLE, TYPE G-1, 5' DIAMETER, SPECIAL	EACH	2
X6021844	INLET-MANHOLE, TYPE G-1, 4' DIAMETER, DOUBLE, SPECIAL	EACH	2
X6021845	INLET-MANHOLE, TYPE G-1, 5' DIAMETER, DOUBLE, SPECIAL	EACH	4
X6022230	MANHOLES, TYPE A, 4-DIAMETER, WITH SPECIAL FRAME AND GRATE	EACH	1
X6023508	INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE	EACH	3
X6024502	INLETS, TYPE B, WITH SPECIAL FRAME AND GRATE	EACH	4
X6061310	CONCRETE MEDIAN SURFACE, 4 INCH (SPECIAL)	SQFT	2471
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	LSUM	1
X8040102	ELECTRIC SERVICE INSTALLATION, SPECIAL	EACH	1
XX001249	ORNAMENTAL FENCE	FOOT	392
	YARD HYDRANT (FROST PROOF)	EACH	1

			CONSTR.
			ROADWAY 0028
ITEM CODE	ITEM	UNIT	TOTAL QUANTITY
XX003614	RECEPTACLE (GFI TYPE) WITH WEATHERPROOF COVER	EACH	1
XX005721	WATER METER TO BE ADJUSTED	EACH	3
XX007039	STREET LIGHTING ASSEMBLY COMPLETE TYPE F1	EACH	9
XX007040	STREET LIGHTING ASSEMBLY COMPLETE TYPE F2	EACH	1
XX007041	STREET LIGHTING ASSEMBLY COMPLETE TYPE F3	EACH	2
XX007585	ELECTRIC CABLE IN CONDUIT, 600V, (XLP-TYPE USE) 2/C NO. 6 & 1/C NO. 6 GROUND	FOOT	2237
XX008872	SOLAR POWERED PEDESTRIAN CROSSING SIGNAL SYSTEM COMPLETE	EACH	1
Z0004522	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"	SQYD	24
Z0013798	CONSTRUCTION LAYOUT	L SUM	1
Z0022800	FENCE REMOVAL	FOOT	249
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	225
Z0054400	ROCK FILL	CUYD	368
Z0055905	TEMPORARY CONSTRUCTION FENCE	FOOT	1411
Z0056648	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE. 12"	FOOT	63
Z0056650	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE. 15"	FOOT	125
Z0056672	STORM SEWERS, TYPE 2. WATER MAIN QUALITY PIPE. 24"	FOOT	92
Z0056678	STORM SEWERS, TYPE 2, WATER MAIN QUALITY PIPE, 36"	FOOT	238
Z0068200	STEEL CASINGS 30"	FOOT	40
	DRIVEWAY PAVEMENT SPECIAL (PERMEABLE)	SQYD	86
	GRADING AND SHAPING SPECIAL	SQYD	143
	TIE RODS, 11/2"	EACH	20
	PRECAST ENERGY DISSIPATORS	EACH	7

MAURER-STUTZ
PLOT SCALE = 48.8288 1/ 10. CHECKED PLOT DATE = 3/24/2815 3:13:32 PM DATE -REVISED - 3/26/15 JDS REVISED -REVISED -REVISED -



ALLEN ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS SUMMARY OF QUANTITIES SHEET OF SHEETS STA. TO STA. SCALE:

F.A.U. RTE. 6585 6641 COUNTY TOTAL SHEET NO.
PEORIA 135 5 SECTION 14-00347-01-PW

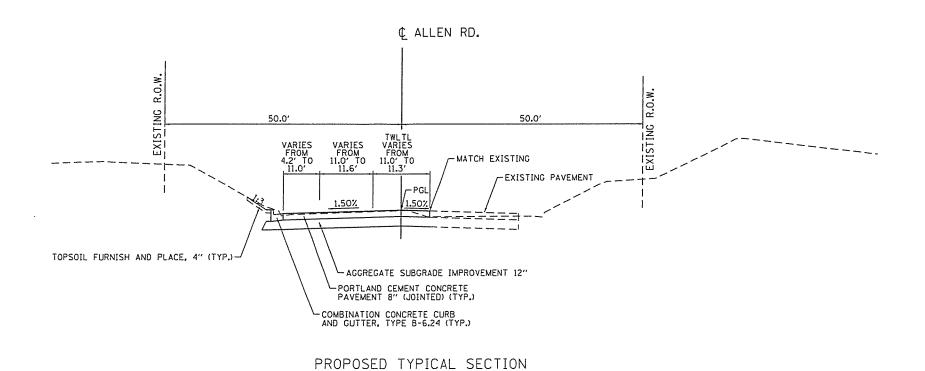
			ζ	LOCATION				EACH	REMARKS		LOCATION				FOOT	REMARK
			7	11694.4	- 42	2.0' LT	-	1	PALLEN		97+76.46	 TO 98+	43.90	LT	88.37	ALLENRO
				11695.05	31			1	PALLEN		98+63.17			LT	133.91	ALLEN RD
K1005481 SHREDDED BARK MULC				11790.55	37			1	PALLEN		99+12.07	TO 99+		RT	26.50	ALLEN RD
	***************************************	DEMARKS	******	11790.55	31	.9 L1		3.0	PALLEN		33+12.07	10 991	33,03	TOTAL		ALLENTO
LOCATION	SQYD	REMARKS					TOTAL	3.0		70055005		TEMPODAS	V CONCTE			
N QUAD	155.87									Z0055905		TEMPORAN	YCONSTRU	ICTION FENCE		25144.016
SQUAD	193.91		XX007039	····	STREET LIGH	HTING ASSEM	BLY COMPLET				LOCATION				FOOT	REMARK
E QUAD	214.33			LOCATION	_			EACH	REMARKS		104+50.00	TO 112-		40' LT	750.00	PALLEN
W QUAD	33.48			203+22.00		RT		1	PRTPALLNA		112+65.00	TO 113-		60' LT	60.00	PALLEN
CENTRAL ISLAND	368.70			206+28,68		LT		1	PLTPALLNA		114+00.00	TO 117-	-00,00	LT	300.50	PALLEN
	TOTAL 966.3			208+07.38		LT		1	PLTPALLNA		117+75.00	TO 120-	75.00	45' LT	300.00	PALLEN
X0327301 RELOCATE EXISTING MA	ILBOX			210+89.95		LT		1	PLTPALLNA					TOTAL	1410.5	
LOCATION	EACH	REMARKS		402+56.53		RT		1	PRTPALTRA							
5+49.07 16.51 L	T 1	ALTA RD		403+41.71		LT		1	PLTPALTRA	Z0068200		STEEL CAS	NGS 30"			
6+72.18 17.06 L	Т 1	ALTA RD		403+41.87		RT		1	PRTPALTRA		LOCATION				FOOT	REMARK
6+97.57 16.36 R	T 1	ALTA RD		405+45.77		RT		1	PRTPALTPA		113+17.87	TO 1134	57.55	LT	40.00	PALLEN
7+79.41 16.90 L	T 1	ALTA RD		408+00.00		LT		1	PLTPALTRA					TOTAL	40.0	
7+82,16 16.54 L	T 1	ALTA RD					TOTAL	9.0								
0+00.00 0.00		0										DRIVEWAY	PAVEMENT	SPECIAL (PER	MEABLE)	
	TOTAL 5.0	-	XX007040		STREET LIGH	HTING ASSEME	BLY COMPLETE	TYPE F2	····		LOCATION				SQYD	REMARKS
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		· · · · · · · · · · · · · · · · · · ·		LOCATION				EACH	REMARKS		15+22.67	_		RT	85.82	ALTA RD
	NCRETE PAVEMENT 9", SPE		7	206+02.71		RT		1	PRTPALLNA		10.22.07			TOTAL		ALIAND
			<del></del>				TOTAL	1.0						IOIAL	. 65,6	
LOCATION	SQYD	REMARKS	}									ODADINO A	UD CLIADING	0050141		
75+00.00 TO 79+14.69	304.53	ROUNDABOUT	XX007041		STREET LIGH	TING ASSEME	BLY COMPLETE			***************************************		GRADING A	ND SHAPING	SPECIAL	00.10	
	TOTAL 304.5		7	LOCATION				EACH	REMARKS		LOCATION				SQYD	REMARKS
				207+88.60		RT		1	PRTPALLNA		203+08,29	TO 204+	21.88 F	₹T	142.54	PRTPALLN
6061310 CONCRETE MEDIAN SUR	FACE, 4 INCH (SPECIAL)		<del></del>	405+67.05		LT		1	PRTPALTRA					TOTAL	. 142.5	
LOCATION	SQFT	REMARKS					TOTAL	2.0								
206+22.17 TO 206+39.20	334.10	PLTPALLNA	VV007505		El COTOLO O	1 DI E IN CONDI	LUT COOL (V) D	ייייי אייייי	NO NO 6 1 4/0 NO 6 CHOUND			PRECAST E	NERGY DISS	SIPATORS		
207+77.32 TO 207+93.85	287.88	PLTPALLNA	XX007585		ELECTRIC CF	ABLE IN CONDI		<u>-</u>	2/C NO. 6 & 1/C NO. 6 GROUND	··········	LOCATION				EACH	REMARKS
403+54.68 TO 403+72.89	331.20	PLTPALTRA	•	LOCATION				FOOT	REMARKS		BOX CULVERT	EXTENSION			7.00	NW QUAD
405+09.77 TO 405+50.67	770.57	PLTPALTRA		SERVICE	TO CONTRO			8.06						TOTAL	7.0	
206+23.26 TO 206+41.19	137.17	PLTPALLNA		CONTROLLER	TO L-			59.02								
75+08.52 TO 75+43.01	183.60	RBLPRABTA		CONTROLLER	то нн			85.05								
205+55.39 TO 206+15.10	426.21	PRTPALLNA		HH-1	TO L-2	2		54.70								
	TOTAL 2470.7			HH-1	TO L-	3		131.50								
	2470.7			HH-1	TO HH	-2		66.60								
8040102 ELECTRIC SERVICE INST	ALLATION SECTAL			HH-2	TO L~	4		53.91								
		DE11101/0		HH-2	то нн	-3		111.12								
LOCATION	EACH	REMARKS		нн-з	TO L-	5		59.52								
206+27.56 L		PLTPALLNA		HH-3	то нн-	-4		282.49								
	TOTAL 1.0			HH-4	TO L-6			53.63								
					TO HH-			114.59								
001249 ORNAMENTAL FENCE				HH-5	TO HH-			281.64								
LOCATION	FOOT	REMARKS						54.70								
77+42.90 TO 77+66.43 R	75.03	RBLPRABTA		HH-6	TO L-7											
202+99.54 TO 204+30.76 R	135.23	PRTPALLNA		HH-5	TO L-8			61.31			٢				EXCAVATION	
113+00.00 TO 114+00.00 LT		PALLEN		HH-5	то нн-			84.80				LOC	ATION	EARTH EXCAVATION	ADJUSTED FOR	EMBANKMENT
405+45.32 TO 405+96.93 R		PRTPALTRA		HH-7	TO L-9			54.00				-		EAGAVATIO	(25%)	(FILL)
	TOTAL 391.4			HH-7	то нн-	-8		77.05			ľ			CUYD	CUYD	CUYD
				HH-8	TO L-1	0		49.88				ALLEN ROAD		5123 30	3842.47	4193.33
(003120 VARD UVDD ANT (FROOT)	מפתחבי			HH-8	то нн-	-9		242.33			15	STA. 202+32.43 T	O STA. 212+50	.00		
003120 YARD HYDRANT (FROST		OCMADICO		HH-9	TO L-1	1		54.00			-	ALLEN	ROAD		-	
LOCATION	EACH	REMARKS		8-HH	то нн-	10		147.81			5	STA. 105+75.68 T		.00 3285.52	2454.14	1895.50
CENTRAL ISLAND	1.00			HH-10	TO L-1:	2		49.41							.,	
	TOTAL 1.0			-			TOTAL	2237.1				ALTA ROAD F		2724,54	2043,41	1381.63
							- · · · · · ·	••			15	STA, 400+00.00 T	O STA. 409+29	.60	<u> </u>	
(000044	MITH WEATHERPROOF COV	/ER	Z0004522		HOT-MIX ASP	HALT DRIVEW	AY PAVEMENT	, 6"			-	ALTA	ROAD			T
.003614 RECEPTACLE (GFITYPE)	EACH	REMARKS		LOCATION				SQYD	REMARKS		F	STA, 14+65,78 T		552,02	414.02	107.35
LOCATION RECEPTABLE (GFTTYPE)			-					00.04			F					
	1,00			402+56.93		LT		23.61	PLTPALTRA		L				· , · · · · · · · · · · · · · · · · · ·	,
LOCATION	1.00 TOTAL 1.0			402+56.93		LT	TOTAL	23.61	PLTPALTRA		E	то	TAL	11685.39	8764.04	7577,81

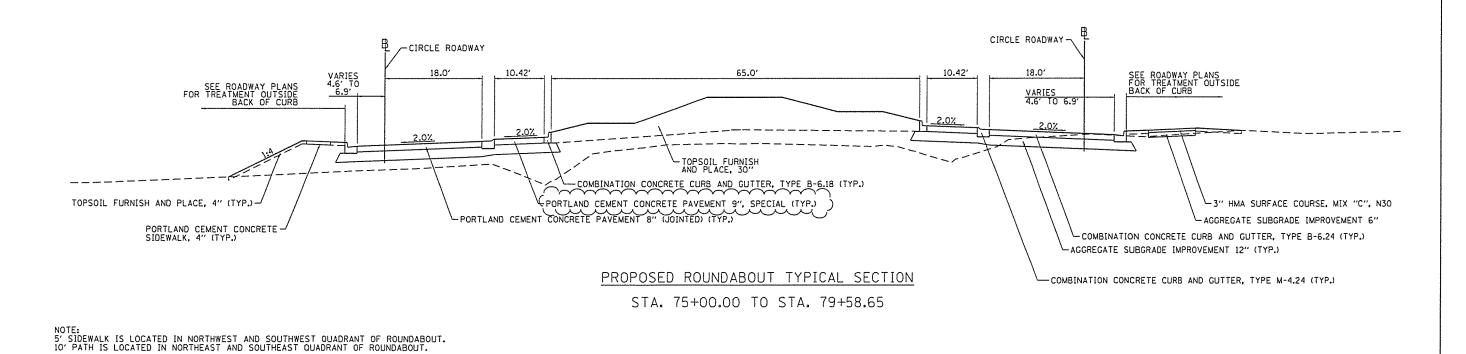
USER NAME = wllewis DESIGNED -REVISED - 3/26/15 JDS MAURER-STUTZ DRAWN -REVISED -PLOT SCALE = 40.0000 '/ in. CHECKED -REVISED -PLOT DATE = 3/24/2015 3:18:05 PM DATE -REVISED -



ALLEN ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS SCHEDULE OF QUANTITIES SCALE: OF SHEETS STA. TO STA. SHEET

COUNTY TOTAL SHEET NO.
PEORIA 135 10 F.A.U. RTE. 6585 6641 SECTION 14-00347-01-PW





STA. 118+19.97 TO STA. 120+84.97

USER NAME = VIIOUS DESIGNED - REVISED - 3/26/15 JDS

DRAWN - REVISED - CITY OF PEORIA

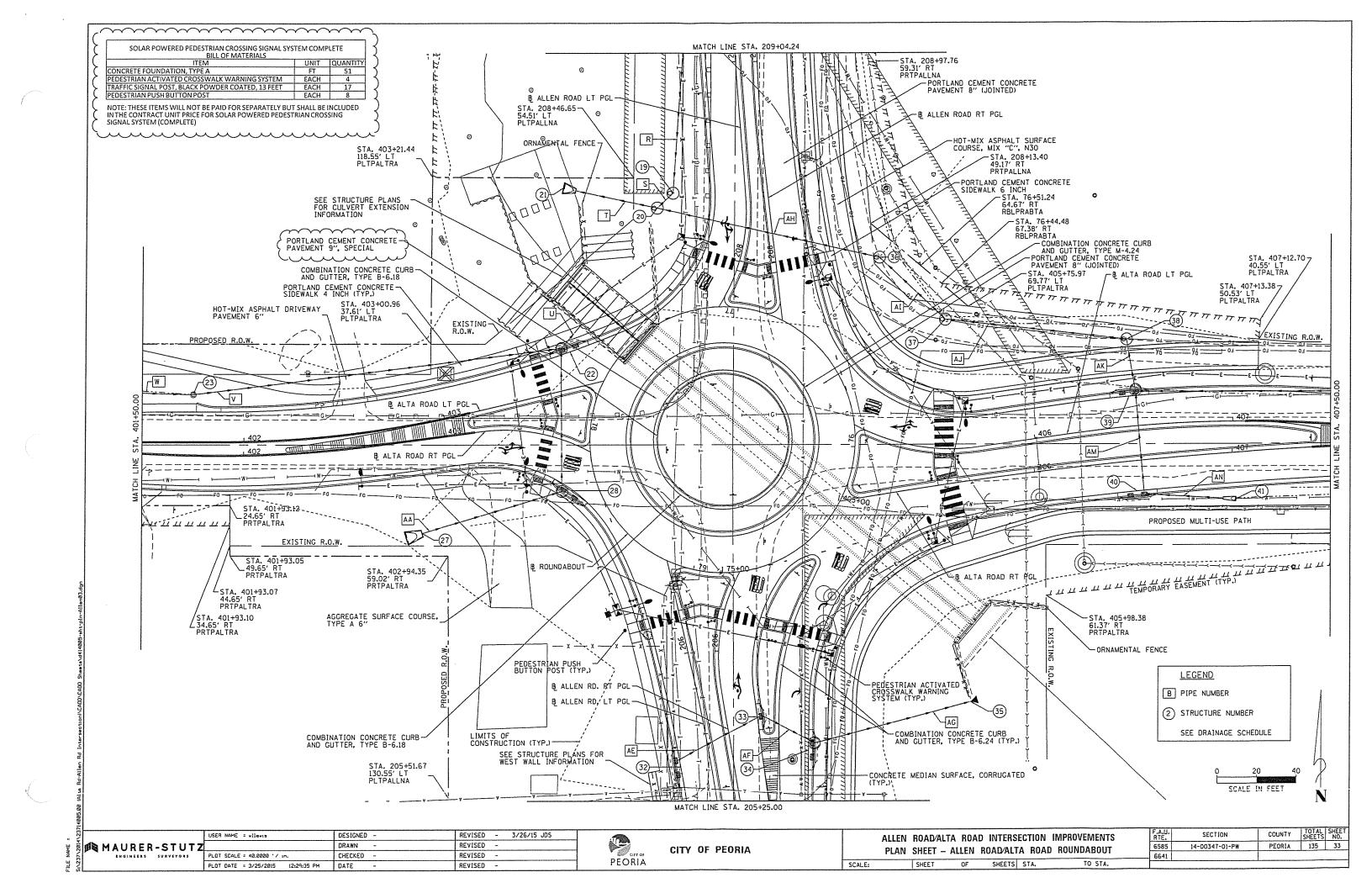
PLOT DATE = 3/24/2815 3:44:16 PM DATE - REVISED - PEORIA

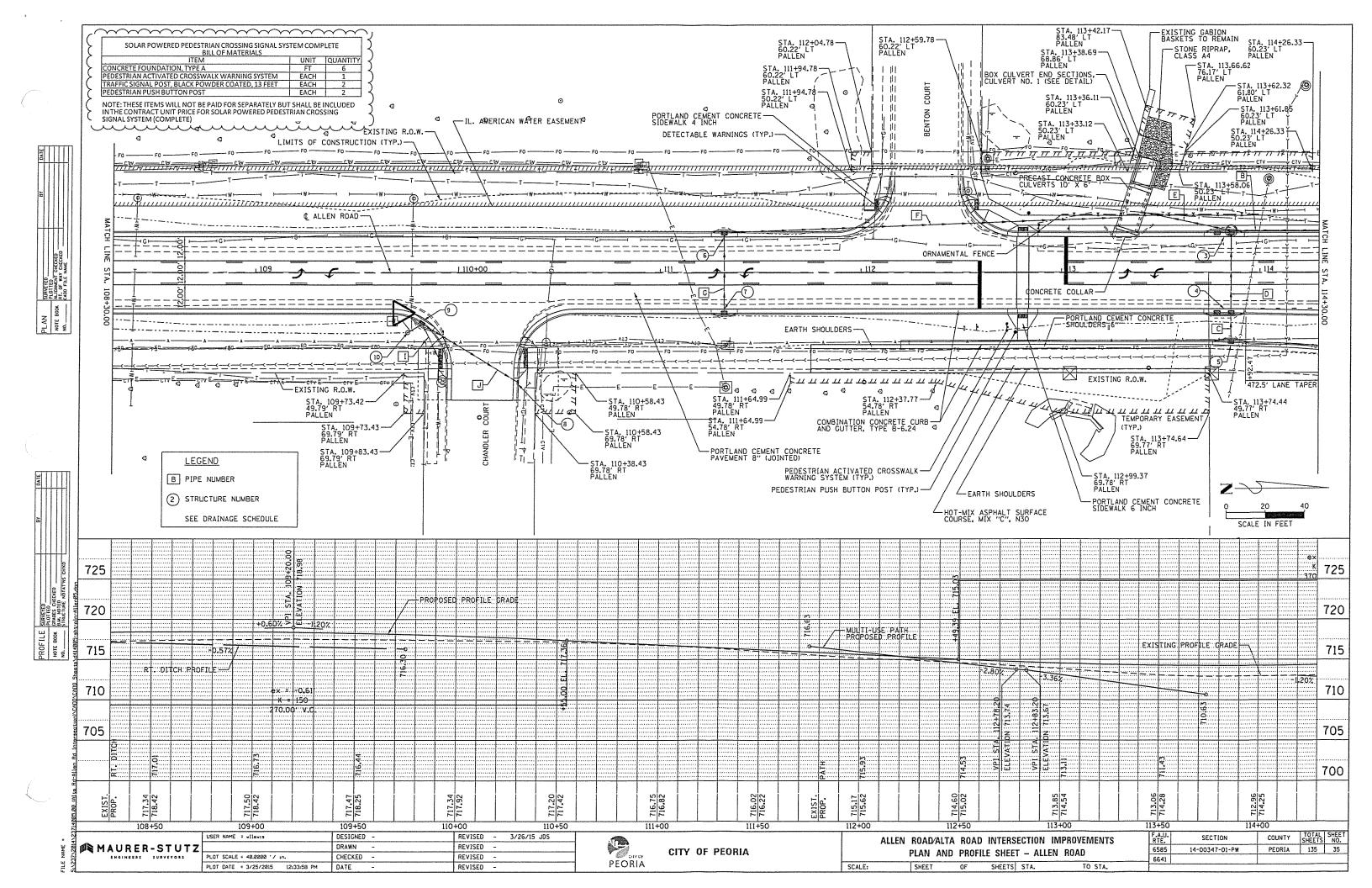
DESIGNED - REVISED - 3/26/15 JDS

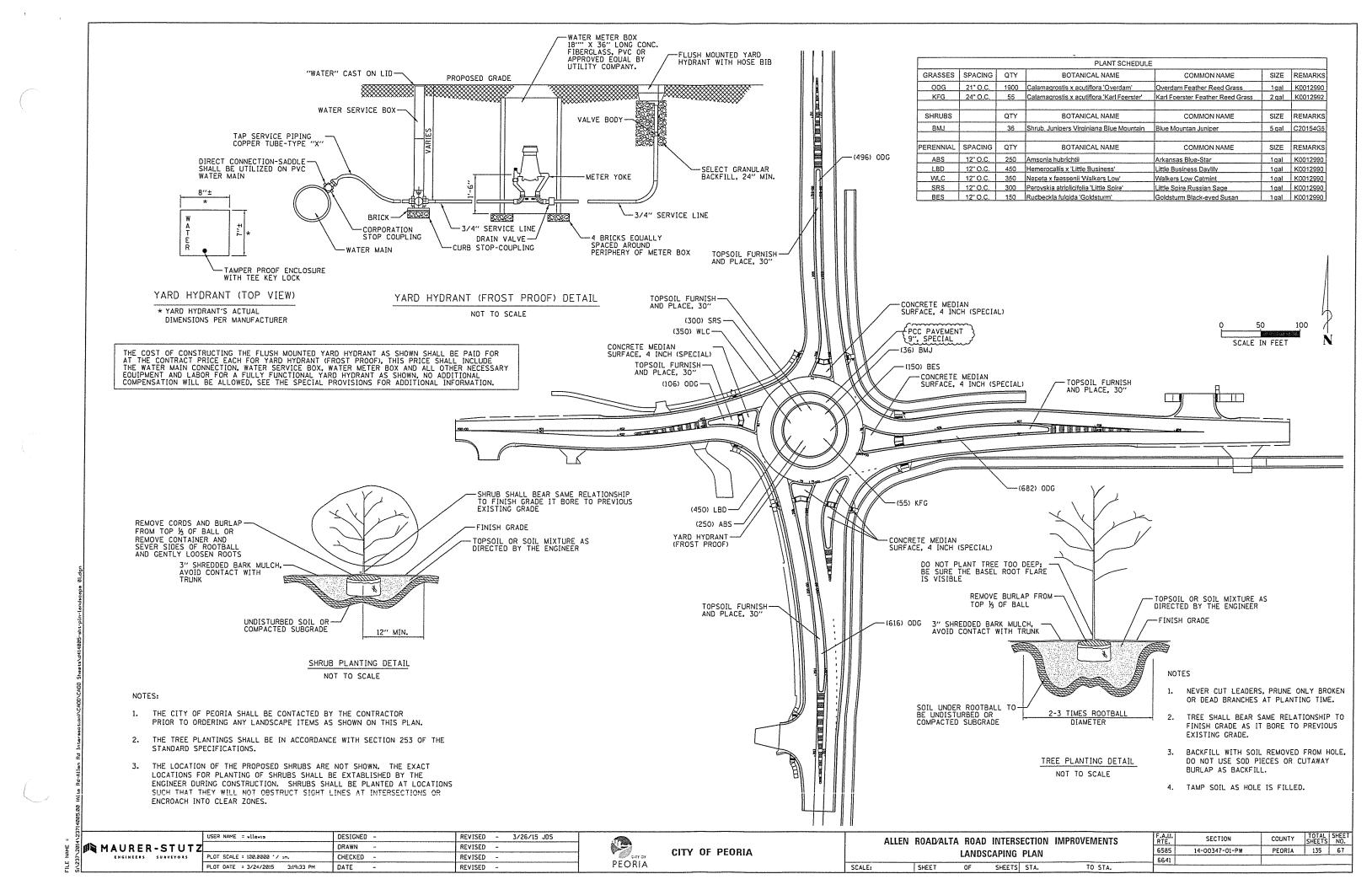
CITY OF PEORIA

PLOT DATE = 3/24/2815 3:44:16 PM DATE - REVISED - SCALE: SHEET

ALLEN ROAD/ALTA ROAD INTERSECTION IMPROVEMENTS
PROPOSED TYPICAL SECTION ALLEN ROAD
| SHEET OF SHEETS STA. TO STA.









#### **SCHEDULE OF PRICES**

#### Revised for Addendum 1

County Peoria

Local Public Agency City of Peoria

Section <u>14-00347-01-PW</u>

Route FAU 6585/6641

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)

Item No.	Items	Unit	Quantity	Unit Price	Total
20100110	TREE REMOV 6-15	UNIT	36		7001
200210	TREE REMOV OVER 15	UNIT	60		
00100	EARTH EXCAVATION	CU YD	11690		
20201200	REM & DISP UNS MATL	CU YD	98		
20700220	POROUS GRAN EMBANK	CU YD	435		
20800150	TRENCH BACKFILL	CU YD	1243		
21001000	GEOTECH FAB F/GR STAB	SQ YD	1647		
21101615	TOPSOIL F & P 4	SQ YD	16359		
21101695	TOPSOIL F & P 30	SQ YD	896		
25000200	SEEDING, CLASS 2	ACRE	3.5		
25000300	SEEDING, CLASS 3	ACRE	0.25		
25000400	NITROGEN FERT NUTR	POUND	315		
25000500	PHOSPHORUS FERT NUTR	POUND	315		
25000600	POTASSIUM FERT NUTR	POUND	315		
25100115	MULCH, METHOD 2	ACRE	3.5		
25100635	HD EROS CONTR BLANKET	SQ YD	265		
25100900	TURF REINFORCEMENT MAT	SQ YD	143		
28000250	TEMP EROS CONTR SEED	POUND	3380		
28000305	TEMPORARY DITCH CHECKS	FOOT	430		
28000400	PERIMETER EROS BAR	FOOT	2701	<u> </u>	
28000500	INLET & PIPE PROTECT	EACH	48		
28000510	INLET FILTERS	EACH	33		
28100107	STONE RIPRAP, CLASS A4	SQ YD	41		
0111	STONE RIPRAP, CLASS A6	SQ YD	256		
20200200	FILTER FABRIC	SQ YD	317	-dy-sec	
30300001	AGG SUBGRADE IMPROVE	CU YD	1104	· · · · · · · · · · · · · · · · · · ·	

Item No.	Items	Unit	Quantity	Unit Price	Total
	AGG SUBGRADE IMPR 6	SQ YD	3664		1 Ottal
30300112	AGG SUBGRADE IMPR 12	SQ YD	20002		
35100900	AGG BASE CSE A 10	SQ YD	227		
40200500	AGG SURF CSE A 6	SQ YD	185		
40201000	AGGREGATE-TEMP ACCESS	TON	495		
40600275	BIT MATLS PR CT	POUND	8084		
40600990	TEMPORARY RAMP	SQ YD	593		
40603305	HMA SC "C" N30	TON	615		
42000301	PCC PVT 8 JOINTED	SQ YD	14540		
42300400	PCC DRIVEWAY PAVT 8	SQ YD	141		
42400100	PC CONC SIDEWALK 4	SQ FT	6026		
42400300	PC CONC SIDEWALK 6	SQ FT	3071		
42400800	DETECTABLE WARNINGS	SQ FT	400		-
44000100	PAVEMENT REMOVAL	SQ YD	11410		
44000200	DRIVE PAVEMENT REM	SQ YD	278		
44000500	COMB CURB GUTTER REM	FOOT	728		
44004000	PAVED DITCH REMOVAL	FOOT	14		
48100700	AGGREGATE SHLDS A 8	SQ YD	236		
48300100	PCC SHOULDERS 6	SQ YD	61		
50105220	PIPE CULVERT REMOVAL	FOOT	788		
50102400	CONCRETE REMOVAL	CU YD	2.1		
50104400	CONC HDWL REM	EACH	1		,
50500405	F & E STRUCT STEEL	POUND	7790		
50800105	REINFORCEMENT BARS	POUND	17770		
51500100	NAME PLATES	EACH	1		
54002020	EXPANSION BOLTS 3/4 INCH	EACH	58		
54001001	BOX CUL END SEC C1	EACH	1		
54003000	CONCRETE BOX CULVERTS	CU YD	125.3		
54011006	PCBC 10X6	FOOT	24		
54213657	PRC FLAR END SEC 12	EACH	3		
54213660	PRC FLAR END SEC 15	EACH	1		
54213675	PRC FLAR END SEC 30	EACH	1		
54213681	PRC FLAR END SEC 36	EACH	1		
54248510	CONCRETE COLLAR	CU YD	7.4		
54215550	METAL END SECTIONS 15"	EACH	6		
542C0220	P CUL CL C 1 15	FOOT	205		
550A0050	STORM SEW CL A 1 12	FOOT	1254		
550A0070	STORM SEW CL A 1 15	FOOT	369		
550A0120	STORM SEW CL A 1 24	FOOT	224		
550A0140	STORM SEW CL A 1 30	FOOT	161		
550A0750	STORM SEW CL A 3 36	FOOT	498		***
55100500	STORM SEWER REM 12	FOOT	45		**************************************
56109210	WATER VALVES ADJUST	EACH	8		
60218400	MAN TA 4 DIA T1F CL	EACH	1		1
60221100	MAN TA 5 DIA T1F CL	EACH	3		
60260100	INLETS TO BE ADJUSTED	EACH	1		

Item No.	Items	Unit	L Quantity	Unit Price	T-1-1
	REMOVING INLETS	EACH	Quantity 1	Offic Price	Total
<u>/</u>	CLASS SI CONC OUTLET	CUYD	7.6		
	COMB CC & G, TB6.18	FOOT	458		
ļ	COMB CC & G TB6.24	FOOT	7949		
	COMB CC & G TM4.24	FOOT	289	***************************************	
	CONC MED SUR CORR	SQ FT	2580		
	EXPLOR TRENCH 52	FOOT	102		
	GUARDRAIL REMOVAL	FOOT	349		
	SIGHT SCRN (WF) TP 8	FOOT	204		
	FUR ERECT ROW MARKERS	EACH	15		
	MOBILIZATION	L SUM	1		
	UNDRGRD C PVC 2	FOOT	1529		
81400100	HANDHOLE	EACH	10		
82500360	LT CONT BASEM 480V100	EACH	1		
	LIGHT POLE FDN 30D	FOOT	72		
C20154G5	S-JUNIP VIRG BM 5G	EACH	36		
K0012990	P PL ORNAMENT T GAL P	UNIT	3400		
K0012992	P PL ORNAMENT T 2G P	UNIT	55		
K1005481	SHREDDED BARK MULCH 3"	SQ YD	966		
X0321837	REMOVE SHEET PILING	L SUM	1		
323265	REMOVE EXISTING RIPRAP	SQ YD	243		
23443	PREC MOD RET WALL	SQ FT	921		
X0326304	SCOURSTOP	EACH	50		
X0326407	WOOD GATE ASSEMBL SPL	EACH	1		
	RELOCATE EXISTING MAILBOX	EACH	5		+
X2810112	STONE RIPRAP CL A6 SP	SQ YD	20		
X4200409	PCC PVT 9 SPL	SQ YD	305		
X5121800	PERM STEEL SHT PILING	SQ FT	8155		
X6020065	INLETS TG-1 DBL SPL	EACH	4		
	INLETS, TYPE G-1, SPECIAL	EACH	9	_	
	INL-MN G-1 4D SPL	EACH	1		
	INL-MN G-1 5D SPL	EACH	2		
	INL-MN G-1 4D DBL SPL	EACH	2		
	INL-MN G-1 5D DBL SPL	EACH	4		
	MAN TA 4 DIA SPL F&G	EACH	1		
<del></del>	INLETS TA W/SPL F&G	EACH	3		
	INLETS TB W/SPL F&G	EACH	4		
	CONC MEDIAN SURF 4 SP	SQ FT	2471		
	TRAF CONT & PROT SPL	LSUM	1		
<del></del>	ELECT SERV INSTALL SP	EACH	11		
	ORNAMENTAL FENCE	FOOT	392		
	YARD HYDRANT (FP)	EACH	1		
	REC (GFI) WEATHER CVR	EACH	11		
<del></del>	WATER METER ADJUSTED	EACH	3		
XX007039 S	ST LIGHT ASSEM COM F1	EACH	9		

Item No.	Items	Unit	Quantity	Unit Price	Total
XX007040	ST LIGHT ASSEM COMP F2	EACH	1		
XX007041	ST LIGHT ASSEM COM F3	EACH	2		
XX007585	EC C XLP 2C#6 1C#6 GR	FOOT	2237		
XX008872	SLR-PWR PED CSS COMP	EACH	1		
Z0004522	HMA DRIVEWAY PVT 6	SQ YD	24		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		<u>-</u> -
Z0022800	FENCE REMOVAL	FOOT	249		
Z0046304	P UNDR FOR STRUCT 4	FOOT	225		
Z0054400	ROCK FILL	CU YD	368		
Z0055905	TEMP CONSTR FENCE	FOOT	1411		
Z0056648	SS 1 WAT MN 12	FOOT	63		
Z0056650	SS 1 WAT MN 15	FOOT	125		
Z0056672	SS 2 WAT MN 24	FOOT	92		
Z0056678	SS 2 WAT MN 36	FOOT	238		
Z0068200	STEEL CASINGS 30"	FOOT	40		
	DRVWY PVMNT SPL PERM	SQ YD	86		
	GRADING & SHAPING SPL	SQ YD	143		
	TIE RODS, 1 1/2"	EACH	20		
	PREC ENER DISSIPATORS	EACH	7		



City of Peoria Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW Peoria County

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#### **EOO DOCUMENTS**

Directions

Minority and Women Business Enterprise Directory

Equal Employment Opportunity

#### **CONTRACT DELIVERABLES**

Subcontractor Payment Form

Monthly Workforce Analysis

Notification of Change in Participation

#### **MISCELLANEOUS**

Construction Debris Manifest Substance Abuse Prevention Program Certification Final Payment Request

Sample Contract

Sample Contract Bond

City of Peoria Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW Peoria County

# PART 1 PROPOSAL ITEMS

		County	Peori	a
NOTICE TO BIDDERS	Local	Public Agency	City	of Peoria
We we I to bibbeing	Sc	ection Number	14-00	0347-01-PW
		Route	FAU	6585/6641
Sealed proposals for the improvement described below will be received	at the c	office of the C	ity Eng	ineer,
Public Works Facility; 3505 N. Dries Lane; Peoria, IL 61604	until	11:00 AM	on	April 1, 2015
Address	_	Time	_	Date
Sealed proposals will be opened and read publicly at the office of _the	City Eng	gineer		
Public Works Facility; 3505 N. Dries Lane; Peoria, IL 61604	at	11:00 AM	on	April 1, 2015
Address	_	Time	-	Date
DESCRIPTION OF W	ORK			
Name Allen Road/ Alta Road Intersection Improvement	Ler	ngth: 5262.	00 fe	et ( 1.0 miles)
Location Intersection of Allen Road and Alta Road in the City of Peoria	•			<u></u> oo)
Proposed Improvement Construction of a single lane modern roundab	out con:	sisting of earthy	vork, tv	wo culvert extensions.
HMA multi-use path, concrete sidewalk, street lighting, landscaping, and	l other c	ollateral work to	o comp	plete the project.
Plans and proposal forms will be available in the office ofthe City ofthe C	of Peoria	, Public Works F	ac.; 350	05 N. Dries Ln
Peoria, IL 61604, by calling 309-494-8800 to req. electronic infor	mation c	or by emailing pw	vdropbo	ox@peoriagov.org
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.

- 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.
- 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.

Printed 3/6/2015 BLR 12200 (01/08/14)

		County	Peoria
	PROPOSAL	Local Public Agency	City of Peoria
	TROTOGAL	Section Number	14-00347-01-PW
		Route	FAU 6585/6641
1.	Proposal of		
		5-6-7	
	for the improvement of the above section by the construction of		
	a total distance of5262.00 feet, of which a distance of5	5262.00 feet, ( 1.00	0 miles) are to be improved.
2.	The plans for the proposed work are those prepared by Maurer-	Stutz, Inc.; 3116 N. Dries Lr	ı; Ste 100; Peoria
	and approved by the Department of Transportation on N/A		
3.	The specifications referred to herein are those prepared by the De "Standard Specifications for Road and Bridge Construction" and the Provisions" thereto, adopted and in effect on the date of invitation	ne "Supplemental Specific	on and designated as cations and Recurring Special
4.	The undersigned agrees to accept, as part of the contract, the app Sheet for Recurring Special Provisions" contained in this proposal	ilicable Special Provisions	s indicated on the "Check
5.	The undersigned agrees to complete the work within unless additional time is granted in accordance with the specification.	working days or by	
6.	A proposal guaranty in the proper amount, as specified in BLRS S Conditions for Contract Proposals, will be required. Bid Bonds will proposal is either a bid bond if allowed, on Department form BLR specifications, made payable to:	be allowed as a proposa	I quaranty. Accompanying this
	Treasurer of		
•	The amount of the check is		(
7.		two or more proposals, to	ne amount must be equal to
8.	The successful bidder at the time of execution of the contract will amount of the award. When a contract bond is not required, the proposal is accepted and the undersigned fails to execute a contract that the Bid Bond or check shall be forfeited to the Awarding Author	roposal guaranty check water and contract bond as r	ill be held in lieu thereof. If this
9.	Each pay item should have a unit price and a total price. If no total product of the unit price multiplied by the quantity, the unit price should be divided by the quantity in order to establish a unit price.	I price is shown or if there all govern. If a unit price	is a discrepancy between the is omitted, the total price will
10.	A bid will be declared unacceptable if neither a unit price nor a total	al price is shown.	
11.	The undersigned submits herewith the schedule of prices on BLR contract.	12200a covering the work	to be performed under this
12.	The undersigned further agrees that if awarded the contract for the BLR 12200a, the work shall be in accordance with the requirement	e sections contained in the ts of each individual prope	e combinations on osal for the multiple bid

Printed 3/6/2015

specified in the Schedule for Multiple Bids below.

#### **Proposal Continued**

	Route County	FAU 6585/6641 Peoria
RETURN WITH BID	Local Agency	City of Peoria
	Section	_14-00347-01-PW

#### 13. <u>EMPLOYEE/EMPLOYMENT RESTRICTIONS – THE CONTRACTOR:</u>

THE CONTRACTOR, (hereinafter referred to as "SERVICE PROVIDER") agrees, as a condition of accepting this contract with the City of Peoria, that, for a period of one (1) year following completion of this contract, it shall be prohibited from hiring, directly or indirectly, any City employee or official who was involved, directly or indirectly in: (1) the selection and/or recommendation to select the SERVICE PROVIDER for performance of this contract; (2) coordinating the efforts of the SERVICE PROVIDER in the consummation or completion of this contract; or (3) monitoring or determining the performance of the SERVICE PROVIDER. The SERVICE PROVIDER further acknowledges and agrees that, upon the City's determination that a violation of this provision has occurred, the penalty imposed, at the sole discretion of the City, may include one or more of the following: (1) cancellation of any other contract(s) between the City of Peoria and the SERVICE PROVIDER; (2) disqualification of the SERVICE PROVIDER from bidding or being awarded future contracts with the City of Peoria for a period of two [2] years; and/or (3) payment of liquidated damages to the City of Peoria in the amount of TWENTY FIVE THOUSAND DOLLARS (\$25,000.00).

14.	EEO CERTIFICATION* (Check <u>one</u> ):
	We are presently applying for the EEO Certification. Employer Report Form (Form CC-1) is completed and enclosed.
	Presently, we have the Employer Report Form (Form CC-1) on file with the City of Peoria, Office of Equal Opportunity and have a current Certificate of Compliance Number.
	Certificate of Compliance Number:

*Please note there is a \$50.00 processing fee for new and renewal certification requests.



#### **SCHEDULE OF PRICES**

County Peoria
Local Public Agency City of Peoria
Section 14-00347-01-PW
Route FAU 6585/6641

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)

Item No.	Items	Unit	Quantity	Unit Price	Total
20100110	TREE REMOV 6-15	UNIT	36		
20100210	TREE REMOV OVER 15	UNIT	60		
20200100	EARTH EXCAVATION	CU YD	11690		
20201200	REM & DISP UNS MATL	CU YD	98		
20700220	POROUS GRAN EMBANK	CU YD	435		
20800150	TRENCH BACKFILL	CU YD	1243		
21001000	GEOTECH FAB F/GR STAB	SQ YD	1647	41. 11	
21101615	TOPSOIL F & P 4	SQ YD	16359		
21101695	TOPSOIL F & P 30	SQ YD	896		
25000200	SEEDING, CLASS 2	ACRE	3.5		
25000300	SEEDING, CLASS 3	ACRE	0.25		·
25000400	NITROGEN FERT NUTR	POUND	315		
25000500	PHOSPHORUS FERT NUTR	POUND	315		
25000600	POTASSIUM FERT NUTR	POUND	315		
25100115	MULCH, METHOD 2	ACRE	3.5		
25100635	HD EROS CONTR BLANKET	SQ YD	265		
25100900	TURF REINFORCEMENT MAT	SQ YD	143		
28000250	TEMP EROS CONTR SEED	POUND	3380		
28000305	TEMPORARY DITCH CHECKS	FOOT	430		
28000400	PERIMETER EROS BAR	FOOT	2701		
28000500	INLET & PIPE PROTECT	EACH	48	-	<del></del>
28000510	INLET FILTERS	EACH	33		
	STONE RIPRAP, CLASS A4	SQ YD	41		*
28100111	STONE RIPRAP, CLASS A6	SQ YD	256		
3200200	FILTER FABRIC	SQ YD	317		
30300001	AGG SUBGRADE IMPROVE	CU YD	1104		

### Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
30300106	AGG SUBGRADE IMPR 6	SQ YD	3664		
30300112	AGG SUBGRADE IMPR 12	SQ YD	20002		
35100900	AGG BASE CSE A 10	SQ YD	227		
40200500	AGG SURF CSE A 6	SQ YD	185		
40201000	AGGREGATE-TEMP ACCESS	TON	495		
40600275	BIT MATLS PR CT	POUND	8084		
40600990	TEMPORARY RAMP	SQ YD	593		
40603305	HMA SC "C" N30	TON	615		
42000301	PCC PVT 8 JOINTED	SQ YD	14540		
42300400	PCC DRIVEWAY PAVT 8	SQ YD	141		
42400100	PC CONC SIDEWALK 4	SQ FT	6026		
42400300	PC CONC SIDEWALK 6	SQ FT	3071		
42400800	DETECTABLE WARNINGS	SQ FT	400		
44000100	PAVEMENT REMOVAL	SQ YD	11410		
44000200	DRIVE PAVEMENT REM	SQ YD	278		
44000500	COMB CURB GUTTER REM	FOOT	728		
44004000	PAVED DITCH REMOVAL	FOOT	14		
48100700	AGGREGATE SHLDS A 8	SQ YD	236		
48300100	PCC SHOULDERS 6	SQ YD	61		
50105220	PIPE CULVERT REMOVAL	FOOT	788		
50102400	CONCRETE REMOVAL	CU YD	2.1		
50104400	CONC HDWL REM	EACH	1		
50500405	F & E STRUCT STEEL	POUND	7790		
50800105	REINFORCEMENT BARS	POUND	17770		
51500100	NAME PLATES	EACH	1		
	EXPANSION BOLTS 3/4 INCH	EACH	58		
	BOX CUL END SEC C1	EACH	1		
	CONCRETE BOX CULVERTS	CU YD	125.3		
	PCBC 10X6	FOOT	24		
	PRC FLAR END SEC 12	EACH	3		
	PRC FLAR END SEC 15	EACH	1		
	PRC FLAR END SEC 30	EACH	1		
	PRC FLAR END SEC 36	EACH	1		
	CONCRETE COLLAR	CU YD	7.4		
	METAL END SECTIONS 15"	EACH	6		
	P CUL CL C 1 15	FOOT	205		
	STORM SEW CL A 1 12	FOOT	1254		
	STORM SEW CL A 1 15	FOOT	369		
	STORM SEW CL A 1 24	FOOT	224		
	STORM SEW CL A 1 30	FOOT	161		
	STORM SEW CL A 3 36	FOOT	498		
	STORM SEWER REM 12	FOOT	45		
	WATER VALVES ADJUST	EACH	8		
	MAN TA 4 DIA T1F CL	EACH	1		
	MAN TA 5 DIA T1F CL	EACH	3		
0022110011	INLETS TO BE ADJUSTED	EACH	1		

### Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
	REMOVING INLETS	EACH	1		rotar
60600095	CLASS SI CONC OUTLET	CU YD	7.6		
60604400	COMB CC & G, TB6.18	FOOT	458		
60605000	COMB CC & G TB6.24	FOOT	7949		
60608582	COMB CC & G TM4.24	FOOT	289		
60618390	CONC MED SUR CORR	SQ FT	2580		
61100500	EXPLOR TRENCH 52	FOOT	102		
63200310	GUARDRAIL REMOVAL	FOOT	349		
64100120	SIGHT SCRN (WF) TP 8	FOOT	204		
66600105	FUR ERECT ROW MARKERS	EACH	15		
67100100	MOBILIZATION	L SUM	1		
81028350	UNDRGRD C PVC 2	FOOT	1529		
81400100	HANDHOLE	EACH	10		
	LT CONT BASEM 480V100	EACH	1		
	LIGHT POLE FDN 30D	FOOT	72		
	CONC FDN TY D	FOOT	3		
	S-JUNIP VIRG BM 5G	EACH	36		
	P PL ORNAMENT T GAL P	UNIT	3400		
	P PL ORNAMENT T 2G P	UNIT	55		
	SHREDDED BARK MULCH 3"	SQ YD	966		
	REMOVE SHEET PILING	L SUM	1		
	REMOVE EXISTING RIPRAP	SQ YD	243		
	PREC MOD RET WALL	SQ FT	921		
	SCOURSTOP	EACH	50		
	WOOD GATE ASSEMBL SPL	EACH	1		
	RELOCATE EXISTING MAILBOX	EACH	5		
	STONE RIPRAP CL A6 SP	SQ YD	20		
	PCC PVT 8 SPL	SQ YD	305		
	PERM STEEL SHT PILING	SQ FT	8155		
	INLETS TG-1 DBL SPL	EACH	4		
	INLETS, TYPE G-1, SPECIAL	EACH	9		
	INL-MN G-1 4D SPL	EACH	1		
	INL-MN G-1 5D SPL	EACH	2		
	INL-MN G-1 4D DBL SPL	EACH	2		
	INL-MN G-1 5D DBL SPL	EACH	4		
	MAN TA 4 DIA SPL F&G	EACH	1		
	INLETS TA W/SPL F&G	EACH	3		
	INLETS TB W/SPL F&G	EACH	4		
	CONC MEDIAN SURF 4 SP TRAF CONT & PROT SPL	SQ FT	2471		
	ELECT SERV INSTALL SP	L SUM EACH	1		
	ORNAMENTAL FENCE	FOOT	392		
	YARD HYDRANT (FP)	EACH	1		
	REC (GFI) WEATHER CVR	EACH	1		
	WATER METER ADJUSTED	EACH	3		
	ST LIGHT ASSEM COM F1	EACH	9		
701007039	OT LIGHT AGGLIN CON FT	LACH	9		

### Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
XX007040	ST LIGHT ASSEM COMP F2	EACH	1		
XX007041	ST LIGHT ASSEM COM F3	EACH	2		
XX007585	EC C XLP 2C#6 1C#6 GR	FOOT	2237		
XX008872	SLR-PWR PED CSS COMP	EACH	1		
Z0004522	HMA DRIVEWAY PVT 6	SQ YD	24		
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		
Z0022800	FENCE REMOVAL	FOOT	249		
Z0046304	P UNDR FOR STRUCT 4	FOOT	225		· · · · · · · · · · · · · · · · · · ·
Z0054400	ROCK FILL	CU YD	368		
Z0055905	TEMP CONSTR FENCE	FOOT	1411		
Z0056648	SS 1 WAT MN 12	FOOT	63		
Z0056650	SS 1 WAT MN 15	FOOT	125		
Z0056672	SS 2 WAT MN 24	FOOT	92		
Z0056678	SS 2 WAT MN 36	FOOT	238		
Z0068200	STEEL CASINGS 30"	FOOT	40		
	DRVWY PVMNT SPL PERM	SQ YD	86		
	GRADING & SHAPING SPL	SQ YD	143		
	TIE RODS, 1 1/2"	EACH	20		
	PREC ENER DISSIPATORS	EACH	7		· -





### **CONTRACTOR CERTIFICATIONS**

County	Peoria
Local Public Agency	City of Peoria
Section Number	14-00347-01-PW
Route	FAU 6585/6641

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 Deliquency.** 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. **Bid-Rigging or Bid 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.



Printed 3/6/2015

		Peoria
SIGNATURES	Local Public Agency	City of Peoria
515 S. 125	Section Number	14-00347-01-PW
	Route	FAU 6585/6641
(If an individual)		
Cimpature of Biddon		
Signature of Bidder		
Business Address		
(If a partnership)		
Signed By		
Dusilless Address		
_		
Inset Names and Addressed of All Partners		
		4
(If a corporation)		
Signed By	Pr	esident
Business Address		
C Describeration		
President _		7.1.
Insert Names of Officers Secretary  Treasurer	•	
Treasurer		
A444		
Attest: Secretary		
· <b>,</b>		4



### Local Agency Proposal Bid Bond

			Route	FAU 6585/6641
			County	Peoria
	RETURN WITH	I BID	Local Agency	City of Peoria
			Section	14-00347-01-PW
	PAPER	BID BOND -		
WE				as PRINCIPAL,
and				as SURETY,
are held jointly, severally and firmly be the amount specified in the proposal d executors, administrators, successors	locuments in effect on the date o	of invitation for bids v	vhichever is the lesser su	sum of 5% of the total bid price, or for
WHEREAS THE CONDITION OF The through its awarding authority for the conditions are the conditions.	THE FOREGOING OBLIGATION construction of the work designat	NIS SUCH that, the ted as the above sec	said PRINCIPAL is submotion.	itting a written proposal to the LA acting
THEREFORE if the proposal is acc shall within fifteen (15) days after awar of the required insurance coverage, al. Specifications, then this obligation sha	rd enter into a formal contract, fu I as provided in the "Standard Sp	irnish surety guaran pecifications for Roa	teeing the faithful perform d and Bridge Constructio	ignated section and the PRINCIPAL lance of the work, and furnish evidence n" and applicable Supplemental
IN THE EVENT the LA determines preceding paragraph, then the LA actin with all court costs, all attorney fees, a	ng through its awarding authority	shall immediately by	tract in compliance with a be entitled to recover the f	ny requirements set forth in the full penal sum set out above, together
IN TESTIMONY WHEREOF, the sarespective officers this	aid PRINCIPAL and the said SUF	RETY have caused	this instrument to be sign	ed by their
· · · · · · · · · · · · · · · · · · ·		Principal		
(Company N	ame)	-	(Comr	pany Name)
By:		Ву:	(0011)	ian, rame,
	e and Title)		(Signati	ure and Title)
(If PRINCIPLE is a joint venture of t	wo or more contractors, the com	npany names, and a	uthorized signatures of ea	ach contractor must be affixed.)
		Surety	•	
		Ву:		
(Name of Su	rety)		(Signature of	Attomey-in-Fact)
STATE OF ILLINOIS, COUNTY OF				
	, a No	tary Public in and	for said county	
do hereby certify that	, 4110	tary r abile in and	for Said County,	
	( Insert names	of individuals signing	on behalf of PRINCIPAL & SI	JRETY)
who are each personally known to me SURETY, appeared before me this day voluntary act for the uses and purpose:	/ in person and acknowledged re	names are subscribe espectively, that they	ed to the foregoing instrur signed and delivered sa	nent on behalf of PRINCIPAL and id instruments as their free and
Given under my	hand and notarial seal this	da	y of	
My commission expires				
			(Notary P	ublic)
		RONIC BID BOND		
Electronic bid bond is allowed. The Principal may submit an electron an electronic bid bond ID code and the Principal and Surety are firmly venture of two or more contractors contractor in the venture.)	ronic bid bond, in lieu of com d signing below, the Principal bound unto the LA under the	pleting the above is ensuring the ide conditions of the	section of the Proposa entified electronic bid bid bond as shown ab	l Bid Bond Form. By providing bond has been executed and ove. (If PRINCIPAL is a joint
Electronic Bid Bond ID Code		(Cor	mpany/Bidder Name)	
)	_			
		(S	lignature and Title)	Date

Page 1 of 1 Printed on 3/6/2015 1:20:20 PM



### Apprenticeship or Training Program Certification

		Return with Bid		Route County Local Agency Section	FAU 6585/6641 Peoria City of Peoria 14-00347-01-PW
All co	ontractors	s are required to com	nplete the foll	owing certificat	tion:
⊠ Fo	r this contra	act proposal or for all gro	oups in this deliv	er and install prop	posal.
☐ Fo	the followi	ng deliver and install gro	oups in this mate	erial proposal:	
require appro- require (1) ap (2) ap	es this cont val by the [ es all bidde proved by a	tract to be awarded to the Department. In addition the sand all bidders' subcolude and registered with the Lathe work of the above income.	e lowest respon to all other respontractors to dis Inited States De	sive and responsi onsibility factors, t close participation epartment of Labor	e provisions of the Illinois Highway Code, ible bidder. The award decision is subject to this contract or deliver and install proposal in apprenticeship or training programs that are r's Bureau of Apprenticeship and Training, are refore, all bidders are required to complete the
ſ.	individua	s provided in paragraph I or as part of a group pr ork or craft that the bidd	ogram, in an ap	proved apprentice	certifies that it is a participant, either as an eship or training program applicable to each yees.
II.	submitted or trainin	d for approval either (A) i g program; or (B) will, pr	is, at the time of ior to commenc	f such bid, particip ement of performa	by subcontract that each of its subcontractors pating in an approved, applicable apprenticeship ance of work pursuant to this contract, establish plicable to the work of the subcontract.
III.	sponsor l participar subcontra	holding the Certificate of nt and that will be performacted shall be included a	Registration for med with the bion and listed as sub-	r all of the types of dder's employees. ocontract work. Th	certifies the official name of each program f work or crafts in which the bidder is a Types of work or craft that will be he list shall also indicate any type of work or r training program available.
					· · · · · · · · · · · · · · · · · · ·

IV.	except for any work identified above, at contract or deliver and install proposal whom the payment of prevailing rates cowner/operator workforce and positions	solely by individual owners, partne of wages would be required, check	ers or members and not by employees to
certific and sh listed. Certific and an applica	quirements of this certification and disclosation provision to be included in all approall make certain that each type of work of The Department at any time before or after the department at any time before or after the first the subcontractors. In order to the program sponsor be currently taking the performance of the work of this contractors.	ved subcontracts. The bidder is re r craft job category that will be utili ter award may require the product States Department of Labor evider fulfill the participation requirement, or that it will take applications for a	esponsible for making a complete report zed on the project is accounted for and ion of a copy of each applicable noing such participation by the contractor, it shall not be necessary that any
Bidder	:	Ву:	(Circolina)
Addres	ss:	Title:	(Signature)



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

### Affidavit of Availability For the Letting of 4/1/2015

**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.

	1	2	3	4	Awards Pending	
Contract Number						
Contract With						<u>-</u>
Estimated Completion Date						
Total Contract Price			<del></del>			Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						Totals
Uncompleted Dollar Value if Firm is the Subcontractor						
				Total Va	lue of All Work	-

### 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 Accumulated company. If no work is contracted, show NONE. Totals Earthwork Portland Cement Concrete Paving HMA Plant Mix HMA Paving Clean & Seal Cracks/Joints Aggregate Bases & Surfaces Highway, R.R. and Waterway Structures Drainage Electrical Cover and Seal Coats Concrete Construction Landscaping Fencing Guardrail Painting Signing Cold Milling, Planning & Rotomilling Demolition Pavement Markings (Paint) Other Construction (List) \$ 0. Totals

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.

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

<b>,</b>		1	2	3	4	Awards Pending
	Subcontractor					-
	Type of Work					
	Subcontract Price					
	Amount Uncompleted					
	Subcontractor					
	Type of Work					
	Subcontract Price					
	Amount Uncompleted					
	Subcontractor					
	Type of Work					
	Subcontract Price					
	Amount Uncompleted					
H	Subcontractor					
	Type of Work					
	Subcontract Price					
	Amount Uncompleted					
	Subcontractor					
	Type of Work					
	Subcontract Price					
	Amount Uncompleted					
	Total Uncompleted					
undersign	luly sworn, do hereby dec ned for Federal, State, Co d and ALL estimated com	unty, City and private	t is a true and corre work, including AL	ect statement relatin L subcontract work,	g to ALL uncomplete ALL pending low bid	ed contracts of the distributed short yet awarded
	ed and sworn to before me	· · · · · · · · · · · · · · · · · · ·	Type or Print Nam	e	r Director	
		Sigr	and	Officer o	r Director	Title
	Notary Public					
My comm	ission expires					
		Con	ipany			
	(Notary Seal)					
<b>N</b>		bbA	ress			



For Office Use Only

Reviewed by:

### CITY OF PEORIA SUBCONTRACTOR UTILIZATION STATEMENT

			PROJECT	
Name:			Name:	
Address:				ct Value:
Phone:				
Contact Person:				
Email:				
Ownership Status: MBE	WBE M	I/WBE	Non-M/WBE_	
Section III: Selected Subcontract				
Subcontractor Name	MBE, WBE or Non M/WBE	Amount	% of Total Contract	Scope of Work
			-	
			-	
POTAT C	_			
FOTALS *If more than seven firms are utilize	ed please copy the	form and attac	h the additional	information
Section IV: Subcontractors that s	-		cted (M/WBE (	Only)
Subcontractor (vaine		Scope of v	VOI K DIU	Denial Reason

Section V: Subcontractors Contacted (N Subcontractor Name	Method of Contact	Contact Outcome
		7-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1
*If more than seven firms were contacted, p	please copy the form and attach the additional in	formation.
funded construction projects: 10% MBE an	ng equal opportunity and has established the foll d 5% WBE. Prime Contractors have an obligationg the firms working on city construction proje	ion to make a good faith effort to advance th
ity's commitment to increase diversity am	ong the firms working on city construction proje	cts.
n Section III above; along with the total ar	tted with bid proposals. ALL subcontractors in nount to be paid to the subcontractors; percentage to utilize a subcontractor not listed above, the	ntended for use on this project shall be listege of total contract; and scope of work. If for must submit a Notification of Change i
Participation.	to diffice a subconfidence not fisted above, the	,
Participation. The undersigned certifies that the informati	on included herein is true and correct; the subconed further certifies that it has no controlling, do	ntractors listed above have agreed to perforr
Participation.  The undersigned certifies that the information he scope of work described. The undersignisted subcontractors.	on included herein is true and correct; the subconed further certifies that it has no controlling, do	ntractors listed above have agreed to perforn
Participation.  The undersigned certifies that the informati he scope of work described. The undersig	on included herein is true and correct; the subco	ntractors listed above have agreed to perform
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Participation.  The undersigned certifies that the information he scope of work described. The undersignisted subcontractors.	on included herein is true and correct; the subconed further certifies that it has no controlling, do	ntractors listed above have agreed to perform ominating or conflict of interest in any of the
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Participation.  The undersigned certifies that the information he scope of work described. The undersignisted subcontractors.	on included herein is true and correct; the subconed further certifies that it has no controlling, do	ntractors listed above have agreed to perform ominating or conflict of interest in any of the
Participation.  The undersigned certifies that the information he scope of work described. The undersignisted subcontractors.	on included herein is true and correct; the subconed further certifies that it has no controlling, do	ntractors listed above have agreed to performation or conflict of interest in any of the

For Office Use Only Reviewed by:



### M/WBE PARTICIPATION WAIVER REQUEST

PRIME CONTRACTOR	PROJECT				
Name:	Name:				
Address:					
Phone:					
Contact Person:					
We hereby request to waive all of the MBE and WBE participation with non-M/WBEs or self-perform all work for the following reason and documents provided are true and correct and not misleadi SUPPORTING DOCUMENTATION MUST BE SUBMITTED VICTORIAN AUGUST AND AUGUST AND AUGUST AU	n(s). The firm further affirms that the stated reasons ng: (CHECK ALL THAT APPLY, SPECIFIC				
1. No MBEs/WBEs responded to our invitation to bid.					
2. No subcontracting opportunities exist. (Attach explanation)					
3. The award of subcontract(s) is impracticable. (Attach explain	nation)				
SIGNED:(Company Official)	DATE:				
FOR OFFICE USE O					
APPROVED DISAPPROVED					
REVIEWED BY	DATE				

ORG.: 5/08 REV.: 3/11

# PART 2 EQUAL OPPORTUNITY REQUIREMENTS

### EEO CONTRACT COMPLIANCE CLAUSE

It is hereby declared to be the public policy of the City of Peoria, that it will not execute a contract for goods and/or services with any individual, business enterprise, supplier/vendor; maintain a financial relationship with any financial institution; or use the services of any labor organization or member thereof found to be in violation of the provisions of the Municipal Code for the City of Peoria, Chapter 17, Article III, Division 4, Section 17-118.

This clause covers contractors, vendors, suppliers, borrowers and/or recipients of city resources, purchasers and/or developers of city owned property, and any other individuals or entities providing goods and/or services to the City of Peoria; and are hereinafter referred to as "Contractor."

If any Contractor conducting business with the City of Peoria fails to comply with the fair employment and affirmative action provisions of Chapter 17, Article III, Division 4 of the municipal code (hereinafter Chapter 17), the city, at its option, may do any or all of the following:

- (1) Cancel, terminate, or suspend the contract in whole or in part;
- (2) Declare the contractor ineligible for further contracts for one calendar year;
- (3) The Fair Employment and Housing Commission (hereinafter FEHC), in accordance with its rules and regulations, shall have the power to impose a penalty upon any Contractor failing to comply with Chapter 17 in an amount not less than \$50.00; nor more than as provided in Chapter 1, Section 1-5 of the municipal code, for each day that the Contractor fails to comply, upon a specific finding of such violation. The FEHC may order a Contractor found guilty of failure to comply with the provisions of Chapter 17 to pay all or a portion of the legal costs incurred by the city as a result of prosecution of such violations. Penalties assessed under the this clause may be recovered from the Contractor by setoff against unpaid portion of the contract price; and
- (4) Such other sanctions as may be imposed by the FEHC pursuant to the provisions of Chapter 17 and other applicable ordinance provisions of the municipal code.

During the performance of this contract, the Contractor agrees:

(A) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual harassment, ancestry, national origin, place of birth, age, or a physical and/or mental disability which would not interfere with the efficient performance of the job in question. The contractor/vendor will take affirmative action to comply with the provisions of Peoria City Code, Chapter 17 and will require any subcontractor to submit to the City of Peoria a written commitment to comply with this division. The Contractor will distribute copies of this commitment to all persons who participate in recruitment, screening, referral, and selection of job applicants, prospective job applicants, members, or prospective contractors.

The Contractor agrees that the provisions of Chapter 17, of the Municipal Code of the City of Peoria is hereby incorporated by reference, as if set out verbatim

- (B) That it will examine each one of its workforce job classifications to determine if minorities and/or females are underutilized; and it will take appropriate affirmative action steps to rectify such identified underutilization.
- (C) That if it hires additional employees in order to perform this contract or any portion thereof, it will determine the availability of minority and females in the area(s) from which it may reasonably recruit; and every good faith effort will be made in its selection process to minimize or eliminate identified areas of minority and/or female underutilization for each job classification for which there are employment opportunities.

- (D) That during the performance of this contract, the Contractor will maintain its eligibility status to conduct business with the City of Peoria under the provisions of the EEO certification registration program.
- (E) That in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, sex, religion, national origin, age, or physical and/or mental disability.
- (F) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under Chapter 17. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with Chapter 17, the Contractor will promptly so notify the Equal Opportunity Office (hereinafter EOO) and/or the FEHC for the City of Peoria.
- (G) That it will submit reports as required and furnish all relevant information as may from time to time be requested the EOO and/or the FEHC.
- (H) That it will permit access to all relevant books, records, accounts and work sites by EOO staff members for purposes of investigation to ascertain compliance with Chapter 17.
- (I) That it will include verbatim or by reference the provisions of Section 17-120 of Chapter 17 so that such provisions will be binding in the same manner as with other provisions of this contract. The Contractor will be liable for compliance with applicable provisions of this clause by all its subcontractors; and further, it will promptly notify the EOO and/or FEHC in the event any subcontractor fails or refuses to comply therewith. In addition, no Contractor will utilize any subcontractor declared by the EOO and/or FEHC to be non-responsive and therefore, ineligible for contracts or subcontracts with the City of Peoria.
- (J) That during the performance of this contract, the Contractor agrees: that it will have written sexual harassment policies that shall include, at a minimum, the following information: (i) the illegality of sexual harassment; (ii) the definition of sexual harassment under state law; (iii) a description of sexual harassment utilizing examples; (iv) the contractor's internal complaint process including penalties; (v) the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Human Rights Commission; (vi) directions on how to contact the Department of Human Rights and the Commission; and (vii) protection against retaliation as provided by Section 6-101 of this Act (Public Act 87-1257). A copy of the policies shall be provided to the Illinois Department of Human Rights or the City of Peoria upon request.
- (K) That during the performance of this contract, the Contractor agrees that they do not and will not maintain or provide for their employees, any segregated facilities at any of their establishments, or permit employees to perform their services at any location under their control where segregated facilities are maintained.

As used in this document, the term segregated facilities means any waiting rooms, work areas, rest rooms and wash rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, religion, color, national origin, because of habit, local custom, or otherwise.



# MINORITY AND WOMEN'S BUSINESS ENTERPRISE (M/WBE) PARTICIPATION REQUIREMENTS FOR GOOD-FAITH EFFORTS

(Projects exceeding \$50,000)

### I. Description of Program

- A. It is the policy of the City of Peoria to encourage participation of M/WBE's on all city-funded construction projects. In complying with this clause bidders are required, when subcontracting opportunities are available, to make a good-faith effort to meet the goals established for M/WBE participation. The participation goals are cited in Section VI on the Subcontractor Utilization Statement.
- B. Failure to submit the documentation requested in Sections II and III of this document may cause (1) the bid to be rejected and determined non-responsive; (2) subject the bidders to the sanctions described in Section VIII.

### II. Pre-Bid Efforts when Awarding Subcontracts

A. Bidders are required to contact and solicit, in writing, bids from M/WBEs for available subcontracting. In seeking solicitations, bidders are to identify the portion(s) of work to be subcontracted and offer to break down any portion(s) of work into economically feasible units in order to facilitate M/WBE participation. Bidders also are to provide the name of a specific contact person in their notice to the M/WBEs. Contact shall be made prior to bid opening. The name of each company contacted, the date and method must be submitted with bid documents.

The low bidder shall provide to the City of Peoria, upon request, copies of faxes, letters, and e-mails sent to M/WBEs

B. Bidders who are a MBE or WBE are not exempt from soliciting bids for available subcontracting. The bidder is required to contact, in writing, firms that will help the bidder meet the participation goal for the targeted group opposite to which the bidder belongs. If the bidder is identified as both a MBE and WBE, the participation goals shall be deemed to have been met.

In seeking solicitations, bidders are to identify the portion(s) of work to be subcontracted and offer to break down any portion(s) of work into economically feasible units in order to facilitate M/WBE participation. Bidders also are to provide the name of a specific contact person in their notice to the M/WBEs.

Contact shall be made prior to bid opening. A list containing the name of each company contacted, the date and method must be submitted with bid documents.

The low bidder shall provide to the City of Peoria, upon request, copies of faxes, letters, and e-mails sent to M/WBEs.

### III. Good-Faith Efforts Documentation when Utilizing Subcontractors

- A. All Bidders must provide proof of its compliance with the pre-bid requirements and good-faith efforts to the City. Both the pre-bid documentation and the support documentation requested below must be submitted with bid documents.
  - All Bidders must submit a properly completed "Subcontractor Utilization Statement." All Bidders must provide the scope of work to be performed, the dollar amount to be paid, and the percentage amount of the contract for each company listed.
  - 2. All Bidders must submit a list of qualified M/WBE's who submitted proposals but will not be utilized. This list must include a justification for not accepting the proposed bid.
- B. Disputes arising from the enforcement of these requirements will be resolved by the Equal Opportunity Office.

### IV. Waiver Requirements When Self-Performing All Work

- A. All bidders will make every effort to make subcontract opportunities available to M/WBEs. However, if such an opportunity cannot be made available, the Bidder must seek a waiver by submitting "M/WBE Participation Waiver Request." The waiver request must be submitted to the City of Peoria with bid documents.
- B. For the M/WBE waiver request to receive consideration, the following supportive documentation that applies must accompany the form:
  - 1. A narrative describing the Bidder's good faith efforts to secure M/WBE participation prior to bid opening.
  - 2. A notarized affidavit attesting the Bidder did not receive inquiries or proposals from qualified M/WBEs in response to the required notification prior to bid opening.
  - 3. A written explanation for why the Bidder believes no subcontracting opportunities exist. If the City of Peoria determines that the explanation

is insufficient it reserves the right to halt the bid award process to request additional information from the Bidder. The Bidder will receive the request for information in writing.

4. A written explanation for why the Bidder believes it is impracticable to award any subcontract(s) on the project in question. If the Equal Opportunity Office determines that the explanation is insufficient it reserves the right to halt the bid award process to request additional information from the Bidder. The Bidder will receive the request for information in writing.

### V. Change In Use of Subcontractors or Self-Performance Status

Before the General Contractor can deviate from utilizing any of the subcontractors listed on the Subcontractor Utilization Statement or its declared intent to self-perform, it must submit a completed **Notification of Change in Participation** form to the City of Peoria. Upon notification construction on the project may be delayed or halted until a review is conducted by the Equal Opportunity Office.

Regarding a self-performance change, if a subcontracting opportunity has been made available, the General Contractor must identify all good faith efforts made to meet the M/WBE participation goals, unless the change was due to an emergency.

- VI. Procedures for Counting M/WBE Participation toward Goals upon Department of Transportation regulations) (based
  - i. When an M/WBE participates in a contract, count only the value of the work actually performed by the M/WBE toward M/WBE participation goals.
    - 1. Count the entire amount of that portion of a construction contract (or other contract not covered by paragraph (i)(2) of this section) that is performed by the M/WBE's own forces. Include the cost of supplies and materials obtained by the M/WBE for the work of the contract including supplies purchased or equipment leased by the M/WBE (except supplies and equipment the M/WBE subcontractor purchases or leases from the prime contractor or its affiliate).
    - 2. Count the entire amount of fees or commissions performed by an M/WBE firm towards M/WBE goals if that firm provides the Apparent Low Bidder a bona fide professional, technical, consultant, or managerial service or provides bonds or insurance specifically required in a City of Peoria contract.
    - 3. If an M/WBE subcontracts a portion of its work to an M/WBE, 100% of the value of the subcontracted work may be counted toward the M/WBE goal,

but any portion of the work the M/WBE subcontracts to a non-M/WBE does not count toward the M/WBE goal.

- ii. When an M/WBE participates in a joint venture on a City contract, only count the dollar value of the portion of the work that the M/WBE performs with its own forces toward M/WBE goals.
- iii. Count expenditures to an M/WBE contractor toward M/WBE goals if, and only if, the M/WBE is performing a commercially useful function on that contract.
  - An M/WBE performs a commercially useful function when it is responsible for performing, managing, and supervising its contracted work; moreover, with respect to materials and supplies used on the contract, it must also be responsible for negotiating its price, and purchasing and managing those supplies.
  - 2. An M/WBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of M/WBE participation. It should be noted that an effort contrived to give the appearance of M/WBE participation is not considered a good faith effort and is considered an ethical violation that is subject to sanctions outlined in section V.
  - 3. If an M/WBE does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own work force, you must presume that it is not performing a commercially useful function and the dollar amount of that work will not count toward the M/WBE goals.
  - 4. When an M/WBE is presumed the City of Peoria not to be performing a commercially useful function as provided in paragraph (iii)(3) of this section, the M/WBE may present evidence to rebut this presumption. Your rebuttal is subject to review by the City of Peoria.
- iv. Use the following factors in determining if an M/WBE trucking company is performing a commercially useful function:
  - The M/WBE trucking company must manage and supervise the trucking work it is being paid to perform. A contrived arrangement for the purpose of giving the appearance of meeting M/WBE goals is not considered a good faith effort.
  - 2. The M/WBE trucking company must own and operate at least one fully licensed, insured, and operational truck used on the contract.

- 3. The M/WBE trucking company receives credit for the total dollar value of the transportation services it provides on the contract using trucks it owns, insures, and operates.
- 4. The M/WBE trucking company may lease trucks from another M/WBE trucking firm, including an owner-operator who is certified as an M/WBE. The M/WBE who leases trucks from another M/WBE receives total credit for the dollar value of the transportation services the M/WBE trucking lessee provides on the contract.
- 5. The M/WBE trucking company may also lease trucks from a non-M/WBE trucking firm, including an owner-operator. The M/WBE who leases trucks from a non-M/WBE is only entitled to credit for the fee or commission it receives as a result of the lease arrangement. The M/WBE does not receive credit for the total dollar value of the transportation services provided by the lessee since these services are not provided by an M/WBE.
- 6. A lease agreement with an M/WBE trucking firm must indicate that the M/WBE has exclusive use of and control over the truck. This does not preclude the leased truck from working for others during the term of the lease with the consent of the M/WBE, so long as the lease gives the M/WBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the M/WBE.
- v. Count expenditures with M/WBEs for materials and supplies toward M/WBE goals in the following manner:
  - 1. If the materials or supplies are obtained from an M/WBE manufacturer, count 100% of the cost of the materials or supplies toward M/WBE goals.

Note: For purposes of this paragraph (v)(1), a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

2. If the materials or supplies are purchased from an M/WBE regular dealer, count 60% of the cost of the materials or supplies toward M/WBE goals.

Note: For purposes of this section, a regular dealer is a firm that owns, operates or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are brought, kept in stock, and regularly sold or leased to the public in the usual course of business.

(A) To be a regular dealer, the firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.

- (B) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business as provided in this paragraph (v)(2), if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.
- (C) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of the paragraph (v)(2).
- 3. If materials or supplies are purchased from an M/WBE which is neither a manufacturer nor a regular dealer, count only 5% of the contract amount toward the M/WBE goals.

### VII. Record Keeping and Reporting

- A. The General Contractor and subcontractors agree to maintain records demonstrative of its good faith efforts to comply with the participation goals attached to the project. This would include, but not limited to, names of M/WBEs and non-minority firms awarded subcontracts, including dollar amount of the contract, payments to subcontractors, and weekly certified payroll reports. These records shall be made available to the City of Peoria.
- B. All information will be provided through ePrismSoft, an electronic web based compliance tracking software. Access to ePrismSoft has been furnished by the City of Peoria. To activate access, the General Contractor and subcontractors must contact Human Capital Development at webnfo@eprismsoft.com or 309/692-6400.

### VIII. Sanctions

- A. The Equal Opportunity Office may recommend the rejection of the apparent low bid where the information submitted by the Apparent Low Bidder fails to objectively demonstrate compliance with the M/WBE Good-Faith Efforts requirements. The Apparent Low Bidder will be notified of this decision and the reasons in writing. The Apparent Low Bidder may request a hearing within five (5) business days of this notice. The request must be submitted to the Equal Opportunity Office. The hearing will be held no later than seven (7) business days after receipt of request. The City Manager or designee will conduct all hearings.
- B. Upon a finding that any party has not complied with the provisions of this clause, any one or a combination of the following actions may be taken:

- 1. Declare the Apparent Low Bidder non-responsive and therefore ineligible for contract award.
- 2. Declare the Apparent Low Bidder ineligible for further contracts for a calendar year.
- 3. File a formal complaint against Apparent Low Bidder, and/or subcontractor with the Fair Employment and Housing Commission.

org. 05/08/08 rev. 04/17/12

### MINORITY AND FEMALE WORKFORCE UTILIZATION

The City of Peoria is committed to ensuring our construction projects offer equal employment opportunity to all the citizens we serve. The Prime Contractor and all of its subcontractors are to make a good faith effort to comply with the following goals for minority and female workforce utilization.

- 1. Eighteen (18) percent of the total hours worked, per trade, should be performed by minority workers.
- 2. Three (3) percent of the total hours worked, per trade, should be performed by female workers.

Each contractor must maintain certified payroll records verifying the hours worked by minority and female workers. These records must be provided to the City of Peoria. For directions on submitting this information, see Minority and Women's Business Enterprise (M/WBE) Participation Requirements for Good-Faith Efforts, Section VII.

### **HUMAN RIGHTS ACT**

The contract will be subject to and governed by the rules and regulations of the Illinois Human Rights Act, including Public Act 87-1257 (effective July 1, 1993) which requires that every bidder shall have a written sexual harassment policy that includes, at a minimum, the following information:

- a. The illegality of sexual harassment;
- b. The definition of sexual harassment under State law;
- c. A description of sexual harassment, utilizing examples;
- d. The bidder's internal complaint process including penalties;
- e. The legal recourse, investigative and complaint process available through the Illinois Department of Human Rights and the Illinois Human Rights Commission;
- f. Directions on how to contact the Department and the Commission;
- g. Protection against retaliation as provided in the Act.

Bidders are hereby placed on notice, a copy of its policy shall be provided to the Department upon request.

SAXI-93 effective 7-1-93 per Legal Dept.

# PART 3 SPECIAL PROVISIONS

- GENERAL CONDITIONS
- PROJECT SPECIFIC SPECIAL PROVISIONS
- BDE SPECIAL PROVISIONS
- LOCAL ROAD SPECIAL PROVISIONS

# INDEX FOR SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS

### Adopted January 1, 2015

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

ERRATA Standard Specifications for Road and Bridge Construction (Adopted 1-1-12) (Revised 1-1-15)

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## CHECK SHEET FOR RECURRING SPECIAL PROVISIONS

### Adopted January 1, 2015

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

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### Adopted January 1, 2015

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

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#### **SPECIAL PROVISIONS**

The following special provisions supplement the "Standard Specifications for Road and Bridge Construction" adopted January 1, 2012, the latest edition of the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", in effect on the date of invitation for bids, the "Manual of Test Procedures for Materials", in effect on the date of invitation for bids, the "Supplemental Specifications and Recurring Special Provisions" indicated on the Check Sheet included herein, the "Bureau of Design & Environment Special Provisions (BDE)" included herein, the latest edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", which apply to and govern the construction of FAU 6585/6641(Allen Road/Alta Road), Section 14-00347-01-PW, in the City of Peoria, Peoria County, and in case of conflict with any part or parts of said Specifications, the said Special Provisions shall take precedence and shall govern.

### **DESCRIPTION OF WORK**

This work includes construction of a single lane modern roundabout at the intersection of Allen Road and Alta Road. The proposed improvement will include 1.0 mile of roadway construction consisting of earthwork, two culvert extensions, HMA multi-use path, concrete sidewalk, street lighting, landscaping, and other collateral work to complete the project. Utility adjustments are anticipated.

### MANDATORY PRE-BID MEETING

Attendance at the Pre-bid Meeting is mandatory for all prospective bidders.

The meeting will be held Wednesday, March 25, 2015 at 11:00 A.M. at the City of Peoria Public Works Facility, 3505 N. Dries Lane, Peoria, Illinois 61604 (Main Conference Room).

### **ILLINOIS DEPARTMENT OF TRANSPORTATION PREQUALIFICATION**

Each Bidder must be prequalified with the Illinois Department of Transportation to perform the type of construction work necessary for the Allen Road/Alta Road Drainage Improvement project. <u>Bidders shall include a copy of their Illinois Department of Transportation "Certificate of Eligibility" with their bid.</u>

### PROPOSED RIGHT OF WAY AND TEMPORARY EASEMENTS STATUS

The City of Peoria has not acquired all of the proposed right of way and temporary easements at the time of advertising for bid. It is the intent of the City to have all properties acquired by time of award of contract. However, the Contractor shall be aware that some parcels may still need to be acquired at the start of construction and

could affect the construction areas of the project that the Contractor will have access.

### RESPONSIBILITY FOR DAMAGE CLAIMS

The Contractor shall indemnify and save harmless the CITY OF PEORIA, its officers and employees against all loss, damage or expense that it or they may sustain as a result of any suits, actions, or claims of any character brought on account of injury to or death of any person or persons, including all persons performing any work under this contract, which may arise in any way (except for a negligent act of the City of Peoria, its officers or employees) in connection with the work to be performed under this contract, including but not limited to, suits, actions or claims arising under "An Act providing for the protection and safety of persons in and about the construction, repairing, alteration or removal of building, bridges, viaducts, and other structures, and to provide for the enforcement thereof," approved June 3, 1907, (740 ILCS 150/1), as amended: the Contractor shall also indemnify and save harmless the CITY OF PEORIA, its officers and employees, from all suits, actions, or claims of any character brought because of any injuries or damages received or sustained by any person, persons, or property, on account of, or in consequence of, any neglect by Contractor or a Subcontractor in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered for any infringements of patent, trademark, or copyright, or from any claims or amounts arising or recovered under the "Workers Compensation Act," or any other law, ordinance, order, or decree, and so much of the money due the said Contractor under and by virtue of his contract as shall be considered necessary by the Department for such purposes, may be retained for the use of the ENGINEERING DIVISION; or, in case no money is due, his surety shall be held until such suits, actions, or claims have been settled and suitable evidence to that effect furnished to the Department.

### **CONTRACTOR'S INSURANCE**

The Contractor shall not commence work under this project until he has obtained all insurance required under this paragraph and such insurance has been approved by the City of Peoria, nor shall the Contractor allow any Subcontractor to commence work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved by the City of Peoria.

The Contractor shall require Subcontractors, if any, not protected under the Contractor's insurance policies as an additional insured to take out and maintain insurance of such nature in amounts not less than that required of the principal Contractor, excluding Umbrella Coverage and Owner's Protective Liability and Property Damage Insurance, and any and all insurance obtained by any Subcontractor or Subcontractors shall be approved by the City of Peoria.

All policies shall contain provisions to the effect that in the event of payment of any loss

or damage the insurers will have no rights of recovery against any of the insureds or additional insured thereunder.

### **COMPENSATION INSURANCE**

The Contractor shall take out and maintain during the life of this project Worker's Compensation Insurance for all of his employees employed at the site of the project and, in case any work is sublet, the Contractor shall require the Subcontractor similarly to provide Worker's Compensation Insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor, and any such insurance obtained by any subcontractor or subcontractors shall be approved by the City of Peoria. In case any class of employees engaged in hazardous work at the site of the project is not protected under the Worker's Compensation statute, the Contractor shall provide, and shall cause each Subcontractor to provide adequate insurance coverage for the protection of his employees not otherwise protected, such as accident insurance, and any such insurance shall be approved by the City of Peoria.

### PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE

The Contractor shall take out and maintain during the life of the project such General Liability, Public Liability and Property Damage Insurance as shall protect him and any Subcontractor performing work covered by this project, from claims for damages for personal injury, including accidental death, as well as from claims for property damages, which may arise from operations under this project, whether such operations be by himself or by any Subcontractors or by anyone directly or indirectly employed by either of them and the amounts of such insurance shall be as follows:

Commercial General Liability Insurance that provides Property Damage and/or Bodily Injury in an amount not less than \$1,000,000 per occurrence and \$2,000,000 aggregate.

### OWNER'S PROTECTIVE LIABILITY AND PROPERTY DAMAGE INSURANCE

The Contractor shall obtain Owner's Protective Liability and Property Damage Insurance in an amount not less than \$1,000,000 per occurrence and \$2,000,000 aggregate. If endorsements to the above public liability and property damage insurance policies cannot be made, then separate policies providing such protection must be furnished by the Contractor.

### **AUTOMOBILE INSURANCE**

The Contractor shall take out and maintain during the life of the project such automobile insurance covering all owned and non-owned vehicles as shall

project him an any Subcontractor performing work covered by this project, from claims for damages in an amount not less than \$1,000,000 Combined Bodily Injury and Property Damage.

### <u>UMBRELLA COVERAGE</u>

The Contractor shall take out and maintain during the life of the project such Umbrella or Excess Liability coverage as shall protect him and any Subcontractor performing work covered by this project, from claims for damages in an amount not less than \$2,000,000 per occurrence and \$5,000,000 annual aggregate.

### ADDITIONAL INSURED ENDORSEMENT

All Liability insurance policies shall name the City of Peoria its officers, directors, employees, agents, representatives, subsidiaries, successors, and assigns, as additional insureds, shall be primary to any other insurance carried by the City of Peoria and shall provide coverage consistent with ISO CG 20 26, and shall maintain the required coverages, naming the City of Peoria as an additional insured, for a period of not less than three years from the date the City of Peoria and Contractor execute an Agreement to Final Quantities.

### PROOF OF CARRIAGE OF INSURANCE

The Contractor and all Subcontractors shall furnish the City of Peoria with satisfactory proof of insurance coverage. This shall include an A.M. Best "A" rating before the project begins. If coverage is cancelled or the carrier's rating falls below A.M. Best "A" rated, the City of Peoria shall be notified in writing.

Certificates of insurance are required. The Certificate must state the following "The City of Peoria, its officers, directors, employees, agents, and representatives, are named as Additional Insured on a primary basis for liability arising out of the contractor's operations."

Upon request the Contractor must provide copies of the policies and endorsements, failure to provide the required certificates of insurance shall not operate to invalidate the insurance requirements under this Contract.

### CERTIFIED PAYROLL REQUIREMENTS

Contractors and subcontractors on public works projects must submit certified payroll records on a weekly basis via EPrismSoft to the public body in charge of the construction project, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate, and that the Contractor is aware that filing records he or she knows to be false is a Class B Misdemeanor. The Certified Payroll Records must include, for every worker

employed on the public works project, the name, address, telephone number, social security number, job classification, hourly wages paid in each pay period, number of hours worked each day, and starting and ending time of work each day. Certified payrolls are to be submitted weekly on EPrismSoft, per the EEO guidelines outlined in Section VII of the Good Faith Efforts Requirements, herein. Copies of the certified payrolls as submitted to EPrismSoft should be submitted with each payment application for review by the City.

### PREVAILING WAGE PROVISION

This contract is for the performance of "public works" as that term is defined by 820 ILCS 130/2. Not less than the prevailing rate of wages as found by the Illinois Department of Labor or determined by a Court on review shall be paid to all laborers, workers and mechanics performing work under this contract. These prevailing rates of wages are included in this contract.

If the Department of Labor revises the prevailing rate of hourly wages to be paid by the public body, the revised rate as provided by the public body shall apply to this contract.

### **Peoria County Prevailing Wage for March 2015**

(See explanation of column headings at bottom of wages)

Trade Name RO		Base	FRMAN M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng	
ASBESTOS ABT-GEN	BLD		27.970 1.5				15.07			
ASBESTOS ABT-GEN			31.080 1.5							
ASBESTOS ABT-MEC	BLD	32.140	34.640 1.5	1.5	2.0	11 17	10.19	0.000	0.800	
BOILERMAKER	BLD		39.750 2.0				15.84			
BRICK MASON	BLD		33.880 1.5				9.870			
CARPENTER	BLD		32.630 1.5				14.71			
CARPENTER	HWY		33.900 1.5	1.5	2.0	8.000	15.46	0.000	0.520	
CEMENT MASON	BLD		29.800 1.5	1.5	2.0	7.500	15.65	0.000	0.500	
CEMENT MASON	HWY	29.280	30.780 1.5	1.5	2.0	7.500	16.02	0.000	0.500	
CERAMIC TILE FNSHER	BLD	29.890	0.000 1.5				10.05			
ELECTRIC PWR EQMT OP	ALL		45.290 1.5				10.73			
ELECTRIC PWR GRNDMAN	ALL		45.290 1.5				7.360			
ELECTRIC PWR LINEMAN	ALL		45.290 1.5				11.92			
ELECTRIC PWR TRK DRV	ALL		45.290 1.5				7.720			
ELECTRICIAN ELECTRICIAN	ALL		37.320 1.5				11.68			
ELECTRICIAN ELECTRONIC SYS TECH	BLD BLD		37.320 1.5	1.5	2.0	6.100	11.43	0.000	0.400	
ELEVATOR CONSTRUCTOR	BLD		30.250 1.5 46.900 2.0	1.5	2.0	13 57	10.54	0.000	0.400	
GLAZIER	BLD		33.870 1.5				14.21 7.700			
HT/FROST INSULATOR	BLD		45.850 1.5				12.36			
IRON WORKER	BLD		33.710 1.5				12.91			
IRON WORKER	HWY		37.340 1.5				12.91			
LABORER	BLD		26.970 1.5				15.07			
LABORER	HWY		30.330 1.5	1.5	2.0	7.700	16.19	0.000	0.800	
LABORER, SKILLED	BLD		27.370 1.5	1.5	2.0	7.700	15.07	0.000	0.800	
LABORER, SKILLED	HWY		30.630 1.5				16.19			
LATHER	BLD	30.380	32.630 1.5				14.71			
MACHINERY MOVER	HWY		37.340 1.5	1.5	2.0	9.390	12.91	0.000	0.540	
MACHINIST	BLD		46.850 1.5	1.5	2.0	6.760	8.950	1.850	0.000	
MARBLE FINISHERS	BLD		0.000 1.5	1.5	2.0	8.600	10.05	0.000	0.580	
MARBLE MASON	BLD		32.900 1.5				10.05			
MILLWRIGHT	BLD		33.050 1.5				14.63			
MILLWRIGHT	HWY		34.470 1.5				15.39			
OPERATING ENGINEER OPERATING ENGINEER			40.050 1.5 40.050 1.5				17.48			
OPERATING ENGINEER			40.050 1.5				17.48			
OPERATING ENGINEER			40.000 1.5				17.48 17.48			
OPERATING ENGINEER			40.000 1.5	1 5	2.0	7.000	17.48	0.000	3.000	
OPERATING ENGINEER			40.000 1.5	1.5	2.0	7.000	17.48	0.000	3.000	
PAINTER	ALL		35.650 1.5	1.5	1.5	10.30	8.200	0.000	3.000 1 350	
PAINTER SIGNS	BLD			1.5	1.5	2.600	2.710	0.000	0.000	
PILEDRIVER	BLD			1.5	2.0	8.000	14.71	0.000	0.520	
PILEDRIVER	HWY						15.46			
PIPEFITTER	BLD	37.400		1.5	2.0	7.000	11.63	0.000	1.060	
PLASTERER	BLD		29.770 1.5	1.5	2.0	7.500	15.00	0.000	0.870	
PLUMBER	BLD		37.630 1.5	1.5	2.0	7.000	13.31	0.000	0.900	
ROOFER	BLD						7.220			
SHEETMETAL WORKER							14.18			
SIGN HANGER SPRINKLER FITTER			37.340 1.5	1.5	2.0	9.390	12.91	0.000	0.540	
STEEL ERECTOR	BLD HWY						8.500			
STONE MASON	BLD		33.880 1.5	1.5	2.0	9.390	12.91	0.000	0.540	
SURVEY WORKER -> NOT		72.300		1.0	2.0	8.600	9.870	0.000	0.590	
TERRAZZO FINISHER	BLD		0.000 1.5	1.5	2 U	8 800 T	.5 2.0 10.05 (	7.700	14.86 U. n 50n	000 0.800
TERRAZZO MASON	BLD			1 5	2.0	8 600	10.05	0.000	0.580	
TILE MASON	BLD			1.5	2.0	8.600	10.05	0.000	0.580	
TRUCK DRIVER							5.230			
TRUCK DRIVER	ALL 2	33.480	36.550 1.5	1.5	2.0	11.10	5.230 (	0.000	0.250	
TRUCK DRIVER	ALL 3	33.700	36.550 1.5	1.5	2.0	11.10	5.230 (	0.000	0.250	
TRUCK DRIVER			36.550 1.5	1.5	2.0	11.10	5.230 (	0.000	0.250	
TRUCK DRIVER			36.550 1.5	1.5	2.0	11.10	5.230 (	0.000	0.250	
TRUCK DRIVER	0&C 1	26.400	29.240 1.5	1.5	2.0	11.10 !	5.230 (	0.000	0.250	

```
TRUCK DRIVER
                       O&C 2 26.780 29.240 1.5 1.5 2.0 11.10 5.230 0.000 0.250
TRUCK DRIVER
                       O&C 3 26.960 29.240 1.5 1.5 2.0 11.10 5.230 0.000 0.250
TRUCK DRIVER
                       O&C 4 27.210 29.240 1.5 1.5 2.0 11.10 5.230 0.000 0.250
TRUCK DRIVER
                       O&C 5 27.920 29.240 1.5
                                                1.5 2.0 11.10 5.230 0.000 0.250
TUCKPOINTER
                       BLD
                            32.380 33.880 1.5
                                                 1.5 2.0 8.600 9.870 0.000 0.590
```

Legend: RG (Region)

(Trade Type - All, Highway, Building, Floating, Oil & Chip, Rivers)

Base (Base Wage Rate) FRMAN (Foreman Rate)

MF-F>8 (OT required for any hour greater than 8 worked each day, Mon through Fri. CSA (Overtime (OT) is required for every hour worked on Saturday)
CSH (Overtime is required for every hour worked on Sunday and Holidays)
H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation) Trng (Training)

#### Explanations

PEORIA COUNTY

The following list is considered as those days for which holiday rates of wages for work performed apply: New Years Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, Christmas Day and Veterans Day in some classifications/counties. Generally, any of these holidays which fall on a Sunday is celebrated on the following Monday. This then makes work performed on that Monday payable at the appropriate overtime rate for holiday pay. Common practice in a given local may alter certain days of celebration. If in doubt, please check with IDOL.

Oil and chip resealing (O&C) means the application of road oils and liquid asphalt to coat an existing road surface, followed by application of aggregate chips or gravel to coated surface, and subsequent rolling of material to seal the surface.

EXPLANATION OF CLASSES

ASBESTOS - GENERAL - removal of asbestos material/mold and hazardous materials from any place in a building, including mechanical systems where those mechanical systems are to be removed. This includes the removal of asbestos materials/mold and hazardous materials from ductwork or pipes in a building when the building is to be demolished at the time or at some close future date.

ASBESTOS - MECHANICAL - removal of asbestos material from mechanical systems, such as pipes, ducts, and boilers, where the mechanical systems are to remain.

CERAMIC TILE FINISHER, MARBLE FINISHER, TERRAZZO FINISHER

Assisting, helping or supporting the tile, marble and terrazzo mechanic by performing their historic and traditional work assignments required to complete the proper installation of the work covered by said crafts. The term "Ceramic" is used for naming the classification only and is in no way a limitation of the product handled. Ceramic takes into consideration most hard tiles.

ELECTRONIC SYSTEMS TECHNICIAN

Installation, service and maintenance of low-voltage systems which utilizes the transmission and/or transference of voice, sound, vision, or digital for commercial, education, security and entertainment purposes for the following: TV monitoring and surveillance, background/foreground music, intercom and telephone interconnect, field programming, inventory control systems, microwave transmission, multi-media, multiplex, radio page, school, intercom and sound burglar alarms and low voltage master clock systems.

Excluded from this classification are energy management systems, life safety systems, supervisory controls and data acquisition systems not intrinsic with the above listed systems, fire alarm systems, nurse call systems and raceways exceeding fifteen feet in length.

LABORER, SKILLED - BUILDING

The skilled laborer building (BLD) classification shall encompass the following types of work, irrespective of the site of the work: cutting & acetylene torch, gunnite nozzlemen, gunnite pump men & pots,

kettlemen & carriers of men handling hot stuff, sandblaster nozzle men, sandblasting pump men & pots, setting up and using concrete burning bars, wood block setters, underpinning & shoring of existing buildings, and the unload-ing and handling of all material coated with creosote.

#### LABORER, SKILLED - HIGHWAY

The skilled laborer heavy & highway (HWY) classification shall encompass the following types of work,irrespective of the site of the work: jackhammer & drill operator, gunite pump & pot man, puddlers, vibrator men, wire fabric placer, sandblast pump & pot man, strike off concrete, unloading, handling & carrying of all creosoted piles, ties or timber, concrete burning bars, power wheelbarrows or buggies, asphalt raker, brickset-ters, cutting torchman (electric & acetylene), men setting lines to level forms, form setters, gunite nozzle man & sandblasting nozzle man, power man, and rip-rapping by hand.

SURVEY WORKER - Operated survey equipment including data collectors,  ${\tt G.P.S.}$  and robotic instruments, as well as conventional levels and transits.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION Class 1. Drivers on 2 axle trucks hauling less than 9 ton. Air compressor and welding machines and brooms, including those pulled by separate units, truck driver helpers, warehouse employees, mechanic helpers, greasers and tiremen, pickup trucks when hauling materials, tools, or workers to and from and on-the-job site, and fork lifts up to 6,000 lb. capacity.

Class 2. Two or three axle trucks hauling more than 9 ton but hauling less than 16 ton. A-frame winch trucks, hydrolift trucks, vactor trucks or similar equipment when used for transportation purposes. Fork lifts over 6,000 lb. capacity, winch trucks, four axle combination units, and ticket writers.

Class 3. Two, three or four axle trucks hauling 16 ton or more. Drivers on water pulls, articulated dump trucks, mechanics and working forepersons, and dispatchers. Five axle or more combination units.

Class 4. Low Boy and Oil Distributors.

Class 5. Drivers who require special protective clothing while employed on hazardous waste work.

TRUCK DRIVER - OIL AND CHIP RESEALING ONLY.

This shall encompass laborers, workers and mechanics who drive contractor or subcontractor owned, leased, or hired pickup, dump, service, or oil distributor trucks. The work includes transporting materials and equipment (including but not limited to, oils, aggregate supplies, parts, machinery and tools) to or from the job site; distributing oil or liquid asphalt and aggregate; stock piling material when in connection with the actual oil and chip contract. The Truck Driver (Oil & Chip Resealing) wage classification does not include supplier delivered materials.

#### OPERATING ENGINEERS - BUILDING

Class 1. Cranes; Overhead Cranes; Gradall; All Cherry Pickers; Mechanics; Central Concrete Mixing Plant Operator; Road Pavers (27E -Dual Drum - Tri Batchers); Blacktop Plant Operators and Plant Engineers; 3 Drum Hoist; Derricks; Hydro Cranes; Shovels; Skimmer Scoops; Koehring Scooper; Drag Lines; Backhoe; Derrick Boats; Pile Drivers and Skid Rigs; Clamshells; Locomotive Cranes; Dredge (all types) Motor Patrol; Power Blades - Dumore - Elevating and similar types; Tower Cranes (Crawler-Mobile) and Stationary; Crane-type Backfiller; Drott Yumbo and similar types considered as Cranes; Caisson Rigs; Dozer; Tournadozer; Work Boats; Ross Carrier; Helicopter; Tournapulls - all and similar types; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Heavy Equipment Greaser; CMI, CMI Belt Placer, Auto Grade & 3 Track and similar types; Side Booms; Multiple Unit Earth Movers; Creter Crane; Trench Machine; Pump-crete-Belt Crete-Squeeze Cretes-Screw-type Pumps and Gypsum; Bulker & Pump -Operator will clean; Formless Finishing Machine; Flaherty Spreader or similar types; Screed Man on Laydown Machine; Wheel Tractors (industrial or Farm-type w/Dozer-Hoe-Endloader or other attachments); F.W.D. & Similar Types; Vermeer Concrete Saw.

Class 2. Dinkeys; Power Launches; PH One-pass Soil Cement Machine (and similar types); Pugmill with Pump; Backfillers; Euclid Loader; Forklifts; Jeeps w/Ditching Machine or other attachments; Tuneluger; Automatic Cement and Gravel Batching Plants; Mobile Drills (Soil Testing) and similar types; Gurries and Similar Types; (1) and (2)

Drum Hoists (Buck Hoist and Similar Types); Chicago Boom; Boring Machine & Pipe Jacking Machine; Hydro Boom; Dewatering System; Straw Blower; Hydro Seeder; Assistant Heavy Equipment Greaser on Spread; Tractors (Track type) without Power Unit pulling Rollers; Rollers on Asphalt -- Brick Macadem; Concrete Breakers; Concrete Spreaders; Mule Pulling Rollers; Center Stripper; Cement Finishing Machines & CMI Texture & Reel Curing Machines; Cement Finishing Machine; Barber Green or similar loaders; Vibro Tamper (All similar types) Self-propelled; Winch or Boom Truck; Mechanical Bull Floats; Mixers over 3 Bag to 27E; Tractor pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Truck Type Hoptoe Oilers; Fireman; Spray Machine on Paving; Curb Machines; Truck Crane Oilers; Oil Distributor; Truck-Mounted Saws.

Class 3. Air Compressor; Power Subgrader; Straight Tractor; Trac Air without attachments; Herman Nelson Heater, Dravo, Warner, Silent Glo, and similar types; Roller: Five (5) Ton and under on Earth or Gravel; Form Grader; Crawler Crane & Skid Rig Oilers; Freight Elevators - permanently installed; Pump; Light Plant; Generator; Conveyor (1) or (2) - Operator will clean; Welding Machine; Mixer (3) Bag and Under (Standard Capacity with skip); Bulk Cement Plant; Oiler on Central Concrete Mixing Plant.

OPERATING ENGINEERS - HEAVY AND HIGHWAY CONSTRUCTION

CLASS 1. Cranes; Hydro Cranes; Shovels; Crane Type Backfiller; Tower, Mobile, Crawler, & Stationary Cranes; Derricks; Hoists (3 Drum); Draglines; Drott Yumbo & Similar Types considered as Cranes; 360 Degree Swing Excavator (Shears, Grapples, Movacs, etc.); Back Hoe; Derrick Boats; Pile Driver and Skid Rigs; Clam Shell; Locomotive Cranes; Road Pavers - Single Drum - Dual Drum - Tri Batcher; Motor Patrols & Power Blades - Dumore - Elevating & Similar Types; Mechanics; Central Concrete Mixing Plant Operator; Asphalt Batch Plant Operators and Plant Engineers; Gradall; Caisson Rigs; Skimmer Scoop Koering Scooper; Dredges (all types); Hoptoe; All Cherry Pickers; Work Boat; Ross Carrier; Helicopter; Dozer; Tournadozer; Tournapulls all and similar types; Operation of Concrete and all Recycle Machines; Multiple Unit Earth Movers; Scoops (all sizes); Pushcats; Endloaders (all types); Asphalt Surfacing Machine; Slip Form Paver; Rock Crusher; Operation of Material Crusher, Screening Plants, and Tunnel Boring Machine; Heavy Equipment Greaser (top greaser on spread); CMI, Auto Grade, CMI Belt Placer & 3 Track and Similar Types; Side Booms; Asphalt Heater & Planer Combination (used to plane streets); Wheel Tractors (with Dozer, Hoe or Endloader Attachments); CAT Earthwork Compactors and Similar Types; Blaw Knox Spreader and Similar Types; Trench Machines; Pump Crete - Belt Crete - Squeeze Crete - Screw Type Pumps and Gypsum (operator will clean); Creter Crane; Operation of Concrete Pump Truck; Formless Finishing Machines; Flaherty Spreader or Similar Types; Screed Man on Laydown Machine; Vermeer Concrete Saw; Operation of Laser Screed; Span Saw; Dredge Leverman; Dredge Engineer; Lull or Similar Type; Hydro-Boom Truck; Operation of Guard Rail Machine; and Starting Engineer on Pipeline or Construction (11 or more pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc, and Ground Heater (Trailer

CLASS 2. Bulker & Pump; Power Launches; Boring Machine & Pipe Jacking Machine; Dinkeys; Operation of Carts, Powered Haul Unit for a Boring Machine; P & H One Pass Soil Cement Machines and Similar Types; Wheel Tractors (Industry or Farm Type - Other); Back Fillers; Euclid Loader; Fork Lifts; Jeep w/Ditching Machine or Other Attachments; Tunneluger; Automatic Cement & Gravel Batching Plants; Mobile Drills - Soil Testing and Similar Types; Pugmill with Pump; All (1) and (2) Drum Hoists; Dewatering System; Straw Blower; Hydro-Seeder; Bump Grinders (self-propelled); Assistant Heavy Equipment Greaser; Apsco Spreader; Tractors (Track-Type) without Power Units Pulling Rollers; Rollers on Asphalt - Brick or Macadam; Concrete Breakers; Concrete Spreaders; Cement Strippers; Cement Finishing Machines & CMI Texture & Reel Curing Machines, Vibro-Tampers (All Similar Types Self-Propelled); Mechanical Bull Floats; Self-Propelled Concrete Saws; Truck Mounted Power Saws; Operation of Curb Cutters; Mixers - Over Three (3) Bags; Winch and Boom Trucks; Tractor Pulling Power Blade or Elevating Grader; Porter Rex Rail; Clary Screed; Mule Pulling Rollers; Pugmill without Pump; Barber Greene or Similar Loaders; Track Type Tractor w/Power Unit attached (minimum); Fireman; Spray Machine on Paving; Curb Machines; Paved Ditch Machine; Power Broom; Self-Propelled Sweepers; Self-Propelled Conveyors; Power Subgrader; Oil Distributor; Straight Tractor; Truck Crane Oiler; Truck Type Oilers; Directional Boring Machine; Horizontal Directional Drill; Articulating End Dump Vehicles; Starting Engineer on Pipeline or Construction (6 -10 pieces) including: Air Compressor (Trailer Mounted), All Forced Air

Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

CLASS 3. Straight Framed Truck Mounted Vac Unit (separately powered); Trac Air Machine (without attachments); Rollers - Five Ton and Under on Earth and Gravel; Form Graders; Bulk Cement Plant; Oilers; and Starting Engineer on Pipeline or Construction (3 - 5 pieces) including: Air Compressor (Trailer Mounted), All Forced Air Heaters (regardless of Size), Water Pumps (Greater than 4-1/2" or Total Discharge Over 4-1/2"), Light Plants, Generators (Trailer Mounted - Excluding Decontamination Trailer), Welding Machines (Any Size or Mode of Power), Conveyor, Mixer (any size), Stud Welder, Power Pac, etc., and Ground Heater (Trailer Mounted).

#### Other Classifications of Work:

For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such a classification and provide such rate, such rate being deemed to exist by reference in this document. If no neighboring county rate applies to the task, the Department shall undertake a special determination, such special determination being then deemed to have existed under this determination. If a project requires these, or any classification not listed, please contact IDOL at 217-782-1710 for wage rates or clarifications.

#### LANDSCAPING

Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or its size) is covered by the classifications of operating engineer. The work performed by landscape truck drivers (regardless of size of truck driven) is covered by the classifications of truck driver.

## **GUARANTEE PERIOD**

The Contractor warrants all work performed under this contract is free from defects and was performed in accordance with the Contract Documents for a period of one (1) year from the date of agreement of final quantities, as agreed in writing, by the City Engineer after all parties have signed the document. In case of acceptance of a part of the work for use prior to the agreement to final quantities, the guarantee for the part so accepted shall be for a period of one (1) year from the date of such partial acceptance, in writing, by the City Engineer. Work performed due to this warranty requirement shall be guaranteed for a period of one (1) year. The Guarantee Period may be further amended in the Special Provisions.

#### SUBSTANCE ABUSE PREVENTION PROGRAM

Before the contractor and any Subcontractor commences work, the Contractor and any Subcontractor shall have in place a written Substance Abuse Prevention Program for the prevention of substance abuse among its employees which meets or exceeds the requirements in P.A. 95-0635 or shall have a collective bargaining agreement in effect dealing with the subject matter of P.A. 95-0635.

The Contractor and any Subcontractor shall file with a public body: a copy of the substance abuse prevention program along with a cover letter certifying that their program meets the requirements of the Act, or a letter certifying that the Contractor or a Subcontractor has a collective bargaining agreement in effect dealing with the subject matter of this Act.

## TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

Traffic control shall be in accordance with the applicable sections of the "Standard Specifications for Road and Bridge Construction", the applicable guidelines contained in the "Illinois Manual on Uniform Traffic Control Devices for Streets and Highways", these special provisions, and any special details and Highway Standards contained herein and in the plans.

Special attention is called to SECTION 701 and Articles 107.09 and 107.14 of the "Standard Specifications for Road and Bridge Construction" and the following Traffic Control Standards:

701006 701301 701311 701501 701502 701901 BLR 21 BLR 22.

The Contractor shall be responsible for the closure including all signs, posts and barricades as needed depending on the type of work as shown on the Standards and as

detailed in the plans. Type III barricades of a sufficient quantity shall be positioned to block all access to work area by motorists and pedestrians on all four legs of the intersection.

All traffic control required will be paid at the contract unit price per lump sum for TRAFFIC CONTROL AND PROTECTION (SPECIAL).

# SUGGESTED SEQUENCE OF CONSTRUCTION

The Contractor is required to maintain access for the residents of Brompton Court at all times. The Contractor shall coordinate detour routes and changes in construction traffic patterns with the IDOT Engineer on the adjacent Allen Road improvement project. The portion of the roadway improvement at the intersection of Allen Road and First Street shall not be constructed until the temporary entrance to Brompton Court is no longer in use and the new Alta Lane and Allen Road intersection is complete to provide access for the residents of Brompton Court.

It is suggested that the Contractor build the project in separate phases. The roundabout phase includes all pavement, curb and gutter, storm sewer, culvert extension, and earthwork to complete the single lane roundabout at the intersection of Allen Road and Alta Road. The limits of this phase start just north of First Street and end just south of Chandler Court on Allen Road and include both the west and east legs of Alta Road. The Contractor shall determine with the Engineer the exact limits of this phase. However, the entire length of all splitter islands shall be constructed in this phase. During this phase, the intersection of Allen Road and Alta Road will be closed to all traffic. A detour route shall be signed as shown in the plans or as directed by the Engineer. The Contractor shall coordinate the intersection closure with the IDOT Engineer of the adjacent Allen Road improvement project and the City of Peoria two (2) weeks prior to the anticipated closure.

The north leg phase includes all pavement, curb and gutter, storm sewer, culvert extension, and earthwork to complete the roadway improvements from Chandler Court to just south of Wilhelm Road on Allen Road. This phase shall be constructed either before the Allen Road and Alta Road intersection closure or after the construction of the single lane roundabout at the Allen Road and Alta Road intersection. The north leg phase shall be constructed in stages to maintain continuous access for residents on Benton Court, Chandler Court, and Kaylie Court. One-way traffic shall be maintained between the intersections of Allen Road and Alta Road and Allen Road and Wilhelm Road. During this phase the north of leg of Allen Road from Alta Road to Wilhelm Road will be closed to thru traffic.

## STORM WATER POLLUTION PREVENTION PLAN

This work shall be done in accordance with the Storm Water Pollution Prevention Plan requirements. As a part of the requirements the Contractor will be required to fill out the "Contractor Certification Statement", on form number BDE 2342 and submit it to the Engineer at the pre-construction conference. A copy of the form is attached.



FAU 6585/6641

Route

#### Storm Water Pollution Prevention Plan

Allen Road/Alta Road

Section	14-00347-01-PW	Project No.						
County	Peoria	Contract No.						
Permit No	This plan has been prepared to comply with the provisions of the National Pollutant Discharge Elimination System (NPDES) Permit No. ILR10 (Permit ILR10), issued 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, am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.								
	Print Name  City Engineer		3/6/15					
	City of Peoria Agency		Date					
4								

Marked Rte.

#### I. Site Description:

A. Provide a description of the project location (include latitude and longitude):

Intersection of Allen Road and Alta Road in Peoria IL

Latitude: 40° 48' 47.181" Longitude: -89° 37' 51.5634"

B. Provide a description of the construction activity which is the subject of this plan:

This work includes construction of a single lane modern roundabout at the intersection of Allen Road and Alta Road. The proposed improvement will include 1.0 mile of roadway construction consisting of earthwork, two culvert extensions, HMA multi-use path, concrete sidewalk, striping, street lighting, landscaping, and other collateral work to complete the project. Utility adjustments are anticipated.

C. Provide the estimated duration of this project:

12 Months

D. The total area of the construction site is estimated to be 8.26 acres.

The total area of the site estimated to be disturbed by excavation, grading or other activities is 8.26

E. The following is a weighted average of the runoff coefficient for this project after construction activities are completed:

0.57

F. List all soils found within project boundaries. Include map unit name, slope information, and erosivity:

See attached RUSLE2 Attributes Tables

G. Provide an aerial extent of wetland acreage at the site:

No wetlands

Peoria Coun

H. Provide a description of potentially erosive areas associated with this project:

Earth Excavation while working on the culvert extensions and retaining walls are being constructed. Earth Excavation and ditch work until temporary and permanent landscaping and erosion control items are placed.

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 slopes, etc):

Stage 1 will consist of extending box culverts, installing wing walls and storm sewer. Temporary erosion control devices shall be installed as soon as possible. Permanent rip rap will also be installed upon completion of the drainage work. Stabilized construction entrances shall be established to avoid tracking soil from the site onto City Streets. Any tracking that does occur shall be swept from the street at the direction of the Engineer

Stage 2 will consist of earth excavation while grading roadway subgrade and ditches. During this stage temporary seeding and ditch checks will be used to reduce erosion until permanent measures can be installed. Items included in the permanent erosion protection are erosion control blanket, permanent seeding, rip rap, and energy disapators.

Stage 3 will consist of aggregate base course, curb and gutter, PCC Pavement and electrical items. During this stage concrete washouts will be used as well as maintaining temporary measures on ditches and slopes.

Stage 4 will consist of topsoil and permanent landscaping. Some of this work shall be ongoing during the project as areas are completed. Temporary erosion control methods shall continue to be maintained until final vegetation is established.

Stage 5 includes clean up and close out. Contractor shall maintain all erosion control and landscaping until project is turned over to the owner.

- J. See the erosion control plans and/or drainage plans for this contract for information regarding drainage pattern approximate slopes anticipated before and after major grading activities, locations where vehicles enter or exit the site and controls to prevent offsite 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:

The City of Peoria owns the existing storm sewer and all proposed storm sewer for the Project

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

Illinois Department of Transportation

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:

Unnamed Tributary of the Kickapoo Creek which drains to the Kickapoo Creek which drains to the Illinois River

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.

	high	ly erodible soils, streams, stream buffers, specimen trees, natural vegetation, nature preserves, etc.	
	No a	areas are marked to remain undisturbed.	
Ο.		following sensitive environmental resources are associated with this project, and may have the potential tacted by the proposed development:	o be
		Floodplain Wetland Riparian Threatened and Endangered Species Historic Preservation	(

Receiving waters with Total Maximum Daily Load (TMDL) for sediment, total suspended solids, turbidity or siltation

Printed 3/6/2015 15 BDE 2342 (Rev. 3/20/14)

303(d) Listed receiving waters for suspended solids, turbidity, or siltation

Peoria County

		Othe	icable Federal, Tribal, State of L er	.ocai Prograi	ns		
1. 303(d) Listed receiving waters (fill				ıt this sectior	n if checked above):		
		a.	The name(s) of the listed water	er body, and	identification of all pollutants causing impairment:		
		b.	Provide a description of how sediment resulting from a stor hour rainfall event:	v erosion ar m event equ	nd sediment control practices will prevent a discharge of al to or greater than a twenty-five (25) year, twenty-four (24)		
		C.	Provide a description of the I body:	ocation(s) o	f direct discharge from the project site to the 303(d) water		
		d.	Provide a description of the loc	cation(s) of a	ny 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 wate	r body:			
		b.	Provide a description of the erd design that is consistent with the	osion and se ne assumption	diment control strategy that will be incorporated into the site ons and requirements of the TMDL:		
		C.	If a specific numeric waste lo discharges, provide a descripti	oad allocation	n has been established that would apply to the project's cessary steps to meet that allocation:		
Ρ.	The f	ollowi	ng pollutants of concern will be a	associated w	ith this construction project:		
		Soil Con Con Solid Pair Solv	Sediment crete crete Truck Waste crete Curing Compounds d Waste Debris		Petroleum (gas, diesel, oil, kerosene, hydraulic oil / fluids) Antifreeze / Coolants Waste water from cleaning construction equipment Other (specify) Other (specify) Other (specify) Other (specify) Other (specify)		
Cont	trols:						
This descr	section	of th	e plan addresses the controls above and for all use areas, born	that will be ow sites, an	implemented for each of the major construction activities d waste sites. For each measure discussed, the Contractor		

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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:

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- 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 Temporary Turf (Seeding, Class 7) Temporary Mulching	Erosion Control Blanket / Mulching Sodding Geotextiles Other (specify) Other (specify)	U
$\boxtimes$	Permanent Seeding	Other (specify)	

Describe how the stabilization practices listed above will be utilized during construction:

Temporary Erosion Control Seeding shall be placed as grading work progresses to minimize the time that newly graded slopes are exposed to erosion. Once the road has been paved the topsoil and permanent seeding with erosion control blanket/mulch will be placed to establish permanent erosion control measures.

Describe how the stabilization practices listed above will be utilized after construction activities have been completed:

Erosion control blanket will secure the slopes until the grass grows. Riprap will protect the culvert outlets from erosion.

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 structural practices will be used for this project:

			•		
$\boxtimes$	Perimeter Erosion Barrier			Rock Outlet Protection	
$\boxtimes$	Temporary Ditch Check		$\boxtimes$	Riprap	
$\boxtimes$	Storm Drain Inlet Protection			Gabions	
	Sediment Trap			Slope Mattress	
	Temporary Pipe Slope Drain		$\boxtimes$	Retaining Walls	
		17			BDE 2342 (Rev. 3/20/14)

Printed 3/6/2015 BDE 2342 (Rev. 3/20/14)

	Section No. 14-0034	
	Temporary Sediment Basin	a County
	Describe how the structural practices listed above will be utilized during construction:	
	Perimeter erosion barrier will be used along the downstream side of all grading areas to contain any carrying runoff. Temporary ditch checks will be used to slow runoff in new ditches and to trap sedimer Drain inlet protections are used in every inlet to prevent sediment on the pavement from entering the sto collection system.	at Storm
	Describe how the structural practices listed above will be utilized after construction activities have been co	mpleted:
	Riprap will remain in place to protect the outlet ends of culverts. Retaining wall will be constructed to reslopes preventing erodable slopes.	duce the
D.	D. Treatment Chemicals	
	Will polymer flocculants or treatment chemicals be utilized on this project: ☐ Yes ☒ No	
	If yes above, identify where and how polymer flocculants or treatment chemicals will be utilized on this pro-	ject.
E.	E. <b>Permanent Storm Water Management Controls:</b> 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 we after construction operations have been completed. The installation of these devices may be subject to See 404 of the Clean Water Act.	ill occur
	<ol> <li>Such practices may include but are not limited to: storm water detention structures (including we storm water retention structures, flow attenuation by use of open vegetated swales and natural dep infiltration of runoff on site, and sequential systems (which combine several practices).</li> </ol>	t ponds), ressions,
	The practices selected for implementation were determined on the basis of the technical guidance in 41 (Construction Site Storm Water Pollution Control) of the IDOT Bureau of Design and Env Manual. If practices other than those discussed in Chapter 41 are selected for implementation or if are applied to situations different from those covered in Chapter 41, the technical basis for such a	ironment practices

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:

will be explained below.

In addition to the rip rap discussed in Section C, permanent erosion control blanket will be used on all slopes 3:1 and 2:1 side slopes and along ditch bottoms where the anticipated flow velocities could result in erosion.

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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:

N/A

- 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 timeframe
    - 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
    - Timeframe 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 Fueling Identify equipment fueling locations for this project and what BMPs will be used to ensure containment and spill prevention.
- 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.

#### II. 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 the Contractor's responsibility to attain maintenance guidelines for any manufactured BMPs which are to be installed and maintained per manufacture's specifications.

#### 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 email at: <a href="mailto:epa.swnoncomp@illinois.gov">epa.swnoncomp@illinois.gov</a>, 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.



## **RUSLE2 Related Attributes**

This report summarizes those soil attributes used by the Revised Universal Soil Loss Equation Version 2 (RUSLE2) for the map units in the selected area. The report includes the map unit symbol, the component name, and the percent of the component in the map unit. Soil property data for each map unit component include the hydrologic soil group, erosion factors Kf for the surface horizon, erosion factor T, and the representative percentage of sand, silt, and clay in the surface horizon.

# Report—RUSLE2 Related Attributes

RUSLE2 Related Attributes–Peoria County, Illinois								
Map symbol and soil name	Pct. of map unit	Stope length (ft)	Hydrologic group	Kf	T factor	Representative value		
						% Sand	% Silt	% Clay
24C2—Dodge silt loam, 5 to 10 percent slopes, eroded								
Dodge	95	_	С	.43	5	5.0	80.0	15.0
86B—Osco silt loam, 2 to 5 percent slopes								
Osco	90	656	В	.32	5	4.0	72.0	24.0
279B—Rozetta silt loam, 2 to 5 percent slopes								
Rozetta	90	492	В	.37	5	4.0	77.0	19.0
675B—Greenbush silt loam, 2 to 5 percent slopes								
Greenbush	95	226	В	.37	5	4.0	75.0	21,0
3070A—Beaucoup silty clay loam, 0 to 2 percent slopes, frequently flooded								
Beaucoup	85	_	C/D	.32	5	5.0	64.0	31.0

#### **Data Source Information**

Soil Survey Area: Peoria County, Illinois
Survey Area Data: Version 9, Sep 13, 2014



## **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 Contractor/subcontractor completing this form.

Route	Marked Rte.
Section	Project No.
County	Contract No.
This certification statement is a part of SWPPP for th Permit No. ILR10 issued by the Illinois Environmental P	ne project described above, in accordance with the General NPDES Protection Agency.
I certify under penalty of law that I understand the terms associated with industrial activity from the construction s	s of the Permit No. ILR 10 that authorizes the storm water discharges site identified as part of this certification.
project; I have received copies of all appropriate maint	rmation and requirements stated in SWPPP for the above mentione tenance procedures; and, I have provided all documentation required and will provide timely updates to these documents as necessary.
☐ Contractor	
☐ Sub-Contractor	
Print Name	Signature
Title	Date
Name of Firm	Telephone
Street Address	City/State/ZIP
Items which this Contractor/subcontractor will be respon	nsible for as required in Section II.G. of SWPPP:

#### CITY SIGNS

The City will be responsible for removing all existing signs from the project area as needed. The City will also be responsible for the placement of new signs or relocation of the existing signs. The Contractor shall coordinate with the City of Peoria Public Works Department on the removal and relocation of the existing signs. The Contractor shall give the City (2) two weeks advanced notice when signs need to be removed, relocated, or installed. This work shall be considered as included in the contract unit prices for the various pay items of the proposed construction involved and no additional compensation will be allowed.

# <u>CUTTING EXISTING PAVEMENT, DRIVEWAY PAVEMENT, SIDEWALK, OR CURB AND GUTTER</u>

At locations where it is necessary to cut asphalt surfaces, concrete pavement, concrete or asphalt driveway pavement, concrete sidewalk, or concrete curb and gutter, where it will abut the proposed new construction, a uniformly straight cut shall be obtained by the use of a diamond concrete saw. The use of pneumatic tools to make these cuts will not be allowed. This work shall be considered as included in the contract unit prices for the various pay items of the proposed construction involved and no additional compensation will be allowed.

#### DAMAGE TO EXISTING TREES

All necessary precautions shall be taken to prevent damage to existing trees outside of the tree removal areas marked on the plans. Roots of two inch (2") diameter or more shall not be severed. Precautions shall be taken to prevent damage to the bark of existing trees by machinery or other means. Any damage shall be corrected as directed by the Engineer at the expense of the Contractor.

Special care shall be taken along the Trails Edge Condominium property from Station 104+50.00 to Station 112+00.00 left side of the Allen Road centerline. It is the intent of this project to not remove any of the trees in this area. Any trees along the Trails Edge Condominium shall not be removed without consent of the City.

# REMOVAL OF ABANDONED UTILITIES, DEBRIS OR UNCLASSIFIED MATERIAL

Abandoned utility facilities, debris or unclassified materials that conflict with the construction whether underground or above ground shall be removed as directed by the Engineer. The material removed shall be disposed of outside the limits of the right-of-way in accordance with Article 202.03 of the Standard Specifications and as directed by the Engineer. Abandoned utility conduits, ducts or pipes, that partially removed shall have the remaining ends capped with methods approved by the Engineer. Excavations under paved surfaces shall be backfilled with trench backfill or controlled low-strength

material as directed by the Engineer. The removal of abandoned utility facilities, debris or unclassified materials and backfilling with earth will not be paid for separately and is considered included in the cost of the various removal items. Backfilling with trench backfill or controlled low-strength material will be paid separately in accordance with sections 208 and 593 of the Standard Specifications.

## STOCKPILE AREAS

Short-term stockpile of backfill and crushed stone material will be allowed only where directed by the Engineer.

Stockpiles of materials shall not be allowed on private property (unless permission is granted by owner in writing), outside street rights-of-way; and shall not be allowed to block private driveways or sidewalks. Any grass area that is damaged by stockpiled material shall be repaired by either seeding or sodding as determined by the Engineer. These areas shall not be measured for payment and the Contractor shall repair them at his/her own expense.

## WATER VALVES TO BE ADJUSTED

This work shall consist of adjusting existing water valve boxes at locations shown on the plans in order to align with the proposed ground level to the satisfaction of the Engineer. Any replacement materials used to facilitate the valve box adjustment shall be new and of the same kind as, or equal to, the material being replaced. This item of work shall be performed in accordance with the applicable portions of Section 603 of the Standard Specifications and shall be paid for at the contract unit price per each for WATER VALVES TO BE ADJUSTED and no additional compensation will be allowed.

#### WATER METERS TO BE ADJUSTED

This work shall consist of adjusting existing water meter boxes at the locations shown on the plans in order to align with the proposed ground level to the satisfaction of the Engineer. Any replacement materials used to facilitate the meter box adjustment shall be new and of the same kind as, or equal to, the material being replaced. This item of work shall be performed in accordance with the applicable portions of Section 603 of the Standard Specifications and shall be paid for at the contract unit price per each for WATER METERS TO BE ADJUSTED and no additional compensation will be allowed.

#### SHREDDED BARK MULCH 3"

<u>Description:</u> This work shall consist of furnishing, transporting, and installing shredded bark mulch at proposed planting locations at a minimum depth of 3 inches. The mulch material shall meet the requirements of Article 1081.06 (b) of the Standard

Specifications and shall be approved by the Engineer prior to installation. Final locations for shredded bark mulch shall be determined by the Engineer.

Measurement and Payment: This work will be measured and paid for at the contract unit price per square yard for SHREDDED BARK MULCH 3", which price shall be considered payment in full for all materials, labor and equipment required to perform the work as specified herein.

## **REMOVE SHEET PILING**

<u>Description.</u> The item shall include all materials, labor, and equipment necessary to remove the existing sheet piling identified in the plans.

<u>Method of Measurement:</u> The removal of the existing sheet piling will be measured for payment on a lump sum basis. No additional compensation will be allowed for alterations or additions necessary to remove this item. No payment shall be made for the removal of any additional sheet piling not specifically called out for removal in the plans.

Basis of Payment: This work will be paid for at the contract lump sum price for REMOVE SHEET PILING.

## REMOVE EXISTING RIPRAP

<u>Description</u>. The item shall include all materials, labor, and equipment necessary to remove the existing riprap identified in the plans.

Method of Measurement: The removal of the riprap will be measured in place in square yards.

Basis of Payment: This work will be paid for at the contract unit price per square yard for REMOVE EXISTING RIPRAP.

### PRECAST MODULAR RETAINING WALL

Effective: March 19, 2001 Revised: December 29, 2014

<u>Description</u>. This work shall consist of preparing the design, furnishing the materials, and constructing the precast modular retaining walls to the lines, grades and dimensions shown in the contract plans and as directed by the Engineer.

<u>General</u>. The precast modular wall shall consist of precast concrete modules, select fill and a leveling pad. The precast concrete modules shall be sized to have sufficient external stability resistance at each module course to satisfy the design criteria. The

material, fabrication and construction shall comply with this Special Provision and the requirements specified by the supplier of the wall system selected by the Contractor for use on the project.

<u>Suppliers.</u> The Department maintains a pre-qualified list of proprietary structural systems allowed for precast modular retaining walls. This list can be found on the Departments web site under Prequalified Structural Systems. The Contractor's options are limited to those systems pre-qualified by the Department. These systems have been reviewed for structural feasibility and adequacy only. Presence on this list shall in no case relieve the Contractor of the site specific design or QC/QA requirements stated herein.

<u>Submittals.</u> The wall system supplier shall submit complete design calculations and shop drawings to the Engineer according to Article 1042.03(b) of the Standard Specifications no later than 90 days prior to beginning construction of the wall. No work or ordering of materials for the structure shall be done by the Contractor until the submittal has been approved in writing by the Engineer. All submittals shall be sealed by a Illinois Licensed Structural Engineer and shall include all details, dimensions, quantities and cross sections necessary to construct the wall and shall include, but not be limited to, the following items:

- (a) Plan, elevation and cross section sheet(s) for each wall showing the following:
  - (1) A plan view of the wall indicating the offsets from the construction centerline to the face of the wall at all changes in horizontal alignment. The plan view shall show the limits of precast modules and stations where changes in length and/or size of modules occur. The centerline shall be shown for all drainage structures or pipes behind or passing through and/or under the wall.
  - (2) An elevation view of the wall indicating the elevations of the top of the modules. These elevations shall be at or above the top of exposed module line shown on the contract plans. This view shall show the elevations of the top of the leveling pads, all steps in the leveling pads and the finished grade line shown in the contract plans. Each module type, size and embeded length shall be designated.
  - (3) A listing of the summary of quantities shall be provided on the elevation sheet of each wall.
  - (4) Typical cross section(s) showing the precast modules, select fill within the modules, porous granular backfill, leveling pad, right-of-way limits, including excavation cut slopes and elevation relationship between existing ground conditions and the finished grade line.

- (5) All general notes required for constructing the wall as well as the locations of lifting devices and/or support points in the precast modules shall be indicated.
- (b) The leveling pads may be precast or cast in place concrete, or compacted coarse aggregate. All details for the leveling pads, including the steps, shall be shown. The top of the leveling pad shall be located at or below the theoretical top of the leveling pad line shown on the contract plans. The theoretical top of leveling pad line shall be 3.5 ft.(1.1 m) below finished grade line at the front face of the wall, unless otherwise shown on the contract plans.
- (c) Where concrete coping or barrier is specified, the modules shall extend up into the coping or barrier a minimum of 2 in. (50 mm). The top of the modules may be level or sloped to satisfy the top of module line shown on the contract plans. Cast-in-place concrete will not be an acceptable replacement for module areas below the top of module line. Precast coping may be substituted for the CIP coping if approved by the Engineer.
- (d) All module types shall be detailed. The details shall show all dimensions necessary to cast and construct each type of module, all reinforcing steel in the module, and the location of any shear key or connection devices.
- (e) All details of the wall module placement around all appurtenances located behind, on top of, or passing through the wall modules and select fill such as traffic barriers, coping, foundations, and utilities etc. shall be clearly indicated. Any modifications to the design of these appurtenances to accommodate a particular system shall also be submitted.
- (f) When specified on the contract plans, all details of architectural treatment for the exposed surfaces of the module, including color, texture and form liners shall be shown.
- (g) The details of bearing pads, joint filler or other materials used to prevent concrete to concrete contact on the front face as well as any pins, groves or other alignment mechanisms shall be indicated.

The initial submittal shall include three sets of shop drawings and one set of calculations. One set of drawings will be returned to the Contractor with any corrections indicated. After approval, the Contractor shall furnish the Engineer with eight sets of corrected prints and one mylar set for distribution by the Department. No work or ordering of materials for the structure shall be done until the submittal has been approved by the Engineer.

Materials. The precast modular retaining walls shall conform to the supplier's standards as previously approved by the Department, AASHTO Specifications for prefabricated

modular walls and the following:

- (a) Steel connection hardware shall be galvanized according to AASHTO M 232 or AASHTO M 111 as applicable.
- (b) All precast modules shall be manufactured with Class PC concrete according to Section 504, Article 1042.02, Article 1042.03, and the following requirements:
  - (1) The minimum panel thickness shall be 3 1/2 in. (90 mm).
  - (2) The minimum reinforcement bar cover shall be 1 1/2 in. (38 mm).
  - (3) All dimensions shall be within 3/16 in. (5 mm).
  - (4) Angular distortion with regard to the height of the panel shall not exceed 0.2 in. (5 mm) in 5 ft. (1.5 m).
  - (5) Surface defects on formed surfaces measured on a length of 5 ft. (1.5 m) shall not be more than 0.1 in. (2.5 mm).

Concrete surfaces exposed to view in the completed wall shall be finished according to Article 503.15(a) of the Standard Specifications.

- (c) Reinforcing steel shall be according to Article 1006.10(a)(2). Welded steel wire fabric for concrete reinforcement shall be according to Article 1006.10(b)(1) except the welded wire fabric shall be epoxy coated according to ASTM A884.
- (d) Soil Reinforcement: If soil reinforcement is required by the approved design, the Contractor shall submit a manufacturer's certification for the soil reinforcement properties which equals or exceeds those required in the design computations. The soil reinforcement shall be manufactured from high density polyethylene (HDPE) uniaxial or polypropylene biaxial resins or high tenacity polyester fibers with a PVC coating, stored between -20 and 140° F (-29 and 60° C). The following standards shall be used in determining and demonstrating the soil reinforcement capacities:

ASTM D638 Test Method for Tensile Properties of Plastic

ASTM D1248 Specification for Polyethylene Plastics Molding and Extrusion Materials

ASTM D4218 Test Method for Carbon Black Content in Polyethylene Compounds
ASTM D5262 Test Method for Evaluating the Unconfined Tension Creep Behavior
of Geosynthetics

GG1-Standard Test Method for Geogrid Rib Tensile Strength

GG2-Standard Test Method for Geogrid Junction Strength

GG4-Standard Practice for Determination of the Long Term Design Strength of

# Geogrid GG5-Standard Practice for Evaluating Geogrid Pullout Behavior

- (e) The select fill, defined as the material placed in the reinforced volume behind the wall or within the precast modules, shall be according to Sections 1003 and 1004 of the Standard Specifications and the following:
  - (1) Select Fill Gradation. Either a coarse aggregate or a fine aggregate may be used. For coarse aggregate, gradations CA 6 thru CA 16 may be used. For fine aggregate, gradations FA 1, FA 2, or FA 20 may be used.
  - (2) Select Fill Quality. The coarse or fine aggregate shall have a maximum sodium sulfate (Na₂SO₄) loss of 15 percent according to Illinois Modified AASHTO T 104.
  - (3) Select Fill Internal Friction Angle. The effective internal friction angle for the coarse or fine aggregate shall be a minimum 34 degrees according to AASHTO T 236 on samples compacted to 95 percent density according to Illinois Modified AASHTO T 99. The AASHTO T 296 test with pore pressure measurement may be used in lieu of AASHTO T 236. If the vendor's design uses a friction angle higher than 34 degrees, as indicated on the approved shop drawings, this higher value shall be taken as the minimum required.
  - (4) Select Fill and Geosynthetic Reinforcing. When geosynthetic reinforcing is used, the select fill pH shall be 4.5 to 9.0 according to Illinois Modified AASHTO T 289.
  - (5) Test Frequency. Prior to start of construction, the Contractor shall provide an internal friction angle and pH test results to show the select fill material meets the specification requirement. However, the pH will be required only when geosynthetic reinforcing is used. This test result shall be no more than 12 months old. In addition, a sample of select fill material will be obtained for testing and approval by the Department. Thereafter, the minimum frequency of sampling and testing at the jobsite will be one per 40,000 tons (36,300 metric tons) of select fill. Testing to verify the internal friction angle will be required when the wall design utilizes a minimum effective internal friction angle greater than 34 degrees, or when crushed coarse aggregate is not used.
- (f) The embankment material behind the precast modules or behind the reinforced volume of select fill shall be according to Section 202 and/or Section 204. An embankment unit weight of 120 lbs/cubic foot (1921 kg/cubic meter) and an effective friction angle of 30 degrees shall be used in the wall system design, unless otherwise indicated on the plans.

- (g) The geotextile filter material used across the module joints shall be either a non-woven needle punch polyester or polypropylene or a woven monofilament polypropylene.
- (h) The bearing pads shall be rubber, neoprene, polyvinyl chloride, or polyethylene material of the type and grade as recommended by the wall supplier. Other material recommended by the wall supplier may be used if approved by the Engineer.
- (i) Leveling pad: The material shall be either Class SI concrete according to Article 1020.04 or compacted coarse aggregate according to Articles 1004.04, (a) and (b). The compacted coarse aggregate gradation shall be CA 6 or CA 10.

<u>Design Criteria.</u> The design shall be according to the AASHTO LRFD Design Specifications for Prefabricated Modular Walls except as modified herein. The wall supplier shall be responsible for all stability aspects of the wall design (including sliding, overturning, and bearing pressure). The analyses of settlement and overall slope stability will be the responsibility of the Department.

Typical design procedures and details, once accepted by the Department, shall be followed. All wall system changes shall be submitted in advance to the Department for approval.

External loads, such as those applied through structure foundations, from traffic or railroads, slope surcharge etc., shall be accounted for in the external stability design. The presence of all appurtenances behind, in front of, mounted upon, or passing through the wall volume such as drainage structures, utilities, structure foundation elements or other items shall be accounted for in the external stability design of the wall.

Coulomb's lateral earth pressure theory shall be used to calculate the vertical and horizontal forces acting on the rear face of the precast modules.

The overturning calculations shall assume no more than 80 percent of the soil dead load within the precast modules available to resist overturning forces. Sliding calculations shall consider sliding both between each element and of the bottom element across the foundation soils.

The maximum applied equivalent uniform bearing pressure under each module width shall be clearly indicated on the shop drawings submitted and shall be less than the allowable bearing pressure of the soil shown on the contract plans. Footings or other treatments to satisfy the bearing pressure requirements will be designed by the wall supplier and included in the wall bid price.

If the wall supplier needs additional information to complete the design, the Contractor shall be responsible for obtaining the information at no additional cost to the

## Department.

<u>Construction Requirements.</u> The Contractor shall obtain technical assistance from the supplier during wall erection to demonstrate proper construction procedures and shall include any costs related to this technical assistance in the unit price bid for this item.

The foundation soils for the structure shall be graded for a width equal to or exceeding the module width. Prior to wall construction, the foundation shall be compacted with a smooth wheel vibratory roller. Any foundation soils found to be unsuitable shall be removed and replaced, as directed by the Engineer, and shall be paid for separately according to Section 202 of the Standard Specifications.

The modules may not be loaded or shipped to the project site until they have obtained a minimum compressive strength of 3500 psi (24 MPa) and no sooner than seven days after casting. Precast modules shall be lifted and supported at the points indicated on the shop plans. They shall be stored off the ground. Stacked modules shall be separated by battens across the full width of each bearing point as recommended by the supplier to prevent concrete to concrete contact.

The first course of modules must be erected with particular care and adjustment as required to in correct the vertical, horizontal and transverse alignment. Poor alignment of the base course will magnify tolerance problems in upper modules and require dismantling and re-erection of the wall. A ¼ in. (6 mm) minimum and ¾ in. (18 mm) maximum joint separation shall be provided between adjacent modules at the face to prevent direct concrete to concrete contact. Vertical tolerances and horizontal alignment tolerances shall not exceed 3/4 in. (19 mm) when measured along a 10 ft. (3 m) straight edge. The overall vertical tolerance of the wall, (plumbness from top to bottom) shall not exceed 1/2 in. per 10 ft. (13 mm per 3 m) of wall height.

The rear face of all vertical and horizontal module joints shall be covered by a geotextile filter fabric, per the wall supplier's recommendations. No adhesive will be allowed on this material directly over the joints to maintain fabric permeability. The minimum fabric width shall be 12 in. (300 mm) and where laps must be used, a non-sewn lap of 6 in. (150 mm) shall be used as a minimum.

The select fill and embankment placement shall closely follow the erection of each lift of modules. The maximum lift thickness shall be placed according to the supplier's recommended procedures except, the lifts shall not exceed 10 in. (255 mm) loose measurement or as approved by the Engineer.

At the end of each day's operations, the Contractor shall shape the last level of select fill to permit runoff of rainwater away from the wall face. Select fill shall be compacted according to the project specifications for embankment except the minimum required compaction shall be 95 percent of maximum density as determined by AASHTO T 99.

The Engineer will perform one density test per 5000 cu yd (3800 cu m) and not less than one test per 2 ft (0.6 m) of lift.

Method of Measurement. Precast Modular Retaining Wall will be measured for payment in square feet (square meters). The retaining wall will be measured from the "top of exposed module line" to the theoretical top of leveling pad line for the length of the wall as shown on the contract plans.

<u>Basis of Payment.</u> This work, including furnishing and placement of the precast modules, select fill, joint separation material, geotextile and other accessories will be paid for at the contract unit price per square foot (square meter) for PRECAST MODULAR RETAINING WALL.

Embankment placed outside of the select fill volume will be measured and paid for according to Section 207 of the Standard Specifications.

Concrete coping when specified on the contract plans shall be included for payment in this work.

## WOOD GATE ASSEMBLY SPECIAL

<u>Description:</u> This work shall consist of placing a wood gate at the residence of 2509 W. First Street. The wood gate shall match the materials of the Sight Screen (Wooden Fence), Type P 8' in accordance with Articles 641.02 and 641.03 of the Standard Specifications.

<u>Measurement:</u> The installation of the wood gate assembly will be measured for payment per each installation. No additional compensation will be allowed for alterations or additions necessary to install the gate at the location shown in the plans.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per Each for WOOD GATE ASSEMBLY SPECIAL, which includes all labor, material and equipment necessary to perform the work.

#### SCOURSTOP

This work shall be to install Scour Protection at the location shown in the plans in accordance with the manufacturer's recommendation and as specified herein.

The Scour Protection shall be ScourStop™ or a similar product meeting engineer's approval.

The Scour Protection shall be placed over a Turf Reinforcement Mat which shall be installed and paid in accordance with Section 251 of the Standard Specifications.

The Scour Protection and Turf Reinforcement Mat shall be installed so that the top surface of the Scour Protection is placed at the flowline or slope elevations shown in the plans.

The number of anchors and embedment shall be per the manufacturer's requirements.

This work shall be paid at the contract unit price per Each for SCOURSTOP of the size specified. The unit price shall include all materials, equipment, and labor required to secure the mats according to the manufacturer's instructions.

#### RELOCATE EXISTING MAILBOX

This work consists of relocating existing mailbox at the locations shown on the plans or as directed by the Engineer in accordance with Article 107.2 of the Standard Specifications except this work will be paid for at the contract unit price per each for RELOCATE EXISTING MAILBOX.

## STONE RIPRAP (SPECIAL)

<u>Description</u>: This work shall consist of furnishing, transporting, and placing a protective course of stone laid as riprap and grouting the riprap at locations as shown on the plans and as directed by the Engineer.

<u>Materials</u>: All stone and bedding material shall conform to the requirements of Article 281.04 of the Standard Specifications for the stone quality and gradation specified in the plans.

Construction Method: The area shall be dewatered while the work is being completed and for an additional 4 hours after the grout has been placed. Foundation preparation and placing shall be done in accordance with Articles 281.03 and 281.04 of the Standard Specifications. The riprap shall be cleaned of all soil or other constituents prior to placement. In-place rock shall be free of fines or soil which would affect the grout bond. All pieces placed shall be approved by the Engineer at least 24 hours in advance of the scheduled time for grouting.

A cement grout shall be placed in such a manner as to form a stable mat between the stone riprap pieces to a height of within four (4) to six (6) inches of the top of the riprap. Placement shall be achieved by a method that ensures complete penetration of the grout into the rock layer while keeping the top surface of the rock clear. Clean and wash any spillage before the grout sets. An approved vibrator should be used to consolidate the grout under the rock and to smooth the appearance of the surface. The Contractor shall use a wood float to smooth and grade the grout surface to drain.

The grout shall consist of a mixture of Portland Cement, sand, 5/8 inch (maximum size) pea gravel and water so proportioned and mixed to provide readily workable slurry with a slump within a range of 3 to 6 inches. A stiffer mix or other measures may be required for steeper slope application. The hardened grout shall have a minimum compressive strength of 3,500 pounds per square inch at 28 days.

<u>Method of Measurement</u>: This work will be measured in place for payment, and the area computed in square yards. Riprap placed outside the specified limits shown on the plan or approved by the Engineer will not be paid for, and the Engineer may require the Contractor to remove and dispose of the excess riprap and grout at the Contractor's expense.

<u>Basis of Payment</u>: This work shall be paid for at the contract unit price per square yard for STONE RIPRAP, of the class (stone quality and gradation) specified (SPECIAL). The price shall include all items including excavation, stone, grout, dewatering, and labor necessary to complete the work.

## PORTLAND CEMENT CONCRETE PAVEMENT 8", SPECIAL

<u>Description:</u> This work shall consist of constructing a Portland cement concrete pavement for the truck apron at the central island per the dimensions shown in the plans and according to Section 420 of the Standard Specifications with the following requirements:

<u>Submittals:</u> The Contractor shall construct and finish a mock-up slab sample (approximate area equivalent to 6'x6') for review and approval by the Engineer prior to construction. The mock-up slab shall represent the final work in material and finish and shall be constructed under similar job site conditions including radial layout. If the mock-up slab sample is denied by the Engineer, the Contractor will be required to repeat the mock-up sample process until approved by the Engineer. The mock-up slab shall remain in place until the final work is completed and accepted by the Engineer. Upon completion of the work, the Contractor shall remove and dispose of the mock-up slab.

<u>Color Requirements:</u> The Portland Cement concrete pavement shall be integrally colored using Dry Pigment Ready Mix Color No. 417 – Brick Red as produced by Solomon Colors, 4050 Color Plant Road, Springfield, Illinois 62702, or approved equal.

It shall be the responsibility of the Contractor to protect the adjacent concrete items from any discoloration as a result of contact with the coloring agent.

<u>Final Finish</u>: The final finish of the concrete pavement shall be stamped with a cobble stone pattern as approved by the Engineer. The individual cobble stone sizes shall

range from approximately 6"x4" to 6"x10" and all joints shall have a grouted appearance.

The concrete pavement shall be cured using a membrane curing compound for integrally colored concrete. The curing compound shall be a transparent type such as "Kure-N-Seal" as manufactured by ChemRex Inc. or approved equal.

<u>Transverse Contraction Joints:</u> Sawed transverse contraction joints shall be placed at locations shown on the plans in accordance with Standard 420001 and as directed by the Engineer. The joints shall extend across the proposed pavements and curb and gutters.

<u>Expansion Joints:</u> All expansion joints adjacent or in the concrete pavement shall be cleaned and sealed with Sonneborn, Type SL-1 or NP-1, Color - Redwood Tan (Red) or approved equal.

Measurement and Payment: This work will be measured and paid for in accordance with Articles 420.19 and 420.20 of the Standard Specifications with the following exceptions. The cost of mock-up slab samples, coloring, stamping, sawing and sealing joints will not be paid for separately but shall be included in the contract unit price per square yard for PORTLAND CEMENT CONCRETE PAVEMENT 8", SPECIAL and no additional compensation will be allowed.

## PERMANENT STEEL SHEET PILING (LRFD)

Effective: January 31, 2012 Revised: August 17, 2012

<u>Description:</u> This work shall consist of furnishing and installing the permanent sheet piling to the limits and tolerances shown on the plans according to Section 512 of the Standard Specifications.

<u>Material</u>: The sheet piling shall be made of steel and shall be new material. Unless otherwise specified the sheeting shall have a minimum yield strength of 50 ksi (345 MPa) according to ASTM A 572. The sheeting shall be identifiable and free of bends and other structural defects. The Contractor shall furnish a copy of the published sheet pile section properties to the Engineer for verification purposes. The Engineer's approval will be required prior to driving any sheeting. All driven sheeting not approved by the Engineer shall be removed at the Contractor's expense.

The Contractor shall furnish a sheet pile section, to be used for each wall section, with a published section modulus and a published moment of inertia equal to or larger than that specified on the plans.

The selection of the sheet pile section shall not relieve the Contractor of the responsibility to satisfy all details including minimum clearances, cover, reinforcement,

shear stud locations, interlocking, and field cutting. Any modifications of the plans to accommodate the Contractor's selection shall be paid for by the Contractor and subject to the approval of the Engineer.

Construction: The Contractor shall verify locations of all underground utilities before driving any sheet piling. Any disturbance or damage to existing structures, utilities or other property, caused by the Contractor's operation, shall be repaired by the Contractor in a manner satisfactory to the Engineer at no additional cost to the Department. The Contractor shall be responsible for determining the appropriate equipment necessary to drive the sheeting to the tip elevation(s) specified on the plans or according to the Contractor's approved design. The sheet piling shall be driven, as a minimum, to the tip elevation(s) specified, prior to commencing any related construction. If unable to reach the minimum tip elevation, the adequacy of the sheet piling design will require re-evaluation by the Department prior to allowing construction adjacent to the sheet piling in question.

Obstructions: Obstructions shall be defined as any object (such as but not limited to, boulders, logs, old foundations, etc.) that cannot be driven through with normal driving procedures, but requires special equipment to remove the obstruction. When obstructions are encountered, the Contractor shall notify the Engineer and upon concurrence of the Engineer, the Contractor shall begin working to break up, push aside, or remove the obstruction.

<u>Method of Measurement</u>: This work will be measured in place in square feet (square meters). Sheet piling associated with other work in this contract or for permanent sheet piling that is cut off or driven beyond those dimensions shown on the plans will not be measured for payment.

Obstruction mitigation shall be paid for according to Article 109.04.

<u>Basis of Payment</u>: This work will be paid for at the contract unit price per square foot (square meter) for PERMANENT STEEL SHEET PILING at the location shown on the plans.

## MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID

This work shall consist of furnishing all labor, equipment, and material for the construction of a manhole in accordance with Section 602 of the Standard Specifications and as shown in the plans.

The structure at Station 208+37.47 Left shall include an orifice as detailed in the plans. The materials, equipment, and labor required to construct the orifice in this structure will not be paid for separately but shall be included in the contract unit price for MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID.

## **INLETS, TYPE G-1, SPECIAL**

Effective October 1, 1995

Revised January 1, 2007

This work shall consist of furnishing all labor, equipment, and material for the construction of Type G-1, Special inlets and Combination Concrete Curb and Gutter in accordance with Sections 602 and 606 of the Standard Specifications and the details in the plans.

Add "INLETS, G-1, SPECIAL" to Article 602.16 of the Standard Specifications. Delete the first paragraph in Articles 606.14 and 606.15.

Payment for transitional Combination Concrete Curb and Gutter will be included in "INLETS, TYPE G-1, SPECIAL" in accordance with details shown in the plans.

This work will be paid for at the contract unit price Each for INLETS, TYPE G-1, SPECIAL.

## INLET-MANHOLE, TYPE G-1, 4' (1.2 M) DIAMETER, SPECIAL

Effective October 1, 1995

Revised January 1, 2007

This work shall consist of all labor, equipment, and material for the construction of Inlet-Manhole, Type G-1, 4' (1.2 m) Diameter, Special and Combination Concrete Curb and Gutter in accordance with Section 602 and 606 of the Standard Specifications and the details in the plans.

Add "INLET-MANHOLE, TYPE G-1, 4' (1.2 m) DIAMETER, SPECIAL" to Article 602.16 of the Standard Specifications. Delete the first paragraph of Articles 606.14 and 606.15.

Payment for transitional Combination Concrete Curb and Gutter will be included in "INLET-MANHOLE, TYPE G-1, 4" (1.2 m) DIAMETER, SPECIAL" in accordance with details shown in the plans.

This work will be paid for at the contract unit price Each for INLET-MANHOLE, TYPE G-1, 4' (1.2 m) DIAMETER, SPECIAL.

## INLET-MANHOLE, TYPE G-1, 5' (1.5 M) DIAMETER, SPECIAL

This work shall consist of all labor, equipment, and material for the construction of Inlet-Manhole, Type G-1, 5' (1.5 m) Diameter, Special and Combination Concrete Curb and Gutter in accordance with Section 602 and 606 of the Standard Specifications and the details in the plans.

Add "INLET-MANHOLE, TYPE G-1, 5' (1.5 m) DIAMETER, SPECIAL" to Article 602.16 of the Standard Specifications. Delete the first paragraph of Articles 606.14 and 606.15.

Payment for transitional Combination Concrete Curb and Gutter will be included in "INLET-MANHOLE, TYPE G-1, 5' (1.5 m) DIAMETER, SPECIAL" in accordance with details shown in the plans.

This work will be paid for at the contract unit price Each for INLET-MANHOLE, TYPE G-1, 5' (1.5 m) DIAMETER, SPECIAL.

The structure at Station 113+81.42 Left shall include an orifice as shown in the plans. The materials, equipment, and labor required to construct the orifice in this structure will not be paid for separately but shall be included in the contract unit price for INLET-MANHOLE, TYPE G-1, 5' (1.5 m) DIAMETER, SPECIAL.

## MANHOLES, TYPE A, 4'-DIAMETER WITH SPECIAL FRAME AND GRATE

Effective: August 2, 2013

This work shall consist of furnishing equipment, labor, and materials for the construction of inlets in accordance with Section 602 of the Standard Specifications, Highway Standard 602401, and the details in the plans.

Add "MANHOLES, TYPE A, 4'-DIAMETER WITH SPECIAL FRAME AND GRATE" to Article 602.16 of the Standard Specifications.

A Type 37 Grate per CADD Standard 604301-D4 as shown in the plans shall be used.

This work will be paid for at the contract unit price per Each for MANHOLES, TYPE A, 4'-DIAMETER WITH SPECIAL FRAME AND GRATE.

## INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE

Effective: August 2, 2013

This work shall consist of furnishing equipment, labor, and materials for the construction of inlets in accordance with Section 602 of the Standard Specifications, Highway Standard 602301, and the details in the plans.

Add "INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE" to Article 602.16 of the Standard Specifications.

A Type 37 Grate per CADD Standard 604301-D4 as shown in the plans shall be used.

This work will be paid for at the contract unit price per Each for INLETS, TYPE A, WITH SPECIAL FRAME AND GRATE.

#### INLETS, TYPE B, WITH SPECIAL FRAME AND GRATE

Effective: August 2, 2013

This work shall consist of furnishing equipment, labor, and materials for the construction of inlets in accordance with Section 602 of the Standard Specifications, Highway Standard 602306, and the details in the plans.

Add "INLETS, TYPE B, WITH SPECIAL FRAME AND GRATE" to Article 602.16 of the Standard Specifications.

A Type 37 Grate per CADD Standard 604301-D4 as shown in the plans shall be used.

This work will be paid for at the contract unit price per Each for INLETS, TYPE B, WITH SPECIAL FRAME AND GRATE.

## **CONCRETE MEDIAN SURFACE, 4 INCH (SPECIAL)**

<u>Description:</u> This work shall consist of constructing a Portland cement concrete median surface for the splitter islands and right turn bypass island per the dimensions shown in the plans and according to Section 606 of the Standard Specifications with the following requirements:

<u>Submittals:</u> The Contractor shall construct and finish a mock-up slab sample (approximate area equivalent to 6'x6') for review and approval by the Engineer prior to construction. The mock-up slab shall represent the final work in material and finish and shall be constructed under similar job site conditions including radial layout. If the mock-up slab sample is denied by the Engineer, the Contractor will be required to repeat the mock-up sample process until approved by the Engineer. The mock-up slab shall remain in place until the final work is completed and accepted by the Engineer. Upon completion of the work, the Contractor shall remove and dispose of the mock-up slab.

<u>Color Requirements:</u> The Portland Cement concrete median surface shall be integrally colored using Dry Pigment Ready Mix Color No. 417 – Brick Red as produced by Solomon Colors, 4050 Color Plant Road, Springfield, Illinois 62702, or approved equal.

It shall be the responsibility of the Contractor to protect the adjacent concrete items from any discoloration as a result of contact with the coloring agent.

<u>Final Finish</u>: The final finish of the concrete median surface shall be stamped with a cobble stone pattern as approved by the Engineer. The individual cobble stone sizes shall range from approximately 6"x4" to 6"x10" and all joints shall have a grouted appearance.

The concrete median surface shall be cured using a membrane curing compound for integrally colored concrete. The curing compound shall be a transparent type such as "Kure-N-Seal" as manufactured by ChemRex Inc. or approved equal.

<u>Transverse Contraction Joints:</u> Sawed transverse contraction joints shall be placed at locations shown on the plans in accordance with Standard 420001 and as directed by the Engineer. The joints shall match the joints from the adjacent proposed pavement and curb and gutter.

<u>Expansion Joints:</u> All expansion joints adjacent or in the concrete pavement shall be cleaned and sealed with Sonneborn, Type SL-1 or NP-1, Color - Redwood Tan (Red) or approved equal.

Measurement and Payment: This work will be measured and paid for in accordance with Articles 606.14 and 606.15 of the Standard Specifications with the following exceptions. The cost of mock-up slab samples, coloring, stamping, sawing and sealing joints will not be paid for separately but shall be included in the contract unit price per square yard for CONCRETE MEDIAN SURFACE, 4 INCH (SPECIAL) and no additional compensation will be allowed.

#### ORNAMENTAL FENCE

<u>Description:</u> This work shall consist of constructing an ornamental fence at the locations shown in the plans in accordance with the manufacturer's recommendation and as specified herein.

The fence shall be Alumi-Guard Ascot 3-Channel Flat Top Fence or a similar product meeting the engineer's approval. The fence shall be 5' in height. The contractor shall coordinate the fence type with the engineer prior to ordering fence or materials.

The spacing and installation of the posts shall be per the manufacturer's requirements. Any posts required to be placed above the culvert structures shall be attached to the top slab or top of headwall per the manufacturer's recommendation and as approved by the Engineer.

Measurement and Payment: This work will be paid for at the contract unit price per lineal foot for ORNAMENTAL FENCE which price shall include all labor and material required to construct the fence including excavation, concrete footings, and backfilling.

## YARD HYDRANT (FROST PROOF)

<u>Description:</u> This work shall consist of the construction of a water main connection, water service box, water meter and box, and a flush mounted yard hydrant with hose bib in accordance with the details as shown on plans and as directed by the Engineer.

<u>Materials:</u> The water service box and water meter with box shall be approved by the utility company. The anti-siphon, frost proof yard hydrant shall be a Woodford Model Y95 or approved equal. The yard hydrant shall include a hose bib.

<u>Construction Requirements:</u> The flush mounted yard hydrant shall be installed flush with surrounding surfaces. The enclosure shall include hinged door with a tamper proof tee key lock and shall include the word "WATER" in the casting. The service line located between the water meter and the yard hydrant shall include a separate drain valve located in the water meter box.

Measurement and Payment: This work will be measured for payment at the contract unit price each for YARD HYDRANT (FROST PROOF) which price shall be considered payment in full for all labor, equipment, and materials required for a fully functional yard hydrant. No additional compensation will be allowed for any material required for the connection to the water main, water service box and water meter as required by the utility company.

## STREET LIGHTING - RESPONSIBILITY OF BIDDER

The installation shall comply with all applicable codes. The devices to be furnished and installed shall be compatible with the electrical requirements of the system and shall equal or exceed the capacity required. If the Contractor finds instances in which governing codes will be violated or the items which are specified are not compatible or have inadequate capacity, the Contractor shall immediately advise the Engineer to enable the Engineer to take the proper action before awarding the contract.

The Contractor shall be responsible for determining the conflicting structures where the Contractor shall cut trench or excavate for foundations.

<u>Basis of Payment:</u> All expenses incurred because of conflicting structures shall be borne by the Contractor. Such expenses shall be considered as included in the cost of the conduits and foundations and no additional compensation will be allowed.

## STREET LIGHTING - RESPONSIBILITY OF CONTRACTOR

The Contractor shall furnish and install complete lighting systems, thoroughly tested and in operating condition. He is cautioned to use the procedures outlined. For example, it is necessary that the wiring be meggered in the presence of the Engineer. All defective or

damaged parts must be replaced at no extra cost before payment will be made, even though approval has been given to use the parts on the basis of manufacturer's specifications and descriptions.

Special attention is called to Section 105 of the "Standard Specifications for Road and Bridge Construction."

The drawings indicate the locations of service installation, lights, conduits and wiring. Any minor change in the locations of these items from those shown on the plans will be made without additional charge, if so requested by the Engineer.

<u>Basis of Payment:</u> The Contractor shall furnish all materials, equipment, and labor necessary in performing the final inspection which cost will not be paid for separately but shall be included in the contract unit cost for the appropriate lighting pay items.

Any inconveniences, delays or additional expense caused by the Contractor in complying with these Special Provisions, shall not be considered cause for additional compensation, and no additional compensation will be allowed.

#### APPROVAL OF STREET LIGHTING MATERIALS

Electrical materials shall be new and of the types and kinds approved by the Underwriter's Laboratories, Inc.

Before any work is started, the Contractor shall obtain written approval from the Engineer to install the furnished materials. Within thirty (30) days after the award of the contract, the Contractor shall submit the following to the City Engineer for approval:

A letter affirming that copies of the Special Provisions applying to fixtures and poles have been sent to the manufacturer certifying that the poles to be furnished will meet the requirements of the Special Provisions and three (3) copies of drawings showing each pole and fixture and including for both, the types of material, dimensions, thickness of material, method of fabrication and description of details and color surface, a sample of all cables and conductors, three (3) copies of photometric data including isofootcandle diagram, utilization curve and isocandle diagram for each pattern of each size of each type of fixture specified, description of pattern indicator, ballast, contactor, circuit breakers, selector switch, cabinet, insulating panel board, photocell, and fused safety switch.

#### GUARANTEES

If a guarantee is included in the standard sales price of any items at no extra cost, the Contractor shall supply the engineer with a copy. Lamps, fixtures, ballasts, photocells, contactors and circuit breakers may have such a guarantee.

#### **ELECTRIC SERVICE INSTALLATION, SPECIAL**

This work shall consist of furnishing and installing the Electrical Service. This work shall be performed in accordance with Section 804 of the Standard Specifications, the plan details, and as noted herein. The electric service installation shall extend beyond utility owned facilities to the point of cable termination of the incoming power to the lighting controller. Termination of the cable in the self-contained meter socket, provided as part of the lighting controller, shall be included in this work.

Basis of Payment: All costs shall be included and shall be paid for at the contract unit price per each for ELECTRIC SERVICE INSTALLATION, SPECIAL.

#### LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP

This work shall consist of furnishing and installing the Lighting Controller. This work shall be performed in accordance with Section 825 of the Standard Specifications, the plan details, and as noted herein.

The enclosure shall be stainless steel, powder coated painted black to match poles.

Measurement and Payment: The work will be measured and paid for at the contract unit price per each for LIGHTING CONTROLLER, BASE MOUNTED, 480VOLT, 100AMP.

#### RECEPTACLE (GFI TYPE) WITH WEATHERPROOF COVER

<u>Description:</u> This item shall consist of furnishing and installing a 20 amp ground fault circuit interrupting receptacle and outdoor box cover on a treated nominal 4x4 post. The work shall include furnishing and installing fuses and fuse blocks and all wiring associated with the receptacle.

<u>Materials</u>: Materials shall be according to the following Articles of Standard Specifications, Section 1000 – Materials.

Item Article/Section

- (a) Wire in the Pole 1066.09
- (b) Fuseholders and Fuses 1065.01

<u>GFCI Receptacle:</u> The receptacle shall be a 20 amp, 120 volt duplex ground fault interrupting premium specification grade. Receptacle shall be Black. The receptacle box shall be black weather resistant.

Outdoor Cover. The cover shall be a rugged UV resistant polycarbonate cover and

back protects devices without cracking or breaking and is non-corrosive and nonconductive.

<u>Treated Nominal 4x4 Post:</u> The post shall be buried to a depth of 4' below proposed ground elevation and extend 2' above proposed elevation.

Construction Requirements:

<u>General:</u> All wire to connect the receptacle to the controller shall be included in the cost of the RECEPTACLE (GFI) TYPE WITH WEATHERPROOF COVER. Wires shall be terminated so all strands are extended to the full depth of the terminal lug with the insulation removed far enough so it abuts against the shoulder of the lug, but is not compressed as the lug is tightened.

Method of Measurement: This work shall be measured each for RECEPTACLE (GFI) TYPE WITH WEATHERPROOF COVER installed.

<u>Basis of Payment:</u> This work shall be paid for at the contract unit price each for RECEPTACLE (GFI) TYPE WITH WEATHERPROOF COVER which price shall be payment in full for furnishing, installing and appurtenances necessary for a complete and operational unit as indicated on the drawings and as approved by the Engineer.

#### STREET LIGHTING ASSEMBLY COMPLETE

This work shall consist of furnishing and installing a complete street light assembly including luminaire, light pole, and all appurtenances to complete the installation as shown on the plans and as noted herein.

The luminaire shall be furnished and installed in accordance with Section 821 of the Standard Specifications, the plan details, and as noted herein. Luminaires shall have a black baked acrylic enamel finish.

The light pole shall be furnished and installed in accordance with Section 830 of the Standard Specifications, the plan details, and as noted herein. Poles shall have a black powder coated finish. Pole/unit identification shall be located behind the pole near the base so that it is clearly legible.

The assembly shall be provided as described via the fixture schedule and details on the plans. Equals will be considered if submitted for approval a minimum of 6 business days prior to bid acceptance. All equal submittals must be accompanied with photometric calculations as described in Article 1067.01 of the Standard Specifications. No substitutions will be allowed except for equals approved in writing prior to bid.

The luminaire, arm, and light pole assembly with the exception of the lamp shall be

warranted with standard manufacturer's warranty for a minimum period of 1 year from project completion. The manufacturer's finish for the davit arm, light pole and base assembly shall be warranted with standard manufacturer's warranty for a minimum period of 5 years from project completion. All certified warranty documents shall be provided with the shop drawings for review and approval by the City of Peoria.

<u>Basis of Payment:</u> This work will be paid at the contract unit price per each for STREET LIGHTING ASSEMBLY COMPLETE of the type specified in the plans.

#### **ELECTRICAL CONDUCTORS - SLAC. REQUIREMENTS**

Sufficient length of electrical conductors shall be installed in handholes and in light standards to provide adequate slack so that electrical conductors may be pulled a minimum of 36" out of pole handhole. Said slack shall be neatly coiled and placed in the handholes.

#### STREET LIGHTING ACCEPTANCE

Final acceptance of the Street Lighting items shall be concluded after test data is approved and a final review of the system by the Engineer and City results in a finding that the system is complete and according to specifications.

#### STREET LIGHTING WIRING TESTS

The tests outlined in this section are witness tests to be performed during construction in the presence of the Engineer at times approved by the Engineer. They shall be performed by the Contractor's personnel and with his equipment. This work is included in the cost of Street Lighting Assembly Complete of the type specified and no extra compensation will be allowed.

Testing will be performed at opportune times before final inspection. Defects shall be corrected and testing repeated until all sections of the installation are sound. Splicing or repairing of insulation below grade is not permissible except in a handhole.

All data required herein shall be read and recorded at the time of the test by the Engineer in the log which will be retained by him for examination and approval at the time of final inspection. It is the responsibility of the Contractor to make certain that the log is complete and the data proves that the system performance exceeds the minimum requirements. Approval for payment will be given only if the Engineer submits a complete log at time of final inspection and that the final, corrected system meets the minimum requirements.

It is the purpose of the test to confirm the quality of insulation in the ballasts and wiring. All construction shall be finished when tests are made. The pole shall be erected with

ballasts and lamps in-place. Trenches shall be backfilled and all connections shall be made up in handholes, poles and control cabinets.

Insulation resistance shall be measured with a megger generating not less than 500 or more than 1,000 volts. A multimeter is not acceptable because it applies only a few volts which will permit some insulation defects to go undetected. Erratic behavior of the megger during the test indicates an intermittent weakness which must be corrected. Only the lowest value indicated shall be considered or recorded.

The Engineer shall log the serial number and voltage rating of the megger used by the Contractor. He shall then confirm the calibration of the megger by connecting the two leads of the megger together so that the resistance to be measured by the megger when it is turned to full speed is zero. Unless this is true, the megger will give false readings under all other circumstances as well.

Each circuit shall be permanently tagged for identification and then tested at the control centers. The full voltage of the megger shall be applied between ground and each insulated wire in each circuit. The ground shall consist of a driven, copper clad rod 8' x 5/8" or larger, connected by #6 wire to the power company neutral in the control cabinet. Circuits shall be isolated from each other by opening the circuit breakers.

The minimum acceptable resistance to ground shown by the megger shall be as detailed in Article 801.13 (a) (2).

The megger shall be operating at full crank speed when it is read. If needle fluctuates, the lowest resistance value shall be recorded.

If any conductor has less resistance than that shown above, it shall be rejected regardless of atmosphere, groundwater or other conditions which may be alleged to be the reason. Defective cables shall be replaced and retested until satisfactory.

<u>Basis of Payment:</u> This work shall not be paid for separately but shall be included in the contract unit price bid for STREET LIGHTING ASSEMBLY COMPLETE of the types specified on the plans.

#### STREET LIGHTING VOLTAGE REGULATION AND CURRENT BALANCE TESTS

It is the purpose of these tests to confirm the design values of voltage drop and the accuracy of the installed wiring layout. The test shall be performed in the sequence given as rapidly as possible, except for the five-minute warm-up. Only one voltmeter and one ammeter shall be used to eliminate discrepancies between instruments. The instruments shall not be adjusted after testing begins.

1) Turn lights on and record "starting" current in supply phase wires A and B.

- 2) After lights are on five minutes:
  - a) Record "operating" current in phase wires A and B;
  - b) Record phase voltage;
  - c) Record voltage across ballast in handhole in end light of circuit designated by Engineer;
  - d) Record voltage of same circuit at control center to determine voltage drop between end lamp and control center; and
  - e) Record current in each lighting circuit.

<u>Basis of Payment:</u> This work shall not be paid for separately but shall be included in the contract unit price bid for STREET LIGHTING ASSEMBLY COMPLETE of the types specified on the plans.

WIRING TEST LOG SHEET

(One REQUIRED for each control of service center)

Control Center Number :			
MEGGER DATA:			
Volts generatedvolts. used: 0 tomegohms	(Must be 500 to 1,000) Scale		
used: 0 tomegohms	·		
Manufactured by:			
Serial Number:			
CONSTRUCTION STATUS:			
Wiring complete			
Trenches open	Backfilled		
MEGOHMS TO GROUND:			
Wire A to power supply	megohms		
Wire B to power supply	mogohme		
Wire A to lighting circuit 1	magahma		
Wire B to lighting circuit 1	magahma		
Wire A to lighting circuit 2	magahma		
Wire B to lighting circuit 2			
Wire A to lighting circuit 3			
Wire B to lighting circuit 3			
AMPERES:			
Wire A to power supply, initial	amperes		
Wire B to power supply,	amperes		
	amperes		
Wire B to power supply, after 5 minutes on	amperes		
Wire A, Circuit 1 - after 5 minutes on	amperes		
Wire A, Circuit 2 - after 5 minutes on	amperes		
Wire A, Circuit 3 - after 5 minutes on	amperes		
Wire A, Circuit 4 - after 5 minutes on	amperes		
DECLIFICATION (A. I. C.II. ). Locks by and an above			
	vn with lights burning after they have		
been on for five (5) minutes or more			
Voltage in control cabinet between Wire A and     Voltage	While B to Fower supply.		
Volts. 2. Voltage between Wire A and Wire B at most d	intent light (designated by Engineer):		
Volts.	istant light (designated by Engineer)		
Voltage in control cabinet between Wire A and	d Wire B to Power supply (same as 1): _		
Volts.			
	Engineer		

## SOLAR POWERED PEDESTRIAN CROSSING SIGNAL SYSTEM (COMPLETE)

This pay item includes all necessary work to furnish and install the post-mounted Pedestrian Activated Solar-Powered Rapid Flashing Beacon Assembly (Complete) at each pedestrian crossing on the modern roundabout and at each midblock crossing as shown in the plans.

This work shall be in accordance with all applicable FHWA and MUTCD guidelines as well as Article 801 of the current Standard Specifications. This specification is for a solar powered Rectangular Rapid Flashing Beacon (RRFB) assembly. The system shall consist of a two direction RRFB unit along with a solar array, batteries, wireless communications equipment, controls, pedestrian push button, and all electronics necessary to support up to 50 activations per day for up to three minutes flash time (180 seconds) per activation. This work shall include all necessary mounting brackets, approved breakaway post and support, and foundation or base.

The solar panels shall be sized appropriately for operation requirements described in this provision and shall be mounted top-of-pole. Batteries shall be sealed, maintenance free, and field replaceable. The battery pack shall have a minimum rated lifespan of three years. The system shall be an easy to install, fully self-contained, weather, corrosion, and vandal-resistant unit. The system shall be power autonomous without the need for an external power supply.

Each RRFB unit, when activated, shall flash two amber indications in a rapidly alternating "wig-wag" flashing sequence (left light on, then right light on). The RRFB units shall be two directions (two amber indications to face approaching vehicular traffic and one pedestrian light on the end of the bar). Each unit shall conform to current FHWA and MUTCD requirements for unit size, mounting location, flash rate, and operational parameters. The units must be programmable to allow an engineer to set the duration of the flashing beacon display based on the crossing time requirements established in the MUTCD and to set the flashing to commence upon pedestrian activation via a push button. The RRFB units at the modern roundabout shall all activate with a single activation with any of the push buttons at the roundabout pedestrian crossings.

Each flashing beacon assembly shall include one pedestrian push button for activation of the flashing beacon. The pushbuttons shall comply with the requirements in the MUTCD and the Standard Specifications. The housing shall be furnished with suitable mounting hardware. Pushbutton housing shall be designed to be mounted directly to a pole. The contractor shall also provide and install the regulatory pedestrian instruction sign according to MUTCD, sign series R10-25, 9x12 inch sign. Pedestrian push buttons shall be fully accessible from a paved surface.

The brackets shall be designed to fit a new pole support capable of load requirements of all necessary equipment. Brackets shall be designed such that adequate space is available on the pole support for mounting pedestrian signage and pedestrian push buttons. The pole support shall be galvanized steel, aluminum, or another approved material and length recommended by the manufacturer.

The RRFB units must communicate wirelessly using an unlicensed radio band so as to simultaneously commence and cease operation appropriately.

The light should be able to withstand and operate at temperature extremes of -40 degrees F to 122 degrees F.

The foundation size and material shall meet manufacturer recommendations.

The system, including batteries, solar panels, and all components shall have a minimum three year manufacturer's warranty.

This work will be paid for at the contract unit price EACH for SOLAR POWERED PEDESTRIAN CROSSING SIGNAL SYSTEM (COMPLETE), which price shall be payment in full for furnishing all parts and labor for the installation of the entire solar unit system with approved pole support and foundation, including the pedestrian sign W11-2 (30"x30"), the arrow plaque W16-7P (24"x12"), and the crosswalk sign R10-25 (9"x12"). No additional compensation will be allowed.

#### **HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6"**

<u>Description:</u> This work shall consist of the construction of driveway pavement at locations shown on the plans, in accordance with the applicable portions of Sections 301 and 406 of the Standard Specifications.

<u>Construction Requirements:</u> The Contractor shall place embankment or excavate in accordance with the applicable portions of Sections 202 and 205 of the Standard Specifications in order to achieve the finished grades shown in the plans.

<u>Materials:</u> The proposed driveway pavement shall consist of Hot-Mix Asphalt Surface Course, Mix "C", N30 6" thickness.

<u>Measurement and Payment:</u> This work will be measured at the top surface area and paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 6".

#### **FENCE REMOVAL**

This work consists of removing fence at the locations shown on the plans or as directed by the Engineer.

The existing fence will be removed before construction activities begin after coordinating with adjacent property owners. This work involves different types of fence.

The Contractor is responsible for ensuring the existing portions of fence to stay in place are not damaged during removal. Damaged portions of fence shall be replaced by the Contractor with no additional compensation as directed by the Engineer.

Removed fence shall be disposed of by the Contractor.

All holes left from the removal shall be backfilled with suitable materials to the satisfaction of the Engineer. Removal of the fence shall start and terminate at existing supports with existing supports to remain their original condition.

Fence to be removed will be measured for payment in feet, along the top of the fence from center to center of posts prior to removal.

This work will be paid for at the contract unit price per lineal foot for FENCE REMOVAL, which includes all labor, material and equipment necessary to perform the work. This will include the disposal of removed material to a suitable off-site location.

### PIPE UNDERDRAINS FOR STRUCTURES

Effective: May 17, 2000

Revised: January 22, 2010

<u>Description</u>. This work shall consist of furnishing and installing a pipe underdrain system as shown on the plans, as specified herein, and as directed by the Engineer.

Materials. Materials shall meet the requirements as set forth below:

The perforated pipe underdrain shall be according to Article 601.02 of the Standard Specifications. Outlet pipes or pipes connecting to a separate storm sewer system shall not be perforated.

The drainage aggregate shall be a combination of one or more of the following gradations, FA1, FA2, CA5, CA7, CA8, CA11, or CA13 thru 16, according to Sections 1003 and 1004 of the Standard Specifications.

The fabric surrounding the drainage aggregate shall be Geotechnical Fabric for French Drains according to Article 1080.05 of the Standard Specifications.

<u>Construction Requirements.</u> All work shall be according to the applicable requirements of Section 601 of the Standard Specifications except as modified below.

The pipe underdrains shall consist of a perforated pipe drain situated at the bottom of an area of drainage aggregate wrapped completely in geotechnical fabric and shall be installed to the lines and gradients as shown on the plans.

Method of Measurement. Pipe Underdrains for Structures shall be measured for payment in feet (meters), in place. Measurement shall be along the centerline of the pipe underdrains. All connectors, outlet pipes, elbows, and all other miscellaneous items shall be included in the measurement. Concrete headwalls shall be included in the cost of Pipe Underdrains for Structures, but shall not be included in the measurement for payment.

<u>Basis of Payment.</u> This work will be paid for at the contract unit price per foot (meter) for PIPE UNDERDRAINS FOR STRUCTURES of the diameter specified. Furnishing and installation of the drainage aggregate, geotechnical fabric, forming holes in structural elements and any excavation required, will not be paid for separately, but shall be included in the cost of the PIPE UNDERDRAINS FOR STRUCTURES.

#### **ROCK FILL**

<u>Description</u>. This work shall consist of furnishing, transporting and placing rock fill for ground stabilization.

<u>Material</u>: The material shall meet Quality Designation "B" as required in Article 1005.01 of the Standard Specifications for Road and Bridge Construction and may be shot rock or primary crusher run. It shall not contain objectionable quantities of dirt, sand, clay, rock fines, RAP, wood or brick.

The material shall be well graded CA 1, CA 3, CA 5, or CA 7 gradation.

Method of Measurement: Rock fill will be measured for payment in place and the volume computed to the nearest cubic yard, based on the actual lengths, widths, and depths.

Basis of Payment: This work will be paid for at the contract unit price per cubic yard of ROCK FILL.

#### TEMPORARY CONSTRUCTION FENCE

Description: This work involves the furnishing and erecting a temporary construction fence at the location shown in the plans and coordinated with the Engineer. The

purpose of this temporary construction fence is to keep construction equipment, personnel, and materials off of the existing berm and trees located along the Trails Edge Condominium property.

The Contractor will be responsible for maintaining the temporary construction fence until construction activities are complete. The Contractor shall remove all temporary construction fence materials and remove them from the site once all construction activities are complet.

Measurement and Payment: This work will be measured and paid for at the contract unit price per lineal foot for TEMPORARY CONSTRUCTION FENCE. This cost includes furnishing and erecting all fence posts, fence, ties, and any other materials necessary, maintenance during construction, removal including backfilling any post holes, and disposal.

#### STORM SEWER, (WATER MAIN QUALITY PIPE)

Effective January 1, 2011 Revised August 1, 2014

This work consists of constructing storm sewer to meet water main standards, as required by the IEPA or when otherwise specified. The work shall be performed in accordance with applicable parts of Section 550 of the Standard Specifications, applicable sections of the current edition of the IEPA Regulations (Title 35 of the Illinois Administrative Code, Subtitle F, Chapter II, Section 653.119), the applicable sections of the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois", and as herein specified.

This provision shall govern the installation of all storm sewers which do not meet IEPA criteria for separation distance between storm sewers and water mains. Separation criteria for storm sewers placed adjacent to water mains and water service lines are as follows:

- 1) Water mains and water service lines shall be located at least 10 feet (3.05 meters) horizontally from any existing or proposed drain, storm sewer, sanitary sewer, or sewer service connections.
- 2) Water mains and water service lines may be located closer than 10 feet (3.05 meters) to a sewer line when:
  - a) Local conditions prevent a lateral separation of 10 feet (3.05 meters); and
  - b) The water main or water service invert is 18 inches (460 mm) above the crown of the sewer; and

- c) The water main or water service is either in a separate trench or in the same trench on an undisturbed earth shelf located to one side of the sewer.
- 3) A water main or water service shall be separated from a sewer so that its invert is a minimum of 18 inches (460 mm) above the crown of the drain or sewer whenever water mains or services cross storm sewers, sanitary sewers or sewer service connections. The vertical separation shall be maintained for that portion of the water main or water services located within 10 feet (3.05 meters) horizontally of any sewer or drain crossed.

When it is impossible to meet (1), (2) or (3) above, the storm sewer shall be constructed of concrete pressure pipe, slip-on or mechanical joints ductile iron pipe, or PVC pipe equivalent to water main standards of construction. Construction shall extend on each side of the crossing until the perpendicular distance from the water main or water service to the sewer or drain line is at least 10 feet (3.05 meters). Storm sewer meeting water main requirements shall be constructed of the following pipe materials:

#### Concrete Pressure Pipe

Concrete pressure pipe shall conform to the latest ANSI/AWWA C300, C301, C302, or C303.

Joints shall conform to Article 41-2.07B of the "Standard Specifications for Water and Sewer Main Construction in Illinois."

#### **Ductile Iron Pipe**

Ductile Iron pipe shall conform to ANSI A 21.51 (AWWA C151), class or thickness designed per ANSI A 21.50 (AWWA C150), tar (seal) coated and /or cement lined per ANSI A 21.4 (AWWA C104), with a mechanical or rubber ring (slip seal or push on) joints.

Joints for ductile iron pipe shall be in accordance with the following applicable specifications.

1. Mechanical Joints - AWWA C111 and C600 2. Push-On-Joints - AWWA C111 and C600

#### Plastic Pipe

Plastic pipe shall be marked with the manufacturer's name (or trademark); ASTM or AWWA specification; Schedule Number, Dimension Ratio (DR) Number or Standard Dimension Ratio (SDR) Number; and Cell Class. The pipe and fittings

shall also meet NSF Standard 14, and bear the NSF seal of approval. Fittings shall be compatible with the type of pipe used. The plastic pipe options shall be in accordance with the following:

- 1. Polyvinyl Chloride (PVC) conforming to ASTM Standard D 1785. Schedule 80 is the minimum required for all pipe sizes, except when the pipe is to be threaded, and then it shall be Schedule 120. It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 2. Polyvinyl Chloride (PVC) conforming to ASTM D 2241. A minimum wall thickness of SDR 26 is required for all pipe sizes (Note: The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- 3. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 441. A minimum of Schedule 80 is required for all pipe sizes. Threaded joints are not allowed. It shall be made from CPVC compound meeting ASTM D 1784, Class 23447.
- 4. Chlorinated Polyvinyl Chloride (CPVC) conforming to ASTM F 442. A minimum wall thickness of SDR 26 is required for all pipe sizes (<u>Note:</u> The lower the SDR number, the higher the wall thickness and pressure rating). It shall be made from CPVC compound meeting ASTM D 1784.
- 5. Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C900. A minimum of wall thickness of DR 25 is required for all pipe sizes (Note: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.
- Polyvinyl Chloride (PVC) conforming to ANSI/AWWA C905. A minimum of wall thickness of DR 26 is required for all pipe sizes (<u>Note</u>: The lower the DR number, the higher the wall thickness and pressure rating). It shall be made from PVC compound meeting ASTM D 1784, Class 12454.

Joining of plastic pipe shall be by push-on joint, solvent welded joint, heat welded joint, flanged joint, or threaded joint, in accordance with the pipe manufacturer's instructions and industry standards. Special precautions shall be taken to insure clean, dry contact surfaces when making solvent or heat welded joints. Adequate setting time shall be allowed for maximum strength.

Elastometric seals (gaskets) used for push-on joints shall comply with ASTM F 477.

Solvent cement shall be specific for the plastic pipe material and shall comply with ASTM D 2564 (PVC) or ASTM F 493 (CPVC) and be approved by NSF.

This work will be measured and paid for at the contract unit price per Foot (Meter) for STORM SEWER (WATER MAIN QUALITY PIPE) of the diameter and type specified.

#### **STEEL CASINGS 30"**

This work shall include all labor, material, and equipment to install a 30" inside diameter steel casing pipe with ½" wall thickness around the existing water main as shown on the roadway plan sheet. The contractor shall install the casing pipe in such a manner that does not allow displacement of the existing water main. The length of the casing shall extend at least 10' past the outside walls of the proposed structure.

The casing spacers shall be attached to the carrier pipe so that the existing water main is centered within the casing pipe and restrained against flotation. Spacers shall be either Pipeline Seal and Insulator (PSI), Inc., Model S stainless steel casing isolators or Advance Products and Systems (APS), Inc., stainless steel band casing spacers, Model SSI, or equal as approved by the Engineer.

Widths and sizes for spacers and isolators shall be based upon both the manufacturer's recommendations and the specific application. Spacers and isolators shall be placed in accordance with the following guidelines:

- 1. Two spacers or isolators shall be placed no more than one (1) foot apart and no more than one (1) foot from both the entrance and exit of carrier pipe into and out of casings.
- 2. One (1) spacer or isolator shall be placed no more than one (1) foot on both sides of a joint between two sections of carrier pipe.
- 3. No more than twelve (12) feet of carrier pipe shall be placed without the placement of a spacer or isolator.

After the casing has been placed around the existing water main, the ends of the casing pipe shall be sealed with brick and mortar, or as approved by the Engineer.

This work will be paid at the contract unit price per Foot for STEEL CASINGS 30".

#### DRIVEWAY PAVEMENT SPECIAL (PERMEABLE)

<u>Description:</u> This work shall consist of constructing a permeable grass paver driveway at the location shown in the plans in accordance with the manufacturer's recommendation and as specified herein.

The grass paver system shall be capable of supporting the load of emergency vehicles and must be able to grow grass.

The Contractor shall submit the manufacturer's product data and samples of all materials for the product chosen. The Engineer shall approve all products prior to installation.

<u>Measurement and Payment:</u> This work will be measured at the top surface area and paid for at the contract unit price per square yard for DRIVEWAY PAVEMENT SPECIAL (PERMEABLE) which price shall include all labor, materials, and equipment required to complete the installation of the gravel subbase, paver material, and free draining growing medium sand.

The grass seed and fertilizer nutrients will be paid for separately in accordance with Section 250 of the Standard Specifications.

#### GRADING AND SHAPING, SPECIAL

This work shall consist of grading and shaping the existing stream slope at the location shown in the plans as directed by the Engineer and as specified herein.

Prior to starting grading and shaping, all clearing shall be performed according to Section 201. Any tree or stump removal will not be paid for separately.

All surplus, unstable and unsuitable material shall be disposed of according to Article 202.03.

Any embankment required to complete the grading and shaping will be completed in accordance with Section 205 of the Standard Specifications. The grading and shaping shall be completed to provide a uniform slope and removal of any existing scarps in preparation for the seeding and installation of the Turf Reinforcement Mat and Scour Stop.

This work shall include the removal, salvage and reinstallation of the existing stone riprap along the base of the completed slope.

This work will be measured for payment in square yards along the face of the slope.

The volume of any unstable and/or unsuitable material removed will be measured for payment according to Article 202.07.

This work shall be paid at the contract unit price per Square Yard for GRADING AND SHAPING, SPECIAL.

Removal and disposal of unstable and/or unsuitable material will be paid for according to Article 202.08.

#### TIE RODS

<u>Description.</u> This work shall consist of furnishing and installing tie rods and the associated anchorages to the retaining walls and anchor walls.

Materials. The tie rods shall conform to the requirements of ASTM A615, Minimum Grade 75 ksi. The specified diameter shall be the minimum net diameter of the rod not including the threads. All bearing plates shall be AASHTO M270 Grade 50W. Anchorage devices and couplers (if applicable) shall be of a type selected by the Contractor and shall include locking devices to prevent turning or loosening. All nuts and couplers shall be capable of developing the full load of the tie rod ultimate load.

All tie rods, washers, nuts, couplers, and all other miscellaneous items shall be hot dip galvanized according to AASHTO M11 or M232, as applicable. Galvanized coating thickness shall be a minimum of 4 mils.

<u>Construction</u>: The Contractor shall be responsible for determining the required lengths of the tie rods.

Prior to backfilling above the tie rods, Contractor shall tighten the nuts enough to remove any slack in the tie rods.

Any damage to the galvanized finish shall be repaired prior to backfilling. Care shall be taken to avoid damage to the galvanized finish during the backfill process. The Contractor shall not drive equipment over the tie rods until a minimum of six (6) inches of backfill covers the rods.

No heavy equipment (i.e. larger than a Rammax compactor) shall be driven within six (6) feet of the retaining wall. This requirement does not apply to anchor walls.

<u>Method of Measurement:</u> The contract unit price shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all of the work involved in installing the tie rods.

<u>Basis of Payment:</u> This work will be paid for at the contract unit price per each for TIE RODS, of the diameter specified. All washers, nuts, couplers, and bearing plates shall not be paid for separately, but shall be included in this price.

#### PRECAST ENERGY DISSIPATORS

This work shall consist of constructing and installing precast energy dissipaters in the downstream channel per the dimensions and at the locations shown on the plans.

The energy dissipators shall be constructed with suitable lifting loops and per the BDE Special Provisions "Placing and Consolidating Concrete" and "Portland Cement Concrete" found later within these special provisions.

The energy dissipators shall be set per a method meeting the approval of the engineer.

The Contractor has the option to remove and reinstall the three existing precast energy dissipators. Care shall be taken in removing the existing dissipators to prevent any damage. The Engineer shall determine if the removed dissipators may be reused.

This work will be paid at the contract unit price per each for PRECAST ENERGY DISSIPATORS. No additional compensation will be given for the removal and relocation of the existing dissipators but shall be included in the cost for PRECAST ENERGY DISSIPATORS.

#### **BORROW AND FURNISHED EXCAVATION**

Effective March 7, 2000 Revised April 27, 2007

Add the following to the requirements of Article 204:

"Soils which demonstrate the following properties shall be restricted to the interior of the embankment and shall be covered on both sides and top with a minimum of 3 feet (900 mm) of non-restricted soil not considered detrimental in terms of erosion potential or excess volume change. A restricted soil is defined as having any one of the following properties:"

A grain size distribution with less than 35% passing the number 75um (#200) sieve.

A plasticity index of less than 12.

A liquid limit in excess of 50.

"All restricted and non-restricted embankment materials shall have the following minimum strengths for the indicated moistures:"

Immediate Bearing Value	Shear Strength At 95% Density *	Moisture
3.0	1,000PSF (50 Kpa)	120%
4.0	1,300 PSF (62 Kpa)	110%

#### **EMBANKMENT (RESTRICTIONS)**

Effective January 21, 2005

Revised August 3, 2007

Add the following to the requirements of Article 205.04:

Gravel, crushed stone or soils having less than 35% passing the number 200 sieve and other materials as allowed by Article 202.03 of the standard specifications are further restricted. These further restricted materials are also limited to the interior of the embankment and shall have a minimum cover of 3' (1 m) of non-restricted soil (see "Borrow and Furnished Excavation" Special Provision). Alternating layers of further restricted material and cohesive soil will not be permitted. The further restricted materials may only be incorporated into the embankment by using one of the following procedures:

- a. The further restricted materials shall be placed in 4" lifts and disked with the underlying lift material until a uniform and homogenous material is formed having more than 35% passing the number 200 sieve.
- b. Sand, gravel or crushed stone embankment when placed on the existing ground surface will be drained using a 10' (3 m) by 10' (3 m) French drain consisting of nonwoven geotechnical fabric with 12" (0.3 m) of B-3 riprap. This shall be constructed on both sides of the embankment at the toe of the foreslope spaced 150' (46 m) apart. At locations requiring a French drain 3' (1 m) cohesive cap shall not be installed within the 10' by 10' riprap area. If the Engineer determines that the existing ground is a granular free draining soil, the French drain may be deleted.
- c. Sand, gravel or crushed stone embankment when placed on top of a cohesive embankment will be drained with a permanent 4" (100 mm) underdrain system. The underdrain system shall consist of a longitudinal underdrain on both sides of the embankment and transverse underdrains spaced at 250' (75 m) centers. The underdrain shall consist of a 2' (0.6 m) deep by 1' (0.3 m) wide trench, backfilled with FA4 sand and a 4" (100 mm) diameter underdrain. In addition, both sides of the embankment will have a 6" (150 mm) diameter pipe drain which will drain the

underdrain system and outletted into a permanent drainage structure or outletted by a headwall at the toe of the embankment.

The above work will not be paid for separately but shall be included in the cost of EARTH EXCAVATION, FURNISHED EXCAVATION, or BORROW EXCACATION.

#### SUBBASE GRANULAR MATERIAL

Effective: November 5, 2004

This work shall be in accordance with Section 311 of the Standard Specifications and as specified herein.

All Subbase Granular Material shall have a minimum IBR of 40.

#### PIPE CULVERTS

Effective July 1, 1990 Revised January 1, 2007

Add the following sentence to the sixth paragraph of Article 542.04(d): "All connecting bands shall be a minimum of 24" (600 mm) wide".

#### STATUS OF UTILITIES/UTILITIES TO BE ADJUSTED

The City of Peoria assumes no responsibility for the presence, specific size or location of underground distribution systems of the several public utility corporations. No responsibility for the protection of said underground systems will be assumed by the City of Peoria unless such protection is incidental to the protection of the municipally-owned property of the City of Peoria. If such protection is found to be necessary to water mains, gas mains, steam mains, underground electrical distribution systems, underground telephone circuit systems or any other underground systems of non-municipal ownership, the cost of same, in whole or in part, is disclaimed by the City of Peoria.

The J.U.L.I.E. (Joint Utility Locating Information for Excavators) shall be notified prior to starting construction, so that the respective utilities may have adequate time to locate and mark their underground facilities. Phone: 1-800-892-0123 or 811.

The following utilities are located within the project limits. For relocations, the utility companies have provided the estimated dates.

Name, Contact Contact Info of Utility	<u>Type</u>	<u>Location</u>	Relocation <u>Needed</u>	Estimated Date Relocation Completed
Ameren Kent Kowalske 8420 N. University St. Peoria, IL 61615 309-693-4839	Gas	Project Limits	No	
Ameren Waheed Shahzad 8420 N. University St. Peoria, IL 61615 309-693-4631	Electric	Project Limits	Yes	During Const
Comcast Raymond Decroix Raymond Decroix@cable	Fiber Optics .comcast.com	Project Limits	Yes	During Const
Frontier Telephone Darrell Senior 309-827-1253	Fiber Optics	Project Limits	Yes	During Const
GPSD Al Howerter 2322 S. Darst Street Peoria, IL 61607 309-637-3511	Sanitary Sewer Force Main	Project Limits	No	
Illinois American Water Christian Volz 7500 N. Harker Drive Peoria, IL 61615 309-566-4114	Water	Project Limits	Relocate Existing Fire Hydrant	During Const.
Stratus Networks, Inc John Petrakis 4700 N. Prospect Rd. Suite 8 Peoria Heights, IL 61616 309-208-0201	Fiber Optics	Project Limits	Yes	During Const

The above represents the best information of the CITY and is only included for the convenience of the bidder. The applicable provisions of Recurring Special Provisions LRS6, and Articles 105.07, 107.20, 107.31, and 108.02 of the Standard Specifications for Road and Bridge Construction shall apply.

The estimated utility relocation dates should be part of the progress schedule submitted by the Contractor. If any utility adjustments or relocations have not been completed by the above dates specified and when required by the Contractor's operations after these dates, the Contractor should notify the Engineer in writing. A request for an extension of time will be considered to the extent the Contractor's critical path schedule is affected.

#### **UTILITIES – LOCATIONS/INFORMATION ON PLANS**

Effective: November 8, 2013

The locations of existing water mains, gas mains, sewers, electric power lines, telephone lines, and other utilities as shown on the plans are based on field investigation and locations provided by the utility companies, but they are not guaranteed. Unless elevations are shown, all utility locations shown on the cross sections are based on the approximate depth supplied by the utility company. It shall be the Contractor's responsibility to ascertain their exact location from the utility companies and by field inspection.

# WEEP HOLE DRAINS FOR ABUTMENTS, WINGWALLS, RETAINING WALLS AND CULVERTS

Effective: April 19, 2012 Revised: October 22, 2013

Delete the last paragraphs of Articles 205.05 and 502.10 and replace with the following.

"If a geocomposite wall drain according to Section 591 is not specified, a prefabricated geocomposite strip drain according to Section 1040.07 shall be placed at the back of each drain hole. The strip drain shall be 24 inches (600 mm) wide and 48 inches (1.220 m) tall. The strip drain shall be centered over the drain hole with the bottom located 12 inches (300 mm) below the bottom of the drain hole. All form boards or other obstructions shall be removed from the drain holes before placing any geocomposite strip drain."

Revise the last sentence of the first paragraph of Article 503.11 to read as follows.

"Drain holes shall be covered to prevent the leakage of backfill material according to Article 502.10."

Revise the title of Article 1040.07 to Geocomposite Wall Drains and Strip Drains.

#### **STATEWIDE 12 PERMIT**

This project is covered under the provisions of the Illinois Department of Natural Resources, Office of Water Resources Statewide Permit 12 – Replacement Structures per the enclosed notification letter. A copy of the statewide permit will be provided upon request.

#### **NATIONWIDE 404 PERMIT**

This project is covered under the provisions of Nationwide Permit #14 by the U.S. Army Corps of Engineers and the Illinois Environmental Protection Agency.

The conditions of this permit can be found in the attached Fact Sheet No. 7(IL).



Illinois Department of Natural Resources

<u>BY</u>

DECEIVED I JUL 3 0 2013 BY: MSI - RJA

Pat Quinn, Governor Marc Miller, Director

One Natural Resources Way Springfield, Illinois 62702-1271 http://dnr.state.il.us

July 19, 2013

City of Peoria

#### STATEWIDE PERMIT NOTIFICATION LETTER

Alta Road over Tributary to Kickapoo Creek, Peoria County

Thank you for your recent submittal regarding the project as shown on the enclosed copy of your submittal. Based on the information you have submitted, it appears that the project qualifies for approval under the Illinois Department of Natural Resources, Office of Water Resources statewide permit program. We have enclosed a copy of the applicable statewide permit(s) (as noted below) which appear to apply to your work. Please review this material to confirm whether your work will meet the terms and conditions of the permit(s). If any of the conditions would not be met, please advise us of the differences and we will continue with the formal permit process.

If we do not hear from you within thirty (30) days, we will assume it is your intention to comply with the conditions of the statewide permit(s).

This letter should not be construed as a release from any other federal, state or local requirements. If you have not already done so, you should contact the local regulatory agency to ascertain applicable local floodplain construction requirements.

If you have any questions feel free to contact the person noted below at 217/782-3863.

Jerry Bishoff
X Jason Campbell

Rob Giesing
Mark McCauley

Mike Diedrichsen Wes Rust

BY:

cc: Maurer-Stutz, Inc. (George Merkle)

City of Peoria, Permits Engineer (Ken Andrejasich) w/encl.

#### Statewide Permit(s) Enclosed:

SW 1 - Fringe Construction

SW 2 - Rural Bridges

SW 3 - Barge Fleeting Facilities

SW 4 - Aerial Utility Crossings

SW 5 - Minor Boat Docks

SW 6 - Minor Floodway Construction

SW 7 - Outfalls

SW 8 - Underground Crossings

SW 9 - Shoreline/Streambank Protection

SW 10 - Additions/Accessory Structures

SW 11 - Dredging

X SW 12 - Replacement Structures

SW 13 - Temporary Construction

SW 14 - Special Use of Public Water



#### DEPARTMENT OF THE ARMY

CORPS OF ENGINEERS, ROCK ISLAND DISTRICT PO BOX 2004 CLOCK TOWER BUILDING ROCK ISLAND, ILLINOIS 61204-2004

RECEIVED

REPLY TO ATTENTION OF

March 3, 2015

Operations Division

SUBJECT: CEMVR-OD-P-2015-202A&B

Mr. Scott Reeise, P.E. City of Peoria 3503 N. Dries Lane Peoria, Illinois 61604

Dear Mr. Reeise:

Our office reviewed all materials in the application received, February 9, 2014, concerning the proposed culvert replacements and extensions over two tributaries of Kickapoo Creek in Peoria, Sections 30 & 31, Township 10 North, Range 8 East, Peoria County, Illinois.

2015-202A: Proposed construction of a roundabout at the current four-way stop at the intersection of W. Alta Road and N. Allen Road, including a 45 foot extension of a double 10' x 8' concrete box culvert in a tributary of Kickapoo Creek in Peoria, Sections 30 & 31, Township 10 North, Range 8 East, Peoria County, Illinois. The project also includes wingwalls, downstream drop structures, energy dissipaters, and an additional 15 feet of riprap.

2015-202B: Proposed culvert replacement, extension, and riprap on N. Allen Road in a tributary of Kickapoo Creek in Peoria, Section 30, Township 10 North, Range 8 West, Peoria County, Illinois.

Your projects are covered under Nationwide Permit No. 14, as published in the enclosed Fact Sheet No. 7 (IL), provided you meet the permit conditions for the nationwide permits, which are also included in the Fact Sheet. The Corps has also made a determination of no effect on federally threatened and endangered species or critical habitat. The Illinois Environmental Protection Agency (IEPA) also issued Section 401 Water Quality Certification with conditions for this nationwide permit. Please note these additional conditions included in the Fact Sheet. The decision regarding this action is based on information found in the administrative record, which documents the District's decision-making process, the basis for the decision, and the final decision.

These verifications are valid until March 18, 2017, unless the nationwide permit is modified, reissued or revoked. It is your responsibility to remain informed of changes to the nationwide permit program. We will issue a public notice announcing any changes if and when they occur. Furthermore, if you commence or are under contract to commence this activity before the date the nationwide permit is modified or revoked, you will have twelve months from this date to complete your activity under the present terms and conditions of this nationwide permit. If your project plans change, you should contact our office for another determination.

Our office has completed a Preliminary Jurisdictional Determination concerning your project areas. A Preliminary Jurisdictional Determination is not appealable, and it is applicable only to the permit program administered by the Corps of Engineers

This authorization does not eliminate the requirement that you must still acquire other applicable Federal, state, and local permits. If you have not already coordinated your project with the Illinois Department of Natural Resources – Office of Water Resources, please contact them at 217/782-3863 to determine if a floodplain development permit is required for your project. You may contact the IEPA Facility Evaluation Unit at 217/782-3362 to determine whether additional authorizations are required from the IEPA. Please send any electronic correspondence to EPA.401.bow@illinois.gov.

You are required to complete and return the enclosed "Completed Work Certification" upon completion of your project, in accordance with General Condition No. 30 of the nationwide permits.

The Rock Island District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please take a moment to complete the attached postcard and return it or go to our Customer Service Survey found on our web site at <a href="http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey">http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey</a>. (Be sure to select "Rock Island District" under the area entitled: Which Corps office did you deal with?)

Should you have any questions, please contact our Regulatory Branch by letter, telephone or email Mrs. Kirsten Brown at 309/794-5104 or <u>Kirsten.L.Brown@usace.army.mil</u>.

Sincerely

Ďonna M. Jones, P.E.

Chief, Illinois/Missouri Section

Regulatory Branch

When the structure(s) or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s), of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

Transferee

Date

Enclosures

Copies Furnished: (w/o enclosures)

Mr. Mike Diedrichsen, P.E. Office of Water Resources IL Department of Natural Resources One Natural Resources Way Springfield, Illinois 62701-1271

Mr. Dan Heacock
Illinois Environmental Protection Agency
Watershed Management Section, Permit Sec. 15
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
Epa.401.bow@illinois.gov (email copy)

U.S. Army Corps of Engineers Illinois Waterway Project Office 257 Grant Street Peoria, Illinois 61603

Mr. George B. Merkle, P.E. 3116 N. Dries Ln, Ste 100 Peoria, Illinois 61604

### COMPLETED WORK CERTIFICATION

CEMVR-OD-P-2015-202A&B

Permit Number:

KB

Name of Permittee:	Peoria County, Illinois			
Date of Issuance:	March 3, 2015			
County/State:	Peoria/Illinois			
Upon completion of the activity authorized by this permit and any mitigation required by the permit, sign this certification and return it to the following address:				
	U.S. Army Engineer District, Rock Island ATTN: Regulatory Branch Clock Tower Building Post Office Box 2004 Rock Island, Illinois 61204-2004			
Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit suspension, modification, or revocation.				
I hereby certify that the work authorized by the above reference permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.				
Signature of Permitte	Date			



### FACT SHEET NO. 7(IL)

USArmy Corps of Engineers Rock Island District

#### NATIONWIDE PERMITS IN ILLINOIS

EFFECTIVE DATE: MARCH 19, 2012

On February 21, 2012, the Corps of Engineers published in the Federal Register (77 FR 10184), the Final Rule for the Nationwide Permits Program under the Rivers and Harbors Act of 1899; the Clean Water Act; and the Marine Protection, Research and Sanctuaries Act. These rules became effective on March 19, 2012.

The Nationwide Permit Program is an integral part of the Corps' Regulatory Program. The Nationwide Permits are a form of general permits issued by the Chief of Engineers and are intended to apply throughout the entire United States and its territories. A listing of the nationwide permits and general conditions is included herein. We encourage prospective permit applicants to consider the advantages of nationwide permit authorization during the preliminary design of their projects. Assistance and further information regarding all aspects of the Corps of Engineers Regulatory Program may be obtained by contacting the appropriate Corps of Engineers District at the address and/or telephone number listed on the last page of this Fact Sheet.

To ensure projects authorized by a Nationwide Permit will result in minimal adverse effects to the aquatic environment, the following Regional Conditions were developed for projects proposed within the state of Illinois (See NOTE regarding the Chicago District):

- 1. Stormwater management facilities shall not be located within a stream, except for NWPs 21, 44, 49, or 50.
- 2. For newly constructed channels through areas that are unvegetated, a riparian buffer strip planted in native grasses, trees and/or shrubs a minimum of 25 feet wide from the top of bank on ephemeral streams must be planted along both sides of the new channel. The buffer width will be a minimum of 50 feet wide from the top of bank on intermittent and perennial streams. A survival rate of 80 percent of desirable species with aerial coverage of at least 50 percent shall be achieved within 3 years of establishment of the buffer strip.
- 3. For a single family residence authorized under Nationwide Permit No. 29, the permanent loss of waters of the United States (including jurisdictional wetlands) must not exceed 1/4 acre.
- 4. For NWP 46, the discharge of dredged or fill material into ditches and canals that would sever the jurisdiction of an upstream water of the United States from a downstream water of the United States is not allowed.
- 5. For NWP 52, no project will be authorized within Lake Michigan. An individual permit will be required.

NOTE: The Chicago District has suspended many of the Nationwide Permits and established regional permits for work in McHenry, Kane, Lake, DuPage, Will and Cook Counties in Illinois. Information regarding Chicago District requirements can be accessed through their website at <a href="http://www.lrc.usace.army.mil/co-r/">http://www.lrc.usace.army.mil/co-r/</a>. If you have any questions regarding the Chicago District program, please contact the Regulatory Office by telephone at 312/846-5530, or e-mail lrcregweb@usace.army.mil.

Permits, issued by the Corps of Engineers, under the authority of Section 404 of the Clean Water Act may not be issued until the state (where the discharge will occur) certifies, under Section 401 of the Act, that the discharge will comply with the water quality standards of the State. On April 2, 2012, the Illinois Environmental Protection Agency (IEPA) issued their final Section 401 Water Quality Certification decision.

#### DENIED NATIONWIDE PERMITS

The IEPA did not issue a generic water quality certification for the following nationwide permits which are listed by subject only:

- 21. Surface Coal Mining Activities
- 23. Approved Categorical Exclusions
- 30. Moist Soil Management for Wildlife
- 31. Maintenance of Existing Flood Control Facilities
- 34. Cranberry Production Activities
- 37. Emergency Watershed Protection and Rehabilitation
- 43. Stormwater Management Facilities
- 48. Commercial Shellfish Aquaculture Activities
- 49. Coal Remining Activities
- 50. Underground Coal Mining Activities

Since Nationwide Permits 21, 23, 31, 37, 48, 49, and 50 are applicable under both Section 10 and 404, the State Section 401 certification is only required for discharges of pollutants under these nationwide permits. Section 10 work not involving discharges of dredged or fill material continues to be authorized under these nationwide permits.

Authorization for discharges covered by all the above nationwide permits is denied without prejudice. Applicants wishing to conduct such discharges must first obtain either an individual water quality certification or waiver from:

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
1021 NORTH GRAND AVENUE EAST
POST OFFICE BOX 19276
SPRINGFIELD, ILLINOIS 62794-9276

If the state certifying agency fails to act on an application for water quality certification within 60 days after receipt, the certification requirement is presumed to be waived. The applicant must furnish the District Engineer (at the appropriate address listed on the last page of the Fact Sheet) with a copy of the certification or proof of waiver. The discharge may proceed upon receipt of the District Engineer's determination that the discharge qualifies for authorization under this nationwide permit. Details of this procedure are contained in 33 CFR 330.4, a copy of which is available upon request.

Nationwide Permits 3, 7, 8, 12, 13, 14, 17, 18, 21, 22, 23, 27, 29, 31, 33, 34, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 48, 49, 50, 51, and 52 require that the permittee notify the District Engineer at least 45 days prior to performing the discharge under certain circumstances. Specific instructions for these notifications are contained in General Condition 31, a copy of which is included.

For all other Nationwide Permits, the IEPA issued Section 401 Water Quality Certification with conditions. General Conditions 1, 2, and 3 apply to all nationwide permits for which certification was not denied and activities require authorization under Section 404 of the Clean Water Act. Other conditions specific to a Nationwide Permit are listed at the end of the subject nationwide permit.

General Condition 1: An individual 401 water quality certification will be required for any activities permitted under these Nationwide Permits for discharges to waters designated by the State of Illinois as Outstanding Resource Waters under 35 Ill. Adm. Code 302.105(b).

General Condition 2: Projects requiring authorization under Section 404 of the Clean Water Act must implement Best Management Practices (BMPs) to protect water quality, preserve natural hydrology and minimize the overall impacts to aquatic resources during and after construction. If the project involves a water with an approved Total Maximum Daily Load (TMDL) allocation for any parameter, measures which ensure consistency with the assumption and requirements of the TMDL shall be included. TMDL program information and water listings are available at <a href="https://www.epa.state.il.us/water/tmdl/">www.epa.state.il.us/water/tmdl/</a>. If the project involves an impaired water listed on the Illinois Environmental Protection Agency's Section 303(d) list for suspended solids, turbidity, or siltation, measures designed for at least a 25-year, 24-hour rainfall event shall be incorporated. Impaired waters are identified at <a href="https://www.epa.state.il.us/water/tmdl/303d-list.html">www.epa.state.il.us/water/tmdl/303d-list.html</a>.

General Condition 3: Prior to proceeding with any work in accordance with any Nationwide Permit, potential impacts to threatened or endangered species shall be identified through use of the State's Ecological Compliance Assessment Tool (EcoCAT) at <a href="http://dnrecocat.state.il.us/ecopublic/">http://dnrecocat.state.il.us/ecopublic/</a>. If potential impacts to State threatened or endangered species are identified, the Illinois Department of Natural Resources shall be consulted with.

#### Nationwide Permits and Conditions

The following is a list of the nationwide permits, authorized by the Chief of Engineers, and published in the Federal Register (77 FR 10184) and (77 FR 16021). Permittees wishing to conduct activities under the nationwide permits must comply with the conditions published in Section C. The Nationwide Permit General Conditions found in Section C have been reprinted at the end of this Fact Sheet. The parenthetical references (Section 10, Section 404) following each nationwide permit indicate the specific authorities under which that permit is issued.

#### B. Nationwide Permits

- 1. Aids to Navigation. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard (see 33 CFR, chapter I, subchapter C, part 66). (Section 10)
- 2. Structures in Artificial Canals. Structures constructed in artificial canals within principally residential developments where the connection of the canal to a navigable water of the United States has been previously authorized (see 33 CFR 322.5(g)). (Section 10)
- 3. Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure, or fill, or of any currently serviceable structure or fill authorized by 33 CFP. 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other

regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project or within the boundaries of the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

- (b) This NWP also authorizes the removal of accumulated sediments and debris in the vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.) and/or the placement of new or additional riprap to protect the structure. The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization. The placement of new or additional riprap must be the minimum necessary to protect the structure or to ensure the safety of the structure. Any bank stabilization measures not directly associated with the structure will require a separate authorization from the district engineer.
- (c) This NWP also authorizes temporary structures, fills, and work necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.
- (d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Sections 10 and 404)

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 3. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 3 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
- 3. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. The applicant for Nationwide Permit 3 shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 5. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 3 shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 3 shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 6. The applicant for Nationwide 3 shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 7. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.

- 8. The applicant for Nationwide 3 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.
- 4. Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities. Fish and Wildlife harvesting devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, duck blinds, and clam and oyster digging, fish aggregating devices, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). This NWP does not authorize artificial reefs or impoundments and semi-impoundments of waters of the United States for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. (Sections 10 and 404)
- 5. Scientific Measurement Devices. Devices, whose purpose is to measure and record scientific data, such as staff gages, tide and current gages, meteorological stations, water recording and biological observation devices, water quality testing and improvement devices, and similar structures. Small weirs and flumes constructed primarily to record water quantity and velocity are also authorized provided the discharge is limited to 25 cubic yards. Upon completion of the use of the device to measure and record scientific data, the measuring device and any other structures or fills associated with that device (e.g., foundations, anchors, buoys, lines, etc.) must be removed to the maximum extent practicable and the site restored to pre-construction elevations. (Sections 10 and 404)
- 6. Survey Activities. Survey activities, such as core sampling, seismic exploratory operations, plugging of seismic shot holes and other exploratory-type bore holes, exploratory trenching, soil surveys, sampling, sample plots or transects for wetland delineations, and historic resources surveys. For the purposes of this NWP, the term ``exploratory trenching'' means mechanical land clearing of the upper soil profile to expose bedrock or substrate, for the purpose of mapping or sampling the exposed material. The area in which the exploratory trench is dug must be restored to its pre-construction elevation upon completion of the work and must not drain a water of the United States. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. This NWP authorizes the construction of temporary pads, provided the discharge does not exceed 1/10-acre in waters of the U.S. Discharges and structures associated with the recovery of historic resources are not authorized by this NWP. Drilling and the discharge of excavated material from test wells for oil and gas exploration are not authorized by this NWP; the plugging of such wells is authorized. Fill placed for roads and other similar activities is not authorized by this NWP. The NWP does not authorize any permanent structures. The discharge of drilling mud and cuttings may require a permit under Section 402 of the Clean Water Act. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 6. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 6 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 2. The applicant for Nationwide Permit 6 shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:
  - A. Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
  - B. Side cast material is not placed within ponds or other water bodies other than wetlands; and
  - C. Sidecast material is not placed within a wetland for a period longer than twenty (20) calendar days. Such sidecast material shall either be removed from the site, or used as backfill (refer to Condition 4 and 5).
- 4. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation. Excavated material may be used only if:
  - A. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
     B. Excavation and backfilling are done under dry conditions.
- 5. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 6. Temporary work pads shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- 7. The applicant for Nationwide 6 that uses temporary work pads in order to perform work in creeks, streams, or rivers shall maintain flow in the these waters by utilizing dam and pumping, fluming, culverts or other such techniques.

7. Outfall Structures and Associated Intake Structures. Activities related to the construction or modification of outfall structures and associated intake structures, where the effluent from the outfall is authorized, conditionally authorized, or specifically exempted by, or otherwise in compliance with regulations issued under the National Pollutant Discharge Elimination System Program (Section 402 of the Clean Water Act). The construction of intake structures is not authorized by this NWP, unless they are directly associated with an authorized outfall structure.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

8. Oil and Gas Structures on the Outer Continental Shelf. Structures for the exploration, production, and transportation of oil, gas, and minerals on the outer continental shelf within areas leased for such purposes by the Department of Interior, Bureau of Ocean Energy Management. Such structures shall not be placed within the limits of any designated shipping safety fairway or traffic separation scheme, except temporary anchors that comply with the fairway regulations in 33 CFR 322.5(1). The district engineer will review such proposals to ensure compliance with the provisions of the fairway regulations in 33 CFR 322.5(1). Any Corps review under this NWP will be limited to the effects on navigation and national security in accordance with 33 CFR 322.5(f), as well as 33 CFR 322.5(1) and 33 CFR part 334. Such structures will not be placed in established danger zones or restricted areas as designated in 33 CFR part 334, nor will such structures be permitted in EPA or Corps designated dredged material disposal areas.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Section 10)

- 9. Structures in Fleeting and Anchorage Areas. Structures, buoys, floats and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where the U.S. Coast Guard has established such areas for that purpose. (Section 10)
  - 10. Mooring Buoys. Non-commercial, single-boat, mooring buoys. (Section 10)
- 11. Temporary Recreational Structures. Temporary buoys, markers, small floating docks, and similar structures placed for recreational use during specific events such as water skiing competitions and boat races or seasonal use, provided that such structures are removed within 30 days after use has been discontinued. At Corps of Engineers reservoirs, the reservoir manager must approve each buoy or marker individually. (Section 10)
- 12. Utility Line Activities. Activities required for the construction, maintenance, repair, and removal of utility lines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than \1/2\-acre of waters of the United States for each single and complete project.

Utility lines: This NWP authorizes the construction, maintenance, or repair of utility lines, including outfall and intake structures, and the associated excavation, backfill, or bedding for the utility lines, in all waters of the United States, provided there is no change in preconstruction contours. A "utility line' is defined as any pipe or pipeline for the transportation of any gaseous, liquid, liquescent, or slurry substance, for any purpose, and any cable, line, or wire for the transmission for any purpose of electrical energy, telephone, and telegraph messages, and radio and television communication. The term "utility line' does not include activities that drain a water of the United States, such as drainage tile or french drains, but it does apply to pipes conveying drainage from another area.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon completion of the utility line crossing of each waterbody.

Utility line substations: This NWP authorizes the construction, maintenance, or expansion of substation facilities associated with a power line or utility line in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

Foundations for overhead utility line towers, poles, and anchors: This NWP authorizes the construction or maintenance of foundations for overhead utility line towers, poles, and anchors in all waters of the United States, provided the foundations are the minimum size necessary and separate footings for each tower leg (rather than a larger single pad) are used where feasible.

Access roads: This NWP authorizes the construction of access roads for the construction and maintenance of utility lines, including overhead power lines and utility line substations, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduror roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize utility lines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (See 33 CFR Part 322). Overhead utility lines constructed over section 10 waters and utility lines that are routed in or

under section 10 waters without a discharge of dredged or fill material require a section 10 permit.

This NWP also authorizes temporary structures, fills, and work necessary to conduct the utility line activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Notification: The permittee must submit a pre-construction notification to the district

engineer prior to commencing the activity if any of the following criteria are met: (1) The activity involves mechanized land clearing in a forested wetland for the utility line right-ofway; (2) a section 10 permit is required; (3) the utility line in waters of the United States, excluding overhead lines, exceeds 500 feet; (4) the utility line is placed within a jurisdictional area (i.e., water of the United States), and it runs parallel to or along a stream bed that is within that jurisdictional area; (5) discharges that result in the loss of greater than 1/10-acre of waters of the United States; (6) permanent access roads are constructed above grade in waters of the United States for a distance of more than 500 feet; or (7) permanent access roads are constructed in waters of the United States with impervious materials. (See general condition 31.) (Sections 10 and 404)

Note 1: Where the proposed utility line is constructed or installed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the utility line to protect navigation.

Note 2: Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the utility line must be removed upon completion of the work, in accordance with the requirements for temporary fills.

Note 3: Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, not utility lines, and may require a permit from the U.S. Coast Guard pursuant to Section 9 of the Rivers and Harbors Act of 1899. However, any discharges of dredged or fill material into waters of the United States associated with such pipelines will require a section 404 permit (see NWP 15).

Note 4: For overhead utility lines authorized by this NWP, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 12. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 12 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

1. Case-specific water quality certification from the Illinois EPA will be required for:

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A. activities in the following waters:
       i. Lake Calumet
       ii. Fox River (including the Fox Chain of Lakes)
       iii. Lake Michigan
       iv. All Public and Food Processing Water Supplies with surface intake facilities.
       The Illinois EPA's Division of Public Water Supply at 217/782-1020 may be
       contacted for information on these water supplies.
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В. activities in the following waters if material is sidecast into waters of the State or wetlands.

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i. Chicago Sanitary and Ship Canal
               ii. Calumet-Sag Channel
               iii. Little Calumet River
               iv. Grand Calumet River
               v. Calumet River
               vi. South Branch of the Chicago River (including the South Fork)
               vii. North Branch of the Chicago River (including the East and West Forks and the
               Skokie Lagoons)
               viii. Chicago River (Main Stem)
               ix. Des Plaines River
               x. Saline River (in Hardin County)
               xi. Richland Creek (in St. Clair and Monroe Counties)
               xii. Rock River (in Winnebago County)
               xiii. Illinois River upstream of mile 229.6 (Illinois Route 178 bridge)
               xiv. Illinois River between mile 140.0 and 182.0
               xv. Pettibone Creek (in Lake County)
               xvi. DuPage River (including the East and West Branches)
               xvii. Salt Creek (Des Plaines River Watershed)
               xviii. Waukegan River (including the South Branch)
2. Section 401 water quality certification is hereby issued for all other waters, with the
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following conditions:

A. The applicant for Nationwide Permit 12 shall not cause:

i. violation of applicable provisions of the Illinois Environmental Protection Act:

ii. water pollution defined and prohibited by the Illinois Environmental Protection Act;

iii. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or

- iv. interference with water use practices near public recreation areas or water supply intakes.
- B. The applicant for Nationwide Permit 12 shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- C. Material resulting from trench excavation within surface waters of the State may be temporarily sidecast adjacent to the trench excavation provided that:
  - Sidecast material is not placed within a creek, stream, river or other flowing water body such that material dispersion could occur;
  - ii. Side cast material is not placed within ponds or other water bodies other than wetlands; and
  - iii. Sidecast material is not placed within a wetland for a period longer than twenty (20) calendar days. Such sidecast material shall either be removed from the site (refer to Condition 2.F), or used as backfill (refer to Condition 2.D and 2.E).
- D. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - i. Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
  - ii. Excavation and backfilling are done under dry conditions.
- E. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- F. All material excavated which is not being used as backfill as stipulated in Condition 2.D and 2.E shall be stored or disposed in self-contained areas with no discharge to waters of the State. Material shall be disposed of appropriately under the regulations at 35 Il. Adm. Code Subtitle G.
- G. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant for Nationwide 12 shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant for Nationwide 12 shall be responsible for obtaining an NPDES Storm Water Permit required by the federal Clean Water Act prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- H. The applicant for Nationwide 12 shall implement erosion control measures consistent with the Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- I. The use of directional drilling to install utility pipelines below surface waters of the State is hereby certified provided that:
  - All pits and other construction necessary for the directional drilling process are located outside of surface waters of the State;
  - ii. All drilling fluids shall be adequately contained such that they cannot cause a discharge to surface waters of the State. Such fluids shall be treated as stipulated in Condition 2.F; and
  - iii. Erosion and sediment control is provided in accordance with Conditions 2.B, 2.G, and 2.H.
- J. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Material excavated or dredged from the surface water or wetland shall not be used to construct the temporary facility. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- K. The applicant for Nationwide 12 that uses temporary work pads, cofferdams, access roads or other temporary fills in order to perform work in creeks, streams, or rivers for construction activities shall maintain flow in the these waters during such construction activity by utilizing dam and pumping, fluming, culverts or other such techniques.
- L. Permanent access roads shall be constructed of clean coarse aggregate or non-erodible nonearthen fill material that will not cause siltation. Material excavated or dredged from the surface water or wetland shall not be used to construct the access road in waters of the state. The applicant for Nationwide 12 that constructs access roads shall maintain flow in creeks, streams and rivers by installing culverts, bridges or other such techniques.
- 13. Bank Stabilization. Bank stabilization activities necessary for erosion prevention, provided the activity meets all of the following criteria:
  - (a) No material is placed in excess of the minimum needed for erosion protection;
- (b) The activity is no more than 500 feet in length along the bank, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;
- (c) The activity will not exceed an average of one cubic yard per running foot placed along the bank below the plane of the ordinary high water mark or the high tide line, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;

- (d) The activity does not involve discharges of dredged or fill material into special aquatic sites, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;
- (e) No material is of a type, or is placed in any location, or in any manner, that will impair surface water flow into or out of any waters of the United States;
- (f) No material is placed in a manner that will be eroded by normal or expected high flows (properly anchored trees and treetops may be used in low energy areas); and,
  - (g) The activity is not a stream channelization activity.

This NWP also authorizes temporary structures, fills, and work necessary to construct the bank stabilization activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

Invasive plant species shall not be used for bioengineering or vegetative bank stabilization. Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if the bank stabilization activity: (1) Involves discharges into special aquatic sites; or (2) is in excess of 500 feet in length; or (3) will involve the discharge of greater than an average of one cubic yard per running foot along the bank below the plane of the ordinary high water mark or the high tide line. (See general Condition 31.) (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 13. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 13 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The bank stabilization activities shall not exceed 1000 linear feet.
- 2. Asphalt, bituminous material and concrete with protruding material such as reinforcing bars or mesh shall not be:
  - A. used for backfill;
  - B. placed on shorelines/streambanks; or
  - C. placed in waters of the State.
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
- 4. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 5. The applicant shall consider installing bioengineering practices in lieu of structural practices of bank stabilization to minimize impacts to the lake, pond, river or stream and enhance aquatic habitat. The applicant shall document the selection process for the bank stabilization technique(s) and the basis for the selection of the bank stabilization practices. Bioengineering techniques may include, but are not limited to:
  - A. adequately sized riprap or A-Jack structures keyed into the toe of the slope with native plantings on the banks above;
  - B. vegetated geogrids;
  - C. coconut fiber (coir) logs;
  - D. live, woody vegetative cuttings, fascines or stumps;
  - E. brush layering; and
  - F. soil lifts.

14. Linear Transportation Projects. Activities required for the construction, expansion, modification, or improvement of linear transportation projects (e.g., roads, highways, railways, trails, airport runways, and taxiways) in waters of the United States. For linear transportation projects in non-tidal waters, the discharge cannot cause the loss of greater than 1/2-acre of waters of the United States. For linear transportation projects in tidal waters, the discharge cannot cause the loss of greater than 1/3-acre of waters of the United States. Any stream channel modification, including bank stabilization, is limited to the minimum necessary to construct or protect the linear transportation project; such modifications must be in the immediate vicinity of the project.

This NWP also authorizes temporary structures, fills, and work necessary to construct the linear transportation project. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

This NWP cannot be used to authorize non-linear features commonly associated with transportation projects, such as vehicle maintenance or storage buildings, parking lots, train stations, or aircraft hangars.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The loss of waters of the United States exceeds 1/10-acre; or (2) there is a discharge in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

Note: Some discharges for the construction of farm roads or forest roads, or temporary roads for moving mining equipment, may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 14. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT

(33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 14 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The affected area of the stream channel shall not exceed 300 linear feet, as measured along the stream corridor
- 2. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
- 3. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 5. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 6. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 7. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- 8. The applicant for Nationwide Permit 14 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.
- 15. U.S. Coast Guard Approved Bridges. Discharges of dredged or fill material incidental to the construction of a bridge across navigable waters of the United States, including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills, provided the construction of the bridge structure has been authorized by the U.S. Coast Guard under Section 9 of the Rivers and Harbors Act of 1899 and other applicable laws. Causeways and approach fills are not included in this NWP and will require a separate section 404 permit. (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 15. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 15 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control
  - Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or D. interference with water use practices near public recreation areas or water supply
  - intakes.
- 2. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 16. Return Water From Upland Contained Disposal Areas. Return water from an upland contained dredged material disposal area. The return water from a contained disposal area is administratively defined as a discharge of dredged material by 33 CFR 323.2(d), even though the disposal itself occurs in an area that has no waters of the United States and does not require a section 404 permit. This NWP satisfies the technical requirement for a section 404 permit for the return water where the quality of the return water is controlled by the state through the section 401 certification procedures. The dredging activity may require a section 404 permit (33 CFR

323.2(d)), and will require a section 10 permit if located in navigable waters of the United States, (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 16. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 16 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:

  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
    B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control
  - Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 2. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. Applicants shall obtain a Subtitle C State Construction and Operating Permit for construction and operation of any dredge material disposal facility.
- 17. Hydropower Projects. Discharges of dredged or fill material associated with hydropower projects having: (a) Less than 5000 kW of total generating capacity at existing reservoirs, where the project, including the fill, is licensed by the Federal Energy Regulatory Commission (FERC) under the Federal Power Act of 1920, as amended; or (b) a licensing exemption granted by the FERC pursuant to Section 408 of the Energy Security Act of 1980 (16 U.S.C. 2705 and 2708) and Section 30 of the Federal Power Act, as amended.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 17. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 17 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS FUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply
- 2. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. An individual Section 401 water quality certification will be required for any project that is not previously approved by a Section 401 water quality certification issued by the Illinois EPA for a Federal Energy Regulatory Commission license or permit.
- 18. Minor Discharges. Minor discharges of dredged or fill material into all waters of the United States, provided the activity meets all of the following criteria:
- (a) The quantity of discharged material and the volume of area excavated do not exceed 25 cubic yards below the plane of the ordinary high water mark or the high tide line;

  (b) The discharge will not cause the loss of more than 1/10-acre of waters of the United
- States; and
  - (c) The discharge is not placed for the purpose of a stream diversion.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The discharge or the volume of area excavated exceeds 10 cubic yards below the plane of the ordinary high water mark or the high tide line, or (2) the discharge is in a special aquatic site, including wetlands. (See general condition 31.) (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 18. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 18 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.

- 2. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 19. Minor Dredging. Dredging of no more than 25 cubic yards below the plane of the ordinary high water mark or the mean high water mark from navigable waters of the United States (i.e., section 10 waters). This NWP does not authorize the dredging or degradation through siltation of coral reefs, sites that support submerged aquatic vegetation (including sites where submerged aquatic vegetation is documented to exist but may not be present in a given year), anadromous fish spawning areas, or wetlands, or the connection of canals or other artificial waterways to navigable waters of the United States (see 33 CFR 322.5(g)). (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 19. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 19 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. Dredging shall be done my mechanical means and material not discharged to Waters of the
- 20. Response Operations for Oil and Hazardous Substances. Activities conducted in response to a discharge or release of oil and hazardous substances that are subject to the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR part 300) including containment, cleanup, and mitigation efforts, provided that the activities are done under either: (1) The Spill Control and Countermeasure Plan required by 40 CFR 112.3; (2) the direction or oversight of the federal on-scene coordinator designated by 40 CFR part 300; or (3) any approved existing state, regional or local contingency plan provided that the Regional Response Team (if one exists in the area) concurs with the proposed response efforts. This NWP also authorizes activities required for the cleanup of oil releases in waters of the United States from electrical equipment that are governed by EPA's polychlorinated biphenyl spill response regulations at 40 CFR part 761. This NWP also authorizes the use of temporary structures and fills in waters of the U.S. for spill response training exercises. (Sections 10 and 404)
- *** 21. Surface Coal Mining Activities. Discharges of dredged or fill material into waters of the United States associated with surface coal mining and reclamation operations.
- (a) Previously Authorized Surface Coal Mining Activities. Surface coal mining activities that were previously authorized by the NWP 21 issued on March 12, 2007 (see 72 FR 11092), are authorized by this NWP, provided the following criteria are met:
- (1) The activities are already authorized, or are currently being processed by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977 or as part of an integrated permit processing procedure by the Department of Interior, Office of Surface Mining Reclamation and Enforcement;
- (2) The permittee must submit a letter to the district engineer requesting re-verification of the NWP 21 authorization. The letter must describe any changes from the previous NWP 21 verification. The letter must be submitted to the district engineer by February 1, 2013;
- (3) The loss of waters of the United States is not greater than the loss of waters of the United States previously verified by the district engineer under the NWP 21 issued on March 12, 2007 (i.e., there are no proposed expansions of surface coal mining activities in waters of the United States);
- (4) The district engineer provides written verification that those activities will result in minimal individual and cumulative adverse effects and are authorized by NWP 21, including currently applicable regional conditions and any activity-specific conditions added to the NWP authorization by the district engineer, such as compensatory mitigation requirements; and
- (5) If the permittee does not receive a written verification from the district engineer prior to March 18, 2013, the permittee must cease all activities until such verification is received. The district engineer may extend the February 1, 2013, deadline by so notifying the permittee in writing, but the permittee must still cease all activities if he or she has not received written verification from the Corps by March 18, 2013, until such verification is received.
- (b) Other Surface Coal Mining Activities. Surface coal mining activities that were not previously authorized by the NWP 21 issued on March 12, 2007, are authorized by this NWP, provided the following criteria are met:
- (1) The activities are already authorized, or are currently being processed by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977 or as part of an integrated permit processing procedure by the Department of Interior, Office of Surface Mining Reclamation and Enforcement;

- (2) The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal individual and cumulative adverse effects. This NWP does not authorize discharges into tidal waters or non-tidal wetlands adjacent to tidal waters; and
- (3) The discharge is not associated with the construction of valley fills. A "valley fill" is a fill structure that is typically constructed within valleys associated with steep, mountainous terrain, associated with surface coal mining activities.

Notification: For activities under paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer and receive written authorization prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

**22. Removal of Vessels.** Temporary structures or minor discharges of dredged or fill material required for the removal of wrecked, abandoned, or disabled vessels, or the removal of man-made obstructions to navigation. This NWP does not authorize maintenance dredging, shoal removal, or riverbank snagging.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The vessel is listed or eligible for listing in the National Register of Historic Places; or (2) the activity is conducted in a special aquatic site, including coral reefs and wetlands. (See general condition 31.) If condition 1 above is triggered, the permittee cannot commence the activity until informed by the district engineer that compliance with the ``Historic Properties'' general condition is completed. (Sections 10 and 404)

Note 1: If a removed vessel is disposed of in waters of the United States, a permit from the U.S. EPA may be required (see 40 CFR 229.3). If a Department of the Army permit is required for vessel disposal in waters of the United States, separate authorization will be required.

Note 2: Compliance with general condition 18, Endangered Species, and general condition 20, Historic Properties, is required for all NWPs. The concern with historic properties is emphasized in the notification requirements for this NWP because of the likelihood that submerged vessels may be historic properties.

- *** 23. Approved Categorical Exclusions. Activities undertaken, assisted, authorized, regulated, funded, or financed, in whole or in part, by another Federal agency or department where:
- (a) That agency or department has determined, pursuant to the Council on Environmental Quality's implementing regulations for the National Environmental Policy Act (40 CFR part 1500 et seq.), that the activity is categorically excluded from environmental documentation, because it is included within a category of actions which neither individually nor cumulatively have a significant effect on the human environment; and
- (b) The Office of the Chief of Engineers (Attn: CECW-CO) has concurred with that agency's or department's determination that the activity is categorically excluded and approved the activity for authorization under NWP 23.

The Office of the Chief of Engineers may require additional conditions, including preconstruction notification, for authorization of an agency's categorical exclusions under this NWP.

Notification: Certain categorical exclusions approved for authorization under this NWP require the permittee to submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The activities that require pre-construction notification are listed in the appropriate Regulatory Guidance Letters. (Sections 10 and 404)

Note: The agency or department may submit an application for an activity believed to be categorically excluded to the Office of the Chief of Engineers (Attn: CECW-CO). Prior to approval for authorization under this NWP of any agency's activity, the Office of the Chief of Engineers will solicit public comment. As of the date of issuance of this NWP, agencies with approved categorical exclusions are the: Bureau of Reclamation, Federal Highway Administration, and U.S. Coast Guard. Activities approved for authorization under this NWP as of the date of this notice are found in Corps Regulatory Guidance Letter 05-07, which is available at: <a href="http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/GuidanceLetters.aspx">http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/GuidanceLetters.aspx</a>. Any future approved categorical exclusions will be announced in Regulatory Guidance Letters and posted on this same Web site.

24. Indian Tribe or State Administered Section 404 Programs. Any activity permitted by a state or Indian Tribe administering its own section 404 permit program pursuant to 33 U.S.C. 1344(g)-(1) is permitted pursuant to Section 10 of the Rivers and Harbors Act of 1899. (Section 10)

Note 1: As of the date of the promulgation of this NWP, only New Jersey and Michigan administer their own section 404 permit programs.

Note 2: Those activities that do not involve an Indian Tribe or State section 404 permit are not included in this NWP, but certain structures will be exempted by Section 154 of Public Law 94-587, 90 Stat. 2917 (33 U.S.C. 591) (see 33 CFR 322.4(b)).

25. Structural Discharges. Discharges of material such as concrete, sand, rock, etc., into tightly sealed forms or cells where the material will be used as a structural member for standard pile supported structures, such as bridges, transmission line footings, and walkways, or for general navigation, such as mooring cells, including the excavation of bottom material from within the form prior to the discharge of concrete, sand, rock, etc. This NWP does not authorize filled structural members that would support buildings, building pads, homes, house pads, parking areas, storage areas and other such structures. The structure itself may require a separate section 10 permit if located in navigable waters of the United States. (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 25. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT

(33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 25 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.

#### 26. [Reserved]

27. Aquatic Habitat Restoration, Establishment, and Enhancement Activities. Activities in waters of the United States associated with the restoration, enhancement, and establishment of tidal and non-tidal wetlands and riparian areas, the restoration and enhancement of non-tidal streams and other non-tidal open waters, and the rehabilitation or enhancement of tidal streams, tidal wetlands, and tidal open waters, provided those activities result in net increases in aquatic resource functions and services.

To the extent that a Corps permit is required, activities authorized by this NWP include, but are not limited to: The removal of accumulated sediments; the installation, removal, and maintenance of small water control structures, dikes, and berms, as well as discharges of dredged or fill material to restore appropriate stream channel configurations after small water control structures, dikes, and berms, are removed; the installation of current deflectors; the enhancement, restoration, or establishment of riffle and pool stream structure; the placement of in-stream habitat structures; modifications of the stream bed and/or banks to restore or establish stream meanders; the backfilling of artificial channels; the removal of existing drainage structures, such as drain tiles, and the filling, blocking, or reshaping of drainage ditches to restore wetland hydrology; the installation of structures or fills necessary to establish or re-establish wetland or stream hydrology; the construction of small nesting islands; the construction of open water areas; the construction of oyster habitat over unvegetated bottom in tidal waters; shellfish seeding; activities needed to reestablish vegetation, including plowing or discing for seed bed preparation and the planting of appropriate wetland species; reestablishment of submerged aquatic vegetation in areas where those plant communities previously existed; re-establishment of tidal wetlands in tidal waters where those wetlands previously existed; mechanized land clearing to remove non-native invasive, exotic, or nuisance vegetation; and other related activities. Only native plant species should be planted at the site.

This NWP authorizes the relocation of non-tidal waters, including non-tidal wetlands and streams, on the project site provided there are net increases in aquatic resource functions and services.

Except for the relocation of non-tidal waters on the project site, this NWP does not authorize the conversion of a stream or natural wetlands to another aquatic habitat type (e.g., stream to wetland or vice versa) or uplands. Changes in wetland plant communities that occur when wetland hydrology is more fully restored during wetland rehabilitation activities are not considered a conversion to another aquatic habitat type. This NWP does not authorize stream channelization. This NWP does not authorize the relocation of tidal waters or the conversion of tidal waters, including tidal wetlands, to other aquatic uses, such as the conversion of tidal wetlands into open water impoundments.

Compensatory mitigation is not required for activities authorized by this NWP since these activities must result in net increases in aquatic resource functions and services.

Reversion. For enhancement, restoration, and establishment activities conducted: (1) In accordance with the terms and conditions of a binding stream or wetland enhancement or restoration agreement, or a wetland establishment agreement, between the landowner and the U.S. Fish and Wildlife Service (FWS), the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the National Marine Fisheries Service (NMFS), the National Ocean Service (NOS), U.S. Forest Service (USFS), or their designated state cooperating agencies; (2) as voluntary wetland restoration, enhancement, and establishment actions documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or (3) on reclaimed surface coal mine lands, in accordance with a Surface Mining Control and Reclamation Act permit issued by the Office of Surface Mining Reclamation and Enforcement (OSMRE) or the applicable state agency, this NWP also authorizes any future discharge of dredged or fill material associated with the reversion of the area to its documented prior condition and use (i.e., prior to the restoration, enhancement, or establishment activities). The reversion must occur within five years after expiration of a limited term wetland restoration or establishment agreement or permit, and is authorized in these circumstances even if the discharge occurs after this NWP expires. The five-year reversion limit does not apply to agreements without time limits reached between the landowner and the FWS, NRCS, FSA, NMFS, NOS, USFS, or an appropriate state cooperating agency. This NWP also authorizes discharges of dredged or fill material in waters of the United States for the reversion of wetlands that were restored, enhanced, or established on prior-converted cropland or on uplands, in accordance with a binding agreement between the landowner and NRCS, FSA, FWS, or their designated state cooperating agencies (even though the restoration, enhancement, or establishment activity did not require a section 404 permit). The prior condition will be documented in the original agreement or permit, and the determination of return to prior conditions will be made by the Federal agency or appropriate state agency executing the agreement or permit. Before conducting any reversion activity the permittee or the appropriate Federal or state agency must notify the district engineer and include the

documentation of the prior condition. Once an area has reverted to its prior physical condition, it will be subject to whatever the Corps Regulatory requirements are applicable to that type of land at the time. The requirement that the activity results in a net increase in aquatic resource functions and services does not apply to reversion activities meeting the above conditions. Except for the activities described above, this NWP does not authorize any future discharge of dredged or fill material associated with the reversion of the area to its prior condition. In such cases a separate permit would be required for any reversion.

Reporting. For those activities that do not require pre-construction notification, the permittee must submit to the district engineer a copy of: (1) The binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement, or a project description, including project plans and location map; (2) the NRCS or USDA Technical Service Provider documentation for the voluntary stream enhancement or restoration action or wetland restoration, enhancement, or establishment action; or (3) the SMCRA permit issued by OSMRE or the applicable state agency. The report must also include information on baseline ecological conditions on the project site, such as a delineation of wetlands, streams, and/or other aquatic habitats. These documents must be submitted to the district engineer at least 30 days prior to commencing activities in waters of the United States authorized by this NWP.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing any activity (see general condition 31), except for the following activities:

- (1) Activities conducted on non-Federal public lands and private lands, in accordance with the terms and conditions of a binding stream enhancement or restoration agreement or wetland enhancement, restoration, or establishment agreement between the landowner and the U.S. FWS, NRCS, FSA, NMFS, NOS, USFS or their designated state cooperating agencies;
- (2) Voluntary stream or wetland restoration or enhancement action, or wetland establishment action, documented by the NRCS or USDA Technical Service Provider pursuant to NRCS Field Office Technical Guide standards; or
- (3) The reclamation of surface coal mine lands, in accordance with an SMCRA permit issued by the OSMRE or the applicable state agency.

However, the permittee must submit a copy of the appropriate documentation to the district engineer to fulfill the reporting requirement. (Sections 10 and 404)

Note: This NWP can be used to authorize compensatory mitigation projects, including mitigation banks and in-lieu fee projects. However, this NWP does not authorize the reversion of an area used for a compensatory mitigation project to its prior condition, since compensatory mitigation is generally intended to be permanent.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 27. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 27 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THIS NATIONWIDE SPECIFIC CONDITION, AND THE CONDITIONS PUBLISHED IN SECTION C.

All activities conducted under NWP 27 shall be in accordance with the provisions of 35 Il. Adm. Code 405.108. Work in reclaimed surface coal mine areas are required to obtain prior authorization from the Illinois EPA for any activities that result in the use of acid-producing mine refuse.

- 28. Modifications of Existing Marinas. Reconfiguration of existing docking facilities within an authorized marina area. No dredging, additional slips, dock spaces, or expansion of any kind within waters of the United States is authorized by this NWP. (Section 10)
- 29. Residential Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of a single residence, a multiple unit residential development, or a residential subdivision. This NWP authorizes the construction of building foundations and building pads and attendant features that are necessary for the use of the residence or residential development. Attendant features may include but are not limited to roads, parking lots, garages, yards, utility lines, storm water management facilities, septic fields, and recreation facilities such as playgrounds, playing fields, and golf courses (provided the golf course is an integral part of the residential development).

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Subdivisions: For residential subdivisions, the aggregate total loss of waters of United States authorized by this NWP cannot exceed 1/2-acre. This includes any loss of waters of the United States associated with development of individual subdivision lots.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 29. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 29 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.

- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 5. The applicant is advised that the following permit(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- An individual Section 401 water quality certification will be required for any project where the District Engineer waives the stream length limitation of NWP 29.

*** 30. Moist Soil Management for Wildlife. Discharges of dredged or fill material into non-tidal waters of the United States and maintenance activities that are associated with moist soil management for wildlife for the purpose of continuing ongoing, site-specific, wildlife management activities where soil manipulation is used to manage habitat and feeding areas for wildlife. Such activities include, but are not limited to, plowing or discing to impede succession, preparing seed beds, or establishing fire breaks. Sufficient riparian areas must be maintained adjacent to all open water bodies, including streams, to preclude water quality degradation due to erosion and sedimentation. This NWP does not authorize the construction of new dikes, roads, water control structures, or similar features associated with the management areas. The activity must not result in a net loss of aquatic resource functions and services. This NWP does not authorize the conversion of wetlands to uplands, impoundments, or other open water bodies. (Section 404)

Note: The repair, maintenance, or replacement of existing water control structures or the repair or maintenance of dikes may be authorized by NWP 3. Some such activities may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4).

*** 31. Maintenance of Existing Flood Control Facilities. Discharges of dredged or fill material resulting from activities associated with the maintenance of existing flood control facilities, including debris basins, retention/detention basins, levees, and channels that: (i) Were previously authorized by the Corps by individual permit, general permit, or 33 CFR 330.3, or did not require a permit at the time they were constructed, or (ii) were constructed by the Corps and transferred to a non-Federal sponsor for operation and maintenance. Activities authorized by this NWP are limited to those resulting from maintenance activities that are conducted within the "maintenance baseline," as described in the definition below. Discharges of dredged or fill materials associated with maintenance activities in flood control facilities in any watercourse that have previously been determined to be within the maintenance baseline are authorized under this NWP. To the extent that a Corps permit is required, this NWP authorizes the removal of vegetation from levees associated with the flood control project. This NWP does not authorize the removal of sediment and associated vegetation from natural water courses except when these activities have been included in the maintenance baseline. All dredged material must be placed in an area that has no waters of the United States or a separately authorized disposal site in waters of the United States, and proper siltation controls must be used.

Maintenance Baseline: The maintenance baseline is a description of the physical characteristics (e.g., depth, width, length, location, configuration, or design flood capacity, etc.) of a flood control project within which maintenance activities are normally authorized by NWP 31, subject to any case-specific conditions required by the district engineer. The district engineer will approve the maintenance baseline based on the approved or constructed capacity of the flood control facility, whichever is smaller, including any areas where there are no constructed channels but which are part of the facility. The prospective permittee will provide documentation of the physical characteristics of the flood control facility (which will normally consist of as-built or approved drawings) and documentation of the approved and constructed design capacities of the flood control facility. If no evidence of the constructed capacity exists, the approved capacity will be used. The documentation will also include best management practices to ensure that the impacts to the aquatic environment are minimal, especially in maintenance areas where there are no constructed channels. (The Corps may request maintenance records in areas where there has not been recent maintenance.) Revocation or modification of the final determination of the maintenance baseline can only be done in accordance with 33 CFR 330.5. Except in emergencies as described below, this NWP cannot be used until the district engineer approves the maintenance baseline and determines the need for mitigation and any regional or activity-specific conditions. Once determined, the maintenance baseline will remain valid for any subsequent reissuance of this NWP. This NWP does not authorize maintenance of a flood control facility that has been abandoned. A flood control facility will be considered abandoned if it has operated at a significantly reduced capacity without needed maintenance being accomplished in a timely manner.

Mitigation: The district engineer will determine any required mitigation one-time only for impacts associated with maintenance work at the same time that the maintenance baseline is approved. Such one-time mitigation will be required when necessary to ensure that adverse environmental impacts are no more than minimal, both individually and cumulatively. Such mitigation will only be required once for any specific reach of a flood control project. However, if one-time mitigation is required for impacts associated with maintenance activities, the district engineer will not delay needed maintenance, provided the district engineer and the

permittee establish a schedule for identification, approval, development, construction and completion of any such required mitigation. Once the one-time mitigation described above has been completed, or a determination made that mitigation is not required, no further mitigation will be required for maintenance activities within the maintenance baseline. In determining appropriate mitigation, the district engineer will give special consideration to natural water courses that have been included in the maintenance baseline and require compensatory mitigation and/or best management practices as appropriate.

Emergency Situations: In emergency situations, this NWP may be used to authorize maintenance activities in flood control facilities for which no maintenance baseline has been approved. Emergency situations are those which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if action is not taken before a maintenance baseline can be approved. In such situations, the determination of mitigation requirements, if any, may be deferred until the emergency has been resolved. Once the emergency has ended, a maintenance baseline must be established expeditiously, and mitigation, including mitigation for maintenance conducted during the emergency, must be required as appropriate.

Notification: The permittee must submit a pre-construction notification to the district engineer before any maintenance work is conducted (see general condition 31). The pre-construction notification may be for activity-specific maintenance or for maintenance of the entire flood control facility by submitting a five-year (or less) maintenance plan. The pre-construction notification must include a description of the maintenance baseline and the dredged material disposal site. (Sections 10 and 404)

- 32. Completed Enforcement Actions. Any structure, work, or discharge of dredged or fill material remaining in place or undertaken for mitigation, restoration, or environmental benefit in compliance with either:
- (i) The terms of a final written Corps non-judicial settlement agreement resolving a violation of Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899; or the terms of an EPA 309(a) order on consent resolving a violation of Section 404 of the Clean Water Act, provided that:
- (a) The unauthorized activity affected no more than 5 acres of non-tidal waters or 1 acre of tidal waters;
- (b) The settlement agreement provides for environmental benefits, to an equal or greater degree, than the environmental detriments caused by the unauthorized activity that is authorized by this NWP; and
- (c) The district engineer issues a verification letter authorizing the activity subject to the terms and conditions of this NWP and the settlement agreement, including a specified completion date; or
- (ii) The terms of a final Federal court decision, consent decree, or settlement agreement resulting from an enforcement action brought by the United States under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act of 1899; or
- (iii) The terms of a final court decision, consent decree, settlement agreement, or non-judicial settlement agreement resulting from a natural resource damage claim brought by a trustee or trustees for natural resources (as defined by the National Contingency Plan at 40 CFR subpart G) under Section 311 of the Clean Water Act, Section 107 of the Comprehensive Environmental Response, Compensation and Liability Act, Section 312 of the National Marine Sanctuaries Act, Section 1002 of the Oil Pollution Act of 1990, or the Park System Resource Protection Act at 16 U.S.C. 19jj, to the extent that a Corps permit is required.
- Compliance is a condition of the NWP itself. Any authorization under this NWP is automatically revoked if the permittee does not comply with the terms of this NWP or the terms of the court decision, consent decree, or judicial/non-judicial settlement agreement. This NWP does not apply to any activities occurring after the date of the decision, decree, or agreement that are not for the purpose of mitigation, restoration, or environmental benefit. Before reaching any settlement agreement, the Corps will ensure compliance with the provisions of 33 CFR part 326 and 33 CFR 330.6(d)(2) and (e). (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 32. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 32 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Except as allowed under condition 9, any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating

construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 6. The applicant is advised that the following permit(s) must be obtained from the Illinois EPA: The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- Backfill used in the stream-crossing trench shall be predominantly sand or larger size material, with <20% passing a #230 U.S. sieve.</li>
- 8. Any channel relocation shall be constructed under dry conditions and stabilized to prevent erosion prior to the diversion of flow.
- 9. Backfill used within trenches passing through surface water of the State, except wetland areas, shall be clean course aggregate, gravel or other material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material may be used only if:
  - a) Particle size analysis is conducted and demonstrates the material to be at least 80% sand or larger size material, using a #230 U.S. sieve; or
  - b) Excavation and backfilling are done under dry conditions.
- 10. Backfill used within trenches passing through wetland areas shall consist of clean material which will not cause siltation, pipe damage during placement, or chemical corrosion in place. Excavated material shall be used to the extent practicable, with the upper six (6) to twelve (12) inches backfilled with the topsoil obtained during trench excavation.
- 11. Any applicant proposing activities in a mined area or previously mined area shall provide to the IEPA a written determination regarding the sediment and materials used which are considered "acid-producing material" as defined in 35 Il. Adm. Code, Subtitle D. If considered "acid-producing material," the applicant shall obtain a permit to construct pursuant to 35 Il. Adm. Code 404.101.
- 12. Asphalt, bituminous material and concrete with protruding material such as reinforcing bar or mesh shall not be 1) used for backfill, 2) placed on shorelines/stream banks, or 3) placed in waters of the State.
- 33. Temporary Construction, Access, and Dewatering. Temporary structures, work, and discharges, including cofferdams, necessary for construction activities or access fills or dewatering of construction sites, provided that the associated primary activity is authorized by the Corps of Engineers or the U.S. Coast Guard. This NWP also authorizes temporary structures, work, and discharges, including cofferdams, necessary for construction activities not otherwise subject to the Corps or U.S. Coast Guard permit requirements. Appropriate measures must be taken to maintain near normal downstream flows and to minimize flooding. Fill must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. The use of dredged material may be allowed if the district engineer determines that it will not cause more than minimal adverse effects on aquatic resources. Following completion of construction, temporary fill must be entirely removed to an area that has no waters of the United States, dredged material must be returned to its original location, and the affected areas must be restored to pre-construction elevations. The affected areas must also be revegetated, as appropriate. This permit does not authorize the use of cofferdams to dewater wetlands or other aquatic areas to change their use. Structures left in place after construction is completed require a separate section 10 permit if located in navigable waters of the United States. (See 33 CFR part 322.)

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). The pre-construction notification must include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-project conditions. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 33. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 33 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, as determined by the Illinois EPA.
- 2. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 3. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NFDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

- 5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 6. Temporary work pads, cofferdams, access roads and other temporary fills shall be constructed of clean coarse aggregate or non-erodible non-earthen fill material that will not cause siltation. Sandbags, pre-fabricated rigid materials, sheet piling, inflatable bladders and fabric lined basins may be used for temporary facilities.
- 7. The applicant for Nationwide Permit 33 that uses temporary work pads, cofferdams, access roads and other temporary fills in order to perform work in creeks, streams, or rivers shall maintain flow in these waters by utilizing dam and pumping, fluming, culverts or other such techniques.
- *** 34. Cranberry Production Activities. Discharges of dredged or fill material for dikes, berms, pumps, water control structures or leveling of cranberry beds associated with expansion, enhancement, or modification activities at existing cranberry production operations. The cumulative total acreage of disturbance per cranberry production operation, including but not limited to, filling, flooding, ditching, or clearing, must not exceed 10 acres of waters of the United States, including wetlands. The activity must not result in a net loss of wetland acreage. This NWP does not authorize any discharge of dredged or fill material related to other cranberry production activities such as warehouses, processing facilities, or parking areas. For the purposes of this NWP, the cumulative total of 10 acres will be measured over the period that this NWP is valid.

Notification: The permittee must submit a pre-construction notification to the district engineer once during the period that this NWP is valid, and the NWP will then authorize discharges of dredge or fill material at an existing operation for the permit term, provided the 10-acre limit is not exceeded. (See general condition 31.) (Section 404)

- 35. Maintenance Dredging of Existing Basins. Excavation and removal of accumulated sediment for maintenance of existing marina basins, access channels to marinas or boat slips, and boat slips to previously authorized depths or controlling depths for ingress/egress, whichever is less, provided the dredged material is deposited at an area that has no waters of the United States site and proper siltation controls are used. (Section 10)
- **36.** Boat Ramps. Activities required for the construction of boat ramps, provided the activity meets all of the following criteria:
- (a) The discharge into waters of the United States does not exceed 50 cubic yards of concrete, rock, crushed stone or gravel into forms, or in the form of pre-cast concrete planks or slabs, unless the district engineer waives the 50 cubic yard limit by making a written determination concluding that the discharge will result in minimal adverse effects;
- (b) The boat ramp does not exceed 20 feet in width, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in minimal adverse effects;
  - (c) The base material is crushed stone, gravel or other suitable material;
- (d) The excavation is limited to the area necessary for site preparation and all excavated material is removed to an area that has no waters of the United States; and,
  - (e) No material is placed in special aquatic sites, including wetlands.
- The use of unsuitable material that is structurally unstable is not authorized. If dredging in navigable waters of the United States is necessary to provide access to the boat ramp, the dredging must be authorized by another NWP, a regional general permit, or an individual permit.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) The discharge into waters of the United States exceeds 50 cubic yards, or (2) the boat ramp exceeds 20 feet in width. (See general condition 31.) (Sections 10 and 404)

- *** 37. Emergency Watershed Protection and Rehabilitation. Work done by or funded by:
- (a) The Natural Resources Conservation Service for a situation requiring immediate action under its emergency Watershed Protection Program (7 CFR part 624);
- (b) The U.S. Forest Service under its Burned-Area Emergency Rehabilitation Handbook (FSH 2509.13);
- (c) The Department of the Interior for wildland fire management burned area emergency stabilization and rehabilitation (DOI Manual part 620, Ch. 3);
- (d) The Office of Surface Mining, or states with approved programs, for abandoned mine land reclamation activities under Title IV of the Surface Mining Control and Reclamation Act (30 CFR Subchapter R), where the activity does not involve coal extraction; or
  - (e) The Farm Service Agency under its Emergency Conservation Program (7 CFR part 701).
- In general, the prospective permittee should wait until the district engineer issues an NWP verification or 45 calendar days have passed before proceeding with the watershed protection and rehabilitation activity. However, in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur, the emergency watershed protection and rehabilitation activity may proceed immediately and the district engineer will consider the information in the pre-construction notification and any comments received as a result of agency coordination to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

Notification: Except in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 31). (Sections 10 and 404)

38. Cleanup of Hazardous and Toxic Waste. Specific activities required to effect the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. Court ordered remedial action plans or related settlements are also authorized by this NWP. This

NWP does not authorize the establishment of new disposal sites or the expansion of existing sites used for the disposal of hazardous or toxic waste.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

Note: Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site by authority of CERCLA as approved or required by EPA, are not required to obtain permits under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 38. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 38 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS,

THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 2. In addition to any actions required of the NWP applicant with respect to the "Notification" General Condition 27, the applicant shall notify the Illinois EPA, Bureau of Water, of the specific activity. This notification shall include information concerning the orders and approvals that have been or will be obtained from the Illinois EPA Bureau of Land (BOL), for all cleanup activities under BOL jurisdiction or for which authorization or approval is sought from BOL for no further remedial action.
- An individual Section 401 water quality certification will be required for activities that do not require or will not receive authorization or approval from the BOL.
- 39. Commercial and Institutional Developments. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of commercial and institutional building foundations and building pads and attendant features that are necessary for the use and maintenance of the structures. Attendant features may include, but are not limited to, roads, parking lots, garages, yards, utility lines, storm water management facilities, and recreation facilities such as playgrounds and playing fields. Examples of commercial developments include retail stores, industrial facilities, restaurants, business parks, and shopping centers. Examples of institutional developments include schools, fire stations, government office buildings, judicial buildings, public works buildings, libraries, hospitals, and places of worship. The construction of new golf courses and new ski areas is not authorized by this NWP.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

Note: For any activity that involves the construction of a wind energy generating structure, solar tower, or overhead transmission line, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 39. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 39 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 2. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

- 5. The applicant is advised that the following permit(s) must be obtained from the Illinois EPA:
  The applicant must obtain permits to construct sanitary sewers, water mains, and related facilities prior to construction.
- 6. An individual Section 401 water quality certification will be required for any project where the District Engineer waives the stream length limitation of NWP 39.
- 7. For construction of cil and gas wells, the impacted waters of the State shall be restored to pre-construction conditions within six months after construction is started. For purposes of this condition, restoration includes stabilization and seeding or planting of vegetation on the disturbed areas that were vegetated prior to construction.
- 40. Agricultural Activities. Discharges of dredged or fill material into non-tidal waters of the United States for agricultural activities, including the construction of building pads for farm buildings. Authorized activities include the installation, placement, or construction of drainage tiles, ditches, or levees; mechanized land clearing; land leveling; the relocation of existing serviceable drainage ditches constructed in waters of the United States; and similar activities.

This NWP also authorizes the construction of farm ponds in non-tidal waters of the United States, excluding perennial streams, provided the farm pond is used solely for agricultural purposes. This NWP does not authorize the construction of aquaculture ponds.

This NWP also authorizes discharges of dredged or fill material into non-tidal waters of the United States to relocate existing serviceable drainage ditches constructed in non-tidal streams.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Section 404)

Note: Some discharges for agricultural activities may qualify for an exemption under Section 404(f) of the Clean Water Act (see 33 CFR 323.4). This NWP authorizes the construction of farm ponds that do not qualify for the Clean Water Act Section 404(f)(1)(C) exemption because of the recapture provision at Section 404(f)(2).

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 40. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 40 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 41. Reshaping Existing Drainage Ditches. Discharges of dredged or fill material into non-tidal waters of the United States, excluding non-tidal wetlands adjacent to tidal waters, to modify the cross-sectional configuration of currently serviceable drainage ditches constructed in waters of the United States, for the purpose of improving water quality by regrading the drainage ditch with gentler slopes, which can reduce erosion, increase growth of vegetation, and increase uptake of nutrients and other substances by vegetation. The reshaping of the ditch cannot increase drainage capacity beyond the original as-built capacity nor can it expand the area drained by the ditch as originally constructed (i.e., the capacity of the ditch must be the same as originally constructed and it cannot drain additional wetlands or other waters of the United States). Compensatory mitigation is not required because the work is designed to improve water quality.

This NWP does not authorize the relocation of drainage ditches constructed in waters of the United States; the location of the centerline of the reshaped drainage ditch must be approximately the same as the location of the centerline of the original drainage ditch. This NWP does not authorize stream channelization or stream relocation projects.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity, if more than 500 linear feet of drainage ditch will be reshaped. (See general condition 31.) (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 41. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 41 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 5. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 6. The applicant is advised that the following permit(s) must be obtained from the Agency: permits to construct sanitary sewers, water mains and related facilities prior to construction.
- 7. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams.
- 42. Recreational Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction or expansion of recreational facilities. Examples of recreational facilities that may be authorized by this NWP include playing fields (e.g., football fields, baseball fields), basketball courts, tennis courts, hiking trails, bike paths, golf courses, ski areas, horse paths, nature centers, and campgrounds (excluding recreational vehicle parks). This NWP also authorizes the construction or expansion of small support facilities, such as maintenance and storage buildings and stables that are directly related to the recreational activity, but it does not authorize the construction of hotels, restaurants, racetracks, stadiums, arenas, or similar facilities.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. Notification: The permittee must submit a pre-construction notification to the district

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 42. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 42 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. Violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating

construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.

5. An individual Section 401 water quality certification will be required for any project where the District Engineer waives the stream length limitation of NWP 42.

*** 43. Stormwater Management Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction of stormwater management facilities, including stormwater detention basins and retention basins and otherstormwater management facilities; the construction of water control structures, outfall structures and emergency spillways; and the construction of low impact development integrated management features such as bioretention facilities (e.g., rain gardens), vegetated filter strips, grassed swales, and infiltration trenches. This NWP also authorizes, to the extent that a section 404 permit is required, discharges of dredged or fill material into non-tidal waters of the United States for the maintenance of stormwater management facilities. Note that stormwater management facilities that are determined to be waste treatment systems under 33 CFR 328.3(a) (8) are not waters of the United States, and maintenance of these waste treatment systems generally does not require a section 404 permit.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize discharges of dredged or fill material for the construction of new stormwater management facilities in perennial streams.

Notification: For the construction of new stormwater management facilities, or the expansion of existing stormwater management facilities, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) Maintenance activities do not require pre-construction notification if they are limited to restoring the original design capacities of the stormwater management facility. (Section 404)

44. Mining Activities. Discharges of dredged or fill material into non-tidal waters of the United States for mining activities, except for coal mining activities. The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) If reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the preconstruction notification. (Sections 10 and 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 44. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 44 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- The applicant shall not cause:
   A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- 2. The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. The facility shall be covered by either a Subtitle D NPDES mining permit or a Subtitle D State Construction and Operating Permit for mining activities.
- 5. An individual Section 401 water quality certification will be required for any project where the District Engineer waives the stream length limitation of NWP 44.
- 45. Repair of Uplands Damaged by Discrete Events. This NWP authorizes discharges of dredged or fill material, including dredging or excavation, into all waters of the United States for activities associated with the restoration of upland areas damaged by storms, floods, or other discrete events. This NWP authorizes bank stabilization to protect the restored uplands. The restoration of the damaged areas, including any bank stabilization, must not exceed the contours, or ordinary high water mark, that existed before the damage occurred. The district engineer retains the right to determine the extent of the pre-existing conditions and the extent of any restoration work authorized by this NWP. The work must commence, or be under contract to commence, within two years of the date of damage, unless this condition is waived in writing by the district engineer. This NWP cannot be used to reclaim lands lost to normal erosion processes over an extended period.

This NWF does not authorize beach restoration or nourishment.

Minor dredging is limited to the amount necessary to restore the damaged upland area and should not significantly alter the pre-existing bottom contours of the waterbody.

Notification: The permittee must submit a pre-construction notification to the district engineer (see general condition 31) within 12-months of the date of the damage. The pre-construction notification should include documentation, such as a recent topographic survey or photographs, to justify the extent of the proposed restoration. (Sections 10 and 404)

Note: The uplands themselves that are lost as a result of a storm, flood, or other discrete event can be replaced without a section 404 permit, if the uplands are restored to the ordinary high water mark (in non-tidal waters) or high tide line (in tidal waters). (See also 33 CFR 328.5.) This NWP authorizes discharges of dredged or fill material into waters of the United States associated with the restoration of uplands.

46. Discharges in Ditches. Discharges of dredged or fill material into non-tidal ditches that are: (1) Constructed in uplands, (2) receive water from an area determined to be a water of the United States prior to the construction of the ditch, (3) divert water to an area determined to be a water of the United States prior to the construction of the ditch, and (4) are determined to be waters of the United States. The discharge must not cause the loss of greater than one acre of waters of the United States. This NWP does not authorize discharges of dredged or fill material into ditches constructed in streams or other waters of the United States, or in streams that have been relocated in uplands. This NWP does not authorize discharges of dredged or fill material that increase the capacity of the ditch and drain those areas determined to be waters of the United States prior to construction of the ditch.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Section 404)

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 46. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 46 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant for Nationwide Permit shall provide adequate planning and supervision during the project construction period for implementing construction methods, processes and cleanup procedures necessary to prevent water pollution and control erosion.
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by the Illinois EPA. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 6. The applicant is advised that the following permit(s) must be obtained from the Agency: permits to construct sanitary sewers, water mains and related facilities prior to construction.
- 7. The proposed work shall be constructed with adequate erosion control measures (i.e., silt fences, etc.) to prevent transport of sediment and materials to the adjoining wetlands and/or streams.
- 8. The applicant shall not sever the connection between upstream and downstream surface waters of the State by the discharge of dredged or fill material into ditches.

### 47. [Reserved]

*** 48. Commercial Shellfish Aquaculture Activities. Discharges of dredged or fill material in waters of the United States or structures or work in navigable waters of the United States necessary for commercial shellfish aquaculture operations in authorized project areas. For the purposes of this NWP, the project area is the area in which the operator is currently authorized to conduct commercial shellfish aquaculture activities, as identified through a lease or permit issued by an appropriate state or local government agency, a treaty, or any other easement, lease, deed, or contract which establishes an enforceable property interest for the operator. This NWP authorizes the installation of buoys, floats, racks, trays, nets, lines, tubes, containers, and other structures into navigable waters of the United States. This NWP also authorizes discharges of dredged or fill material into waters of the United States necessary for shellfish seeding, rearing, cultivating, transplanting, and harvesting activities. Rafts and other floating structures must be securely anchored and clearly marked. This NWP does not authorize:

(a) The cultivation of a nonindigenous species unless that species has been previously cultivated in the waterbody;

(b) The cultivation of an aquatic nuisance species as defined in the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990; or,

(c) Attendant features such as docks, piers, boat ramps, stockpiles, or staging areas, or the deposition of shell material back into waters of the United States as waste.

This NWP also authorizes commercial shellfish aquaculture activities in new project areas, provided the project proponent has obtained a valid authorization, such as a lease or permit issued by an appropriate state or local government agency, and those activities do not directly affect more than 1/2-acre of submerged aquatic vegetation beds.

Notification: The permittee must submit a pre-construction notification to the district engineer if: (1) Dredge harvesting, tilling, or harrowing is conducted in areas inhabited by submerged aquatic vegetation; (2) the activity will include a species not previously cultivated in the waterbody; (3) the activity involves a change from bottom culture to floating or suspended culture; or (4) the activity occurs in a new project area. (See general condition 31.)

In addition to the information required by paragraph (b) of general condition 31, the preconstruction notification must also include the following information: (1) A map showing the boundaries of the project area, with latitude and longitude coordinates for each corner of the project area; (2) the name(s) of the cultivated species; and (3) whether canopy predator nets are being used. (Sections 10 and 404)

Note 1: The permittee should notify the applicable U.S. Coast Guard office regarding the project.

Note 2: To prevent introduction of aquatic nuisance species, no material that has been taken from a different waterbody may be reused in the current project area, unless it has been treated in accordance with the applicable regional aquatic nuisance species management plan.

Note 3: The Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 defines "aquatic nuisance species" as "a nonindigenous species that threatens the diversity or abundance of native species or the ecological stability of infested waters, or commercial, agricultural, aquacultural, or recreational activities dependent on such waters."

*** 49. Coal Remining Activities. Discharges of dredged or fill material into non-tidal waters of the United States associated with the remining and reclamation of lands that were previously mined for coal. The activities must already be authorized, or they must currently be in process as part of an integrated permit processing procedure, by the Department of Interior Office of Surface Mining Reclamation and Enforcement, or by states with approved programs under Title IV or Title V of the Surface Mining Control and Reclamation Act (SMCRA) of 1977. Areas previously mined include reclaimed mine sites, abandoned mine land areas, or lands under bond forfeiture contracts.

As part of the project, the permittee may conduct new coal mining activities in conjunction with the remining activities when he or she clearly demonstrates to the district engineer that the overall mining plan will result in a net increase in aquatic resource functions. The Corps will consider the SMCRA agency's decision regarding the amount of currently undisturbed adjacent lands needed to facilitate the remining and reclamation of the previously mined area. The total area disturbed by new mining must not exceed 40 percent of the total acreage covered by both the remined area and the additional area necessary to carry out the reclamation of the previously mined area.

Notification: The permittee must submit a pre-construction notification and a document describing how the overall mining plan will result in a net increase in aquatic resource functions to the district engineer and receive written authorization prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

*** 50. Underground Coal Mining Activities. Discharges of dredged or fill material into non-tidal waters of the United States associated with underground coal mining and reclamation operations provided the activities are authorized, or are currently being processed as part of an integrated permit processing procedure, by the Department of Interior, Office of Surface Mining Reclamation and Enforcement, or by states with approved programs under Title V of the Surface Mining Control and Reclamation Act of 1977.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This NWP does not authorize discharges into non-tidal wetlands adjacent to tidal waters. This NWP does not authorize coal preparation and processing activities outside of the mine site.

Notification: The permittee must submit a pre-construction notification to the district Engineer and receive written authorization prior to commencing the activity. (See general condition 31.) If reclamation is required by other statutes, then a copy of the reclamation plan must be submitted with the pre-construction notification. (Sections 10 and 404)

Note: Coal preparation and processing activities outside of the mine site may be authorized by NWP 21.

51. Land-Based Renewable Energy Generation Facilities. Discharges of dredged or fill material into non-tidal waters of the United States for the construction, expansion, or modification of land-based renewable energy production facilities, including attendant features. Such facilities include infrastructure to collect solar (concentrating solar power and photovoltaic), wind, biomass, or geothermal energy. Attendant features may include, but are not limited to roads, parking lots, and stormwater management facilities within the land-based renewable energy generation facility.

The discharge must not cause the loss of greater than 1/2-acre of non-tidal waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. This permit does not authorize discharges into non-tidal wetlands adjacent to tidal waters.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404) Note 1: Utility lines constructed to transfer the energy from the land-based renewable generation facility to a distribution system, regional grid, or other facility are generally

considered to be linear projects and each separate and distant crossing of a waterbody is eligible for treatment as a separate and complete linear project. Those utility lines may be authorized by NWP 12 or another Department of the Army authorization. If the only activities associated with the construction, expansion, or modification of a land-based renewable energy generation facility that require Department of the Army authorization are discharges of dredged or fill material into waters of the United States to construct, maintain, repair, and/or remove utility lines, then NWP 12 shall be used if those activities meet the terms and conditions of NWP 12, including any applicable regional conditions and any case-specific conditions imposed by the district engineer.

Note 2: For any activity that involves the construction of a wind energy generating structure, solar tower, or overhead transmission line, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 51. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 51 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of 1 (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- 5. An individual Section 401 water quality certification will be required for any project where the District Engineer waives the stream length limitation of NWP 51.
- 52. Water-Based Renewable Energy Generation Pilot Projects. Structures and work in navigable waters of the United States and discharges of dredged or fill material into waters of the United States for the construction, expansion, modification, or removal of water-based wind or hydrokinetic renewable energy generation pilot projects and their attendant features. Attendant features may include, but are not limited to, land-based collection and distribution facilities, control facilities, roads, parking lots, and stormwater management facilities.

For the purposes of this NWP, the term "pilot project" means an experimental project where the renewable energy generation units will be monitored to collect information on their performance and environmental effects at the project site.

The discharge must not cause the loss of greater than 1/2-acre of waters of the United States, including the loss of no more than 300 linear feet of stream bed, unless for intermittent and ephemeral stream beds the district engineer waives the 300 linear foot limit by making a written determination concluding that the discharge will result in minimal adverse effects. The placement of a transmission line on the bed of a navigable water of the United States from the renewable energy generation unit(s) to a land-based collection and distribution facility is considered a structure under Section 10 of the Rivers and Harbors Act of 1899 (see 33 CFR 322.2(b)), and the placement of the transmission line on the bed of a navigable water of the United States is not a loss of waters of the United States for the purposes of applying the 1/2-acre or 300 linear foot limits.

For each single and complete project, no more than 10 generation units (e.g., wind turbines or hydrokinetic devices) are authorized.

This NWP does not authorize activities in coral reefs. Structures in an anchorage area established by the U.S. Coast Guard must comply with the requirements in 33 CFR 322.5(1)(2). Structures may not be placed in established danger zones or restricted areas as designated in 33 CFR part 334, Federal navigation channels, shipping safety fairways or traffic separation schemes established by the U.S. Coast Guard (see 33 CFR 322.5(1)(1)), or EPA or Corps designated open water dredged material disposal areas.

Upon completion of the pilot project, the generation units, transmission lines, and other structures or fills associated with the pilot project must be removed to the maximum extent practicable unless they are authorized by a separate Department of the Army authorization, such as another NWP, an individual permit, or a regional general permit. Completion of the pilot project will be identified as the date of expiration of the Federal Energy Regulatory Commission (FERC) license, or the expiration date of the NWP authorization if no FERC license is issued.

Notification: The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity. (See general condition 31.) (Sections 10 and 404)

Note 1: Utility lines constructed to transfer the energy from the land-based collection facility to a distribution system, regional grid, or other facility are generally considered to

be linear projects and each separate and distant crossing of a waterbody is eligible for treatment as a separate and complete linear project. Those utility lines may be authorized by NWP 12 or another Department of the Army authorization.

Note 2: An activity that is located on an existing locally or federally maintained U.S. Army Corps of Engineers project requires separate approval from the Chief of Engineers under 33 U.S.C. 408.

Note 3: If the pilot project, including any transmission lines, is placed in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, copies of the pre-construction notification and NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration, National Ocean Service, for charting the generation units and associated transmission line(s) to protect navigation.

Note 4: For any activity that involves the construction of a wind energy generating structure, solar tower, or overhead transmission line, a copy of the PCN and NWP verification will be provided to the Department of Defense Siting Clearinghouse, which will evaluate potential effects on military activities.

NOTE: THE IEPA HAS CONDITIONED SECTION 401 WATER QUALITY CERTIFICATION APPLICABLE TO NATIONWIDE PERMIT 52. DEPARTMENT OF THE ARMY AUTHORIZATION PURSUANT TO SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) UNDER NATIONWIDE PERMIT 52 WILL BE SUBJECT TO THE THREE GENERAL IEPA CONDITIONS, THESE NATIONWIDE SPECIFIC CONDITIONS, AND THE CONDITIONS PUBLISHED IN SECTION C.

- 1. The applicant shall not cause:
  - A. violation of applicable provisions of the Illinois Environmental Protection Act;
  - B. water pollution defined and prohibited by the Illinois Environmental Protection Act;
  - C. violation of applicable water quality standards of the Illinois Pollution Control Board, Title 35, Subtitle C: Water Pollution Rules and Regulation; or
  - D. interference with water use practices near public recreation areas or water supply intakes.
- The applicant shall implement erosion control measures consistent with the "Illinois Urban Manual" (IEPA/USDA, NRCS; 2011).
- 3. Any spoil material excavated, dredged or otherwise produced must not be returned to the waterway but must be deposited in a self-contained area in compliance with all state statutes, regulations and permit requirements with no discharge to waters of the State unless a permit has been issued by this Agency. Any backfilling must be done with clean material and placed in a manner to prevent violation of applicable water quality standards.
- 4. All areas affected by construction shall be mulched and seeded as soon after construction as possible. The applicant shall undertake necessary measures and procedures to reduce erosion during construction. Interim measures to prevent erosion during construction shall be taken and may include the installation of sedimentation basins and temporary mulching. All construction within the waterway shall be conducted during zero or low flow conditions. The applicant shall be responsible for obtaining an NPDES Storm Water Permit prior to initiating construction if the construction activity associated with the project will result in the disturbance of I (one) or more acres, total land area. An NPDES Storm Water Permit may be obtained by submitting a properly completed Notice of Intent (NOI) form by certified mail to the Agency's Division of Water Pollution Control, Permit Section.
- An individual Section 401 water quality certification will be required for any project where the District Engineer waives the stream length limitation of NWP 52.
- 6. An individual Section 401 water quality certification will be required for any project that is not previously approved by a Section 401 water quality certification issued by the Illinois EPA for a Federal Energy Regulatory Commission license or permit.

### C. Nationwide Permit General Conditions

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

- 1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation. (b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- (c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.
- 2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged,

or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species.

- 3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.
- 4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.
- 5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- 6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see Section 307 of the Clean Water Act).
- 7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- 8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization and storm water management activities, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).
- 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- 11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow.
- 13. Removal of Temporary Fills. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- 15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers. No activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a ``study river'' for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service).
- 17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.
- 18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which ``may affect'' a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal permittees must provide the district engineer with the appropriate

documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the NWP activity, or whether additional ESA consultation is necessary.

- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally listed endangered or threatened species or designated critical habitat, the preconstruction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed work or that utilize the designated critical habitat that might be affected by the proposed work. The district engineer will determine whether the proposed activity ``may affect'' or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. In cases where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the project, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification the proposed activities will have "no effect" on listed species or critical habitat, or until Section 7 consultation has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the
- (d) As a result of formal or informal consultation with the FWS or NMFS the district engineer may add species-specific regional endangered species conditions to the NWPs.
- (e) Authorization of an activity by a NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the U.S. FWS or the NMFS, The Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- (f) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the U.S. FWS and NMFS or their world wide web pages at <a href="http://www.fws.gov/">http://www.fws.gov/</a> or <a href="http://www.fws.gov/">http://www.fws.gov/</a> in and <a href="http://www.noaa.gov/fisheries.html">http://www.noaa.gov/fisheries.html</a> respectively.
- 19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for obtaining any "take" permits required under the U.S. Fish and Wildlife Service's regulations governing compliance with the Migratory Bird Treaty Act or the Bald and Golden Eagle Protection Act. The permittee should contact the appropriate local office of the U.S. Fish and Wildlife Service to determine if such "take" permits are required for a particular activity.
- 20. Historic Properties. (a) In cases where the district engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- (b) Federal permittees should follow their own procedures for complying with the requirements of Section 106 of the National Historic Preservation Act. Federal permittees must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will review the documentation and determine whether it is sufficient to address section 106 compliance for the NWP activity, or whether additional section 106 consultation is necessary.
- (c) Non-federal permittees must submit a pre-construction notification to the district engineer if the authorized activity may have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties may be affected by the proposed work or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of or potential for the presence of historic resources can be sought from the State Historic Preservation Officer or Tribal Historic Preservation Officer, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of Section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts, which may include background research, consultation, oral history interviews, sample field investigation, and field survey. Based on the information submitted and these efforts, the district engineer shall determine whether the proposed activity has the potential to cause an effect on the historic properties. Where the non-Federal applicant has identified historic properties on which the activity may have the potential to cause effects and so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.
- (d) The district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA Section 106 consultation is required. Section 106 consultation is not required when the Corps determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). If NHPA section 106 consultation is required and will occur, the district engineer will notify the non-Federal applicant that he or she cannot begin work until Section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

- (e) Prospective permittees should be aware that section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.
- 21. Discovery of Previously Unknown Remains and Artifacts. If you discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by this permit, you must immediately notify the district engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
- 22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
- (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, and 52 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, and 38, notification is required in accordance with general condition 31, for any activity proposed in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after it is determined that the impacts to the critical resource waters will be no more than minimal.
- 23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that adverse effects on the aquatic environment are minimal:
- (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the adverse effects to the aquatic environment are minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse effects of the proposed activity are minimal, and provides a project-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in minimal adverse effects on the aquatic environment. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in minimal adverse effects on the aquatic environment.
- (2) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, wetland restoration should be the first compensatory mitigation option considered.
- (3) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2)-(14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan s not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)).
- (4) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan only needs to address the baseline conditions at the impact site and the number of credits to be provided.
- (5) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan.
- (d) For losses of streams or other open waters that require pre-construction notification, the district engineer may require compensatory mitigation, such as stream rehabilitation,

enhancement, or preservation, to ensure that the activity results in minimal adverse effects on the aquatic environment.

- (e) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any project resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that a project already meeting the established acreage limits also satisfies the minimal impact requirement associated with the NWPs.
- (f) Compensatory mitigation plans for projects in or near streams or other open waters will normally include a requirement for the restoration or establishment, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, riparian areas may be the only compensatory mitigation required. Riparian areas should consist of native species. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to establish a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or establishing a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.
- (g) Permittees may propose the use of mitigation banks, in-lieu fee programs, or separate permittee-responsible mitigation. For activities resulting in the loss of marine or estuarine resources, permittee-responsible compensatory mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- (h) Where certain functions and services of waters of the United States are permanently adversely affected, such as the conversion of a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse effects of the project to the minimal level.
- 24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. Water Quality. Where States and authorized Tribes, or EPA where applicable, have not previously certified compliance of an NWP with CWA Section 401, individual 401 Water Quality Certification must be obtained or waived (see 33 CFR 330.4(c)). The district engineer or State or Tribe may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). The district engineer or a State may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.
- 28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is prohibited, except when the acreage loss of waters of the United States authorized by the NWPs does not exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
- 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date

(Transferee)

(Date)

- 30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:
- (a) A statement that the authorized work was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and
  - (c) The signature of the permittee certifying the completion of the work and mitigation.
- 31. Pre-Construction Notification--(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
- (1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
- (2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or in the vicinity of the project, or to notify the Corps pursuant to general condition 20 that the activity may have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or Section 106 of the National Historic Preservation (see 33 CFR 330.4(g)) has been completed. Also, work cannot begin under NWPs 21, 49, or 50 until the permittee has received written approval from the Corps. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).
- (b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:
  - (1) Name, address and telephone numbers of the prospective permittee;
  - (2) Location of the proposed project;
- (3) A description of the proposed project; the project's purpose; direct and indirect adverse environmental effects the project would cause, including the anticipated amount of loss of water of the United States expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity. The description should be sufficiently detailed to allow the district engineer to determine that the adverse effects of the project will be minimal and to determine the need for compensatory mitigation. Sketches should be providedwhen necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the project and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
- (4) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial, intermittent, and ephemeral streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many waters of the United States. Furthermore, the 45 day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
- (5) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands and a PCN is required, the prospective permittee must submit a statement describing how the

mitigation requirement will be satisfied, or explaining why the adverse effects are minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(6) If any listed species or designated critical habitat might be affected or is in the vicinity of the project, or if the project is located in designated critical habitat, for non-Federal applicants the PCN must include the name(s) of those endangered or threatened species that might be affected by the proposed work or utilize the designated critical habitat that may be affected by the proposed work. Federal applicants must provide documentation demonstrating compliance with the Endangered Species Act; and

(7) For an activity that may affect a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, for non-Federal applicants the PCN must state which historic property may be affected by the proposed work or include a vicinity map indicating the location of the historic property. Federal applicants must provide documentation demonstrating compliance with Section 106 of the National

Historic Preservation Act.

(c) Form of Pre-Construction Notification: The standard individual permit application form (Form ENG 4345) may be used, but the completed application form must clearly indicate that it is a PCN and must include all of the information required in paragraphs (b)(1) through (7) of this general condition. A letter containing the required information may also be used.

(d) Agency Coordination: (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the project's adverse environmental effects to a

minimal level.

- (2) For all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States, for NWP 21, 29, 39, 40, 42, 43, 44, 50, 51, and 52 activities that require pre-construction notification and will result in the loss of greater than 300 linear feet of intermittent and ephemeral stream bed, and for all NWP 48 activities that require pre-construction notification, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (U.S. FWS, state natural resource or water quality agency, EPA, State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Office (THPO), and, if appropriate, the NMFS). With the exception of NWF 37, these agencies will have 10 calendar days from the date the material is transmitted to telephone or fax the district engineer notice that they intend to provide substantive, sitespecific comments. The comments must explain why the agency believes the adverse effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.
- (3) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by Section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
- (4) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

### D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. For a linear project, this determination will include an evaluation of the individual crossings to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings authorized by NWP. If an applicant requests a waiver of the 300 linear foot limit on impacts to intermittent or ephemeral streams or of an otherwise applicable limit, as provided for in NWPs 13, 21, 29, 36, 39, 40, 42, 43, 44, 50, 51 or 52, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in minimal adverse effects. When making minimal effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

2. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for projects with smaller impacts. The district engineer will consider any proposed compensatory mitigation the applicant has included

in the proposal in determining whether the net adverse environmental effects to the aquatic environment of the proposed activity are minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse effects on the aquatic environment are minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure no more than minimal adverse effects on the aquatic environment. If the net adverse effects of the project on the aquatic environment (after consideration of the compensatory mitigation proposal) are determined by the district engineer to be minimal, the district engineer will provide a timely written response to the applicant. The response will state that the project can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

3. If the district engineer determines that the adverse effects of the proposed work are more than minimal, then the district engineer will notify the applicant either: (a) That the project does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the project is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level; or (c) that the project is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse effects occur to the aquatic environment, the activity will be authorized within the 45-day PCN period, with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation or a requirement that the applicant submit a mitigation plan that would reduce the adverse effects on the aquatic environment to the minimal level. When mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

### E. Further Information

- 1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
  - 3. NWPs do not grant any property rights or exclusive privileges.
  - 4. NWPs do not authorize any injury to the property or rights of others.
  - 5. NWPs do not authorize interference with any existing or proposed Federal project.

### F. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Ephemeral stream: An ephemeral stream has flowing water only during, and for a short duration after, precipitation events in a typical year. Ephemeral stream beds are located above the water table year-round. Groundwater is not a source of water for the stream. Runoff from rainfall is the primary source of water for stream flow.

**Establishment (creation):** The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps regulatory program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Intermittent stream: An intermittent stream has flowing water during certain times of the year, when groundwater provides water for stream flow. During dry periods, intermittent streams may not have flowing water. Runoff from rainfall is a supplemental source of water for stream flow.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. The loss of stream bed includes the linear feet of stream bed that is filled or excavated. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities eligible for exemptions under Section 404(f) of the Clean Water Act are not considered when calculating the loss of waters of the United States.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. The definition of a wetland can be found at 33 CFR 328.3(b). Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of standing or flowing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: An ordinary high water mark is a line on the shore established by the fluctuations of water and indicated by physical characteristics, or by other appropriate means that consider the characteristics of the surrounding areas (see 33 CFR 328.3(e)).

**Perennial stream:** A perennial stream has flowing water year-round during a typical year. The water table is located above the stream bed for most of the year. Groundwater is the primary source of water for stream flow. Runoff from rainfall is a supplemental source of water for stream flow.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Pre-construction notification:** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of

appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands adjacent to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a wetland (i.e., water of the United States) that is inundated by tidal waters. The definitions of a wetland and tidal waters can be found at 33 CFR 328.3(b) and 33 CFR 328.3(f), respectively. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line, which is defined at 33 CFR 328.3(d).

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

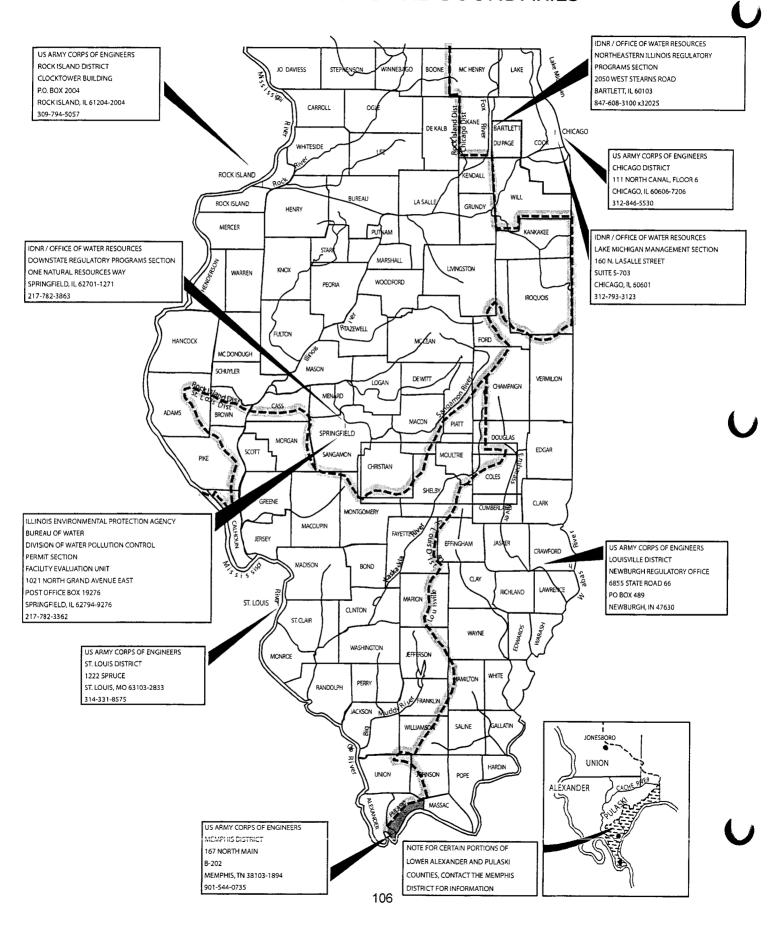
Waterbody: For purposes of the NWPs, a waterbody is a jurisdictional water of the United determined to be a water of the United States under 33 CFR 328.3(a) (1)-(6), that waterbody and its adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c) (2)). Examples of "waterbodies" include streams, rivers, lakes, ponds, and wetlands.

***Nationwide permit where Illinois Environmental Protection Agency has denied Section 401 Water Quality Certification.

PCN - Pre-Construction Notification

*** Nationwide permit where Illinois Environmental Protection Agency has denied Section 401 Water Quality Certification.

## REGULATORY JURISDICTIONAL BOUNDARIES



# BDE SPECIAL PROVISIONS For the April 24 and June 12, 2015 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.

	Stos ,t lingA	Pavement Marking Tape Type IV	43	80208	U
	Nov. 1, 2014	Pavement Marking Blackout Tape	7 24		
	4102 ,t lingA	Paved Shoulder Removal			
Jan. 1, 2010	Nov. 1, 2006	Moisture Cured Urethane Paint System	07		
Jan. 1, 2015	Aug. 1, 2014	Mechanical Side Tie Bar Inserter	- 6ε - 6ε		
Aug. 1, 2014	1999 June 12, 1999	Material Transfer Device	38		
2102,1 lingA	E102,1, voV	LRFD Storm Sewer Burial Tables	<b>Ζ</b> ε		
April 1, 2015		LRFD Pipe Culvert Burial Tables	2000 Personal Co.		•
**************************************	April 1, 2014	Longitudinal Joint and Crack Patching	32	96608	
	Jan. 1, 2015	Light Tower	34	13508	
Nov. 1, 2013	Jan. 1, 2013	Insertion Lining of Culverts	33	80315	
.,	Nov. 1, 2014	Hot-Mix Asphalt – Prime Coat	35	80348	
		Jobsite Sampling	4.56	87608	
April 1, 2015	Nov. 1, 2014	Hot-Mix Asphalt - Pay for Performance Using Percent Within Limits -	10	74508	
Nov. 1, 2014	Nov. 1, 2013	Hot-Mix Asphalt – Mixture Design Verification and Production	30		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,00 , 11	Requirements  Neguirements	- "	66608	
Nov. 1, 2014	Nov. 1, 2013	V Hot-Mix Asphalt - Mixture Design Composition and Volumetric	67	80322	
2102 ,1 linqA	Jan. 1, 2010	Hot-Mix Asphalt - Density Testing of Longitudinal Joints	82	80246	
Aug. 1, 2014	Nov. 1, 2012	Grooving for Receased Pavement Markings	72	40508	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Jan. 1, 2014	Glare Screen	97		
July 1, 2009	4 Pril 1, 2009	Fuel Cost Adjustment	52		
Nov. 1, 2014	Jan. 1, 2011	Friction Aggregate	74		
7,700	April 1, 2015	Equal Employment Opportunity		80358	*
Jan. 2, 2015	Sept 1, 2000	Disadvantaged Business Enterprise Participation	**************************************	62008	*
	4102,1 lingA	Contract Claims		80332	O.Ž
Nov. 1, 2014	June 1, 2010	Construction Air Quality - Diesel Retrofit	50		- iii
Jan. 1, 2014	Jan. 1, 2012	Concrete Mix Design – Department Provided	1 61		
Aug. 1, 2014	4102 ,1 lingA	Concrete Gutter, Curb, Median, and Paved Ditch		\$6334 52508	•
7700 7 337	Jan. 1, 2013	Concrete End Sections for Pipe Culverts	21	11508	
	0700 P ==1	Design Fill and Skews > 30 Degrees with Design Fills > 5 Feet	- 21	11608	
April 1, 2014	Stos, t lingA	Concrete Box Culverts with Skews < 30 Degrees Regardless of	91	<del>1</del> 6208	
7700 71.	CPOO PI:==V	Peet Service Box Guitarian Service Ser	4-34	70008	
Gruz , r indA	, S102 ,t lingA	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5	Cit	80293	*
. = / 00 / 1	800S , l lingA	Completion Date (via calendar days) Plus Working Days	リーフレ	80199	
	800S , L lingA	Completion Date (vis calendar days)	13	80198	
Jan. 1, 2015	Aug. 1, 2014	Coilable Nonmetallic Conduit	21	80341	
Jan. 1, 2015	Jan. 1, 2013	Coated Galvanized Steel Conduit	1 ::	80310	
Ofos ,f lingA	Sept. 1, 1990	Building Removal-Case IV (No Asbestos)	1 61	2023I	
010S ,t lingA	Sept. 1, 1990	Building Removal-Case III (Friable Asbestos)	1 6	16409	
0102 ,t lingA	Sept. 1, 1990	Building Removal-Case II (Non-Friable Asbestos)	8	18709	
010S ,1 lingA	Sept. 1, 1990	Building Removal-Case I (Non-Friable and Friable Asbestos)			
3700 F 1:V	1, 2009	Bridge Demolition Debris  Bridge Demolition Debris	۷ ا	20541 20541	
E102 ,1 .guA	Nov. 2, 2006	Bituminous Materials Cost Adjustments  Ridge Demolition Debtis	9	87108	
3700 FV	1, 2008 3005 C Yeld	Automated Flagger Assistance Device	4 4	26108	
Jan. 1, 2013	S10S ,1 linqA	Aggregate Subgrade Improvement	4 '	\$0274 80192	
Jan. 1, 2014	600S , f lingA	Accessible Pedestrian Signals (APS)	E	66008	
S102 ,1 .nst	1 2009 1 Viul		5		
Revised	Effective	Above Grade Inlet Protection	」 _# └	80240	<del></del>
bosived	evitoe#3	Special Provision Title	#	le Name	! <b>ゴ</b>

File Name	#	Special Provision Title	Effective	Revised
80254	44	Pavement Patching	Jan. 1, 2010	
80352	45	Pavement Striping - Symbols	Jan. 1, 2015	
* 80359	46	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	
* 80353	47	Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2015
80338	48	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	
80343	49	Precast Concrete Handhole	Aug. 1, 2014	
80300	50	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	
80328	51	Progress Payments	Nov. 2, 2013	
34261	52	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	53	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306	54	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt	Nov. 1, 2012	April 1, 2014
		Shingles (RAS)		
80350	55	Retroreflective Sheeting for Highway Signs	Nov. 1, 2014	
80327	56	Reinforcement Bars	Nov. 1, 2013	
80344	57	Rigid Metal Conduit	Aug. 1, 2014	
* 80354	58	Sidewalk, Corner, or Crosswalk Closure	Jan. 1, 2015	April 1, 2015
80340	59	Speed Display Trailer	April 2, 2014	
80127	60	Steel Cost Adjustment	April 2, 2004	April 1, 2009
80317	61	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	
80355	62	Temporary Concrete Barrier	Jan. 1, 2015	
80301	63	Tracking the Use of Pesticides	Aug. 1, 2012	
80356	64	Traffic Barrier Terminals Type 6 or 6B	Jan. 1, 2015	
20338	65	Training Special Provisions	Oct. 15, 1975	
80318	66	Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
* 80345	67	Underpass Luminaire	Aug. 1, 2014	April 1, 2015
80357	68	Urban Half Road Closure with Mountable Median	Jan. 1, 2015	4
* 80346	69	Waterway Obstruction Warning Luminaire	Aug. 1, 2014	April 1, 2015
80288	70	Warm Mix Asphalt	Jan. 1, 2012	Nov. 1, 2014
80302	71	Weekly DBE Trucking Reports	June 2, 2012	
80289	72	Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	73	Working Days	Jan. 1, 2002	

The following special provisions are in the 2015 Supplemental Specifications and Recurring Special Provisions:

File Name	Special Provision Title	New Location	Effective	Revised
80292	Coarse Aggregate in Bridge Approach Slabs/Footings	Articles 1004.01(b) and 1004.02(f)	April 1, 2012	April 1, 2013
80303	Granular Materials	Articles 1003.04, 1003.04(c), and 1004.05(c)	Nov. 1, 2012	
80330	Pavement Marking for Bike Symbol	Article 780.14	Jan. 1, 2014	
80331	Payrolls and Payroll Records	Recurring CS #1 and #5	Jan. 1, 2014	
80332	Portland Cement Concrete – Curing of Abutments and Piers	Article 1020.13	Jan. 1, 2014	
80326	Portland Cement Concrete Equipment	Article 1103.03(a)(5)	Nov. 1, 2013	
80281	Quality Control/Quality Assurance of Concrete Mixtures	Recurring CS #31	Jan. 1, 2012	Jan. 1, 2014
80283	Removal and Disposal of Regulated Substances	Articles 669.01, 669.08, 669.09, 669.14, and 669.16	Jan. 1, 2012	Nov. 2, 2012
80319	Removal and Disposal of Surplus Materials	Article 202.03	Nov. 2, 2012	
80307	Seeding	Article 250.07	Nov. 1, 2012	
80339	Stabilized Subbase	Article 312.06	April 1, 2014	
80333	Traffic Control Setup and Removal Freeway/Expressway	Articles 701.18(I) and 701.19(a)	Jan. 1, 2014	,

The following special provisions require additional information from the designer. The additional information needs to be encluded 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 !
- 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

### AGGREGATE SUBGRADE IMPROVEMENT (BDE)

Effective: April 1, 2012 Revised: January 1, 2013

Add the following Section to the Standard Specifications:

## "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.

ltem	Article/Section
(a) Coarse Aggregate	1004.06
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2, and	13)1031

- Note 1. Crushed RAP, from either full depth or single lift removal, may be mechanically blended with aggregate gradations CS 01, CS 02, and RR 01 but shall not exceed 40 percent of the total product. The top size of the 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 gradations CS 01, CS 02, or RR 01 are used in lower lifts.
- 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.
- **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 gradations CA 02, CA 06, or CA 10 shall be 12 in. (300 mm). The maximum nominal lift thickness of aggregate gradations CS 01, CS 02, and RR 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 the contract specifies that a granular subbase is to be placed on the aggregate subgrade improvement, the 3 in. (75 mm) of capping aggregate shall be the same gradation and may be placed with the underlying aggregate subgrade improvement material.

- **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) or ton (metric ton) 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:

- "1004.06 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.
  - (b) Quality. The coarse aggregate shall consist of sound durable particles reasonably free of deleterious materials.
  - (c) Gradation.
    - (1) The coarse aggregate gradation for total subgrade thickness less than or equal to 12 in. (300 mm) shall be CA 2, CA 6, CA 10, or CS 01.

The coarse aggregate gradation for total subgrade thickness more than 12 in. (300 mm) shall be CS 01, CS 02 or RR 01(see Article 1005.01(c)).

	COARSE AGGREGATE SUBGRADE GRADATIONS					
Grad No.		Sieve Si	ze and Percent	Passing		
Crad No.	8"	6"	4"	2"	#4	
CS 01	100	97 ± 3	90 ± 10	45 ± 25	20 ± 20	
CS 02		100	80 ± 10	25 ± 15		

	COARSE AGGREGATE SUBGRADE GRADATIONS (Metric)				
Grad No.	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
CS 02		100	80 ± 10	25 ± 15	

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

# CONCRETE BOX CULVERTS WITH SKEWS ≤ 30 DEGREES REGARDLESS OF DESIGN FILL AND SKEWS > 30 DEGREES WITH DESIGN FILLS > 5 FEET (BDE)

Effective: April 1, 2012 Revised: April 1, 2014

Revise the second paragraph of Article 540.04 of the Standard Specifications to read:

"Unless otherwise noted on the plans, the Contractor shall have the option, when a cast-in-place concrete box culvert is specified, of constructing the box culvert using precast box culvert sections when the design cover is 6 in. (150 mm) minimum. The precast box culvert sections shall be designed for the same design cover shown on the plans for cast-in-place box culvert; shall be of equal or larger size opening, and shall satisfy the design requirements of ASTM C 1577."

80294

## CONCRETE GUTTER, CURB, MEDIAN, AND PAVED DITCH (BDE)

Effective: April 1, 2014 Revised: August 1, 2014

Add the following to Article 606.02 of the Standard Specifications:

"(i) Polyurethane Joint Sealant ......1050.04"

Revise the fifth paragraph of Article 606.07 of the Standard Specifications to read:

"Transverse contraction and longitudinal construction joints shall be sealed according to Article 420.12, except transverse joints in concrete curb and gutter shall be sealed with polysulfide or polyurethane joint sealant."

Add the following to Section 1050 of the Standard Specifications:

"1050.04 Polyurethane Joint Sealant. The joint sealant shall be a polyurethane sealant, Type S, Grade NS, Class 25 or better, Use T ( $T_1$  or  $T_2$ ), according to ASTM C 920."

80334

## FRICTION AGGREGATE (BDE)

Effective: January 1, 2011 Revised: November 1, 2014

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.

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination 5/:
		Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete

Use	Mixture	Aggregates Allowed		
HMA Low ESAL	Stabilized Subbase or Shoulders	Allowed Alone or in Combination ^{5/} :  Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{1/} Crushed Concrete		
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	Allowed Alone or in Combination ^{5/} :  Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete ^{3/}		
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	Allowed Alone or in Combination ^{5/} :  Crushed Gravel Carbonate Crushed Stone ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}		
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	Allowed Alone or in Combination ^{5/} :  Crushed Gravel Carbonate Crushed Stone (other than Limestone) ^{2/} Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag ^{4/} Crushed Concrete ^{3/}		
		Other Combinations Allowed:  Up to  With  25% Limestone  Dolomite		

Use	Mixture	Aggregates Allowed			
		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	Allowed Alone or in Combination ^{5/} :  Crushed Gravel Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete ^{3/} No Limestone.			
		Other Combinations Allowed:  Up to  With			
		Up to  50% Dolomite ^{2/} Any Mixture E aggregate			
		75% Dolomite ^{2/} Crushed Sandst Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crush Stone			
		75% Crushed Gravel or Crushed Concrete ^{3/}	Crushed Sandstone, Crystalline Crushed Stone, Crushed Slag (ACBF), or Crushed Steel Slag		
HMA High ESAL	F Surface IL-9.5 SMA Ndesign 80 Surface	Allowed Alone or in Combination ^{5/} :  Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag No Limestone.  Other Combinations Allowed:			

Use	Mixture	Aggregates Allowed		
		Up to	With	
		50% Crushed Gravel, Crushed Concrete ^{3/} , or Dolomite ^{2/}	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 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."

80265

# HOT-MIX ASPHALT - MIXTURE DESIGN COMPOSITION AND VOLUMETRIC REQUIREMENTS (BDE)

Effective: November 1, 2013 Revised: November 1, 2014

Revise the last sentence of the first paragraph of Article 312.05 of the Standard Specifications to read:

"The minimum compacted thickness of each lift shall be according to Article 406.06(d)."

Delete the minimum compacted lift thickness table in Article 312.05 of the Standard Specifications.

Revise the second paragraph of Article 355.02 of the Standard Specifications to read:

"The mixture composition used shall be IL-19.0."

Revise Article 355.05(a) of the Standard Specifications to read:

"(a) The top lift thickness shall be 2 1/4 in. (60 mm) for mixture composition IL-19.0."

Revise the Leveling Binder table and second paragraph of Article 406.05(c) of the Standard Specifications to read:

"Leveling Binder				
Nominal, Compacted, Leveling Binder Thickness, in. (mm)	Mixture Composition			
≤ 1 1/4 (32)	IL-4.75, IL-9.5, or IL-9.5L			
> 1 1/4 to 2 (32 to 50)	IL-9.5 or IL-9.5L			

The density requirements of Article 406.07(c) shall apply for leveling binder, machine method, when the nominal compacted thickness is: 3/4 in. (19 mm) or greater for IL-4.75 mixtures; and 1 1/4 in. (32 mm) or greater for IL-9.5 and IL-9.5L mixtures."

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)			
IL-9.5, IL-9.5L	1 1/4 (32)			
SMA-12.5	1 1/2 (38)			
IL-19.0, IL-19.0L	2 1/4 (57)"			

Revise the ninth paragraph of Article 406.14 of the Standard Specifications to read:

"Test strip mixture will be evaluated at the contract unit price according to the following."

Revise Article 406.14(a) of the Standard Specifications to read:

"(a) If the HMA placed during the initial test strip is determined to be acceptable the mixture will be paid for at the contract unit price."

Revise Article 406.14(b) of the Standard Specifications to read:

"(b) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was not produced within 2.0 to 6.0 percent air voids or within the individual control limits of the JMF according to the Department's test results, the mixture will not be paid for and shall be removed at the Contractor's expense. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Revise Article 406.14(c) of the Standard Specifications to read:

"(c) If the HMA placed during the initial test strip (1) is determined to be unacceptable to remain in place by the Engineer, and (2) was produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF according to the Department's test results, the mixture shall be removed. Removal will be paid according to Article 109.04. This initial mixture will be paid for at the contract unit price. An additional test strip shall be constructed and the mixture will be paid for in full, if produced within 2.0 to 6.0 percent air voids and within the individual control limits of the JMF."

Delete Article 406.14(d) of the Standard Specifications.

Delete Article 406.14(e) of the Standard Specifications.

Delete the last sentence of Article 407.06(c) of the Standard Specifications.

Revise Note 2. of Article 442.02 of the Standard Specifications to read:

"Note 2. The mixture composition of the HMA used shall be IL-19.0 binder, designed with the same Ndesign as that specified for the mainline pavement."

Delete the second paragraph of Article 482.02 of the Standard Specifications.

Revise the first sentence of the sixth paragraph of Article 482.05 of the Standard Specifications to read:

"When the mainline HMA binder and surface course mixture option is used on resurfacing projects, shoulder resurfacing widths of 6 ft (1.8 m) or less may be placed simultaneously with the adjacent traffic lane for both the binder and surface courses."

Revise the second sentence of the fourth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 5 in. (125 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise the second sentence of the fifth paragraph of Article 601.04 of the Standard Specifications to read:

"The top 8 in. (200 mm) of the trench shall be backfilled with an IL-19.0L Low ESAL mixture meeting the requirements of Section 1030 and compacted to a density of not less than 90 percent of the theoretical density."

Revise Article 1003.03(c) of the Standard Specifications to read:

"(c) Gradation. The fine aggregate gradation for all HMA shall be FA 1, FA 2, FA 20, FA 21, or FA 22. The fine aggregate gradation for SMA shall be FA/FM 20.

For mixture IL-4.75 and surface mixtures with an Ndesign = 90, at least 50 percent of the required fine aggregate fraction shall consist of either stone sand, slag sand, or steel slag meeting the FA 20 gradation.

For mixture IL-19.0, Ndesign = 90 the fine aggregate fraction shall consist of at least 67 percent manufactured sand meeting FA 20 or FA 22 gradation. For mixture IL-19.0, Ndesign = 50 or 70 the fine aggregate fraction shall consist of at least 50 percent manufactured sand meeting FA 20 or FA 22 gradation. The manufactured sand shall be stone sand, slag sand, steel slag sand, or combinations thereof.

Gradation FA 1, FA 2, or FA 3 shall be used when required for prime coat aggregate application for HMA."

Remove footnote 3/ from the tables and at the end of the tables in Article 1004.01(c) of the Standard Specifications.

Delete the last sentence of the first paragraph of Article 1004.03(b) of the Standard Specifications.

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	CA 11 ^{1/}	
	IL-9.5	CA 16 and/or CA 13	
		CA 16	
HMA Low ESAL	IL-19.0L	CA 11 ^{1/}	
	IL-9.5L	CA 16	
	Stabilized Subbase		
	or Shoulders		

^{1/} CA 16 or CA 13 may be blended with the gradations listed."

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

9.5 surface
der; IL-9.5L surface; Subbase (HMA) ^{1/} ; A Shoulders ^{2/}

- 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.

<i>'</i>	
Item	Article/Section
(a) Coarse Aggregate	
(b) Fine Aggregate	
(c) RAP Material	1031
(d) Mineral Filler	1011
(e) Hydrated Lime	
(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)	

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.

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.

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:

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

High ESAL, MIXTURE COMPOSITION (% PASSING) 1/								
Sieve	IL-19	.0 mm	SMA	12.5 4/	IL-9	.5 mm	IL-4.	75 mm
Size	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	90	99		100		100
3/8 in. (9.5 mm)			50	85	90	100		100
#4 (4.75 mm)	40	60	20	40	32	69	90	100
#8 (2.36 mm)	26	42	16	24 ^{5/}	32	52 ^{2/}	70	90
#16 (1.18 mm)	15	30			10	32	50	65
#50 (300 µm)	6	15			4	15	15	30
#100 (150 µm)	4	9			3	10	10	18
#200 (75 µm)	3	6	8.0	11.0 ^{3/}	4	6	7	9
Ratio Dust/Asphalt Binder		1.0				1.0		1.0 3/

- 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 Ndesign = 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  $\mu$ m) sieve shall be  $\leq$  3 percent.
- 5/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted above 24 percent."

Delete Article 1030.04(a)(3) of the Standard Specifications.

Delete Article 1030.04(a)(4) of the Standard Specifications.

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

	"VOLUMETRIC REQUIREMENTS High ESAL						
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA),			
Ndesign	IL-19.0	IL-9.5	%				
50			65 – 78 ^{2/}				
70 90	13.5	15.0	65 - 75				

- 1/ Maximum Draindown for IL-4.75 shall be 0.3 percent
- 2/ VFA for IL-4.75 shall be 76-83 percent"

Revise the table in Article 1030.04(b)(2) of the Standard Specifications to read:

"VOLUMETRIC REQUIREMENTS Low ESAL							
Mixture Composition	Design Compactive Effort	Design Air Voids Target %	VMA (Voids in the Mineral Aggregate), % min.	VFA (Voids Filled with Asphalt Binder), %			
IL-9.5L	N _{DES} =30	4.0	15.0	65-78			
IL-19.0L	N _{DES} = 30	4.0	13.5	N/A"			

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

# "(3) SMA Mixtures.

ESALs (million)	Ndesign	Design Air Voids Target %	Voids in the Mineral Aggregate (VMA), % min.	Voids Filled with Asphalt (VFA), %
≤ 10	50	4.0	16.0	75 – 80
> 10	80	4.0	17.0	75 – 80"

Delete Article 1030.04(b)(4) of the Standard Specifications.

Delete Article 1030.04(b)(5) from the Supplemental Specifications.

Revise the table in Article 1030.05(d)(2)a. of the Standard Specifications to read:

"Parameter	Frequency of Tests  High ESAL Mixture Low ESAL Mixture	Test Method See Manual of Test Procedures for Materials
Aggregate Gradation % passing sieves: 1/2 in. (12.5 mm), No. 4 (4.75 mm), No. 8 (2.36 mm), No. 30 (600 μm) No. 200 (75 μm)	1 washed ignition oven test on the mix per half day of production Note 3.	Illinois Procedure
Asphalt Binder Content by Ignition Oven Note 1.	1 per half day of production	Illinois-Modified AASHTO T 308
VMA Note 2.	Day's production ≥ 1200 tons:  1 per half day of production  Day's production < 1200 tons:  1 per half day of production for first 2 days and 1 per day thereafter (first sample of the day)	Illinois-Modified AASHTO R 35

	Frequency of Tests	Test Method See Manual of
"Parameter	High ESAL Mixture	Test Procedures
	Low ESAL Mixture	for Materials
Air Voids	Day's production	
	≥ 1200 tons:	
Bulk Specific		Illinois-Modified
Gravity	1 per half day of	AASHTO T 312
of Gyratory Sample	production	
N		
Note 4.	Day's production	
	< 1200 tons:	
	1 per half day of	
	production for first	
	2 days and 1 per	
	day thereafter (first	
	sample of the day)	
	Day's production	
Maximum Specific	≥ 1200 tons:	Illinois-Modified
Gravity of Mixture		AASHTO T 209
	1 per half day of	
	production	
	Day's production	
	< 1200 tons:	
	1200 (01/0.	
	1 per half day of	
	production for first	
	2 days and 1 per	
	day thereafter (first	
	sample of the day)	

Note 1. The Engineer may waive the ignition oven requirement for asphalt binder content if the aggregates to be used are known to have ignition asphalt binder content calibration factors which exceed 1.5 percent. If the ignition oven requirement is waived, other Department approved methods shall be used to determine the asphalt binder content.

Note 2. The  $G_{\text{sb}}$  used in the voids in the mineral aggregate (VMA) calculation shall be the same average  $G_{\text{sb}}$  value listed in the mix design.

Note 3. The Engineer reserves the right to require additional hot bin gradations for batch plants if control problems are evident.

Note 4. The WMA compaction temperature for mixture volumetric testing shall be 270  $\pm$  5 °F (132  $\pm$  3 °C) for quality control testing. The WMA compaction temperature for quality assurance testing will be 270  $\pm$  5 °F (132  $\pm$  3 °C) if the mixture is not allowed to cool to room temperature. If the mixture is allowed to cool to room temperature, it shall be reheated to standard HMA compaction temperatures."

Revise the table in Article 1030.05(d)(2)b. of the Standard Specifications to read:

"Parameter	High ESAL Mixture Low ESAL Mixture
Ratio Dust/Asphalt Binder	0.6 to 1.2
Moisture	0.3 %"

Revise the Article 1030.05(d)(4) of the Supplemental Specifications to read:

"(4) Control Limits. Target values shall be determined by applying adjustment factors to the AJMF where applicable. The target values shall be plotted on the control charts within the following control limits.

CONTROL LIMITS						
B	High ESAL Low ESAL		SMA		IL-4.75	
Parameter	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4	Individual Test	Moving Avg. of 4
% Passing: 1/						
1/2 in. (12.5 mm)	±6%	±4%	±6%	± 4 %		
3/8 in. (9.5mm)			± 4 %	± 3 %		
No. 4 (4.75 mm)	±5%	± 4 %	± 5 %	±4%		
No. 8 (2.36 mm)	±5%	± 3 %	±4%	± 2 %		
No. 16 (1.18 mm)			±4%	± 2 %	± 4 %	± 3 %
No. 30 (600 µm)	±4%	± 2.5 %	± 4 %	± 2.5 %		
Total Dust Content No. 200 (75 µm)	± 1.5 %	± 1.0 %			± 1.5 %	± 1.0 %
Asphalt Binder Content	± 0.3 %	± 0.2 %	± 0.2 %	± 0.1 %	± 0.3 %	± 0.2 %
Voids	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %	± 1.2 %	± 1.0 %
VMA	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}	-0.7 % ^{2/}	-0.5 % ^{2/}

- 1/ Based on washed ignition oven
- 2/ Allowable limit below minimum design VMA requirement

DENSITY CONTROL LIMITS				
Mixture Composition Parameter Individual Te				
IL-4.75	Ndesign = 50	93.0 - 97.4 % ^{1/}		
IL-9.5	Ndesign = 90	92.0 - 96.0 %		
IL-9.5,IL-9.5L	Ndesign < 90	92.5 - 97.4 %		
IL-19.0	Ndesign = 90	93.0 - 96.0 %		
IL-19.0, IL-19.0L	Ndesign < 90	93.0 ^{2/} - 97.4 %		
SMA	Ndesign = 50 & 80	93.5 - 97.4 %		

- 1/ Density shall be determined by cores or by correlated, approved thin lift nuclear gauge.
- 2/ 92.0 % when placed as first lift on an unimproved subgrade."

Revise the table in Article 1030.05(d)(5) of the Supplemental Specifications to read:

CONTROL CHART	High ESAL,
REQUIREMENTS	Low ESAL, SMA
	& IL-4.75
	% Passing Sieves:
	1/2 in. (12.5 mm) ^{2/}
Gradation 1/3/	No. 4 (4.75 mm)
	No. 8 (2.36 mm)
	No. 30 (600 µm)
Total Dust Content 1/	No. 200 (75 µm)
	Asphalt Binder Content
	Bulk Specific Gravity
	Maximum Specific
	Gravity of Mixture
	Voids
	Density
	VMA

- 1/ Based on washed ignition oven.
- 2/ Does not apply to IL-4.75.
- 3/ SMA also requires the 3/8 in. (9.5 mm) sieve."

Delete Article 1030.05(d)(6)a.1.(b.) of the Standard Specifications.

Delete Article 1030.06(b) of the Standard Specifications.

Delete Article 1102.01(e) of the Standard Specifications.

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## HOT-MIX ASPHALT - MIXTURE DESIGN VERIFICATION AND PRODUCTION (BDE)

Effective: November 1, 2013 Revised: November 1, 2014

<u>Description</u>. This special provision provides the requirements for Hamburg Wheel and tensile strength testing for High ESAL, IL-4.75, and Stone Matrix Asphalt (SMA) hot-mix asphalt (HMA) mixes during mix design verification and production. This special provision also provides the plant requirements for hydrated lime addition systems used in the production of High ESAL, IL-4.75, and SMA mixes.

<u>Mix Design Testing.</u> Add the following below the referenced AASHTO standards in Article 1030.04 of the Standard Specifications:

AASHTO T 324 Hamburg Wheel Test

AASHTO T 283 Tensile Strength Test

Add the following to Article 1030.04 of the Standard Specifications:

"(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 (Illinois Modified AASHTO T 324) and the Tensile Strength Test (Illinois Modified 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 necessary changes to the mix and provide passing Hamburg Wheel and tensile strength test results from a private lab. The Department will verify the passing results.

All new and renewal mix designs shall meet the following requirements for verification testing.

(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 1/

PG Grade	Number of Passes	
PG 58-xx (or lower)	5,000	
PG 64-xx	7,500	
PG 70-xx	15,000	
PG 76-xx (or higher)	20,000	

- 1/ When produced at temperatures of  $275 \pm 5$  °F ( $135 \pm 3$  °C) or less, loose Warm Mix Asphalt shall be oven aged at  $270 \pm 5$  °F ( $132 \pm 3$  °C) for two hours prior to gyratory compaction of Hamburg Wheel specimens.
- (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 550 kPa (80 psi) for polymer modified PG asphalt binder. The maximum allowable unconditioned tensile strength shall be 200 psi (1380 kPa)."

Production Testing. Revise 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 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".

Before start-up, target values shall be determined by applying gradation correction factors to the JMF when applicable. These correction factors shall be determined from previous experience. The target values, when approved by the Engineer, shall be used to control HMA production. Plant settings and control charts shall be set according to target values.

Before constructing the test strip, target values shall be determined by applying gradation correction factors to the JMF when applicable. After any JMF adjustment, the JMF shall become the Adjusted Job Mix Formula (AJMF). Upon completion of the first acceptable test strip, the JMF shall become the AJMF regardless of whether or not the JMF has been adjusted. If an adjustment/plant change is made, the Engineer may require a new test strip to be constructed. If the HMA placed during the initial test strip is determined to be unacceptable to remain in place by the Engineer, it shall be removed and replaced.

The limitations between the JMF and AJMF are as follows.

Parameter	Adjustment
1/2 in. (12.5 mm)	± 5.0 %
No. 4 (4.75 mm)	± 4.0 %
No. 8 (2.36 mm)	± 3.0 %
No. 30 (600 µm)	*
No. 200 (75 µm)	*
Asphalt Binder	± 0.3 %
Content	

^{*} In no case shall the target for the amount passing be greater than the JMF.

Any adjustments outside the above limitations will require a new mix design.

Mixture sampled to represent the test strip shall include additional material sufficient for the Department to conduct Hamburg Wheel testing according to Illinois Modified AASHTO T324 (approximately 60 lb (27 kg) total).

The Contractor shall immediately cease production upon notification by the Engineer of failing Hamburg Wheel test. All prior produced material may be paved out provided all other mixture criteria is being met. No additional mixture shall be produced until the Engineer receives passing Hamburg Wheel tests.

The Department may conduct additional Hamburg Wheel tests on production material as determined by the Engineer."

Revise the title of Article 1030.06(b) of the Standard Specifications to read:

"(b) Low ESAL Mixtures."

<u>System for Hydrated Lime Addition</u>. Revise the fourth sentence of the third paragraph of Article 1030.04(c) of the Standard Specifications to read:

"The method of application shall be according to Article 1102.01(a)(10)."

Replace the first three sentences of the second paragraph of Article 1102.01(a)(10) of the Standard Specifications to read:

"When hydrated lime is used as the anti-strip additive, a separate bin or tank and feeder system shall be provided to store and accurately proportion the lime onto the aggregate either as a slurry, as dry lime applied to damp aggregates, or as dry lime injected onto the hot aggregates prior to adding the liquid asphalt cement. If the hydrated lime is added either as a slurry or as dry lime on damp aggregates, the lime and aggregates shall be mixed by a power driven pugmill to provide a uniform coating of the lime prior to entering the dryer. If dry hydrated lime is added to the hot dry aggregates in a dryer-drum plant, the lime shall be added in such a manner that the lime will not become entrained into the air stream of the dryer-drum and that thorough dry mixing shall occur prior to the injection point of the liquid asphalt. When a batch plant is used, the hydrated lime shall be added to the mixture in the weigh hopper or as approved by the Engineer."

<u>Basis of Payment</u>. Replace the seventh paragraph of Article 406.14 of the Standard Specifications with the following:

"For mixes designed and verified under the Hamburg Wheel criteria, the cost of furnishing and introducing anti-stripping additives in the HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

If an anti-stripping additive is required for any other HMA mix, the cost of the additive will be paid for according to Article 109.04. The cost incurred in introducing the additive into the

HMA will not be paid for separately, but shall be considered as included in the contract unit price of the HMA item involved.

No additional compensation will be awarded to the Contractor because of reduced production rates associated with the addition of the anti-stripping additive."

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## **HOT MIX ASPHALT - PRIME COAT (BDE)**

Effective: November 1, 2014

Revise Note 1 of Article 406.02 of the Standard Specifications to read:

"Note 1. The bituminous material used for prime coat shall be one of the types listed in the following table.

When emulsified asphalts are used, any dilution with water shall be performed by the emulsion producer. The emulsified asphalt shall be thoroughly agitated within 24 hours of application and show no separation of water and emulsion.

Application	Bituminous Material Types
Prime Coat on Brick, Concrete, or HMA Bases	SS-1, SS-1h, SS-1hP, SS-1vh, RS-1, RS-2, CSS-1, CSS-1h, CSS-1hp, CRS-1, CRS-2, HFE-90, RC-70
Prime Coat on Aggregate Bases	MC-30, PEP"

Add the following to Article 406.03 of the Standard Specifications.

"(i)	Vacuum Sweeper110	1.19
	Spray Paver1102	

Revise Article 406.05(b) of the Standard Specifications to read:

- "(b) Prime Coat. The bituminous material shall be prepared according to Article 403.05 and applied according to Article 403.10. The use of RC-70 shall be limited to air temperatures less than 60 °F (15 °C).
  - (1) Brick, Concrete or HMA Bases. The base shall be cleaned of all dust, debris and any substance that will prevent the prime coat from adhering to the base. Cleaning shall be accomplished by sweeping to remove all large particles and air blasting to remove dust. As an alternative to air blasting, a vacuum sweeper may be used to accomplish the dust removal. The base shall be free of standing water at the time of application. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface as specified in the following table.

Type of Surface to be Primed	Residual Asphalt Rate
	lb/sq ft (kg/sq m)
Milled HMA, Aged Non-Milled HMA, Milled Concrete,	0.05 (0.244)
Non-Milled Concrete & Tined Concrete	` ,
Fog Coat between HMA Lifts, IL-4.75 & Brick	0.025 (0.122)

The bituminous material for the prime coat shall be placed one lane at a time. If a spray paver is not used, the primed lane shall remain closed until the prime coat is

fully cured and does not pickup under traffic. When placing prime coat through an intersection where it is not possible to keep the lane closed, the prime coat may be covered immediately following its application with fine aggregate mechanically spread at a uniform rate of 2 to 4 lb/sq yd (1 to 2 kg/sq m).

(2) Aggregate Bases. The prime coat shall be applied uniformly and at a rate that will provide a residual asphalt rate on the prepared surface of  $0.25 \, \text{lb/sq}$  ft  $\pm 0.01 \, (1.21 \, \text{kg/sq} \, \text{m} \, \pm 0.05)$ .

The prime coat shall be permitted to cure until the penetration has been approved by the Engineer, but at no time shall the curing period be less than 24 hours for MC-30 or four hours for PEP. Pools of prime occurring in the depressions shall be broomed or squeegeed over the surrounding surface the same day the prime coat is applied.

The base shall be primed 1/2 width at a time. The prime coat on the second half/width shall not be applied until the prime coat on the first half/width has cured so that it will not pickup under traffic.

The residual asphalt rate will be verified a minimum of once per type of surface to be primed as specified herein for which at least 2000 tons (1800 metric tons) of HMA will be placed. The test will be according to the "Determination of Residual Asphalt in Prime and Tack Coat Materials" test procedure.

Prime coat shall be fully cured prior to placement of HMA to prevent pickup by haul trucks or paving equipment. If pickup occurs, paving shall cease in order to provide additional cure time, and all areas where the pickup occurred shall be repaired.

If after five days, loss of prime coat is evident prior to covering with HMA, additional prime coat shall be placed as determined by the Engineer at no additional cost to the Department."

Revise the last sentence of the first paragraph of Article 406.13(b) of the Standard Specifications to read:

"Water added to emulsified asphalt, as allowed in Article 406.02, will not be included in the quantities measured for payment."

Revise the second paragraph of Article 406.13(b) of the Standard Specifications to read:

"Aggregate for covering prime coat will not be measured for payment."

Revise the first paragraph of Article 406.14 of the Standard Specifications to read:

"406.14 Basis of Payment. Prime Coat will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT), or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT)."

Revise Article 407.02 of the Standard Specifications to read:

"407.02 Materials. Materials shall be according to Article 406.02, except as follows.

ltem Article/Section
(a) Packaged Rapid Hardening Mortar or Concrete .......1018"

Revise Article 407.06(b) of the Standard Specifications to read:

"(b) A bituminous prime coat shall be applied between each lift of HMA according to Article 406.05(b)."

Delete the second paragraph of Article 407.12 of the Standard Specifications.

Revise the first paragraph of Article 408.04 of the Standard Specifications to read:

"408.04 Method of Measurement. Bituminous priming material will be measured for payment according to Article 406.13."

Revise the first paragraph of Article 408.05 of the Standard Specifications to read:

"408.05 Basis of Payment. This work will be paid for at the contract unit price per pound (kilogram) of residual asphalt applied for BITUMINOUS MATERIALS (PRIME COAT) or POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) and at the contract unit price per ton (metric ton) for INCIDENTAL HOT-MIX ASPHALT SURFACING."

Revise Article 1032.02 of the Standard Specifications to read:

"1032.02 Measurement. Asphalt binders, emulsified asphalts, rapid curing liquid asphalt, medium curing liquid asphalts, slow curing liquid asphalts, asphalt fillers, and road oils will be measured by weight.

A weight ticket for each truck load shall be furnished to the inspector. The truck shall be weighed at a location approved by the Engineer. The ticket shall show the weight of the empty truck (the truck being weighed each time before it is loaded), the weight of the loaded truck, and the net weight of the bituminous material.

When an emulsion or cutback is used for prime coat, the percentage of asphalt residue of the actual certified product shall be shown on the producer's bill of lading or attached certificate of analysis. If the producer adds extra water to an emulsion at the request of the purchaser, the amount of water shall also be shown on the bill of lading.

Payment will not be made for bituminous materials in excess of 105 percent of the amount specified by the Engineer."

Add the following to the table in Article 1032.04 of the Standard Specifications.

"SS-1vh	160-180	70-80
RS-1, CRS-1	75-130	25-55"

Add the following to Article 1032.06 of the Standard Specifications.

"(g) Non Tracking Emulsified Asphalt SS-1vh shall be according to the following.

Requirements for SS-1vh													
Test		SPEC	AASHTO Test Method										
Saybolt Viscosity @ 25C,	SFS	20-200	T 72										
Storage Stability, 24hr.,	%	1 max.	T 59										
Residue by Evaporation,	%	50 min.	T 59										
Sieve Test,	%	0.3 max.	T 59										
Tests	on Residue	from Evapora	ation										
Penetration @25°C, 100g., 5	sec., dmm	20 max.	T 49										
Softening Point,	°C	65 min.	T 53										
Solubility,	%	97.5 min.	T 44										
Orig. DSR @ 82°C,	kPa	1.00 min.	T 315"										

Revise the last table in Article 1032.06(f)(2)d. of the Standard Specifications to read:

"Grade	Use
SS-1, SS-1h, RS-1, RS-2, CSS-1, CRS-1, CRS-2, CSS-1h, HFE-90, SS-1hP, CSS-1hP, SS-1vh	Prime or fog seal
PEP	Bituminous surface treatment prime
RS-2, HFE-90, HFE-150, HFE- 300, CRSP, HFP, CRS-2, HFRS-2	Bituminous surface treatment
CSS-1h Latex Modified	Microsurfacing"

Add the following to Article 1101 of the Standard Specifications.

"1101.19 Vacuum Sweeper. The vacuum sweeper shall have a minimum sweeping path of 52 in. (1.3 m) and a minimum blower rating of 20,000 cu ft per minute (566 cu m per minute)."

Add the following to Article 1102 of the Standard Specifications:

"1102.06 Spray Paver. The spreading and finishing machine shall be capable of spraying a rapid setting emulsion tack coat, paving a layer of HMA, and providing a smooth HMA mat in one pass. The HMA shall be spread over the tack coat in less than five seconds after the

application of the tack coat during normal paving speeds. No wheel or other part of the paving machine shall come into contact with the tack coat before the HMA is applied. In addition to meeting the requirements of Article 1102.03, the spray paver shall also meet the requirements of Article 1102.05 for the tank, heating system, pump, thermometer, tachometer or synchronizer, and calibration. The spray bar shall be equipped with properly sized and spaced nozzles to apply a uniform application of tack coat at the specified rate for the full width of the mat being placed."

# LRFD PIPE CULVERT BURIAL TABLES (BDE)

Effective: November 1, 2013 | Revised: April 1, 2015

Revise Article 542.02 of the Standard Specifications to read as follows:

	"Item	Article/Section
(a)		1006.01
(b)	•	
(c)	Bituminous Coated Corrugated Steel Pipe	1006.01
(d)	Bituminous Coated Corrugated Steel Pipe Arch	1006.01
(e)	Reserved	
(f)	Aluminized Steel Type 2 Corrugated Pipe	1006.01
(g)	Aluminized Steel Type 2 Corrugated Pipe Arch	1006.01
(h)	Precoated Galvanized Corrugated Steel Pipe	
(i)	Precoated Galvanized Corrugated Steel Pipe Arch	1006.01
(j)	Corrugated Aluminum Alloy Pipe	1006.03
(k)	Corrugated Aluminum Alloy Pipe Arch	
(1)	Extra Strength Clay Pipe	1040.02
(m)	•	
(n)	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	
(0)	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe	
(p)	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe	
(q)	Polyvinyl Chloride (PVC) Pipe	1040.03
(r)	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	
(s)	Corrugated Polypropylene (CPP) pipe with smooth Interior	1040.08
(t)	Corrugated Polyethylene (PE) Pipe with a Smooth Interior	
(u)	Polyethylene (PE) Pipe with a Smooth Interior	
(v)	Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	
(w)	•	
(x)	External Sealing Band	
(y)	Fine Aggregate (Note 1)	
(z)	Coarse Aggregate (Note 2)	
	) Packaged Rapid Hardening Mortar or Concrete	
	) Nonshrink Grout	
` '	Reinforcement Bars and Welded Wire Fabric	
(dd	) Handling Hole Plugs	1042.16

Note 1. The fine aggregate shall be moist.

Note 2. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 542.03 of the Standard Specifications as follows:

"Class	Materials
Α	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
С	Rigid Pipes:
	Extra Strength Clay Pipe
	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe Flexible Pipes:
	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
	Precoated Galvanized Corrugated Steel Pipe
	Precoated Galvanized Corrugated Steel Pipe Arch
	Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Arch
	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
i	Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior
D	Rigid Pipes:
	Extra Strength Clay Pipe
ļ	Concrete Sewer Storm Drain and Culvert Pipe, Class 3
Ì	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
{	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
į	Flexible Pipes:
	Galvanized Corrugated Steel Pipe
- 1	Galvanized Corrugated Steel Pipe Arch
Ì	Bituminous Coated Corrugated Steel Pipe
	Bituminous Coated Corrugated Steel Pipe Arch
İ	Aluminized Steel Type 2 Corrugated Pipe
	Aluminized Steel Type 2 Corrugated Pipe Arch
į	Precoated Galvanized Corrugated Steel Pipe
f	Precoated Galvanized Corrugated Steel Pipe Arch Corrugated Aluminum Alloy Pipe
	Corrugated Aluminum Alloy Pipe Corrugated Aluminum Alloy Pipe Arch
	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior
	Corrugated Polyvinyi Chloride (PVC) Pipe with a Smooth Interior  Corrugated Polyethylene (PE) Pipe with a Smooth Interior
İ	Polyethylene (PE) Pipe with a Smooth Interior"
	Corrugated Polypropylene (CPP) Pipe with Smooth Interior

Revise Articles 542.03(b) and (c) of the Standard Specifications to read:

- "(b) Extra strength clay pipe will only be permitted for pipe culverts Type 1, for 10 in., 12 in., 42 in. and 48 in. (250 mm, 300 mm, 1050 mm and 1200 mm), Types 2, up to and including 48 in. (1200 mm), Type 3, up to and including 18 in. (450 mm), Type 4 up to and including 10 in. (250 mm), for all pipe classes.
- (c) Concrete sewer, storm drain, and culvert pipe Class 3 will only be permitted for pipe culverts Type 1, up to and including 10 in (250 mm), Type 2, up to and including 30 in. (750 mm), Type 3, up to and including 15 in. (375 mm); Type 4, up to and including 10 in. (250 mm), for all pipe classes."

Replace the pipe tables in Article 542.03 of the Standard Specifications with the following:

		for the Resp	"Table IA: Classe pective Diameters of	es of Reinforced Co Pipe and Fill Heigh	ncrete Pipe ts over the Top of th	e Pipe	
	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Type 7
Nominal	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:
Diameter in.	3' and less 1' min cover	Greater than 3' not exceeding 10'	Greater than 10' not exceeding 15'	Greater than 15' not exceeding 20'	Greater than 20' not exceeding 25'	Greater than 25' not exceeding 30'	Greater than 30' not exceeding 35'
12	IV	H	111	IV	IV	V	V
15	IV	l II	III	IV	١٧	ĺ	ĺ v
18	IV	- 11	111	IV	IV	ĺ	v
21	III	ll II	111	IV	IV	V	v
24	!!!	- 11	III	IV	IV	v	ľ
30	IV	. II	111	IV	IV	ľ	ľ
36	III	II	111	IV	IV	V	V
42	<b>!</b>	11	111	IV	IV	v	v
48	<u>li</u>	11	111	IV	IV	V	V
54	H	II	111	IV	IV	V	V
60	Н	l II	Ш	IV	١٧	V	ĺ
66		II	111	IV	iV	V	ľ
72	H	ll ll	Ш	IV	V	V	V
78	li	II	111	IV	2020	2370	2730
84	<u> </u>	- 11		iV	2020	2380	2740
90	11	l II	III	1680	2030	2390	2750
96	11	Ш	III	1690	2040	2400	2750
102	lt .	III	111	1700	2050	2410	2760
108	<u></u> !	111	1360	1710	2060	2410	2770

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

# Table IA: Classes of Reinforced Concrete Pipe for the Respective Diameters of Pipe and Fill Heights over the Top of the Pipe (Metric)

130	120	100	08	04	111	l)	2700
130	120	100	08	Ш	l III	11	5220
130	011	100	08	Ш	III	11	2400
130	011	100	08	Ш	II .	, N	2250
130	011	100	٨١	Ш	1)	11	2100
130	011	001	٨١	111	ii l	11	096เ
٨	٨	٨	ΛΙ	III	11	II	1800
٨	۸	۸۱	۸۱	III	11	11	1650
Λ	٨	ΛΙ	ΛΙ	III ,	11	II	1200
^	٨	ΛΙ	ΛΙ	III	II	II	1320
٨	٨	ΛΙ	٨١	111	1	=	1200
٨	٨	ΛΙ	ΛΙ	III.	11	H	1020
ΛΛ	Λ	۱۸	ΛΙ	101		III	006
^	٨	۸۱	ΛΙ	111	11	ΛΙ	097
٨	٨	ΛΙ	ΛΙ	Ш	11	III	009
^	Λ	ΛΙ	Λ1	III	II	m	979
٨	٨	ΛΙ	ΛΙ	III	İl	۸۱	420
٨	٨	ΛΙ	ΛΙ	Ш	11	٨١	375
^	٨	Λ!	ΛΙ	Ш	H	Λ١	300
m č.01 gnibəəxxə	m e gnibəəxə	m č.7 gnibasoxa	m 8 gnibaaxa	m č.4 gnibaaoxa	m & gnibəəxə	min cover	
Greater than 9 m not	Greater than 7.5 m not	Greater than 6 m not	Greater than 4.5 m not	Greater than 3 m not	Greater than 1 m not	m &.0 asəl bas m f	
Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Fill Height:	Nominal Diameter mm
√ <del>aq</del> γT	7уре б	7уре 5	Type 4	Туре 3	Туре 2	Type 1	ĺ

Notes: A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, Type 2 bedding and Class C Walls

### TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2", 3"x1" AND 5"x1" CORRUGATIONS

		Type 1			Type 2		<u> </u>	Type 3			Type 4		1	Type 5		T	Type 6		T .	Type 7	
Nominal Diameter in.*	Fi	ll Height	:		Fill Heigh	t:		Fill Heigh	t:		Fill Heigh	ıt·		Fill Heigh		<b>—</b>	Fill Height		<b></b>	<del></del>	
,∗ Dian		_			. 5		·		•••		iii i icigi			i ili rieigi	и.		riii neigni			Fill Height	:
la i		and less		Gr	eater tha	n 3'	Gre	eater than	า 10'	Gre	eater thai	า 15'	G	reater that	n 20'	Gr	eater than	25'	Gr	eater than	30'
Fo		min. cov	er		exceedin	g 10'	not exceeding 15'			not exceeding 20'			no	t exceedin	ıg 25'		exceeding		not exceeding 35'		
	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"	2 2/3" x 1/2"	3"x1"	5"x1"
12	0.064			0.064			0.064			0.064			0.064			0.064			0.064		
15	0.064			0.064		Ī	0.064			0.064			0.064			0.064	•		(0.079)		
18	(0.079)			0.064			0.064		_	0.064			0.064			(0.079)			(0.079)		
21	(0.079)			0.064			0.064			0.064			(0.079)			(0.079)			(0.079)		
24	(0.079)			0.064	ĺ	ļ	0.064			0.064	]		(0.079)			(0.079)			(0.109)		
30	(0.109E)			0.064	<u> </u>		0.064			(0.079)			(0.079)			(0.109)			0.109		
36	(0.109E)			0.064			(0.079)			(0.079)			(0.109)			0.109			(0.138E)		
42	0.079			0.064	•		(0.079)			(0.079)			(0.109)			(0.109E)			(0.109E)		
48	0.109	(0.109)	0.109	(0.109)	0.079	0.079	(0.109)	0.079	(0.109)	0.109	(0.109)	0.109	(0.138)	(0.109)	0.109	(0.138E)	0.109	0.109	(0.138E)	0.109	(0.138)
54	0.109	(0.109)	0.109	(0.109)	0.079	0.079	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	0.109	(0.138)	(0.138E)	0.138	0.138
60	0.109	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	(0.109)	0.109	(0.138)	0.109	0.109	(0.138E)	(0.138)	(0.138)	0.138E	(0.138E)	(0.138E)
66	(0.138)	0.109	0.109	0.109	0.079	(0.109)	0.109	(0.109)	0.109	0.109	0.109	0.109	(0.138)	0.109	(0.138)	(0.138E)	0.138	0.138	0.138E	(0.138E)	0.138E
72	0.138	0.109	(0.138)	0.138	(0.109)	(0.109)	0.138	(0.109)	0.109	0.138	0.109	0.109	0.138	(0.138)	(0.138)	(0.168E)	(0.138E)	0.138E	(0.168E)	(0.138E)	0.138E
78	0.168	0.109	(0.138)	0.168	(0.109)	0.109	0.168	0.109	0.109	0.168	0.109	(0.138)	0.168	(0.138)	(0.138)	H0.168E	(0.138E)	0.138E	H0.168E	0.138E	(0.168E)
84		(0.138)		0.168	(0.109)	0.109	0.168	0.109	0.109	0.168	0.109	(0.138)	0.168	(0.138)	0.138	H0.168E	(0.138E)	0.138E	H0.168E	(0.168E)	(0.168E)
90		(0.138)	. 4		(0.109)	0.109	İ	0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		0.138E	(0.168E)		(0.168E)	(0.168E)
96		(0.138)	' '		(0.109)	0.109	1	0.109	0.109		(0.138)	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)		(0.168E)	(0.168E)
102		0.109Z			(0.109)	0.109		0.109	(0.138)		(0.138)	(0.138)		(0.138)	0.138		(0.168E)	(0.168E)		H0.138E	H0.168E
108		0.109Z			0.109	0.109		0.109	(0.138)		(0.138)	0.138		0.138	(0.168)		(0.168E)	(0.168E)		H0.138E	H0.168E
114	- 1	0.109Z			0.109	0.109	Ī	0.109	(0.138)		(0.138)	0.138		(0.168)	(0.168)		(0.168E)	0.168E		H0.138E	H0.168E
120		0.109Z	1		0.109	0.109	1	٠ / ا	(0.138)		(0.138)	0.138		(0.168)	(0.168)		H0.138E	H0.168E		H0.168E	H0.168E
126		0.138Z			0.138	0.138		0.138	0.138		0.138	(0.168)		(0.168)	(0.168)		H0.138E	H0.168E		H0.168E	H0.168E
132		0.138Z		l	0.138	0.138	ł	0.138	0.138		(0.168)	(0.168)		0.168	0.168		H0.138E	H0.168E		H0.168E	H0.168E
138		0.138Z	- 1	į	0.138	0.138	ľ	0.138	0.138		(0.168)	(0.168)		(0.168E)	H0.168E		H0.168E	H0.168E		H0.168E	
144 Not		0.168Z	U.168Z		0.168	0.168		0.168	0.168		0.168	0.168		H0.168E	H0.168E		H0.168E	H0.168E		H0.168E	

Notes:

* Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 42" according to Article 1006.01, 1 1/2" x 1/4" corrugations shall be used for diameters less than 12". Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

A thickness preceded by "H" indicates only helical seam fabrication is allowed.

Elongation according to Article 542.04(e)

1"-6" Minimum fill

(Metric) FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm, 75 mm x 25 mm CORRUGATIONS TABLE IB: THICKNESS OF CORRUGATED STEEL PIPE

372.4 H	3.51E		(4.27E)	(4.27E)		(4.27)	13.51		3.51	(13.5)	<u> </u>	(13.5)	77.2	ļ	,,,,,,	111.7		7510101			
∃72.4 H	1	I i		(37S.4)		18.5	(18.5)		(13.E)	(13.5)			Į	ľ	77.2	77.2		(S18.E)	ZYY.S		2700
1.	(∃\S.4)	f	(4.27E)	(4.27E)	1	13.6	(13.5)	1			1	(13.6)	77.2		77.2	(27.2)		ZY7.2	ZYY.S		S220
	(4.27E)		(372.4)	3.51E				ŀ	(13.5)	(13.5)		77.2	77.2		77.2	(77.2)		(13.5)	(13.6)		2400
(4.27E)	1.	∃72.4 H				13.51	(13.5)		(13.5)	(13.6)		77.2	77.2		77.2	(77.2)		(13.5)	(13.5)		2250
(37S.4)	Į.	1 1		f .	H 4.27E		(13.6)	72.4	(13.5)	27.7	72.4	2.77	77.2	72.4	2.77	(77.2)	7S.4	(13.5)	(13.5)	72.A	2100
		372.4 H		I	H 4.27E		(13.5)	7S.4	(13.5)	77.2	72.4	77.2	77.2	7S.4	77.2	(77.2)	7S.A	(3.51)	77.2	7S.4	0961
3.51€	1	(4.27E)	3.51E		(4.27E)		(13.5)	13.51	77.2	77.2	13.5	77.2	(77.2)	13.5	(TT.S)	(77.2)	13.51	(3.51)	77.2	13.51	1800
3.51E	(3,51€)	; I	13.51	13.5	(3.51€)		2.77	(13.5)	77.2	2.77	77.2	277.2	(77.5)	77.2	(77.2)	2.01	2.77	27.2	77.2	(13.5)	0991
	(3.51E)		(13.5)	(13.5)	(3.51E)	77.2	77.2	(13.5)	77.2	(2.77)	77.2	77.2	(77.5)	77.2	(27.7)	2.01	2.77	27.7	77.2	77.2	1600
13.51	13.5	(3.51E)	(13.E)	77.2	(3.51E)	77.2	77.2	(13.5)	77.2	(77.2)	77.2	77.2	(77.2)	77.2	2.01	2.01	(27.7)	77.2	(77.2)	77.2	1320
(13.5)	77.2	(∃ra.£)	77.2	77.2	(3.51E)	77.2	(77.2)	(13.51)	2.77	(2.77)	77.2	(77.2)	2.01	(77.5)	2.01	2.01	(2.77)	2.7.2	(2.77)	77.2	1200
	}	(2.77E)			(3.77E)			(77.2)			(2.01)			(2.01)			£9.1		\LL 0,	2.01	1050
•		(3.51E)			77.2			(77.2)			(10.2)		İ	(10.S)			£9.1			(3.77.2)	006
		77.2			(77.2)			(2.01)			(2.01)			69.1			59.1			(377.S)	
		(2.77)			(10.5)			(2.01)			1.63			£8.f			£9.1				750
		(2.01)			(10.2)			(2.01)			£8.1									(2.01)	009
<del></del>		(2.01)			(10.5)			1.63					_	£9.1			1.63			(10.5)	979
		(10.S)			1.63						£8.1			£8.1			1.63			(10.5)	420
		1.63						69.1			£9.1			€9.1		-	£8.1			£9.1	375
ww	ww	uuu l	iuui		£9.1			€9.1			1.63			£8.1			£8.1			€9.1	300
125 x 25				WW CZ X C/	WW CLY OO	WW CZ X CZ I	uuu CZ X C /	ww.	ww	ww	ww	พพ	ww	ww	ww	ww	ww	ww	พพ	ww	z
111 0:01	Guibeeo	(2.10)													125 x 25	25 x 25	El x 88	125 x 25	75 x 25	Ef x 88	e e
	ster thar seeding			nsın rəm əxceedin			sater thai xceeding			uibeeaxe			gnibeeax			gribeeax			າງ .uim ເຄ	0 0	n ai
"	Greater than 7.5 m Greater than 9			~-5	wyt	edt 1918:	ريدو	ացե	ater than	: <del>9</del> 19	m E i	ater thar	an Đ	m t	ater than	en O	SS	el bas m	ı	mm t	
:10	Fill Height: Fill Height: Fill Height:							31	Fill Heigh		•1	Fill Heigh		.,	usiarriii			6		T a	
	Type 5 Type 6 Type 7						71.110,=						<u>1 ype 2</u>					Nominal Diameter mm *			
										1000	naivi)	L	<u> </u>			0.23,17			r can1		

Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for diameters up to 1050 mm according to Article 1006.01, 38 mm x 6.5 mm corrugations shall be used for diameters less Notes: 372.4 H 372.4 H 4.27E 14,27E H 4,27E 72.A 72.A 12.4 4.27 7S.4 4.27

(75.4)

(75.4)

13.51

(13.51)

(13.5)

(75.4)

(4.27)

(7S.A)

13.51

13.51

372.4 H

372.4 H 372.4 H

372.4 H 4.27E

372.4 H 372.4 H

|H 3.51E| H 4.27E |

H 3.57E H 4.27E

372.4 H 372.4 H

375.4 H 4.27E

H 3.51E H 4.27E

372.4 H 318.6 H

(4.27E)

4.27E

H 4.27E

4.27

(TS.A)

(TS.4)

(TS.4)

(4.27E)

4.27

(4.27)

(4.27)

(TS.A)

A thickness preceded by an "H" indicates only helical seam fabrication is allowed. Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.

13.5

13.51

13.5

(13.5)

77.2

13.5

13.51

13.5

77.2

77.2

13.51

13.51

13,51

77.2

77.2

13.51

13.51

13.51

(13.E)

(13.5)

450 mm Minimum Fill Elongation according to Article 542.04(e)

ZYZ.A

Z12.E

Z18.E

3,51Z

3600

3420

3300

3120

3000

2850

ZYZ.A

3.51Z

3.51Z

315.E

(Z13.E) | Z77.S

(Z12.E) | ZTT.S

# TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 2 2/3"x1/2" AND 3"x1" CORRUGATIONS

	l				I				<del></del>				<del></del>	
ige	Туре	1	Туре	2	Туре	3	Турє	4	Тур	e 5	Тур	e 6	Тур	e 7
iame	Fill He	ight:	Fill He	ight:	Fill He	ight:	Fill He	ight:	Fill He	eight:	Fill H	eight:	Fill He	eight:
Nominal Diameter in.	3' and 1' min.		Greater t		Greater to		Greater ti		Greater i		Greater not exce	than 25' eding 30'	Greater t	
No.	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"	2 2/3"x1/2" 3"x1"		2 2/3"x1/2"	3"x1"	2 2/3"x1/2"	3"x1"
12	(0.075)		0.060		0.060		0.060		0.060		0.060	<del></del>	0.060	
15	(0.075)		0.060		0.060		0.060		0.060		0.060		(0.075)	1
18	(0.075)		0.060		0.060		0.060		0.060	1	(0.075)		H 0.060	
21	H 0.060E		0.060		0.060		0.060		(0.075)		H 0.060		H 0.060E	
24	(0.105E)		0.060		0.060		(0.075)		(0.105)		(0.105)		(0.105E)	
30	H 0.075E	H 0.060	0.075	H 0.060	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	H 0.075E	H 0.060	H 0.075E	H 0.060
36	(0.135E)	H 0.060E	0.075	H 0.060	(0.105)	H 0.060	(0.105)	H 0.060	(0.135)	H 0.060	H 0.075E	H 0.060	H 0.075E	H 0.060E
42	0.105E	(0.075)	0.105	0.060	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105E	0.105	0.105E	(0.105E)
48	0.105E	(0.075)	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)	0.105E	(0.135E)
54	0.105E	(0.105)	0.105	0.060	0.105	0.060	0.105	(0.075)	0.105	(0.105)	0.105E	(0.105E)	(0.135E)	(0.135E)
60	0.135E	(0.105)	0.135	0.060	0.135	(0.075)	0.135	(0.105)	0.135	(0.105)	0.135E	(0.135E)	(0.164E)	(0.135E)
66	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	0.164E	(0.135E)	H 0.164E	(0.135E)
72	0.164E	(0.105)	0.164	0.060	0.164	(0.075)	0.164	(0.105)	0.164	(0.135)	H 0.164E	(0.135E)	H 0.164E	(0.164E)
78		(0.135)		0.075		(0.105)		(0.105)		(0.135)	.,	(0.135E)	110.10-12	(0.164E)
84		(0.135)		0.105		0.105		(0.135)		(0.135)		(0.164E)		(0.164E)
90		(0.135)		0.105		0.105		(0.135)		(0.135)	······································	(0.164E)		(0.164E)
96		(0.135)	-	0.105		0.105		(0.135)		(0.135)		(0.164E)		H 0.135E
102		0.135Z		0.135		0.135		0.135		(0.164)		(0.164E)		H 0.135E
108		0.135Z		0.135		0.135		0.135		(0.164)		(0.164E)		H 0.164E
114		0.164Z		0.164		0.164		0.164		0.164		H 0.164E		H 0.164E
120		0.164Z		0.164		0.164		0.164		0.164		H 0.164E		,, o., io-ic
Notes:														L

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 1'-6"

Z 1"-6" Minimum fill

### TABLE IC: THICKNESS OF CORRUGATED ALUMINUM ALLOY PIPE FOR THE RESPECTIVE DIAMETER OF PIPE AND FILL HEIGHTS OVER THE TOP OF THE PIPE FOR 68 mm x 13 mm AND 75 mm x 25 mm CORRUGATIONS (Metric)

₀	Тур	e 1	Тур	e 2	Тур	e 3	Тур	e 4	Тур	e 5	Тур	e 6	Тур	e 7
met.	Fill H	Fill Height: Fill Height:		eight:	Fill He	eight:	Fill H	eight:	Fill He	eight:	Fill He	eight:	Fill He	
Nominal Diameter mm	1 m and less Greater than 0.3 m min. cover not exceeding			Greater t not exceed		Greater the not excee	nan 4.5 m eding 6 m	Greater t		Greater th		Greater t		
Nom	68 x 13		75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	68 x 13 75 x 25 mm mm		68 x 13 mm	75 x 25 mm	68 x 13 mm	75 x 25 mm	
300	(1.91)		1.52		1.52		1.52		1.52		1.52		1.52	
375	(1.91)		1.52		1.52		1.52		1.52		1.52		(1.91)	
450	(1.91)		1.52		1.52		1.52		1.52		(1.91)		H 1.52	
525	H 1.52E		1.52		1.52		1.52		(1.91)		H 1.52		H 1.52E	
600	(2.67E)		1.52		1.52		(1.91)		(2.67)		(2.67)		(2.67E)	
750	H 1.91E	H 1.52	1.91	H 1.52	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	H 1.91E	H 1.52	_ H 1.91E	H 1.52
900	(3.43E)	H 1.52E	1.91	H 1.52	(2.67)	H 1.52	(2.67)	H 1.52	(3.43)	H 1.52	H 1.91E	H 1.52	H 1.91E	H 1.52E
1050	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67E	2.67	2.67E	(2.67E)
1200	2.67E	(1.91)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	2.67E	(3.43E)
1350	2.67E	(2.67)	2.67	1.52	2.67	1.52	2.67	(1.91)	2.67	(2.67)	2.67E	(2.67E)	(3.43E)	(3.43E)
1500	3.43E	(2.67)	3.43	1.52	3.43	(1.91)	3.43	(2.67)	3.43	(2.67)	3.43E	(3.43E)	(4.17E)	(3.43E)
1650	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	4.17E	(3.43E)	H 4.17E	(3.43E)
1800	4.17E	(2.67)	4.17	1.52	4.17	(1.91)	4.17	(2.67)	4.17	(3.43)	H 4.17E	(3.43E)	H 4.17E	(4.17E)
1950		(3.43)		1.91		(2.67)		(2.67)		(3.43)		(3.43E)		(4.17E)
2100		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		(4.17E)
2250		(3.43)		2.67		2.67		(3.43)		(3.43)		(4.17E)		(4.17E)
2400		(3.43)		2.67	ĺ	2.67		(3.43)		(3.43)		(4.17E)		H 3.43E
2550		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)		H 3.43E
2700		3.43Z		3.43		3.43		3.43		(4.17)		(4.17E)		H 4.17E
2850		4.17Z		4.17		4.17		4.17		4.17		H 4.17E		H 4.17E
3000		4.17Z		4.17		4.17		4.17		4.17		H 4.17E		

#### Notes:

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. A thickness preceded by an "H" indicates only helical seam fabrication is allowed.

E Elongation according to Article 542.04(e), the elongation requirement for Type 1 fill heights may be eliminated for fills above 450 mm.

Z 450 mm Minimum fill

				Т	able IIA F	: THIC	KNESS FO	R CORRU	JGATED JIVALEN	STEEL I T ROUN	PIPE ARO D SIZE C	CHES AN OF PIPE	ND CORRI AND FILL	UGATED HEIGHT	ALUMIN S OVER	IUM ALL	OY PIP P OF P	E ARCH	ES			
	Corru	igated	Corru	ıgated						Type 1					Type 2				•	Type 3		
Equivalent Round Size in.	Ste Alum Pipe 2 2/3*	el & ninum Arch ' x 1/2"	Ste Alum Pipe	el & ninum Arch x 1"	Corru Ste Pipe 5" >	Arch	Min. Cover		Fill Height:				Fill Height: Greater than 3' not exceeding 10'					Gre		exceeding 15'		
in d	Span	Rise	Span	Rise	Span	Rise	Steel &		Steel Alu			inum		Steel		Alumi	num		Steel	Alum	inum	
ш	(in.)*	(in.)	(in.)	(in.)	(in.)	(in.)	Aluminum	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"	2 2/3" x 1/2"	3"x1"	5" x 1"	2 2/3" x 1/2"	3"x1"
15	17	13					1'-6"	0.064			0.060		0.064			0.060		0.064			0.060	
18	21	15					1'-6"	0.064			0.060		0.064			0.060		0.064			0.060	
21	24	18					1'-6"	0.064			(0.075)		0.064			0.060		0.064			0.060	
24	28	20					1'-6"	(0.079)			(0.105)		0.064			0.075		0.064			0.075	
30	35	24					1'-6"	(0.079)			(0.105)		0.064			0.075		(0.079)			(0.105)	
36	42	29					1'-6"	(0.079)			0.105		0.064			0.105		0.064			0.105	
42	49	33					1'-6"	0.109			0.105		(0.109)			0.105		(0.109)			0.105	
48	57	38	53	41	53	41	1'-6"	0.109	(0.109)	(0.109)	0.135	0.060	0.109	0.079	0.079	0.135	0.060	0.109	0.079	(0.109)	0.135	0.060
54	64	43	60	46	60	46	1'-6"	0.109	(0.109)	0.109	0.164	(0.075)	0.109	0.079	0.079	0.164	0.060	0.109	(0.109)	0.109	0.164	(0.075)
60	71	47	66	51	66	51	1'-6"	0.138	(0.109)	0.109	0.164	(0.075)	0.138	0.079	(0.109)	0.164	0.060	0.138	(0.109)	0.109	0.164	(0.075)
66 72	77 83	52 57	73 81	55 59	73	55 59	1'-6" 1'-6"	0.168	(0.109)	0.109		0.075	0.168	0.079	(0.109)		0.075	0.168	(0.109)	0.109		0.075
78	65	57			81			0.168	(0.109)	0.109		0.105	0.168	0.079	(0.109)		0.105	0.168	(0.109)	0.109		0.105
84			87 95	63 67	87 95	63 67	1'-6" 1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105		0.109	0.109		0.105
90			103	71	103	71	1'-6"		0.109	0.109		0.105		(0.109)	0.109		0.105	İ	0.109	0.109		0.105
96			112	75	112	75	1'-6"		0.109	0.109	-	0.135		(0.109)	0.109		0.135		0.109	0.109		0.135
102			117	79	117	75 79	1'-6"		0.109	(0.138)		0.164	ļ	0.109	0.109		0.164		0.109	(0.138)		0.164
108			128	83	128	83	1'-6"		0.109 0.138	(0.138) 0.138		0.164		0.109	0.109		0.164		0.109	(0.138)		0.164
114			137	87	137	87	1'-6"							0.138	0.138				0.138	0.138		<del></del>
120			142	91	142	91	1'-6"		0.138 0.168	0.138 0.168	İ			0.138	0.138				0.138	0.138		
lotes						٠, ا			0.108	0.108				0.168	0.168		L	<u> </u>	0.168	0.168	i	

Notes:

Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 42" according to Article 1006.01.

Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized. The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 3 tons per square foot.

The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 2 tons per square foot.

This minimum bearing capacity will be determined by the Engineer in the field.

# Table IIA: THICKNESS FOR CORRUGATED STEEL PIPE ARCHES AND CORRUGATED ALUMINUM ALLOY PIPE ARCHES FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)

							· · · · · · · · ·										T					
Equivalent Round Size (mm)	Corrugated Steel & Aluminum Pipe Arch 68 x 13 mm		Corrugated Steel & Aluminum Pipe Arch 75 x 25 mm		Corrugated Steel Pipe Arch 125 x 25 mm		Min. Cover	Type 1 Fill Height:					Type 2 Fill Height:					Type 3 Fill Height:				
								1 m and less					Greater than 1 m not exceeding 3 m				Greater than 3 m not exceeding 4.5 m					
								alen (									The same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the same of the sa					
uiv								Span	Rise (mm)			Span (mm)	Rise (mm)	Steel & Aluminum	Steel			Aluminum		Steel		
П	(mm)*			125 x 25	_	75 x 25	68 x 13	75 x 25							125 x 25	68 x 13	75 x 25	68 x 13	75 x 25	125 x 25	<u> </u>	
								mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
375	430	330					0.5 m	1.63			1.52		1.63		ļ	1.52		1.63			1.52	
450	530	380					0.5 m	1.63			1.52		1.63			1.52		1.63			1.52	
525	610	460					0.5 m	1.63			(1.91)		1.63			1.52		1.63			1.52	L
600	710	510					0.5 m	(2.01)			(2.67)		1.63			1.91		1.63			1.91	
750	870	630					0.5 m	(2.01)			(2.67)		1.63			1.91		(2.01)			(2.67)	
900	1060	740					0.5 m	(2.01)			2.67		1.63			2.67		1.63			2.67	
1050	1240	840					0.5 m	2.77			2.67		(2.77)			2.67		(2.77)			2.67	
1200	1440	970	1340	1050	1340	1050	0.5 m	2.77	(2.77)	(2.77)	3.43	1.52	2.77	2.01	2.01	3.43	1.52	2.77	2.01	(2.77)	3.43	1.52
1350	1620	1100	1520	1170	1520	1170	0.5 m	2.77	(2.77)	2.77	4.17	(1.91)	2.77	2.01	2.01	4.17	1.52	2.77	(2.77)	2.77	4.17	(1.91)
1500	1800	1200	1670	1300	1670	1300	0.5 m	3.51	(2.77)	2.77	4.17	(1.91)	3.51	2.01	(2.77)	4.17	1.52	3.51	(2.77)	2.77	4.17	(1.91)
1650	1950	1320	1850	1400	1850	1400	0.5 m	4.27	(2.77)	2.77		1.91	4.27	2.01	(2.77)		1.91	4.27	(2.77)	2.77		1.91
1800	2100	1450	2050	1500	2050	1500	0.5 m	4.27	(2.77)	2.77		2.67	4.27	2.01	(2.77)		2.67	4.27	(2.77)	2.77		2.67
1950			2200	1620	2200	1620	0.5 m		2.77	2.77		2.67		(2.77)	2.77		2.67		2.77	2.77		2.67
2100			2400	1720	2400	1720	0.5 m		2.77	2.77		2.67		(2.77)	2.77	l	2.67		2.77	2.77		2.67
2250			2600	1820	2600	1820	0.5 m		2.77	2.77	_	3.43		(2.77)	2.77		3.43		2.77	2.77		3.43
2400			2840	1920	2840	1920	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17		2.77	(3.51)		4.17
2550			2970	2020	2970	2020	0.5 m		2.77	(3.51)		4.17		2.77	2.77		4.17	]	2.77	(3.51)	]	4.17
2700			3240	2120	3240	2120	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		7.17
2850			3470	2220	3470	2220	0.5 m		3.51	3.51				3.51	3.51				3.51	3.51		
3000			3600	2320	3600	2320	0.5 m		4.27	4.27				4.27	4.27	J	ļ		4.27	4.27	ĺ	l
Notes																	1			1.2.		

^{*} Aluminized Type 2 Steel or Precoated Galvanized Steel shall be required for steel spans up to 1060 mm according to Article 1006.01.
Thicknesses are based on longitudinal riveted seam fabrication, values in "()" can be reduced by one gage thickness if helical seam fabrication is utilized.
The Type 1 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 290 kN per square meter.
The Type 2 and 3 corrugated steel or aluminum pipe arches shall be placed on soil having a minimum bearing capacity of 192 kN per square meter.
This minimum bearing capacity will be determined by the Engineer in the field.

	Table IIE FOR TI	3: CLASSE HE RESPE	S OF REIN	IFORCED ( UIVALENT	CONCRETE ELLI ROUND SIZE O	PTICALL AN	ND REINFO	RCED CON ITS OVER	CRETE AR THE TOP C	CH PIPE OF PIPE	
	Reinf	orced				Тур	oe 1	Тур	e 2	Typ	e 3
Equivalent Round Size (in.)	Con Elliptic	crete cal pipe n.)	Con	orced crete ipe (in.)	Minimum Cover	Fill Height: 3' and less		Greater t	eight: han 3' not ding 10'	Fill H	eight: an 10' not
	Span	Rise	Span	Rise	RCCP HE & A	HE	Arch	HE	Arch	HE	Arch
15	23	14	18	11	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
18	23	14	22	13 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
21	30	19	26	15 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
24	30	19	28 1/2	18	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
27	34	22	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
30	38	24	36 1/4	22 1/2	1' -0"	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
36	45	29	43 3/4	26 5/8	1' -0"	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
42	53	34	51 1/8	31 5/16	1' -0"	HE-I	A-II	HE-III	A-III	HE-IV	A-IV
48	60	38	58 1/2	36	1' -0"	HE-I	A-II	HE-III	A-III	1460	1450
54	68	43	65	40	1' -0"	HE-I	A-II	HE-III	A-III	1460	1460
60	76	48	73	45	1' -0"	HE-I	A-II	HE-III	A-III	1460	1470
66	83	53	88	54	1' -0"	HE-I	A-II	HE-III	A-III	1470	1480
72	91	58	88	54	1' -0"	HE-I	A-II	HE-III	A-III	1470	1480

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

## Table IIB: CLASSES OF REINFORCED CONCRETE ELLIPTICALL AND REINFORCED CONCRETE ARCH PIPE FOR THE RESPECTIVE EQUIVALENT ROUND SIZE OF PIPE AND FILL HEIGHTS OVER THE TOP OF PIPE (Metric)

	l					Тур	pe 1	Тур	e 2	Тур	e 3
Equivalent Round Size (mm)	Cor	oforced ocrete pipe (mm)	Con	orced crete ce (mm)	Minimum Cover	Fill Height: 1 m and less		Fill He Greater tha exceedi	an 1 m not	Fill Height: Greater than 3 m not exceeding 4.5 m	
	Span	Rise	Span	Rise	RCCP HE & A	HE	Arch	HE	Arch	HE	Arch
375	584	356	457	279	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
450	584	356	559	343	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
525	762	483	660	394	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
600	762	483	724	457	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
686	864	559	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
750	965	610	921	572	0.3 m	HE-III	A-III	HE-III	A-III	HE-IV	A-IV
900	1143	737	1111	676	0.3 m	HE-II	A-II	HE-III	A-III	HE-IV	A-IV
1050	1346	864	1299	795	0.3 m	HE-I	A-II	HE-III	A-III	HE-IV	A-IV
1200	1524	965	1486	914	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1350	1727	1092	1651	1016	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1500	1930	1219	1854	1143	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1676	2108	1346	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70	70
1800	2311	1473	2235	1372	0.3 m	HE-I	A-II	HE-III	A-III	70	70

Notes:

A number indicates the D-Load for the diameter and depth of fill and that a special design is required. Design assumptions; Water filled pipe, AASHTO Type 2 installation per AASHTO LRFD Table 12.10.2.1-1

#### TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE Type 1 Type 2 Type 3 Type 4 Fill Height: 3' and less, Fill Height: Greater than 3', Fill Height: Greater than 10', Fill Height: Greater than 15', Nominal with 1' min not exceeding 10' not exceeding 15' not exceeding 20' Diameter (in.) PVC **CPVC** PΕ CPE CPP PVC CPVC CPE PΕ CPP PVC CPP CPVC CPVC PE CPE PVC PΕ CPP 10 X Х Х Х Х NA Х Х NA Х Х Х Х Х NA X Х Х NA 12 Χ Х Χ Χ Х Χ Х Х Х Χ Х Х Χ Х Χ Х NA Х NA 15 Χ Χ NA Х Х Χ Х NA Х Х Х Χ NA NA Х Х Х NA Х 18 Χ Χ Х Х Х Χ Χ Χ Χ Χ Х Χ Х NA Χ Χ Х Х NA 21 Χ Χ NA NA NA Χ Χ NA NA NA Χ Χ NA NA Х Х NΑ NA NA Х 24 Χ Х Χ Х Х Х X Х Х Χ Х NA Х Х NA NA Х NA 30 Х Х Х Х Х Χ Χ Χ Х Х Χ Χ Χ NA Χ Х Χ Х NA 36 Х Х Х Χ Χ Х Х Х Х Χ Χ Χ Х Х NA NA Χ Х NA 42 X NA Χ Х NA Х NA Х NA NA Х NA Χ NA NA Χ NΑ Х NA NA 48 Х Х Χ Х Χ NA Χ NA NA Х NA Χ

NA

NA

Χ

NA

Х

NA

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior

CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior

Polyethylene (PE) pipe with a smooth interior

CPE Corrugated Polyethylene (PE) pipe with a smooth interior CPP Corrugated Polypropylene (CPP) pipe with a smooth interior

Χ This material may be used for the given pipe diameter and fill height

NA Not Available

#### TABLE IIIA: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (Metric)

			Type 1					Type 2					Type 3			Type 4				
Nominal Diameter		Fill Heigh with 0.		and less		Fi	Fill Height: Greater than 1 m, not exceeding 3 m					ill Height: not ex	Greate ceeding		m,	Fill Height: Greater than 4.5 m, not exceeding 6 m				
(mm)	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPE	CPP	PVC	CPVC	PE	CPP	
250	Х	Х	Х	Х	NA	X	X	X	Х	NA	X	Х	Х	Х	NA	×	X	X	NA	
300	Х	Х	X	X	Х	Х	X	Х	X	Х	Х	x	Х	NA	Х	Х	X	X	NA	
375	Х	Х	NA	X	X	Х	X	NA	X	Х	Х	Х	NA	NA	Х	Х	X	NA	X	
450	X	X	X	X	Х	Х	X	Х	X	Х	Х	X	Х	NA	Х	Х	X	Х	NA	
525	X	X	NA	NA	NA	Х	Х	NA	NA	NA	Х	X	NA	NA	NA	Х	X	NA	NA	
600	Х	Х	Χ	Х	Х	Х	X	Х	X	X	Х	Х	NA	NA	NA	X	Х	X	NA	
750	X	Х	Χ	X	X	Х	X	Х	X	Х	Х	X	Х	NA	Х	Х	×	Х	NA	
900	Х	Х	Χ	Х	X	Х	Х	Х	X	X	Х	X	Х	NA	NA	Х	X	Х	NA	
1000	Х	NA	Х	X	NA	Х	NA	Х	NA	NA	X	NA	Х	NA	NA	Х	NA	X	NA	
1200	X	NA	X	X	X	Х	NA	Х	NA	NA	Х	NA	X	NA	NA	×	NA	X	NA	

#### Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior

Polyethylene (PE) pipe with a smooth interior

CPE Corrugated Polyethylene (PE) pipe with a smooth interior
CPP Corrugated Polypropylene (CPP) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height

NA Not Available

	TABLE IIIB: PLASTIC PIPE PERMITTED									
			FOR A GIVEN PIPE D	IAMETER AND	FILL HEIGHT	OVER THE TOP OF	THE PIPE			
		Туре	5	- CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR	Type 6			Type 7		
Nominal Diameter	Fill Height:	Greater than	20', not exceeding 25'	Fill Height: G	Greater than 25	', not exceeding 30'	Fill Height: Greater than 30', not exceeding 35			
(in.)	PVC	CPVC		PVC	CPVC		CPVC			
10 12	X	X		X X	X		X			
15 18	X	X		X	X		X X X			
21	X	X		X	X		X			
30 36	X	) ŝ		X	) x		X			
42	X	NA NA		X	NA NA		NA NA			
48	X	NA NA		X	NA NA		NA			

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
This material may be used for the given pipe diameter and fill height
NA Not Available

#### TABLE IIIB: PLASTIC PIPE PERMITTED FOR A GIVEN PIPE DIAMETER AND FILL HEIGHT OVER THE TOP OF THE PIPE (metric)

		Type 5	5		Туре 6		Туре 7				
Nominal Diameter	Fill Height: G	reater than 6 m	n, not exceeding 7.5 m	Fill Height: G	reater than 7.5	m, not exceeding 9 m	Fill Height: Gr	reater than 9 m, not exceeding 10.5 m			
(mm)	PVC	PVC CPVC		PVC	CPVC		CPVC				
250	Х	X		X	X		X				
300	X	×		X	x		â	ĺ			
375	Х	X		X	X	<del></del>	X				
450	X	X		X	X		X				
525	X	X	l	X	/ x		X				
600	X	X		Х	Х		X				
750	X	X		X	x		X				
900	X	X		_ X	x		X				
1000	Х	NA		X	NA		NA				
1200	X	NA		X	NA		NA				

Notes:

PVC Polyvinyl Chloride (PVC) pipe with a smooth interior
CPVC Corrugated Polyvinyl Chloride (CPVC) pipe with a smooth interior
PE Polyethylene (PE) pipe with a smooth interior
X This material may be used for the given pipe diameter and fill height
NA Not Available"

Revise the first sentence of the first paragraph of Article 542.04(c) of the Standard Specifications to read:

"Compacted aggregate, at least 4 in. (100 mm) in depth below the pipe culvert, shall be placed the entire width of the trench and for the length of the pipe culvert, except compacted impervious material shall be used for the outer 3 ft (1 m) at each end of the pipe culvert."

Revise the seventh paragraph of Article 542.04(d) of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Replace the third sentence of the first paragraph of Article 542.04(h) of the Standard Specifications with the following:

"The total cover required for various construction loadings shall be the responsibility of the Contractor."

Delete "Table IV : Wheel Loads and Total Cover" in Article 542.04(h) of the Standard Specifications.

Revise the first and second paragraphs of Article 542.04(i) of the Standard Specifications to read:

"(i) Deflection Testing for Pipe Culverts. All PE, PVC and CPP pipe culverts shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP pipe culverts with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP pipe culverts with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise Articles 542.04(i)(1) and (2) of the Standard Specifications to read:

- "(1) For all PVC pipe: as defined using ASTM D 3034 methodology.
- (2) For all PE and CPP pipe: the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the second sentence of the second paragraph of Article 542.07 of the Standard Specifications to read:

"When a prefabricated end section is used, it shall be of the same material as the pipe culvert, except for polyethylene (PE), polyvinylchloride (PVC), and polypropylene (PP) pipes which shall have metal end sections."

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
- (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

- "1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.
  - (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
  - (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be

Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

#### LRFD STORM SEWER BURIAL TABLES (BDE)

Effective: November 1, 2013

Revised: April 1, 2015

Revise Article 550.02 of the Standard Specifications to read as follows:

"Item	Article Section
(a) Clay Sewer Pipe	1040.02
(b) Extra Strength Clay Pipe	1040.02
(c) Concrete Sewer, Storm Drain, and Culvert Pipe	1042
(d) Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe	1042
(e) Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Not	e 1) 1042
(f) Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Note 1)	
(g) Polyvinyl Chloride (PVC) Pipe	1040.03
(h) Corrugated Polyvinyl Chloride (PVC) Pipe with a Smooth Interior	1040.03
(i) Corrugated Polypropylene (CPP) Pipe with Smooth Interior	1040.08
(j) Rubber Gaskets and Preformed Flexible Joint Sealants for Concrete Pipe	1056
(k) Mastic Joint Sealer for Pipe (l) External Sealing Band (m) Fine Aggregate (Note 2)	1055
(I) External Sealing Band	1057
(m) Fine Aggregate (Note 2)	1003.04
(n) Coarse Aggregate (Note 3)	1004.05
(o) Reinforcement Bars and Welded Wire Fabric	1006.10
(p) Handling Hole Plugs	1042.16
(q) Polyethylene (PE) Pipe with a Smooth Interior	1040.04
(r) Corrugated Polyethylene (PE) Pipe with a Smooth Interior	1040.04

- Note 1. The class of elliptical and arch pipe used for various storm sewer sizes and heights of fill shall conform to the requirements for circular pipe.
- Note 2. The fine aggregate shall be moist.
- Note 3. The coarse aggregate shall be wet."

Revise the table for permitted materials in Article 550.03 of the Standard Specifications as follows:

"Class	Materials
Α	Rigid Pipes:
	Clay Sewer Pipe
	Extra Strength Clay Pipe
	Concrete Sewer, Storm Drain, and Culvert Pipe
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
В	Rigid Pipes:
	Clay Sewer Pipe
	Extra Strength Clay Pipe
	Concrete Sewer, Storm Drain, and Culvert Pipe
	Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
	Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
	Flexible Pipes:
	Polyvinyl Chloride (PVC) Pipe
	Corrugated Polyvinyl Chloride Pipe (PVC) with a Smooth Interior
	Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polyethylene (PE) Pipe with a Smooth Interior
	Corrugated Polypropylene (CPP) Pipe with a Smooth Interior"

Replace the storm sewers tables in Article 550.03 of the Standard Specifications with the following:

#### STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 1 Type 2 Nominal Fill Height: 3' and less Fill Height: Greater than 3' Diameter With 1' minimum cover not exceeding 10' in. RCCP **CSP ESCP** PVC CPVC PΕ CPE CPP **RCCP CSP ESCP PVC CPVC** PΕ CPE CPP 10 NA 3 Х Х Χ Х X NA NA *X Х Х Х Х NΑ 12 1V NA Х Х Х Χ Х Х -11 *X 1 Χ Х Х Х Х 15 IV NA NA Х Х NA Х Х *X 1 Х NA Х Х 18 IV NA NA X Х X Х X П 2 X X Х X X Х 21 Ш NA NA Х Х NA NA NA ш 2 Х Х Х NA NA NA 24 Ш NA Х NA Х Х Х 2 Х Х Х Х Х Х 27 Ш NA NA NA NA NΑ NA NA 11 3 Х NA NA NA NA NA 30 IV NA NA Х Х Х Х Х 11 3 Х Х Х Х Х Х 33 111 NA NA NA NA NA NA NA NA Х NA NA NA NA NA 36 111 NA NA Х X Χ Х Х П NA X Х X X Х X 42 Ш NA Χ Х NA Х Х NA 11 NA Χ Х NA Х NA NA 48 NA Х Х NA Х Х Х NA Н Х Х Х NA NA NA 54 н NA NA NA NA NA NA NA П NA ΝĀ NA NA NA NA NA 60 Ш NA NA NA NA NA NA Х Ш NA NA NA NA NA NA Х 66 NA NA NA NA NA NA NA NA NΑ NA NA NA NA NA 72 П NA NA NA NA NA NA NA П NA NA NA NA NA NA NA 78 11 NA NA NA NA NA NA NA П NA NA NA NA NA NA NA 84 П NA NA NA NΑ NA NA NA 11 NA NA NA NA NA NA NA 90 П NA NA NA NΑ NA NA NA 11 NA NA NA NA NA NA NA 96 NA 11 NA NA NA NA NA NA Ш NA NA NA NA NA NA NA 102 П NA NA NA NA NA NA NA Ш NA NA NA NA NA NA NA 108 NA NA NA NA NA NA NA NA NA NA NA NA NA

Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe PVC Polyvinyl Chloride Pipe

CPVC

Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PΕ Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior CPP Corrugated Polypropylene pipe with a Smooth Interior

Х This material may be used for the given pipe diameter and fill height.

This material is Not Acceptable for the given pipe diameter and fill height. NA

May also use Standard Strength Clay Pipe

			FO	K R A GIVE	IND OF M EN PIPE D	ATERIAL	STORM S PERMI RS AND	TTED AN	ID STRÉN	GTH REC	UIRED OP OF TH	IE PIPE			- P SINS	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
				Туре	<del>1</del>				Type 2							
Nominal Diameter in.		Fill Height: 1 m and less With 300 mm minimum cover							Fill Height: Greater than 1 m not exceeding 3 m							
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP
250	NA	3	Х	X	X	X	Х	NA	NA	1	*X	X	X	X	X	NA
300	IV	NA	Х	Х	X	X	Х	X	Ш	1	*X	X	X	x	Ιŝ	'x'
375	IV	NA	NA	X	X	_NA	X	X		1	*X	Х	Х	NA	Ϊ́х	l $\hat{x}$
450	IV	NA	NA	Х	X	X	X	X	. 11	2	X	Х	Х	X	X	X
525	111	NA	NA	Х	X	NA	NA	NA	Ш	2	×	Х	X	NA	NA	NA
600	111	NA_	NA	X	X	X	X	X	- 11	2	×	Х	X	X	l x	X
675	111	NA	NA	NA	NA "	NA	NA	NA	11	3	Х	NA	NA	NA	NA	NA
750	IV	NA	NA NA	X	X	X	X	Х	- 11	3	X	Х	X	Х	Х	Х
825		NA	NA_	NA	NA	NA	NA_	NA	Н	NA	X	NA	NA	NA	NA	NA
900	III	NA	NA	X	Х	X	X	X	- 11	NA	X	Х	Х	Х	Х	X
1050		NA	X	X	NA	X	X	NA		NA	X	Х	NA	Х	NA	NA
1200	11	NA	X	X	NA	X	X	X		NA	X	X	NA	X	NA	NA
1350	!!	NA	NA	NA	NA	NA	NA	NA	11	NA	NA	NA	NA	NA	NA	NA
1500	!!	NA	NA	NA	NA	NA	NA	X	11	NA	NA	NA	NA	NA	NA	X
1650	ll ll	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA NA	NA	NA
1800	[ !!	NA	NA	NA	NA	NA	NA	NA	- 11	NA	NA	NA	NA	NA	NA	NA
1950	!!	NA	NA	NA	NA	NA	NA	NA		NA	NA	NA	NA	NA	NA	NA
2100	11	NA	NA	NA	. NA	NA	NA	NA	II	NA	NA	NA	NA	NA_	NA	NA
2250	!!	NA	NA	NA	NA NA	NA	NA	NA	!!	NA	NA	NA	NA	NA	NA	NA
2400	11	NA	NA	NA ,	NA	NA	NA	NA	III	NA	NA	NA	NA	NA	NA	NA
2550 2700		NA NA	NA NA	NA NA	NA NA	NA	NA	NA NA	III	NA	NA	NA	NA	NA	NA	NA
			NA Ctornol	NA	NA	NA	NA	NA	111	NA	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

Concrete Sewer, Storm drain, and Culvert Pipe CSP

PVC Polyvinyl Chloride Pipe CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe
PE Polyethylene Pipe with a Smooth Interior
CPE Corrugated Polyethylene Pipe with a Smooth Interior Corrugated Polypropylene pipe with a Smooth Interior This material may be used for the given pipe diameter and fill height. CPP

Х NA This material is Not Acceptable for the given pipe diameter and fill height.

May also use Standard Strength Clay Pipe

#### STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE Type 3 Type 4 Nominal Fill Height: Greater than 10' Fill Height: Greater than 15' Diameter not exceeding 15' not exceeding 20' in. RCCP **CSP ESCP PVC CPVC** PΕ CPE CPP **RCCP CSP ESCP PVC CPVC** PΕ CPP 10 NA 2 Х Х Χ Х Х NA NA Χ Х X Χ NA 12 Ш 2 Х Х Х Х NA Х IV NA NA Χ Χ Χ NA 15 3 Х Ш Х Х NA NA Χ IV NA NA Χ Х NA Х 18 Ш NA Χ Χ Х NA X IV NΑ Х NA Х Χ Х NA 21 Ш NA NA Х Χ NA NA NA IV NA NA Χ Χ NA NA 24 111 NA NA Χ Х Χ NA NA IV NA NA Х Х Χ NA 27 Ш NA NA NA NA NA NA NA IV NA NA NA NA NA NA 30 111 NA NA Х Х Х NA Х IV NA NA Χ Χ Х NA 33 Ш NA NA NA NA NA NA NA IV NA NA NA NA NA NA 36 Ш NA NA Х ĪΫ Χ Χ NA NA NA NA X X X NA 42 111 NA NA Χ NA Χ NA NA IV NA NΑ Χ NA Х NA 48 Ш Х NA NA NA Х NA NA IV NA NA Х NA Х NA 54 III NA NA NA NA NA NA NA IV NA NA NA NA NA NA 60 111 NA NA NA NA NA NA NA IV NA NΑ NA NA NA NA 66 111 NA NA NA NA NA NA NA IV NA NA NA NA NA NA 72 111 NA NA NA NA NA NA I۷ NΑ NA NA NA NA NA NA 78 111 NA NA NA NA NA NA NA IV NA NA NA NA NA NA 84 NA NA NA NA NA NA NA IV NA NA NA NA NA NA 90 111 NA NA NA NA NA NA NA 1680 NA NA NA NA NA NΑ 96 111 NΑ NA NA NA NA NA NA 1690 NA NA NA NA NA NA 102 111 NA NA NA NA NA NA 1700 NA NA NA NA NA NA NA 1360 108 NA NA NA NA NA NA 1710 NA NA NA NA NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior CPP Corrugated Polypropylene pipe with a Smooth linterior

X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.

* May also use Standard Strength Clay Pipe

Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce a

0.01 in crack.

## STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

				Туре	3							Type 4			
Nominal Diameter in.	Fill Height: Greater than 3 m  not exceeding 4.5 m								ill Height: Greater than 4.5 m not exceeding 6 m						
	RCCP	CSP	ESCP	PVC	CPVC	PE	CPE	CPP	RCCP	CSP	ESCP	PVC	CPVC	PE	CPP
250	NA	2	Х	Х	Х	Х	Х	NA	NA	3	Х	X	Х	X	NA
300	111	2	X	X	X	Х	NA	Х	IV	NA	NA	X	X	x	NA NA
375	111	3	X	X	X	NA	NA	Х	١٧	NA	NA	Х	Х	NA	l x
450	HI	NA	X	X	X	Х	NA	Х	IV	NA	NA	Х	Х	X	NA
525	101	NA	NA	X	X	NA	NA	NA	IV	NA	NA	Х	X	NA	NA
600	111	NA	NA	X	X	Х	NA	NA	IV	NA	NA	Х	Х	X	NA
675	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
750	III	NA	NA	Х	X	Х	NA	Х	IV	NA	NA	Х	X	X	NA
825	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
900	111	NA	NA	X	Х	Х	NA	NA	IV	NA	NA	Х	Х	X	NA
1050	III	NA	NA	Х	NA	Х	NA	NA	IV	NA	NA	Х	NA	х	NA
1200	HI	NA	NA	Х	NA	X	NA	NA	IV	NA	NA	Х	NA	X	NA
1350	III	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1500	III	NA	NA .	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1650	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1800	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA
1950	111	NA	NA	NA	NA .	NA	NA	NA	IV .	NA	NA	NA	NA	NA	NA NA
2100	111	NA	NA	NA	NA	NA	NA	NA	IV	NA	NA	NA	NA	NA	NA.
2250	111	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA.	NA	NA
2400	III	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA.
2550	111	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA .	NA NA
2700	70	NA	NA	NA	NA	NA	NA	NA	80	NA	NA	NA	NA	NA	NA

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

CSP Concrete Sewer, Storm drain, and Culvert Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

PE Polyethylene Pipe with a Smooth Interior

CPE Corrugated Polyethylene Pipe with a Smooth Interior CPP Corrugated Polypropylene pipe with a Smooth Interior

X This material may be used for the given pipe diameter and fill height.
NA This material is Not Acceptable for the given pipe diameter and fill height.

* May also use Standard Strength Clay Pipe

Note RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to produce

a 25.4 micro-meter crack.

#### STORM SEWERS KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

		Type 5			Type 6		Ту	pe 7	
Nominal Diameter in.		: Greater exceeding			nt: Greate exceeding		Fill Height: Greater than 30' not exceeding 35'		
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC	
10	NA	Х	Х	NA	Х	X	NA	X	
12	IV	x	X	V	Ιx	l x	l v	X	
15	IV	_ X	Х	V	X	X	V	x	
18	ΙV	X	X	V	X	Х	V	Х	
21	IV	Х	X	V	X	l x	ĺ	x	
24	IV.	Х	Х	V	X	ΙX	ĺ v	â	
27	IV	NA	NA	V	NA	NA	v	NA	
30	IV	Х	X	V	X	X	ľ v	X X	
33	I IV	NA	NA	V	NA	NA	v	NA	
36	IV	Х	Х	V	X	X	V	X	
42	l IV	X	NA	V	l x	NA	v	NA	
48	l IV	X	NA	V	l x	NA	V	NA	
54	IV	NA	NA	V	NA	NA	V	NA	
60	l tv	NA	NA	V	NA	NA	v	NA	
66	l IV	NA	NA	V	NA NA	NA	V	NA	
72	V	NA	NA	V	NA	NA	V	NA	
78	2020	NA	NA	2370	NΑ	NA	2730	NA	
84	2020	NA	NA	2380	NA	NA	2740	NA	
90	2030	NA	NA	2390	NA	NA	2750	NA	
96	2040	NA	NA	2400	NA	NA	2750	NA	
102	2050	NA	NA	2410	NA	NA	2760	NA	
108	2060	NA	NA .	2410	NA	NA	2770	NA	

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

PVC Polyvinyl Chloride Pipe

CPVC Corrugated Polyvinyl Chloride Pipe

ESCP Extra Strength Clay Pipe

NA

This material may be used for the given pipe diameter and fill height.

This material is Not Acceptable for the given pipe diameter and fill height.

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the D-load to produce

a 0.01 in crack.

#### STORM SEWERS (metric) KIND OF MATERIAL PERMITTED AND STRENGTH REQUIRED FOR A GIVEN PIPE DIAMETERS AND FILL HEIGHTS OVER THE TOP OF THE PIPE

		Type 5			Type 6		Тур	e 7	
Nominal Diameter in.		t: Greater exceeding			nt: Greater exceeding		Fill Height: Greater than 30' not exceeding 35'		
	RCCP	PVC	CPVC	RCCP	PVC	CPVC	RCCP	CPVC	
250	NA	Х	Х	NA	Х	Х	NA	×	
300	IV.	X	X	V	×	X	l v	X	
375	IV IV	X	X	V	X	l x	l v	X	
450	IV	X	x	V	X	X	V	Х	
525	IV	×	×	V	X	X	l v	X	
600	IV	X	X	V	x	l x	l v	l x	
675	IV	NA	NA	V	NA	NA	V	NA	
750	IV.	X	Х	V	x	X	V	X	
825	IV	NA	NA	V	NA	NA	V	NA NA	
900	IV	X	Χ	V	X	X	V	X	
1050	IV	X	NA	V	X	NA	V	NA	
1200	IV	X	NA	V	×	NA	V	NA	
1350	IV	NA	NA	V	NA	NA	V	NA	
1500	IV	NA	NA	V	NA	NA	l v	NA	
1650	IV	NA	NA	V	NA	NA	V	NA	
1800	V	NA	NA	٧	NA	NA	V	NA	
1950	100	NA	NA	110	NA	NA NA	130	NA	
2100	100	NA	NA	110	NA	NA	130	NA	
2250	100	NA	NA	110	NA	NA	130	NA	
2400	100	NA	NA	120	NA	NA	130	NA NA	
2550	100	NA	NA	120	NA	NA	130	NA	
2700	100	NA	NA	120	NA	NA	130	NA	

RCCP Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe

PVC Polyvinyl Chloride Pipe
CPVC Corrugated Polyvinyl Chloride Pipe
ESCP Extra Strength Clay Pipe

This material may be used for the given pipe diameter and fill height.

This material is Not Acceptable for the given pipe diameter and fill height. Х NA

RCCP with a number instead of a Roman numeral shall be furnished according to AASHTO M170 Section 6. This number represents the metric D-load to

produce a 25.4 micro-meter crack.

Revise the sixth paragraph of Article 550.06 of the Standard Specifications to read:

"PVC, PE and CPP pipes shall be joined according to the manufacturer's specifications."

Revise the first and second paragraphs of Article 550.08 of the Standard Specifications to read:

"550.08 Deflection Testing for Storm Sewers. All PVC, PE, and CPP storm sewers shall be tested for deflection not less than 30 days after the pipe is installed and the backfill compacted. The testing shall be performed in the presence of the Engineer.

For PVC, PE, and CPP storm sewers with diameters 24 in. (600 mm) or smaller, a mandrel drag shall be used for deflection testing. For PVC, PE, and CPP storm sewers with diameters over 24 in. (600 mm), deflection measurements other than by a mandrel shall be used."

Revise the fifth paragraph of Article 550.08 to read as follows.

"The outside diameter of the mandrel shall be 95 percent of the base inside diameter. For all PVC pipe the base inside diameter shall be defined using ASTM D 3034 methodology. For all PE and CPP pipe, the base inside diameter shall be defined as the average inside diameter based on the minimum and maximum tolerances specified in the corresponding ASTM or AASHTO material specifications."

Revise the first paragraph of Article 1040.03 of the Standard Specifications to read:

"1040.03 Polyvinyl Chloride (PVC) Pipe. Acceptance testing of PVC pipe and fittings shall be accomplished during the same construction season in which they are installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements."

Delete Articles 1040.03(e) and (f) of the Standard Specifications.

Revise Articles 1040.04(c) and (d) of the Standard Specifications to read:

- "(c) PE Profile Wall Pipe for Insertion Lining. The pipe shall be according to ASTM F 894. When used for insertion lining of pipe culverts, the pipe liner shall have a minimum pipe stiffness of 46 psi (317 kPa) at five percent deflection for nominal inside diameters of 42 in. (1050 mm) or less. For nominal inside diameters of greater than 42 in. (1050 mm), the pipe liner shall have a minimum pipe stiffness of 32.5 psi (225 kPa) at five percent deflection. All sizes shall have wall construction that presents essentially smooth internal and external surfaces.
- (d) PE Pipe with a Smooth Interior. The pipe shall be according to ASTM F 714 (DR 32.5) with a minimum cell classification of PE 335434 as defined in ASTM D 3350. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written

certification that the material meets those properties and the resin used to manufacture the pipe meets or exceeds the minimum cell classification requirements."

Add the following to Section 1040 of the Standard Specifications:

"1040.08 Polypropylene (PP) Pipe. Storage and handling shall be according to the manufacturer's recommendations, except in no case shall the pipe be exposed to direct sunlight for more than six months. Acceptance testing of the pipe shall be accomplished during the same construction season in which it is installed. The section properties shall be according to the manufacturer pre-submitted geometric properties on file with the Department. The manufacturer shall submit written certification that the material meets those properties. The pipe shall meet the following additional requirements.

- (a) Corrugated PP Pipe with a Smooth Interior. The pipe shall be according to AAHSTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type S or D.
- (b) Perforated Corrugated PP Pipe with A Smooth Interior. The pipe shall be according to AASHTO M 330 (nominal size 12 to 60 in. (300 to 1500 mm)). The pipe shall be Type SP. In addition, the top centerline of the pipe shall be marked so that it is readily visible from the top of the trench before backfilling, and the upper ends of the slot perforations shall be a minimum of ten degrees below the horizontal."

#### PAVEMENT STRIPING - SYMBOLS (BDE)

Effective: January 1, 2015

Revise the Symbol Table of Article 780.14 of the Supplemental Specifications to read:

#### "SYMBOLS

r		
Symbol	Large Size	Small Size
	sq ft (sq m)	sq ft (sq m)
Through Arrow	11.5 (1.07)	6.5 (0.60)
Left or Right Arrow	15.6 (1.47)	8.8 (0.82)
2 Arrow Combination Left (or Right) and Through	26.0 (2.42)	14.7 (1.37)
3 Arrow Combination Left, Right, and Through	38.4 (3.56)	20.9 (1.94)
Lane Drop Arrow	41.5 (3.86)	
Wrong Way Arrow	24.3 (2.26)	
Railroad "R" 6 ft (1.8 m)	3.6 (0.33)	
Railroad "X" 20 ft (6.1 m)	54.0 (5.02)	
International Symbol of Accessibility	3.1 (0.29)	
Bike Symbol	4.7 (0.44)	
Shared Lane Symbol	8.0 (0.74)	"

#### PRECAST CONCRETE HANDHOLE (BDE)

Effective: August 1, 2014

Revise the third paragraph of Article 814.03 of the Standard Specifications to read:

"Handholes shall be constructed as shown on the plans and shall be cast-in-place, composite concrete, or precast units. Heavy duty handholes shall be either cast-in-place or precast units."

Add the following to Article 814.03 of the Standard Specifications:

"(c) Precast Concrete. Precast concrete handholes shall be fabricated according to Article 1042.17. Where a handhole is contiguous to a sidewalk, preformed joint filler of 1/2 inch (13 mm) thickness shall be placed between the handhole and the sidewalk."

Add the following to Section1042 of the Standard Specifications:

"1042.17 Precast Concrete Handholes. Precast concrete handholes shall be according to Articles 1042.03(a)(c)(d)(e)."

#### RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES (BDE)

Effective: November 1, 2012

Revise: April 1, 2014

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 produced by cold milling or crushing an existing hot-mix asphalt (HMA) pavement. 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 93 percent passing the #4 (4.75 mm) sieve based on a dry shake gradation. RAS shall be uniform in gradation and asphalt binder content and 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. No additional RAP shall be added to the pile after the pile has been sealed. Stockpiles shall be sufficiently separated to prevent intermingling at the base. Stockpiles shall be identified by signs indicating the type as listed below (i.e. "Homogeneous Surface").

Prior to milling, the Contractor shall request the District provide documentation on the quality of the RAP to clarify the appropriate stockpile.

(1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, HMA (High and Low ESAL) 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 fractionated prior to testing by screening into a minimum of two size 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 shall pass the sieve size specified below for the mix into which the FRAP will be incorporated.

Mixture FRAP will be used in:	Sieve Size that 100% of FRAP Shall Pass
IL-25.0	2 in. (50 mm)
IL-19.0	1 1/2 in. (40 mm)
IL-12.5	1 in. (25 mm)
IL-9.5	3/4 in. (20 mm)
IL-4.75	1/2 in. (13 mm)

- (2) Homogeneous. Homogeneous RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) mixtures and represent: 1) the same aggregate quality, but shall be at least C quality; 2) the same type of crushed aggregate (either crushed natural aggregate, ACBF slag, or steel slag); 3) similar gradation; and 4) similar asphalt binder content. If approved by the Engineer, combined single pass surface/binder millings may be considered "homogenous" with a quality rating dictated by the lowest coarse aggregate quality present in the mixture.
- (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, HMA (High and Low ESAL) 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 prior to testing by crushing to where all RAP shall pass the 5/8 in. (16 mm) or smaller screen. Conglomerate RAP stockpiles shall not contain steel slag.
- (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from Class I, HMA (High or Low ESAL), or "All Other" (as defined by Article 1030.04(a)(3)) mixtures. 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.
- (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

RAP/FRAP containing contaminants, such as earth, brick, sand, concrete, sheet asphalt, bituminous surface treatment (i.e. chip seal), pavement fabric, joint sealants, 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 not be intermingled. Each stockpile shall be signed indicating what type of RAS is present.

Unless otherwise specified by the Engineer, mechanically blending manufactured sand (FM 20 or FM 22) up to an equal weight of RAS with the processed RAS will be permitted to improve workability. The sand shall be "B Quality" or better from an approved Aggregate Gradation Control System source. The sand shall be 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.** RAP/FRAP and RAS testing shall be according to the following.

- (a) RAP/FRAP Testing. When used in HMA, the RAP/FRAP shall be sampled and tested either during or after stockpiling.
  - (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) 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 minimum frequency required above and detail the procedure used to obtain representative samples throughout the pile for testing.

Each sample shall be split to obtain two equal 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 or RAS blended with manufactured sand shall be sampled and tested during stockpiling according to Illinois Department of Transportation Policy Memorandum, "Reclaimed Asphalt Shingle (RAS) Source".

Samples shall be collected during stockpiling 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 250 tons (225 metric tons) thereafter. A minimum of five samples are required for stockpiles less than 1000 tons (900 metric tons). Once a ≤ 1000 ton (900 metric ton), five-sample/test stockpile has been established it shall be sealed. Additional incoming RAS or RAS blended with manufactured sand shall be stockpiled 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.

Before testing, each sample shall be split to obtain two test samples. One of the two test samples from the final split shall be labeled and stored for Department use. The Contractor shall perform a washed extraction and test for unacceptable materials on 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.

If the sampling and testing was performed at the shingle processing facility in accordance with the QC Plan, the Contractor shall obtain and make available all of the test results from start of the initial stockpile.

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

(a) Evaluation of RAP/FRAP Test Results. All of the extraction results shall be compiled and averaged for asphalt binder content and gradation and, when applicable  $G_{mm}$ . Individual extraction test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	FRAP/Homogeneous /Conglomerate	Conglomerate "D"  Quality
1 in. (25 mm)		± 5 %
1/2 in. (12.5 mm)	± 8 %	± 15 %
No. 4 (4.75 mm)	± 6 %	± 13 %
No. 8 (2.36 mm)	± 5 %	
No. 16 (1.18 mm)		± 15 %
No. 30 (600 µm)	± 5 %	
No. 200 (75 μm)	± 2.0 %	± 4.0 %
Asphalt Binder	± 0.4 % ^{1/}	± 0.5 %
G _{mm}	± 0.03	

^{1/} The tolerance for FRAP shall be  $\pm$  0.3 %.

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, the RAP/FRAP shall not be used in HMA unless the

RAP/FRAP representing the failing tests is removed from the stockpile. All test data and acceptance ranges shall be sent to the District for evaluation.

With the approval of the Engineer, the ignition oven may be substituted for extractions according to the Illinois Test Procedure, "Calibration of the Ignition Oven for the Purpose of Characterizing Reclaimed Asphalt Pavement (RAP)".

(b) Evaluation of RAS and RAS Blended with Manufactured Sand 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. Individual test results, when compared to the averages, will be accepted if within the tolerances listed below.

Parameter	RAS
No. 8 (2.36 mm)	± 5 %
No. 16 (1.18 mm)	± 5 %
No. 30 (600 μm)	± 4 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder Content	± 1.5 %

If more than 20 percent of the individual sieves and/or asphalt binder content tests are out of the above tolerances, or if the percent unacceptable material exceeds 0.5 percent by weight of material retained on the # 4 (4.75 mm) sieve, the RAS or RAS blend shall not be used in Department projects. All test data and acceptance ranges shall be sent to the District for evaluation.

#### 1031.05 Quality Designation of Aggregate in RAP/FRAP.

- (a) RAP. The aggregate quality of the RAP for homogenous, 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. Coarse and fine FRAP 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 prequalified by the Department for the specified testing. The consultant 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 BMPR Aggregate Lab for MicroDeval Testing, according to Illinois Modified AASHTO T 327. A maximum loss of 15.0 percent will be applied for all HMA applications.

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

- (a) RAP/FRAP. The use of RAP/FRAP in HMA shall be as follows.
  - (1) Coarse Aggregate Size. The coarse aggregate in all RAP shall be equal to or less than the nominal maximum size requirement for the HMA mixture to be produced.
  - (2) Steel Slag Stockpiles. Homogeneous RAP stockpiles containing steel slag will be approved for use in all HMA (High ESAL and Low ESAL) Surface and Binder Mixture applications.
  - (3) Use in HMA Surface Mixtures (High and Low ESAL). RAP/FRAP stockpiles for use in HMA surface mixtures (High and Low ESAL) shall be FRAP or homogeneous in which the coarse aggregate is Class B quality or better. RAP/FRAP from Conglomerate stockpiles shall be considered equivalent to limestone for frictional considerations. Known frictional contributions from plus #4 (4.75 mm) homogeneous RAP and FRAP stockpiles will be accounted for in meeting frictional requirements in the specified mixture.
  - (4) Use in HMA Binder Mixtures (High and Low ESAL), HMA Base Course, and HMA Base Course Widening. RAP/FRAP stockpiles for use in HMA binder mixtures (High and Low ESAL), HMA base course, and HMA base course widening shall be FRAP, homogeneous, or conglomerate, in which the coarse aggregate is Class C quality or better.
  - (5) Use in Shoulders and Subbase. RAP/FRAP stockpiles for use in HMA shoulders and stabilized subbase (HMA) shall be FRAP, homogeneous, conglomerate, or conglomerate DQ.
  - (6) When the Contractor chooses the RAP option, the percentage of RAP shall not exceed the amounts indicated in Article 1031.06(c)(1) below for a given N Design.

- (b) RAS. RAS meeting Type 1 or Type 2 requirements will be permitted in all HMA applications as specified herein.
- (c) RAP/FRAP and/or RAS Usage Limits. Type 1 or Type 2 RAS may be used alone or in conjunction with RAP or FRAP in HMA mixtures up to a maximum of 5.0% by weight of the total mix.
  - (1) RAP/RAS. When RAP is used alone or RAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the Max RAP/RAS ABR table listed below for the given Ndesign.

RAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures 1/, 2/	RAP/	RAS Maximum A	ABR %
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified
30	30	30	10
50	25	15	10
70	15	10	10
90	10	10	10
105	10	10	10

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N-30, the RAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When RAP/RAS ABR exceeds 20 percent, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when RAP/RAS ABR exceeds 25 percent (i.e. 26 percent RAP/RAS ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- (2) FRAP/RAS. When FRAP is used alone or FRAP is used in conjunction with RAS, the percentage of virgin asphalt binder replacement shall not exceed the amounts listed in the FRAP/RAS table listed below for the given N design.

FRAP/RAS Maximum Asphalt Binder Replacement (ABR) Percentage

HMA Mixtures	FRA	P/RAS Maximu	m ABR %
Ndesign	Binder/Leveling Binder	Surface	Polymer Modified 3/, 4/
30	50	40	10

50	40	35	10
70	40	30	10
90	40	30	10
105	40	30	10

- 1/ For HMA "All Other" (shoulder and stabilized subbase) N30, the FRAP/RAS ABR shall not exceed 50 percent of the mixture.
- 2/ When FRAP/RAS ABR exceeds 20 percent for all mixes the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28). If warm mix asphalt (WMA) technology is utilized, and production temperatures do not exceed 275 °F (135 °C) the high and low virgin asphalt binder grades shall each be reduced by one grade when FRAP/RAS ABR exceeds 25 percent (i.e. 26 percent ABR would require a virgin asphalt binder grade of PG64-22 to be reduced to a PG58-28).
- 3/ For SMA the FRAP/RAS ABR shall not exceed 20 percent.
- 4/ For IL-4.75 mix the FRAP/RAS ABR shall not exceed 30 percent.

**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.

- (a) RAP/FRAP and/or RAS. RAP/FRAP and/or RAS mix designs shall be submitted for verification. If additional RAP/FRAP stockpiles are tested and found that no more than 20 percent of the results, as defined under "Testing" herein, are outside of the control tolerances set for the original RAP/FRAP stockpile and HMA mix design, and meets all of the requirements herein, the additional RAP/FRAP stockpiles may be used in the original mix 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 2.500 shall be used for mix design purposes.

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

(a) RAP/FRAP. The coarse aggregate in all RAP/FRAP used shall be equal to or less than the nominal maximum size requirement for the HMA mixture being produced.

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 RAP 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 the RAP/FRAP control tolerances or QC/QA test results require corrective action, the Contractor shall cease production of the mixture containing RAP/FRAP and either switch to the virgin aggregate design or submit a new RAP/FRAP design.

- (b) 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 ± 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.
- (c) RAP/FRAP and/or RAS. HMA plants utilizing RAP/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).
    - d. Accumulated dry weight of RAP/FRAP/RAS 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 RAP/FRAP material as a percent of the total mix to the nearest 0.1 percent.
    - h. Aggregate and RAP/FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAP/FRAP are printed in wet condition.)
  - (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).
- e. RAP/FRAP/RAS weight to the nearest pound (kilogram).
- f. Virgin asphalt binder weight to the nearest pound (kilogram).
- g. Residual asphalt binder in the RAP/FRAP/RAS material as a percent of the total mix to the nearest 0.1 percent.

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 Shoulders. The use of RAP in aggregate surface course (temporary access entrances only) and aggregate wedge shoulders Type B 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 to construct aggregate surface course and aggregate shoulders shall be according to the current Bureau of Materials and Physical Research's Policy Memorandum, "Reclaimed Asphalt Pavement (RAP) for Aggregate Applications".
- (b) Gradation. One hundred percent of the RAP material shall pass the 1 1/2 in. (37.5 mm) sieve. The RAP material shall be reasonably well graded from coarse to fine. RAP material that is gap-graded or single sized will not be accepted."

#### REINFORCEMENT BARS (BDE)

Effective: November 1, 2013

Revise the first and second paragraphs of Article 508.05 of the Standard Specifications to read:

"508.05 Placing and Securing. All reinforcement bars shall be placed and tied securely at the locations and in the configuration shown on the plans prior to the placement of concrete. Manual welding of reinforcement may only be permitted or precast concrete products as indicated in the current Bureau of Materials and Physical Research Policy Memorandum "Quality Control / Quality Assurance Program for Precast Concrete Products", and for precast prestressed concrete products as indicated in the Department's current "Manual for Fabrication of Precast Prestressed Concrete Products". Reinforcement bars shall not be placed by sticking or floating into place or immediately after placement of the concrete.

Bars shall be tied at all intersections, except where the center to center dimension is less than 1 ft (300 mm) in each direction, in which case alternate intersections shall be tied. Molded plastic clips may be used in lieu of wire to secure bar intersections, but shall not be permitted in horizontal bar mats subject to construction foot traffic or to secure longitudinal bar laps. Plastic clips shall adequately secure the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. Plastic clips may be recycled plastic, and shall meet the approval of the Engineer. The number of ties as specified shall be doubled for lap splices at the stage construction line of concrete bridge decks when traffic is allowed on the first completed stage during the pouring of the second stage."

Revise the fifth paragraph of Article 508.05 of the Standard Specifications to read:

"Supports for reinforcement in bridge decks shall be metal. For all other concrete construction the supports shall be metal or plastic. Metal bar supports shall be made of cold-drawn wire, or other approved material and shall be either epoxy coated, galvanized or plastic tipped. When the reinforcement bars are epoxy coated, the metal supports shall be epoxy coated. Plastic supports may be recycled plastic. Supports shall be provided in sufficient number and spaced to provide the required clearances. Supports shall adequately support the reinforcement bars, and shall permit the concrete to flow through and fully encase the reinforcement. The legs of supports shall be spaced to allow an opening that is a minimum 1.33 times the nominal maximum aggregate size used in the concrete. Nominal maximum aggregate size is defined as the largest sieve which retains any of the aggregate sample particles. All supports shall meet the approval of the Engineer."

Revise the first sentence of the eighth paragraph of Article 508.05 of the Standard Specifications to read:

"Epoxy coated reinforcement bars shall be tied with plastic coated wire, epoxy coated wire, or molded plastic clips where allowed."

Add the following sentence to the end of the first paragraph of Article 508.06(c) of the Standard Specifications:

"In addition, the total slip of the bars within the splice sleeve of the connector after loading in tension to 30 ksi (207 MPa) and relaxing to 3 ksi (20.7 MPa) shall not exceed 0.01 in. (254 microns)."

Revise Article 1042.03(d) of the Standard Specifications to read:

"(d) Reinforcement and Accessories: The concrete cover over all reinforcement shall be within ±1/4 in. (±6 mm) of the specified cover.

Welded wire fabric shall be accurately bent and tied in place.

Miscellaneous accessories to be cast into the concrete or for forming holes and recesses shall be carefully located and rigidly held in place by bolts, clamps, or other effective means. If paper tubes are used for vertical dowel holes, or other vertical holes which require grouting, they shall be removed before transportation to the construction site."

#### SIDEWALK, CORNER, OR CROSSWALK CLOSURE (BDE)

Effective: January 1, 2015 Revised: April 1, 2015

Revise the first sentence of Article 1106.02(m) of the Supplemental Specifications to read:

"The top and bottom panels shall have alternating white and orange stripes sloping 45 degrees on both sides."

#### WORKING DAYS (BDE)

Effective: January 1, 2002

The Contractor shall complete the work within 100 working days.

# 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:

City of Peoria

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

# Department of Transportation Bureau of Local Roads and Streets SPECIAL PROVISION FOR CONSTRUCTION AND MAINTENANCE SIGNS

State of Illinois

Effective: January 1, 2004 Revised: June 1, 2007

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

701.14. Signs. Add the following paragraph to Article 701.14:

All warning signs shall have minimum dimensions of 1200 mm x 1200 mm (48" x 48") and have a black legend on a fluorescent orange reflectorized background, meeting, as a minimum, Type AP reflectivity requirements of Table 1091-2 in Article 1091.02.

City of Peoria Allen Road/Alta Road Intersection Improvement FAU 6585/6641 Section No. 14-00347-01-PW Peoria County

## **APPENDIX A**

- EOO DOCUMENTS
- CONTRACT DELIVERABLES
- MISCELLANEOUS



## READ THIS PAGE BEFORE FILLING OUT THE EMPLOYER REPORT CC-1 OR THE RENEWAL APPLICATION

This page outlines the instructions you need to follow to process either the Employer Report Form CC-1 or the Renewal Application. Forms that are not filled out properly will not be processed.

**Processing Fee:** Effective January 1st, 2006, in accordance with recent changes to chapter 17 of the Peoria Municipal Code, a fifty-dollar (\$50.00) processing fee will be charged with each submission of the Employer Report Form CC-1 and the Renewal Application. The only exception to payment of the processing fee is neighborhood associations.

**Method of Processing Fee Payment:** The City of Peoria Treasurer's office will only accept check, money order, and cash payment. Make checks payable to the "City of Peoria".

Who needs to fill out the Employer Report Form CC-1 or the Renewal Application? Any business providing a good or service to the City for remuneration or any business receiving financial assistance from the City.

*Under what legal authority does the City of Peoria require this application?* The filing requirement is authorized under chapter 17, Peoria Municipal Code, section 17-120(b).

#### Which form do I submit?

**Employer Report Form CC-1:** If your company has not received an EEO Certification Number from the City of Peoria, you need to complete the Employer Report Form CC-1. You will also need to submit a copy of your company's **Sexual Harassment Policy** (for specific instructions on the sexual harassment policy, see the Sexual Harassment Policy Information Sheet).

**Renewal Application:** If your company currently has an EEO Certification Number from the City of Peoria that has expired, or is about to expire, you only need to complete the Renewal Application form. If you are submitting the Renewal Application you do not need submit the Sexual Harassment Policy as it is already on file.

Submittal Instructions: Either mail or hand deliver your completed materials.

**Mail**: Mail forms and payment to the Office of Equal Opportunity. The EO Office will review the forms. If they are complete and correct, the EO Office will process your forms and mail, fax, or email you a copy of your EEO certificate. Send forms and payment to:

City of Peoria Office of Equal Opportunity 419 Fulton Street, Room 303 Peoria, IL 61602-1276

**Hand Delivery:** If you choose to hand deliver your forms and payment, you must first go to the Office of Equal Opportunity (address listed above). The EO Office will review your form for completeness and then ask you to stop by the Treasurer's Office, City Hall Building, Room 100 to make your Processing Fee payment. The EO office will process your forms and mail, fax, or email you a copy of your EEO certificate.

If you have any questions, call the Equal Opportunity Office at (309) 494-8530

KEEP THIS PAGE FOR YOUR RECORDS



#### MINORITY AND WOMEN BUSINESS ENTERPRISE DIRECTORY

To assist Bidders in their outreach efforts, the City of Peoria has developed a Minority and Women Business Enterprise (M/WBE) directory. Go to the City's website at <a href="www.ci.peoria.il.us/mwbe">www.ci.peoria.il.us/mwbe</a> to view the directory.

### **EQUAL EMPLOYMENT OPPORTUNITY**

To be awarded a contract all Suppliers, Vendors and Contractors to the City of Peoria must be registered in the City of Peoria's Contract Compliance Program and have a current EEO Certification Number. This program is unrelated to any State or Federal program. To obtain or renew a number, an Employer Report Form CC-1, a copy of your company's sexual harassment policy statement, if a first time applicant and a Fifty-dollar (\$50.00) processing fee must be submitted to the City of Peoria. Go to the City's website at <a href="https://www.ci.peoria.il.us/equal-opportunity-forms">www.ci.peoria.il.us/equal-opportunity-forms</a> to obtain the form and instructions page.

Note: Suppliers, Vendors and Contractors do not need an EEO Certification Number to submit a bid proposal. However, it is required prior to the award of the contract.



# CITY OF PEORIA SUBCONTRACTOR PAYMENT FORM

PRIME CONTRACTOR	PROJECT				
Name:	Name:				
Address:	Pay Estimate No:				
Phone:	Percent Complete:%				
Contact Person:		to			
<b>INSTRUCTIONS</b> : Complete the table below. If additional information listed in the table below; along with project narrows.	al space is needed attach extra pages as need me and prime contractor.	led and included all			
Subcontractor (Name)	Payment Amount	Payment Type (F-full/ P-partial)			
	\$				
	\$				
	\$				
	\$				
	\$				
	\$				
Total Payment Amount for Work Completed	\$				
This form is to verify the work completed and the amount penalty of law for perjury or falsification, the undersign subcontractors listed.	ed certifies that the payment reported he	e listed project. Under rein was made to the			
Signature of Prime Contractor	Date	· <del>-</del>			



#### CITY OF PEORIA MONTHLY WORKFORCE ANALYSIS

Contractor Subcontractor						N	donin Er	iding						
Name:											·			
Address:														
Contact Person:								Phone:						
Project:														
Date Work Started:							I	Percent C	Complete:		%			
	Nur	nber of	Emplo	yees					Hours	of Employ	ment			
Job Categories	Emp	al#of ployee s		tal orities		ican rican	Asian/ Isla	Pacific nder	Ame Indian/	rican Alaskan tive		oanic	Wł	nite
	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Foremen						<u> </u>								
Electricians														
Glaziers														
Iron Workers														
Laborers														
Teamsters														
Millwrights												_		
Pipe Fitters														
Plumbers														
Plasterers														
Painters														
Roofers													<u> </u>	
Operating Engs														
Tile Layers														
Sheet Metal Wkrs											· · · · · · · · · · · · · · · · · · ·			
TOTALS														

Instructions: The total number of hours worked on the project (Hours of Employment), and the total number of individuals working on the project during the reporting period (Number of Employees) should be submitted on this form to the Project Resident Engineer every month. Each contractor and subcontractor should submit with this form certified payroll records for the period covered. The prime contractor is responsible for securing and submitting with his/her report, reports from all subcontractors.



## CITY OF PEORIA NOTIFICATION OF CHANGE IN PARTICIPATION

Type of Change Subcontractor. Complete Part 1	Date:
Self-Performance. Complete Part 2	
PRIME CONTRACTOR	PROJECT
Name:	Name:
Address:	
Phone:	
${f PA}$ If changing from previously identified subcontractor to another	RT 1 c, complete both From and To.
From Name	To Name
Address	Address
Phone Status MBE WBE Non-M/WBE	Status MRF WRF Non-M/WRF
	Phone MBE WBE Non-M/WBE Contract Amount
Will scope of work change? Yes No	
Describe change	
Complete if deviating from intent to self-perform.  Prime Contractor will have to hire another contractor to perform  Change was due to Emergency Non-Emergency	
Explain Situation	
Name of added Contractor	
Address	
Phone	
StatusMBEWBENon-M/WBE Scope of Work	Contract Amount
Signed:	
Contractor	Title



## CONSTRUCTION DEBRIS MANIFEST

	Ticket No			
	Contract No			
Generator				
Hauler	Truck No			
Description of Material				
Approximate Weight of Material				
Approximate Volume of Material		(		
Disposition of Material:	Location:			
	Date:			
	Time:			
	Owner:			
	Operator:			



#### Substance Abuse Prevention Program Certification

Letting Date: _____Item No.:_____

PEORIA	Contract No.:
	Route:
	Section:
	Job No.:
	County:
defined in the Act, by employees of the Contractor work on a public works project. The Contractor/Sul bargaining agreement or makes the public filing of	Act, Public Act 95-0635, prohibits the use of drugs and alcohol, as and by employees of all approved Subcontractors while Performing occurractor herewith certifies that it has a superseding collective its written substance abuse prevention program for the prevention of ot covered by a collective bargaining agreement dealing with the subject
A. The undersigned representative of the Contract collective bargaining agreements that are in eff Public Act 95-0635.	or/Subcontractor certifies that the contracting entity has signed ect for all of its employees, and that deal with the subject matter of
Contractor/Subcontract	or
Name of Authorized Representative	ve (type or print)
Title of Authorized Representati	ve (type or print)
Signature of Authorized Re	presentative Date
of its employees not covered by a collective bar	or/Subcontractor certifies that the contracting entity has in place for all regaining agreement that deals with the subject of the Act, the attached is or exceeds the requirements of Public Act 95-0635.
Contractor/Subcontractor	or .
Name of Authorized Representative	ve (type or print)
Title of Authorized Representativ	e (type or print)
Signature of Authorized Rep	presentative Date

TAPE HERE	
My firm has served as a subcontractor or supplier on contract # We request to be notified 30 days before the City intends to process papers for final payment on this contract.	Postage Stamp Required
We understand that it is a subcontractor or supplier's responsibility to ensure they are paid for a project and that notification provided by the Department is a courtesy only and does not provide any protection. We are aware of our rights to make a claim against the bond or file a lien against public funds in accordance with 30 ILCS 550 or 770 ILCS 60/23 and that this request constitutes neither action.	City of Peoria
DateName	
TAPE HERE	
	Effective January 1, 1994 the Illinois Department of Transportation no longer requires prime contractors on highway construction projects to obtain release forms from subcontractors and suppliers. If you wish to be notified when final payment on a project will be made, please complete all of the shaded areas on this card, affix first class postage on both sides of the card, then fold the card so the City address is visible and mail the card. The card will be returned to you prior to the final payment being made on the contract.  If you would like more information on filing a lien or bond claim, IDOT publishes a booklet "Getting Paid" that is available from the district office. You may wish to consult with your attorney if you have specific legal questions concerning the state laws on liens and bond claims and your rights therein.
FOLD HERE	Postage
Your firm has served as a subcontractor or supplier on contract # The City of Peoria plans to submit papers for processing of final payment to the prime contractor during the next 30 days.	PEORIA Stamp Required
This information is provided as a courtesy only, pursuant to your request. This notification does not constitute an acknowledgment of a bond claim or a lien against public funds and does not guarantee payment.	Attn:
Date prepared	

BC 2246 (Rev. 9/97)