



**Local Public Agency
Formal Contract Proposal**

PROPOSAL SUBMITTED BY		
Contractor's Name		
Street	P.O. Box	
City	State	Zip Code

STATE OF ILLINOIS

COUNTY OF Cook
Hanover Township Road District
 (Name of City, Village, Town or Road District)

FOR THE IMPROVEMENT OF

STREET NAME OR ROUTE NO. Magnolia Lane & Magnolia Court
 SECTION NO. N/A
 TYPES OF FUNDS General

SPECIFICATIONS (required)

PLANS (required)

For Municipal Projects
 Submitted/Approved/Passed

Mayor President of Board of Trustees Municipal Official

Date

Department of Transportation
 Released for bid based on limited review

Regional Engineer

Date

For County and Road District Projects
 Submitted/Approved

Highway Commissioner

Date

Submitted/Approved

County Engineer/Superintendent of Highways

Date

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

RETURN WITH BID

NOTICE TO BIDDERS

County Cook
Local Public Agency Hanover Township
Section Number N/A
Route Various

Sealed proposals for the improvement described below will be received at the office of Hanover Township Road District, 250 South Route 59, Bartlett, IL 60103; Attn: Katy Dolan Baumer, Hanover Township until 10:00 AM on September 20, 2016

Sealed proposals will be opened and read publicly at the office of Hanover Township Road District 250 South Route 59, Bartlett IL 60103; Attn: Katy Dolan Baumer, Hanover Township at 10:00 AM on September 20, 2016

DESCRIPTION OF WORK

Name 2016 Road Maintenance Program Length: 975.00 feet (0.18 miles)
Location (See Description of Work and Location Map)
Proposed Improvement Full-Depth Reclamation; Preparation of Base; Removal and Disposal of Unsuitable Material, HMA Binder and Surface Course; Driveway Removal and Replacement; drainage improvemen; other associated improvements.

- 1. Plans and proposal forms will be available in the office of Hanover Township Road District 250 South Route 59, Bartlett, IL 60103; Attn: Katy Dolan Baumer, Hanover Township Clerk
2. [X] Prequalification
If checked, the 2 low bidders must file within 24 hours after the letting an "Affidavit of Availability" (Form BC 57), in duplicate, showing all uncompleted contracts awarded to them and all low bids pending award for Federal, State, County, Municipal and private work. One original shall be filed with the Awarding Authority and one original with the IDOT District Office.
3. The Awarding Authority reserves the right to waive technicalities and to reject any or all proposals as provided in BLRS Special Provision for Bidding Requirements and Conditions for Contract Proposals.
4. The following BLR Forms shall be returned by the bidder to the Awarding Authority:
a. BLR 12200: Local Public Agency Formal Contract Proposal
b. BLR 12200a Schedule of Prices
c. BLR 12230: Proposal Bid Bond (if applicable)
d. BLR 12325: Apprenticeship or Training Program Certification (do not use for federally funded projects)
e. BLR 12326: Affidavit of Illinois Business Office

RETURN WITH BID

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.

RETURN WITH BID

PROPOSAL

County Cook
Local Public Agency Hanover Township
Section Number N/A
Route Various

1. Proposal of _____

for the improvement of the above section by the construction of Full-Depth Reclamation; Preparation of Base; Removal and Disposal of Unsuitable Material; HMA Binder and Surface Course; Driveway Pavement Removal and Replacement; drainage improvements; HMA Pavement Patching; Landscape and Shoulder Restoration and other associated improvements for a total distance of 975.00 feet, of which a distance of 975.00 feet, (0.180 miles) are to be improved.

2. The plans for the proposed work are those prepared by Gewalt Hamilton Associates, Inc. and approved by the Department of Transportation on _____

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 n/a working days or by 10/28/2016 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 Hanover Township Road District

The amount of the check is Bid Bond (5% of Total Bid) (_____).

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 N/A _____.

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 BLR 12200a, the work shall be in accordance with the requirements of each individual proposal for the multiple bid specified in the Schedule for Multiple Bids below.



SCHEDULE OF PRICES

County Cook
 Local Public Agency Hanover Township Road Dis
 Section N/A
 Route Magnolia Lane

Schedule for Single Bid

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

Bidder's Proposal for making Entire Improvements

Item No.	Items	Unit	Quantity	Unit Price	Total
20201200	Removal and Disposal of Unsuitable Material	60.0	CY		
21001000	Geotechnical Fabric For Ground Stabilization	60.0	SY		
21101600	Topsoil Furnish and Place, Variable Depth	1,315.0	SY		
21400100	Grading and Shaping Ditches	450.0	FT		
25000110	Seeding, Class 1A	0.3	AC		
25000400	Nitrogen Fertilizer Nutrient	30.0	LBS		
25000500	Phosphorus Fertilizer Nutrient	30.0	LBS		
25000600	Potassium Fertilizer Nutrient	30.0	LBS		
25100125	Mulch, Method 3A	1,315.0	SY		
30300001	Aggregate Subgrade Improvement	60.0	CY		
35800100	Preparation of Base	2,915.0	SY		
35800200	Aggregate Base Repair	40.0	TN		
40600982	Hot-Mix Asphalt Surface Removal - Butt Joint	45.0	SY		
40603080	Hot-Mix Asphalt Binder Course, IL-19.0, N50	380.0	TN		
40603335	Hot-Mix Asphalt Surface Course, Mix 'D', N50	340.0	TN		
40700100	Bituminous Materials (Tack Coat)	1,970.0	LBS		
44000200	Driveway Pavement Removal	140.0	SY		
50105220	Pipe Culvert Removal	90.0	FT		
542C0229	Pipe Culverts, Class C, Type 1, 24" (Special) (on Berner Drive)	40.0	FT		
67100100	Mobilization	1.0	LS		
LR400899	Full-Depth Reclamation, 10.0"	2,915.0	SY		
X7010216	Traffic Control and Protection (Special)	1.0	LS		
XX004774	Brick Driveway Removal and Replacement	260.0	SF		
Z0004510	Hot-Mix Asphalt Driveway Pavement, 3"	140.0	SY		
-	Pipe Culverts, Ductile Iron, Type 1 12"	50.0	FT		
-	24" Inlet with Frame & Grate	3.0	EA		
-	24" Catch Basin with Frame & Grate	3.0	EA		
-	36" Catch Basin with Frame & Grate	1.0	EA		
-	Storm Sewer - 8" PVC	370.0	FT		

Total Bid: _____

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CONTRACTOR CERTIFICATIONS

County	<u>Cook</u>
Local Public Agency	<u>Hanover Township</u>
Section Number	<u>N/A</u>
Route	<u>Various</u>

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

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

2. **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.

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SIGNATURES

County Cook
Local Public Agency Hanover Township
Section Number N/A
Route Various

(If an individual)

Signature of Bidder _____

Business Address _____

(If a partnership)

Firm Name _____

Signed By _____

Business Address _____

Inset Names and Addressed of All Partners



(If a corporation)

Corporate Name _____

Signed By _____

President

Business Address _____

Inset Names of Officers



President _____

Secretary _____

Treasurer _____

Attest: _____
Secretary

SUPPLEMENTARY SPECIAL PROVISIONS
2016 Road Maintenance Program
Hanover Township Road District

1. Definitions

The following words and phrases, used herein, shall have the meaning ascribed to them as follows:

- A. "Hanover Township Road District" or "HTRD" or "Owner" shall mean the Hanover Township Road District, Cook County Illinois, 250 South Route 59, Bartlett, Illinois, 60103 (the "Township Office").
- B. "Bidder" shall mean each contractor bidding on the HTRD's pavement resurfacing project located on Magnolia Lane and Magnolia Court, Cook County, Illinois, including but not limited to hot-mix asphalt binder and surface courses, thermoplastic pavement markings, and restoration in strict compliance with the Project Manual, Plans, Specifications, and Drawings prepared by Gewalt Hamilton Associates, Inc. (the "Engineer") and the other Contract Documents (the "Project Work").
- C. "Successful Bidder" or "Contractor" shall mean the Bidder that receives the award of contract from the HTRD for the Project.
- D. "Contract Documents" shall mean: (i) these General Conditions and Special Provisions, and supplementary special provisions, (ii) Project Manual prepared by Engineer;

(iii) Plans, Specifications and Engineering Drawings prepared by Engineer; (iv) the Bid Proposal to be submitted on form furnished by HTRD; (v) the Tax Compliance Affidavit, (vi) the attached Certifications regarding bid rigging and adoption of sexual harassment policy, (vii) all addenda issued prior to receipt of bids, (viii) Performance Bond Labor and Material Payment Bond, IDOT Contract Bond, or irrevocable letter of credit; and (ix) IDOT Highway Permit form and Permit Bond.

Whenever the term "*addenda*" appears in any of the Contract Documents, it shall be understood to refer to any written or graphic instruments issued prior to the bid opening which modify or interpret the Contract Documents, by additions, deletions, clarifications, or corrections. Addenda will become part of the Contract Documents when the Contract is executed.

Changes or corrections may be made by the HTRD to the Contract Documents after they have been issued and before the Bid Opening. In such case, a written addendum describing the change or correction will be issued by the HTRD to all bidders on record. Such addendum or addenda shall take precedence over that portion of the documents concerned, and shall become part of the Contract Documents.

- E. "Project Site" shall mean Magnolia Lane and Magnolia Court, Cook County, Illinois, as depicted on the Location Map, included in these bid documents.

2. Preparation and Submission of Bid

- A. The Bidder must submit its bid on the forms furnished by the HTRD. All blank spaces on the bid form must be filled in if applicable. Authorized signature must be the individual owner of a sole proprietorship, a general partner of a partnership, a duly authorized officer, attested to by the corporate secretary, of a corporation, or the manager of a limited liability company. The bid form is contained in these documents. All signatures and spaces to be completed in ink or typewritten, when applicable. Prices/Costs shall be in United States dollars. Incorrect completion, execution or submission of bids shall be sufficient grounds for rejection of a bid.
- B. All bids shall be submitted in a sealed envelope stating the following information on the face of the envelope: Bidder's Name, Address, and shall be marked "HTRD 2016 Road Maintenance Program".
- C. Bids must be received by the HTRD Clerk no later than 10:00 am on September 20, 2016. Bidders shall be responsible for the actual delivery of bids during business hours to the address indicated. It shall not be sufficient to show that the bid was mailed in time to be received before scheduled closing time for bids.
- D. Conditional Bids. Qualified bids are subject to rejection in whole or in part.
- E. Authority to Act as Agent. Upon request, the Bidder will provide proof to the HTRD that the signature on the bid form has the authority to bind the Bidder to the unit prices quoted and to the terms and conditions of a contract.
- F. Errors in Bids. When an error is made in extending total prices, the unit bid price will govern. Carelessness in quoting prices or in preparation of bid will not relieve Bidder. Erasures or changes in bids must be initialed.
- G. Withdrawal of Bid. Any Bidder may withdraw or modify his or her bid at any time prior to the scheduled closing time for receipt of bids. However, only telegrams, letters or other written requests for modifications or corrections of a previously submitted bid which are addressed in the same manner as the bid, and are received by the HTRD prior to the scheduled closing time for receipt of bids, will be accepted. The bid, when opened, will then be corrected in accordance with such written request, provided that the written request is contained in a sealed envelope which is plainly marked "Modification of Bid on HTRD 2016 Road Maintenance Program".
- H. The Bidder shall provide a name, address, and phone number of one contact person who will be responsible for implementation of the total package bid.

3. Examination by Bidder

The Bidder shall, before submitting a bid, carefully examine the Contract Documents and visit and inspect the Project Site. If the bid is accepted, the Bidder will be responsible for all errors in its bid resulting from its failure or neglect to comply with these instructions. The HTRD will not, in any case, be responsible for any change in anticipated profits or any unanticipated losses resulting from such failure or neglect.

4. Bid Bond

Each bid shall be accompanied by a Bid Bond, certified check, cashier's check, or bank draft in an amount equal to five percent (5%) of the bid, made payable to the Hanover Township Road District to guarantee that if the bid is accepted, the bidder will furnish a Performance Bond -Labor and Material Payment Bonds, IDOT Contract Bond or Irrevocable Letter of Credit of not less than 110% of the Contract Sum in accordance with Addendum No. One ("Payment and Performance Bond"), IDOT Permit Bond and any other bonds and/or securities required by IDOT (collectively, "IDOT Bonds"), and shall execute the Contract Documents within ten (10) days of the award of the contract. In the event the bidder fails to furnish such Payment and Performance Bond, IDOT Bonds, or Irrevocable Letter of Credit and/or execute the Contract Documents within said ten days, the amount of the check or Bid Bond shall be forfeited to the HTRD as liquidated damages.

5. Prevailing Wages

All work on the Project will be subject to the provisions of the Illinois Prevailing Wage Act (820 ILCS 130/01 *et seq.*) providing for payment of prevailing rate of wages. Contractor shall pay prevailing wages for Cook County as established by the Illinois Department of Labor for each craft or type of work needed to execute the Contract in accordance with the Illinois Prevailing Wage Act (820 ILCS 130/01, *et seq.*) The Contractor shall notify immediately in writing all of its subcontractors, of all changes in the schedule of prevailing wages. Contractor shall include in each of its subcontracts a written stipulation that not less than the prevailing rate of wages shall be paid to all laborers, workers, and mechanics performing work under the Contract and shall require each of its sub-subcontractors of every tier to include said stipulation regarding payment of prevailing rate of wages. Any increase in costs to the Contractor due to changes in the prevailing rate of wages or labor law during the term of any contract and/or sub-contract of any tier shall be at the expense of the Contractor and not at the expense of the HTRD. The Contractor shall be solely responsible to maintain accurate records as required by the prevailing wage statute and shall be solely liable for paying the difference between prevailing wages and any wages actually received by laborers, workmen and/or mechanics engaged in the work and for ensuring strict compliance with the requirements of the Act, including but not limited to providing certified payrolls to the HTRD in accordance with the Act. A copy of the current prevailing wage rates for July, 2015 is attached.

6. Minimum Qualification Documents

Each Bidder should furnish the HTRD with a list of the projects its organization has completed in the past three (3) years that are similar in size, scope, cost, and complexity to this Project Work. This list shall include the name of the project, owner, contract amount, and date of completion. In addition, describe extra costs and reason for extra cost incurred to the owner. List names and phone numbers of appropriate job reference individuals for each project listed. The list of Projects must include a minimum of five (5) projects that are similar in size, scope and complexity as the Project Work ("Minimum Qualification Documentation"). The Road District reserves the right to accept Minimum Qualification Document and Certification of Eligibility after the bid due date (see below).

7. Basis of Award

A. Award, Rejection or Negotiation of Bids. The contract will be awarded to the lowest responsible and responsive Bidder complying with all the provisions of the General Conditions and Special Provisions, provided the bid price is reasonable and it is to the interest of the HTRD to accept it.

The HTRD reserves the right to reject any or all bids received whenever such rejection is in the best interest of the HTRD. The HTRD also reserves the right to reject the bid of a Bidder who (a) has previously failed to perform properly or complete on time contracts of a similar nature, (b) when investigation shows that the Bidder is not in a position to perform the contract, (c) is delinquent on any state or federal taxes, and/or (d) is barred from bidding on this contract or any other contract pursuant to 720 ILCS 5/33E-3 and 720 ILCS 5/33E-4, (e) is not actively engaged in work of similar size, scope, and complexity as the Project Work and/or has not satisfactorily completed the minimum project work set forth in Paragraph 6 above, and/or (f) fails to submit the IDOT Certificate of Eligibility and/or Minimum Qualification Documentation required herein within two (2) business days of demand by the Road District.

- B. The HTRD reserves the right to reject any or all bids and to waive or not to waive any irregularities, informalities or variances therein, or to accept any bid considered by the HTRD to be in the best interest of the HTRD. The HTRD also reserves the right to accept all or part of a bid when the Highway Commissioner determines that it is in the best interest of the HTRD.
- C. Notwithstanding any provision herein to the contrary, the award of contract, project work, and bidder are all subject to the approval of IDOT. In the event any approval by IDOT cannot be obtained, the sole and exclusive remedy of bidder shall be the return of its bid bond by the HTRD.

8. Award of Contract

- A. The HTRD reserves the right to review all bids submitted for a period of sixty (60) days after the bid due date, and by submitting a bid, the Bidder agrees that the amount specified in his/her bid shall remain in full force and effect for such sixty (60) day period. No Bidder shall modify, withdraw, or cancel his/her bid, or any part thereof, for sixty (60) days after said bid due date, and no attempted modification, withdrawal, or cancellation shall be valid.
- B. An approved contract executed by the HTRD Highway Commissioner is required before the HTRD is bound. An award may be canceled any time by said Highway Commissioner prior to execution in order to protect the public interest and integrity of the bidding process or for any other reason if, in the judgment of said Highway Commissioner, the best interests of the HTRD will be promoted. In the event of such award cancellation, bidder/contractor's sole remedy shall be a refund of his/her/its bid bond.

9. Collusive Bidding

The Bidder represents and warrants that his, her, or its bid is made without any previous understanding, agreement or connection with any person, firm, or corporation making a bid for the same project; without prior knowledge of competitive prices; and is in all respects fair, without outside control, collusion, fraud or otherwise illegal action.

10. Material Inspection and Responsibility

Materials, the style, make or quality of which is specifically designated, shall be as specified. Should any substitution of material or item of equipment or apparatus be made, the HTRD's written approval must be obtained prior to installation.

11. Completion Dates

The Successful Bidder shall commence the Project Work no later than 10-days (following receipt of Notice to Proceed) and shall complete Project Work in strict compliance with the Contract Documents on or before October 28, 2016, weather permitting. Time is of the essence on this Contract.

12. Non-Discrimination

No Contractor who is the recipient of HTRD funds, or who proposes to perform any work or furnish any goods provided for herein shall discriminate against any worker, employee or applicant for employment because of religion, race, sex, color, sexual orientation, national origin, marital status, ancestry, age, physical or mental disability unrelated to ability, or an unfavorable discharge from the military service, nor otherwise commit an unfair employment practice.

13. Binding Obligation and Non-Assignability

By submitting a bid, the Bidder agrees that if awarded the bid said Successful Bidder shall be contractually bound to perform the Project Work in compliance with the Contract Documents. Successful Bidder shall not assign the whole or any part of the bid award or any obligations created or under the Contract Documents without the written consent of the HTRD. All sub-contractors shall be approved by the HTRD.

14. Taxes

The HTRD is a Tax Exempt Organization and is not subject to sales, consumer, use, and other similar taxes required by law. This exemption does not, however, apply to tools, machinery, equipment or other property leased by the Successful Bidder, or its subcontractors, or to suppliers and materials which, even though they are consumed are not incorporated into the completed Project. The Successful Bidder and its subcontractors shall be responsible for and pay any and all applicable taxes, including sales and use taxes, on such leased tools, machinery, equipment or other property and upon such unincorporated supplies and materials, and the cost of any such tax shall be included in the Bid Amount submitted by the Bidder.

15. Investigations Prior To Bid Award

The HTRD may make such investigations as are deemed necessary to determine the ability of the Bidder to perform the Project Work, and the Bidder shall furnish all such information and data for this purpose as the HTRD may request. The HTRD reserves the right to reject any bid if the evidence submitted by, or investigation of such Bidder, fails to satisfy the HTRD that such Bidder is properly qualified to carry out the obligations of the Contract Documents and to complete the work contemplated therein.

16. Bonds and/or Letter of Credit

Prior to commencement of the Project Work, Contractor must submit to the HTRD: (a) performance and payment bonds or IDOT Contract Bond, each in the amount of 110% of the Contract Sum, naming the HTRD, Hanover Township, the State of Illinois and IDOT as the primary co-obligees, in form acceptable to the HTRD co-signed by a surety company authorized by the Illinois Department of Insurance to sell and issue sureties in the State of Illinois ("Performance and Payment Bonds") or (b) an irrevocable letter of credit in the amount of 110% of the Contract Sum guarantying Contractors obligations under the Contract Documents issued by a financial institution worth at least \$40,000,000 in assets and a capital to asset ratio of not less than 6% in form acceptable to the HTRD ("Letter of Credit"), which said Bonds and/or Letter of Credit shall be conditioned upon proper and faithful performance by the Contractor of the work specified in

strict accordance with the Contract Documents and payment of all debts incurred by the Contractor in the execution of the Project Work, including those for labor and materials furnished, including but not limited to compliance with the Illinois Prevailing Wage Act. Contractor shall also be required to furnish an IDOT Permit Bond, in form acceptable to IDOT co-signed by a surety company meeting the above requirements and acceptable to IDOT. The amount of the Permit Bond shall be determined by IDOT. The cost of said Performance and Payment Bonds and/or Letter of Credit and IDOT Permit Bond is included in the Contract Sum.

17. Bid Amount

The Bid Amount submitted by Bidder shall include all applicable prices, materials, labor, warranties, permits, licenses, insurance and bonds and/or letter of credit costs, and all other fees, expenses, costs, profits and overhead of Bidder to complete the Project Work in strict compliance with the Contract Documents.

18. Certifications and Affidavits

The Contractor shall complete the Contractor's Certification forms and Tax Compliance Affidavit attached to the Proposal form. Failure to do so may result in disqualification of the Bidder.

19. IDOT Requirements

Each bidder should carefully review the IDOT Highway Permit form. The IDOT Highway Permit form, in part, provides that the Project Work must be construed to the satisfaction of the IDOT Regional Engineer or his/her authorized representative ("IDOT Engineer"); requires that all revisions or additions to the Project Work be approved by the IDOT Engineer; requires that the Project Work comply with all standards, specifications, understandings, and/or conditions imposed by the IDOT Engineer; requires certain restoration work and traffic controls; imposes limitations on the hours and days in which Project Work can be performed; and additional requirements, obligations, limitations and restrictions imposed therein and/or by IDOT and/or the IDOT Engineer (collectively, the "IDOT Requirements").

The IDOT Requirements are applicable to the Project Work that occurs within or affects the IDOT right of way.

20. Payment

A. All payments under the Contract shall be based on the unit prices set forth in Contractor's Bid Form (including any alternates approved by the HTRD) (the "Contractor's Bid Proposal") and based on actual quantities supplied and installed/constructed by Contractor in accordance with the terms and conditions herein, as determined and certified by Gewalt Hamilton Associates Inc. (the "Engineer").

Neither Owner nor Engineer guarantees the accuracy of the estimated units for completion of the Project Work. In no event shall Contractor be entitled to any additional compensation for lost profits and/or revenues due to estimated units exceeding actual units.

B. In addition to the payment request documentation set forth under the Contract, Contractor shall provide the following documentation to the HTRD and the Engineer:

(1) Contractor shall provide monthly invoices to the HTRD throughout the Project Work. It shall be a condition precedent to the HTRD obligation to make a monthly progress

payment that the Contractor shall have submitted to the Engineer, on or before the first day of the month in which the Contractor is applying for a payment, the following documentation, which shall hereinafter collectively be referred to as the "Contractor's Progress Payment Documents":

- (2) An itemized Application of Payment for operations completed in accordance with the schedule of values, supported by such data to substantiate the Contractor's right to payment as the HTRD and the Engineer may require, such as copies of requisitions from material suppliers, and reflecting a 10% retainage until after final acceptance has been made by the HTRD. Payment shall be further reduced by such additional amounts that Engineer determines for non-conforming work and unsettled claims.
 - (3) A general Contractor's Sworn Statement in form customarily used by Chicago Title and Trust Company.
 - (4) Current Partial Waivers of Lien from the Contractor and from all subcontractors of every tier and all of the material suppliers that supplied labor and/or material in connection with the Project covering such period.
 - (5) All of the Contractor's Progress Payment Documents shall be sworn to and notarized.
 - (6) Such additional documentation and/or information requested by the HTRD and/or Engineer relative to said payment.
- C. Following completion of the Project Work, Contractor shall furnish the HTRD the following documents: final lien waivers from (i) Contractor; (ii) all subcontractors of every tier that furnished labor and/or materials for the Project Work; and (iii) all suppliers that furnished materials in connection with the Project Work; all of which shall be signed and notarized and such additional documentation and/or information requested by the HTRD relative to said payment.
- D. It shall be a condition precedent to any payment required by the HTRD hereunder, that the HTRD and the Engineer have determined that the Project Work being invoiced is free from any defects and has been completed in strict accordance with the terms and conditions herein. The HTRD shall deduct from the final payment hereunder, amounts as determined for incomplete Work, including but not limited to punch list work, and any required Restoration Work, and for any unsettled claims. Payment for work within any IDOT right-of-way shall be contingent upon IDOT approval.
- E. Payments shall be further contingent upon the consent of the surety issuing the performance and payment bonds, IDOT Contract Bond, IDOT Permit Bond, and/or other bond hereunder to said payment. Any amounts required to be withheld from said payment by the surety shall be withheld without any liability to HTRD.
- F. In the event the Contractor, Engineer and/or HTRD is in receipt of any claim(s) for lien and/or other notice of any claim in connection with the Project, the amount claimed shall be held out from payment for a period of at least 120 days to determine whether said claimant files a lawsuit to foreclose or otherwise adjudicate its lien claim. In the event a lawsuit is in fact filed within the statutory period, HTRD, in its sole discretion, may elect to (a) file an interpleader action and/or intervene in the lawsuit and deposit the amount in question with the Clerk of the Court or (b) continue to hold said disputed sum until the lawsuit has been fully adjudicated or settled, or (c) elect

to pay said disputed sum to the Contractor after having first received such additional indemnification agreement(s) and surety bond(s) as are acceptable to HTRD. In the event the lien claimant fails to file a lawsuit within the applicable statutory period, the Contractor shall either furnish a release or final waiver from said lien claimant or furnish HTRD with an indemnification agreement and an additional mechanic's lien bond in form approved by the HTRD issued by a surety company acceptable to the HTRD.

- G. It shall also be a condition precedent to any payment hereunder that Contractor must complete and submit certified payrolls to HTRD covering all payouts in strict compliance with the Prevailing Wage Act (820 ILCS 130/01, et seq.) (the "Certified Payrolls"). HTRD will not process or release any payments prior to receiving the Certified Payrolls relative to each applicable pay application.
- H. Notwithstanding the foregoing, in no event shall the HTRD's acceptance of the Project Work, Contractor's Payment Request Documentation, Engineer's Certification and/or the HTRD's payments to Contractor be deemed a waiver, express or implied, of any warranties required herein.

21. Non-Discrimination

Contractor shall not discriminate against any worker, employee or applicant for employment because of religion, race, sex, sexual orientation, color, national origin, marital status, ancestry, age, physical or mental disability unrelated to ability, or an unfavorable discharge from the military service, nor otherwise commit an unfair employment practice.

22. Compliance With Law

All goods, equipment, materials, and all labor furnished by Contractor and subcontractors of every tier shall comply with all applicable federal, state and local laws, regulations, rules, ordinances, statutes and codes relative thereto including, but not limited to, all safety related regulations as required by the Illinois Department of Transportation (IDOT), Federal Occupational Safety and Health Act (OSHA), the Americans with Disabilities Act of 1990 as amended, Illinois Department of Labor (IDOL), United States Department of Labor (USDOL), the Human Rights Commission, the Illinois Department of Human Rights, EEOC, Environmental Laws (defined below), and all applicable Cook County, Illinois Building Codes (collectively, the "Laws"). To the fullest extent permitted by law, the Contractor shall indemnify, defend, and hold harmless the HTRD, Hanover Township, the State of Illinois, IDOT, the Engineer, and their respective officials, officers, employees, volunteers, directors, agents, invitees, and others associated with the State of Illinois and/or IDOT from loss or damage, including but not limited to, attorney's fees, and other costs of defense by reason of actual or alleged violations of any of the Laws. In the event of any conflict and/or inconsistencies between any of the Laws, the most stringent Laws shall be controlling and applicable to the Project Work. This obligation shall survive the expiration and/or termination of this Agreement.

23. Indemnification

To the fullest extent permitted by law, the Contractor shall indemnify, defend and hold harmless HTRD, Hanover Township, the Engineer, the State of Illinois, IDOT, and their respective officials, officers, employees, agents, invitees, and others associated with the State of Illinois and/or IDOT (collectively, the "Indemnified Parties"), against all injuries, deaths, damage to property, loss, damages, claims, suits, liens, lien rights, liabilities, judgments, costs and expenses which may in any way arise directly or indirectly from the Project Work, Repair Work and/or Warranty Work provided hereunder, and/or any acts and/or omissions of or on behalf of the Contractor, its employees, contractors, subcontractors of any tier, suppliers, and/or

agents and/or any person and/or entity acting on behalf of any of them ("Contractor's Agents"); except to the extent caused by the negligence of a party indemnified hereunder. In which case, Contractor shall at its own expense, appear, defend and pay all charges of attorneys and costs and other expenses arising therefrom or incurred in connection therewith, and if any judgment shall be rendered against the Indemnified Parties or any of them, in any such action, Contractor agrees that any bond or insurance protection required herein, or otherwise provided by Contractor, shall in no way limit the responsibility to indemnify, keep and save harmless and defend the Indemnified Parties as herein provided. Contractor shall similarly protect, indemnify and hold and save harmless the Indemnified Parties against and from any and all claims, costs, causes, actions and expenses including but not limited to attorney's fees, incurred by reason of Contractor's breach of any of its obligations under, or Contractor's default of, any provision of the Agreement. This obligation shall survive the expiration and/or termination of the Agreement.

24. Binding Obligation and Non-Assignability

Contractor shall not assign the whole or any part of this Agreement without the written consent of the HTRD. All subcontractors shall be approved by the HTRD. Any such assignment by Contractor without the HTRD's written approval shall be null and void.

25. Investigations by Contractor

Contractor has made such investigations as it deems necessary to perform the Project Work, including but not limited to, Project Site inspections, and represents and warrants that the Specifications, Plans, Drawings and other Contract Documents as defined in the General Conditions are adequate and the required result can be produced thereunder. No plea of ignorance of conditions that exist or of conditions or difficulties that may be encountered in the execution of the Project Work under this Agreement as a result of failure to make the necessary investigations will be accepted as an excuse for any failure or omission on the part of Contractor to fulfill in every detail all of the requirements of this Agreement, or will be accepted as a basis for any claims whatsoever, for extra compensation.

26. Insurance

Contractor shall procure and maintain for the duration of the Project Work, Repair Work and Warranty Work, insurance of the types and in amounts of not less than the coverages listed below. The cost of such insurance is included in the Contract Sum.

A. Commercial General and Umbrella Liability Insurance.

Contractor shall maintain commercial general liability (CGL) insurance with a limit of not less than \$1,000,000 each occurrence. If the CGL contains a general aggregate limit, it shall be in an amount not less than \$2,000,000 or its shall apply separately to this project/location.

CGL insurance shall be written on Insurance Services Office (ISO) occurrence from CG 00 01 10 93, or a substitute form providing equivalent coverage, and shall cover liability arising from: liability arising out of the Project Work, including activities performed by or on behalf of Contractor; premises owned, leased, or used by Contractor; operations; administration of the work; independent contractors; subcontractors; vendors and suppliers; products-completed operations; personal injury and advertising injury; and liability assumed under an insured contract (including the tort liability of another assumed in a business contract).

Any endorsement or policy provision which limits contractual liabilities shall be deleted in its entirety.

The HTRD, Hanover Township, the Engineer, the State of Illinois, IDOT and each of their respective officers, officials, directors, employees, volunteers, agents, invitees and others associated with the State of Illinois and/or IDOT (collectively, the "Additional Insured") shall be included as an insured under the CGL, Commercial Umbrella Liability Coverage, and Business Auto Liability Coverage, using ISO additional insured endorsement CG 20 10 or substitute providing equivalent coverage.

These insurance coverages shall apply as primary insurance with respect to any other insurance or self-insurance afforded to the Additional Insured, or any of them, and shall not require exhaustion of any other coverage or tender of any claim or action to any other insurer providing coverage to any of the Additional Insured. The coverage shall contain no special limitations on the scope of protection afforded to the Additional Insured, or any of them.

There shall be no endorsement or modification of the CGL limiting the scope of coverage for liability arising from explosion, collapse or underground property damage.

B. Continuing Completed Operations Liability Insurance.

Contractor shall maintain commercial general liability (CGL) coverage with a limit of not less than \$1,000,000 each occurrence for at least three years following substantial completion of the Project Work.

Continuing CGL insurance shall be written on ISO occurrence form CG 00 01 10 93, or substitute form providing equivalent coverage, and shall, at a minimum, cover liability arising from products-completed operations and liability assumed under an insured contract.

Continuing CGL insurance shall have a products-completed operations aggregate of at least two times its each occurrence limit.

C. Business Auto Liability Insurance.

Contractor shall maintain business auto liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of "Any Auto" including owned, hired and non-owned autos.

Business auto insurance shall be written on Insurance Services Office (ISO) form CA 00 01, CA 00 05, CA 00 12, CA 00 20, or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage equivalent to that provided in the 1990 and later editions of CA 00 01.

D. Workers Compensation and Employees Liability Insurance.

Contractor shall maintain workers compensation as required by statute and employers liability insurance. The employers liability limits shall not be less than \$500,000 each accident for bodily injury by accident or \$500,000 each employee for bodily injury by disease.

If the HTRO, Hanover Township, the State of Illinois, IDOT, and/or the Engineer have not been included as an insured under the Commercial General Liability, Excess Umbrella Liability Insurance and/or Business Auto Liability coverages required in the Contract, then the Contractor waives all rights against the HTRO, Hanover Township, the State of Illinois, IDOT, and Engineer, and each of their respective officers, officials, directors, employees, volunteers, agents, invitees, and others associated with the State of Illinois and/or IDOT, for recovery of damages arising out of or incident to the Project Work.

E. Excess Umbrella Liability Insurance Coverage.

Contractor shall maintain Excess Umbrella Liability Insurance coverage of not less than \$1,000,000. The minimum amount of Excess Umbrella Liability Insurance Coverage required may be reduced by the amount that Contractor's CGL coverage per occurrence exceeds \$1,000,000.

F. General Insurance Provisions.

i. Evidence of Insurance.

Prior to beginning work, Contractor shall furnish the HTRD with a certificate(s) of insurance and applicable policy endorsement(s), including but not limited to all additional insured endorsements required herein, executed by a duly authorized representative of each insurer, showing compliance with the insurance requirements set forth above.

All certificates shall provide for 30 days' written notice to the HTRD and Hanover Township prior to the cancellation or material change of any insurance referred to therein. Written notice to the HTRD and Hanover Township shall be by certified mail, return receipt requested.

Failure of the HTRD and/or Hanover Township to demand such certificate, endorsement or other evidence of full compliance with these insurance requirements or failure of the HTRD and/or Hanover Township to identify a deficiency from evidence that is provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.

The HTRD and/or Hanover Township shall have the right, but not the obligation, of prohibiting Contractor or any subcontractor of any tier from entering the Project Site(s) until such certificates or other evidence that insurance has been placed in complete compliance with these requirements is received and approved by the HTRD and/or Hanover Township.

Failure to maintain the required insurance may result in termination of this Contract at the option of the HTRD.

With respect to insurance maintained after final payment in compliance with a requirement above, an additional certificate(s) evidencing such coverage shall be promptly provided to the HTRD and Hanover Township whenever requested.

Contractor shall provide certified copies of all insurance policies required above within 10 days of the HTRD and/or Hanover Township's written request for said copies.

ii. Acceptability of Insurers

Insurance shall be provided by insurance companies licensed to do business in the State of Illinois with a policy holder rating of not less than A and a financial rating of not less than VII in the latest edition of Best Insurance Guide.

iii. Cross-Liability Coverage.

If Contractor's liability policies do not contain the standard ISO separation of insureds provision, or a substantially similar clause, they shall be endorsed to provide cross-liability coverage.

iv. Deductibles and Self-Insured Retentions.

Any deductibles or self-insured retentions must be declared to the HTRD and Hanover Township. At the option of the HTRD and/or Hanover Township, Contractor may be asked to eliminate such deductibles or self-insured retentions as respects the additional Insured or required to procure a bond guaranteeing payment of losses and other related costs, including, but not limited to, investigations, claim administration and defense expenses.

v. HTRD and Hanover Township Shall Not Waive Any Rights of Subrogation.

Neither HTRD nor Hanover Township shall, in any manner, be deemed or intended to have waived any right of subrogation which either they, and/or any of them, and/or their respective insurance carrier and/or risk pool provider, risk management agency, and/or insurance company providing excess coverage on behalf of the any of them may have against the Contractor, for any property injury, death, or other damage caused by Contractor, and/or any of its subcontractors of any tier, and/or otherwise arising out of the Project Work.

vi. Failure to Comply With Insurance Reporting Provisions

All insurance required of the Contractor shall provide that any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Additional Insured, or any of them.

vii. All Insurance Obtained Shall Apply Separately to Each Insured.

All insurance required of the Contractor shall provide that the insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the limits of the insurer's liability.

viii. Insurance Requirements Cannot be Waived.

Under no circumstances shall the HTRD, Hanover Township, and/or any of the other Additional Insured be deemed to have waived any of the insurance requirements of this Contract by any action or omission, including, but not limited to:

- a. allowing any work to commence by the Contractor before receipt of Certificates of Insurance;

- b. failing to review any Certificates of Insurance received;
- c. failing to advise the Contractor that any Certificate of Insurance fails to contain all the required insurance provisions, or is otherwise deficient in any manner; and/or
- d. issuing any payment without receipt of a sworn certification from the Contractor stating that all the required insurance is in force.

The Contractor agrees that the obligation to provide the insurance required by these documents is solely its responsibility and that this is a requirement which cannot be waived by any conduct, action, inaction or omission by the HTRD, Hanover Township, and/or any of the other Additional Insured.

- ix. Liability of Contractor is not Limited by Purchase Of Insurance.

Nothing herein contained in the insurance requirements of the Contract Documents is to be construed as limiting the liability of the Contractor, and/or their respective insurance carriers. HTRD and the other Additional Insureds do not, in any way, represent that the coverages or limits of insurance specified is sufficient or adequate to protect the Additional Insured, or any of them, the Contractor, or any subcontractor's interest or liabilities, but are merely minimums. Any obligation of the Contractor to purchase insurance shall not, in any way, limit their obligations to the Additional Insured in the event that the Additional Insured, or any of them should suffer an injury or loss in excess of the amount recovered through insurance, or any loss or portion of the loss which is not covered by either the Subcontractor's and/or Contractor's insurance.

- x. Notice of Personal Injury or Property Damage.

Contractor shall notify the HTRD, Hanover Township, and Engineer, in writing, of any actual or possible claim for personal injury or property damage relating to the work, or of any occurrence which might give rise to such a claim, promptly upon obtaining first knowledge of same.

- xi. Subcontractors.

Contractor shall cause each subcontractor employed by Contractor to purchase and maintain insurance of not less than the types and amounts specified above. When requested by HTRD, Contractor shall furnish copies of certificates of insurance evidencing coverage for each subcontractor.

27. Default.

In the event of default hereunder, the non-defaulting party shall be entitled to all remedies available at law and/or equity, including reasonable attorney's fees, subject to the limitations set forth in paragraph L below.

28. Limitation on the Owner's Liability.

The Contractor agrees to waive any right which it may have to punitive, consequential, special, indirect, incidental, and/or exemplary damages against the HTRD, Hanover Township, Engineer, the State of Illinois and IDOT, and agrees not to make any claim or demand for such damages against the HTRD, Hanover Township, the Engineer, the State of Illinois and/or IDOT.

29. Hazardous Substances.

Contractor shall not cause or permit any Hazardous Substances to be brought upon, kept, stored or used in or about the Project Site, and/or any other property owned, leased, controlled or under the jurisdiction of HTRD, Hanover Township, the State of Illinois and/or IDOT ("Owner's Property") by Contractor, its employees, subcontractors of any tier, suppliers and anyone for whose acts and/or omissions for whom Contractor may be liable (collectively "Contractor's Agents"). If the presence of Hazardous Substances brought upon, kept, stored or used in or about any of the Owner's Property by or on behalf of Contractor or Contractor's Agents in violation of this paragraph, results in contamination of the said Property, Contractor shall pay for all actual costs of clean up and shall indemnify, hold harmless and defend the Indemnified Parties (described above) and against any and all claims, demands, expenses (including reasonable attorneys' fees), costs, fines, penalties and other liabilities of any and every kind and nature, including, but not limited to, costs and expenses incurred in connection with any clean-up, remediation, removal or restoration work required by any federal, state or local governmental authority because of the presence of any such Hazardous Substances on or about said Property.

For purposes hereof, Hazardous Substances shall include, but not be limited to, substances defined as "hazardous substances," "toxic substances" in the federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended; the federal Hazardous Materials Transportation Act, as amended; and the federal Resource Conservation and Recovery Act, as amended ("RCRA"); those substances defined as "hazardous substances," "materials," or "wastes" under any Federal law or the law of the State of Illinois; and as such substances are defined in any regulations adopted and publications promulgated pursuant to said laws (collectively, "Environmental Laws"). If Contractor's activities or the activities of any of Contractor's Agents violate or create a risk of violation of any Environmental Laws, Contractor shall cause such activities to cease immediately upon notice from the HTRD and/or IDOT. Contractor shall immediately notify IDOT (if within or affecting an IDOT right-of-way) and the HTRD both by telephone and in writing of any spill or unauthorized discharge of Hazardous Substances or of any condition constituting an "imminent hazard" under any Environmental Laws.

Contractor's indemnification obligations and duties hereunder shall survive the termination and/or expiration of this Contract.

30. Delays in Project Work.

Notwithstanding any provision herein to the contrary, the Contractor shall not be entitled to an increase in the Contract Sum as a result of any delays in the progress of the Work. The Contractor's sole remedy for delay shall be an extension of time.

If the Contractor, but for a delay not within the Contractor's control, would have completed the Work prior to the project completion date, the Contractor shall not be entitled to any recovery of damages arising out of any event of delay which prevented such early completion of the Work.

31. Change Orders.

(A) Notwithstanding any provisions herein to the contrary, where proposed changes to the Project Work involve a modification to (i) the Contract Sum; (ii) the Contract Time, or (iii) material changes in the Work (Le., other than minor field changes), a written Change Order shall be

prepared by the Engineer. It shall be a condition precedent to the acceptance of any Change Order or any Series of Change Orders which involves an increase or decrease in the Contract Sum of \$10,000 or more or changes the time of completion by a total of thirty (30) days or more, that the Highway Commissioner shall have first approved such written Change Order(s) and made the requisite determinations and findings in writing as required by 720 ILCS 5/33 E-9 (as amended). Other changes involving modifications to the Contract Sum, Contract Time or material change in the Work which will result in an increase or decrease of less than \$10,000 or extension of less than thirty (30) days to the Contract Time shall be made by the Highway Commissioner.

(B) All change orders will be calculated based solely on Contractor's Unit Pricing set forth in Contractor's Proposal and actual revised quantities, regardless of whether the change order is for an increase or decrease in Project Work. No additional compensation will be allowed for change orders for additional work other than based on Contractor's Unit Pricing times the increased actual units constructed calculated by the Engineer, in that said Unit Pricing already reflects Contractor's overhead and profits.

(C) Notwithstanding any provision herein to the contrary all change orders (pertaining to work within or affecting the IDOT right of way) are subject to approval by IDOT.

32. Relationship of the Parties.

- A. It is understood, acknowledged and agreed by the parties that the relationship of the Contractor to the HTRD arising out of this Agreement shall be that of an independent contractor. Neither Contractor, nor any employee or agent of Contractor, is an employee, partner, joint venturer, and/or agent of the HTRD, and therefore is not entitled to any benefits provided to employees of the HTRD. Contractor has no authority to employ/retain any person as an employee or agent for or on behalf of the HTRD for any purpose. Neither Contractor nor any person engaging in any work or services related to this Agreement at the request or with the actual or implied consent of the Contractor may represent himself to others as an employee of the HTRD. Should any person indicate to the Contractor or any employee or agent of Contractor by written or oral communication, course of dealing or otherwise, that such person believes Contractor to be an employee or agent of the HTRD, Contractor shall use its best efforts to correct such belief. In ordering or accepting delivery of or paying for any goods or services, Contractor shall do so in Contractor's own business.
- B. Contractor shall at all times have sole control over the manner, means and methods of performing the services required by this Agreement according to its own independent judgment. Contractor acknowledges and agrees that it will devote such time and resources as necessary to produce the contracted for results. Neither HTRD, Hanover Township, nor the Engineer shall have any control over, change of, nor be responsible for, the construction means, methods, techniques, sequences of procedures, or for safety precautions and programs in connection with the Work since they are solely the Contractor's rights and responsibilities. The Contractor shall supervise and direct the Work efficiently with his, her or its best skill and attention; and the Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work; and the Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to all employees on the Project Site and all other persons who may be affected thereby.

33. Exhibits and Contract Documents.

All Exhibits and Contract Documents referred to herein are expressly incorporated herein and made a part hereof.

34. Assumption of Liability.

To the fullest extent permitted by law, Contractor assumes liability for all injury to or death of any person or persons including employees of Contractor, any subcontractor of any tier, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to this Contract.

35. IDOT Requirements.

A. The IDOT Highway Permit form, in part, provides that the Project Work must be constructed to the satisfaction of the IDOT Regional Engineer or his/her authorized representative ("IDOT Engineer"); requires that all revisions or additions to the Project Work be approved by the IDOT Engineer; requires that the Project Work comply with all standards, specifications, understandings, and/or conditions imposed by the IDOT Engineer; requires certain restoration work and traffic controls; imposes limitations on the hours and days in which Project Work can be performed; and additional requirements, obligations, limitations and restrictions imposed therein and/or by IDOT and/or the IDOT Engineer (collectively, the "IDOT Requirements"). The IDOT Requirements are applicable to the Project Work that occurs within or affects the IDOT right of way. Any breach by Contractor and/or Contractor's Agents of any IDOT Requirement shall be a material breach of this Agreement.

B. In addition to the other bond requirements set forth herein, Contractor shall furnish, at its sole cost, an IDOT Permit Bond co-signed by a surety company authorized by the Illinois Department of Insurance to sell and issue sureties in the State of Illinois and subject to approval by IDOT. Contractor shall similarly furnish any other bond and/or such additional bond and/or other security required by IDOT, co-signed by sureties acceptable to IDOT (collectively, the "IDOT Bonds"). The cost of the IDOT Bonds is included in the Contract Sum.

36. Permits and Bonds.

In addition to the above mentioned IDOT Bonds, Contractor shall obtain at its sole cost any and all other bonds, permits and approvals from any federal, state and/or local government and/or agency or body thereof that has jurisdiction over the Project Site and/or Project Work. The cost of such bonds, permits, and approvals is included in the contract sum.

37. Illinois Human Rights Act.

The Contractor shall comply with all terms and procedures of the Illinois Human Rights Act, (775 ILCS 5 et seq.) and Contractor represents and warrants to HTRD as follows:

A. That it will not discriminate against any employees or applicant for employment because of race, color, religion, sex, marital status, national origin or ancestry, age physical or mental handicap unrelated to ability, or an unfavorable discharge from military service, and further that it will examine all job classifications to determine if minority persons or women are under-utilized and will take appropriate affirmative action to rectify any such under-utilization.

- B. That, if it hires employees in order to perform this Contract or any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations) of minorities and women in the areas from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized
- C. 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, religion, sex, marital status, national origin, or ancestry, age, physical or mental handicap unrelated to ability, or an unfavorable discharge from military service.
- D. That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts to comply with such Acts and Rules and Regulations, the Contractor will promptly so notify the Department and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- E. That it will submit reports as required by the Department's Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
- F. That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to a certain compliance with the Illinois Human Rights Act to a certain compliance with the Illinois Human Rights Act.
- G. That it will include verbatim or by reference the provisions of these clauses in every subcontracting awards under which any portion of the Contract obligations are undertaken or assumed, so that each provision will be binding upon such subcontractor. 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 such subcontractors; and further it will promptly notify the contracting agency and the Department in the event any Subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the Illinois Human Rights Commission to be ineligible for Contracts or Subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

38. Severability.

If any clause, phrase, provision or portion of this Contract or the application thereof, to any person or circumstance, shall be invalid or unenforceable under applicable law, such event shall not affect, impair or render invalid or unenforceable the remainder of this Contract, nor shall it affect the application of any other clause, phrase, provision or portion hereof to other persons or circumstances.

39. No Waiver of Immunities and/or Privileges.

Nothing herein shall be construed as an express and/or implied waiver of any common law and/or statutory

immunities and/or privileges of Hanover Township, HTRD, the State of Illinois, IDOT, and/or any of their respective officials, officers, employees, volunteers and/or agents; such immunities and privileges are expressly reserved.

40. Miscellaneous.

- A. This Agreement supersedes all prior agreements and understandings, both written and oral, of the parties to the subject matter hereof. This Agreement applies to and binds the successors and assigns of the Parties to this Agreement. Any amendments to this Agreement must be in writing and executed by both Parties.
- B. This Agreement may be executed in any number of counterparts, and by the HTRD and Contractor on different counterparts, each of which when executed shall be deemed an original and all of which together shall constitute one and the same Agreement.
- C. Changes in the number, gender and grammar of terms and phrases herein when necessary to conform this Agreement to the circumstances of the parties hereto shall in all cases, be assumed as though in each case fully expressed therein.
- D. This Agreement shall be construed, governed and enforced according to the laws of the State of Illinois, and the exclusive venue for the enforcement of this Agreement and/or litigation between the parties shall be the Circuit Court of Cook County, Illinois.
- E. In construing this Agreement, section headings shall be disregarded.
- F. Time is of the essence of this Agreement and every provision contained herein.
- G. Each of the undersigned signing as an officer or agent on behalf of the respective party to this Agreement warrants that he or she holds such capacity as is specified beneath his or her name and further warrants that he or she is authorized to execute and effectuate this Agreement and that he or she does so voluntarily and in his or her official capacity.
- H. Survival of Obligations. Except as otherwise provided, any obligations and duties which by their nature extend beyond the expiration or termination of this Agreement, including, without limitation, Sections pertaining to Indemnity shall survive the expiration of this Agreement.
- I. In the event of any conflict between the terms and conditions of any of the Contract Documents, the most stringent requirements shall control.



Route Magnolia Ln & Ct
County Cook
Local Agency Hanover Township
Section N/A

RETURN WITH BID

PAPER BID BOND

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

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

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

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

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

Principal

_____(Company Name) _____(Company Name)
By: _____(Signature and Title) By: _____(Signature and Title)

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

Surety

_____(Name of Surety) By: _____(Signature of Attorney-in-Fact)

STATE OF ILLINOIS,
COUNTY OF _____

I, _____, a Notary Public in and for said county,
do hereby certify that _____

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

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

Given under my hand and notarial seal this _____ day of _____

My commission expires _____ (Notary Public)

ELECTRONIC BID BOND

[] Electronic bid bond is allowed (box must be checked by LA if electronic bid bond is allowed)

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

Electronic Bid Bond ID Code (grid)

Electronic Bid Bond ID Code

_____(Company/Bidder Name)

_____(Signature and Title)

_____(Date)



Illinois Department of Transportation

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

Affidavit of Availability For the Letting of _____

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						
Estimated Completion Date						
Total Contract Price						Accumulated Totals
Uncompleted Dollar Value if Firm is the Prime Contractor						
Uncompleted Dollar Value if Firm is the Subcontractor						
Total Value 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 company. If no work is contracted, show **NONE**.

						Accumulated 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)						
						\$ 0.00
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.

	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					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Subcontractor					
Type of Work					
Subcontract Price					
Amount Uncompleted					
Total Uncompleted					

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

Subscribed and sworn to before me
 this _____ day of _____, _____ Type or Print Name _____
 Officer or Director Title

Signed _____

 Notary Public

My commission expires _____

(Notary Seal)

Company _____

Address _____

TAX COMPLIANCE AFFIDAVIT

The undersigned, being the duly appointed official of _____ (Name of Company) ("Bidder") duly sworn and under oath hereby certifies that Bidder is not delinquent in payment of any taxes to the Illinois Department of Revenue, and/or the Internal Revenue Service.

Signature

STATE OF ILLINOIS)
)
COUNTY OF _____) SS.

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that _____ appeared before me this day in person and, being first duly sworn on oath, acknowledged that he/she is authorized to act on behalf of _____ (Company), and that he/she executed the foregoing certificate as his/her free act and deed and as the act and deed of _____ (Company).

Dated: _____, 2016

Notary

Public

**CERTIFICATION THAT BIDDER
IS NOT BARRED FROM PUBLIC CONTRACTING DUE TO
BID-RIGGING OR BID-ROTATING CONVICTIONS**

The undersigned hereby certifies that _____ (Name of Company) ("Bidder") is not barred from bidding on or entering into public contracts due to having been convicted of bid-rigging or bid-rotating under paragraphs 33E-3 or 33E-4 of the Illinois Criminal Code. The undersigned further certifies that no officers or employees of the Bidder's firm have been so convicted and that Bidder is not the successor company or a new company created by the officers or owners of one so convicted. The undersigned certifies that any such conviction occurring after the date of this certification will be reported to the Hanover Township Road District, immediately in writing, if it occurs during the bidding process or otherwise prior to entering into the Contract therewith.

Dated: _____, 2016

(Print Name of Bidder/Company)

(Signature of Authorized Officer)

(Printed Name of Signatory)

(Title of Signatory)

STATE OF ILLINOIS)
)
COUNTY OF _____)

SS.

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that _____ appeared before me this day in person and, being first duly sworn on oath, acknowledged that he/she is authorized to act on behalf of _____ (Company), and that he/she executed the foregoing certificate as his/her free act and deed and as the act and deed of _____ (Company).

Dated: _____, 2016

Notary Public

**CERTIFICATION THAT BIDDER HAS ADOPTED
AND MAINTAINS A WRITTEN SEXUAL HARASSMENT POLICY
AND REGARDING SUBSTANCE ABUSE PREVENTION PROGRAM**

The undersigned hereby certifies that _____ (Name of Company) ("Bidder") has in full force and effect a written sexual harassment policy in accordance with the Illinois Human Rights Act (775 ILCS 5/1-101 *et seq.*), including at least the following:

- a statement on the illegality of sexual harassment;
- the definition of sexual harassment under Illinois law;
- a description of sexual harassment, utilizing examples;
- an internal complaint process, including penalties;
- the legal recourse, investigative and complaint process available through the Illinois Department of Human Rights ("Department") and the Illinois Human Rights Commission ("Commission");
- directions on how to contact the Department and the Commission; and,
- protection against retaliation as provided by Section 6-101 of the Act.

The undersigned further certifies that such policy shall remain in full force and effect throughout the term of the Contract.

The undersigned further certifies that it has or will have in place prior to commencement of the Project Work, a written substance abuse prevention program which meets or exceeds the requirements set forth in the Substance Abuse Prevention on Public Works Projects Acts (PA 95-0635) (the "Act") to the extent required under said Act.

(Print Name of Bidder/Company))

(Signature of Authorized Officer)

(Printed Name of Signatory)

(Title of Signatory)

STATE OF ILLINOIS)
)
COUNTY OF _____)

SS.

I, the undersigned, a notary public in and for the State and County aforesaid, hereby certify that _____ appeared before me this day in person and, being first duly sworn on oath, acknowledged that he/she is authorized to act on behalf of _____ (Company), and that he/she executed the foregoing certificate as his/her free act and deed and as the act and deed of _____ (Company).

Dated: _____, 2016

Notary Public

Hoffman Estates

Shoe Factory Rd

Shoe Factory Rd

Sutton Rd

Sutton Rd

Sutton Rd

Hoffman Estates

Golf Rd

Golf Rd

Golf Rd

Golf Rd



1 inch = 700 Feet

Magnolia Lane and Magnolia Court

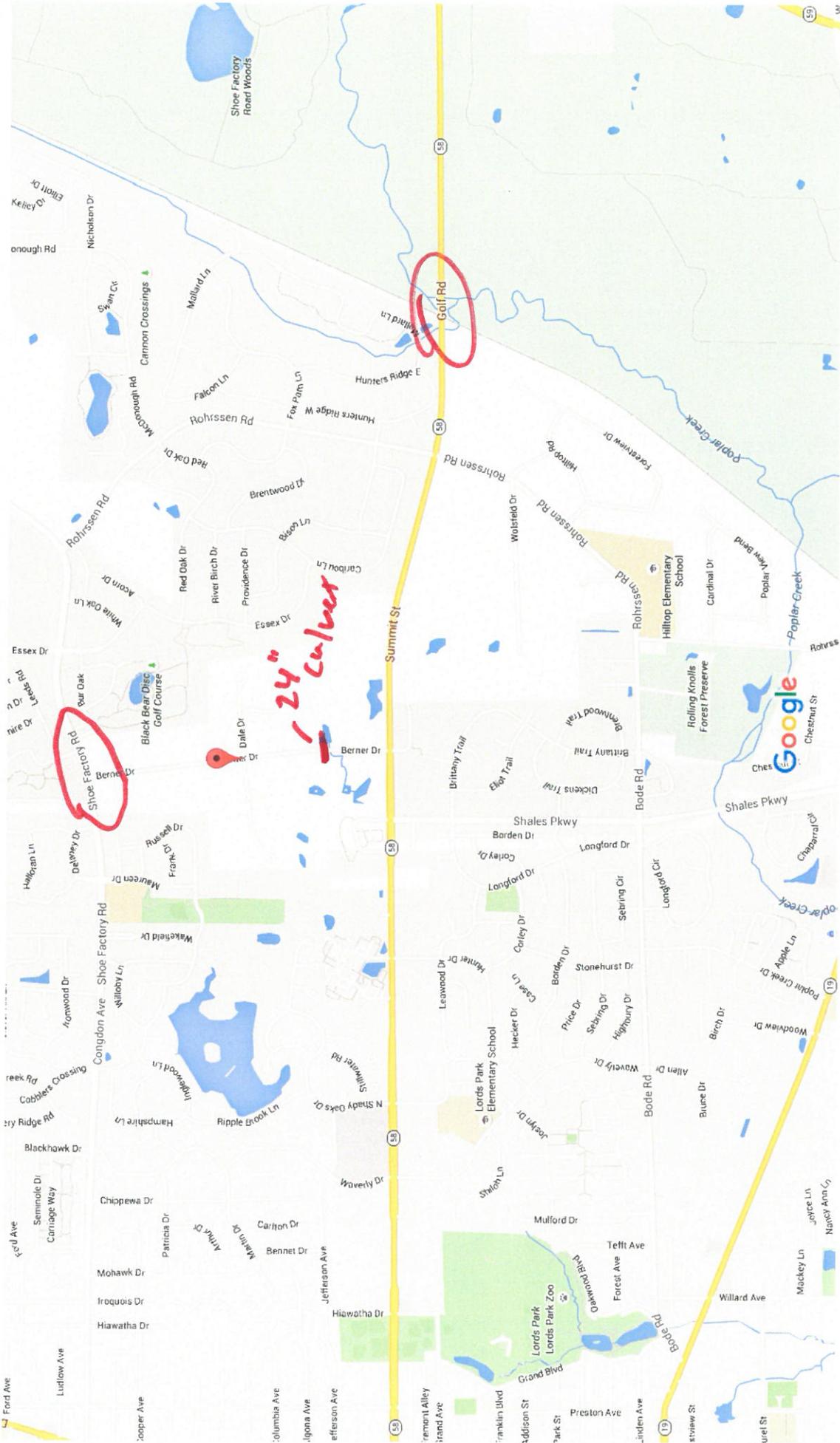
Gewalt Hamilton Associates, Inc.

Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors

Berner Dr

AN

24" Culvert



**Description of Work
 2016 Road Improvement Program
 Hanover Township Road District**

The following is a list of streets including limits, lengths, area and a brief description:

Street	From/To	Length	Area
Magnolia Lane	Route 59 – East to Dead End	550 FT	1,350 SY
Magnolia Court	Magnolia Lane – South to Dead End	425 FT	1,150 SY
		Totals: 975 FT	2,500 SY

The above street segments will include full-depth reclamation, preparation of base, removal and disposal of unsuitable material, hot-mix asphalt binder course, hot-mix asphalt surface course, driveway pavement removal and replacement, landscape and shoulder restoration and other associated improvements.

Street	From/To	Length	Area
Berner Drive	Summit Street to Dale Drive	100 FT (0.019 miles)	N/A
		Totals: 100 FT (0.019 miles)	

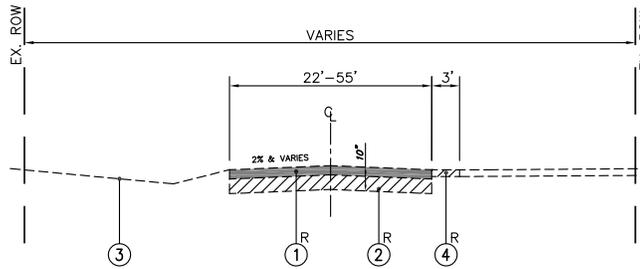
The above street segments will include culvert removal and replacement, hot-mix asphalt pavement patching operations, landscape and shoulder restoration and other associated improvements.

Pipe Culvert Removal and Replacement Location(s)

Location	Existing Material	Existing Diameter (IN)	Existing Length (FT)	Proposed Material	Proposed Diameter (IN)	Proposed Length (FT)
12N201 Berner Drive	CMP	24	40	PVC	24	40

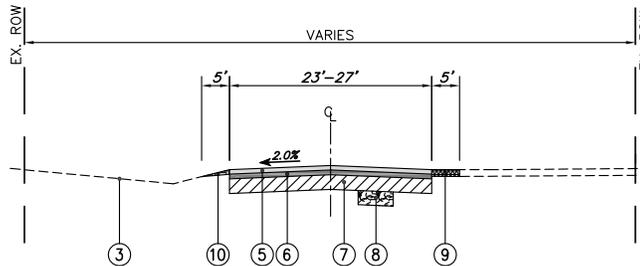
**FULL-DEPTH RECLAMATION – RURAL
LOCATIONS – TABLE A**

STREET	Ex Width	Prop Width
MAGNOLIA LANE	22'-23'	23' (Uniform Width)
MAGNOLIA COURT	24'	23' (Uniform Width)



EXISTING PAVEMENT SECTION

SEE 'LOCATIONS – TABLE A'



PROPOSED PAVEMENT SECTION

SEE 'LOCATIONS – TABLE A'

TYPICAL SECTION LEGEND

- | NO | DESCRIPTION |
|----------------|---|
| ① | EXISTING HOT-MIX ASPHALT PAVEMENT, VARIES 8" TO 18" |
| ② | EXISTING AGGREGATE BASE, VARIES |
| ③ | EXISTING GROUND |
| ④ | EXISTING DRIVEWAY |
| ⑤ | PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX D, N50, 2 INCH |
| ⑥ | PROPOSED HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50, 2.25 INCH |
| ⑦ | PROPOSED FULL-DEPTH RECLAMATION, 10 INCH |
| ⑧ | PROPOSED AGGREGATE SUBGRADE IMPROVEMENT (as required) |
| ⑨ | PROPOSED DRIVEWAY (HMA: 5' 0/S E/P; Conc: 10' 0/S E/P; Brick: 5' 0/S E/P) |
| ⑩ | PROPOSED RESTORATION, VARIABLE DEPTH (PULV TOPSOIL, SEEDING CL 1A, FERTILIZER NUTRIENT, MULCH, METHOD 3A) |
| ⓧ ^R | ITEM TO BE REMOVED |

HMA – MIXTURE REQUIREMENTS

MIXTURE TYPE	AIR VOIDS @ Ndes
PAVEMENT	
HMA Surface Course, Mix D, N50 (IL 9.5mm) 2"	4% @ 50 Gyr.
HMA Binder Course, IL-19.0, N50 2.25"	4% @ 50 Gyr.
DRIVEWAYS	
HMA Surface Course, Mix D, N50 (IL 9.5mm) 3"	4% @ 50 Gyr.
PATCHING	
HMA Surface Course, Mix D, N50 (IL 9.5mm) 2"	4% @ 50 Gyr.
HMA Binder Course, IL-19.0, N50 4"	4% @ 50 Gyr.

- The unit weight used to calculate all HMA Surface Mixture quantities is 112 lb/sy/in.
- The 'AC Type' for Polymerized HMA mixes shall be 'SBS/SBR PG 76-22' and for non-polymerized HMA the 'AC Type' shall be 'PG 64-22' unless modified by District One Special Provisions. For use of recycled materials see Special Provisions.

NOTE:

- THE LIMITS OF UNSUITABLE SOIL REMOVAL HAVE BEEN ESTIMATED. THE LIMITS OF UNDERCUT WILL BE VERIFIED OR RE-ESTABLISHED DURING CONSTRUCTION BY THE ENGINEER BASED ON ACTUAL FIELD CONDITIONS. THE PLAN QUANTITIES ARE ESTIMATED AND ANY ADDITIONS OR SUBTRACTIONS RESULTING FROM THE CHANGE IN LIMITS OF UNDERCUTTING SHALL BE MADE BY THE ENGINEER. THE CONTRACTOR WILL BE PAID FOR THE ACTUAL QUANTITY OF WORK PERFORMED.
- SEE EXISTING PAVEMENT CORE REPORTS FOR EXISTING PAVEMENT SECTION INFORMATION.

REPORT OF SUBSURFACE EXPLORATION SERVICES

**Magnolia Lane and Magnolia Court
Elgin, Illinois**

Prepared for

**Gewalt Hamilton Associates, Inc.
Mr. Steven D. Berez, P.E.**

Prepared by

CGMT, Inc.

CGMT Project No. 16G0216

June 1, 2016



Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
♦ Telephone (630) 595-1111 ♦ Fax (630) 595-1110



Construction & Geotechnical Material Testing, Inc.

60 Martin Lane, Elk Grove Village, Illinois 60007
Telephone (630) 595-1111 ♦ Fax (630) 595-1110

June 1, 2016

Project No. 16G0216

Gewalt Hamilton Associates, Inc.
Mr. Steven D. Berez, P.E.
Senior Engineer
625 Forest Edge Drive
Vernon Hills, Illinois 60061

RE: Report of Subsurface Exploration
Proposed Pavement Improvements
Magnolia Lane and Magnolia Court
Elgin, Illinois

Dear Mr. Berez:

Construction & Geotechnical Material Testing, Inc. (CGMT) has completed the limited subsurface exploration for the above mentioned project located in Elgin, Illinois.

The purpose of CGMT's field investigation was to determine the pavement thickness along with immediate underlying subbase conditions of the existing pavements at the subject pavement locations in Elgin, Illinois. Locations of the drilling were located in accordance to conversations and diagram by Gewalt Hamilton Associates and necessary offsets were made to accommodate underground obstructions.

Drilling activities commenced on the week of May 20, 2016. CGMT mobilized a core team to determine the requested subsurface conditions.

The report of the exploration including summaries of our findings follows this cover letter. Please do not hesitate to contact our offices if you have any questions regarding this exploration or any of the information provided in the report.

Respectfully,

CONSTRUCTION & GEOTECHNICAL MATERIAL TESTING, INC.

Pratik K. Patel, P.E.
Vice President

CC: File/PK



Pavement Investigation Report

I. SCOPE OF INVESTIGATION

This report presents the results of the subsurface exploration requested for the subject pavements in Elgin, Illinois.

The purpose of the exploration was to secure and log existing pavement thicknesses and underlying subbase conditions as encountered during the field investigation, and to present the data obtained.

Assessments of the existing storm water drainage system, engineering recommendations, construction considerations and traffic studies to assess roadway condition and geometries were not part of the CGMT scope of services.

II. FIELD EXPLORATION

Prior to mobilizing a drill team on site, CGMT performed a utility locate through JULIE, as required by state law, to verify that no conflicts existed between the planned drilling locations and buried utilities. Intrusive activities associated with the pavement exploration were initiated after the utility locate had been completed by the participating utility companies.

A total of six cores, C-1 through C-6, were planned for this project. In general the drilling performed extended to depths of approximately 1 to 1 ½ feet in the vicinity of the subject pavements. These locations are depicted on the attached Boring Location Diagrams (Attachment A). The drilling was performed using a diamond impregnated core barrel and hand auger sampling.

The drill crew maintained a field log of the soils encountered in the coring and boring operation. After recovery, samples classified and recorded. Representative portions of soils samples were obtained and were then sealed in jars and brought to our laboratory in Elk Grove Village, Illinois for further visual examination and laboratory testing. After completion of the drilling operations, the core holes were backfilled with auger cuttings and asphaltic patch.



IV. GENERAL CONDITIONS

A. Report Preparation and Review

This report has been prepared in accordance with generally accepted geotechnical engineering practices common to this geographic area. No other warranty, expressed or implied is intended. The report has been prepared for the client for his stated purpose only, and the report may not contain sufficient recommendations or information for other parties or uses.

In the event that any changes in the scope of the project, however slight, are planned, the conclusions contained in this report shall not be considered valid unless the changes are reviewed, and the conclusion of their report modified or reaffirmed in writing. In the event that conclusions based upon the data of this report are made by others, such conclusions are not our responsibility unless a review is made and a concurring opinion is submitted in writing.

B. Exploration Logs

Logs of the exploration were prepared in the field by a qualified driller foreman. These field logs were used to develop the detail descriptions presented in the logs presented in Attachment B.

The change in pavement layers may be uneven. The logs describe the average thickness of at least three measurements for each layer.

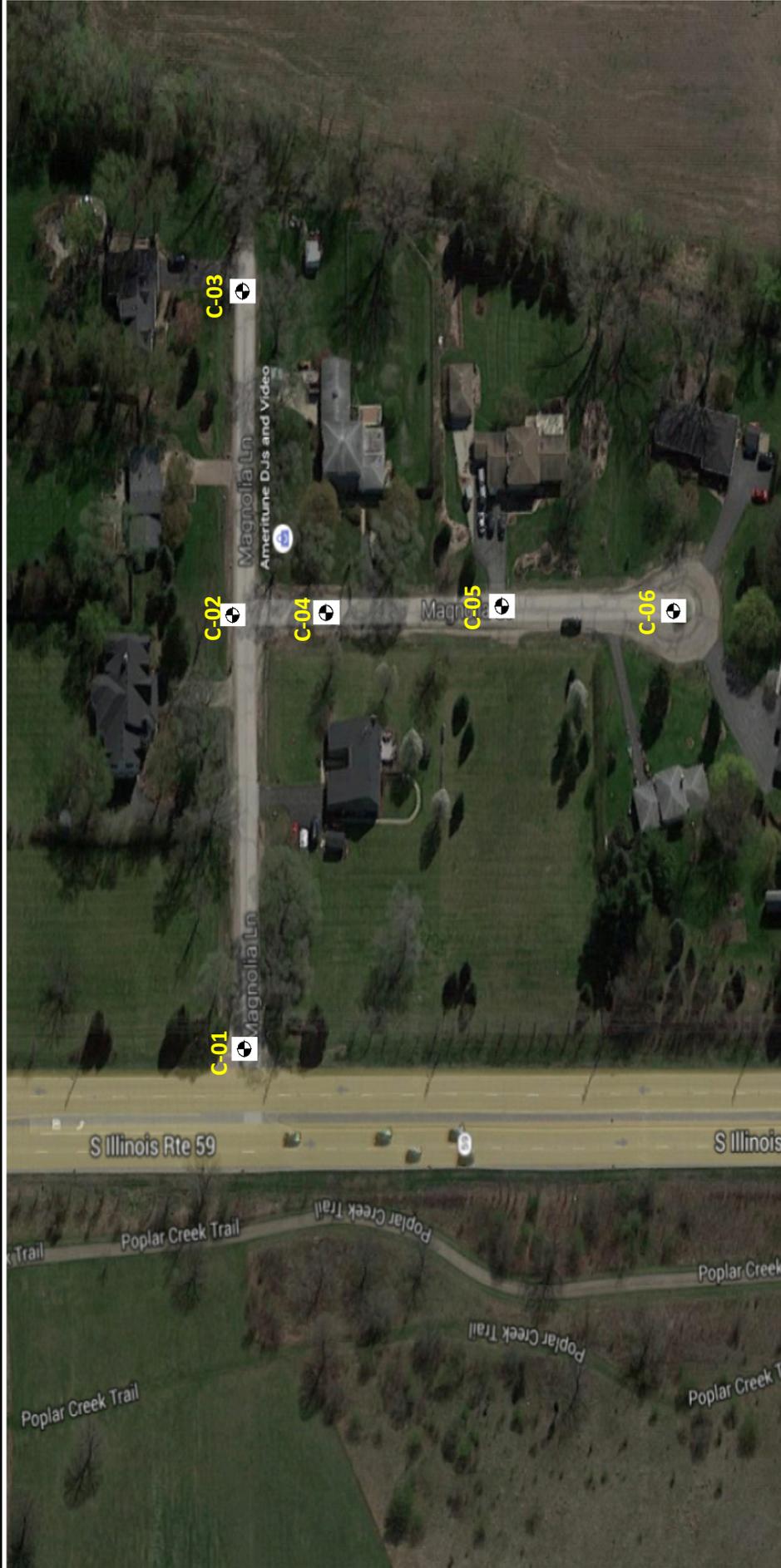
C. Pavement Variations

The findings and data presented in this report are based upon the data obtained at the identified test locations. The pavement conditions in any pavement can vary widely, being dependent on the quality of the original construction. The CGMT scope of work did not include the mapping of pavement conditions over the project area. Information presented in this report may not reflect any pavement variations which may exist away from or between the test locations.



ATTACHMENT A

Location Diagram



Not to Scale

Soil Boring Location Diagram	
Magnolia Lane & Magnolia Court	
Elgin, Illinois	
Project Manager	Project Number
P. Patel	16G0216
Date	Sheet Number
6/1/2016	Fig. 1



LEGEND



 - Approximate Soil Boring Location



ATTACHMENT B

Core Logs

CORE LOG

Core	Location	Total Depth of (inches)	Pavement Components	Comments
C-1	Magnolia Lane & Rte 59	18	1 3/8" Asphalt	Surface Coarse, Little voids, good bond
			1 3/4" Asphalt	Binder Coarse, Trace voids
			4 7/8" Basecourse	Apparent IDOT CA-06
			Subgrade	Brown sand and gravel
C-2	Magnolia Court & Magnolia Lane	14	1 3/4" Asphalt	Surface Coarse, Little voids, good bond
			2 1/2" Asphalt	Binder Coarse, Trace voids
			3 1/2" Basecourse	Asphalt Grindings
			Subgrade	Brown sand and gravel
C-3	699 Magnolia Lane	12 1/2	1 3/8" Asphalt	Surface Coarse, Little voids, good bond
			2 3/8" Asphalt	Binder Coarse, Trace voids
			5" Basecourse	Asphalt Grindings
			Subgrade	Brown sand and gravel
C-4	2207 Magnolia Lane	13	1 1/4" Asphalt	Surface Coarse, Little voids, good bond
			2" Asphalt	Binder Coarse, Trace voids, good bond
			1" Asphalt	Leveling Binder Coarse, Fractured horizontally, good bond
			3 1/4" Asphalt	Binder Coarse, Trace voids
			Subgrade	Brown sand and gravel
C-5	267 Magnolia Court	12	1 1/2" Asphalt	Surface Coarse, Little voids, good bond
			2" Asphalt	Binder Coarse, Trace voids
			5" Basecourse	Asphalt Grindings
			Subgrade	Brown sand and gravel
C-6	12N224 Magnolia Court	13	1 1/2" Asphalt	Surface Coarse, Little voids, good bond
			3 1/4" Asphalt	Binder Coarse, Trace voids
			Subgrade	Brown sand and gravel

County Boundaries (6 County)



1 inch = 100 Feet

- low areas - 799 - 798 - 797 - 796

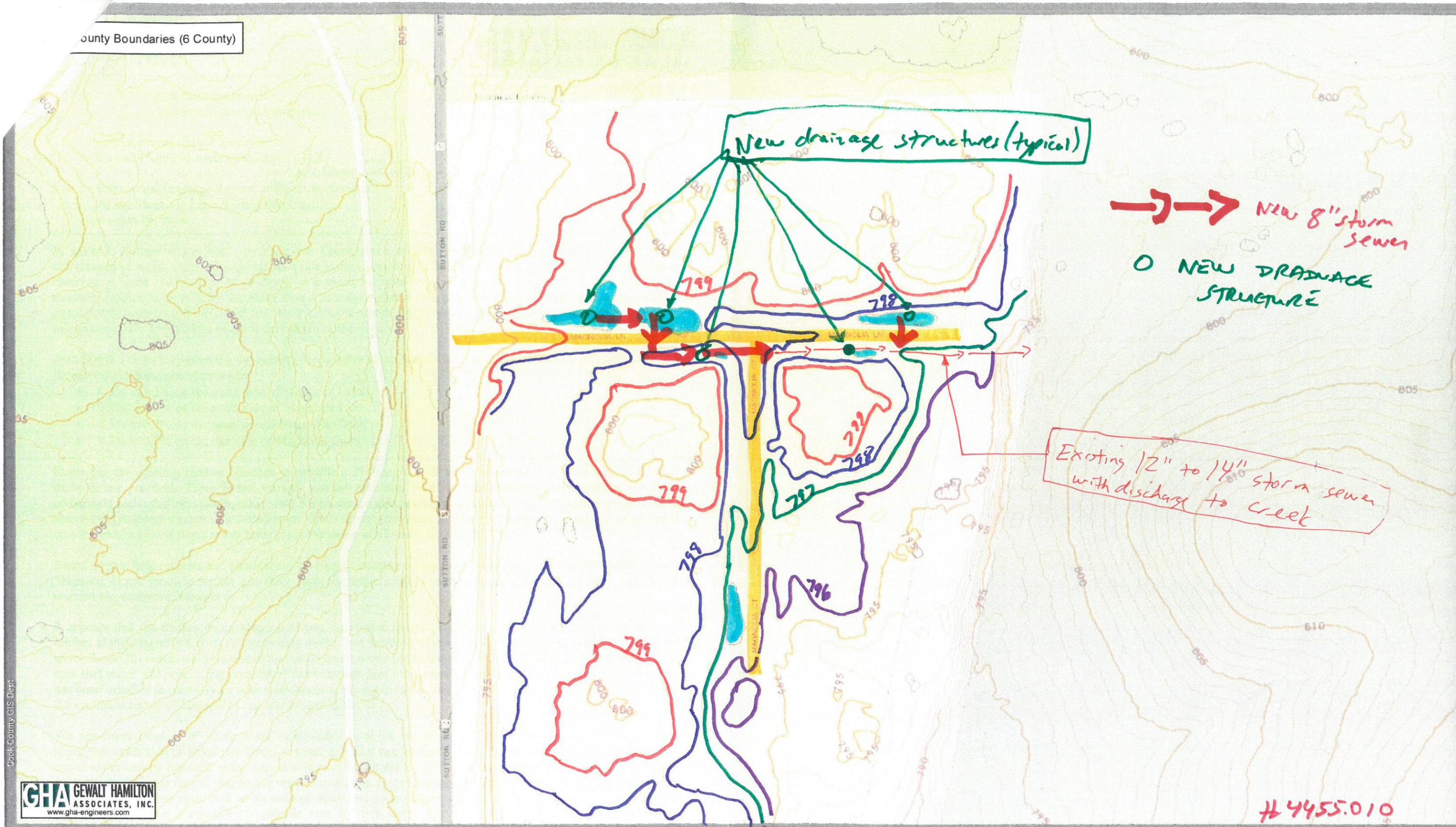
Roadways

4455.010

8/10/2016

ArcGIS Web Map

Gewalt Hamilton Associates, Inc.



Cook County GIS Dept.

INDEX
FOR
SUPPLEMENTAL SPECIFICATIONS
AND RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

No ERRATA this year.

SUPPLEMENTAL SPECIFICATIONS

Std. Spec. Sec.

Page No.

No Supplemental Specifications this year.

CHECK SHEET
FOR
RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

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

CHECK SHEET
FOR
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

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

LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

<u>CHECK SHEET #</u>		<u>PAGE NO.</u>
LRS 1	Reserved	130
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LRS 3	<input type="checkbox"/> Work Zone Traffic Control Surveillance	132
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LRS 5	<input type="checkbox"/> Contract Claims	134
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The following Special Provisions supplement the “Standard Specifications for Road and Bridge Construction”, Adopted April 1, 2016 , the latest edition of the “Manual on Uniform Traffic Control Devices for Streets and Highways”, and the “Manual of Test Procedures of Materials” in effect on the date of invitation of bids, and the Supplemental Specifications and Recurring Special Provisions indicated on the Check Sheet included here in which apply to and govern the construction of 2016 Road Maintenance Program , and in case of conflict with any part, or parts, of said Specifications, the said Special Provisions shall take precedence and shall govern.

Hanover Township Road District

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FOR CONTRACT SPECIAL PROVISIONS**

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7. Pre-Construction Meeting
8. Period of Establishment
9. Protection of Mailboxes
10. Dust Control
11. Traffic Control and Protection
12. Maintenance of Roadways

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2. Aggregate Wedge Shoulder
3. Pipe Culverts
4. Full-Depth Reclamation
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7. Brick Driveway Removal and Replacement
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2. HMA Mixture Design Requirements (D-1)
3. Reclaimed Asphalt Pavement and Shingles (D-1)

Local Roads - Special Provisions

LR 107-4 - Insurance

General Conditions

1. Scope of Work

The provisions of Article 104.02 of the Standard Specifications are hereby amended as follows: "Hanover Township Road District expressly reserves the right to remove from the project any roads or portions thereof included in the 2016 Road Maintenance Program. Such reductions, if any, shall be made in writing by the District prior to execution of the Contract Documents. Any reduction in the scope of work required by the District prior to the execution of the Contract Documents shall not result in an adjustment to the contact or to the unit prices originally bid.

2. JULIE Notification

The Contractor is to call J.U.L.I.E. (1-800-892-0123 or 811), a minimum of forty-eight (48) hours in advance of work being done in the area.

The Contractor shall contact the owner of all utilities and obtain locations of all utilities within limits of the proposed construction

The Contractor will be required to cooperate with all utility companies and municipal agencies involved in connection with the removal, temporary relocation, reconstruction or abandonment by these agencies of any and all services

No additional compensation will be allowed the Contractor for any expense incurred by complying with these requirements, or because of delays, inconvenience or interruptions in his work resulting from the failure of the municipal agencies or utility company to remove, relocate, reconstruct or abandon their services.

3. Prequalification of Bidders

Bidders shall be prequalified with the Illinois Department of Transportation in accordance with Article 102.01 of the Standard Specifications and is required by all bidders.

4. Completion Date

The Contractor shall commence the work to be performed under this contract, 10 days following the execution of the contract. The work shall be prosecuted in such a manner and with such a supply of materials, equipment and labor as considered necessary to ensure its completion according to the time specified in the contract. The Contractor shall complete all work in the contract by October 28, 2016 including landscape restoration and punch list items, as defined in Article 108.04 of the Standard Specifications.

In case of failure to complete the work on time, the provisions of Article 108.09 of the Standard Specifications shall apply. Landscape restoration planting times shall follow Article 250.07 of the Standard Specifications.

5. Contract Sequencing

The Contractor shall notify the Engineer at least 72 hours in advance of beginning work. Construction operations shall be conducted in a manner such that streets will remain open to all traffic. At no time shall residents or business owners be kept out of their driveway over a weekend or holiday as defined in article 107.09 of the Standard Specifications.

Work shall be scheduled so that it is continuous on the various roadways. The Contractor and approved Subcontractor(s) shall, at all times, employ and provide sufficient labor, tools, equipment, and other incidental items for prosecuting the work to full completion in the manner and time required by the contract. Furthermore, article 440.04 shall be revised to read as follows: 'Milled or removed pavement shall be resurfaced to Binder within seven (7) calendar days.'

6. Construction Work Periods

All work shall be confined to the period beginning at 7:00 AM and ending at 7:00 PM on weekdays. No work shall be done on Saturdays, Sundays or legal holiday periods as defined in article 107.09 of the Standard Specifications, without the express permission of the District.

7. Pre-Construction Meeting

Prior to commencing any construction operations, there shall be a pre-construction meeting. The Owner or Engineer will set the time and date of the meeting after execution of the contract by both parties.

The following shall be submitted for review at the pre-construction meeting:

A Progress Schedule

The 24-hour emergency phone number, field phone number, pager number, and cellular phone number of the Contractor's superintendent.

The name and 24-hour emergency telephone number of the person in the direct employ of the Contractor who is responsible for administering the Traffic Control and Protection for the Contract

A list of subcontractors with contact names, addresses, and phone numbers. Also, include quantity and type of work to be sublet.

A list of material suppliers with contacts and phone numbers.

A list of mix designs for concrete and bituminous items to be incorporated in the Contract.

8. Period of Establishment

Include the following in addition to SECTION 250 SEEDING:

The work for these items shall include all labor, materials, and equipment necessary to furnish and place pulverized topsoil, seed, fertilizer nutrients and Mulch Method 3A. Work shall include preparing the existing ground surface, placing topsoil and fine grading the topsoil to match existing grades in preparation for seed. The topsoil shall be feathered to match the existing terrain and adjacent curb or roadway. This item is intended to blend any changes in pavement, curbs, shoulders and/or ditches to existing contours in accordance with Sections 211, 250, 251 and 252 of the Standard Specifications or as directed by the Engineer.

The Contractor shall insure that the proposed grass seed meets the requirements of the IDOT class of seed specified, and shall be produced and tested in the current year, be of good quality, and free of weeds. Fertilizer shall be applied in accordance with Article 250.04 of the Standard Specifications.

The first watering shall begin within 24-hours of the placement of the mulch. The recommended rate of watering is 3 gallons per square yard every other day until final acceptance by the Engineer, however it is the sole responsibility of the Contractor to make necessary adjustments as to not under or over water.

Areas seeded must undergo a 30-day period of establishment beginning on the last day that seed is sowed. During this period, the Contractor shall be responsible for, at no additional cost to the District, watering, removing weeds and maintaining the seeded areas and repairing any damage to the seeded areas due to but not limited to, errant vehicles, severe weather or all other causes. At the end of the period of establishment, the pay quantity for seeded areas, which results in weeds, bare areas, or are otherwise unacceptable, shall be deducted from the Contract quantities. However, the reduction in quantity of the contract pay item does not relieve the Contractor from their obligation to make repairs as determined necessary by the Engineer. Should the seed not germinate because of prevailing cool weather, the period of establishment may be adjusted as determined by the Engineer.

Planting times shall be April 1 to June 15 and August 1 to November 1.

The Contractor shall provide the Engineer with proper documentation on the landscaping materials supplied to the project such as topsoil source, topsoil certification, fertilizer bags, seed tags, and seed bags.

9. Protection of Mailboxes

The Contractor shall take all necessary precautions when working near mailboxes within or adjacent to the project limits. If at the Contractor's discretion, a mailbox will interfere with construction operations, a temporary mailbox shall be located per the United States Postal Service requirements and the permanent mailbox reinstalled following said operation. At no time shall a resident be without a

mailbox for greater than 24 hours or not receive mail due to a mailbox being removed, replaced or damaged. The Contractor shall replace, at no additional cost to the Owner, any mailbox or post which has been damaged by the Contractor's operations due to neglect, misconduct or poor workmanship. The cost of all materials required and all labor necessary to comply with the above Provisions will not be paid for separately, but shall be considered as included in the unit bid prices of the contract, and no additional compensation will be allowed

10. Dust Control

The Contractor shall be required to control dust resulting from construction operations throughout the duration of the project. Dust shall be controlled by the uniform application of sprinkled water from a water truck or otherwise. Individual fire hydrant use shall not be permitted to control dust at specific locations. The Contractor shall provide dust control operations on a daily basis or as required by the Engineer.

At the discretion of the Engineer, a street sweeper shall be utilized to clean pavement within or adjacent to the project limits.

No additional compensation shall be approved to control dust as specified herein.

11. Traffic Control and Protection

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 herein and in the plans, if applicable, and the Standard Specifications for Traffic Control Items. Special attention is called to the following sections of the Standard Specifications, the Highway Standards, and the special provisions relating to traffic control:

Delays to the Contractor caused by complying with these requirements will be considered included in the cost of the contract, and no additional compensation will be allowed.

Standards

701001, 701011, 701301, 701311, and 701901

Details

TC-10 Traffic Control and Protection for Side Roads, Intersections and Driveways
BD-32 Butt Joint and HMA Taper Details

Special Provisions

Maintenance of Roadways
Traffic Control Plan

12. Maintenance of Roadways

Effective: September 30, 1985

Revised: November 1, 1996

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

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

Special Provisions

1. Driveway Pavement Removal

This item shall include all labor, material and equipment necessary to remove existing driveway pavement as marked by the Engineer in accordance with Section 440 of the Standard Specifications.

Driveway material type may include aggregate of various gradation, portland cement concrete and hot-mix asphalt pavements. The contractor shall form a perpendicular straight joint by full depth machine sawing at the end of the portion to be removed to prevent surface spalling. These areas must be marked and measured for payment by the Engineer prior to removal. The Contractor at his/her expense shall repair any driveway pavement damaged by the Contractor during the driveway pavement removal operations. At the sole discretion of the Engineer, if the existing elevations allow, the existing hot-mix asphalt driveway may only require a butt-joint at the limits.

Supplemental aggregate required for grade adjustment for depths greater than three inches may be added in lieu of hot-mix asphalt and shall be considered included in the cost of this pay item.

For portland cement concrete driveway pavement, the limits shall be to the first perpendicular joint.

This work will be measured in place and paid for at the contract unit price per square yard for DRIVEWAY PAVEMENT REMOVAL, which shall include all labor, equipment, and materials required to complete the work as specified herein.

2. Aggregate Wedge Shoulder

This item shall include all labor, material and equipment necessary to furnish, place, shape and compact an aggregate wedge shoulder as marked by the Engineer in accordance with Section 481 of the Standard Specifications.

The material used for this item shall be exclusively IDOT certified recycled asphalt pavement (RAP) in accordance with Section 1031 of the Standard Specifications.

This work will be measured in place and paid for at the contract unit price per ton for AGGREGATE WEDGE SHOULDER, TYPE B, which shall include all labor, equipment, and materials required to complete the work as specified herein.

3. Pipe Culverts

This item shall include all labor, material and equipment necessary to furnish and install pipe culverts at locations shown on the plans or as marked by the Engineer in accordance with Section 542 of the Standard Specifications.

The material used for this item shall be exclusively Polyvinyl Chloride Pipe (PVC) in accordance with Article 1040.03 of the Standard Specifications. This item shall also include all granular aggregate bedding material and trench backfill to grade.

This work will be measured in place and paid for at the contract unit price per foot for PIPE CULVERTS, CLASS C, TYPE 1, of the diameter specified, which shall include all labor, equipment, and materials required to complete the work as specified herein.

4. Full-Depth Reclamation

This item shall include all labor, material and equipment necessary to pulverize and mix the existing hot-mix asphalt pavement, various bituminous asphalt layers and the aggregate material to a specified depth and gradation by a self-propelled reclaimer. The pulverized material shall be used as the aggregate subgrade for proposed hot-mix asphalt binder and surface courses, and will be shaped by a motor grader to the grades, slopes and widths as shown on the approved plan and at the direction of the Engineer.

All equipment shall be according to Section 1101 of the Standard Specifications.

The self-propelled reclaimer shall be capable of fully pulverizing and mixing the existing pavement to the width and depth as shown on the approved plans. The self-propelled reclaimer shall be capable of reclaiming up to 10-inches (254 mm) deep in a single pass. Equipment such as road planers or cold milling machines designed to mill or shred the existing bituminous concrete, rather than crush or fracture it, shall not be allowed.

Subgrade preparation equipment shall be the requirements Article 301.02, Article 311.03, Article 351.03 and Article 358.03 of the Standard Specifications.

The final pulverized material shall be compacted to not less than 95% of the standard laboratory density. The pulverizing shall continue until the material passes meets the gradation of CA-6, or to the satisfaction of the Engineer. The Engineer shall be the sole judge as to when the pulverization process is complete.

No compensation will be made for pulverization or respective restoration or grading outside the project limits, in the opinion of the Engineer.

The Contractor shall take care to protect all existing and proposed drainage and/or utility structures within the limits of pulverization. The Contractor shall remove the existing frames and lids and install a temporary steel plate at the proposed subgrade elevation for all existing structures in the pulverized limits prior to commencement of the pulverization.

This work shall consist of pulverizing and mixing the existing hot-mix asphalt pavement, various bituminous asphalt layers and the aggregate material to a specified depth by the self-propelled reclaimer and/or shaped by the motor grader to the grades, slopes and widths as shown on the approved plan. The pulverized and shaped material shall be compacted immediately following the self-propelled reclaimer to support equipment and/or traffic. All pulverized surfaces must be drivable by the end of each day, to the satisfaction of the engineer. The mixture shall be of the specified gradation, and shall include re-spreading, re-shaping and re-compaction of the mixture to the grades, slopes and widths as shown on the approved plan and to the specified density.

Subgrade soils shall not be mixed with the pulverized bituminous materials and/or aggregate base. At the Engineer's discretion, the Contractor shall periodically remove the pulverized material to the subgrade and demonstrate that the pulverized material has not been contaminated.

The breakdown roller shall be 500 FT (150 m) or less behind all self-propelled reclaimer units. The recycled material shall be compacted by the padfoot roller or the pneumatic-tired roller, applying high amplitude and low frequency. No significant wheel impressions shall be left on the surface.

After completion of breakdown rolling, the motor grader shall be used to cut the pulverized material no deeper than necessary to remove breakdown roller marks from the initial compaction and to achieve desired cross slope.

The bladed pulverized material shall be compacted by the intermediate and final rollers. The number of passes and order of rollers may be altered, if necessary, by the Engineer to meet compaction requirements. In an effort to minimize roller marks, finish rolling shall not be done in vibratory mode. Water may be lightly sprayed by a water truck to aid in improving final density and appearance.

After the pavement section is pulverized, rolled and shaped, the prepared pulverized material shall be proof rolled with a fully-loaded six-wheel dump truck; witnessed by the Engineer. If permanent deformation does not occur, moving traffic may be allowed on the pulverized aggregate subbase. If permanent deformation greater than $\frac{1}{4}$ " (6 mm) is observed then moving traffic shall be kept off the subbase until the material has been repaired or is firm enough to support the traffic with minimal deflection.

At the completion of each working day, the pulverized material shall be graded to the Engineer's satisfaction to provide transitions between the pulverized material and the adjoining existing pavement to facilitate the maintenance of traffic through the work area.

This work shall be measured in place and paid for at the contract unit price per square yard for FULL-DEPTH RECLAMATION, 10.0", which shall include all labor, equipment, and materials required to complete the work as specified herein.

5. Aggregate Shoulders

This item shall include all labor, material and equipment necessary to furnish, place, shape and compact an aggregate shoulder as marked by the Engineer in accordance with Section 481 of the Standard Specifications.

The material used for this item shall be considered a specialty aggregate material. Aggregate material shall be similar and closely match the existing color, type and gradation of the existing surface. The materials of the furnished aggregate shall be approved by the Engineer prior to ordering and placement.

This work will be measured in place and paid for at the contract unit price per square yard for AGGREGATE SHOUDERS (SPECIAL), which shall include all labor, equipment, and materials required to complete the work as specified herein.

6. Traffic Control and Protection

This item shall include all labor, material and equipment necessary to provide proper traffic control and protection operations in accordance with Section 701 of the Standard Specifications and as described herein.

All applicable details and general conditions shall be included in the cost of this item.

This work will be measured in place and paid for at the contract unit price per lump sum for TRAFFIC CONTROL AND PROTECTION (SPECIAL), which shall include all labor, equipment, and materials required to complete the work as specified herein.

7. Brick Driveway Removal and Replacement

This item shall include all labor, material and equipment necessary to remove, store, and reinstall brick paver driveways as marked by the Engineer as specified herein.

All references to brick pavers in the plans or the following special provision shall be interpreted to mean all specialty materials, including, but not limited to, brick pavers, raised aggregate, slate, flagstone, and all non-portland cement or bituminous sidewalks or driveways.

The cost to dispose of existing damaged/missing bricks or purchase and install replacement bricks shall be included in this pay item. No additional compensation will be provided for replacement bricks. The brick pavers that are reusable shall be carefully removed and stored to prevent loss or damage. Any bricks, which are lost or damaged during construction, shall be replaced in kind by the Contractor at his own expense.

The Contractor may salvage the existing brick edging. If the existing brick edging is damaged, in the opinion of the Engineer, the Contractor shall furnish and install new edging of sufficient size to prevent the brick pavers from 'rolling' or losing their bond. The brick edging will not be paid for separately but shall be included in the cost of this pay item. The Contractor shall provide the appropriate material to level the area prior to replacement the any brick pavers. Additional aggregate required for grade adjustments shall be mechanically compacted and is included in this item.

The Contractor shall furnish and apply mason and/or polymeric sand, whichever is applicable to match existing materials, after paver blocks have been set to grade. After a sufficient amount of sand has been applied to the brick paver surface, the area shall be mechanically tamped to ensure a tight bond. The application of sand may need to be repeated until the desired results are achieved to the satisfaction of the Engineer. The Contractor shall ensure that positive drainage is achieved prior applying sand and mechanically tamping the brick paver surface.

This work will be measured in place and paid for at the contract unit price per square feet for BRICK DRIVEWAY REMOVAL AND REPLACEMENT, which shall include all labor, equipment, and materials required to complete the work as specified herein.

8. Hot-Mix Asphalt Driveway Pavement

This item shall include all labor, material and equipment necessary to furnish and install stabilized driveway pavement in accordance with the applicable portions of Sections 355 and 406 of the Standard Specifications and the details shown in the plans. All references to Bituminous Concrete in said Specifications shall be interpreted to mean Hot-Mix Asphalt.

The stabilized driveway pavement, of the specified thickness, shall be Hot-Mix Asphalt, Mix "D", N50, meeting the requirements in Section 406 of the Standard Specifications. Excavation required for the removal of the existing driveway and to obtain proper sub-grade elevation shall be paid for under a separate item.

This work will be measured in place and paid for at the contract unit price per square yard for HOT-MIX ASPHALT DRIVEWAY PAVEMENT, of the depth specified, which shall include all labor, equipment, and materials required to complete the work as specified herein.

9. Portland Cement Driveway Pavement

This item shall include all labor, material and equipment necessary to complete the installation of exposed aggregate concrete driveway pavement, to the depth specified, where marked by the Engineer and in accordance with Section 423 of the Standard Specifications and the details shown in the plans.

The new concrete driveway shall be poured within 24 hours following removal operations. Exposed aggregate material shall be similar and closely match the existing color, type and gradation of the existing surface. The materials of the aggregate are shall be approved by the Engineer prior to ordering and placement.

Materials for portland cement concrete shall be in accordance with Section 1020 of the Standard Specifications.

This work will be measured in place and paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, of the depth specified (SPECIALTY), which shall include all labor, equipment, and materials required to complete the work as specified herein.

10. Storm Sewer – 8" PVC

This item shall include all labor, material and equipment necessary to complete the installation of an 8" diameter PVC SDR 26 storm sewer, to the depth specified, where marked by the Engineer and in accordance with the Standard Specifications and the sketch included in the contract documents.

The storm sewer shall be extended from the recent project constructed with an approximate end point of the storm sewer in a grassed area at the southeast corner of Magnolia Lane and Magnolia Court. The existing storm sewer is estimated to be 12" or 14" in diameter and about 3' to 4' deep to the invert. It is anticipated that the new 8" storm sewer will be buried in the 2.5' to 4' depth to invert, depending on the actual elevation of the existing storm sewer and ground elevations. The contractor shall expose the existing 12"-14" storm sewer at least two days prior to the installation of the new storm sewer, so that the Engineer can provide elevations for the rims and inverts for the new system. Other than the street crossings, the new storm sewer shall be installed in the ditch line and can be backfilled with existing materials, except for stone bedding and stone to 6" above the top of pipe.

This work will be measured in place and paid for at the contract unit price per lineal foot for STORM SEWER – 8" PVC, of the depth specified, which shall include all labor, equipment, and materials required to complete the work as specified herein.

11. Pipe Culverts, Class C, Type 1, 24"

This item shall include all labor, material and equipment necessary to complete the installation of 24" diameter culvert, to the depth specified, where marked by the Engineer and in accordance with the Standard Specifications.

Work includes maintenance of traffic, barricades, flaggers, etc. to construct the culvert. The roadway shall be open to traffic with one-lane open during construction. Work includes installation of a flared end section on both sides. Trench backfill is included in this pay item.

Work includes pavement removal for the trench, along with a full depth sawcut on both sides. Pavement restoration is included in this item and consists of 3" of HMA N50 Binder Course and 2" HMA N50 Surface Course. Cold mix shall be installed as needed during construction.

This work will be measured in place and paid for at the contract unit price per lineal foot for PIPE CULVERTS, CLASS C, TYPE 1, 24" (SPECIAL), which shall include all labor, equipment, and materials required to complete the work as specified herein.

IDOT District One - Special Provisions

1. Aggregate Subgrade Improvement (D-1)

Effective: February 22, 2012

Revised: April 1, 2016

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.

Item	Article/Section
(a) Coarse Aggregate	1004.07
(b) Reclaimed Asphalt Pavement (RAP) (Notes 1, 2 and 3)	1031

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

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

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

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

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

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

303.06 **Capping Aggregate.** The top surface of the aggregate subgrade shall consist of a minimum 3 in. (75 mm) of aggregate gradations CA 06 or CA 10. When Reclaimed Asphalt Pavement (RAP) is used, it shall be crushed and screened where 100 percent is passing the 1 1/2 in. (37.5 mm) sieve and being well graded. RAP that has been fractionated to size will not be permitted for use in capping. Capping aggregate will not be required when the aggregate subgrade improvement is used as a cubic yard pay item for undercut applications. When RAP is blended with any of the coarse aggregates, the blending shall be done with mechanically calibrated feeders.

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

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

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

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

Add the following to Section 1004 of the Standard Specifications:

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

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

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

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

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

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

2. HMA Mixture Design Requirements (D-1)

Effective: January 1, 2013

Revised: April 1, 2016

1) Design Composition and Volumetric Requirements

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

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

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

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

- 1/ CA 16 or CA 13 may be blended with the gradations listed.
- 2/ The coarse aggregates used shall be capable of being combined with stone sand, slag sand, or steel slag sand meeting the FA/FM 20 gradation and mineral filler to meet the approved mix design and the mix requirements noted herein.
- 3/ CA 13 shall be 100 percent passing the 1/2 in. (12.5mm) sieve.

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

"(e) Absorption. For SMA the coarse aggregate shall also have water absorption ≤ 2.0 percent."

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

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

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

"High ESAL	IL-19.0 binder; IL-9.5 surface; IL-4.75; SMA-12.5, SMA-9.5
Low ESAL	IL-19.0L binder; IL-9.5L surface; Stabilized Subbase (HMA) ^{1/} ; HMA 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.

Item	Article/Section
(a) Coarse Aggregate	1004.03
(b) Fine Aggregate	1003.03
(c) RAP Material	1031
(d) Mineral Filler	1011
(e) Hydrated Lime	1012.01

- (f) Slaked Quicklime (Note 1)
- (g) Performance Graded Asphalt Binder (Note 2) 1032
- (h) Fibers (Note 3)
- (i) Warm Mix Asphalt (WMA) Technologies (Note 4)

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

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

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

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

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

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

VOLUMETRIC REQUIREMENTS				
High ESAL				
Ndesign	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
	IL-19.0	IL-9.5	IL-4.75 ^{1/}	
50	13.5	15.0	18.5	65 – 78 ^{2/}
70			65 - 75	
90				

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

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

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

“(3) SMA Mixtures.

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

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

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

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

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

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

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

- (a.) Sufficient collected dust (baghouse) is available for production of the SMA mix for the entire project.
- (b.) A mix design was prepared based on collected dust (baghouse).

2) Design Verification and Production

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

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

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

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

Illinois Modified AASHTO T 324 Requirements ^{1/}

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

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

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

For IL 4.75mm Designs (N-50) the maximum rut depth is 9.0mm at 15,000 repetitions.

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

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

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

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

"The Hamburg Wheel test shall also be conducted on all HMA mixtures from a sample taken within the first 500 tons (450 metric tons) on the first day of production or during start up with a split reserved for the Department. The mix sample shall be tested according to the Illinois Modified AASHTO T 324 and shall meet the requirements specified herein. Mix production shall not exceed 1500 tons (1350 metric tons) or one day's production, whichever comes first, until the testing is completed and the mixture is found to be in conformance. The requirement to cease mix production may be waived if the plant produced mixture demonstrates conformance prior to start of mix production for a contract.

If the mixture fails to meet the Hamburg Wheel criteria, no further mixture will be accepted until the Contractor takes such action as is necessary to furnish a mixture meeting the criteria"

Method of Measurement:

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

"The plan quantities of SMA mixtures shall be adjusted using the actual approved binder and surface Mix Design's G_{mb} ."

Basis of Payment.

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

"Stone matrix asphalt will be paid for at the contract unit price per ton (metric ton) for POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified; and POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, STONE MATRIX ASPHALT, of the mixture composition and Ndesign specified."

3. Reclaimed Asphalt Pavement and Reclaimed Asphalt Shingles (D-1)

Effective: November 1, 2012

Revise: April 2, 2016

Revise Section 1031 of the Standard Specifications to read:

"SECTION 1031. RECLAIMED ASPHALT PAVEMENT AND RECLAIMED ASPHALT SHINGLES

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

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

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

- (a) RAP Stockpiles. The Contractor shall construct individual, sealed RAP stockpiles meeting one of the following definitions. Additional processed RAP (FRAP) shall be stockpiled in a separate working pile, as designated in the QC Plan, and only added to the sealed stockpile when test results for the working pile are complete and are found to meet tolerances specified herein for the original sealed FRAP stockpile. Stockpiles shall be sufficiently separated to prevent intermingling at the base. All stockpiles (including unprocessed RAP and FRAP) shall be identified by signs indicating the type as listed below (i.e. "Non- Quality, FRAP - #4 or Type 2 RAS", etc...).
 - (1) Fractionated RAP (FRAP). FRAP shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in FRAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. All FRAP shall be processed prior to testing and sized into fractions with the separation occurring on or between the #4 (4.75 mm) and 1/2 in. (12.5 mm) sieves. Agglomerations shall be minimized such that 100 percent of the RAP in the coarse fraction shall pass the maximum sieve size specified for the mix the FRAP will be used in.
 - (2) Restricted FRAP (B quality) stockpiles shall consist of RAP from Class I, Superpave (High ESAL), or HMA (High ESAL). If approved by the Engineer, the aggregate from a maximum 3.0 in. (75 mm) single combined pass of surface/binder milling will be classified as B quality. All millings from this application will be processed into FRAP as described previously.
 - (3) Conglomerate. Conglomerate RAP stockpiles shall consist of RAP from Class I, Superpave HMA (High and Low ESAL) or equivalent mixtures. The coarse aggregate in this RAP shall be crushed aggregate and may represent more than one aggregate type and/or quality, but shall be at least C quality. This RAP may have an inconsistent gradation and/or asphalt binder content prior to processing. All conglomerate RAP shall be processed (FRAP) prior to testing. Conglomerate RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
 - (4) Conglomerate "D" Quality (DQ). Conglomerate DQ RAP stockpiles shall consist of RAP from HMA shoulders, bituminous stabilized subbases or Superpave (Low ESAL)/HMA (Low ESAL) IL-19.0L binder mixture. The coarse aggregate in this RAP may be crushed or round but shall be at least D quality. This RAP may have an inconsistent gradation and/or asphalt binder content. Conglomerate DQ RAP stockpiles shall not contain steel slag or other expansive material as determined by the Department.
 - (5) Non-Quality. RAP stockpiles that do not meet the requirements of the stockpile categories listed above shall be classified as "Non-Quality".

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

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

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

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

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

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

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

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

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

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

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

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

Parameter	FRAP
No. 4 (4.75 mm)	± 6 %
No. 8 (2.36 mm)	± 5 %
No. 30 (600 μm)	± 5 %
No. 200 (75 μm)	± 2.0 %
Asphalt Binder	± 0.3 %
G_{mm}	± 0.03 ^{1/}

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

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

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

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

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

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

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

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

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

The Engineer will notify the Contractor of observed deficiencies.

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

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

1/ Based on washed extraction.

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

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

1031.05 Quality Designation of Aggregate in RAP and FRAP.

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

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

for all HMA applications. The fine aggregate portion of the fractionated RAP shall not be used in any HMA mixtures that require a minimum of "B" quality aggregate or better, until the coarse aggregate fraction has been determined to be acceptable thru a MicroDeval Testing.

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

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

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

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

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

When FRAP is used alone or FRAP is used in conjunction with RAS, the percent of virgin asphalt binder replacement (ABR) shall not exceed the amounts indicated in the table below for a given N Design.

Max Asphalt Binder Replacement for FRAP with RAS Combination

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

1/ For Low ESAL HMA shoulder and stabilized subbase, the percent asphalt binder replacement shall not exceed 50 % of the total asphalt binder in the mixture.

2/ When the binder replacement exceeds 15 % for all mixes, except for SMA and IL-4.75, the high and low virgin asphalt binder grades shall each be reduced by one grade (i.e. 25 % binder replacement using a virgin asphalt binder grade of PG64-22 will be reduced to a PG58-28). When constructing full depth HMA and the ABR is less than 15 %, the required virgin asphalt binder grade shall be PG64-28.

- 3/ When the ABR for SMA or IL-4.75 is 15 % or less, the required virgin asphalt binder shall be SBS PG76-22 and the elastic recovery shall be a minimum of 80. When the ABR for SMA or IL-4.75 exceeds 15%, the virgin asphalt binder grade shall be SBS PG70-28 and the elastic recovery shall be a minimum of 80.
- 4/ When FRAP or RAS is used alone, the maximum percent asphalt binder replacement designated on the table shall be reduced by 10 %.

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

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

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

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

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

- (a) RAS. RAS shall be incorporated into the HMA mixture either by a separate weight depletion system or by using the RAP weigh belt. Either feed system shall be interlocked with the aggregate feed or weigh system to maintain correct proportions for all rates of production and batch sizes. The portion of RAS shall be controlled accurately to within ± 0.5 percent of the amount of RAS utilized. When using the weight depletion system, flow indicators or sensing devices shall be provided and interlocked with the plant controls such that the mixture production is halted when RAS flow is interrupted.
- (b) HMA Plant Requirements. HMA plants utilizing FRAP and/or RAS shall be capable of automatically recording and printing the following information.

(1) Dryer Drum Plants.

- a. Date, month, year, and time to the nearest minute for each print.
- b. HMA mix number assigned by the Department.
- c. Accumulated weight of dry aggregate (combined or individual) in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- d. Accumulated dry weight of RAS and FRAP in tons (metric tons) to the nearest 0.1 ton (0.1 metric ton).
- e. Accumulated mineral filler in revolutions, tons (metric tons), etc. to the nearest 0.1 unit.
- f. Accumulated asphalt binder in gallons (liters), tons (metric tons), etc. to the nearest 0.1 unit.
- g. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.
- h. Aggregate RAS and FRAP moisture compensators in percent as set on the control panel. (Required when accumulated or individual aggregate and RAS and FRAP are printed in wet condition.)

- i. When producing mixtures with FRAP and/or RAS, a positive dust control system shall be utilized.
 - j. Accumulated mixture tonnage.
 - k. Dust Removed (accumulated to the nearest 0.1 ton (0.1 metric ton))
- (2) Batch Plants.
- a. Date, month, year, and time to the nearest minute for each print.
 - b. HMA mix number assigned by the Department.
 - c. Individual virgin aggregate hot bin batch weights to the nearest pound (kilogram).
 - d. Mineral filler weight to the nearest pound (kilogram).
 - f. RAS and FRAP weight to the nearest pound (kilogram).
 - g. Virgin asphalt binder weight to the nearest pound (kilogram).
 - h. Residual asphalt binder in the RAS and FRAP material as a percent of the total mix to the nearest 0.1 percent.

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

1031.09 RAP in Aggregate Surface Course and Aggregate Wedge Shoulders, Type B. The use of RAP or FRAP in aggregate surface course and aggregate shoulders shall be as follows.

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

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:

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

BDE SPECIAL PROVISIONS
For the July 29 and September 16, 2016 Lettings

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

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80099	1	Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
80274	2	Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
80192	3	Automated Flagger Assistance Device	Jan. 1, 2008	
80173	4	Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
80241	5	Bridge Demolition Debris	July 1, 2009	
5026I	6	Building Removal-Case I (Non-Friable and Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5048I	7	Building Removal-Case II (Non-Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5049I	8	Building Removal-Case III (Friable Asbestos)	Sept. 1, 1990	April 1, 2010
5053I	9	Building Removal-Case IV (No Asbestos)	Sept. 1, 1990	April 1, 2010
* 80366	10	Butt Joints	July 1, 2016	
80360	11	Coarse Aggregate Quality	July 1, 2015	
80198	12	Completion Date (via calendar days)	April 1, 2008	
80199	13	Completion Date (via calendar days) Plus Working Days	April 1, 2008	
* 80293	14	Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	July 1, 2016
80311	15	Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
80277	16	Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
80261	17	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
80029	18	Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2016
80363	19	Engineer's Field Office	April 1, 2016	
80358	20	Equal Employment Opportunity	April 1, 2015	
80364	21	Errata for the 2016 Standard Specifications	April 1, 2016	
80229	22	Fuel Cost Adjustment	April 1, 2009	July 1, 2015
80304	23	Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
80246	24	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
80347	25	Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	April 1, 2016
* 80367	26	Light Poles	July 1, 2016	
* 80368	27	Light Tower	July 1, 2016	
80336	28	Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
* 80369	29	Mast Arm Assembly and Pole	July 1, 2016	
80045	30	Material Transfer Device	June 15, 1999	Aug. 1, 2014
80342	31	Mechanical Side Tie Bar Inserter	Aug. 1, 2014	April 1, 2016
* 80370	32	Mechanical Splicers	July 1, 2016	
80165	33	Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
80361	34	Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	April 1, 2016
80349	35	Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
* 80371	36	Pavement Marking Removal	July 1, 2016	
80298	37	Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
80365	38	Pedestrian Push-Button	April 1, 2016	
* 80372	39	Preventive Maintenance – Bituminous Surface Treatment (A-1)	Jan. 1, 2009	July 1, 2016
* 80373	40	Preventive Maintenance – Cape Seal	Jan. 1, 2009	July 1, 2016
* 80374	41	Preventive Maintenance – Micro-Surfacing	Jan. 1, 2009	July 1, 2016
* 80375	42	Preventive Maintenance – Slurry Seal	Jan. 1, 2009	July 1, 2016
* 80359	43	Portland Cement Concrete Bridge Deck Curing	April 1, 2015	July 1, 2016
80353	44	Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2016

<u>File Name</u>	<u>#</u>	<u>Special Provision Title</u>	<u>Effective</u>	<u>Revised</u>
80338	45	Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
80300	46	Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
80328	47	Progress Payments	Nov. 2, 2013	
3426I	48	Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
80157	49	Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
80306	50	Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
80340	51	Speed Display Trailer	April 2, 2014	April 1, 2016
80127	52	Steel Cost Adjustment	April 2, 2004	July 1, 2015
80362	53	Steel Slag in Trench Backfill	Jan. 1, 2016	
80317	54	Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016
80355	55	Temporary Concrete Barrier	Jan. 1, 2015	July 1, 2015
20338	56	Training Special Provisions	Oct. 15, 1975	
80318	57	Traversable Pipe Grate	Jan. 1, 2013	April 1, 2014
80288	58	Warm Mix Asphalt	Jan. 1, 2012	April 1, 2016
80302	59	Weekly DBE Trucking Reports	June 2, 2012	April 2, 2015
80289	60	Wet Reflective Thermoplastic Pavement Marking	Jan. 1, 2012	
80071	61	Working Days	Jan. 1, 2002	

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

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
80240	Above Grade Inlet Protection	Articles 280.02, 280.04, and 1081.15	July 1, 2009	Jan. 1, 2012
80310	Coated Galvanized Steel Conduit	Article 811.03	Jan. 1, 2013	Jan. 1, 2015
80341	Coilable Nonmetallic Conduit	Article 1088.01	Aug. 1, 2014	Jan. 1, 2015
80294	Concrete Box Culverts with Skews \leq 30 Degrees Regardless of Design Fill and Skews $>$ 30 Degrees with Design Fills $>$ 5 Feet	Article 540.04	April 1, 2012	April 1, 2014
80334	Concrete Gutter, Curb, Median, and Paved Ditch	Articles 606.02, 606.07, and 1050.04	April 1, 2014	Aug. 1, 2014
80335	Contract Claims	Article 109.09	April 1, 2014	
Chk Sht #27	English Substitution of Metric Reinforcement Bars	Article 508.09	April 1, 1996	Jan. 1, 2011
80265	Friction Aggregate	Articles 1004.01 and 1004.03	Jan. 1, 2011	Nov. 1, 2014
80329	Glare Screen	Sections 638 and 1085	Jan. 1, 2014	
Chk Sht #20	Guardrail and Barrier Wall Delineation	Sections 635, 725, 782, and 1097	Dec. 15, 1993	Jan. 1, 2012
80322	Hot-Mix Asphalt – Mixture Design Composition and Volumetric Requirements	Sections 312, 355, 406, 407, 442, 482, 601, 1003, 1004, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80323	Hot-Mix Asphalt – Mixture Design Verification and Production	Sections 406, 1030, and 1102	Nov. 1, 2013	Nov. 1, 2014
80348	Hot-Mix Asphalt – Prime Coat	Sections 403, 406, 407, 408, 1032, and 1102	Nov. 1, 2014	
80315	Insertion Lining of Culverts	Sections 543 and 1029	Jan. 1, 2013	Nov. 1, 2013
80351	Light Tower	Article 1069.08	Jan. 1, 2015	
80324	LRFD Pipe Culvert Burial Tables	Sections 542 and 1040	Nov. 1, 2013	April 1, 2015
80325	LRFD Storm Sewer Burial Tables	Sections 550 and 1040	Nov. 1, 2013	April 1, 2015
80337	Paved Shoulder Removal	Article 440.07	April 1, 2014	
80254	Pavement Patching	Article 701.17	Jan. 1, 2010	
80352	Pavement Striping - Symbols	Article 780.14	Jan. 1, 2015	

<u>File Name</u>	<u>Special Provision Title</u>	<u>New Location</u>	<u>Effective</u>	<u>Revised</u>
Chk Sht #19	Pipe Underdrains	Section 601 and Articles 1003.01, 1003.04, 1004.05, 1040.06, and 1080.05	Sept. 9, 1987	Jan. 1, 2007
80343	Precast Concrete Handhole	Articles 814.02, 814.03, and 1042.17	Aug. 1, 2014	
80350	Retroreflective Sheeting for Highway Signs	Article 1091.03	Nov. 1, 2014	
80327	Reinforcement Bars	Section 508 and Articles 421.04, 442.06, 1006.10	Nov. 1, 2013	
80344	Rigid Metal Conduit	Article 1088.01	Aug. 1, 2014	
80354	Sidewalk, Corner, or Crosswalk Closure	Article 1106.02	Jan. 1, 2015	April 1, 2015
80301	Tracking the Use of Pesticides	Article 107.23	Aug. 1, 2012	
80356	Traffic Barrier Terminals Type 6 or 6B	Article 631.02	Jan. 1, 2015	
80345	Underpass Luminaire	Articles 821.06 and 1067.04	Aug. 1, 2014	April 1, 2015
80357	Urban Half Road Closure with Mountable Median	Articles 701.18, 701.19, and 701.20	Jan. 1, 2015	July 1, 2015
80346	Waterway Obstruction Warning Luminaire	Article 1067.07	Aug. 1, 2014	April 1, 2015

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

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

AUTOMATED FLAGGER ASSISTANCE DEVICES (BDE)

Effective: January 1, 2008

Description. This work shall consist of furnishing and operating automated flagger assistance devices (AFADs) as part of the work zone traffic control and protection for two-lane highways where two-way traffic is maintained over one lane of pavement. Use of these devices shall be at the option of the Contractor.

Equipment. AFADs shall be according to the FHWA memorandum, "MUTCD - Revised Interim Approval for the use of Automated Flagger Assistance Devices in Temporary Traffic Control Zones (IA-4R)", dated January 28, 2005. The devices shall be mounted on a trailer or a moveable cart and shall meet the requirements of NCHRP 350, Category 4.

The AFAD shall be the Stop/Slow type. This device uses remotely controlled "STOP" and "SLOW" signs to alternately control right-of-way.

Signs for the AFAD shall be according to Article 701.03 of the Standard Specifications and the MUTCD. The signs shall be 24 x 24 in. (600 x 600 mm) having an octagon shaped "STOP" sign on one side and a diamond shaped "SLOW" sign on the opposite side. The letters on the signs shall be 8 in. (200 mm) high. If the "STOP" sign has louvers, the full sign face shall be visible at a distance of 50 ft (15 m) and greater.

The signs shall be supplemented with one of the following types of lights.

- (a) Flashing Lights. When flashing lights are used, white or red flashing lights shall be mounted within the "STOP" sign face and white or yellow flashing lights within the "SLOW" sign face.
- (b) Stop and Warning Beacons. When beacons are used, a stop beacon shall be mounted 24 in. (600 mm) or less above the "STOP" sign face and a warning beacon mounted 24 in. (600 mm) or less above, below, or to the side of the "SLOW" sign face. As an option, a Type B warning light may be used in lieu of the warning beacon.

A "WAIT ON STOP" sign shall be placed on the right hand side of the roadway at a point where drivers are expected to stop. The sign shall be 24 x 30 in. (600 x 750 mm) with a black legend and border on a white background. The letters shall be at least 6 in. (150 mm) high.

This device may include a gate arm or mast arm that descends to a horizontal position when the "STOP" sign is displayed and rises to a vertical position when the "SLOW" sign is displayed. When included, the end of the arm shall reach at least to the center of the lane being controlled. The arm shall have alternating red and white retroreflective stripes, on both sides, sloping downward at 45 degrees toward the side on which traffic will pass. The stripes shall be 6 in. (150 mm) in width and at least 2 in. (50 mm) in height.

Flagging Requirements. Flaggers and flagging requirements shall be according to Article 701.13 of the Standard Specifications and the following.

AFADs shall be placed at each end of the traffic control, where a flagger is shown on the plans. The flaggers shall be able to view the face of the AFAD and approaching traffic during operation.

To stop traffic, the "STOP" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall descend to a horizontal position. To permit traffic to move, the "SLOW" sign shall be displayed, the corresponding lights/beacon shall flash, and when included, the gate arm shall rise to a vertical position.

If used at night, the AFAD location shall be illuminated according to Section 701 of the Standard Specifications.

When not in use, AFADs will be considered nonoperating equipment and shall be stored according to Article 701.11 of the Standard Specifications.

Basis of Payment. This work will not be paid for separately but shall be considered as included in the cost of the various traffic control items included in the contract.

80192

COARSE AGGREGATE QUALITY (BDE)

Effective: July 1, 2015

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

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

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

1/ Does not apply to crushed concrete.

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

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

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

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

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

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

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

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

CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE)

Effective: June 1, 2010

Revised: November 1, 2014

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Diesel Retrofit Deficiency Deduction

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

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

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

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

80261

ERRATA FOR THE 2016 STANDARD SPECIFICATIONS (BDE)

Effective: April 1, 2016

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

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

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

"EQUIPMENT DEFINITION

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

Page 331 Article 505.04(p). Under Range of Clearance in the first table change "in. x 10⁻⁶" to "in. x 10⁻³".

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

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

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

80364

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

Effective: January 1, 2010

Revised: April 1, 2016

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

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

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

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

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

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

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

Cook County Prevailing Wage for July 2015

(See explanation of column headings at bottom of wages)

Trade Name	RG	TYP	C	Base	FRMAN	M-F>8	OSA	OSH	H/W	Pensn	Vac	Trng
=====	==	===	=	=====	=====	=====	===	===	=====	=====	=====	=====
ASBESTOS ABT-GEN		ALL		39.400	39.950	1.5	1.5	2.0	13.98	10.72	0.000	0.500
ASBESTOS ABT-MEC		BLD		36.340	38.840	1.5	1.5	2.0	11.47	10.96	0.000	0.720
BOILERMAKER		BLD		47.070	51.300	2.0	2.0	2.0	6.970	18.13	0.000	0.400
BRICK MASON		BLD		43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030
CARPENTER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
CEMENT MASON		ALL		43.750	45.750	2.0	1.5	2.0	13.05	14.45	0.000	0.480
CERAMIC TILE FNSHER		BLD		36.810	0.000	1.5	1.5	2.0	10.55	9.230	0.000	0.770
COMM. ELECT.		BLD		40.000	42.800	1.5	1.5	2.0	8.670	12.57	1.100	0.750
ELECTRIC PWR EQMT OP		ALL		46.100	51.100	1.5	1.5	2.0	10.76	14.87	0.000	0.460
ELECTRIC PWR GRNDMAN		ALL		37.050	52.500	1.5	2.0	2.0	8.630	12.28	0.000	0.370
ELECTRIC PWR LINEMAN		ALL		47.500	52.500	1.5	2.0	1.5	11.06	15.75	0.000	0.480
ELECTRICIAN		ALL		45.000	48.000	1.5	1.5	2.0	13.83	15.27	0.000	1.000
ELEVATOR CONSTRUCTOR		BLD		50.800	57.150	2.0	2.0	2.0	13.57	14.21	4.060	0.600
FENCE ERECTOR		ALL		37.340	39.340	1.5	1.5	2.0	13.05	12.06	0.000	0.300
GLAZIER		BLD		40.500	42.000	1.5	2.0	2.0	13.14	16.99	0.000	0.940
HT/FROST INSULATOR		BLD		48.450	50.950	1.5	1.5	2.0	11.47	12.16	0.000	0.720
IRON WORKER		ALL		44.200	46.200	2.0	2.0	2.0	13.65	21.14	0.000	0.350
LABORER		ALL		39.200	39.950	1.5	1.5	2.0	13.98	10.72	0.000	0.500
LATHER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
MACHINIST		BLD		45.350	47.850	1.5	1.5	2.0	7.260	8.950	1.850	0.000
MARBLE FINISHERS		ALL		32.400	34.320	1.5	1.5	2.0	10.05	13.75	0.000	0.620
MARBLE MASON		BLD		43.030	47.330	1.5	1.5	2.0	10.05	14.10	0.000	0.780
MATERIAL TESTER I		ALL		29.200	0.000	1.5	1.5	2.0	13.98	10.72	0.000	0.500
MATERIALS TESTER II		ALL		34.200	0.000	1.5	1.5	2.0	13.98	10.72	0.000	0.500
MILLWRIGHT		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
OPERATING ENGINEER		BLD	1	48.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		BLD	2	46.800	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		BLD	3	44.250	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		BLD	4	42.500	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		BLD	5	51.850	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		BLD	6	49.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		BLD	7	51.100	52.100	2.0	2.0	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		FLT	1	53.600	53.600	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER		FLT	2	52.100	53.600	1.5	1.5	2.0	17.10	11.05	1.900	1.250
OPERATING ENGINEER		FLT	3	46.400	53.600	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER		FLT	4	38.550	53.600	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER		FLT	5	55.100	53.600	1.5	1.5	2.0	17.10	11.80	1.900	1.250
OPERATING ENGINEER		FLT	6	35.000	35.000	1.5	1.5	2.0	16.60	11.05	1.900	1.250
OPERATING ENGINEER		HWY	1	46.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		HWY	2	45.750	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		HWY	3	43.700	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		HWY	4	42.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		HWY	5	41.100	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		HWY	6	49.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
OPERATING ENGINEER		HWY	7	47.300	50.300	1.5	1.5	2.0	17.55	12.65	1.900	1.250
ORNAMNTL IRON WORKER		ALL		45.000	47.500	2.0	2.0	2.0	13.55	17.94	0.000	0.650
PAINTER		ALL		41.750	46.500	1.5	1.5	1.5	11.50	11.10	0.000	0.770
PAINTER SIGNS		BLD		33.920	38.090	1.5	1.5	1.5	2.600	2.710	0.000	0.000
PILEDRIIVER		ALL		44.350	46.350	1.5	1.5	2.0	11.79	16.39	0.000	0.630
PIPEFITTER		BLD		46.000	49.000	1.5	1.5	2.0	9.000	15.85	0.000	1.780
PLASTERER		BLD		43.430	46.040	1.5	1.5	2.0	13.05	14.43	0.000	1.020
PLUMBER		BLD		46.650	48.650	1.5	1.5	2.0	13.18	11.46	0.000	0.880
ROOFER		BLD		41.000	44.000	1.5	1.5	2.0	8.280	10.54	0.000	0.530
SHEETMETAL WORKER		BLD		42.230	45.610	1.5	1.5	2.0	10.53	20.68	0.000	0.720
SIGN HANGER		BLD		31.310	33.810	1.5	1.5	2.0	4.850	3.280	0.000	0.000

SPRINKLER FITTER	BLD	49.200	51.200	1.5	1.5	2.0	11.75	9.650	0.000	0.550			
STEEL ERECTOR	ALL	42.070	44.070	2.0	2.0	2.0	13.45	19.59	0.000	0.350			
STONE MASON	BLD	43.780	48.160	1.5	1.5	2.0	10.05	14.43	0.000	1.030			
SURVEY WORKER	->NOT IN EFFECT	ALL	37.000	37.750	1.5	1.5	2.0	12.97	9.930	0.000	0.500		
TERRAZZO FINISHER	BLD	38.040	0.000	1.5	1.5	2.0	10.55	11.22	0.000	0.720			
TERRAZZO MASON	BLD	41.880	44.880	1.5	1.5	2.0	10.55	12.51	0.000	0.940			
TILE MASON	BLD	43.840	47.840	1.5	1.5	2.0	10.55	11.40	0.000	0.990			
TRAFFIC SAFETY WRKR	HWY	32.750	34.350	1.5	1.5	2.0	6.550	6.450	0.000	0.500			
TRUCK DRIVER	E ALL 1	35.480	35.680	1.5	1.5	2.0	8.350	10.50	0.000	0.150			
TRUCK DRIVER	E ALL 2	34.100	34.500	1.5	1.5	2.0	8.150	8.500	0.000	0.150			
TRUCK DRIVER	E ALL 3	34.300	34.500	1.5	1.5	2.0	8.150	8.500	0.000	0.150			
TRUCK DRIVER	E ALL 4	34.500	34.500	1.5	1.5	2.0	8.150	8.500	0.000	0.150			
TRUCK DRIVER	W ALL 1	35.600	35.800	1.5	1.5	1.5	8.250	9.140	0.000	0.150			
TRUCK DRIVER	W ALL 2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000			
TRUCK DRIVER	W ALL 3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000			
TRUCK DRIVER	W ALL 4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.000			
TUCKPOINTER	BLD	43.800	44.800	1.5	1.5	2.0	8.280	13.49	0.000	0.670			

Legend: RG (Region)

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

C (Class)

Base (Base Wage Rate)

FRMAN (Foreman Rate)

M-F>8 (OT required for any hour greater than 8 worked each day, Mon through Fri.

OSA (Overtime (OT) is required for every hour worked on Saturday)

OSH (Overtime is required for every hour worked on Sunday and Holidays)

H/W (Health & Welfare Insurance)

Pensn (Pension)

Vac (Vacation)

Trng (Training)

Explanations

COOK 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.

TRUCK DRIVERS (WEST) - That part of the county West of Barrington Road.

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

The grouting, cleaning, and polishing of all classes of tile, whether for interior or exterior purposes, all burned, glazed or unglazed products; all composition materials, granite tiles, warning detectable

tiles, cement tiles, epoxy composite materials, pavers, glass, mosaics, fiberglass, and all substitute materials, for tile made in tile-like units; all mixtures in tile like form of cement, metals, and other materials that are for and intended for use as a finished floor surface, stair treads, promenade roofs, walks, walls, ceilings, swimming pools, and all other places where tile is to form a finished interior or exterior. The mixing of all setting mortars including but not limited to thin-set mortars, epoxies, wall mud, and any other sand and cement mixtures or adhesives when used in the preparation, installation, repair, or maintenance of tile and/or similar materials. The handling and unloading of all sand, cement, lime, tile, fixtures, equipment, adhesives, or any other materials to be used in the preparation, installation, repair, or maintenance of tile and/or similar materials. Ceramic Tile Finishers shall fill all joints and voids regardless of method on all tile work, particularly and especially after installation of said tile work. Application of any and all protective coverings to all types of tile installations including, but not be limited to, all soap compounds, paper products, tapes, and all polyethylene coverings, plywood, masonite, cardboard, and any new type of products that may be used to protect tile installations, Blastrac equipment, and all floor scarifying equipment used in preparing floors to receive tile. The clean up and removal of all waste and materials. All demolition of existing tile floors and walls to be re-tiled.

COMMUNICATIONS ELECTRICIAN

Installation, operation, inspection, maintenance, repair and service of radio, television, recording, voice sound vision production and reproduction, telephone and telephone interconnect, facsimile, data apparatus, coaxial, fibre optic and wireless equipment, appliances and systems used for the transmission and reception of signals of any nature, business, domestic, commercial, education, entertainment, and residential purposes, including but not limited to, communication and telephone, electronic and sound equipment, fibre optic and data communication systems, and the performance of any task directly related to such installation or service whether at new or existing sites, such tasks to include the placing of wire and cable and electrical power conduit or other raceway work within the equipment room and pulling wire and/or cable through conduit and the installation of any incidental conduit, such that the employees covered hereby can complete any job in full.

MARBLE FINISHER

Loading and unloading trucks, distribution of all materials (all stone, sand, etc.), stocking of floors with material, performing all rigging for heavy work, the handling of all material that may be needed for the installation of such materials, building of scaffolding, polishing if needed, patching, waxing of material if damaged, pointing up, caulking, grouting and cleaning of marble, holding water on diamond or Carborundum blade or saw for setters cutting, use of tub saw or any other saw needed for preparation of material, drilling of holes for wires that anchor material set by setters, mixing up of molding plaster for installation of material, mixing up thin set for the installation of material, mixing up of sand to cement for the installation of material and such other work as may be required in helping a Marble Setter in the handling of all material in the erection or installation of interior marble, slate, travertine, art marble, serpentine, alberene stone, blue stone, granite and other stones (meaning as to stone any foreign or domestic materials as are specified and used in building interiors and exteriors and customarily known as stone in the trade), carrara, sanionyx, vitrolite and similar opaque glass and the laying of all

marble tile, terrazzo tile, slate tile and precast tile, steps, risers treads, base, or any other materials that may be used as substitutes for any of the aforementioned materials and which are used on interior and exterior which are installed in a similar manner.

MATERIAL TESTER I: Hand coring and drilling for testing of materials; field inspection of uncured concrete and asphalt.

MATERIAL TESTER II: Field inspection of welds, structural steel, fireproofing, masonry, soil, facade, reinforcing steel, formwork, cured concrete, and concrete and asphalt batch plants; adjusting proportions of bituminous mixtures.

OPERATING ENGINEER - BUILDING

Class 1. Asphalt Plant; Asphalt Spreader; Autograde; Backhoes with Caisson Attachment; Batch Plant; Benoto (requires Two Engineers); Boiler and Throttle Valve; Caisson Rigs; Central Redi-Mix Plant; Combination Back Hoe Front End-loader Machine; Compressor and Throttle Valve; Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Conveyor (Truck Mounted); Concrete Paver Over 27E cu. ft; Concrete Paver 27E cu. ft. and Under; Concrete Placer; Concrete Placing Boom; Concrete Pump (Truck Mounted); Concrete Tower; Cranes, All; Cranes, Hammerhead; Cranes, (GCI and similar Type); Creter Crane; Spider Crane; Crusher, Stone, etc.; Derricks, All; Derricks, Traveling; Formless Curb and Gutter Machine; Grader, Elevating; Grouting Machines; Heavy Duty Self-Propelled Transporter or Prime Mover; Highlift Shovels or Front Endloader 2-1/4 yd. and over; Hoists, Elevators, outside type rack and pinion and similar machines; Hoists, One, Two and Three Drum; Hoists, Two Tugger One Floor; Hydraulic Backhoes; Hydraulic Boom Trucks; Hydro Vac (and similar equipment); Locomotives, All; Motor Patrol; Lubrication Technician; Manipulators; Pile Drivers and Skid Rig; Post Hole Digger; Pre-Stress Machine; Pump Cretes Dual Ram; Pump Cretes: Squeeze Cretes-Screw Type Pumps; Gypsum Bulker and Pump; Raised and Blind Hole Drill; Roto Mill Grinder; Scoops - Tractor Drawn; Slip-Form Paver; Straddle Buggies; Operation of Tie Back Machine; Tournapull; Tractor with Boom and Side Boom; Trenching Machines.

Class 2. Boilers; Broom, All Power Propelled; Bulldozers; Concrete Mixer (Two Bag and Over); Conveyor, Portable; Forklift Trucks; Highlift Shovels or Front Endloaders under 2-1/4 yd.; Hoists, Automatic; Hoists, Inside Elevators; Hoists, Sewer Dragging Machine; Hoists, Tugger Single Drum; Laser Screed; Rock Drill (Self-Propelled); Rock Drill (Truck Mounted); Rollers, All; Steam Generators; Tractors, All; Tractor Drawn Vibratory Roller; Winch Trucks with "A" Frame.

Class 3. Air Compressor; Combination Small Equipment Operator; Generators; Heaters, Mechanical; Hoists, Inside Elevators (remodeling or renovation work); Hydraulic Power Units (Pile Driving, Extracting, and Drilling); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Low Boys; Pumps, Well Points; Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 4. Bobcats and/or other Skid Steer Loaders; Oilers; and Brick Forklift.

Class 5. Assistant Craft Foreman.

Class 6. Gradall.

Class 7. Mechanics; Welders.

OPERATING ENGINEERS - HIGHWAY CONSTRUCTION

Class 1. Asphalt Plant; Asphalt Heater and Planer Combination; Asphalt Heater Scarfire; Asphalt Spreader; Autograder/GOMACO or other similar type machines: ABG Paver; Backhoes with Caisson Attachment; Ballast Regulator; Belt Loader; Caisson Rigs; Car Dumper; Central Redi-Mix Plant; Combination Backhoe Front Endloader Machine, (1 cu. yd. Backhoe Bucket or over or with attachments); Concrete Breaker (Truck Mounted); Concrete Conveyor; Concrete Paver over 27E cu. ft.; Concrete Placer; Concrete Tube Float; Cranes, all attachments; Cranes, Tower Cranes of all types: Creter Crane: Spider Crane; Crusher, Stone, etc.; Derricks, All; Derrick Boats; Derricks, Traveling; Dredges; Elevators, Outside type Rack & Pinion and Similar Machines; Formless Curb and Gutter Machine; Grader, Elevating; Grader, Motor Grader, Motor Patrol, Auto Patrol, Form Grader, Pull Grader, Subgrader; Guard Rail Post Driver Truck Mounted; Hoists, One, Two and Three Drum; Heavy Duty Self-Propelled Transporter or Prime Mover; Hydraulic Backhoes; Backhoes with shear attachments up to 40' of boom reach; Lubrication Technician; Manipulators; Mucking Machine; Pile Drivers and Skid Rig; Pre-Stress Machine; Pump Cretes Dual Ram; Rock Drill - Crawler or Skid Rig; Rock Drill - Truck Mounted; Rock/Track Tamper; Roto Mill Grinder; Slip-Form Paver; Snow Melters; Soil Test Drill Rig (Truck Mounted); Straddle Buggies; Hydraulic Telescoping Form (Tunnel); Operation of Tieback Machine; Tractor Drawn Belt Loader; Tractor Drawn Belt Loader (with attached pusher - two engineers); Tractor with Boom; Tractaire with Attachments; Traffic Barrier Transfer Machine; Trenching; Truck Mounted Concrete Pump with Boom; Raised or Blind Hole Drills (Tunnel Shaft); Underground Boring and/or Mining Machines 5 ft. in diameter and over tunnel, etc; Underground Boring and/or Mining Machines under 5 ft. in diameter; Wheel Excavator; Widener (APSCO).

Class 2. Batch Plant; Bituminous Mixer; Boiler and Throttle Valve; Bulldozers; Car Loader Trailing Conveyors; Combination Backhoe Front Endloader Machine (Less than 1 cu. yd. Backhoe Bucket or over or with attachments); Compressor and Throttle Valve; Compressor, Common Receiver (3); Concrete Breaker or Hydro Hammer; Concrete Grinding Machine; Concrete Mixer or Paver 7S Series to and including 27 cu. ft.; Concrete Spreader; Concrete Curing Machine, Burlap Machine, Belting Machine and Sealing Machine; Concrete Wheel Saw; Conveyor Muck Cars (Haglund or Similar Type); Drills, All; Finishing Machine - Concrete; Highlift Shovels or Front Endloader; Hoist - Sewer Dragging Machine; Hydraulic Boom Trucks (All Attachments); Hydro-Blaster; Hydro Excavating (excluding hose work); Laser Screed; All Locomotives, Dinky; Off-Road Hauling Units (including articulating) Non Self-Loading Ejection Dump; Pump Cretes: Squeeze Cretes - Screw Type Pumps, Gypsum Bulker and Pump; Roller, Asphalt; Rotary Snow Plows; Rototiller, Seaman, etc., self-propelled; Self-Propelled Compactor; Spreader - Chip - Stone, etc.; Scraper - Single/Twin Engine/Push and Pull; Scraper - Prime Mover in Tandem (Regardless of Size); Tractors pulling attachments, Sheeps Foot, Disc, Compactor, etc.; Tug Boats.

Class 3. Boilers; Brooms, All Power Propelled; Cement Supply Tender; Compressor, Common Receiver (2); Concrete Mixer (Two Bag and Over); Conveyor, Portable; Farm-Type Tractors Used for Mowing, Seeding, etc.; Forklift Trucks; Grouting Machine; Hoists, Automatic; Hoists, All Elevators; Hoists, Tugger Single Drum; Jeep Diggers; Low Boys; Pipe Jacking Machines; Post-Hole Digger; Power Saw, Concrete Power Driven; Pug Mills; Rollers, other than Asphalt; Seed and Straw Blower; Steam Generators; Stump Machine; Winch Trucks with "A" Frame; Work Boats; Tamper-Form-Motor Driven.

Class 4. Air Compressor; Combination - Small Equipment Operator; Directional Boring Machine; Generators; Heaters, Mechanical; Hydraulic

Power Unit (Pile Driving, Extracting, or Drilling); Light Plants, All (1 through 5); Pumps, over 3" (1 to 3 not to exceed a total of 300 ft.); Pumps, Well Points; Vacuum Trucks (excluding hose work); Welding Machines (2 through 5); Winches, 4 Small Electric Drill Winches.

Class 5. SkidSteer Loader (all); Brick Forklifts; Oilers.

Class 6. Field Mechanics and Field Welders

Class 7. Dowell Machine with Air Compressor; Gradall and machines of like nature.

OPERATING ENGINEER - FLOATING

Class 1. Craft Foreman; Master Mechanic; Diver/Wet Tender; Engineer; Engineer (Hydraulic Dredge).

Class 2. Crane/Backhoe Operator; Boat Operator with towing endorsement; Mechanic/Welder; Assistant Engineer (Hydraulic Dredge); Leverman (Hydraulic Dredge); Diver Tender.

Class 3. Deck Equipment Operator, Machineryman, Maintenance of Crane (over 50 ton capacity) or Backhoe (115,000 lbs. or more); Tug/Launch Operator; Loader/Dozer and like equipment on Barge, Breakwater Wall, Slip/Dock, or Scow, Deck Machinery, etc.

Class 4. Deck Equipment Operator, Machineryman/Fireman (4 Equipment Units or More); Off Road Trucks; Deck Hand, Tug Engineer, Crane Maintenance (50 Ton Capacity and Under) or Backhoe Weighing (115,000 pounds or less); Assistant Tug Operator.

Class 5. Friction or Lattice Boom Cranes.

Class 6. ROV Pilot, ROV Tender

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

TERRAZZO FINISHER

The handling of sand, cement, marble chips, and all other materials that may be used by the Mosaic Terrazzo Mechanic, and the mixing, grinding, grouting, cleaning and sealing of all Marble, Mosaic, and Terrazzo work, floors, base, stairs, and wainscoting by hand or machine, and in addition, assisting and aiding Marble, Masonic, and Terrazzo Mechanics.

TRAFFIC SAFETY

Work associated with barricades, horses and drums used to reduce lane usage on highway work, the installation and removal of temporary lane markings, and the installation and removal of temporary road signs.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION - EAST & WEST

Class 1. Two or three Axle Trucks. A-frame Truck when used for transportation purposes; Air Compressors and Welding Machines, including those pulled by cars, pick-up trucks and tractors; Ambulances; Batch Gate Lockers; Batch Hopperman; Car and Truck Washers; Carry-alls; Fork Lifts and Hoisters; Helpers; Mechanics Helpers and Greasers; Oil Distributors 2-man operation; Pavement Breakers; Pole Trailer, up to 40 feet; Power Mower Tractors; Self-propelled Chip Spreader; Skipman; Slurry Trucks, 2-man operation;

Slurry Truck Conveyor Operation, 2 or 3 man; Teamsters; Unskilled Dumpman; and Truck Drivers hauling warning lights, barricades, and portable toilets on the job site.

Class 2. Four axle trucks; Dump Crets and Adgetors under 7 yards; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnapulls or Turnatrailers when pulling other than self-loading equipment or similar equipment under 16 cubic yards; Mixer Trucks under 7 yards; Ready-mix Plant Hopper Operator, and Winch Trucks, 2 Axles.

Class 3. Five axle trucks; Dump Crets and Adgetors 7 yards and over; Dumpsters, Track Trucks, Euclids, Hug Bottom Dump Turnatrailers or turnapulls when pulling other than self-loading equipment or similar equipment over 16 cubic yards; Explosives and/or Fission Material Trucks; Mixer Trucks 7 yards or over; Mobile Cranes while in transit; Oil Distributors, 1-man operation; Pole Trailer, over 40 feet; Pole and Expandable Trailers hauling material over 50 feet long; Slurry trucks, 1-man operation; Winch trucks, 3 axles or more; Mechanic--Truck Welder and Truck Painter.

Class 4. Six axle trucks; Dual-purpose vehicles, such as mounted crane trucks with hoist and accessories; Foreman; Master Mechanic; Self-loading equipment like P.B. and trucks with scoops on the front.

Other Classifications of Work:

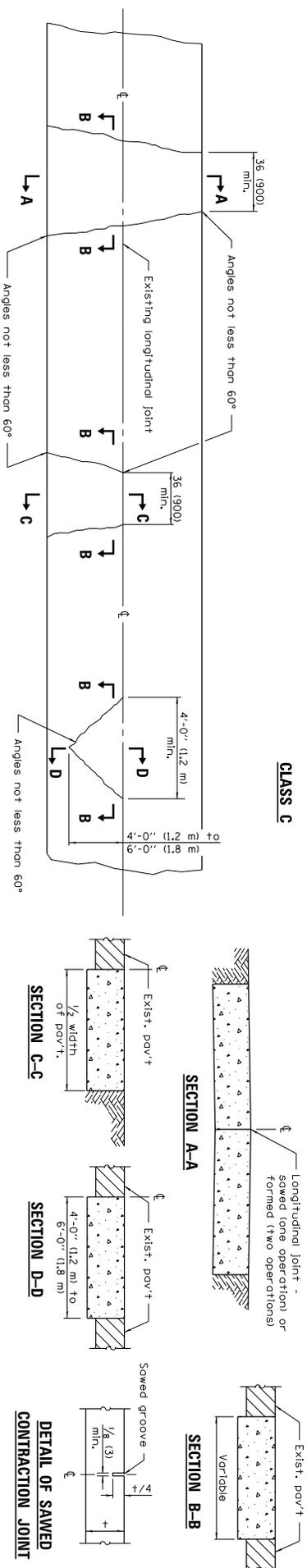
For definitions of classifications not otherwise set out, the Department generally has on file such definitions which are available. If a task to be performed is not subject to one of the classifications of pay set out, the Department will upon being contacted state which neighboring county has such 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

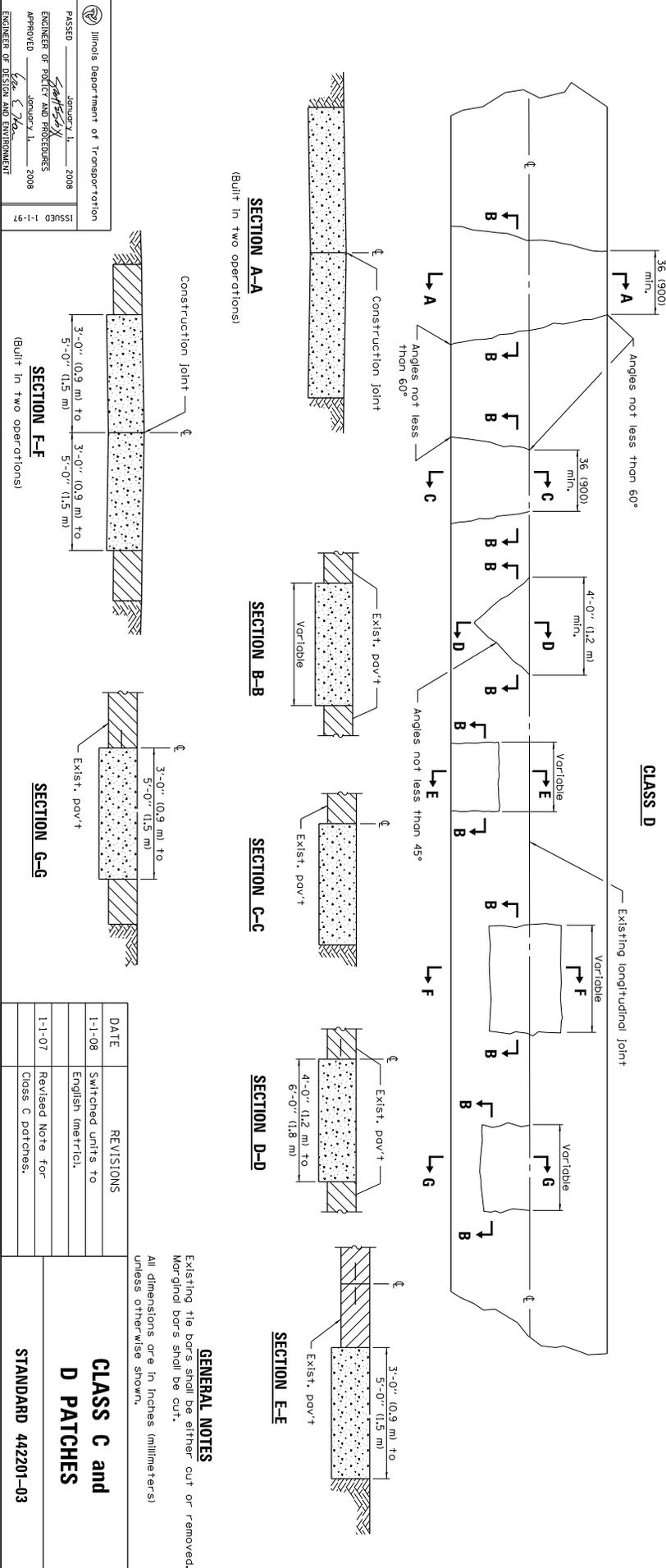
Landscaping work falls under the existing classifications for laborer, operating engineer and truck driver. The work performed by landscape plantsman and landscape laborer is covered by the existing classification of laborer. The work performed by landscape operators (regardless of equipment used or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

MATERIAL TESTER & MATERIAL TESTER/INSPECTOR I AND II

Notwithstanding the difference in the classification title, the classification entitled "Material Tester I" involves the same job duties as the classification entitled "Material Tester/Inspector I". Likewise, the classification entitled "Material Tester II" involves the same job duties as the classification entitled "Material Tester/Inspector II".



Notes:
 Longitudinal joints shall be as detailed on Standard 422001, except the bars are not required for patches 20'-0" (6.0 m) or less in length.

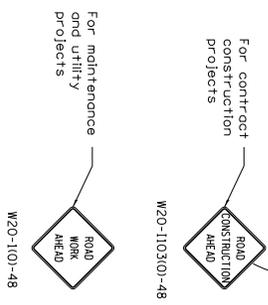
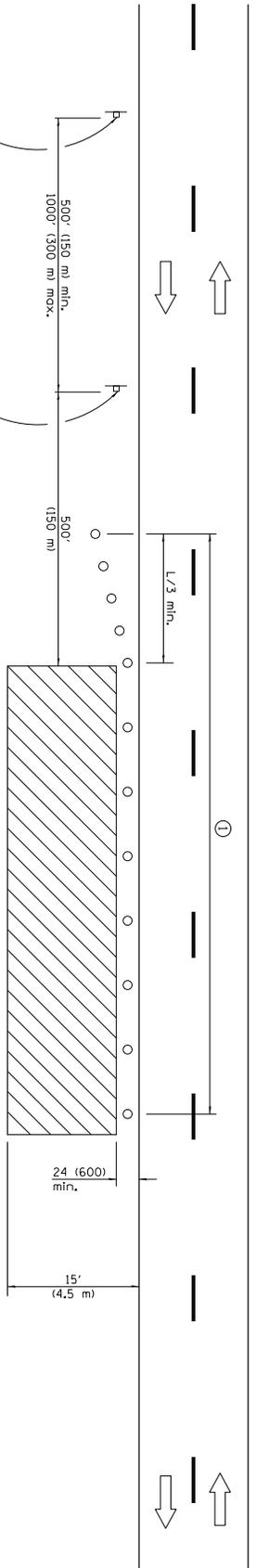


Illinois Department of Transportation
 PASSED January 1, 2008
 ENGINEER OF POLICY AND PROCEDURES
 APPROVED January 1, 2008
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

CLASS C and D PATCHES
 STANDARD 442201-03

GENERAL NOTES
 Existing the bars shall be either cut or removed. Marginal bars shall be cut.
 All dimensions are in inches (millimeters) unless otherwise shown.



TYPICAL APPLICATIONS

- Utility operations
- Culvert extensions
- Side slope changes
- Quarrel installation and maintenance
- Delineator installation
- Landscaping operations
- Shoulder repair
- Sign installation and maintenance

SYMBOLS

- Work area
- Sign
- Cone, drum or barricade

① When the work operation exceeds one hour, cones, drums or barricades shall be placed at 25' (8 m) centers for L/3 distance, and at 50' (15 m) centers through the remainder of the work area.

GENERAL NOTES

This Standard is used where any vehicles, equipment, workers or their activities will encroach in the area 15' (4.5 m) to 24 (600) from the edge of pavement.

Calculate L as follows:

SPEED LIMIT	FORMULAS
40 mph (70 km/h)	English (Metric)
or less:	$L = WS^2$ $L = WS^2$
45 mph (80 km/h) or greater:	$L = 60$ $L = 150$
	$L = WS^2$ $L = 0.65S(WS)$
W = Width of offset in feet (meters).	
S = Normal posted speed in feet (meters).	

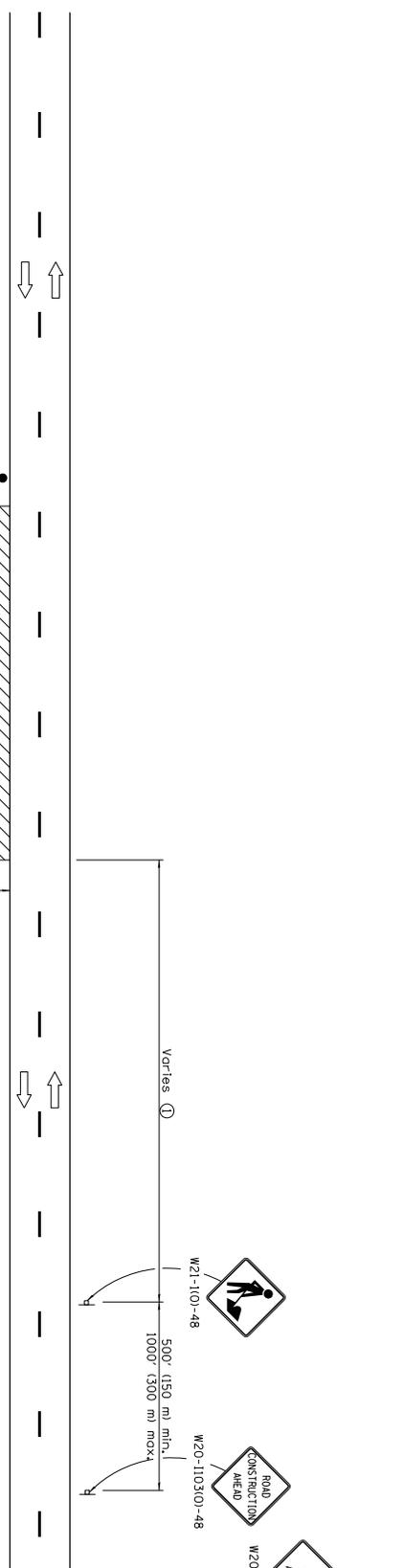
All dimensions are in inches (millimeters) unless otherwise shown.

OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE

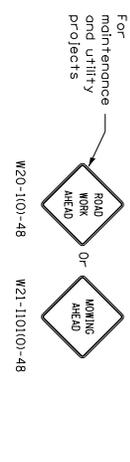
Illinois Department of Transportation
 Approved: *Jonathan L. ...* January 1, 2014
 ENGINEER OF SAFETY ENGINEERING
 Approved: *Jonathan L. ...* January 1, 2014
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

DATE	REVISIONS
1-1-14	Revised workers sign number to agree with current MUTCD.
1-1-13	Omitted text "WORKERS" sign.

STANDARD 701006-05



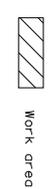
TYPICAL APPLICATIONS
Shoulder work
Utility operations



① Minimum distance is 200' (60 m). Maximum distance to be determined by the Engineer but should not exceed 1/2 the length required for one normal working day's operation, or 4 miles (6.4 km) whichever is less.

GENERAL NOTES
This Standard is used where at any time, any vehicle, equipment, workers or their activities require an intermittent or continuous moving operation on the shoulder, where the average speed is 1 mph (2 km/h) or less.
When the work operation does not exceed 60 minutes, traffic control may be according to Standard 701301.
All dimensions are in inches (millimeters) unless otherwise shown.

SYMBOLS



Work Area

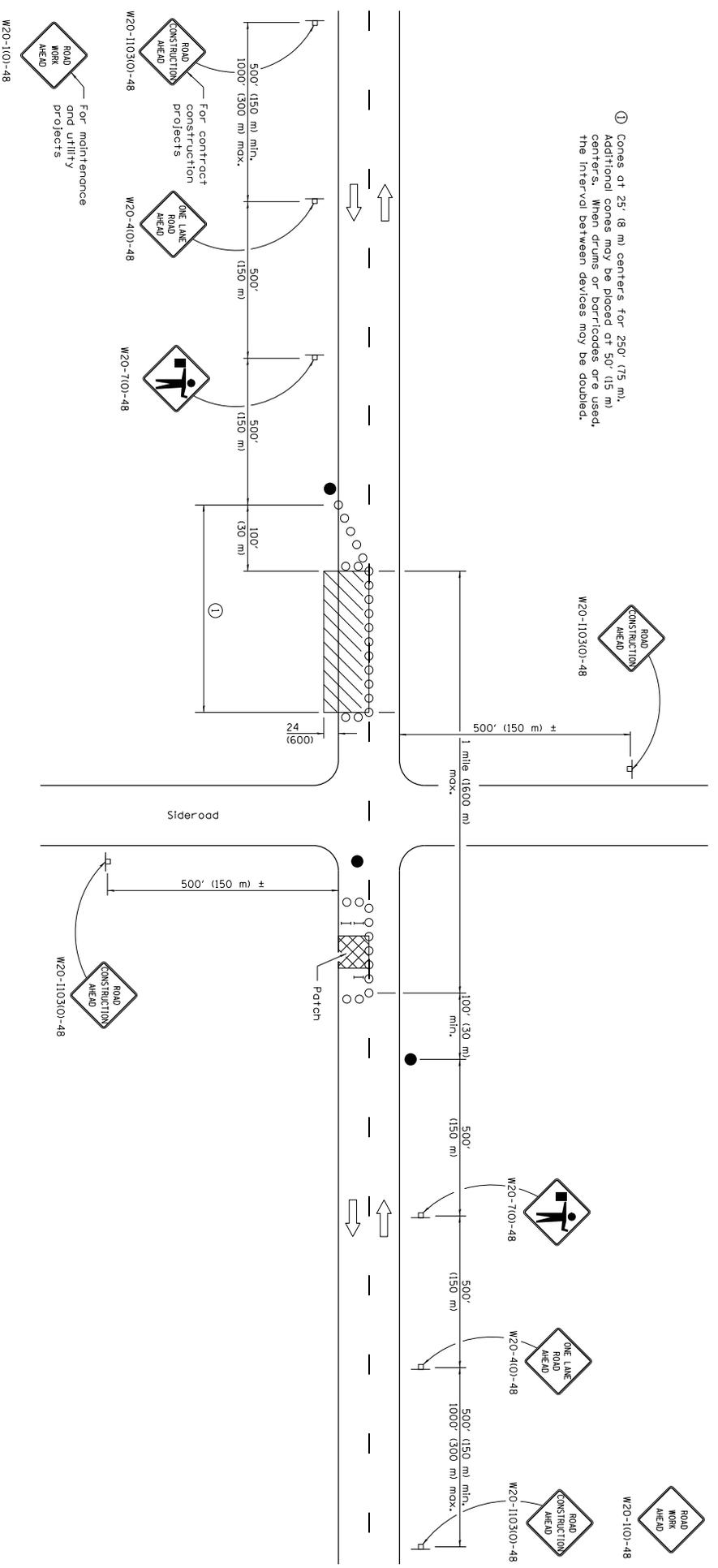
• P Sign
• Flagger with traffic control sign when required

Illinois Department of Transportation
Approved: [Signature] January 1, 2014
ENGINEER OF SAFETY ENGINEERING
APPROVED: [Signature] January 1, 2014
ENGINEER OF DESIGN AND ENVIRONMENT
ISSUED 1-1-97

DATE	REVISIONS
1-1-14	Revised worker's sign number to agree with current MUTCD.
1-1-13	Omitted text 'WORKERS' sign.

**OFF-ROAD MOVING OPERATIONS,
21, 2W, DAY ONLY**
STANDARD 701011-04

① Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or barricades are used, the interval between devices may be doubled.



TYPICAL APPLICATIONS
 Isolated portering
 Utility operations
 Storm sewer
 Curb risers
 Cable placement

SYMBOLS

- Work area
- Sign
- Barricade or drum
- Cone, drum or barricade
- Flagger with traffic control sign

GENERAL NOTES

This Standard is used where at any time, any vehicles, equipment, workers or their activities will encroach in the area between the center line and a line 24 (600) outside the edge of pavement for daylight operation.

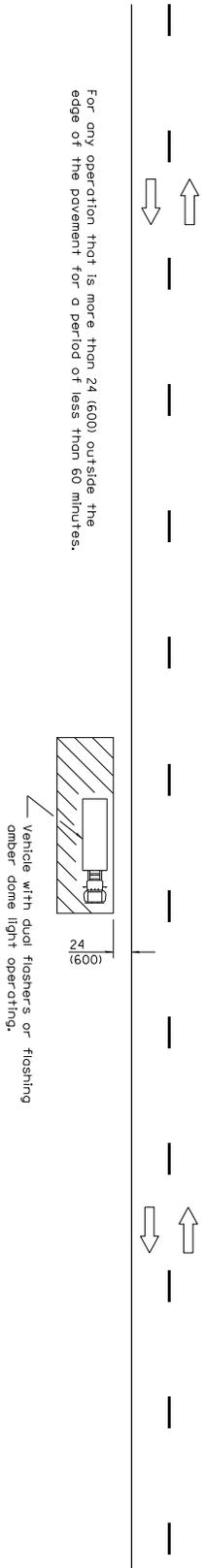
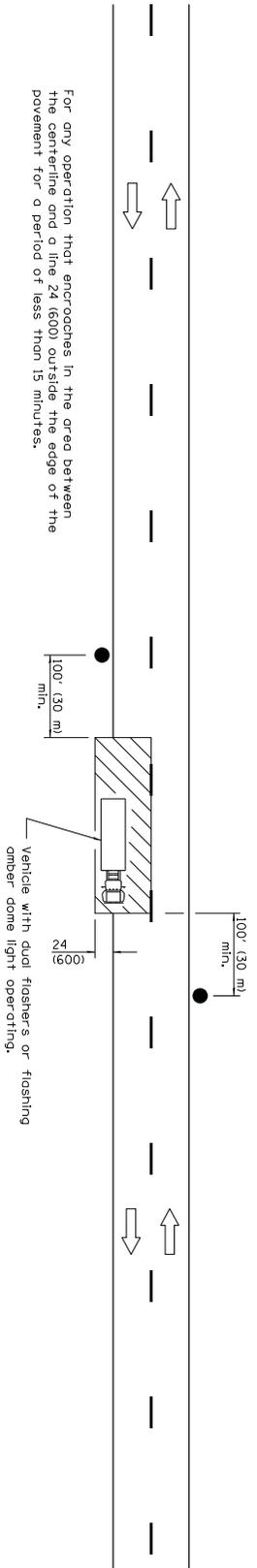
When the distance between successive work areas exceeds 2000' (600 m), additional warning signs, flaggers, and taper shall be placed as shown.

All dimensions are in inches (millimeters) unless otherwise shown.

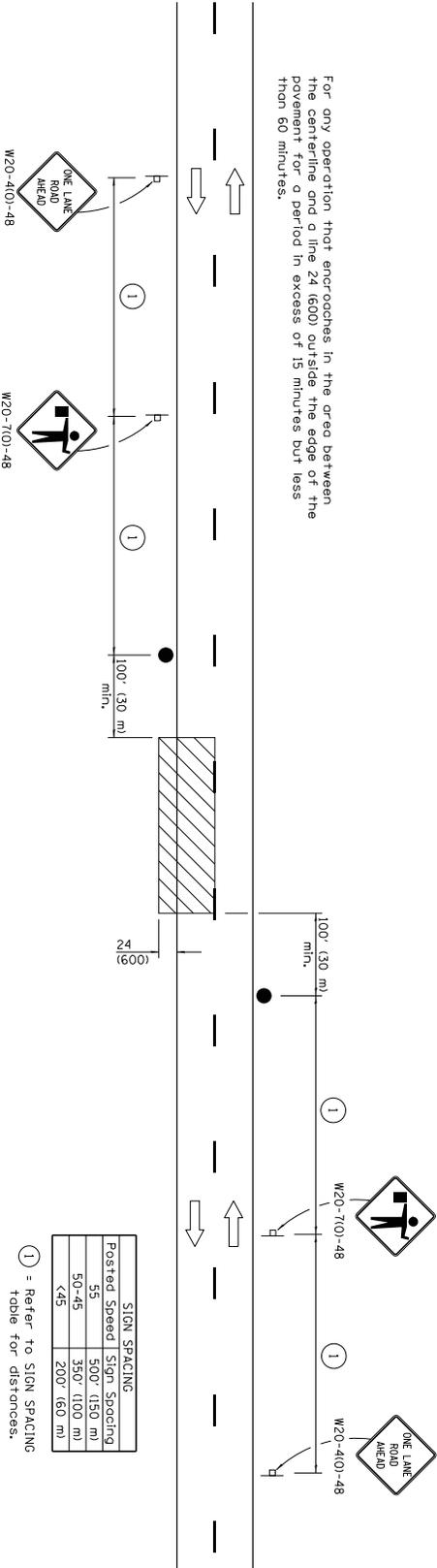
Illinois Department of Transportation
 APPROVED: *January 1, 2011*
 ENGINEER OF SAFETY ENGINEERING
 APPROVED: *January 1, 2011*
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).
	Corrected sign No.s.

**LANE CLOSURE, 2L, 2W,
 DAY ONLY,
 FOR SPEEDS > 45 MPH**
 STANDARD 701201-04



For any operation that encroaches in the area between the centerline and a line 24 (600) outside the edge of the pavement for a period in excess of 15 minutes but less than 60 minutes.



Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

(1) = Refer to SIGN SPACING table for distances.

TYPICAL APPLICATIONS

- Working patches
- Field survey
- String line
- Utility operations
- Cleaning up debris on pavement

SYMBOLS

- Work area
- Sign on portable or permanent support
- Flagger with traffic control sign

Illinois Department of Transportation
 APPROVED: *Jonathan V. Jensen* 2011
 ENGINEER OF SAFETY ENGINEERING
 APPROVED: *Jonathan V. Jensen* 2011
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).

All dimensions are in inches (millimeters) unless otherwise shown.

LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS

STANDARD 701301-04

Illinois Department of Transportation
 APPROVED January 1, 2011
 ENGINEER OF SAFETY ENGINEERING
 APPROVED January 1, 2011
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

Posted Speed	Sign Spacing
55	500' (150 m)
50-45	350' (100 m)
<45	200' (60 m)

SYMBOLS

- Work area
- Cone, drum or barricade (not required for moving operations)
- Sign on portable or permanent support
- Flagger with traffic control sign
- Barricade or drum with flashing light
- Type III barricade with flashing lights

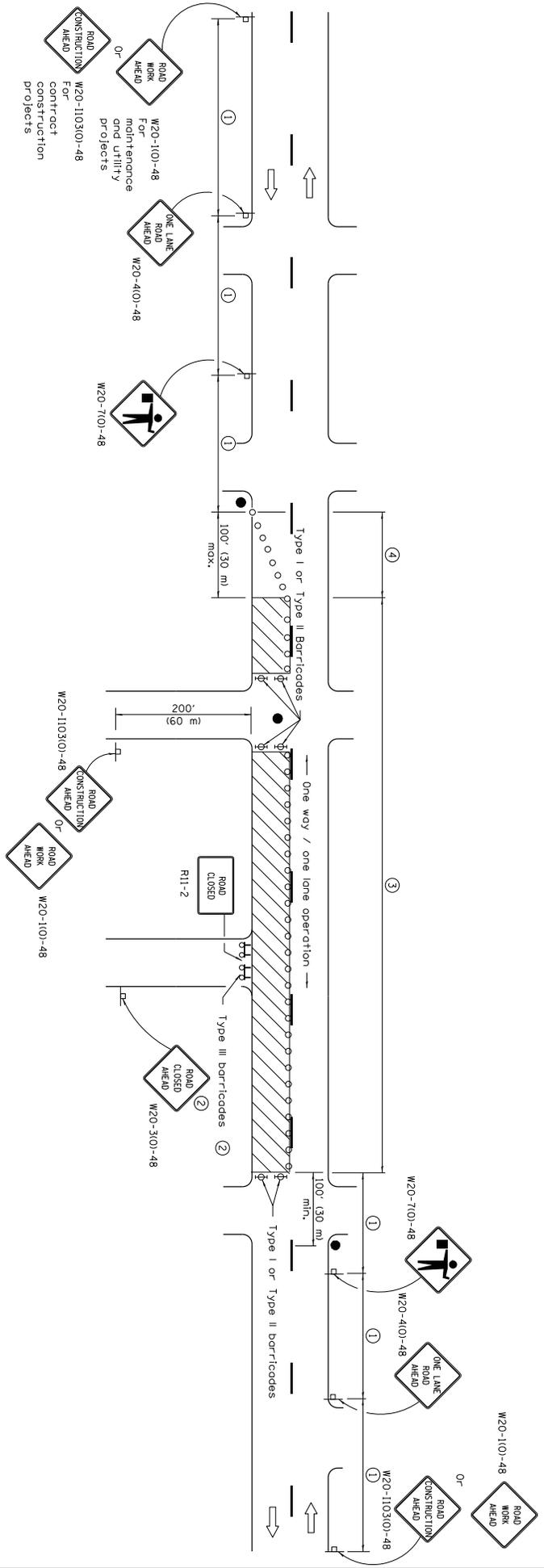
- 1 Refer to SIGN SPACING TABLE for distances.
- 2 Approved sideroad closures.
- 3 Cones of 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) intervals. Type I or Type II barricades are used. The interval between devices may be doubled.
- 4 Cones, drums or barricades of 20' (6 m) centers.

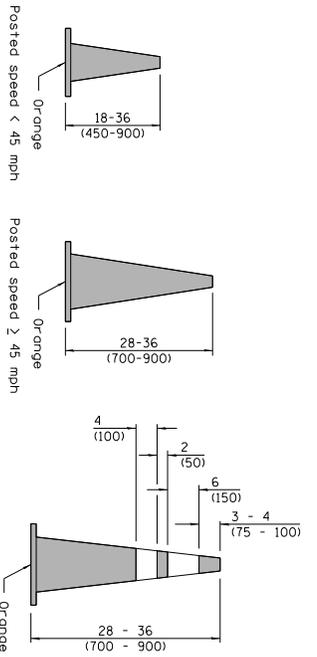
GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities on the pavement requiring the closure of one traffic lane in an urban area. All dimensions are in inches (millimeters) unless otherwise shown.

DATE	REVISIONS
1-1-11	Revised flagger sign.
1-1-09	Switched units to English (metric).
	Corrected sign No.s.

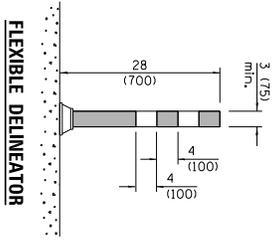
**URBAN LANE CLOSURE,
 2L, 2W, UNDIVIDED**
 STANDARD 701501-06



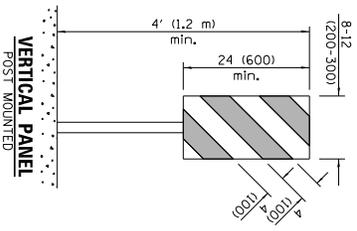


CONE FOR DAYTIME

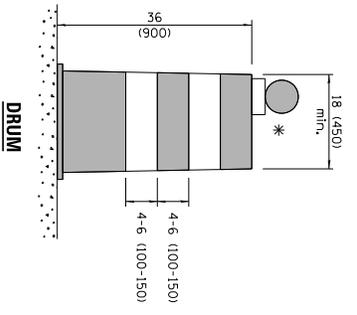
REFLECTORIZED CONE FOR NIGHTTIME



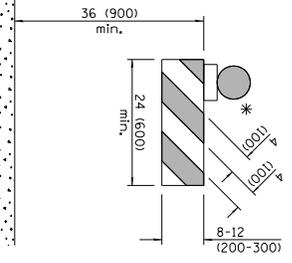
FLEXIBLE DELINEATOR



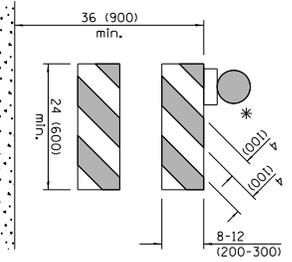
VERTICAL PANEL POST MOUNTED



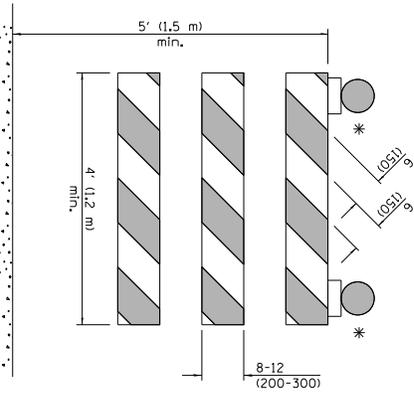
DRUM



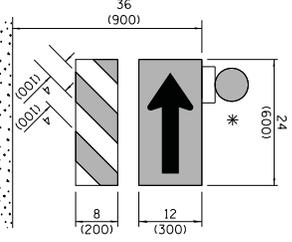
TYPE I BARRICADE



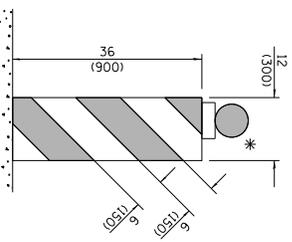
TYPE II BARRICADE



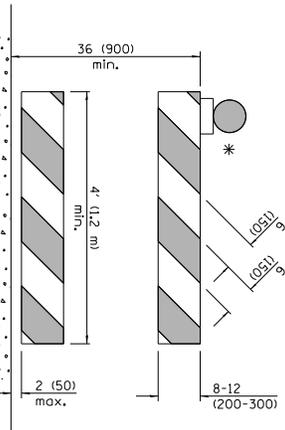
TYPE III BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

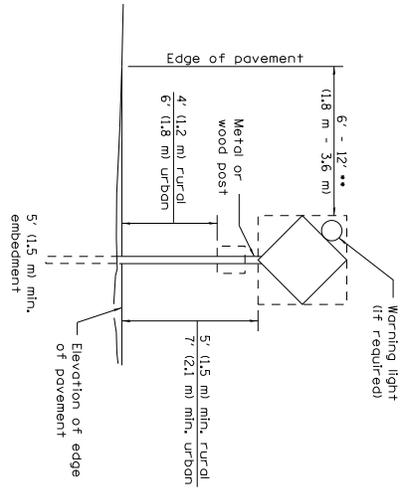
* Warning lights (if required)

Illinois Department of Transportation
 APPROVED: [Signature] April 1, 2016
 ENGINEER OF OPERATIONS
 APPROVED: [Signature] April 1, 2016
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED: 1-1-97

DATE	REVISIONS
4-1-16	Add dims to barricades. Rev. note for post mt. signs.
1-1-15	Rev. cone dts. Add WZ-103. Revised two sign numbers on sheet 2. Added note req. PHOTO ENFORCED plaque.

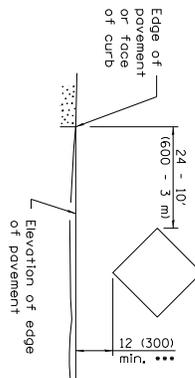
TRAFFIC CONTROL DEVICES
 (Sheet 1 of 3)
STANDARD 701901-05

GENERAL NOTES
 All heights shown shall be measured above the pavement surface.
 All dimensions are in inches (millimeters) unless otherwise shown.



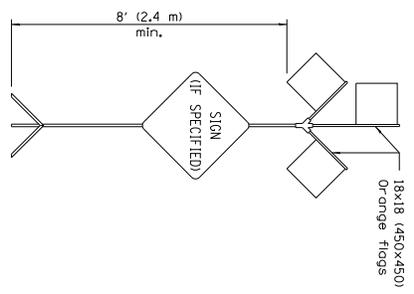
•• When curb or paved shoulder are present this dimension shall be 24 (600) to the face of curb or 6' (1.8 m) to the outside edge of the paved shoulder.

POST MOUNTED SIGNS



••• When work operations exceed four days, this dimension shall be 5' (1.5 m) min. If located behind other devices, the height shall be sufficient to be seen completely above the devices.

SIGNS ON TEMPORARY SUPPORTS

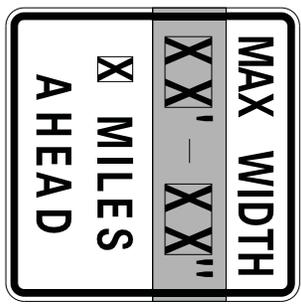


HIGH LEVEL WARNING DEVICE

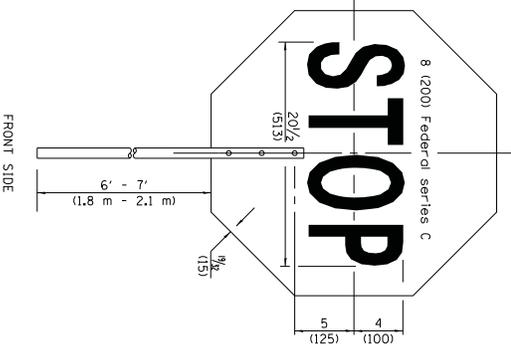
WORK LIMIT SIGNING

This signing is required for all projects 2 miles (3200 m) or more in length.
 ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.
 END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).
 Dual sign displays shall be utilized on multi-lane highways.

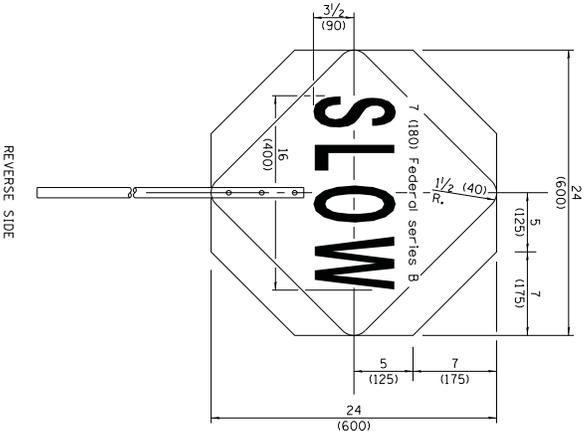
ROAD CONSTRUCTION NEXT X MILES	END CONSTRUCTION
G20-1104(0)-6036	G20-1105(0)-6024



W12-1103-4848
 WIDTH RESTRICTION SIGN
 XX'-XX" width and X miles are variable.



FRONT SIDE



REVERSE SIDE

FLAGGER TRAFFIC CONTROL SIGN

TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

Illinois Department of Transportation
 APPROVED April 1, 2016
 ENGINEER OF OPERATIONS
 APPROVED April 1, 2016
 ENGINEER OF DESIGN AND ENVIRONMENT
 ISSUED 1-1-97

STANDARD 701901-05

••• R10-1108p shall only be used along roadways under the jurisdiction of the State.

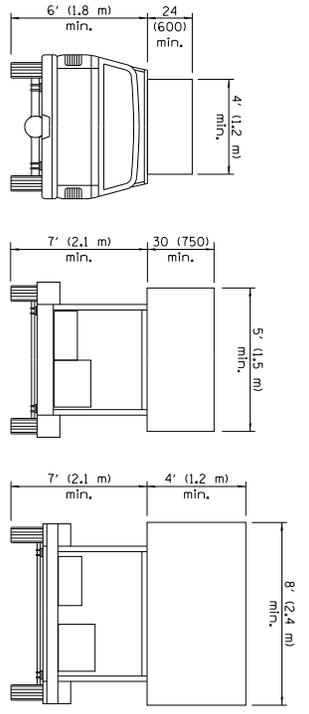
SPEED ZONE SIGNS

This sign shall be used when the above sign assembly is used.

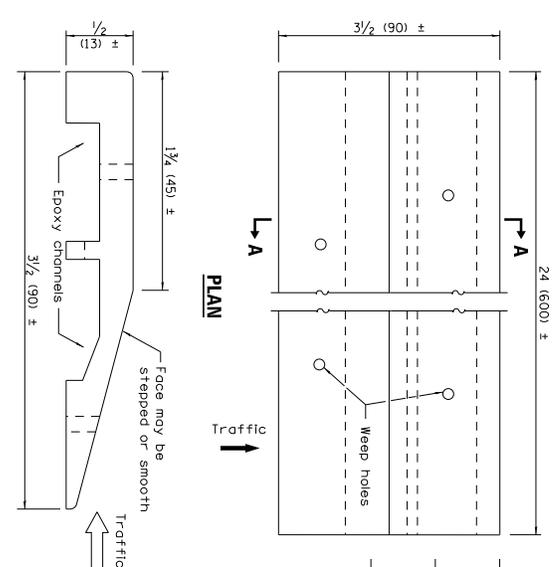
END WORK ZONE SPEED LIMIT	G20-1103(0)-6036
---------------------------	------------------

Sign assembly as shown on Standards or as allowed by District Operations.

WORK ZONE SPEED LIMIT	W21-1115(0)-3618
XX	R2-1-3648
PHOTO ENFORCED	R10-1108p-3618 •••
SXXX FINE MINIMUM	R2-1106p-3618

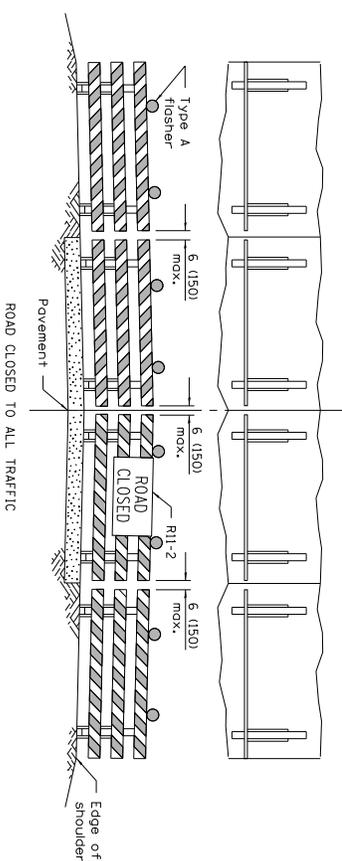
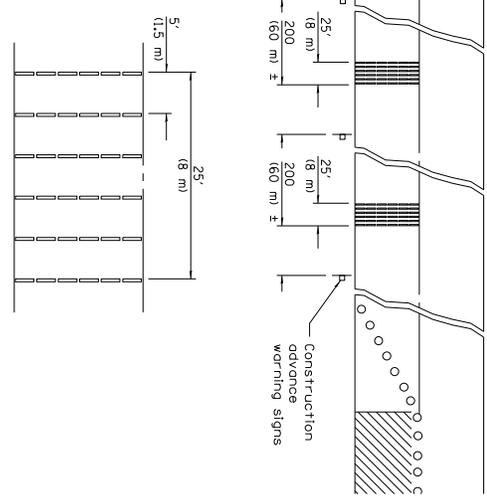


ARROW BOARDS

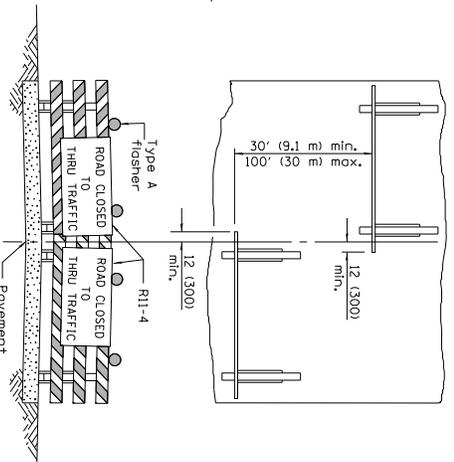


TEMPORARY RUMBLE STRIPS

TYPICAL INSTALLATION



Reflectorized striping may be omitted on the back side of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the sign may be mounted on an NCHRP 350 temporary sign support directly in front of the barricade.

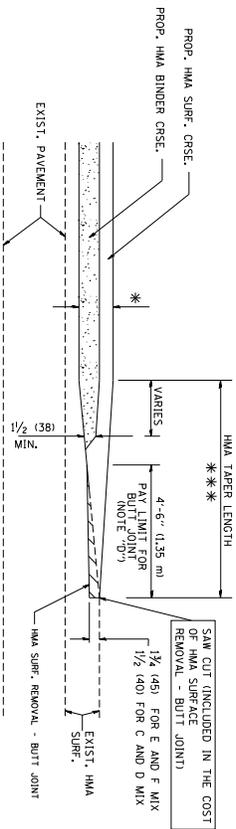
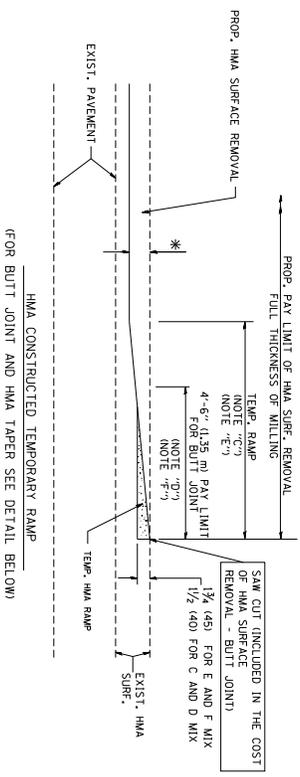
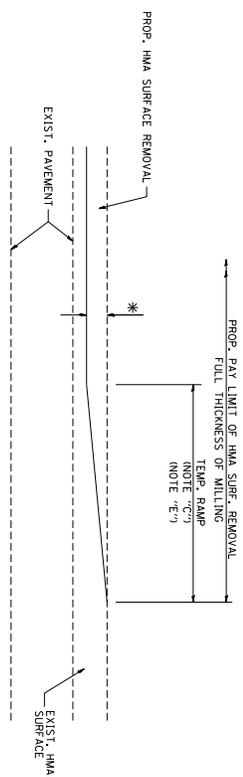


Reflectorized striping shall appear on both sides of the barricades. If a Type III barricade with an attached sign panel which meets NCHRP 350 is not available, the signs may be mounted on NCHRP 350 temporary sign supports directly in front of the barricade.

TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD

Illinois Department of Transportation
 Approved April 1, 2016
 Approved by Operations
 Approved by Design and Environment
 ISSUED 1-1-97

TRAFFIC CONTROL DEVICES
 STANDARD 701901-05
 (Sheet 3 of 3)



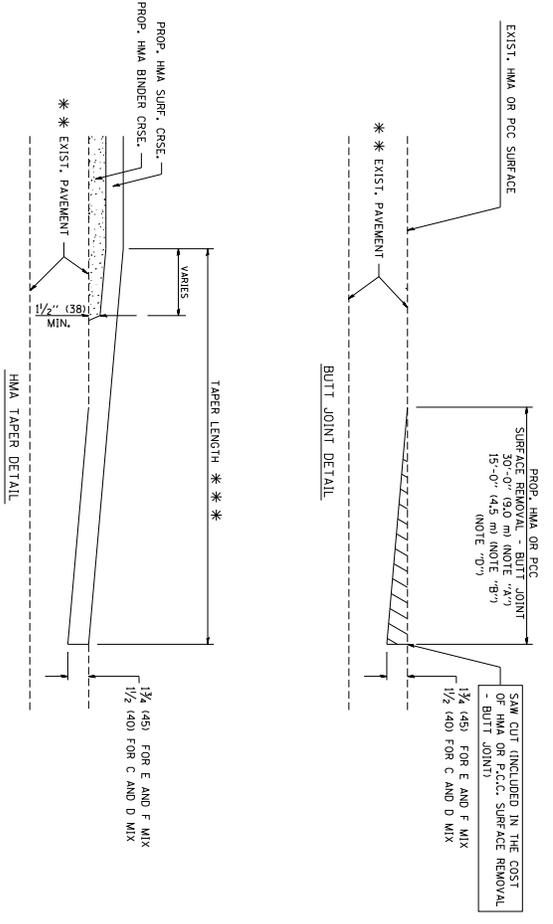
TYPICAL BUTT JOINT AND HMA TAPER
FOR MILLING AND RESURFACING

FILE NAME *	USER NAME *	DESIGNED -	W. DE YONG	REVISED -	R. SHAH 10-25-94
W:\mva\23-24\m23.dgn	SRG/moost	DRAWN -	DRAMA	CHECKED -	A. ASBARI 03-21-97
		PLOT SCALE *	96.8000 / IN.	REVISED -	M. GOMEZ 04-06-01
		PLOT DATE *	1/4/2008	DATE	06-13-90
				REVISED -	R. BORO 01-01-07

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE NONE	SHEET NO. 1 OF 1 SHEETS	STN.	TO STA.
BUTT JOINT AND HMA TAPER DETAILS			
FILE #	SECTION	COUNTY	TOTAL SHEETS
BD00-08	0802		1
ED. ROAD DIST. NO. 1	ILLINOIS FED. AID PROJECT	CONTRACT NO.	

- NOTES
- A. MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
 - B. MINOR SIDE ROADS.
 - C. THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
 - D. THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSE.
 - E. TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
 - F. INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL - BUTT JOINT.
 - G. SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
 - * SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
 - ** 20'-0" (6.1 m) PER 1 (29) RESURFACING NOTE "A"
 - 10'-0" (3.0 m) PER 1 (29) RESURFACING NOTE "B"
- BASIS OF PAYMENT:
- THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE YARD (SQUARE METER) REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT".
- ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SHOWN.



TYPICAL BUTT JOINT AND HMA TAPER
FOR RESURFACING ONLY

* * * PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

FILE NAME *	USER NAME *	DESIGNED -	LHA	REVISED -	J. OBERNIE 10-18-95
W:\mva\22-24\vd\ldgpr	spgilmoot	DRAWN -		REVISED -	A. HOUSE 03-06-96
		CHECKED -		REVISED -	A. HOUSE 10-16-96
		DATE -	06-93	REVISED -	T. RAMMACHER 01-06-00

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE NONE	Traffic Control and Protection for Side Road Intersections and Driveways	TOTAL SHEETS	1
		SHEET NO. 1 OF 1	SHEETS
		TO STA.	
		CONTRACT NO.	
		ED. ROAD DIST. NO. 1	ILLINOIS HIGHWAY AND PROJECT

All dimensions are in millimeter's (Inches) unless otherwise shown.

- NOTES:**
- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAY
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER
 - ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/3 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER
 - ONE ROAD CONSTRUCTION AHEAD SIGN 48 x 48 (122 m x 122 m) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
 - THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
 - WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SLOPING AND THE WORK ZONE, A SINGLE HEADED ARROW (M6-11) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (M6-9).

- B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY
- USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 7050), STD. 7050A, OR THE APPROPRIATE STANDARD, AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER. THE SIGN SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE APPLIED TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OF ITEMS.

TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

