INVITATION FOR BIDS

RFB # 2016-101

BID DOCUMENTS AND SPECIFICATIONS

ASPHALT PATCHING AND RESURFACING PROGRAM

FOR THE MUNICIPALITIES OF:

BENSENVILLE, GLENDALE HEIGHTS, LOMBARD, VILLA PARK AND WOODRIDGE

VILLAGE OF LOMBARD PUBLIC WORKS
1051 S. HAMMERSCHMIDT AVENUE
LOMBARD, IL 60148
(630) 620-5740

TABLE OF CONTENTS

1. **INTENT**

It is the intent of the Village of Bensenville ("Bensenville"), the Village of Glendale Heights ("Glendale Heights"), the Village of Lombard ("Lombard"), the Village of Villa Park ("Villa Park") and the Village of Woodridge ("Woodridge") hereafter referred to as "Municipalities", to jointly bid the 2016 Asphalt Patching and Resurfacing Program.

Work performed under this RFB, shall be in accordance with the provisions of the Illinois Prevailing Wage Act 820 ILCS 130/0.01 et seq. and Employment of Illinois Workers on Public Works Act (30 ILCS 570/).

Through the joint bid process, the Municipalities are presenting an economy of scale to potential bidders, providing them with opportunities for increased revenues as well as reduced costs, which the bidders should in turn extend to the Villages via lower pricing.

The Village of Lombard is the lead agency for the bid process on behalf of the Municipalities. Each Village and Village's manager or board of trustees/council, as the case may be, will have the right to review and independently approve or reject the bid award and execute the Agreement Acceptance.

2. **BID PRICE**

The Contractor shall provide pricing on the schedule of prices included in this Request for Bids ("RFB") per the specifications identified herein. The Contractor shall offer pricing for all of the items included on the schedule of prices. The schedule of prices includes base bid items for which the Municipalities are requesting unit prices.

Bidders shall maintain pricing for a minimum of ninety (90) days from opening date.

Project Location Maps – Each Municipality will supply the Contractor with one 11" x 17" map of its territory that highlights the locations for which the Contractor will provide patching and resurfacing services.

3. **AWARD**

The Contract award will be based on the Base Bid Total Costs amount proposed by the Contractor. Award shall be made to the lowest responsive and responsible bidder(s) who best meets the specifications including financial capacity to perform, experience and qualifications performing similar work and scheduling based upon the evaluation criteria specified herein.

No work shall be awarded to a Bidder that is in arrears or is in default to any of the Municipalities for any debt or contract, or that has defaulted, as surety or otherwise, upon any obligation to the municipality, or that has failed to perform satisfactorily any previous contract with, or work for, the Municipalities.

4. **TERM**

The term of this Agreement shall be one (1) year from the date of award. Each Municipality reserves the right to renew this Contract for two (2) additional one (1) year periods, subject to acceptable performance by the Contractor. Unit prices (including supplemental unit prices) shall be held constant for the initial term of this agreement.

For subsequent terms, requests for increases of unit prices shall be limited to two percent (2%) or CPI of the Chicago-Gary-Kenosha Index, whichever is less. Requests for price increases shall be submitted.

At the end of any contract term, the Village of Lombard reserves the right to extend this Contract for a period of up to sixty (60) days for the purpose of getting a new contract in place.

For any year beyond the initial year, this Contract is contingent upon the appropriation of sufficient funds by each Municipality; no charges shall be assessed for failure of a municipality to appropriate funds in future contract years.

The Village of Lombard reserves the right to reject any request for a subsequent term price increase and terminate the Agreement.

Work in each Municipality shall begin in spring/summer 2016, pending approval by its corporate authorities, and will complete these services by September 30th of each year. The completion date may be extended for a municipality upon mutual written consent by the Municipality and the Contractor. Upon each renewal, the contractor shall provide asphalt pavement patching and resurfacing services for the Municipalities per the schedule that each Municipality coordinates with the Contractor.

5. **VOLUME/ESTIMATED QUANTITY**

The volumes identified herein are estimated quantities. The Municipalities do not guarantee any specific amount and shall not be held responsible for any deviation. This Contract shall cover the Municipalities' requirements whether more or less than the estimated amount.

The Village of Lombard reserves the right to increase and/or decrease quantities, add or delete locations or Municipalities during the term of the Agreement, whatever is deemed to be in the best interest of the Municipalities.

In the event awarded Contractor (s) is unavailable, the Municipalities reserve the right to use whatever contractor is available to minimize and/or mitigate damages to their Municipality.

6. **ADDITIONAL INFORMATION**

Should the bidder require additional information about this bid, submit questions via email to: goldsmithc@villageoflombard.org. Questions are requested prior to the Bid Opening and are required **no later than 4:00 P.M. on APRIL 26, 2016.**

ANY and ALL changes to these specifications are valid only if they are included by written Addendum from the Village of Lombard to All Bidders. No interpretation of the meaning of the plans, specifications or other contract documents will be made orally. Failure of any bidder to receive any such addendum or interpretation shall not relieve the bidder from obligation under this bid as submitted. All addenda so issued shall become part of the bid documents. Failure to request an interpretation constitutes a waiver to later claim that ambiguities or misunderstandings caused a bidder to improperly submit a bid.

The Village of Lombard recognizes that in some cases the information conveyed in this RFB may provide an insufficient basis for performing a complete analysis of the RFB requirements. Prospective bidders are, therefore, requested to make the best possible use of the information provided, without the expectation that the Village of Lombard will be able to answer every request for further information or that the schedule for receipt and evaluation of bids will be modified to accommodate such request.

7. **JOINT PURCHASING/PURCHASING EXTENSION**

The purchase of goods and services pursuant to the terms of this Agreement shall also be offered for purchases to be made by the Municipalities, as authorized by the Governmental Joint Purchasing Act, 30 ILCS 525/0.01, *et seq.* (the "Act"). All purchases and payments made under the Act shall be made directly by and between each Municipality and the successful bidder. The bidder agrees that the Village of Lombard shall not be responsible in any way for purchase orders or payments made by the other Municipalities. The bidder further agrees that all terms and conditions of this Agreement shall continue in full force and effect as to the other Municipalities during the extended term of this Agreement.

Bidder and the other Municipalities may negotiate such other and further terms and conditions to this Agreement ("Other Terms") as individual projects may require. In order to be effective, Other Terms shall be reduced to writing and signed by a duly authorized representative of both the successful bidder and the other Municipality.

The bidder shall provide the other Municipalities with all documentation as required in the RFB, and as otherwise required by the Village of Lombard, including, but not limited to:

- 100% performance and payment bonds for the project awarded by other Municipalities
- Certificate of Insurance naming each other Municipality as an additional insured
- Certified payrolls to the other Municipality for work performed

8. CONTACT WITH VILLAGE PERSONNEL

All bidders are prohibited from making any contact with the Municipalities' Presidents, Trustees, or any other official or employee of the Municipalities (collectively, "Municipal Personnel") with regard to the Project, other than in the manner and to the person(s) designated herein. The Lombard Village Manager reserves the right to disqualify any bidder found to have contacted Municipal Personnel in any manner with regard to the Project. Additionally, if the Lombard Village Manager determines that the contact with Municipal Personnel was in violation of any provision of 720 ILCS 5/33E, the matter will be turned over to the DuPage County State's Attorney for review and prosecution.

9. RESERVATION OF RIGHTS

Each Municipality reserves the right to accept the Bidder's Proposal that is, in their judgment, the best and most favorable to the interests of the Municipality and the public; to reject the low Price Proposal; to accept any item to any Bidder's Proposal; to reject any and all Bidder's Proposals; to accept and incorporate corrections, clarifications or modifications following the opening of the Bidder's Proposals when to do so would not, in Municipalities' opinion, prejudice the bidding process or create any improper advantage to any Bidder; and to waive irregularities and informalities in the bidding process or in any Bidder's Proposal submitted; provided, however, that the waiver of any prior defect or informality shall not be considered a waiver of any future or similar defects or informalities, and Bidders should not rely upon, or anticipate, such waivers in submitting the Bidder's Proposals. The enforcement of this Reservation of Rights by one or more of the Municipalities shall not be considered an alteration of the bids.

10. INVOICES AND PAYMENTS

The Contractor shall provide individual invoices for the services that it and all of its subcontractors undertake for a Municipality to that Municipality. The Contractor shall be responsible for paying its subcontractors. The Contractor's subcontractors shall not invoice a Municipality, nor shall a Municipality pay the Contractor's subcontractors directly.

The Contractor shall submit invoices to each Municipality detailing the services the Contractor provided directly to the respective Municipality. All services shall be invoiced-based on unit pricing and quantities used. Each Municipality shall only pay for quantities it used or ordered. Quantities may be adjusted up or down based on the needs of each Municipality. Each Municipality shall make payments in accordance with the Local Government Prompt Payment Act.

No payment, final or otherwise, shall release the Contractor or its subcontractors from any of the requirements or obligations set forth in this Agreement.

Invoices shall be delivered to:

Village of Bensenville
Director of Public Works
717 E. Jefferson Street
Bensenville, IL 60106

Village of Glendale Heights
Director of Public Works
1615 Glen Ellyn Road
Glendale Heights, IL 60139

Village of Lombard
Director of Public Works
1051 S. Hammerschmidt Avenue
Lombard, IL 60148

Village of Villa Park
Public Works Director
20 South Ardmore Avenue
Villa Park, IL 60181

Village of Woodridge
Brandon Tonarelli, P.E.
1 Plaza Drive
Woodridge, IL 60517

The following provisions supplement the "Standard Specifications for Road and Bridge Construction," adopted April 1, 2016 (referred to hereinafter as the "Standard Specifications"); the "Supplemental Specifications and Recurring Special Provisions", adopted April 1, 2016; the latest edition of the "Illinois Manual on Uniform Traffic Control Devices For Streets and Highways" (IMUTCD); and the latest edition of "The Standard Specifications for Sewer and Water Construction in Illinois" adopted June 2014. In case of conflict with any part or parts of said specifications, these special provisions shall take precedence and shall govern. Where no conflict exists, the named specifications shall apply to this Contract as if repeated in their entirety herein.

SECTION 107. LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC REV 01/16

107.09 Public Convenience and Safety. Add the following to the list of legal holidays; Martin Luther King Day, Christmas Eve.

Add the following before the third Paragraph: The Contractor shall plan their operations to ensure that no resident will be denied access to their driveway for more than a single twenty-one (21) day period. During this period the Contractor shall construct curb and gutter, pavement, sidewalk and driveway approaches. Should the Engineer determine that the Contractor will exceed this time constraint, the Engineer will order that temporary roads and/or approaches be installed at the Contractor's expense.

The Contractor is prohibited (with or without the permission of the property owner) from drawing water from any private property sources. If the Contractor wishes to utilize the Village water supply system he must secure an RPZ valve per section 107.18 of the Standard Specifications.

107.15 Dirt on Pavement or Structures. Add the following at the end of this Section: If the pavement on or adjacent to the section under construction shall need cleaning because of the Contractor's operation and the Contractor fails to clean the pavement to the satisfaction of the Engineer at any time during the duration of the Contract, the Engineer will notify the Contractor, at which time the Contractor will have twenty-four (24) hours in which to perform the cleaning. If the Contractor fails to perform the required cleaning within this period of time, the Village shall contract the cleaning to be performed by whatever such method they feel necessary. At the time such work has been completed, the amount incurred by the Village for such work along with a $500.00 per incident fine will be deducted from monies due, or that may become due, the Contractor.

107.16 Equipment on Pavement and Structures. Add the following at the end of this Section: In accordance with Village Code (Title 9, Chapter 97, Section 97.200) the Contractor must obtain a permit for the movement of any overweight or oversize vehicle within the jurisdiction of the Village. If any of the following limits are exceeded, a permit is required.

Maximum Gross Weight:	***80,000 pounds***
Maximum Gross Length:	
Tractor Trailer	***55 feet***
Truck Trailer	***60 feet***
Maximum Gross Width:	***8 feet 6 inches***
Maximum Gross Height:	***13 feet 6 inches***
Maximum Single Axle Weight Limit	***20,000 pounds***
Maximum Axle Tandem Weight Limit	***34,000 pounds***

To reference the complete Village Ordinance concerning permit moves and fee structure visit http://www.villageoflombard.org/DocumentCenter/View/11754

The Contractor must be familiar with the ordinance. This ordinance is strictly enforced; offenders will be subject to fine, arrest and prosecution.

The Lombard Police Department is now using an online-based permitting system via the website, www.oxcartpermits.com. Contractors applying for an overweight/oversize permit will have to use the Oxcart permitting software. The form can be completed on the Oxcart website under the Trucking login/sign up link (http://oxcartpermits.com/user/trucking)

Visit http://www.villageoflombard.org/421/Truck-Enforcement-OversizeOverweight-Per regarding enforcement and truck routes. If you have any questions regarding commercial motor vehicle/permits please contact Officer Latronica at 630-873-4453 or by e-mail at latronicaj@villageoflombard.org.

107.18 Use of Fire Hydrants. Add the following at the end of this Section: The Contractor may request to use fire hydrants within the project area. Fire hydrant usage will only be allowed after the Contractor receives authorization from the Village. The Village has the option of designating a hydrant(s) that the Contractor can utilize within the work zone or project area. Prior to drawing water from any fire hydrant, the Contractor shall rent a water meter and RPZ valve from the Village. The meter and RPZ valve must be connected to the fire hydrant while it is in use. **Meter rentals must be returned after 90 days**. Meter rentals may be renewed after 90 days; however, rental and usage fees at the time of renewal will be charged. Meter renewals will require a new deposit and a renewal fee. The Village will refund any balance from the daily rental fee incurred during the 90-day rental period.

Billing rates and fees are listed below.

Water Meter Rental Charges

5/8" or 3/4" Meter

Initial Administration Fee	$40.00
Deposit	$500.00
Meter Rental Fee (per day)	$3.00
Maximum Rental Time	90 days
Renewal Fee	$10.00

2" Meter

Initial Administration Fee	$40.00
Deposit	$2,000.00
Meter Rental Fee (per day)	$5.00
Maximum Rental Time	90 days
Renewal Fee	$10.00

Contractors wishing to rent a water meter should contact the Village Department of Public Works at (630) 620-5740. The Finance Department will deduct the water meter rental fee from the deposit.

Unauthorized or improper use will subject the offender to arrest and prosecution.

VILLAGE OF BENSENVILLE WATER SUPPLY

The Contractor can obtain municipal water in bulk from Public Works Facility, at **NO CHARGE**, as long as there is not a "watering ban" in effect. Prior to obtaining any water, an account with the Finance Department must be set up for documentation of water usage. The indiscriminate use of fire hydrants is strictly prohibited. Water for construction shall be metered or otherwise accounted for on a daily log maintained with the Public Works Department. The Contractor shall provide the water truck and driver required to obtain and transport this water. The Village reserves the right to restrict or refuse the use of Village water if deemed necessary.

107.24 Forest Protection. Add the following at the end of this Section: In the case of excavation, the Contractor shall attend the showing of a videotape regarding tree protection during construction. The videotape will be shown at the Public Works Building. The approximate time required to view the videotape is one (1) hour. The videotape shall be viewed before any excavation begins. The Engineer will arrange a time suitable to all parties involved to view the videotape. This work will not be paid for separately, but shall be considered incidental to the Contract. The Contractor shall also protect parkway trees from damage by their operations. Failure to do so will result in the following deductions from monies owed to the Contractor:

DAMAGE TO PARKWAY TREES CAUSING REMOVAL (PAYMENT): Any person that damages a parkway tree so severely that the tree dies or requires removal shall compensate the Village for the loss of the parkway tree. The amount paid shall be based on the following schedule:

1. If the damaged parkway tree is up to 6 in. in diameter (measured at 6 in. above ground level), the amount paid shall be determined by using the "Replacement Cost Method" of evaluating trees found in the most current edition of the *Council of Tree and Landscape Appraisers Guide (CTLA) for Plant Appraisal*.
2. For parkway trees larger than a 6 in. trunk diameter, (measured at 54 in. above grade) the amount paid shall be determined by using the "Trunk Formula Method" of evaluating trees found in the most current edition of the above-referenced *CTLA*'s Guide.
3. Added to the costs established under the above provisions shall be the cost of the removal of the parkway tree.

DAMAGE TO PARKWAY TREES NOT CAUSING REMOVAL (PAYMENT): Any person that causes injury to a parkway tree shall compensate the Village for the injury to the parkway tree. Such injuries include, but are not limited to the following: damage to the tree trunk, broken branches, and the storing of construction materials within the drip-line of the tree. The amount paid shall be the actual cost to repair the damage.

The Forestry Division using the most current edition of the above-referenced CTLA's Guide shall determine the appraised value or the partial loss in the tree value.

The following is a SAMPLE of both methods of evaluating parkway trees:

REPLACEMENT COST METHOD (TREES UP TO 6" DIAMETER):	
2" AUTUMN BLAZE FREEMAN MAPLE	$ 365.00
2" HORSECHESTNUT	$ 370.00
2" SWAMP WHITE OAK	$ 375.00
2" RED OAK	$ 375.00
2" HEDGE MAPLE	$ 350.00
2" IVORY SILK JAPANESE TREE-LILAC	$ 375.00

TRUNK FORMULA METHOD (TREES OVER 6" DIAMETER):	
10" HONEY LOCUST	$ 1,595.00
15" LITTLE-LEAF LINDEN	$ 2,995.00
18" SUGAR MAPLE	$ 4,770.00
19" RED MAPLE	$ 4,677.00
30" SILVER MAPLE	$ 7,331.00
32" HONEY LOCUST	$12,853.00

SECTION 211 TOPSOIL

REV. 01/12

This work shall be performed in accordance with Sections 211 of the Standard Specifications with the following alterations.

211.01 Description. Delete the words "or compost."

211.02 Materials. Add "Only 'pulverized' top soil shall be used." Delete subsection (b).

21.04 Placing Topsoil. Delete paragraph two.

211.05 Finishing delete the words "or compost/topsoil blend" from sentence one.

211.07 Method of Measurement. In subparagraph (b), paragraph two delete the words "and compost furnish and place "

211.08 Basis of Payment. Delete the words "and per square yard (square meter) for COMPOST FURNISH AND PLACE, of the thickness specified.

SECTION 250 SEEDING

REV 01/12

This work shall be performed in accordance with Sections 250 of the Standard Specifications with the following alterations.

250.09 Method of Measurement. Delete paragraph 2 and replace with:
(b) Measured Quantities. Seeding of the class specified will be measured in square yards (square meters) of surface area seeded.

250.10 **Basis of Payment.** Replace "acre (hectare)" in the first paragraph with, "square yards (square meters)".

SECTION 423 PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT

REV. 01/12

This work shall be performed in accordance with Section 423 and 351 of the Standard Specifications with the following alterations.

423.01 Description. Add the following: Driveways shall consist of a minimum of 6 in. for residential and 8 in. for commercial driveways, Class PV concrete placed on 2 in. of Aggregate Base Course, Type B.

423.05 Forms. Delete sentence one and replace with the following: Side forms shall be of lumber of not less than 6 in for residential driveways and not less than 8 in for commercial driveways or of steel of equal rigidity.

423.10 Method of Measurement. Add the following: All required excavation and saw cutting shall be included and shall not be paid for separately.

423.11 Basis of Payment. This work will be paid for at the contract unit price per square yard for PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, SPECIAL of the thickness specified, which price shall include all required materials (including base course), labor and equipment necessary to complete the work as specified herein.

424.09 Detectable Warnings: Add the following.

Materials:

PLASTIC

Detectable warning shall be a prefabricated system. The size of the detectable warning panels shall consist of one (1) 24" x 60" warning panel. The color of the detectable warning surface shall be red, or approved equivalent. Approved products are listed below and are subject to change during time of Contract.

Access Tile, Inc.
241 Main Street, Suite 100
Buffalo, NY 14203
Phone: (888) 679-4022
Fax: (877) 679-4022
sales@accessproducts.com
www.accesstile.com

Local Distributor:
Welch Bros., Inc.
9N325 Rt. 25
Bartlett, IL 60103
Phone: (847) 741-6134
Fax: (847) 697-0123
mwelch@welchbrothers.com
http://welchbrothers.com

ADA Solutions, Inc.
P.O. Box 3
North Billerica, MA 01862
Phone: (800) 372-0519
Fax: (978) 262-9125
www.adatile.com

Local Distributor:
Bracing Systems, Inc.
4N350 Old Gary Avenue
Hanover Park, IL 60133
Phone: (630) 665-2732
Fax: (630) 665-0838
www.bracingsystems.com

TufTile, Inc.
1200 Flex Court
Lake Zurich, IL 60047
Phone: (888) 960-8897
Fax: (847) 550-8004
sales@tuftile.com
www.tuftile.com

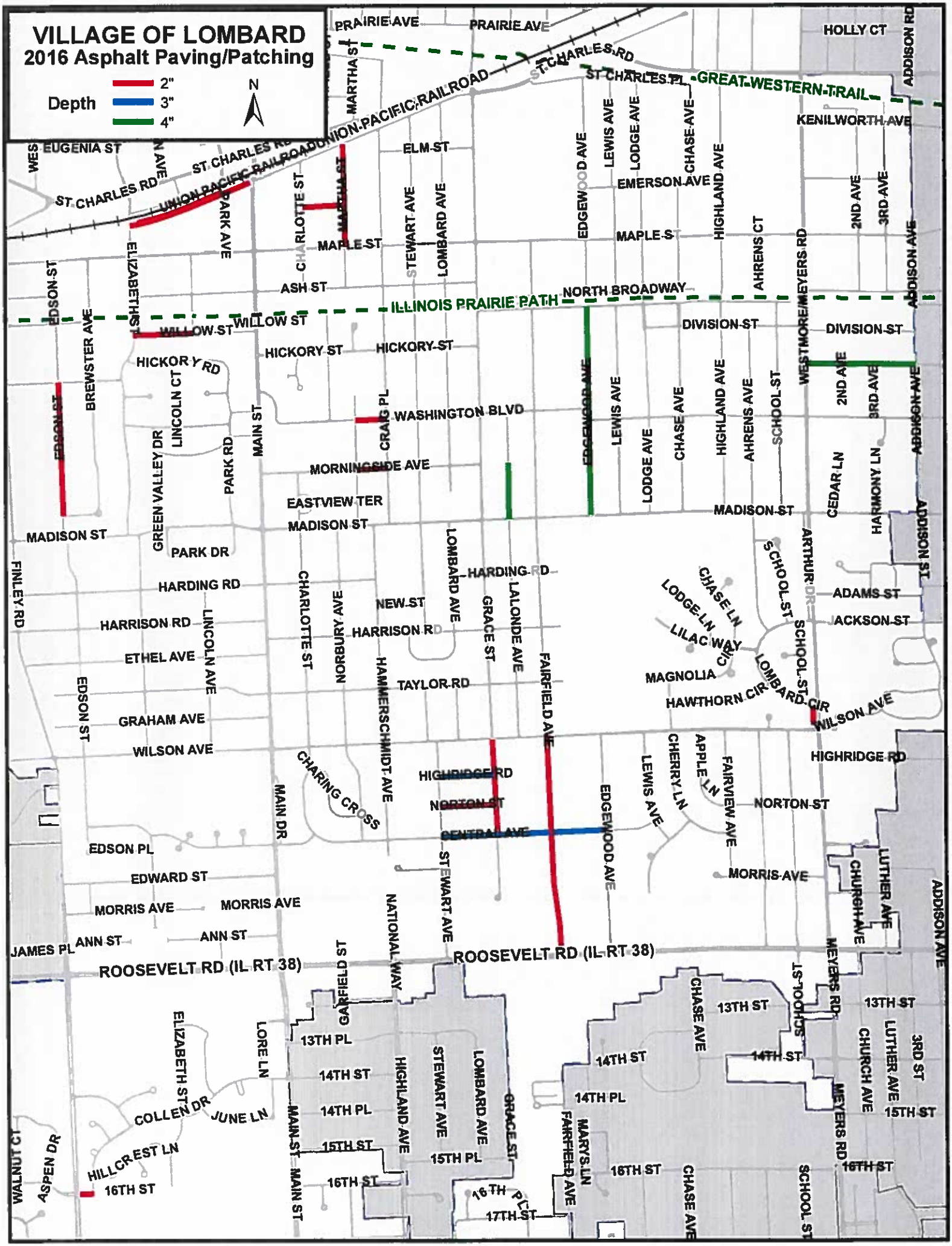
Local Distributor:
TufTile, Inc.
1200 Flex Court
Lake Zurich, IL 60047
Phone: (888) 960-8897
Fax: (847) 550-8004
sales@tuftile.com
www.tuftile.com

Wet Set by:
Armorcast Products Company
13230 Saticoy Street
North Hollywood, CA 91605
Phone: (818) 982-3600
Fax: (818) 982-7742
info@armorcastprod.com
www.armorcastprod.com/ada.htm

Local Distributor:
McCann Industries, Inc.
543 S. Rohlwing Road
Addison, IL 60101
Phone: (630) 627-0000
Fax : (630) 627-8711
sales@mccannomline.com
www.mccannonline.com

APPENDIX A

VILLAGE OF LOMBARD DETAILS


VILLAGE OF LOMBARD
2016 Asphalt Paving/Patching
Depth
2"
3"
4"
N
PRAIRIE AVE
PRAIRIE AVE
HOLLY CT
ADDISON RD
MARTHA ST
ST CHARLES RD
ST CHARLES PL
GREAT WESTERN TRAIL
KENILWORTH AVE
UNION PACIFIC RAILROAD
EUGENIA ST
ST CHARLES RD
ELM ST
EMERSON AVE
MAPLE ST
MAPLE ST
ASH ST
NORTH BROADWAY
ILLINOIS PRAIRIE PATH
WILLOW ST
WILLOW ST
DIVISION ST
DIVISION ST
HICKORY ST
HICKORY ST
HICKORY RD
WASHINGTON BLVD
MORNINGSIDE AVE
EASTVIEW TER
MADISON ST
MADISON ST
MADISON ST
PARK DR
HARDING RD
HARDING RD
HARRISON RD
HARRISON RD
NEW ST
ETHEL AVE
TAYLOR RD
GRAHAM AVE
WILSON AVE
WILSON AVE
HIGHRIDGE RD
HIGHRIDGE RD
NORTON ST
NORTON ST
CENTRAL AVE
EDSON PL
EDWARD ST
MORRIS AVE
MORRIS AVE
MORRIS AVE
JAMES PL
ANN ST
ANN ST
ROOSEVELT RD (IL RT 38)
ROOSEVELT RD (IL RT 38)
13TH PL
13TH ST
13TH ST
14TH ST
14TH ST
14TH PL
14TH PL
15TH ST
15TH PL
16TH ST
16TH ST
16TH PL
17TH ST
HILLCREST LN
COLLEEN DR
JUNE LN
LORE LN
ELIZABETH ST
ASPEN DR
WALNUT CT
PRAIRIE AVE
MARTHA ST
CHARLOTTE ST
PARK AVE
ELIZABETH ST
EDSON ST
BREWSTER AVE
LINCOLN CT
GREEN VALLEY DR
PARK RD
MAIN ST
CRAIG PL
EDSON ST
FINLEY RD
LINCOLN AVE
EDSON ST
CHARLOTTE ST
NORBURY AVE
HAMMERSCHMIDT AVE
CHARING CROSS
MAIN DR
MAIN ST
GARFIELD ST
NATIONAL WAY
STEWART AVE
HIGHLAND AVE
LOMBARD AVE
GRACE ST
FAIRFIELD AVE
MARYS LN
MAIN ST
STEWART AVE
LOMBARD AVE
LALONDE AVE
GRACE ST
FAIRFIELD AVE
EDGEWOOD AVE
LEWIS AVE
CHERRY LN
APPLE LN
FAIRVIEW AVE
EDGEWOOD AVE
LEWIS AVE
LODGE AVE
CHASE AVE
HIGHLAND AVE
AHRENS AVE
SCHOOL ST
CHASE AVE
CHASE AVE
SCHOOL ST
MEYERS RD
CHURCH AVE
LUTHER AVE
ADDISON AVE
EDGEWOOD AVE
LEWIS AVE
LODGE AVE
CHASE AVE
HIGHLAND AVE
AHRENS CT
WESTMORE/MEYERS RD
2ND AVE
3RD AVE
ADDISON AVE
CEDAR LN
HARMONY LN
ADDISON ST
ARTHUR DR
SCHOOL ST
ADAMS ST
JACKSON ST
CHASE LN
LODGE LN
LILAC WAY CIR
SCHOOL ST
MAGNOLIA
HAWTHORN CIR
LOMBARD CIR
WILSON AVE
HIGHRIDGE RD
NORTON ST
MORRIS AVE
CHURCH AVE
LUTHER AVE
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LUTHER AVE
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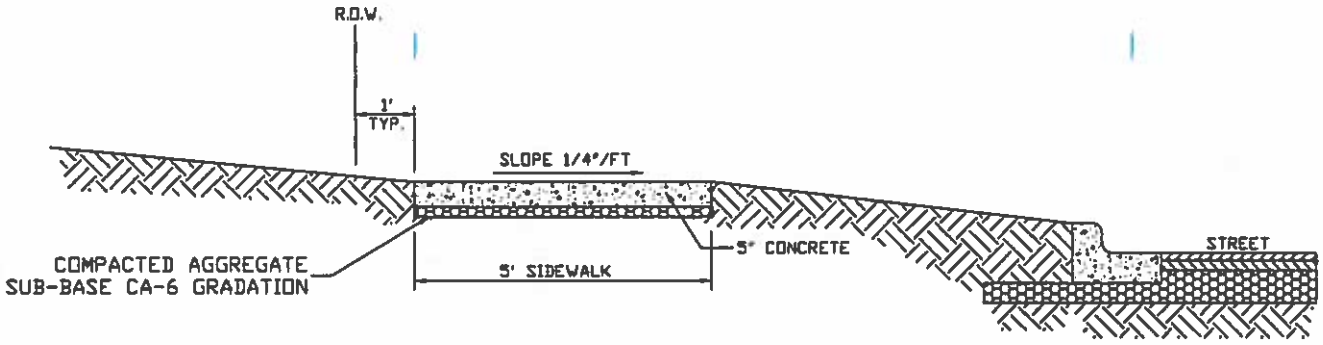
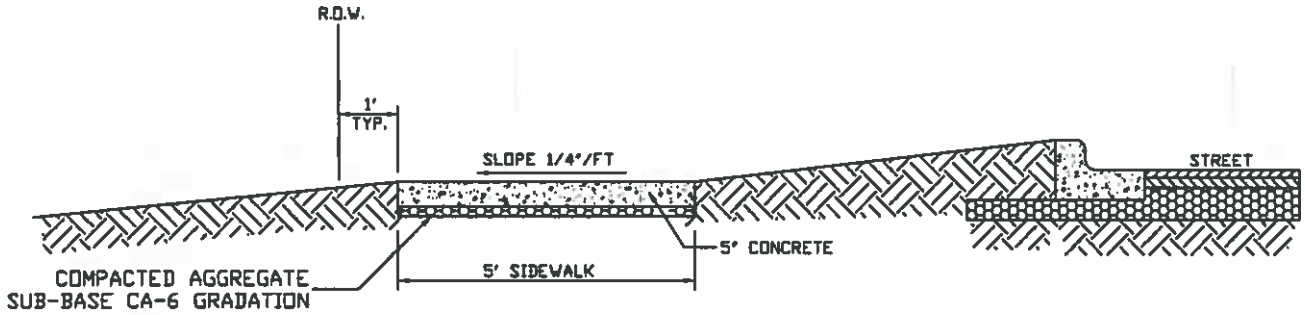
MEYERS RD
16TH ST
SCHOOL ST
CHASE AVE





GENERAL NOTES:

1. CONCRETE SHALL BE CLASS SI.
2. MINIMUM SIDEWALK THICKNESS SHALL BE FIVE INCHES (5").
3. SIDEWALK THICKNESS ACROSS DRIVEWAYS SHALL BE SIX INCHES (6") MINIMUM FOR RESIDENTIAL DRIVEWAYS, AND EIGHT INCHES (8") MINIMUM FOR NON-RESIDENTIAL DRIVEWAYS.
4. MAXIMUM LONGITUDINAL SLOPE SHALL NOT EXCEED 6% (16:1).
5. MINIMUM TRANSVERSE SLOPE SHALL BE 1/4"/FT. (2%) TYPICAL. MAXIMUM TRANSVERSE SLOPE SHALL BE NO GREATER THAN 1/2"/FT. (4%) TYPICAL.
6. A TWO INCH (2") MINIMUM AGGREGATE SUB-BASE (CA-6 GRADATION) SHALL BE PROVIDED (FOUR INCHES (4" MINIMUM) THROUGH NON-RESIDENTIAL DRIVEWAYS).
7. AGGREGATE SUB-BASE COURSE SHALL BE MECHANICALLY COMPACTED.
8. ALL SIDEWALK SHALL BE PROMPTLY BACKFILLED AND PROTECTED FROM DAMAGE.

REV.:	DRG	REV.: 02-05-2015
REV.:	ERH	REV.: 3-26-99
DRAWN BY:	VJGL	DATE: 2-16-98

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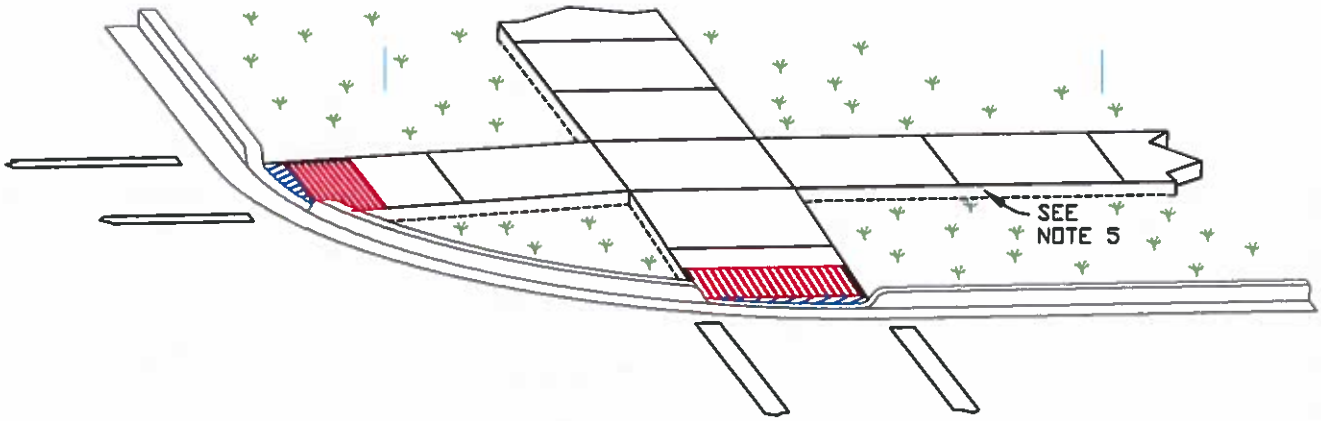
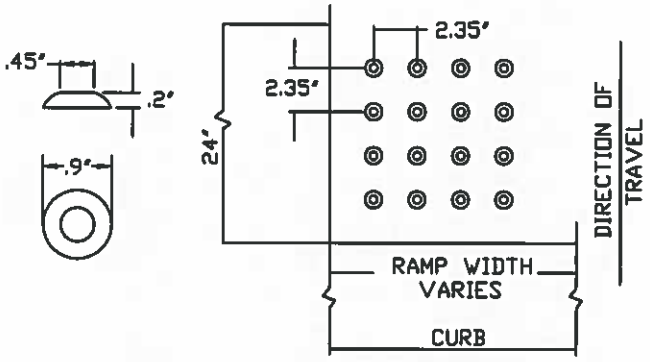
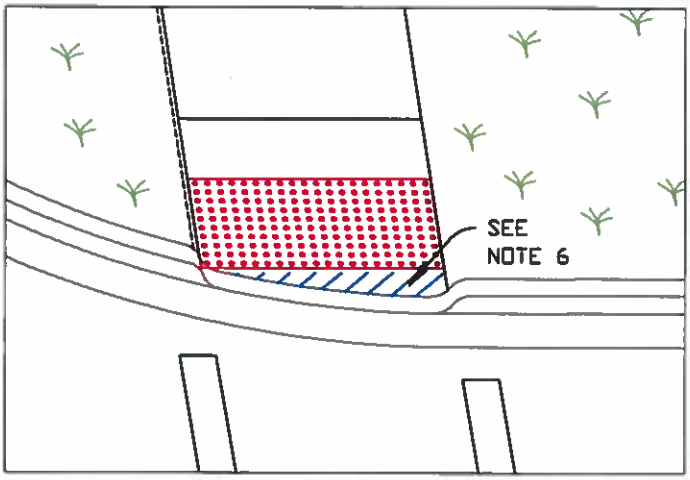
SIDEWALK

VILLAGE OF LOMBARD

PAVEMENT 2







TRUNCATED DOME DETAIL
FOR PUBLIC RIGHT-OF-WAY

GENERAL NOTES:

1. RAMPS SHALL BE LOCATED AS SHOWN ON THE PLANS IN ALIGNMENT WITH NORMAL SIDEWALK AND/OR CROSSWALK AND SHALL HAVE SUFFICIENT CURB LENGTH AT CORNER RADIUS TO PREVENT VEHICULAR ENCROACHMENT.
2. CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
3. THE MAXIMUM SLOPE OF THE SIDE FLARE FOR TYPE B RAMPS SHALL BE 1:10. HOWEVER, IF THE WIDTH OF THE LANDING AREA BETWEEN THE TOP OF THE RAMP AND AN OBSTRUCTION IS LESS THAN 48 INCHES, THE MAXIMUM SLOPE SHALL BE 1:12.
4. RAMPS SHALL BE CONSTRUCTED OF P.C. CONCRETE IN ACCORDANCE WITH THE IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION". DETECTABLE WARNING SURFACE SHALL BE A 2 FOOT BY 5 FOOT SECTION CONSISTING OF TRUNCATED DOMES ALIGNED IN A SQUARE (PARALLEL ALIGNMENT) PATTERN. DETECTABLE WARNINGS SHALL BE SET BACK A MINIMUM OF 6 INCHES FROM THE FRONT OF CURB. THE TYPE OF DETECTABLE WARNING PRODUCT SHALL BE SPECIFIED IN THE CONTRACT DOCUMENTS.
5. THICKNESS OF RAMPS WILL BE THE SAME AS THE ADJACENT SIDEWALK WITH A MINIMUM OF 5 INCHES. THICKNESS OF SIDEWALKS THROUGH RESIDENTIAL DRIVEWAYS SHALL BE A MINIMUM OF 6 INCHES. COMMERCIAL DRIVEWAYS SHALL BE A MINIMUM OF 8 INCHES.
6. UNLESS CURB RAMP IS ALIGNED PERPENDICULAR TO THE STREET RADIUS, AN AREA OF SPECIAL SHAPING MUST BE PROVIDED AT THE BOTTOM OF THE RAMP. THIS AREA SHALL ALLOW THE GRADE BREAK AT THE BOTTOM OF THE RAMP TO BE PERPENDICULAR TO THE RAMP AND SHALL PROVIDE A SMOOTH TRANSITION TO THE GUTTER LINE FOR WHEELCHAIR ACCESS. NO CURB LIP ALLOWED IN THIS AREA. MAXIMUM CROSS SLOPE SHALL BE 2%.

REV.: AKL	REV.: 2-28-12	HANDICAPPED SIDEWALK RAMP	VILLAGE OF LOMBARD	
REV.: ERB	REV.: 4-28-05			
DRAWN BY: VJGL	DATE: 2-16-98		PAVEMENT 3A	
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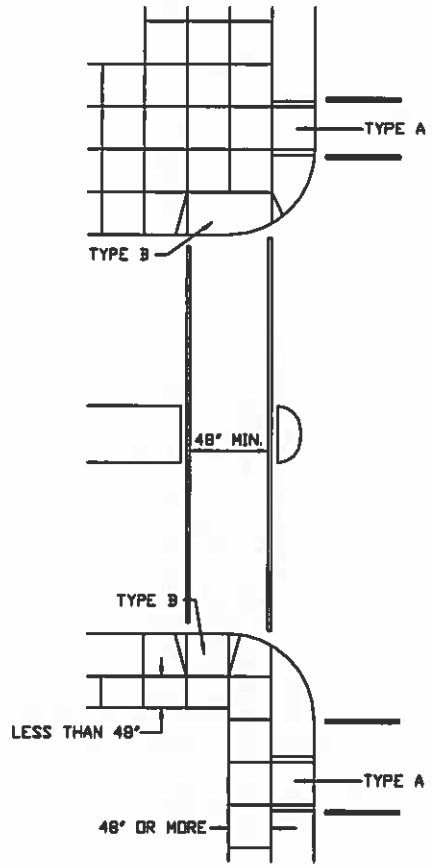
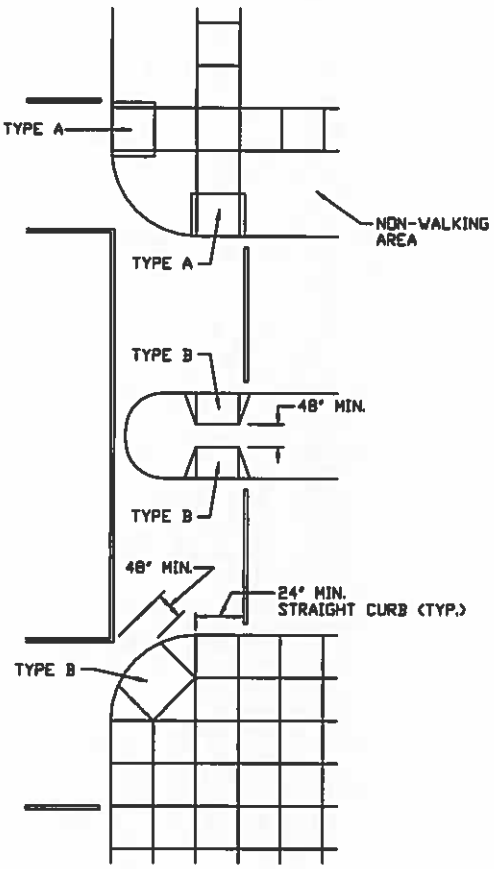
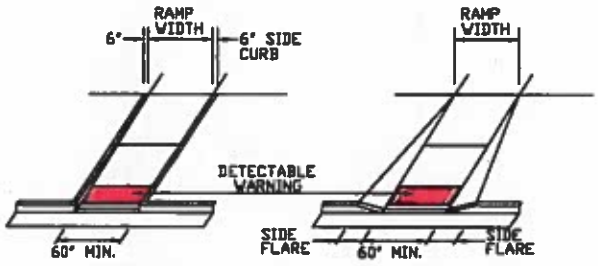


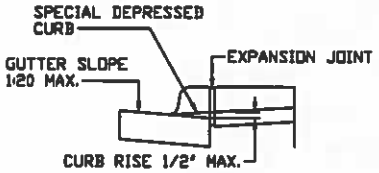


RECOMMENDED LOCATION OF RAMPS

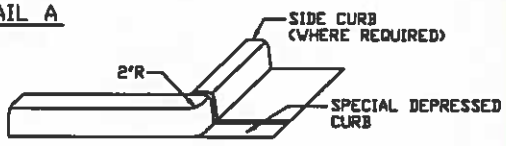


TYPE A TYPE B

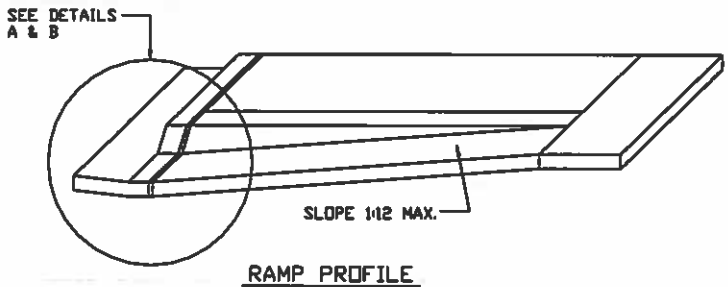
DETAILS OF RAMPS



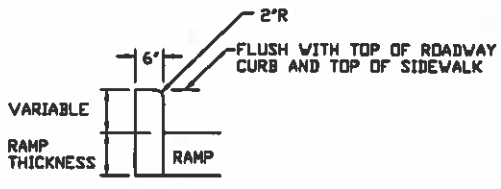
DETAIL A



DETAIL B



RAMP PROFILE



DETAIL OF SIDE CURB

(Side curb may be constructed monolithically with ramp)

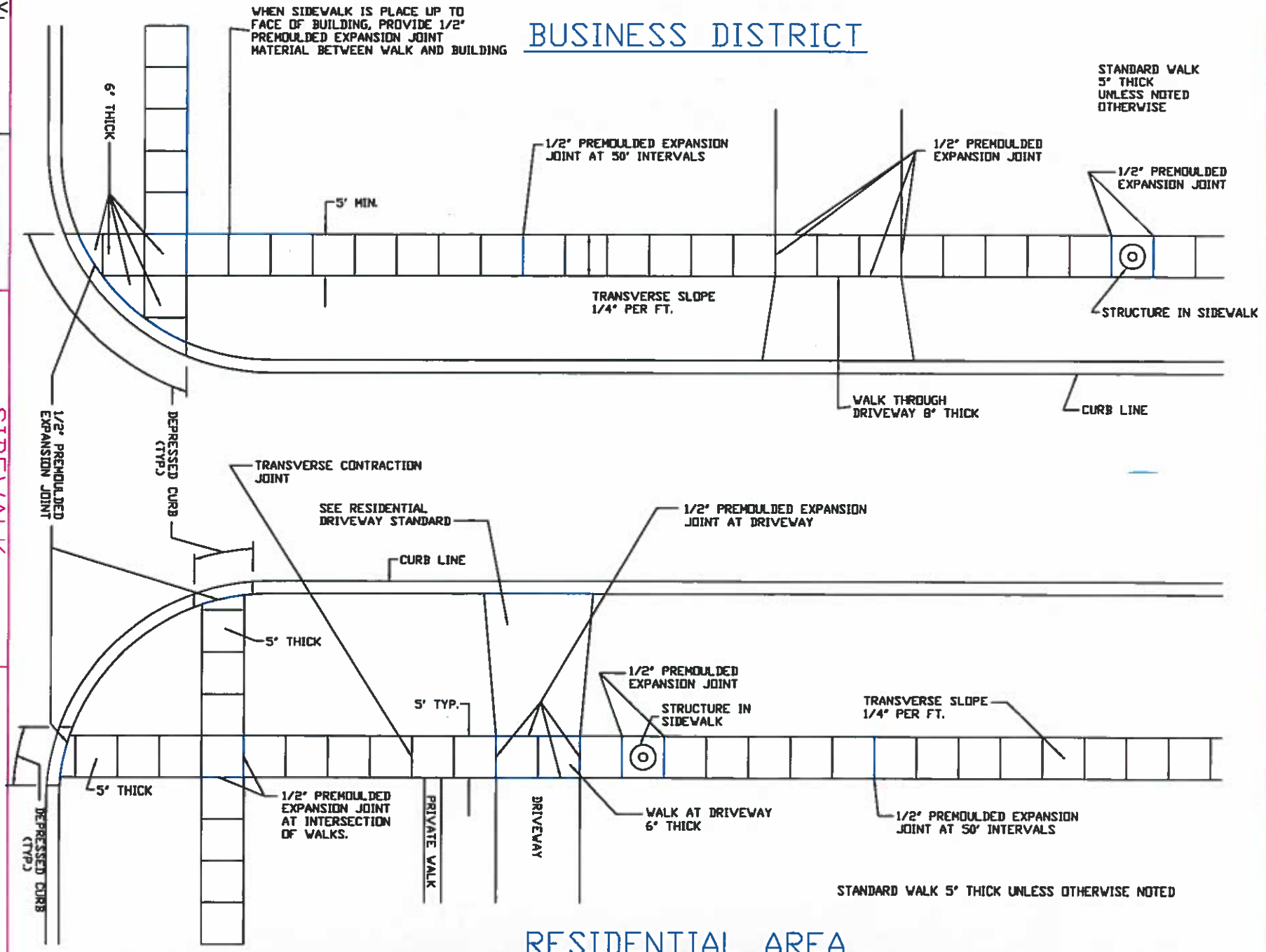
REV.: KDH	REV.: 2-28-2012	HANDICAPPED SIDEWALK RAMP (CONTINUED)	VILLAGE OF LOMBARD
REV.: ERB	REV.: 1-10-05		
DRAWN BY: VJGL	DATE: 2-16-98		PAVEMENT 3B
H:\HOME\LADANG\DRAWINGS\DETAILS\CH400\PAVE-3B.DWG			

REV.:
REV.: ERH
DRAWN BY: VJGL
DATE: 2-16-98
REV.: 3-26-99

SIDEWALK CONSTRUCTION

VILLAGE OF LOMBARD

PAVEMENT 4

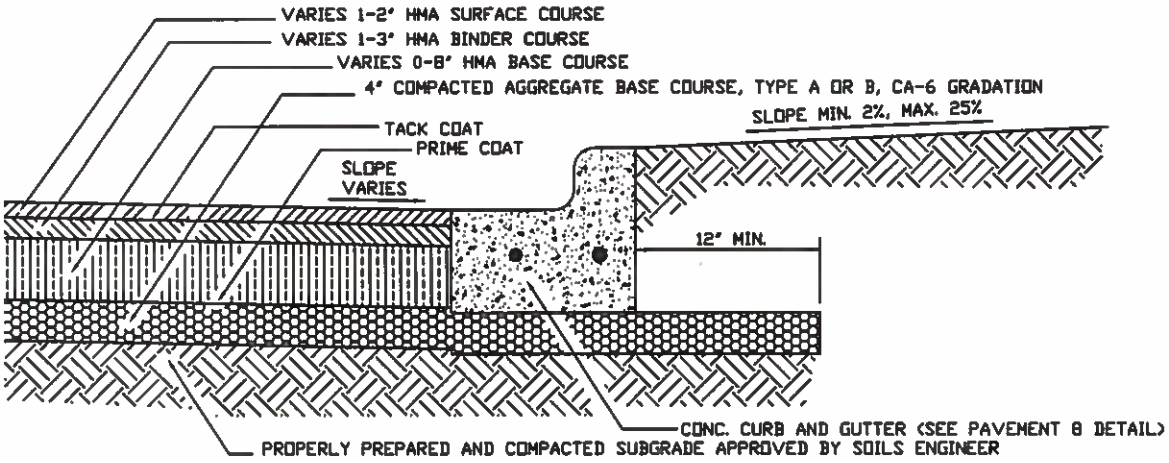


HOT-MIX ASPHALT MIXTURE REQUIREMENTS	
MIXTURE TYPE	**AIR VOIDS @Ndes**
PAVEMENT RESURFACING	
HMA SURFACE COURSE, MIX D, N50 (IL 9.5 mm)	4% @ 50 Gyr.
HMA BINDER COURSE, IL-19.0, N50	4% @ 50 Gyr.
LEVELING BINDER (MACHINE METHOD), N50	4% @ 50 Gyr.
DRIVEWAYS	
HMA SURFACE COURSE, MIX D, N 50 (IL 9.5 mm) 3"	4% @ 50 Gyr.
PATCHING	
CLASS D PATCHES (HMA BINDER IL-19 mm)	4% @ 70 Gyr.

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

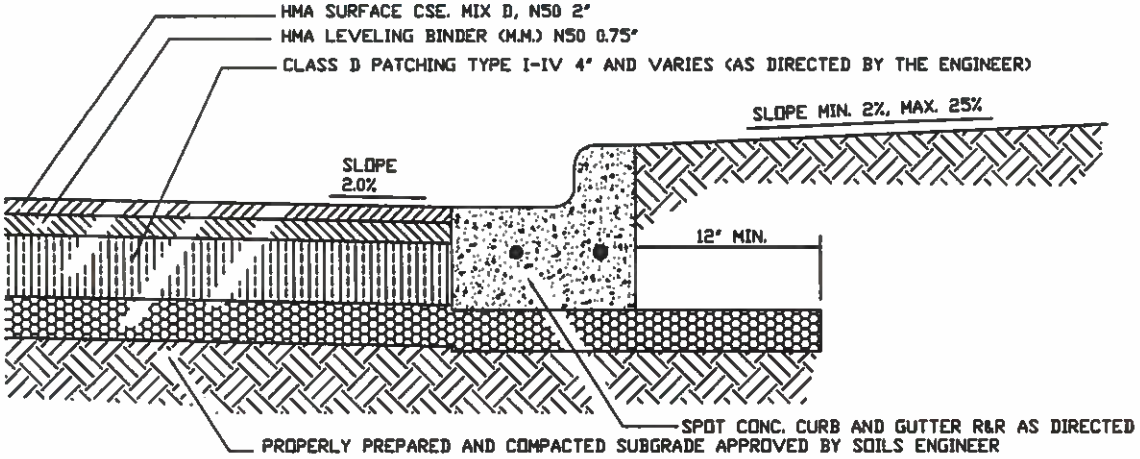
THE "AC TYPE" FOR POLYMERIZED HMA MIXES SHALL BE "SBS/SBR PG 76-22" AND FOR NON-POLYMERIZED HMA THE "AC TYPE" SHALL BE " PG 64-22" UNLESS MODIFIED BY DISTRICT ONE SPECIAL PROVISIONS.
FOR USE OF RECYCLED MATERIALS SEE SPECIAL PROVISIONS.

EXISTING X-SECTION



PROPOSED X-SECTION 2" GRIND/OVERLAY

RANDOLPH, MARTHA, PARKSIDE, GRACE, FAIRFIELD, NORTON, 16TH, WILLOW, EDSON



GENERAL NOTES:

REV.: RAH	REV.: 3-23-16	TYPICAL PAVEMENT CROSS-SECTION	VILLAGE OF LOMBARD
REV.: ERH	REV.: 8-15-01		PAVEMENT 5
DRAWN BY: VJGL	DATE: 2-16-98		
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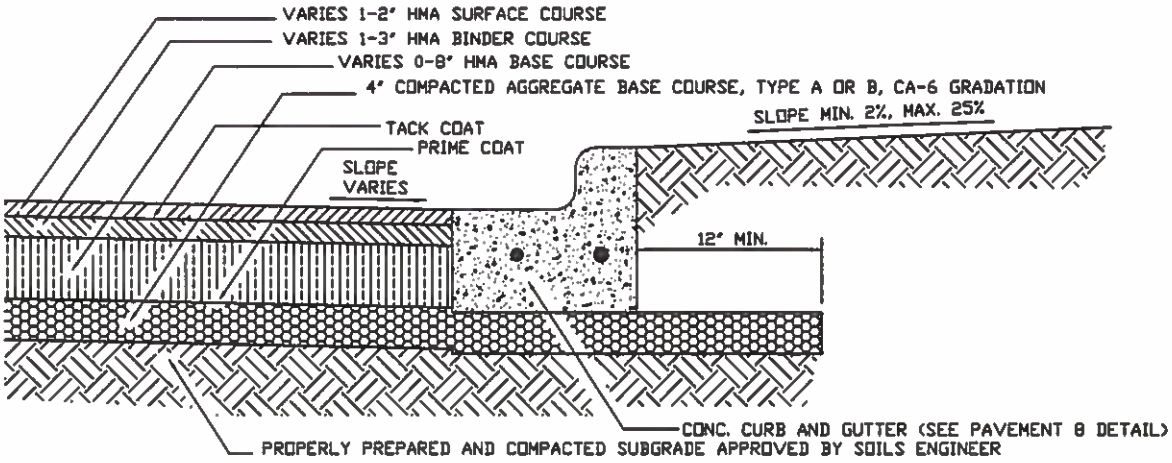
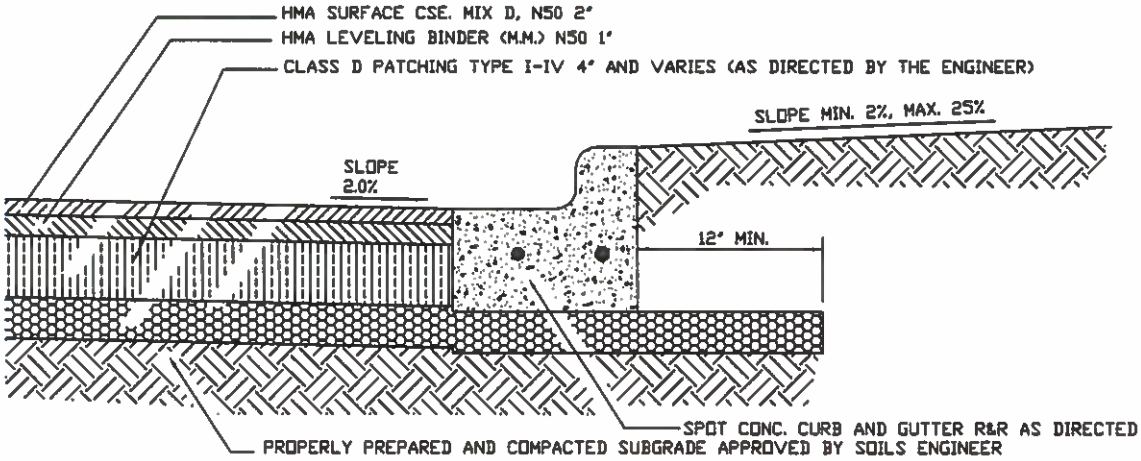
EXISTING X-SECTION



PROPOSED X-SECTION 3" GRIND/OVERLAY

HIGHRIDGE RD. & CENTRAL AVE.



GENERAL NOTES:

REV.:	RAH	REV.: 3-23-16	TYPICAL PAVEMENT CROSS-SECTION
REV.:	ERH	REV.: 8-15-01	VILLAGE OF LOMBARD
DRAWN BY:	VJGL	DATE: 2-16-98	PAVEMENT 5
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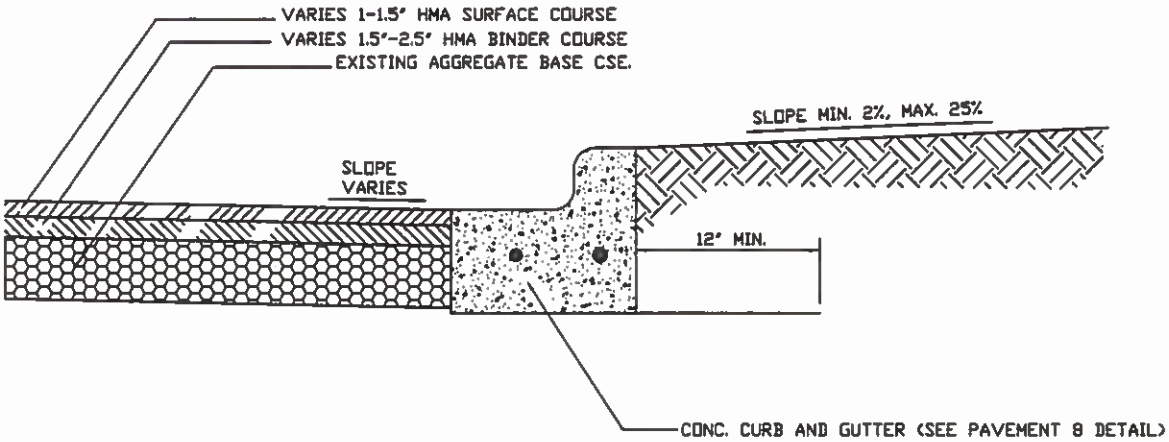
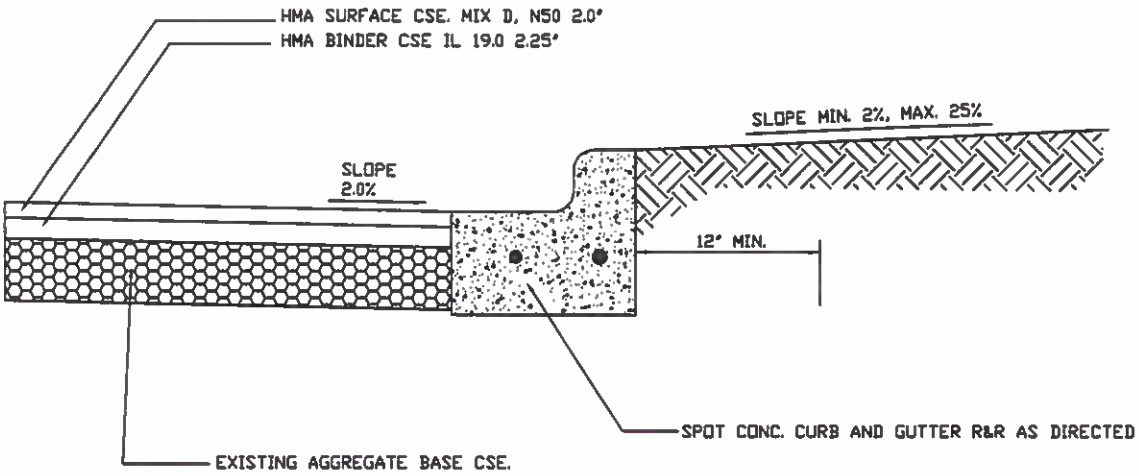
EXISTING X-SECTION 4" GRIND/OVERLAY.

WOODROW AVE.



PROPOSED X-SECTION 4" GRIND/OVERLAY

WOODROW AVE.



GENERAL NOTES:

REV.: RAH	REV.: 3-23-16	TYPICAL PAVEMENT CROSS-SECTION	VILLAGE OF LOMBARD
REV.: ERH	REV.: 8-15-01		PAVEMENT 5
DRAWN BY: VJGL	DATE: 2-16-98		
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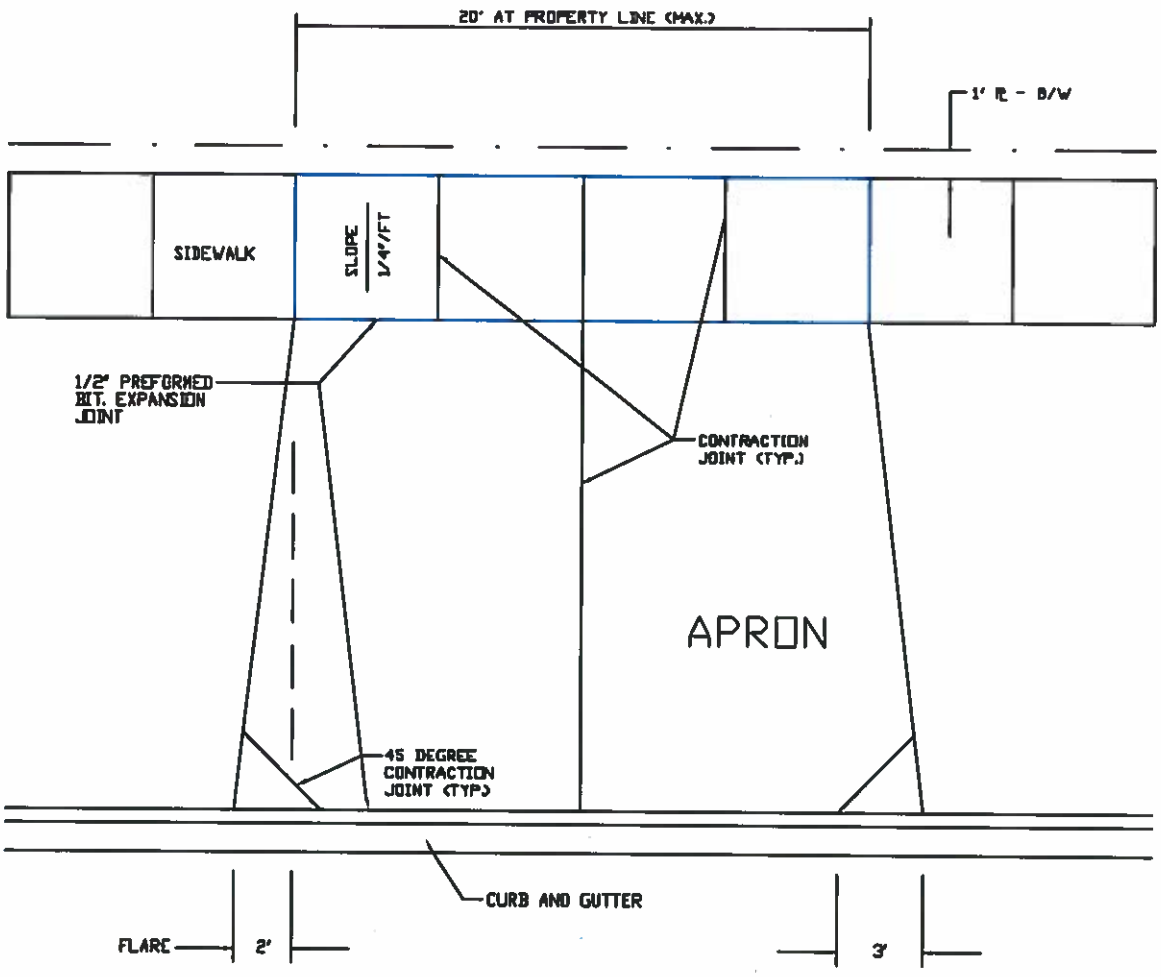

GENERAL NOTES:

1. APRONS SHALL NOT EXCEED 20 FEET IN WIDTH MEASURED AT THE RIGHT-OF-WAY LINE.
2. ALL AGGREGATE SUB-BASE SHALL BE MECHANICALLY COMPACTED.
3. MINIMUM THICKNESS FOR APRONS: 6" P.C. CONCRETE ON 2" COMPACTED AGGREGATE SUB-BASE (CA-6 GRADATION), OR 3" BITUMINOUS SURFACE ON 6" COMPACTED AGGREGATE SUB-BASE (CA-6 GRADATION).
4. SIDEWALK SHALL EXTEND THROUGH THE DRIVEWAY.
5. DRIVEWAYS SHALL HAVE A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 8%.
6. DRIVEWAY APRONS SHALL HAVE A MINIMUM SLOPE OF 2% AND A MAXIMUM SLOPE OF 5%.
7. PATCHES ARE NOT ALLOWED IN NEW APRONS.

REV.:	REV.:
REV.: ERH	REV.: 3-20-99
DRAWN BY: VJGL	DATE: 2-16-98
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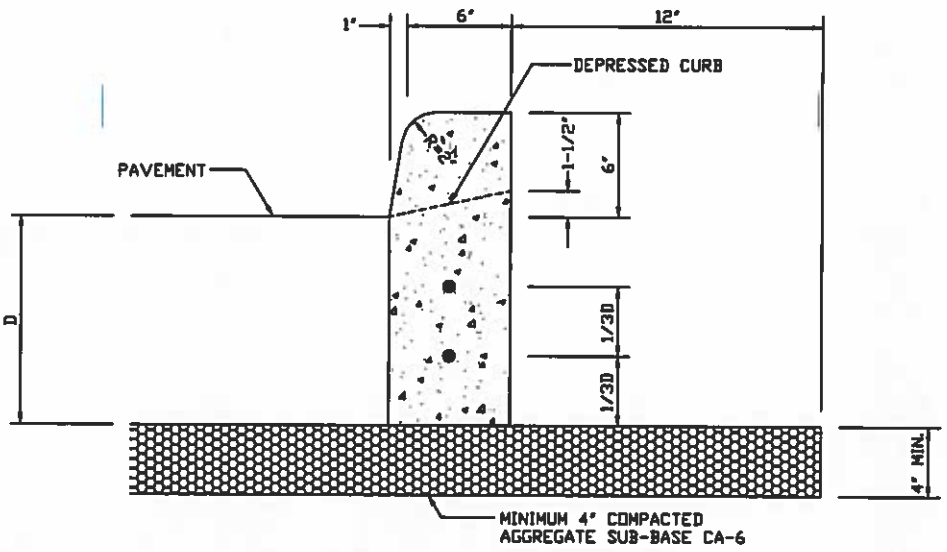
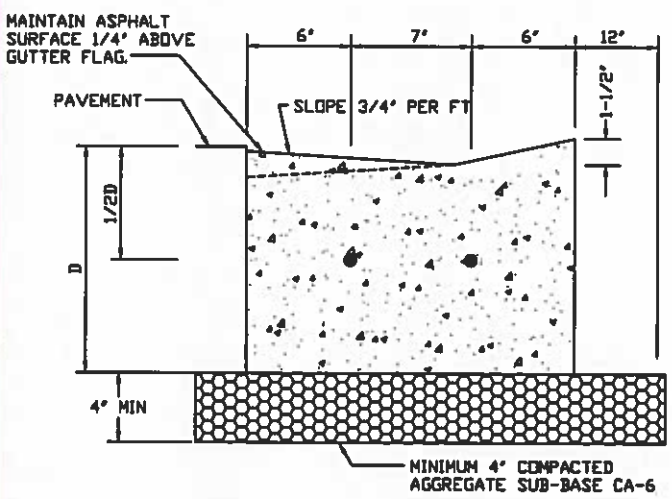
RESIDENTIAL DRIVEWAY APRON

VILLAGE OF LOMBARD

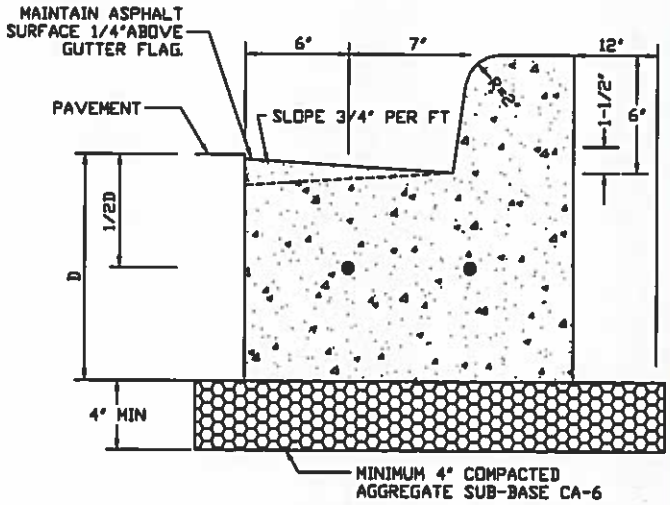
PAVEMENT 6



6" CONCRETE CURB TYPE B



DEPRESSED COMBINATION CURB & GUTTER

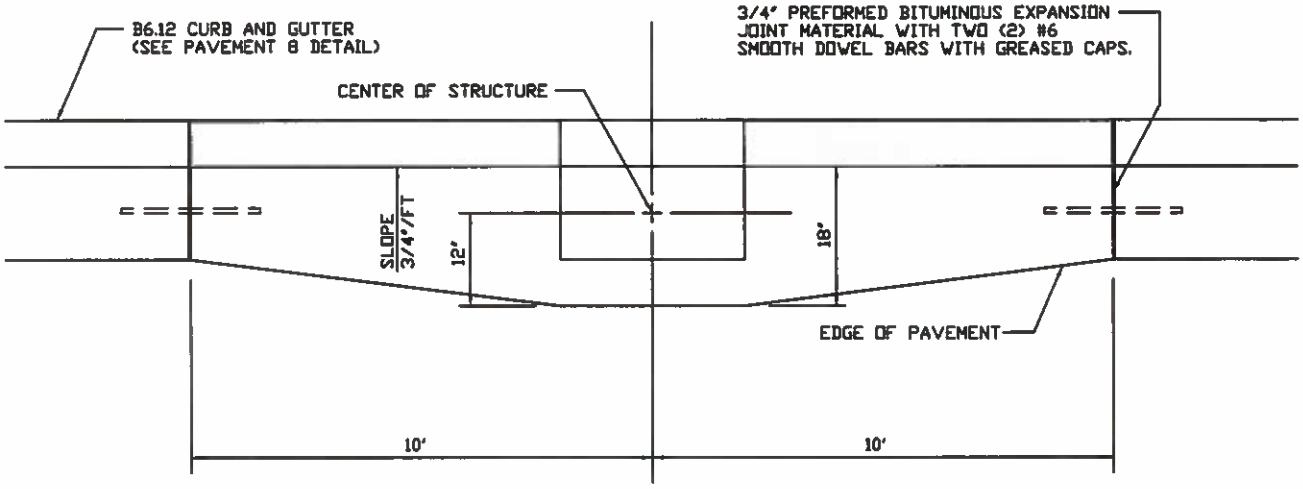


COMBINATION CURB & GUTTER

GENERAL NOTES:

1. 3/4" PREFORMED BITUMINOUS EXPANSION JOINT MATERIAL WITH TWO #6 COATED SMOOTH DOWEL BARS (3/4" DIAMETER X 18") WITH GREASED CAPS SHALL BE PLACED EVERY 45 FEET. THEY SHALL ALSO BE PLACED AT 10' EITHER SIDE OF DRAINAGE STRUCTURES, P.C.'S, RADIUS POINTS, AND BACK OF CUL-DE-SACS. WHEN EXPANSION JOINTS ARE CONSTRUCTED ADJACENT TO EXISTING CURB AND GUTTER, THE EXISTING CURB SHALL BE DRILLED, AND TWO # 6 COATED SMOOTH DOWEL BARS (3/4" DIAMETER x 18") SHALL BE GROUTED IN PLACE. GREASE CAPS SHALL BE PLACED ON THE SIDE OF THE NEW CURB AND GUTTER AND SHALL HAVE A PINCHED STOP THAT WILL PROVIDE A MINIMUM 1" EXPANSION.
2. TOOLED CONTROL JOINTS OR SAWCUTS SHALL BE MADE EVERY 15 FEET.
3. SAWCUTS SHALL BE MADE WITHIN TWENTY-FOUR (24) HOURS AND SEALED WITH A VILLAGE APPROVED JOINT SEALANT. JOINTS SHALL BE CLEAN AND DRY PRIOR TO APPLICATION OF SEALANT.
4. TWO (2) #4 REBARS SHALL BE PLACED CONTINUOUS THROUGHOUT THE CURB AND GUTTER.

REV.: DRG	REV.: 02-05-2015	CURB AND GUTTER	VILLAGE OF LOMBARD
REV.: ERH	REV.: 1-18-01		PAVEMENT 8
DRAWN BY: VJGL	DATE: 2-16-98		



GENERAL NOTES:

REV.:	REV.:	STORM SEWER INLET CURB AND GUTTER	VILLAGE OF LOMBARD
REV.: ERH	REV.: 3-20-99		PAVEMENT 9
DRAWN BY: VJGL	DATE: 2-16-98		
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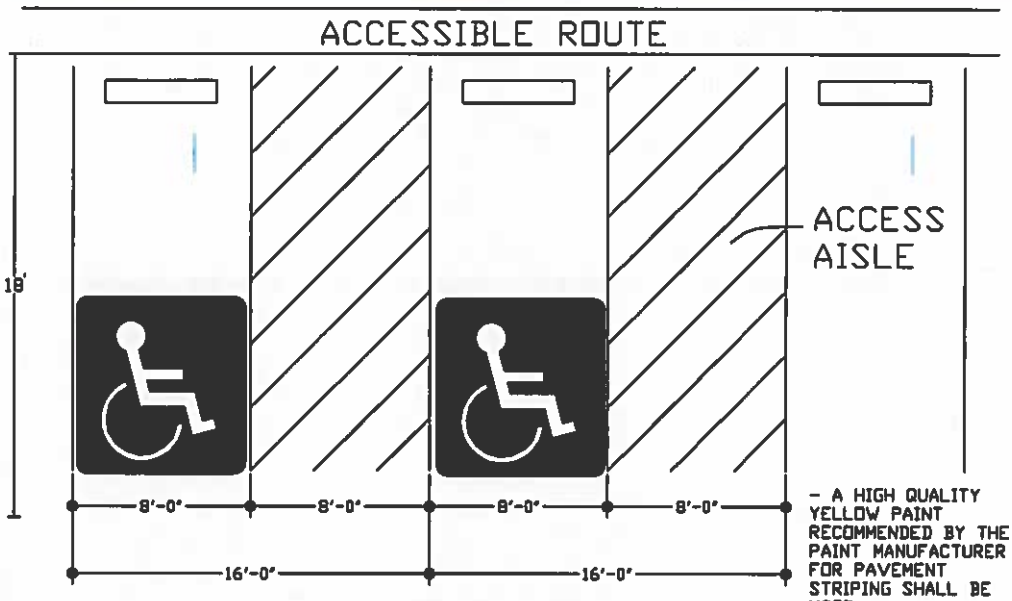

STANDARD IL DESIGN

R7-8

THIS IS A STANDARD SIGN AND MAY BE ORDERED FROM ANY TRAFFIC SIGN SUPPLIER BY NUMBER. THE ARROW SHOULD BE OMITTED WHERE THERE IS ONLY ONE SPACE. THE ARROW MAY ALSO BE MADE TO POINT IN ONLY ONE DIRECTION. THE SIGN MUST BE SUPPLEMENTED WITH THE ILLINOIS STANDARD R7-I101 PLATE GIVING THE AMOUNT OF THE FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S).

ILLINOIS STANDARD
R7-I101

THIS PLATE MAY BE MOUNTED DIRECTLY BELOW THE R7-8 SIGN OR COMBINED WITH THAT SIGN ON A SINGLE 12" BY 24" PANEL. WHERE A FINE IN EXCESS OF $100 IS ESTABLISHED BY A MUNICIPALITY BY ORDINANCE IN ACCORDANCE WITH THE STATUES, THE ACTUAL AMOUNT OF THE FINE SHOULD BE SHOWN.

REV.:	ERH	REV.: 08-01-06	HANDICAP STALL
REV.:	ERH	REV.: 09-16-02	VILLAGE OF LOMBARD
DRAWN BY:	RTL	DATE: 7-20-99	PAVEMENT 14
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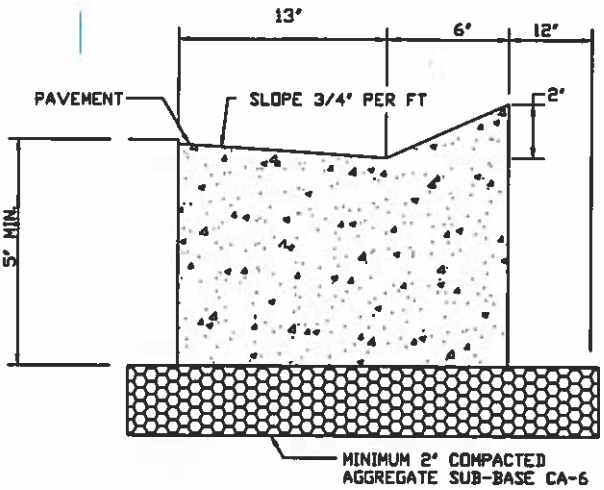
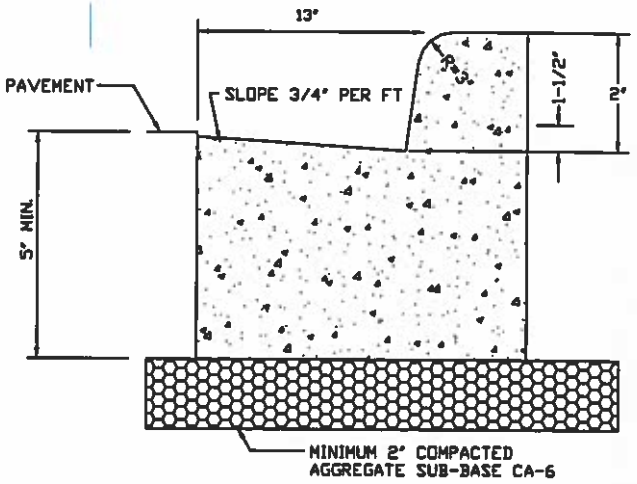
CONCRETE

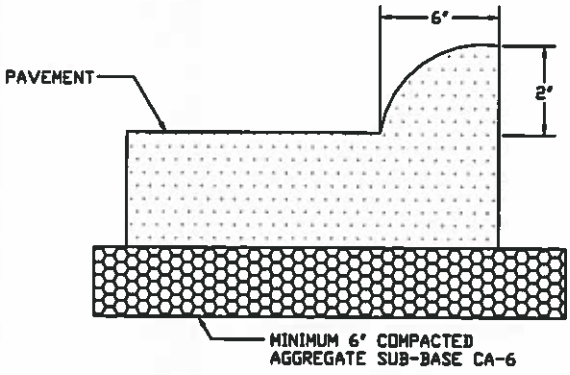


DEPRESSED COMBINATION CURB & GUTTER

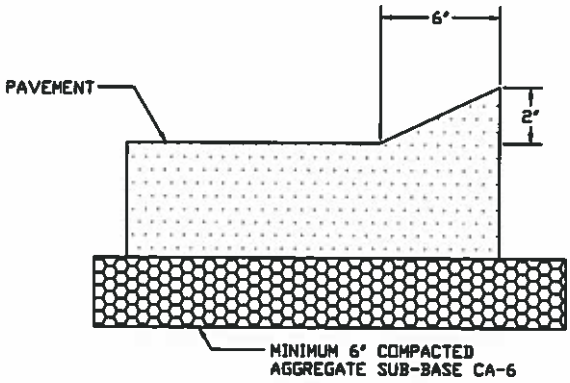


COMBINATION CURB & GUTTER

ASPHALT



ROLLED ASPHALT CURB AND GUTTER

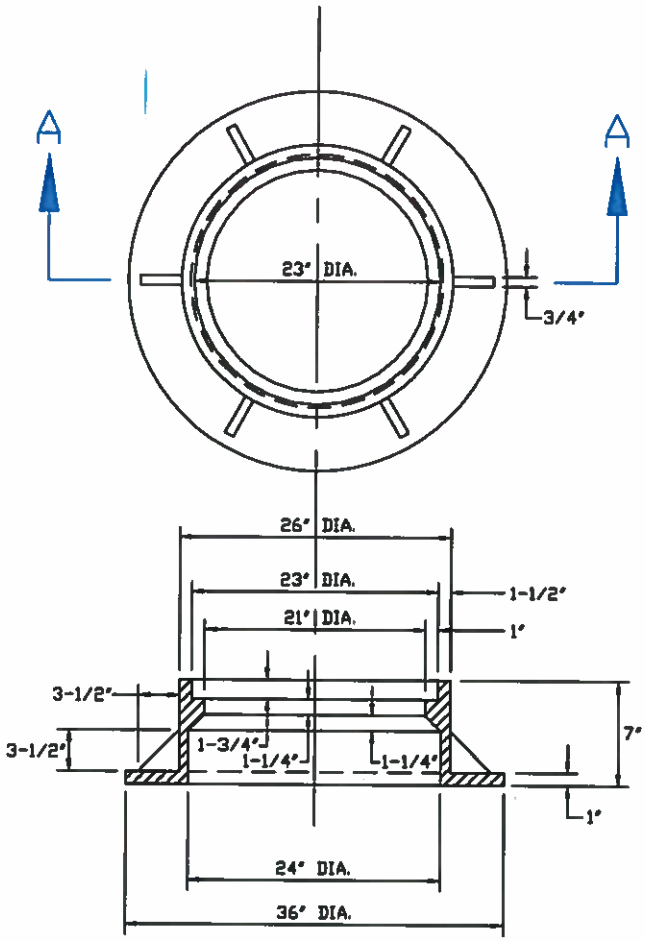


DEPRESSED ASPHALT CURB AND GUTTER

CONCRETE GENERAL NOTES:
1. TOOLED CONTROL JOINTS OR SAWCUTS SHALL BE MADE EVERY 15 FEET.
2. SAWCUTS SHALL BE MADE WITHIN TWENTY-FOUR (24) AND SEALED WITH A VILLAGE APPROVED JOINT SEALANT. JOINTS SHALL BE CLEAN AND DRY PRIOR TO THE APPLICATION OF SEALANT.

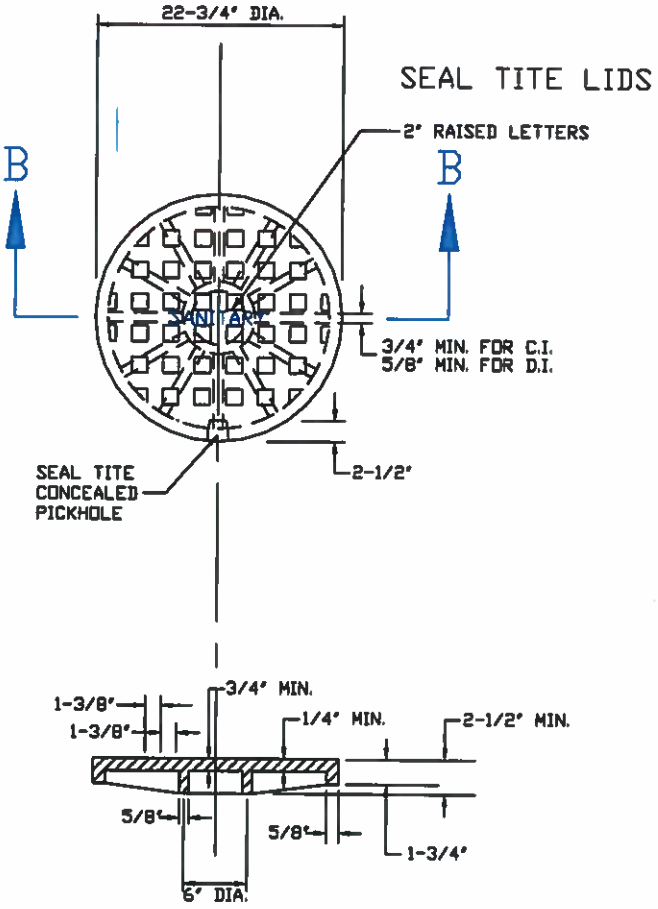
ASPHALT GENERAL NOTES:
1. HAND TAMP 2" CURB IN PLACE.

REV.:		Driveway Curb Edge	VILLAGE OF LOMBARD
REV.: DRG	REV.: 02/05/2015		PAVEMENT 15
DRAWN BY: MTM	DATE: 08/06/2014		



SECTION A-A

CAST FRAME



SECTION B-B

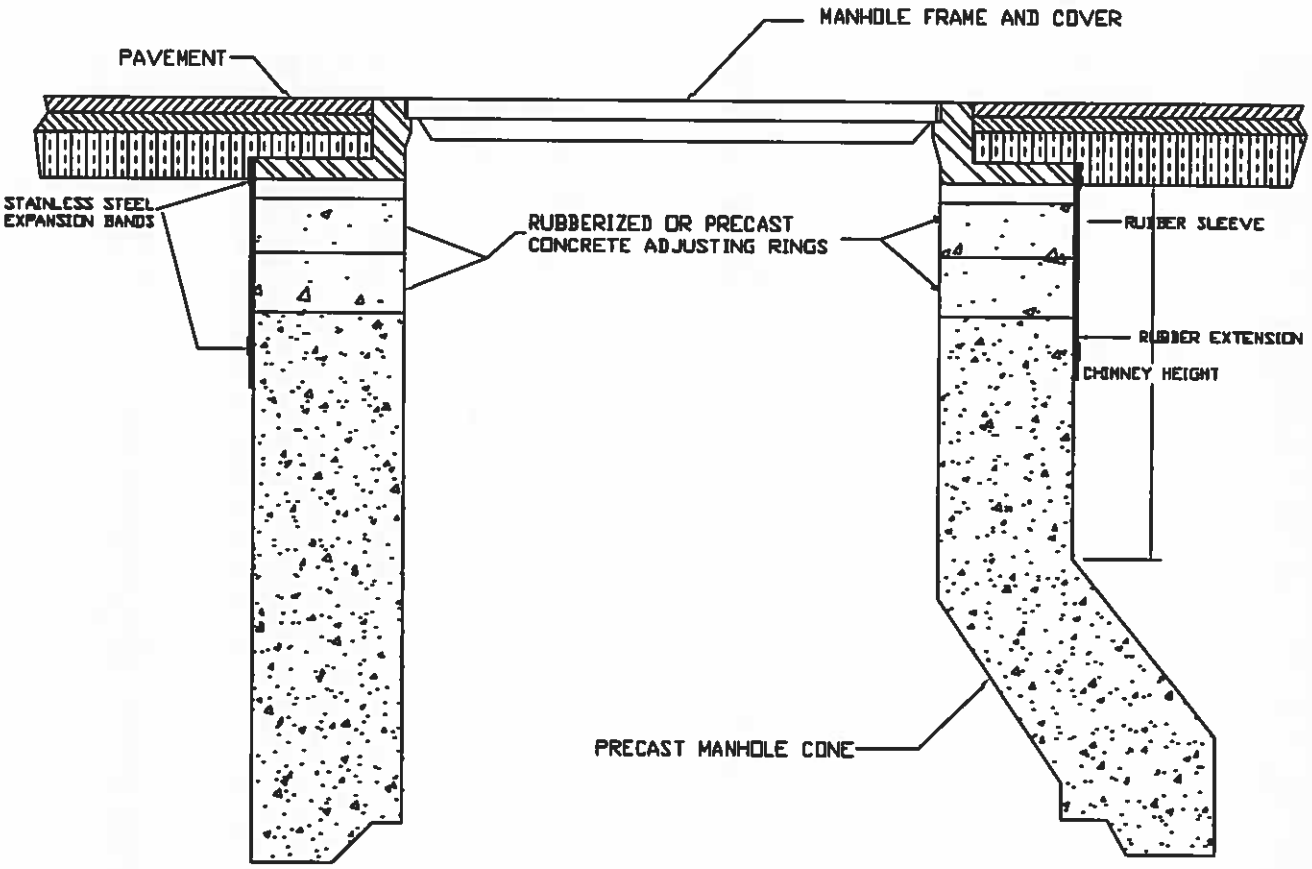
CAST CLOSED LID

(SEAL TITE CONCEALED PICKHOLE)

GENERAL NOTES:

1. DUCTILE IRON CASTING SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
2. ALL FRAMES AND COVERS SHALL HAVE A MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES IN THE COVER SHALL NOT BE OPEN.
3. THE MANHOLE COVERS SHALL HAVE RAISED LETTERS AS SHOWN.
4. DIMENSIONS FOR CASTINGS ARE COMPARABLE TO EAST JORDAN IRON WORKS, INC. 1022 OR NEENAH FOUNDRY 1772 FURNISHED WITH TYPE F CONCEALED PICK HOLES.
5. WATERPROOF, BOLTDOWN FRAME AND COVER SHALL BE USED IN ANY LOCATION SUBJECT TO INUNDATION. (NEENAH R-1916, EAST JORDAN 1022 WT WITH TYPE 5 CLOSED PICK HOLES OR APPROVED EQUAL).
6. LIDS SHALL BE "WATERTITE" OR "SELF-SEALING" WITH A FACTORY INSTALLED GASKET.

REV.: ERH	REV.: 5-17-10	SANITARY MANHOLE FRAME AND COVER	VILLAGE OF LOMBARD
REV.: ERH	REV.: 3-20-99		SANITARY 3
DRAWN BY: VJGL	DATE: 2-16-98		



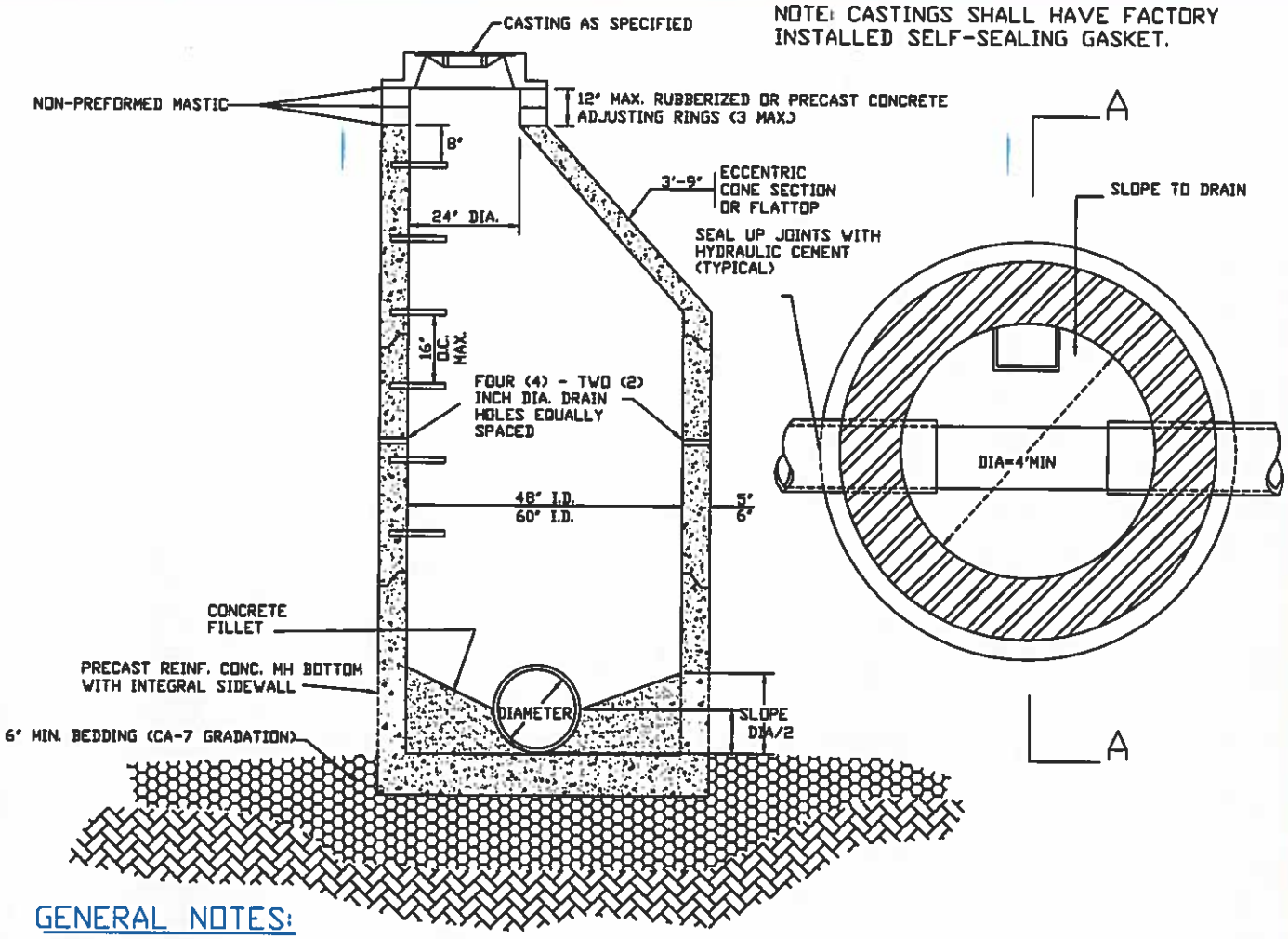
SECTIONAL VIEW PRECAST CONE AND CHIMNEY

GENERAL NOTES:

1. THE RUBBER SLEEVE IS AVAILABLE IN BOTH THE STANDARD 9" WIDE OR THE NARROW 6" WIDE CROSS SECTION.
2. SEE CHIMNEY HEIGHT TABLE OF SEAL AND EXTENSION COMBINATIONS NEEDED TO SPAN FORM THE FRAME TO THE TOP OF THE CONE ON MANHOLES WITH VARIOUS CHIMNEY HEIGHTS. DIAMETER DIFFERENTIALS WILL REDUCE THESE SPAN HEIGHTS.
3. THE TOP OF THE CONE MUST HAVE A MINIMUM 2" HIGH VERTICAL SURFACE THAT IS SMOOTH AND FREE OF ANY FORM OFFSETS OR EXCESSIVE HONEYCOMB.
4. CHIMNEY SEALS SHALL BE REQUIRED UNLESS THE MANHOLE IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH VILLAGE DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS.

COMBINATIONS OF SEALS & EXTENSIONS	TO SPAN HEIGHTS OF:
NARROW (6") SEAL ONLY	0 - 3"
STANDARD (9") SEAL ONLY	OVER 3" - 6.5"
STANDARD SEAL + EXTENSION	OVER 6.5" - 13.5"
SEAL + MULT. EXTENSIONS	OVER 13.5"
+ 7" FOR EACH ADDED EXTENSION	
NOTE: FRAME OFFSETS AND DIAMETER DIFFERENTIALS WILL REDUCE THESE SPAN HEIGHTS.	

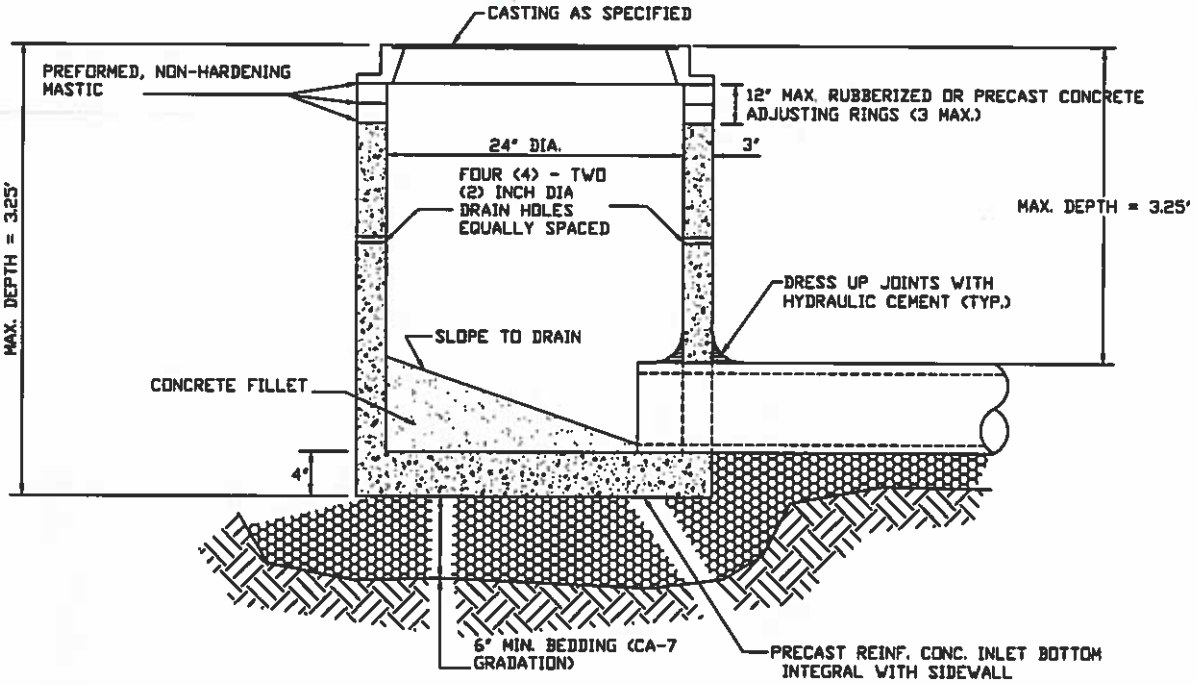
REV.:	ERH	REV.: 12-05-05	PRECAST CONE AND CHIMNEY
REV.:	ERH	REV.: 7-14-99	VILLAGE OF LOMBARD
DRAWN BY:	VJGL	DATE: 2-16-98	SANITARY 6



GENERAL NOTES:

1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTIONS. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE GRANULAR BACKFILL AROUND MANHOLE TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE CA-7 GRADATION UP TO 12" BELOW THE BOTTOM OF THE PAVEMENT, THEN PLACE CA-6 FROM 12" BELOW THE BOTTOM OF THE PAVEMENT TO THE TOP OF THE TRENCH.
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR EZ STICK) TO EACH JOINT BELOW THE BOTTOM OF CONE OR FLATTOP TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET IN A BED OF NON-PREFORMED MASTIC.
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF 2 INCHES.
6. WITHIN NON-PAVED AREAS MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
8. WHEN MANHOLE DEPTH IS OVER 12 FEET, THE THICKNESS OF THE PRECAST, REINFORCED CONCRETE BASE SHALL BE A MINIMUM OF 10 INCHES. WHEN MANHOLE DEPTH IS LESS THAN 12 FEET, THE THICKNESS SHALL BE A MINIMUM OF 8 INCHES.
9. DRESS UP INTERIOR JOINTS OF PRECAST MANHOLE AND OPENINGS AROUND PIPES WITH HYDRAULIC CEMENT.
10. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
11. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.
12. CHIMNEY SEALS SHALL BE REQUIRED UNLESS THE MANHOLE IS ADJUSTED TO FINAL GRADE IN ACCORDANCE WITH VILLAGE DETAIL STORM 7 - CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS.

REV.: DRG	REV.: 5-5-15	MANHOLE TYPE A	VILLAGE OF LOMBARD
REV.: ERH	REV.: 1-6-09		STORM 1
DRAWN BY: VJGL	DATE: 2-16-98		



GENERAL NOTES:

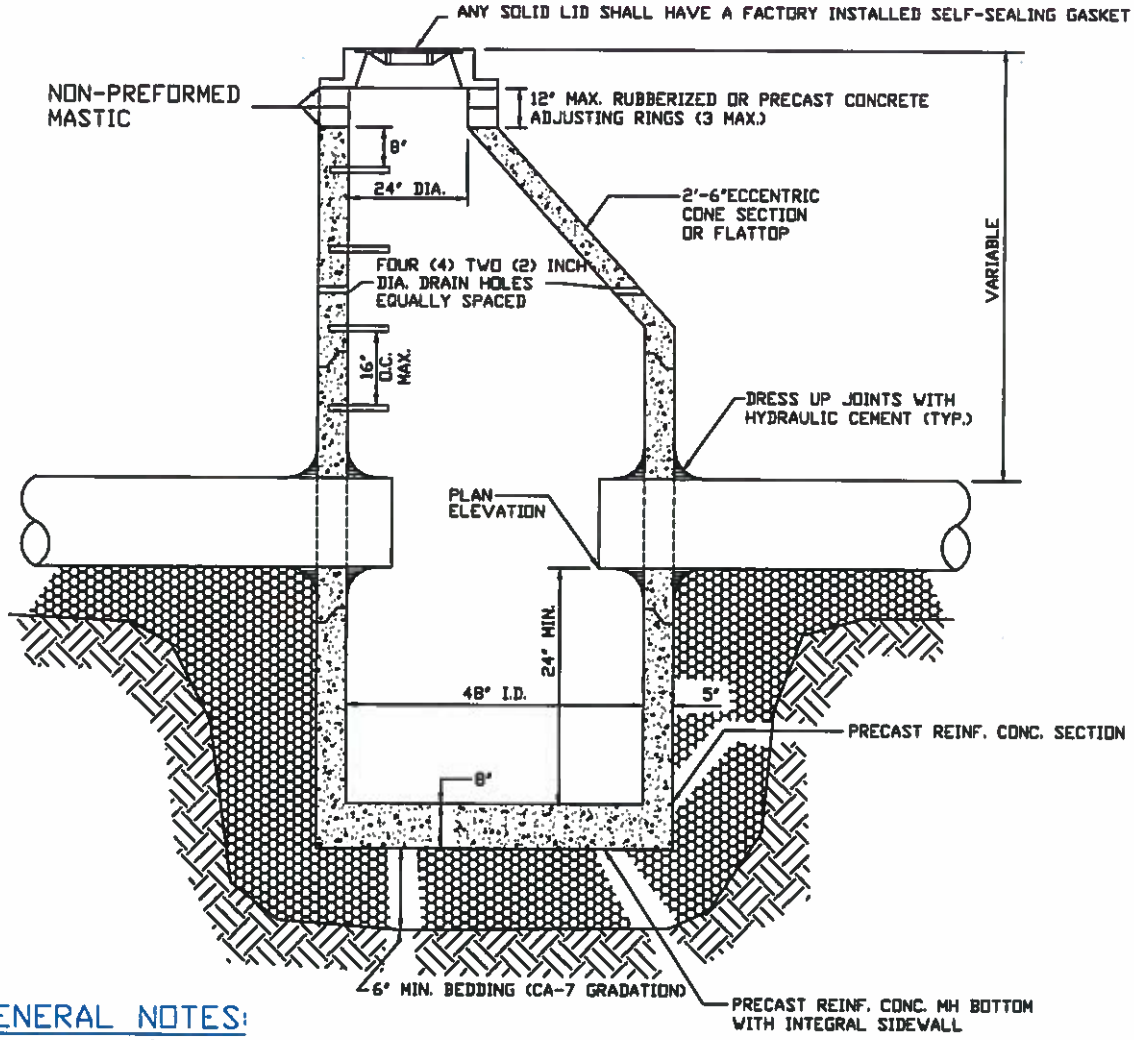
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITED.
2. PROVIDE GRANULAR BACKFILL AROUND INLET TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION' FOR COARSE AGGREGATE CA-7 GRADATION UP TO 12" BELOW THE BOTTOM OF THE PAVEMENT, THEN PLACE CA-6 FROM 12" BELOW THE BOTTOM OF THE PAVEMENT TO THE TOP OF THE TRENCH.
3. WHEN THE FRAME DOES NO MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET IN A BED OF PREFORMED NON-HARDENING MASTIC (RUB-R-NEK, EZ STICK OR APPROVED EQUAL).
4. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
5. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME.
6. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
7. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.
8. IF AN IDOT TYPE 8 GRATE CASING IS CALLED OUT, NO MASTIC SHALL BE ALLOWED BETWEEN THE FRAME AND THE TOP RING OR STRUCTURE. A MINIMUM OF ONE RUBBER RING 1 /4" THICKNESS SHALL BE PLACED BETWEEN THE FRAME AND THE TOP RING OR STRUCTURE (EAST JORDAN INFRA-RISER c 24.0 / 36.0 F 0.25 OR APPROVED EQUAL). ALL EXCESS MATERIAL EXTENDING BEYON THE EDGE OF THE GRATE SHALL BE TRIMMED FLUSH.

REV.:	DRG	REV.: 5-5-15	
REV.:	CJW	REV.: 2-17-10	
DRAWN BY: VJGL		DATE: 2-16-98	

INLET TYPE A

VILLAGE OF LOMBARD

STORM 2



GENERAL NOTES:

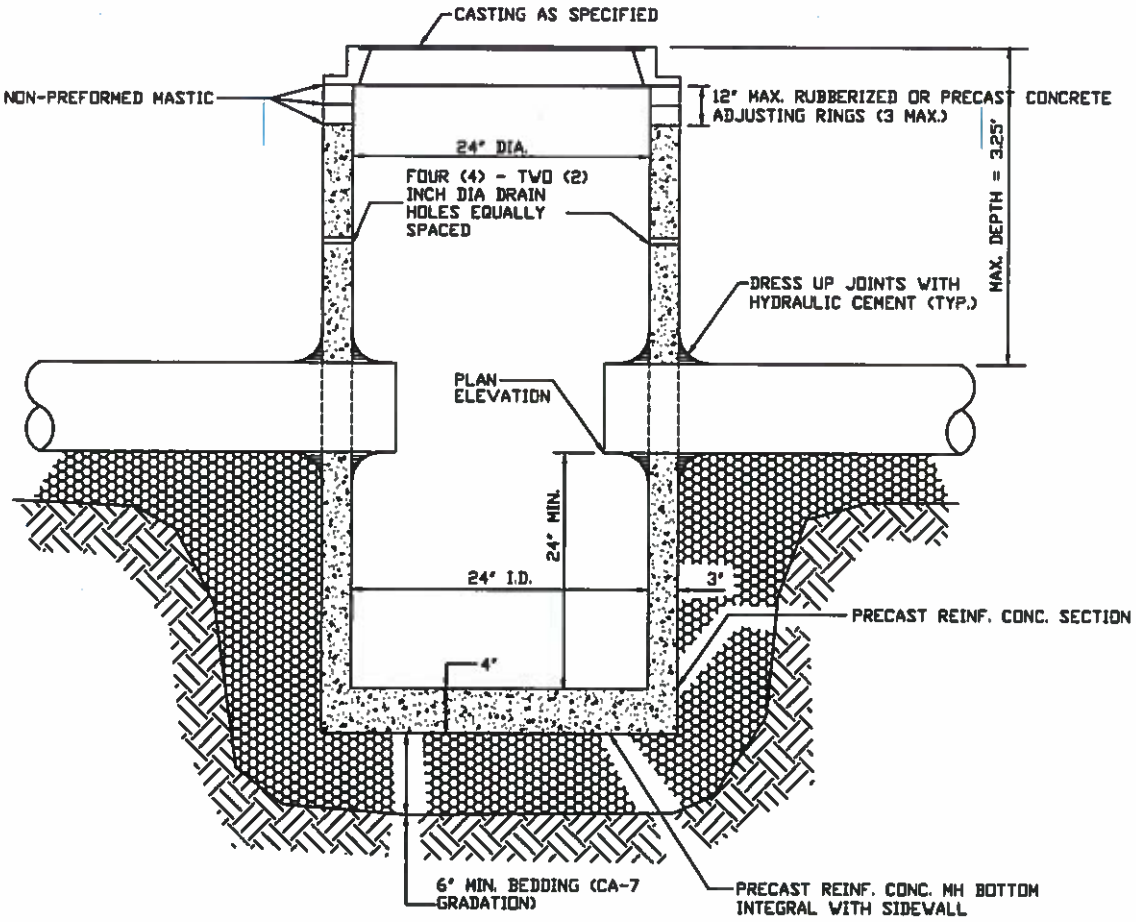
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTIONS. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITTED.
2. PROVIDE GRANULAR BACKFILL AROUND CATCHBASIN TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION' FOR COARSE AGGREGATE CA-7 GRADATION UP TO 12" BELOW THE BOTTOM OF THE PAVEMENT, THEN PLACE CA-6 FROM 12" BELOW THE BOTTOM OF THE PAVEMENT TO THE TOP OF THE TRENCH.
3. APPLY A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC MATERIAL (RUB-R-NEK OR E Z STICK) TO EACH JOINT BELOW THE BOTTOM OF CONE OR FLATTOP TO PREVENT INFLOW.
4. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET ON A BED OF NON-PREFORMED MASTIC.
5. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
6. WITHIN NON-PAVED AREAS, MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAMES ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. ONLY PLASTIC POLYMER STEPS SHALL BE USED.
8. WHEN CATCHBASIN DEPTH IS OVER 12 FEET, THE THICKNESS OF THE PRECAST, REINFORCED CONCRETE BASE SHALL BE A MINIMUM OF 10 INCHES. WHEN CATCHBASIN DEPTH IS LESS THAN 12 FEET, THE THICKNESS SHALL BE A MINIMUM OF 8 INCHES.
9. DRESS UP INTERIOR JOINTS OF PRECAST CATCHBASIN AND OPENINGS AROUND THE PIPES WITH HYDRAULIC CEMENT.
10. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
11. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.

REV.:	DRG	REV.: 5-5-15	
REV.:	ERH	REV.: 1-6-09	
DRAWN BY:	VJGL	DATE: 2-16-98	

CATCH BASIN TYPE A

VILLAGE OF LOMBARD

STORM 3



GENERAL NOTES:

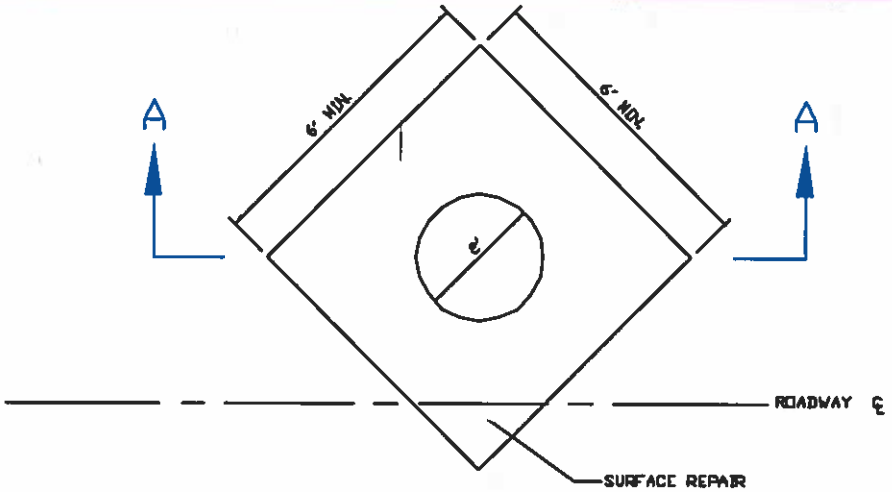
1. PROVIDE PRECAST REINFORCED CONCRETE BARREL AND RISER SECTION. CONCRETE BLOCK CONSTRUCTION IS NOT PERMITED.
2. PROVIDE GRANULAR BACKFILL AROUND CATCH BASIN TO SUBGRADE ELEVATION IN PAVED AREAS. MATERIAL SHALL MEET THE REQUIREMENTS OF IDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" FOR COARSE AGGREGATE CA-7 GRADATION UP TO 12" BELOW THE BOTTOM OF THE PAVEMENT, THEN PLACE CA-6 FROM 12" BELOW THE BOTTOM OF PAVEMENT TO THE TOP OF THE TRENCH, OR AS OTHERWISE DIRECTED BY THE VILLAGE ENGINEER.
3. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. EACH RING AND THE FRAME SHALL BE SET ON A BED OF NON-PREFORMED MASTIC.
4. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO INCHES.
5. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
6. WITHIN NON-PAVED AREAS, MORTAR SHALL ONLY BE USED TO DRESS UP ADJUSTING RINGS AND/OR FRAME ON THE EXTERIOR OF THE STRUCTURE. MORTAR IS NOT PERMITTED ON THE INSIDE OF THE RINGS AND/OR FRAME.
7. DRESS UP INTERIOR JOINTS WITH HYDRAULIC CEMENT.
8. IN PAVED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE COVERED WITH FILTER FABRIC. FILTER FABRIC SHALL BE SECURED TO THE OUTSIDE OF STRUCTURE PRIOR TO BACKFILL.
9. IN GRASSED AREAS, DRAIN HOLES/WEEP HOLES SHALL BE PLUGGED WITH HYDRAULIC CEMENT.

REV.:	DRG	REV.: 05-11-15
REV.:	CJW	REV.: 11-05-09
DRAWN BY:	VJGL	DATE: 2-16-98

CATCH BASIN TYPE C

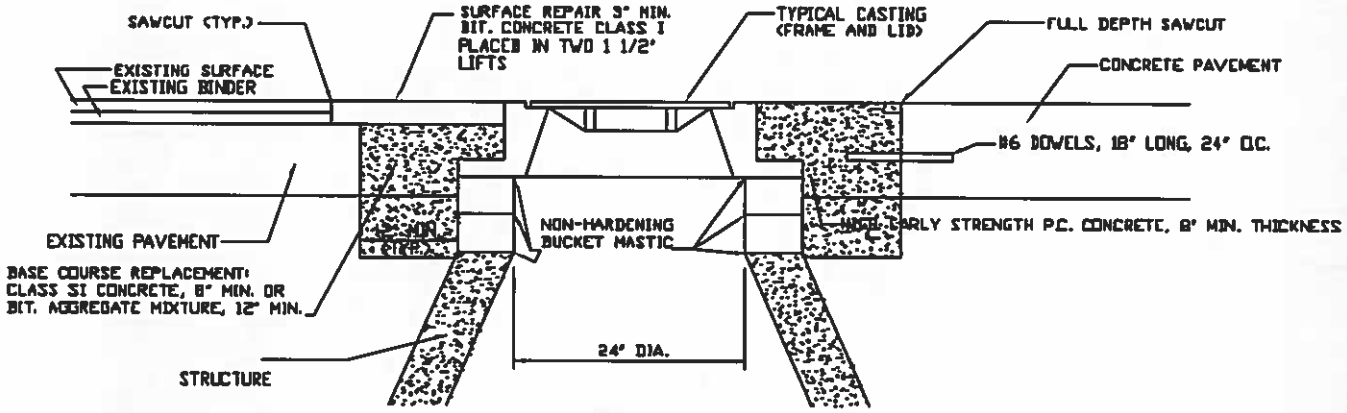
VILLAGE OF LOMBARD

STORM 4



PLAN

ADJUSTMENTS IN BITUMINOUS PAVEMENT | ADJUSTMENTS IN CONCRETE PAVEMENT



SECTION A-A

GENERAL NOTES:

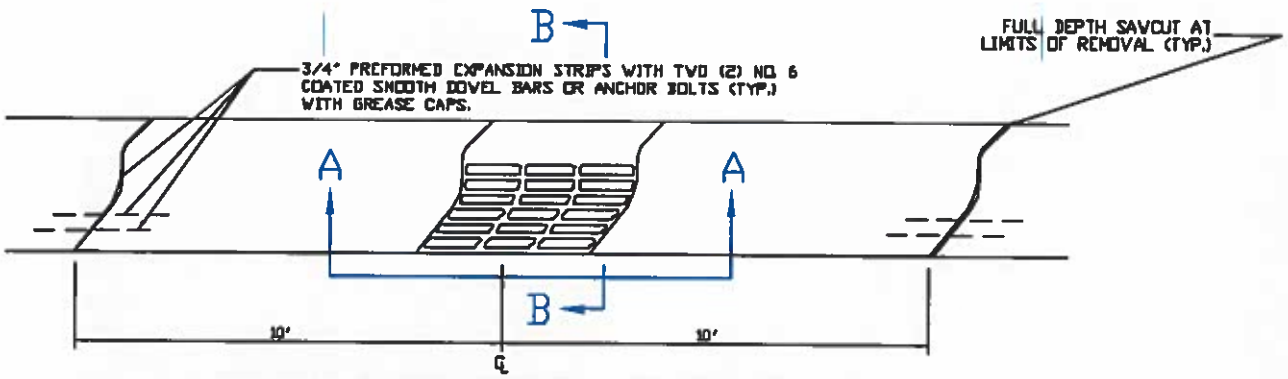
1. PROVIDE SELECT GRANULAR BACKFILL, CA-6 GRADATION AROUND MANHOLE TO SUBGRADE ELEVATION.
2. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF NON-HARDENING BUCKET MASTIC.
3. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICHNESS OF TWO (2) INCHES.
4. WHEN ADJUSTMENTS ARE LOCATED IN TRAVEL LANES, THEY SHALL BE PROTECTED BY A BARRICADE WITH TWO (2) FLASHING LIGHTS, TWO (2) BARRICADES EACH WITH A SINGLE FLASHING LIGHT OR COVERED BY A ONE (1) INCH STEEL PLATE PROVIDED AND MAINTAINED BY THE CONTRACTOR UNTIL THE SURFACE RESTORATION IS COMPLETE.
5. WHEN ADJUSTMENTS TEMPORARILY RAISE A CASTING ABOVE THE ELEVATION OF THE PAVEMENT SURFACE, IN AREAS SUBJECTED TO VEHICULAR TRAFFIC, A BITUMINOUS RAMP SHALL BE TRANSITIONED A DISTANCE OF ONE (1) FOOT HORIZONTAL FOR EACH INCH OF VERTICLE DISTANCE ABOVE THE EXISTING PAVEMENT. SUCH RAMPS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE COMPLETION OF THE SURFACE RESTORATION.
6. FOR BOTH CONCRETE AND ASPHALT ROADS, THE BASE COURSE REPLACEMENT (CONCRETE COLLAR) SHALL BE EXTENDED DOWN TO THE TOP OF THE CONE SECTION.

REV.:	ERH	REV.:08-23-06
REV.:	ERH	REV.:07-14-99
DRAWN BY:	VJGL	DATE:02-16-98

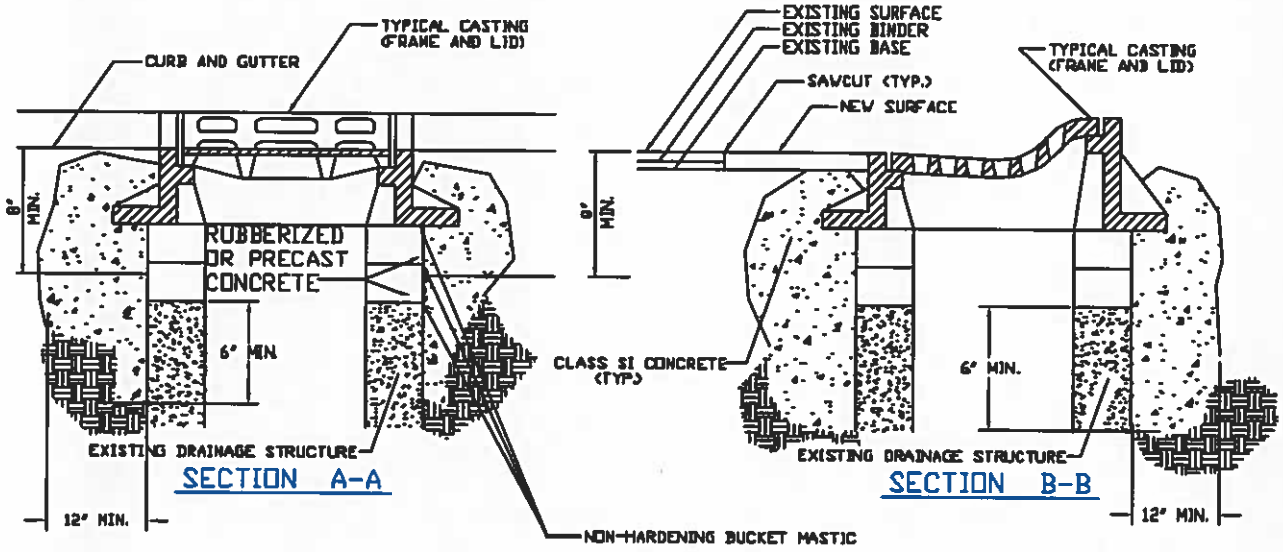
CASTING ADJUSTMENTS FOR STRUCTURES IN PAVED AREAS

VILLAGE OF LOMBARD

STORM 7



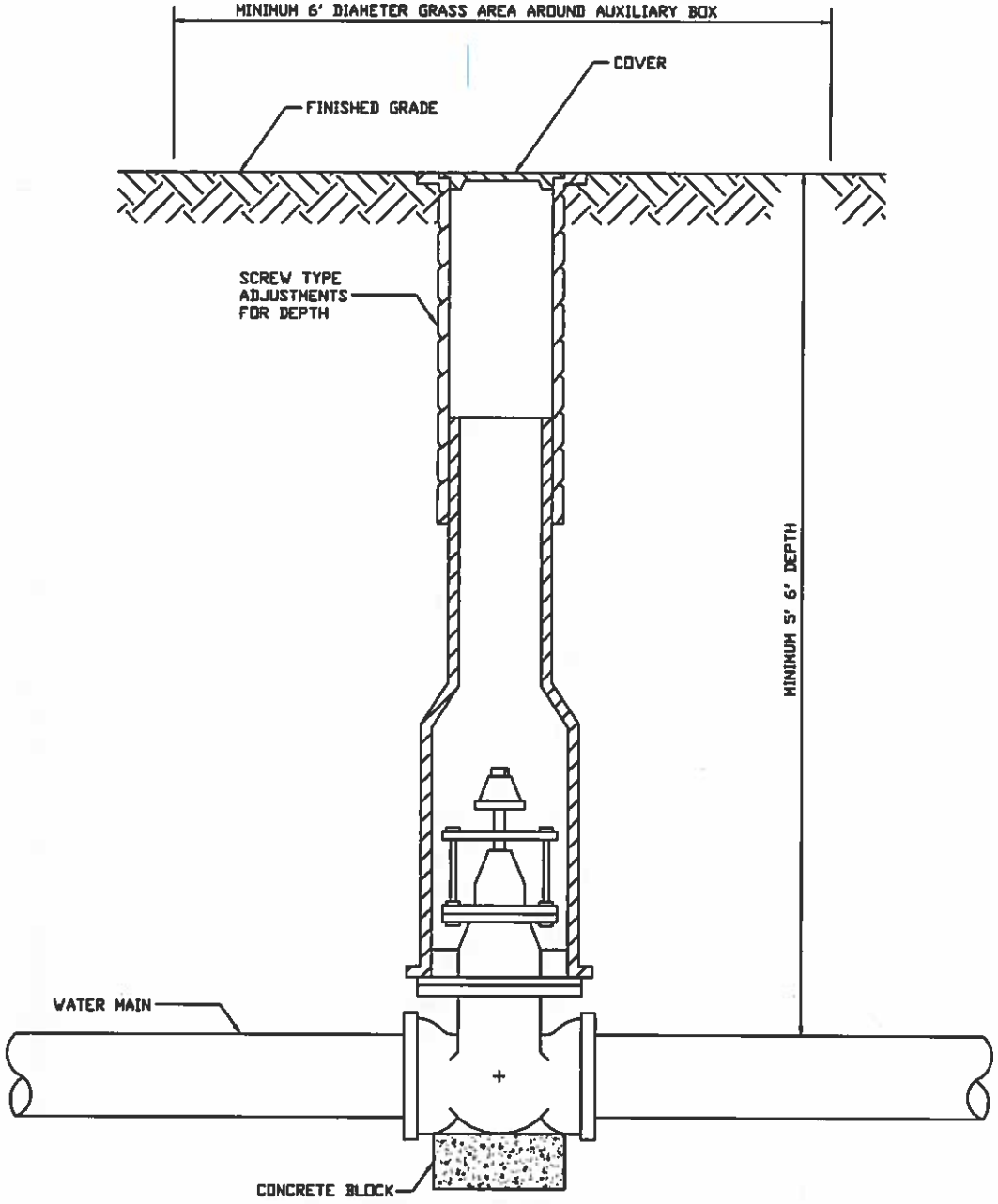
REMOVE AND REPLACE CURB A MINIMUM OF 10' EITHER SIDE OF STRUCTURE OR TO THE NEAREST EXPANSION JOINT (WHICHEVER IS CLOSEST)



GENERAL NOTES:

1. WHEN THE FRAME DOES NOT MEET PROPOSED ELEVATION, A MINIMUM OF TWO TAPERED RUBBERIZED ADJUSTING RINGS SHALL BE USED FOR FINAL ADJUSTMENT. ONE CONCRETE RING NOT LESS THAN TWO INCHES THICK MAY ALSO BE USED. A MAXIMUM OF THREE ADJUSTING RINGS MAY BE USED TO A MAXIMUM HEIGHT OF 12 INCHES. THE RING(S) AND FRAME SHALL BE SET ON A BED OF NON-HARDENING BUCKET MASTIC.
2. PRECAST ADJUSTING RINGS SHALL BE REINFORCED WITH NO. 3 GAUGE WIRE OR EQUIVALENT AND SHALL HAVE A MINIMUM THICKNESS OF TWO (2) INCHES.
3. MORTAR SHALL NOT BE USED TO DRESS UP ADJUSTING RINGS.
4. ALL REMOVABLE CASTINGS SHALL BE ORIENTED SO THE OPENING IN THE GRATE PROVIDES THE MAXIMUM HYDRAULIC EFFICIENCY.

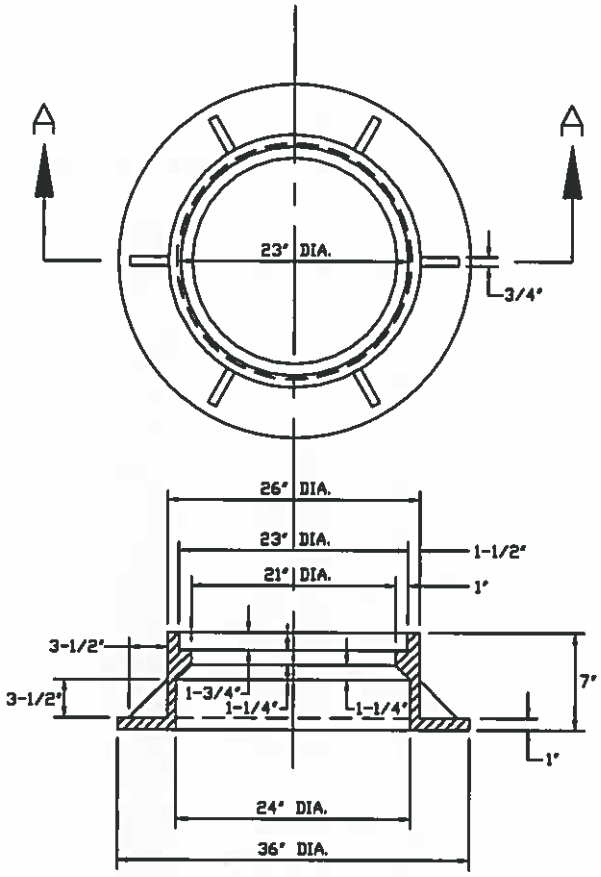
REV.: ERH	REV.: 12-06-05	CASTING ADJUSTMENTS FOR STRUCTURES IN THE CURB LINE	VILLAGE OF LOMBARD
REV.: ERH	REV.: 3-16-99		STORM B
DRAWN BY: VJGL	DATE: 2-16-98		



GENERAL NOTES:

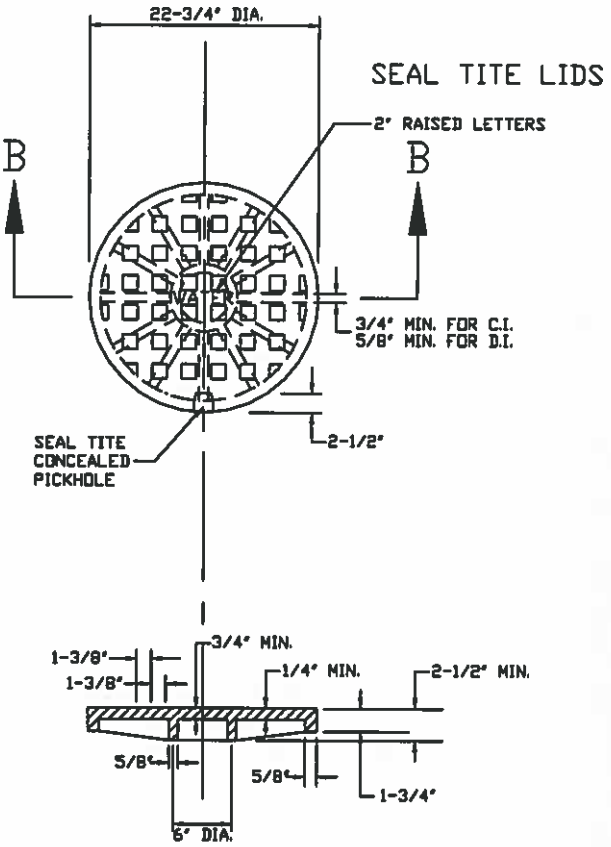
1. ALL VALVES 2-1/2" OR LARGER SHALL BE PLACED IN A VALVE VAULT, UNLESS APPROVED BY THE VILLAGE ENGINEER.
2. VALVES SHALL BE MUELLER A-2360 RESILIENT WEDGE GATE VALVE WITH STAINLESS STEEL TRIM BOLTS OR WATEROUS 2500 RESILIENT WEDGE GATE VALVE WITH STAINLESS STEEL TRIM BOLTS OR APPROVED EQUAL.
3. VALVES THAT REQUIRE RESTRAINT JOINTS, MAY USE FIELD-LOK OR MEGA LUG BRANDS.

REV.: ERH	REV.: 5-17-10	VALVE BOX INSTALLATION
REV.: ERH	REV.: 3-20-99	VILLAGE OF LOMBARD
DRAWN BY: VJGL	DATE: 2-16-98	WATER 3



SECTION A-A

CAST FRAME



SECTION B-B

CAST CLOSED LID

(SEAL TITE CONCEALED PICKHOLE)

GENERAL NOTES:

1. DUCTILE IRON CASTING SHALL BE TESTED IN ACCORDANCE WITH FEDERAL SPECIFICATIONS.
2. ALL FRAMES AND COVERS SHALL HAVE A MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES. PICK HOLES IN THE COVER SHALL NOT BE OPEN.
3. THE MANHOLE COVERS SHALL HAVE RAISED LETTERS AS SHOWN.
4. DIMENSIONS FOR CASTINGS ARE COMPARABLE TO EAST JORDAN 1022 OR NEENAH FOUNDRY 1772.
5. WATERPROOF, BOLTDOWN FRAME AND COVER SHALL BE USED IN ANY LOCATION SUBJECT TO INUNDATION. (NEENAH R-1916-C, EAST JORDAN 1022 WT OR APPROVED EQUAL).
6. LIDS SHALL BE "WATERTITE" OR "SELF-SEALING" WITH A FACTORY INSTALLED GASKET.

REV.:	ERH	REV.: 5-17-10	
REV.:	ERH	REV.: 3-20-99	
DRAWN BY: VJGL		DATE: 2-16-98	

VALVE VAULT FRAME AND COVER

VILLAGE OF LOMBARD

WATER 5

APPENDIX B

BDE SPECIAL PROVISIONS

&

RECURRING SPECIAL PROVISIONS

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

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

	File Name	#		Special Provision Title	Effective	Revised
	80099	1		Accessible Pedestrian Signals (APS)	April 1, 2003	Jan. 1, 2014
*	80274	2		Aggregate Subgrade Improvement	April 1, 2012	April 1, 2016
	80192	3		Automated Flagger Assistance Device	Jan. 1, 2008	
	80173	4		Bituminous Materials Cost Adjustments	Nov. 2, 2006	July 1, 2015
	80241	5		Bridge Demolition Debris	July 1, 2009	
	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
	80360	10	✓	Coarse Aggregate Quality	July 1, 2015	
	80198	11		Completion Date (via calendar days)	April 1, 2008	
	80199	12		Completion Date (via calendar days) Plus Working Days	April 1, 2008	
	80293	13		Concrete Box Culverts with Skews > 30 Degrees and Design Fills ≤ 5 Feet	April 1, 2012	April 1, 2015
*	80311	14		Concrete End Sections for Pipe Culverts	Jan. 1, 2013	April 1, 2016
*	80277	15		Concrete Mix Design – Department Provided	Jan. 1, 2012	April 1, 2016
	80261	16	✓	Construction Air Quality – Diesel Retrofit	June 1, 2010	Nov. 1, 2014
*	80029	17		Disadvantaged Business Enterprise Participation	Sept. 1, 2000	Jan. 2, 2016
*	80363	18		Engineer's Field Office	April 1, 2016	
	80358	19		Equal Employment Opportunity	April 1, 2015	
*	80364	20	✓	Errata for the 2016 Standard Specifications	April 1, 2016	
	80229	21		Fuel Cost Adjustment	April 1, 2009	July 1, 2015
	80304	22		Grooving for Recessed Pavement Markings	Nov. 1, 2012	Aug. 1, 2014
*	80246	23	✓	Hot-Mix Asphalt – Density Testing of Longitudinal Joints	Jan. 1, 2010	April 1, 2016
*	80347	24		Hot-Mix Asphalt – Pay for Performance Using Percent Within Limits – Jobsite Sampling	Nov. 1, 2014	April 1, 2016
*	80336	25		Longitudinal Joint and Crack Patching	April 1, 2014	April 1, 2016
	80045	26		Material Transfer Device	June 15, 1999	Aug. 1, 2014
*	80342	27		Mechanical Side Tie Bar Inserter	Aug. 1, 2014	April 1, 2016
	80165	28		Moisture Cured Urethane Paint System	Nov. 1, 2006	Jan. 1, 2010
*	80361	29		Overhead Sign Structures Certification of Metal Fabricator	Nov. 1, 2015	April 1, 2016
*	80349	30		Pavement Marking Blackout Tape	Nov. 1, 2014	April 1, 2016
*	80298	31		Pavement Marking Tape Type IV	April 1, 2012	April 1, 2016
*	80365	32		Pedestrian Push-Button	April 1, 2016	
*	80359	33		Portland Cement Concrete Bridge Deck Curing	April 1, 2015	April 1, 2016
*	80353	34		Portland Cement Concrete Inlay or Overlay	Jan. 1, 2015	April 1, 2016
*	80338	35		Portland Cement Concrete Partial Depth Hot-Mix Asphalt Patching	April 1, 2014	April 1, 2016
*	80300	36		Preformed Plastic Pavement Marking Type D - Inlaid	April 1, 2012	April 1, 2016
	80328	37		Progress Payments	Nov. 2, 2013	
	3426I	38		Railroad Protective Liability Insurance	Dec. 1, 1986	Jan. 1, 2006
	80157	39		Railroad Protective Liability Insurance (5 and 10)	Jan. 1, 2006	
*	80306	40		Reclaimed Asphalt Pavement (RAP) and Reclaimed Asphalt Shingles (RAS)	Nov. 1, 2012	April 1, 2016
*	80340	41		Speed Display Trailer	April 2, 2014	April 1, 2016
	80127	42		Steel Cost Adjustment	April 2, 2004	July 1, 2015
	80362	43		Steel Slag in Trench Backfill	Jan. 1, 2016	
*	80317	44		Surface Testing of Hot-Mix Asphalt Overlays	Jan. 1, 2013	April 1, 2016

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

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

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

File Name	Special Provision Title	New Location	Effective	Revised
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

Du Page 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
COMMUNICATION TECH		BLD		32.650	34.750	1.5	1.5	2.0	9.550	15.16	1.250	0.610
ELECTRIC PWR EQMT OP		ALL		37.890	51.480	1.5	1.5	2.0	5.000	11.75	0.000	0.380
ELECTRIC PWR EQMT OP		HWY		39.220	53.290	1.5	1.5	2.0	5.000	12.17	0.000	0.390
ELECTRIC PWR GRNDMAN		ALL		29.300	51.480	1.5	1.5	2.0	5.000	9.090	0.000	0.290
ELECTRIC PWR GRNDMAN		HWY		30.330	53.290	1.5	1.5	2.0	5.000	9.400	0.000	0.300
ELECTRIC PWR LINEMAN		ALL		45.360	51.480	1.5	1.5	2.0	5.000	14.06	0.000	0.450
ELECTRIC PWR LINEMAN		HWY		46.950	53.290	1.5	1.5	2.0	5.000	14.56	0.000	0.470
ELECTRIC PWR TRK DRV		ALL		30.340	51.480	1.5	1.5	2.0	5.000	9.400	0.000	0.300
ELECTRIC PWR TRK DRV		HWY		31.400	53.290	1.5	1.5	2.0	5.000	9.730	0.000	0.310
ELECTRICIAN		BLD		38.160	41.980	1.5	1.5	2.0	9.550	18.29	4.680	0.680
ELEVATOR CONSTRUCTOR		BLD		50.800	57.150	2.0	2.0	2.0	13.57	14.21	4.060	0.600
FENCE ERECTOR	NE	ALL		37.340	39.340	1.5	1.5	2.0	13.05	12.06	0.000	0.300
FENCE ERECTOR	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
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	E	ALL		44.200	46.200	2.0	2.0	2.0	13.65	21.14	0.000	0.350
IRON WORKER	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
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		36.000	36.000	1.5	1.5	2.0	17.10	11.80	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	E	ALL		45.000	47.500	2.0	2.0	2.0	13.55	17.94	0.000	0.650
ORNAMNTL IRON WORKER	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
PAINTER		ALL		41.730	43.730	1.5	1.5	1.5	10.30	8.200	0.000	1.350
PAINTER SIGNS		BLD		33.920	38.090	1.5	1.5	1.5	2.600	2.710	0.000	0.000
PILEDRIVER		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	10.05	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		44.720	46.720	1.5	1.5	2.0	10.65	13.31	0.000	0.820
SPRINKLER FITTER		BLD		49.200	51.200	1.5	1.5	2.0	11.75	9.650	0.000	0.550
STEEL ERECTOR	E	ALL		42.070	44.070	2.0	2.0	2.0	13.45	19.59	0.000	0.350
STEEL ERECTOR	W	ALL		45.060	48.660	2.0	2.0	2.0	10.52	20.76	0.000	0.700
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	ALL 1	35.920	36.120	1.5	1.5	2.0	8.280	8.760	0.000	0.150
TRUCK DRIVER	ALL 2	32.700	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 3	32.900	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TRUCK DRIVER	ALL 4	33.100	33.100	1.5	1.5	2.0	6.500	4.350	0.000	0.150
TUCKPOINTER	BLD	42.620	43.620	1.5	1.5	2.0	10.05	13.34	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

DUPAGE COUNTY

IRON WORKERS AND FENCE ERECTOR (WEST) - West of Route 53.

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.

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.

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.

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 TECHNICIAN

Low voltage installation, maintenance and removal of telecommunication facilities (voice, sound, data and video) including telephone and data inside wire, interconnect, terminal equipment, central offices, PABX, fiber optic cable and equipment, micro waves, V-SAT, bypass, CATV, WAN (wide area networks), LAN (local area networks), and ISDN (integrated system digital network), pulling of wire in raceways, but not the installation of raceways.

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

Diver. Diver Wet Tender, Diver Tender, 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.

TRUCK DRIVER - BUILDING, HEAVY AND HIGHWAY CONSTRUCTION

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 yeards; 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.

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.

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".

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

ADJUSTMENTS AND RECONSTRUCTIONS
Effective: March 15, 2011

Revise the first paragraph of Article 602.04 to read:

"**602.04 Concrete.** Cast-in-place concrete for structures shall be constructed of Class SI concrete according to the applicable portions of Section 503. Cast-in-place concrete for pavement patching around adjustments and reconstructions shall be constructed of Class PP-1 concrete, unless otherwise noted in the plans, according to the applicable portions of Section 1020."

Revise the third, fourth and fifth sentences of the second paragraph of Article 602.11(c) to read:

"Castings shall be set to the finished pavement elevation so that no subsequent adjustment will be necessary, and the space around the casting shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.05 to read:

"**603.05 Replacement of Existing Flexible Pavement.** After the castings have been adjusted, the surrounding space shall be filled with Class PP-1 concrete, unless otherwise noted in the plans, to the elevation of the surface of the base course or binder course. HMA surface or binder course material shall not be allowed. The pavement may be opened to traffic according to Article 701.17(e)(3)b."

Revise Article 603.06 to read:

"**603.06 Replacement of Existing Rigid Pavement.** After the castings have been adjusted, the pavement and HMA that was removed, shall be replaced with Class PP-1 concrete, unless otherwise noted in the plans, not less than 9 in. (225 mm) thick. The pavement may be opened to traffic according to Article 701.17(e)(3)b.

The surface of the Class PP concrete shall be constructed flush with the adjacent surface."

Revise the first sentence of Article 603.07 to read:

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

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_2SO_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."

80360

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

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%"

WARM MIX ASPHALT (BDE)

Effective: January 1, 2012
Revised: April 1, 2016

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

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

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

Equipment.

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

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

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

"(11) Equipment for Warm Mix Technologies.

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

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

Mix Design Verification.

Add the following to Article 1030.04 of the Standard Specifications.

"(e) Warm Mix Technologies.

(1) Foaming. WMA mix design verification will not be required when foaming technology is used alone (without WMA additives). However, the foaming technology shall only be used on HMA designs previously approved by the Department.

(2) Additives. WMA mix designs utilizing additives shall be submitted to the Engineer for mix design verification."

Construction Requirements.

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

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

Basis of Payment.

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

80288

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:

RECURRING SPECIAL PROVISIONS

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

CHECK SHEET
FOR
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

Adopted April 1, 2016

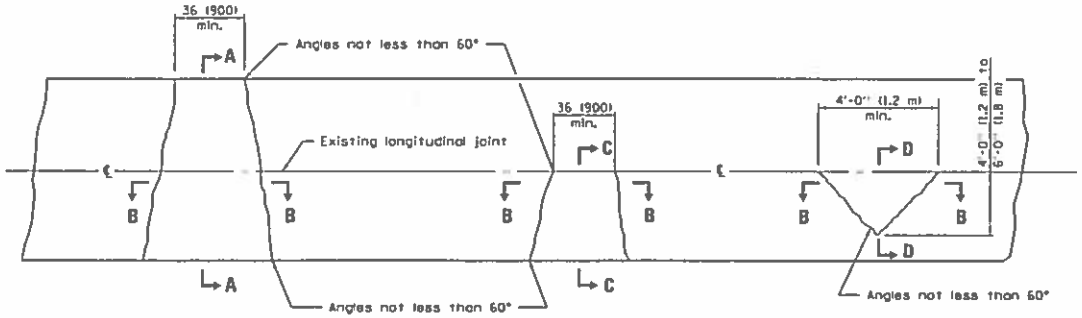
The following LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS indicated by an "X" are applicable to this contract and are included by reference:

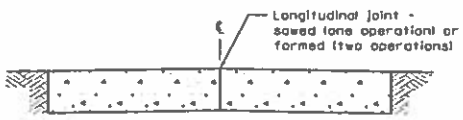
LOCAL ROADS AND STREETS RECURRING SPECIAL PROVISIONS

APPENDIX C

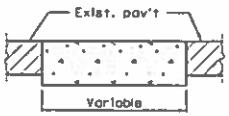
IDOT STANDARDS

CLASS C

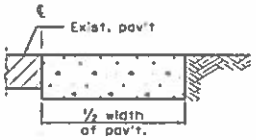




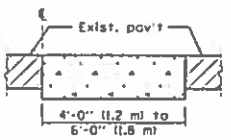
SECTION A–A



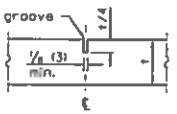
SECTION B–B



SECTION C–C



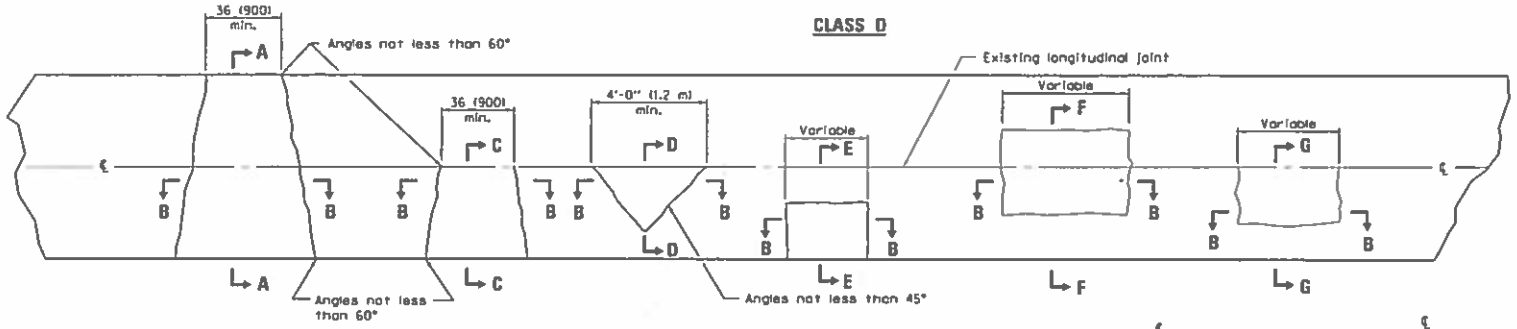
SECTION D–D

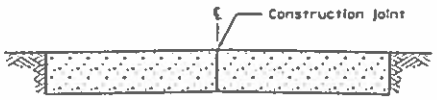


DETAIL OF SAWED CONTRACTION JOINT

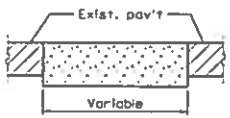
Note:
Longitudinal joints shall be as detailed on Standard 420001, except tie bars are not required for patches 20'-0" (6.0 m) or less in length.

CLASS D

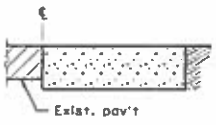




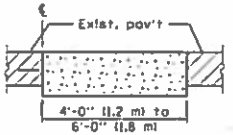
SECTION A–A
(Built in two operations)



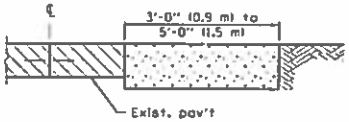
SECTION B–B



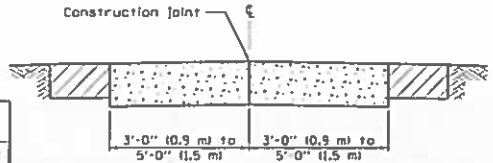
SECTION C–C



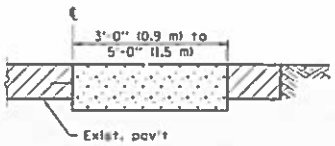
SECTION D–D



SECTION E–E



SECTION F–F
(Built in two operations)



SECTION G–G

GENERAL NOTES

Existing tie bars shall be either cut or removed. Marginal bars shall be cut.

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

Illinois Department of Transportation

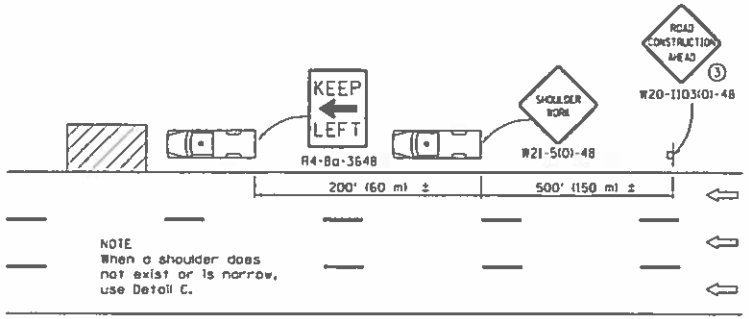
PASSED January 1, 2008
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2008
ENGINEER OF BUREAU OF DESIGN AND ENVIRONMENT

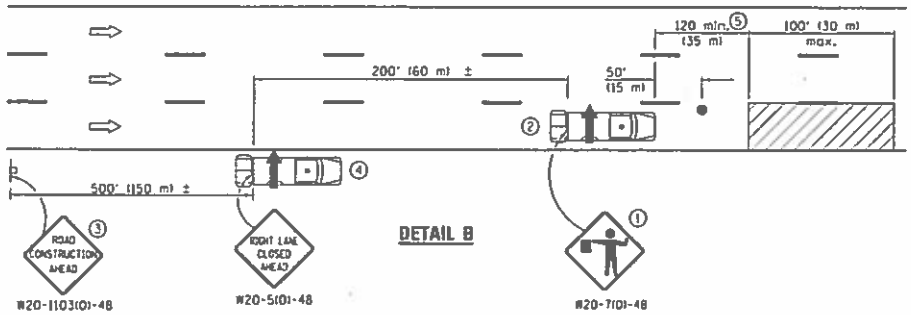
DATE	REVISIONS
1-1-08	Switched units to English (metric).
1-1-07	Revised Note for Class C patches.

CLASS C and D PATCHES

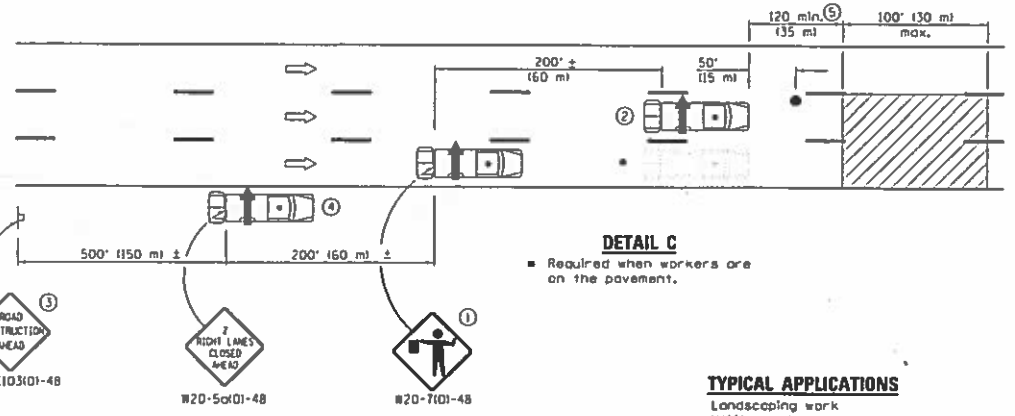
STANDARD 442201-03



DETAIL A



DETAIL B



DETAIL C

■ Required when workers are on the pavement.

TYPICAL APPLICATIONS

Landscaping work
Utility work
Pavement marking
Weed spraying
Roadometer measurements
Debris cleanup
Crack pouring

1. Flaggers are required when workers are on the pavement.
2. For striping operations only. See sign arrow detail on this standard.
3. For stationary operations which are on the roadway or shoulder, greater than 15 minutes and up to 1 hour.
4. Omit truck, attenuator and arrow board when no shoulder exists due to curb and gutter.
5. The distance between the work and the lead truck may vary according to terrain or paint/crack sealing time.

G20-1101-2430
(appropriate arrow)
(2)(when striping only)

GENERAL NOTES

This Standard is used where any vehicle, equipment, workers or their activities will require: 1) stationary operations up to 1 hour, or 2) a continuous or intermittent moving operation where the average speed of movement is greater than 1 mph (2 km/h).

This Standard is also applicable when work is being performed in the left lane(s) or on the median shoulder. Under these conditions, KEEP RIGHT signs shall be substituted for KEEP LEFT signs and arrow board indications shall be directed to the right.

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

SYMBOLS

- Arrow board
- Work area
- Truck with flashing amber light
- Truck/Trailer mounted attenuator
- Flagger with traffic control sign
- Sign

Illinois Department of Transportation

APPROVED April 1, 2016
ENGINEER OF SAFETY ENGINEERING

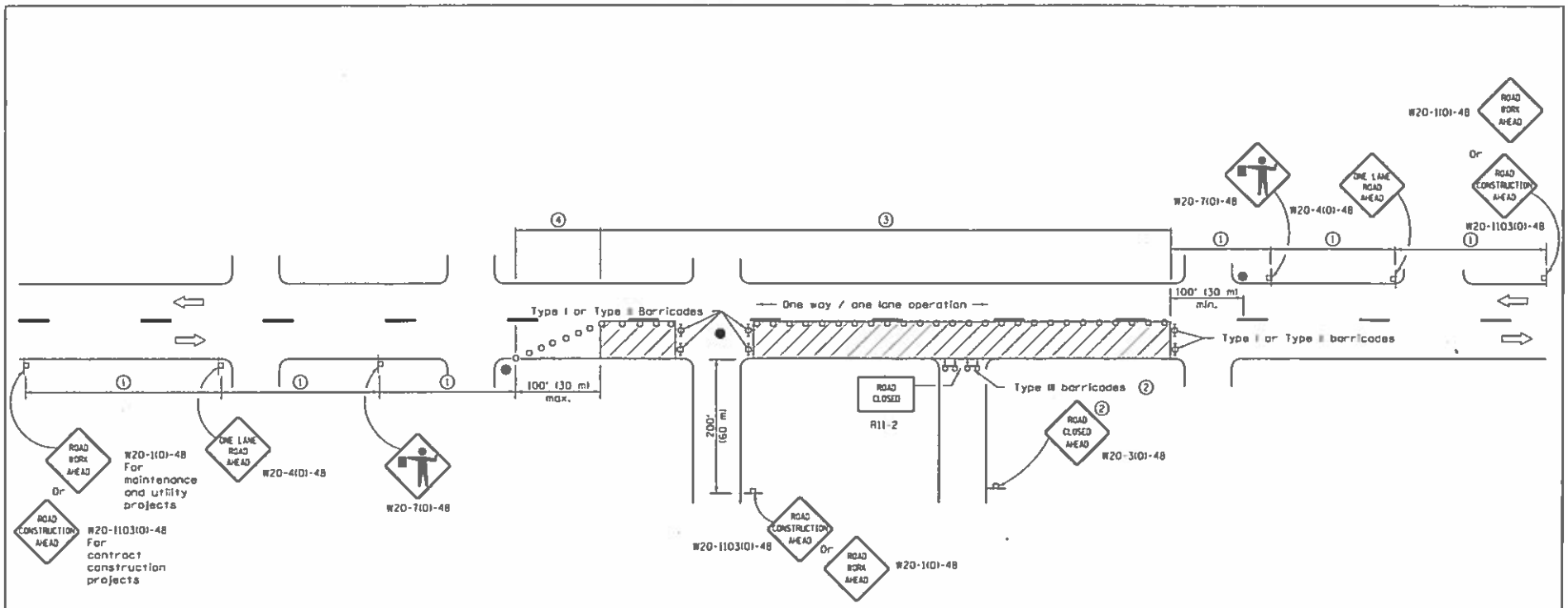
APPROVED April 1, 2016
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-16

DATE	REVISIONS
4-1-16	Rev. gen. notes. Added note (5). Rev. dist. between work and lead truck.
1-1-15	Added general note regarding vehicle spacing. Corr. KEEP LEFT sign no.

LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≤ 40 MPH

STANDARD 701427-04



SIGN SPACING	
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) For approved sideroad closures.

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

(4) Cones, drums or barricades at 20' (6 m) centers.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

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

Illinois Department of Transportation

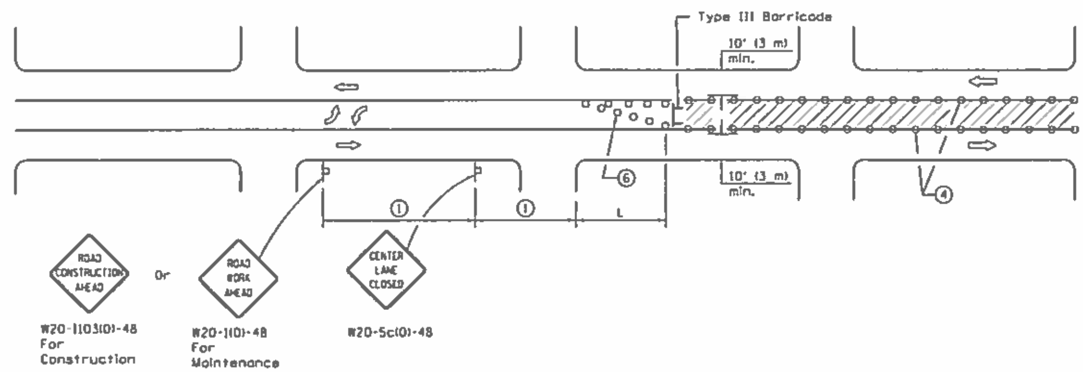
APPROVED January 1, 2011
ENGINEER OF SAFETY ENGINEERING

APPROVED January 1, 2011
ENGINEER OF DESIGN AND ENVIRONMENT

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



CASE I

(Signs required for both directions)

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

SYMBOLS

- Work area
- Barricade or drum with flashing light
- Flagger with traffic control sign
- Cone, drum or barricade (Cones for daytime use only)
- Sign on portable or permanent support

① Refer to SIGN SPACING TABLE for distances.

② Required for speeds > 40 mph (70 km/h).

③ Required if work exceeds 500' (164 m) or 1 block.

④ Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 15 m (50') centers. When drums or type I or II barricades are used, the interval between devices may be doubled.

⑤ For approved sideroad closures.

⑥ Cones, drums or barricades at 20' (6 m) centers in taper.

⑦ Use flagger sign only when flagger is present.

GENERAL NOTES

This Standard is used to close one lane of an urban, two lane, two way roadway with a bidirectional turn lane.

Case I applies when no workers are present. When workers are present, two lanes shall be closed and traffic control shall be according to Standard 701501.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	FORMULAS (Metric)
40 mph (70 km/h) or less:	$L = \frac{WS^2}{60}$	$L = \frac{WS^2}{150}$
45 mph (80 km/h) or greater:	$L = (W)(S)$	$L = 0.65(W)(S)$

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

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

DATE	REVISIONS
1-1-14	Omitted original note ④. Rev. workers sign no. to agree with current MUTCD.
1-1-13	Omitted text 'WORKERS' sign.

Illinois Department of Transportation

APPROVED January 1, 2014 ENGINEER OF SAFETY ENGINEERING

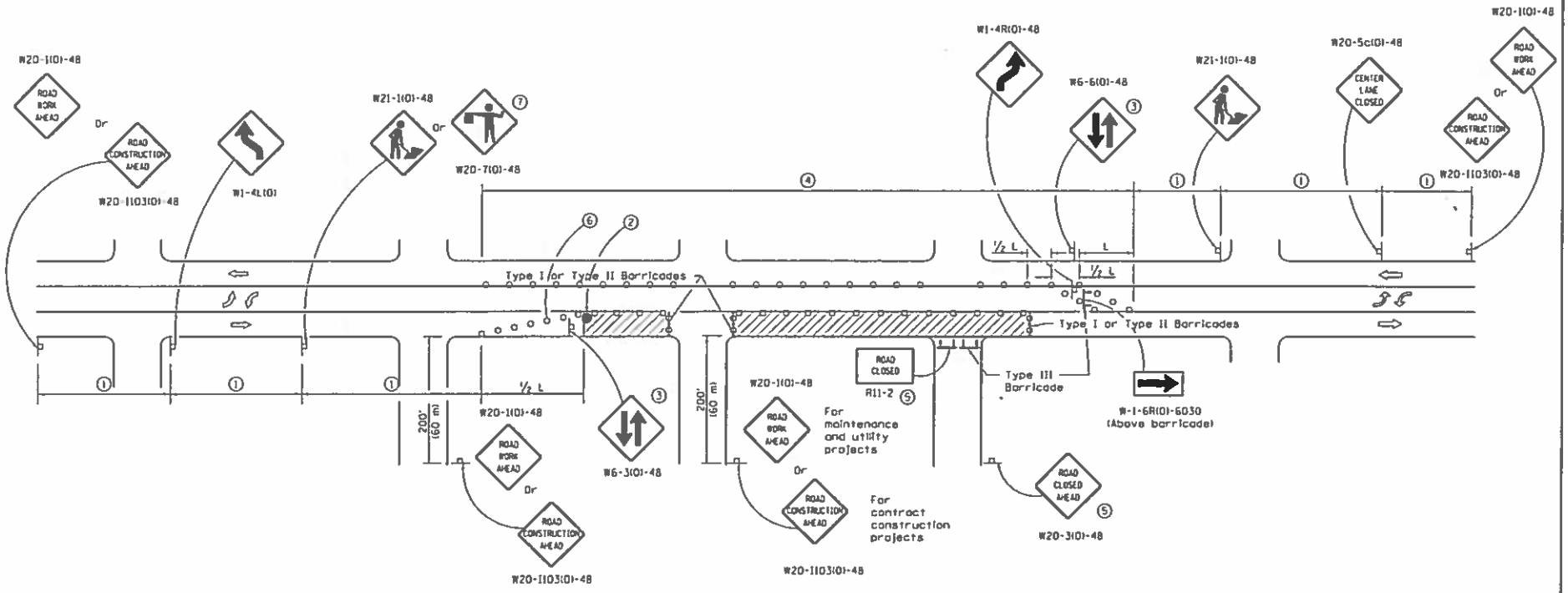
APPROVED January 1, 2014 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-01

URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 1 of 2)

STANDARD 701502-06



CASE II

Illinois Department of Transportation

APPROVED January 1, 2014
ENGINEER OF SAFETY ENGINEERING

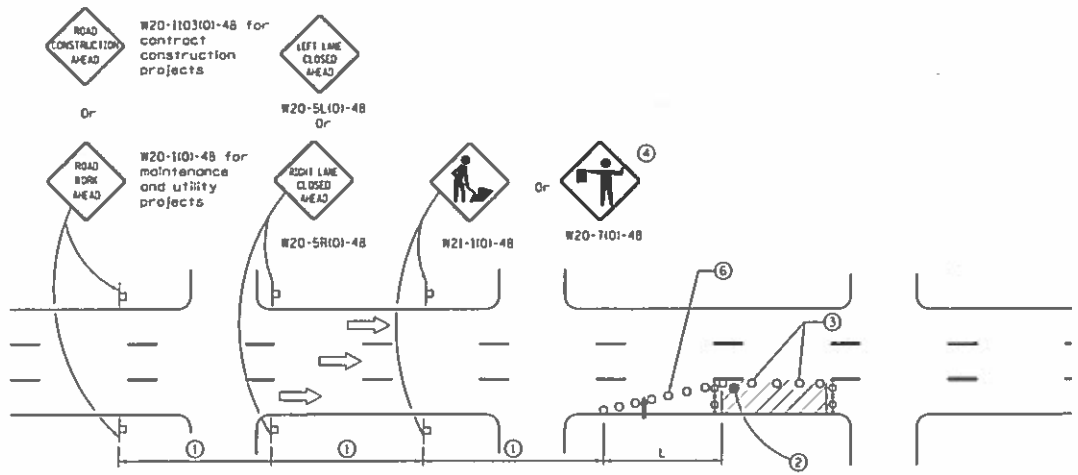
APPROVED January 1, 2014
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 10-11-13

URBAN LANE CLOSURE, 2L, 2W, WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 2 of 2)

STANDARD 701502-06



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

SYMBOLS

- Arrow board
- Cone, drum or barricade
- Sign on portable or permanent support
- Work area
- Barricade or drum with flashing light
- Type III barricade with flashing lights
- Flagger with traffic control sign.

(1) Refer to SIGN SPACING TABLE for distances.

(2) Required for speeds > 40 MPH

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

(4) Use flagger sign only when flagger is present.

(5) For approved sideroad closures.

(6) Cones, drums or barricades at 20' (6 m) in taper.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in urban areas.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

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

Illinois Department of Transportation

APPROVED January 1, 2014
ENGINEER OF SAFETY ENGINEERING

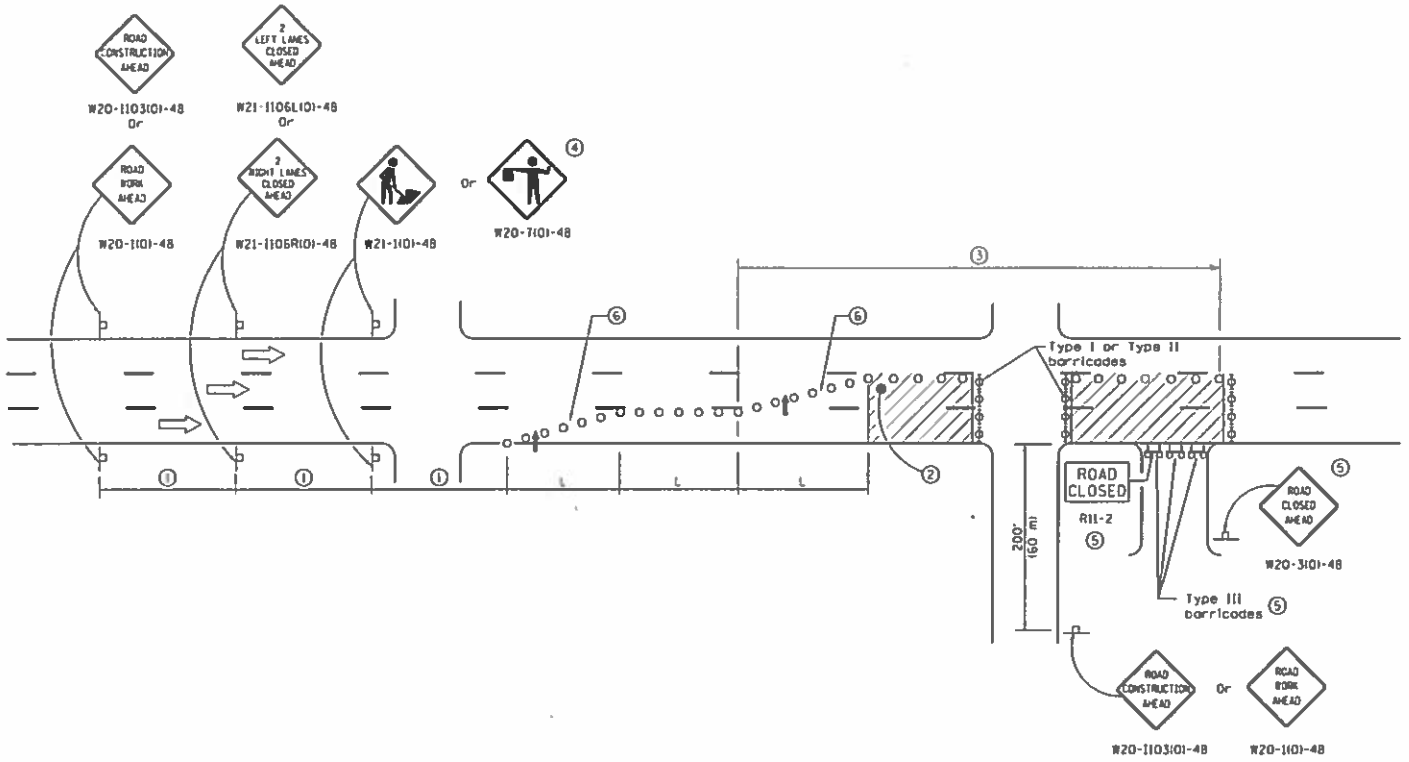
APPROVED January 1, 2014
ENGINEER OF DESIGN AND ENVIRONMENT

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

URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

(Sheet 1 of 2)

STANDARD 701601-09



Illinois Department of Transportation

APPROVED _____ January 1, 2014
ENGINEER OF SAFETY ENGINEERING

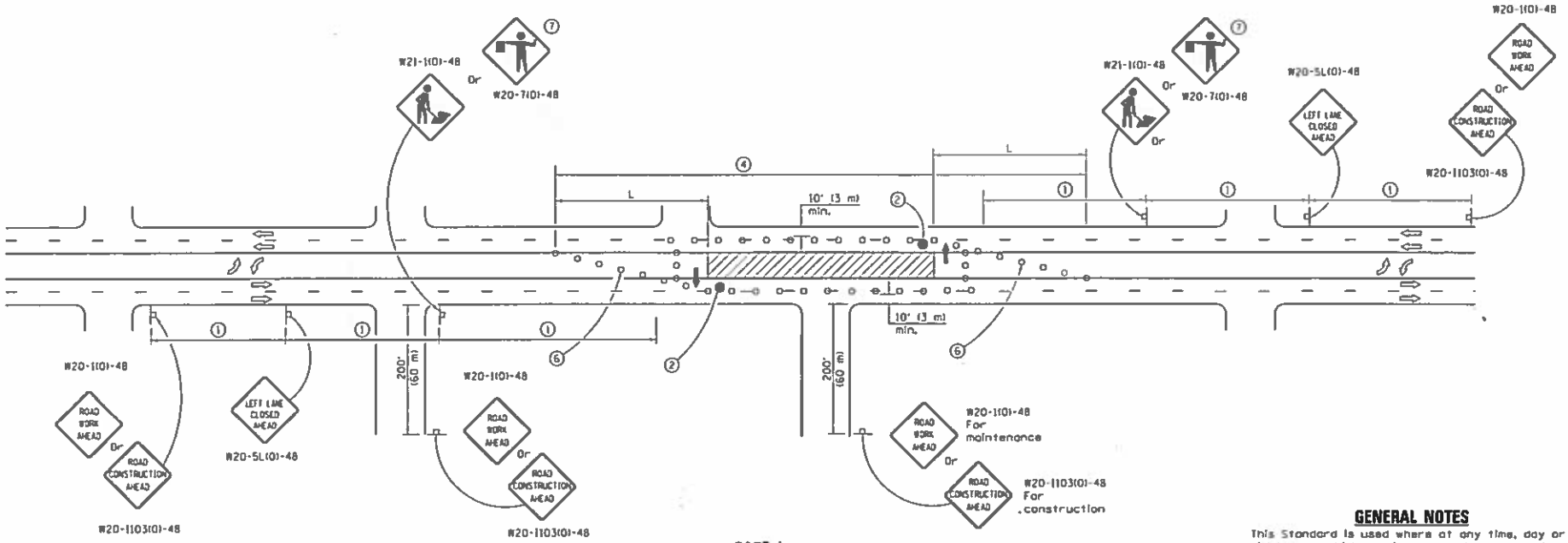
APPROVED _____ January 1, 2014
ENGINEER OF BRIDGES AND STRUCTURES

(6-14 GTS)

URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN

(Sheet 2 of 2)

STANDARD 701601-09



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

SYMBOLS

- Arrow board
- Work area
- Barricade or drum with steady burning mondirectional light
- Flagger with traffic control sign
- Cone, drum or barricade (Cones for daytime use only)
- Sign on portable or permanent support
- Type III Barricade

CASE I

1. Refer to SIGN SPACING TABLE for distances.
2. Required for speeds > 40 mph (70 km/h).
3. Required if work exceeds 500' (164 m) or 1 block, repeat every 1 mile (1.6 km).
4. Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or type I or II barricades are used, the interval between devices may be doubled.
5. For approved sideroad closures.
6. Cones, drums or barricades at 20' (6 m) centers in taper.
7. Use flagger sign only when flagger is present.

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of one traffic lane in an urban area.

If the work operation is performed between 9:00 a.m. and 3:00 p.m. and does not exceed 15 min. Traffic protection shall be as shown for Standard 701426.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	FORMULAS (Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

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

Illinois Department of Transportation

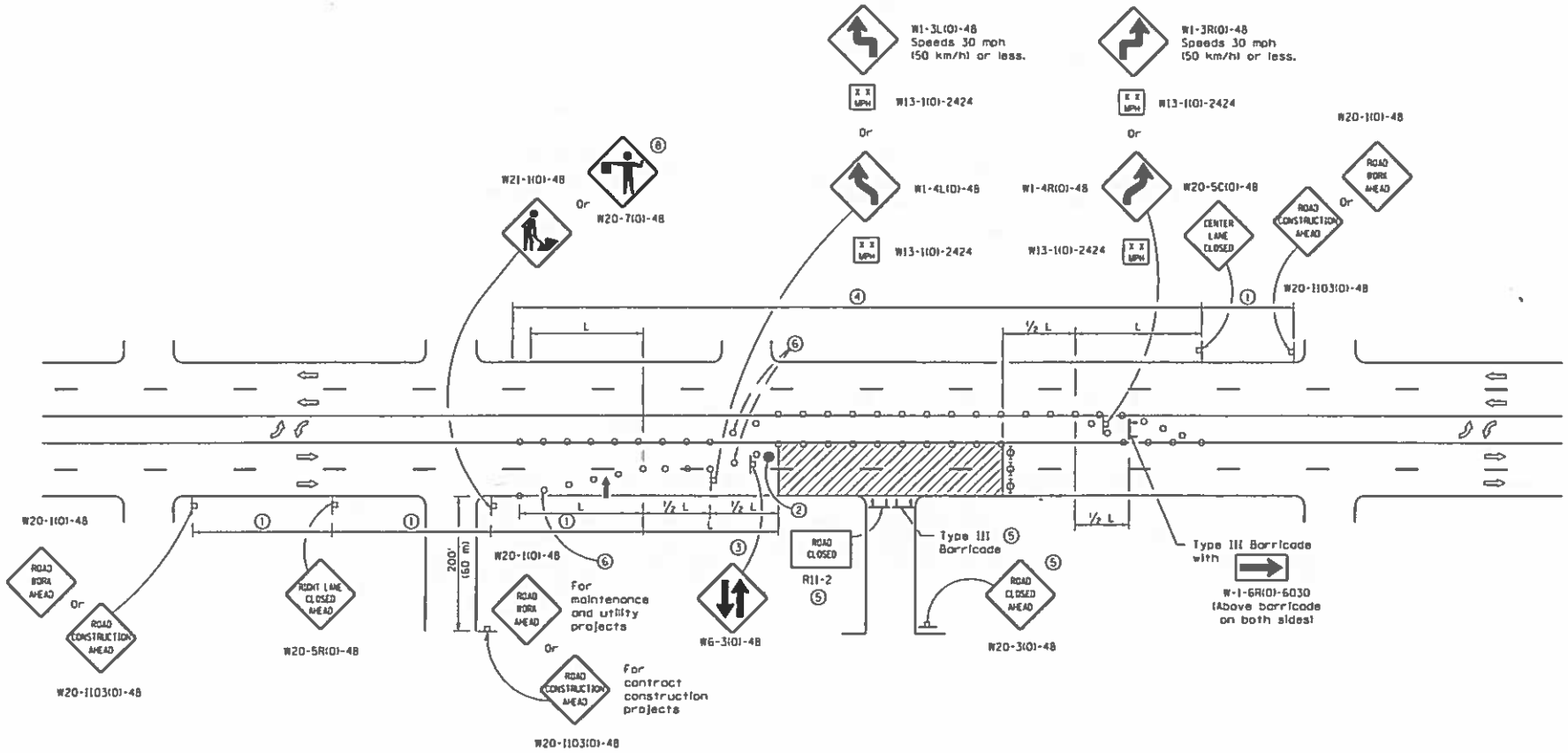
APPROVED January 1, 2014
ENGINEER OF SAFETY ENGINEERING
APPROVED January 1, 2014
ENGINEER OF URBAN AND STRUCTURES
ISSUED 1-1-14

DATE	REVISIONS
1-1-14	Omitted original note (4).
	Rev. workers sign no. to
	agree with current MUTCD.
1-1-13	Omitted text 'WORKERS'
	sign.

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 1 of 4)

STANDARD 701602-07



CASE II

Illinois Department of Transportation

APPROVED _____ 2014
ENGINEER OF SAFETY ENGINEERING

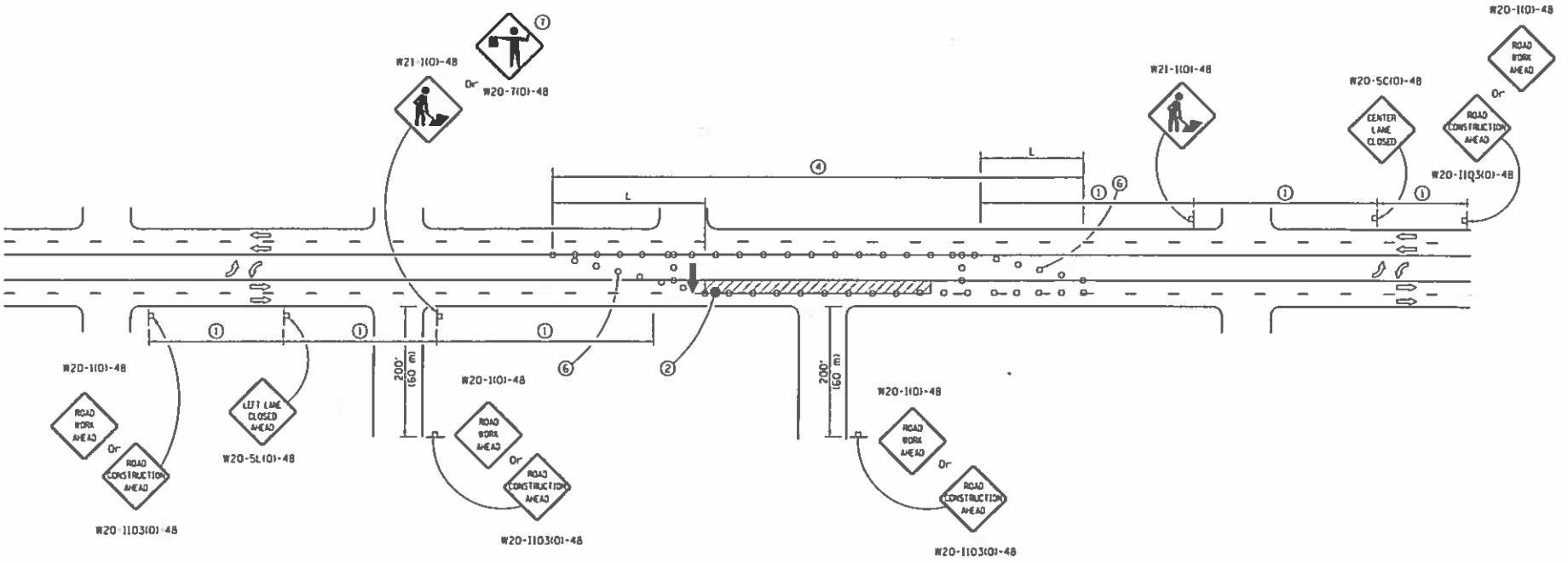
APPROVED _____ 2014
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-01

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 2 of 4)

STANDARD 701602-07



CASE III

Idaho's Department of Transportation

APPROVED January 1, 2014
ENGINEER OF SAFETY ENGINEERING

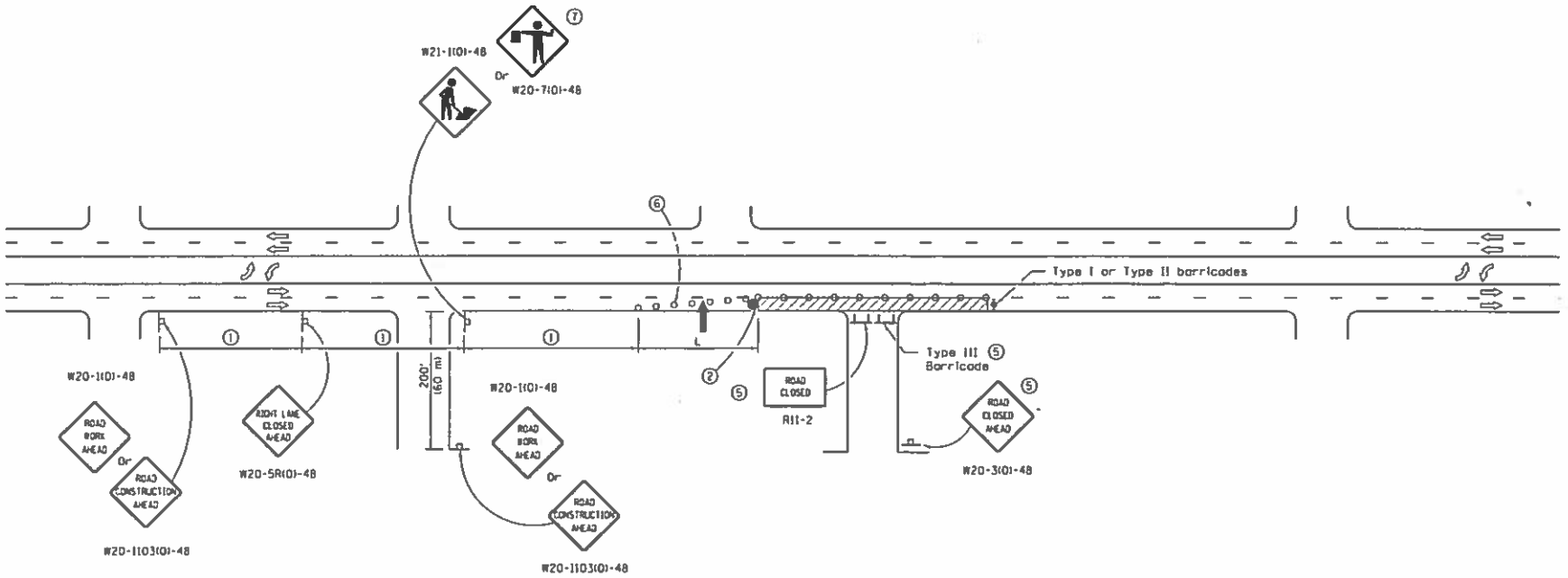
APPROVED January 1, 2014
ENGINEER OF OPERATIONS AND ENVIRONMENT

10 11 03 (SHEET 3)

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

(Sheet 3 of 4)

STANDARD 701602-07



CASE IV

Illinois Department of Transportation

APPROVED _____ JANUARY 1, 2014

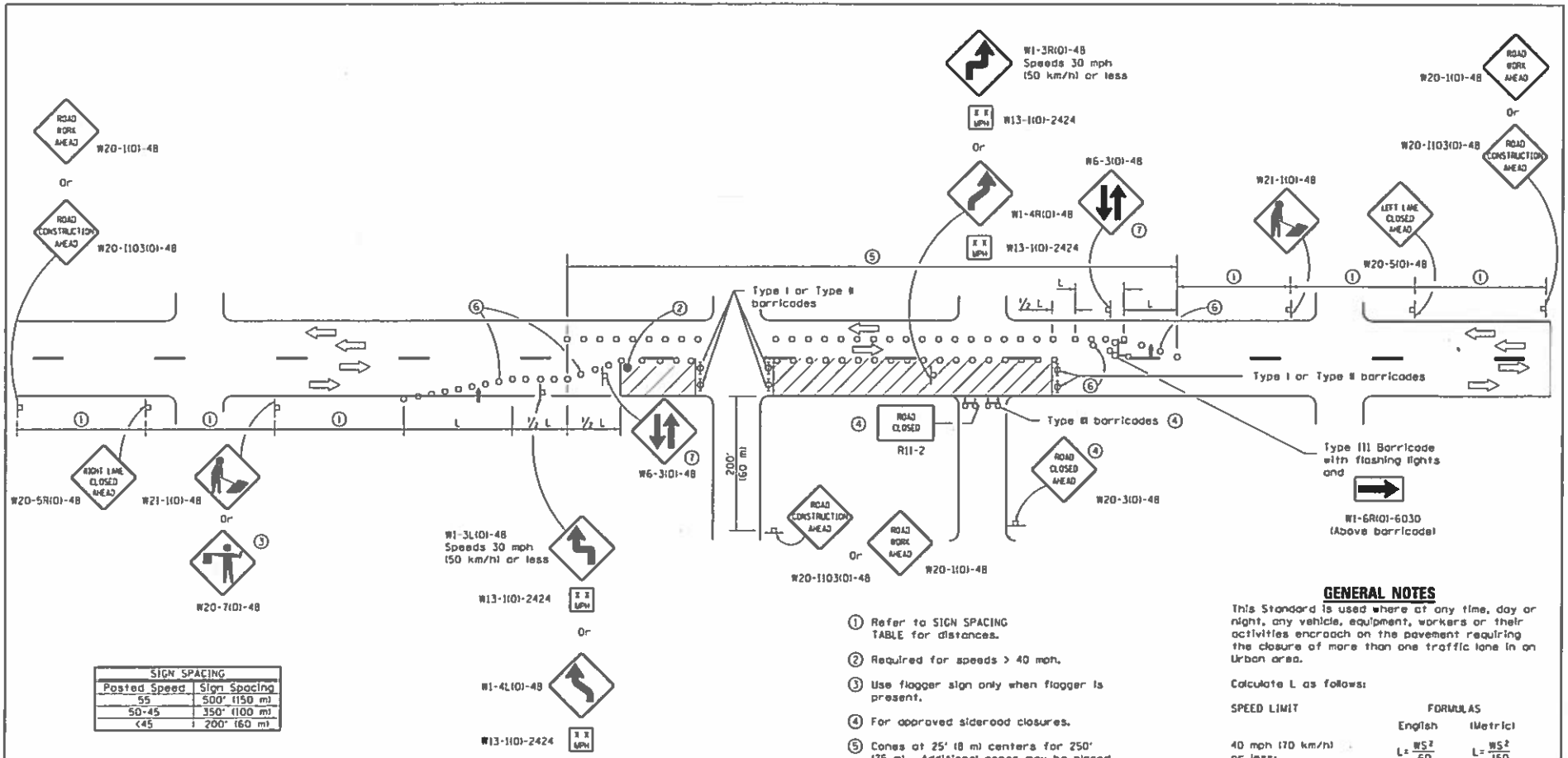
ENGINEER OF SAFETY ENGINEERING

APPROVED _____ JANUARY 1, 2014

ENGINEER OF DESIGN AND ENVIRONMENT

URBAN LANE CLOSURE, MULTILANE, 2W WITH BIDIRECTIONAL LEFT TURN LANE

STANDARD 701602-07



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

SYMBOLS

- Arrow board
- Cone, drum or barricade
- Sign on portable or permanent support
- Work area
- Barricade or drum with flashing light
- Type III barricade with flashing lights
- Flagger with traffic control sign.

1. Refer to SIGN SPACING TABLE for distances.
2. Required for speeds > 40 mph.
3. Use flagger sign only when flagger is present.
4. For approved sideroad closures.
5. Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
6. Cones, drums or barricades at 20' (6 m) centers in taper.
7. Repeat every 1 mile (1.6 km).

GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement requiring the closure of more than one traffic lane in an urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS	
	English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

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

Illinois Department of Transportation

APPROVED Apr 1, 2016
ENGINEER OF SAFETY ENGINEERING

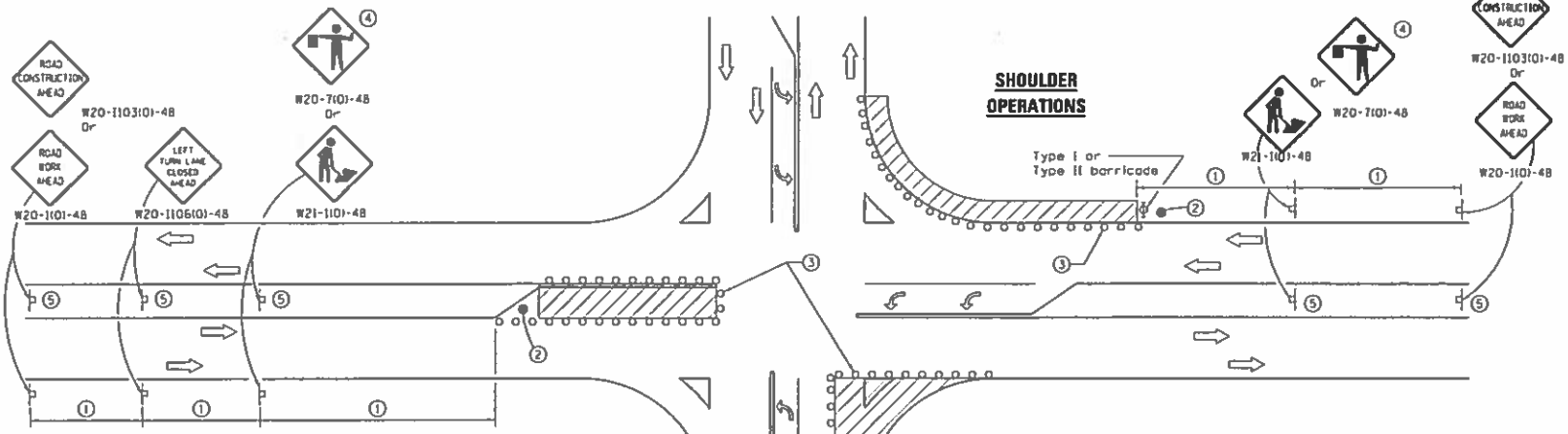
APPROVED Apr 1, 2016
(ENGINEER OF DESIGN AND ENVIRONMENT)

ISSUED 1-1-16

DATE	REVISIONS
4-1-16	Moved first reverse curve/turn sign to middle of tangent.
1-1-15	New Standard.

URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

STANDARD 701611-01



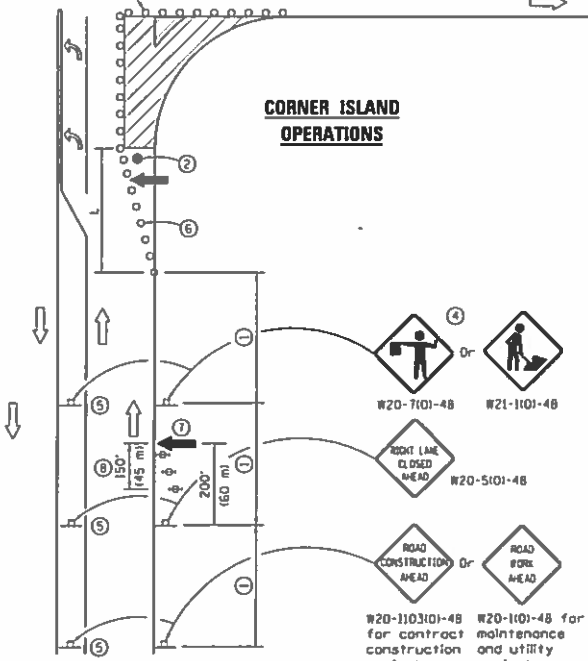
LEFT TURN LANE OR CENTER MEDIAN OPERATIONS

1. Refer to SIGN SPACING TABLE for distance.
2. Required for speed > 40 mph.
3. Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
4. Use flagger sign only when flagger is present.
5. Omit this sign when median is less than 10' (3 m) or for bi-directional turn lanes.
6. Cones, drums or barricades at 20' (6 m) centers in taper.
7. Advanced arrow board required for speeds > 45 mph.
8. Three Type II barricades, drums or vertical barricades at 50' (15 m) centers.

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

SYMBOLS

- Work area
- Cone, drum or barricade
- Sign on portable or permanent support
- Arrow board
- Barricade or drum with flashing light
- Flagger with traffic control sign



GENERAL NOTES

This Standard is used where at any time, day or night, any vehicle, equipment, workers or their activities encroach on the pavement during shoulder operations or where construction requires lane closures in an urban area.

Calculate L as follows:

SPEED LIMIT	FORMULAS English	(Metric)
40 mph (70 km/h) or less:	$L=\frac{WS^2}{60}$	$L=\frac{WS^2}{150}$
45 mph (80 km/h) or greater:	L=(W)(S)	L=0.65(W)(S)

W = Width of offset in feet (meters).

S = Normal posted speed mph (km/h).

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

Illinois Department of Transportation

APPROVED April 1, 2016
ENGINEER OF SAFETY ENGINEERING

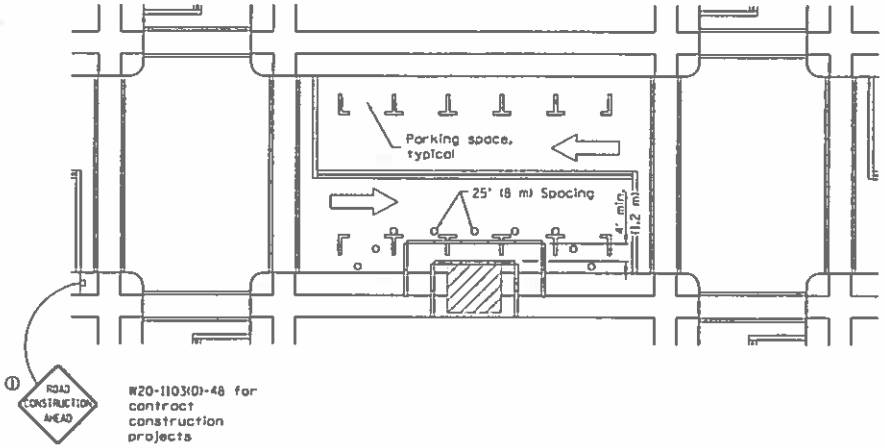
APPROVED April 1, 2016
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

DATE	REVISIONS
4-1-16	Corrected sign number for
	LEFT TURN LANE CLOSED
	AHEAD.
1-1-14	Added devices at arrow
	board upstream from taper.
	Rev. workers sign number.

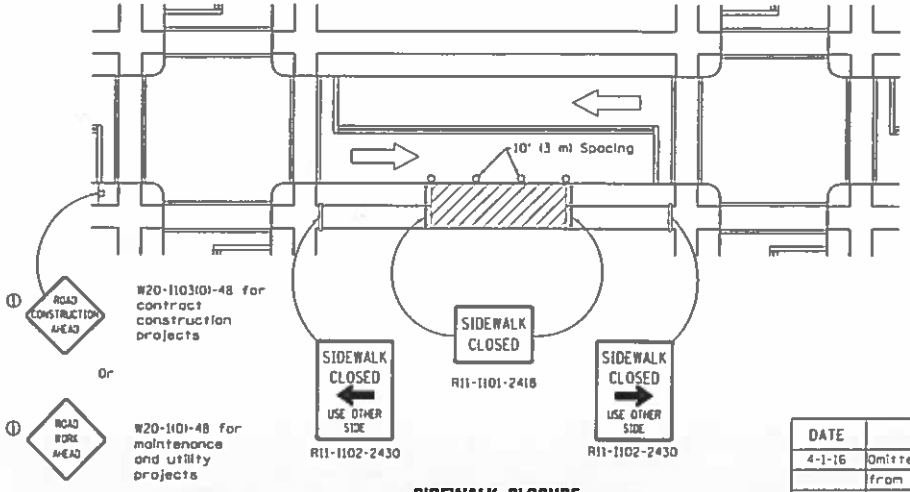
URBAN LANE CLOSURE, MULTILANE INTERSECTION

STANDARD 701701-10



① Omit whenever duplicated by road work traffic control.

SIDEWALK DIVERSION



SIDEWALK CLOSURE

SYMBOLS

- Work area
- Sign on portable or permanent support
- Barricade or drum
- Cone, drum or barricade
- Type III barricade
- Detectable pedestrian channelizing barricade

GENERAL NOTES

This Standard is used where, at any time, pedestrian traffic must be rerouted due to work being performed.

This Standard must be used in conjunction with other Traffic Control & Protection Standards when roadway traffic is affected.

Temporary facilities shall be detectable and accessible.

The temporary pedestrian facilities shall be provided on the same side of the closed facilities whenever possible.

The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the corners across the street from the closure. The SIDEWALK CLOSED signs shall be used at the ends of the actual closures.

Type III barricades and R11-2-4830 signs shall be positioned as shown in "ROAD CLOSED TO ALL TRAFFIC" detail on Standard 701901.

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

Illinois Department of Transportation

APPROVED April 1, 2016
ENGINEER OF SAFETY ENGINEERING

APPROVED April 1, 2016
ENGINEER OF BUREAU OF LOCAL ROADS & STREETS

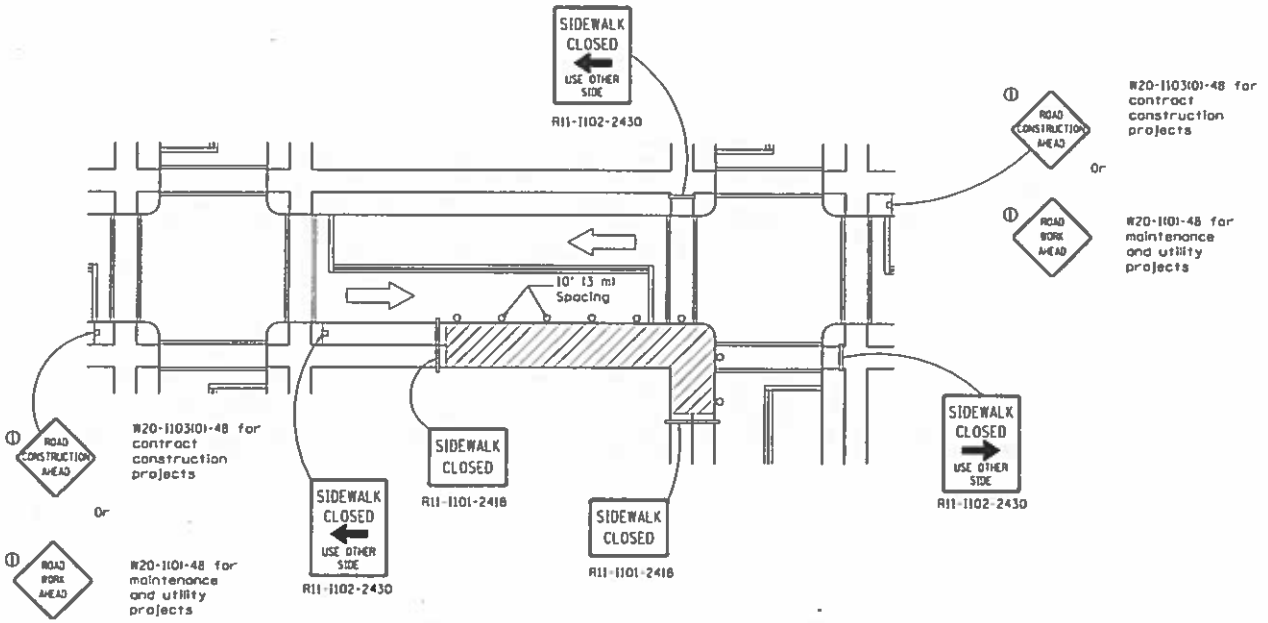
ISSUED 1-1-12

DATE	REVISIONS
4-1-16	Omitted orange safety fence
	from standard as this is
	covered in the std. spec.
1-1-12	Added SIDEWALK DIVERSION.
	Modified appearance of
	plan views. Reinstated Std.

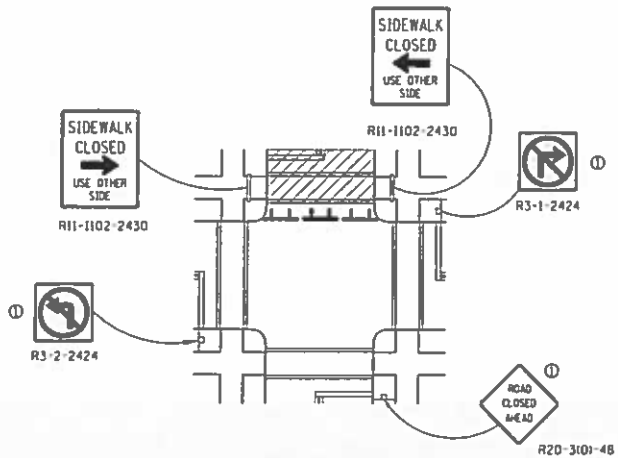
SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 1 of 2)

STANDARD 701801-06



CORNER CLOSURE



CROSSWALK CLOSURE

Idaho's Department of Transportation

APPROVED _____ APR 1, 2016
ENGINEER OF SAFETY ENGINEERING

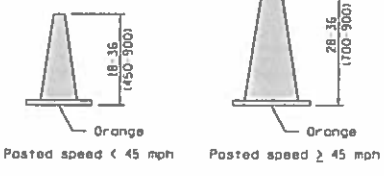
APPROVED _____ APR 1, 2016
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-16

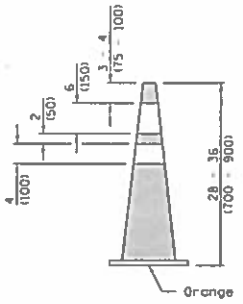
SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 2 of 2)

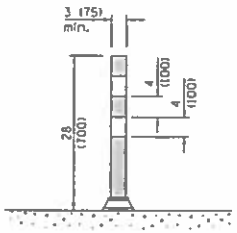
STANDARD 701801-06



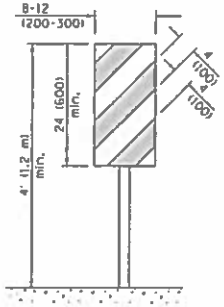
CONE FOR DAYTIME



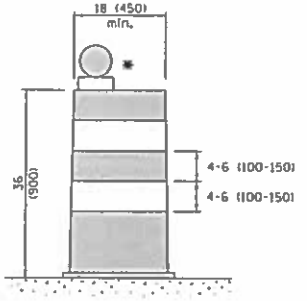
REFLECTORIZED CONE FOR NIGHTTIME



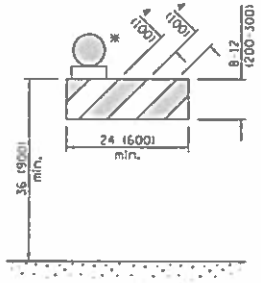
FLEXIBLE DELINEATOR



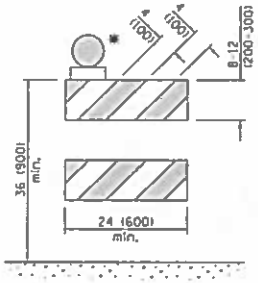
VERTICAL PANEL
POST MOUNTED



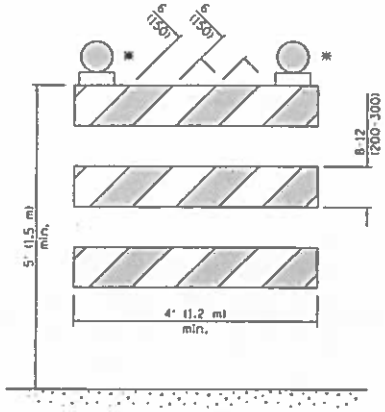
DRUM



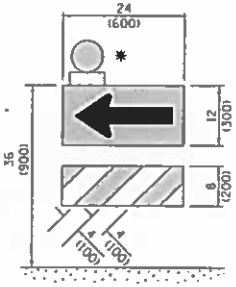
TYPE I BARRICADE



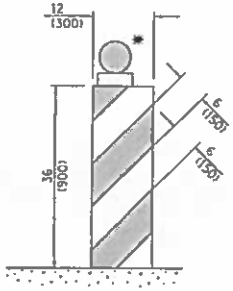
TYPE II BARRICADE



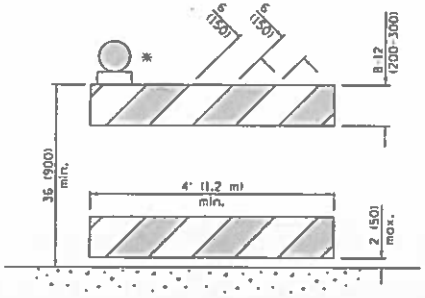
TYPE III BARRICADE



DIRECTION INDICATOR BARRICADE



VERTICAL BARRICADE



DETECTABLE PEDESTRIAN CHANNELIZING BARRICADE

* Warning lights (if required)

GENERAL NOTES

All heights shown shall be measured above the pavement surface.

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

Illinois Department of Transportation

APPROVED April 1, 2016
ENGINEER OF OPERATIONS

APPROVED April 1, 2016
ENGINEER OF DESIGN AND ENVIRONMENT

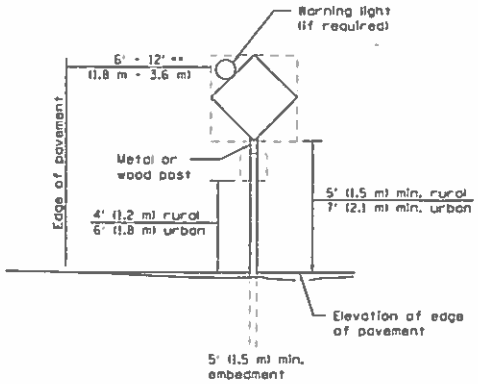
ISSUED 1-1-15

DATE	REVISIONS
4-1-16	Add dim's to barricades. Rev.
	note for post mnt. signs.
	Rev. cone dtls. Add M12-1103.
1-1-15	Revised two sign numbers on
	sheet 2. Added note reg.
	PHOTO ENFORCED plaque.

TRAFFIC CONTROL DEVICES

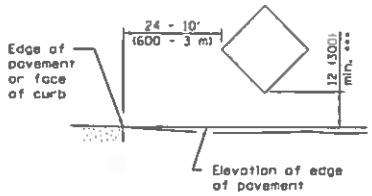
(Sheet 1 of 3)

STANDARD 701901-05



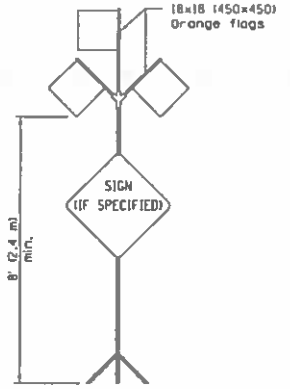
POST MOUNTED SIGNS

** 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.

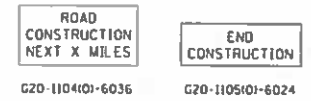


SIGNS ON TEMPORARY SUPPORTS

*** 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.



HIGH LEVEL WARNING DEVICE



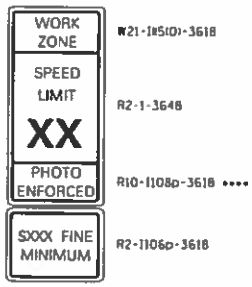
This signing is required for all projects 2 miles (3200 m) or more in length.

ROAD CONSTRUCTION NEXT X MILES sign shall be placed 500' (150 m) in advance of project limits.

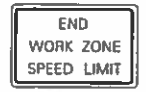
END CONSTRUCTION sign shall be erected at the end of the job unless another job is within 2 miles (3200 m).

Dual sign displays shall be utilized on multi-lane highways.

WORK LIMIT SIGNING



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



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

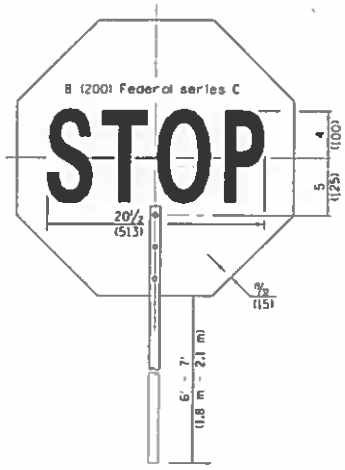
HIGHWAY CONSTRUCTION SPEED ZONE SIGNS

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

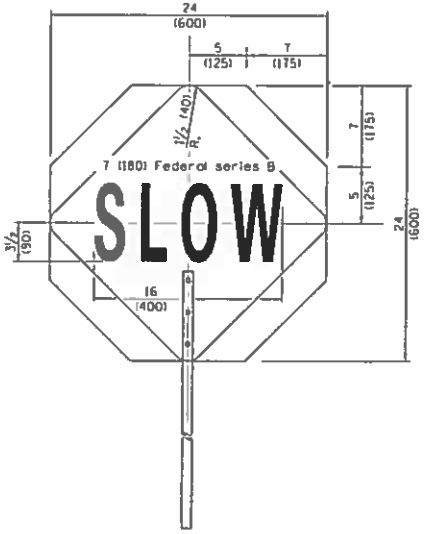
W12-1103-4848

WIDTH RESTRICTION SIGN

XX'-XX" width and X miles are variable.



FRONT SIDE



REVERSE SIDE

FLAGGER TRAFFIC CONTROL SIGN

Illinois Department of Transportation

APPROVED Apr 1, 2016
ENGINEER OF OPERATIONS

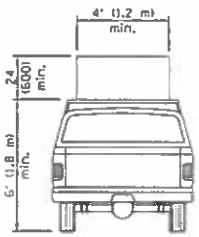
APPROVED Apr 1, 2016
ENGINEER OF POLICY AND PROCEDURE

ISSUED 1-1-87

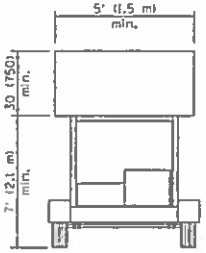
TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

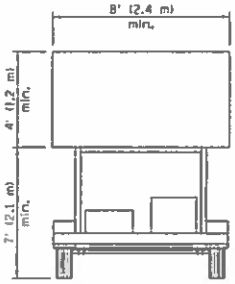
STANDARD 701901-05



TYPE A ROOF MOUNTED

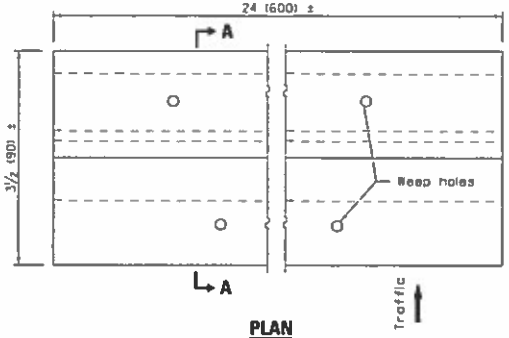


TYPE B ROOF OR TRAILER MOUNTED

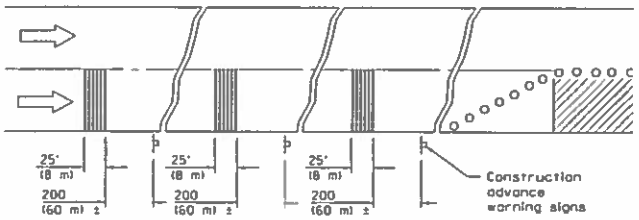


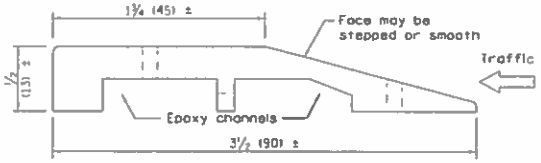
TYPE C TRAILER MOUNTED

ARROW BOARDS

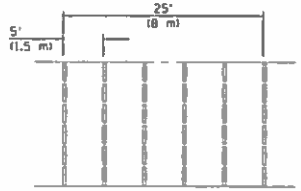


PLAN



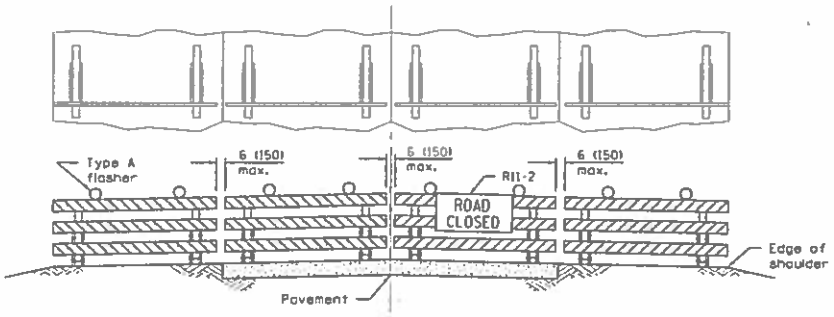


SECTION A–A



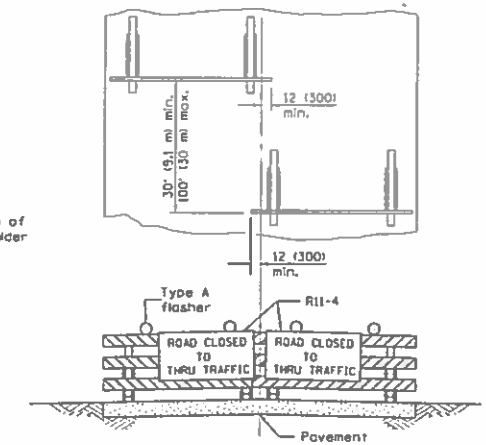
TYPICAL INSTALLATION

TEMPORARY RUMBLE STRIPS



ROAD CLOSED TO ALL TRAFFIC

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.



ROAD CLOSED TO THRU TRAFFIC

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 Apr 7 2016
ENGINEER OF OPERATIONS

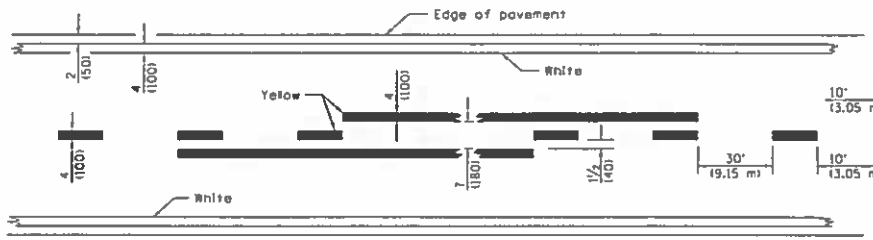
APPROVED Apr 7 2016
ENGINEER OF POLICY AND TECHNOLOGY

ISSUED 1-1-97

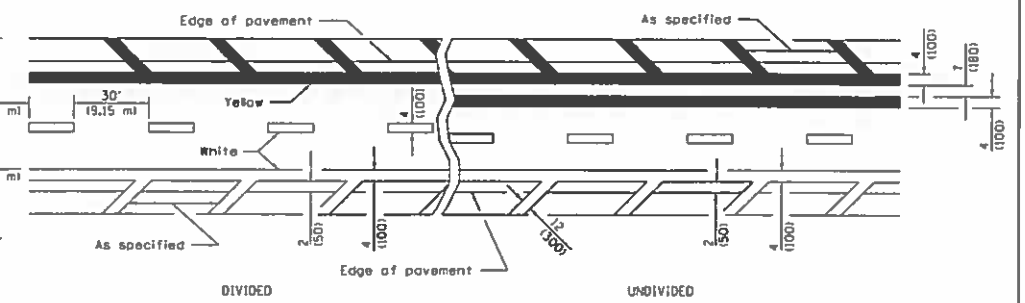
TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

STANDARD 701901-05

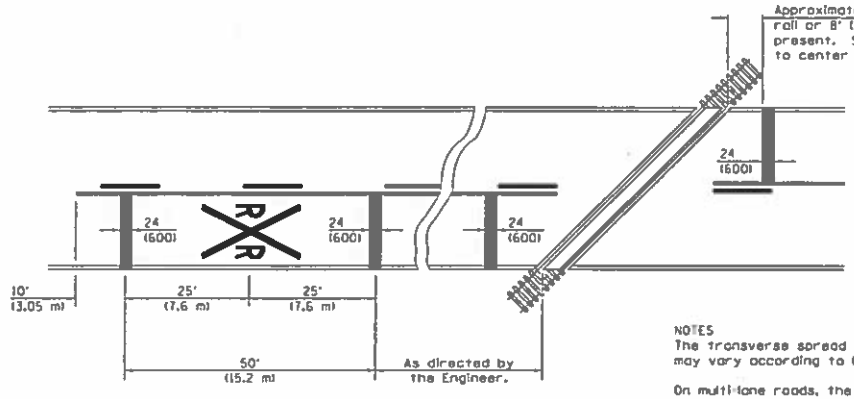


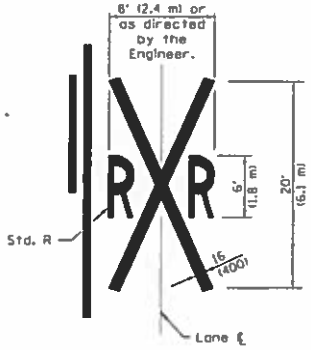
2 LANE



MULTI LANE

LANE AND EDGE LINES





NOTES
The transverse spread of the "X" may vary according to lane width.

On multi-lane roads, the stop lines shall extend across all approach lanes and separate RXR symbols shall be placed adjacent to each other in each lane.

When the pavement marking symbol is used, a portion of the symbol should be located directly adjacent to the Advance Warning Sign (W10-1) as placed by Table 2C-4, Condition B of the MUTCD.

PAVEMENT MARKINGS AT RAILROAD–HIGHWAY GRADE CROSSING

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

Illinois Department of Transportation

APPROVED January 1, 2015
ENGINEER OF OPERATIONS

APPROVED January 1, 2015
ENGINEER OF DESIGN AND ENVIRONMENT

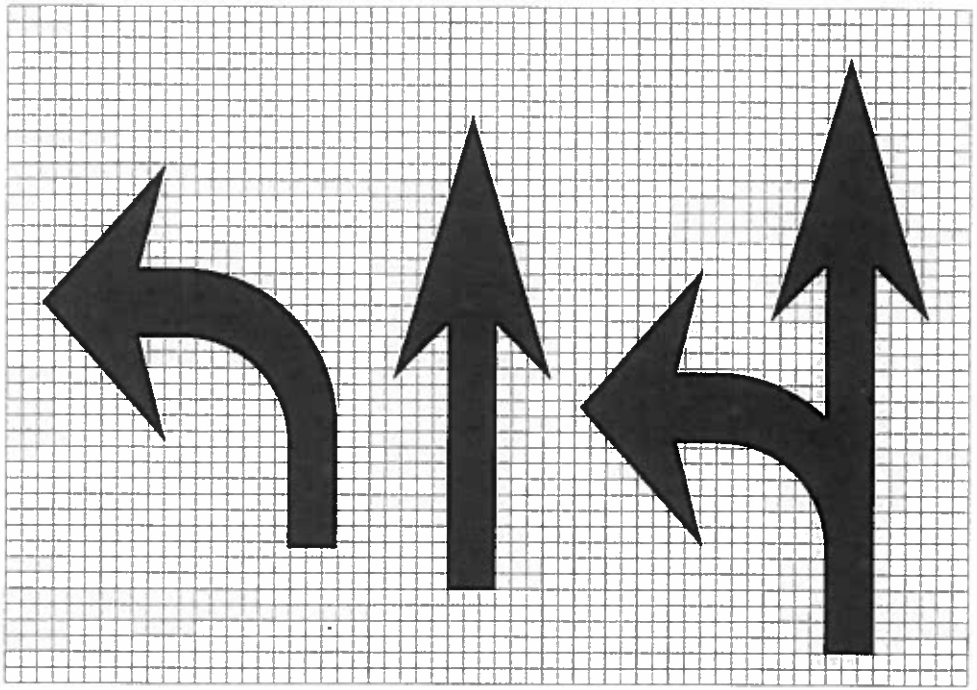
ISSUED 16 1 1

DATE	REVISIONS
1-1-15	Added symbols. Revised
	bike symbol. Revised note
	for stop line at RR crossing.
1-1-14	Added bike symbol. Renamed
	'LANE DROP ARROW' detail to
	'LANE REDUCTION ARROW'.

TYPICAL PAVEMENT MARKINGS

(Sheet 1 of 3)

STANDARD 780001-05



Legend Height	Arrow Size	a
6' (1.8 m)	Small	2.9 (74)
8' (2.4 m)	Large	3.8 (96)

The space between adjacent letters or numerals should be approximately 3 (75) for 6' (1.8 m) legend and 4 (100) for 8' (2.4 m) legend.

LETTER AND ARROW GRID SCALE

Illinois Department of Transportation

APPROVED January 1, 2015
ENGINEER OF OPERATIONS

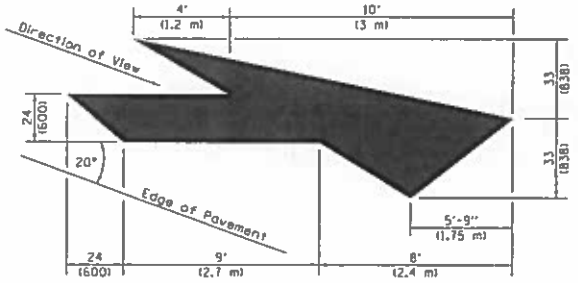
APPROVED January 1, 2015
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

TYPICAL PAVEMENT MARKINGS

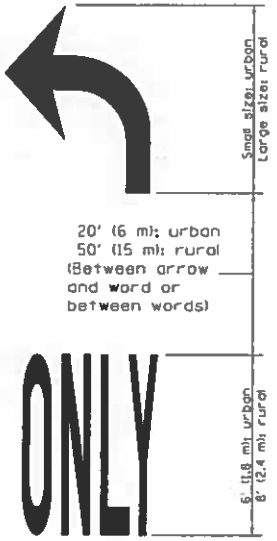
(Sheet 2 of 3)

STANDARD 780001-05

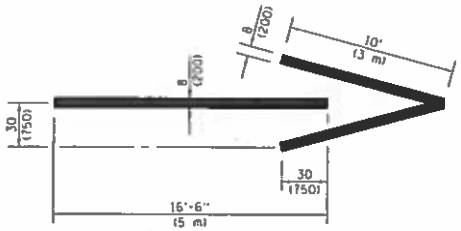


LANE-REDUCTION ARROW

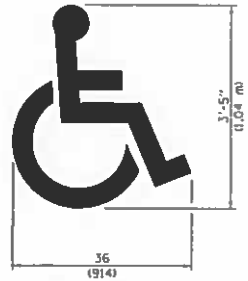
Right lane-reduction arrow shown.
Use mirror image for left lane.



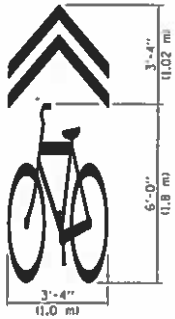
WORD AND ARROW LAYOUT



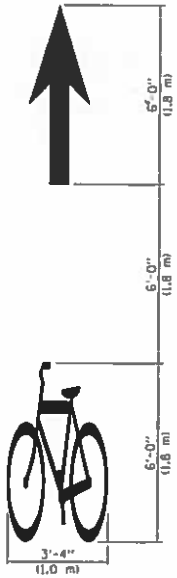
WRONG WAY ARROW



INTERNATIONAL SYMBOL OF ACCESSIBILITY



SHARED LANE SYMBOL



BIKE SYMBOL
(Arrow is optional.)

Illinois Department of Transportation

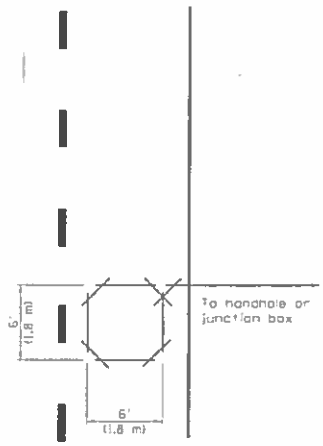
APPROVED January 1, 2015
ENGINEER OF OPERATIONS
APPROVED January 1, 2015
ENGINEER OF LAND AND ENVIRONMENT

ISSUED 16-1-1

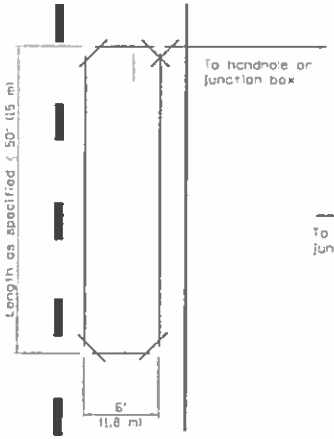
TYPICAL PAVEMENT MARKINGS

(Sheet 3 of 3)

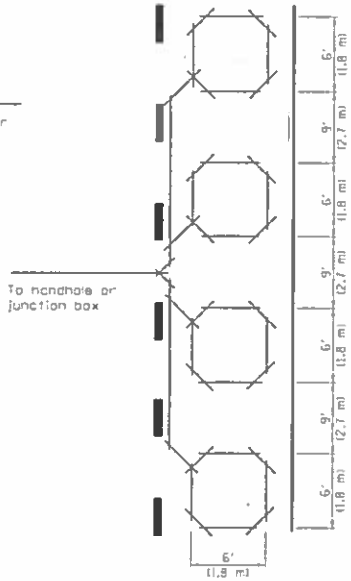
STANDARD 780001-05



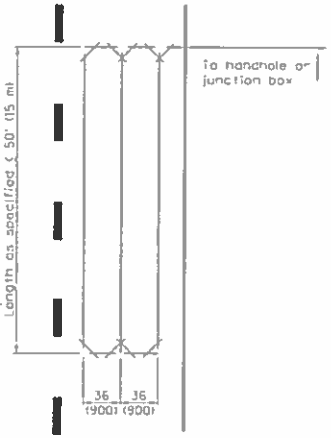
FOR POINT DETECTION
SHORT LOOP



FOR PRESENCE DETECTION
LONG LOOP

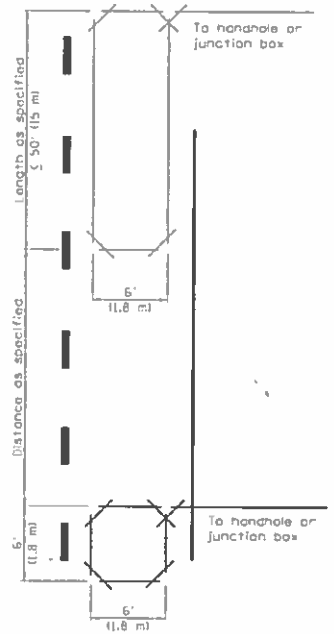


FOR PRESENCE DETECTION
MULTIPLE LOOP IN SERIES

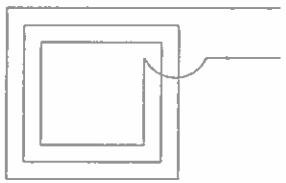


FOR PRESENCE DETECTION
QUADRUPOLE LOOP

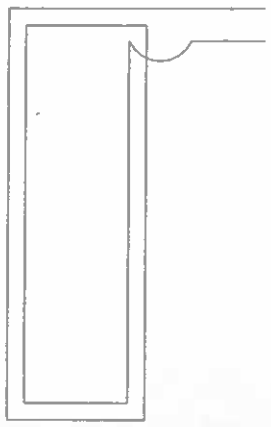
SLOT PLAN



FOR EXTENDED-CALL DETECTION



SHORT LOOP



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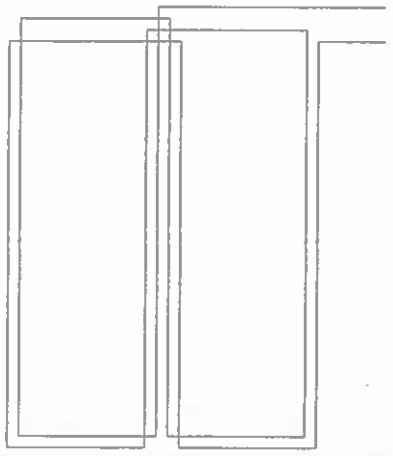


QUADRUPOLE LOOP

WIRING DIAGRAM

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

Illinois Department of Transportation

APPROVED _____ 2009
ENGINEER OF OPERATIONS

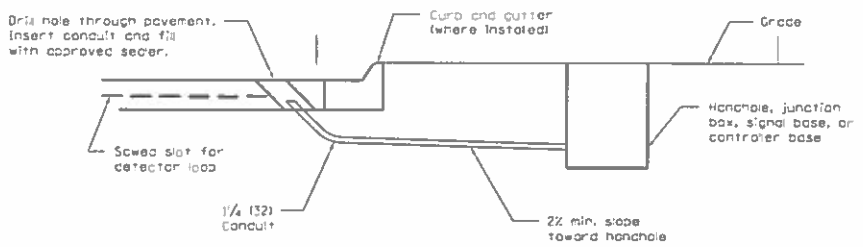
APPROVED _____ 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 2-1-09

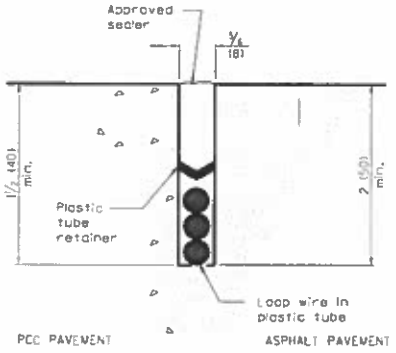
DATE	REVISIONS
1-1-09	Switched units to English (metric)
1-1-02	Renum. Standard 846006.

TYPICAL LAYOUTS FOR DETECTION LOOPS

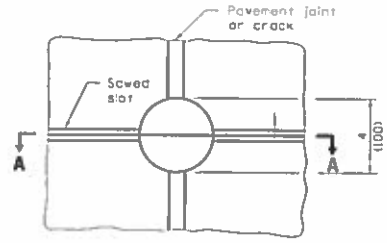
STANDARD 886006-01



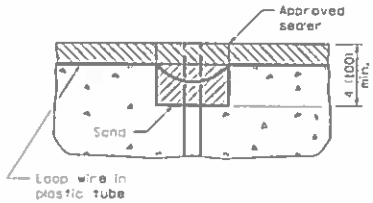
DETECTOR LOOP LEAD-IN



DETECTOR LOOP INSTALLATION



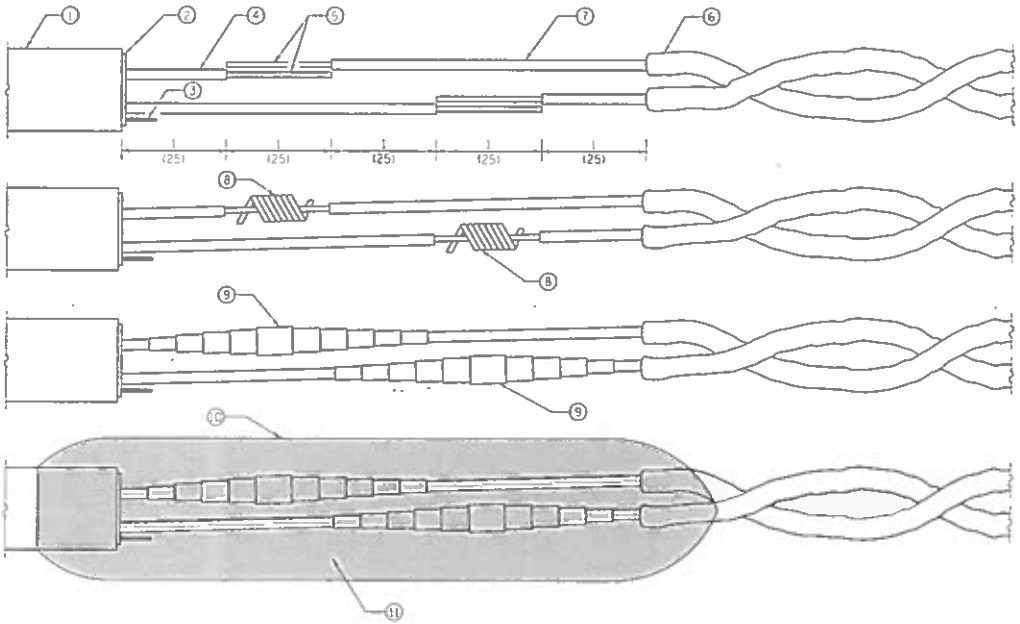
PLAN



SECTION A-A

NOTE
Loop wire shall follow saw cut to bottom, forming slack section at joint.

DETECTOR LOOP AT PAVEMENT JOINT OR PAVEMENT CRACK



LOOP WIRE AND LEAD-IN CABLE SPLICE

① = Lead-in cable (single pair or multipair)
② = Lead-in cable shield
③ = Lead-in cable shield drain-wire
④ = Lead-in cable insulated conductor
⑤ = Bare conductor
⑥ = Loop wire in tube
⑦ = Loop wire insulated conductor
⑧ = Twisted and resin soldered conductor
⑨ = Electrical tape insulated splice
⑩ = Rigid mold
⑪ = Waterproof and dielectric resin

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

Illinois Department of Transportation

APPROVED January 1, 2009
ENGINEER OF OPERATIONS

APPROVED January 1, 2009
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 2011

DATE	REVISIONS
1-1-09	Switched units to English (metric)
1-1-02	Renum. Standard 846001.

DETECTOR LOOP INSTALLATIONS

STANDARD 886001-01

APPENDIX D

IDOT DISTRICT 1 SPECIAL PROVISIONS

DRAINAGE AND INLET PROTECTION UNDER TRAFFIC (DISTRICT 1)

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

Add the following to Article 603.02 of the Standard Specifications:

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

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

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

Property	Test Method	Requirement
Durometer Hardness, Shore A	ASTM D 2240	75 ±15
Tensile Strength, psi (kPa)	ASTM D 412	300 (2000) min
Elongation, percent	ASTM D 412	90 min
Specific Gravity	ASTM D 792	1.0 - 1.3
Brittleness, °F (°C)	ASTM D 746	-40 (-40)"

Revise Article 603.07 of the Standard Specifications to read:

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

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

(a) Temporary Asphalt Ramps. Temporary hot-mix asphalt ramps shall be placed around the casting, flush with its surface and decreasing to a featheredge in a distance of 2 ft (600 mm) around the entire surface of the casting.

(b) Temporary Rubber Ramps. Temporary rubber ramps shall only be used on roadways with permanent posted speeds of 40 mph or less and when the height of the casting to be protected meets the proper sizing requirements for the rubber ramps as shown below.

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

Placement shall be according to the manufacturer's specifications.

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

FRICTION AGGREGATE (D-1)

Effective: January 1, 2011
Revised: July 24, 2015

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

"(4) Crushed Stone. Crushed stone shall be the angular fragments resulting from crushing undisturbed, consolidated deposits of rock by mechanical means. Crushed stone shall be divided into the following, when specified.

a. Carbonate Crushed Stone. Carbonate crushed stone shall be either dolomite or limestone. Dolomite shall contain 11.0 percent or more magnesium oxide (MgO). Limestone shall contain less than 11.0 percent magnesium oxide (MgO).

b. Crystalline Crushed Stone. Crystalline crushed stone shall be either metamorphic or igneous stone, including but is not limited to, quartzite, granite, rhyolite and diabase."

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

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

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

Use	Mixture	Aggregates Allowed
Class A	Seal or Cover	Allowed Alone or in Combination [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag Crushed Concrete

Use	Mixture	Aggregates Allowed
HMA Low ESAL	Stabilized Subbase or Shoulders	<u>Allowed Alone or in Combination</u> [5/]: Gravel Crushed Gravel Carbonate Crushed Stone Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[1/] Crushed Concrete
HMA High ESAL Low ESAL	Binder IL-19.0 or IL-19.0L SMA Binder	<u>Allowed Alone or in Combination</u> [5/]: Crushed Gravel Carbonate Crushed Stone[2/] Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Concrete[3/]
HMA High ESAL Low ESAL	C Surface and Leveling Binder IL-9.5 or IL-9.5L SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> [5/]: Crushed Gravel Carbonate Crushed Stone[2/] Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[4/] Crushed Concrete[3/]
HMA High ESAL	D Surface and Leveling Binder IL-9.5 SMA Ndesign 50 Surface	<u>Allowed Alone or in Combination</u> [5/]: Crushed Gravel Carbonate Crushed Stone (other than Limestone)[2/] Crystalline Crushed Stone Crushed Sandstone Crushed Slag (ACBF) Crushed Steel Slag[4/] Crushed Concrete[3/]
		<u>Other Combinations Allowed:</u> *Up to...* — *With...* 25% Limestone — Dolomite

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

Use	Mixture	Aggregates Allowed	
		50% Crushed Gravel[2/], Crushed Concrete[3/], or Dolomite[2/]	Crushed Sandstone, Crushed Slag (ACBF), Crushed Steel Slag, or Crystalline Crushed Stone

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

GROUND TIRE RUBBER (GTR) MODIFIED ASPHALT BINDER (D-1)
Effective: June 26, 2006
Revised: April 1, 2016

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

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

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

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

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

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

"A dedicated storage tank for the Ground Tire Rubber (GTR) modified asphalt binder shall be provided. This tank must be capable of providing continuous mechanical mixing throughout by continuous agitation and recirculation of the asphalt binder to provide a

uniform mixture. The tank shall be heated and capable of maintaining the temperature of the asphalt binder at 300 °F to 350 °F (149 °C to 177 °C). The asphalt binder metering systems of dryer drum plants shall be calibrated with the actual GTR modified asphalt binder material with an accuracy of ± 0.40 percent."

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

"(c) RAP Materials (Note 5) .....1031"

Add the following note to 1030.02 of the Standard Specifications:

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

HEAT OF HYDRATION CONTROL FOR CONCRETE STRUCTURES (D-1)

Effective: November 1, 2013

Article 1020.15 shall not apply.

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 steal 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 Job Mix Formula (JMF) shall fall within the following limits.

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

1/ Based on percent of total aggregate weight.

2/ The mixture composition shall not exceed 44 percent passing the #8 (2.36 mm) sieve for surface courses with Ndesign = 90.

3/ Additional minus No. 200 (0.075 mm) material required by the mix design shall be mineral filler, unless otherwise approved by the Engineer.

4/ The maximum percent passing the #635 (20 µm) sieve shall be ≤ 3 percent.

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

6/ When establishing the Adjusted Job Mix Formula (AJMF) the percent passing the #8 (2.36 mm) sieve shall not be adjusted below 34 percent.

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

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

VOLUMETRIC REQUIREMENTS High ESAL				
	Voids in the Mineral Aggregate (VMA), % minimum			Voids Filled with Asphalt Binder (VFA), %
Ndesign	IL-19.0	IL-9.5	IL-4.75 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."

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	
% Passing:[1/]	FRAP	RAS
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		
Ndesign	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 µm) sieve shall not apply. The sample for the RAP material shall be air dried to constant weight prior to being tested for gradation."

APPENDIX E

VILLAGE OF LOMBARD LOCATIONS

Street	From	To	Type	Contractor or Village
PARKSIDE AVENUE	ELIZABETH STREET	MAIN STREET	2" Grind and Overlay	Contractor
PARKSIDE COMMUTER PARK	ELIZABETH STREET	PARK AVENUE	2" Grind and Overlay	Contractor
WOODROW STREET	WESTMORE-MEYERS	ADDISON AVENUE	4" Grind and Binder & Surface	Contractor/Village
GRACE STREET	WILSON AVENUE	CENTRAL AVENUE	2" Grind and Overlay	Contractor/Village
FAIRFIELD AVENUE	WILSON AVENUE	ROOSEVELT ROAD	2" Grind and Overlay	Contractor/Village
HIGHRIDGE ROAD	STEWART AVENUE	GRACE STREET	3" Grind and Overlay	Contractor/Village
NORTON STREET	STEWART AVENUE	GRACE STREET	2" Grind and Overlay	Contractor/Village
CENTRAL AVENUE	STEWART AVENUE	EDGEWOOD AVENUE	3" Grind and Overlay	Contractor/Village
MORNINGSIDE AVE.	MARTHA STREET	CRAIG PLACE	2" Grind and Overlay	Contractor/Village
WASHINGTON BLVD	MARTHA STREET	CRAIG PLACE	2" Grind and Overlay	Contractor/Village
MARTHA STREET	PARKSIDE AVENUE	MAPLE STREET	2" Grind and Overlay	Contractor/Village
RANDOLPH STREET	CHARLOTTE STREET	MARTHA STREET	2" Grind and Overlay	Contractor/Village
EDGEWOOD AVENUE	SOUTH BROADWAY	MADISON STREET	4" Grind and Overlay	Contractor
LaLONDE AVENUE	MID- BLOCK	MADISON STREET	4" Grind and Overlay	Contractor
ARTHUR DRIVE	LOMBARD CIRCLE	DEAD END SOUTH	2" Grind and Overlay	Contractor
16TH STREET	FINLEY ROAD	COLLEN DRIVE	2" Grind and Overlay	Contractor
WILLOW STREET	ELIZABETH STREET	LINCOLN AVENUE	2" Grind	Contractor
EDSON STREET	HICKORY STREET	BREWSTER AVENUE	2" Grind	Contractor

APPENDIX F

VILLAGE OF BENSENVILLE LOCATIONS

VILLAGE OF GLENDALE HEIGHTS LOCATIONS

VILLAGE OF VILLA PARK LOCATIONS

VILLAGE OF WOODRIDGE LOCATIONS

Village of Bensenville

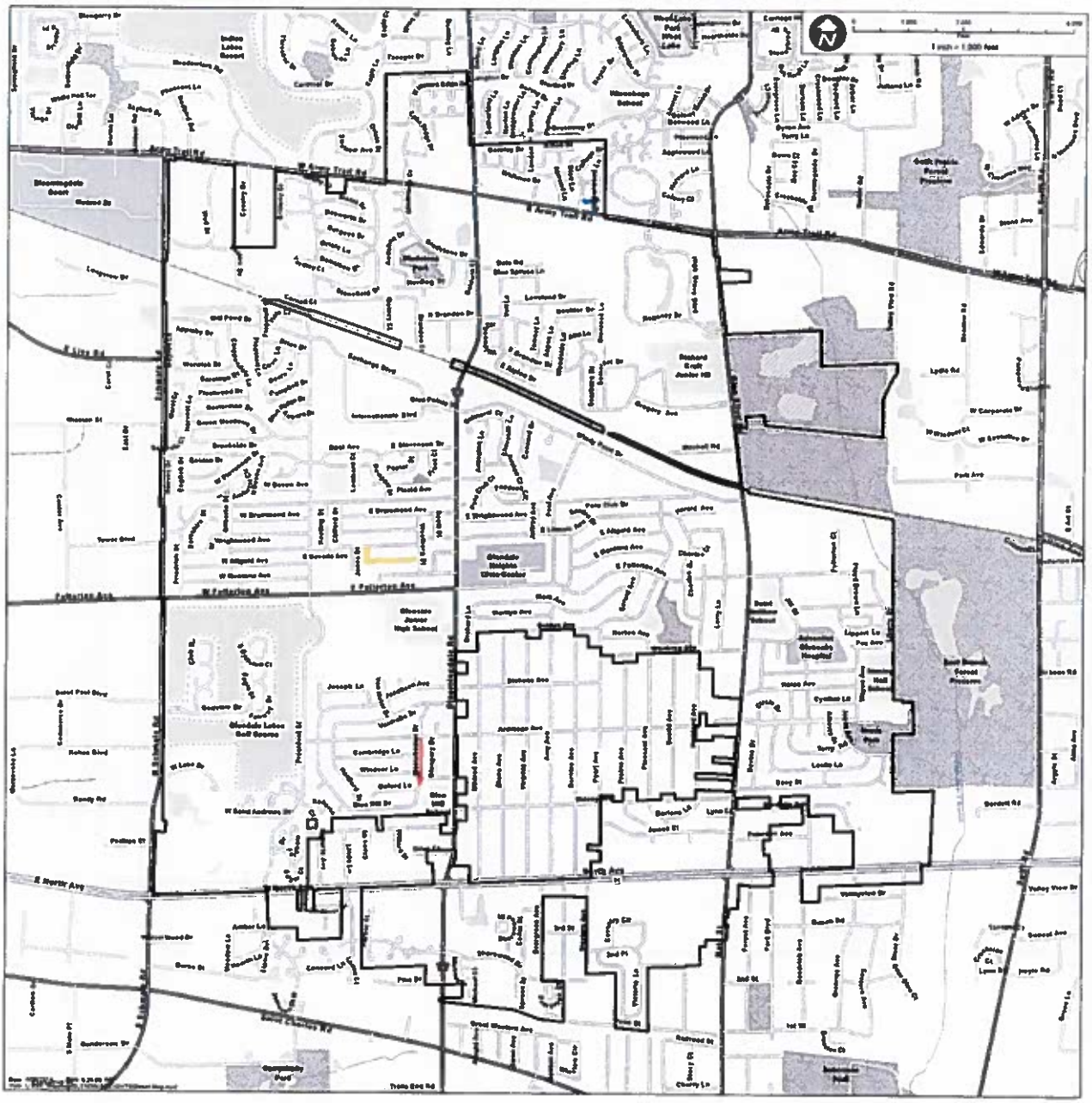
2016 Pavement Patching

= East Altgeld Avenue and Van Meter Court - from Lincoln Ave to Westberg St.

= Westchester Drive - from Armitage Ave to Glen Hill Dr.

= Jamison Drive - from Whitman Dr to Pepperwood Ln.

= Hilldale Lane - from Jamison Dr to South End



Village of Glendale Heights

2" Grind Streets

= Class D Type IV Locations

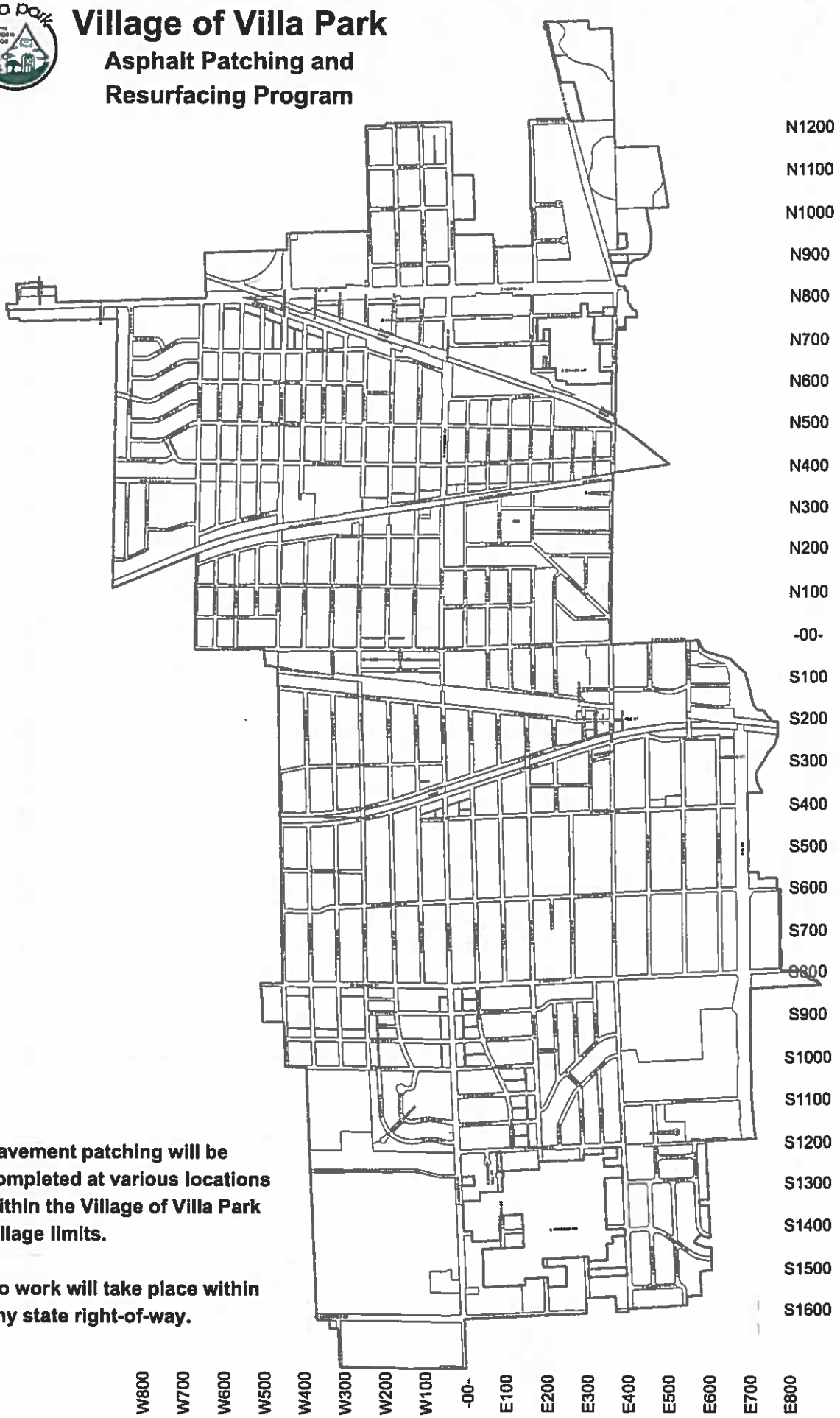
Village of Glendale Heights

Village of Glendale Heights - Road Patching 2016

Street Name	Patch Location	Dimension	SQ Feet	SQ Yards
Armitage Avenue	191	12' X 30'	360	40.0
Polo Club Drive	331	80' x 12'	960	106.7
Polo Club Drive	471 to 479	60' x 12'	720	80.0
Polo Club Drive	535	30' x 12'	360	40.0
Polo Club Drive	451	30' x 6'	180	20.0
Polo Club Drive	425	40' x 12'	480	53.3
Polo Club Drive	415	30' x 12'	360	40.0
Polo Club Drive	303	30' x 12'	360	40.0
Polo Club Drive	252	20' x 8'	160	17.8
Polo Club Drive	At Bloomingdale Road; Westbound Lane	30' x 12'	360	40.0
Gregory Avenue	Before stop sign @ 440	12' x 30'	360	40.0
Gregory Avenue	1828 to 1832	14' x 50'	700	77.8
Gregory Avenue	388	12' x 6'	72	8.0
Gregory Avenue	1879	14' x 80'	1,120	124.4
Gregory Avenue	1880	6' x 45'	270	30.0
Jacobsen Avenue	189	12' x 20'	240	26.7
Jacobsen Avenue	119 to 125	12' x 35'	420	46.7
Jacobsen Avenue	49	12' x 15'	180	20.0
Amy Avenue	1589	12' x 45'	540	60.0
		TOTAL:	8,202	911.4

Village of Villa Park

Asphalt Patching and Resurfacing Program



Pavement patching will be completed at various locations within the Village of Villa Park village limits.

No work will take place within any state right-of-way.

GIS consortium MapOffice™

Woodridge Driveway Patching Exhibit

VILLAGE OF WOODRIDGE

ESTIMATE OF DRIVEWAY PATCHING

Location	PATCH DEPTH (INCH)	LENGTH (LF)	WIDTH (LF)	SQ.YD.	Comments
7309 Catalpa Avenue	3	14	9	14.0	
2704 Ravinia Lane	3	12	11	15.0	
2811 Cooper Court	3	6	10	7.0	
6125 Allan Drive	3	6	8	6.0	
2813 Kincaid Drive	3	12	16	22.0	
6117 Ridgeway Drive	3	12	16	22.0	

VILLAGE OF WOODRIDGE

ESTIMATE OF PAVEMENT PATCHING

Location	PATCH DEPTH (INCH)	LENGTH (LF)	WIDTH (LF)	SQ.YD.	Comments
3 Oakview Court	4	14	9	14.0	
2420 Davey Road	4	12	37	50.0	
Internationale Parkway	2	45	20	100.0	Northwest Corner of Werch and Internationale
1940 Internationale Parkway	2	115	12	154.0	
10204 Werch Drive	2	40	19	85.0	
2353 Goldfinch Street	2	8	10	9.0	
2349 Goldfinch Street	2	8	10	9.0	
2345 Goldfinch Street	2	6	8	6.0	
6716 Westmoreland Drive	2	18	40	80.0	
6621 Westmoreland Drive	2	52	15	87.0	Southbound
6621 Westmoreland Drive	2	10	6	7.0	Northbound
8337 Mendingwall Drive	2	19	14	30.0	
8352 Mendingwall Drive	2	9	14	14.0	

Appendix G

Quantities by Municipality

ITEM DESCRIPTION	UNIT	LOMBARD	BENSENVILLE	GLENDALE HEIGHTS	VILLA PARK	WOODRIDGE	TOTAL QTY
EARTH EXCAVATION	CY	100	-	-	-	-	100
REM & DISP OF UNSUITABLE MATERIAL	CY	50	-	-	-	-	50
HOT-MIX ASPHALT BASE COURSE 6"	SY	1,814	-	-	-	-	1,814
AGGREGATE FOR TEMPORARY ACCESS	TN	200	-	-	-	-	200
BIT. MATERIALS (TACK COAT)	LB	21,394	3,615	-	-	-	25,009
LEVELING BINDER (MACHINE METHOD), N50	TN	1,365	-	-	-	-	1,365
TEMPORARY RAMP	SY	100	-	-	-	-	100
HMA BINDER COURSE, IL-19.0, N50, 2.25"	TN	2,663	-	-	-	-	2,663
HMA SURFACE COURSE, MIX D, N50, 2"	TN	2,219	-	-	-	-	2,219
PORTLAND CONCRETE SIDEWALK 5"	SF	2,650	-	-	-	-	2,650
DETECTABLE WARNING, PLASTIC	SF	530	-	-	-	-	530
HMA SURFACE REMOVAL, 2"	SY	28,989	-	13,800	-	-	42,789
HMA SURFACE REMOVAL 3"	SY	7,450	-	-	-	-	7,450
HMA SURFACE REMOVAL, 4"	SY	12,558	-	-	-	-	12,558
DRIVEWAY PAVEMENT REMOVAL	SY	350	-	-	-	86	436
COMB CURB AND GUTTER REMOVAL	FT	1,082	-	-	-	-	1,082
SIDEWALK REMOVAL	SF	2,650	-	-	-	-	2,650
CLASS D PATCHES, TYPE II, 2" HMA SURFACE COURSE, MIX D, N50, 2"	SY	-	-	-	-	45	45
CLASS D PATCHES, TYPE IV, 2" HMA SURFACE COURSE, MIX D, N50, 2"	SY	-	-	-	8,500	536	9,036
CLASS D PATCHES, TYPE IV, 3" HMA SURFACE COURSE MIX D, N50, 3"	SY	-	3,964	-	-	-	3,964
CLASS D PATCHES, TYPE II, 4"	SY	-	-	-	-	14	14
CLASS D PATCHES, TYPE IV, 4"	SY	-	-	-	-	50	50
CLASS D PATCHES, TYPE IV, 6"	SY	2,500	-	1,352	-	-	3,852
CLASS D PATCHES, TYPE IV, 10"	SY	50	-	-	-	-	50
PIPE UNDERDRAINS, 4"	LF	400	-	-	-	-	400
COMB CONC CURB & GUTTER, TB6.12	FT	1,032	-	-	-	-	1,032
COMB CONC CURB & GUTTER, TB6.24	FT	50	-	-	-	-	50
NON-SPECIAL WASTE DISPOSAL	CY	50	-	-	-	-	50
TRAFFIC CONTROL & PROTECTION	LS	1	-	-	-	-	1
TRAFFIC CONTROL & PROTECTION	LS	-	1	-	-	-	1
TRAFFIC CONTROL & PROTECTION	LS	-	-	1	-	-	1
TRAFFIC CONTROL & PROTECTION	LS	-	-	-	1	-	1
TRAFFIC CONTROL & PROTECTION	LS	-	-	-	-	1	1

ITEM DESCRIPTION	UNIT	LOMBARD	BENSENVILLE	GLENDALE HEIGHTS	VILLA PARK	WOODRIDGE	TOTAL QTY
THERMOPLASTIC PAVEMENT MARKING-LINE 4" YELLOW	FT	2,695	-	-	-	-	2,695
THERMOPLASTIC PAVEMENT MARKING-LINE 4" WHITE	FT	375	-	-	-	-	375
THERMOPLASTIC PAVEMENT MARKING-LINE 6" WHITE	FT	134	-	-	-	-	134
THERMOPLASTIC PAVEMENT MARKING-LINE 24" WHITE	LF	350	-	-	-	-	350
THERMOPLASTIC PAVEMENT MARKING-LETTERS & SYMBOLS	SF	144	-	-	-	-	144
DETECTOR LOOP, TYPE I	FT	325	-	-	-	-	325
HMA DRIVEWAY PAVEMENT 3"	SY	250	-	-	-	86	336
DRAINAGE AND UTILITY STRUCTURES TO BE ADJUSTED	EA	116	-	-	-	-	116
DRAINAGE AND UTILITY STRUCTURES TO BE RECONSTRUCTED	EA	5	-	-	-	-	5
PULVERIZED TOPSOIL, FURNISHED AND PLACED, 4" (SPECIAL)	SY	1,200	-	-	-	-	1,200
SEEDING	SY	1,200	-	-	-	-	1,200
EROSION CONTROL BLANKET (SPECIAL)	SY	1,200	-	-	-	-	1,200
MIXTURE FOR CRACKS, JOINTS AND FLANGEWAYS	TN	50	-	-	-	-	50
PCC DRIVEWAY PAVEMENT, 6" (SPECIAL)	SY	100	-	-	-	-	100
DUST CONTROL	UNIT	25	-	-	-	-	25