

INVITATION FOR BIDS

BID DOCUMENTS AND SPECIFICATIONS

2019 SEWER LINING

FOR THE MUNICIPALITIES OF:

BUFFALO GROVE and WHEELING

VILLAGE OF BUFFALO GROVE
50 Raupp Blvd
Buffalo Grove, IL 60089
(847) 459-2500



BID NOTICE

Sealed proposals will be received by the Village of Buffalo Grove, 50 Raupp Blvd, Buffalo Grove, Illinois, and will be publicly opened at 9:30 a.m. local time **on June 11, 2019**. Each bidder shall deliver their Bid Proposal along with their Bid Security in a sealed envelope or box. The envelope or box shall be marked or endorsed:

VoBG-2019-14
SANITARY SEWER LINING FOR THE MUNICIPALITIES OF:
BUFFALO GROVE and WHEELING

Scope of work will consist of sewer cleaning, televising, and cured-in-place pipelining of 12,510 linear feet of existing sanitary pipes by the Inversion and Curing of a Resin-Impregnated Tube process. The project includes approximately 2,857 feet of 8" diameter, 894 feet of 10" diameter, 1,527 feet of 12" diameter, 2,007 feet of 21" diameter, 4,566 feet of 24" diameter and 659 feet of 30" diameter sanitary sewer. Work will also include bypass pumping, restoration, and other related and incidental work as further described in the Contract Documents.

For information on how to receive a copy of the Bid Package and any addenda visit the Village of Buffalo Grove procurement website at <https://www.vbg.org/bids> or contact the Office of the Purchasing Manager at 847-459-2500

All bids shall be accompanied by a Bid Bond, Certified or Cashier's Check made payable to the Village of Buffalo Grove for not less than **ten percent (10%)** of the bid amount. The successful bidder must furnish a satisfactory performance and payment bond in the full amount of the bid.

All work under this contract shall comply with the Prevailing Wage Act of the State of Illinois, 820 ILCS 130/0.01 et seq. & the Employment of Illinois Workers on Public Works Act (30 ILCS 570/0.01 et. seq).

Any Bid submitted unsealed, unsigned, fax transmissions or received subsequent to the aforementioned date and time, will be disqualified and returned to the bidder.

The Municipalities reserve the right to reject any and all bids or parts thereof, to waive any irregularities or informalities in bid procedures and to award the contract in a manner best serving the interest of the Municipalities.

Dated: **May 24, 2019**

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SCHEDULE OF PRICES
2019 Sewer Lining Project

Company Name: _____

Address: _____

City, State, Zip: _____

BIDDER agrees to perform all the work described on the CONTRACT DOCUMENTS for the prices as follows:

ITEM NO.	DESCRIPTION	UNIT	BUFFALO GROVE QTY	WHEELING QTY	QUANTITY TOTALS	UNIT PRICE	TOTAL PRICE
1	PRE-CONSTRUCTION CLEANING AND TELEVISIONING OF SEWER	LF	4,250	8,260	12,510		
2	DYE TESTING OF EXISTING SERVICE CONNECTIONS	EA	3	2	5		
3	CURED-IN-PLACE PIPELINING, 8" DIAMETER	LF	2,243	614	2,857		
4	CURED-IN-PLACE PIPELINING, 10" DIAMETER	LF		894	894		
5	CURED-IN-PLACE PIPELINING, 12" DIAMETER	LF		1,527	1,527		
6	CURED-IN-PLACE PIPELINING, 21" DIAMETER	LF	2,007		2,007		
7	CURED-IN-PLACE PIPELINING, 24" DIAMETER	LF		4,566	4,566		
8	CURED-IN-PLACE PIPELINING, 30" DIAMETER	LF		659	659		
9	INTERNAL SERVICE LATERAL REINSTATEMENT	EA	27	9	36		
10	PROTRUDING TAP REMOVAL	EA	5	1	6		
11a.	BYPASS PUMPING - BUFFALO GROVE	LS	1		1		
11b.	BYPASS PUMPING - WHEELING	LS		1	1		
12	PRE-CONSTRUCTION SURFACE VIDEO RECORDING	LS		1	1		
13a.	TRAFFIC CONTROL AND PROTECTION- BUFFALO GROVE	LS	1		1		
13b.	TRAFFIC CONTROL AND PROTECTION - WHEELING	LS		1	1		
						Total Base Bid:	

TOTAL BASE BID
(in writing)

Any and all exceptions to these specifications MUST be clearly and completely indicated on the bid sheet. Attach additional pages if necessary. **NOTE TO BIDDERS:** Please be advised that any exceptions to these specifications may cause your bid to be disqualified. Submit bids by SEALED BID ONLY. Fax and e-mail bids are not acceptable and will not be considered.

THE SECTION BELOW MUST BE COMPLETED IN FULL AND SIGNED

The undersigned hereby certifies that they have read and understand the contents of this solicitation and agree to furnish at the prices shown any or all of the items above, subject to all instructions, conditions, specifications and attachments hereto. Failure to have read all the provisions of this solicitation shall not be cause to alter any resulting contract or to accept any request for additional compensation. By signing this bid document, the bidder hereby certifies that they are not barred from bidding on this contract as a result of a violation of either Section 33E-3 or 33E-4 of the Illinois Criminal Code of 1961, as amended.

Authorized Signature: _____

Company Name: _____

Typed/Printed Name: _____

Date: _____

Title: _____

E-mail: _____

Telephone Number: _____

GENERAL TERMS AND CONDITIONS

The Village of Buffalo Grove (“Buffalo Grove”), and The Village of Wheeling (“Wheeling”) (separately, “Village” or “Municipality”; collectively, “Municipalities”) intend to jointly bid sanitary sewer lining and award to a primary bidder or contractor (“Contractor”)

Through this 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 will in turn extend to the Municipalities via lower pricing. The Village of Buffalo Grove is conducting the bidding process on behalf of the Municipalities. Each Municipality’s municipal manager or board of trustees/Village council as the case may be, will have the right to review and independently approve or reject the bid award and execute the Contract Acceptance. There will be separate contracts for each Village.

The work performed 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/).

Submissions shall include, at a minimum, five (5) references that indicate the bidder’s ability to successfully perform similar work within the last three (3) years. At a minimum reference submissions shall include two (2) municipal references.

1. **BID PRICE**

The Contractor shall provide pricing per the specifications identified herein.

2. **PRE-BID CONFERENCE**

BUFFALO GROVE - NO PRE-BID MEETING WILL BE HELD.

WHEELING – MANDATORY PRE-BID MEETING WILL BE TUESDAY, JUNE 4, 2019, 10:00 A.M.

Contractors are warned that no allowance will be granted to bidders unfamiliar with the work.

3. **AWARD**

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 municipality.

4. **CALENDAR DAYS AND TIME.**

Unless otherwise provided in this Contract any reference in this Contract to “day” or “days” shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Contract falls on a Saturday, Sunday or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday or federal holiday.

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.

6. JOINT PURCHASING/PURCHASING EXTENSION

The purchase of goods and services pursuant to the terms of this Contract 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 Buffalo Grove shall not be responsible in any way for purchase orders or payments made by the Village of Wheeling. The bidder further agrees that all terms and conditions of this Contract shall continue in full force and effect for each Village during the extended term of this Contract.

Bidder and the other Municipalities may negotiate such other and further terms and conditions to this Contract ("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 Municipalities with all documentation as required in the request/invitation for bids ("RFB"), and as otherwise required by the Village of Buffalo Grove, 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 each of the other Municipalities for work performed

7. WAIVER OF WORKERS COMPENSATION/OCCUPATIONAL DISEASE EXPENSE REIMBURSEMENT

The Contractor agrees to waive any and all rights to reimbursement of workers' compensation expenses under Section 1(a)(4) of the Illinois Workers' Compensation Act (820 ILCS 305), and as amended; and the Contractor agrees to waive any and all rights to reimbursement of occupational disease expenses under Section 1(a)(3) of the Illinois Occupational Diseases Act (820 ILCS 310), and as amended.

8. UNBALANCED BIDS

Any bid which is materially unbalanced as to prices for the Base Bid and/or Optional Bid Items may be rejected. An unbalanced bid is one which is based on the prices significantly less than the cost for some work and/or prices which are significantly overstated for other work.

The Village of Buffalo Grove and the Village of Wheeling will review all unit prices submitted by the apparent lowest responsible bidder and will decide whether any of the unit prices are excessively above or below a reasonable cost analysis value determined by the Owners.

In the event any unit prices are determined to be unbalanced and contrary to the interest of the Village of Buffalo Grove, the right is reserved to reject such bid at the discretion of the Village of Buffalo Grove.

9. DISCREPANCIES

In all cases of discrepancies between the drawings and specifications, respective Village shall be notified in the manner as identified in the General Terms and Conditions. The specifications shall govern over the drawings. If work proceeds without obtaining proper interpretations of the conflicting drawings and specifications from the owner or their designee, the installed work that is not in accordance with the design and best practices must be replaced at no additional cost.

10. OMISSIONS/HIDDEN CONDITIONS

The drawings and specifications are intended to include all work and materials necessary for

completion of the work. Any incidental item of material, labor, or detail required for the proper execution and completion of the work and omitted from either the drawings or specifications or both, but obviously required by governing codes, federal or state laws, local regulations, trade practices, operational functions, and good workmanship, shall be provided as a part of the contract work at no additional cost to the owner, even though not specifically detailed or mentioned.

11. **FIELD MODIFICATIONS**

A field modification is written by the owner or his designee to the contractor for purposes of clarification of the specifications or plans. A field modification is limited to items that do not change the scope of the project. Field modifications do not affect either the project cost or completion date.

Field modifications become part of the Contract Documents and become binding upon the contractor if he fails to object within three (3) working days after receiving the modification. A field modification may be used as the basis of a project cost change or contract extension if all parties agree on the field modification form to a potential future claim of either party, or that the field modification will be compiled with, but under protest.

Any bid which is materially unbalanced as to prices for the Base Bid and/or Optional Bid Items may be rejected. An unbalanced bid is one which is based on the prices significantly less than the cost for some work and/or prices which are significantly overstated for other work.

The Municipalities will review all unit prices submitted by the apparently lowest responsible bidder and will decide whether any of the unit prices are excessively above or below a reasonable cost analysis value determined by the Owners.

In the event any unit prices are determined to be unbalanced and contrary to the interest of the Municipalities, the right is reserved to reject such bid at the discretion of the Municipalities.

12. **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 the 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.

The individual municipalities reserve the right to utilize their own specific Contracts for execution of awarded proposal/bid. The contracts are available for review by contacting the respective Project Manager listed in Appendix A.

13. **DOCUMENT OBTAINED FROM OTHER SOURCES**

The Village of Buffalo Grove is the only official source for bid packages and supporting materials.

Registration with the Village of Buffalo Grove at <https://www.vbg.org/bids> is the only way to ensure bidders receive all Addenda and other Notices concerning this project. The Village of Buffalo Grove cannot ensure that bidders who obtain bid packages from sources other than The Village of Buffalo Grove web portal will receive Addenda and other Notices. All bidders are

advised that bids that do not conform to the requirements of this bid package, including compliance with and attachment of all Addenda and other Notices, may, at The Village of Buffalo Grove's discretion, be rejected as non-responsive and/or the bidder disqualified. **In such cases, The Village of Buffalo Grove will NOT rebid the project absent extraordinary circumstances.**

14. **SECURITY GUARANTEE**

Each bidder shall submit a Bid Bond, Certified or Cashier's Check in the amount of **10%** to serve as a guarantee that the bidders shall enter into a contract with the Municipalities to perform the work identified herein, at the price bid. As soon as the bid prices have been compared, The Village of Buffalo Grove will return the bonds of all except the three lowest responsible bidders. When the Contract is executed the bonds of the two remaining unsuccessful bidders will be returned. The bid bond of the successful bidder will be retained until the payment bond and performance bond have been executed and approved, after which it will be returned.

Any bid not complying with the Security requirement will be rejected as non-responsive.

15. **CONTRACT BONDS**

The successful Contractor shall furnish within ten (10) calendar days after being notified of the acceptance of bid:

- 15.1 A performance bond satisfactory to each municipality, executed by a surety company authorized to do business in the State of Illinois, in an amount equal to 100 percent (100%) of the contract price as security for the faithful performance of the municipality's contract; and
- 15.2 A payment bond satisfactory to each municipality, executed by a surety company authorized to do business in the State of Illinois, for the protection of all persons supplying labor and materials to the Contractor of Subcontractors for the performance of work provided for in the contract, in an amount equal to 100 percent (100%) of the contract price.
- 15.3 Documents required by this section must be received and approved by the Municipality before a written contract will be issued.

All bonds must be from companies having a rating of at least A-minus and of a class size of at least X as determined by A.M. Best Ratings.

16. **ADDITIONAL INFORMATION**

Should the bidder require additional information about this bid, submit questions via email to: bgfinance@vbg.org. All such e-mails must contain "VBG & VWH 2019 Sewer Lining" in the subject line of the e-mail. Questions are required **no later than 12:01 P.M. on June 6, 2019.**

ANY and ALL changes to these specifications are valid only if they are included by written Addendum from the Village of Buffalo Grove 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 Buffalo Grove 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 Buffalo Grove will be able to answer every request for further information or that the schedule for receipt and

evaluation of proposals will be modified to accommodate such request.

17. 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 Purchasing Department reserves the right to disqualify any bidder found to have contacted Municipal Personnel in any manner with regard to the Project. Additionally, if the Purchasing Department 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 Cook County State's Attorney for review and prosecution.

18. DISCLOSURE OF POTENTIAL OR ACTUAL CONFLICT OF INTEREST

Each Municipality's Code of Ethics prohibits public officials or employees from performing or participating in an official act or action with regard to a transaction in which he has or knows he will thereafter acquire an interest for profit, without full public disclosure of such interest. This disclosure requirement extends to the spouse, children and grandchildren, and their spouses, parents and the parents of a spouse, and brothers and sisters and their spouses.

To ensure full and fair consideration of all bids, the Municipalities require all Bidders including owners or employees to investigate whether a potential or actual conflict of interest exists between the Bidder and any Municipality, their officials, and/or employees. If the Bidder discovers a potential or actual conflict of interest, the Bidder must disclose the conflict of interest in its bid, identifying the name of the municipal official or employee with whom the conflict may exist, the nature of the conflict of interest, and any other relevant information. The existence of a potential or actual conflict of interest does NOT, on its own, disqualify the disclosing Bidder from consideration. Information provided by Bidders in this regard will allow The Village of Buffalo Grove to take appropriate measures to ensure the fairness of the bidding process.

The Village of Buffalo Grove requires all bidders to submit a certification, enclosed with this bid packet, that the bidder has conducted the appropriate investigation and disclosed all potential or actual conflicts of interest.

By submitting a bid, all Bidders acknowledge and accept that if a Municipality discovers an undisclosed potential or actual conflict of interest, that Municipality may disqualify the Bidder and/or refer the matter to the appropriate authorities for investigation and prosecution.

19. SILENCE OF SPECIFICATIONS

The apparent silence of specifications as to any detail or apparent omission from a detailed description concerning any portion shall be interpreted as meaning that only the best commercial material or practice shall prevail and that only items of the best material or workmanship to be used.

20. NEW PARTS AND MATERIALS: TITLE

Equipment and materials must be of current date (latest model or supply) and meet specifications. This provision excludes the use of surplus, re-manufactured or used products, whether in part or in whole, except where specifications explicitly provide therefore. Further, the bidder warrants that it has lien free title to all equipment, supplies, or materials purchased under the terms of this contract.

21. PREVAILING WAGE

All contracts, for work herein are subject to the provisions of the Prevailing Wage Act, 820 ILCS 130/0.01 et. seq.); providing for the payment of the prevailing rate of wage to all laborers, workmen and mechanics engaged on the work. This shall include payment of the general prevailing rate for

legal holiday and overtime work. Any revisions to the enclosed prevailing wage information prior to the date of the contract shall be in force for the duration of the contract.

22. **CERTIFIED PAYROLL REQUIREMENTS (820 ILCS 130/5)**

Contractors and subcontractors on public works projects must submit certified payroll records on a monthly basis to the public body in charge of the project, along with a statement affirming that such records are true and accurate, that the wages paid to each worker are not less than the required prevailing rate and that the contractor is aware that filing records he or she knows to be false is a Class B misdemeanor.

The certified payroll records must include for each worker employed on the public works project the name, address, telephone number, last four digits of social security number, job classification, hourly wages paid in each pay period, number of hours worked each day, and starting and ending time of work each day. These certified payroll records are considered public records and public bodies must make these records available to the public under the Freedom of Information Act, with the exception of the employee's address, telephone number and social security number. Any contractor who fails to submit a certified payroll or knowingly files a false certified payroll is guilty of a Class B misdemeanor.

23. **EMPLOYMENT OF ILLINOIS WORKERS ON PUBLIC WORKS ACT (30 ILCS 570/0.01 et.seq.)**

Pursuant to 30 ILCS 570/0.01 et. seq., any month immediately following 2 consecutive calendar months during which the level of unemployment in the State of Illinois has exceeded 5% as measured by the United States Department of Labor, the Contractor shall employ at least 90% Illinois laborers on this project unless Illinois laborers are not available, or are incapable of performing the particular type of work involved, which the contractor must certify with the Purchasing Division or Approved Equal.

24. **NON-DISCRIMINATION AND LEGAL EMPLOYMENT PRACTICES (775 ILCS 5/)**

In the event of the Contractor's non-compliance with the provisions of the Equal Employment Opportunity Clause, the Illinois Human Rights Act or the Applicable Rules and Regulations of the Illinois Department of Human Rights ("Department"), the contractor may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, and the contract may be cancelled or voided in whole or part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute or regulation.

25. **SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS PROJECTS ACT**

Contractor shall comply with the provisions of 820 ILCS 265/1, *et seq.*, which include prior to commencement of work on a municipal project, having in place a written substance abuse program for the prevention of substance abuse among its employees which meets or exceeds the program requirements identified in this Act. The substance abuse policy shall be submitted in writing to the municipality and shall be made available to the general public.

26. **TOXIC SUBSTANCES DISCLOSURES**

All bidders must comply with the requirements of the Toxic Substance Disclosure to Employees Act, 820 ILCS 255/1, *et seq.*, for any materials, supplies, and covered by said Act.

27. **DEFINITIONS**

27.1 **Base Bid** is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which Work may be added or from which Work may be deleted for sums stated in Option Bids or Unit Prices.

27.2 **Unit Price** is an amount stated in the bid as a price per unit of measurement for materials,

equipment or services, including all overhead and profit for a portion of the Work as described in the Bidding Documents.

The Municipality may reject or negotiate any unit price which is considered excessive or unreasonable.

In the event of a conflict or calculation error between the total base bid pricing, and/or extension pricing, the Unit Price shall prevail.

28. RESPONSIVE BID

28.1 A "Responsive Bid" is defined as a "bid which conforms in all material respects to the requirements set forth in the invitation for bids." Bidders are hereby notified that any failure to comply with the requirements of this bid may be cause for rejection of the bid.

28.2 Bidders shall promptly notify The Village of Buffalo Grove of any ambiguity, inconsistency or error which they may discover upon examination of the bidding documents. Interpretations, corrections and changes will be made by addendum. Each bidder shall ascertain prior to submitting a bid that all addenda have been received and acknowledged in the bid.

29. MODIFICATIONS

BIDDERS shall be allowed to modify/withdraw their bids prior to opening. Once BIDS have been received and opened they cannot be changed or withdrawn unless requested in writing and approved by the Village of Buffalo Grove.

30. ACCIDENT PREVENTION

The Contractor shall exercise every precaution at all times to protect itself, the property of the Municipalities and the property of others. The safety provision of all applicable laws and ordinances shall be strictly observed by the Contractor at all times. Any practice deemed hazardous or dangerous by the Municipalities shall be immediately discontinued by the Contractor upon receipt of instructions from the authorized representatives. To the fullest extent permitted by law, the Contractor shall be solely responsible for all safety-related matters.

In the event of any accident of any kind that involves the general public or property of the Village or a third party, the Contractor shall immediately notify the Village representative by phone as well as provide Notice of the same. The Notice shall include a full accounting of all details of the accident. The Contractor shall furnish the Village with copies of all reports of such accidents at the same time that the reports are forwarded to any other interested parties.

31. INSURANCE

The Contractor shall not commence work under this contract until the Contractor has obtained all insurance required herein and such insurance has been approved by the Municipalities. Contractor shall procure and maintain, for the duration of the Contract and any maintenance period, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. Separate insurance documents are required for each Municipality. The requirements listed here apply to both Municipalities unless stated otherwise.

31.1 Minimum Scope of Insurance: Coverage shall be at least as broad as:

Insurance Services Office Commercial General Liability occurrence form CG 0001 with each Municipality named as additional insured on a primary and non-contributory basis. This

primary, non-contributory additional insured coverage shall be confirmed through the following required policy endorsements: ISO Additional Insured Endorsement CG 20 10 or CG 20 26 and CG 20 01 04 13.

- a) Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Municipality named as additional insured, on a form at least as broad as the ISO Additional Insured Endorsement CG 2010 and CG 2026
- b) Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."
- c) Workers' Compensation as required by the Labor Code of the State of Illinois and Employers' Liability insurance.
- d) Owners and Contractors Protective Liability (OCP) policy with the Village of Buffalo Grove as insured.
- e) Builder Risk Property Coverage with Village as loss payee

31.2 Minimum Limits of Insurance: Contractor shall maintain limits no less than:

- a) Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$4,000,000 or a project/contract specific aggregate of \$2,000,000.
- b) Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
- c) Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.
- d) Owners and Contractors Protective Liability (OCP): \$1,000,000 combined single limit per occurrence for bodily injury and property damage.
- e) Builder's Risk: Shall insure against "All Risk" of physical damage, including water damage (flood and hydrostatic pressure not excluded), on a completed replacement cost basis.

31.3 Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Village. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as it respects the Village, its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

31.4 Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

General Liability and Automobile Liability Coverages:

- a) The Village, their officials, agents, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Village, their officials, agents, employees and volunteers.
- b) RJN Group shall be named as additional insured.
- c) The Contractor's insurance coverage shall be primary and non-contributory as respects the Village, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Village, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.

- d) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Village, its officials, agents, employees and volunteers.
- e) The Contractor's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
- f) If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Contractor shall be required to name the Village, its officials, employees, agents and volunteers as additional insureds
- g) All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
- h) The contractor and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by the Village. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding

31.5 All Coverages

- a) No Waiver. Under no circumstances shall the Village be deemed to have waived any of the insurance requirements of this Contract by any act or omission, including, but not limited to:
 - i) Allowing work by Contractor or any subcontractor to start before receipt of Certificates of Insurance and Additional Insured Endorsements.
 - ii) Failure to examine, or to demand correction of any deficiency, of any Certificate of Insurance and Additional Insured Endorsement received.
- b) Each insurance policy required shall have the Village expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

31.6 Acceptability of Insurers

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

31.7 Verification of Coverage

Contractor shall furnish the Village with certificates of insurance naming the appropriate Village (Buffalo Grove and/or Wheeling), RJN Group, their officials, agents, employees, and volunteers as additional insured's and with original endorsements, affecting coverage required herein. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the Village before any work commences. The Village reserves the right to request full certified copies of the insurance policies and endorsements.

31.8 Subcontractors

Contractor shall include all subcontractors as insured's under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to all of the requirements stated herein.

31.9 Assumption of Liability

The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any subcontractor, any supplier or any other person and

assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to the Contract.

31.10 Workers' Compensation and Employers' Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Village of Buffalo Grove, its officials, employees, agents and volunteers for losses arising from work performed by Contractor for the municipality.

31.11 Failure to Comply:

In the event the Contractor fails to obtain or maintain any insurance coverage's required under this agreement, The Municipalities may purchase such insurance coverage's and charge the expense thereof to the Contractor.

32. **HOLD HARMLESS**

The Contractor agrees to indemnify, save harmless and defend the Village of Buffalo Grove, Village of Wheeling, and their respective elected and appointed officials, employees, agents, consultants, attorneys and representatives and each of them against and hold it and them harmless from any and all lawsuits, claims, injuries, demands, liabilities, losses, and expenses; including court costs and attorney's fees for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of, or in connection with the work covered by this project. The obligations of the Contractor under this provision shall not be limited by the limits of any applicable insurance required of the Contractor.

33. **CHANGE IN STATUS**

The Contractor shall notify The Village of Buffalo Grove and the Village of Wheeling immediately of any change in its status resulting from any of the following: (a) vendor is acquired by another party; (b) vendor becomes insolvent; (c) vendor, voluntary or by operation law, becomes subject to the provisions of any chapter of the Bankruptcy Act; (d) vendor ceases to conduct its operations in normal course of business. The Village of Buffalo Grove and the Village of Wheeling shall have the option to terminate its contract with the vendor immediately on written notice based on any such change in status.

34. **SUBCONTRACTORS**

If any Bidder submitting a bid intends on subcontracting out all or any portion of the engagement, that fact, and the **name of the proposed subcontracting firm(s) must be clearly disclosed in the bid on the form provided herein** (use additional sheets if necessary) **Failure to identify subcontractors could result in disqualification.**

In the event the Contractor requires a change of the subcontractor(s) identified a written request from the Contractor and a written approval from The Village of Buffalo Grove is required.

Notwithstanding written consent to subcontract approved by the Municipalities, the Contractor shall perform with the Contractor's own organization, work amounting to not less than fifty (50%) percent of the total contract cost, and with materials purchased or produced by the Contractor.

The subcontracting, if any, shall be done by the Contractor in accordance with applicable Article 108.01 of the Illinois Department of Transportation ("IDOT") Standard Specifications.

35. **CHANGE ORDERS**

The Municipality believes that the project is fully defined in the Contract Documents and that Change orders will not be necessary. However, **in the event that a Change Order is required, the Contractor shall review the scope of work to be performed under the contract to suggest alternatives that can be implemented to offset the cost increase of any necessary changes**

without sacrificing the quality and/or scope of the contract specifications. All Change Orders and alternative suggestions must be approved by Municipalities prior to execution.

- 35.1. Change Orders shall comply with 720 ILCS 5/33E-9.
- 35.2. In case of an increase in the Contract Sum, there will be an allowance for overhead and profit.
- 35.3. The allowance for the combined overhead and profit, including premiums for all bonds and insurance, shall be based on the percentage as bid. This same percentage shall apply to **both extras and credits and for work** performed by the Contractor, a Subcontractor, or Sub-subcontractor.
- 35.4. Detailed written Requests for Change Orders must be submitted to the Municipality's Representative on the form provided by the Municipality. (Request furnished in any other format or lacking sufficient information will be rejected). In order to facilitate checking of quotations for extras or credits, all requests for change orders shall be accompanied by a complete itemization of costs including labor, materials and Subcontracts. Where major cost items are Subcontracts, they shall also be itemized. Requests will be reviewed by the affected Municipality's Project Manager
- 35.5. Each written Request for a Change Order must be accompanied by written suggestions where costs can be reduced to offset the Change Order increase requested or a written certification stating that the Contractor has reviewed the work to be performed and cannot identify areas where costs can be reduced.
- 35.6. A written Change Order must be issued by the affected Municipality's Project Manager prior to commencing any additional work covered by such order. Work performed without proper authorization shall be the Contractor's sole risk and expense.

36. **NOTICE OF STARTING WORK**

The Contractor shall provide Notice to the Village prior to the Contractor, or its employees or subcontractors, starting the Work or any phase of the Work.

37. **SEQUENCE OF WORK**

The Municipalities shall have the power to direct the order and sequence of the Work. On any major portion of the Work, all accessories shall be set coincident with the main construction. Payment for major portions of the Work may be withheld until proper completion of accessories.

38. **SUPERVISION**

The Village representative shall have override power to superintend and direct the Work, and the Contractor shall perform all of the Work herein specified to the satisfaction, approval and acceptance of the Village representative. The Contractor shall have at all times a competent foreman or superintendent at the Work's site, who shall have full authority to act for the Contractor and to receive and execute orders from the Village representative, and any instructions given to such superintendent or person, executing work for the Contractor, shall be binding on the Contractor as though it was personally given to the Contractor.

39. **CONDITIONS OF THE WORK SITE**

The Contractor shall provide and maintain such sanitary accommodations for the use of its employees as may be necessary to comply with the State and local Board of Health requirements. Public nuisances will not be permitted. The Contractor shall leave said Work's site(s) in the best possible condition to the complete satisfaction of the Village representative. No vehicles of any

kind shall be placed, parked, or operated upon any grass areas at any time except as authorized by the Village representative or his authorized representative. Further, the Contractor shall exercise every precaution for the protection of all persons and all property. The safety provisions of all-applicable laws and ordinances shall be strictly observed. Any practice hazardous in the opinion of the Village representative or his authorized representatives shall be immediately discontinued by the Contractor upon his receipt of instructions from the Village representative or his authorized representative. To the maximum extent permitted by law, the Contractor shall be responsible for all safety-related matters.

40. **WARRANTY PERIOD**

All material and workmanship shall be warranted and guaranteed according to manufacturer's recommendation after inspection and approval by the Village representative. All work performed by the Contractor shall be warranted by the Contractor following completion and final acceptance of the Work for a period of twelve (12) months from the date of final, and not substantial, completion.

41. **NO ASSIGNMENT**

If the Contractor sublets or assigns any part of the Work then the Contractor shall not under any circumstances be relieved of its liabilities hereunder. All transactions of the Municipalities shall be with the Contractor. Subcontractors shall be recognized only in the capacity of employees or workmen and shall be subject to the same requirements as to character and competence. The Contractor shall not assign, transfer, convey, sell or otherwise dispose of the whole or any part of this Contract to any person, firm or corporation without written consent of the Village representative.

42. **DEFAULT**

The following shall constitute a default an "**Event of Default**" by the Contractor under this Contract:

42.1 If the Contractor shall fail to strictly observe or perform one or more of the terms, conditions, covenants and agreements of this Contract;

42.2 If there shall be placed on any property owned by the Village any mechanics', materialmens' or suppliers' lien;

42.3 If there shall be instituted any proceeding against the Contractor seeking liquidation, dissolution or similar relief and the same shall not be dismissed within forty-five (45) calendar days;

42.4 If there shall be appointed any trustee, receiver or liquidator of the Contractor and such appointment shall not have been vacated within forty-five (45) calendar days; and

42.5 If the Contractor fails to maintain or obtain any and all permits, licenses and the like, if any, required by the Village, State or Federal governments for the Work.

Upon any Event of Default the Village shall have the option of (i) terminating the Contract; (ii) pursuing any remedy available to it at law or in equity; or (iii) pursuing both simultaneously. In addition, upon an Event of Default, the Village may withhold payments due to the Contractor until it has hired a replacement of the Contractor and deducted all costs of hiring a replacement.

43. **FREEDOM OF INFORMATION**

The Contractor agrees to furnish all documentation related to the Contract, the Work and any documentation related to the Village required under an Illinois Freedom of Information Act (ILCS 140/1 et. seq.) ("FOIA") request within five (5) calendar days after the Village issues Notice of such request to the Contractor. The Contractor agrees to defend, indemnify and hold harmless the Village, and agrees to pay all reasonable costs connected therewith (including, but not limited to attorney's and witness fees, filing fees and any other expenses) for the Village to defend any and all causes, actions, causes of action, disputes, prosecutions, or conflicts arising from Contractor's actual or alleged violation of FOIA or the Contractor's failure to furnish all documentation related to a FOIA request within five (5) calendar days after Notice from the Village for the same. Furthermore, should the Contractor request that the Village utilize a lawful exemption under FOIA in relation to any FOIA request thereby denying that request, Contractor agrees to pay all costs connected therewith (such as attorneys' and witness fees, filing fees and any other expenses) to defend the denial of the request. This defense shall include, but not be limited to, any challenged or appealed denials of FOIA requests to either the Illinois Attorney General or a court of competent jurisdiction.

44. **INVOICES AND PAYMENTS**

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

Invoices and signed certified payroll shall be delivered to:

Village of Buffalo Grove
Attn: Kyle Johnson

Village of Wheeling
Attn: Lana Rudnik

51 Raupp Blvd.
Buffalo Grove, IL 60089

2 Community Blvd.
Wheeling, IL 60090

45. **PAY ESTIMATES**

Each municipality will provide a spreadsheet that will list the segments and sewer pipe lengths to be lined. The contractor shall submit any changes at time of submittal of pay estimates, and two week schedules. The spreadsheet shall include at a minimum, the following items: street name (from – to); segment (from manhole to manhole); actual length; size of pipe; unit cost; service connections reinstated; protruding taps and End Seals. The items mentioned above are in addition to other required submittals, i.e., certified payroll, waivers of lien, invoice, and electronic payout form (provided by each municipality). Pay estimates shall be submitted by the Contractor once a month.

46. **PAYOUT PROCEDURES**

Each municipality payout procedure schedule will be submitted to the contractor at the preconstruction meeting. A monthly pencil draw meeting must be held between the contractor's representative and each municipality project manager to agree on the quantities to be submitted for payment. If a pencil draw meeting is not held, the project manager will submit to the contractor the latest quantities measured by municipality staff and those numbers must be used for the current billing period. If the contractors submitted quantities are different than those agreed to or submitted to each municipality, the municipality will proceed with the invoice approval of the lesser amount per line item (either the contractor's itemized invoice or the inspected and approved item quantity by the

municipality inspectors) for payment. In no case, will the line item invoice payment exceed the inspected and approved quantity per municipality inspection requirements.

Applications for payment must be submitted on a municipality approved itemized invoicing form that includes pay item descriptions, original contract quantities and unit prices, previous, current and total quantity summaries, and approved change orders. Other required submissions include the current waivers of lien, contractor's affidavits, contractor's sworn statement, certified payroll report, and any other documents or invoice paperwork as requested by each municipality.

Any questions pertaining to payments are to be forwarded to the municipal project manager. Contractors shall not call each municipality Finance Department with questions regarding pay applications. The pay application process is approximately six weeks from the pencil draw meeting to the issuance of checks. All checks will be mailed and no allowances will be made to hold checks for pickup.

47. PAYMENT FOR EXTRA WORK

The methods for measurements and payments for Extra Work shall be in accordance with the applicable articles of Section 109 of the IDOTSPECS.

Extra work shall not be started until written authorization from the respective Municipality is received. Extra work will be paid for at either the contract price, a lump sum price or agreed unit prices, or on a force account basis.

48. PRECEDENCE

Where there appears to be variances or conflicts among the contract documents in the terms, requirements or specifications of work, the following order of precedence shall prevail: The Village of Buffalo Grove Project Specifications; The Village of Buffalo Grove General Terms & Conditions, The Village of Buffalo Grove Invitation for Bids, General Terms & Specifications and the Contractor's Bid Response.

49. JURISDICTION, VENUE, CHOICE OF LAW

This contract shall be governed by and construed according to the laws of the State of Illinois. Jurisdiction and venue shall be exclusively found in the Circuit Court of Cook County.

50. NON-ENFORCEMENT BY THE MUNICIPALITY

The Contractor shall not be excused from complying with any of the requirements of the Contract because of any failure on the part of the Municipalities, on any one or more occasions, to insist on the Contractor's performance or to seek the Contractor's compliance with any one or more of said terms or conditions.

51. TORT IMMUNITY DEFENSES

Nothing contained in this Contract shall constitute a waiver by the Municipalities of any right, privilege or defense available to the Municipalities under statutory or common law, including, but not limited to, the Illinois Local Governmental and Governmental Tort Immunity Act, as amended.

52. INDEPENDENT CONTRACTOR

The Contractor is an independent contractor and no employee or agent of the Contractor shall be deemed for any reason to be an employee or agent of the Municipalities.

53. TERMINATION

Each Municipality reserves the right to terminate its respective portion of this contract, or any part thereof, upon thirty (30) days written notice. In case of such termination, the Contractor(s) shall be entitled to receive payment from the terminating Municipalities for work completed to date in accordance with the terms and conditions of this contract. In the event that this Contract is terminated due to Contractor's default, the Municipalities shall be entitled to purchase substitute items and/or services elsewhere and charge the Contractor with any or all losses incurred, including attorney's fees and expenses.

54. NON APPROPRIATIONS

The Municipalities reserve the right to terminate their respective part of this contract or to reject bids, in the event that sufficient funds to complete the contract are not appropriated by the Village Board of Trustees of the affected Municipality.

55. PROTEST PROCEDURE

Any bidder wishing to file a protest regarding the proposal process may do so by giving written notice to The Village of Buffalo Grove Purchasing Division within seven calendar days of the closing time and date. This notice should include the title of the requirement, the bid number, the closing date and the nature of the protest.

Any disputes concerning a question of fact under this procurement which is not disposed of by agreement shall be decided by the Municipality. The decision of the Municipality, or its duly authorized representative, for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessary to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the decision of the Purchasing Manager.

56. AFFIDAVITS

The following affidavits included in these contract documents must be executed and submitted with the bid:

- A) References
- B) Disqualification of Certain Bidders (Affirmation by signing Bid Form)
- C) Affidavit/Anti-collision
- D) Conflict of Interest Form
- E) Tax Compliance
- F) Identification of Subcontractors

57. ALTERNATE AND MULTIPLE BIDS

Unless otherwise indicated in these documents, the bidder may not submit alternate or multiple bids as part of this package. The submission of more than one bid within a single package may be cause for rejection of any or all of the bids of that bidder.

58. CONTRACTOR'S LICENSE

The Bidder to which the contract is awarded (including subcontractors), prior to commencing any work, must have a valid Contractor's License or other required license on-file with the Municipality in which the work is performed.

59. AUDIT/ACCESS TO RECORDS

- A) The contractor shall maintain books, records, documents and other evidence directly pertinent to performance of the work under this Contract consistent with generally accepted accounting standards in accordance with the American Institute of Certified Public Accountants Professional Standards. The contractor shall also maintain the financial information and data used by the contractor in the preparation or support of any cost submissions required under this subsection, (Negotiation of Contract Amendments, Change Orders) and a copy of the cost summary submitted to the owner. The Auditor General, the owner, the Agency, or any of their duly authorized representatives shall have access to the books, records, documents, and other evidence for purposes of inspection, audit, and copying. The contractor will provide facilities for such access and inspection.
- B) If this contract is a formally advertised, competitively awarded, fixed price contract, the contractor agrees to include access to records as specified in above. This requirement is applicable to all negotiated change orders and contract amendments in excess of \$25,000, which affect the contract price. In the case of all other prime contracts, the contractor also agrees to include access to records as specified above in all his contracts and all tier subcontracts or change orders thereto directly related to project performance, which are in excess of \$25,000.
- C) Audits conducted pursuant to this provision shall be consistent with generally accepted auditing standards in accordance with the American Institute of Public Accountants Professional Standards.
- D) The contractor agrees to the disclosure of all information and reports resulting from access to records pursuant to the subsection above. Where the audit concerns the contractor, the auditing agency will afford the contractor an opportunity for an audit exit conference and an opportunity to comment on the pertinent portions of the draft audit report. The final audit report will include the written comments, if any, of the audited parties.
- E) Records under the subsections above shall be maintained and made available during performance of the work under this Contract and until three years from the date of final audit for the project. In addition, those records which relate to any dispute or litigation or the settlement of claims arising out of such performance, costs or items to which an audit exception has been taken, shall be maintained and made available for three years after the date of resolution of such dispute, appeal, litigation, claim or exception.
- F) The right of access conferred by this clause will generally be exercised (with respect to financial records) under:
 - i. negotiated prime contractors;
 - ii. negotiated change orders or contract amendments in excess of \$25,000 affecting the price of any formally advertised, competitively awarded, fixed price contract; and
 - iii. subcontracts or purchase orders under any contract other than a formally advertised, competitively awarded, fixed price contract.

- G) This right of access will generally not be exercised with respect to a prime contract, subcontract, or purchase order awarded after effective price competition. In any event, the right of access shall be exercised under any type of contract or subcontract:
- i. with respect to records pertaining directly to contract performance, excluding any financial records of the contractor; and
 - ii. if there is any indication that fraud, gross abuse, or corrupt practices may be involved.

60. WITHDRAWAL OF BID

Upon written request, bids may be withdrawn at any time prior to the advertised bid opening. Bidders withdrawing their bid prior to the date and time set for the bid opening may still submit another bid if done so in accordance with these instructions. After the bid opening time, no bid shall be withdrawn or canceled for a period of ninety (90) calendar days thereafter. The successful Bidder shall not withdraw or cancel its bid after having been notified that the respective Municipalities Board of Trustees has accepted said bid, otherwise, Municipality shall claim contractors' bid bond and keep all the proceeds as compensation for any resulting delay and the work required to select another qualified contractor.

61. COMPETENCY OF BIDDER

If requested in writing by a municipality, the Bidder must present within three (3) working days, satisfactory evidence of its ability and possession of the necessary facilities, experience, financial resources and adequate insurance to comply with the terms of the Contract Documents.

Additionally, bidders shall provide, at a minimum, five (5) references that indicate the bidder's ability to successfully perform similar work on the form identified herein.

LABOR STATUTES, RECORDS AND RATES

CONSTRUCTION CONTRACTS for

MUNICIPALITIES - STATE OF ILLINOIS

February 21, 2019

All Contractors shall familiarize themselves with all provisions of all Acts referred to herein and in addition shall make an investigation of labor conditions and all negotiated labor agreements which may exist or are contemplated at this time. Nothing in the Acts referred to herein shall be construed to prohibit the payment of more than the prevailing wage scale.

In the employment and use of labor, the Contractor and any subcontractor of the Contractor shall conform to all Illinois Constitutional and statutory requirements including, but not limited to, the following:

- 1.0 Equal Employment Opportunity:
 - 1.1 Illinois Constitution, Article I, Section 17, which provides: "All persons shall have the right to be free from discrimination on the basis of race, color, creed, national ancestry and sex in the hiring and promotion practices of any employer or in the sale or rental of property."
 - 1.2 Illinois Constitution, Article I, Section 18, which provides: "The equal protection of the laws shall not be denied or abridged on account of sex by the state of its units of local government and school districts."
 - 1.3 The Public Works Employment Discrimination Act, 775 ILCS 10/1, provides in substance that no person may be refused or denied employment by reason of unlawful discrimination, nor may any person be subjected to unlawful discrimination in any manner in connection with contracting for or performance of any work or service of "any kind by, for, on behalf of, or for the benefit of the State, or of any department, bureau, commission, board or other political subdivision or agency thereof."
 - 1.4 Contractor shall comply with the Illinois Human Rights Act, 775 ILCS 5/1-101 et seq., as amended and any rules and regulations promulgated in accordance therewith, including, but not limited to the Equal Employment Opportunity Clause, Illinois Administrative Code, Title 44, Part 750 (Appendix B), which is incorporated herein by reference. Furthermore, the Contractor shall comply with the Public Works Employment Discrimination Act, 775 ILCS 10/0.01 et seq., as amended.
- 2.0 The Veterans Preference Act, 330 ILCS 55/1, provides: "In the employment and appointment to fill positions in the construction, addition to, or alteration of all public works undertaken or contracted for by the State, or any of its political subdivisions thereof, preference shall be given to persons who have been members of the Armed Forces of the United States...in times of hostilities with a foreign country..."
- 3.0 The Servicemen's Employment Tenure Act, as amended, 330 ILCS 60/2, "safeguarding the employment and the rights and privileges inhering in the employment contract, of servicemen."
- 4.0 The Prevailing Wage Act, 820 ILCS 130/0.01 et seq., provides: "It is the policy of the State of Illinois that a wage of no less than the general prevailing hourly rate as paid for work of a similar character in the locality in which the work is performed, shall be paid to all laborers, workers and mechanics employed by or on behalf of any and all public bodies engaged in public works." The current Schedule of Prevailing Wages for Cook County and/or Lake County must be prominently posted at the project site by the Contractor.

- 4.1 The Prevailing Wage Act, 820 ILCS 130/4, provides: "All bid specifications shall list the specified rates to all laborers, workers and mechanics in the locality for each craft or type of worker or mechanic needed to execute the contract. If the Department of Labor revises the prevailing rate of hourly wages to be paid by the public body, the revised rate shall apply to such contract, and the public body shall be responsible to notify the Contractor and each subcontractor of the revised rate."
- 4.1.1 The municipality shall notify the Contractor of any revised rates as determined by the Department of Labor and as received by the municipality. It shall be the responsibility and liability of the Contractor to promptly notify each and every subcontractor of said revised rates.
- 4.1.2 Unless otherwise specified in the Contract Documents, the Contractor shall assume all risks and responsibility for any changes to the prevailing hourly wage which may occur during the Contract Time. A revision to the prevailing rate of hourly wages shall not be cause for any adjustment in the Contract Sum.
- 4.2 The Prevailing Wage Act, 820 ILCS 130/5 provides that the Contractor and each Sub Contractor shall, "submit monthly, in person, by mail or electronically a certified payroll to the public body in charge of the project."
- 4.2.1 The Contractor shall submit to the municipality by the tenth day, monthly, a certified payroll list including all workers, laborers and mechanics employed by the Contractor and each of the Sub Contractors.
- 4.2.2 The certified payroll records shall include each worker's name, address, telephone number, last four digits of social security number, classification, number of hours worked each day, the hourly wage and starting and ending times each day.
- 4.2.3 Included with the payroll records, the Contractor and each Sub Contractor shall attest, in writing, to the veracity and accuracy of the records and that the hourly rate paid is not less than the general prevailing wages required.
- 5.0 The Child Labor Law, as amended, 820 ILCS 205/1, which provides: "No minor under 16 years of age...at any time shall be employed, permitted or suffered to work in any gainful occupation...in any type of construction work within this state."

The Contractor will include verbatim or by reference the provisions contained herein in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subcontractor. The Contractor will be liable for compliance with these provisions by such subcontractors.

The Contractor and each subcontractor shall keep or cause to be kept an accurate record of names, occupations and actual wages paid to each laborer, workman and mechanic employed by him in connection with the contract. This record shall be open at all reasonable hours for inspection by any representative of the municipality or the Illinois Department of Labor and must be preserved for four (4) years following completion of the contract.

The current Prevailing Wages Rates for Cook County can be found at:

https://data.illinois.gov/dataset/idol-2018-prevailing-wage-rates/resource/0c95f063-aed9-4db7-adc3-c224acee8fc2?view_id=2a43e3c8-0378-43c5-91ae-a1151c4cbc7e&filters=County%3ACook

GENERAL PROVISIONS
FOR
2019 SEWER LINING – VILLAGE OF BUFFALO GROVE AND VILLAGE OF WHEELING

General

Wherever the word "Project Manager" appears in this document, it shall be interpreted to mean each municipality representative. Wherever the word "Village" or "Municipality" (without specifying a particular Village) appears in this document, it shall be interpreted to mean each municipality.

Wherever the word "Contractor" appears in this document, it shall be interpreted to mean the firm, partnership, joint venture, or corporation contracting with each municipality for performance of prescribed work.

Scope of Project

The work will consist of sewer cleaning, televising, and cured-in-place pipelining of existing sanitary sewer pipes by the Inversion and Curing of a Resin-Impregnated Tube process. The project includes approximately 2,857 feet of 8" diameter sewer, 894 feet of 10" diameter sewer, 1,527 feet of 12" diameter sewer, 2,007 feet of 21" diameter sewer, 4,566 feet of 24" diameter sewer, and 659 feet of 30" diameter sewer. Work will also include bypass pumping, restoration, and other related and incidental work as further described in the Contract Documents.

The work contained on this project is located within the Village of Buffalo Grove and the Village of Wheeling. Work will be in Cook County Department of Transportation (CCDOT) or Illinois Department of Transportation (IDOT) easements or rights-of-way. Each municipality has the right to delete from or add to the contract quantities at the contract unit costs for construction.

While the Village of Buffalo Grove shall serve as the central point of contact to facilitate the bidding process described in this Contract, each municipality further reserves the right to reject any and all bids or parts thereof, to waive any irregularities or informalities in bidding procedures and to award the contract in a manner best serving the interest of the municipality. Work included is shown on drawings prepared by The Village of Buffalo Grove which has been supplied by each municipality. The lining work shown on the drawings is not conclusive and is subject to change. The drawings can be found in "Appendix B".

Maintenance Bond

The Contractor is required to furnish a maintenance bond approved by the municipality in the amount equal to ten percent (10%) of the contract price. This bond shall provide a guarantee against defective materials and workmanship on all materials, items and work furnished under this contract, including contract changes and additions **for a period of one year** from date of written final acceptance and final payment. If within the guarantee one (1) year period, any defects or signs of deterioration are noted which, in the opinion of the municipality, are due to the faulty installation, workmanship, or materials, the municipality shall notify the Contractor. The municipality will be responsible for performing inspection of work. At the Contractor's expense, the Contractor agrees to make any and all repairs, adjustments or replacements to correct the condition/s to the complete satisfaction of the municipality work has been completed in.

Contract Completion Dates and Interim Completion Dates

The Contractor shall execute the contract within ten working days after contract award by each individual municipality. Within 15 calendar days from contract execution the Contractor will provide each Village with a start date and a schedule. Once the work has started, the contractor will reach final completion within 25 working days for the Buffalo Grove project and 90 working days for the Wheeling project.

The Contractor shall substantially complete all work under this Contract for the Village of Buffalo Grove by November 1, 2019 with Final Completion by November 15, 2019.

The Contractor shall substantially complete all work under this Contract for the Village of Wheeling by December 1, 2019 with Final Completion by December 15, 2019.

If the Contractor shall fail to complete the work within the Contract Time which shall include any proper extension granted by the Municipality, the Contractor shall pay to the Municipality an amount equal to One Thousand dollars (\$1000) per calendar day for each day past the Contract Time until final acceptance by the Municipality, as liquidated damages and not as a penalty.

Easement and Access Agreements

The Municipalities will obtain easements and access agreements for all work to be performed within private property (outside public right-of-way). Working easements shall be staked by each Village prior to commencement of construction. **Extreme caution shall be exercised to protect the existing trees, signs, light posts, etc.** within or near the limits of all work. This shall be considered incidental to the Contract.

Work on school property will require a 1 week advance notice to the appropriate Project Manager. This includes Buffalo Grove High School, Jack London Middle School, and any other school affected by the work.

Inspection

All phases of the improvements will be subject to inspection by representatives of the Village. Projects will not be accepted by the Village without the final approval of the Village Public Works Department.

The Contractor shall be bound by these specifications and by all Village ordinances and codes.

Traffic Control and Protection

Traffic control shall be in accordance with the applicable portions of Section 701, 702 and 703 of the Standard Specifications, the Supplemental Specifications, the Illinois Manual on Uniform Traffic Control Devices for Streets and Highways, any special details and Highway Standards contained in the plans, and the Special Provisions contained herein.

Special attention is called to Articles 107.09 and 107.14 of the Standard Specifications and the following Highway Standards, Details, Recurring Special Provisions, and Special Provisions contained herein, relating to traffic control.

The Contractor shall maintain traffic in accordance with the applicable portions of Article 107.14 of the Standard Specifications. The Contractor shall furnish, install, maintain, relocate, and subsequently remove all signs, signals, markings, traffic cones, barricades, warning lights, flagmen, and other devices which are to be used for the purpose of controlling traffic.

- 701301- 04: Lane Closure, Short Term Operations
- 701606-10: Urban Single Lane Closure, Multilane, 2W with Mountable Median
- 701701-10: Urban Lane Closure, Multilane Intersection
- 701801-06: Sidewalk, Corner or Crosswalk Closure
- 701901-07: Traffic Control Devices
- 704001-08: Temporary Concrete Barrier
- 782006: Guardrail and Barrier Wall Reflector Mounting

Details: Traffic Control and Protection for Side Roads, Intersections, and Driveways (TC 10)

No traffic interruptions are permitted on IL Route 68 in Buffalo Grove.

Barricades shall be placed and maintained along the limits of the work until the surface has been restored, or as otherwise directed by the Engineer.

The Contractor shall contact the Village at least 72 hours in advance of beginning work. Construction operations shall be conducted in a manner such that streets shall be open to emergency traffic and accessible as required to local traffic. Advanced notice shall be provided to residents, police, fire, school districts, school bus companies, and trash haulers when access to any street will be temporarily closed or limited. The work shall be accomplished such that the streets shall be left open to local traffic at the end of each workday.

At the Pre-Construction Meeting, the Contractor shall furnish the name, and a 24 hour phone number of the individual in his direct employ, who is responsible for the installation and maintenance of the traffic control for the project. In accordance with Art 108.01, if a Subcontractor is to provide this aspect of the work, consent of the Engineer is required. This shall not relieve the Contractor of the foregoing requirement for an individual in his direct employ to superintend the implementation and maintenance of the traffic control.

The Contractor shall furnish, install, maintain, relocate, and remove all traffic cones, signs, barricades, warning lights and other devices that are to be used for the purpose of controlling traffic. The Contractor shall furnish certified flaggers upon request of the Village or when required for safe operations. The Contractor is responsible to ensure that all barricades, warning signs, lights and other devices installed for traffic control are in place and operating 24 hours Each calendar day this Contract is in effect. As a minimum, all areas of work shall be protected each night by Type II barricades at maximum 50 foot centers equipped with working flashing lights. Type III barricades shall be placed at all project limits.

The Contractor shall furnish and place "No Parking" signs a minimum of 1 day prior to any construction activities. The signs must be a minimum of 11 inches by 13 inches with red letters imprinted on a white background on 140 lb. index stock material. An example showing the exact wording to be printed is provided in the plan details. All "No Parking" signs must have the approval of, be affixed, and displayed to the satisfaction of the Engineer. Posting of signs on trees shall be done with a staple gun. The Contractor shall remove and reinstall the signs when directed by the Engineer.

Protection of Existing Drainage Facilities during Construction

Unless otherwise noted in the contract plans, the existing drainage facilities shall remain in use during the period of construction.

Locations of existing drainage structures and sewers, if shown on the contract plans, are approximate. Prior to commencement of work, the Contractor, at his/her own expense, shall determine the exact location of existing structures which are within the proposed construction site.

All drainage structures are to be kept free from any debris resulting from construction operations. All work and materials necessary to prevent accumulation of debris in the drainage structure resulting from construction operations shall be removed at the Contractor's own expense, and no extra compensation will be allowed.

Unless reconstruction or adjustment of an existing manhole, catch basin, or inlet is called for in the contract plans or ordered by the Engineer, the proposed work shall meet the existing elevations of these structures. Should reconstruction or adjustment of a drainage structure be required by the Engineer in the field, the necessary work and payment shall be done in accordance with Section 602 and Article 104.02 respectively, of the Standard Specifications.

Existing frames and grates are to remain unless otherwise noted in the contract plans or as directed by the Engineer. Frames and grates that are missing or damaged prior to construction shall be replaced. The type of replacements frame or grate shall be determined by the Engineer, and replacement and payment for same shall be in accordance with Section 604 and Article 104.02 respectively, of the Standard Specifications unless otherwise noted in the plans or special provisions.

CIPP Material and Contractor Requirements

Product, Manufacturer / Installer Qualification Requirements:

Since sewer products are intended to have a 50-year design life, and in order to minimize the Municipality's risk, only proven products with substantial successful long-term track records will be approved. All trenchless rehabilitation products and installers must be pre-approved prior to the formal opening of proposals.

Products and Installers seeking approval must meet all of the following criteria to be deemed commercially acceptable:

- A. For a Product to be considered Commercially Proven, a minimum of 1,000,000 linear feet or 4,000 manhole-to-manhole line sections of successful wastewater collection system installations in the U.S. must be documented to the satisfaction of the "Owner" to assure commercial viability.
- B. For a Contractor to be considered as Commercially Proven, the Contractor must satisfy all insurance, financial, and bonding requirements of the bid documents, and must have had at least 5 (five) years active experience in the commercial installation. In addition, the Contractor must have successfully installed at least 200,000 feet of the product bid in wastewater collection systems. Acceptable documentation of these minimum installations must be submitted to Kyle Johnson/Village of Buffalo Grove.
- C. Contractor (or Sub Contractor) must have experience with at least five (5) similar size bypass pumping operations.
- D. Sewer rehabilitation products submitted for approval must provide third party test results supporting the structural performance (short-term and long-term) of the product and such data shall be satisfactory to the Owner. Test samples shall be prepared so as to simulate installation methods

and trauma of the product. No product will be approved without independent third party testing verification.

- E. Both the rehabilitation manufacturing and installation processes shall operate under a quality management system which is third-party certified to ISO 9000 or other recognized organization standards. Proof of certification shall be required for approval.

Documentation for products and installers seeking pre-approved status must be submitted no less than two weeks prior to proposal due date to allow time for adequate consideration. The Village of Buffalo Grove will advise of acceptance or rejection a minimum of three days prior to the due date. All required submittals must be satisfactory to the Village Engineer.

Required Submittals

Prior to fabrication of materials, the Contractor shall submit shop drawings of the materials to the Project Manager per Appendix A for review. Shop drawings shall consist of complete descriptive literature on the materials including all pertinent dimensions, material specifications, and data. Prior to submitting shop drawings, the Contractor shall first review the shop drawings and make corrections or revisions which are appropriate. The Contractor shall be required to maintain a complete set of shop drawings on the job site at all times while work is in progress and shall make them available to the Project Manager upon request.

Provide complete copies of required submittals and deliver to **each Village** as follows:

1. Construction progress schedule: (1) electronic copy
 - a. Initial work schedule
 - b. Revisions to work schedule
2. Pre-construction surface televising: (1) electronic copy – **Wheeling only**
3. Traffic Control Plan: (1) electronic copy
4. Detailed Plan for all flow bypassing: (1) electronic copy
5. Material Data Sheet Submittals: (1) electronic copy. All materials data sheets are to be submitted to the Engineer and approved before rehabilitation can proceed.
 - a. Liner Design Work Sheets.
 - b. Liner End Seals Data Sheet.
6. Samples
 - a. Contractor shall submit the number of samples required by the specification.
 - b. Samples shall clearly identify the location of use, material, supplier, pertinent data such as catalog numbers, etc.
7. Pre & Post construction internal television inspection: both digital and hard copies
 - a. One (1) External USB powered hard drives containing:
 - Digital video files (MPEG format)
 - PDFs of digital reports
 - PACP export Digital database with observation data
 - Master spreadsheet with hyperlinks to video and PDF reports
 - b. One (1) hard copy, appropriately bound and labeled, of all TV reports.
8. One set of “red-line” field changes on construction plans.
9. Notice to residents
10. Other required submittals: (1) electronic copy if required for review or record

Submittals to the respective Owner, for approval, product data, and catalogue cuts for all materials used in the installation of the CIPP, prior to ordering of material, shall contain:

- Date of submittal and dates of previous submittals.
- Project title and number.
- Contract identification.

- Names of:
 - Contractor
 - Supplier
 - Manufacturer
- Identification of product, with identification numbers, and drawing and specification section numbers.
- Field dimensions, clearly identified.
- Identify details required on drawings and in specifications.
- Show manufacturer and model number, give dimensions, and provide clearances.
- Relation to adjacent or critical features of work or materials.
- Applicable standards, such as ASTM or Federal Specification numbers.
- Identification of deviations from Contract Documents.
- Identification of revisions on resubmittals.
- Eight-inch by 3-inch blank space for Contractor and Owner stamps.
- Contractor's stamp, signed, certifying to review of submittal, verification of products, field measurement, field construction criteria, and coordination of information within submittal with requirements of work and Contract Documents.

This is a non-exhaustive list. The Contractor shall provide all shop drawings or submittals that are required in the specifications. All submittals are considered incidental to the cost of the project.

Sequence of Operations

The contractor shall coordinate his work in a manner that will cause as little inconvenience to traffic as possible. The Contractor shall work closely with Municipality Officials, Fire, Police Departments and other Contractors in coordinating interruption to normal traffic and parking facilities, access to homes and businesses, and inconvenience to the public.

The proposed work sequence for the Contractor follows:

1. The proposed sewer main pipe locations and conditions have been determined from the available records. It is the Contractor's responsibility to review the available records, obtain additional new video records for evaluation of existing sewer system condition, field verify locations, elevations and diameters of all to be lined sewer pipes prior to ordering the appropriate materials.
2. Clean existing manholes and sewer lines to condition necessary for proper installation of lining material, including root cutting, removal of debris and other protruding obstructions.
3. Rehabilitate existing sewer systems.
4. Reinstate and reconnect active sewer service connections

If the Contractor proposes a different work schedule than outlined above, the Owner's written approval of the modified schedule must be obtained in advance.

Material Storage and Removal

The Contractor shall not deliver and store any material on the project site more than one week in advance before commencing with this work. Paved portions of the street may be used for material storage and the exact material storage location shall be approved by the Owner.

Any remnants of construction materials, debris and litter generated by the Contractor shall be collected and removed off the jobsite periodically (every week) or the same day if requested by the Owner. Any required pavement repair and parkway restoration (sodding), due to the damage caused by on-site material storage, shall be borne by the Contractor and be considered incidental to the contract.

Quality Assurance

Codes and Standards references:

1. Illinois Department of Transportation
 - a. Standard Specifications for Road and Bridge Construction (Current Edition) (IDOTSPECS).
 - b. Illinois Department of Transportation. Bureau of Design. Highway Standards (ILHWSTDS).
 - c. Illinois Department of Transportation. Bureau of Local Roads.
 - d. BLR Standard 17-3 - Standard Design Typical Application of Traffic Control Devices for Day Labor Construction on Rural Local Highways.
 - e. BLR Standard 21-6 - Standard Design Typical Application of Traffic Control Devices for Contract Construction on Rural Local Highways.
2. Standard Specifications for Water & Sewer Main Construction in Illinois, latest edition (SS W&S).
3. Metropolitan Water Reclamation District of Greater Chicago (MWRD) requirements if applicable to Municipality.
5. ASTM Standard F 1216 "Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Impregnated Tube" latest edition.
6. Local municipal improvement codes.

Work Quality Inspection

As part of post lining testing, the Contractor may be requested by the respective Owner to open manholes for field inspection and/or "punch list" generation at no additional cost to the municipality when project is complete.

Corrective work

Any lining installation that fails to meet performance standards as identified herein, or contains other significant defects, shall be subject to corrective action.

Each municipality shall notify the Contractor in writing of any work that is rejected, and shall specify the reasons for rejection. Within 10 days of receiving notice of rejected work, the Contractor shall submit a written proposal to the Municipality detailing the proposed corrective action for each item of rejected work. The Contractor shall not proceed with corrective action until the respective Owner has approved the proposed corrective action. All corrective work must meet the standards and specifications set forth in this contract.

If determined that the existing sewer service is damaged by cutting of the liner, the municipality will allow the use of the LMK T-Liner (smaller diameter) or LMK Lapel Liner (larger diameter), or the municipality respective Owner approved equal for service restoration.

If it appears that there is no acceptable alternative for sewer repair, the municipality may require the Contractor to remove all or a portion of the defective lining and install new lining in place. All expenses for any corrective work/defective sewer repair/relining work and material shall be borne by the Contractor.

Prosecution and Progress

The Contractor shall complete all work under this Contract as specified in the paragraph "Contract Completion Date and Interim Completion Dates". Failure to complete the work by the dates identified will result in liquidated damages as specified in Section 108 of the Standard Specifications (IDOTSPECS).

Contractor's Use of Premises

At all times when the Contractor will be working on property within Municipality's boundaries, Contractor shall be responsible for:

1. Coordinating use of premises under direction of respective Municipality.
2. Assuming full responsibility for protection and safekeeping of products under this Contract such that if any products are lost, damaged, or stolen it shall be Contractor's sole responsibility to replace the products.
3. Obtaining and pay for use of additional storage or work areas needed for operations at no additional cost to Municipality.
4. Conducting operations to ensure least inconvenience to general public, including but not limited to minimizing any traffic obstructions, noise, and offensive odors.
5. Complying with any requirements in Appendix A for each municipality's additional input on local parking plan.

Pre-construction Meeting

A pre-construction meeting with the Contractor will be held with each municipality to discuss all issues pertaining to this project. The Contractor is requested to bring the following information to this meeting:

1. The Contractor's proposed construction schedule.
2. Name of sub-contractors (if applicable) involved in these projects.
3. Name of Project Manager.
4. Name of individual responsible for traffic control and maintenance.
5. Emergency Contact.

Project Meetings

See Appendix A for project meeting requirements.

Protection of Trees

Every effort shall be made by the Contractor when working near trees and shrubs to preserve same from harm. No trees or shrubs shall be removed unless so indicated on the Plans or as authorized in the field by the respective Owner. The Contractor shall be responsible for damage to or loss of any tree or shrub not specifically designated to be removed.

Damage to tree limbs shall be held to a minimum. Shrubs and tree limbs shall be tied back wherever necessary to prevent their loss or damage. Wherever damage by construction equipment to limbs and branches is unavoidable, they shall be pruned before starting work and sealed in accordance with best forestry practice.

No pruning of tree limbs or branches will be allowed without the written permission from the respective Owner. If pruning is necessary and approved, it will be done by an approved licensed landscape contractor, if the Owner deems it is necessary. The Contractor shall contact the respective Owner at least 24 hours prior to his need to prune. Tree protection shall be incidental to the Contract.

Safety

The Contractor shall comply with State, Local, Metropolitan Water Reclamation District ("MWRD") and Federal Safety and Health regulations applicable to the work being performed including Occupational Safety and Health Administration ("OSHA") approved confined space entry procedures. Prior to entering

access areas such as manholes, and performing inspection or cleaning operations, an evaluation of the atmosphere to determine the presence of toxic or flammable vapors or lack of oxygen must be undertaken in accordance with Local, State, or Federal Safety regulations.

The cost associated with the above referenced safety precautions shall be considered incidental to the cost of the contract.

Water Usage

See Appendix A for each municipality's additional input on local water usage plan.

MWRD

The MWRD Permit section field office (708-222-4055) must be notified at least two days prior to commencement of work.

When access to MWRD manhole is required the MWRD manhole opening shall be coordinated with Mr. Roscoe Hardeman (321-497-9472) of MWRD. Any MWRD manholes shall be identified at the pre-bid meeting.

Public Advisory

A minimum of two weeks prior to commencing with sewer repair/lining work the Contractor shall coordinate with each municipality to provide general public notice of the work to be done.

Public advisory services will be required to notify all parties whose sewer services will be out of commission and to advise against water usage until the sewer service is back in service. This is the responsibility of the Contractor. Notices shall be given within 24 hours of interruption. Written notices must be approved by each municipality prior to publication, and must contain specific information as to when the sewer service disruption will begin and end. Notices must be given the proposed day of work if work is cancelled for any reason, as well as the proposed reschedule of shut-down.

No customer shall be deprived of sanitary sewer service for more than twelve consecutive hours unless approved by the Owner.

The Contractor shall assume responsibility for any sewer backups or other damages sustained by residents or businesses as a result of testing, cleaning, lining or any other part of the work. The Contractor shall arrange and pay for professional cleaning and/or repair services where required at no additional cost to the municipality

"No Parking - Police Order" signs are available upon request at the office of the Owner. All such notices shall be removed by the Contractor immediately upon the completion of work in each block. The cost associated with public advisory shall be considered incidental to the cost of the contract.

Hours of Construction

Normal working hours shall be 7:00 a.m. to 6:00 p.m., Monday through Friday. Any work required to be done Monday thru Friday outside of those hours, or on Saturdays, Sundays, or legal holidays will require no less than 72 hours written notice to the Owner and written permission of Owner, as well as from IDOT or CCDOT as required. Permission to work the day before or on a holiday must be granted two (2) weeks in advance of work. However, emergency work may be done with permission from Owner. Work activity, as intended herein, includes warming or starting up of any machinery or engines. If any activity requires encroachment into the lane of traffic on an IDOT or CCDOT roadway, that activity shall

be restricted to within the hours of 9:00 a.m. and 3:00 p.m. unless prior approval is obtained from IDOT or CCDOT, as appropriate.

Protection of Environment

The protection of environment shall include:

1. Contractor, in executing work, shall maintain work areas on- and off-site free from environmental pollution that would be in violation of any federal, state or local regulations.
2. Take adequate measures to prevent impairment of operation of existing sewer systems. Prevent construction material, earth, or other debris from entering sewers or sewer structures.
3. Observe rules and regulations of State of Illinois and agencies of U.S. government prohibiting pollution of any lake, stream, river or wetland by dumping of refuse, rubbish, dredge material or debris therein.
4. Comply with procedures outlined in U.S. EPA manuals entitled, "Guidelines for Erosion and Sedimentation Control Planning and Implementation," Manual EPA-R2-72-015 and "Processes, Procedures, and Methods to Control Pollution Resulting from All Construction Activity," Manual EPA 430/9-73-007.
5. Dispose of excess excavated material and other waste material in a lawful manner.
6. Minimize air pollution by wetting down bare soils during windy periods, requiring use of properly operating combustion emission control devices on construction vehicles and equipment used by Contractors, and encouraging shutdown of motorized equipment not actually in use.
7. Trash burning will not be permitted on construction site.
8. Chemicals used during project construction or furnished for project operation, whether herbicide, pesticide, disinfectant, polymer, reactant, or of other classification, must show approval of either U.S. EPA or U.S. Department of Agriculture or any other applicable regulatory agency.
9. Use of such chemicals and disposal of residues shall be in conformance with manufacturer's instructions.
10. Conduct operations in such a manner as to cause the least possible disruption or annoyance to residents in the vicinity of work performed, and to comply with all applicable local ordinances.
11. Equip compressors, hoists, and other apparatus with such mechanical devices as may be necessary to minimize noise and dust.
12. Equip gasoline or oil operated equipment with silencers or mufflers on intake and exhaust lines
13. Line storage bins and hoppers with material that will deaden sounds.
14. Conduct operation of dumping rock and of carrying rock away in trucks so as to cause minimum of noise and dust.

Clarification

Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.

SPECIAL PROVISIONS FOR CONTRACT ITEMS

This shall be a unit price contract and shall include all work mentioned in the Project General Special Provisions, Plans and Specifications, and any other work, not specifically mentioned, that is necessary for constructing the improvement in a skilled and professional manner. Any conflicts or omissions in the Plans or Specifications shall be brought to the attention of the Engineer. The Engineer's decision in resolving such matters shall be final. The Contractor shall in no manner take advantage of conflicts of omissions should they occur, and it shall be the Contractor's responsibility to bring such components of the Contract to the attention of the Engineer so they can be properly resolved. All Village provisions and details shall prevail in the event of a conflict.

The quantities bid upon are estimated quantities, except where an item is noted to be supplied "complete". The Contractor shall be paid for actual quantities, in place, as measured and agreed upon by the Engineer and Contractor. The Contractor shall be paid in full for items to be supplied "complete" when said item is finished, or at a percentage of the bid amount agreed upon by the Owner, Engineer, and Contractor if the item is not complete.

ITEM 1: PRE-CONSTRUCTION CLEANING AND TELEVISIONING OF SEWER

Description. This section governs all work required for sewer cleaning and sewer inspection by closed-circuit televising done in preparation for cured-in-place pipelining, grouting. Cleaning and televising shall be performed on the entire section of sewer between upstream and downstream manhole structures and shall be completed to the industry standard of 95% clean.

The existing sewer main pipe condition and sewer service pipe locations have been determined from the available records. Each municipality has provided manhole to manhole lengths, pipe sizes and location maps. However, it is the Contractor's responsibility to re-inspect the condition and verify the size of the existing sewer system. The interior of the sewer pipe and service connections shall be carefully inspected to determine the location of any conditions that may prevent proper installation of the impregnated tube, such as defective (protruding) service connections collapsed or crushed pipe and reductions in ovality of more than ten (10%) percent. These conditions shall be recorded and brought to the attention of each municipality so that they may be corrected prior to lining. The Village shall be notified of any point repairs necessary prior to lining and these shall either be handled by the municipality directly or shall be considered a change order. Any deviation from the location and/or quantity indicated in bid documents shall be noted and brought to the attention of the Owner, so that the bid quantities may be adjusted prior to commencing with any sewer repair/lining work.

Notice to Residents. The Contractor shall provide and hang notices on doors of all residences and businesses with service lines connected to sewer mains to be cleaned. Notices shall be distributed 48 hours in advance of the work. The Contractor shall include the contact information for the onsite field supervisor as the primary contact for affected residents. Each Village shall review and approve the notice format and text at the beginning of the project prior to distribution. All work required for notification to residents shall be incidental to the contract.

Equipment. The Contractor is responsible to provide and maintain all industry-standard equipment required to complete the project. Each crew shall have a vacuum or jetter combination truck equipped with a high velocity gun for washing and scouring manholes and a TV truck capable of seating a minimum of 4 people including the Village and Engineer. For easement work, the Contractor shall be required to have off-road equipment as necessary to access off-street sewer areas.

If any equipment gets stuck in the sewer and needs to be dug up, the Contractor is solely responsible for the cost of the dig, complete restoration and repair of sewer and any other costs associated with the retrieval of the equipment.

1. Hydraulic Sewer Cleaning Equipment Requirements:

- a. Hydraulic sewer cleaning equipment shall be the movable dam type constructed such that a portion of the dam may be collapsed during cleaning to prevent flooding of the sewer.
- b. The movable dam shall be the same diameter as the pipe being cleaned and shall provide a flexible scraper around the outer periphery to ensure total removal of grease.
- c. The Contractor shall take special precautions against flooding prior to using sewer cleaning balls or other equipment that cannot be collapsed instantly.

2. High Velocity Hydro-Cleaning Equipment Requirements:

- a. A minimum of 700 feet of high pressure hose.

- b. Two or more high velocity nozzles capable of producing a scouring action from 10 degrees to 45 degrees in all size lines to be cleaned.
- c. A high velocity gun for washing and scouring manhole walls and floor with the capability of producing flows from a fine spray to a long distance solid stream.
- d. A 1,500-gallon minimum water tank, auxiliary engines and pumps, and a hydraulically driven hose reel.
- e. Equipment operating controls located above ground.
- f. Minimum working pressure of 1,000 pounds per square inch at a 50 gpm rate.

3. Mechanical Cleaning Equipment Requirements:

a. Bucket Machines:

- i. Furnish with buckets in pairs and with sufficient dragging power to perform the work efficiently.
- ii. Use V-belts for power transmission or have an overload device. No direct drive machines will be permitted.
- iii. Be equipped with a take up drum and a minimum of 500 feet of cable.

b. Rodding Machines:

- i. Either sectional or continuous.
- ii. Hold a minimum of 750 feet of rod.
- iii. The rod shall be specifically heat-treated steel.
- iv. The machine shall be fully enclosed and have an automatic safety throw out clutch or relief valve.

c. Lumberjack & Impact Cutters

- i. Lumberjack high speed low torque multi-purpose cutters
- ii. Speeds up to 50,000 rpm
- iii. Paikert low-speed, high-torque auger cutter

4. Closed Circuit Television Equipment:

- a. Television equipment shall include television camera, television monitor, cables, power source, lights and other equipment necessary to the televising operation. The television camera shall be specifically designed and constructed for operation in connection with sewer inspection and pipe joint sealing and testing.
- b. Camera and lighting quality shall be suitable to provide a clear, continuously in-focus picture of the entire inside periphery of the sewer pipe for all conditions encountered during the work. The camera shall be able to operate efficiently in 100% humidity conditions.
- c. The TV camera shall have a rotating head with a high resolution lens, capable of spanning 360-degrees circumference and 270-degrees on horizontal axis to televise sewer lines 6-inch diameter and larger. Focal distance shall be adjustable through a range of 1 inch to infinity. The purpose of the rotating head camera is to view all service connections, and to locate all defects, as well as any questionable problem areas. The camera shall be zoom capable.
- d. The TV camera shall be equipped with remote control devices to adjust the light intensity and at a minimum one thousand (1,000) feet of continuous cable shall be provided. The camera shall be able to transmit a continuous image to the television monitor as it is being

pulled through the sewer segments. Lighting system shall be adequate for quality pictures. A reflection in front of the camera may be required to enhance lighting.

- e. For manholes that may be difficult to access or where lamp holes are present in the place of manholes, the Contractor shall have available a self-propelled crawler transporter on which to mount the color television camera so as to be able to inspect the sewer as required.
- f. The TV camera shall be able to provide a continuous image of not less than ninety five percent (95%) of the internal pipe surface at all times for sewers 8" through 48" in diameter. Maximum acceptable speed of camera through sewer shall be thirty (30) feet per minute.
- g. The camera, television monitor and other components of the video system shall be capable of producing a minimum 500 line resolution color video picture.
- h. Electronic media shall visually display and include a narrative noting:
 - i. Date, time of day, and depth of flow;
 - ii. Sewer segment number "from manhole to manhole";
 - iii. Distance from upstream manhole;
 - iv. Locations of service connections into sewer;
 - v. Location of obstructions, structural defects, joint deterioration, leakage or evidence thereof, and other abnormalities with respect to the sewer condition and distance in feet from the upstream manhole centerline.
- i. The remote reading footage counter shall be accurate to two-tenths of a foot over the length of the particular section being inspected and shall be mounted over the television monitor.
- j. Digital images should be provided in the common format accessible by Windows Media Player or approved equal.

Sewer Cleaning. The sewer manhole sections designated for sewer cleaning shall be cleaned using hydraulically propelled, high-velocity jet, or mechanically powered equipment. Selection of the equipment used shall be based on the conditions of the sewer lines at the time the work commences. The equipment and methods selected shall be satisfactory to the Engineer. Sewer cleaning shall consist of root cutting, removal of dirt, grease, rocks, sand and other materials and obstructions from sewer lines and manhole troughs. If cleaning of an entire section cannot be successfully performed from one manhole, the equipment shall be set on the other manhole and cleaning again attempted.

The Contractor shall perform all work in accordance with the latest OSHA confined space entry regulations.

Satisfactory precautions shall be taken to protect the sewer segments and sewer manholes from damage that might be inflicted by the improper use of cleaning equipment. Whenever hydraulically propelled cleaning tools, which depend upon water pressure to provide their cleaning force, or any tools which retard the flow of water in the sewer segment are used, precautions shall be taken to ensure that the water pressure created does not cause any damage or flooding to public or private property being served by the sewer segment involved.

When hydraulic or high velocity cleaning equipment is used, a suitable sand trap, weir, or dam shall be constructed in the downstream manhole in such a manner that all solids and debris are trapped and removed, thereby preventing such material from passing into the next sewer segment.

If conditions such as broken pipe and major blockages are encountered that prevent cleaning from being accomplished or where damage would result if cleaning were attempted or continued, the Contractor shall immediately notify the Engineer. The Engineer shall be notified of any conditions

which warrant termination of cleaning activities.

Root cutting. Root cutting shall be required where it has been determined that root growth is substantial and cutting would be required to facilitate a thorough and complete examination of the condition of the sewer through internal closed-circuit color television inspection.

The root cutting tools shall be the industry standard concave saws, flat saws, water blasters or chain knockers and shall be carefully selected to ensure no damage is caused to the sewer main or any portion of the lateral including protruding laterals. Extreme caution should be taken when operating root cutters in the sewer and a video inspection shall be on the root cutter at all times to ensure damage is not caused from root cutting.

Root cutting will be considered incidental to the Contract and will not be paid for separately.

Debris Removal and Disposal. The Contractor shall remove all sludge, dirt, sand, rocks, grease and other solid or semisolid material resulting from the cleaning operation from the downstream manhole of the sewer segment being cleaned prior to beginning television inspection. Passing material from sewer segment to sewer segment shall not be permitted. In the event that sludge, dirt, sand, rocks, grease and other solid or semisolid material resulting from the cleaning operation are observed and/or detected, as passing to downstream sewer segment(s), the Contractor shall clean such sewer segment(s) at no additional cost.

Debris catchers or baskets will be required to be set in the channel of the downstream manhole during all cleaning operations. Additionally, a "Vactor" or similar vacuum truck must be onsite during all cleaning operations and will be required to be setup on the downstream manhole to pull debris out of the sewer during all cleaning operations. As the sewer jet or other cleaning equipment is in use, the vacuum equipment shall be running in order to prevent debris from moving further downstream. The use of the vacuum truck does not constitute heavy cleaning.

When bucket machines are being used, a suitable container shall be provided to receive the materials dumped from the buckets. The Contractor at his discretion may use an approved container (roll off) for the storage of debris removed from the line segments. All material resulting from the cleaning operations shall be removed from the site when the container has reached 3/4 of its volume, or at least once each working day and disposed of at the permitted disposal site.

Disposal of all sewer debris shall be the responsibility of the Contractor and shall be done in accordance with the Illinois Environmental Protection Agency (IEPA) and all other regulating agencies. Under no circumstances shall the removed sewage or solids be dumped onto streets or into ditches, catch basins, storm drains, sanitary, combined sewer manholes or otherwise improperly disposed. Improper disposal of sewage or solids removed from the sewers may subject the Contractor to fines imposed by the Village. In addition, the Contractor may be subject to civil and/or criminal penalties for improper disposal under the law.

Removal and disposal of all sewer debris shall be incidental to the contract and will not be paid for separately.

Internal Closed-Circuit TV Inspection. The Inspection of sewer lines by CCTV shall be performed on all lines prior to and after all rehabilitation work by trained experienced PACP certified personnel. The Contractor shall take all necessary measures to televise the internal surface of each sewer segment in its entirety.

The Contractor shall furnish all labor, electronic equipment and technicians schooled and licensed in PACP with latest format, to perform the closed-circuit television inspection of the sewers. Operation

of the equipment is to be controlled from above ground with a skilled technician at the control panel in the television studio, controlling the movement of the television camera through the sewer in either direction one segment at a time.

The video operator(s) shall be Pipeline Assessment Certification Program (PACP) certified by the National Association of Sewer Service Companies (NASSCO) and will be required to show proof of PACP ID or certification before performing work on this project. Certification dates must be current including renewal every three years. Operators with expired PACP ID numbers will not be allowed to work on the project until they have undergone the renewal process. The Contractor shall provide copies of each equipment operator's Certification Number at the preconstruction conference.

The Contractor shall begin each inspection with an onscreen written and verbal explanation of the project name, a detailed description of the location, the manhole to manhole segment, the direction of flow, the direction of camera setup and date. The depth (rim-invert) measurement of each manhole shall be recorded on the PDF report as well. A continuous footage counter shall be provided during the entire inspection, and shall be used to accurately record the locations of defects, connections, or objects in the pipe. The counter shall be accurate to two tenths of a foot. Maintain verbal commentary to identify any item that is called out on the report.

All inspections shall begin and end in the center of the manhole – this is not NASSCO standard. The start of the video shall NOT begin already in the pipe segment. At the end of each inspection, the Contractor shall pan the camera around the ending manhole to get a view of what it looks like for identification purposes as well as documenting all incoming pipes.

The camera shall be moved through the line in either direction at a uniform rate of no more than 30 feet per minute, stopping when necessary to ensure proper documentation of the sewer's condition. The Contractor shall take all necessary measures to televise 95% of the internal surface of each sewer segment in its entirety. If dewatering with the jet truck is required to see 95% of the pipe, this shall be done at no additional charge to the Village. Lighting system shall be adequate for quality pictures. A reflection in front of the camera may be required to enhance lighting.

If any obstruction in the sewer segment such as a protruding building lateral prohibits the passage of the television camera, the Contractor shall attempt to inspect the remainder of the sewer segments by making a reverse set up at the next downstream manhole. No additional payment shall be made for reverse setups.

All obstructions in the sewer segment that prohibit passage of the television camera shall be immediately reported to the Engineer by the Contractor referencing the location and nature of the obstruction.

The Contractor shall be responsible for any damage to public or private property resulting from its televising activities and shall repair or otherwise make whole such damage at no cost to the Village.

Digital Video & Report Deliverables. Electronic media of all sections shall be provided to the Village together with the respective television inspection reports. All pre-lining inspections must be submitted to the Village for review and approval prior to liner installation. TV reports shall legibly show the location of each observation in relation to an identified manhole.

Each video shall be named according to the "upstream manhole number – downstream number.mpg" format. For example, a pipe segment video with an upstream manhole of 12345 and downstream manhole 67890 would be named "12345 - 67890.mpg". Separate MPEG files and PDF reports shall be created for each manhole to manhole pipe segment inspected. Video recordings shall be one file per sewer line section and shall be included on the external hard drives submitted.

Any out-of-focus video recordings, or portions thereof, shall be cause for rejection of the video recording and will necessitate re-televising at the Contractor's expense. Televising shall be done one section at a time. Inspections shall be performed using NASSCO's PACP Version 6.0 or later. The sewer pipe video inspection reports must be saved with the PACP overview report.

Audio and video observation documentation is to be provided in the most up-to-date form of a NASSCO PACP coding methodology database. The PACP data base shall include all required header information as well as any observations recorded. Links to the videos and the PDF format of the reports shall be included within the data base. This data base shall be updated monthly and shall contain every observation from the beginning of the project through current delivery date.

The deliverable video files shall be full-color, high-resolution, and shall include all pipe surfaces above the water line. At each lateral and connected service line, the camera shall stop, rotate, and record a clear image of the lateral or service line to determine condition and if it is active or inactive. The inspection and database shall be fully compatible with PACP Version 6.0 or later. All televising for the project must be performed and delivered using the same version.

Contractor shall record inspection in a PACP format – except as noted. Video recordings and inspection shall visually display and include a narrative noting:

- a. Date, time of day, and depth of flow
- b. Sewer segment number "from manhole to manhole"
- c. Direction of Flow
- d. Distance from upstream manhole'
- e. Locations of service connections into sewer;
- f. All other PACP observations

The television inspection reports shall be provided both electronically in PDF format as well as two bound hardcopies of the printed paper report. The file naming format shall follow a similar format to the video naming format. Each inspection report shall be named according to the "upstream manhole number – downstream manhole number.pdf" format. For example, a pipe segment with an upstream manhole of 12345 and downstream manhole 67890 would be named "12345 - 67890.pdf".

The final report files, in paper and electronic PDF formats, shall include a still shot image of every observation. A report including NASSCO Structural, O&M and Overall Ratings will be provided.

The Contractor shall provide three (3) copies of all deliverables, video, reports, images, on three (3) identically formatted external hard drives with USB 2.0/3.0 connections. Cost of external hard drives shall be incidental to the contract and will not be paid for separately.

Basis of Payment. Sewer cleaning and television inspection in preparation for cured-in-place pipelining shall be paid for at the Contract Unit Price per Linear Foot for PRE-CONSTRUCTION CLEANING AND TELEVISIONING OF SEWER.

ITEM 2: DYE TESTING OF EXISTING SERVICE CONNECTIONS

Description. Only one lateral reinstatement per property shall be allowed during cured-in-place

pipelining unless otherwise approved in advance by the Owner. Any properties with more than one lateral shall be identified during PRE-CONSTRUCTION CLEANING AND TELEVISIONING OF SEWER and shall be dye tested by the Contractor to verify active or abandoned connections to the sewer, prior to cured-in-place pipelining. This work includes contacting the homeowners, coordinating and performing the dye test, as well as presenting the findings to the Engineer and the Owner. If the property cannot be dye tested, the Contractor shall notify the Engineer immediately. Additional lateral connections with visible caps shall not warrant dye testing and shall be left closed without reinstatement.

In addition to dye testing properties with more than one lateral, the Contractor shall layout locations of services for any sewer segments that have more active lateral connections than houses on the same stretch. The Contractor shall utilize a measuring wheel or tape to measure from the manhole and locate each service lateral point based on camera reel counter footage. This layout shall aid in confirmation that the correct service location is marked and being re-instated. The Contractor shall paint the location of services in an oil-based white paint for paved areas. The Contractor shall layout services only where services are dye tested.

If there is question as to whether a connection is active or abandoned, all video, layout, dye test and other pertinent information shall be presented to the Engineer and the Owner for a decision on reinstatement prior to cured-in-place pipelining. All dye testing and layout results shall be presented to the Engineer and the Owner to verify results.

Basis of Payment. This work shall be paid for at the Contract Unit Price per Each for DYE TESTING OF EXISTING SERVICE CONNECTIONS.

ITEMS 3 – 8: CURED-IN-PLACE PIPELINING, BY DIAMETER

Description. This work shall include the repair of defective sewer by the installation of a resin impregnated flexible felt tube in all segments as shown on the plans. The tube shall be saturated with a thermosetting resin and installed into the existing sewer using an inversion process. Curing shall be accomplished by circulating hot water or steam to cure the resin into a hard impermeable cured-in-place pipe. When cured, the liner shall be a continuous, tight fitting, and watertight pipe-within-a-pipe.

This specification references American Society for Testing and Materials (ASTM) standard specifications, Insituform of North America, Inc. (INA), and Inliner USA, Inc., or the Village approved equal, manufacturer's standards which are made a part hereof by such reference and shall be the latest edition and revision thereof.

Materials. The Tube shall consist of one or more layers of a flexible needled felt or an equivalent nonwoven or woven material, or a combination of nonwoven and woven materials, capable of carrying resin and withstanding the installation pressures and curing temperatures. The tube should be compatible with the resin system to be used on this project. The material should be able to stretch to fit irregular pipe sections and negotiate bends.

The tube shall be uniform in thickness and when subjected to the installation pressures will meet or exceed the required finish wall thickness. The tube shall be marked for distance at regular intervals along its entire length, not to exceed 5 feet. Such markings shall also include the lining manufacturer's name or identifying symbol.

Any plastic film (including polyethylene, polyurethane, and polypropylene layers) applied to the tube on what will become the interior wall of the finished Cured-In-Place Pipe (CIPP) shall be compatible

with the resin system used, translucent enough that the resin is clearly visible, firmly bonded to the felt material, and shall be capable of withstanding installation pressures and curing temperatures.

The resin system shall be a corrosion resistant polyester, vinyl ester, or epoxy and catalyst system that when properly cured meets the minimum requirements given herein or those that are to be utilized in the design of the CIPP for this project. The manufacturer shall be Insituform, Inliner USA, National Liner or an approved equal.

Sizing of the Liner. The liner shall be fabricated to a size that when installed will neatly fit the internal circumference of the sewer to be lined. Allowance for circumferential stretching of the liner during insertion shall be made as per manufacturer's standards. The length of the liner shall be that deemed necessary by the Contractor to effectively carry out the insertion and seal the liner at the inlet and outlet points. The Contractor shall verify the lengths in the field. Individual installation runs can be made over one or more access points as determined in the field by the Contractor and approved by the Engineer.

The liner thickness shall be based on the condition of the existing pipe which shall be classified as fully deteriorated pipe and structurally unsound. The liner shall be designed to withstand all imposed loads. The liner thickness shall have sufficient wall thickness to withstand the anticipated external pressures and loads which will be imposed after installation. The design of the liner shall include considerations for ring bending, deflection, combined loading, buckling, and ovality. Liner thickness shall be based on the use of the standard flexible pipe equations, as detailed in ASTM F-1216 and shall account for the effects of ovality. The Contractor shall use wall thickness appropriate to the depth of pipe being lined.

The design parameters to determine the liner thickness shall be as follows:

1. For pipes up to and including 15" diameter:
 - Existing pipe fully deteriorated
 - Safety Factor of 2
 - Ovality: 5%
 - Ground Water Table: ground water table at surface (except where sewer is located in flood plain then use 100-year flood stage elevation)
 - Soil Density: 120 lb./cu. ft.
 - The following parameters will depend on locations and shall be determined specifically for each sewer segment to be lined: Depth to invert, Live Loads, Soil Modulus and 100-year flood plain elevation.
 - Minimum liner thickness: 6.0 millimeters

2. For pipes over 15" diameter:
 - Existing pipe fully deteriorated
 - Safety Factor of 2
 - Ovality: 5%
 - Ground Water Table: ground water table at surface (except where sewer is located in flood plain then use 100-year flood stage elevation)
 - Soil Density: 120 lb./cu. ft.
 - The following parameters will depend on locations and shall be determined specifically for each sewer segment to be lined: Depth to invert, Live Loads, Soil Modulus and 100-year flood plain elevation.
 - Minimum liner thickness: 10 millimeters

Structural Requirements. The materials properties of the finished CIPP shall meet or exceed the following structural standards:

Minimum Physical Properties

Property	ASTM Test Method	Polyester System	Filled Polyester System	Vinyl Ester System
Flexural Strength	D790	4,500 psi	4,500 psi	5,000 psi
Flexural Modulus (Initial)	D790	250,000 psi	400,000 psi	300,000 psi
Flexural Modulus (50 Yr)	D790	125,000 psi	200,000 psi	150,000 psi
Tensile Strength	D638	3,000 psi	3,000 psi	4,000 psi

Execution. Installation shall be in accordance with standard practice for rehabilitation of existing pipelines and conduits and curing of a resin – impregnated tube ASTM F-1216. The Contractor may use either hot water or steam cure as deemed necessary for the installation, however specific installations may warrant the designation of a certain curing method and the Contractor is to allow for the installation using either technique.

The Contractor when required shall provide for the transfer of flow around the section or sections of pipe that are to be lined. The bypass shall be made by diversion of the flow at an existing upstream access point and pumping the flow into a downstream access point or adjacent system. The pump and bypass lines shall be of adequate capacity and size to handle the flow. The proposed bypassing system shall be approved in advance by the Village.

No lining will be permitted during periods of high flow.

Prior to any lining of designated sanitary sewer segments the Contractor shall remove internal deposits and roots as necessary to assure proper liner installation. Television inspection shall be performed to verify extent of damage, and location of service connections. Cleaning and inspection shall be in accordance with these specifications.

Public Notice. A public notification program shall be implemented, and shall as a minimum, require the Contractor to be responsible for contacting each home or business connected to the sanitary sewer and informing them of the work to be conducted, and when the sewer will be off-line. The Contractor shall also provide the following:

- a. Written notice to be delivered to each home or business describing the work, schedule, how it affects them, and a local telephone number of the Contractor they can call to discuss the project or any problems that could arise.
- b. Personal contact and attempted written notice 24-48 hours prior to the beginning of work being conducted on the section of sewer relative to the residents affected.
- c. Personal contact with any home or business that cannot be reconnected within the time stated in the written notice.

Flexible Liner Installation. The Contractor shall designate a location where the uncured resin in the original containers and the un-impregnated fiber felt tube will be vacuum impregnated prior to installation. The Contractor shall allow the Engineer to inspect the materials and procedure. A resin and catalyst system compatible with the requirement of this method shall be used. The quantities of the liquid thermosetting materials shall be per manufacturer's standards to provide the lining

thickness specified and shall be sufficient to fill the volume of air voids in the tube with additional allowances being made for polymerization shrinkage and the anticipated loss of any resin through cracks and irregularities in the original pipe wall.

The wet out (inversion) fiber felt tube shall be inserted through an existing manhole or other approved access point. The manufacturer's standards shall be closely followed during the elevated curing temperatures so as not to over stress the felt fiber and cause damage or failure during the cure.

If the Contractor installs a shot through an existing manhole ("double shot"), it is the Village's intention for the Contractor to provide a liner through the manhole channel. The Contractor shall extend the liner to cover as much of the manhole channel as possible. The liner seam, along the manhole bottom, between bench and trough, shall be sealed with an epoxy compatible with CIPP resin.

The finished cured-in-place pipe shall be continuous over the entire length of the insertion run and be as free as commercially practicable from significant defects. Any defects which will affect, in the foreseeable future, or warranty period, the integrity, maintenance, or strength of the cured-in-place pipe, including foreign inclusions, dry spots, pinholes, delaminations, wrinkles, bubbles and blisters shall be repaired at Contractor's expense, in a manner mutually agreed upon by the Village and the Contractor.

End Seal. All pipes shall be fitted with a hydrophilic gasket, the "Insignia" as manufactured by LMK or approved equal, at both ends of each segment prior to installation of the liner. In addition, the liner shall be neatly cut at least 4-inches from the manhole wall to allow for filling of the annular space at the manhole opening with an epoxy resin compatible to CIPP. This epoxy resin filling, along with a hand brushed hydraulic cement topcoat, shall be applied at all manhole wall to CIPP joints to ensure a water tight seal at the manhole.

The cost for End Seal work shall be incidental to the contract and will not be paid for separately.

Testing. The Contractor shall prepare a sample for each installation of CIPP. The samples shall be restrained samples for diameters of CIPP less than 18" and flat plate samples for diameters of CIPP 18" and larger. The flat plate samples shall be taken directly from the wet out tube, clamped between flat plates, and cured in the downtube. The restrained samples shall be tested for thickness and initial physical properties; flat plate samples shall be tested for initial physical properties only. The Contractor shall be responsible for providing one data set for each week of installation (testing sample to be determined by the Engineer). If that data set does not meet the testing criteria, then all remaining samples for that week shall be tested for compliance and the liners not meeting the design criteria shall be rejected for payment and removed at the Contractor's expense.

Inspection. The post-installation television inspection shall be used to confirm tightness of fit of the CIPP to the host pipe and to identify any imperfections; the finished liner shall be continuous over its entire length and to be free from visual defects such as foreign inclusions, dry spots, pinholes, delamination areas, wrinkles, bubbles and blisters. All defects discovered during the post-installation television inspection shall be corrected by the Contractor at no additional cost, prior to completion of work. After defects are corrected, the sewer shall be televised again to show effectiveness of repairs. Post- installation CCTV to be delivered to Village and Engineer.

The work for sewer televising post-liner installation shall be incidental to the cost item.

Basis of Payment. The work will be paid for at the Contract Unit Price per Linear Foot for CURED-IN-PLACE PIPELINING of diameter specified. Measurement shall be made from face of starting manhole to face of ending manhole. In the case of a "double shot" measurement shall include the length through the intermediate manhole.

ITEM 9: INTERNAL SERVICE LATERAL REINSTATEMENT

Description. This work shall include the reinstatement of active service laterals after Cured-In-Place Pipelining.

Lateral Reinstatements. After the cured-in-place pipe has been cured, the Contractor shall reconnect the existing active branch or service lines as designated by the Village. This shall be done without excavation and in the case of non-man entry pipes, from the interior of the pipelines by means of a television camera and a remote cutting device that re-establishes them to not less than 90 percent capacity and not more than 100% of the internal diameter of the lateral pipe. The surface of the opening shall be wire brushed to remove extraneous material and provide a smooth edge at each lateral connection.

Basis of Payment. The work will be paid for at the Contract Unit Price per Each for INTERNAL SERVICE LATERAL REINSTATEMENT.

ITEM 10: PROTRUDING TAP REMOVAL

Description. For break-in service connections that protrude more than 1/2 inch into the sewer, the Contractor shall remove the protruding portion of the tap in preparation for cured-in-place pipelining, grouting or other rehabilitation work. Cutters used shall be power-driven cutting devices (lateral cutters) designed to remove protruding taps. Cutter shall be capable of slicing laterally through cast iron, 3/4" rebar and anchors, clay tile, and concrete protruding into sewer lines.

The Contractor shall cut protruding taps so that protrusions are no greater than 1/2 inch. While using a protruding tap cutter, slow revolution per minute (RPM) will cut more effectively than rapid RPM. The Contractor shall maintain a steady flow and RPM while cutting and shall hydro-flush cut and broken pieces out of the sewer before proceeding to the next protruding tap. If a protruding tap cannot be removed by the cutting device, then the Engineer shall be notified to determine if a point repair will be necessary. If the pipe in the vicinity of the protruding tap is in poor condition, the Contractor is to request authorization before proceeding with protruding tap removal.

Any damages caused to the sewer main or sewer service lateral during tap cutting shall be the responsibility of the Contractor and shall be repaired at no additional expense to the Village, unless prior authorization has been given by the Village.

Basis of Payment. This work item shall be paid at the Contract Unit Price per each for PROTRUDING TAP REMOVAL.

ITEM 11a: BYPASS PUMPING – BUFFALO GROVE

ITEM 11b: BYPASS PUMPING – WHEELING

Description. This work shall include control of sanitary sewer flow during sewer rehabilitation of all sewer segments that are part of this project, including in/across/near West Dundee Road, Old Arlington

Heights Road, Elmhurst Road, and Wheeling Road. The Contractor shall be fully responsible for maintaining sewer service during these operations and shall not be allowed to backup or flood any sanitary or storm sewer system user, building, or property. It shall be the responsibility of the Contractor to plan and execute, where necessary, sewer bypass pumping operations sufficient to avoid causing sewer back-ups for each municipality residential and commercial customers and to avoid illegal discharge onto land or into waterways. The Contractor shall be solely liable for property damages that result from the work being performed.

The Contractor shall have the ability to release bypass flows when rains are forecast. No bypass pumping or lining will be performed during rain events or when rain is forecast during that time.

The Contractor will be responsible for coordinating with each Village for any necessary permits needed for bypass pumping. Coordination with schools, including Buffalo Grove High School in Buffalo Grove and Jack London Middle School in Wheeling, and any other schools in the work area is also required, in addition to coordination with businesses and residences affected by the bypass pumping.

The Contractor will be required to submit separate detailed drawings and complete design data showing methods and equipment to be utilized in bypass and dewatering operations for all sewer segments. Approval of the plan is required prior to start of bypass operations.

The Contractor will be responsible for permanent restoration of any excavated area after the work is completed.

The bypass plans to be provided by the Contractor shall include the following information:

1. Schedule and timing of setup and bypass
2. Location of temporary sewer plugs and bypass discharge lines indicated on plans
3. Capacities of pumps, prime movers, and standby equipment
4. Approach for preventing any sewage leaks from sanitary bypass system into storm conveyance and access structures
5. Type of standby power source
6. Traffic control plan

During sewer cleaning operations, only 25% of the internal pipe diameter flow or "limited sewage flow" is acceptable. Flows shall be reduced by plugging, blocking, manually operating pump stations or bypass pumping. During sewer televising operations, NASSCO Standards must be followed and only 5% of the internal pipe diameter flow is acceptable. During sewer installation, sewer rehabilitation, manhole installation, manhole rehabilitation, and point repairs, no flows will be allowed.

The Contractor shall furnish all temporary pumps, conduits, and other equipment to divert the flow of sewage around the sewer section in which work is to be performed. The bypass system shall have sufficient capacity to handle existing flow plus additional flow that may occur during peak flow periods or from precipitation. The Contractor shall construct the bypass system of material(s) necessary to prevent leakage during pumping operation.

The Contractor shall equip all engines with mufflers and/or enclose to keep noise level less than 50 decibels, or 10 decibels above ambient noise levels when measured at building closest to noise source.

The Contractor shall maintain sufficient labor, equipment and materials on site to ensure continuous and successful operation of bypass and dewatering systems including the following:

1. Keep standby pumps fueled and operational at all times.
2. Maintain on site sufficient number of valves, tees, elbows, connections, tools, sewer plugs, piping, and other parts or system hardware to ensure immediate repair or modification of any part of system as necessary.
3. Provide piping, joints and accessories designed to withstand at least twice the maximum system pressure or 50 psi (345 kPa), whichever is greater.

The flow values presented here are estimates only and are not to be used for designing of the bypass. The Contractor is responsible for determining the flow volumes to be bypassed during the rehabilitation.

When piping through culverts, creeks, or other storm conveyance routes the piping shall be designed to ensure no discharge of sanitary flow into the storm system. The capacity of the storm system will not be

In areas where flows are bypassed, all discharge flow shall be returned to the sanitary sewer. No bypassing to ground surface, receiving waters, storm drains, or bypassing which results in groundwater contamination or potential health hazards shall be permitted. This will include any necessary flushing of the bypass system.

In the event sewage is released into a storm drainage system or street, the Contractor shall immediately stop the release, notify the Village, and take all necessary actions to clean up and disinfect spillage to satisfaction of the Engineer. It is the responsibility of the Contractor to report any sanitary sewer overflows to the IEPA local office in Des Plaines within 24 hours of an occurrence.

The Contractor shall bear all costs arising from failure to anticipate bypass pumping needs, including, but not limited to the emergency stoppage of work, remobilization, removal and replacement of damaged work, emergency response by municipality personnel and compensation for damage to public and private property.

During plugging or bypass pumping operations, the Contractor shall utilize sewer plugs specifically designed so that all or any portion of sewage can be released. During sewer flow control operations, reduce flow to comply with requirements as describe above. After cleaning, inspection, installation, or rehabilitation work has been completed, restore the flow to normal.

Village Specific Bypass Pumping Items:

Buffalo Grove

- For crossing West Dundee Road in Buffalo Grove, the Village of Buffalo Grove approves the use of the 48" x 48" box culvert located north of 915 West Dundee Road (former Saturn dealer). This is shown on Appendix B-1. Bypass ramps across or traffic detours around West Dundee Road are not allowed.
- Estimated flows through the sewer segment C09-1510 – B09-1022
 - Average dry weather flow: 0.75 mgd (521 gpm)
 - Peak daily dry weather flow: 1.0 mgd (694 gpm)
 - Full pipe flow: 3.2 mgd (2,222 gpm)
- Estimated flows through the sewer segment C08-1752 – C09-1510 are one-third (1/3) of the total flow through segment C09-1510 – B09-1022
 - Average dry weather flow: 0.25 mgd (174 gpm)

- Peak daily dry weather flow: 0.33 mgd (229 gpm)
- Full pipe flow: 0.7 mgd (486 gpm)
- Piping through culvert shall be continuous with no pipe joints within the culvert.

Wheeling

- The Village of Wheeling approves the usage of creek culverts to cross Elmhurst Road or McHenry Road. The use of creek culverts to cross the railroad, is not pre-approved, but may be approved upon request.
- Bypass ramps across any IDOT road are not permitted.
- Full pipe flows for the Village of Wheeling are estimated as follows:
 - 8 inch – 0.5 mgd (347 gpm)
 - 10 inch – 0.75 mgd (521 gpm)
 - 12 inch – 1.1 mgd (764 gpm)
 - 21 inch – 3.2 mgd (2222 gpm)
 - 24 inch – 4.1 mgd (2847 gpm)
 - 30 inch – 6.4 mgd (4444 gpm)

Basis of Payment. The cost of bypass pumping will be paid for at the Contract Lump Sum price for BYPASS PUMPING, for each Village.

ITEM 12: PRE-CONSTRUCTION SURFACE VIDEO RECORDING

Description. This work consists of performing color video and audio recording of the project area and other areas which may be impacted by construction, specifically excavation or any work that requires backyard access.

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

Video recordings will begin with an audio narrative which provides the current date and time, the name of Owner and name of project, and a description of both the starting location and the location or locations to be recorded, including street name or names, street addresses, and any additional information which may be necessary to describe the location and subject of viewing.

Video recordings will maintain viewer orientation by means of an audio commentary in the audio track of each video recording which provides an explanation of what is being viewed; and by videotaping landmarks and readily identifiable objects (property addresses, street signs, etc.) at appropriate intervals.

Preconstruction surface televising will be recorded at a rate of travel not exceeding 48 feet per minute, and zooming and panning rates will be controlled to provide clarity of features during

playback. The finished product will be provided with bright, clear pictures and accurate colors free from distortion, tearing, rolls, or other forms of picture imperfection. The audio will have proper volume and clarity. All recordings will be performed at times of satisfactory visibility, and when no more than ten percent of ground is obscured by snow, leaves, or other cover.

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

Schedule. Pre-construction surface televising will be performed according to the following schedule:

- a. Pre-construction surface televising will take place after a Notice to Proceed has been issued.
- b. Pre-construction surface televising will take place after the Joint Utility Locating Information for Excavators (JULIE) request for the project area has cleared.
- c. Pre-construction surface televising will take place before any equipment, materials, or other items are delivered to the site.
- d. Pre-construction surface televising will take place no more than fourteen (14) chargeable days prior to the start of construction.
- e. The required pre-construction surface televising deliverables will be submitted to the Engineer, and the Engineer will review and issue written approval of the video before any activity other than utility locating will be permitted to start. Such activity will include, but not be limited to, delivery of materials and equipment, installation of traffic control and erosion control, and completion of construction layout and tree protection. No days will be charged against the contract time while the video is under review by the Engineer, including the day the deliverables are submitted and the day a response is provided. If the video or any portions thereof are rejected, the contract time will commence to run until revisions are submitted.
- f. The televising will be submitted to Engineer for review prior to commencement of any construction, and acceptance of recordings must be provided by Engineer prior to commencement of construction. Any areas found not acceptable to the Owner will be re-filmed at no additional cost to the contract.

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

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

Pre-construction surface televising electronic files will be provided on a portable electronic media device or devices of one of the following types: USB flash drive, external hard drive, or such other portable electronic media device as may be approved by Engineer. Pre-construction surface televising electronic files may also be provided via online file sharing, cloud storage, File Transfer Protocol (FTP), or other online or network file transfer methods if approved by Engineer.

Pre-construction surface televising electronic files will be accompanied by corresponding logs which document the dates, times, and locations covered by each preconstruction video recording electronic file.

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

Basis of Payment. This work will be paid for at the contract Lump Sum price for PRE-CONSTRUCTION SURFACE VIDEO RECORDING.

ITEM 13a: TRAFFIC CONTROL AND PROTECTION – BUFFALO GROVE
ITEM 13b: TRAFFIC CONTROL AND PROTECTION – WHEELING

Description. This work consists of providing traffic control during bypass operations and rehabilitation work for the Village of Buffalo Grove and Village of Wheeling, as described in the general provisions.

This work shall consist of the furnishing, installation, maintenance, relocations, and removal of all signs, signals, barricades, warning, or directing traffic during construction. Also included is the planning, construction, and maintenance of any approved detour routes. All traffic control devices shall be installed per CCDOT and IDOT permit requirements.

This work shall be performed in accordance with Section 701, 702, and 703 of the "Illinois Department of Transportation Standard Specifications for Road and Bridge Construction", and any traffic control requirements specified or requested by the Village of Buffalo Grove, Village of Wheeling, and the Illinois Department of Transportation, or other designated governing authority over roadway rights-of-way.

The contractor shall be responsible for completing permits and posting the required bonds including a Utility Permit Bond with the Illinois Department of Transportation, Cook County Department of Transportation, the Village of Buffalo Grove, the Village of Wheeling, and complying with all requirements of the highway permits. Costs for these bonds shall be included in the cost of TRAFFIC CONTROL AND PROTECTION for each Village.

Basis of Payment. The cost of traffic control and protection will be paid for at the Contract Lump Sum Price for TRAFFIC CONTROL AND PROTECTION, per Village, which price shall be full compensation for all work and material required for installation, maintenance, and removal and replacement of any traffic control devices required for this project.

APPENDIX A Additional Municipality-Specific Information

Buffalo Grove

Project Manager – Kyle Johnson, Civil Engineer, 847-459-2523, kjohnson@vbq.org

Local Parking Plan – Overnight parking and equipment storage will be coordinated at the pre-construction meeting. Overnight parking and equipment storage is not permitted on local roads.

Local Water Plan - The Contractor can obtain non-potable water in bulk at no charge at Buffalo Grove Public Works Department, 50 Raupp Blvd. The Contractor shall provide the water truck and driver to obtain and transport the water. In addition, the Village of Buffalo Grove will provide a water meter and allow a contractor hook up to a hydrant on site if they can supply the appropriate system and responsibly operate the hydrant. The contractor must provide a backflow preventer that has been bench tested in the last 12 months and supply those passing results to the Village before hook up. They also must have a system to support the backflow preventer and meter off of the hydrant so the threaded connections are not the only object supporting all the weight. Wood is an acceptable apparatus but it must be cut to an appropriate length and hold the backflow preventer and meter in a “saddle” so it cannot easily slip out. The hydrant must be operated very slowly as to not create any percussions in the Village’s water system. **Failure to operate the hydrant appropriately or provide the correct materials will result in the contractor being required to truck water from the Village’s Public Works building.**

Maps – See segment list and maps attached in Appendices B-1 and B-2.

Project Meetings – No regular project meetings are required for the Buffalo Grove project.

Wheeling

Project Manager – Lana Rudnik, 847279-6912, LRudnik@wheelingil.gov

Local Parking Plan – To be coordinated at preconstruction meeting

Local Water Plan – Water will be available at no charge at the Public Works Facility located at 77 W. Hintz Road only provided that an account is set up with Finance Department. An RPZ is also available with a \$2,500 deposit.

Maps – See segment list and maps attached in Appendices B-1 and B-2

Project Meetings – The Village of Wheeling will schedule bi-weekly meetings to discuss progress and project coordination and make physical arrangements for meetings and preside at meetings either on-site or at an agreed upon location. The Contractor shall be required to have a project representative attend all bi-weekly meetings and provide progress status updates. The cost for progress meetings shall be considered incidental to the project.

APPENDIX B-1

2019 Sewer Lining Schedules

VILLAGE OF BUFFALO GROVE								
2019 SEWER LINING SCHEDULE								
Upstream Manhole	Downstream Manhole	Location	Pipe Diameter (in)	Pipe Material	Segment Length (ft)	Number of Live Services	Number of Abandoned Services	Number of Protruding Taps
C09-1510	B09-1022	Old Arlington Heights Rd	21	RCP	117	0	0	0
B09-1022	B09-1010	Old Arlington Heights Rd	21	RCP	403	0	0	0
B09-1010	B09-1009	Old Arlington Heights Rd	21	RCP	420	0	0	0
B09-1009	B09-1013	Old Arlington Heights Rd	21	RCP	62	0	0	0
B09-1013	B09-1012	Old Arlington Heights Rd	21	RCP	108	0	0	0
B09-1012	B09-1507	Old Arlington Heights Rd	21	RCP	448	0	0	0
B09-1507	B09-1506	Old Arlington Heights Rd	21	RCP	449	0	0	0
C13-1009	C13-1010	S Buffalo Grove Rd	8	VCP	333	5	3	2
C13-1010	D13-1513	S Buffalo Grove Rd	8	VCP	306	5	2	2
D13-1513	D13-1512	S Buffalo Grove Rd	8	VCP	330	4	0	1
D13-1510	D13-1511	S Buffalo Grove Rd	8	VCP	333	5	0	0
D13-1511	D13-1512	S Buffalo Grove Rd	8	VCP	385	4	0	0
D13-1509	D13-1009	S Buffalo Grove Rd	8	VCP	236	2	0	0
D13-1009	D13-1007	S Buffalo Grove Rd	8	VCP	320	2	0	0

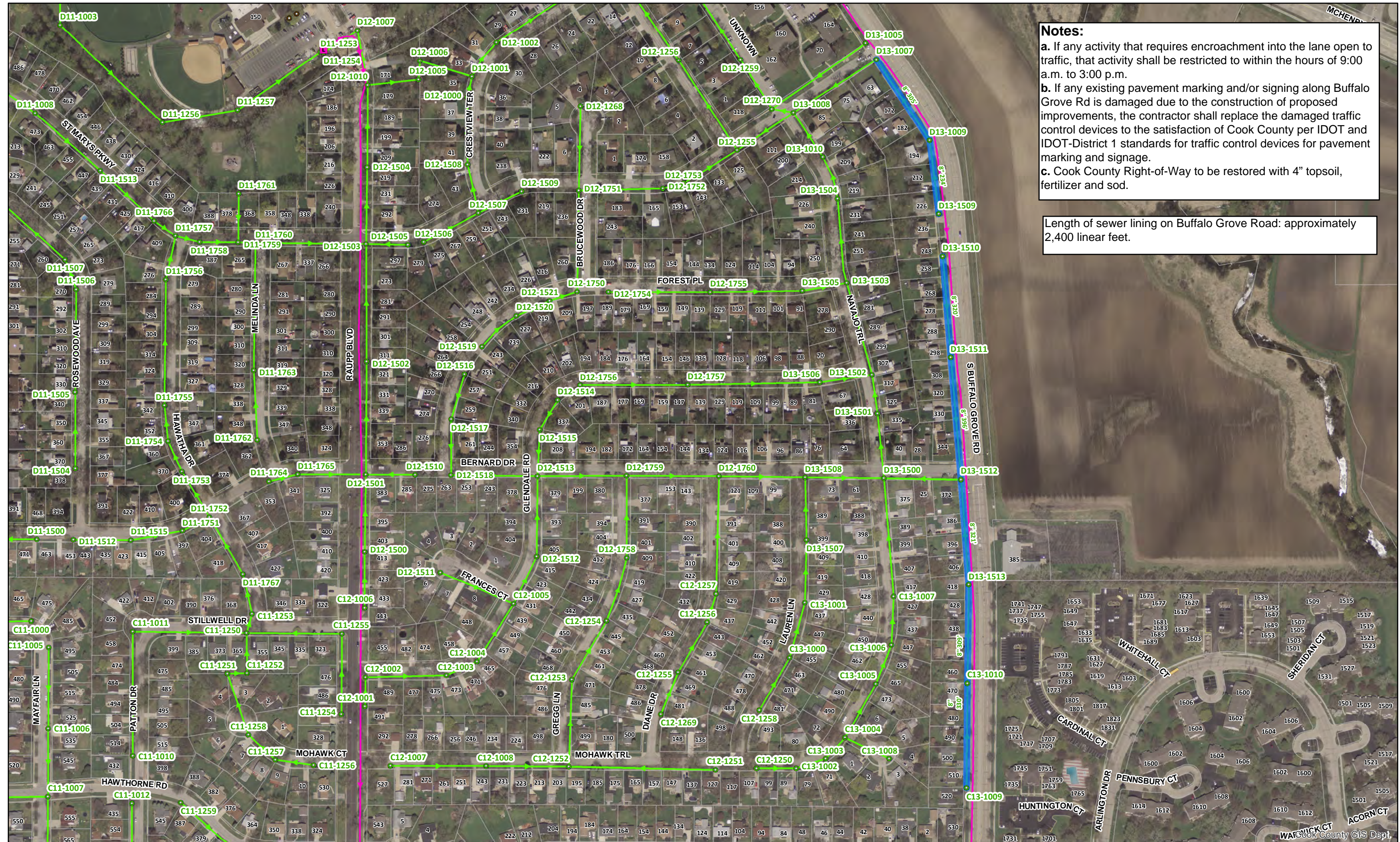
VILLAGE OF WHEELING 2019 SEWER LINING SCHEDULE								
Upstream Manhole	Downstream Manhole	Location	Pipe Diameter (in)	Pipe Material	Segment Length (ft)	Number of Live Services	Number of Abandoned Services	Number of Protruding Taps
A225	A225A	Dundee Rd	8	DI	402	1	0	0
A225A	A226	Dundee Rd	8	DI	70	0	0	0
D205	D206	Dundee Rd	8	VCP	51	0	0	0
D206	F115B	Dundee Rd	8	VCP	91	0	0	0
A4	A5	Northgate Pkwy	10	VCP	407	0	0	0
A5	A226	Northgate Pkwy	10	DI	399	0	0	0
A226	C5	Northgate Pkwy	10	DI	88	0	0	0
C11	C13	Dundee Rd	12	ESVCP	384	0	0	0
C11A	C11	Dundee Rd	12	ESVCP	384	0	0	0
C5	C6	Dundee Rd	12	ESVCP	378	0	0	0
C6	C11A	Dundee Rd	12	ESVCP	381	1	0	0
A10	A9	Dundee Rd	24	VCP	397	0	0	0
A9	C3	Dundee Rd	24	VCP	85	0	0	0
C10C	C13	Dundee Rd	24	RCP	6	0	0	0
C3	C4	Dundee Rd	24	VCP	209	0	0	0
C4	C7	Dundee Rd	24	VCP	397	0	0	0
C7	C8A	Dundee Rd	24	VCP	348	1	0	0
C8	C9A	Dundee Rd	24	VCP	83	0	0	0
C8A	C8	Dundee Rd	24	VCP	399	1	0	0
C9A	C10C	Dundee Rd	24	VCP	317	2	0	0
F114B	F114C	Dundee Rd	24	RCP	13	0	0	0
F114B	F115	Dundee Rd	24	RCP	28	0	0	0
F115	F115B	Dundee Rd	24	RCP	145	0	0	0
F115B	F116	Dundee Rd	24	RCP	192	1	0	0
F116	A10	Dundee Rd	24	RCP	397	2	1	1
F117	F114C	Dundee Rd	24	RCP	321	0	0	0
F118	F117	Dundee Rd	24	RCP	336	0	0	0
F119	F118	Dundee Rd	24	RCP	314	0	1	0
F120	F119	Dundee Rd	24	RCP	300	0	0	0
F121	F120	Dundee Rd	24	RCP	279	0	0	0
C13	C14	Dundee Rd	30	ESVCP	326	0	0	0
C14	C15	Dundee Rd	30	ESVCP	333	0	0	0

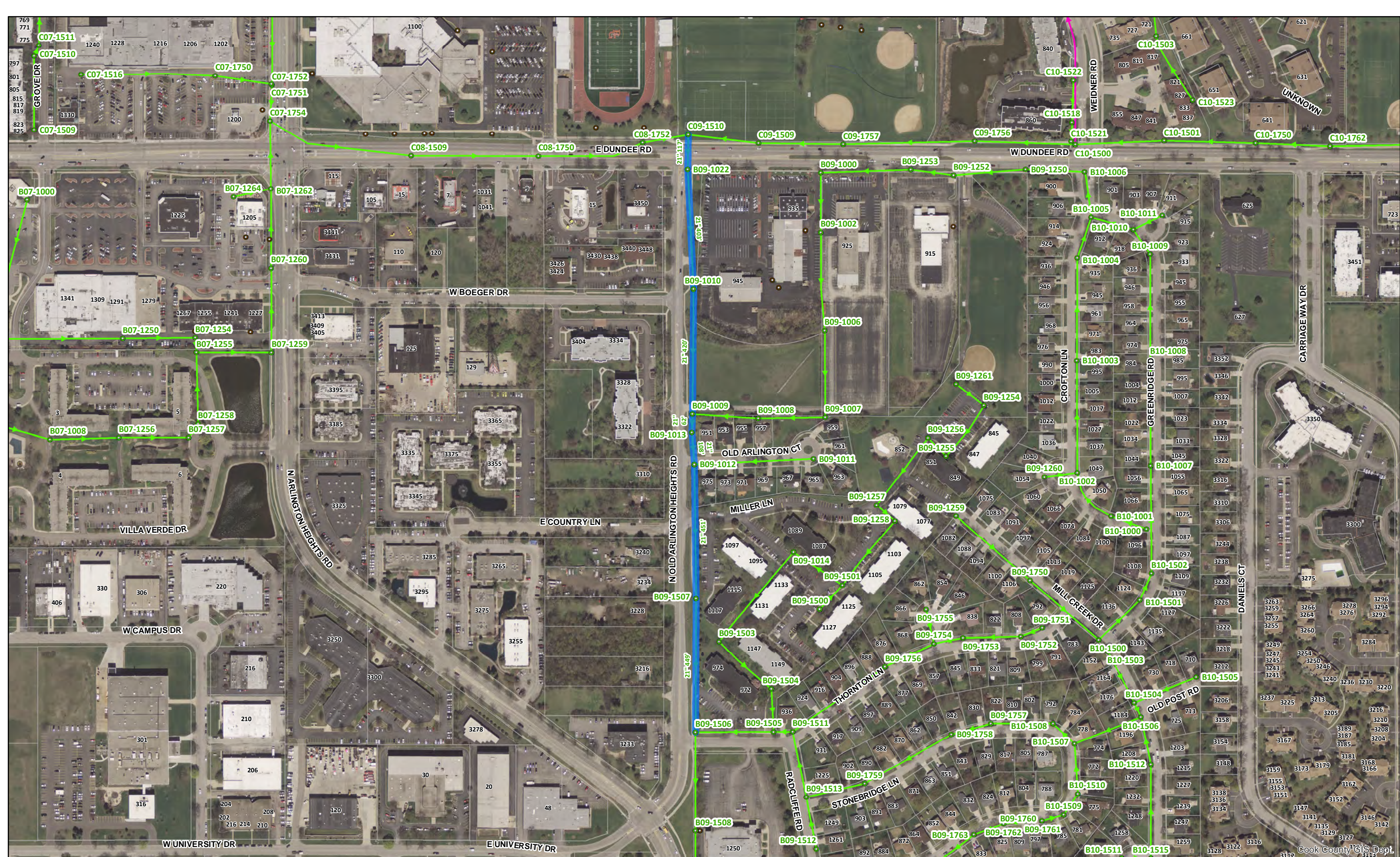
APPENDIX B-2
2019 Sewer Lining Exhibits

Notes:

- a. If any activity that requires encroachment into the lane open to traffic, that activity shall be restricted to within the hours of 9:00 a.m. to 3:00 p.m.
- b. If any existing pavement marking and/or signing along Buffalo Grove Rd is damaged due to the construction of proposed improvements, the contractor shall replace the damaged traffic control devices to the satisfaction of Cook County per IDOT and IDOT-District 1 standards for traffic control devices for pavement marking and signage.
- c. Cook County Right-of-Way to be restored with 4" topsoil, fertilizer and sod.

Length of sewer lining on Buffalo Grove Road: approximately 2,400 linear feet.



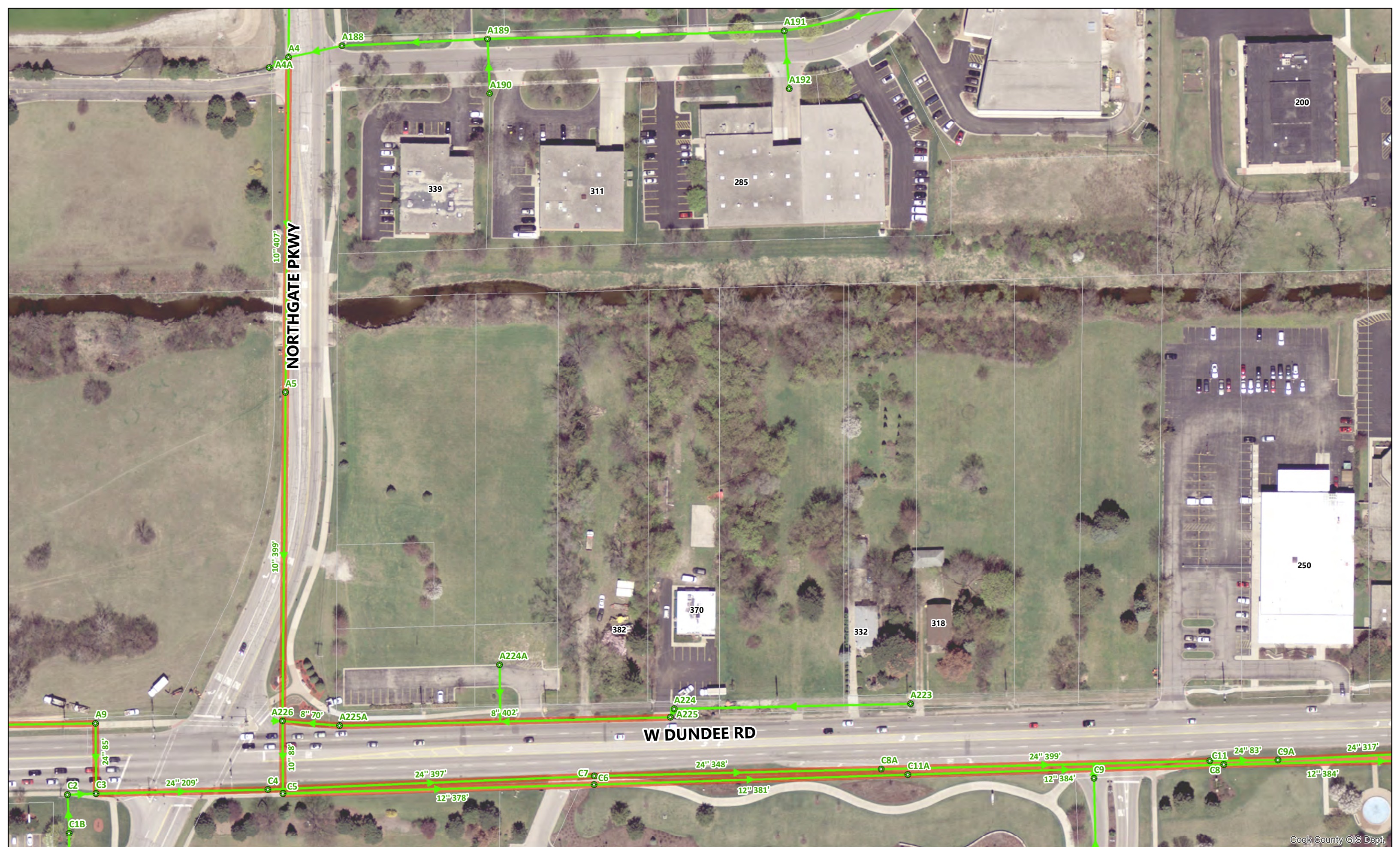




0 40 80 160 240 Feet
 1 inch = 100 feet

Cook County GIS Dept.
 Village of Wheeling, IL
 Dundee Rd CIPP Lining
 March 2019





rjngroup
Engineering Infrastructure for tomorrow

⊕ Wheeling Manhole
→ Wheeling Sewer
— Wheeling CIPP Lining

0 40 80 160 240 Feet
1 inch = 100 feet

Cook County GIS Dept.
Village of Wheeling, IL
Dundee Rd CIPP Lining
March 2019

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W DUNDEE RD

● Wheeling Manhole
 → Wheeling Sewer
 — Wheeling CIPP Lining

0 40 80 160 240 Feet

1 inch = 100 feet



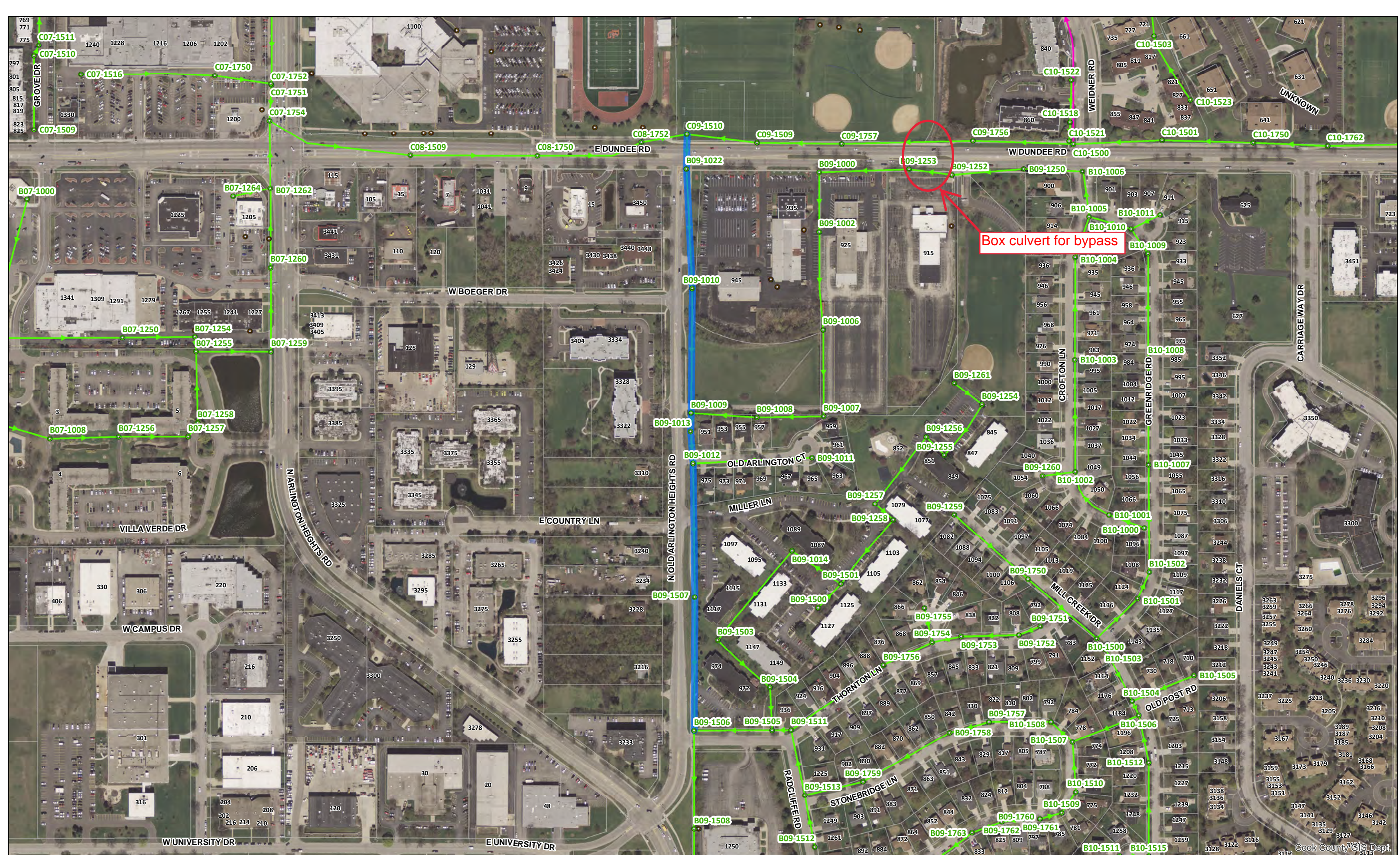
Cook County GIS Dept.
Village of Wheeling, IL
Dundee Rd CIPP Lining
March 2019

rjngroup
 Engineering Infrastructure for tomorrow

\\whe-panzura1\OFFICE-1\WHEATON\PROJECTS\Wheeling_IL\11335600 2018 Dundee Road Sewer Rehab Design\GIS\Map Documents\Dundee Rd CIPP Lining (11x17).mxd - Date Printed: 3/29/2019 4:15:02 PM

APPENDIX B-3

Bypass Pumping Options



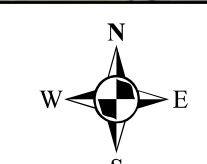
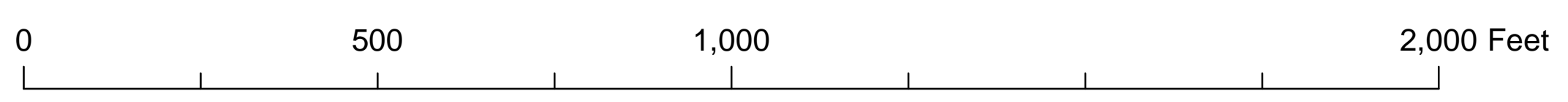
Box culvert for bypass

Lift Station	Private Manholes	Lake Zurich Manholes	Village of Buffalo Grove Sewers	Private Sewers	Village of Lake Zurich Sewers	CIPP Lining
Buffalo Grove Manholes	Lake County Manholes	Force Main	MWRD	Lake County Sewers	Village of Wheeling Sewers	

Wheeling - Potential Bypass Routes



- Wheeling Manhole
- MWRD Manhole
- Wheeling Sewer
- MWRD Sewer
- Force Main
- Wheeling CIPP Lining



APPENDIX B-4
Materials List
Village of Buffalo Grove

**EXHIBIT NO.109
MATERIALS LIST**

Date of revision: 1/1/16

Water Distribution Material Specifications:

Water main pipe.	Ductile Iron Pipe. Pipe class thickness—AWWA C150, minimum thickness, Class 52. Pipe—AWWA C151. Pipe lining—AWWA C104. Fittings—AWWA C153. Joints—mechanical and push-on, AWWA C111. Wrap—4 mil. X-Lam conforming to AWWA C105.A21.5 and AWWA C600. No 90 degree bends allowed. All stainless steel trim.
Valves.	American Flow Control, Series 2500 resilient wedge gate valve, All sizes two inch to fourteen inch, counter clockwise to open, AWWA C500., AWWA C504. Clow AWWA C-504 Butterfly Valve for sixteen inch and above. Joint end—mechanical, AWWA C111. All stainless steel trim.
Valve Vault.	All structures shall be monolithically precast with designed openings or mechanically cored in the field and shall have rubber boots conforming to ASTM C-923. Dog house vaults are excluded from these requirements when permitted by Village Engineer. Size: For six and eight inch diameter valves, valve vaults shall have a forty-eight inch inside diameter; for pressure connections and valves ten inches and larger in diameter, valve vaults shall have a sixty inch inside diameter. All valve vault cones must be eccentric centers with valve properly aligned.
Castings.	East Jordan Iron Works 1022 Frame and Lid or Neenah R-1713, embossed per Exhibit No. 401 of Buffalo Grove Numerical Code Title 16.
Fire Hydrant.	Waterous Pacer Model WB67-250, AWWA C502, painted fire engine red above ground, with resilient wedge auxiliary gate valve. Nozzles, two at two and one half inch, one at four and one half inch, with threads conforming to National Standard Specifications. Frangible section (breakaway type) with the break line flange located one inch above finished grade. Joint end, six inch, mechanical or push-on. All stainless steel trim. Auxiliary boxes and hydrants shall be a direct flange-to-flange connection.
Fire hydrant extension	Fire hydrant extensions and parts to be manufactured by Waterous only. All stainless steel trim.
Hydrant Valve Box \ Valve boxes	Hydrant Valve Box Tyler 664-S. Lid embossed "WATER." Rubber valve box stabilizer required.
Service Pipe.	Copper tube, two inches and smaller, ASTM B88, Type K (1" minimum). Ductile iron, larger than two inches. Conform to Water main section above. Service upgrade for existing water main requires a stainless steel tap repair clamp. Ford model FS1-CC, minimum length 15" long.
Corporation Stop.	Mueller H15000, 1" minimum, AWWA C800. 1" Direct tap or 1 1/4" and larger shall use Ford FC202 stainless steel band, epoxy coated saddle.
Curb Stop.	Copper service, Mueller H-15154. Ductile iron service, Resilient wedge counter clockwise to open, AWWA C500. Joint end—mechanical, AWWA C111.
Curb box	Copper service, Mueller H-10302. Ductile iron service, conform to Hydrant Valve Box section above. Ductile iron service, 6" and larger, conform to Valve Vault section above.
Copper to Copper Fittings	Mueller Company Model #H-15400. An all flared coupling is required, no sweat joint or compression allowed.
Pressure Connections	Ford FTSS style tapping sleeve. American Flow Control Series 2500 tapping valve four inch minimum. All stainless steel trim.

Sanitary Sewer Material Specifications:

Sewer and Service Connection Pipe	Reinforced concrete pipe—circular reinforcement, minimum Class 3, ASTM C76, with epoxy lining. PVC solid wall (SDR-26H) pipe—ASTM D-3034 for six to fifteen inches in diameter.
Sewer and Service Connection Pipe Joints.	Reinforced concrete pipe—ASTM C443. PVC solid wall (SDR-26H) pipe—ASTM D-3212 for six to eighteen inches in diameter.
Sewer and Service Connection Pipe Fittings	PVC solid wall (SDR-26H) pipe—ASTM D3034 for six to fifteen inches in diameter.
Casing Pipes.	Steel pipe—ASTM A120, three-eighths inch minimum thickness.
Manholes	Size: For sewer eighteen inch diameter or less, manhole shall have a forty-eight inch inside diameter. For sewer twenty-one inch to thirty-six inch diameter, manhole shall have a sixty inch inside diameter. For sewer greater than thirty-six inch diameter, manhole shall have an offset riser pipe of forty-eight inch inside diameter. All structures shall be monolithically precast including bases and invert flow lines.
Castings.	East Jordan Iron Works Frame 1022 or Neenah R-1713, with self-sealing lid and recessed pick hole, embossed per Exhibit No. 301 of Buffalo Grove Numerical Code Title 16.

Storm Sewer System Material Specifications:

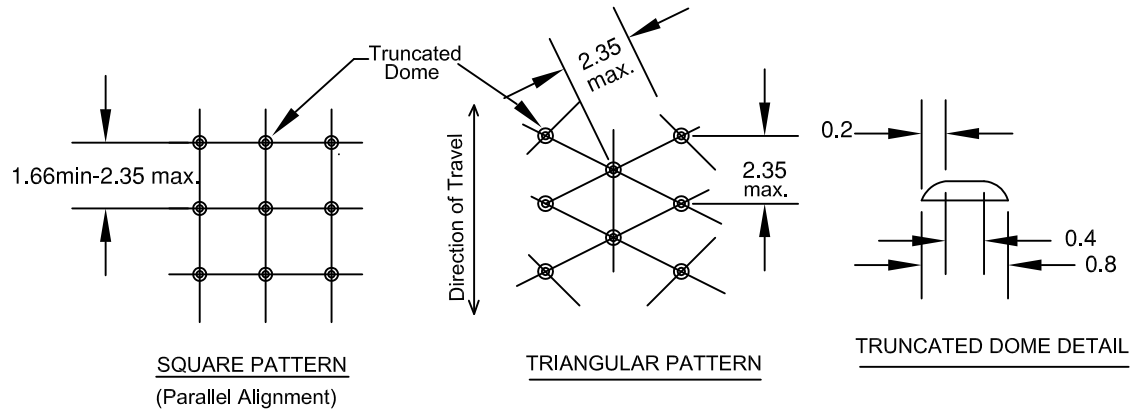
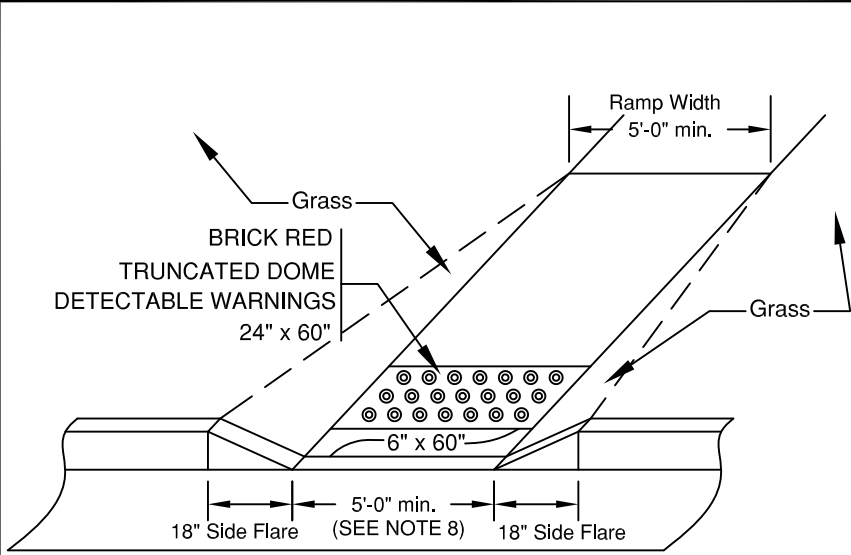
Structures.	All structures shall be precast with designed openings or mechanically cored in the field.
Castings.	Closed Lid, East Jordan Iron Works 1022 or Neenah R-1713, embossed per Exhibit No. 201., Open Lid, East Jordan Iron Works 1022 or Neenah R-1713, Standard B4.12 or any other barrier curb, Type 11— East Jordan Iron Works 7210 or Neenah 3281-A or Neenah 3170 on existing structures where required. Box height must be 6” minimum with 5’ tapers to match curb height., Depressed barrier curb, Type M3 Grate, Yard inlet, Type 8— East Jordan Iron Works 6517 or Neenah R-4340-B
Sewer Pipe Joints.	Reinforced concrete pipe—ASTM C443 or C361. PVC solid wall (SDR-26H) pipe—ASTM D-3212 for six to eighteen inches in diameter.
Sump pump service connection pipe/sub surface drain pipe.	4” PVC solid wall sewer pipe SDR-35. Blind connections must be cored in storm sewer and pipe connection shall be made with a rubber boot and stainless steel band. Sump pump per Exhibit No. 202 of Buffalo Grove Numerical Code Title 16 and underdrain per Exhibit No. 203.

Material Specifications For All Utilities:

Bedding	CA-11, Class B or better. All stone shall be crushed; rounded aggregate will not be permitted. The stone shall be compacted to 90% modified proctor density as required by ASTM D1557 or AASHTO T-180. Recycled materials permitted from IDOT approved sources meeting the correct gradations.
Trench Backfill	CA-11, Class B or better. This item shall meet the requirements of Class B CA-11, per the IDOT Standard Specifications for Road and Bridge Construction. All stone shall be crushed; rounded aggregate will not be permitted. The stone shall be compacted to 95% modified proctor density as required by ASTM D1557 or AASHTO T-180. Jetting of trenches is not permitted. Recycled materials permitted from IDOT approved sources meeting the correct gradations.
Adjustments	No more than two precast concrete adjusting rings with six inch maximum height adjustment shall be allowed, minimum one 2” ring installed on new structures. All adjustment rings less than 2” shall be HDPE rings. Only one HDPE may be used within the precast tolerances. Only precast concrete or

APPENDIX B-5

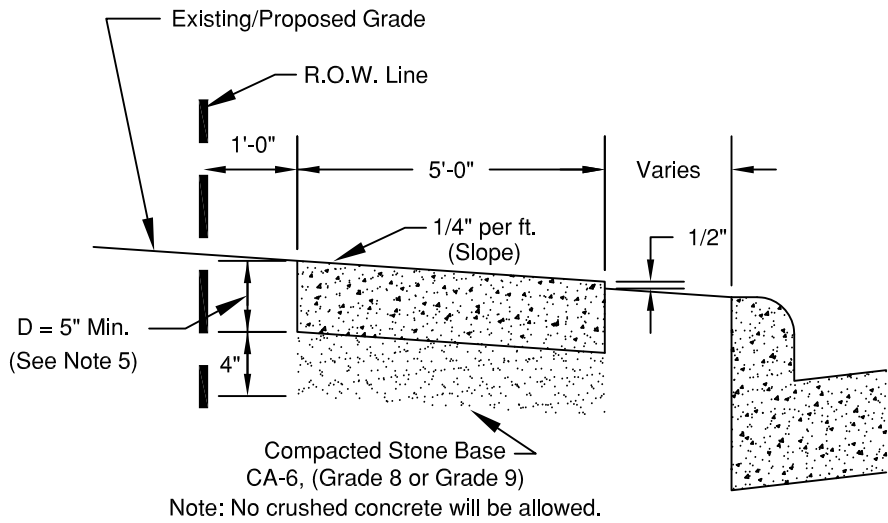
Details



DETECTABLE WARNINGS DETAIL

All dimensions are in inches unless otherwise shown

SIDEWALK RAMP



PUBLIC SIDEWALK

NOTE:

1. TO BE FORMED WITH 2" x 6" BOARDS OR BY 5" WIDE STEEL FORMS.
2. TOOLED JOINTS SHALL BE 1/2" AT 5' CENTERS.
3. EXPANSION JOINTS SHALL BE 3/4" THICK X 5" WIDE BITUMINOUS IMPREGNATED FIBERBOARD AT 50' CENTERS, AT DRIVEWAYS AND OTHER CONCRETE JOINTS.
4. PROVIDE BROOM FINISH EXCEPT AT TRUNCATED DOME.
5. D = 6" AT RESIDENTIAL DRIVEWAY
D = 8" AT COMMERCIAL/INDUSTRIAL DRIVEWAYS
6. SIDEWALK RAMPS AT DRIVEWAYS SHALL BE BUILT PER THE VILLAGE STANDARD.
7. THE CONCRETE SHALL BE A 6 BAG MIX AND SHALL NOT CONTAIN CHLORIDE OR FLY ASH. THE COMPRESSIVE STRENGTH SHALL MEET OR EXCEED I.D.O.T.'S REQUIREMENTS FOR "SI" CONCRETE (MINIMUM 3500 PSI @ 14 DAYS)
8. PROVIDE DEPRESSED CURBS AT ALL WALKS, 5' MINIMUM WIDTH ON DEPRESSION.
9. ALL SIDEWALKS, CURB/GUTTER AND PAVEMENT TO BE SAW-CUT AS REQUIRED.
10. MAXIMUM SLOPE OF RAMP NOT TO EXCEED 8%.
11. DRIVEWAY APRON REMOVAL & REPLACEMENT SHALL INCLUDE THE INSTALLATION OF A TRUNCATED DOME HANDICAPPED SIDEWALK RAMP ON BOTH SIDES OF THE APRON UNLESS OTHERWISE APPROVED BY THE VILLAGE ENGINEER.
12. TRUNCATED DOME CONSTRUCTION FOR DETECTABLE WARNINGS SHALL BE ARMOR-TILE TACTILE SYSTEMS FEDERAL #22144 OR TUFTILE DETECTABLE WARNING TILES, BRICK RED AND SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE I.D.O.T. STANDARDS. NO SURFACE MOUNT PANELS ALLOWED.

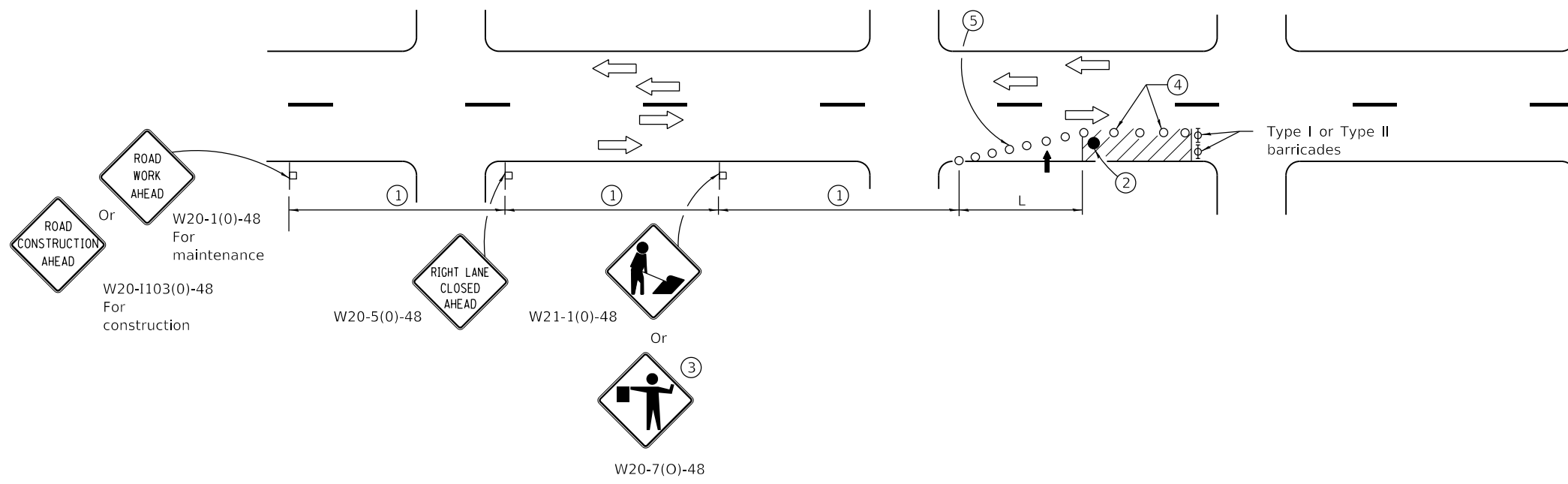


VILLAGE OF WHEELING
ENGINEERING DIVISION
2 COMMUNITY BOULEVARD
WHEELING, IL 60090
WWW.WHEELINGIL.GOV







PUBLIC SIDEWALK STANDARDS

VILLAGE OF WHEELING SPECIFICATIONS AND DETAILS	
FILE LOCATION	T:\ENGINEERING\STANDARDS

REVISIONS	
K.R.G.	9-11-06 AS PER T.W.M.
C.J.C.	11-27-07 AUTOCAD FILE
C.J.C.	08-08-08 AS PER K.R.G.
L.R.	04-04-14 AS PER J.T.
K.A.G.	12-21-16 AUTOCAD FILE



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
 -  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 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.
- ⑤ Cones, drums or barricades at 20' (6 m) centers 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 requiring the closure of 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).

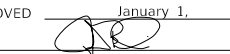
S = Normal posted speed mph (km/h).

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

Illinois Department of Transportation

PASSED January 1, 2015

 ENGINEER OF SAFETY ENGINEERING

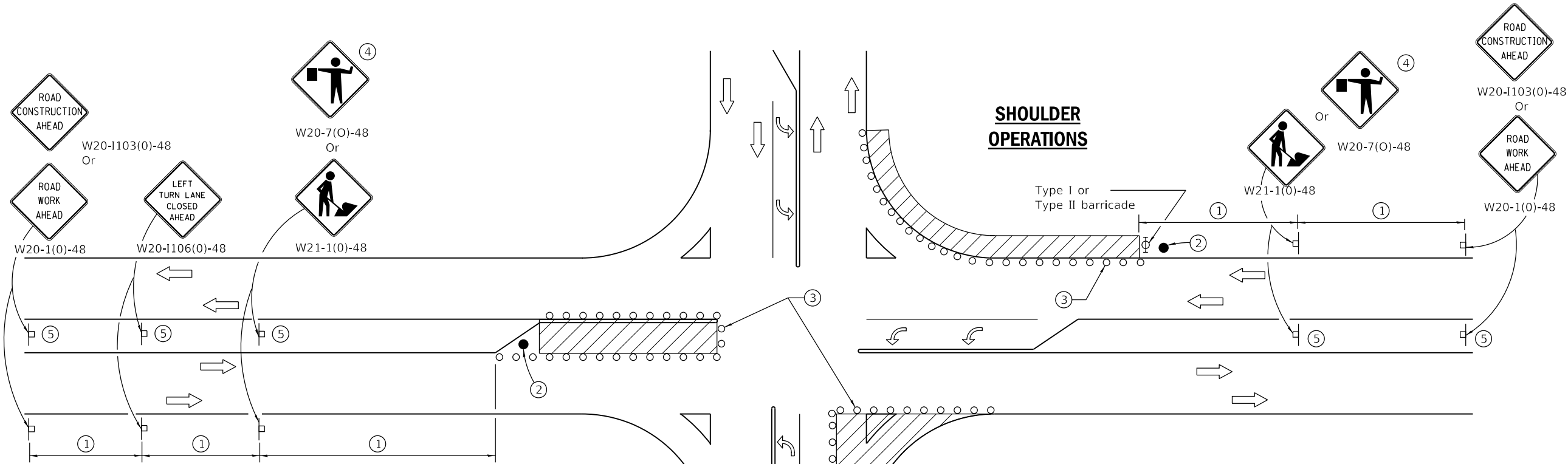
ISSUED 1-1-97

APPROVED January 1, 2015

 ENGINEER OF DESIGN AND ENVIRONMENT

DATE	REVISIONS
1-1-15	Renamed standard. Moved case on Sheet 2 to new Highway Standard.
1-1-14	Revised workers sign number to agree with current MUTCD.

URBAN SINGLE LANE CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN

STANDARD 701606-10



LEFT TURN LANE OR CENTER MEDIAN OPERATIONS

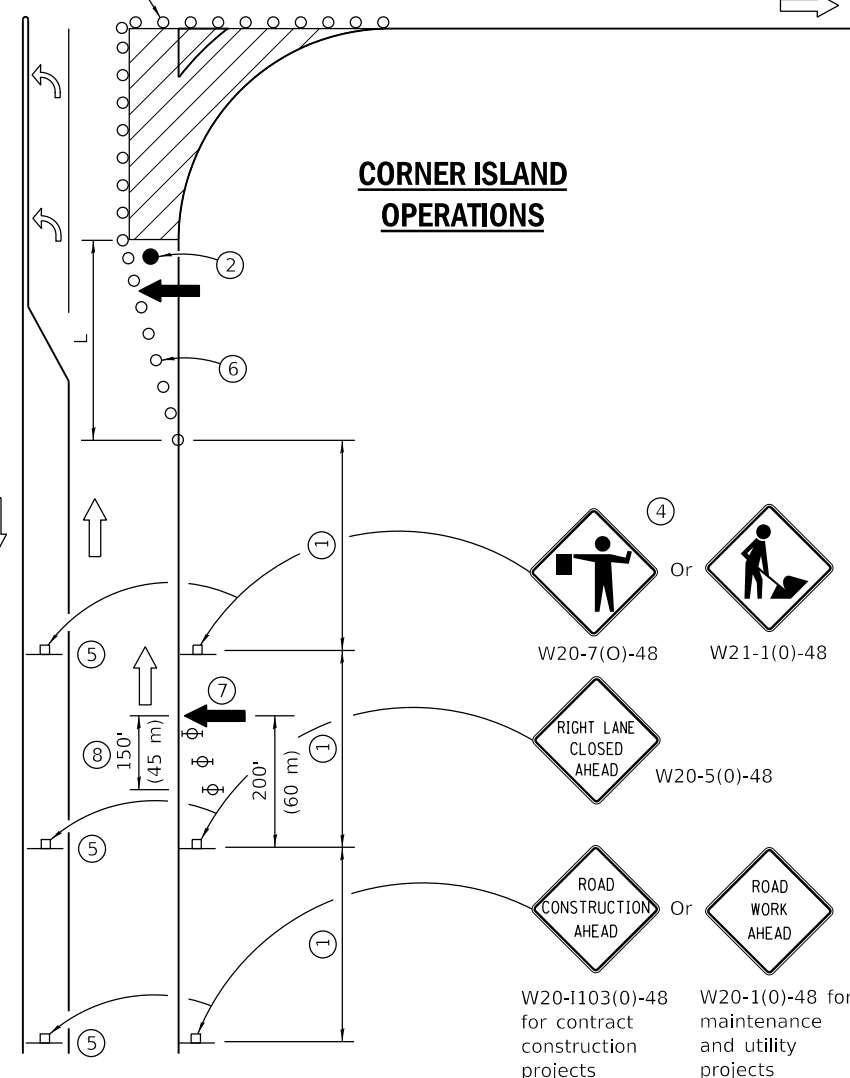
- ① Refer to SIGN SPACING TABLE for distance.
- ② Required for speed > 40 mph.
- ③ Cones at 25' (8 m) centers for 250' (75 m). Additional cones may be placed at 50' (15 m) centers. When drums or Type I or Type II barricades are used, the interval between devices may be doubled.
- ④ Use flagger sign only 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

CORNER ISLAND OPERATIONS



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.

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

Illinois Department of Transportation

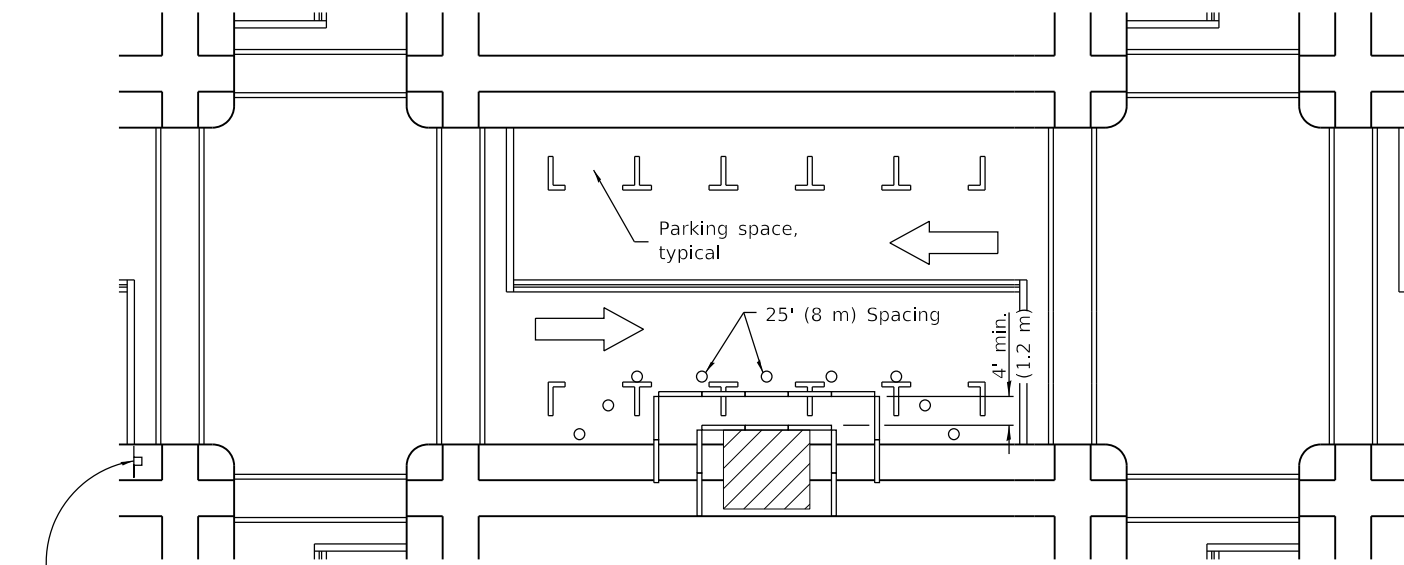
PASSED April 1, 2016

[Signature]
ENGINEER OF SAFETY ENGINEERING

APPROVED April 1, 2016

[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

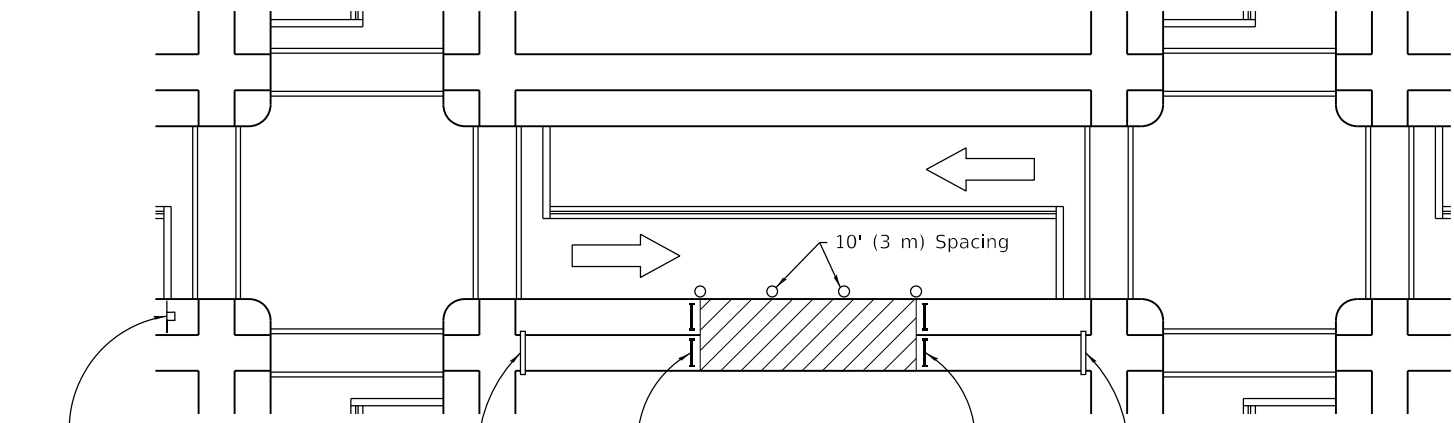
ISSUED 1-1-97



① ROAD CONSTRUCTION AHEAD
W20-1103(0)-48 for contract construction projects

Or
① ROAD WORK AHEAD
W20-1(0)-48 for maintenance and utility projects

SIDEWALK DIVERSION



① ROAD CONSTRUCTION AHEAD
W20-1103(0)-48 for contract construction projects

Or
① ROAD WORK AHEAD
W20-1(0)-48 for maintenance and utility projects

SIDEWALK CLOSED
←
USE OTHER SIDE
R11-1102-2430

SIDEWALK CLOSED
R11-1101-2418

SIDEWALK CLOSED
→
USE OTHER SIDE
R11-1102-2430

SIDEWALK CLOSURE

① Omit whenever duplicated by road work traffic control.

GENERAL NOTES

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

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

Temporary facilities shall be detectable and accessible.

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

The SIDEWALK CLOSED / USE OTHER SIDE sign shall be placed at the nearest crosswalk or intersection to each end of the closure. Where the closure occurs at a corner, the signs shall be erected on the 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.

SYMBOLS

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

Illinois Department of Transportation

PASSED April 1, 2016

 ENGINEER OF SAFETY ENGINEERING

APPROVED April 1, 2016

 ENGINEER OF DESIGN AND ENVIRONMENT

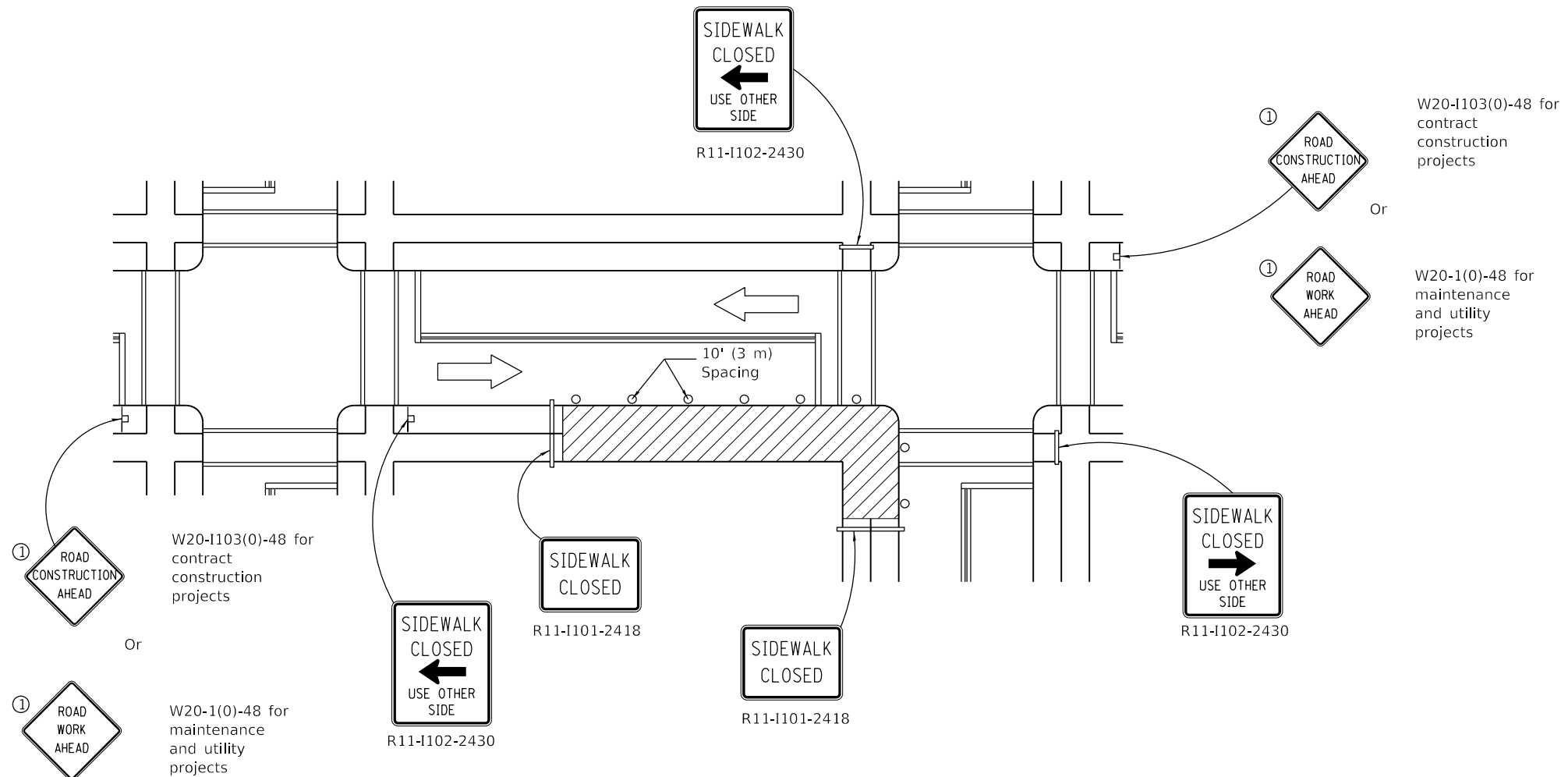
ISSUED 1-1-97

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

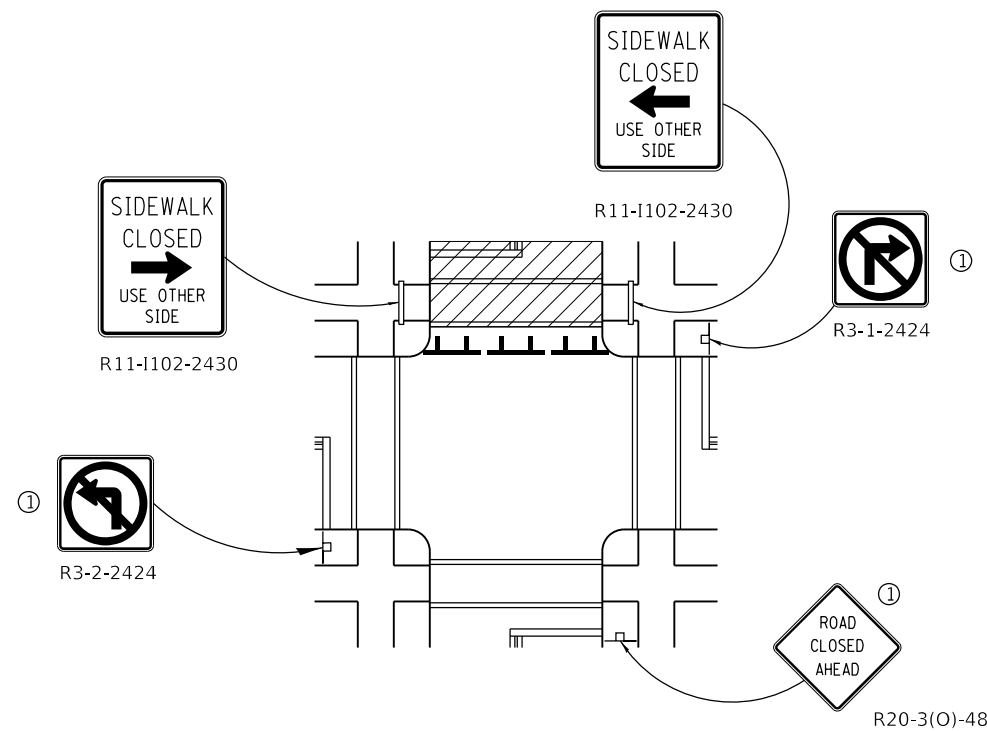
SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 1 of 2)

STANDARD 701801-06



CORNER CLOSURE



CROSSWALK CLOSURE

W20-I103(0)-48 for contract construction projects

Or

W20-1(0)-48 for maintenance and utility projects

SIDEWALK, CORNER OR CROSSWALK CLOSURE

(Sheet 2 of 2)

STANDARD 701801-06

Illinois Department of Transportation

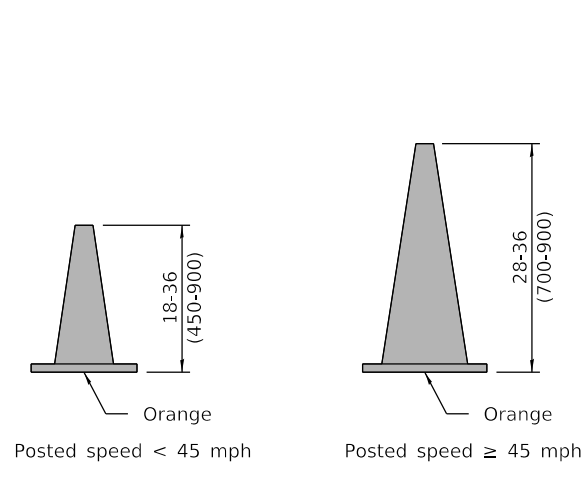
PASSED April 1, 2016

[Signature]
ENGINEER OF SAFETY ENGINEERING

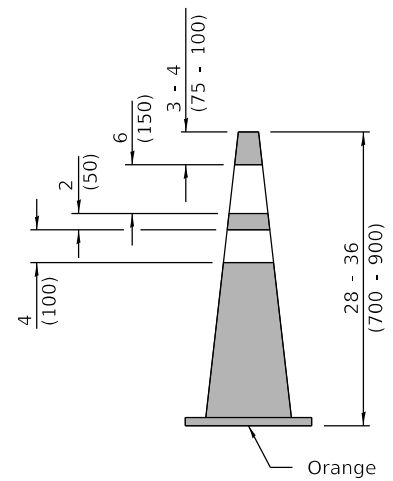
APPROVED April 1, 2016

[Signature]
ENGINEER OF DESIGN AND ENVIRONMENT

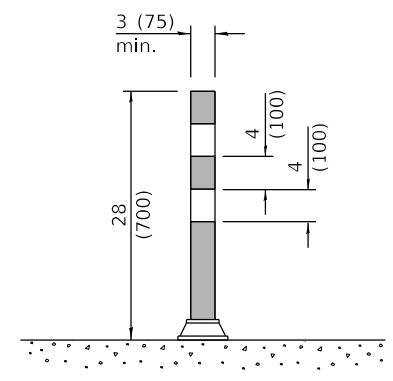
ISSUED 1-1-97



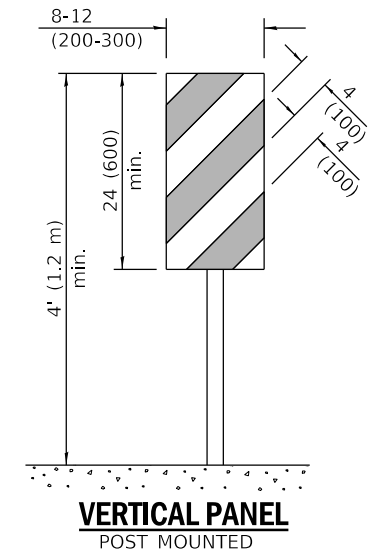
CONE FOR DAYTIME



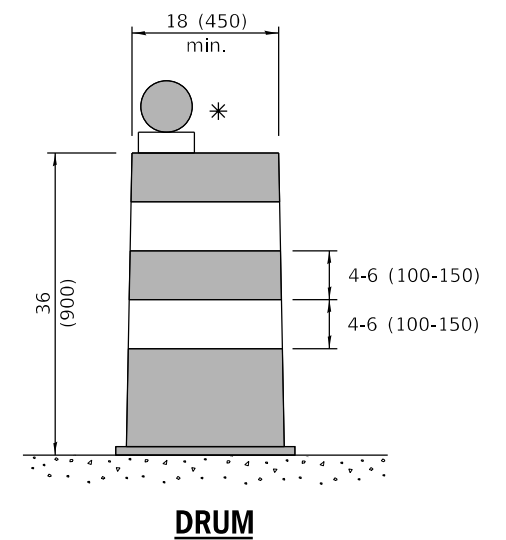
REFLECTORIZED CONE FOR NIGHTTIME



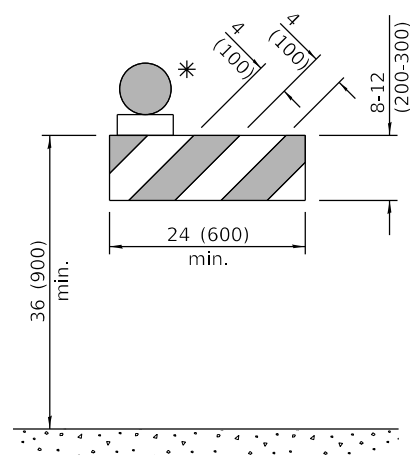
TUBULAR MARKER



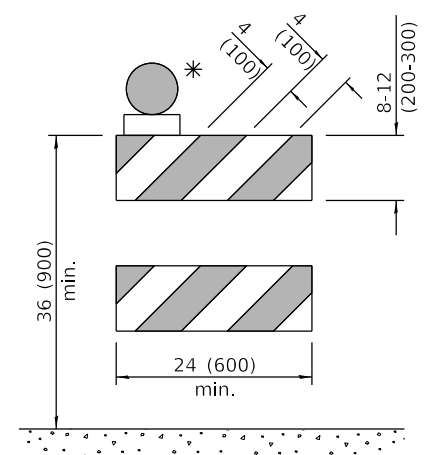
VERTICAL PANEL POST MOUNTED



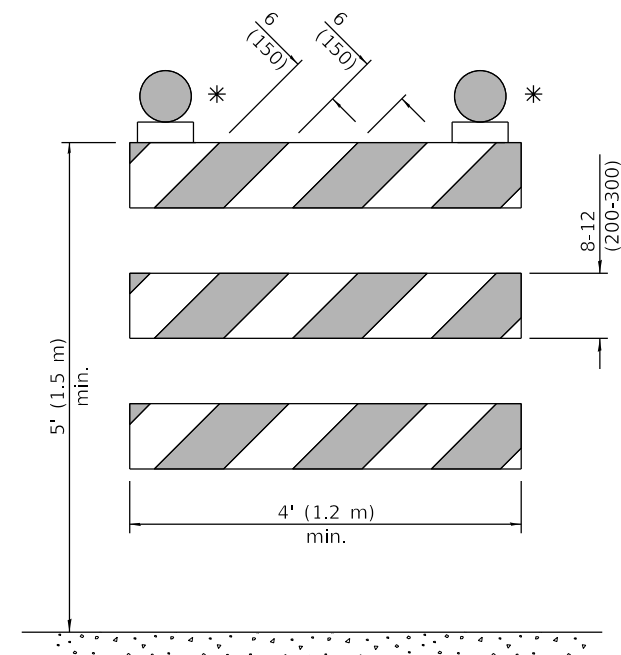
DRUM



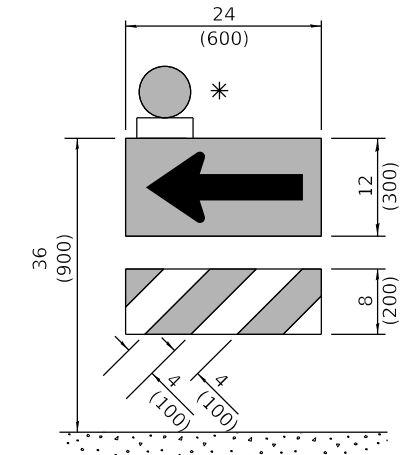
TYPE I BARRICADE



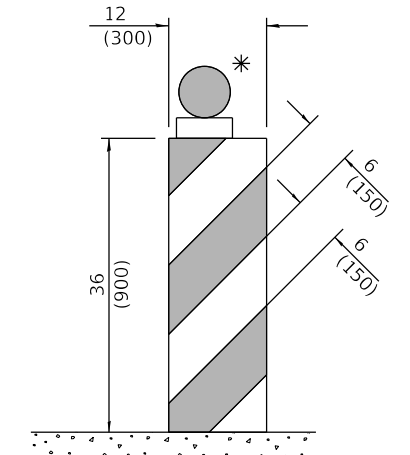
TYPE II BARRICADE



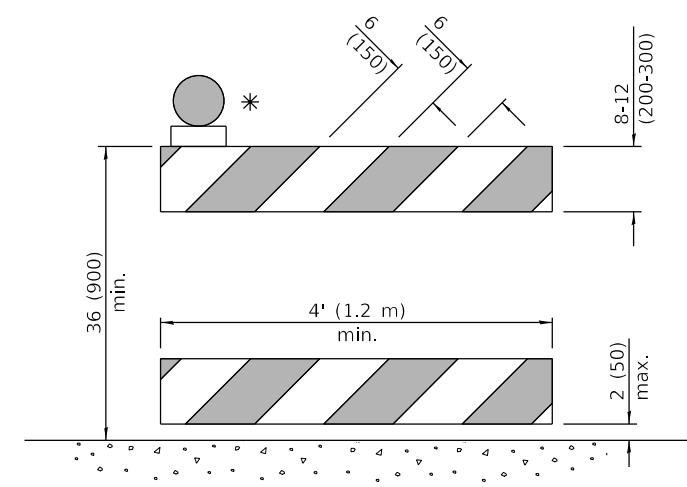
TYPE III BARRICADE



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.

DATE	REVISIONS
1-1-18	Revised END WORK ZONE SPEED LIMIT sign from orange to white background.
1-1-17	Changed FLEXIBLE DELINEATOR to TUBULAR MARKER.

TRAFFIC CONTROL DEVICES

(Sheet 1 of 3)

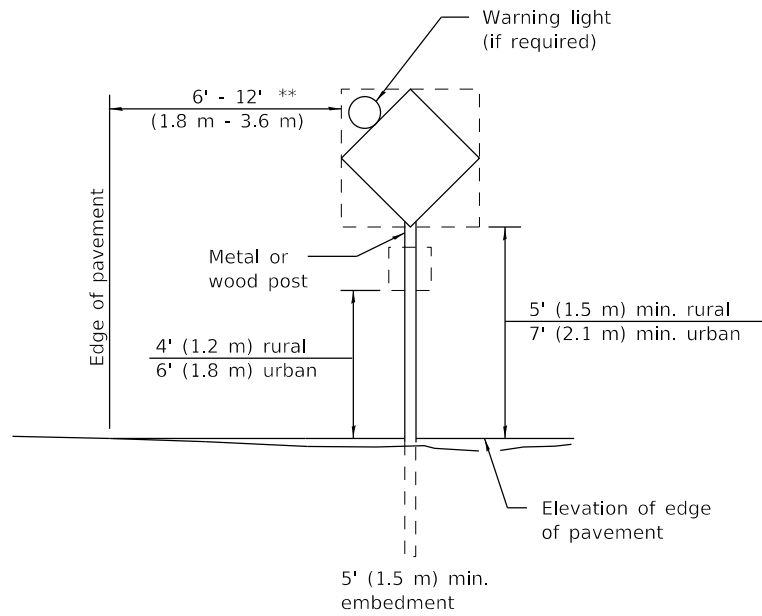
STANDARD 701901-07

Illinois Department of Transportation

PASSED January 1, 2018
Amy Allen
 ENGINEER OF OPERATIONS

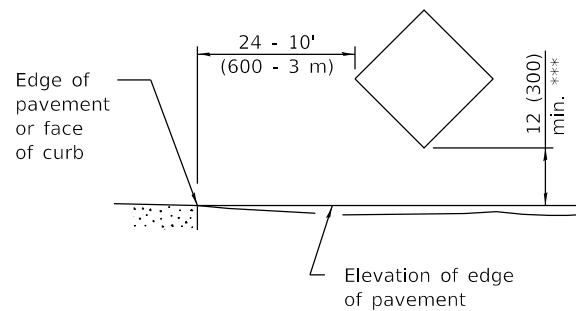
APPROVED January 1, 2018
Marcus M. Beck
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-18



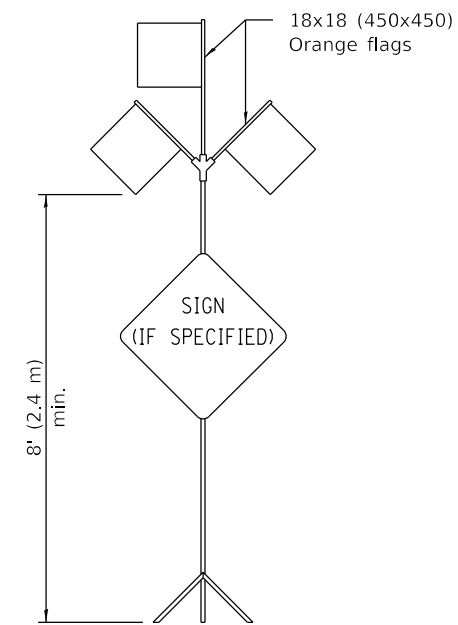
POST MOUNTED SIGNS

** 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.

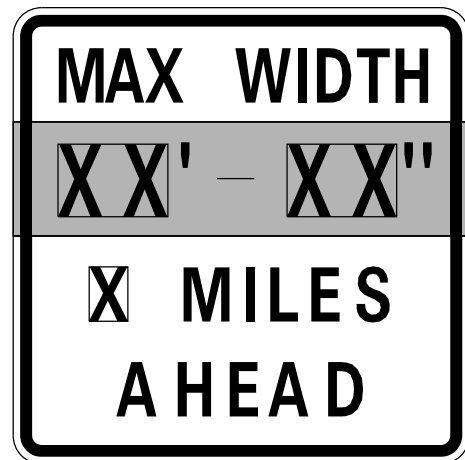


SIGNS ON TEMPORARY SUPPORTS

*** 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.



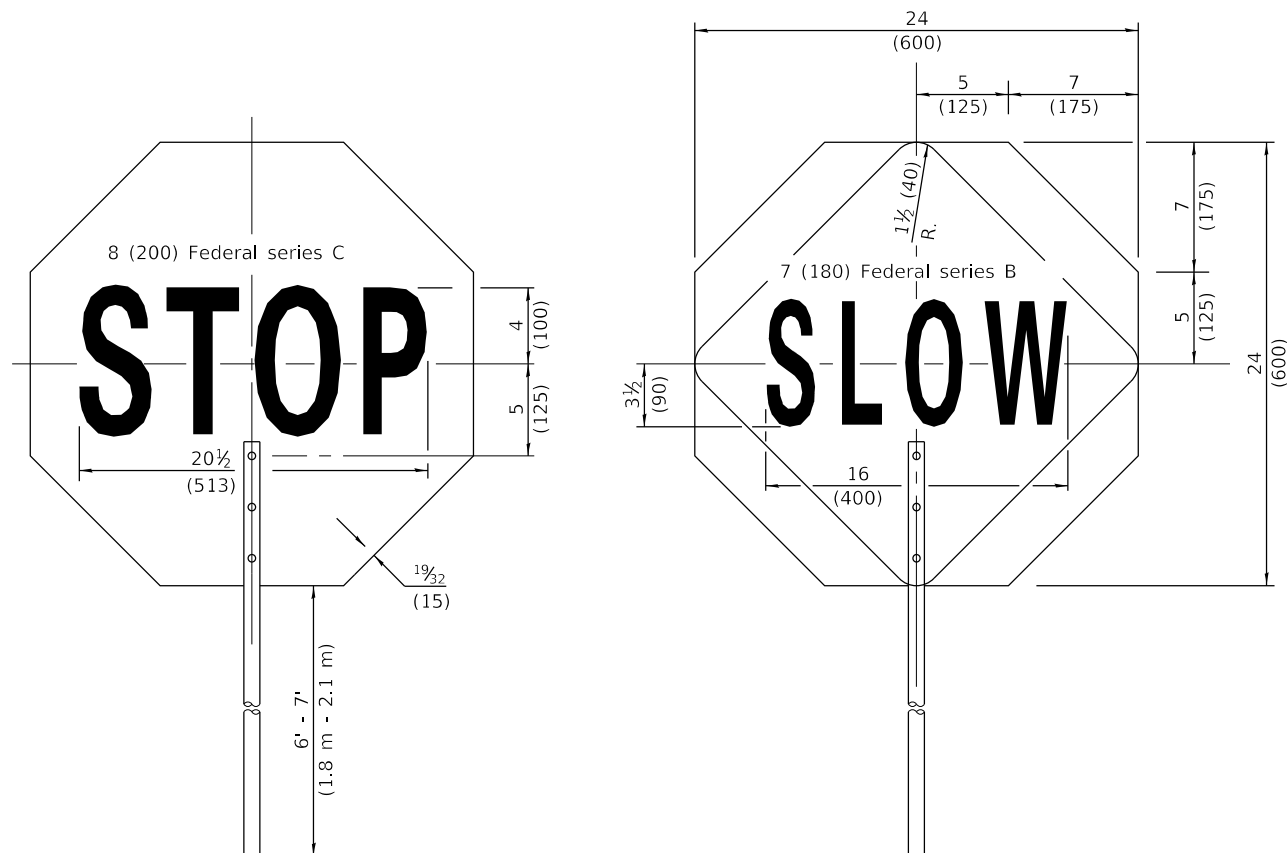
HIGH LEVEL WARNING DEVICE



W12-1103-4848

WIDTH RESTRICTION SIGN

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



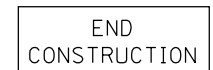
FRONT SIDE

REVERSE SIDE

FLAGGER TRAFFIC CONTROL SIGN



G20-1104(0)-6036



G20-1105(0)-6024

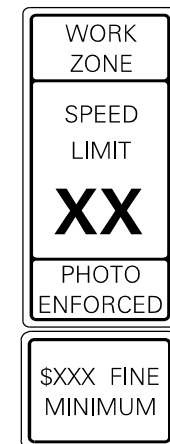
This signing is required for all projects 2 miles (3200 m) or more in length.

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



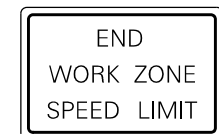
W21-III5(0)-3618

R2-1-3648

R10-1108p-3618 ****

R2-1106p-3618

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



G20-1103-6036

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.

TRAFFIC CONTROL DEVICES

(Sheet 2 of 3)

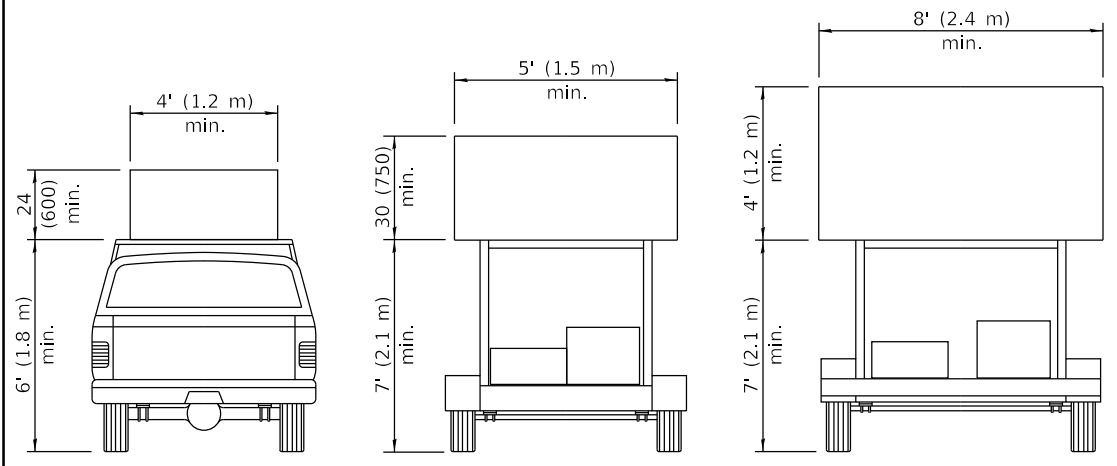
STANDARD 701901-07

Illinois Department of Transportation

PASSED January 1, 2018
Amy Allen
 ENGINEER OF OPERATIONS

APPROVED January 1, 2018
Maureen M. Beck
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

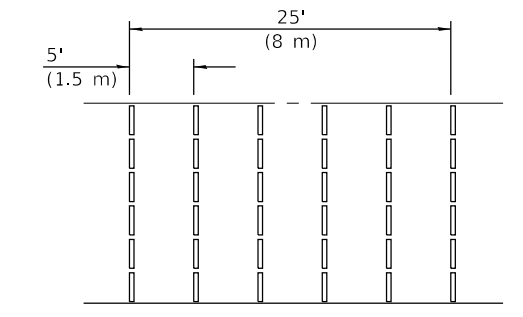
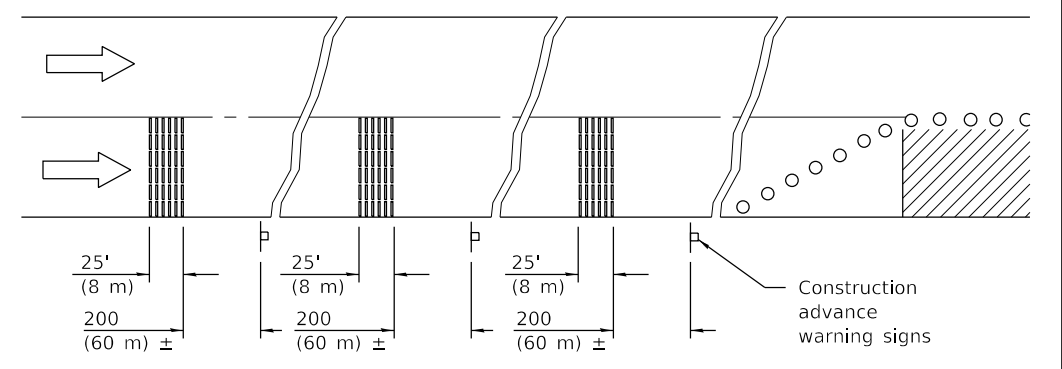
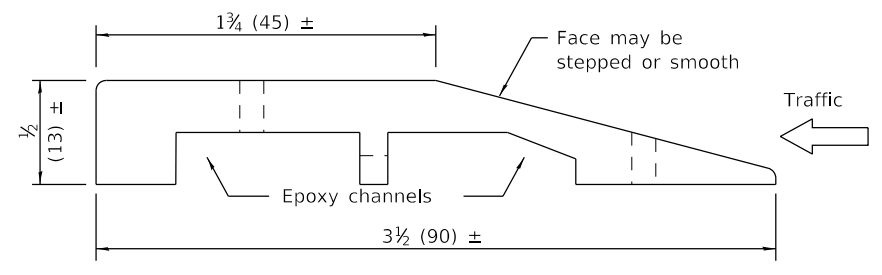
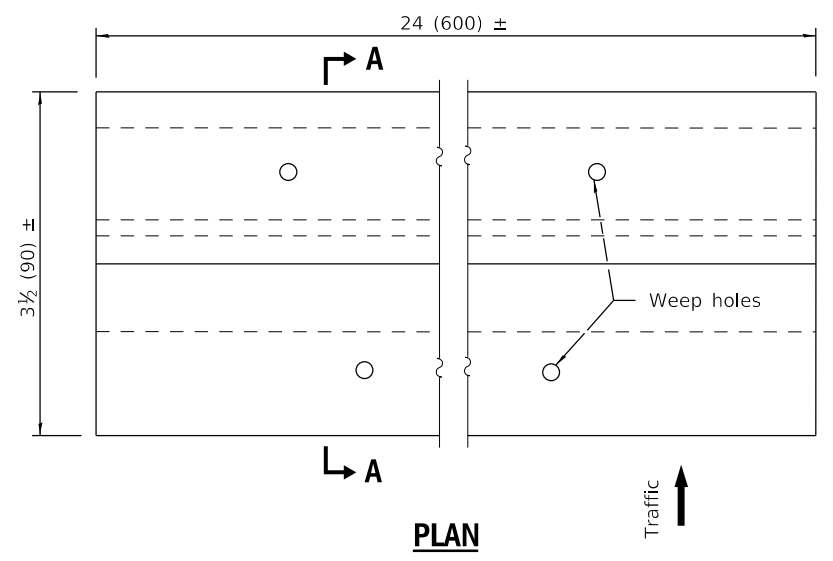


TYPE A
ROOF MOUNTED

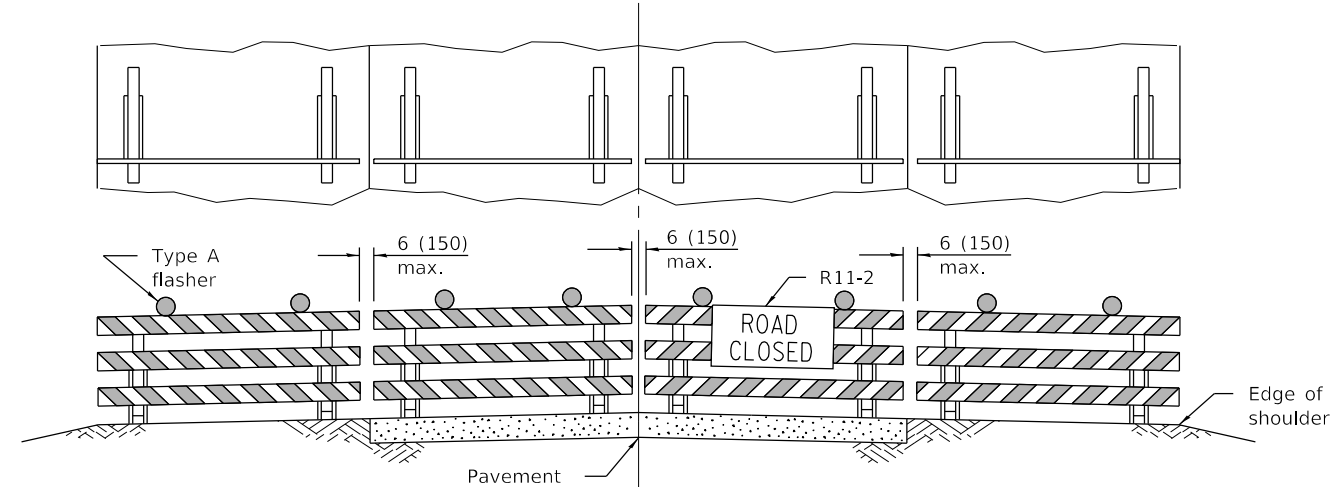
TYPE B
ROOF OR TRAILER MOUNTED

TYPE C
TRAILER MOUNTED

ARROW BOARDS



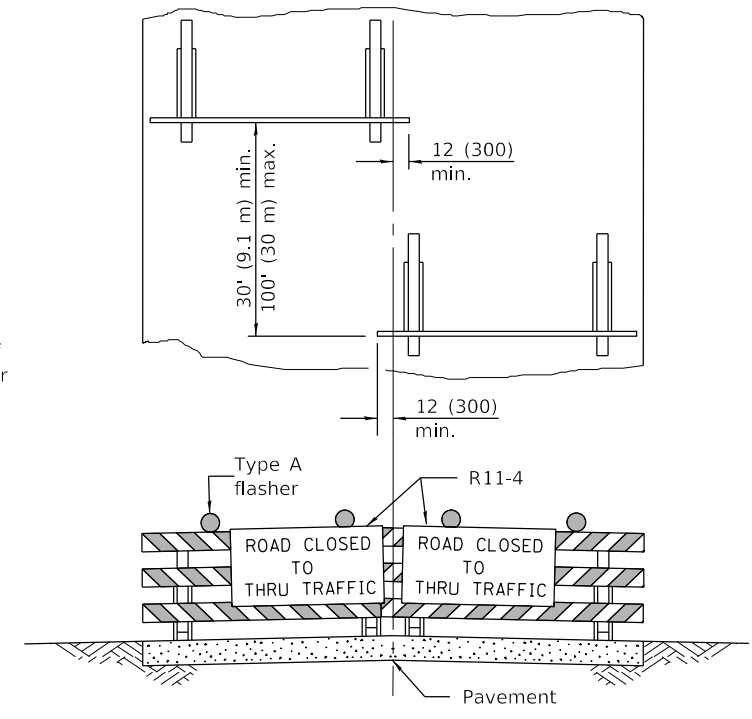
TEMPORARY RUMBLE STRIPS



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.

TYPICAL APPLICATIONS OF TYPE III BARRICADES CLOSING A ROAD



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.

Illinois Department of Transportation

PASSED January 1, 2018

Amy Allen
ENGINEER OF OPERATIONS

APPROVED January 1, 2018

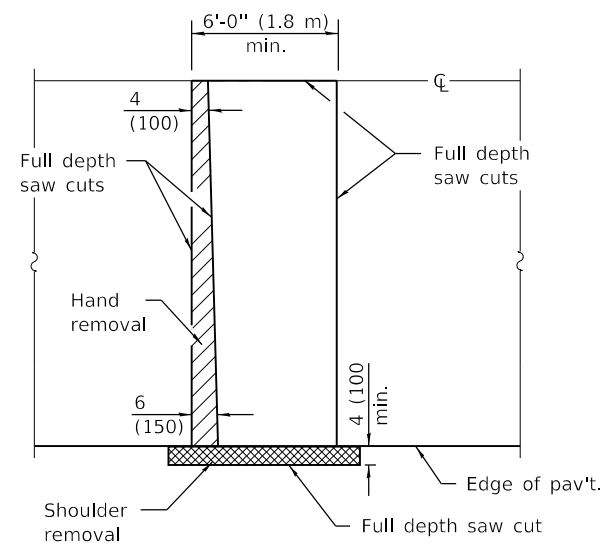
Maureen M. Beck
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

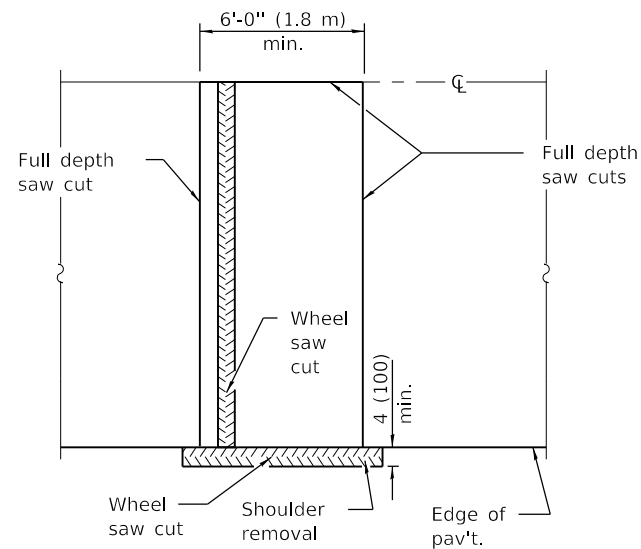
TRAFFIC CONTROL DEVICES

(Sheet 3 of 3)

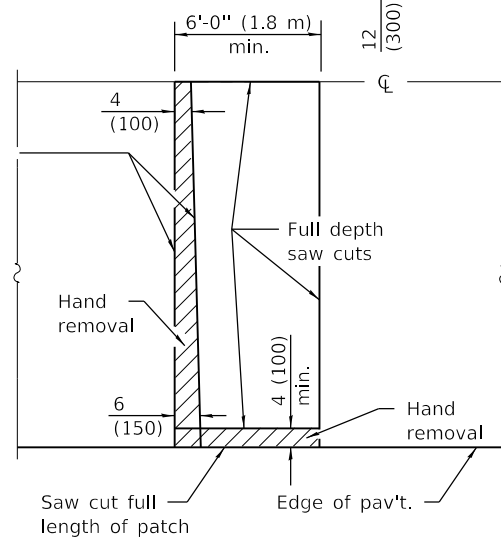
STANDARD 701901-07



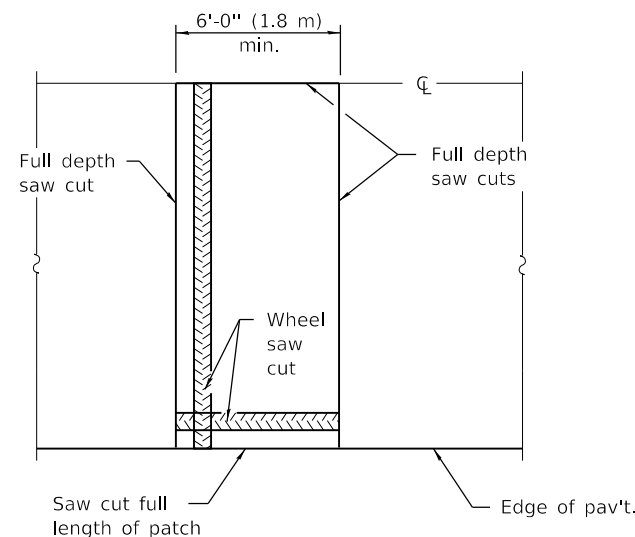
PAVEMENT SAWING DETAIL
(HMA SHOULDER)



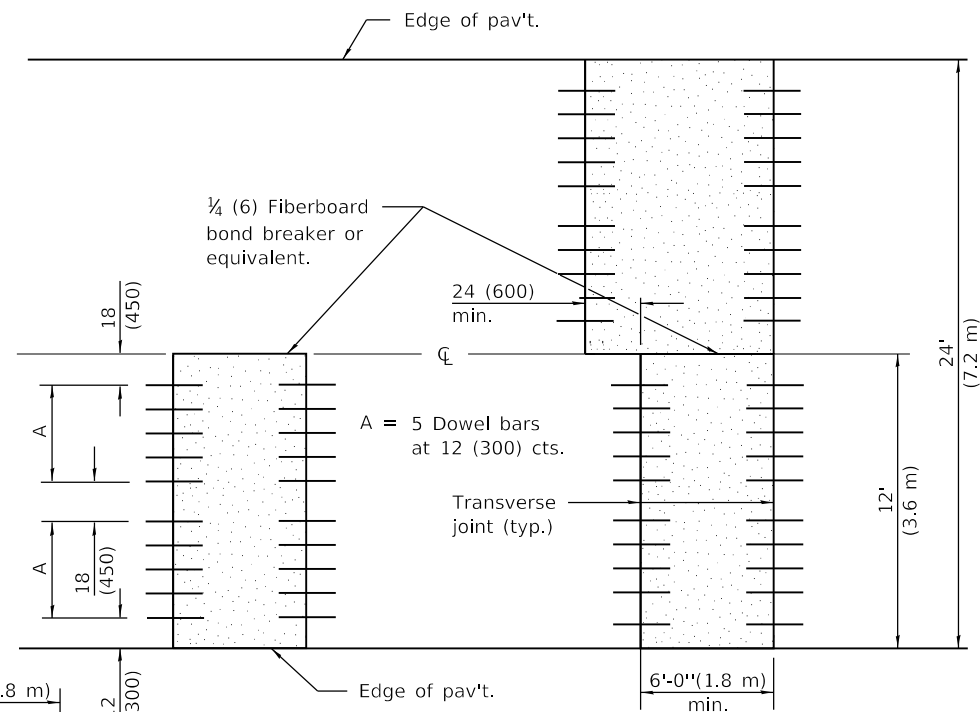
ALTERNATE SAWING DETAIL
(HMA SHOULDER)



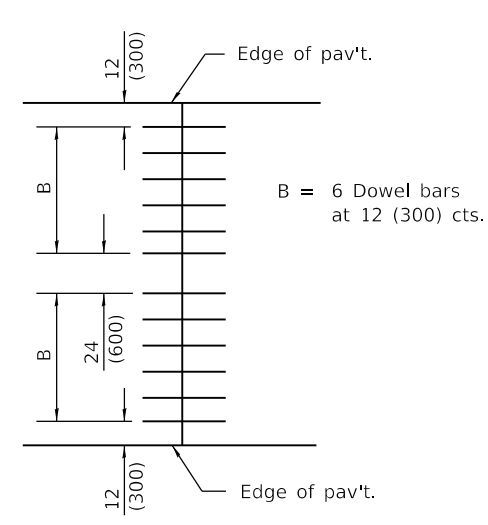
PAVEMENT SAWING DETAIL
(PCC SHOULDER)



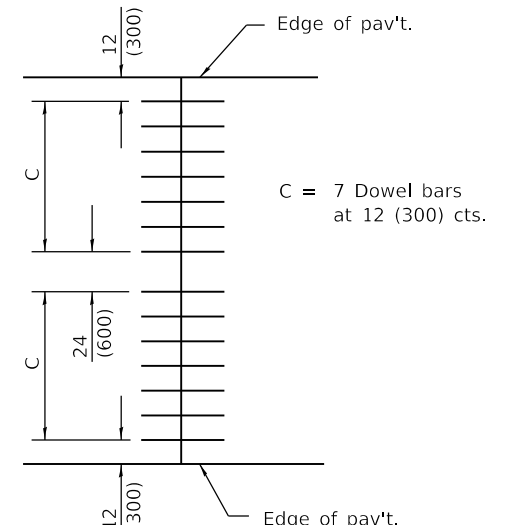
ALTERNATE SAWING DETAIL
(PCC SHOULDER)



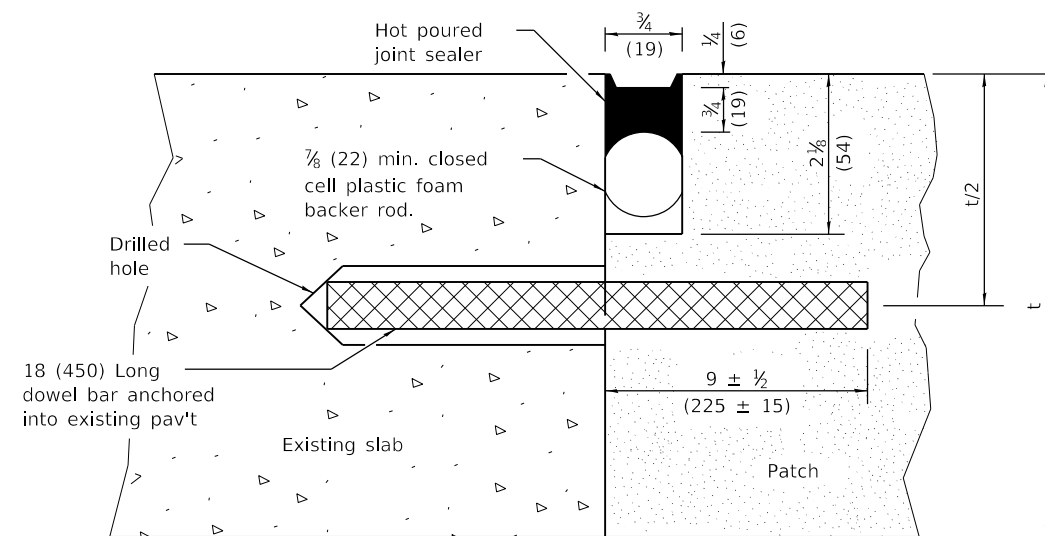
12' (3.6 m) WIDE LANES



14' (4.2 m) WIDE RAMP

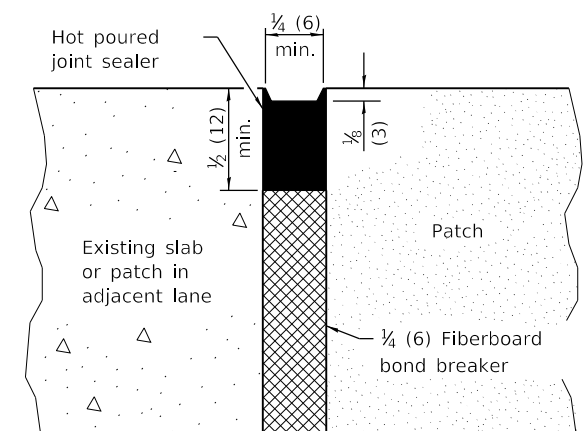


16' (4.8 m) WIDE RAMP



TRANSVERSE JOINT

DOWEL BAR TABLE		
PAVEMENT THICKNESS	DOWEL BAR DIAMETER	HOLE DIAMETER
10 (250) or greater	1½ (38)	1¾ (41)
8 (200) thru 9.99 (249)	1¼ (32)	1⅝ (35)
Less than 8 (200)	1 (25)	1⅞ (29)



CENTERLINE JOINT

GENERAL NOTES

The transverse joints for Class B patches shall align with joints or cracks in the adjacent lane whenever possible.

See Standard 420701 for details of welded wire reinforcement.

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

DATE	REVISIONS
1-1-19	Revised reference to Standard 420701 in General Notes.
1-1-18	Revised DOWEL BAR TABLE.

CLASS B PATCHES

(Sheet 1 of 2)

STANDARD 442101-09

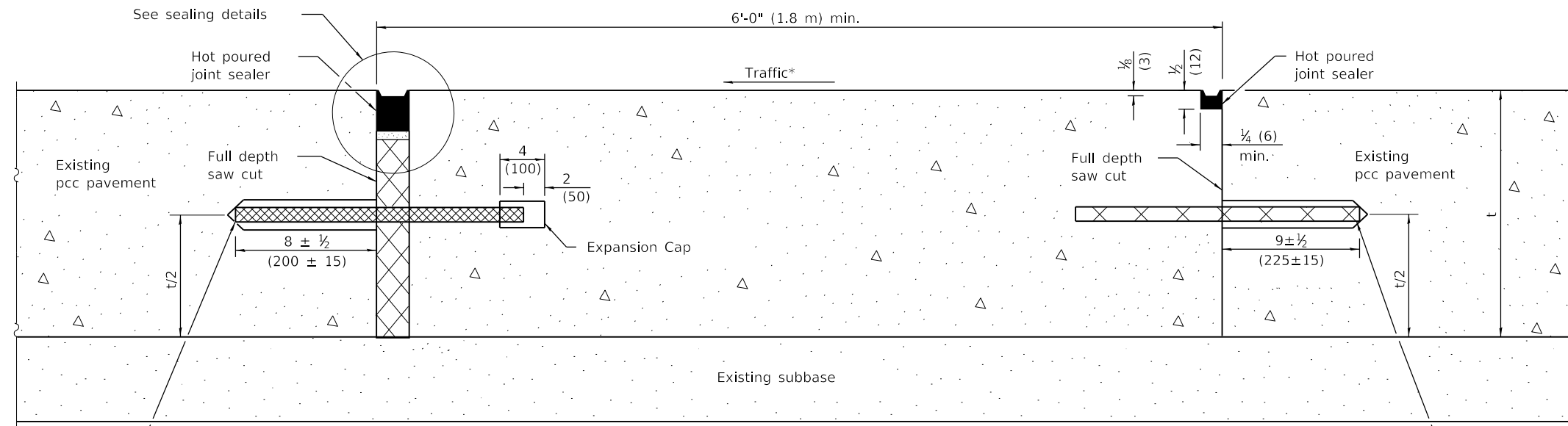
Illinois Department of Transportation

PASSED January 1, 2019
Michael Bond
ENGINEER OF POLICY AND PROCEDURES

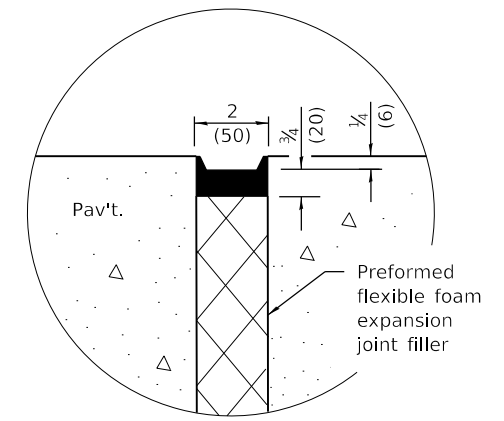
APPROVED January 1, 2019
Joe E. ...
ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-19

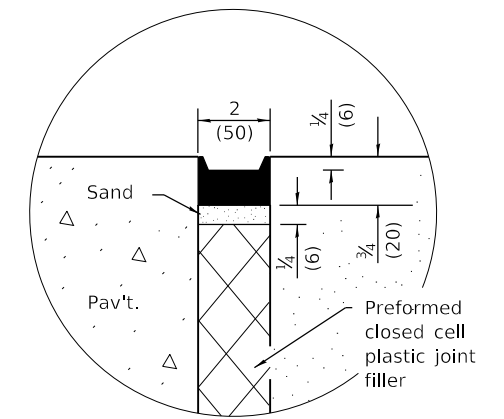
TRANSVERSE EXPANSION JOINTS



METHOD I
(Without Resurfacing)



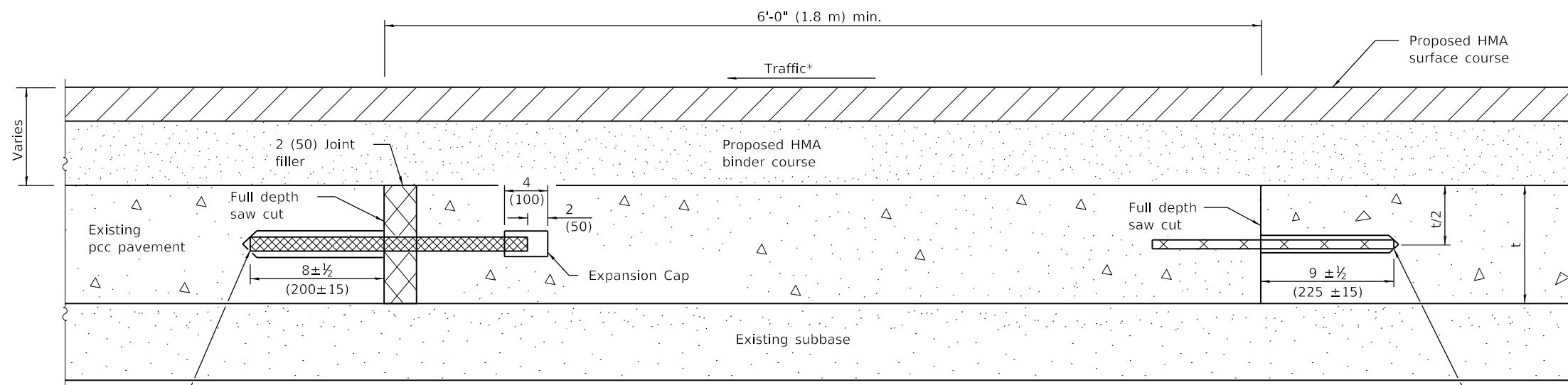
SEALING DETAIL



SEALING DETAIL

NOTE

* When re-establishing a transverse expansion joint on a two-lane, two-way road, reverse the orientation of the dowel bars with respect to traffic for one of the patches such that the joint will be continuous across both lanes.



METHOD II
(With Resurfacing)

Illinois Department of Transportation

PASSED January 1, 2019
Michael Bond
 ENGINEER OF POLICY AND PROCEDURES

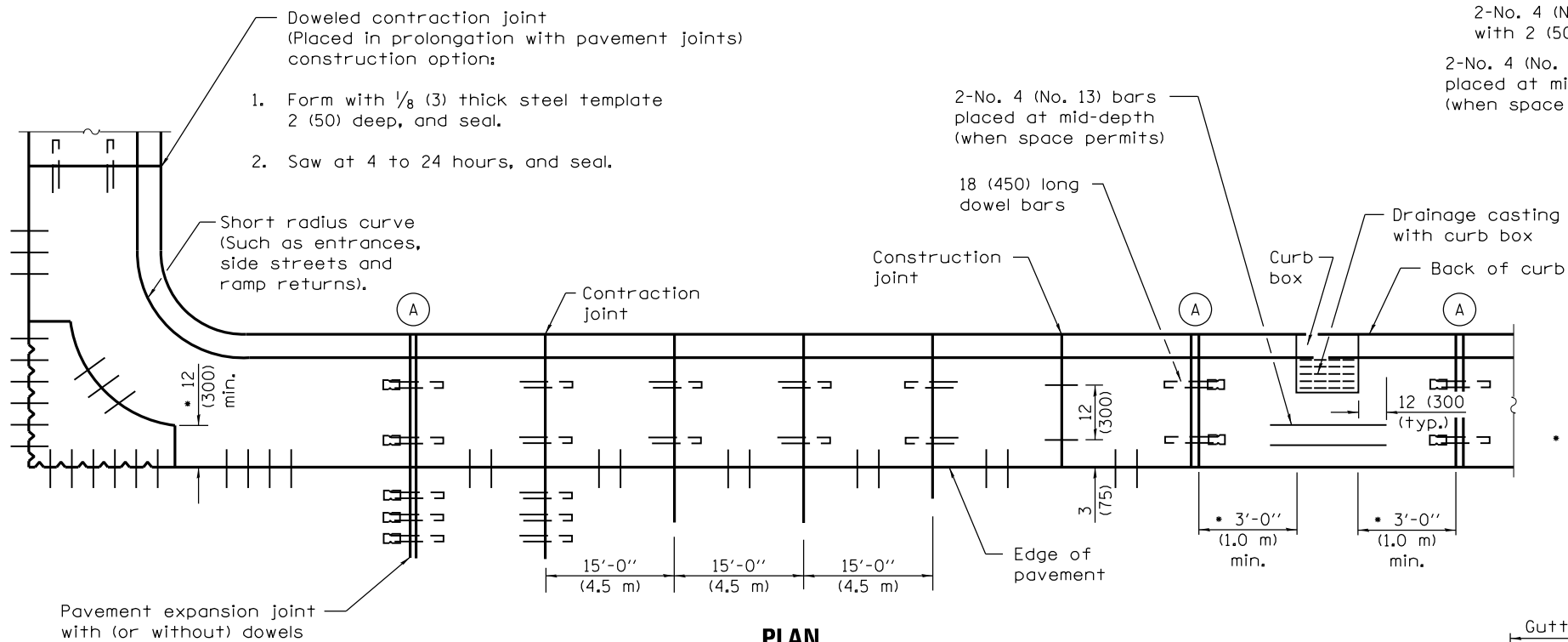
APPROVED January 1, 2019
John E. ...
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

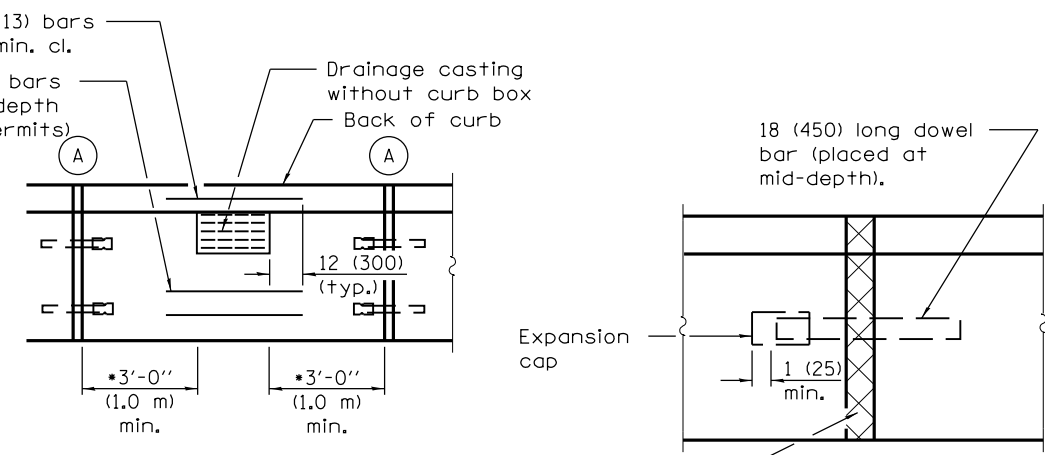
CLASS B PATCHES

(Sheet 2 of 2)

STANDARD 442101-09



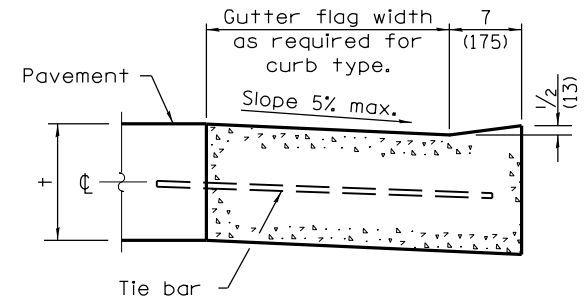
PLAN
ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE



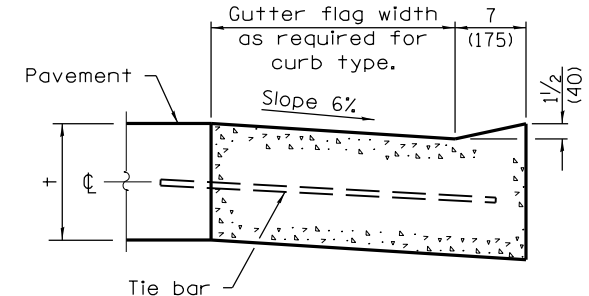
DETAIL A
EXPANSION JOINT

Full depth & width 1 (25) - thick (min.) preformed expansion joint filler.

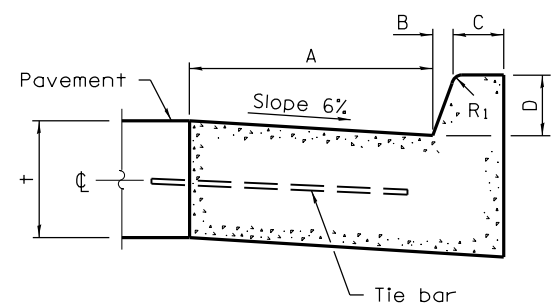
* This dimension shall be adjusted to align with joint on the adjacent pavement



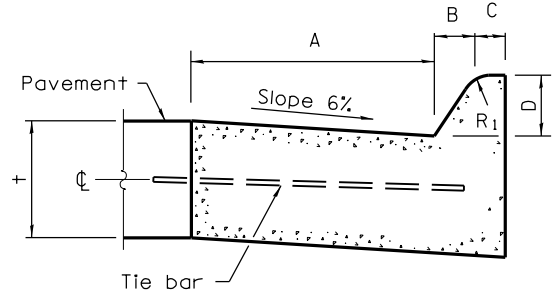
DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED



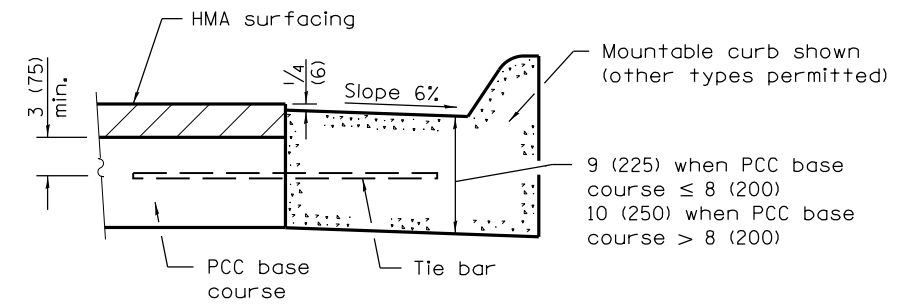
DEPRESSED CURB (TYPICAL)



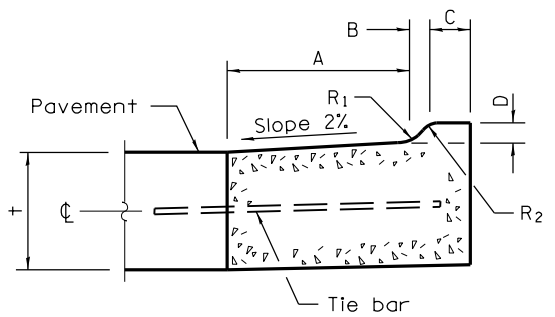
BARRIER CURB



MOUNTABLE CURB



ADJACENT TO PCC BASE COURSE WITH HMA SURFACING



M-2.06 (M-5.15) and M-2.12 (M-5.30)

TABLE OF DIMENSIONS BARRIER CURB					
TYPE	A	B	C	D	R ₁
B-6.06 *	6	1	6	6	1
(B-15.15)	(150)	(25)	(150)	(150)	(25)
B-6.12	12	1	6	6	1
(B-15.3)	(300)	(25)	(150)	(150)	(25)
B-6.18	18	1	6	6	1
(B-15.45)	(450)	(25)	(150)	(150)	(25)
B-6.24	24	1	6	6	1
(B-15.60)	(600)	(25)	(150)	(150)	(25)
B-9.12	12	2	5	9	1
(B-22.30)	(300)	(50)	(125)	(225)	(25)
B-9.18	18	2	5	9	1
(B-22.45)	(450)	(50)	(125)	(225)	(25)
B-9.24	24	2	5	9	1
(B-22.60)	(600)	(50)	(125)	(225)	(25)

* For corner islands only.

TABLE OF DIMENSIONS MOUNTABLE CURB						
TYPE	A	B	C	D	R ₁	R ₂
M-2.06	6	2	4	2	3	2
(M-5.15)	(150)	(50)	(100)	(50)	(75)	(50)
M-2.12	12	2	4	2	3	2
(M-5.30)	(300)	(50)	(100)	(50)	(75)	(50)
M-4.06	6	4	3	4	3	NA
(M-10.15)	(150)	(100)	(75)	(100)	(75)	NA
M-4.12	12	4	3	4	3	NA
(M-10.30)	(300)	(100)	(75)	(100)	(75)	NA
M-4.18	18	4	3	4	3	NA
(M-10.45)	(450)	(100)	(75)	(100)	(75)	NA
M-4.24	24	4	3	4	3	NA
(M-10.60)	(600)	(100)	(75)	(100)	(75)	NA
M-6.06	6	6	2	6	2	NA
(M-15.15)	(150)	(150)	(50)	(150)	(50)	NA
M-6.12	12	6	2	6	2	NA
(M-15.30)	(300)	(150)	(50)	(150)	(50)	NA
M-6.18	18	6	2	6	2	NA
(M-15.45)	(450)	(150)	(50)	(150)	(50)	NA
M-6.24	24	6	2	6	2	NA
(M-15.60)	(600)	(150)	(50)	(150)	(50)	NA

GENERAL NOTES

The bottom slope of combination curb and gutter constructed adjacent to pcc pavement shall be the same slope as the subbase or 6% when subbase is omitted.

t = Thickness of pavement.

Longitudinal joint tie bars shall be No. 6 (No. 19) at 24 (600) centers in accordance with details for longitudinal construction joint shown on Standard 420001.

A minimum clearance of 2 (50) between the end of the tie bar and the back of the curb shall be maintained.

The dowel bars shown in contraction joints will only be required for monolithic construction.

See Standard 606301 for details of corner islands.

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

DATE	REVISIONS
1-1-15	Added B-6.06 (B-15.15) barrier curb and gutter to table (corner islands only).
1-1-13	Added general note regarding requirement for dowel bars.

CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
(Sheet 1 of 2)

STANDARD 606001-06

Illinois Department of Transportation

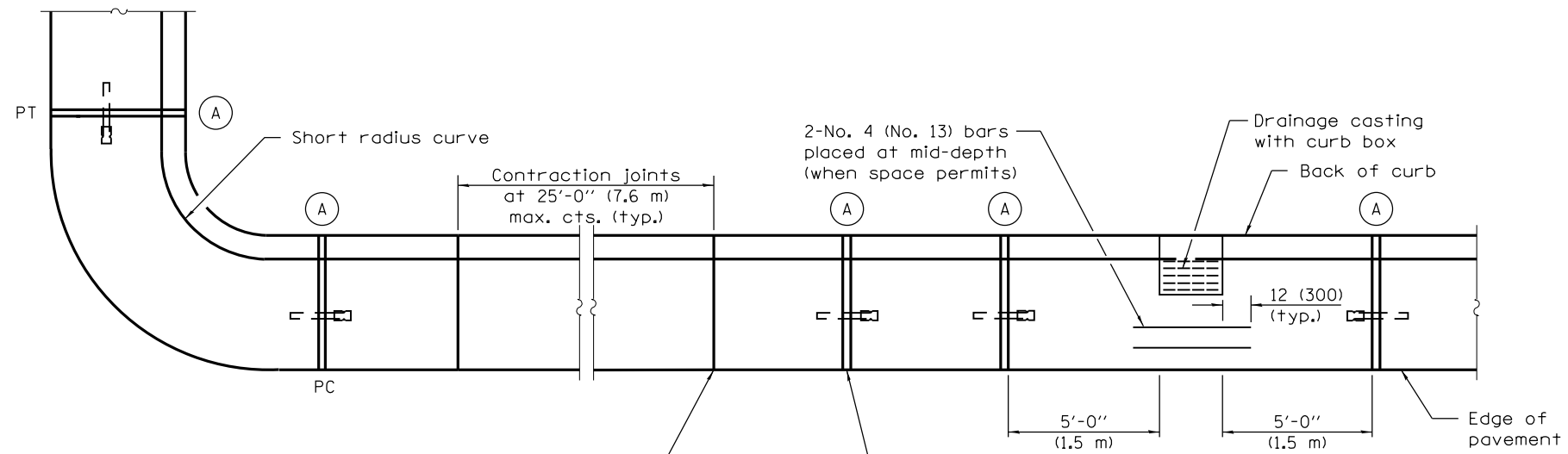
PASSED January 1, 2015

Michael Brand
ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2015

ENGINEER OF DESIGN AND ENVIRONMENT

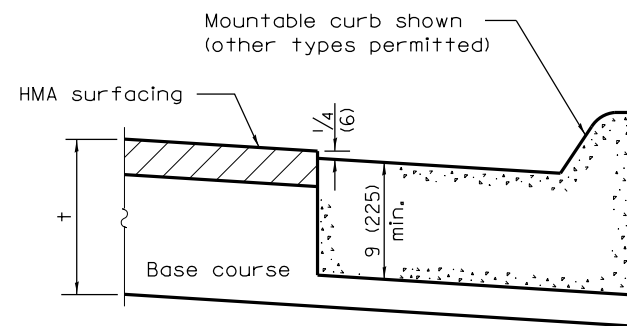
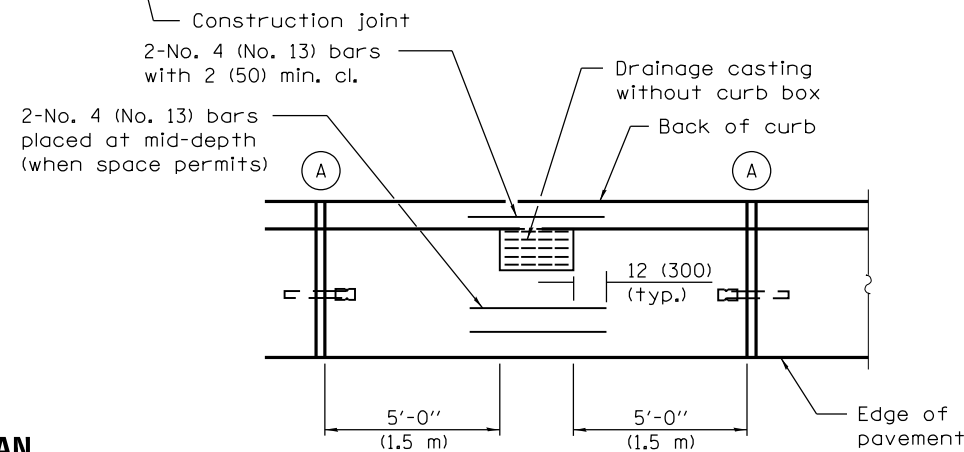
ISSUED 1-1-97



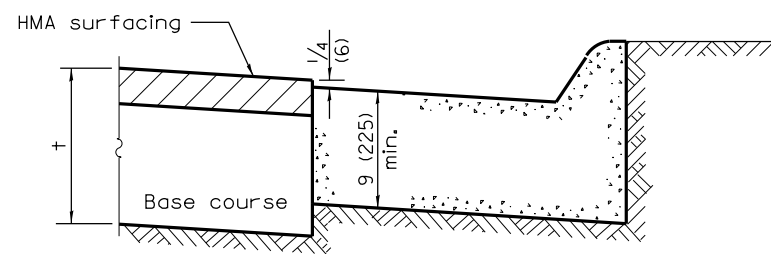
Undoweled contraction joint (typ.) construction options:

1. Form with 1/8 (3) thick steel template 2 (50) deep, and seal.
2. Saw 2 (50) deep at 4 to 24 hours, and seal.
3. Insert 3/4 (20) thick preformed joint filler full depth and width.

PLAN

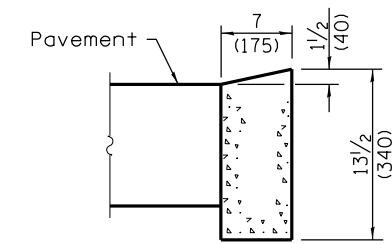


ON DISTURBED SUBGRADE

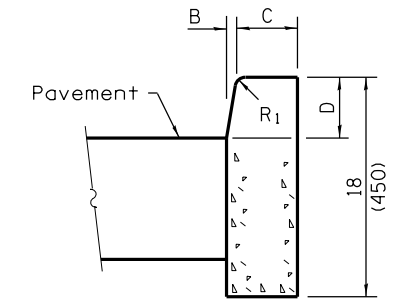


ON UNDISTURBED SUBGRADE

ADJACENT TO FLEXIBLE PAVEMENT

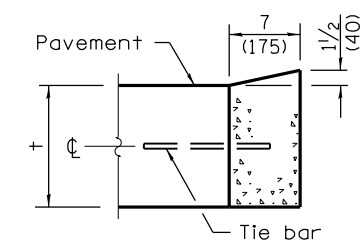


DEPRESSED CURB

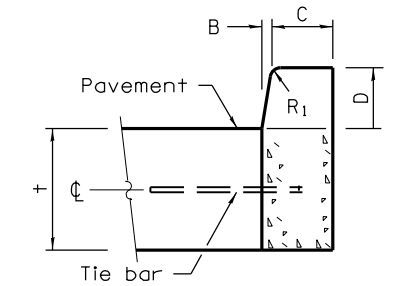


BARRIER CURB

ADJACENT TO FLEXIBLE PAVEMENT



DEPRESSED CURB



BARRIER CURB

ADJACENT TO PCC PAVEMENT OR PCC BASE COURSE

CONCRETE CURB TYPE B

**CONCRETE CURB TYPE B
AND COMBINATION
CONCRETE CURB AND GUTTER**
(Sheet 2 of 2)

STANDARD 606001-06

Illinois Department of Transportation

PASSED January 1, 2015
Michael Beard
 ENGINEER OF POLICY AND PROCEDURES

APPROVED January 1, 2015
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT

ISSUED 1-1-97

APPENDIX C

DOCUMENTS TO RETURN WITH BID SUBMISSION

- Signed and completed Schedule of Prices - page 3 and 4
- Completed Contractor References form
- Disqualification of Certain Bidders page
- Completed and notarized Anti-collusion Affidavit and Contractor's Certification form
- Completed and notarized Conflict of Interest form
- Completed and notarized Tax Compliance Affidavit form
- Completed Sub –contractor form

CONTRACTOR REFERENCES

Please list below five (5) references for which your firm has performed similar work for municipalities as identified in Bidder Qualifications.

Municipality: _____
Address: _____
City, State, Zip Code: _____
Contact Person/
Telephone Number: _____
Dates of Service/Award
Amount: _____

Municipality: _____
Address: _____
City, State, Zip Code: _____

Contact Person/Telephone
Number: _____
Dates of Service/Award
Amount: _____

Agency: _____
Address: _____
City, State, Zip Code: _____
Contact Person/
Telephone Number: _____
Dates of Service/Award
Amount: _____

Agency: _____
Address: _____
City, State, Zip Code: _____
Contact Person/
Telephone Number: _____
Dates of Service/Award
Amount: _____

Agency: _____
Address: _____
City, State, Zip Code: _____
Contact Person/
Telephone Number: _____
Dates of Service/Award
Amount: _____

DISQUALIFICATION OF CERTAIN BIDDERS

PERSONS AND ENTITIES SUBJECT TO DISQUALIFICATION

No person or business entity shall be awarded a contract or subcontract, for a stated period of time, from the date of conviction or entry of a plea or admission of guilt, if the person or business entity,

1. has been convicted of an act committed, within the State of Illinois or any state within the United States, of bribery or attempting to bribe an officer or employee in the State of Illinois, or any State in the United States in that officer's or employee's official capacity;
2. has been convicted of an act committed, within the State of Illinois or any state within the United States, of bid rigging or attempting to rig bids as defined in the Sherman Anti-Trust Act and Clayton Act 15 U.S.C.;
3. has been convicted of bid rigging or attempting to rig bids under the laws of the State of Illinois, or any state in the United States;
4. has been convicted of bid rotating or attempting to rotate bids under the laws of the State of Illinois, or any state in the United States;
5. has been convicted of an act committed, within the State of Illinois or any state in the United States, of price-fixing or attempting to fix prices as defined by the Sherman Anti-Trust Act and Clayton Act 15 U.S.C. Sec. 1 et seq.;
6. has been convicted of price-fixing or attempting to fix prices under the laws of the State of Illinois, or any state in the United States;
7. has been convicted of defrauding or attempting to defraud any unit of state or local government or school district within the State of Illinois or in any state in the United States;
8. has made an admission of guilt of such conduct as set forth in subsection (A) through (F) above which admission is a matter of record, whether or not such person or business entity was subject to prosecution for the offense or offenses admitted to;
9. has entered a plea of nolo contendere to charges of bribery, price fixing, bid rigging, bid rotating, or fraud; as set forth in subparagraphs (A) through (F) above.

Business entity, as used herein, means a corporation, partnership, limited liability company trust, association, unincorporated business or individually owned business.

(Sign Schedule of Prices indicating compliance)

ANTI-COLLUSION AFFIDAVIT AND CONTRACTOR'S CERTIFICATION

_____, being first duly sworn,

deposes and says that he is _____
(Partner, Officer, Owner, Etc.)

of _____
(Contractor)

The party making the foregoing proposal or bid, that such bid is genuine and not collusive, or sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference with any person; to fix the bid price element of said bid, or of that of any other bidder, or to secure any advantage against any other bidder or any person interested in the proposed contract.

The undersigned certifies that he is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating.

The Contractor affirms and covenants that neither the Contractor nor any individual employed by the Contractor for this Work or under this Contract is a person forbidden from doing business with a unit of local government under Executive Order No. 13224 (Sept 23, 2001), 66 Fed.Reg. 49,079 (Sept 23, 2001) or is a person registered on the Specially Designated Nationals and Blocked Persons List. The Contractor shall indemnify the Village from all costs associated with failure to comply with this paragraph.

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed a sworn to before a notary public.
Subscribed and Sworn to this _____ day of _____, 2019

Notary Public

Failure to complete and return this form may be considered sufficient reason for rejection of the bid.

CONFLICT OF INTEREST

_____, hereby certifies that

it has conducted an investigation into whether an actual or potential conflict of interest exists between the bidder, its owners and employees and any official or employee of a Municipality identified herein.

Bidder further certifies that it has disclosed any such actual or potential conflict of interest and acknowledges if bidder has not disclosed any actual or potential conflict of interest, The Village of Buffalo Grove may disqualify the bid or the affected the Municipality may void any award and acceptance that the Municipality has made.

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed a sworn to before a notary public.
Subscribed and Sworn to this _____ day of _____, 2019

Notary Public

Failure to complete and return this form may be considered sufficient reason for rejection of the bid.

TAX COMPLIANCE AFFIDAVIT

_____, being first duly sworn,

deposes and says that he is _____

(Partner, Officer, Owner, Etc.)

of _____

(Contractor)

The individual or entity making the foregoing proposal or bid certifies that he is not barred from contracting with the any of the Municipalities identified herein because of any delinquency in the payment of any tax administered by the Department of Revenue unless the individual or entity is contesting, in accordance with the procedures established by the appropriate revenue act. The individual or entity making the proposal or bid understands that making a false statement regarding delinquency in taxes is a Class A Misdemeanor and, in addition, voids the contract and allows the municipality to recover all amounts paid to the individual or entity under the contract in civil action

(Name of Bidder if the Bidder is an Individual)
(Name of Partner if the Bidder is a Partnership)
(Name of Officer if the Bidder is a Corporation)

The above statements must be subscribed and sworn to before a notary public.

Subscribed and Sworn to this _____ day of _____, 2019

Notary Public

Failure to complete and return this form may be considered sufficient reason for rejection of the bid.

SUB-CONTRACTOR INFORMATION

(ATTACH ADDITIONAL PAGES AS NEEDED)

Name: _____ **# Years in Business:** _____

Address: _____ **# Years used by Contractor:** _____

Services provided by Sub-Contractor: _____

.....

Name: _____ **# Years in Business:** _____

Address: _____ **# Years used by Contractor:** _____

Services provided by Sub-Contractor: _____

.....

Name: _____ **# Years in Business:** _____

Address: _____ **# Years used by Contractor:** _____

Services provided by Sub-Contractor: _____

**APPENDIX D
PROPOSAL ACCEPTANCE**

2019 VILLAGE OF BUFFALO GROVE AND VILLAGE OF WHEELING SEWER LINING

ACCEPTANCE

The Contract/Proposal attached hereto and by this reference incorporated herein and made a part hereof is hereby accepted by the order of _____ this _____ day of _____, 2019.

This Acceptance, together with the Contract/Proposal attached hereto, constitutes the entire and only agreement between the parties relating to the accomplishment of the Work and the compensation therefore and supersedes and merges any other prior or contemporaneous discussions, agreements, or understandings, whether written or oral, and shall prevail over any contradictory or inconsistent terms or conditions contained in any purchase order, acceptance, acknowledgement, invoice, or other standard form used by the parties in the performance of the Contract/Proposal. Any such contradictory or inconsistent terms or conditions shall be deemed objected to by Owner without further notice of objection and shall be of no effect nor in any circumstances binding upon Owner unless accepted by Owner in a written document plainly labeled "Amendment to Contract/Proposal." Acceptance or rejection by Owner or any such contradictory or inconsistent terms or conditions shall not constitute acceptance of any other contradictory or inconsistent terms or conditions.

By: _____

Title: _____

APPENDIX E
PERFORMANCE AND PAYMENT BOND

Bond Number:

KNOW ALL MEN BY THESE PRESENTS, That _____ (the “Principal”) and _____ (the “Surety”), are held and firmly bound unto the _____, an Illinois home-rule unit of government (the “Village”), the full and just sum of _____ Dollars (\$ _____) in lawful money of the UNITED STATES OF AMERICA as herein provided.

THE CONDITION OF THIS OBLIGATION is such that the Principal and Surety agree to bind themselves, their successors, assigns, executors, heirs and administrators, jointly and severally, for the full and faithful performance of the Work as defined in that particular **2019 Sewer Rehabilitation Program** contract between Principal and the Village dated _____ day of _____, 20____, (hereinafter referred to as the “Contract”), a copy of which is attached and incorporated by reference as though fully set forth herein.

NOW THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if the said Principal (i) shall in all respects keep and perform all the undertakings, covenants, terms, conditions and agreements of the Contract; (ii) shall pay all sums of money due or to become due, for any labor, materials, apparatus, fixtures or equipment furnished for the Work provided in said Contract; and (iii) shall remove and replace any defects in workmanship or materials which may be apparent or may develop within the **ARTICLE XIX – WARRANTY PERIOD** of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Work thereunder shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work.

IN WITNESS WHEREOF, we have hereunto set our hands and sea _____ day of _____, 20____.

SURETY

PRINCIPAL

By:
Name:
Title:

By:
Name:
Title:

ATTEST

ATTEST

By:

By:

NOTE: Date of Bond must not be prior to date of Contract.
If Contractor is Partnership, all partners should execute Bond.
IMPORTANT: Surety companies executing Bonds must appear on the Treasury Departments most current list (Circular 570 as amended) and be authorized to transact business in the state where the Work is located.

**APPENDIX F
PARTIAL LIEN WAIVER**

PARTIAL LIEN WAIVER

STATE OF ILLINOIS

COUNTY OF _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____
to furnish _____
for the premises known as _____
of which _____ is the owner.
THE undersigned, for and in consideration of _____
(\$ _____

) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged, do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material, fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the owner, on account of all labor, services, material, fixtures, apparatus or machinery, furnished to this date by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____ COMPANY NAME _____
ADDRESS _____
SIGNATURE AND TITLE _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS

COUNTY OF _____

TO WHOM IT MAY CONCERN:

THE UNDERSIGNED, (NAME) _____ BEING DULY SWORN, DEPOSES
AND SAYS THAT HE OR SHE IS (POSITION) _____ OF
(COMPANY NAME) _____ WHO IS THE
CONTRACTOR FURNISHING _____ WORK ON THE BUILDING
LOCATED AT _____
OWNED BY _____

That the total amount of the contract including extras* is \$ _____ on which he or she has received payment of \$ _____ prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses of all parties who have furnished or delivered material or labor, or both, for said work and all parties having contracts or sub contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to become due to each, and that the items mentioned include all labor and material required to complete said work according to plans and specifications:

NAMES AND ADDRESSES	WHAT FOR	CONTRACT PRICE INCLUDG EXTRAS*	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS* TO COMPLETE.					

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE _____ SIGNATURE: _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT.

NOTARY PUBLIC

**APPENDIX G
FINAL LIEN WAIVER**

FINAL WAIVER OF LIEN

STATE OF ILLINOIS

COUNTY OF _____

TO WHOM IT MAY CONCERN:

WHEREAS the undersigned has been employed by _____
to furnish _____
for the premises known as _____
of which _____ is the owner.

THE undersigned, for and in consideration of _____
(\$ _____) Dollars, and other good and valuable considerations, the receipt whereof is hereby acknowledged,
do(es) hereby waive and release any and all lien or claim of, or right to, lien, under the statutes of the State of Illinois, relating
to mechanics' liens, with respect to and on said above-described premises, and the improvements thereon, and on the material,
fixtures, apparatus or machinery furnished, and on the moneys, funds or other considerations due or to become due from the
owner, on account of all labor, services, material, fixtures, apparatus or machinery, heretofore furnished, or which may be
furnished at any time hereafter, by the undersigned for the above-described premises, INCLUDING EXTRAS.*

DATE _____ COMPANY NAME _____
ADDRESS _____
SIGNATURE AND TITLE _____

***EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT**

CONTRACTOR'S AFFIDAVIT

STATE OF ILLINOIS

COUNTY OF _____

TO WHOM IT MAY CONCERN:

THE UNDERSIGNED, (NAME) _____ BEING DULY SWORN, DEPOSES
AND SAYS THAT HE OR SHE IS (POSITION) _____ OF
(COMPANY NAME) _____ WHO IS THE
CONTRACTOR FURNISHING _____ WORK ON THE BUILDING
LOCATED AT _____
OWNED BY _____

That the total amount of the contract including extras* is \$ _____ on which he or she has received payment of
\$ _____ prior to this payment. That all waivers are true, correct and genuine and delivered unconditionally and that
there is no claim either legal or equitable to defeat the validity of said waivers. That the following are the names and addresses
of all parties who have furnished or delivered material or labor, or both, for said work and all parties having contracts or sub
contracts for specific portions of said work or for material entering into the construction thereof and the amount due or to
become due to each, and that the items mentioned include all labor and material required to complete said work according to
plans and specifications:

NAMES AND ADDRESSES	WHAT FOR	CONTRACT PRICE INCLD G	AMOUNT PAID	THIS PAYMENT	BALANCE DUE
TOTAL LABOR AND MATERIAL INCLUDING EXTRAS*					

That there are no other contracts for said work outstanding, and that there is nothing due or to become due to any person for
material, labor or other work of any kind done or to be done upon or in connection with said work other than above stated.

DATE _____ SIGNATURE: _____

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____

*EXTRAS INCLUDE BUT ARE NOT LIMITED TO CHANGE
ORDERS, BOTH ORAL AND WRITTEN, TO THE CONTRACT.

NOTARY PUBLIC