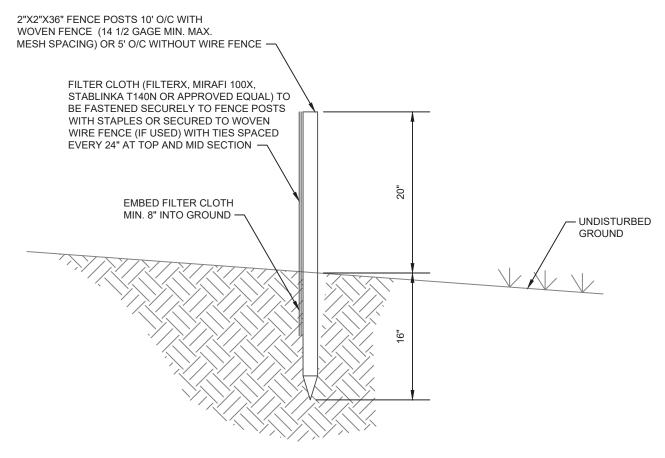
EROSION CONTROL EC-001 SILT FENCE EC-002 INLET PROTECTION - PAVED AREAS DROP-IN PROTECTION LANDSCAPING LAN-001 TREE GRATE ASSEMBLY, COMPLETE, DUPLEX WEATHERPROOF GFI RECEPTACLE AND COVER PLATE, TREE WELL LAN-002 DECIDUOUS TREE PLANTING LAN-003 SHRUB PLANTING LIGHTING LGT-001 HANDHOLE AND GROUNDING LGT-002 ELECTRICAL SERVICE INSTALLATION LIGHT POLES LGT-003 LGT-004 ELECTRIC CABLES LGT-005 LIGHT POLE FOUNDATION - COLLECTOR STREET LGT-006 LIGHTING CONTROLLER CABINET LIGHTING CONTROLLER WIRING DIAGRAM LGT-007 **MISCELLANEOUS** MSC-001 RESIDENTIAL MAILBOX **ROADWAY** RDY-001 COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 RDY-002 DEPRESSED CURB RDY-003 TYPICAL RESIDENTIAL STREET SECTION RDY-004 PAVEMENT RESTORATION RDY-005 PARKING LOT PAVEMENT RDY-006 ACCESSIBLE PARKING SPACES RDY-007 SIDEWALK AND RESIDENTIAL DRIVEWAY APRON RDY-008 COMMERCIAL AND INDUSTRIAL DRIVEWAY APRON SANITARY SEWER SAN-001 SANITARY SEWER MANHOLE SAN-002 DROP MANHOLE CONNECTION SAN-003 SANITARY SEWER SERVICES CONNECTION SAN-004 SANITARY SEWER CLEANOUT SAN-005 GREASE BASIN STORM SEWER STM-001 STORM SEWER MANHOLE STM-002 CATCH BASIN TYPE A STM-003 CATCH BASIN TYPE C STM-004 INLET TYPE A WATERMAIN WM-001 VALVE VAULT WM-002 THRUST BLOCK INSTALLATION WM-003 VALVE VAULT ABANDONMENT WM-004 PRESSURE CONNECTION VALVE VAULT WM-005 FIRE HYDRANT ABANDONMENT WM-006 FIRE HYDRANT WM-007 WATER SERVICE 800-MW RESIDENTIAL DOMESTIC RISER WM-009 COMMERCIAL METER DETAIL A WM-010 COMMERCIAL METER DETAIL B WM-011 NEPTUNE METER INSTALLATION INSTRUCTIONS WM-012 WATERMAIN CONFLICT WM-013 UNDERGROUND UTILITY CASING PIPE WM-014 TRENCH SECTIONS

CITY OF WEST CHICAGO
475 MAIN STREET
WEST CHICAGO, IL 60185
PHONE: 630-293-2255
FAX: 630-293-2971

CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS



SILT FENCE SHALL BE INSTALLED AND INSPECTED BY THE CITY PRIOR TO ANY OTHER CONSTRUCTION

WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.

TOPSOIL STOCKPILES SHALL HAVE DIVERSION DITCHES PLACED AROUND THEM WITH A SILT TRAP BUILT AT THE LOW POINT OF THE DITCHES.

SILT FENCE TO BE PROVIDED AROUND ENTIRE PERIMETER OF ALL WETLAND AREAS PRIOR TO MASS EARTHWORK START.

MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN SILT FENCE.

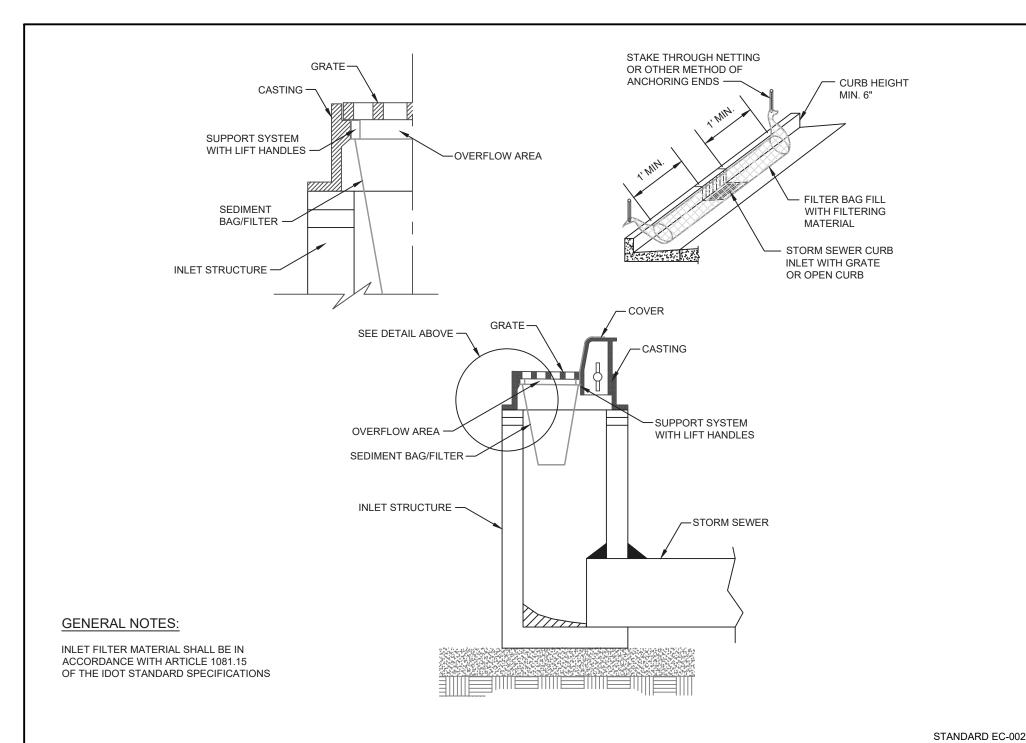
SILT FENCE SHALL BE INSTALLED USING MACHINE METHOD.

STANDARD EC-001



SILT FENCE

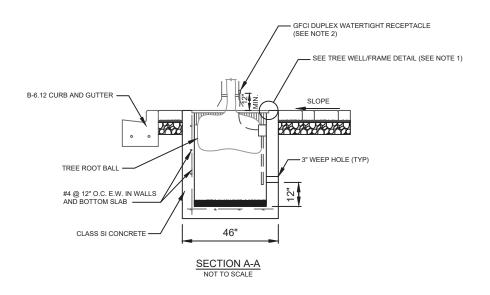
REVISIONS		

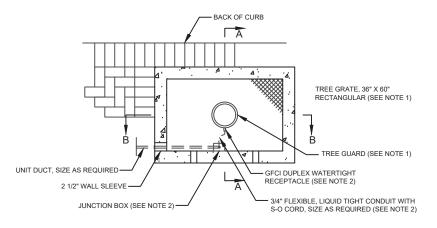


CITY OF WEST CHICAGO
475 MAIN STREET
WEST CHICAGO, IL 60/185
PHONE: 802-932-255
FAX: 630-293-2971

INLET PROTECTION - PAVED AREAS DROP-IN PROTECTION

CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS

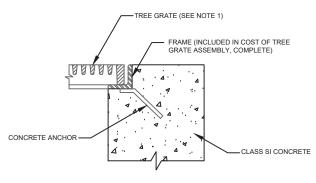




TREE GRATE ASSEMBLY, COMPLETE, DUPLEX WEATHERPROOF GFI RECEPTACLE

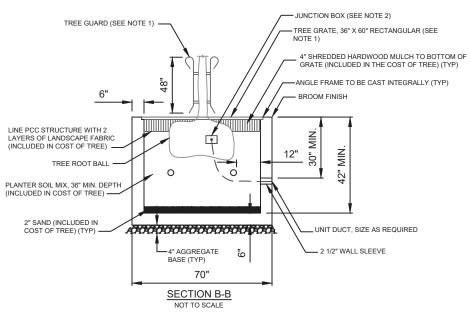
AND COVER PLATE, TREE WELL

NOT TO SCALE



TREE WELL/FRAME DETAIL

NOT TO SCALE



STANDARD LAN-001

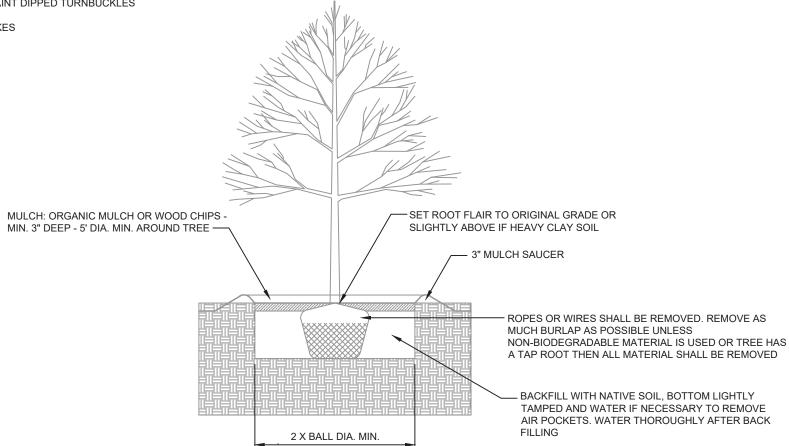


GUYING IS ONLY USED WHEN NECESSARY:

- 3 GUYS MUST BE USED WITH WHITE FLAG ON EACH SIDE TO INCREASE VISIBILITY *AVOID TIGHT GUY WIRES AS THEY PREVENT NATURAL SWAY
- RUBBER HOSE MUST BE USED ON BARK

- GALVANIZED OR PAINT DIPPED TURNBUCKLES

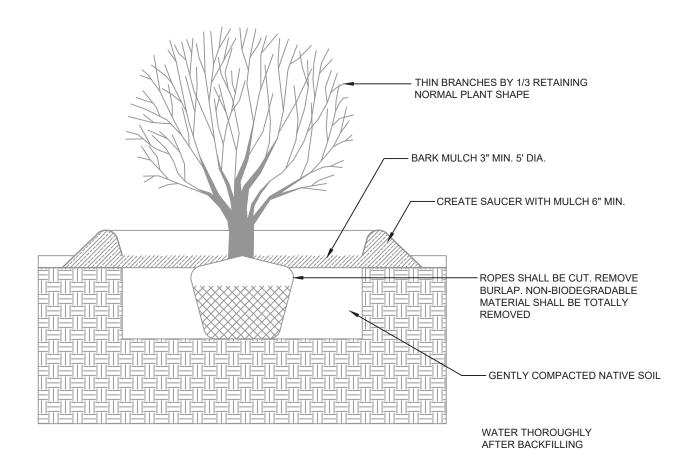
- USE WOODEN STAKES



STANDARD LAN-002



REVISIONS		



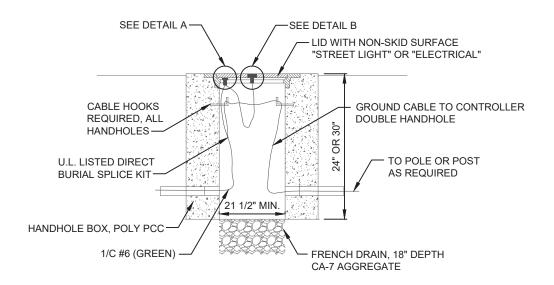
STANDARD LAN-003

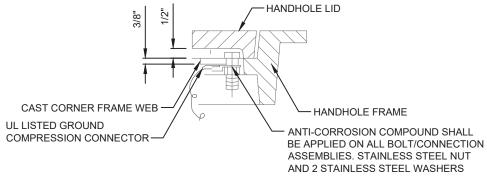


SHRUB PLANTING

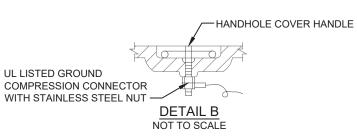
CITY OF WEST CHICAGO
CONSTRUCTION SPECIFICATIONS,
STANDARDS, AND DETAILS

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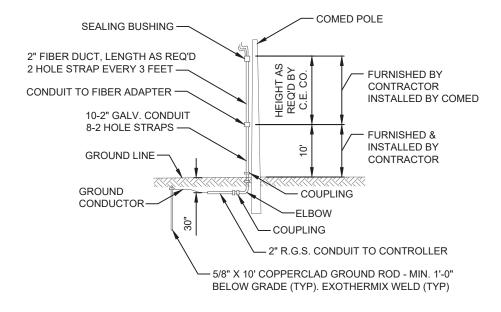




STANDARD LGT-001

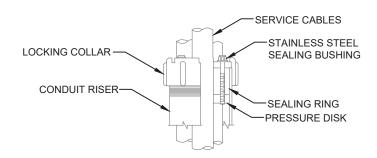


REVISIONS		



SEE COMED BOOK OF INFORMATION AND REQUIREMENTS FOR THE SUPPLY OF ELECTRICAL SERVICE PAGE NO. 90591.

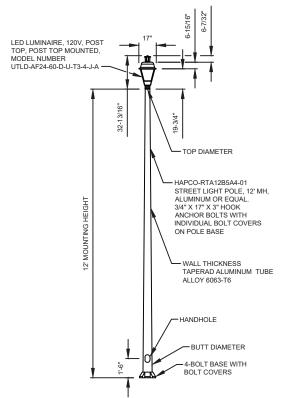
GROUND ROD, GROUND CLAMPS AND GROUND WIRE TO BE IN ACCORDANCE WITH COMED REQUIREMENTS.



SEALING BUSHING DETAIL NOT TO SCALE

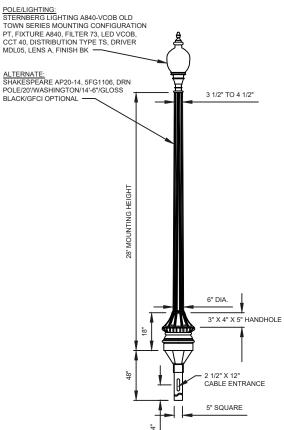
STANDARD LGT-002





24" DIAMETER CONCRETE FOUNDATION, 4' DEEP, WITH REINFORCEMENT CAGE OF 6.#5 VERTICALS, AND #4 HORIZONTAL TIES AT 12" MAXIMUM SPACING

RESIDENTAL STREET (STANDARD)



24" DIAMETER CONCRETE FOUNDATION 5' DEEP, WITH REINFORCEMENT CAGE OF 6-#5 VERTICALS, AND #4 HORIZONTAL TIES AT 12" INCH SPACING, WITH 4-3/4" ANCHOR BOLTS COLOR TO MATCH "CUSTOMER GREY"

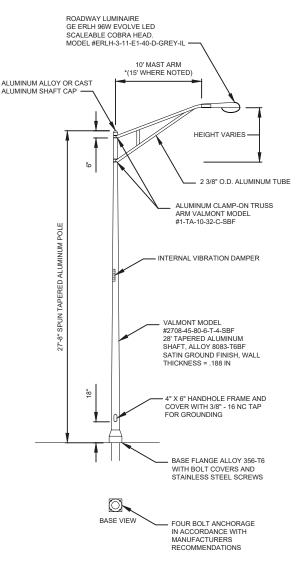
RESIDENTIAL STREET (ALTERNATE DECORATIVE)

GENERAL NOTES:

CABLE AND POWER SUPPLY TO LUMINAIRE: BOTH CONDUCTORS SHALL BE SIGNAL CONDUCTOR, UNDERGROUND FEEDER AND BRANCH CIRCUIT CABLE, BARE COPPER GROUND, TYPE USE INSULATED COPPER CONDUCTOR, 600 VOLT CABLE, AND MINIMUM AWG SIZE 6 OR OF THE SIZE REQUIRED BASED ON USE OF 150-WATT LUMINAIRE, IN 2-INCH UNIDUCT OR CONDUIT. EACH LIGHT TO BE CONNECTED DIRECTLY TO UTILITY PEDESTAL

CABLE AND POWER SUPPLY TO LUMINAIRE FOR COLLECTOR STREET: SAME AS RESIDENTIAL EXCEPT CONDUCTOR SIZE SHALL BE AS REQUIRED BASED ON VOLTAGE DROP CALCULATIONS. SEE LIGHT POLE FOUNDATION DETAIL.

LIGHT POLES SHALL MEET WIND LOADING AND VIBRATION REQUIREMENTS ACCORDING TO THE LATEST ASSHTO STANDARDS AND ARTICLE 1089.01 IN STANDARD SPECIFICATIONS. ALL LUMINARIES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLT OPERATION

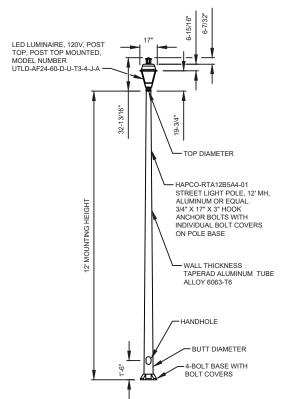


COLLECTOR STREET (STANDARD)

STANDARD LGT-003

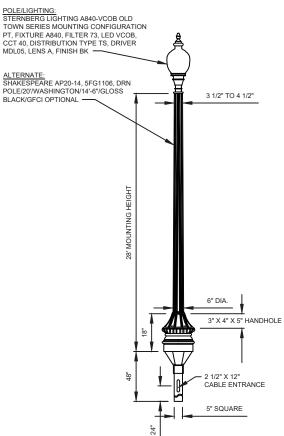


REVISIONS		



24" DIAMETER CONCRETE FOUNDATION, 4' DEEP, WITH REINFORCEMENT CAGE OF 6.#5 VERTICALS, AND #4 HORIZONTAL TIES AT 12" MAXIMUM SPACING

RESIDENTAL STREET (STANDARD)



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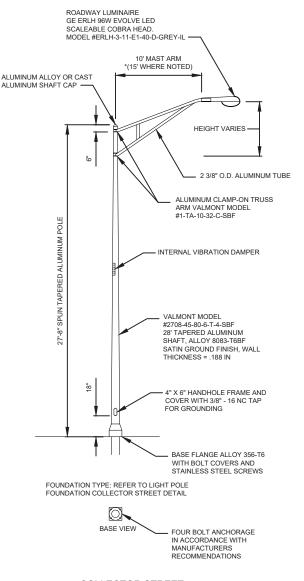
RESIDENTIAL STREET (ALTERNATE DECORATIVE)

GENERAL NOTES:

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CABLE AND POWER SUPPLY TO LUMINAIRE FOR COLLECTOR STREET: SAME AS RESIDENTIAL EXCEPT CONDUCTOR SIZE SHALL BE AS REQUIRED BASED ON VOLTAGE DROP CALCULATIONS. SEE LIGHT POLE FOUNDATION DETAIL.

LIGHT POLES SHALL MEET WIND LOADING AND VIBRATION REQUIREMENTS ACCORDING TO THE LATEST ASSHTO STANDARDS AND ARTICLE 1089.01 IN STANDARD SPECIFICATIONS. ALL LUMINARIES SHALL HAVE A MULTI-TAP BALLAST WIRED FOR 240 VOLT OPERATION



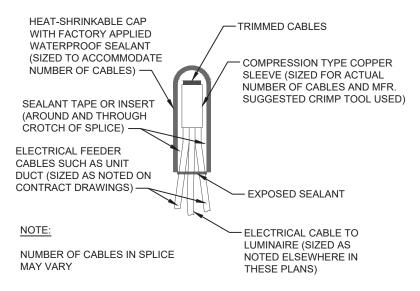
(STANDARD)

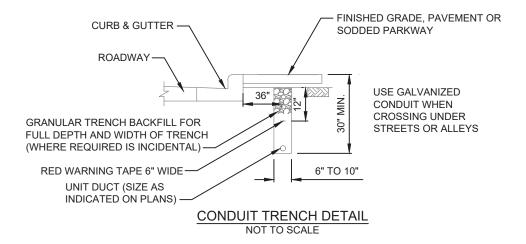
STANDARD LGT-003



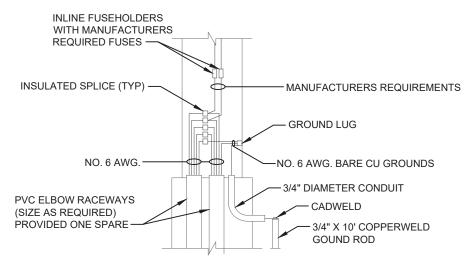
CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS

CHICAGO REVISIONS
ECIFICATIONS,
ID DETAILS





SPLICING ELECTRIC CABLES BASIC MATERIALS AND METHODS NOT TO SCALE



NOTE:

ALL CONDUCTORS IN THE UNIT DUCT RUNS SHALL HAVE INDIVIDUALLY COLOR-CODED INSULATION THROUGHOUT THE ENTIRE LENGTH OF THE CONDUCTOR. THE COLOR IDENTIFICATION FOR THE SYSTEM GROUND SHALL BE GREEN. THE PHASE CONDUCTORS SHALL BE IN ACCORDANCE WITH THE STANDARD IDOT PRACTICES FOR WIRING MULTICONDUCTOR CIRCUITS IN SINGLE UNIT DUCT RUNS.

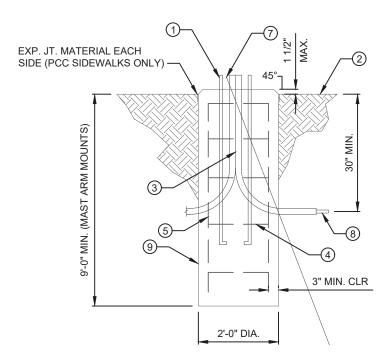
STREET LIGHT POLE BASE WIRING DIAGRAM NOT TO SCALE

STANDARD LGT-004

CITY OF WEST CHICAGO
475 MAIN STREET
WEST CHICAGO, IL 60185
PHONE: 630-293-2255
FAX: 630-293-2971

ELECTRICAL CABLES

CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS



TYPICAL LIGHT POLE FOUNDATION DETAIL NOT TO SCALE

LEGEND:

- (1) ANCHOR BOLTS (INSTALLED PER MANUFACTURERS RECOMMENDATIONS)
- (2) FINISHED GRADE
- 3) PVC ELBOW RACEWAYS (NUMBER AND SIZE AS REQUIRED) PROVIDE ONE SPARE
- (4) #4 TIE HOOPS @12" CENTERS
- (5) (8) #6 VERTICAL REINFORCING BARS EQUALLY SPACED
- (6) COPPERWELD GROUND ROD 3/4" DIA. 10' LONG
- (7) EXOTHERMIC WELD CONNECTIONS AND #6 BARE COPPER WIRE
- (8) UNIT DUCT (SIZE AS INDICATED ON PLANS)
- (9) CONCRETE BASE

GENERAL NOTES:

CONCRETE CLASS SI. SHALL BE SUPPLIED AND PLACED IN ACCORDANCE WITH SECTION 503 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

REINFORCING BARS SHALL MEET THE REQUIREMENTS OF SECTION 508 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

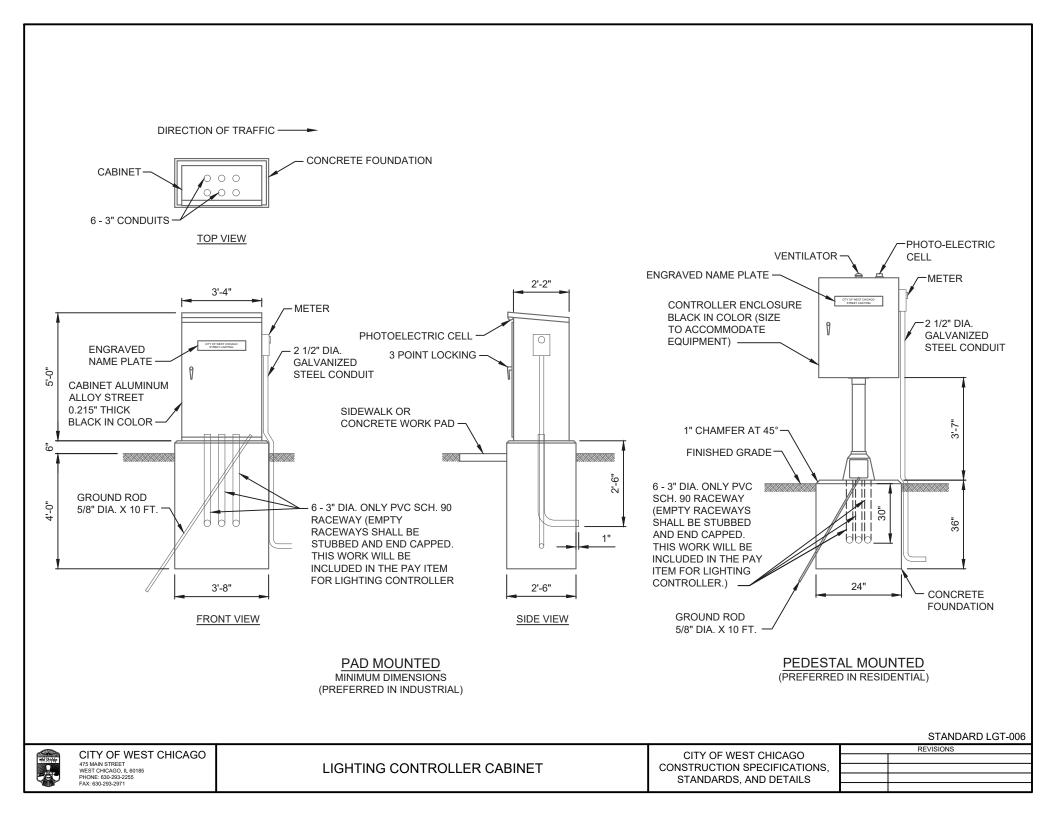
EXCAVATION HOLE FOR THE FOUNDATION SHALL BE AUGERED.

MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF SOIL AT FOUNDATION BASE SHALL BE 2000 PSI.

STANDARD LGT-005



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THE CABINET SHALL BE FABRICATED FROM 0.125" THICK ALUMINUM ALLOY SHEET AND SHALL BE REINFORCED WITH ALUMINUM ANGLES. THE CABINET SHALL BE NEMA TYPE 3 CONSTRUCTION WITH NEOPRENE GASKET, THE DOOR SHALL HAVE STAINLESS STEEL HINGES AND THREE POINT LOCKING SYSTEM.

CONTROL WIRING SHALL BE NO. 12 AWG., 600V, TYPE 'SIS' GRAY SWITCHBOARD WIRE, STRANDED COPPER.

THE HEADS OF CONNECTOR SCREWS SHALL BE PAINTED WHITE FOR NEUTRAL BUS CONNECTION AND GREEN FOR GROUND BUS CONNECTORS.

PROVIDE SEALING GROMMETS FOR ALL WIRING EXTENDING FROM DEVICE ENCLOSURES.

ALL WIRING SHALL BE NEATLY DRESSED AND SUPPORTED.

THE CONTROLLER SHALL BE CONSTRUCTED TO U.L. STD. 508 AND BEAR THE U.L. LABEL 'ENCLOSURE INDUSTRIAL CONTROL PANEL'.

PROVIDE A HOLDER AND WATERPROOF POUCH ON THE INNER SIDE OF THE CONTROLLER DOOR. FURNISH THE APPROVED COPY OF 'CONTROL CABINET WIRING DIAGRAM'.

A CONCRETE PAD 36" X 60" X 4" MINIMUM SIZE SHALL BE PLACED IN FRONT OF CONTROLLER CABINET DOOR WHEN THERE IS NO SIDEWALK. THE PAD SHALL BE POURED SEPARATELY FROM THE FOUNDATION AND INCLUDE A PREFORMED EXPANSION JOINT FILLER.

PROVIDE A RED WARNING NAMEPLATE IN THE CONTROLLER NEAR THE MAIN BREAKER INDICATING 'LIVE CIRCUITS EVEN WHEN MAIN CIRCUIT BREAKER IS IN OFF POSITION''.

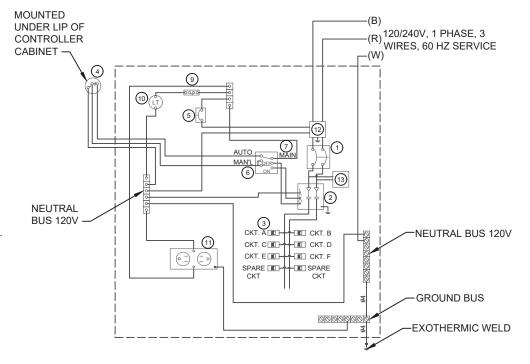
THE PANEL MANUFACTURER SHALL LABEL THE CABINET WITH THE APPROPRIATE ARC FLASH WARNING AND PERSONNEL PROTECTION EQUIPMENT REQUIRED FOR SERVICING.

CONTROLLER CABINET DOOR SHALL BE ON THE PARKWAY SIDE OF THE CABINET, OPPOSITE THE ROADWAY.

THE ELECTRIC METER SHALL BE MOUNTED ON THE HINGE SIDE OF THE DOOR.

CONTROLLER CABINET PAINTING: THE CABINET SHALL BE PRIMED AND PAINTED GREEN. A SAMPLE SHALL BE SUBMITTED WITH THE SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

		TYPICAL DEVICE SCHEDULE NOTE: VALUES SHALL BE DISIGNED SPECIFIC TO EACH PROJECT)
ITEM	QUANT.	DESCRIPTION
0	1	100 AMP CIRCUIT BREAKER, MOLDED CASE, THERMAL MAGNETIC, 2-POLE, SINGLE THROW, 800V FRAME, NON-INTERCHANGEABLE TRIP, BOLT ON TYPE; INTERRUPTING CAPACITY OF NOT LESS THAN 22,000 RMS SYMMETRICAL AMPERES AT 600V
2	1	100 AMP, SQUARE D ELECTRICALLY OPERATED AND ELECTRICALLY HELD LIGHTING CONTRACT OR 2-POLE, 240 V. COIL
3	8	120/240V, 1 PHASE PANEL BOARD WITH 100 A. COOPER MAIN SINGLE POLE, 30 A., 240 V. BOLT ON BRANCH CIRCUITS BREAKERS INTERUPTING CAPACITY OF NOT LESS THAN 10,000 RMS SYMMETRICAL AMPERES AT 240 V.
4	1	PHOTO-ELECTRIC CELL, 120 V, MOUNT ON CONTROLLER CABINET, DELAY TYPE, FPFA-105M
(5)	2	THERMAL MAGNETIC, MOLDED CASE CIRCUIT BREAKER, 1-POLE, 15 A., 120V, BOLT ON TYPE. INTERUPTING CAPACITY OF NOT LESS THAN 5,000 RMS SYMMETRICAL AMPERES AT 120 V.
6	1	CONTROL SWITCH, MOMENTARY CONTACT, SPDT, 15 A., 120 V.
7	1	CONTROL SWITCH, TOGGLE TYPE, SPDT, 20 A., 120 V. SPEC GRADE
9	1	MICRO SWITCH (MOUNTED WITH ACTUARTOR TO SWITCH WHEN DOOR IS OPEN
10	1	800 LUMEN LED LIGHT FIXTURE VAPORTIGHT WITH GLOBE, GUARD AND MOUNTING BOX
11	1	120 VOLT, 20 AMP, GFCI RECEPTACLE, SPECIFICATION GRADE IN NEMA 5-15R WEATHERPROOF BOX WITH FLAP-TYPE COVER
12	1	SURGE ARRRESTOR
13	1	LINE VOLTAGE MONITOR



STANDARD LGT-007



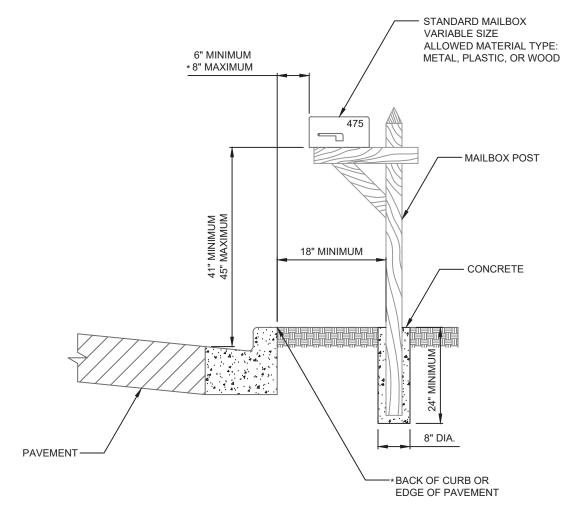
STREET ADDRESS SHALL BE ON THE MAILBOX IF MAILBOX IS ON A DIFFERENT STREET FROM THE RESIDENCE.

MAILBOX POST SHALL MEET THE FOLLOWING REQUIREMENTS:

- 4" X 4" PRE-TREATED WOOD POST
- 4-1/2" DIAMETER PRE-TREATED WOOD POST
- 2" DIAMETER STANDARD STEEL PIPE
- 2" DIAMETER STANDARD ALUMINUM PIPE

ORNAMENTAL OR DECORATIVE, INCLUDING BRICK OR MASONRY STRUCTURES, SHALL NOT BE INSTALLED IN THE CITY RIGHT-OF-WAY

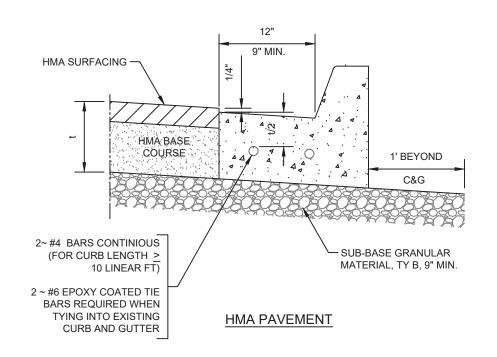
RESIDENTIAL MAILBOX

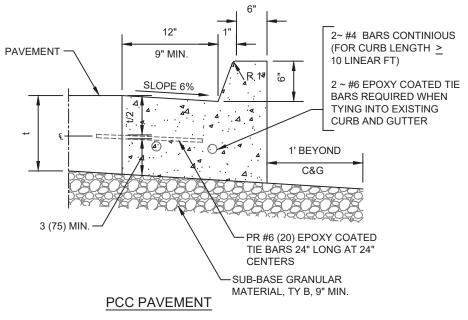


STANDARD MSC-001



REVISIONS		



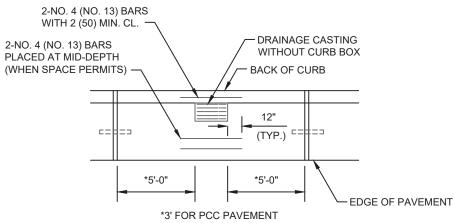


t = THICKNESS OF PAVEMENT

CONTRACTION JOINTS SHALL BE 15' MAX FOR PCC PAVEMENT AND 25' MAX FOR HMA PAVEMENT

TRANSITION FROM FULL HEIGHT CURB TO DEPRESSED CURB SHALL BE MADE AT THE MINIMUM RATE OF 2-INCH PER FOOT.

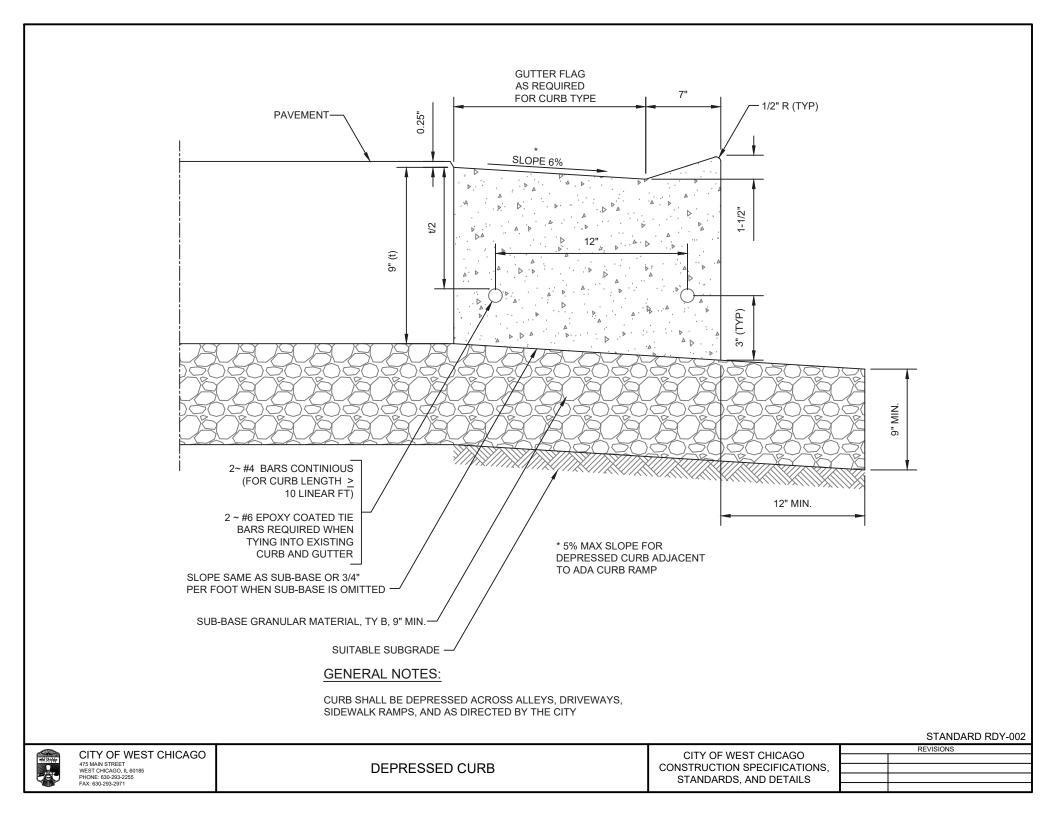
CONSTRUCTION SHALL BE IN ACCORDANCE WITH STATE STANDARD 606001

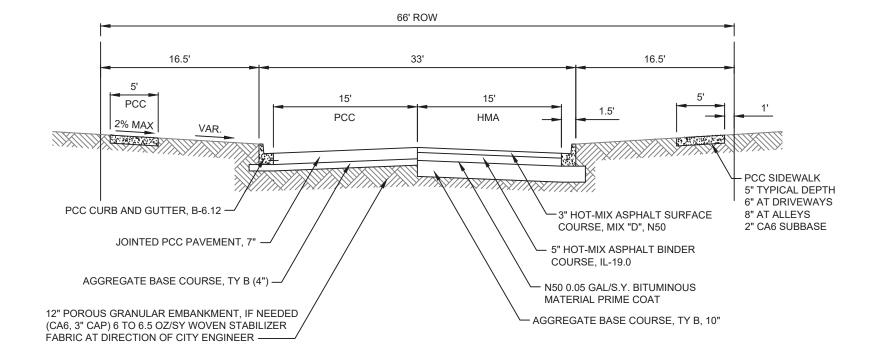


DRAINAGE OPENINGS

STANDARD RDY-001



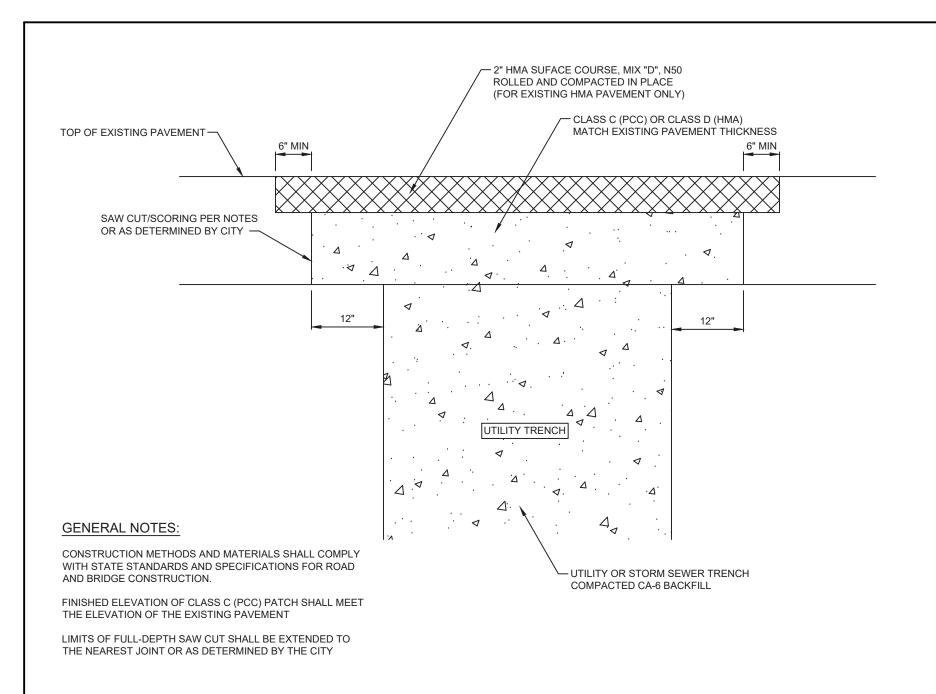




STANDARD RDY-003



REVISIONS	

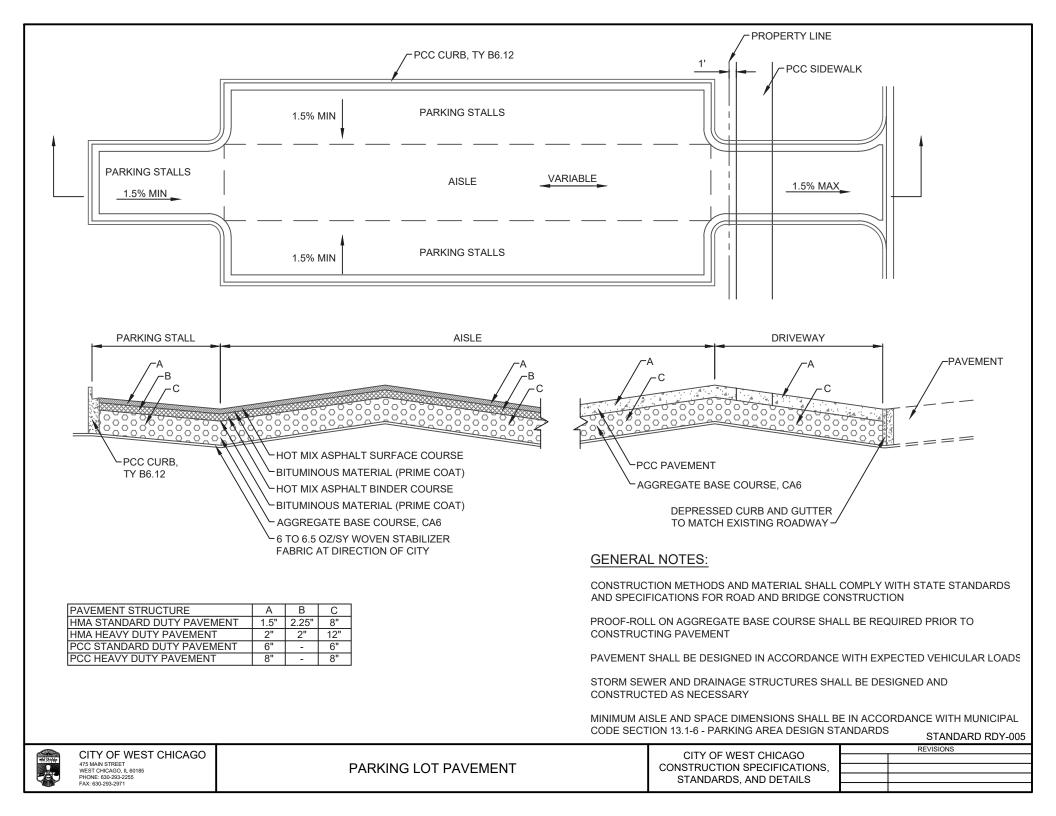


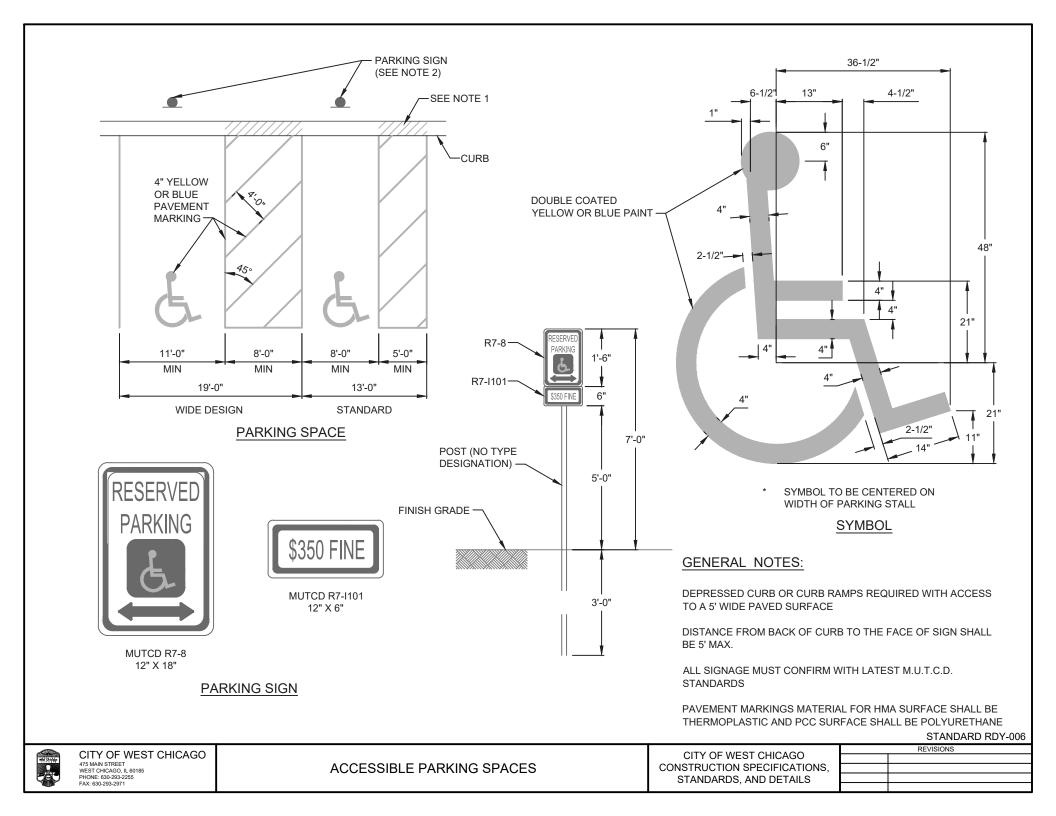
STANDARD RDY-004

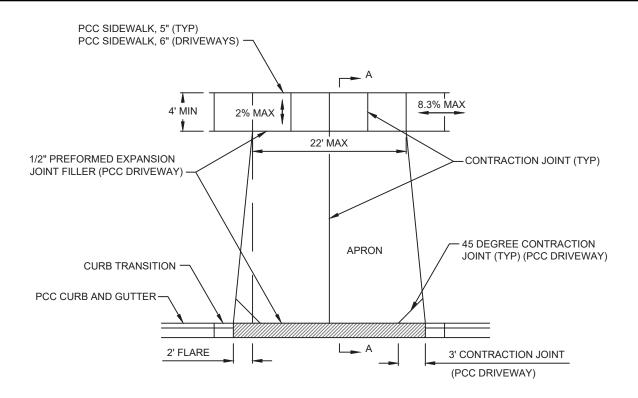


PAVEMENT RESTORATION

REVISIONS		







SIDEWALK EXPANSION JOINTS AT 50' CENTERS MAX, TRANSVERSE JOINTS AT 5' CENTERS MAX.

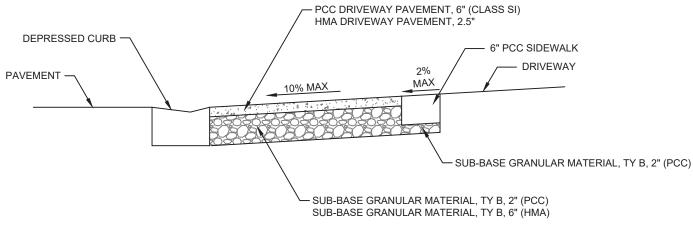
SUB-BASE SHALL BE MECHANICALLY COMPACTED

PCC DRIVEWAY PAVEMENT SHALL BE NON-REINFORCED

SIDEWALK ADA CURB RAMP AND DETECTABLE WARNINGS WHEN REQUIRED SHALL MEET STATE STANDARDS

DETECTABLE WARNINGS SHALL BE REQUIRED AT STREET AND ALLEYWAY CROSSINGS

DETECTABLE WARNING SHALL BE CAST-IN-PLACE WET-SET AND SHALL BE FEDERAL STANDARD COLOR 30166 (RED BRICK)

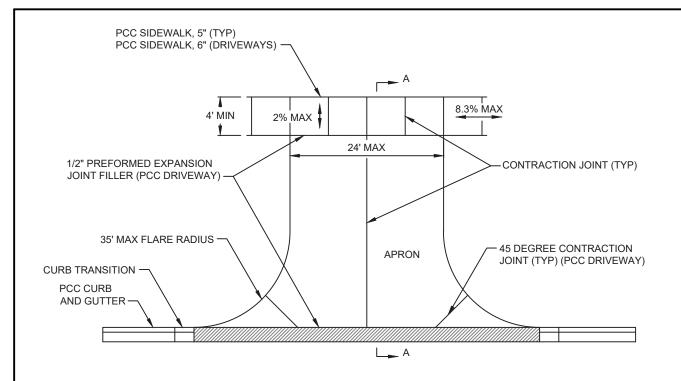


SECTION A-A

STANDARD RDY-007



REVISIONS		



SIDEWALK EXPANSION JOINTS AT 50' CENTERS MAX, TRANSVERSE JOINTS AT 5' CENTERS MAX.

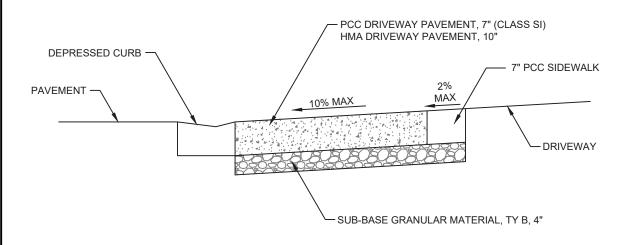
SUB-BASE SHALL BE MECHANICALLY COMPACTED

PCC DRIVEWAY PAVEMENT SHALL BE NON-REINFORCED

SIDEWALK ADA CURB RAMP AND DETECTABLE WARNINGS WHEN REQUIRED SHALL MEET STATE STANDARDS

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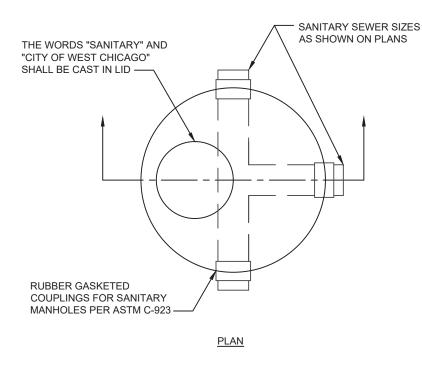


SECTION A-A

STANDARD RDY-008



REVISIONS		
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MANHOLE LIDS SHALL BE NEENAH R1772 TYPE "B" SELF SEALING LID OR EJIW 1022-1 HD OR APPROVED EQUAL.

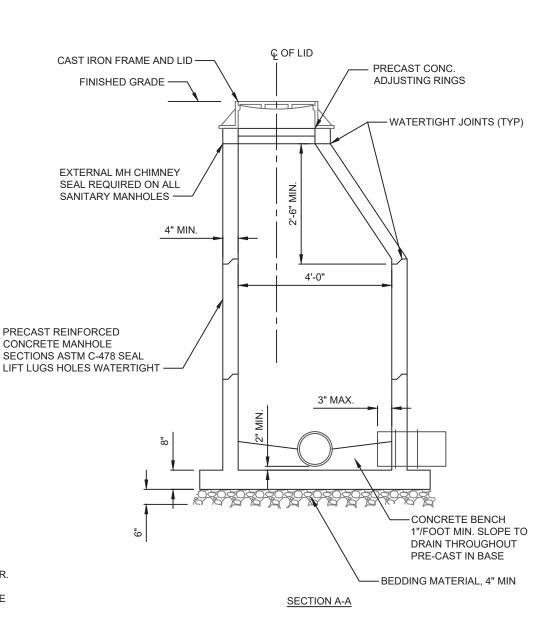
EZ-STICK GASKET OR APPROVED EQUAL SHALL BE INSTALLED AT ALL JOINTS.

EXTERNAL CHIMNEY SEALS TO BE CANUSA, INFISHIELD OR APPROVED EQUAL.

EXTERNAL JOINT SEALS TO BE MAC-WRAP OR APPROVED EQUAL.

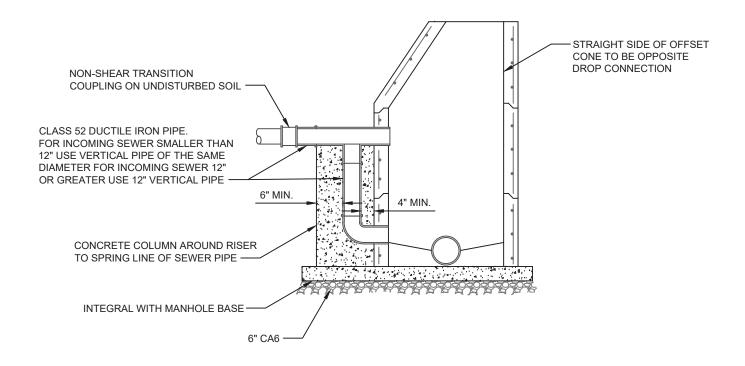
CONCRETE ADJUSTING RINGS NOT TO EXCEED 12" IN HEIGHT AND 3 IN NUMBER.

PIPE ENDS SHALL BE CUT FLUSH WITH MANHOLE WALLS. NO PROTRUDING PIPE IS ALLOWED.



STANDARD SAN-001





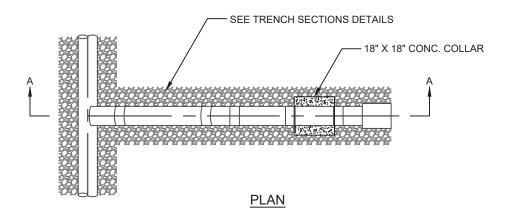
DROP CONNECTION SHALL BE USED FOR ALL SANITARY SEWERS ENTERING MANHOLES 24" OR MORE THAN ABOVE OUTLET PIPE

ALL DROP CONNECTION SHALL BE ON THE EXTERIOR OF THE MANHOLE

STANDARD SAN-002



REVISIONS		



CLEAN OUT ADAPTOR (HUB) WITH RAISED MIPT PLUG -

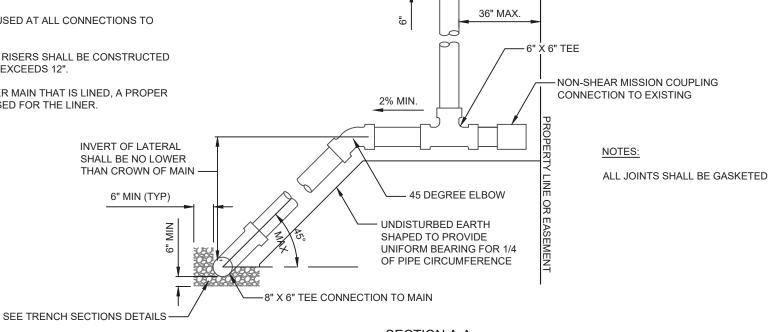
GENERAL NOTES:

PROVIDE MINIMUM OF 18" OF CLEARANCE AROUND CLEANOUT

SADDLES SHALL BE USED AT ALL CONNECTIONS TO **CLAY SEWER MAIN**

SANITARY SERVICES RISERS SHALL BE CONSTRUCTED WHERE MAIN DEPTH EXCEEDS 12".

FOR SANITARY SEWER MAIN THAT IS LINED, A PROPER SITTING SHALL BE USED FOR THE LINER.



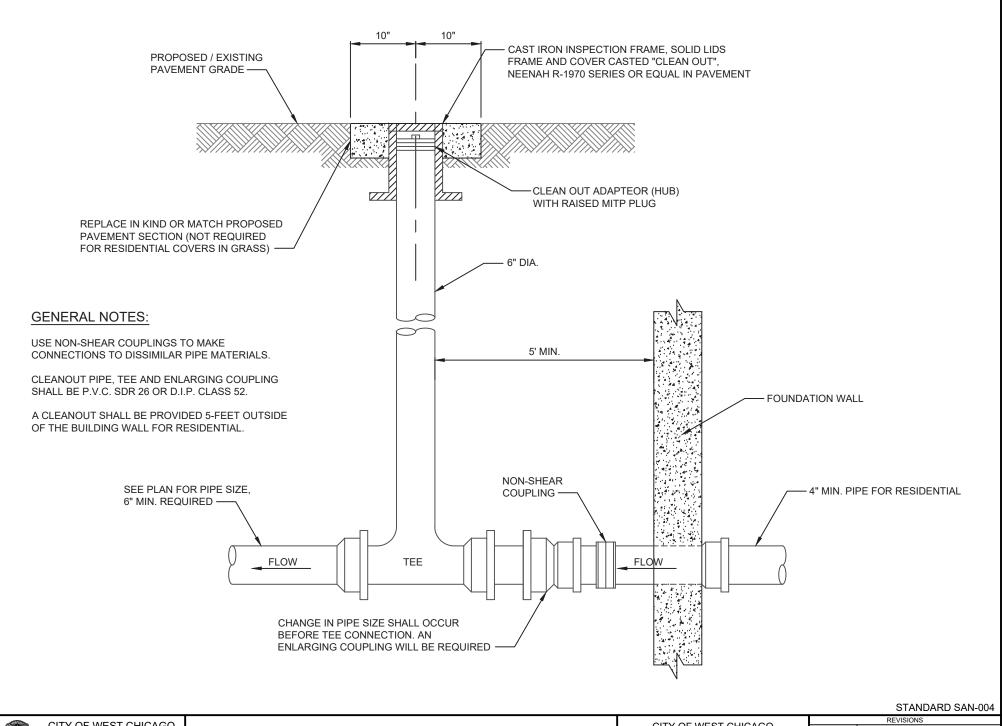
SECTION A-A

STANDARD SAN-003



LOCKING SEWER CLEAN OUT FRAME AND LID TO BE SET AT FINISH GRADE

FINISH GRADE

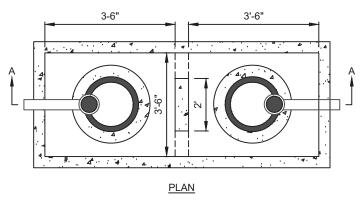


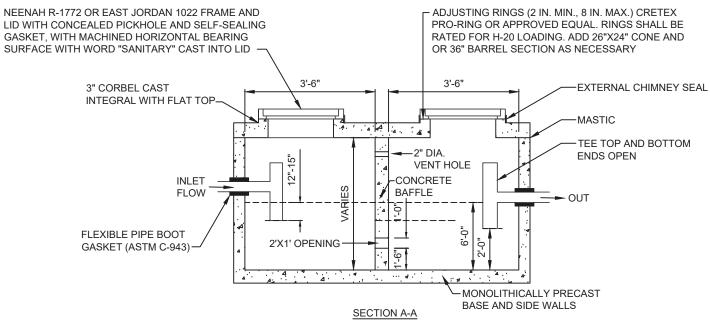
CITY OF WEST CHICAGO

475 MAIN STREET
WEST CHICAGO, IL 60185
PHONE: 630-293-2255
FAX: 630-293-2251

SANITARY SEWER CLEANOUT

CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS





THE GREASE TRAP SHALL BE LOCATED OUTSIDE AND IN A PLACE EASILY ACCESSIBLE FOR CLEANING AND INSPECTION.

EXTERIOR CHIMNEY SEALS CRETEX "CLASSIC", CANUSE "WRAPIDSEAL" OR ADAPTOR INC.

THE MINIMUM 1,000 GALLON HOLDING CAPACITY SHALL BE BASED UPON DEPTH MEASURED FROM THE TANK BOTTOM TO THE DISCHARGE INVERT. THE MINIMUM LIQUID DEPTH SHALL BE 6 FEET.

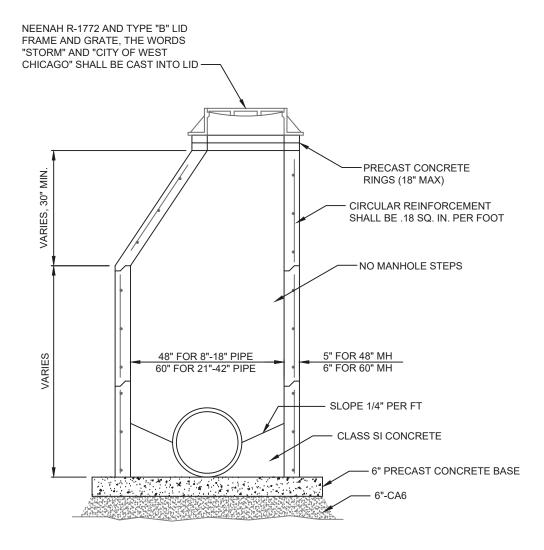
INTERIOR PIPING SHALL BE PVC, SCH 40 OR HEAVIER, GLUED JOINTS.

CONCRETE GREASE BASIN SHALL BE LINED WITH AN APPROVED BIOGENIC CORROSION RESISTANT LINER OR FABRICATED WITH AN APPROVED CONCRETE ADDITIVE.

STANDARD SAN-005



REVISIONS



STORM SEWER MANHOLE

PRE-CAST REINFORCED CONCRETE RISER RINGS AND DOMES SHALL COMPLY WITH ASTM C-39.

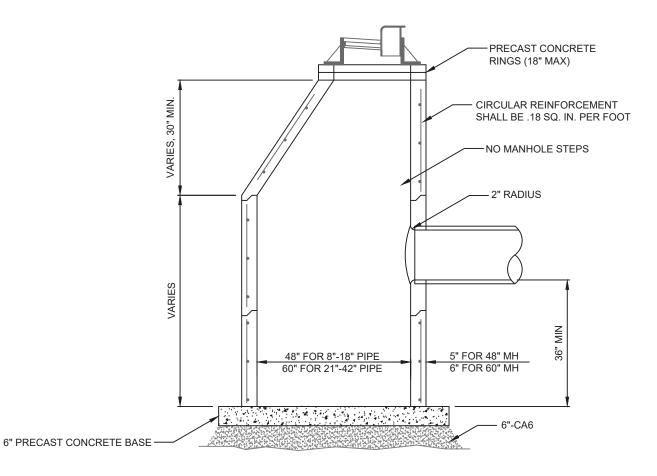
ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT.

FOR RESTRICTED DEPTH MANHOLES OMIT PRE-CAST CONE SECTION AND PROVIDE 8" THICK REINFORCED CONCRETE FLAT TOP SLAB WITH 24" ECCENTRIC OPENING.

STANDARD STM-001



REVISIONS		
	-	



PRE-CAST REINFORCED CONCRETE RISER RINGS AND DOMES SHALL COMPLY WITH ASTM C-39.

ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT.

NEENAH R-3281-A OR EQUAL FRAME AND GRATE FOR B6.12 C&G (SHOWN) WITH VANE GRATES ON FLOW-THROUGH STRUCTURES AND AT DOUBLE STRUCTURES AT SAG LOCATIONS.

NEENAH R-4340-B OR EQUAL GRATE FOR YARD INLETS
NEENAH R-2504-C W/TYPE D OR G GRATE OR EQUAL FOR PARKING LOT INLETS

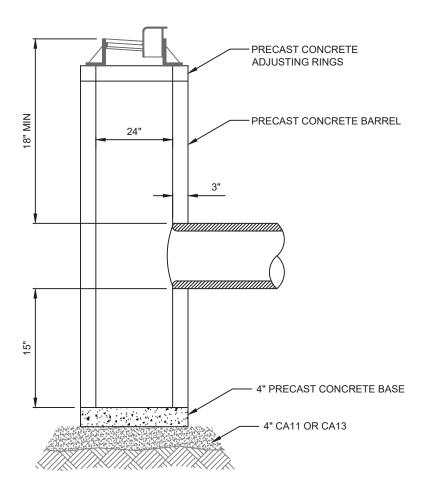
FOR SHALLOW CATCH BASINS OMIT PRE-CAST CONE SECTION AND PROVIDE 8" THICK FLAT TOP CONCRETE SLAB WITH 24" ECCENTRIC OPENING

CATCH BASIN TYPE A

STANDARD STM-002



REVISIONS		



PRE-CAST REINFORCED CONCRETE RISER RINGS SHALL COMPLY WITH ASTM C-39.

ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT.

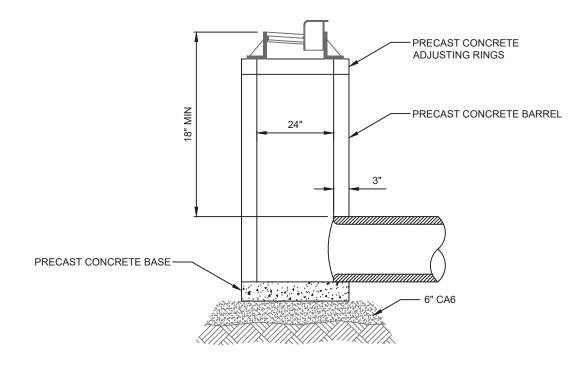
NEENAH R-3281-A OR EQUAL FRAME AND GRATE FOR B6.12 C&G (SHOWN)
NEENAH R-3501-P OR EQUAL FRAME AND GRATE FOR M3.12 ROLL CURB
NEENAH R-4340-B OR EQUAL GRATE FOR YARD INLETS
NEENAH R-2504-C W/TYPE D OR G GRATE OR EQUAL FOR PARKING LOT INLETS

CATCH BASIN TYPE C

STANDARD STM-003



CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS



PRE-CAST REINFORCED CONCRETE RISER RINGS SHALL COMPLY WITH ASTM C-39.

ALL JOINTS BETWEEN PRE-CAST ELEMENTS, ADJUSTING RINGS AND MANHOLE FRAMES SHALL BE SET IN PLACE WITH A BUTYL RUBBER JOINT SEALANT.

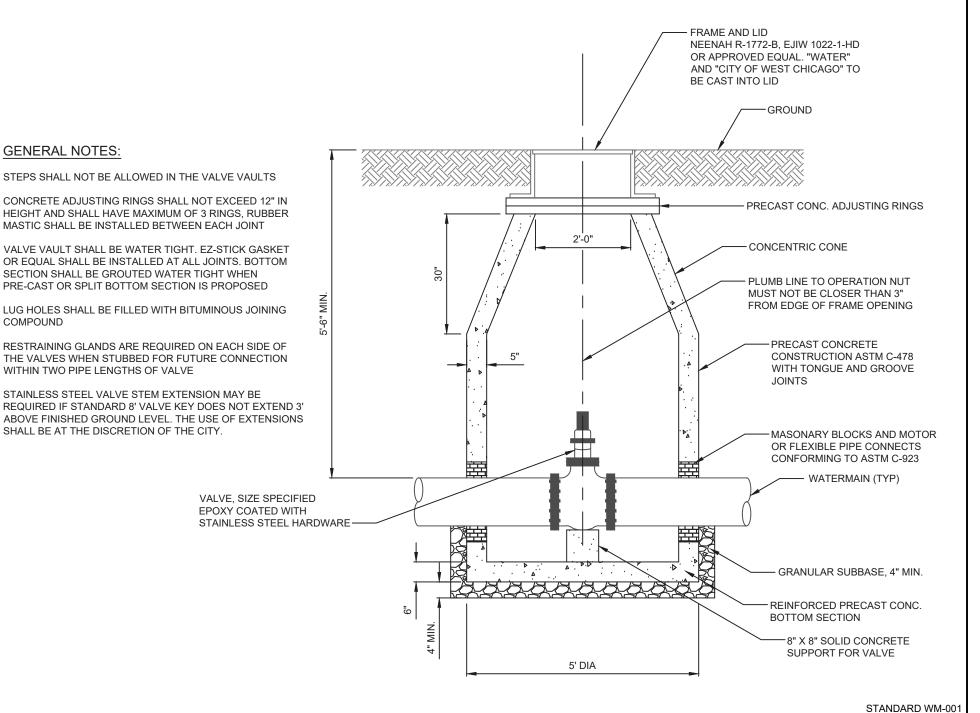
NEENAH R-3281-A OR EQUAL FRAME AND GRATE FOR B6.12 C&G (SHOWN)
NEENAH R-3501-P OR EQUAL FRAME AND GRATE FOR M3.12 ROLL CURB
NEENAH R-4340-B OR EQUAL GRATE FOR YARD INLETS
NEENAH R-2504-C W/TYPE D OR G GRATE OR EQUAL FOR PARKING LOT INLETS

INLET TYPE A

STANDARD STM-004

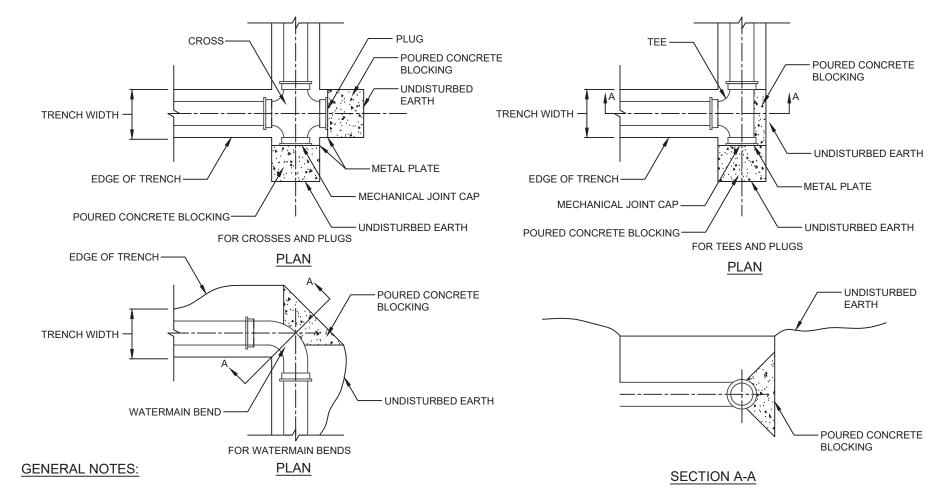


CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS



CITY OF WEST CHICAGO
475 MAIN STREET
WEST CHICAGO, IL 60185
PHONE: 630-293-2255
FAX: 630-293-2971

CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS



BLOCKING SHALL BE APPLIED FOR ALL TEES, PLUGS, CAPS, AND BENDS BEARING MINIMUM CAPACITY OF 2000 PSF

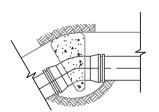
MINIMUM SQ. FT. AREA OF VERTICAL CROSS SECTION AGAINST 2000 PSF UNDISTURBED EARTH

	6"	8"	10"	12"
90° BEND	5.5	9.4	15.4	21.8
45° BEND	3.0	5.1	8.4	11.9
22.5° BEND	1.5	2.6	4.3	6.1
11.25° BEND	1.5	2.6	4.3	6.1
TEE	3.9	6.7	10.9	15.5

ALL AREAS OF UNDISTURBED EARTH SHALL HAVE A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. BEARING AREA OF THE SOIL IS BASED ON 65 PSI WATER MAIN PRESSURE

CONCRETE SHALL NOT BE ALLOWED TO BE POURED DIRECTLY AGAINST WATER MAIN PIPE OR FITTINGS. MAIN SHALL BE WRAPPED IN PLASTIC SHEETING. NO LESS THAN 4 MIL THICKNESS PRIOR TO POURING CONCRETE THRUST BLOCK

CONCRETE SHALL BE PLACED MINIMUM OF 12" BETWEEN UNDISTURBED GROUND AND FITTING SHALL BE ANCHORED SUCH THAT IT IS ACCESSIBLE FOR FUTURE REPAIRS



VERICAL BEND

STANDARD WM-002



CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS. STANDARDS, AND DETAILS

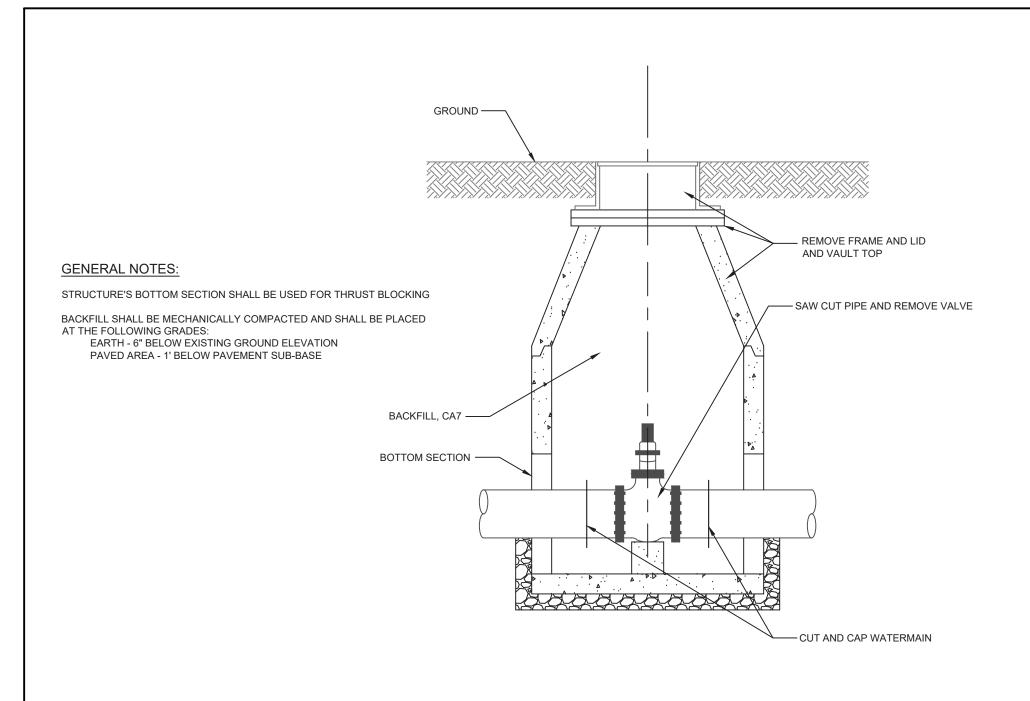
REVISIONS

UNDISTURBED

EARTH

POURED CONCRETE

BLOCKING



STANDARD WM-003



CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS

STRUCTURE FRAME, ADJUSTING RINGS, AND ALL CONCRETE SECTIONS TO BE SET ON AND SEALED WITH A PREFORMED BITUMEN SEAL (E-Z STICK OR APPROVED EQUAL)

CAST IRON MANHOLE FRAME AND COVER, R 1772 TYPE "B" OR EJIW 1022-1 HD OR APPROVED EQUAL WITH STANDARD DUTY, NON-ROCKING TYPE LIDS. "CITY OF WEST CHICAGO" AND "WATER" SHALL BE CAST INTO LID.

ALL VALVE HARDWARE MUST BE 304 STAINLESS STEEL, INCLUDING NUTS, BOLTS, AND WASHERS.

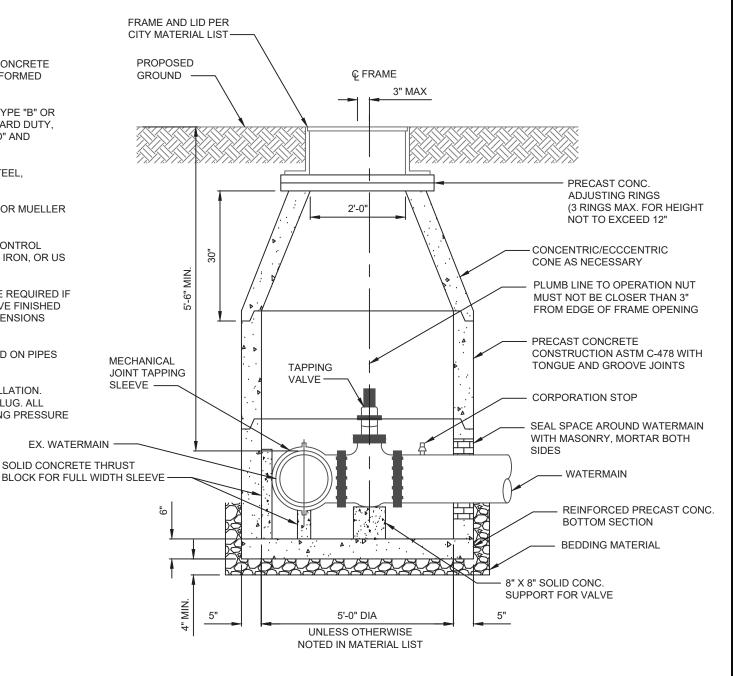
AMERICAN FLOW CONTROL, CLOW, EAST JORDAN, OR MUELLER RESILIENT WEDGE TAPPING VALVE.

MUELLER CAST IRON MJ #H615, AMERICAN FLOW CONTROL DUCTILE IRON SERIES 2800, TYLER/UNION DUCTILE IRON, OR US PIPE DUCTILE IRON T-9 TAPPING SLEEVE.

STAINLESS STEEL VALVE STEM EXTENSION MAY BE REQUIRED IF STANDARD 8' VALVE KEY WILL NOT EXTEND 3' ABOVE FINISHED GROUND LEVEL AFTER INSTALLATION. USE OF EXTENSIONS SHALL BE AT THE DISCRETION OF WCPW.

STAINLESS STEEL TAPPING SLEEVES NOT ALLOWED ON PIPES 12" AND LARGER.

EXISTING PIPE TO BE DISINFECTED BEFORE INSTALLATION. TAPPING SLEEVES SHALL HAVE A TEST PORT OR PLUG. ALL TAPPING SLEEVES SHALL BE TESTED TO OPERATING PRESSURE PLUS 50% BEFORE INSTALLATION.







REVISIONS		

NOTIFY PUBLIC WORKS UTILITY DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION.

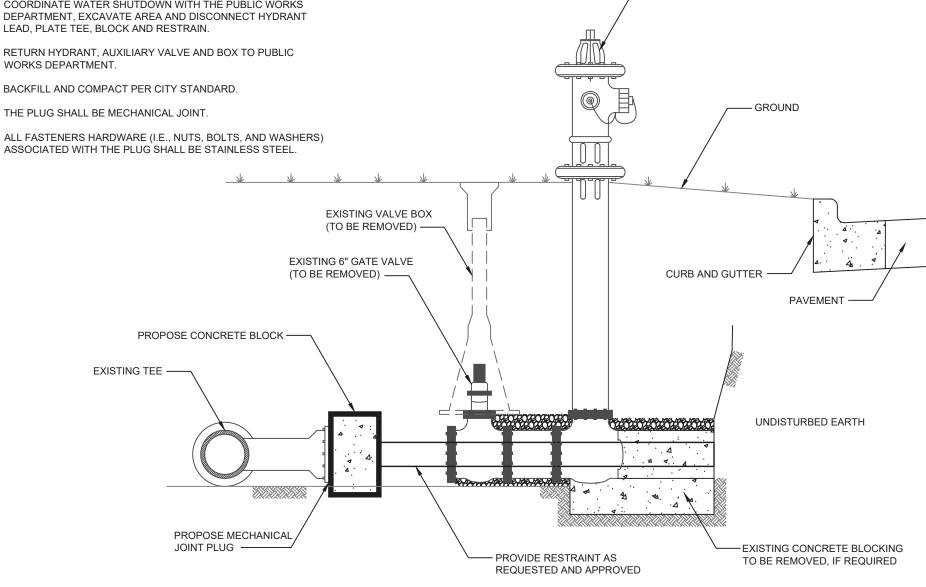
COORDINATE WATER SHUTDOWN WITH THE PUBLIC WORKS DEPARTMENT, EXCAVATE AREA AND DISCONNECT HYDRANT LEAD, PLATE TEE, BLOCK AND RESTRAIN.

RETURN HYDRANT. AUXILIARY VALVE AND BOX TO PUBLIC WORKS DEPARTMENT.

BACKFILL AND COMPACT PER CITY STANDARD.

THE PLUG SHALL BE MECHANICAL JOINT.

ASSOCIATED WITH THE PLUG SHALL BE STAINLESS STEEL.



STANDARD WM-005

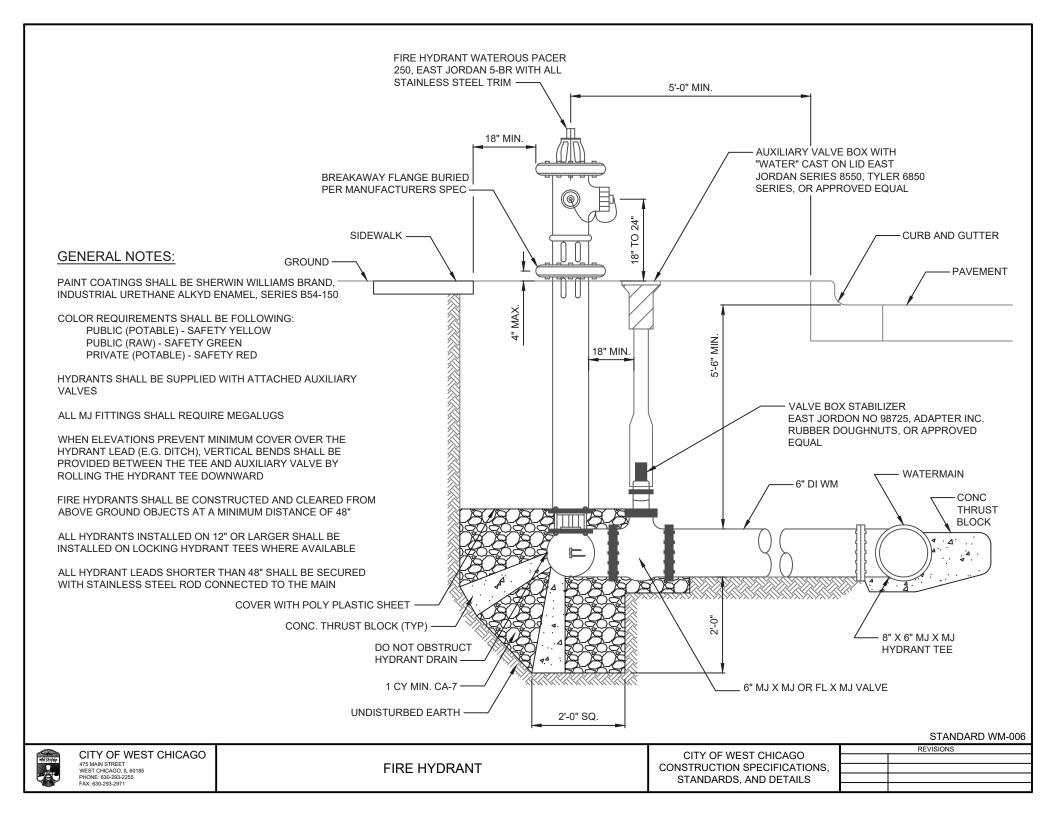


FIRE HYDRANT ABANDONMENT

REVISIONS CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS. STANDARDS, AND DETAILS

EXISTING HYDRANT

(TO BE REMOVED)



CORPORATION STOPS OR CURB BOX SHALL NOT BE INSTALLED UNDER PAVED AREAS, INCLUDING DRIVEWAY AND SIDEWALK.

SERVICE PIPING SHALL BE A CONTINUOUS PIECE, SPLICE SHALL NOT BE ALLOWED.

TEFLON PASTE OR TAPE SHALL NOT BE ALLOWED ON FITTINGS.

PIPE SHALL BE UNCOVERED ON EITHER SIDE OF THE PROPOSED TAP LOCATION TO ENSURE FOLLOWING SET BACK FROM JOINTS OR BELLS ARE MAINTAINED:

3.5' FOR WATER MAIN 8" OR LESS 5.5' FOR WATER MAIN 10" OR LESS

EXISTING WATER MAIN SHALL REMAIN IN SERVICE DURING CONNECTION. SHUT DOWN OF EXISTING MAIN SHALL NOT BE ALLOWED

DUCTILE IRON WATER MAIN PIPE SHALL BE USED FOR SERVICES GREATER THAN 3".

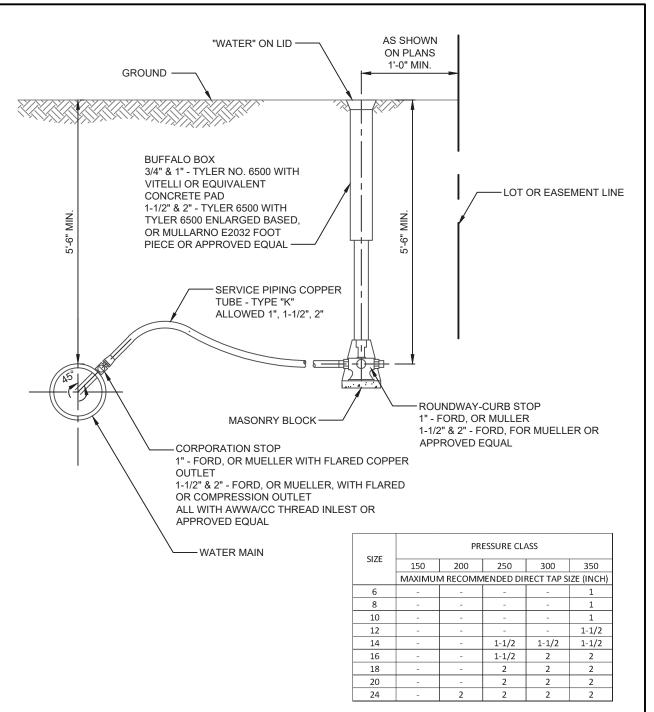
WATER SERVICE SHALL BE SURROUNDED BY HOMOGENOUS BACKFILL, INCLUDING BETWEEN TRENCH FLOOR AND THE BOTTOM OF TUBE WITH ONE OF THE FOLLOWING BACKFILL MATERIALS:

WASHED SAND LIMESTONE SAND SMALL LIME STONE CHIPS WASHED PEA GRAVEL

BUFFALO BOX FOR ALL MULTI-UNIT BUILDINGS SHALL BE CLEARLY AND PERMANENTLY LABELED BY WELDING THE UNIT NUMBERS AND LETTERS ON THE TOP OF THE LID

PACK FITTING-BRASS SHALL BE A.Y. MCDONALD, FORD, MUELLER OR APPROVED EQUAL.

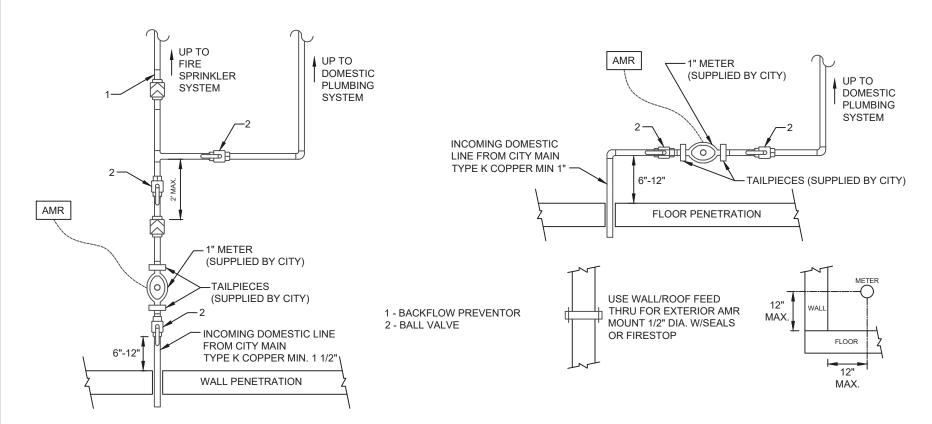
ALL NON DIRECT TAPS SHALL USE SMITH BLAIR #372, CASCADE #CSC2. FORD FS313. OR APPROVED EQUAL



STANDARD WM-007



WATER SERVICE



DOMESTIC RISER DIAGRAM
WITH FIRE SUPRESSION

DOMESTIC RISER DIAGRAM WITHOUT FIRE SUPRESSION

GENERAL NOTES:

REFER TO NEPTUNE METER INSTALLATION INSTRUCTION FOR ADDITIONAL GENERAL AND INSTALLATION REQUIREMENTS.

ALL WATER METER BE INSTALLED HORIZONTALLY. VERTICAL INSTALLMENT SHALL BE PROHIBITED.

BONDING OF ELECTRICAL SYSTEM TO THE WATER METER SHALL NOT BE ALLOWED.

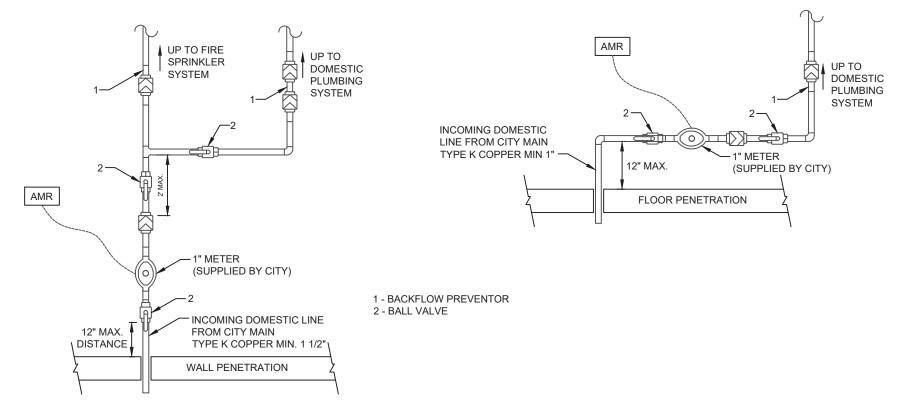
SPRINKLER METERS ARE TO BE INSTALLED AFTER MAIN METER TO RECEIVE METERING CREDIT.

STANDARD WM-008



RESIDENTIAL DOMESTIC RISER

CITY OF WEST CHICAGO
CONSTRUCTION SPECIFICATIONS,
STANDARDS, AND DETAILS



REFER TO NEPTUNE METER INSTALLATION INSTRUCTION FOR ADDITIONAL GENERAL AND INSTALLATION REQUIREMENTS.

ALL WATER METER BE INSTALLED HORIZONTALLY. VERTICAL INSTALLMENT SHALL BE PROHIBITED.

BONDING OF ELECTRICAL SYSTEM TO THE WATER METER SHALL NOT BE ALLOWED.

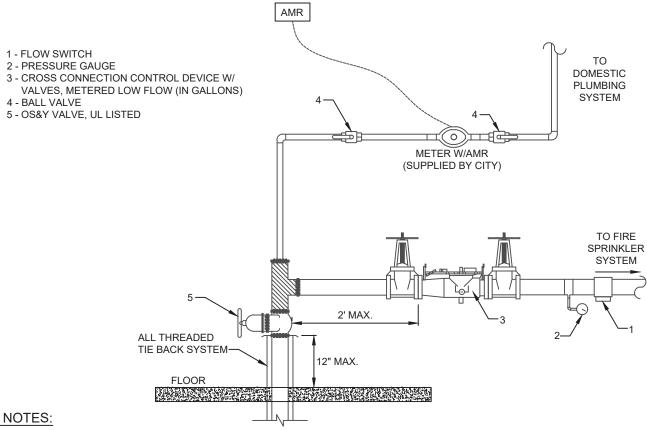
SPRINKLER METERS ARE TO BE INSTALLED AFTER MAIN METER TO RECEIVE METERING CREDIT.

COMBINED WATER SERVICE 2" AND SMALLER DOMESTIC SUPPLY 1-1/2"

STANDARD WM-009



REVISIONS		



REFER TO NEPTUNE METER INSTALLATION INSTRUCTION FOR ADDITIONAL GENERAL AND INSTALLATION REQUIREMENTS.

ALL WATER METER BE INSTALLED HORIZONTALLY. VERTICAL INSTALLMENT SHALL BE PROHIBITED.

BONDING OF ELECTRICAL SYSTEM TO THE WATER METER SHALL NOT BE ALLOWED.

SPRINKLER METERS ARE TO BE INSTALLED AFTER MAIN METER TO RECEIVE METERING CREDIT.

COMBINED WATER SERVICE 3" AND DOMESTIC SUPPLY 2" AND LARGER

STANDARD WM-010



COMMERCIAL METER DETAIL-B

GENERAL ITEMS

ALL METERS SHALL BE FURNISHED BY THE CITY. ALL METERS WILL INCLUDE A REMOTE READING HEAD. THE METER WILL BE FURNISHED AT THE TIME OF APPLICATION AND UPON PAYMENT OF ALL SERVICE CHARGES. THE CUSTOMER IS RESPONSIBLE FOR ALL METERS PURCHASED. IF METERS ORDERED ARE SIZED INCORRECTLY OR NOT NEEDED UPON FINAL CONSTRUCTION, THE CITY IS NOT RESPONSIBLE.

WATER METERS SHALL BE INSTALLED ON ALL WATER SERVICES AS REQUIRED FOR THE PARTICULAR SERVICES. THE SIZE OF WATER METERS SHALL BE ESTABLISHED UPON THE PROBABLE DEMAND LOAD. THE DEMAND LOAD SHALL BE BASED UPON THE NUMBER AND KIND OF FIXTURES OR CONNECTIONS INSTALLED AND ON THE PROBABLE SIMULTANEOUS USE OF THESE FIXTURES OR CONNECTION.

ALL METERS ONE (1) INCH OR LESS SHALL BE MAINTAINED BY THE CITY. ALL WATER METERS GREATER THAN ONE (1) INCH SHALL BE MAINTAINED BY THE CUSTOMER. ALL METERS ONE AND ONE-HALF (1½) INCHES IN SIZE SHALL BE TESTED AND REPAIRED EVERY THREE (3) YEARS. ALL METERS GREATER THAN ONE AND ONE-HALF (1½) INCHES SHALL BE TESTED AND REPAIRED EVERY TWO (2) YEARS. ALL METERS SHALL MEASURE FLOW AT ALL RATES AFTER TESTING IN ACCORDANCE WITH ACCURACY STANDARDS FOUND IN THE AMERICAN WATER WORKS ASSOCIATION STANDARD C700.

ALL BRASS FITTINGS, SUCH AS TAILPIECES, VALVES, FLANGES, STRAINERS, SHALL BE NO LEAD, LOW-LEAD OR ENVIROBRASS CONFORMING TO 2014 EPA REQUIREMENTS, SHALL BE CLEARLY LABELED OR MARKED, AND SHALL BE PROVIDED BY THE CONTRACTOR.

ALL METERS MUST BE INSTALL IN THE HORIZONTAL POSITION AND A MAXIMUM OF 12" FROM WALL OR FLOOR PENETRATION. THE METER CAN NOT REST ON THE FLOOR.

SUFFICIENT SPACE MUST BE PROVIDED, TYPICALLY 1'-2' IN EACH DIRECTION, TO ACCESS AND MAINTAIN THE METER AND BACK FLOW DEVICE. ALL METERS AND OTHER DEVICES MUST BE ADEQUATELY SUPPORTED BY PROPER PIPE/DEVICE SUPPORTS.

THE METER MAY NOT BE LOCATED IN A CRAWL SPACE OR OTHER UNHEATED AREA.

PROVIDE CERTIFICATION OF BACK FLOW / CROSS CONNECTION CONTROL DEVICES REQUIRED ON ALL COMMERCIAL SERVICES. PROVIDE CERTIFICATION TO PUBLIC WORKS BEFORE REQUESTING OCCUPANCY.

CROSS CONNECTION CERTIFICATIONS MUST BE WITH EACH DEVICE.

USE OF A SPOOL PIECE, METER BYPASS, OR USE OF WATER WITHOUT A METER IS PROHIBITED, AND SUBJECT TO PENALTIES.

NO DISSIMILAR METALS WITHOUT DIELECTRIC SEPARATION.

PLUMBER TO INSTALL 1-1/2" OR LARGER METER WITH FLANGE.

STRAINER SPACING SHALL BE CONNECTED DIRECTLY TO THE METER UNLESS SPECIFIED OTHERWISE BY THE MANUFACTURER.

METERS SHALL HAVE STRAINER INSTALLED UPSTREAM.

INSTALLATION

DO NOT REMOVE THE WHITE TAG FROM THE METER. THE WATER METER SHALL BE INSTALLED IN THE BASEMENT OR UTILITY ROOM OR AN ACCESSIBLE LOCATION WHERE METER CAN BE REMOVED WITHOUT THE REMOVAL OF ANY PART OF THE BUILDING STRUCTURE. THE METER SHALL NOT BE INSTALLED IN THE FOLLOWING LOCATIONS: CRAWL SPACES, UNDER KITCHEN CABINETS OR SINKS, LIVING ROOMS, UNDER ENCLOSED STAIRWAYS, LOCATIONS WHERE METERS ARE SUBJECTED TO FLOODING OR FREEZING; COAL BINS, VENTILATION SHAFTS AND ELECTRICAL PANELS OR CABINETS. THE LOCATION OF THE METER SHALL BE NOT MORE THAN TWENTY-FIVE (25) FEET FROM THE EXTERIOR REMOTE READING HEAD.

WATER METER MUST BE INSTALLED INSIDE, A MINIMUM SIX INCHES ABOVE THE FINISHED FLOOR AND A MAXIMUM FIVE FEET ABOVE FINISHED FLOOR.

THE WATER METER MUST BE INSTALLED HORIZONTALLY. NOT VERTICALLY.

A ½" DIAMETER CONDUIT MUST BE RAN THROUGH BUILDING'S EXTERIOR FOR MIU MOUNTING ON OUTSIDE OF BUILDING.

THE REMOTE READING HEAD SHALL BE INSTALLED ON THE OUTSIDE OF THE BUILDING IN A LOCATION SO THAT SAID METER CAN BE READ WITHOUT OBSTRUCTION OR ENTERING THE BUILDING OR ENCLOSURE. A MINIMUM OF 3' FEET OF SPACE SHOULD BE MAINTAINED AROUND THE EXTERIOR READER. WATER METER AND REMOTE READING HEAD SHALL BE INSTALLED BY THE CUSTOMER SUBJECT TO INSPECTION BY THE CITY, THE WATER SERVICE WILL NOT BE ACTIVATED UNTIL METER IS PROPERLY INSTALLED.

ONCE THE WATER METER IS INSTALLED, THE CITY OF WEST CHICAGO'S PLUMBING INSPECTOR REQUIRES AN INSPECTION:

PLEASE CALL (630) 293-2200, EXT. 131 TO SCHEDULE A PLUMBING INSPECTION.

AFTER THE WATER METER INSTALLATION HAS PASSED THE PLUMBING INSPECTION, YOU MUST CALL CITY HALL (630-293-2200) AND SCHEDULE AN APPOINTMENT TO HAVE THE NEWLY INSTALLED NEPTUNE WATER METER SEALED, PROGRAMMED, AND MIU INSTALLED BY THE CITY'S PUBLIC WORKS DEPARTMENT.

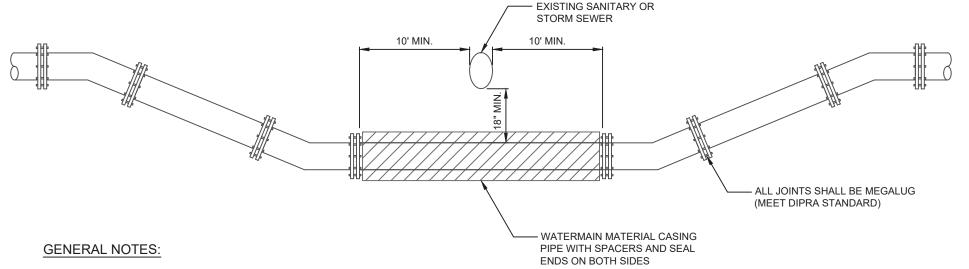
ALL NEW METERS ARE ISSUED WITH 0 GALLONS ON THE REGISTER. THE CUSTOMER SHALL BE RESPONSIBLE FOR ALL USE RECORDED ON THE METER PRIOR TO ACCOUNT ACTIVATION.

IF THE WATER METER BEING INSTALLED IS FOR IRRIGATION PURPOSES ONLY, FAILURE TO FOLLOW THE STEPS IDENTIFIED ABOVE MAY RESULT IN YOU NOT GETTING A CREDIT ON THE SANITARY SEWER PORTION OF YOUR WATER BILL.

STANDARD WM-011



	REVISIONS



ALL FASTENER HARDWARE (I.E. NUTS, BOLTS, AND WASHERS) ASSOCIATED WITH THE WATERMAIN AND CASING SPACERS SHALL BE STAINLESS STEEL.

WATERMAIN DIA.	CASING PIPE DIA.
6"	12"
8"	15"
10"	18"
12"	18"

CONFLICTS OCCUR WHERE WATERMAINS PASS WITHIN 18" OVER OR PASS UNDER A SANITARY AND/OR STORM SEWER AND SHALL BE PROVIDED FOR AS FOLLOWS:

SANITARY CONFLICTS:

PROVIDE WATERMAIN EQUIVALENT PIPE AND JOINTS FOR THE SANITARY SEWER 10 FT. EITHER SIDE OF WATERMAIN CROSSING USING MISSION TYPE COUPLINGS TO MAKE THE TRANSITION BETWEEN THE TWO MATERIALS, OR ENCASE WATERMAIN AS SHOWN BELOW, REGARDLESS OF METHOD, THERE SHALL BE A MINIMUM 18" CLEARANCE BETWEEN TOP OF WATERMAIN AND THE BOTTOM OF THE SANITARY SEWER.

STORM SEWER CONFLICTS:

PROVIDE STORM SEWER PIPE WITH O-RING GASKET JOINTS CONFORMING TO ASTM C-361 10 FT. EITHER SIDE OF WATERMAIN CONFLICTS AND PROVIDE A MINIMUM CLEARANCE BETWEEN TOP OF WATERMAIN AND THE BOTTOM OF THE STORM SEWER.

WATERMAIN CONFLICT

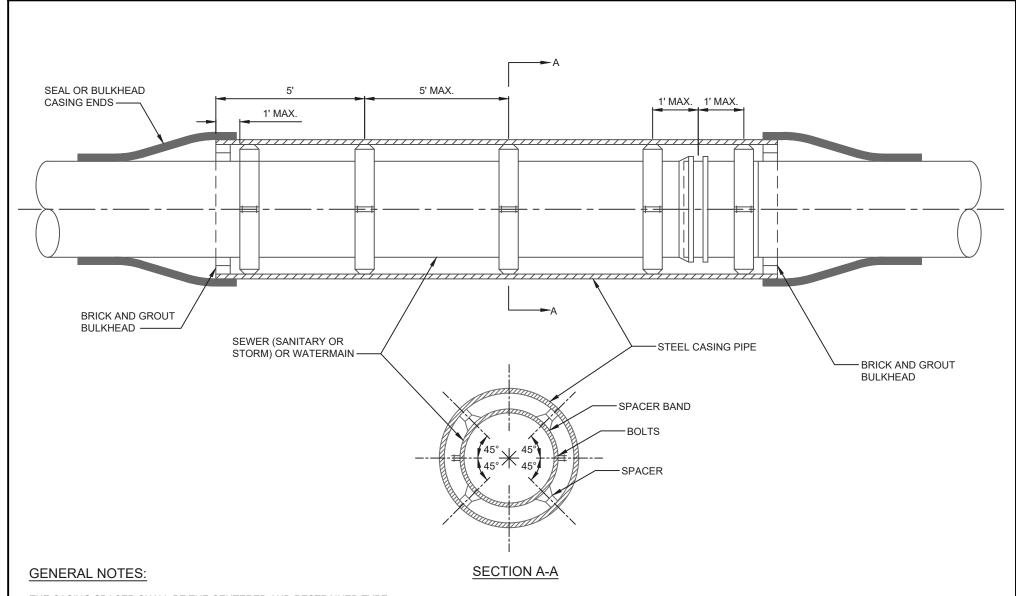
STANDARD WM-012



CITY OF WEST CHICAGO CONSTRUCTION SPECIFICATIONS, STANDARDS, AND DETAILS

CHICAGO

ECIFICATIONS,
D DETAILS



THE CASING SPACER SHALL BE THE CENTERED AND RESTRAINED TYPE.

THE SPACER BANDS SHALL BE STAINLESS STEEL.

ALL FASTENER HARDWARE (I.E. NUTS, BOLTS, AND WASHERS)
ASSOCIATED WITH THE CASING SPACERS SHALL BE STAINLESS STEEL.

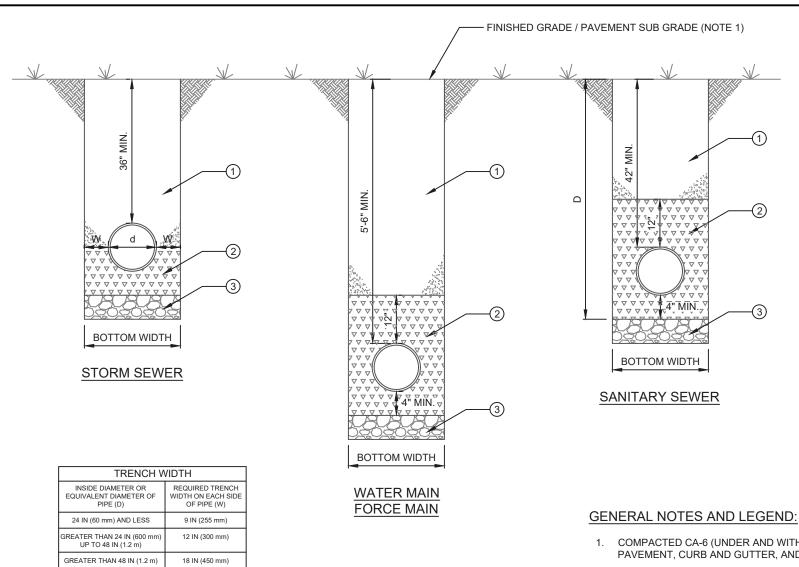
THE SPACERS SHALL BE STAINLESS STEEL OR APPROVED EQUAL.

STANDARD WM-013



UNDERGROUND UTILITY CASING PIPE

REVISIONS		



	INSIDE DIAMETER OR EQUIVALENT DIAMETER OF PIPE (D)	REQUIRED TRENCH WIDTH ON EACH SIDE OF PIPE (W)	
	24 IN (60 mm) AND LESS	9 IN (255 mm)	
	GREATER THAN 24 IN (600 mm) UP TO 48 IN (1.2 m)	12 IN (300 mm)	
Ì	GREATER THAN 48 IN (1.2 m)	18 IN (450 mm)	

TRENCH DEPTH		
TRENCH DEPTH/PROTECTION (D)	REQUIRED TRENCH WIDTH ON EACH SIDE OF PIPE (W)	
5 FT (1.5 m) AND LESS, WITH OUT PROTECTION	9 IN (255 mm)	
5 FT (1.5 m) AND LESS, WITH PROTECTION	18 IN (450 mm)	

- 1. COMPACTED CA-6 (UNDER AND WITHIN 2' OF PAVEMENT, CURB AND GUTTER, AND/OR SIDEWALK)
- COMPACTED CA-7
- SUITABLE SUBGRADE

ALL AGGREGATE SHALL BE PLACED AND MECHANICALLY COMPACTED IN 8" LIFTS TO 95% STANDARD LAB DENSITY

EARTH BACKFILL SHALL BE JETTED IN PLACE

UNSUITABLE MATERIAL TO BE REMOVED AND REPLACED, AS REQUIRED BY ENGINEER.

STANDARD WM-014



TRENCH SECTIONS

REVISIONS