

CITY OF HIGHLAND
BUILDING & ZONING DEPARTMENT
www.highlandil.gov
highlandzoning@highlandil.gov
654-7115
654-5570 fax

SINGLE & MULTI- FAMILY ELECTRIC SERVICE INSTALLATION GUIDELINES

OUTSIDE SERVICE

1. Minimum 200 amps for new construction / 100 amps for upgrades
2. Service mast must be galvanized rigid steel or aluminum
3. Entrance cable of adequate size: 200 amp – 3/0 wire, 2 ½ " conduit -
100 amp - #3 wire, 1 ½ " conduit
4. Neutral wire unbroken through meter box
5. Meter must be properly bonded and grounded: 200 amp - #4 wire; 100
amp -#6 wire
6. Overhead service line must have proper clearance at sag: 10' minimum
over pedestrian traffic, 12' minimum over driveways, 3' minimum over
roofline.

NOTE: ALUMINUM WIRE WILL NOT BE PERMITTED

INSIDE FEEDER SERVICE

7. Panel box equipped with single main disconnect
8. Rigid conduit or schedule 80 minimum to service panel / SER Cable is not
allowed
9. All sub-panel feed wires must be properly sized and in conduit
10. Minimum size wire is 12 gauge copper
11. All circuits shall be legibly labeled
12. Water pipes must be properly bonded – hot & cold lines bonded over
water heater, service panel bonded to incoming water service
13. Incoming gas line must be bonded to service panel (see attached)

BRANCH CIRCUITS

14. Minimum of two (2) small appliance circuits shall be in kitchen. GFCI'd on
all food prep areas and one (1) necessary for island.

15. Major appliances on dedicated circuits (i.e. refrigerator, microwave, garbage disposal, freezer, washer, furnace) Sump pump shall be GFCI protected
16. Furnace – must have service disconnect switch within easy reach and sight of furnace.
17. Limit of eight (8) devices per circuit
18. All circuits shall terminate in UL approved boxes
19. Splices shall be contained in UL approved junction boxes with covers and must be accessible. Junction boxes are not allowed to be concealed within walls, ceilings, etc.
20. Ground Fault protection (GFCI) required on all outside receptacles, kitchens, baths, unfinished basements, sump pumps, and garages,
21. Attic circuits must be away from areas that may be used as storage (30" or greater head room clearance)
22. Outlet placement - six (6) feet from each corner and as evenly spaced as practical per NEC requirements
23. Water pipes must be properly bonded hot & cold lines bonded over water heater, service panel bonded to incoming water service
24. All wires must be properly stapled
25. ARC Fault (AFCI) for bedrooms, as per NEC
26. UL listed boxes for ceiling fans
27. Carbon Monoxide Detector required as per NEC and IL SB2316 (effective 5/8/06)
28. Smoke detectors are required in every sleeping area, within 15' of sleeping area, on every floor, and must be hard-wired and interconnected
29. External Power that runs through a unit shall be in conduit (not allowed in Single Family Attached units {townhomes, condos, etc.})

THIS IS A BASIC GUIDELINE. ALL INSTALLATIONS SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRIC CODE (currently the 2005 NEC) NFPA #70. ITEMS NOT IN COMPLIANCE WITH THE NATIONAL ELECTRIC CODE NFPA #70 WILL RESULT IN FAILURE OF INSPECTION

December 27, 2013

SUBJECT: Policy for Installation of Permanent Power within the City of Highland Electrical Service Area

1. The following shall be completed before the City of Highland Electric Department will install permanent electrical service:
 - a. Construction shall be at Final Grade
 - b. Structure must be secure (under lock and key)
 - c. **In City Service** - All inspections complete with release from City of Highland Building & Zoning Department
 - d. **Out of City Service** -Madison County Planning & Development must complete the final inspection and provide the City of Highland Electrical Department with the building permit number
2. After completion of the above steps the customer/builder may request a work order for permanent service from Building & Zoning @ **654-7115 (In City)** or City Hall @ **654-9891 (Out of City only)**. For underground service the Electric Department will stake the cable route and request a JULIE locate within two working days after receiving the work order. On average the service will be installed within 10 working days after the request has been submitted or in the case of underground services, after the JULIE has cleared. However, the staking and construction time may be affected by weather conditions, emergencies, and/or previously scheduled work.
3. If the building is not ready when the person doing the staking visits the site, or in the case of overhead service when the crew arrives to complete the connection, the work order will be returned to Building & Zoning or City Hall without action. A new work order must be submitted to restart the process.
4. Please contact the Electric Department regarding special circumstances or questions about the above policy.

5. Please note that although the customer supplies and installs the meter base, the meter itself is the property of the City of Highland Electric Department and as such, the meter base will be locked with a seal and the customer shall not cut the seal to gain access into the meter base or they will violate Ordinance 2602 and a penalty will be imposed as outlined in the code.

Daniel Cook
Director of Light & Power

Illinois Carbon Monoxide Alarm Detector Act

Effective January 1, 2007, every dwelling unit will be required to have at least one approved carbon monoxide alarm in an operating condition within 15 feet of every room used for sleeping purposes. Alarms can be battery powered, plug-in with battery back-up or wired into the AC power line with a secondary battery back-up. The alarm can be combined with smoke detecting devices if the combined unit complies with specific standards and the alarm differentiates the hazard.

The Law

The Illinois General Assembly has passed and the Governor has signed the Carbon Monoxide Alarm Detector Act (Public Act 094-0741). This new law, effective January 1, 2007, requires homeowners and landlords to install carbon monoxide detectors in all buildings containing bedrooms and sleeping facilities.

The primary features of the law are:

- Every “dwelling unit” must be equipped with at least one operable carbon monoxide alarm within 15 feet of every room used for sleeping purposes.
- The alarm may be combined with smoke detecting devices provided the unit complies with respective standards and the alarm differentiates the hazard.
- A “dwelling unit” means a room or suite of rooms used for human habitation, and includes single family residences, multiple family residences, and mixed use buildings.
- If a structure contains more than one “dwelling unit,” an alarm must be installed within 15 feet of every sleeping room in each “dwelling unit.”
- The owner must supply and install all required alarms. A landlord must ensure that the alarms are operable on the date of initiation of a lease. The tenant is responsible for testing and maintaining the alarm after the lease commences.
- A landlord is required to furnish one tenant per dwelling unit with written information regarding alarm testing and maintenance.
- Willful failure to install or maintain in operating condition any alarm is a Class B criminal misdemeanor.
- The Act does exempt certain residential units from the requirement. Those residential units in a building that (i) does not rely on combustion of fossil fuel for heat, ventilation or hot water; (ii) is not connected to a garage; and (iii) is not sufficiently close to any ventilated source of carbon monoxide to receive carbon monoxide from that source OR a residential unit that is not sufficiently close to any source of carbon monoxide so as to be at risk of receiving carbon monoxide from that source, as determined by the local building commissioner shall NOT require carbon monoxide detectors.

Smoke Detectors Are Required by Law

Smoke detectors shall be installed in each sleeping room, outside of each separate sleeping area in the immediate vicinity of the bedrooms and one each additional story of the dwelling. Including basements and cellars but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels, a smoke detector need be installed only on the upper level, provided the lower level is less than one full story below the upper level, except that if there is a door between levels, then a detector is required on each level. All detectors shall be interconnected such that the actuation of tone alarm will actuate all the alarms in the individual unit and shall provide an alarm which will be audible in all sleeping areas. All detectors shall be approved and listed and shall be installed in accordance with the manufacturer's instructions.

Alterations, repairs and additions: When alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added to created in existing dwellings, the entire building shall be provided with smoke detectors located as required for new dwellings; the smoke detectors are not required to be interconnected unless other remodeling considerations require removal of the appropriate wall and ceiling coverings to facilitate concealed interconnected wiring.

Power source: Required smoke detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke detectors may be battery operated when installed in buildings without commercial power.

**SECTION 4.10B —
BONDING CONVENTIONAL
YELLOW-JACKETED TRACPIPE**

1. For bonding of the conventional yellow-jacketed **TracPipe**® system, a bonding clamp must be attached to the brass AutoFlare® fitting adapter (adjacent to the pipe thread area – see Figure 4-21) or to a black pipe component (pipe or fitting) located in the same electrically continuous gas piping system as the AutoFlare® fitting. The corrugated stainless steel portion of the gas piping system SHALL NOT be used as the bonding attachment point under any circumstances. Bonding electrode conductor sizing shall be in accordance with NFPA 70 Article 250 (Table 250-66) Paragraph (A).

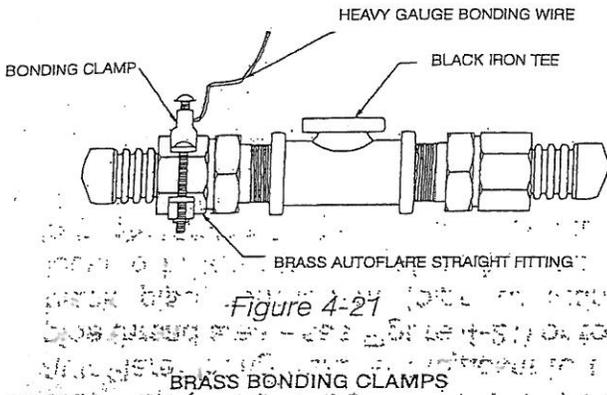


Figure 4-21

TracPipe AutoFlare Fitting Size Range	BONDING CLAMP SIZE	PART NO. OR EQUAL (Bridge Port)
3/8" & 1/2" & 3/4"	1/2" & 3/4"	1309-B
1"	1-1/4"	1313-B
1-1/4"	2"	1314-B
1-1/2"	2-1/2"	1314-B
2"	3"	1315-B

IMPORTANT SAFETY PRECAUTION

- Failure to properly bond the conventional yellow-jacketed **TracPipe**® flexible gas piping may lead to damage to the CSST system in the event of a lightning strike.
- The lightning may arc to or from another metal system, creating a hole in the wall of the **TracPipe**® CSST.
- This presents a risk of fire in the building and could lead to serious personal injury or significant property damage.

2. Lightning is a powerful and unpredictable natural force, and it has the capacity of damaging gas piping systems due to arcing between the gas piping system and other metallic systems in the building.
3. If the building to be piped is in a high lightning flash density area or a region with a high number of thunderstorm days per year, (Figure 4-22) consideration should be given to utilizing the Lightning Risk Assessment method given in Annex L of NFPA 780 for a determination of the need for a lightning protection system.

Notes:

- a. If possible, avoid running the bonding jumper a long distance through the building. The connection should be as short as possible. Gas meter should be near the electrical service if possible. If not, the bond can be connected at any point near the electrical service per Figure 4-21.
- b. Lightning induced voltages seeking ground are subject to impedance, utilize a braided or stranded bonding jumper for greater surface area, rather than solid wire.
- c. Upon completion of the conventional yellow-jacketed **TracPipe**® Gas Piping System installation and prior to gas service initiation, check to see if the bonding has been completed.
- d. Routing of gas piping should be as low in the structure as reasonably possible for best performance.
- e. **TracPipe**® CSST runs, including **CounterStrike**®, should be installed with a bend radius of 8 inches or more whenever possible; this will reduce the possibility that energy will jump from the piping to other conductive surfaces.

SECTION 4.10 — ELECTRICAL BONDING/GROUNDING



WARNING! FIRE / FUEL GAS PIPING

The **TracPipe**® flexible gas piping **MUST** be bonded to an effective ground-fault current path per NFPA 54 in accordance with the instructions contained in this section.

It is **HIGHLY RECOMMENDED** to equipotentially bond all mechanical systems to the building's grounding electrode.

1. Definitions:

Grounding: The process of making an electrical connection to the general mass of the earth. This is most often accomplished with ground rods, ground mats or some other grounding system. Low resistance grounding is critical to the operation of lightning protection techniques.

Bonding: The process of making an electrical connection between the grounding electrode and any equipment, appliance, or metal conductor: pipes, plumbing, flues, etc. Equipment bonding serves to protect people and equipment in the event of an electrical fault.

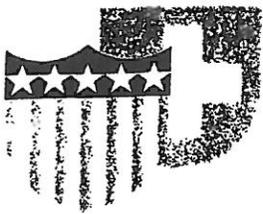
Equipotential Bonding: The process of making an electrical connection between the grounding electrode and any metal conductor: pipes, plumbing, flues, etc., which may be exposed to a lightning strike and can be a conductive path for lightning energy towards or away from the grounding electrode.

2. The **TracPipe**® gas piping system shall be bonded in accordance with the National Fuel Gas Code, NFPA 54/ANSI Z223. The piping system is not to be used as a grounding conductor or electrode for an electrical system.

SECTION 4.10A COUNTERSTRIKE® INSTALLATION INSTRUCTIONS

for all products date coded 0731 and higher (manufactured after July 30, 2007)

1. **CounterStrike**® CSST with the black, protective sleeve uses the same easy to install **AutoFlare**® fittings as conventional **TracPipe**® with the yellow jacket. **CounterStrike**® systems are sized in the same manner as **TracPipe**® either using Capacity Tables or other approved methods.
2. The instructions for cutting the tubing and for making fitting connections to **CounterStrike**® are identical to standard yellow-jacketed **TracPipe**®. The jacket shall remain intact as much as practical when attaching the fitting.
3. There are no special installation requirements for **CounterStrike**® date coded 0731 and higher. The bonding requirements for **CounterStrike**® are per National Electrical Code NFPA 70 and the National Fuel Gas Code NFPA 54.
4. **CounterStrike**® date coded 0731 and higher meets building code requirements (ASTM E84) with respect to flame spread and smoke density. This permits installation in drop ceilings used as return air plenums.
5. **CounterStrike**® date coded 0731 and higher has thru penetration UL classifications for 1, 2, 3 and 4 hours with the black jacket intact.



City of Highland

Department of Light & Power

21-Feb-12

The City of Highland no longer provides meter bases. The following is a list of meter bases approved for customer use.

AMP	PHASE	MFG	CAT #
1 200 UG or OH	1Ø	Siemens	SUAT417-XG
2 200 UG or OH	1Ø	Landis & Gyr	UAT417-XG
3 200 UG or OH	1Ø	Milbank	U7040-XL
4 200 UG or OH	1Ø	Durham	UT-RS213C
5 200 UG or OH	1Ø	Cutler-Hammer	UHTTRSZ13CCH
6 200 UG or OH	1Ø	Cooper/B-Line	EN20L43GRST
7 200 OH	1Ø	Landis & Gyr	UAT317-0G
8 200 OH	1Ø	Milbank	U7021
9 200 OH	1Ø	Durham	UT-RS202B
10 200	1Ø (2 pos)	Landis & Gyr	US2717-YG
11 200	1Ø (2 pos)	Milbank	U1252-X-K1
12 200	1Ø (2 pos)	Durham	UT-2R2332T
13 320/400	1Ø	Milbank	U1129
14 320/400	1Ø	Landis & Gyr	47604-02QG
15 320/400	1Ø (2-200 amp)	Milbank	M400-PAR
16 200	3Ø (4-wire)	Landis & Gyr	40407-02QC
17 200	3Ø (4-wire)	Milbank	U9701-RXL
18 200	3Ø (4-wire)	Durham	UT-H7213U
19 20	3Ø	Durham	SCOD13T58
20 20	3Ø	Milbank	UC7461-WL-91

Other meter bases may be used only if approved by the City of Highland Electric Department.

Meter bases may be purchased locally at the following locations:
(All meter bases may not be available at all locations)

Aviston Lumber
101 Forest Drive
Highland, IL 62249
(618) 654-7441

A.D. Electrical Supply, Inc.
712 West Franklin Ave
Greenville, IL 62246
(618) 664-2781

Frost Electric Collinsville Branch 2
2 Collinsville Business Center
Collinsville, IL 62234
(618) 345-7255

Highland Rural King
12531 Sportsman Rd
Highland, IL 62249
(618) 654-3303

R & P Lumber
12595 State Rt 143
Highland, IL 62249
(618) 654-3303

2610 Plaza Drive - P.O. Box 218 Highland, Illinois 62249-0218
Phone:(618)654-7511 Fax: (618)654-1901

**EFFECTIVE IMMEDIATELY
2012 ILLINOIS ENERGY CONSERVATION CODE**

The State of Illinois is mandating the enforcement and compliance of the 2012 **ILLINOIS** Energy Conservation Code (IECC). This code regulates the minimum energy conservation requirements for new commercial **and** residential structures.

The applicant is required to complete the applicable REScheck (residential use) or COMcheck (commercial use) online forms to demonstrate compliance with the code. These forms must be printed out, signed, and submitted with the building application. This program is a free software program that is available at the following link www.energycodes.gov.

The inspection form that is printed out with the documents must be posted and remain on the jobsite until all inspections are completed. All stickers indicating energy compliance **MUST** remain on windows/doors to avoid removal and replacement.

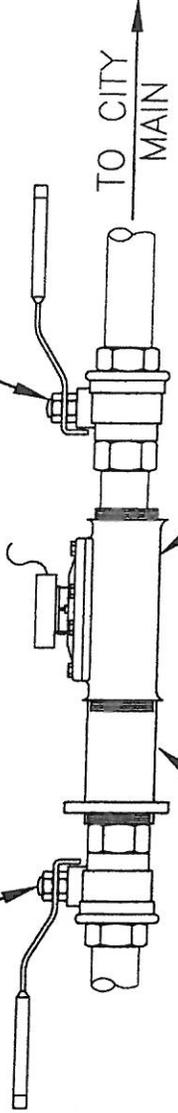
Highland (Madison Co) is located in the **Climate Zone 4** as indicated in Table below

Please contact the City of Highland Building & Zoning department at 654-7115 if you any questions.

	Windows			Insulation				Foundation		
	Fenestration U-Factor	Skylight U-Factor	Glazed Fenestration SHGC	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value	Floor R-Value	Basement Wall R-Value	Slab R-Value and Depth	Crawl Space Wall R-Value
Zone 5	0.32	0.55	NR	49	20 or 13 + 5	13/17	30	15/19	10, 2 ft	15/19
Zone 4	0.35	0.55	0.40	49	20 or 13 + 5	8/13	19	10/13	10, 2 ft	10/13

NR indicates No Requirement

BALL VALVE, APPROVED BY CITY W & S DEPT.



CHECK VALVE, SUPPLIED BY CITY

METER, SUPPLIED BY CITY

WATER METER CONFIGURATION

N.T.S.

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



CITY OF HIGHLAND
PUBLIC WORKS DEPARTMENT

SHEET - TITLE WATER METER CONFIGURATION

TYPICAL WATER METER CONFIGURATION

DESIGNED BY RP	JOB NO.
DRAWN BY JD	SHEET NO.
CHECKED BY JC	1 of 1
DATE 9/29/09	

NOW, THEREFORE, BE IT ORDAINED, by the City Council of the City of Highland, as follows:

Section 1. The foregoing recitals are incorporated herein as findings of the City Council of the City of Highland, Illinois.

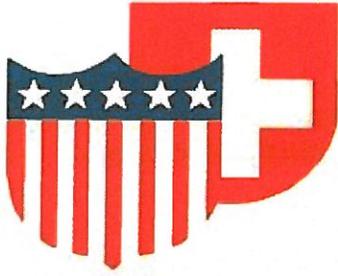
Section 2. Subsection (e)(3) of Section 78-469 "Water service connection; application" of the *Code of Ordinances, City of Highland, Illinois*, is amended to read as follows:

"(e)(3) All pipe used in making connections between the water main and the curbstop, and between the curbstop and the meter shall be capable of withstanding a hydraulic pressure test of not less than 100 pounds, and equivalent in strength and capacity to pipe of the size and weights mentioned in this subsection. Copper pipe shall be of Type K. Plastic pipe shall be water service tubing PE SDR 9 200psi ASTM 2737copper tube size. When using plastic pipe the applicant shall terminate the use of plastic pipe a minimum of five (5) feet from the outside of the foundation wall and connect and extend copper Type K or Type L through the wall and to the meter. Fittings connecting the plastic to copper shall be pack joint type brass only (Mueller, Ford, or McDonald) and use an insert in the plastic line. Tracer wire shall be installed on plastic pipe using #12 THNN tracer wire and securely taped to the service line a minimum of every ten (10) feet. One end of the tracer wire shall extend through the curb box with an excess of eight (8) inches at the top. The other end of the tracer wire shall be placed inside one half (1/2) inch plastic electrical conduit piping installed adjacent to the outside of the foundation wall above grade and below the finished building material. The top of the conduit shall be terminated with a condulette fitting and cover."

Section 3. Subsection (d)(6) of Section 66-5-9.5 "Water Service Lines" of the *Code of Ordinances, City of Highland, Illinois*, is amended to read as follows:

"(d)(6) Copper tubing ASTM B88, Type K, Polyethylene SDR 9 200psi CTS."

Section 4. This ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form as provided by law.



City of Highland

DEPARTMENT OF ECONOMIC AND
COMMUNITY DEVELOPMENT
BUILDING AND ZONING DIVISION
PUBLIC WORKS DEPARTMENT

**CITY OF HIGHLAND
SEWER LINE REPAIR
MATERIAL REQUIREMENTS**

TYPE OF PIPE – Gasketed SDR26 - ASTM 3034 Rating - SCHEDULE 40 Solid Core Pipe

CLEAN OUT - MINIMUM one in line clean out using bi-directional Tee. Clean out pipe extending above ground must have a water tight cap.

¾" CLEAN ROCK – Pipe must be embedded in MINIMUM of 6" of ¾" clean rock. Inspected by Water & Sewer personnel and then covered with 6" of ¾" clean rock. **PIPE MUST BE INSPECTED BY WATER & SEWER DEPARTMENT PERSONNEL PRIOR TO BACKFILL.** Call 654-6823 to schedule inspections.

BENDS – 90 degree bends may only be made with 45 degree elbows

COUPLINGS / FITTINGS – Fernco 1000 RC Series and 5000 RC Series couplings will be utilized. For fittings requiring replacement on the City main the Contractor shall contact the Public Works Dept (654-6823) for further directions.

Additional Information :

Excavation, Sewer & Water, Drive Approach, Sidewalk, and Roadway (In City Right-of-Way)

1. Complete Contractor Registration Application 24 hours prior to excavation (one-time application only)
2. Complete Contractor Registration Application (annual registration)

3. Provide copy of Plumbing Contractors Registration (PCR). (For Sewer & Water Contractors)
4. Contractor supplies properly lighted barricades and **notifies Highland Police Dept (618-654-2131)** of any road/alley closure
5. Contractor follows all OSHA Safety Standards dealing with Excavations
6. Contractor properly disposes of all spoils. **At no time shall the spoils be placed on a Public Street or Alleyway**
7. Follow all requirements per Article II Section 62 of the City of Highland Municipal Code of Ordinances.
8. Permit holder shall notify J.U.L.I.E 48 hours prior to excavation (800) 892-0123.

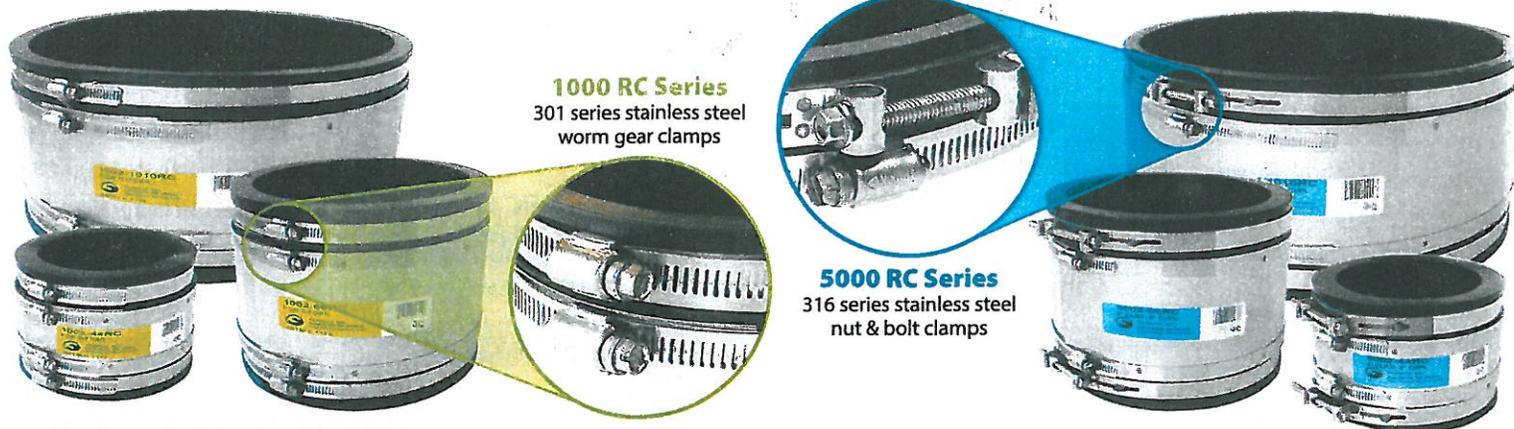
Contact the Public Works Department at 654-6823 or the Building & Zoning Department at 654-7115 with any questions.

2/13/15 slw



1000 RC Series & 5000 RC Series Couplings

The Ultimate Repair Couplings - Engineered for resistance to heavy earth loads and shear forces, while providing improved pipe alignment.



1000 RC Series
301 series stainless steel
worm gear clamps

5000 RC Series
316 series stainless steel
nut & bolt clamps

Ultimate Shear Resistance - .012" (12mil) 300 series stainless steel shear ring is the heaviest the industry offers with excellent resistance to corrosion.

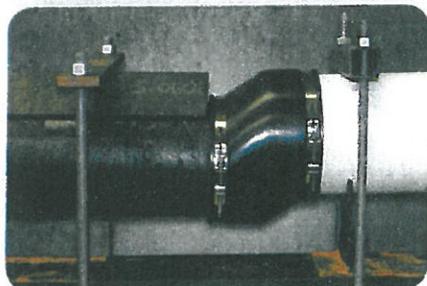
Ultimate Pipe Alignment - Due to the thickness and strength of the Strong Back RC Series shear ring, you are assured consistent pipe alignment against shear forces from soil compaction, shifting and settling, and improper backfill.

Ultimate Sealing Clamps - Fernco's **1000 RC Series Couplings** come with 301 series stainless steel worm gear clamps. The **5000 RC Series Couplings** come with 316 series stainless steel nut and bolt clamps. Both offer great corrosion resistance.

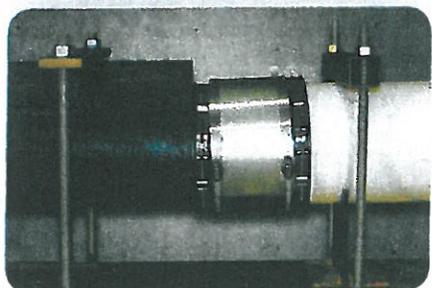
Ultimate Sealing Gasket - The flexible PVC gasket has a smooth inside surface providing greater sealing performance than ribbed rubber gaskets. The smooth internal wall of the gasket makes contact 360° over its entire length. This equates to a larger sealing surface and a higher coefficient of friction, providing maximum sealing capabilities as well as preventing slippage under the weight of shear forces. The gaskets have excellent resistance to sewer gas, common household chemicals found in the sewer system, as well as dry rot, fungus growth, ozone and UV. When properly installed Strong Back RC series gaskets will provide decades of problem free service.

Ultimate Transition Connections - When making transition connections of differing pipe sizes or materials, the Strong Back RC Series gasket features a one piece molded-in bushing. **Designated part numbers come with an insert bushing.*

Ultimate Versatility - Fernco **1000 RC Series & 5000 RC Series** couplings offer the ability to connect all common drain pipes in any combination of size and material.



Shear Resistance Test using an unshielded sewer coupling per ASTM C 1173 (applied load 50 pounds per nominal inch of pipe diameter)



Shear Resistance Test using a Fernco Repair Coupling per ASTM C 1173 (applied load 50 pounds per nominal inch of pipe diameter)

Meets requirements of:

- **ASTM C 1173** - Standard Specification for Flexible Transition Couplings for Underground Piping Systems
- **ASTM D 5926** - Standard Specification for Poly Vinyl Chloride (PVC) Gaskets for Drain, Waste, and Vent (DWV), Sewer, Sanitary, and Storm Plumbing Systems
- **CSA B602** - Mechanical couplings for drain, waste, vent pipe and sewer pipe



United States
PH: 810-653-9626
FX: 810-653-8714

www.fernco.com

Canada
PH: 519-332-6711
FX: 519-332-8610

1001 & 5001 RC Series - Clay to Clay

1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1001-44RC	5001-44RC	5.29	134	5.29	134	4.10	104			
1001-44WCRC	5001-44WCRC	5.51	140	5.51	140	3.97	101			
1001-64RC*	5001-64RC	7.50	191	5.50	140	6.02	153			
1001-66RC	5001-66RC	7.50	191	7.50	191	6.02	153			
1001-66WCRC	5001-66WCRC	8.00	203	8.00	203	6.00	152			
1001-88RC	5001-88RC	9.65	245	9.65	245	5.99	152			
1001-88WCRC	5001-88WCRC	10.00	254	10.00	254	6.00	152			
1001-1010RC	5001-1010RC	12.40	315	12.40	315	5.90	150			
1001-1010WCRC	5001-1010WCRC	12.40	315	12.40	315	5.90	150			
1001-1212RC	5001-1212RC	14.51	369	14.51	369	6.38	162			
1001-1212WCRC	N/A	15.25	387	15.25	387	6.42	163			
1001-1515RC	5001-1515RC	18.14	461	18.14	461	9.89	251			
1001-1818RC	5001-1818RC	21.90	556	21.90	556	9.63	245			
1001-2424RC	N/A	28.97	736	28.97	736	9.89	251			

1002 & 5002 RC Series - Clay to Cast Iron or Plastic

1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1002-43RC*	5002-44RC	5.29	134	3.38	86	4.10	104			
1002-44RC	5002-44WCRC	5.36	136	4.51	115	4.07	103			
1002-44WCRC	N/A	5.44	138	4.55	116	3.96	101			
1002-46RC*	5002-46RC	5.13	130	6.60	168	5.74	146			
1002-55RC*	5002-55RC	6.60	168	5.50	140	5.74	146			
1002-64RC*	5002-64RC	7.50	191	4.50	114	6.02	153			
1002-64WCRC*	5002-64WCRC	8.00	203	4.50	116	6.00	152			
1002-64WCRC-SDR*	5002-66RC	8.00	203	4.38	111	6.00	152			
1002-66RC	5002-66WCRC	7.50	191	6.56	167	5.89	150			
1002-66WCRC	5002-86RC	8.04	204	6.38	162	5.91	150			
1002-88RC	5002-88RC	9.76	248	8.57	218	5.96	151			
1002-88WCRC	5002-88WCRC	10.00	254	8.66	220	6.00	152			
1002-1010RC*	5002-1010RC	12.40	315	10.75	273	5.90	150			
1002-1010WCRC*	5002-1010WCRC	12.40	315	10.75	273	5.90	150			
1002-1210RC*	N/A	14.51	369	10.60	269	6.00	152			
1002-1212RC*	5002-1212RC	14.51	369	12.60	320	6.38	162			
1002-1212WCRC*	N/A	15.25	387	12.60	320	6.42	163			
1002-1215RC*	N/A	14.38	365	15.25	387	6.42	163			
1002-1515RC*	5002-1515RC	18.14	461	15.40	391	9.89	251			
1002-1818RC*	5002-1818RC	21.90	556	19.00	483	9.63	245			
1002-2121RC*	N/A	25.46	647	22.30	566	9.89	251			
1002-2424RC*	N/A	28.97	736	25.00	635	9.89	251			

1003 & 5003 RC Series - Clay to AC or Ductile Iron

1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1003-44RC	5003-44RC	5.41	137	4.94	125	4.07	103			
1003-66RC	5003-66RC	7.25	184	6.84	174	5.93	151			
1003-66WCRC*	N/A	8.00	203	6.80	173	6.00	152			
1003-68RC*	N/A	7.20	183	9.05	230	5.98	152			
1003-8-10RC*	N/A	9.65	245	11.22	285	5.97	152			
1003-88RC	5003-88RC	9.75	248	9.06	230	5.94	151			
1003-1010RC*	N/A	12.40	315	11.12	282	5.90	150			
1003-1212RC*	5003-1212RC	14.51	369	13.20	335	6.38	162			
N/A	5003-1516RC	18.10	460	18.10	460	9.89	251			
1003-1818RC*	N/A	21.90	556	19.50	495	9.63	245			

1004 & 5004 RC Series - Concrete to Concrete

1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1004-44RC	5004-44RC	5.51	140	5.51	140	3.97	101			
1004-66RC	5004-66RC	7.58	193	7.58	193	5.94	151			
1004-88RC	5004-88RC	10.38	264	10.38	264	5.90	150			

1004-1010RC	5004-1010RC	12.40	315	12.40	315	5.90	150			
1004-1212RC	5004-1212RC	15.25	387	15.25	387	6.42	163			
N/A	5004-1212LCRC	15.25	387	15.25	387	6.42	163			
1004-1515RC	N/A	19.74	501	19.74	501	9.89	251			

1006 & 5006 RC Series - Concrete to Cast Iron or Plastic

1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1006-44RC*	5006-44RC	5.64	143	4.51	115	3.97	101			
1006-64RC*	N/A	7.58	193	4.38	111	5.94	151			
1006-66RC*	5006-66RC	7.63	194	6.63	168	5.94	151			
1006-86RC*	N/A	10.38	264	6.38	162	5.90	150			
1006-88RC*	5006-88RC	10.49	266	8.63	219	5.90	150			
1006-1010RC*	5006-1010RC	12.40	315	10.75	273	5.90	150			
1006-1212RC*	5006-1212RC	15.25	387	12.60	320	6.42	163			
1006-1515RC*	N/A	19.74	501	15.40	391	9.89	251			

1051 & 5051 RC Series - AC or Ductile Iron to Cast Iron or Plastic

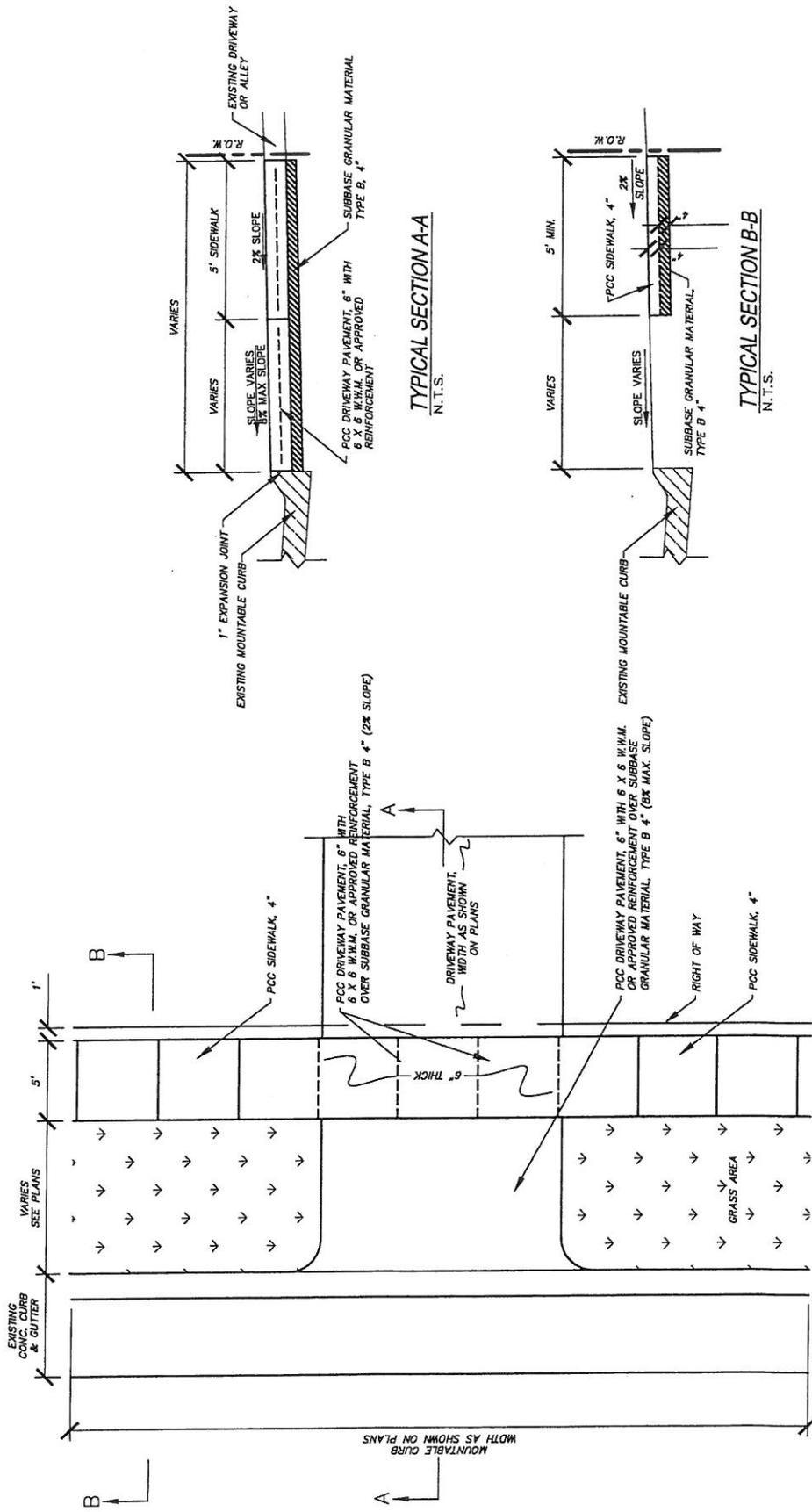
1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1051-44RC	5051-44RC	4.80	122	4.39	112	3.94	100			
1051-45RC*	N/A	5.00	127	5.52	140	3.97	101			
1051-46RC*	5051-46RC	4.75	121	6.60	168	5.74	146			
1051-55RC*	N/A	5.90	150	5.50	140	5.92	150			
1051-64RC*	5051-64RC	6.95	177	4.38	111	5.92	150			
1051-65RC*	N/A	6.95	177	5.50	140	5.92	150			
1051-66RC	5051-66RC	6.69	177	6.69	170	5.91	150			
1051-8-10RC*	N/A	9.05	230	10.63	270	5.89	150			
1051-88RC	5051-88RC	9.25	235	8.51	216	5.97	152			
1051-10-8RC*	N/A	11.02	280	8.38	213	5.97	152			
N/A	5051-1010RC	11.02	280	10.52	267	5.85	148			
1051-1212RC*	5051-1212RC	13.37	340	12.60	320	5.97	152			
N/A	5051-1615RC	18.14	461	15.40	391	9.89	251			
1051-1818RC	N/A	19.74	501	19.74	501	9.89	251			

1055 & 5055 RC Series - AC or Ductile Iron to AC or Ductile Iron

1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1055-44RC	5055-44RC	4.75	121	4.75	121	3.96	101			
1055-66RC	5055-66RC	6.65	169	6.65	169	5.92	150			
1055-88RC	5055-88RC	9.05	230	9.05	230	5.98	152			
1055-1212RC	5055-1212RC	13.37	340	13.37	340	5.97	152			

1056 RC Series - Cast Iron, Plastic, Copper, Steel or Lead

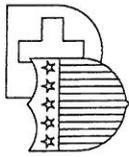
1000 RC SERIES	5000 RC SERIES	A	in	mm	B	in	mm	C	in	mm
1056-150RC	N/A	1.94	49	1.94	49	3.43	87			
1056-22RC	N/A	2.41	61	2.41	61	3.45	88			
1056-32RC*	N/A	3.52	89	2.38	60	3.96	101			
1056-33RC	N/A	3.46	88	3.46	88	3.98	101			
1056-43RC*	5056-43RC	4.58	116	3.38	86	4.02	102			
1056-44RC	5056-44RC	4.58	116	4.58	116	4.02	102			
1056-54RC*	5056-54RC	5.52	140	4.38	111	3.97	101			
1056-55RC	5056-55RC	5.52	140	5.52	140	3.97	101			
1056-64RC*	5056-64RC	6.60	168	4.50	114	5.74	146			
1056-65RC*	N/A	6.60	168	5.62	143	5.74	146			
1056-66RC	5056-66RC	6.60	168	6.60	168	5.74	146			
1056-86RC*	N/A	8.64	219	6.63	162	6.04	153			
1056-88RC	5056-88RC	8.64	219	8.64	219	6.04	153			
1056-1010RC	5056-1010RC	10.63	270	10.63	270	5.89	150			
1056-1212RC	5056-1212RC	12.52	318	12.52	318	6.32	161			
1056-1515RC	5056-1515RC	15.92	404	15.92	404	9.89	251			
1056-1818RC	5056-1818RC	19.10	485	19.10	485	9.89	251			
N/A	5056-2424RC	25.10	638	25.10	638	9.89	251			

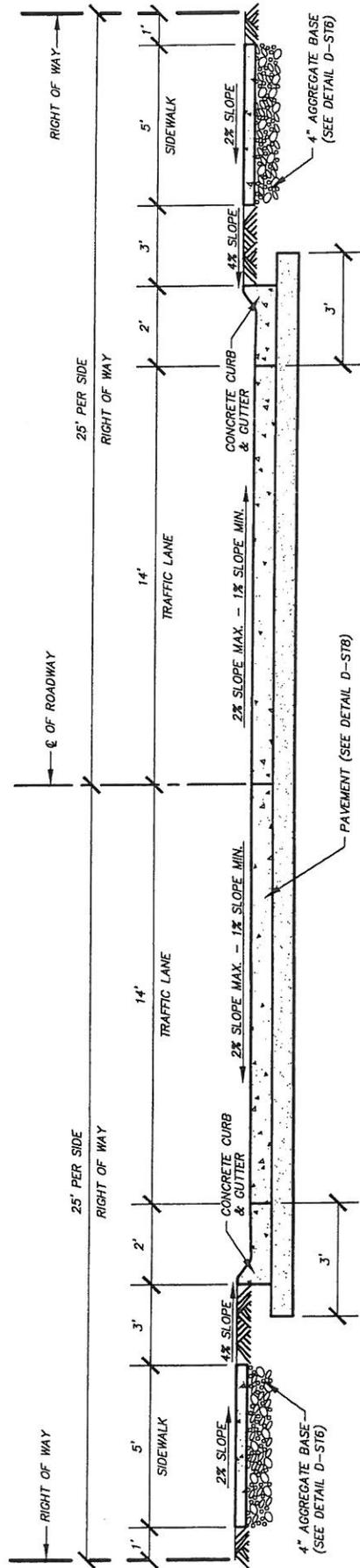


TYPICAL SECTION A-A
N.T.S.

TYPICAL SECTION B-B
N.T.S.

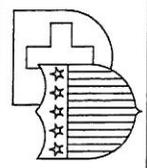
DRIVEWAY PAVEMENT DETAIL
N.T.S.

JOB NO. STD DETAILS		DESIGNED BY JG	SHEET NO. D-ST6
DRAWN BY JD		CHECKED BY JG	DATE 07/12/07
SHEET - TITLE			
SIDEWALK DETAILS		TYPICAL DRIVEWAY SIDEWALK DETAILS	
CITY OF HIGHLAND PUBLIC WORKS DEPARTMENT			
			
DRAWING ISSUE			
PRELIMINARY DRAWINGS			
PROGRESS DRAWING			
ISSUED FOR DESIGN			
ISSUED FOR PERMIT			
ISSUED FOR CONSTRUCTION			



TYPICAL LOCAL / RESIDENTIAL ROAD SECTION
(PARKING ONE SIDE)

DRAWING ISSUE	
PRELIMINARY DRAWINGS	
PROGRESS DRAWING	
ISSUED FOR DESIGN	
ISSUED FOR PERMIT	
ISSUED FOR CONSTRUCTION	



CITY OF HIGHLAND
PUBLIC WORKS DEPARTMENT

SHEET - TITLE
TYPICAL RESIDENTIAL ROAD
TYPICAL LOCAL / RESIDENTIAL ROAD
50' R.O.W.

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO. D-ST3
CHECKED BY JG	DATE 07/12/07

HIGHLAND LAND DEVELOPMENT CODE

5-7.10 Survey Markers

- A) Permanent survey reference markers shall be installed at all points of curvature and right-of-way corners.
- B) Location and installation shall be performed under the direct supervision of a Professional Land Surveyor licensed in the State of Illinois.
- C) A brass disc shall be used in Portland cement concrete streets.

5-7.11 Sidewalks

In a subdivision, sidewalks shall be required:

- 1) On the recommendation of the Combined Planning and Zoning Board that sidewalks are needed to ensure public safety.
- 2) Along streets (both sides), near schools, and in shopping areas similar to public places.

The requirements of this section shall not be waived unless the Combined Planning and Zoning Board advises the City Council that, in the area in question, sidewalks are not needed to ensure public safety, and/or that topographical conditions make the installation of sidewalks impractical. All sidewalks constructed within the city shall meet the Illinois Department of Transportation Standard Specification for Road and Bridge Construction.

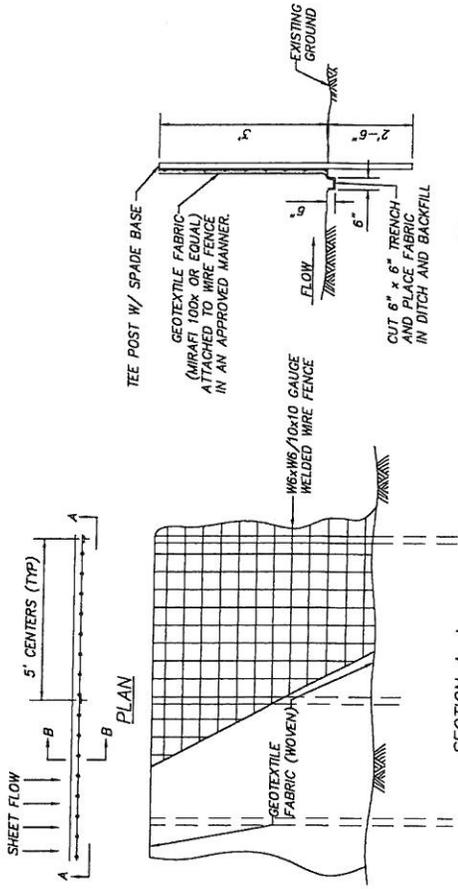
- A) Sidewalks shall be accessible to the handicapped per the American Disabilities Act (ADA).
- B) Sidewalks butting to the roadway pavement at intersections shall align with the sidewalk or proposed sidewalk on the opposite side of the street.
- C) The minimum width of sidewalk shall be five feet. See detail D-ST6, Appendix A.
- D) The minimum distance between the back of curb and the face of sidewalk shall be two feet with a maximum slope of 4%.
- E) Sidewalks shall be constructed with 3500 psi compressive strength at 14 days Portland Cement Concrete in accordance with Section 424 of the Standard Specification for Road and Bridge Construction.
- F) Sidewalk pitch (slope from side-to-side) shall be ¼" per foot (2%). The longitudinal slope shall not exceed ADA standards.
- G) Sidewalk handicap ramp grade shall not exceed one vertical to twelve horizontal (8.3%).
- H) Sidewalk shall be constructed of a minimum of four (4) inches in-thickness of Portland cement concrete with four (4) inches in-thickness of aggregate base (CA 6) except across driveway, where the minimum thickness of walk shall be six (6) inches with four (4) inches of base. See detail D-ST6, Appendix A.

HIGHLAND LAND DEVELOPMENT CODE

- I) Sidewalks shall be built on a continuous grade through driveways with a maximum pitch of 2%. See detail D-ST6, Appendix A.
- J) All vegetation and tree roots shall be removed from the sidewalk area to allow sufficient thickness of concrete. The aggregate base may be eliminated in those areas next to the tree. No trees, roots or plants may be removed or pruned without the authorization from the resident inspector.
- K) Ramps shall be constructed as appropriate at road crossings. Conforming to IDOT Standard 424001, Type B ramp. The width of the ramp (excluding the flared sides) shall match the sidewalk width.
- L) Expansion joints shall be placed where the sidewalk concrete butts existing concrete and every one hundred (100) feet along the length of the sidewalk.
- M) Contraction joints shall be placed every five (5) feet, where possible, along the length of the sidewalk. In any case, the joint spacing shall not exceed six (6) feet, nor be less than four (4) feet.
- N) Concrete surface finish and curing shall be per IDOT Type B finish specifications. No smooth finishes will be accepted.
- O) Concrete curb cuts for sidewalk ramp construction shall be done per IDOT approved procedures.
- P) Work area shall be protected and properly barricaded for safety to the public.
- Q) Testing shall be conducted as specified in Section 66-5-7.8.
- R) Courtesy walks are Portland cement concrete sidewalks perpendicular to the main sidewalk extending from the back of curb to the main sidewalk. They shall be three (3) feet in width with no cross slope.

5-7.12 Maintenance Responsibility.

Subsequent to completion of street construction by the developer, and the receipt of all of the construction testing reports, the as-built record drawings and the engineer of record's certification that the improvements are in substantial compliance with the development specifications, plans, and intent, the Director of Public Works shall make a final inspection of all streets to ascertain the acceptability of structural condition, earth slopes, drainage structures, etc. The Owner/Developer shall be responsible for all maintenance of streets, curbs, gutters and associated appurtenances until such time all of the required subdivision improvements are inspected, approved, dedicated and officially accepted by the City via a City Council resolution.



SECTION B-B

SECTION A-A

EROSION CONTROL NOTES:

1. SILTATION FENCES SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND FOR THE AMOUNT OF SEDIMENTATION WHICH HAS ACCUMULATED. REMOVAL OF SEDIMENT WILL BE REQUIRED WHEN IT REACHES 1/2 OF THE HEIGHT OF THE SILTATION FENCE.
2. ATTACHMENT OF WELDED WIRE FENCE AND GEOTEXTILE FABRIC TO BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

1
N.T.S.
TEMPORARY SILTATION CONTROL FENCE DETAIL

2
N.T.S.
SILTATION FENCE DETAIL

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION

CITY OF HIGHLAND
PUBLIC WORKS DEPARTMENT

SHEET - TITLE
EROSION CONTROL DETAILS

EROSION CONTROL DETAILS

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-GN1
DATE 07/12/07	

MATERIALS

1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY

FILTERING EFFICIENCY

TEXTILE STRENGTH AT
20% ELONGATION

FLOW RATE

REQUIREMENTS

75% (MIN.)

EXTRA STRENGTH 50 LBS./LIN. IN (MIN.)
STANDARD STRENGTH 30 LBS./LIN. IN (MIN.)

0.3 GAL./SQ. FT./MIN. (MIN.)

SYNTHETIC FILTER FABRIC REQUIREMENTS

2. BURLAP SHALL BE 10 OUNCE PER SQUARE YARD FABRIC.
3. POSTS FOR FILTER FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
4. STAKES FOR FILTER FENCES SHALL BE 1" X 2" WOOD (PREFERRED) OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
5. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 36 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.

CONSTRUCTION

- THIS SEDIMENT BARRIER UTILIZES BURLAP, STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED. IN SPECIAL CASES BURLAP MAY BE USED IN DRAINAGEWAYS.
1. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES (HIGHER BARRIERS MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE).
 2. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL, CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCHES OVERLAP, AND SECURELY SEALED.
 3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 5 FEET.
 4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
 5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, THE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.

6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.
7. WHEN EXTRA STRENGTH FILTER FABRIC OR BURLAP AND CLOSED POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEMS NO. 6 APPLYING.
8. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
9. FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

PLANS AND SPECIFICATIONS

PLANS SHOULD SHOW THE LOCATION AND ALL DIMENSIONS OF FILTER BARRIERS. SUFFICIENT DETAIL MUST BE SHOWN THAT CONTROL MEASURES ARE INSTALLED AS DESIGNED. MATERIAL REQUIREMENTS MUST BE SPECIFIED. SEE DETAIL "D-GN1" FOR MORE DETAILED DRAWINGS OF EROSION CONTROL MEASURES.

DRAWING ISSUE

PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



CITY OF HIGHLAND
PUBLIC WORKS DEPARTMENT

SHEET - TITLE

EROSION CONTROL NOTES

EROSION CONTROL NOTES

DESIGNED BY JO	JOB NO. STD DETAILS
DRAWN BY JO	SHEET NO.
CHECKED BY JO	D-GN2
DATE 07/12/07	

LOCATE REQUEST FORM

1-800-892-0123

It's Smart. It's Free. It's The Law.



1	COMPANY PHONE NUMBER WITH AREA CODE ()		COMPANY NAME		
2	CALLER NAME				
3	COMPANY ADDRESS				
4	CITY, STATE, ZIP CODE			FAX NUMBER WITH AREA CODE ()	
5	SITE CONTACT NAME		PHONE NUMBER WITH AREA CODE ()		EXTENSION (IF APPLIES)
6	COUNTY (MUST provide this information)	Circle one and list location name		VILLAGE/CITY (URBAN)	UNINCORPORATED TOWNSHIP (RURAL)
7	SUBDIVISION NAME		EXCAVATION SITE ADDRESS OR LOT NUMBER		
8	NEAREST CROSS ST/CROSS RD, REGARDLESS OF SIZE (indicate st, rd, ln, dr, ave)			IS THIS WITHIN A 1/4 MILE OF THE JOB SITE? (circle one) YES NO	
9	The standard we accept is North American Datum 83 (NAD83); format is degrees, minutes & seconds.		LATITUDE		LONGITUDE
10	JULIE members and their subcontractors MUST provide the section - quarter/section information.		TIER	RANGE	SECTION QUARTER/SECTION
11	ADDITIONAL ADDRESS OR DIRECTIONAL INFORMATION TO JOB SITE (i.e., directions, landmarks, distance from nearest town, etc.)				
12					
13	TYPE OF WORK (Examples: trench for sewer, cable/telephone drops, fence/deck installation, plant trees/shrubs, foundation, ditch work, etc.)				
14	ARE YOU DIRECTIONAL BORING OR HORIZONTAL DIRECTIONAL DRILLING? (Circle One) YES NO		WILL YOU BE DIGGING DEEPER THAN 7 FEET? (Circle One) YES NO UNSURE		
15	EXTENT OF WORK (Examples: locate north side of building, along rear lot line, front of property to curb, lot line to lot line, etc.)				
16					
17	CUSTOMERS NAME OR COMPANY NAME (the work is being done for)			IS THE SITE PRE-MARKED? (Circle One) YES NO UNSURE	
18	NOTES TO UTILITIES ABOUT EXCAVATION SITE				
19					
20	WORK DATE AND TIME OF EXCAVATION (given to caller by operator)		DIG BY DATE (given to caller by operator)		
21	EXPIRATION DATE OF TICKET (given to caller by operator)		DIG NUMBER (given to caller by operator)		
22	DO YOU WANT TO WAIVE THE UTILITY "ALL CLEAR" CALL BACK? (Circle One) YES NO				
JULIE MEMBER COMPANIES SENT THIS MESSAGE (given to caller by operator)					

Keep your dig number as proof of your call to JULIE and as a reference number for this call. For your protection, JULIE recommends that you search the area for the facilities of others who are not JULIE members and notify them separately. In addition, you should communicate with the owner of the dig site to determine if there are any privately installed lines which are not marked by member utilities.

INFORMATION ABOUT THE ILLINOIS ONE-CALL SYSTEM

JULIE, Inc. (Joint Utility Locating Information for Excavators), also known as the Illinois One-Call System, is a not-for-profit corporation that provides professional and non-professional excavators with a toll-free number (1-800-892-0123) for the free locating and marking of underground facilities. JULIE serves as a notification service for underground facility owners, taking information about planned excavations and distributing this information to its membership. *It is then the responsibility of each facility owner to mark the location of their underground facilities at the excavation site.*

WAYS TO REACH JULIE

JULIE operators are available at 1-800-892-0123 to process locate requests 24 hours a day, 7 days a week, 365 days of the year. Excavators who have access to the internet are able to enter locate requests via a JULIE ticket entry Web site (WRTE). For more information about this free service, contact the JULIE Data Department at 815-741-5011.

HOW TO USE THE JULIE SYSTEM

Safe digging starts when you contact JULIE. Whenever possible, it is very important to visit the site and pre-mark the proposed excavation area with white paint or flags prior to your call to JULIE. The 48 hour notice does **NOT** include Saturdays, Sundays or Holidays. If digging inside the city limits of Chicago, contact **DIGGER AT 312-744-7000**.

Completing a Locate Request Form (over) prior to contacting JULIE makes the locate request process faster and easier. You can request this form through the Public Relations Department (815-741-5935) or download a copy at www.illinois1call.com.

At a minimum, be prepared to provide the following information when you contact JULIE:

- ◆ Your name, address and a phone number at which you and/or a site contact can be reached. An inability by the utilities to speak to someone if questions should arise can possibly delay your locate;
- ◆ County and city or county and unincorporated area of township;
- ◆ Location at which the excavation or demolition will take place, which may include but not be limited to: address, cross street, lot numbers, etc. In addition, JULIE member companies and their contractors/subcontractors **MUST** provide the tier, range, section and quarter section of the excavation site (or GPS coordinates) allowing the system to grid the ticket;
- ◆ Section/quarter sections when the above information does not allow the State-Wide One-Call Notice System to determine the appropriate geographic section/quarter sections. This does not apply to residential property owners.
- ◆ Latitude and Longitude of the excavation site is also accepted in lieu of section and quarter/section information. The standard JULIE accepts is North American Datum 83 (NAD83) and the format is degrees, minutes and seconds;
- ◆ The type and extent (size of excavation area) of the work involved, and whether white paint, flags and/or stakes were used to outline the proposed excavation area;
- ◆ Will you be directional boring or horizontal directional drilling? Will you be digging deeper than 7 feet?; and
- ◆ The start date and time of the planned excavation or demolition.

AVAILABLE RESOURCES

Resources to find the above information include: property plat map; real estate tax bill; permanent real estate tax number for the property; county plat map; rural residential directory; village, town or city permit, building, engineering or street department (city limits); or township or county permit, building, engineering or highway department (outside city limits).

DIG NUMBER EXPLANATION

JULIE system reference numbers → A or X 555 5555 ← Request sequence number for that day
↑
Julian calendar date

TYPES OF LOCATE REQUESTS

Normal: Made at least 2 working days, but not more than 14 calendar days, in advance of excavation project.

Emergency: Condition constituting an imminent danger to life, health or property or a utility service outage and which requires immediate repair or action.

Joint Meet: Scheduled when the extent of the work may be confusing or extends over a large geographic area. A joint meet is not a locating session, but a meet to exchange information. **A joint meet is a 96-hour process--not 48 hours.** All members must mark before digging can proceed.

www.illinois1call.com

JULIE Damage Prevention Managers are available to assist members and excavators--contact information can be found at www.illinois1call.com. In addition, JULIE's Web site contains a complete listing of JULIE members illustrating their facilities, upcoming events, ICC Enforcement information, member damage prevention team contacts, educational free materials, frequently asked questions, newsletters, the state law and procedural changes.

APWA APPROVED UTILITY MARKING COLORS	
YELLOW	Gas, oil, petroleum, steam
RED	Electric
ORANGE	Communication, telephone, TV
BLUE	Water
GREEN	Sewer
PURPLE	Reclaimed water
PINK	Temporary survey
WHITE	Proposed area of excavation