

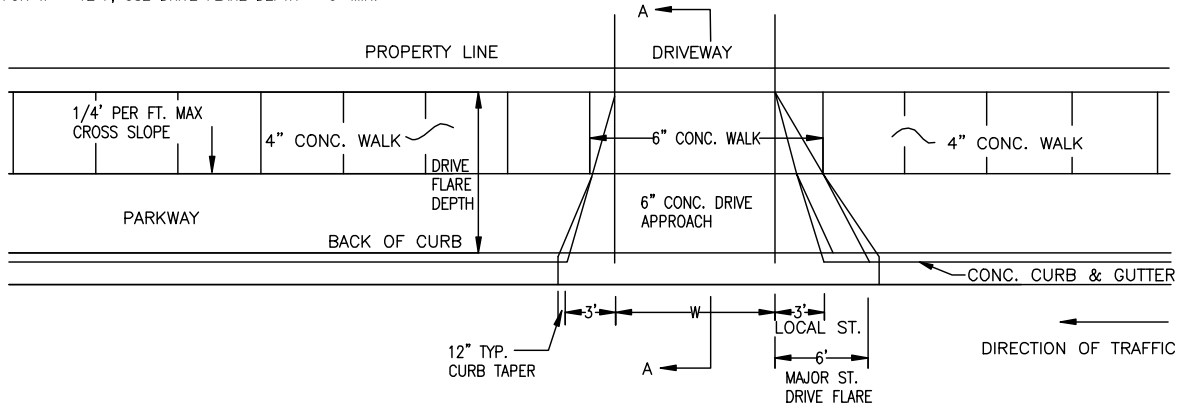
APPROVAL CONDITIONS
for
OCCUPATION AND USE OF CITY OF EAST LANSING STREET RIGHTS-OF-WAY

Rev. 7/10/09

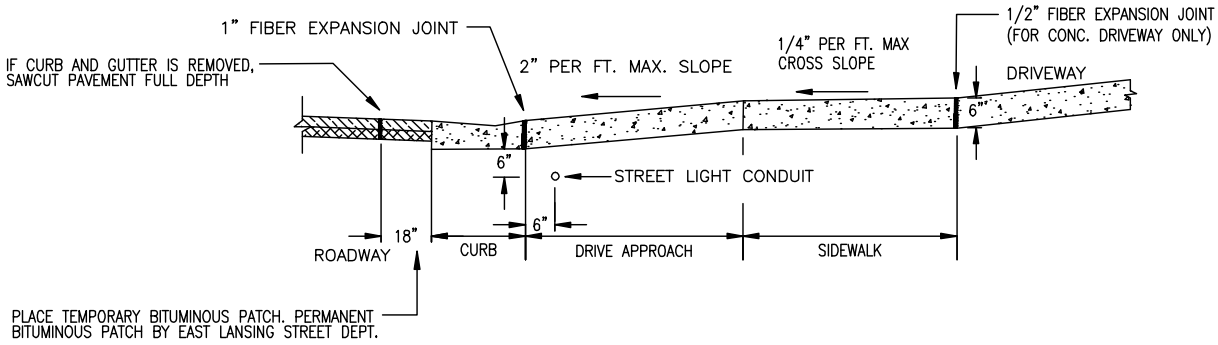
1. **RIGHT-OF-WAY** - Approval of this permit only applies to work within the East Lansing public right-of-ways. It is the Applicant's responsibility to verify the right-of-way location in the field during construction and to obtain proper approval from the individual property owners for work occurring outside of the public right-of-way. **Contact the City's Code Enforcement Department at (517) 337-1731 for additional permits required for work outside the right-of-way.**
2. **SPECIFICATIONS** – When applicable, all work shall be completed in conformance with current City of East Lansing Engineering Department Construction Specifications and Details and in conformance with the East Lansing City Code.
3. **MAINTENANCE OF UTILITIES** – The Applicant shall protect existing utilities within the work area. The Applicant shall be responsible for any damage to existing utilities caused by the operations undertaken with this permit.
4. **SAFETY** - The Applicant shall provide and maintain all necessary traffic control devices to insure a safe work area and properly control traffic. The types and placement of traffic control signs and barricades shall be in accordance with the recommendations established in the current edition of the Michigan Manual of Uniform Traffic Control Devices (MMUTCD) and shall be maintained at all times. All traffic control devices that are not in use shall be promptly removed or covered.
5. **MISS DIG** – The Applicant shall call Miss Dig (1-800-482-7171) at least 72 hours prior to beginning any excavation.
6. **PAVEMENT CUTS** - All pavement edges must be squared, straight and not undermined. Replacement shall match the existing cross section unless otherwise specified. Unless otherwise approved, backfill on major streets shall be with controlled density flowable fill to the bottom of the paved base for bituminous streets and to the bottom of the concrete for concrete streets. Backfill within the right-of-way and for all other streets and alleys shall be MDOT Class II fill material and shall be compacted to 95% of its maximum density. Unless otherwise specified, the aggregate base for bituminous streets and alleys shall be 8 inches of 22A Aggregate and shall be compacted to 98% of its maximum density. Unless otherwise specified, the temporary wearing surface shall be 4 inches of compacted cold patch.
7. **TREE PROTECTION** - All trees within the work area shall be properly protected from damage. The contractor shall not operate or park trucks or equipment within the drip line of any tree. If damage to a tree occurs, the contractor shall contact the City's Environmental Specialist immediately at (517) 337-9459.
8. **IDEMNIFICATION** – The company/owner and his/her/their contractor(s) shall maintain appropriate levels of insurance for bodily injury and property damage. The City of East Lansing does not assume any liability or maintenance responsibilities resulting from its approval of the facility installed, used or maintained by this permit. The company/owner and his/her/their contractor(s) shall save harmless the City of East Lansing and its employees from all damages or actions at law that may arise or may be brought on account of injury to persons or property resulting from the work done under this permit. The City of East Lansing must be listed as a certificate holder and as a co-insured on this policy.

In accordance with Chapter 38-34 of the East Lansing City Code, the minimum liability insurance limits shall be:
 - a. \$100,000 for injury to, or death of, any person in any one accident.
 - b. \$300,000 for any one accident resulting in injury to, or death of, more than one person.
 - c. \$100,000 for damage to property in any one accident.
9. **HOURS OF OPERATION** - City Code Chapter 26, Section 81 (6) prohibits construction on Sundays and on all other days between the hours of 8:00 PM and 7:00 AM, unless otherwise approved by the City Manager.
10. **RESTORATION** – The company/owner and his/her/their contractor(s) shall jointly be responsible for restoration of the entire work area to an equal or better condition.
11. **FUTURE USE OF RIGHT OF WAY** - Approval of this permit application shall not diminish the City of East Lansing's future use of the street/alley right of way. The City of East Lansing reserves the right to require the Applicant to remove and/or relocate all or part of the facility covered by this permits which may be in conflict with the City's desired use of the right-of-way. Such removal and/or relocations shall be without cost to the City of East Lansing.
12. **SOIL EROSION CONTROL** - Silt Fencing and Filter Fabric shall be placed and maintained as necessary to prevent the erosion of soil into sewers, open drains and/or ditches. See Chapter 34 of the East Lansing City Code for additional requirements.

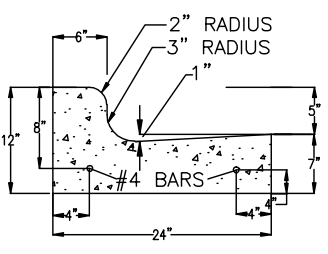
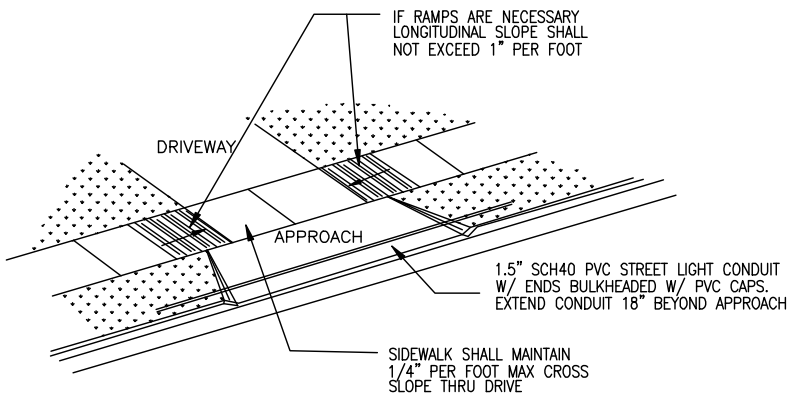
FOR W = 8' - 12', USE DRIVE FLARE DEPTH = 10' MIN.
 FOR W = 12'+, USE DRIVE FLARE DEPTH = 6' MIN.



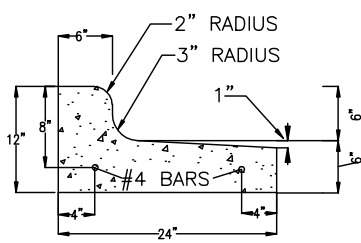
NOTE: MAJOR STREET FLARE SHALL BE 3 FEET WHERE THE PARKWAY IS UNDER 4 FEET



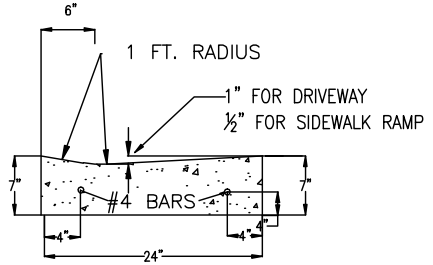
SECTION A-A



STANDARD CURB CROSS SECTION



PITCH-OUT CURB CROSS SECTION



DRIVE/RAMP GUTTER CROSS SECTION

SIDEWALK, DRIVE APPROACH AND CURB & GUTTER DETAILS
 (SEE REVERSE SIDE FOR SPECIFICATION SUMMARY)

CITY OF EAST LANSING
 DEPARTMENT OF ENGINEERING
 1800 E. STATE ROAD
 EAST LANSING, MI 48823
 (517) 337-9459 FAX: (517) 337-3943



SIDEWALK, DRIVE APPROACH AND CURB GENERAL REQUIREMENTS

GENERAL:

1. **Removal:**
 - Concrete must be saw-cut full depth at the limits of removal.

2. **Concrete Requirements:**
 - Air content 5% - 8%
 - Slump no greater than 4"
 - Compressive strength 3500 psi @ 28 days
 - Mix (6 sack minimum) P1 (As defined in the MDOT 2003 Standard Specifications For Construction)

3. **Finish:**
 - Concrete surfaces shall have a broomed finish.
 - After finishing, the concrete surface must have clear cure applied at a rate of 1 gallon per 200 square feet.
 - The contractor must stamp the concrete with the contractor name and current year at the limits of the pour.

4. **Weather & Protection:**
 - The air temperature must be at least 25 degrees F and rising prior to any concrete pour. The subgrade and forms shall not be frozen or have frost.
 - The concrete shall be protected against damage from rain with plastic or burlap.
 - The concrete shall be protected against freezing with blankets or straw.

5. **Inspection:**
 - The City of East Lansing Engineering Department must be contacted for a grade and form work inspection at least 24 hours in advance of any concrete pour.

SIDEWALK AND DRIVE APPROACHES:

1. **Joints & Expansion:**
 - Sidewalk shall have troweled joints with spacing equal to the width of the sidewalk.
 - Sidewalk shall have expansion joints using ½" thick fiber matrix every 50 feet. Expansion fiber 1" thick shall be used at locations where the sidewalk abuts a curb.

2. **Subgrade fill:**
 - Subgrade fill for sidewalk and drive approaches shall be MDOT class II granular material compacted to 95% maximum density.

3. **Barricading:**
 - Lighted, type II barricades shall be placed on both ends of each continuous sidewalk section removed, with a maximum barricade spacing of fifty feet. For sidewalk sections not within a driveway, the barricades shall remain in place from the time of removal until 24 hours after the concrete has been poured and cured. For sidewalk sections within a driveway and drive approaches, the barricades shall remain in place from the time of removal until 7 days after the concrete has been poured.

CURB AND GUTTER:

1. **New Drive Openings:**
 - The curb may be removed and replaced or horizontally cut to create drive openings. The details on the reverse side must be adhered to regardless of the chosen method.

2. **Joints & Expansion:**
 - Curb and gutter shall have troweled joints spaced every 10 feet.
 - Curb and gutter shall have expansion joints using 1" thick fiber matrix every 300 feet.

3. **Subgrade fill:**
 - Subgrade fill for curb and gutter shall be MDOT 22A aggregate material compacted to 98% maximum density.