Figure 1: SPEED HUMP CROSS SECTION

Figure 2: WARNING SIGN

Figure 3: PAVEMENT MARKING

PAVEMENT MARKING DETAIL

PUBLIC SERVICES DEPARTMENT
CITY OF ANN ARBOR

SPEED HUMP DETAILS

<table>
<thead>
<tr>
<th>COLOR</th>
<th>MATERIAL</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>CLEarence</th>
</tr>
</thead>
<tbody>
<tr>
<td>RED</td>
<td>10&quot; x 10&quot;</td>
<td>15&quot;</td>
<td>24&quot;</td>
<td>3.5&quot;</td>
</tr>
<tr>
<td>WHITE</td>
<td>10&quot; x 10&quot;</td>
<td>15&quot;</td>
<td>24&quot;</td>
<td>3.5&quot;</td>
</tr>
</tbody>
</table>

PROJECT MANAGEMENT SERVICE UNIT
CITY OF ANN ARBOR PUBLIC SERVICE
201 EAST ARBOR STREET, P.O. BOX 6557
ANN ARBOR, MICHIGAN 48106-0557
734/761-8100 www.a2gov.org
### Construction Method and Sequencing

1. The work to be completed on the street shall include, but not be limited to, the following items. The order of construction shall be as given unless otherwise authorized or specified by the engineer.

2. Permanent traffic control, and soil erosion controls, to be in accordance with the plans, and as directed by the Engineer.

3. Lifts of concrete, sidewalk, and underground as shown on the plans, and as directed by the Engineer.

4. Under all structure covers, including valve and monument boxes.

5. Perform all concrete work,其中包括 restoration in accordance with the plans, and as directed by the Engineer.

6. Hills 5 inches of granular material, from existing disturbed, and include granular base material, to be compacted by the Engineer.

7. Grade, align, and re-compact the existing road base as required, and as directed by the Engineer.

8. Place 2 lifts of the granular material and compact, as required by the Engineer.

9. Place 2 lifts of the granular material and compact, as required in one lift.

10. Complete all miscellaneous construction including all cleanup and final restoration.

11. Complete all pavement markings.

12. Restore all traffic control devices, except with the signs.

### Notes:

The construction work on these plans and specifications is subject to revision. The contractor shall be responsible for all work done herein and for the consequences thereof. The City of Ann Arbor reserves the right to make any changes to these plans and specifications at any time and for any reason, without notice. The plans and specifications are subject to change without notice, and the contractor shall not be held liable for any cost or expense incurred as a result of such changes.

The underground facilities are shown for reference only.

The City of Ann Arbor is not responsible for any damages or injuries sustained by the contractor.
# City of Ann Arbor Project Management 2013 Annual Resurfacing Program

**Project Location:** Alley Mary Hoover

**File No.:** 2013004-5

## Traffic Control & yaklaşım

<table>
<thead>
<tr>
<th>QTY</th>
<th>DESCRIPTION</th>
<th>CODE</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Traffic Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Decals</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Signs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Arrow Signs</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lane Closures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Stop Bars</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lane Dividers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flagger</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other Traffic Controls</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Construction Method & Sequencing

1. The work to be completed on this street shall include but not be limited to the following items. The scope of construction shall be as defined herein and approved or directed by the Engineer.
2. Temporary traffic maintenance and the traffic controls in accordance with the plans and as directed by the Engineer.
3. Essential utility work and underground as shown on the plans and as directed by the Engineer.
4. Lower all structure covers, involving valve and manhole boxes.
5. Removal of all concrete work, including restoration, in accordance with the plans and as directed by the Engineer.
6. Saw cut and remove 2 inches of existing material from existing roadway. Saw may include standard saw box material. The use of the equipment is to be approved by the Engineer and no additional charges are to be made.
7. Saw cut and remove existing asphalt, grade, and re-compress the road base as required, and as directed by the Engineer. The use of the equipment is to be approved by the Engineer.
8. Pour 3 inches of the concrete mix specified on the plans. As the leveling course is to be placed in the left lane of the equipment is to be approved by the Engineer and no additional charges are to be made.
9. Adequate all structure covers, manhole boxes and valve boxes to their proper locations.
10. Pour 2 inches of the concrete mix specified on the plans. As the leveling course, in the right lane of the equipment is to be approved by the Engineer and no additional charges are to be made.
11. Complete all miscellaneous construction including all clean-up and final restoration.
12. Remove all traffic control devices. Restore medians and flags.

## Notes

- **NOTES:**
  - The work to be performed on these plans shall be performed in accordance with the specifications and the conditions of the contract. The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.

- **REFERENCES:**
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.

- **REMARKS:**
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.

- **CONTRACT dataframe:**
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.

- **CONTRACTOR:**
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
  - The Contractor shall be responsible for the proper execution of the work and the restoration of the roadway to its original condition and shall not be responsible for any damage to adjacent structures or property.
CITY OF ANN ARBOR
PROJECT MANAGEMENT
2013 ANNUAL RESURFACING PROGRAM
PROJECT LOCATION: ALLEY BENJAMIN
FILE No. 2013004-6

CONSTRUCTION METHOD AND SEQUENCING

1. The work to be completed on the street shall include, but not be limited to, the following items: The scope of construction shall be as shown unless otherwise authorized by the engineer.
2. Maintain traffic maintenance and soil erosion controls in accordance with the plans and as directed by the engineer.
3. Install, set, and anchor, trim, and landscape as shown on the plans and as directed by the engineer.
4. Lumber all structure controls, including valve and monument boxes.
5. Perform all concrete work, including restoration, in accordance with the plans, and as directed by the engineer.
6. Use cut and cover 2 inches or more above existing roadway, this may require removal of existing structures and/or utility services, and must be approved by the engineer.
7. Unload 3 trucks for entire roadway, grade, finish, and re-contract the roadway as directed by the engineer.
8. Place 2 inches of the embankment on sections or directions as the existing course is in the location as shown on the plans and as directed by the engineer.
9. Assemble all structure controls, header boxes, and valve boxes to their finished elevations.
10. Place 2 inches of the embankment on sections or directions as the existing course is in the location as shown on the plans and as directed by the engineer.
11. Complete all miscellaneous construction including all cleanup and final restoration.
12. Remove all traffic control devices, fence and road signs.
CITY OF ANN ARBOR
PROJECT MANAGEMENT
2013 ANNUAL RESURFACING
PROGRAM
PROJECT LOCATION: HICOCK
FILE No. 2013004-8

TRAFFIC CONTROL & WORK ZONE

<table>
<thead>
<tr>
<th>CITY</th>
<th>TYPE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CONSTRUCTION METHOD AND SEQUENCING
1. The work to be conducted on this street shall commence, and will be located in the Following table. The construction shall be as shown unless otherwise as provided or directed by the Engineer.
2. Both Traffic and work zone shall be as shown unless otherwise as provided or directed by the Engineer.
3. Complete curb removal from Street to Spring St curb to be replaced will be assessed by the Engineer at the curb level.
4. Install any proper and work zone, and underslab as shown on the plans, and as directed by the Engineer.
5. Limit all structure work, including finish and cement work, and as directed by the Engineer.
6. Complete all concrete work, including restoration, in accordance with the plans, and as directed by the Engineer.
7. Will S3 of hydrant, manhole, and other similar work to be shown on the plans, and as directed by the Engineer.
8. Drain, clean, and re-contact the existing road base as required, and as directed by the Engineer.
9. Place 3 inches of the shoulders and the edges of the street as shown on the plans, and as directed by the Engineer.
10. Assist all structure work, including finish and cement work, and as directed by the Engineer.
11. Place 3 inches of the shoulders and the edges of the street as shown on the plans, and as directed by the Engineer.
12. Complete all miscellaneous construction including all cleanup and final restoration.
13. Complete all clean-up work.
14. Remove all traffic control devices, remove the curbs.

NOTES:
The construction work to be conducted in these plans shall be performed in such a manner as to minimize the inconvenience to the public. The work shall be performed in accordance with this specification and the plans and specifications. The engineer of the work is hereby authorized to make such changes and modifications to the plans and specifications, as may be necessary, without changing the nature of the work, to assure the proper performance of the work. The engineer shall be entitled to receive the sum of $500 for any such changes or modifications, and shall be entitled to receive the same sum for any additional work required by such changes or modifications. The contract shall be subject to the provisions of the laws of the State of Michigan, and the same shall be binding on the contractor and all persons dealing with him.
<table>
<thead>
<tr>
<th>Key</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25</td>
<td>Catch Basin and Curb, Catch Basin - one way - concrete curb and tarmac gutter. Additional options include:</td>
</tr>
<tr>
<td>1.56</td>
<td>Access with the exception of Fire hydrant.</td>
</tr>
<tr>
<td>2.00</td>
<td>Accessible by vehicle only.</td>
</tr>
<tr>
<td>2.75</td>
<td>Pipe structure.</td>
</tr>
<tr>
<td>3.00</td>
<td>Accessible by vehicle only.</td>
</tr>
<tr>
<td>4.50</td>
<td>Pipe structure.</td>
</tr>
<tr>
<td>5.00</td>
<td>Accessible by vehicle only.</td>
</tr>
</tbody>
</table>

**Key**
- **1.25**: Catch Basin and Curb, Catch Basin - one way - concrete curb and tarmac gutter.
- **1.56**: Access with the exception of Fire hydrant.
- **2.00**: Accessible by vehicle only.
- **2.75**: Pipe structure.
- **3.00**: Accessible by vehicle only.
- **4.50**: Pipe structure.
- **5.00**: Accessible by vehicle only.

**Legend**
- **<1.25**: Catch Basin and Curb, Catch Basin - one way - concrete curb and tarmac gutter.
- **<1.56**: Access with the exception of Fire hydrant.
- **<2.00**: Accessible by vehicle only.
- **<2.75**: Pipe structure.
- **<3.00**: Accessible by vehicle only.
- **<4.50**: Pipe structure.
- **<5.00**: Accessible by vehicle only.
## CITY OF ANN ARBOR

### PROJECT MANAGEMENT

**2013 ANNUAL RESURFACING PROGRAM**

**PROJECT LOCATION: WALDENWOOD DRIVE**

**FILE No. 2013004-10**

---

### Project Details

**Construction Method and Sequencing**

- The project will be constructed using the microsurfacing method.
- All work will be done during the summer months.

### Notes

- All materials will be stored on-site in accordance with safety regulations.
- All work will be completed during regular business hours.

---

<table>
<thead>
<tr>
<th>Date</th>
<th>Location</th>
<th>Description</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/01/2013</td>
<td>Waldenwood</td>
<td>Resurfacing</td>
<td>0%</td>
</tr>
<tr>
<td>02/01/2013</td>
<td>Waldenwood</td>
<td>Resurfacing</td>
<td>10%</td>
</tr>
<tr>
<td>04/01/2013</td>
<td>Waldenwood</td>
<td>Resurfacing</td>
<td>30%</td>
</tr>
<tr>
<td>06/01/2013</td>
<td>Waldenwood</td>
<td>Resurfacing</td>
<td>70%</td>
</tr>
<tr>
<td>08/01/2013</td>
<td>Waldenwood</td>
<td>Resurfacing</td>
<td>100%</td>
</tr>
</tbody>
</table>

---

**City of Ann Arbor Project Management**

For more information, please contact the Public Services Department at 734-792-9200.
CITY OF ANN ARBOR
PROJECT MANAGEMENT
2013 ANNUAL RESURFACING PROGRAM
PROJECT LOCATION: ARBANA DRIVE
FILE No. 2013004-12

CONSTRUCTION METHOD AND SEQUENCING

1. The work to be completed on this street shall include, but not be limited to the following: Opens the street to one lane while construction is taking place.
2. Sprinkle traffic maintenance and soil erosion control in accordance with the plans.
3. Complete curb repairs and any other street work to be performed on the curb or sidewalk.
4. Install any proposed storm sewer, and underground as shown on the plans.
5. Litter all structure contents, including value and monument signs.
6. Perform all concrete work, including restoration, in accordance with the plans.
7. You shall provide sheets and other materials for every opening in the street and keep the streets in a neat and safe condition.
8. Use plastic for the excavated streets and re-construct the existing road after all repairs, and as directed by the Engineer.
9. Place 3 inches of the structure which are specified or directed, at all leveling courses, in one lift.
10. Adjust all structure contents, and amount of value shown to their finished elevations.
11. Place 3 inches of the structure which are specified or directed, at the leveling course, in one lift.
12. Complete all miscellaneous construction including all clean-up and final restoration.
13. Complete all pavement markings.
14. Remove all traffic control devices, remove signs and lights.

Notes:
1. Only the work shown in these plans shall comply with the procedures of the construction shall be as shown unless otherwise amended or directed by the Engineer.
2. Sprinkle traffic maintenance and soil erosion control in accordance with the plans and as directed by the Engineer.
3. Complete curb repairs and any other street work to be performed on the curb or sidewalk.
4. Install any proposed storm sewer, and underground as shown on the plans, and as directed by the Engineer.
5. Litter all structure contents, including value and monument signs.
6. Perform all concrete work, including restoration, in accordance with the plans, and as directed by the Engineer.
7. You shall provide sheets and other materials for every opening in the street and keep the streets in a neat and safe condition.
8. Use plastic for the excavated streets and re-construct the existing road after all repairs, and as directed by the Engineer.
9. Place 3 inches of the structure which are specified or directed, at all leveling courses, in one lift.
10. Adjust all structure contents, and amount of value shown to their finished elevations.
11. Place 3 inches of the structure which are specified or directed, at the leveling course, in one lift.
12. Complete all miscellaneous construction including all clean-up and final restoration.
13. Complete all pavement markings.
14. Remove all traffic control devices, remove signs and lights.

The undersigned clocked in these plans shall comply with the procedures of the construction shall be as shown unless otherwise amended or directed by the Engineer. The signature of any person signing the above should not alter the Contractor's right to receive any portion of the total amount due, and the undersigned shall be deemed to be a part of the City's pay roll system.
CITY OF ANN ARBOR
PROJECT MANAGEMENT
2013 ANNUAL RESURFACING
PROGRAM
PROJECT LOCATION: BIRCH HOLLOW
FILE No. 2013004-14

CONSTRUCTION METHOD AND SEQUENCING

1. The work to be completed on the street shall include, but not be limited to, the
   following: (a) the source of construction shall be as shown unless otherwise authorized
   or directed by the Engineer.

2. Implement traffic maintenance, and soil erosion controls in accordance with the plans,
   and as directed by the Engineer.

3. Install any proposed storm sewer, and underdrain as shown on the plans, and as
   directed by the Engineer.

4. Lower all structure covers, including valve and manhole covers.

5. Perform all on-street work, including resurfacing, in accordance with the plans, and as
   directed by the Engineer.

6. Use 6 hours of forceps during work hours from existing roadway, this may include granular
   aggregate mix to be preplaced by the Engineer.

7. Prepare, stamp, and re-compact the existing roadway base as required, and as directed by the
   Engineer.

8. Place 2 inches of the surfacing as specified or directed, as the existing course, in one
   lift.

9. Install all previously placed, monolith sidewalks under 300 feet of the existing sidewalks.

10. Place 2 inches of the surfacing as specified or directed, as the existing course, in one
    lift.

11. Complete all miscellaneous construction followings all clean-up and final restoration.

12. Complete all inventory wars.

13. Remove all traffic control devices, remove盖s on pugs.

NOTES:

The construction work shown on these plans shall include the
following work and operations as shown on the plans, and as
modified by the Engineer. The construction of the above and further work
shall be subject to the conditions, specifications, and requirements
herein.

The undersigned, being the duly appointed agent and in accordance with
the terms of a contract dated, agrees to perform the work herein described,
and will make all proper arrangements for the same. The undersigned
hereby acknowledges the responsibility of performing this work, and
will not be liable for any work done without the written permission
of the City of Ann Arbor.

The undersigned is hereby furnished with a copy of the plans and a
description of the work to be performed. The undersigned will be
responsible for the performance of this work and will be liable for all
aggregate representation in this regard. He is not permitted to enter
construction to locate these streets.

The undersigned hereby acknowledges the responsibility of performing this
work, and will not be liable for any work done without the written permission
of the City of Ann Arbor.