PERMITS REQUIRED TO BE OBTAINED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF CONSTRUCTION.

PERMIT ISSUING AUTHORITY

LANE CLOSURE PERMIT: CITY OF ANN ARBOR ENGINEERING
"NO PARKING" SIGNS PERMIT: CITY OF ANN ARBOR ENGINEERING
GRADING/SOIL EROSION & SEDIMENTATION CONTROL PERMIT: CITY OF ANN ARBOR CUSTOMER SERVICE
RIGHT-OF-WAY PERMIT: CITY OF ANN ARBOR CUSTOMER SERVICE

*NO COST TO CONTRACTOR

CONTACT INFORMATION

PUBLIC UTILITIES

PRIVATE UTILITIES

PROJECT NAME BENCHMARKS

BM # ELEV DESCRIPTION
2 907.61 BENCHTIE IN SOUTH FACE OF POWER POLE EAST OF MAPLE RIDGE APARTMENTS
3 905.89 BENCHTIE ON EAST SIDE OF POWER POLE AT NW CORNER OF DOTY & DEXTER
4 901.94 BENCHTIE ON SW FACE OF POWER POLE ON WEST SIDE OF DOTY
5 893.42 BENCHTIE IN SE FACE OF POWER POLE OPPOSITE PARK ON W SIDE OF WESTWOOD
6 896.92 BENCHTIE IN EAST FACE OF POWER POLE S SIDE OF LINWOOD @ E END OF PARK
7 877.89 BENCHTIE ON S SIDE OF POWER POLE ON S SIDE OF LINWOOD & E OF WILDWOOD AVE
8 874.54 METAL SPIKE ON SE FACE OF POWER POLE @ SW CORNER OF LINWOOD AND N REVENA
9 857.86 BENCHTIE ON NW FACE OF POWER POLE NE CORNER OF LINWOOD & ARBANA
10 848.33 BENCHTIE ON W FACE OF POWER POLE NE OF SALVATION ARMY DRIVE & LINWOOD
<table>
<thead>
<tr>
<th>HMA Mix</th>
<th>Rate of Application</th>
<th>Thickness (inches)</th>
<th>Binder</th>
<th>Location/Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMA, 5E1</td>
<td>220 LB/SYD</td>
<td>2</td>
<td>PG 64-28</td>
<td>TOP COURSE</td>
</tr>
<tr>
<td>HMA, 4E1</td>
<td>220 LB/SYD</td>
<td>-</td>
<td>PG 64-28</td>
<td>LEVELING COURSE</td>
</tr>
<tr>
<td>HMA, 3E1</td>
<td>330 LB/SYD</td>
<td>-</td>
<td>PG 64-28</td>
<td>BASE COURSE</td>
</tr>
<tr>
<td>Bond Coat SS-1h</td>
<td>0.05 - 0.15 GAL/SYD</td>
<td>-</td>
<td>-</td>
<td>INCLUDE IN COST OF HMA ITEM</td>
</tr>
</tbody>
</table>

**DEXTER AVE**

**TYPICAL SECTION**

(LOOKING EAST)

**ARBANA DR**

**TYPICAL SECTION**

(LOOKING NORTH)
TREE PROTECTION DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

9 OF 40

HURON-WEST PARK SANITARY SEWER REPLACEMENT
CONSTRUCTION DETAILS

MISCELLANEOUS DETAILS II

5" X 5" POSTS
2" X 6" RAIL
96" C/C
11"
10 1/2"
2"
52"

TREE PLANTING DETAIL

PROPOSED AGGREGATE PARK PATH

CONCRETE UTILITY SADDLE

PROPOSED AGGREGATE MAINTENANCE PATH

CURB AND GUTTER, CONC, DET F4, SPECIAL

UTILITY TRENCH - TYPE I

UTILITY TRENCH - TYPE V

TREE PLANTING DETAIL

VINYL FENCE DETAIL
RICHARD HURON-WEST PARK SANITARY SEWER REPLACEMENT

MINIMIZE DISRUPTION TO PEDESTRIANS TO THE MAXIMUM EXTENT FEASIBLE BY PROVIDING FLAGS OR OTHER ENGINEER-APPROVED DEVICES AT NO ADDITIONAL COST TO THE PROJECT.

ENOUGH TO CREATE A HAZARD, THE TRAFFIC CONTROL DEVICES SHALL BE DELINEATED WITH POST MOUNTED SIGNS LOCATED ADJACENT TO A SIDEWALK SHALL HAVE A 7 FOOT MINIMUM CLEARANCE FROM THE BOTTOM OF THE SIGN TO THE SIDEWALK SURFACE.

COORDINATE THIS WORK WITH THE ENGINEER A MINIMUM OF 72 HOURS (NOT INCLUDING WEEKENDS & HOLIDAYS) PRIOR TO THE BEGINNING OF WORK THAT REQUIRES A SIDEWALK CLOSURE. REPORTING HAZARDS.

PEDESTRIAN ACCESS SHALL BE PROVIDED TO ALL ADJACENT PROPERTIES, BUILDINGS, RESIDENCES AND COMMERCIAL PROPERTIES AT ALL TIMES. THIS MAY REQUIRE THE CONTRACTOR TO MANAGE EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

ACCESSIBILITY SHALL NOT BE DISPLAYED IF PERSONS WITH DISABILITIES SHOULD NOT USE THE PEDESTRIAN TEMPORARY TRAFFIC CONTROL PLAN, SIGNS, OTHER DEVICES OR EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

PEDESTRIAN DETOUR USING OPPOSITE SIDE OF STREET

PROJECT PLANS.

ROADWAY, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.

PEDESTRIAN TEMPORARY TRAFFIC CONTROL NOTES

1. THE CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS TO THE PROJECT FROM THE PRIMARY PEDESTRIAN TRAFFIC CONTROL PLAN, SIGNS, OTHER DEVICES OR EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL. THE SYMBOL OF THE INTERNATIONAL SYMBOL OF ACCESSIBILITY SHOULD BE DISPLAYED WHEN ANY WALKWAY THROUGH A WORK ZONE HAS BEEN DETERMINED TO BE TPAR COMPLIANT. THE SYMBOL OF ACCESSIBILITY WALKWAY SHALL BE POSTED ON THE SAME SIDE OF THE ROAD AS THE CLOSED SIDEWALK, SHOWING ACCESSIBILITY TO THE PROJECT FROM THE PRIMARY PEDESTRIAN TRAFFIC CONTROL PLAN, SIGNS, OTHER DEVICES OR EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

2. PEDESTRIAN ACCESS SHALL BE PROVIDED TO PEDESTRIANS NON-COMPLIANT TO TPAR STANDARDS.

3. PEDESTRIAN ACCESS SHALL BE PROVIDED TO PEDESTRIANS THROUGH A TEMPORARY PEDESTRIAN CONTROL PLAN, SIGNS, OTHER DEVICES OR EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

4. THE CONTRACTOR SHALL POST ALTERNATE PEDESTRIAN ROUTES OR DETOURS ON APPROPRIATE SIGNS AND/or ADDITIONAL APPEARANCES OF TRAFFIC CONTROLS DEVICES OR SIGNS TO PROVIDE PEDESTRIAN ACCESS NON-COMPLIANT TO TPAR STANDARDS.

5. IF SIGNS ARE CLOSED, A TEMPORARY PEDESTRIAN ACCESS ROUTE (TPAR) SHALL BE POSTED ON THE OTHER SIDE OF THE ROAD (A SOUTH SIDEWALK CLOSURE REQUIRES THE CONTRACTOR TO PROVIDE A NORTH TPAR, AND VICE VERSA). THE CONTRACTOR SHALL POST THE TPAR ON A MINIMUM OF THREE SIDES AND PROVIDE A TPAR IN AN AREA IN WHICH THE PRIMARY PEDESTRIAN TRAFFIC CONTROL PLAN, SIGNS, OTHER DEVICES OR EQUIPMENT OR SIGNS IN THE PEDESTRIAN PATH OF TRAVEL.

6. IF THE TPAR IS NON-COMPLIANT TO TPAR STANDARDS, THE CONTRACTOR SHALL POST ALTERNATE PEDESTRIAN ROUTES OR DETOURS ON APPROPRIATE SIGNS AND/or ADDITIONAL APPEARANCES OF TRAFFIC CONTROLS DEVICES OR SIGNS TO PROVIDE PEDESTRIAN ACCESS NON-COMPLIANT TO TPAR STANDARDS.

7. THE CONTRACTOR SHALL POST ALTERNATE PEDESTRIAN ROUTES OR DETOURS ON APPROPRIATE SIGNS AND/or ADDITIONAL APPEARANCES OF TRAFFIC CONTROLS DEVICES OR SIGNS TO PROVIDE PEDESTRIAN ACCESS NON-COMPLIANT TO TPAR STANDARDS.

8. THE CONTRACTOR SHALL POST ALTERNATE PEDESTRIAN ROUTES OR DETOURS ON APPROPRIATE SIGNS AND/or ADDITIONAL APPEARANCES OF TRAFFIC CONTROLS DEVICES OR SIGNS TO PROVIDE PEDESTRIAN ACCESS NON-COMPLIANT TO TPAR STANDARDS.

PEDESTRIAN DETOUR TRAILBLAZING SIGNS SHALL BE USED IF THE PEDESTRIAN DETOUR IS NON-COMPLIANT TO TPAR STANDARDS.

ALTERNATE PEDESTRIAN ROUTE - DETOUR

WHERE IT IS NOT FEASIBLE TO PROVIDE AN APR ON THE OTHER SIDE OF THE STREET, PROVIDE AN APR DETOUR WITH TRAILBLAZING SIGNS AS SHOWN ON THE PROJECT PLANS.
Minimize disruption to pedestrians to the maximum extent feasible by providing devices shall be delineated with flags or other engineer-approved devices at no cost posted signs located adjacent to a sidewalk shall have a 7-foot minimum.

Provide a smooth, continuous, hard surface through the length of the apr.

Provide an alternate pedestrian route (APR) at all times. For roadways with no available detours, maintain one open sidewalk at all times.

Stage work, as necessary, to provide detectable temporary facilities and include accessibility features.

General Notes

When closing or restricting portions of streets or sidewalks, the contractor shall provide additional temporary traffic control devices where feasible and necessary, as necessary. Provide an alternate pedestrian route (APR) at all times. For roadways with no available detours, maintain one open sidewalk at all times.

Provide a smooth, continuous, hard surface throughout the length of the apr. Compacted gravel, aggregate, or slag materials are not allowed. Provide a firm, stable, and slip-resistant temporary walkway surface to cover short segments of rough, soft, or uneven ground.

When closing or restricting portions of streets or sidewalks, the contractor shall coordinate this work with the engineer a minimum of 72 hours (not including weekends & holidays) prior to the beginning of work that requires a sidewalk closure.

The pedestrian traffic signals controlling the crosswalks shall be covered or deactivated by the city of ann arbor. the contractor shall schedule and coordinate the work with the engineer a minimum of 72 hours (not including weekends & holidays) prior to the beginning of work that requires a sidewalk closure.

The international symbol of accessibility shall be displayed when any walkway through a work zone has been determined to be TPAR compliant. The symbol of accessibility shall not be displayed if persons with disabilities should not use the roadway.

Specific Notes

Temporary curb ramps with detectable warnings.

4-foot minimum, s‘ desirable

Temporary truncated domes required if bridging a minor road or commercial driveway.

Sidewalk bypass using parking or shoulder on low speed roadway

Bypass type B

Sidewalk bypass using shoulder or parking lane on high speed roadway

Bypass type C

NOTE: MAY ONLY BE USED ON ROADWAY WITH POSTED SPEED OF 45 MPH OR LESS.
Curb Ramps shall be 48" min. width with a firm, stable and slip resistant surface.

Protective edging shall be 2" min. height and shall be placed when a curb ramp or landing platform has a vertical drop of 6" or greater or when a curb ramp or landing platform has a side apron slope steeper than 1:3. Protective edging should be considered when curb ramps or landing platforms have a vertical drop of 3" or more.

Detectable edging with 6" min. height and contrasting color shall be placed on all curb ramp landings where the adjacent curbed section terminates.

Curb ramps and landing platforms shall have a 2% max. cross slope.

Clear space of 48" x 48" min. shall be provided above and below the curb ramp.

The curb ramp walkway edge shall be marked with a contrasting color, 2" to 4" wide marking. The marking is optional where color contrasting edging is used.

Water flow in the gutter system shall not be impeded.

Lateral joints or gaps between surfaces shall not exceed 1/2" width.

Changes between surface heights shall not exceed 1/2".

Lateral edges should be vertical up to 1/4" high, and beveled at 1:2 between 1/4" and 1/2" height.

Temporary curb ramp parallel to curb.

Temporary curb ramp perpendicular to curb.

Know what's below. Call before you dig.
GENERAL NOTES
- Railings or other objects may protrude a maximum of 4 inches into the walkway clear space when located a minimum of 27 inches above the walkway surface.
- Any temporary pedestrian access should be designed to provide positive protection for pedestrians on narrow walkways.

RAILINGS OR OTHER OBJECTS MAY PROTRUDE A MAXIMUM OF 4 INCHES INTO THE WALKWAY CLEAR SPACE WHEN LOCATED A MINIMUM OF 27 INCHES ABOVE THE WALKWAY SURFACE.

ANY PEDESTRIAN DEVICES USED TO PROVIDE POSITIVE PROTECTION FOR PEDESTRIANS OR WORKERS SHALL MEET NCHRP 350 CRASHWORTHY REQUIREMENTS APPROPRIATE FOR THE BARRIER'S APPLICATION.

BARRICADES SHALL BE PLACED CONTINUOUSLY ACROSS THE ENTIRE WIDTH OF THE WALKWAY SURFACE BEING CLOSED.

SPECIFIC NOTES
- Any tripping hazard in the walkway needs a detectable edge. Ballast shall be located behind or internal to the device. Any support on the front of the device shall not extend into the 48 inch minimum walkway clear space and shall not exceed 0.5 inches in height above the walkway surface.
- Detectable edges shall be continuous and a minimum of 6 inches high above the walkway surface and have color markings contrasting with the walkway surface.
- Devices shall not block water drainage from the walkway. A gap height or opening from the walkway surface up to a maximum of 2 inches is allowed for drainage purposes.
- When hand guidance is required, the top rail or top surface shall:
  - Be in a vertical plane perpendicular to the walkway above the detectable edge.
  - Be continuous at a height of 34 to 38 inches above the walkway surface, and
  - Be supported with minimal interference to the pedestrian's hands or fingers.
- All devices shall be free of sharp or rough edges, and fasteners located shall not extend to project harm to hands, skin or clothing of pedestrians.
- All devices used to channelize pedestrian flow shall be rounded such that they may not allow pedestrians to step through the pedestrian channelized path.
- A permanent survey tag shall be visible and legible from the post at all times.
- A permanent survey tag shall be visible and legible from the post at all times.
- Any detectable channelizing devices for pedestrians shall be 32 inches in height or greater.

TYPICAL AUDIBLE MESSAGE DEVICE LOCATION WHEN USED

PEDESTRIAN CHANNELIZER USING A BARRIER (MINIMUM REQUIREMENTS)

PEDESTRIAN CHANNELIZER (MINIMUM REQUIREMENTS)

NEW WALKING EDGE

DETECTABLE EDGE SHALL BE CONTINUOUS AND A MINIMUM OF 6 INCHES AHEAD OF THE WALKWAY SURFACE

NARROW TEMPORARY PEDESTRIAN ACCESS ROUTE PASSING DETAIL

SIDEWALK BARRICADE
BM-5
BM-6
INSTALLATION DETAIL
SIDE VIEW INSTALLED
SILTSACK DETAIL
REGULAR FLOW SILTSACK
HI-FLOW SILTSACK
OIL-ABSORBANT SILTSACK
MULCH BLANKET DETAIL
SILT FENCE SD-EC-3
FRONT VIEW SECTION A-A
SECTION B-B
PLAN VIEW

Know what's below. Call before you dig.

City of Ann Arbor - Public Services - Engineering
City of Ann Arbor
Public Services
301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107-8647
734-794-6410
www.a2gov.org

2019-024-
17 OF 40
HURON-WEST PARK SANITARY SEWER REPLACEMENT
SESC & REMOVAL AND RESTORATION PLAN
SESC NOTES AND DETAILS
STAGING AREA PLAN
LINWOOD AVE WESTWOOD AVE APPROXIMATE STAGING AREA
PLAN:
1" = 20'

PROFILE: 1" = 4'

SESC & REMOVAL PLAN

REMOVAL KEY

<table>
<thead>
<tr>
<th>KEY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

REMOVAL KEY

<table>
<thead>
<tr>
<th>KEY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

CONSTRUCTION KEY

<table>
<thead>
<tr>
<th>KEY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

RESTORATION PLAN
PLAN: 1" = 20'

PROFILE: 1" = 4'

LINWOOD AVE (50' WIDE R.O.W.)

SESC & REMOVAL PLAN

RESTORATION PLAN

REMOWAL KEY

KEY
DESCRIPTION

REST-1

CONSTRUCTION KEY

KEY
DESCRIPTION

HMA

CG

CON6

SW4

SW6

SWR6

DOM

DOL

DWS

ASC

AB

REST-1

REST-2

R

N

F

4

2

8

1

D

E

D

N

U

O

F

1

5

8

1

D

E

T

A

R

O

P

R

O

C

N

I

G

I

H

R

O

B

R

A

O

Y

T

I

C

M

2019-024 - HURON-WEST PARK SANITARY SEWER REPLACEMENT

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR

PUBLIC SERVICES

301 EAST HURON STREET

P.O. BOX 8647

ANN ARBOR, MI 48107-8647

734-794-6410

www.a2gov.org

CONSTRUCTION KEY

KEY
DESCRIPTION

PATH-PK

PATH-PK
<table>
<thead>
<tr>
<th>Page</th>
<th>2019-024</th>
<th>HURON WEST PARK SANITARY SEWER REPLACEMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27</td>
<td>SESC &amp; REMOVAL AND RESTORATION PLAN</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>EXISTING TREE TABLE I</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tree Number</th>
<th>Location</th>
<th>Year</th>
<th>Diameter</th>
<th>Species</th>
<th>Condition</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Huron St</td>
<td>2019</td>
<td>15</td>
<td>Elm</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>West Park</td>
<td>2019</td>
<td>20</td>
<td>Oak</td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Huron St</td>
<td>2018</td>
<td>18</td>
<td>Maple</td>
<td>Excellent</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>West Park</td>
<td>2017</td>
<td>12</td>
<td>Birch</td>
<td>Good</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Huron St</td>
<td>2016</td>
<td>22</td>
<td>Spruce</td>
<td>Fair</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>West Park</td>
<td>2015</td>
<td>25</td>
<td>Pine</td>
<td>Excellent</td>
<td></td>
</tr>
</tbody>
</table>

**City of Ann Arbor - Public Services - Engineering**

**City of Ann Arbor**

**Public Services**

**301 East Huron Street**

**P.O. Box 8647**

**Ann Arbor, MI 48107-8647**

**734-794-6410**

**www.a2gov.org**

---

**Date of Submission:**

**HURON WEST PARK SANITARY SEWER REPLACEMENT**

**SESC & REMOVAL AND RESTORATION PLAN**

**EXISTING TREE TABLE I**
<table>
<thead>
<tr>
<th>EX</th>
<th>TREE</th>
<th>TABLE II</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SANITARY SEWER STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STA</th>
<th>TYPE</th>
<th>DIA</th>
<th>ELEV</th>
<th>H/I</th>
<th>C.L.</th>
<th>R/S</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0+00</td>
<td>1x1</td>
<td>600</td>
<td>880</td>
<td>15</td>
<td>2000</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>0+50</td>
<td>1x1</td>
<td>600</td>
<td>880</td>
<td>15</td>
<td>2000</td>
<td>200</td>
<td></td>
</tr>
</tbody>
</table>

PLAN VIEW

PROFILE VIEW

CAUTION HAZARDOUS OR FLAMMABLE MATERIAL

Know what's below. Call before you dig.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

2019-024 HURON-WEST PARK SANITARY SEWER REPLACEMENT PLAN AND PROFILE

DEXTER AVE (66' WIDE R.O.W.)
SANITARY SEWER STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>STATION</th>
<th>DATE</th>
<th>T.C.</th>
<th>WD</th>
<th>WT</th>
<th>TYPE</th>
<th>DEPTH</th>
<th>NOTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1</td>
<td>5+00</td>
<td>2006</td>
<td>22</td>
<td>65</td>
<td></td>
<td>WM</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>9+00</td>
<td>2006</td>
<td>12</td>
<td>65</td>
<td></td>
<td>WM</td>
<td>114</td>
<td></td>
</tr>
<tr>
<td>D1</td>
<td>10+00</td>
<td>2006</td>
<td>12</td>
<td>65</td>
<td></td>
<td>WM</td>
<td>114</td>
<td></td>
</tr>
</tbody>
</table>

PLAN VIEW

PROFILE VIEW

Know what's below. Call before you dig.

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING
CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org
SANITARY SEWER STRUCTURE TABLE

PLAN: 1" = 20'

PROFILE: 1" = 4'

PLAN VIEW

PROFILE VIEW

CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING

CITY OF ANN ARBOR
PUBLIC SERVICES
301 EAST HURON STREET
P.O. BOX 8647
ANN ARBOR, MI 48107-8647
734-794-6410
www.a2gov.org

DOTY AVE
(50' WIDE R.O.W.)

HURON-WEST PARK SANITARY SEWER REPLACEMENT

PLAN AND PROFILE

STA. 10+00 TO STA. 15+00

HAZARDOUS OR FLAMMABLE MATERIAL

KNOW WHAT'S BELOW. CALL BEFORE YOU DIG.
SANITARY SEWER STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>LOCATION</th>
<th>STATION</th>
<th>TYP</th>
<th>DIA (IN)</th>
<th>H (FT)</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>15+00</td>
<td></td>
<td>12&quot;</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

PLAN VIEW

PROFILE VIEW

CAUTION
HAZARDOUS
OR FLAMMABLE
MATERIAL

Know what's below. Call before you dig.
SANITARY SEWER STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STA</th>
<th>DWELL / ADDRESS</th>
<th>DIAM.</th>
<th>DEPTH</th>
<th>FILL</th>
<th>TYPE</th>
<th>SLP</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>31+00</td>
<td>314-71</td>
<td>802.00</td>
<td>7.34</td>
<td>46</td>
<td>AH</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>31+15</td>
<td>314-72</td>
<td>802.00</td>
<td>6.30</td>
<td>46</td>
<td>AH</td>
<td>0.4%</td>
<td></td>
</tr>
<tr>
<td>31+30</td>
<td>314-81</td>
<td>847.39</td>
<td>4.80</td>
<td>46</td>
<td>AH</td>
<td>0.4%</td>
<td></td>
</tr>
</tbody>
</table>

CAUTION
HAZARDOUS OR FLAMMABLE MATERIAL

Critical Utility Service Dr. (16' R.O.W.)

Know what's below.
Call before you dig.
### SANITARY SEWER STRUCTURE TABLE

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th>STATION</th>
<th>DESIGN (IN)</th>
<th>TYPE</th>
<th>FUTURE (IN)</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>75</td>
<td>1400</td>
<td>0.8</td>
<td>45</td>
<td>1.0</td>
<td>N</td>
</tr>
<tr>
<td>50</td>
<td>1400</td>
<td>0.8</td>
<td>45</td>
<td>1.0</td>
<td>N</td>
</tr>
<tr>
<td>110</td>
<td>1400</td>
<td>0.8</td>
<td>45</td>
<td>1.0</td>
<td>N</td>
</tr>
</tbody>
</table>

**PLAN VIEW**

- **Dexter Ave (66' Wide R.O.W.)**
- **Doty Ave (50' Wide R.O.W.)**
- **Westwood Ave (50' Wide R.O.W.)**

**SANITARY SEWER CONNECTIONS**

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>WIDTH (FT)</th>
<th>R.O.W. (FT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dexter Ave</td>
<td>66</td>
<td>33.5</td>
</tr>
<tr>
<td>Doty Ave</td>
<td>50</td>
<td>25.5</td>
</tr>
<tr>
<td>Westwood Ave</td>
<td>50</td>
<td>25.5</td>
</tr>
</tbody>
</table>

**Know what's below. Call before you dig.**

---

**CITY OF ANN ARBOR - PUBLIC SERVICES - ENGINEERING**

301 East Huron Street
P.O. Box 8647
Ann Arbor, MI 48107-8647
734-794-6410
www.a2gov.org
<table>
<thead>
<tr>
<th>Column Header</th>
<th>Column_content</th>
<th>Column_content</th>
<th>Column_content</th>
<th>Column_content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Column 1</td>
<td>Column 2</td>
<td>Column 3</td>
<td>Column 4</td>
<td>Column 5</td>
</tr>
<tr>
<td>Column 6</td>
<td>Column 7</td>
<td>Column 8</td>
<td>Column 9</td>
<td>Column 10</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SANITARY STRUCTURE TABLE**

**STORM STRUCTURE TABLE**

---

**Know what's below. Call before you dig.**

---

**City of Ann Arbor - Public Services - Engineering**

301 East Huron Street

P.O. Box 8647

Ann Arbor, MI 48107-8647

734-794-6410

www.a2gov.org