STANDARD CONSTRUCTION DRAWINGS

OFFICE OF THE CITY ENGINEER

LIMA  OHIO

Kirk P. Niemeyer, P.E.
CITY ENGINEER
USE: To be used only for storm drainage.

CONSTRUCTION: All joints and pipe openings in the catch basin shall be thoroughly caulked to prevent infiltration. Construction shall be in accordance with item 604.

ADJUSTING BRICKS: The top of the dome shall be placed at an elevation so that a minimum of 3" of adjustment shall be used, unless otherwise specified on the plans.

SETTING OF CASTINGS: The base of the frame shall be set in a full bed of portland cement mortar to conform to the finished ground or pavement grade.

CASTINGS: Castings shall be made in accordance with A.S.T.M. standards and shall have one coat of asphaltum paint. Frame and lid to be as specified on Standard Construction Drawings C-1 and C-2.

W = 8" FOR BRICK OR CONCRETE BLOCK
W = 8" FOR CAST IN PLACE CONCRETE
W = 4½" FOR PRE-CAST CONCRETE
NOTES

USE: To be used for storm sewers.

MATERIAL: Materials shall comply with Item 604.

CONSTRUCTION: All joints of pipe opening in the catch basin shall be thoroughly caulked to prevent infiltration. Construction shall be in accordance with Item 604.

ADJUSTING CASTING: The top of the dome shall be placed at an elevation so that a minimum of 3” of adjustment shall be used at all times, unless otherwise specified on plans.

SETTING OF CASTINGS: The base of the frame shall be set in a full bed of portland cement mortar and so adjusted to conform to the finished ground or pavement grade.

CASTINGS: Castings shall be made in accordance with ASTM standards and shall be given one coat of asphaltum paint. Frame and lid shall be in accordance with standard casting sheet No. C-2 or C-3.

NOTE: Self cleaning catch basin lead to be tied into standard catch basin No. 3 or storm sewer only.
STANDARD CATCH BASIN NO. 5

NOTES

USE: To be used for storm sewers.

MATERIAL: Materials shall comply with Item 604.

CONSTRUCTION: All joints of pipe opening in the catch basin shall be thoroughly caulked to prevent infiltration. Construction shall be in accordance with Item 604.

ADJUSTING CASTING: The top of the dome shall be placed at an elevation so that a minimum of 3" of adjustment shall be used at all times, unless otherwise specified on plans.

SETTING OF CASTINGS: The base of the frame shall be set in a full bed of portland cement mortar and so adjusted to conform to the finished ground or pavement grade.

CASTINGS: Castings shall be made in accordance with ASTM standards and shall be given one coat of asphaltum paint. Frame and lid shall be in accordance with standard casting sheet No. C-2 or C-3.

CITY OF LIMA, OHIO

Kirk Niemeyer, P.E. CITY ENGINEER

REVISED

CATCH BASIN DETAIL
C.B. No. 5

STANDARD CONSTRUCTION DRAWING CB-5

Drawn By: ELB Date: 11/17/09 Approved By: KPN
NOTE: All dimensions as specified for catch basin inlet R-3275 with barred curb box and Type "A" Grate and 4" radius & single fish logo as manufactured by NEENAH FOUNDRY, or equal.

NOTE: Curb box adjustable 4" to 9"

MATERIAL: Cast gray iron
Class 30, ASTM Spec. A48-64
CURB OPENINGS

ALL DIMENSIONS AS SPECIFIED FOR STORM WATER CURB OPENING R-3262-3 AS MANUFACTURED BY NEENAH FOUNDRY, OR EQUAL. LOCATIONS TO BE APPROVED BY CITY ENGINEER.

MANHOLE STEPS

ALL DIMENSIONS AS SPECIFIED FOR CAST IRON MANHOLE STEP R-390-C AS MANUFACTURED BY NEENAH FOUNDRY OR ALUMINUM ASTM B221, GGGI-TG OR EQUAL. ALSO ACCEPTABLE IS A 3/8 STEEL REINFORCEMENT ROD COVERED BY A POLYPROPYLENE PLASTIC AS MANUFACTURED BY M A INDUSTRIES INCORPORATED OR EQUAL.

SECTION 'B-B'

ALL DIMENSIONS AS SPECIFIED FOR CATCH BASIN INLET R-3270 AS MANUFACTURED BY NEENAH FOUNDRY, OR EQUAL.

MATERIAL: GRAY IRON, CLASS 30, ASTM SPEC A48-G4

SECTION 'A-A'

CITY OF LIMA, OHIO

REVISED DATE BY
1-7-73 DAVID J GRIZEZ CITY ENGINEER

CASTINGS

STANDARD CONST DRAWING C-3

DRAWN BY: , APPROVED BY:
**NOTES**

**GENERAL**—All joints of pipe openings in the manhole shall be thoroughly caulked to prevent infiltration. Domes shall have at least one line of steel reinforcement with a minimum cross-sectional area of 0.116 sq.in. per linear foot of dome.

**MATERIALS**—Concrete for manhole base shall be Class "C." Precast reinforced concrete rings shall meet the strength and design requirements for 704.02 reinforced concrete sewer pipe.

**ADJUSTING BRICKS**—The top of the dome shall be placed at the elevation so that a minimum height of 3" of adjustment shall be used at all times, unless otherwise specified on the plans.

**SETTING OF CASTINGS**—The base of the frame shall be set in a full bed of Portland cement mortar and be adjusted to conform to the finished ground or pavement grade.

**CASTING AND STEPS**—Castings and steps shall be made in accordance with ASME Standards and shall be given one coat of asphalt paint.

Frames, lids, and steps shall be in accordance with Casting Sheets 01 and 02.

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**4'-0" FOR SEWERS 24" & UNDER STD. MANHOLE NO. 3**

**5'-0" FOR SEWERS 27" TO 42" STD. MANHOLE NO. 4**

**NOTE:** Manhole details for sewers over 42" will be shown on the construction plans.

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**REVISIONS**

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**CITY OF LIMA, OHIO**

**STANDARD MANHOLES**

**MH 3 & MH 4**

**APPROVED BY**

---
USE: To be used for sanitary or storm sewers.

GENERAL: All joints are to have "O"-Ring gaskets.


ADJUSTMENT: The top of the dome shall be placed at an elevation that a minimum of 3" of adjustment shall be used at all times unless otherwise specified on plans.

SETTING OF CASTING: The base of the frame shall be set in a full bed of portland cement mortar and so adjusted to conform to the finished ground or pavement grade.

CASTINGS: Castings and steps shall be made in accordance with ASTM standards and shall be given one coat of asphaltum paint. Frames, lids and steps shall be in accordance with casting sheets C–1 and C–3.
GENERAL NOTES

USE: SANITARY SEWER MH'S SHALL BE OF PRECAST CONCRETE ONLY. STORM SEWER MH'S MAY ALSO INCLUDE BRICK AND CONCRETE BLOCK MH'S.

MATERIALS: ALL MATERIALS SHALL CONFORM TO ITEM 604, STATE OF OHIO, DEPT. OF HIGHWAYS, CONSTRUCTION AND MATERIAL SPECIFICATIONS, (PREVAILING EDITION).

CONSTRUCTION: ALL JOINTS OF PIPE OPENINGS IN THE MANHOLE SHALL BE THOROUGHLY CAULKED TO PREVENT INFILTRATION.

ADJUSTING BRICKS: THE TOP OF THE PRECAST SLAB SHALL BE PLACED AT AN ELEVATION THAT WILL PROVIDE A MINIMUM HEIGHT OF 3" OF ADJUSTMENT AT ALL TIMES, UNLESS OTHERWISE SPECIFIED.

SETTING OF CASTINGS: THE BASE OF THE FRAME SHALL BE SET IN A FULL BED OF PORTLAND CEMENT MORTAR AND SO ADJUSTED TO CONFORM WITH THE FINISHED GROUND OR PAVEMENT GRADE.

CASTINGS: FRAME, LID AND STEPS SHALL BE MADE IN ACCORDANCE WITH ASTM STANDARDS AND SHALL BE GIVEN ONE COAT OF ASPHALTUM PAINT. FRAMES, LIDS & STEPS SHALL BE IN ACCORDANCE WITH CASTINGS SHEET C-1, C-3.

TRANSITION SLAB: SLAB MAY BE CAST IN THE FIELD AS DETAILED OR A PRECAST SLAB MAY BE USED AS SUPPLIED BY PIPE SUPPLIER WITHSTANDING HIGHWAY LIVE LOAD OF 16,000 LB. WHEEL LOAD.

CITY OF LIMA, OHIO.

DAVID J. CRIZEZ CITY ENGINEER

STANDARD MANHOLE NO. MH-6

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STANDARD CONSTRUCTION DRAWING MH-6

DRAFTED BY: V.A.E. APPROVED BY: W.J.M.
NOTES

USE: To be used for sanitary or combination sewers.

GENERAL: All joints are to have "O"-Ring gaskets.

MATERIAL: Precast Concrete, ASTM-C478 W/ ASTM-C443 Joints.

ADJUSTMENT: The top of the dome shall be placed at an elevation that a minimum of 3" of adjustment shall be used at all times unless otherwise specified on plans.

SETTING OF CASTING: The base of the frame shall be set in a full bed of portland cement mortar and so adjusted to conform to the finished ground or pavement grade.

CASTINGS: Castings and steps shall be made in accordance with ASTM standards and shall be given one coat of asphaltum paint. Frames, lids and steps shall be in accordance with casting sheets C-1 and C-3.

CITY OF LIMA, OHIO

MANHOLE DETAIL

REVISED

DATE BY

Kirk Niemeyer, P.E. CITY ENGINEER

STANDARD CONSTRUCTION DRAWING MH-7

Drawn By: ELB Date: 4/2/07 Approved By: KPN
NOTES

USE: To be used for sanitary or combination sewers.

GENERAL: All joints are to have "O"-Ring gaskets.

MATERIAL: Precast Concrete. ASTM-C478
W/ ASTM-C443 Joints.

ADJUSTMENT: The top of the dome shall be placed at
an elevation that a minimum of
3" of adjustment shall be used at all
times unless otherwise specified on plans.

SETTING OF CASTING: The base of the frame shall
be set in a full bed of portland
cement mortar and so adjusted
to conform to the finished
ground or pavement grade.

CASTINGS: Castings and steps shall be made in
accordance with ASTM standards and shall be
given one coat of asphaltum paint. Frames,
lids and steps shall be in accordance with
casting sheets C-1 and C-3.

SANITARY SEWER PRECAST MANHOLE
MAXIMUM PIPE SIZE 36 INCH
ASTM C-478
DROP MANHOLE
NOTES

USE: To be used for sanitary or combination sewers.

GENERAL: All joints are to have "O"-Ring gaskets.


ADJUSTMENT: The top of the dome shall be placed at an elevation that a minimum of 3" of adjustment shall be used at all times unless otherwise specified on plans.

SETTING OF CASTING: The base of the frame shall be set in a full bed of portland cement mortar and so adjusted to conform to the finished ground or pavement grade.

CASTINGS: Castings and steps shall be made in accordance with ASTM standards and shall be given one coat of asphaltum paint. Frames, lids and steps shall be in accordance with casting sheets C-1 and C-3.

CITY OF LIMA, OHIO

REVISED

DATE

CITY ENGINEER

Kirk Niemeyer, P.E.

DROP MANHOLE

DETAIL

STANDARD CONSTRUCTION DRAWING MH-D2

Drawn By: ELB

Date: 1/2/05

Approved By: KPN
TYPICAL PLACEMENT OF PIPE

NOTE: RECESSED FOR BELLS

DOUBLE STRING METHOD MAY BE USED IN LIEU OF BATTERBOARDS

GRADE BAR MIN. 2 X 6 X 12'

LAYING PIPE

NOTES

GRADE STAKES: Grade stakes shall be set at the following intervals:
- For grades less than 0.70% - 25 feet.
- For grades 0.70% and over - 50 feet.

GRADE POLE: The grade pole shall be a straight pole dressed with corners rounded, size depending on length but approximately 1/2" - 5/8". The pole shall be equipped with a metal bracket on bottom with a projecting length of 12". Notches shall be cut on the pole for the depth of the flow line below the grade string and for the depth of trench. A spirit level shall be used on the pole to determine when the pole is vertical.

PIPE BEDDING: Pipe bedding shall conform with the classification as shown on the Plans or as directed by the Engineer.

ALTERNATE METHOD: The Engineer may approve other methods of determining alignment and gradient of pipe lines if the contractor can demonstrate the same degree of accuracy can be obtained as by the method shown on this drawing.

CLASS "A"

CLASS "B"

CLASS "C"

PERMISSIBLE BEDDINGS

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SEWER CONSTRUCTION

STANDARD CONST DRAWING: SC-1
DRAWN BY: | APPROVED BY: |
LAMPHOLE FRAME & LID CASTING

ALL DIMENSIONS AS SPECIFIED FOR R-1975-B OR R-1978-B
LAMPHOLE FRAME & LID AS MANUFACTURED BY NEENAH FOUNDARY OR EQUAL
CONCRETE PAVEMENT

Minimum 2" Item 448 Asphalt Concrete Surface Course, Type 1

Existing Surface 8" Item 304 Aggregate Base

Granular Material

NOTE:
In the winter months, cold mix shall be used and replaced with 448 Asphalt Concrete in the spring.

FLEXIBLE PAVEMENT

NOTE:
Use Plastic Layer "Bond Breaker"
For Winter Repair.

Use hot A.C. (65-100) as a sealer. Apply to exposed areas before 448 Asphalt Concrete is placed and after to the joint.

Granular Material

Minimum 2" Item 448 Asphalt Concrete Surface Course, Type 1

Existing Surface

Granular Material

NOTE:
Remove 2" Concrete Surface, and replace with 448 Asphalt Concrete Type 1, PC 64-22 by May 15th of the following spring.

Compacted Backfill 304 Aggregate

"W"/2 But Not Less Than 6"

Compacted Backfill 304 Aggregate

"W"/2 But Not Less Than 6"

Compacted Backfill 304 Aggregate

"W"/2 But Not Less Than 6"

FLOWABLE FILL MIX:

Quantity of Dry Materials Per Cubic Yard

Cement: 100 pounds
Fly Ash (Class C): 300 pounds
Fine Aggregate: 2,800 pounds

These materials with approximately 70 gallons of water will yield approximately one cubic yard of flowable mortar with a compressive strength around 100 PSI. The fine aggregate should all pass the 3/16" sieve with from 0-10% passing a No. 200 sieve.

TAR & CHIP SURFACE

CITY OF LIMA, OHIO

Kirk P. Niemeyer, P.E. CITY ENGINEER

PAVEMENT REPLACEMENT ABOVE UTILITY CUTS

REVISED

DATE BY
6/8/06 DOL
6/20/01 JMG
5/3/15 ELB
1/12/16 ELB

STANDARD CONSTRUCTION DRAWING PRC

Drawn By: ELB Date: 3/22/05 Approved By: KPN
NOTE:
Remove 2” Concrete Surface, and replace with 44B Asphalt Concrete Type 1, PG 64–22 by May 15th of the following spring.

Concrete is to be Class "C, 8" thick on major street, 6" thick on residential street.

Use hot A.C. (65–100) as a sealer. Apply to exposed areas before 44B Asphalt Concrete is placed and after to the joint.

Plastic Layer "Bond Breaker"

Existing Surface

Paving Brick

Existing Base

NOTE:
To insure adhesion of 44B Asphalt Concrete to concrete leave finish rough.

Granular Material

Compacted Backfill 304 Aggregate

WINTER STREET CUT REPAIR

NOTES:
Bedding illustrated is "CLASS B" in all examples.

In lieu of Compacted Backfill 304 Aggregate, a ready mixed Flowable Fill may be used. If Flowable Fill is used, then overcutting of the trench is not necessary, but it is to be left 2” down from existing surface and a minimum of 2” of Asphalt Concrete Surface Course, Type 1 is to be applied as shown in typical sections.

FLOWABLE FILL MIX:

<table>
<thead>
<tr>
<th>Quantity of Dry Materials Per Cubic Yard</th>
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<tbody>
<tr>
<td>Cement: 100 pounds</td>
</tr>
<tr>
<td>Fly Ash (Class C) 300 pounds</td>
</tr>
<tr>
<td>Fine Aggregate 2,600 pounds</td>
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</tbody>
</table>

These materials with approximately 70 gallons of water will yield approximately one cubic yard of flowable mortar with a compressive strength around 100 PSI. The fine aggregate should all pass the ¾” sieve with from 0–10% passing a No. 200 sieve.

CITY OF LIMA, OHIO

KIRK NIEMEYER, P.E.  CITY ENGINEER

WINTER STREET CUT REPAIR

REVISIONS

STANDARD CONSTRUCTION DRAWING  PRC-2

Drawn By: BSH  Date: 3/22/05  Approved By: KPN
<table>
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<tr>
<td>1. The design details shown hereon shall govern the construction of curbs unless otherwise shown on project plans.</td>
</tr>
<tr>
<td>2. Concrete shall be class &quot;C&quot; with, 6% ±2% entrained air.</td>
</tr>
<tr>
<td>3. Maximum spacing for contraction joints shall be 10 feet.</td>
</tr>
<tr>
<td>4. Expansion joints shall be placed a maximum of 30 feet apart.</td>
</tr>
<tr>
<td>5. Transverse joints in rigid pavements shall be extended through curbs constructed integrally with the pavement.</td>
</tr>
<tr>
<td>6. Type CG, CS, and W may be used with rigid or flexible pavements.</td>
</tr>
<tr>
<td>7. Type RG is for use with rigid pavements only and may be used for replacement sections only.</td>
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<tr>
<td>Charles R. Foliard, P.E., P.S. CITY ENGINEER</td>
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<tr>
<td>CONCRETE CURB DETAILS Type CG, CS, RG, and W</td>
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<tr>
<td>STANDARD CONSTRUCTION DRAWING CD-1</td>
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<tr>
<td>Drawn By:</td>
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<tr>
<td>SCF</td>
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NOTES

1. The design details shown hereon shall govern the construction of driveways unless otherwise shown on project plans.

2. All concrete shall be class C with 6% ±2% entrained air.

3. Minimum driveway width shall be 10 feet. Maximum driveway width, without a safety island shall be 25 feet.

4. All driveway widths over 25 feet must have a safety island as shown. Maximum driveway width with a safety island shall be 50 feet.

5. Expansion joints shall be placed a maximum of 30 feet apart.

6. If contraction joints are sawn, such work shall be completed within three days after concrete placement, preferably within eight to twenty-four hours.

7. Sidewalks, curbs and drive approaches may be poured monolithically with the approval of the Engineer. When constructed in this manner the expansion material is optional and in its place a 1” finish groove must be provided parallel to the curb.

8. Driveways requiring safety islands may be constructed of the alternate approach method where the islands radius would be 2½ feet.

ALTERNATE APPROACH

SECTION A-A, CONCRETE APPROACH

SECTION A-A, ASPHALT APPROACH

SPECIAL NOTE: FOR DRIVE APPROACHES WHERE CURB ABUTS SIDEWALK, SEE STANDARD DRAWING SW-1

CONCRETE RADIUS

SAFETY ISLAND IF REQ'D

6" CONCRETE ITEM 608

7" ACORECATE BASE ITEM 304

6" CONCRETE ITEM 452

SLOPE 1/4" PER FOOT

4" ASPHALT ITEM 404

SLOPE 1/4" PER FOOT
OFF-STREET PARALLEL PARKING
UNIMPROVED STREET
(NO CURB WITH ORIGINAL CONSTRUCTION)

NOTES:
1. PARKING AREA SHALL MEET HARD SURFACE STANDARDS FOR OFF-STREET PARKING (RESIDENTIAL).
2. STORM WATER MANAGER OR DESIGNEE RESERVES RIGHT TO REFUSE CONSTRUCTION OF NEW PARKING AREA IF DEEMED DETRIMENTAL TO STORM WATER COLLECTION AND CONVEYANCE.
3. STORM WATER MANAGER OR DESIGNEE RESERVES RIGHT TO REQUIRE REMOVAL OR MODIFICATION OF EXISTING PARKING AREA IF DEEMED DETRIMENTAL TO STORM WATER COLLECTION OR CONVEYANCE.
4. CITY OF LIMA ASSUMES NO RESPONSIBILITY FOR MAINTENANCE OR REPAIR OF PARALLEL OFF-STREET PARKING AREAS.
5. NO CONCRETE/WOOD CURBING OR LANDSCAPE ROCKS.
NOTES:
1. SURFACE WATER RUNOFF FROM HARD SURFACES SHALL NOT BE DIRECTED TO NOR CREATE FLOODING OR DAMAGE TO ADJACENT PROPERTY.

2. TOPSOIL (6" to 8") SHALL BE REMOVED PRIOR TO INSTALLATION OF HARD SURFACE PARKING MATERIALS.

3. STANDARDS FOR INDUSTRIAL AND COMMERCIAL PARKING SHALL BE STAMPED AND SEALED BY A REGISTERED OHIO PROFESSIONAL ENGINEER.
NOTES

1. The design details shown hereon shall govern the construction of sidewalks unless otherwise shown on project plans.

2. All concrete shall be class C with 6±2% entrained air.

3. Expansion joints shall be placed at a maximum of thirty (30) feet apart.

4. If contraction joints are sawn, such work shall be completed within three days after concrete placement, preferably within eight to twenty-four hours.

5. Maximum area for each sidewalk section shall be 35 square feet.

6. A 4" cylindrical form should be used in places where meters or signs are to be installed. If meters or signs are not removed, they shall be boxed according to the drawing.

7. Sidewalks, curbs and drive approaches may be poured monolithically with the approval of the Engineer. When constructed in this manner the premolded expansion material is optional and in its place a 1" finish groove must be provided parallel to the curb.

8. When sidewalk is cut for utility repairs or other purposes, the entire sidewalk panel shall be replaced.

9. In areas of replacement for deficient existing sidewalk, match existing width.

CITY OF LIMA, OHIO

STANDARD SIDEWALKS

STANDARD CONSTRUCTION DRAWING SW-1

Drawn By: DOL Date: 10/1/97 Approved By: C F
NOTES

DIMENSIONS, LOCATION AND TYPE of curb ramp may be modified as directed by the engineer in accordance with the following.

TYPE of curb ramp built shall be the type that best fits the location unless a type is specified in the plans.

JOINTS shall be provided in the curb ramp as extensions of walk joints and consistent with 608.03 requirements for a new concrete walk. A 1/2" (705.03) expansion joint filler shall be provided around the edge of ramps built in existing concrete walk. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

WIDTH of ramp shall normally be 4' but a minimum width of 3'-4" may be used to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

SLOPE (Sr) of the ramp toward the curb is preferred to be 12:1 or flatter related to the horizontal but the maximum slope shall be 12:1 relative to the existing or proposed walk slope.

LENGTH (L): The minimum ramp length is 6’ from the face of a 6” curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration.

LANDING (D): May be reduced to 3’-0” in existing sidewalks if the landing is unconstrained along the backedge.

WALK THICKNESS in the ramp slopes shall be 4” minimum or thicker as necessary to match adjacent walk thickness.

SURFACE TEXTURE shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk.

DETECTABLE WARNINGS: Detectable warning tiles are to be fiberglass and installed in the location shown. Dimensions for the domes are 2’ from the back of the curb by the full width of the ramp. (see notes on DWG & Stds. WR-2)
NOTES

DIMENSIONS, LOCATION AND TYPE of curb ramp may be modified as directed by the engineer in accordance with the following:

TYPE of curb ramp built shall be the type that best fits the location unless a type is specified in the plans.

JOINTS shall be provided in the curb ramp as extensions of walk joints and consistent with 608.03 requirements for a new concrete walk. A 1/2” (705.03) expansion joint filler shall be provided around the edge of ramps built in existing concrete walks. Lines shown on this drawing indicate the ramp edge and slope changes and are not necessarily joint lines.

WIDTH of ramp shall normally be 4’ but a minimum width of 3’-4” may be used to better fit the walk configuration or where site conditions are restricted by narrow walks, pole foundations, drainage inlets, etc. The width may be tapered.

SLOPE (Sr) of the ramp toward the curb is preferred to be 12:1 or flatter related to the horizontal but the maximum slope shall be 12:1 relative to the existing or proposed walk slope.

LENGTH (L): The minimum ramp length is 6’ from the face of a 6” curb and may be increased where feasible to obtain a flatter ramp slope or to better blend with the walk configuration.

WALK THICKNESS in the ramp slopes shall be 4” minimum or thicker as necessary to match adjacent walk thickness.

SURFACE TEXTURE shall be obtained by coarse brooming transverse to the ramp slopes and shall be rougher than adjacent walk.

DETECTABLE WARNINGS: Detectable warning tiles are to be fiberglass and installed in the location shown. Dimensions for the domes are 2’ from the back of the curb by the full width of the ramp. (see notes on DWG & Stds. WR-2)
NOTES

1. FOR CURB DETAILS SEE STANDARD CONSTRUCTION DRAWING, CD-1, TYPE CS

2. FOR SIDEWALK DETAILS SEE STANDARD CONSTRUCTION DRAWING, SW-1

3. SOIL AREA BETWEEN CURB AND SIDEWALK AND BETWEEN SIDEWALK AND BUILDING SHALL BE LANDSCAPED TO CONFORM WITH ADJACENT STREETSCLAE
SECTION THRU FILL

SECTION THRU CUT OR FILL

SECTION THRU CUT

5'-0"

ALTERNATE TYPICAL SECTION

INCLINED STYLE

TYPICAL SECTION

PARABOLIC STYLE

CITY OF LIMA, OHIO

WALKWAYS

REVISED DATE BY
CITY ENGINEER

1/1/77 11/20/85 REA

WALKWAY

STANDARD CONST. DRAWING WW-1

DRAWN: 27 JUNE 1969

DRAWN BY: V.A.C. APPROVED BY
NOTE: Table reflects the absolute minimum allowable design of flexible pavements. Soil Conditions of CBR 3.

1. Item 448 Asphalt Concrete Surface Course, Type 1 (1” Minimum)
2. Item 407 Tack Coat
3. Item 448 Asphalt Concrete Intermediate Course, Type 2
4. Item 301 Asphalt Concrete Base
5. Item 304 Aggregate Base
6. Item 204 Subgrade Compaction
7. Item 408 Prime Coat
8. Item 609 Concrete Curbs—(Type W or CG) See Std. CD-1
9. Item 608 Concrete Sidewalk—(4” Minimum Width)

FLEXIBLE PAVEMENT

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<th>LOCAL STREET</th>
<th>COLLECTOR STREET</th>
<th>ARTERIAL STREET</th>
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<td>A Asph. Conc. Pavement</td>
<td>7½” Asphalt Concrete</td>
<td>9½” Asphalt Concrete</td>
<td>11” Asphalt Concrete</td>
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<tr>
<td>B Composite Pavement</td>
<td>4” Asphalt Concrete on 7” Aggr. Base</td>
<td>5” Asphalt Concrete on 9” Aggr. Base</td>
<td>5” Asphalt Concrete on Aggr. Base</td>
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CITY OF LIMA, OHIO

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FLEXIBLE PAVEMENT
A Asphalt Concrete Pavement
B Composite Pavement

STANDARD CONSTRUCTION DRAWING PVT. A&B
Drawn By: B&B Date: 3/2/92 Approved By: CEF
GUTTER FINISH

Special care shall be exercised during construction to ensure a tight joint. A width of 3.0" is recommended in all gutters.

CASTING ADJUSTED TO GRADE

CAST TO BE SET IN FULL BED OF PORTLAND CEMENT MORTAR.

PORTLAND CEMENT CONCRETE CLASS C

FINISH SURFACE 1/4" ABOVE CASTING. CASTING SHALL BE SET AFTER COMPLETION OF INTERMEDIATE COURSE.

LAPPING LONGITUDINAL JOINTS

FEATHERED AREA MIN. LENGTH=10' PER 1' OF "D"

PLACING FEATHERED AREAS

RESURFACING
NOTES

MATERIAL: Lumber used in the construction of barricades shall be No. 1 common yellow pine or No. 1 common douglas fir, or other materials approved by the Engineer, surfaced on four sides standard.

PAINTING AND REFLECTORIZATION: All rails of the barricades shall be reflectorized with orange and white reflectorized sheeting in 6" wide alternate stripes which slope downward toward the centerline of the road at an angle of 45°. All braces and legs shall be painted white.

YELLOW LIGHTS: Each barricade shall have a yellow light with a minimum lens diameter of 6". The optical unit consisting of lens, reflector and source shall be enclosed in, and securely held in place by the housing. The optical shall be monodirectional. The rate of flash shall be 50 to 70 flashes per minute and "On Time" shall be at least 25% of the time. During the hours of darkness the flash shall be conspicuously visible at all distances up to 800 feet under normal atmospheric conditions. Flasher may be operated by battery, electric generator, commercial power or propane gas.

SIGNS: Upon the erection of barricades according to the above standards, the contractor shall furnish a ROAD CLOSED sign size 48” by 30” which shall be mounted on barricades as shown.

LOCATION: Two barricades shall be located on the construction site and maintained at each location noted on the construction drawings or as directed by the Engineer.
NOTES

MATERIAL: Lumber used in the construction of barricades shall be No. 1 common yellow pine or No. 1 common Douglas fir, or other materials approved by the Engineer, surfaced on four sides standard.

PAINTING and REFLECTORIZATION: All barricade rails shall be reflectorized using orange and white reflectorized sheeting in 6" wide alternate stripes which slope downward at an angle of 45°. All remaining braces and legs shall be painted yellow.

YELLOW LIGHTS: In lieu of reflectorization, at the discretion of the Engineer, a flashing yellow light with a minimum lens diameter of 6" may be used. The optical unit consisting of lens, reflector and source shall be enclosed in, and securely held in place by the housing. The optical shall be mono-directional. The rate of flash shall be 50 to 70 flashes per minute and the "On Time" shall be at least 25% of the time. During the hours of darkness the flash shall be conspicuously visible at all distances up to 800' under normal atmospheric conditions.

LOCATION: A minimum of two barricades shall be placed and maintained at each location, or as noted on the construction drawings, or as directed by the Engineer.

FAILURE TO PLACE AND MAINTAIN: The failure to place and maintain proper barricades at each location shall result in barricades being placed by the City of Lima and a fine of $100 per day being levied in accordance with The Codified Ordinances Chapter 1022.