STANDARD PLANS
FOR STREET IMPROVEMENTS
MAY 2019

Stephen Jackson, City Engineer
Shannon Hansen, Assistant City Engineer – Development
Alan McKeen, Assistant City Engineer – Capital Projects
## STREET DRAWINGS INDEX

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Pipe Zone Backfilling

Type A
Flowable Fill Concrete

Type B
Typical for PVC Pipe Installation

Type C
Typical for Concrete Pipe Installation

Type D
Typical for Ductile Iron Pipe or C-900 Installation

Notes
1. Place graded imported 1-1/2 inch minus sewer rock (ASTM 4 or 5) gravel material per APWA 31 05 13 or native soil (as directed by city engineer) for backfill in pipe zone with maximum lift thickness 8-inches before compaction. Compaction is 95% or greater relative to a standard proctor density.

2. Minimum width of trench measured at the spring line of the pipe, including any necessary sheathing:

<table>
<thead>
<tr>
<th>Pipe I.D.</th>
<th>Width</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 21&quot;</td>
<td>O.D. + 12&quot;</td>
</tr>
<tr>
<td>21&quot; to 44&quot;</td>
<td>O.D. + 24&quot;</td>
</tr>
<tr>
<td>Greater than 44&quot;</td>
<td>O.D. + 30&quot;</td>
</tr>
</tbody>
</table>

3. Install pipe in center of trench.

4. Concrete: 2000 PSI minimum per APWA 03 30 04 flowable fill per APWA 31 05 15.

5. Pipe zone: Do not use large sewer rock, pea gravel or recycled rap aggregate in the pipe zone.

6. Under perforated PVC pipe install Mirafl 500X or acceptable equal. Stabilization—Separation geotextile between sewer rock and all other backfill material per APWA section 31 05 19.

7. Install geotextile Mirafl #140 fabric or approved equivalent over trench backfill prior to placement of roadbase or subgrade.

Drawn by: DHR
Scale: None
Date: 9/01
Revisions: 1/19

Layton City
Standard Drawing
Backfill
ST-ST-01
NOTES:

1. PROVIDE APWA 31 05 13 GRANULAR BORROW WELL GRADED 2-INCH MAXIMUM ABOVE PIPE ZONE. IF NATIVE MATERIAL COMPLIES WITH THE SPECIFIED BORROW, CONTRACTOR MAY USE AS APPROVED BY CITY ENGINEER. COMPACT MATERIALS IN MAXIMUM LIFTS OF 8 INCH BEFORE COMPACTION. COMPACTION IS 95% OR GREATER RELATIVE TO A MODIFIED PROCTOR DENSITY, APWA SECTION 31 23 26.

2. ASPHALT CONCRETE: USEAC−10 PG 58−28 DM − 1/2 OR AC−20 PG 64−55 DM − 3/4 AS SPECIFIED BY CITY ENGINEER AND PER APWA 32 12 05 ASPHALT CONCRETE.

3. SEAL CRACKS PER APWA 32 01 17 WITH ELASTOFLEX 65 PER ASTM D 5078.

4. UNTREATED BASE COURSE: USE GRADE 1 OR GRADE 3/4 APWA 32 11 23 AGGREGATE BASE COURSE. INSTALL PER APWA SECTION 32 05 10 WITH LIFT THICKNESS (BEFORE COMPACTION) OF 8-INCHES WITH RIDING COMPACTION EQUIPMENT AND 6-INCHES USING HANDHELD COMPACTION EQUIPMENT.

5. TACK COAT: CLEAN ALL HORIZONTAL AND VERTICAL SURFACES. APPLY FULL COVERAGE. USE EMULSIFIED ASPHALT GRADE SS−1H AT THE RATE OF 0.15 GALLONS PER SQUARE YARD PER APWA SECTION 32 12 13.13.

6. MATCH THICKNESS OF EXISTING ROADBASE OR 8" MINIMUM.

7. A 3 YEAR MORATORIUM EXISTS ON ALL NEWLY PAVED ROAD WAYS. ANY CUTS INTO A MORATORIUM MUST BE APPROVED BY THE CITY ENGINEER. THE EXISTING ASPHALT MUST BE MILLED AND PAVED A MINIMUM OF 5', OR AT THE DISCRETION OF THE CITY ENGINEER, FROM EACH EDGE OF THE TRENCH.
NOTES:

1. CONCRETE SHALL BE AS SPECIFIED IN APPLICABLE STANDARD DRAWINGS & SPECIFICATIONS.

2. ALL STREET CROWNS SHALL BE INSPECTED AND APPROVED BY THE CITY INSPECTOR BEFORE PAVING OPERATION BEGINS.

3. NO SANITARY SEWER OR LAND DRAIN LATERALS OUT OF MANHOLES.

4. NATURAL GAS LINES SHALL BE LAID 6.0 FT FROM PROPERTY LINE ON EITHER SIDE OF THE STREET.

5. SANITARY SEWER LINES AND CULINARY WATER LINES SHALL BE LOCATED ON OPPOSITE SIDES OF THE STREET, WITH A MINIMUM OF 10' OF SEPARATION, AS SHOWN, AT ALL TIMES AND SHALL CROSS AS FEW TIMES AS POSSIBLE.

6. WATER VALVES SHALL BE PLACED IN LINE WITH PROPERTY LINES AT INTERSECTIONS AND AS DETERMINED BY THE CITY ENGINEER.

7. SEE ST-ST-04 AND ST-ST-05 FOR WIDTHS ON ITEMS A-D AS WELL AS PROPER USE OF 4.5' AND 7.5' WIDTH PARK STRIPS.

8. THIS DRAWING SHALL BE CONSIDERED A PART OF ALL DEVELOPMENT UTILITY CONSTRUCTION AND THE CITY'S STANDARD SPECIFICATIONS.

9. FOR ADDITIONAL INFORMATION ON SPECIFIC ITEMS, SEE STANDARD DRAWINGS.
SUBDIVISION STREET CROSS SECTIONS

62 FT. RIGHT OF WAY – RESIDENTIAL COLLECTOR STREET

58 FT. RIGHT OF WAY – RESIDENTIAL STREET

*50 FT. RIGHT OF WAY – MINOR STREET

*39 FT. RIGHT OF WAY

*PRIVATE STREET 33 FT. TBC TO TBC

*ONLY IN CUL-DE-SACS, OR LOOP STREETS SERVING TEN OR FEWER LOTS OR SENSITIVE LANDS AREA

*DESIGNATED FOOTHILL AREA ONLY AS APPROVED BY CITY ENGINEER

*PARK-STRIP/SIDEWALK/ROW REQUIREMENTS AS APPROVED BY CITY ENGINEER

DRAWN BY
DHR
SCALE
NONE
DATE
6/09
REVISIONS

City
Layton

STANDARD DRAWING
SUB ST XSECTION
ST-ST-05
DRIVE APPROACH

SECTION A-A

<table>
<thead>
<tr>
<th>TABLE OF DRIVEWAY WIDTHS</th>
<th>% OF FRONTAGE ALLOWED IN APPROACH</th>
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<tbody>
<tr>
<td>ZONE</td>
<td>MINIMUM WIDTH (FT)</td>
</tr>
<tr>
<td>A</td>
<td>10</td>
</tr>
<tr>
<td>R-5</td>
<td>10</td>
</tr>
<tr>
<td>R-1-6</td>
<td>10</td>
</tr>
<tr>
<td>R-1-8</td>
<td>10</td>
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<tr>
<td>R-1-10</td>
<td>10</td>
</tr>
<tr>
<td>R-MH</td>
<td>10</td>
</tr>
<tr>
<td>R-2</td>
<td>10</td>
</tr>
<tr>
<td>RM-1</td>
<td>10</td>
</tr>
<tr>
<td>RM-2</td>
<td>10</td>
</tr>
<tr>
<td>R-H</td>
<td>10</td>
</tr>
</tbody>
</table>

THE DRIVE PAVEMENT SHALL BE CONSTRUCTED AS FOLLOWS:

WIDTH AT WALK          PAVEMENT SECTION
10.0' TO 12.0'         NO SPLIT REQUIRED
13.0' TO 20.0'         2 EQUAL WIDTH SECTIONS
21.0' TO 28.0'         3 EQUAL WIDTH SECTIONS
29.0' TO 40.0'         4 EQUAL WIDTH SECTIONS

THERE SHALL BE EXPANSION JOINT MATERIAL BETWEEN EACH SECTION.
NOTES:
1. DRIVE APPROACH SHALL BE USED AS APPROVED BY CITY ENGINEER.
2. DRIVEWAY SHALL HAVE A WIDTH OF NOT LESS THAN TWENTY FEET (20') NOR GREATER THAN THIRTY-FIVE FEET (35') IN WIDTH ON LOCAL AND COLLECTOR STREETS.
3. ON CITY ARTERIAL STREETS THE WIDTH SHALL NOT BE LESS THAN TWENTY-EIGHT FEET (28'), NOR EXCEED FORTY FEET (40') IN WIDTH.
4. THERE SHALL BE EXPANSION JOINT MATERIAL BETWEEN EACH SECTION.
5. SIDEWALK SECTION MUST BE 6" MINIMUM THICKNESS (PLACED ON 6 INCHES OF COMPACTED ROADBASE) THROUGH WIDTH OF DRIVEWAY OR BE REPLACED WITH 6" CONCRETE TO NEAREST JOINT BEYOND WIDTH OF DRIVEWAY.
6. REMOVE AND REPLACE ALL DETERIORATED, WEAK, OR UNSOUND CONCRETE.
7. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5' FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15%. REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 6% MAXIMUM.
8. CONCRETE SHALL BE CLASS 4,000 PER APWA 03 30 04.

THE DRIVE PAVEMENT SHALL BE CONSTRUCTED AS FOLLOWS:
WIDTH AT WALK  PAVEMENT SECTION
20' TO 28' 3 EQUAL WIDTH SECTIONS
29' TO 40' 4 EQUAL WIDTH SECTIONS
DRIVE APPROACH AT EXISTING CURB & GUTTER

NOTES

1. THE CONTRACTOR IS REQUIRED TO HAVE A CITY PERMIT.

2. HORIZONTAL CUT TO BE WIDTH OF DRIVEWAY PLUS FLARES ON EACH SIDE.

3. SIDEWALK SECTION MUST BE 6" MINIMUM THICKNESS (PLACED ON 6 INCHES OF COMPACTED ROADBASE) THROUGH WIDTH OF DRIVEWAY OR BE REPLACED WITH 6" CONCRETE TO NEAREST JOINT BEYOND WIDTH OF DRIVEWAY.

4. REMOVE AND REPLACE ALL DETERIORATED, WEAK, OR UNSOUND CONCRETE.

5. DIFFERENCE IN SLOPE OF DRIVEWAY RAMP AND THE SLOPE OF A LINE BETWEEN THE GUTTER AND A POINT ON THE ROADWAY 5' FROM THE FRONT EDGE OF THE GUTTER SHALL NOT EXCEED 15% REDUCE DRIVEWAY RAMP SLOPE, NOT GUTTER SLOPE, WHERE REQUIRED. BREAKOVER ANGLE AT BACK OF APPROACH SHALL NOT EXCEED 8% MAXIMUM.

6. CONCRETE SHALL BE CLASS 4,000 PER APWA 03 30 04.

7. THE MINIMUM DISTANCE FROM THE PROPERTY LINE TO THE DRIVEWAY (MEASURED AT THE FRONT OF THE WALK) IS 4.5 FEET.

8. CURE CONCRETE WITH TYPE II (WHITE PIGMENTED) COMPOUND PER APWA 03 39 00.

TABLE OF DRIVEWAY WIDTHS

<table>
<thead>
<tr>
<th>ZONE</th>
<th>MINIMUM WIDTH (FT)</th>
<th>MAXIMUM WIDTH (FT)</th>
<th>% OF FRONTAGE ALLOWED IN APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>R-S</td>
<td>10</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>R-1-6</td>
<td>10</td>
<td>35</td>
<td>35</td>
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<tr>
<td>R-1-8</td>
<td>10</td>
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<tr>
<td>R-1-10</td>
<td>10</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>R-MH</td>
<td>10</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>R-2</td>
<td>10</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>RM-1</td>
<td>10</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>RM-2</td>
<td>10</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>R-H</td>
<td>10</td>
<td>32</td>
<td>33</td>
</tr>
</tbody>
</table>
A PERMIT AND INSPECTION ARE REQUIRED FOR CURB AND GUTTER OR DRIVE APPROACH REPLACEMENT. CALL PUBLIC WORKS AT 801-336-3700 TO SET UP INSPECTION. MINIMUM OF 24 HOURS NOTICE IS REQUIRED.

TYPICALLY 30" WIDE HIGH BACK CURB AND GUTTER

WHEN CURB AND GUTTER OR A DRIVE APPROACH IS BEING REPLACED ADJACENT TO EXISTING STREET ASPHALT, A MINIMUM WIDTH OF 12 INCHES OF EXISTING ASPHALT, MUST BE SAWCUT, REMOVED AND REPLACED. THE LENGTH OF ASPHALT TO BE REMOVED WILL BE THE SAME LENGTH OF CURB AND GUTTER OR DRIVE APPROACH BEING REPLACED.

EXISTING STREET ASPHALT

SAWCUT EXISTING ASPHALT
CURB & GUTTER & WATERWAY

TYPICAL SECTION — STANDARD 30 INCH HIGH BACK CONCRETE CURB AND GUTTER — 4.5 FT. OR 7.0 FT. PARKSTRIP — 4.0 FT. WIDE WALK

SLOPE 2.0%

6" COMPACTED ROADBASE

TYPICAL SECTION — STANDARD 30 INCH HIGH BACK CONCRETE CURB AND GUTTER — 6.0 FT. WIDE ABUTTING WALK.

CURB AND WALK ARE TO BE PLACED ON COMPACTED ROADBASE 6 INCHES THICK.

NOTE: PLACE MASTIC EXPANSION JOINTS @ 40 FT. AND CONSTRUCTION JOINTS @ 10 FT.

TYPICAL SECTION 30” CONCRETE CURB & GUTTER

3" MIN. 5" MAX

5.0 FT. MIN/10.0 FT. MAX

MINIMUM 8 INCHES COMPACTED

5-#5 BARS @ 12" O.C.

TYPICAL WATERWAY SECTION

CONCRETE SHALL BE 6.3 BAG MIX MINIMUM 4000 PSI.
CONCRETE SIDEWALK

PLAN

6'-0" USE IN VICINITY OF SCHOOLS, CHURCHES, SHOPPING CENTERS, AND WHERE DIRECTED.

5'-0" USE FOR ALL STANDARD SIDEWALKS

4" 6"

6" COMPACTED ROADBASE

NOTE 1 AND 6

SECTION A-A

NOTE: PLACE MASTIC EXPANSION JOINTS @ 40 FT. AND CONSTRUCTION JOINTS @ 40 FT. (ALTERNATE) AND CONTROL JOINT @ 4 FT.

NOTES:

1. USE MONOLITHIC CONSTRUCTION 4" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS OF 6" IN RESIDENTIAL ZONE AND 8" IN COMMERCIAL AND INDUSTRIAL ZONE AREA IS REQUIRED.

2. PLACE CONTROL JOINTS AT INTERVALS EQUAL TO 1 TO 1 1/2 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK. CONTROL JOINT 3/4 INCH DEEP.

3. USE 1/2" EXPANSION JOINT FILLER AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS OR DRIVEWAYS AND WHERE SIDEWALK MEETS TOP BACK OF CURB.

4. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".

5. USE FINE HAIR-BROOM TO FINISH WALKS ON GRADES UNDER 6% OVER 6% GRADE USE ROUGH HAIR-BROOM.

6. USE SIX INCHES OF COMPACTED ROADBASE UNDER SIDEWALK, CURB AND CUTTER AND DRIVE APPROACHES.

7. CURE CONCRETE WITH TYPE II (WHITE PIGMENTED) COMPOUND PER APWA 03 39 00.

DRAWN BY
DHR

SCALE
NONE

DATE
10/93

REVISIONS
4/01

STANDARD
DRAWING
WALK-DET

ST-10-10
NOTES:
1. SITE CONDITIONS WILL VARY. CONSTRUCTION OF RAMP, LANDING, AND TRANSITION MAY BE CHANGED, BUT THEY MUST MEET DIMENSIONS AND SLOPE SHOWN ON PLAN. THE USE OF FLARES, CURB WALKS, ETC. ARE AT THE DISCRETION OF THE ENGINEER.

2. 4' X 4' MINIMUM LANDING WITH MAXIMUM 2% RUNNING AND CROSS SLOPE. BLENDED RAMPS (5% MAX. SLOPE) DO NOT REQUIRE LANDING.

3. RAMPS 8.33% (1:12) MAXIMUM RUNNING SLOPE.

4. THE WARNING SURFACE SHALL EXTEND 24" MIN. IN THE DIRECTION OF PEDESTRIAN TRAVEL AND MUST OCCUPY THE FULL WIDTH OF CURB CUT.

5. LOCATE THE DETECTABLE WARNING SURFACE SO THE EDGE NEAREST THE STREET IS AT OR WITHIN 2" OF THE BACK OF CURB.

6. RAMP GRADE BREAK MUST BE PERPENDICULAR TO RUNNING SLOPE.

7. LOCATE CURB CUT WITHIN CROSSWALK.

8. WHEN DETECTABLE WARNING SURFACE IS CUT, GRIND OFF REMAINING PORTION OF ANY CUT DOMES. SEAL ALL CUT PANEL EDGES TO PREVENT WATER DAMAGE.


<table>
<thead>
<tr>
<th>ITEM</th>
<th>MAX. RUNNING SLOPE*</th>
<th>MAX. CROSS SLOPE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LANDING</td>
<td>2% (1:48H)</td>
<td>2% (1:48H)</td>
</tr>
<tr>
<td>2. RAMP</td>
<td>8.33% (1:12H)</td>
<td>2% (1:48H)</td>
</tr>
<tr>
<td>3. CLEAR SPACE</td>
<td>5% (1:20H)</td>
<td>2% *1:48H</td>
</tr>
<tr>
<td>4. SIDEWALK</td>
<td></td>
<td>2% *1:48H</td>
</tr>
<tr>
<td>5. FLARE</td>
<td>10% (1:10H)</td>
<td></td>
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</tbody>
</table>
DETECTABLE WARNING SURFACE PAVER UNIT

PAVER UNIT PLAN

PAVER UNIT REFLECTED PLAN

SECTION A

SECTION B

NOTE: MAY BE SAW CUT TO CREATE A 24"x24" PAVER UNIT

DETAIL 1

DETAIL 2

TRUNCATED DOME

FIELD DOT PATTERNS

STANDARD DRAWING
SURFACE PAVER
ST-ST-12
MINIMUM MILL AND OVERLAY LIMITS FOR STREET EXCAVATION

PERPENDICULAR TRENCHES

PARALLEL TRENCHES

NOTES:

1. WIDTH OF MILL AND OVERLAY
   EXTEND 2-INCH MILL AND OVERLAY TO THE
   EDGE OF THE ADJACENT TRAVEL LANE.
   MINIMUM OF 10- FEET WIDE.

2. SURFACE LEVEL TOLERANCES
   3/8 INCH PARALLEL TO STREET CENTERLINE
   AND 1/4 INCH TRANSVERSE TO STREET
   CENTERLINE AS MEASURED WITH A 10 FOOT
   LONG STRAIGHT EDGE.

3. MULTIPLE TRENCHES
   MULTIPLE TRENCHES INTO THE STREET AN
   INDIVIDUAL STREET SYSTEM WILL REQUIRE A
   CONTIGUOUS MILL AND OVERLAY THAT
   ENCOMPASSES ALL TRENCHES.

TRENCH REPAIR
OVERLAY LIMITS

STANDARD
DRAWING
ST-ST-13
STANDARD AND TEMPORARY CUL-DE-SAC

500' MAXIMUM LENGTH OF CUL-DE-SAC

30" CURB & GUTTER
4.5' PARK STRIP
4.0 FT. WALK

STANDARD CUL-DE-SAC

500' MAXIMUM LENGTH OF CUL-DE-SAC

30" CURB & GUTTER
7.5' PARK STRIP
5.0 FT. WALK

MOUNTABLE CURB
ASPHALT SURFACE

FIRE ACCESS ROAD FOR FUTURE DEVELOPMENT WITH ON-SITE AND OFF-SITE TEMPORARY TURN-AROUNDS

500' MAXIMUM LENGTH OF CUL-DE-SAC

30" CURB & GUTTER
7.5' PARK STRIP
5.0 FT. WALK

4.5' PARK STRIP
MIN. 10'

SUBDIVISION BOUNDARY
DRIVEABLE SURFACE

FUTURE STREET EXTENSION

*ANY CUL-DE-SAC WITH FUTURE STREET TIE-IN MUST HAVE CITY ENGINEER AND FIRE MARSHALL APPROVAL PRIOR TO CONSTRUCTION.

<table>
<thead>
<tr>
<th>RADIUS (FT.)</th>
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<tbody>
<tr>
<td>R-1 MINIMUM DRIVEABLE</td>
<td>40</td>
</tr>
<tr>
<td>R-2 CENTER TO RIGHT-</td>
<td>50</td>
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<tr>
<td>OF-WAY</td>
<td></td>
</tr>
<tr>
<td>R-3 BACK OF CURB</td>
<td>25</td>
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<tr>
<td>RADIUS</td>
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Layton City
STANDARD DRAWING
CULDESAC
ST-ST-14

DRAWN BY
DHR
SCALE
NONE
DATE
3/96
REVISIONS
4/10
DEAD END ACCESS WAY
ONLY ALLOWED IN SENSITIVE LAND AREA

ALTERNATIVES TO 120' HAMMERHEAD
TEMPORARY TURNAROUNDS – MODIFIED

REQUIREMENTS FOR TEMPORARY TURNAROUND:

1. TEMPORARY EASEMENT ESTABLISHED ON PLAT & WILL BE VACATED UPON EXTENSION OF PUBLIC STREET
2. HOMEOWNER TO MAINTAIN & KEEP THE TURN AROUND CLEAR AT ALL TIMES. NOTE ON PLAT AS WELL AS SEPARATE NOTICE TO BE RECORDED TO LOT.
3. SIGN ADDED AT ENTRANCE “TURNAROUND – PUBLIC SERVICE VEHICLES ONLY”
4. PERMANENT DRIVABLE SURFACE CAPABLE OF HOLDING 75,000 LB VEHICLE
5. SIDEWALK DEPTH 6” MINIMUM OVER 6” THICK ROADBASE
6. CURB SHALL BE PAINTED RED 12’ EACH SIDE OF DRIVE APPROACH
MONUMENT CAP AND BASE

MONUMENT CAP
SURVEYED BY LAND SURVEYORS

(TYP.) NOTE 4
C. INT.

3-18-1993
L.S. 1012

(TYP.) NOTE 2
(TYP.) NOTE 3

PLAN

CAST IN PLACE MONUMENT BASE

6" MIN.  
30" - 36"

CONCRETE APAWA 03304
CLASS 4000

PRECAST MONUMENT BASE

6" MIN.  
30" - 36"

8" MIN.

1.5" MIN
1/4"

3" MIN.
5/8"

1" 1/2"

SECTION

NOTES:

1. USE MONUMENT CAP (PLATE) OF BRASS OR BRONZE.

2. SHOW MONTH, DAY, AND YEAR WHEN CAP IS INSTALLED.

3. SHOW LICENSE NUMBER OF LAND SURVEYOR WHO SET THE CAP.

4. SHOW THE TYPE OF MONUMENT ON THE CAP. THE FOLLOWING IS A LIST OF COMMONLY USE ABBREVIATIONS:

ML INT. : MONUMENT LINE INTERSECTION
INT. : INTERSECTION LINE
C. INT. : CENTERLINE INTERSECTION
P.I : POINT OF INTERSECTION
P.C. : POINT OF CURVATURE
P.T. : POINT OF TANGENCY
P.O.C. : POINT ON CURVE
P.R.C. : POINT OF REVERSE CURVE
P.C.C. : POINT OF COMPOUND CURVE
W.C. : WITNESS CORNER
P.O.T. : POINT ON TANGENT
S.C. : SECTION CORNER

Layton City
STANDARD DRAWING
MON-CAP
ST-ST-16
UTILITY LOCATION ON CURVED STREET
MINIMUM RADIUS 200'

STORM DRAIN TYPICALLY PLACED SOUTH AND WEST OF LIP OF CURB.

WATERLINE TYPICALLY PLACED 4 FT. NORTH OR EAST OF THE STREET CENTERLINE. BENDS ARE REQUIRED ON WATERLINE WITH STREET CENTERLINE RADIUS LESS THAN 220 FT.

MIN. 200' RADIUS

STORM DRAIN AND LAND DRAIN MAXIMUM 3 FT. EXTENSION PAST TOP BACK OF CURB

LAND DRAIN TYPICALLY PLACED 10 FEET NORTH AND EAST OF STREET CENTERLINE.

SANITARY SEWER TYPICALLY PLACED 9 FEET SOUTH AND WEST OF STREET CENTERLINE.

SECONDARY WATERLINE TYPICALLY PLACED OFF LIP OF CURB OR IN 7.5 FT. PARK-STRIP ON EITHER SIDE OF THE STREET SO IT DOES NOT CROSS AT CURVES.
CONCRETE GRADE RING ADJUSTMENT

PLAN

A

12" MIN.

STORM

A

SEE NOTE

12"

FINAL PAVEMENT SURFACE

CONCRETE SHALL BE 4000 PSI

USE GRADE RINGS TO ADJUST FRAME TO GRADE

SECTION A

12" MIN. CONCRETE COLLAR

SEE NOTE

12"

SECTION B

NOTE: FINISH GRADE TO BE 1/2" BELOW AND MATCH EXISTING SLOPE OF STREET PAVEMENT SURFACE.
FIELD FENCE AND GATE

1. FIELD "T" FENCE POSTS TO BE INSTALLED 2' MINIMUM IN GROUND.

2. ALL CORNER AND GATE POST TO BE 3" DIAMETER SCHEDULE 40 STEEL POSTS EMBEDDED IN 3' ON CONCRETE WITH MIN 2" DIAMETER ANGLE POST.

3. MAXIMUM BRACE POST SPACING IS 400’.

4. FENCE TO BE CONNECTED TO FENCE POST WITH 10 GAUGE WIRE AT GROUND LEVEL, TOP OF FENCE POSTS, AND AT 1’ SPACING BETWEEN (3 CONNECTIONS MINIMUM).

5. CONCRETE SHALL BE 6.0 BAG MIN. AND DESIGNED TO 4000 PSI ON A 28 DAY COMPRESSIVE TEST.

6. MAXIMUM FENCE POST SPACING IS 16 FEET WITH 2 – 36” STAYS (RED BRAND OR EQUAL) PER 16 FEET.

7. MESH TO BE 12 GAUGE GALVANIZED WIRE WITH 4”X4” SPACING (RED BRAND OR EQUAL).

8. BARB WIRE TO BE 50 DEFENDER WITH 2 RUNS WITH 6” SPACING (RED BRAND OR EQUAL).
NON-CLIMBING FIELD FENCE AND GATE

FIELD "T" FENCE POST
2" DIAM. STEEL ANGLE POST
3" DIAM. STEEL GATE POSTS

5.0 FT. HIGH NON-CLIMBING FENCE OR
4.0 FT. HIGH NON-CLIMBING FENCE
WITH ONE STRAND OF BARB WIRE

CONCRETE EMBEDMENT
(CORNER/GATE POSTS)
(ANGLE POST OPTION 1)

NOTES:
1. FIELD "T" FENCE POSTS TO BE INSTALLED 2' MINIMUM IN GROUND.
2. ALL CORNER AND GATE POST TO BE 3" DIAMETER SCHEDULE 40 STEEL POSTS EMBEDDED IN 3' OF CONCRETE WITH MIN 2" DIAMETER ANGLE POST.
3. FENCE TO BE CONNECTED TO FENCE POST WITH 10 GAUGE WIRE AT GROUND LEVEL, TOP OF FENCE POSTS, AND AT 1' SPACING BETWEEN (3 CONNECTIONS MINIMUM).
4. MAXIMUM FENCE POST SPACING IS 10 FEET.
5. CONCRETE SHALL BE 6.0 BAG MIN. AND DESIGNED TO 4000 PSI ON A 28 DAY COMpressive TEST.
6. MAXIMUM BRACE POST SPACING IS 400 FEET.
SHOULDER WORK WITH MINOR ENCROACHMENT
66-FOOT RIGHT OF WAY

NOTES:

1. FOR NIGHTTIME USE, CONES AND WARNING SIGNS SHALL BE EQUIPPED WITH LIGHTING DEVICES FOR MAXIMUM VISIBILITY.

2. THIS EXAMPLE IS FOR A 40 MPH SPEED LIMIT (S) AND AN OFFSET (W) OF 8.0'. L = WSS/60. IN THIS EXAMPLE, L = (8x40x40)/60 = 213.3'. 1/3 L = 213.3/3 = 71 OR ROUND TO 70.0'.
SHOULDER WORK WITH MINOR ENCROACHMENT 60-FOOT RIGHT OF WAY

NOTES:

1. FOR NIGHTTIME USE, CONES AND WARNING SIGNS SHALL BE EQUIPPED WITH LIGHTING DEVICES FOR MAXIMUM VISIBILITY.

2. THIS EXAMPLE IS FOR A 40 MPH SPEED LIMIT (S) AND AN OFFSET (W) OF 8.0’. L = WSS/60. IN THIS EXAMPLE, L = (6x40x40)/60 = 213.3’. 1/3 L = 213.3/3 = 71 OR ROUND TO 70.0’.
LANE CLOSURE ON TWO LANE ROAD
WITH LOW TRAFFIC VOLUMES

NOTES:
1. FOR NIGHTTIME USE, CONES AND WARNING SIGNS SHALL BE
   EQUIPPED WITH LIGHTING DEVICES FOR MAXIMUM
   VISIBILITY.
# Sign Spacing Chart

<table>
<thead>
<tr>
<th>Posted Speed(s) MPH</th>
<th>Minimum Sign Spacing (A)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 and Lower</td>
<td>100 FT</td>
</tr>
<tr>
<td>35</td>
<td>350 FT</td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td></td>
</tr>
</tbody>
</table>

## Lane Shift

**Notes:**

1. For nighttime use, cones and warning signs shall be equipped with lighting devices for maximum visibility.

2. For speeds of 40 MPH and less, \( L = \frac{(W*S^2)}{60} \). For speeds greater than 40 MPH, \( L = W*S \), where \( S \) = posted speed.

3. 10.0-FT MIN lanes required.
TEMPORARY MAIL SERVICE

ACCEPTABLE TEMPORARY MAIL SERVICE
MUST BE MOVABLE AND ON STABLE BASE
NOTES:
1) ALL ROUNDABOUTS SHALL CONFORM TO THE FHWA DESIGN STANDARDS.
2) TO BE USED ON COLLECTOR ROADS AS APPROVED BY THE CITY ENGINEER.
3) REFER TO ST-ST-27 FOR DETAILS OF SPEED TABLE DESIGN AND CROSS SECTION "A-A".

LEGEND

SN-1

ROUNDABOUT

W16-17P
24" X 12"

SN-2

NOTE PB

WASHINGTON

30" X 30"

W11-2
30" X 30"

SN-3

Street

W16-17P
24" X 12"

W3-5
30" X 30"

R2-1
24" X 30"

R4-7
24" X 30"

SN-4

WALK

SN-5

ONE WAY
SIGN RB-1

SN-6

D3-1
VARIES X 12"
8" LETTERING

SN-7

YIELD SIGN
R1-2

SPEED LIMIT
15

SN-8

NOTE PA

DRAWN BY

STANDARD
DRAWING

LAYTON CITY

ST-ST-26

REFORM
TRAFFIC CIRCLE

NOTES:
1) ALL TRAFFIC CIRCLES SHALL CONFORM TO THE FHWA DESIGN STANDARDS.
2) TO BE USED IN RESIDENTIAL APPLICATIONS AS APPROVED BY THE CITY ENGINEER.
STANDARD CROSSWALK SIGNS AND STRIPING

NOTES:
1. The City Engineer may approve having the lights flash at all times. In this case, the pedestrian push button should not be installed.

<table>
<thead>
<tr>
<th>TABLE 1: PLACEMENT OF YIELD LINES</th>
<th>TABLE 2: PLACEMENT OF WARNING SIGNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 MPH AND BELOW</td>
<td>35 MPH AND BELOW</td>
</tr>
<tr>
<td>20 FT</td>
<td>100 FT</td>
</tr>
<tr>
<td>35-40 MPH</td>
<td>40 MPH AND ABOVE</td>
</tr>
<tr>
<td>35 FT</td>
<td>120 FT</td>
</tr>
<tr>
<td>40 MPH</td>
<td>150 FT</td>
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<tr>
<td>50 FT</td>
<td>225 FT</td>
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<tr>
<td>45 MPH</td>
<td>275 FT</td>
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<tr>
<td>60 FT</td>
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</tbody>
</table>

Layton City

STANDARD
DRAWING
CROSSWALKS
ST-ST-29