STANDARD DETAILS

PUBLIC WORKS
CITY OF LITTLE ROCK

STREET AND DRAINAGE FACILITIES IMPROVEMENTS

APRIL 2015
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RING & COVER PW-13

#6 @ 6" O.C. EW (EACH WAY)

4'-0" MIN

#6 BARS

CURB FACE

PEDESTAL / STOOL SHALL BE CONCRETE FILLED. TIE TO INLET TOP AND BOTTOM STRUCTURE

HEIGHT VARIES

#6 @ 6" O.C. EW

6" CLEARANCE FROM OUTSIDE OF PIPE TO INSIDE OF BOX

FALL: 2" - 3' EXT
4" - 6' EXT
6" - 10' EXT

#6 @ 10" O.C. EW

4" DIA STOOLS . SPACING NOT TO EXCEED 4' FROM EDGE OF BOX.

4" SCH 40 PVC TO DRAIN SUBGRADE

B-B
NOTE:

PRE-CAST STRUCTURES ARE ALLOWED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASSURE COMPLIANCE OF PRE-CAST STRUCTURES TO STANDARD DESIGN DETAILS AND PLAN CONFIGURATIONS.
RING & COVER

#6 BARS

2'-0" MIN

A-A

CURB FACE

PEDESTAL / STOOL SHALL BE CONCRETE FILLED, TIE TO INLET TOP AND BOTTOM STRUCTURE.

HEIGHT VARIES

SEE TABLE FOR THICKNESS

#6 @ 6" O.C. EW

FALL: 2" - 3' EXT

#6@10" O.C. EW

4" DIA STOOLS . SPACING NOT TO EXCEED 4' FROM EDGE OF BOX.

PEDESTAL / STOOL SIZE DEPENDANT ON WALL THICKNESS

4" SCH 40 PVC TO DRAIN SUBGRADE

B-B

4'-0" MIN

#6 @ 6" O.C. EW

6" CLEARANCE FROM OUTSIDE OF PIPE TO INSIDE OF BOX

6" - 10' EXT

#6@10" O.C. EW

2'-0" MIN

SEE TABLE FOR THICKNESS

HEIGHT VARIES

4'-0" MIN

#6 BARS

3', 6', OR 10' (MAX)

#6@10" O.C. EW

4" - 6' EXT

6" - 10' EXT

4" SCH 40 PVC TO DRAIN SUBGRADE

B-B

2'-0" MIN

PEDESTAL / STOOL SHALL BE CONCRETE FILLED, TIE TO INLET TOP AND BOTTOM STRUCTURE.
NOTE: ALL REINFORCING TO BE PLACED 1-1/2" CLEAR TO THE INSIDE OF THE STRUCTURE.

NOTE:

PRE-CAST STRUCTURES ARE ALLOWED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASSURE COMPLIANCE OF PRE-CAST STRUCTURES TO STANDARD DESIGN DETAILS AND PLAN CONFIGURATIONS.
CURB INLET W/ YARD DRAINAGE
NOTE: LOW POINT (/SAG) INLETS: SLOPE SHALL BE 1 FT PER 1" OF DEPRESSION BOTH SIDES

GUTTER DEPRESSION DETAIL

NOTE: THE TOP FACE OF GUTTER SHALL DROP 1/2 OF THE GUTTER DEPRESSION ACROSS THE INLET OPENING.
NOTE:

PRE-CAST STRUCTURES ARE ALLOWED. IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO ASSURE COMPLIANCE OF PRE-CAST STRUCTURES TO STANDARD DESIGN DETAILS AND PLAN CONFIGURATIONS.

ROUND AREA INLETS ARE ALLOWED. REFER TO PW-1B FOR STRUCTURE REINFORCING.
PLACE 4" DIA. STOOLS AT CENTERLINE OF INLET, THEN SPACE ADDITIONAL STOOLS EQUAL DISTANCE FROM CENTERLINE NOT TO EXCEED 4".

INLET THROAT BETWEEN STOOLS

NOTE: This detail is not to be used for inlets in curb radius. See PW-10 for detail of inlet top in curb radius.
Reinforcement #6 @ 6" centers each direction

1-1/2" radius concrete edge

Face of Adjacent curb.

REFER TO CURB DIMENSION

2" gutter depression

Two 3/4" rebar extra reinforcement
Required when inlet is located within intersection radius or adjacent to commercial driveway.

1-1/2" X 1-1/2"
Chamfer

Transition gutter starting 3" from face of inlet to allow 6" opening

SQUARE REINFORCED BOX REQUIRED

INLET THROAT IN RADIUS (SIDE VIEW)

PLACE 4" DIA. STOOLS AT CENTERLINE OF INLET,
THEN SPACE ADDITIONAL STOOLS EQUAL DISTANCE
FROM CENTERLINE NOT TO EXCEED 3'.

INLET THROAT IN RADIUS (FRONT VIEW)
NOTE: Junction box top may be held below ACHM Surface and manhole cover extended up flush with paving surface.
A. Manhole steps: corrosion resistant, coated, and reinforced with steel per ASTM C-478. Steel reinforcing minimum 1/2" diameter.

B. Acceptable Manufacturers:
   1. Utility Products Inc. Perma Step 100-2
   2. ICM Inc. Polypropylene coated steps.
   3. M.A Industries, Inc. Polypropylene coated steps. #PSI-PF
   4. BOWCO, by H. Bowen Co.

C. Capable of supporting minimum 300 lb. load.

D. Non-Slip textured treads.

E. Required in all structures 3'-0" deep or greater.
NOTE:
1. FURNISHED WITH MACHINED HORIZONTAL BEARING SURFACES.

ITEM:
1. #2018-A (ENVIRONMENTAL) AS MANUFACTURED BY DEETER FOUNDRY, INC. OR EAST JORDAN 2750A MANHOLE COVER (275-24) WITH ABOVE LETTERING, OR APPROVED EQUAL PER ENGINEER.

MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35B
FINISH: NO PAINT
WEIGHT: COVER 140 LBS.
        FRAME 133 lbs.
FACE OF MAILBOX AT BACK OF CURB

Min 3'-0" Clearance

1/4"x1" Aluminum Or 1/8"x1 1/2" Steel Brace

1"x6"x16" Mounting Board

4"x4"x6" TREATED Support Post

1/2" Expansion 4 Sides (Where Sidewalk Exists)

8" PVC Sleeve (Grout Adj. To Post)

Curb & Gutter

Compacted Earth

Front To Match Back Of Curb 48" Above Street.
ROOF: 1/2" BOARD SHEATHING
RAFTERS ON 24" C-C (2"x4" HORIZONTAL)
SHINGLES: 3-TAB SQUARE BUTT (100 LB)
OR ROLL ROOFING (MINERAL SURFACED)
ROOFING MELT (15-LB)
PAIN: (ALL EXPOSED WOOD SHALL BE PAINTED)
LIGHT GREY, DARK ROOF
INCLUDING UNDER EAVES.

KIOSK TO BE PLACED ON PROJECT
AS DIRECTED BY THE ENGINEER.
OR AS SHOWN ON PLANS.
NOTE: Placement and Location of Sub-Drain shall be determined by Engineer during Construction Period or as Indicated on Plans.

BACKFILL ABOVE C-BALLAST TO BE 50% MIX EXCAVATION MATERIAL AND SAND. SOD TO BE PLACED ON TOP.

Wearing Surface (see typical section)

C. & G.

C-Ballast 1/4"
Min to 1 1/2" Max

2'

6"

Filter Fabric Encasement Mirofi 140N or Equivalent

4" Perforated PVC Pipe Drain to Inlets.

SUB-DRAIN DETAIL
Material for pedestrian handrail shall be AASHTO M270, Gr. 36 and shall be painted (black). Nuts & washers shall be stainless steel as noted on details.
Contractor may place the 1/8" galvanized steel template on the finished sidewalk surface and provide shim plates and neoprene pads for leveling, in lieu of placing the template on nuts, leveling and finishing with grout.

Note: All posts & balusters shall be vertical.
GENERAL NOTES

1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS, OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 95% OF MAXIMUM DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT. (AASHTO T-180)

2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, SUBGRADE SHALL BE COMPACTED TO A DENSITY OF 90% MAXIMUM (AASHTO T-180).

3. CRUSHED STONE MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF 100% MAXIMUM (AASHTO T-191).

4. CENTERLINE PROFILE WILL REQUIRE HEIGHT GREATER THAN CURB FOR SOME STREETS TO MAINTAIN 2% CROSS-SLOPE.

THICKNESS SHALL BE DETERMINED BY SOIL TEST AND PAVEMENT DESIGN IF REQUIRED BY DEPARTMENT OF PUBLIC WORKS.

20′-0″ PAVEMENT FOR MINOR RESIDENTIAL WHERE APPROVED BY CITY.

*NOTE: PAVEMENT RECONSTRUCTION TO CENTERLINE IS REQUIRED WHEN EXISTING STREET DOES NOT MEET THESE STANDARDS.
GENERAL NOTES

1. In areas to receive bituminous paving, concrete driveways, or curb and gutter, subgrade shall be compacted to a density not less than 95% of maximum density obtained at optimum moisture content. (AASHTO T-180)

2. For areas of subgrade preparation to receive concrete sidewalks, subgrade shall be compacted to a density 95% maximum. (AASHTO T-180).

3. Crushed stone- density of compacted material in each course shall be compacted to a density 100% maximum. (AASHTO T-191).

4. Centerline profile will require height greater than curb streets to maintain 2% cross-slope.

Thickness shall be determined by Soil Test and PAVEMENT Design if required by Department of Public Works.

NOTE:

* 8" Concrete W/ 3" ACWM (1 1/2 Binder / 1 1/2 Surface) as approved by Public Works as Substitute Construction. PAVEMENT Reconstruction to Centerline is required if existing pavement does not CONFORM to these STANDARDS.
GENERAL NOTES

1. IN AREAS TO RECEIVE BITUMINOUS PAVING, CONCRETE DRIVEWAYS, OR CURB AND GUTTER, SUBGRADE SHALL BE COMPACTED TO A DENSITY NOT LESS THAN 90% OF MAXIMUM DENSITY OBTAINED AT OPTIMUM MOISTURE CONTENT. (AASHTO T-180)

2. FOR AREAS OF SUBGRADE PREPARATION TO RECEIVE CONCRETE SIDEWALKS, THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF 95% OF THE MAXIMUM (AASHTO T-180).

3. CRUSHED STONE - DENSITY OF COMPACTED MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY 100% MAXIMUM (AASHTO T-191).

4. CENTERLINE PROFILE WILL REQUIRE HEIGHT GREATER THAN CURB FOR SOME STREETS TO MAINTAIN 2% CROSS-SLOPE.

5. WIDENING REQUIRES BUTT JOINTS SAW CUT WHERE NEW WIDENING ABUTS OLD.

ALL THICKNESS SHALL BE DETERMINED BY SOIL TEST AND PAVEMENT DESIGN IF REQUIRED BY DEPARTMENT OF PUBLIC WORKS.

NOTE:

* 8" CONCRETE W/ 4" ACHM (2" BINDER/2" SURFACE) FOR AREA AS APPROVED BY PUBLIC WORKS AS SUBSTITUTE CONSTRUCTION.

PAVEMENT RECONSTRUCTION TO CENTERLINE IS REQUIRED, IF EXISTING PAVEMENT DOES NOT CONFORM TO THESE STANDARDS.
OUTSIDE ROADWAY / SIDE DRAIN BEDDING

SELECT BACKFILL MATERIAL COMPACTED TO 95% MODIFIED PROCTOR

MINIMUM OF 6 INCHES STRUCTURAL BEDDING COURSE

RIGID PIPE SIDE DRAIN
(REINFORCED CONCRETE PIPE)

Compacted or Undisturbed Subgrade

OUTSIDE ROADWAY / SIDE DRAIN BEDDING

SELECT BACKFILL MATERIAL COMPACTED TO 95% MODIFIED PROCTOR

FINISHED GRADE

MINIMUM OF 6 INCHES STRUCTURAL BEDDING COURSE

FLEXIBLE PIPE SIDE DRAIN
(HIGH DENSITY POLYETHYLENE
HIGH DENSITY POLYPROPYLENE)

Compacted or Undisturbed Subgrade

Backfill Trench with CLASS-7 base material or select granular material approved by the engineer.
Compact to 95% Modified proctor
(Do Not Use Excavation spoil for backfill)

MINIMUM COVER

1'
Under Roadway / Cross Drain Bedding

* See Public Works Standard Specifications for trench width and depth required for storm drain applications.
The City will allow Contractor to backfill utility and storm drain installations under a planned new street with select material or approved borrow material providing Engineer of Record and Contractor comply with following:

* Engineer of Record must submit a request in writing to Department of Public Works. Letter must note agreement with conditions of this memorandum.

* Trench backfill with other than aggregate per current City standard is not allowed in cuts of existing street, on projects where street construction is a partial widening (boundary street widening), or a street extension less than 300 feet in length. Locations must be approved prior to start of construction.

* A one year maintenance bond shall be provided and shall cover all construction associated with project (curbs, base, ACHM surface, drainage inlets, storm drain, sidewalks, and other improvements in right-of-way).

* Trenches shall be a minimum of eighteen inches in width to allow for proper compaction.

* Aggregate material (Class 7) shall be placed to subgrade elevation per PW-25.

* Material used for backfilling shall be free of frozen material, trash, lumber, broken concrete having a dimension larger that two inches, or other debris. Such material shall be capable of being compacted to a density of not less than ninety-five (95) percent of maximum density, at optimum moisture, obtained in laboratory in accordance with AASHTO—Designation T-180. All tests are to be at expense of Developer or Contractor.

* A letter certifying compaction of backfill in trenches shall be furnished for a minimum of every third lift with eight inch lifts maximum (one test per two feet of fill). Test locations shall be spaced no further than one hundred feet, one per street crossing, or as required by Engineer of Record or City staff.

* Failure to provide satisfactory density testing of backfill for each trench will require one of three options of Contractor: A. Removal and re-compaction with certified testing. B. A maintenance bond for five (5) years shall be furnished for total project. C. A 3000 psi seven inch thick concrete cap two feet wider than trench may be installed below base course similar to Public Works Standard Detail PW-25.
UPRIGHT CLASS I

Standard section for integral curb shall conform to that portion of standard section above dashed line as indicated hereon.

Use Edger Here

2"Radius

5" 2"

14" to 16"

2"Radius

17"

7"

8"

1 1/2" for normal crown section. This dimension may vary from 1" to 2.5".

* REQUIRED ON CHENAL PARKWAY

Install 1/2" Bituminous Expansion Joint Material
At 100’ Max. Intervals Or At Tie Ins To Boxes,
Radius Returns Or Driveway Aprons. Control Joints
15’ Max. O.C.

Joint Sealant Shall be Sonneborn SL2 Self Leveling Urethane
as Manufactured by Chemrex or Equivalent.
Install 1/2" Bituminous Expansion Joint Material
At 100' Max. Intervals Or At Tie Ins To Boxes,
Radius Returns Or Driveway Aprons. Control Joints
15' Max. O.C.

Joint Sealant Shall be Sonneborn SL2 Self Leveling Urethane
as Manufactured by Chemrex or Equivalent.
If Less Than 10', Construct as Composite Drive (Subject to Property Owners Approval)

5' min

10' Min. 20' Max 10' Min 10' Min 20' Max

 Sidewalk

ROW Width

Grass buffer

Gutter

1/2" Expansion Joint

C of Street

PLAN-PARALLEL DRIVE

PROPERTY LINE

 Sidewalk

Expansion Joint

Control Joint

Sidewalk

Grass buffer

Gutter

1/2" Expansion Joint

Varies

Sidewalk at Property Line

NOTE:
1. CONTROL JOINTS REQUIRED IN ALL DRIVEWAYS AT 12'-0" O.C. EACH WAY OR SPACED EQUAL TO THE WIDTH OF DRIVEWAY WHICHEVER IS LESS.

2. SECTIONS ARE ON PW-31.

3. GRASS BUFFER TO BE 5" WIDE UNLESS APPROVED BY CITY TO BE MODIFIED. GRASS BUFFER MAY BE REDUCED TO MINIMUM 3" WITH CITY APPROVAL.

4. DRIVEWAY GRADES SHALL BE DESIGNED BY ENGINEER TO KEEP STORMWATER IN STREET; 2% MINIMUM SLOPE AT SIDEWALK CROSSING, MAXIMUM % OF GRADE CHANGE IS 16.
1. Driveway Grade Not To Exceed City Ordinance Requirements Stated in Section 31-210. Field Adjustment May Be Required At Certain Locations To Insure Proper Relation Between Driveway and Street Grades.

2. Driveways Shall Be Constructed To Property Line With Concrete Where Sidewalk Exists.

3. Driveway Apron Shall Be Constructed Monolithically With Gutter Section, Unless Dowled Into Gutter Section With 1/2” Dowels 18” Long at 12” on Center and Approved by Engineer.

4. DRIVEWAY GRADES SHALL BE DESIGNED BY ENGINEER TO KEEP STORMWATER IN STREET, 2% MINIMUM SLOPE AT SIDEWALK CROSSING, MAXIMUM % OF GRADE CHANGE IS 16. SEE DETAILS PW-36-40 FOR TYPICAL GRADING DETAIL.
Spacing Per City Ordinance 31-210

* Sidewalks at back of curb by permission of Department of Public Works (only when conditions dictate).

** Sidewalk area at driveway shall have cross slope of 1:50.
See City Ordinance Section 31-210 for permissible driveway slopes.

Thickness and reinforcements are required for conditions & expected wheel loading – 6” minimum thickness.

DRIVEWAY GRADES SHALL BE DESIGNED BY ENGINEER TO KEEP STORMWATER IN STREET, 2% MINIMUM SLOPE AT SIDEWALK CROSSING, MAXIMUM % OF GRADE CHANGE IS 16.
Thickness and reinforcements are required for conditions & expected wheel loading – 8" minimum thickness.

NOTE: Chenal Parkway Design Standards Required for Commercial Drives on Chenal Parkway. (See Master Street Plan)

DRIVEWAY GRADES SHALL BE DESIGNED BY ENGINEER TO KEEP STORMWATER IN STREET, 2% MINIMUM SLOPE AT SIDEWALK CROSSING, MAXIMUM % OF GRADE CHANGE IS 16.
NOTE: Alley Turnout Shall Be Constructed Monolithic With Gutter Section.
Hatched area denotes area of measurement for this pay item.

DRIVEWAY GRADES SHALL BE DESIGNED BY ENGINEER TO KEEP STORMWATER IN STREET, 2% MINIMUM SLOPE AT SIDEWALK CROSSING, MAXIMUM % OF GRADE CHANGE IS 16.
MAXIMUM GRADES FOR DRIVEWAY WITH 5’ SIDEWALK WHICH IS 5’ OFF BACK OF CURB

NOTE: 1. ALL GRADE CHANGES SHALL BE ROUNDED OFF WITH A 2’ RADIUS.
2. THE MAXIMUM GRADE CHANGE SHALL NOT EXCEED 16%.
3. GRADES SHOWN ARE THE MAXIMUM ALLOWED TO AVOID DRAGGING A VEHICLE.
   THE GRADES SHALL NOT BE DESIGNED OR USED EXCEPT IN EXTREME CONDITIONS.
MAXIMUM GRADES FOR DRIVEWAY WITH 5’ SIDEWALK AT BACK OF CURB

NOTE: 1. ALL GRADE CHANGES SHALL BE ROUNDED OFF WITH A 2’ RADIUS.
2. THE MAXIMUM GRADE CHANGE SHALL NOT EXCEED 16%.
3. GRADES SHOWN ARE THE MAXIMUM ALLOWED TO AVOID DRAGGING A VEHICLE. THE GRADES SHALL NOT BE DESIGNED OR USED EXCEPT IN EXTREME CONDITIONS.
MAXIMUM GRADES FOR DRIVEWAY WHEN GROUND FALLS AWAY FROM STREET WITH NO SIDEWALK

NOTE (1) DRIVEWAY AT 5.5’ FROM FACE OF CURB SHALL BE LEVEL WITH TOP OF CURB TO KEEP WATER IN STREET. ANY VARIATION REQUIRES APPROVAL FROM ENGINEER.

(2) ALL GRADE CHANGES SHALL BE ROUNDED OFF WITH A 2’ RADIUS.

(3) THE MAXIMUM GRADE CHANGE SHALL NOT EXCEED 16%.

(4) GRADES SHOWN ARE THE MAXIMUM ALLOWED TO AVOID DRAGGING A VEHICLE. THE GRADES SHALL NOT BE DESIGNED OR USED EXCEPT IN EXTREME CONDITIONS.
MAXIMUM GRADES FOR DRIVEWAY WHEN GROUND RISES FROM STREET WITH NO SIDEWALK

NOTE: 1. ALL GRADE CHANGES SHALL BE ROUNDED OFF WITH A 2’ RADIUS.
      2. THE MAXIMUM GRADE CHANGE SHALL NOT EXCEED 16%.
      3. GRADES SHOWN ARE THE MAXIMUM ALLOWED TO AVOID DRAGGING A VEHICLE.
         THE GRADES SHALL NOT BE DESIGNED OR USED EXCEPT IN EXTREME CONDITIONS.
MAXIMUM GRADES FOR DRIVEWAY WHEN GROUND FALLS AWAY FROM STREET WITH 5’ SIDEWALK 5’ OFF BACK OF CURB

NOTE

(1) DRIVEWAY AT 5.5’ FROM FACE OF CURB SHALL BE LEVEL WITH TOP OF CURB TO KEEP WATER IN STREET. ANY VARIATION Requires Approval FROM ENGINEER.
(2) ALL GRADE CHANGES SHALL BE ROUNDED OFF WITH A 2’ RADIUS.
(3) THE MAXIMUM GRADE CHANGE SHALL NOT EXCEED 16%.
(4) GRADES SHOWN ARE THE MAXIMUM ALLOWED TO AVOID DRAGGING A VEHICLE. THE GRADES SHALL NOT BE DESIGNED OR USED EXCEPT IN EXTREME CONDITIONS.
SIDEWALK MEANDER WITH GRASS BUFFER

NOTES:

1. THE EFFECTIVE LENGTH OF THE SIDEWALK MEANDER IS TO BE CENTERED ON THE OBSTRUCTION.
2. THE MINIMUM CLEAR WIDTH PARALLEL TO THE PATH OF TRAVEL TO PASS THE OBSTRUCTION SHALL BE 3 FEET.
Sidewalk Joints Shall be Cut at Least 20% Full Depth Of Sidewalk at Intervals Equal to Sidewalk Widths.

**NOTE:**

1. 1/2" Expansion Joint Spacing at 60' Or adjacent to Structures and Drives.
2. Sidewalk Expansion Material is Required Between Sidewalk and Curb.
3. Dowel bars with Expansion Joint Material required at inlets. See PW-42.

Existing Residential Walk Joint Sealant Shall be Sonneborn SL2 Self Leveling Urethane as Manufactured by Chemrex or Equivalent.

Back of Sidewalk to be right-of-way lines unless alternate location is approved.

Expansion joint shall be installed between public and private sidewalk, buildings or driveways.
GENERAL NOTE: PUBLIC SIDEWALK SHALL BE BUFFERED FROM STREET. SIDEWALK MAY BE INSTALLED ADJACENT TO CURB ONLY UPON RECEIVING WRITTEN AUTHORIZATION FROM PUBLIC WORKS.

SIDEWALK AT INLET

NOTE:
1/2" Expansion Joint Spacing at 60’ or adjacent to Structures and Drives. Sidewalk Expansion Material is Required Between Sidewalks and Inlets. Dowel bars with Expansion Joint Material required at Inlets.

Expansion Joint shall be installed between public sidewalks and private sidewalks, buildings or driveways.
GENERAL NOTE: PUBLIC SIDEWALK SHALL BE BUFFERED FROM STREET. SIDEWALK MAY BE INSTALLED ADJACENT TO CURB ONLY UPON RECEIVING WRITTEN AUTHORIZATION FROM PUBLIC WORKS.

NOTE: Control Joint at 10'-0" O.C. to Match Sidewalk Joins, Expansion Joints at 60' O.C. to Match Sidewalk Expansion Joints.

UNDISTURBED SOIL OR COMPACTED FILM

Face of Handrail

5'-0" (minimum width for sidewalk against curb)

#4'S AT 2'-0" -- TYPICAL TRANSVERSE REINFORCING

#4'S AT 1'-4" O.C. -- TYPICAL LONG REINFORCING

1% (2% MAX)

1/2" EXPANSION JOINT IS REQUIRED

STD. CLR CURB & GUTTER

NOTE: SUBSTITUTE 6" CURB FOR HANDRAIL WHEN HEIGHT IS LESS THAN 24" ABOVE GRADE.

** INTEGRAL TURNDOWN WALL SHALL NOT EXCEED 3'-0" IN HEIGHT. IF HEIGHT EXCEEDS 3'-0" THEN RETAINING WALL WITH FOOTING SHALL BE PROVIDED.
NOTE: Control Joint at 10'-0" O.C. to Match Sidewalk Joints. Expansion Joints at 60' O.C. to Match Sidewalk Expansion Joints.

3/4" Chamfer On Top Edges

2'-0" Minimum

5'-0" (Minimum Width for Sidewalk Adjacent to Curb)

1/2" Expansion Joint Required

Std. CLR Curb & Gutter

Compacted Fill

#4's at 2'-0" Typical Transverse Reinf.

#4's at 1'-4" o.c. typical long. reinf.

1% (2% max)

NOTES: Weep holes not required in turbnup wall. If height exceeds 2'-0", then this detail is not used. Retaining walls with footing required where height of turbnup exceeds 2'-0". Handrail or fencing required where height of turbnup exceeds 2'-0".

* Minimum Width For Sidewalk Adjacent to Curb On State Or U.S. Highway is 6'-0"
SIDEWALK CROSSOVER BRIDGE
DESIGNED FOR 500 L.B. VEHICLE LOAD

SECTION B-B

DRAINAGE CHANNEL WALL

PLAN VIEW

BAR | L | No.
---|---|---
A  | (L)+1'-6" | #7@4"
B  | (W)-3"   | #4@12"
C  | (H)+2'-2" | #4@8"
D  | (W)-2"   | #4@10"
E  | 3'-10"    | #4@8"
F  | (W)-3"   | #4@12"
G  | 3"        | #4@8"

L : LENGTH OF BRIDGE
W : WIDTH OF BRIDGE
1. Splice length permitted for "B", "D", and "F" bars only and shall be 18".

2. Compressive strength of concrete shall be not less than
   4000 p.s.i. for bridge slab
   3500 p.s.i. for bridge footings at piers

3. Use deformed bars grade 60

4. Allowable soil bearing pressure shall be not less than 1000 lb per sq.ft.

5. See PW-46 for rebar information

DITCH CHANNEL

SECTION A-A

Compacted subgrade

NOTE: See PW-41.
(A) The slope of the ramp shall not exceed 1:12 (8.33%). Contractors should form ramps at a grade lower than 8.33% to allow room for construction tolerances. Pouring and finishing ramps without the aid of a digital level in checking grades is discouraged, because contractors will be required to remove any ramp with grades exceeding requirements shown in standard details. Ramp surface shall be coarse broomed transverse to the slope. Grooves/joints are not to be installed in the ramp surface.

(B) The minimum thickness of ramps, sidewalks and landing areas shall be 4 inches. Concrete to be minimum 3000 p.s.i. Exposed aggregate concrete shall not be used on surface ramps. Wire reinforcement is not required in ramps or sidewalks unless specifically stated in design plans.

(C) The maximum ramp and landing cross-slope shall be 2.0% unless the street grade exceeds 2.0%, then the cross-slope of the ramp shall match the street running grade. Do not provide transitional warps in the gutter, ramp surface or landing area. The street running grade is measured directly in front of the ramp with a 4 foot digital level and is the grade of the street perpendicular to the ramp running slope where the asphalt abuts the gutter.

(D) Gutter shall not exceed 5.0% directly in front of a curb ramp. No lip or verticle separation shall be installed between the gutter and the ramp.

(E) The minimum ramp width shall be 4 feet. A three foot wide ramp is acceptable only in the case of an obstruction and with Public Works written approval. Curb ramps, sidewalks, median cuts and crosswalks shall be aligned unless not possible to aid impaired users.

(F) Ramp side flares shall not exceed 10.0% relative to the street. (Example: if the street slope is 5.0% then the side flare slope may be up to 15.0% on the low side to allow the flare to match curb height in a reasonable distance. The side flare slope on the high side of the ramp would remain at 10.0% or less grade since it will match curb height quickly).

(G) A minimum 3 foot long sidewalk transition shall be provided when matching curb ramp/level landing to existing sidewalks with cross slope exceeding 2.0%. Additional transition length may be required when matching to existing sidewalk with severe cross slope.

(H) Median cuts shall be 6 feet wide for two-way pedestrian traffic aligned with crossing. Median cut cross slope shall be maximum 2.0% or match street grade when roadway slope exceeds 2.0%.

(I) Ramp length is limited to 15 feet.

General Notes for Detectable Warning Devices

The detectable warning device shall be located so that the nearest edge of the device is 6 to 8 inches from the face of curb.

Truncated domes in the detectable warning surface shall meet the requirements of the geometric configuration shown.

Domes shall be aligned on a square grid in the predominant direction of travel to permit the wheels to roll between domes.

Detectable warning device shall be 24 inches in the direction of travel and extend the full width of the curb ramp or flush surface.

Detectable warning device shall be on the AHTD qualified products list for cast-in-place tactile panels (ADA detectable warning).

<table>
<thead>
<tr>
<th>FIRST CHOICE</th>
<th>SECOND</th>
<th>TYPE 1</th>
<th>CORNER LOCATIONS WITH WALK ADJACENT TO CURB BOTH NEW CONSTRUCTION AND ALTERATIONS</th>
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<tbody>
<tr>
<td>TYPE 2</td>
<td>CORNER LOCATIONS WITH WALK OFFSET FROM CURB A DISTANCE INSUFFICIENT TO ALLOW REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS)</td>
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<tr>
<td>TYPE 3</td>
<td>CORNER LOCATIONS WITH WALK OFFSET FROM CURB A DISTANCE SUFFICIENT TO ALLOW REQUIRED RAMP SLOPE (BOTH NEW CONSTRUCTION AND ALTERATIONS)</td>
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</tr>
<tr>
<td>TYPE 4</td>
<td>TANGENT LOCATIONS (BOTH NEW CONSTRUCTION AND ALTERATIONS)</td>
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</tr>
<tr>
<td>TYPE 5</td>
<td>TANGENT LOCATIONS (ALTERATIONS ONLY)</td>
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</tr>
</tbody>
</table>
CONCRETE ISLAND DETAIL

TYPE 1 RAMP
(WALK ADJACENT TO CURB)

EXPANSION JOINT

LEVEL LANDING

CONTROL JOINTS AT 5’ MAX. SPACING IN SIDEWALK

5% MAX

10:1 MAX

EXPANSION JOINTS

5’ MAX

DENOTES ACCESS RAMP UNIT PAY AREA

LEGEND

① SEE NOTE "A" ON PW-48
② SEE NOTE "C" ON PW-48
③ SEE NOTE "D" ON PW-48
④ SEE NOTE "F" ON PW-48
TYPE 2 RAMP
(WALK OFFSET FROM CURB–LANDING REQUIRED)
RAMPs ADJACENT TO GRASS REQUIRE 4"
CURB OR 1" FLARE PER PW–51 & PW–52.

LEGEND
① SEE NOTE "A" ON PW–48
② SEE NOTE "C" ON PW–48
③ SEE NOTE "D" ON PW–48
④ SEE NOTE "F" ON PW–48
DENOTES ACCESS RAMP
UNIT PAY AREA

TYPE 4 RAMP
(WALK ADJACENT TO CURB)

SECTION B–B
Ramp must cross street perpendicular to center line unless otherwise approved by the Public Works Department.

**Legend**

- **A** SEE NOTE "A" ON PW-48
- **C** SEE NOTE "C" ON PW-48
- **D** SEE NOTE "D" ON PW-48
- **G** SEE NOTE "G" ON PW-48

- DENOTES ACCESS RAMP UNIT PAY AREA

---

**Type 3 RAMP PLAN**

**Expansion Joint Alternate 1**

Curb Beyond Constructed Monolithic w/ Gutter

**Section A-A**
Ramp must cross street perpendicular to center line unless otherwise approved by the Public Works Department.

Curb must be poured with gutter as monolithic unit.

1' Side flare or 4" wide curb adjacent to ramp to protect landscape.

LEVEL LANDING NOT REQUIRED ON TYPE 3 RAMPS

DENOTES ACCESS RAMP UNIT PAY AREA

TYPE 3 RAMP PLAN

EXPANSION JOINT ALTERNATE 2

SECTION A–A
LEGEND

© SEE NOTE "A" ON PW-48
© SEE NOTE "C" ON PW-48
© SEE NOTE "D" ON PW-48

DENOTES UNIT PAY AREA

Curb Shall be 6" tall to protect landscaping.
Curb height taper to 0".

TYPE 5 RAMP

THIS RAMP REQUIRES APPROVAL FROM PUBLIC WORKS DEPARTMENT.

© RAMP LENGTH IS NEEDED TO OBTAIN GRADE LESS THAN 12:1 SLOPE, BUT MAXIMUM LENGTH SHALL BE 15 FEET.
NOTE: IF WALL HEIGHT EXCEEDS 8’ OR IF RETAINED EARTH SLOPES UP EXCEEDING 10% GRADE, THE WALL SHALL BE DESIGNED BY PROFESSIONAL ENGINEER WITH GEOTECHNICAL STUDY.

**BENDING DIAGRAM**

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<tr>
<th>BAR SIZE</th>
<th>BAR</th>
<th>PIN DIA.</th>
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<tbody>
<tr>
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<td>4</td>
<td>1 1/2</td>
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<tr>
<td>#5</td>
<td>5</td>
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**STEEL SCHEDULE**

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<tr>
<th>&quot;h&quot;</th>
<th>&quot;c&quot;</th>
<th>&quot;d&quot;</th>
<th>&quot;a&quot;</th>
<th>&quot;b&quot;</th>
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<td>6&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
<td>18&quot;</td>
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</tbody>
</table>

*Provide 3/4" chamfer full height of wall (each face) and, across top, tool joint concrete channel base.

**CONTROL JOINT**

Used at 10' O.C. each side (to align with fence posts).

**EXPANSION JOINT**

(Dowel bars to be 12" on center)

Reinforced concrete retaining wall

2" weep holes (max. spacing 10'-0" CTRs) to be placed to align with control joints.

All exposed edges to be chamfered 3/4".
NOTES:
* ALL FASTENING HARDWARE TO BE NON-CORROSIVE
* CONTRACTOR SHALL USE 8p. GALVANIZED SIDING NAILS OR 2" GALVANIZED SCREWS THROUGHOUT.
* ALL WOOD MEMBERS SHALL BE TREATED.
NOTES:

* ALL FASTENING HARDWARE TO BE NON-CORROSIVE
* CONTRACTOR SHALL USE 8p. GALVANIZED SIDING NAILS OR 2" GALVANIZED SCREWS THROUGHOUT.
* ALL WOOD MEMBERS SHALL BE TREATED.

GALVANIZED 2 7/8" O.D.
SCH. 40 ASTM A53
GRADE 8 METAL POSTS
MAXIMUM 8' O.C.

ROUND HEAD SHEET METAL BLUNT POINT HARDENED SELF TAPPING 20 GA.#10.

5/8"x1 1/2" LAG BOLTS (EACH SIDE)

2 HOLE ELECTRICAL METALLIC CONDUIT STRAP 2" WIDE

1"x6" TREATED FACE BOARDS
2"x4" INTERMEDIATE RAIL
2"x4" INTERMEDIATE RAIL (TYP.)
METAL POST
2"x4" INTERMEDIATE RAIL
1"x6" FACE BOARDS
2"x4" INTERMEDIATE RAIL
4"
2" CLEAR

12"Φ CONC. FTG. 3000 PSI CONC (TYP. ALL POSTS)

PLAN VIEW

ELEVATION

N.T.S.
**Grouted Rip-Rap Embankment Details**

- **Finished Grade**
- **Grouted Minimum Thickness**
- **Stone Rip-Rap**
- **Grout – 50% Penetration**
  - (Do Not Cover Surface)
  - See Detail A.
- **Measured Per S.Y.**
- **Extend Rip-Rap Slope Below Natural Grade.**
- **A filter fabric should be installed between the rip-rap and soil foundation complying with AASHTO M288**

**Detail A**

- **Grout AT Minimum 50% Penetration.**
- **Broom grout into stone. Minimum 50% of Surface Shall Be Exposed Stone.**

**% Stone | Weight of Pieces in Pounds**
--- | ---
Not More Than 15 | 75–150
40–45 | 25–75
30–35 | 6–25
Not More Than 15 | Less Than 6
SLOPE Rounding
(typical on all cut or fill slopes)

* Maximum height 15'-0" unless midheight
10' terraces utilized according to Section 29
of Little Rock Code of Ordinances.

** Interceptor ditch size shall be determined by engineer
soil foundation complying with AASHTO M288.

Notes

1. $L_a$ is the length of the riprap apron. Please see design plans for length.
2. $D = 1.5$ times the maximum stone diameter but not less than 6”.
3. In a well-defined channel extend the apron up the channel banks to an elevation of 6” above the maximum tailwater depth of to the top of the bank, whichever is less.
4. A filter blanket or filter fabric should be installed between the riprap and soil foundation complying with AASHTO M288.
5. Please see detail PW-60 for grouting.
NOTES:
1. GEOTEXTILE FABRIC (TYPE 4) IN ACCORDANCE WITH SECTION 625 (AHD SPECS).
3. TYPE B — USE ON DEVELOPMENTS WHERE THE LIFE OF THE PROJECT IS GREATER THAN SIX MONTHS AND WHERE THE SLOPE GRADIENT IS 3:1 OR GREATER.
5. INSPECT BARRIERS AT THE END OF EACH WORKING DAY, OR AFTER EACH RAIN, AND REPAIR OR CLEAN AS NECESSARY.
6. REMOVE SEDIMENT FROM BARRIER WHEN ONE HALF FULL.
7. DISPOSE OF SEDIMENT AND STABILIZE IT WITH VEGETATION.
8. REPLACE FILTER FABRIC WHEN DETERIORATED.
9. DESIGN LIFE OF A SYNTHETIC SILT FENCE IS APPROXIMATELY 6 MONTHS.
10. MAINTAIN UNTIL THE PROJECT IS VEGETATED OR OTHERWISE STABILIZED.
11. REMOVE BARRIERS AND ACCUMULATED SEDIMENT AND STABILIZE THE EXPOSED AREA WHEN THE PROJECT IS STABILIZED.
12. SILT FENCE SHALL BE INSTALLED ALONG THE CONTOUR, NEVER UP OR DOWN A SLOPE.
14. THE MAXIMUM DRAINAGE AREA FOR A CONTINUOUS SILT FENCE WITH BACKING SHALL BE 1 ACRE PER 150 LINEAR FEET OF FENCE LENGTH. THE SLOPE LENGTH ABOVE THE SILT FENCE WITH BACKING SHOULD BE NO MORE THAN 300 FEET.
NOTE: Use wood or steel posts.

SF-A SILT FENCE (TYPE A)

SF-B SILT FENCE (TYPE B)

SF-C SILT FENCE (TYPE C)

NOTE: Use steel posts - only.
1. LOCATE STONE STABILIZED PAD AT ANY POINT WHERE VEHICULAR TRAFFIC WILL BE LEAVING THE CONSTRUCTION SITE ONTO A PUBLIC RIGHT-OF-WAY, STREET, ALLEY, SIDEWALK, OR PARKING AREA OR ANY OTHER AREA WHERE THERE IS A TRANSITION FROM BARE SOIL TO A PAVED AREA.

2. WIDTH — 20'-0" MINIMUM BUT NOT LESS THAN FULL WIDTH OF ALL POINTS OF VEHICULAR EGRESS. LENGTH — 50'-0" MINIMUM.

3. MAINTAIN THE EXIT TO PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. PROVIDE PERIODIC TOP DRESSING WITH 1.5” - 3.5” STONE, AS CONDITIONS DEMAND. IMMEDIATELY REMOVE ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLE OR SITE ONTO ROADWAY OR INTO STORM DRAINS. CLEAN WHEELS TO REMOVE MUD PRIOR TO ENTRANCE ON TO PUBLIC RIGHTS-OF-WAY.

4. WHEN WASHING IS REQUIRED, DO SO ON AREAS STABILIZED WITH CRUSHED STONE DRAINING INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
DEBRIS FROM SLOPE ABOVE IS CAUGHT BY STEPS

WATER, SOIL, AND FERTILIZER ARE HELD BY STEPS—PLANTS CAN BECOME ESTABLISHED ON THE STEPS

STAIR STEPPING CUT SLOPES

GROOVING IS CUTTING FURROWS ALONG THE CONTOUR OF A SLOPE. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND PROVIDE SOME COVERAGE OF LIME, FERTILIZER AND SEED

GROOVING SLOPES

DOZER TREADS CREATE GROOVES PERPENDICULAR TO THE SLOPE

FILL SLOPE TREATMENT

EACH LIFT OF THE FILL IS COMPACTED, BUT THE OUTER FACE OF THE SLOPE IS ALLOWED TO REMAIN LOOSE SO THAT THE ROCKS, CLods, ETC. REACH THE NATURAL ANGLE OF REPOSE

TRACKING

SURFACE ROUGHENING
### TEMPORARY STABILIZATION

<table>
<thead>
<tr>
<th>Species</th>
<th>Rate / 1000 SF.</th>
<th>Planting Dates</th>
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</thead>
<tbody>
<tr>
<td>STRAW MULCH</td>
<td>92 LB.</td>
<td>ANY TIME FOR TEMPORARY COVER.</td>
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### TEMPORARY GRASSING

<table>
<thead>
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<th>Species</th>
<th>Rate / Acre</th>
<th>Planting Dates</th>
<th>Fertilizer</th>
<th>Rate / Acre</th>
<th>Mulch Rate</th>
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<tr>
<td>MILLET</td>
<td>50 LB.</td>
<td>JAN 21 TO AUG 14</td>
<td>10–20–10</td>
<td>500 LB.</td>
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<tr>
<td>RYE</td>
<td>100 LB.</td>
<td>AUG 15 TO JAN 20</td>
<td>10–20–10</td>
<td>500 LB.</td>
<td>TS–1</td>
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### PERMANENT GRASSING

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<th>Species</th>
<th>Rate / Acre</th>
<th>Planting Dates</th>
<th>Fertilizer</th>
<th>Rate / Acre</th>
<th>Mulch Rate</th>
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<tr>
<td>BERMUDA GRASS (UN-HULLLED)</td>
<td>5 LB.</td>
<td>MARCH 1 TO JUNE 15</td>
<td>10–20–10</td>
<td>800 LB.</td>
<td>REFER TO</td>
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<tr>
<td>BERMUDA GRASS (HULLLED)</td>
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<td>LESPEDEZA (KOBE)</td>
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<td>10–20–10</td>
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<td>BERMUDA GRASS (UN-HULLLED)</td>
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<td>SEPTEMBER 1 TO FEBRUARY 29</td>
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<tr>
<td>WHEAT</td>
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DIVERSION BERM

EXCAVATED CHANNEL

COMPACTED EARTH BERM

ORIGINAL GRADE

8"-12"

6'-12'

DIVERSION BERM
L = The distance such that points A and B are of equal elevation (100' MAX)

SPACING BETWEEN CHECK DAMS

STONE CHECK DAM

NOTES:
1. PLACE IN SMALL, OPEN CHANNELS, NOT IN LIVE STREAMS.
2. CONSTRUCT CENTER AT LEAST 6 INCHES LOWER THAN OUTER EDGES.
3. EXTEND ACROSS ENTIRE WIDTH OF DITCH OR SWALE.
4. MAKE SIDE SLOPES 2:1 OR FLATTER.
5. DRAINAGE AREA NOT TO EXCEED 2 ACRES.
6. CONSTRUCTED OF GRADED SIZE 2 IN–10 IN STONE.
7. PERIODIC INSPECTION AND MAINTENANCE REQUIRED.
8. REMOVE SEDIMENT WHEN IT REACHES A DEPTH OF ONE–HALF THE ORIGINAL DAM HEIGHT.
9. SAND BAGS MAY BE USED AS AN ALTERNATE. GEOTEXTILE MAY BE OMITTED WHEN USING SAND BAGS
NOTES:
1. PLACE ON UNDISTURBED SOIL OR WELL-COMPACTED FILL.
2. INSTALL TEE, L" OR FLARED END SECTION INLET AT THE TOP OF THE SLOPE.
3. ENTRANCE SLOPED 1/2" PER FOOT TOWARD INLET.
4. COMPACT A DIKE RIDGE NO LESS THAN ONE FOOT ABOVE THE TOP OF THE PIPE.
5. ANCHOR WITH HOLD-DOWN GROMMETS OR STAKES AT INTERVALS NOT TO EXCEED 10 FEET.
6. ENSURE CONNECTIONS ARE WATERTIGHT.
7. EXTEND PIPE BEYOND THE TOE OF THE SLOPE.
8. DIRECT OUTLET UPHILL.
9. STABILIZE OUTLET WITH TEE, RIPRAP OR OTHER SUITABLE MATERIAL.

MAXIMUM DRAINAGE PIPE DIAMETER AREA PER

<table>
<thead>
<tr>
<th>ACRES</th>
<th>PIPE (INCHES)</th>
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<tr>
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</table>
NOTE: Sediment Trap is to be cleaned out when volume becomes half full.

**Table:**

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<td>R-7</td>
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</tbody>
</table>

*1 National Stone Association

*2 At least 50% of the individual stone particles must be equal or larger than this listed size

**Notes:**
1. For use in small channels with drainage areas of 50 acres or less.
2. Must be used in conjunction with other appropriate sediment control measures.
3. Use below culvert installations, dam construction, or any project that may involve grading activity directly in a stream.
4. Not intended to substantially impound water.
5. Use at the upstream end of ponds or lakes.
6. Edges should not be higher than the channel banks.
7. Center should be at least 8 inches lower than the outer edges of the dam at the channel banks.
8. Height should not exceed elevation of upstream property line.
9. Side slopes should be 2:1 or flatter.
10. Top width should be greater than 6 feet.
11. Extend completely across the channel and securely tie into both channel banks.
12. Requires periodic inspection and maintenance.
13. Sediment removed when it reaches one-half of the original dam height.
**SD-1**

**Silt Fence**

- Temporary sediment pool
- 1' min
- 2' max
- 2:1 slope
- 3:1 slope
- Fine gravel face (1' min thickness)
- 3' - 6' stone
- Wire mesh (optional)

**SD-2**

**Grate Inlet - Gravel Ring**

- Concrete block
- Dewatering
- 2:1 slope, gravel filter
- Temporary sediment pool
- Wire screen
- Dewatering
- 1' min
- 2' max
- Sediment

**SD-3**

**Grate Inlet - Block & Gravel**

- 4" GAP MIN
- Catch Basin
- Curb
- Pavement
- 8" Concrete block wrapped in filter fabric (or equivalent material)
- Gutter
- Catch Basin
- Flow
- Paving

**SD-4**

**Curb Inlet - Block**

- Note: Install filter after any asphalt paving
PROTECT INLETS DURING CONSTRUCTION. KEEP SEDIMENT OUT OF STORM DRAINAGE SYSTEM. USE HALF CIRCLE BEHIND CURB INLETS DURING STREET CONSTRUCTION. CIRCULAR SHAPE IS NOT ESSENTIAL — VARY SHAPE TO FIT DRAINAGE AREA AND TERRAIN. OBSERVE TO CHECK TRAP EFFICIENCY AND MODIFY AS NECESSARY TO TRAP SEDIMENT.

CLEAN WHEN SEDIMENT IS 6" BELOW RIM ELEVATION.

INLET SEDIMENT TRAP

NOTES:

THE SEDIMENT STORAGE VOLUME OF THE BASIN, AS MEASURED TO THE ELEVATION OF THE Crest of the SPILLWAY, SHALL BE AT LEAST 67 CUBIC YARDS PER ACRE FOR THE DISTURBED AREA DRAINING INTO THE BASIN (67 CUBIC YARDS IS EQUIVALENT TO 1/2 INCH OF SEDIMENT PER ACRE OF DRAINAGE AREA). THE ENTIRE DRAINAGE BASIN AREA SHOULD BE USED FOR THIS COMPUTATION, RATHER THAN THE DISTURBED AREA ALONE. TO HELP ENSURE ADEQUATE TRAPPING EFFICIENCY, SEDIMENT SHALL BE REMOVED FROM THE BASIN WHEN APPROXIMATELY ONE-THIRD OF THE STORAGE VOLUME HAS BEEN LOST TO SEDIMENT ACCUMULATION. THIS VOLUME SHALL BE MARKED ON THE RISER OR BY SETTING A MARKED POST NEAR THE RISER.
NOTE:
SIZE OF BASIN TO BE DETERMINED
BY VOLUME REQUIRED, HOWEVER, A
MINIMUM LENGTH-TO-WIDTH RATIO OF
2:1 SHALL BE MAINTAINED.

TOP OF LEVEE
TOP OF LEVEE
3' MIN. WIDTH

SLOPE TO BE 1:1 OR FLATTER

TOP OF LEVEE
TOP OF BANK
EXIST. FLOW LINE

8" MAX

SLOPE TO BE 1:1 OR FLATTER

3' MIN. WIDTH

TOP OF LEVEE
TOP OF BANK
EXIST. FLOW LINE

8" MAX

ROCK FILTER
6" MIN. THICKNESS

DUMPED RIPRAP
A

DUMPED RIPRAP

GEOTEXTILE FABRIC
(TYPE 5)

1' MIN.

4' MIN.

DUMPED RIPRAP

GEOTEXTILE FABRIC
(TYPE 5)

3' MIN.

SECTION A-A

SECTION ON FLOW LINE

SEDIMENT BASIN WITH RIPRAP OUTLET

TOP OF LEVEE
TOP OF LEVEE
3' MIN. WIDTH

SLOPE TO BE 1:1 OR FLATTER

TOP OF LEVEE
TOP OF BANK
EXIST. FLOW LINE

8" MAX

ROCK FILTER

DUMPED RIPRAP

1" MIN.

18" MIN.
NON-PERFORATED
PIPE WITH
ANTI-SEED COLLAR

natural ditch

SEDIMENT BASIN WITH PIPE OUTLET

TOP OF LEVEE
TOP OF LEVEE
3' MIN. WIDTH

SLOPE TO BE 1:1 OR FLATTER

TOP OF LEVEE
TOP OF BANK
EXIST. FLOW LINE

8" MAX

ROCK FILTER

DUMPED RIPRAP

19" MIN. PERFORATED RISER PIPE

EXIST. FLOW LINE

SECTION ON FLOW LINE

SEDIMENT BASIN WITH PIPE OUTLET

SB-1 TEMPORARY SEDIMENT BASIN
NOTE: TEMPORARY FENCING SHALL BE PLACED PRIOR TO CONSTRUCTION IN AREA.
NOTE:
FASTEN TREATED LUMBER WITH 3"x6" LAG SCREWS, WITH WASHERS 2 EACH SIDES

BARRICADE SHALL CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. SECTION 3F.01