

CHAPTER TEN MANUFACTURED DWELLING PARK CONSTRUCTION

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10-1 General.

10-1.1 Statewide Code. This code establishes the minimum and maximum requirements for the design and construction of manufactured dwelling parks throughout the state of Oregon to provide uniformity and affordability and to keep construction costs predictable. Except where specifically permitted by this code, no jurisdiction may require a person to exceed the requirements of this code.

NOTE: See Chapter One for information on plans, permits, and inspections.

10-1.2 Applicability of Code. This chapter of the code is applicable to all mobile home parks and manufactured dwelling parks except where specifically exempted by one of the following:

- (a) Except where specifically excluded in **ORS 446.055**, four or more manufactured dwellings located on a single parcel of land constitutes a mobile home or manufactured dwelling park and shall be subject to this code;
- (b) Except where specifically excluded in **ORS 446.090** and **446.105**, mobile home and manufactured dwelling parks shall comply with all applicable provisions of this code; and
- (c) Parks existing at the time of the effective date of this code may continue

their use providing their use was legal at the time this code was adopted.

10-1.3 Permitted Park Use. Parks may only be used according to the following requirements:

- (a) Manufactured dwelling parks are intended for the siting of manufactured dwellings only to serve as single family dwellings on a temporary or full time basis;
- (b) Site built single or multi family dwellings existing before the construction of the park may remain in the park;
- (c) Only one new site built single family dwelling shall be constructed in a park for use by the park owner, manager, or caretaker;
- (d) Recreational vehicles (including park trailers) and recreational structures are not permitted in mobile home or manufactured dwelling parks except under the following conditions:
 1. Park trailer recreational vehicles (RV) may be permitted within a manufactured dwelling park if the park trailer RV is labeled as both a recreational vehicle and a manufactured home and bears both a HUD Label and a state recreational vehicle insignia of compliance. Park trailer RV's labeled as recreational vehicles only are not permitted in manufactured dwelling parks;
 2. Recreational vehicles are permitted in mobile home parks built prior to August 5, 1959;
 3. Recreational vehicles are permitted to be stored in a mobile home or manufactured dwelling park in an area designated by the park owner or operator for such storage; and
 4. Recreational vehicles are permitted in the recreation park area of a combination park.
- (e) Combination recreational vehicle parks and mobile home or manufactured dwelling parks, known as "combination parks", may be constructed on the same property under the following conditions:
 1. Combination parks shall be zoned for both uses;

2. Combination parks shall have prior approval from the authority having jurisdiction and the local planning department;

3. Combination parks shall have designated areas for recreational vehicles and for manufactured dwellings;

4. Where there are common amenities serving both parks (such as streets or play areas), the park shall meet the most restrictive requirements of both park codes; and

5. Existing mobile home, manufactured dwelling, or recreation parks may be converted to combination parks if the park can meet the conditions listed above.

10-1.4 Park Approval. No person shall construct, alter, convert, or expand a mobile home or manufactured dwelling park without first making application to the authority having jurisdiction, submitting plans, and obtaining permits according to Chapter One of this code.

(a) A certificate of occupancy shall be issued when the park is completed and approved by the authority having jurisdiction. When a park is built in phases, there shall be a new certificate of occupancy issued when each new phase is completed and approved by the authority having jurisdiction.

(b) The authority having jurisdiction may permit manufactured dwellings to be sited and installed in a manufactured dwelling park prior to issuing a certificate of occupancy, however, no manufactured dwelling shall be placed in a manufactured dwelling park without prior approval from the authority having jurisdiction.

10-1.5 Unusual Construction. This code is not intended to limit the appropriate use of materials, equipment, or methods of design or construction not specifically prescribed by this code. A person may design for unusual construction using alternate materials or methods not provided for in this code as long as the alternate method or material is at least equivalent to the requirements

of this code in suitability, quality, strength, effectiveness, fire resistance, durability, dimensional stability, safety, and sanitation. All alternate methods or materials shall have prior approval from the authority having jurisdiction.

10-2 Land Use Compatibility and Park Location.

10-2.1 Land Use. No manufactured dwelling park or mobile home park shall be constructed, altered, converted, or expanded unless it is in accordance with comprehensive plan and local zoning ordinance and meets the requirements of this code.

(a) The local planning department is given specific authority to establish reasonable criteria related to the following as long as the criteria for a park is not less than the minimum requirements in this code and not greater than the requirements for single family uses in the underlying zone:

1. The location of the park within the municipality;
2. The density of the park;
3. The minimum setbacks around the perimeter of the park;
4. The minimum setbacks and buffer zones around existing wetlands within the park;
5. The minimum setbacks and buffer zones around a stream, creek, or river running through the park;
6. The landscaping, fencing, and buffer zones around the perimeter of the park;
7. The establishment of open areas and green ways within the park;
8. The orientation of those manufactured dwellings and accessory buildings and structures within the park adjacent to a public way;
9. The location of play areas within the park;
10. The size and construction of the park street, curbs, and sidewalks where they connect to the public way for the first 100 feet (30.5 m) of length or to the first intersecting street within the park, whichever is less;

11. The location, size, and construction of a public street(s) running through the park when the municipality can demonstrate the street(s) is needed as required for conductivity or when the street(s) is already designated in the municipalities acknowledged transportation system plan. All other streets within the park shall remain private and a part of the park property;

12. The street and address designations within the park;

13. The color and style of street signage within the park; and

14. The control of erosion and construction debris.

(b) The local planning department may prohibit the disturbance of certain aspects of the land having a redeeming value, such as land with mature trees, geological formations, waterways, or historical significance.

(c) A municipality is not permitted to establish or require construction standards for manufactured dwelling parks or manufactured dwelling installations that are more or less restrictive than this code except where specifically permitted in this code.

10-2.2 Hazardous Locations.

Manufactured dwelling parks shall be located according to the following:

(a) Manufactured dwelling parks shall not be located in a floodway. Existing mobile home or manufactured dwelling parks located in floodways shall not be permitted to expand within the floodway.

(b) Manufactured dwelling parks or park expansions shall not be located in a flood related erosion area without specific approval from the authority having jurisdiction.

(c) Manufactured dwelling parks or park expansions shall not be located in a geological hazard area (includes areas with landslide potential or other hazardous conditions) without specific approval from the authority having jurisdiction.

(d) Manufactured dwelling parks or park expansions shall not be permitted in a

flood hazard area unless the stands are elevated above the **Base Flood Elevation** (BFE) as identified on the **Flood Insurance Rate Map** (FIRM).

(e) Manufactured dwelling parks or park expansions shall not be permitted in a Coastal High Hazard Zone, as identified on the FIRM, unless the affected park, park buildings, manufactured dwellings, accessory buildings, and accessory structures within the zone meet the requirements of **Section 3108** of the **Oregon Structural Specialty Code** (OSSC).

NOTE: The information in subsection 10-2.2 is based on the **Federal Emergency Management Agency** (FEMA) regulation **44 CFR, Chapter 1** published October 1, 1990.

10-2.3 Suitability of Site. The site shall be suitable for its intended use to the authority having jurisdiction based on this code and local land use regulations according to the following:

(a) Manufactured dwelling parks or park expansions shall not be located on land that is unsuitable due to swampy terrain, lack of drainage, or proximity to the breeding places of rodents or vermin unless improvements have been made to the land to eliminate or control the hazards and such improvements are acceptable to the authority having jurisdiction;

(b) The authority having jurisdiction shall consider the condition of the soil, ground water level, drainage, and topography of the land prior to issuing construction permits for a manufactured dwelling park or the expansion of a mobile home park;

(c) The authority having jurisdiction shall consider the hazards of flood related erosion areas, coastal high hazard zones, slide hazard areas, and other unstable conditions prior to issuing construction permits for a manufactured dwelling park or the expansion of a mobile home park.

(d) Each manufactured dwelling stand shall have or be improved to have a

minimum capacity of 1,000 pounds per square foot (14,788 kg/m⁽²⁾);

(e) The ground supporting park streets, alleys, driveways, and common driveways shall have or be improved to have a minimum soil bearing capacity of 2,000 pounds per square foot (29,576 kg/m⁽²⁾);

(f) Each manufactured dwelling lot within a park shall be prepared according to chapter 3 prior to the installation of any manufactured dwelling;

(g) Fills over 12 inches (30 cm) in depth shall be placed in accordance with accepted engineering practice. A soil investigation report of satisfactory placement of fill, acceptable to the authority having jurisdiction, shall be submitted prior to final approval of the park;

(h) Cuts and fills in flood hazard areas shall be equal in area so that the fill material does not cause a rise in the water level; and

(i) The slope of cut or fill surfaces shall be no steeper than is safe for the intended use and shall be no steeper than 1 unit vertical in 2 units horizontal or 50 percent unless the permittee furnishes a soils engineering or engineering geology report, or both, stating that the site has been investigated, and given an opinion that a cut at a steeper slope will be stable and not create a hazard to public or private property.

10-3 Public Safety.

10-3.1 Park Design. Manufactured dwelling parks shall be designed to provide reasonable safeguards against fire and other hazards according to the following:

(a) Manufactured dwellings, park buildings, accessory buildings, and accessory structures shall be arranged in a manner that does not prevent or restrict access by emergency equipment and personnel;

(b) Streets, alleys, common driveways, park buildings, and manufactured dwelling lots shall be identified according to the street naming and numbering

policies of the authority having jurisdiction;

(c) Fire apparatus shall be able to approach within 50 feet (15.2 m) of each manufactured dwelling or park building within a manufactured dwelling park; and

(d) Manufactured dwellings, park buildings, accessory buildings, and accessory structures shall be located in a manner that provides the minimum setbacks and clearances required in Chapter 9 of this code.

10-3.2 Water Supplies. Water supplies for fire department operations shall be as required by the local fire official.

10-3.3 Identification. Manufactured dwellings and park buildings shall be posted in a conspicuous and uniform manner that is clearly visible from the street or alley serving the site according to the following:

(a) Each park shall have a general directory located at each entrance to the park. The directory shall indicate street names, addresses and/or lot numbers and be easily legible from a vehicle entering the park;

(b) Each park street, alley or common driveway shall be posted with a sign identifying its name according to the requirements of the authority having jurisdiction;

(c) Each manufactured dwelling lot shall be clearly identified with 3 inch (76 mm) high numbers on the curb, mail box, home, or other location acceptable to the authority having jurisdiction;

(d) Each park building shall be clearly identified with 3 inch (76 mm) high characters giving the name or number;

(e) The park shall be identified by name and street address on the public way according the local municipality's requirements;

(f) Curbs or streets shall be painted with a 4 inch (10 cm) wide red stripe 10 feet (305 cm) either side of a fire hydrant;

(g) Applicable park streets, alleys, or common driveways serving as fire lanes shall be marked with red painted curbs,

striped pavement, or 12 inch by 18 inch (30 cm by 46 cm) white signs with red letters, to indicate where parking is prohibited. The marking shall state “**Fire Lane - No Parking**” and shall be in minimum 3 inch (76 mm) high block letters and posted every 25 feet;

(h) One way park streets shall be posted with a 18 inch by 24 inch (46 cm by 61 cm) white sign with black letters indicating “**ONE WAY**” with an arrow to indicate the correct direction of the traffic flow;

(i) Park streets shall be posted with a 24 inch by 24 inch (61 cm by 61 cm) red octagon shaped sign with white letters indicating “**STOP**” located at each intersection with the park and at the exit from the park onto the public way when required by the municipality. A stop sign is not necessary at the exit from the park when it exits into an intersection controlled by municipal traffic signal lighting;

(j) The approach to vehicle bridges within the park shall be posted at each end with an 18 inch by 18 inch (46 cm by 46 cm) white sign with black letters indicating “**___ TON LIMIT**” showing the maximum capacity of the bridge according to the approved engineering;

(k) Parking for disabled persons shall be marked and posted according to **Chapter 11** of the **OSSC**;

(l) Signs required by this chapter shall be located not less than 80 inches (203 cm) from the center of the sign to the ground and shall be made of durable material acceptable to the authority having jurisdiction. Sign posts shall be made of hot rolled steel, 3-1/2 inch by 3-1/2 inch (89 mm by 89 mm) pressure treated wood, or fiberglass manufactured for such applications.

10-3.4 Lighting. Manufactured dwelling park streets, alleys, sidewalks, walkways, shall be illuminated to provide for the safety of all park residents and guests according to the following:

(a) Park luminaires (lighting fixtures) shall be located to provide the following levels of illumination:

1. Park streets, alleys, and abutting sidewalks or walkways shall have luminaires that provide an average of 4.0 lux maintained over the entire surface, with average to minimum uniformity ratio not to exceed 6 to 1;

2. Park sidewalks or walkways not abutting a street shall have luminaires that provide an average of 4.0 lux maintained over the entire surface, with average to minimum uniformity ratio not to exceed 6 to 1;

3. The park street connecting to the public way shall have luminaires that provide an average of 6.0 lux maintained over the entire surface, with average to minimum uniformity ratio not to exceed 4 to 1.

(b) Park luminaires shall be controlled by photocells set to turn on automatically at dusk and off at dawn;

(c) Park luminaires shall not be controlled by individual park residents;

(d) Park luminaires may be controlled for maintenance purposes only by the park owner or operator or by a contracting utility company;

10-3.5 Density. The total area of a lot occupied by a manufactured dwelling and all accessory structures and buildings shall not exceed 75 percent of the total lot area when located in a manufactured dwelling park, mobile home park, or combination park.

10-4 Utilities and Storm Water Drainage.

10-4.1 Utility Services. The manufactured dwelling park owner shall provide the following to each manufactured dwelling lot as required:

(a) An adequate supply of potable water (not less than 20 psi (138 kPa) at the supply connection) shall be provided to each manufactured dwelling lot in a mobile home or manufactured dwelling park;

1. All plumbing installations in connection with mobile home or manufactured dwelling park construction, alteration, repair, conversion, or addition shall be

made according to this code and, where not specific, to the **Oregon Plumbing Specialty Code**;

2. Piping shall be accessible and can only be placed under the manufactured dwelling it is serving. Piping cannot be laid beneath a manufactured dwelling for the purpose of providing service to an adjacent manufactured dwelling or other structure on an adjacent lot; and

3. When a park is located in a flood hazard area, all plumbing openings shall be located a minimum of 12 inches (30 cm) above the base flood elevation or be equipped with approved backwater valves.

(b) Sewage disposal facilities shall be made available on each manufactured dwelling lot within a park to adequately dispose of all sewage. The sewage system within a park shall be installed and connected according to Chapter 5 and where not specific, to the **Oregon Plumbing Specialty Code** and the **Department of Environmental Quality (DEQ) rules, OAR 340-71**;

(c) An adequate amount of electric power shall be supplied to each manufactured dwelling lot and shall be equivalent to the amperage required for the manufactured dwelling.

(d) Where natural gas is provided, an adequate supply of natural gas shall be supplied to each manufactured dwelling using the product. Gas piping within the park shall be installed and connected according to Chapter 6 and where not specific, to the **Oregon Mechanical Specialty Code** and **NFPA 54**; and

(e) Where liquid petroleum gas (LPG) is provided, an adequate supply of LPG shall be supplied to each manufactured dwelling using the product. The LPG tank and piping shall be installed and connected according to Chapter 6 and where not specific, to the requirements of the **State Fire Marshal** and **NFPA 58**.

(f) The parks water, sewer, gas, electric, or storm water drainage lines shall not be located under a manufactured dwelling, accessory building, or accessory structure or located in an area where a

manufactured dwelling, accessory building, or accessory structure is likely to be placed. Individual water, sewer, and gas branch lines may terminate under the manufactured dwelling they serve.

10-4.2 Manufactured Dwelling Park Electrical Installations. All electrical installations in connection with park construction, alteration, repair, conversion, or addition shall be made according to this code and, where not specific, to the **NEC**.

(a) Each lot in a mobile home or manufactured dwelling park shall be supplied with electrical service of not less than 100 Amps and shall contain a means for connecting an accessory building or additional electrical equipment.

(b) When a manufactured dwelling park is located in a flood hazard area, all electrical connections in the park shall be a minimum of 12 inches (30 cm) above the base flood level.

(c) Newer manufactured dwellings installed in older parks that exceed the capacity of the existing park service equipment shall not be energized until the park's service equipment has been upgraded.

10-4.3 Storm Water Drainage. All manufactured dwelling lots, streets, and alleys shall be provided with adequate storm drainage according to the following:

(a) Storm water drainage systems shall be designed and sized by an Oregon professional engineer to the specifications provided by the authority having jurisdiction and **The Department of Environmental Quality (DEQ)**;

(b) When deemed necessary by the authority having jurisdiction, storm water drainage shall include suitable detention;

(c) Storm water shall not be directed into a sanitary sewer system. Combined sanitary sewers and storm drains are prohibited;

(d) Each manufactured dwelling lot shall be provided with at least one 4 inch (101 mm) or two 3 inch (76 mm) storm water

drain(s) to the street. Where curbs are used, the curbs shall be built with equivalently sized weepholes. If the slope of the land prevents lot surface and rain drain storm water from draining to the street, a storm water lateral shall be provided from the site to the park's storm water system;

(e) Dry wells or infiltrator systems shall only be used for storm water drains when soil tests have been performed by a qualified Oregon geological engineer or geotechnical engineer showing that soils are suitable for the subsurface disposal of storm water. Test results shall be submitted to the authority having jurisdiction for review and approval prior to constructing the system; and

(f) When a park is being built in phases, the park's storm water drainage plan shall take into consideration present and future water volumes based on 10 year storm data.

10-4.4 Fuel Gas Pipe Installations. All fuel gas piping systems serving a manufactured dwelling shall be constructed according to the minimum requirements of this code and, where not specific, to the **Oregon Mechanical Specialty Code (Section 1312)**, the **National Fuel Gas Code (NFPA 54-1999)**, and the **Liquefied Petroleum Gas Code (NFPA 58-1998)**. Gas supply systems, where provided on a manufactured dwelling lot from an underground gas supply piping system, shall be located and arranged to permit attachment to the manufactured dwelling according to this chapter.

(a) The gas supply to a manufactured dwelling shall be located within 2 feet (66 mm) of the manufactured dwelling stand.

(b) Privately owned or installed fuel gas supply lines in a manufactured dwelling park shall be sized and installed according to **Chapter 13 of the Oregon Mechanical Specialty Code**. Liquid petroleum gas storage tanks and supply piping systems in manufactured dwelling parks shall be installed according to the requirements of the **1998 Oregon**

Uniform Fire Code. There shall be a readily accessible and identified shutoff valve controlling the flow of gas to the entire gas-piping system installed near the point of connection to the utility service supply connection or to the main liquefied petroleum gas storage tank.

(c) A privately owned or installed gas supply to a manufactured dwelling, including the riser, regulator, meter, valves, and other exposed equipment shall be located where they are protected against accidental damage. All buried park owned or installed metallic gas piping shall be protected from corrosion by approved coatings or wrapping materials to a point at least 6 inches (152 mm) above ground. Where metallic gas piping has or is required to have cathodic protection, it shall be installed to conform to the provisions of **49 CFR 192**.

(d) Privately owned gas meters, where provided on a manufactured dwelling lot, shall be installed according to the following:

(1) Gas meters shall be adequately supported by an anodeless riser support stake to a depth adequate to bolster or support the meter set weight requirement or by other means acceptable to the authority having jurisdiction;

2. Gas meters shall not depend on the gas outlet riser for support, and shall not be supported by the manufactured dwelling;

3. Each gas meter shall be installed in an accessible location and shall be provided with unions or other fittings to permit servicing or replacement of the meter or meter parts;

4. Meters shall not be installed in unventilated or inaccessible locations or closer than 3 feet (91 cm) to sources of ignition;

5. All gas meter installations shall be provided with shutoff valves or cocks located adjacent to and on the inlet side of the meters. In the case of a single meter installation utilizing an LPG container, the container service valve shall be permitted to be used in lieu of the manufactured dwelling shutoff valve; and

6. All gas meter installations shall be provided with test tees located adjacent to and on the outlet side of the meters.

10-4.5 Underground Gas Piping.

Privately owned underground gas piping, when provided, shall be installed according to the following:

(a) All gas piping installed below ground level shall have a minimum earth covering of 18 inches (45 cm) and shall be installed with at least 12 inches (305 mm) clearance in any direction from any other underground utility system;

(b) Underground gas piping shall not be placed in contact with other metallic objects such as pipes or wires;

(c) Underground nonmetallic gas lines shall have a number 18 AWG yellow insulated copper tracer wire conductor installed adjacent to the gas line and shall be accessible or terminate above ground at each end;

(d) Underground gas piping shall not be installed beneath a manufactured dwelling, accessory building, or accessory structure unless installed according to the following conditions:

1. Underground gas piping located under a manufactured dwelling, accessory building, or accessory structure shall be encased in a conduit capable of withstanding superimposed loads;

2. The conduit shall extend to a point not less than 4 inches (102 mm) beyond the outside wall of the manufactured dwelling, accessory building, or accessory structure, and be vented above grade to the outside; and

3. Where the conduit terminates within a manufactured dwelling, accessory building, or accessory structure, it shall be readily accessible and the space between the conduit and the gas piping shall be sealed to prevent leakage of gas into the manufactured dwelling, accessory building, or accessory structure.

10-5 Vehicle and Pedestrian Access.

10-5.1.1 Streets and Alley Design. Each area of a manufactured dwelling park

shall be accessible from the public way through a system of streets, alleys, and common driveways designed according to the following:

(a) Park streets and alleys shall be sized according to **Table 10-C** (see **Figure 10-5.1A**) and (see **Figure 10-5.1B**);

(b) Park streets may have center dividers with one way traffic on each side. Each lane on either side of a center divider shall be sized according to **Table 10-C** of this code. Center dividers shall be designed according to the following criteria (see **Figure 10-5.1C**):

1. Center dividers shall always be located on the left side (driver's side) of the vehicles;

2. Center dividers shall have a minimum 60 foot (18.3 m) long break located a maximum of every 200 feet (61 m) of street length;

3. Center dividers may be paved or landscaped;

4. Center dividers may be occupied by bus shelters, gazebos, pump houses, or guardhouses not exceeding 120 square feet (1114.8 m²) each in floor area.

5. Center dividers may contain an open storm drain or water detention facilities where permitted by the authority having jurisdiction;

6. Center dividers may contain the required play area if adequately protected from the traffic area;

7. Center dividers may contain off street parking;

8. Center dividers shall not exceed 50 feet (15.2 m) in width between the two lanes of the street; and

9. Center dividers shall not contain manufactured dwellings, accessory buildings, accessory structures, or other park buildings except for those mentioned in this section.

(c) Park streets connecting to the public way shall be sized according to **Table 10-C** and shall extend undiminished in size from the public way 100 feet (30.5 m) or to the first cross street within the park, whichever is less. (see **Figure 10-5.1D**);

(d) Alleys shall be sized according to **Table 10-C**.

(e) Park streets and alleys shall be appropriately marked indicating where on-street parking is prohibited;

(f) All park streets, alleys, driveways, sidewalks, and walkways shall remain the property of the park except when:

1. The street is a public street running through the park when permitted by Section 10-2.1(a)(12) of this chapter;

2. The street is a public street in existence prior to the construction of the park.

(g) Streets and alleys shall be limited in length according to the following:

1. Streets with both an inlet and outlet at opposite ends are not restricted to a maximum length (see **Figure 10-5.1C**);

2. Alleys with both an inlet and outlet are restricted to a maximum length of 400 feet (121.9 m);

3. Streets or alleys with dead ends shall be limited to a maximum of 150 feet (45.7 m) in length when there is no approved turnaround provided (see **Figures 10-5.1A, B, and C**);

4. Streets or alleys with approved turnarounds shall be limited in length to a maximum of 300 feet (91.4 m) excluding the turnaround (see **Figures 10-5.1A and C**); and

5. Streets or alleys with dead ends may branch off any street or approved turnaround (see **Figures 10-5.1A and C**).

(h) Curved park streets and alleys shall have a minimum 29 foot (8.8 m) radius on the inside edge and a minimum 55 foot (16.7 m) radius on the outside edge (see **Figure 10-5.1C**);

(i) Park street or alley intersections shall have a minimum inside radius of 15 feet (4.6 m) (see **Figure 10-5.1C**);

(j) Park streets or alleys providing access to the public way shall have a minimum inside radius of 35 feet (10.6 m);

(k) Park street or alley intersections shall have a minimum angle of 70 degrees (see **Figure 10-5.1C**);

(l) Park streets and alleys shall have a minimum vertical clearance of 16 feet (4.9 m);

(m) Dead-end streets or alleys in excess of 150 feet (45.7 m) in length shall have

approved turnarounds. Turnarounds shall have a wearing surface equivalent to that of the streets being served by the turnaround. Turnarounds shall be constructed according to the following:

1. Cul-de-sacs with parallel parking permitted shall have a minimum 38-foot (11.5 m) radius excluding curbs, sidewalks, walkways, or shoulders. Cul-de-sacs with parking prohibited shall have a minimum 30-foot (9.1 m) radius excluding any curbs, sidewalks, walkways, or shoulders and shall be appropriately marked to indicate parking is prohibited. Street connections to cul-de-sacs shall have a minimum inside radius of 20 feet (6.1 m) (see **Figure 10-5.1A**); or

2. Hammerhead turnarounds shall be a minimum of 20 feet (6.1 m) wide excluding any curbs, sidewalks, walkways, or shoulders, shall have a minimum back up length of 30 feet (9.1 m), and shall be appropriately marked to indicate parking is prohibited. Street connections to hammerhead turnarounds shall have a minimum inside radius of 20 feet (6.1 m) (see **Figure 10-5.1B**).

(n) Streets and alleys shall not have fences, walls, hedges, or other obstructions at corners or intersections blocking the driver's view of oncoming pedestrian or vehicle traffic. Fences or walls within 10 feet (3 m) of a street or alley corner or intersection shall be a maximum of 4 feet (122 cm) high with 75 percent of the area in the upper 2 feet (61 cm) open to permit vision through the fence or wall.

10-5.1.2 Street and Alley Construction.

Manufactured dwelling park streets and alleys shall be designed and constructed according to the following:

(a) Park streets and alleys shall not have a running grade exceeding 12 percent;

(b) Park streets and alleys shall have a minimum grade of 1 percent running the length of the streets;

(c) Park streets and alleys with curbs shall have a crown with a minimum 2 percent cross slope (see **Figure 10-5.1E**)

or an inverted crown with a minimum 1 percent cross slope (see **Figure 10-5.1G**), or a flat sheet street with a minimum single slope of 2%;

(d) Park streets and alleys without curbs shall have a crown with a minimum .5 percent cross slope (see **Figure 10-5.1F**) or an inverted crown with a minimum 1 percent grade (see **Figure 10-5.1G**), or a flat sheet street with a minimum single slope of 1%;

(e) Park streets and alleys without curbs shall have a 2 foot (61 cm) shoulder on each side (see **Figures 10-5.1F, G, and H**);

(f) Park streets with center dividers but without curbs shall have an inverted crown with a minimum 1 percent grade (see **Figure 10-5.1H**);

(g) Park streets with center dividers and curbs shall have each lane slope away from the center divider with a minimum 1 percent grade or shall have a crown on each lane with a minimum 2 percent grade to each side (see **Figure 10-5.1I**);

(h) Park streets shall be designed and constructed to prevent the accumulation of water and provide adequate drainage according to the following:

(i) Crowned streets with curbs shall be provided with inlets for proper drainage of surface water (see **Figure 10-5.1J**); and

(j) Inverted crowned streets shall have and drainage basins and gutters located down the center of the street (see **Figures 10-5.1K and 10-5.1L**);

(k) Park streets and alleys shall be engineered and designed for minimum of 5,000

(18-kip) single axle loads and shall be surfaced according to the following:

1. With a 2 inch (5 cm) wearing course of asphaltic-concrete over a 6 inch (15 cm) well-compacted and well-graded base consisting of 4 inches (10 cm) of 1-1/2 inch (38 mm) minus crushed rock topped with 2 inches (5 cm) of 3/4 inch (19 mm) minus crushed rock (see **Figures 10-5.1E through I**);

2. With a 4 inch (10 cm) wearing course of Portland cement concrete over a 6 inch (15 cm) well-compacted and well-graded

base consisting of 4 inches (10 cm) of 1-1/2 inch (38 mm) minus crushed rock topped with two inches of 3/4-inch (19 mm) minus crushed rock (see **Figures 10-5.1E through I**). Concrete shall have grid work of expansion/contraction joints placed in each direction at 10 feet (3.5 m) apart. Concrete shall have a compressive strength not less than 2,500 pounds (1,135 kg) per 1 square inch (6.45 square centimeters) in 28 days with 7 days of cure time; or

3. Parks located East of the Cascade summit may have streets with a wearing surface of well-graded crushed rock or clean well-graded quarry or pit-run material over a well-compacted base of 4 inches (10 cm) of 3/4 inch (19 mm) minus or 1-1/2 inch (38 mm) minus crushed rock, where permitted by the local planning department.

4. All base materials shall be clean and free from organic materials;

5. All surfaces and materials on which the base is to be constructed shall be thoroughly compacted before the pavement surface is placed;

6. Lime treatment of native soils with a pH greater than 10 may be substituted for base rock with an application of not less than 25 pounds (11 kg) of slacked lime per square yard mixed thoroughly (rototilled) to a minimum depth of 6 inches (15 cm); and

7. Cement treatment of native soils with a pH less than 10 may be substituted for base rock with an application of not less than 25 pounds (11 kg) of Portland cement per square yard mixed thoroughly (rototilled) to a minimum depth of 6 inches (15 cm).

10-5.2 Driveways. Each manufactured dwelling lot shall have a driveway connecting to a park street or alley to allow individuals access to and egress from their manufactured dwelling. Driveways shall be designed and constructed according to the following:

(a) Individual driveways to one manufactured dwelling shall have a

minimum 10-foot (3 m) wide wearing surface (**see Figure 10-5.2**);

(b) Double driveways serving two adjacent manufactured dwelling shall have a minimum 24 feet (7.3 m) wide wearing surface (**see Figure 10-5.2**);

(c) Driveways shall be constructed on ground having, or improved to have, a minimum soil bearing capacity of 1,000 pounds per square foot (4.883 kg/m²);

(d) Driveways shall be designed and constructed to prevent the accumulation of water and provide adequate drainage;

(e) Driveways shall have a wearing surface made of asphaltic-concrete, Portland concrete cement, or with other hard surfaced material approved by the authority having jurisdiction; and

(f) Driveways constructed of concrete cement shall have grid work of expansion/contraction joints placed in each direction at 10 feet (3.5 m) apart.

(g) Common driveways may serve individual or double driveways when manufactured dwellings are clustered in a single area such as on flag lots. Common driveways shall be constructed to the following (**see Figure 10-5.2**):

1. Common driveways may serve up to four individual manufactured dwellings but shall not exceed 100 feet (30.5 m) in length;

2. Common driveways shall have a minimum 20 foot (6.1 m) wide unobstructed right of way for emergency access;

3. Common driveways shall have a wearing surface constructed equivalent to that required for the streets or with other hard surfaced material approved by the authority having jurisdiction;

4. Common driveways shall have a minimum wearing surface area of 12 feet (3.6 m) in width excluding any curbs, sidewalks, walkways, or shoulders with one 4 foot (30 cm) shoulder on each side;

5. When parking is permitted, the common driveway shall be sized according to **Table 10-C** of this code;

6. Common driveways shall not be permitted to have parking within the minimum right of way area and shall be

appropriately marked to indicate where parking is not permitted;

7. Common driveways shall have a crown with a minimum .5 percent grade or an inverted crown with a minimum 1 percent grade (**see Figures 10-5.1F and G**);

8. Common driveways shall not exceed a 12 percent grade;

9. Common driveways shall have a minimum 14 foot (4.3 m) radius on the inside corners and a minimum 27 foot (8.3 m) radius on the outside corners; and

10. Common driveways shall have a minimum vertical clearance of 16 feet (5 m).

10-5.3 Parking. Automobile parking shall be provided in all mobile home and manufactured dwelling parks. Parking areas shall be designed and constructed according to the following:

(a) Each manufactured dwelling lot shall be provided with a minimum of two parking spaces that may be end to end, side to side, or with one on-street parking space and one off-street parking space. A usable garage or carport on a manufactured dwelling lot shall satisfy these parking requirements;

(b) One guest parking space shall be provided for every eight manufactured dwelling lots and shall be located within 400 feet (121.9 m) of each manufactured dwelling lot served. A separate guest parking area is not required where individual manufactured dwelling lots have a parking area for three or more vehicles or where streets are sized for on-street parking according to **Table 10-C** of this chapter;

(c) Play areas shall have a minimum of two parking spaces provided for every 2,500 square feet (2470.7 m⁽²⁾) of play area. Parking for a play area shall be located within 100 feet (30.5 m) of the play area it serves;

(d) Common facilities such as a clubhouse, recreation hall, tennis court, swimming pool, and similar facilities shall have a minimum of one parking space for every 30 manufactured dwelling lots within the park. If these facilities are open

to the public, the parking area shall be based on the occupant load of the facilities according to the **Oregon Structural Specialty Code (OSSC)** and the authority having jurisdiction;

(e) The park office shall have one parking space for every 50 manufactured dwelling lots within the park except when the park office is located inside a club house, recreation hall, or similar facility where parking is already provided;

(f) Combined parking areas serving more than one facility or area are permitted but shall not diminish total number of parking spaces required and shall stay within the maximum distances to each area served;

(g) At least 4 percent of the parking spaces intended for guest parking, office parking, play areas, recreation areas, club house, community facility, or similar facilities shall be made accessible according to **Chapter 11** of the **OSSC**;

(h) Parking areas, except in designated fenced and gated storage areas, shall have a wearing surface equivalent to that of the park streets, or of other hard surfaced material approved by the authority having jurisdiction;

(i) Parking areas shall not exceed a 1:20 or 5 percent slope;

(j) Parking areas shall be designed and constructed to prevent the accumulation of water and provide adequate drainage **(see Figure 10-5.1I and J)**;

(k) When a park is built in phases, parking shall be provided in each phase and sized appropriately for the number facilities and manufactured dwelling lots in that phase;

(l) When a park is built in phases and the common facilities are intended to serve more than one phase, the number of parking spaces at the common facilities shall be based on the total number of manufactured dwelling lots to be served in all phases;

(m) Street widths shall be increased based on the number, type, and location of the on-street parking according to **Table 10-C**;

(n) On-street parking spaces, other than for parallel parking, shall be marked on the pavement with a suitable paint;

(o) Off-street parking shall be sized according to **Table 10-D** or as otherwise approved by the authority having jurisdiction; and

(p) Areas in parking lots not designed for parking shall be identified as a no parking area.

10-5.4 Pedestrian Access. Each manufactured dwelling park shall be provided with an accessible route for pedestrians from each manufactured dwelling lot to each common area or facility and to the public way. Residents may be required to cross the park street in front of their manufactured dwelling lot to get to a sidewalk or walkway on the other side of the street. This section of the code does not require sidewalks or walkways on individual lots to individual manufactured dwellings.

(a) A sidewalk or walkway shall be required only on one side of each park street; located through green ways between the manufactured dwelling lots; or may be provided in other locations approved by the authority having jurisdiction;

(b) Park streets without sidewalks may have a designated walkway on one side of the street. The walkway shall be marked for pedestrian traffic on the pavement or divided from the traffic and parking area with curbing or similar barriers **(see Figure 10-5.4 and 10-5.4A)**. Required walkways shall not diminish the minimum required widths of streets or alleys established in **Table 10-C** of this code;

(c) Sidewalks and walkways shall be a minimum of 4 feet (122 cm) in width.

(d) Sidewalks and walkways shall provide a slip-resistant surface.

(e) Sidewalks, curbs, and walkways shall be accessible according to **Chapter 11** of the **OSSC (see Figures 10-5.4B, C, D, E, F, and H)**

(f) Sidewalks and walkways shall not be diminished in width by fire hydrants, light

poles, signs, curb cuts, or similar obstructions (see **Figure 10-5.4G**).

(g) Sidewalks and walkways shall not exceed a running slope of 1:20 or 5 percent and cross slope of 1:50 or 2 percent.

(h) Alleys and common driveways may serve as the pedestrian access without an increase in size if the slope does not exceed 1:50 or 2 percent (see **Figure 10-5.4H**).

(i) Park streets in temporary parks may serve as the pedestrian access without an increase in size if the slope does not exceed 1:50 or 2 percent.

(j) Stairways, ramps, landings, handrails, and guardrails, that are part of the sidewalk or walkway system, shall be constructed according to the **OSSC**.

(k) When sidewalks are provided in a manufactured dwelling park, they shall meet the requirements for an accessible route and be constructed according to one of the following:

1. 3-1/2 inch (9 cm) thick concrete, on an adequate base, with a compressive strength not less than 2,500 pounds per 1 square inch (176 kg/cm⁽²⁾) in 28 days with 7 days of cure time;

2. Asphaltic-concrete or other hard surfaced material approved by the authority having jurisdiction;

3. Pressure treated foundation grade lumber pressure preservatively treated according to **AWPA C22** and identified as in conformance with such standard by an approved agency; or

4. Wood-polymer composite complying with **ASTM 790**, **ASTM 2-1037**, **ASTM D1413**, and **AWPA EI-72**.

(l) When walkways are provided in a manufactured dwelling park, they shall meet the requirements for an accessible route and be constructed of hard packed, firm, stable, and slip resistant surface of rock or other material approved by the authority having jurisdiction meeting **ADA** guidelines. Walkways may be constructed from any of the materials approved for sidewalks according to Subsection (k) above.

10-5.5 Curb Construction. When curbs are provided by the park owner, they shall be constructed in a manner acceptable to the authority having jurisdiction:

10-5.6 Speed Bumps. Speed bumps, if provided in a park, shall be constructed and installed according to the following (see **Figure 10-5.6**):

(a) Speed bumps shall be spaced no closer than 300 feet (91.4 m);

(b) Speed bumps shall be no greater than 3 inches (76 mm) in height at the centerline, taper down to 0 inches over a 7 foot (2.1 m) distance in each direction, and taper down to 0 inches within 1 foot (30.5 cm) of each end;

(c) Speed bumps shall be striped with a highly visible reflective paint;

(d) Speed bumps shall be placed 3 feet (91 cm) away from the curb or the side of the street where no curb exists;

(e) Speed bumps shall not be placed in the same area occupied by a cross walk or walkway; and

(f) Speed bumps shall be made of asphaltic concrete and placed only when the ambient temperature is 55 degrees Fahrenheit (23 Celsius) or greater or made of prefabricated concrete, polymers, or other materials acceptable to the authority having jurisdiction.

10-6 Park Structures.

10-6.1 Park Buildings. Park buildings shall comply with the following:

(a) Park buildings shall have permits from the authority having jurisdiction prior to any construction.

(b) Park buildings shall be constructed according to the **Oregon Structural Specialty Code (OSSC)**, the **Oregon Electrical Specialty Code (OESC)**, the **Oregon Plumbing Specialty Code (OPSC)**, and the **Oregon Mechanical Specialty Code (OMSC)**;

(c) Park buildings shall have the minimum required setbacks prescribed by **Chapter 9** or the **OSSC**, which ever is more restrictive;

(d) Park buildings that are considered an "affected building", shall be made

accessible according to **Chapter 11** of the **OSSC**; and

(e) A park building shall not be occupied until it has a certificate of occupancy issued by the authority having jurisdiction.

10-6.2 Accessory Buildings and Structures. Accessory buildings and accessory structures shall comply with the following:

(a) As required by **ORS 446.111**, accessory buildings or accessory structures may not be constructed on a manufactured dwelling lot within a park without the consent of the park owner or operator;

(b) As required by **ORS 446.111**, the park owner or operator giving consent to construct is responsible for advising the park resident of applicable laws, codes and regulations concerning the construction, use, and placement of accessory buildings and accessory structures on a manufactured dwelling lot; and

(c) Accessory buildings and accessory structures shall be built according to Chapter 8 and, where not specific, to the **Oregon One and Two Family Dwelling Specialty Code**.

10-6.3 Pools and Spas. Pools and spas intended or available for common use by the park residents shall be constructed according to the **Oregon Structural Specialty Code** and **OAR 333-60 and 333-62** administered by the **Health Division**.

10-6.4 Retaining Walls and Fences. Retaining walls and fences in mobile home or manufactured dwelling parks shall be constructed according to the **OSSC** and the following:

(a) Barbed wire fences and electrified fences are prohibited in mobile home or manufactured dwelling parks except where specifically permitted or required by the authority having jurisdiction;

(b) Fences, walls, hedges; or other obstructions shall not be constructed or located along driveways, streets, or

intersections where they can block a driver's view of oncoming pedestrian or vehicle traffic; and

(c) Fences or walls within 10 feet (3 m) of the intersection of any street, sidewalk, or walkway shall be a maximum of 4 feet (122 cm) high with 75 percent of the area in the upper 2 feet (61 cm) open to permit vision through the fence or wall.

10-6.5 Bridges

10-6.5.1 Pedestrian and Vehicle Bridges. Bridges and culverts shall be designed by an Oregon licensed professional engineer according to this chapter and where not specific, to the engineering requirements of the **OSSC** or **ASHTO-LRFD**.

10-6.5.2 Vehicle Bridges and Culverts. Except where otherwise required or permitted by the local authority having jurisdiction, vehicle bridges and culverts shall be designed to carry no less than the heaviest fire fighting equipment in the fire district serving the park. Vehicle bridges and culverts shall have the following minimum widths:

(a) Where the bridge or culvert is serving a standard street it shall be a minimum of 20 feet (6.1 m) wide if there is no parking, walkway, or sidewalk on the bridge or culvert;

(b) Where a bridge or culvert accommodates parking, it shall be sized according to **Table 10-C** of this code;

(c) Where a bridge or culvert accommodates sidewalks or walkways, add 4 feet (122 cm) to the bridge or culvert's width for each sidewalk or walkway added;

(d) Where a single bridge or culvert is serving a street with a center divider, the bridge or culvert shall be equivalent to the combined width of the street and the center divider;

(e) Where the bridge or culvert is serving a park street approaching a public way, it shall be sized according to **Table 10-C** of this code;

(f) Where the bridge or culvert is serving an alley or common driveway, it shall be

sized according to **Table 10-C** of this code; and

(g) Required street parking may be omitted where a street passes over a bridge or culvert;

(h) Where there is a sidewalk or walkway on one or both sides of a street approaching a bridge or culvert, the sidewalk(s) or walkways(s) shall be continued over the bridge or culvert unless a separate pedestrian bridge is provided and connected to the sidewalk(s) or walkway(s); and

(i) Bridges or culverts with sidewalks or walkways on one or both sides and have ramps, landing, guardrails, and handrails constructed according to the **OSSC**;

10-6.5.3 Pedestrian Bridges and Culverts. Pedestrian bridges and culverts shall be designed and constructed according to the following:

(a) Pedestrian bridges and culverts shall be designed for a minimum capacity of 100 pounds per square foot (488 kg/m⁽²⁾).

(b) Pedestrian bridges and culverts shall be a minimum of 4 feet (122 cm) wide;

(c) Pedestrian bridges over 200 feet (60.9 m) in length shall be 5 feet (152 cm) wide or shall have a passing space of 6 feet by 6 feet (183 cm by 183 cm) located every 200 feet or less;

(d) Pedestrian bridges shall be constructed according to the **OSSC**;

(e) Pedestrian bridges shall have ramps, landings, guardrails, and handrails constructed according to the **OSSC**;

(f) Pedestrian bridges and culverts shall not exceed a running slope of 1:20 or 5 percent and cross slope of 1:50 or 2 percent; and

(g) Pedestrian bridges shall be accessible according to this code and, where not specific, to **Chapter 11** of the **OSSC**.

10-7 Play Areas.

10-7.1 Play Area Basic Requirement. Except as specifically permitted by **ORS 446.090** and **ORS 446.095**, all manufactured dwelling parks shall have play areas conforming to the requirements of this section.

10-7.2 Play Area Construction Requirements. Play areas in manufactured dwelling parks shall meet the following requirements:

(a) Size of play areas shall meet or exceed the following:

1. Each play area shall be a minimum of 2,500 square feet (2470.7 m⁽²⁾) of area;

2. Play areas shall have a minimum length to width aspect ratio of 3:1; and

3. When 5,000 square feet (4970.7 m⁽²⁾) or more of play area is required, the park may have one play area or multiple play areas, each with a minimum 2,500 square feet (2470.7 m⁽²⁾);

(b) Location of play areas shall meet or exceed the following:

1. The location of the play area(s) shall be subject to the approval of the local planning department;

2. When a park is built in phases, play areas shall be provided for each phase and sized appropriately for the number of manufactured dwelling lots in that phase;

3. One play area may serve all phases of the park providing its construction is completed prior to the opening of the first phase; and

4. Play areas shall be accessible from all parts of the park or where there are multiple play areas, each play area shall be accessible to the park area it serves.

(c) Reasonable safety shall be provided within the park's play area(s) according to the following:

1. Play areas shall be provided with a 4 foot (122 cm) high fence or other suitable safeguard, acceptable to the authority having jurisdiction, when a play area abuts or is near a railroad, public street, sharp declivity, water hazard, or other hazards identified by the authority having jurisdiction;

2. Play ground equipment, when provided, shall comply with **ASTM F1487-95**;

3. Play areas shall be located in a safe area and maintained in a safe and sanitary condition;

4. Covers over play or recreation areas, when provided, shall be constructed according to the **OSSC**; and

(d) Use of play areas shall conform with the following:

1. Required play areas shall be restricted to play or recreational use only and shall not include any other use. Where permitted by the local planning department, the play area may occupy the same space as an open area or green way;

2. Required play areas shall not occupy the same space as a storage lot, street, alley, driveway, pool, retention pond, club house, recreation hall, or any other similar area or facility;

3. Play areas are not required to have play ground or athletic equipment but if provided, it shall be accessible;

4. Required play areas shall be complete and usable prior to the first occupant moving into the park.

(e) Ground surfaces in play or recreation areas shall meet or exceed the following:

1. Play areas shall not have a surface grade exceeding 5 percent;

2. Ground surface located under and within 6 feet (183 cm) horizontally of playground equipment shall consist of loose fill or shock absorbing unitary material meeting the requirements of **ASTM F12-99** or **Table 10-E** of this chapter and be rated for the specific height of the equipment provided;

3. Ground surface for recreational uses, such as soccer, baseball, or football, shall be made of sod, artificial turf, and other suitable stable surfaces;

4. Ground surface for specialty recreational uses, such as jogging, volley ball, horse shoes, or tether ball, shall be made of sand, fine gravel, pavement, or other suitable surfaces; and

5. Ground surface in play or recreational areas shall not consist of dirt, mud, bark-dust, rock, hazardous materials, or other unsuitable surfaces.

10-7.3 Play Areas In Parks for Families.

Manufactured dwelling parks designated as “family parks” or parks that do not

qualify as “55 and older parks” under the federal **Fair Housing Act**, shall have a minimum of one 2,500 square foot (2470.7 m⁽²⁾) play area for every 30 manufactured dwelling lots in the park, and have an additional 80 square feet (50.7 m⁽²⁾) of play area added for every manufactured dwelling lot after the first 30 lots.

(NOTE: Based on an 80% family occupancy).

10-7.4 Play Areas In Parks for Persons 55 and Older.

Manufactured dwelling parks meeting the requirements of a “55 and older park” under the federal **Fair Housing Act**, shall have a minimum of one 2,500 square foot (2470.7 m⁽²⁾) play area, and have an additional 20 square feet (9.3 m⁽²⁾) of play area added for every manufactured dwelling lot after the first 125 lots.

(NOTE: Based on an 80% 55 and older occupancy).

10-7.5 Play Areas In Park Conversions.

A mobile home or manufactured dwelling park being converted from a 55 and older park to a family park shall meet the following:

(a) A mobile home or manufactured dwelling park built after March 13, 1989 and converted from a “55 and older park” to a “family park” shall have a play area(s) meeting the requirements of Subsection 10-7.3 of this code; and

(b) As permitted by **ORS 446.095**, a manufactured dwelling park in existence on or before March 13, 1989 as a “55 and older park” and later converted to a “family park” is not required to have additional play areas added. However, if a play area already exists in this park it shall be maintained during and after the conversion to a family park and shall not be eliminated or converted to any other use.

10-8 Temporary Parks.

10-8.1 Temporary Park Limitations.

The authority having jurisdiction and the local planning department may only permit the establishment of a temporary manufactured dwelling park within the restrictions of **ORS 446.105** and this code.

(a) Permits for temporary parks may only be issued when there is a severe housing shortage created by a large construction project, timber operation, military operation, natural disaster, declared emergency, or seasonal farm work.

(b) Permits for temporary parks issued by the authority having jurisdiction shall include an expiration date. After the expiration date, the authority having jurisdiction may renew the permit if the project or need still exists.

(c) All permits shall expire upon completion of the project or at end of the emergency need. Upon termination of the permit, a temporary park shall be dismantled and all manufactured dwellings removed within 30 days of the park closure, except where the authority having jurisdiction allows the park to be used for storage of the manufactured dwellings.

(d) A temporary manufactured dwelling park may be converted to a permanent manufactured dwelling park if approved by the authority having jurisdiction and the local planning department and the park is upgraded to meet all the requirements of this chapter for a permanent park.

10-8.2 Long Term Temporary Parks.

Temporary manufactured dwelling parks permitted to be occupied for any period exceeding six consecutive months shall be constructed to the requirements of this chapter except for the following:

(a) With prior approval from the authority having jurisdiction, some or all of the play area requirements may be waived if there will be no families occupying the park;

(b) With prior approval from the authority having jurisdiction, accessibility

requirements may be waived where it can be shown that no immediate need exists;

(c) With prior approval from the authority having jurisdiction, walkways or sidewalks may be omitted; and

(d) With prior approval from the authority having jurisdiction, park streets, alleys, and driveways may be constructed with a 4 inch (10 cm) wearing surface of well-graded crushed rock or clean well graded quarry pit run material over a well-compacted base of 4 inches (10 cm) of $\frac{3}{4}$ inch (19 mm) minus or 1-1/2 inch (38 mm) minus crushed rock. All base materials shall be clean and free from organic materials. Base materials may be substituted with the following:

1. Lime treatment of native soils with a pH greater than 10 may be substituted for base rock with an application of not less than 25 pounds (11.34 kg) of slacked lime per square yard mixed thoroughly (rototilled) to a minimum depth of 6 inches (15 cm); or

2. Cement treatment of native soils with a pH less than 10 may be substituted for base rock with an application of not less than 25 pounds (11.34 kg) of Portland cement per square yard mixed thoroughly (rototilled) to a minimum depth of 4 inches (10 cm).

10-8.3 Short-Term Temporary parks.

Temporary manufactured dwelling parks permitted to be occupied for a period of six months or less in any one calendar year shall be constructed to the requirements of this chapter except for the following:

(a) With prior approval from the authority having jurisdiction, a temporary park may be permitted in a flood hazard area without requiring the manufactured dwellings to be elevated above the BFE if there is no anticipated threat of flooding within the time limitations stated in the permit;

(b) With prior approval from the authority having jurisdiction, some or all of the park lighting requirements may be waived;

(c) With prior approval from the authority having jurisdiction, some or all of the play

area requirements may be waived if there will be no families occupying the park;

(d) With prior approval from the authority having jurisdiction, walkways or sidewalks may be omitted;

(e) With prior approval from the authority having jurisdiction, accessibility requirements may be waived where it can be shown that no immediate need exists; and

(f) With prior approval from the authority having jurisdiction, park streets, alleys, and driveways may be constructed with a 2 inch (5 cm) wearing surface of well-graded crushed rock or clean well graded quarry pit run material over a well-compacted base of 4 inches (10 cm) of $\frac{3}{4}$ inch (19 mm) minus or 1-1/2 inch (38 mm) minus crushed rock. All base materials shall be clean and free from organic materials. Base materials may be substituted with the following:

1. Lime treatment of native soils with a pH greater than ten may be substituted for base rock with an application of not less than 25 pounds (11.34 kg) of slacked lime per square yard mixed thoroughly (rototilled) to a minimum depth of 6 inches (15 cm); or

2. Cement treatment of native soils with a pH less than ten may be substituted for base rock with an application of not less than 25 pounds (11.34 kg) of Portland cement per square yard mixed thoroughly (rototilled) to a minimum depth of 4 inches (10 cm).

10-8.4 Temporary Parks for Labor Camps and Employee Housing.

Temporary manufactured dwelling parks used as labor camps shall also meet the following requirements:

(a) A temporary park and manufactured dwellings located within the park shall comply with the sanitation, health, and safety regulations contained in **Oregon Administrative Rule, Chapter 437**, of the **Oregon Occupational Safety and Health Division (OR-OSHA)** when the park is a labor camp; and

(b) Manufactured dwellings within a temporary park provided by an employer

to house employees and families of employees shall have an approved operating smoke detector located in each bedroom and outside each bedroom area in addition to any smoke detectors already provided by the manufacturer. Smoke detectors shall be installed according to chapter 9 of this code.

10-9 Park Additions, Alterations, and Conversions.

10-9.1 Park Additions. Mobile home and manufactured dwelling park additions shall comply with the following:

(a) Plans and permit applications shall be submitted to the authority having jurisdiction for park additions as required in Chapter 1 of this code;

(b) The applicant shall submit proof that the site is suitable for construction according to this code;

(c) Park additions shall be constructed in conformance with this chapter; and

(d) The existing portion of the park does not need to be upgraded to the requirements of this code provided the park was in compliance prior to the addition except for the following:

1. The existing portion of the park shall be upgraded to the maintenance requirements in this chapter of the code;

2. The existing portion of the park shall be upgraded when required by the authority having jurisdiction to provide additional electric, water, sewer, or gas service; and

3. The existing portion of the park shall be upgraded where the authority having jurisdiction has identified unsafe, life threatening, or unsanitary conditions needing correction.

10-9.2 Park Alterations. Mobile home and manufactured dwelling park alterations shall comply with the following:

(a) Manufactured dwelling lot lines may be moved or reconfigured to accommodate minor changes. Manufactured dwelling lots may be added, moved, combined, expanded, or eliminated within a park to accommodate a different size or shape manufactured dwelling, accessory building, or

accessory structure provided an amended park plan is submitted to and approved by the authority having jurisdiction prior to making any changes. The amended park plan shall show the location of the new lot lines, the new lot sizes, and the new numerical identification of the affected lots;

(b) Manufactured dwelling lots that have been amended shall have the replacement manufactured dwelling, accessory building, or accessory structure installed according to the minimum setbacks and clearances required in Chapter 9 of this code;

(c) The authority having jurisdiction may approve alterations to existing mobile home or manufactured dwelling parks as long as the alterations comply with the requirements of this chapter of the code; and

(d) The authority having jurisdiction may approve alternate methods and materials if they provide equivalent protection to those requirements contained in this code, except where the alternate method or material would be in direct conflict with statute.

10-9.3 Conversion of Parks. Mobile home and manufactured dwelling parks being converted to another use shall comply with the following:

(a) A mobile home or manufactured dwelling park shall only be converted to a subdivision with the prior approval of the authority having jurisdiction and the local planning department. The municipality may require all park streets, alleys, and common areas to be dedicated to the municipality. A municipality may deny approval of such a conversion;

(b) A mobile home or manufactured dwelling park may be converted from a “family park” to a “55 and older park” providing the park complies with the Housing For Older Persons Act of 1995;

(c) A mobile home or manufactured dwelling park may be converted from a “55 and older park” to a “family park” providing the park complies with the Housing For Older Persons Act of 1995;

(d) A mobile home or manufactured dwelling park may be converted to a recreational vehicle park or combination park if approved by the authority having jurisdiction and the local planning department and if it meets all state and local requirements for a recreational vehicle park; and

(e) A temporary manufactured dwelling park may be converted to a permanent manufactured dwelling park if approved by the authority having jurisdiction and the local planning department and is upgraded to meet all the requirements of this chapter.

10-10 Maintenance and Safety.

10-10.1 Park Responsibilities. The owner or operator of a mobile home or manufactured dwelling park shall:

(a) Maintain the park’s common use areas such as trees, streets, alleys, all common luminaires, common driveways, sidewalks, walkways, bridges, culverts, pools, park buildings, and other similar areas or facilities in a safe and sanitary condition;

(b) Maintain the park’s common use areas such as green spaces, bike paths, buffer zones, open spaces, play and recreation areas, and other similar areas in a safe and sanitary condition;

(c) Maintain all required park signage, marking, striping, safety barriers, and other similar accessories to keep them functional and in good repair;

(d) Maintain all undeveloped grounds adjacent to the occupied portion of the park to prevent the spread of fire and infestation of rodents or vermin;

(e) Maintain the park’s sewer, water, fuel gas, and electrical service to the utility termination on each lot in a safe and sanitary condition;

(f) Maintain the park’s storm water drainage system to prevent standing water or water run off on to manufactured dwelling lots, common use areas, or adjacent properties;

(g) Maintain vegetation, including trees, in the park’s common use areas to prevent over growth, accumulation of

decomposing materials, fire hazards, and the attraction of rodents or vermin;

(h) Keep the park grounds free from accumulation of dry brush, leaves, weeds, debris, and refuse that are capable of promoting the spread of fire or attracting rodents or vermin;

(i) Require the residents to maintain their homes and lots according to this code;

(j) Maintain and provide an updated site plan of the park to the local fire official showing all street names, lot numbers, water supplies, and utility disconnects;

(k) Maintain the surfacing material under and around playground equipment;

(l) Keep fire lanes open at all times and enforce “no parking” areas within the park;

(m) Permit and assist the entry and access of all emergency vehicles within the park;

(n) Prevent any construction within the minimum clearances and setbacks required by this code and the authority having jurisdiction; and

(o) Burn debris only in designated areas at times permitted by the **Department of Environmental Quality** (DEQ) and the local fire official.

10-10.2 Resident Responsibilities.

Residents of a manufactured dwelling lot in a mobile home or manufactured dwelling park shall maintain their home, lot, and parking area and provide reasonable safeguards against fire and other hazards. A resident in a mobile home or manufactured dwelling park shall:

(a) Maintain the vegetation on the manufactured dwelling lot to prevent over growth, accumulation of decomposing of dry materials, and debris creating fire hazards, and the attraction of rodents or vermin, except as otherwise provided by the rental agreement;

(b) Maintain the manufactured dwelling roof gutters and down spout connections, when required, to the lot’s storm water drainage systems to prevent standing water, erosion, and run off onto adjacent lots or properties;

(c) Maintain the grounds, walkways, driveways, patio slabs, accessory structures, and accessory buildings on the manufactured dwelling lot in a safe and sanitary condition;

(d) Maintain the sewage connections to the home to assure they are air and water tight, free from leaks and other defects;

(e) Maintain the water and fuel gas connections between the manufactured dwelling and utility termination on the lot in a safe condition free from leaks or other defects;

(f) Maintain the electrical utility connections between the manufactured dwelling and the service disconnect in a safe condition free from damage and degradation;

(g) No person shall allow their pet or animal to run at large or to create any health hazard within a mobile home or manufactured dwelling park;

(h) Keep the area directly under each manufactured dwelling, accessory structure, or accessory building free and clean of refuse or other objects that may create a fire hazard or harbor rodents or vermin;

(i) Prevent the storage of combustible materials, flammable liquids, gases, or fuel powered equipment under any manufactured dwellings, accessory building, or structure;

(j) Park only in designated parking areas and keep fire lanes within the park open and unobstructed at all times;

(k) Maintain approved smoke alarms in their manufactured dwelling;

(l) Burn debris only in designated areas at times as permitted by DEQ and the local fire official; and

10-10.3 Contractual Services. Where there is a written contract between a resident and the park owner to provide some or all of the resident’s maintenance requirements described in Section 10-10-2 of this chapter, the resident shall not be held accountable for such maintenance provided the resident is acting in good faith and has fulfilled all the terms of the contract.

10-10.4 Monitoring. As permitted by **ORS 446.066** and **446.072**, the Division may perform continued monitoring inspections in mobile home and manufactured dwelling parks to assure continued compliance with state statutes and this code:

(a) The authority having jurisdiction may inspect mobile home or manufactured dwelling parks to assure the park continues to conform with the relevant state statutes and this code;

(b) Police officials may cite and remove vehicles parked in fire lanes, no parking areas, and in parking spaces reserved for disabled persons;

(c) Fire officials may inspect the common areas of the park and any park buildings to identify fire hazards and require corrective action; and

(d) Upon request by state, county, or city officials, acting on official business, the park owner or operator shall permit access to all parts of a mobile home or manufactured dwelling park, except for private residences.

TABLE 10-C
MINIMUM PAVEMENT WIDTHS

DESCRIPTION	ONE OR TWO WAY STREET	ONE LANE OF A DEVIDED STREET	PARK STREET CONNECTING TO THE PUBLIC WAY	ONE WAY ALLEY	TWO WAY ALLEY	COMMONDRIVE -WAY
UNOBSTRUCTED TRAFFIC LANE WIDTH	16 Feet	12 Feet	20 Feet	12 Feet	16 Feet	9 Feet
NO PARKING ON EITHER SIDE	20 Feet	14 Feet	30 Feet	14 Feet	20 Feet	12 Feet
PARALLEL PARKING ON ONE SIDE	30 Feet	19 Feet	34 Feet	19 Feet	26 Feet	19 Feet
PARALLEL PARKING ON BOTH SIDES	30 Feet	28 Feet	34 Feet	28 Feet	30 Feet	28 Feet
30 DEGREE DIAGONAL PARKING ON ONE SIDE	33.3 Feet	29.3 Feet	37.3 Feet	29.3 Feet	33.3 Feet	29.3 Feet
30 DEGREE DIAGONAL PARKING ON BOTH SIDES	50.6 Feet	46.6 Feet	54.6 Feet	46.6 Feet	50.6 Feet	46.6 Feet
45 DEGREE DIAGONAL PARKING ON ONE SIDE	35.6 Feet	32.6 Feet	39.6 Feet	32.6 Feet	35.6 Feet	32.6 Feet
45 DEGREE DIAGONAL PARKING ON BOTH SIDES	55.2 Feet	52.2 Feet	59.2 Feet	52.2 Feet	55.2 Feet	52.2 feet
60 DEGREE DIAGONAL PARKING ON ONE SIDE	39 Feet	39 Feet	41 Feet	39 Feet	39 Feet	39 Feet
60 DEGREE DIAGONAL PARKING ON BOTH SIDES	60 Feet	60 Feet	62 Feet	60 Feet	60 Feet	60 Feet
90 DEGREE PERPINDICULAR PARKING ON ONE SIDE	43 Feet	43 Feet	43 Feet	43 Feet	43 Feet	43 Feet
90 DEGREE PERPINDICULAR PARKING ON BOTH SIDES	62 Feet	62 Feet	62 Feet	62 Feet	62 Feet	62 Feet

NOTES:

1. Use this table to size all streets, alleys, and common driveways with or without on-street parking.
2. The dimensions shown are measured curb to curb and includes all traffic lanes and on street parking but does not include curbs, sidewalks, or walkways.
3. Alternate street configurations may be used with prior approval from the authority having jurisdiction.
4. Alternate parking angles or configurations may be used with the prior approval from the authority having jurisdictions.
5. Where a street or alley is not designed for parking on one or both sides, it shall be identified as a “No Parking” area.
6. A two-foot wide bike lane may be added to one side of any street or alley without increasing the size of the street or alley.
7. This table does not include parking sized to meet the accessibility requirements of the **Americans with Disabilities Act (ADA)**. For more information, see **Chapter 11** of the **Oregon Structural Specialty Code**.
8. This table is based on information provided through the **American Institute of Architects (AIA)**.

TABLE 10-D PARKING LOT LAYOUT

DESCRIPTION	STALL WIDTH	CURB LENGTH	STALL DEPTH	ISLE WIDTH	ROW WIDTH
PARALLEL PARKING ON ONE SIDE	8 Feet	23 Feet	8 Feet	12 Feet	20 Feet
	9 Feet	23 Feet	9 Feet	12 Feet	21 Feet
PARALLEL PARKING ON BOTH SIDES	8 Feet	23 Feet	8 Feet	12 Feet	28 Feet
	9 Feet	23 Feet	9 Feet	12 Feet	30 Feet
30 DEGREE DIAGONAL PARKING ON ONE SIDE	9 Feet	18 Feet	17.33 Feet	11 Feet	28.33 Feet
	10 Feet	20 Feet	18.25 Feet	11 Feet	29.25 Feet
30 DEGREE DIAGONAL PARKING ON BOTH SIDES	9 Feet	18 Feet	17.33 Feet	11 Feet	45.66 Feet
	10 Feet	20 Feet	18.25 Feet	11 Feet	47.5 Feet
45 DEGREE DIAGONAL PARKING ON ONE SIDE	9 Feet	12.75 Feet	19.85 Feet	13 Feet	32.85 Feet
	10 Feet	14.15 Feet	20.5 Feet	13 Feet	33.5 Feet
45 DEGREE DIAGONAL PARKING ON BOTH SIDES	9 Feet	12.75 Feet	19.85 Feet	13 Feet	52.7 Feet
	10 Feet	14.15 Feet	20.5 Feet	13 Feet	54 Feet
60 DEGREE DIAGONAL PARKING ON ONE SIDE	9 Feet	10.4 Feet	21 Feet	18 Feet	39 Feet
	10 Feet	11.5 Feet	21.5 Feet	18 Feet	39.5 Feet
60 DEGREE DIAGONAL PARKING ON BOTH SIDES	9 Feet	10.4 Feet	21 Feet	18 Feet	60 Feet
	10 Feet	11.5 Feet	21.5 Feet	18 Feet	61 Feet
90 DEGREE PERPINDICULAR PARKING ON ONE SIDE	9 Feet	9 Feet	19 Feet	24 Feet	43 Feet
	10 Feet	10 Feet	19 Feet	24 Feet	43 Feet
90 DEGREE PERPINDICULAR PARKING ON BOTH SIDES	9 Feet	9 Feet	19 Feet	24 Feet	62 Feet
	10 Feet	10 Feet	19 Feet	24 Feet	62 Feet

NOTES:

1. Use this table to size all off-street parking areas in manufactured dwelling parks.
2. The dimensions shown are measured curb to curb and includes parking space and aisle widths but does not include curbs, sidewalks, or walkways.
3. Alternate parking angles or configurations may be used with prior approval from the authority having jurisdictions.
4. Areas in parking lots not designed for parking shall be identified as a “No Parking” area.
5. This table does not include parking sized to meet the accessibility requirements of the **Americans with Disabilities Act (ADA)**. For more information, see **Chapter 11** of the **Oregon Structural Specialty Code**.
6. This table is based on information provided through the **American Institute of Architects (AIA)**.

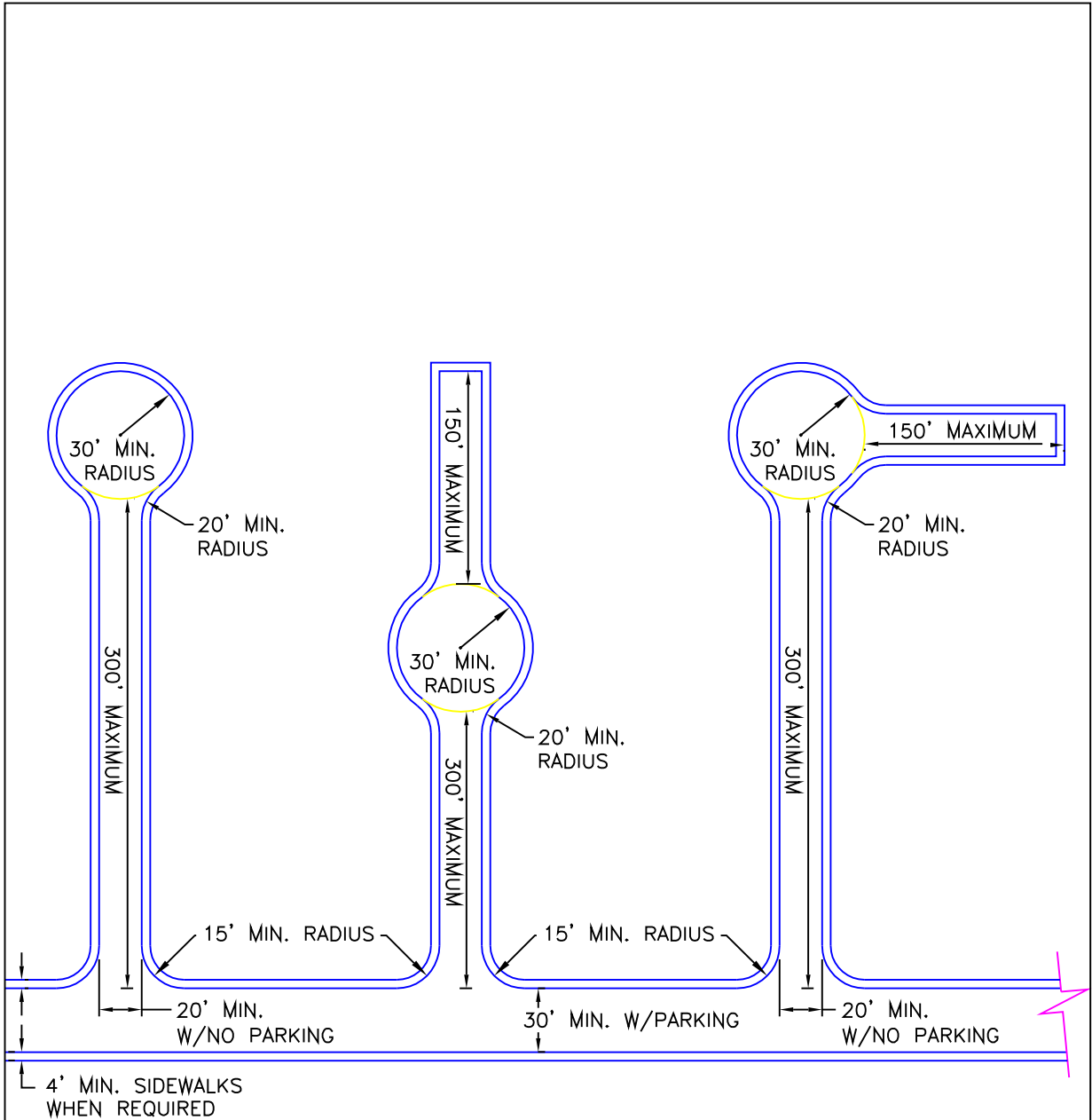
TABLE 10-E

PLAYGROUND SURFACING MATERIALS

MATERIAL	6 INCH DEPTH	9 INCH DEPTH	12 INCH DEPTH
WOOD MULCH	7 Feet	10 Feet	11 Feet
DOUBLE SHREDDED BARK MULCH	6 Feet	10 Feet	11 Feet
UNIFORM WOOD CHIPS	6 Feet	7 Feet	12 Feet
FINE SAND	5 Feet	5 Feet	9 Feet
COURSE SAND	5 Feet	5 Feet	6 Feet
FINE GRAVEL	6 Feet	7 Feet	10 Feet
MEDIUM GRAVEL	5 Feet	5 Feet	6 Feet
SHREDDED TIRES	Not Rated	Not Rated	Not Rated
BARK NUGGETS	Not Rated	Not Rated	Not Rated

NOTES:

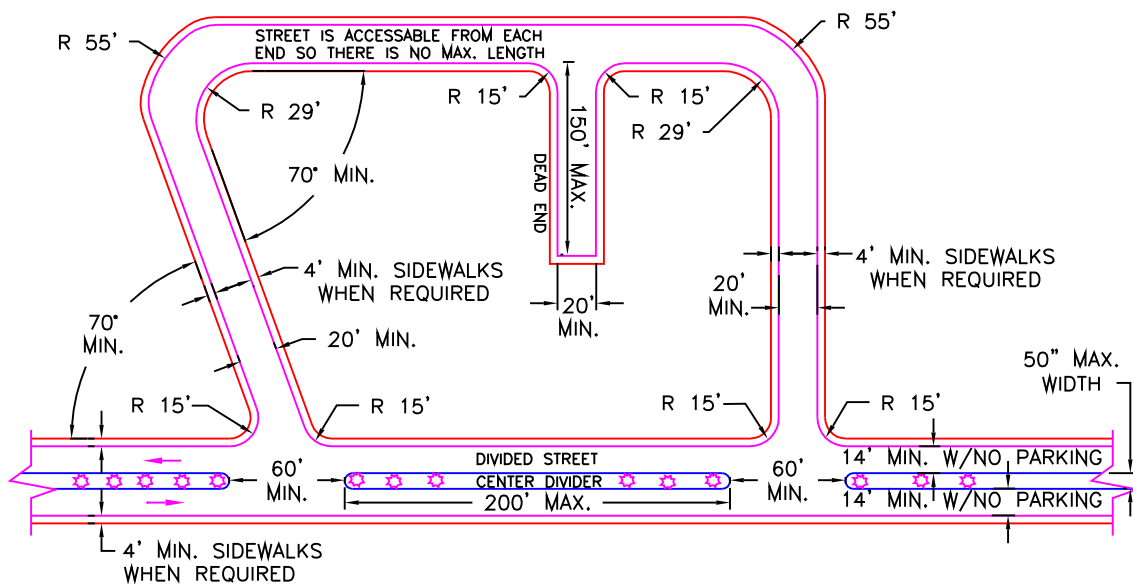
1. Surfacing material under and around playground equipment shall be made of one of the materials described in this table and placed at the depths shown based on the height of the playground equipment installed.
2. Shock absorbing unitary materials or alternate loose-fill materials may be used if tested to meet the requirements of **ASTM F12-99**, rated for protection against fall injuries, and installed according to the manufacturer's installation instructions. Concrete, asphalt, soil, and turf shall not be used for surfacing material under or around playground equipment.
3. Non-rated loose-fill materials may be used under playground equipment that is not elevated and presents no fall hazard injuries.
4. This table is based on research performed by **the U.S. Consumer Product Safety Commission** to identify the maximum fall height from which a life-threatening head injury would not be expected using various loose fill materials.
5. This table is provided to reduce the number and seriousness of injury accidents during the use of playground equipment, however, it can not prevent all injury accidents from happening. Children playing on playground equipment should be under constant adult supervision.
6. Surfacing materials under and around playground equipment shall be maintained and replaced as necessary to provide continued safety.



NOTE: PARK STREETS SHALL BE A MINIMUM OF 20 FEET WIDE WITH NO PARKING OR 30 FEET WIDE WITH PARALLEL PARKING ON ONE OR BOTH SIDES OF THE STREET.

TYPICAL CUL-DE-SAC TURNAROUND CONFIGURATIONS

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1A



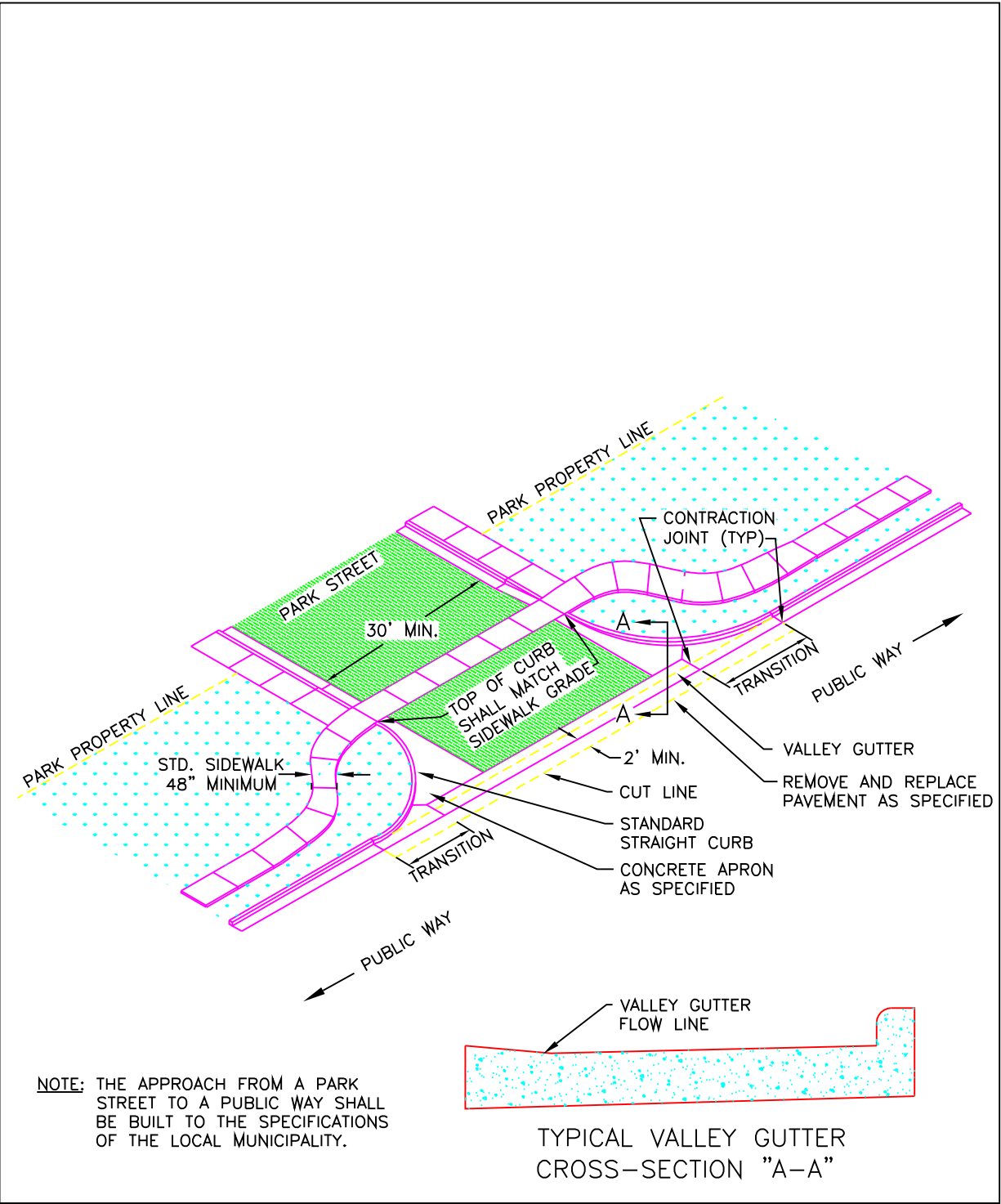
NOTE: THE LETTER "R" FOLLOWED BY A NUMBER STANDS FOR THE MINIMUM RADIUS PERMITTED ON A STREET CORNER OR A CURVED STREET.

NOTE: EACH LANE ON A DIVIDED STREET SHALL BE A MIN. OF 14 FEET WIDE WITH NO PARKING, 19 FEET WIDE WITH PARALLEL PARKING ON ONE SIDE, AND 28 FEET WIDE WITH PARALLEL PARKING ON BOTH SIDES OF THE LANE.

NOTE: PARK STREETS SHALL BE A MINIMUM OF 20 FEET WIDE WITH NO PARKING OR 30 FEET WIDE WITH PARALLEL PARKING ON ONE OR BOTH SIDES OF THE STREET.

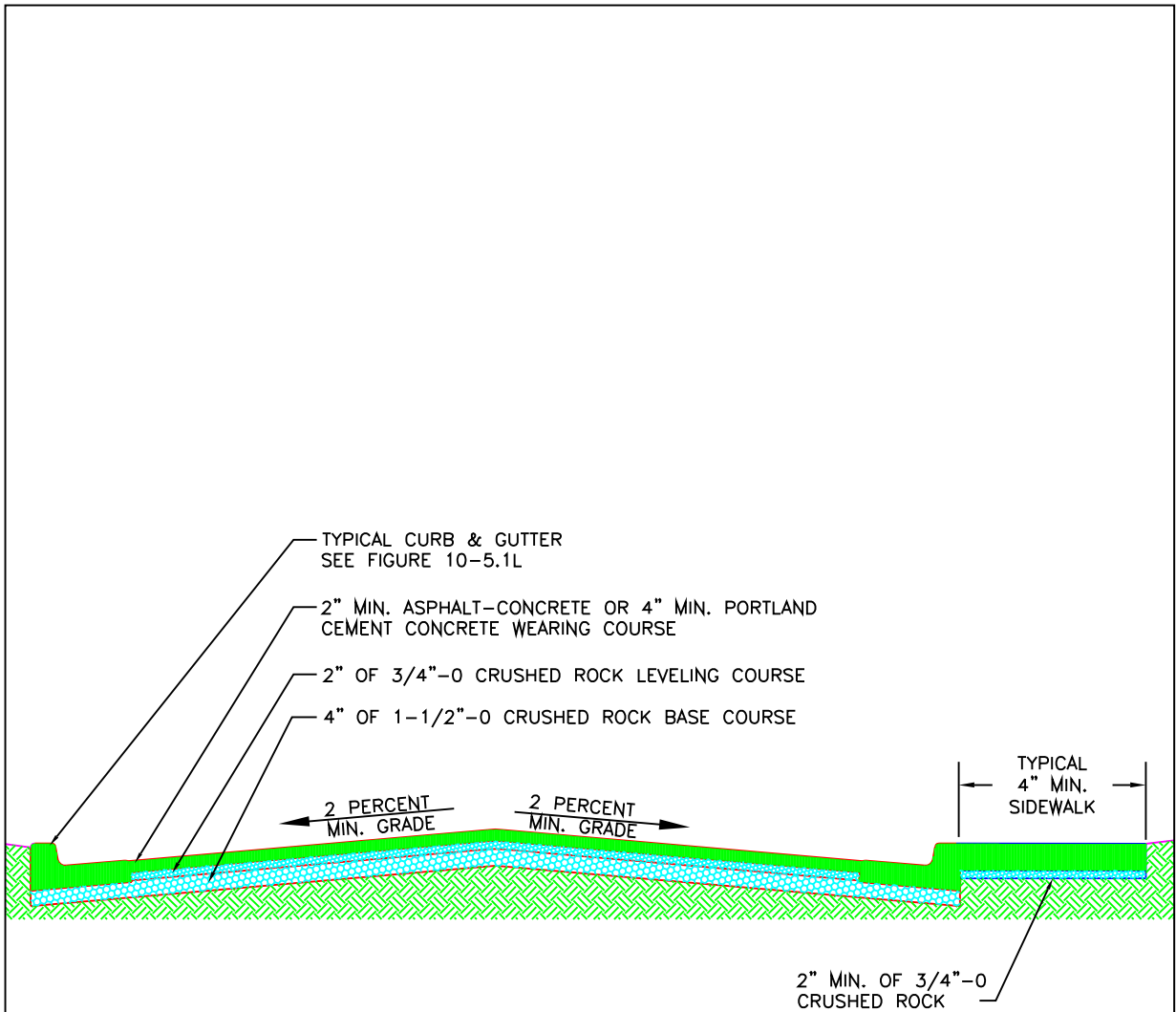
TYPICAL PARK STREET CONFIGURATIONS

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1C



TYPICAL PARK STREET APPROACH TO THE PUBLIC WAY DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1D

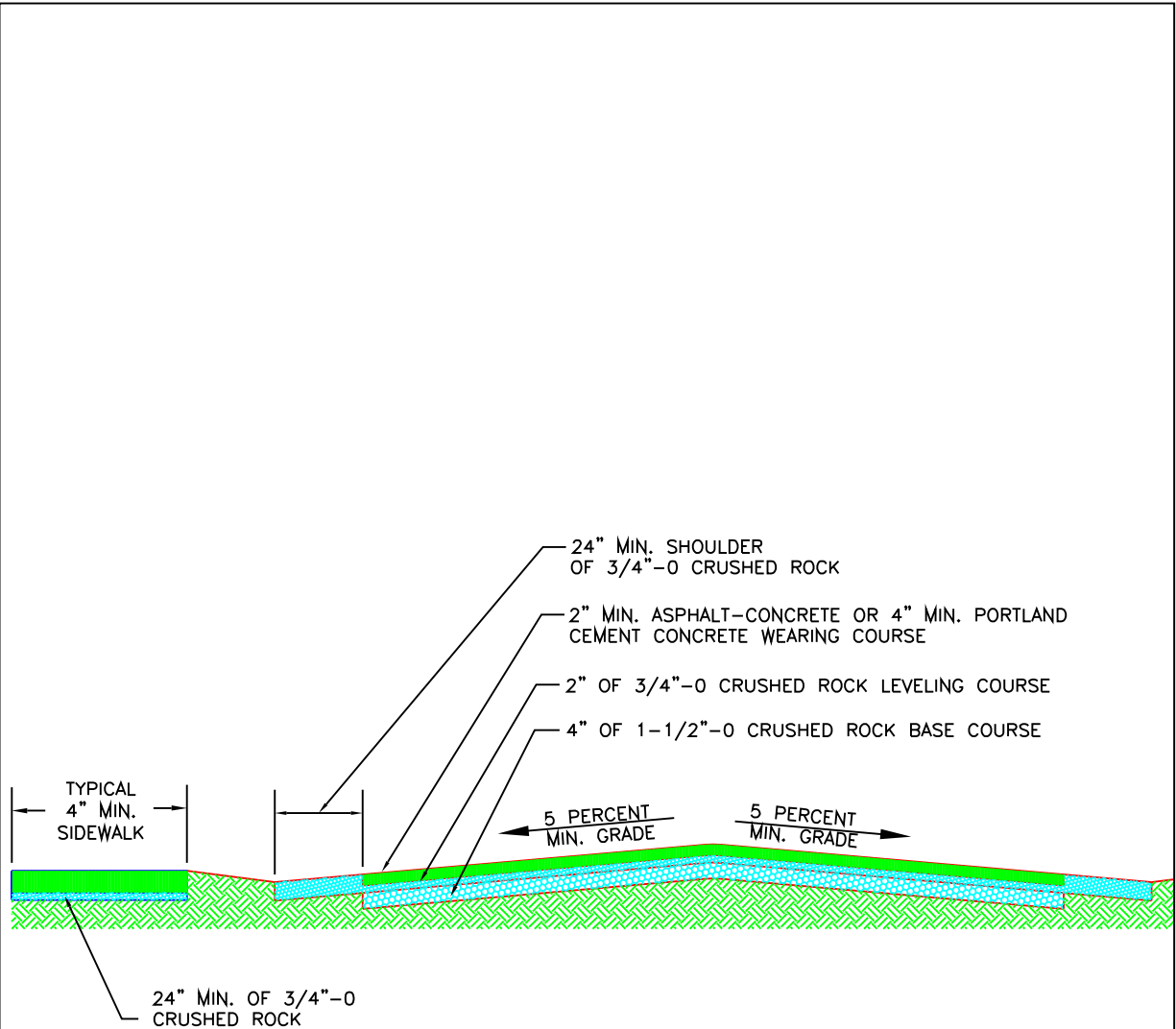


NOTE: SEE FIGURE 10-5.1J
FOR TYPICAL DRAIN DETAIL.

NOTE: PARK STREETS SHALL BE CONSTRUCTED WITH A WELL-COMPACTED AND WELL-GRADED BASE OF 4" OF 1-1/2"-0 CRUSHED ROCK TOPPED WITH 2" OF 3/4"-0 CRUSHED ROCK AND FINISHED WITH A 2" WEARING COURSE OF ASPHALT-CONCRETE OVER OR A 4" WEARING COURSE OF PORTLAND CEMENT CONCRETE. STREETS MADE OF PORTLAND CEMENT CONCRETE SHALL HAVE CONTRACTION JOINTS SPACED 10 FEET APART. ALL TRANSVERSE CONTRACTION JOINTS SHALL MATCH AND ALIGN WITH CURBS AND/OR GUTTERS UNLESS PAVING AND CURBS ARE SEPARATED BY AN ISOLATION JOINT. MAXIMUM JOINT SPACING SHALL BE 10 FEET.

TYPICAL CROWNED STREET WITH CURB DETAIL

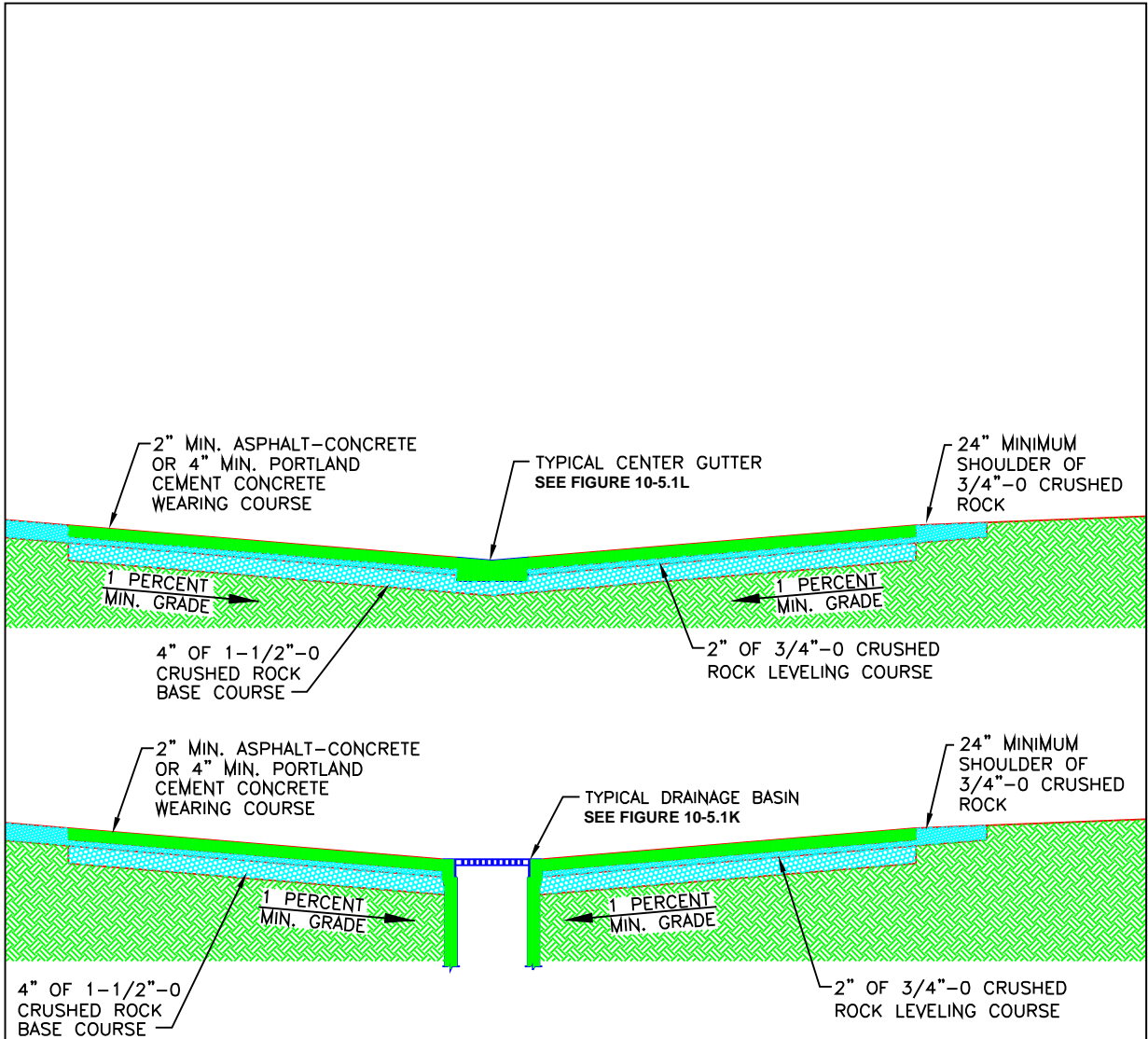
	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1E



NOTE: PARK STREETS SHALL BE CONSTRUCTED WITH A WELL-COMPACTED AND WELL-GRADED BASE OF 4" OF 1-1/2"-0 CRUSHED ROCK TOPPED WITH 2" OF 3/4"-0 CRUSHED ROCK AND FINISHED WITH A 2" WEARING COURSE OF ASPHALT-CONCRETE OVER OR A 4" WEARING COURSE OF PORTLAND CEMENT CONCRETE. STREETS MADE OF PORTLAND CEMENT CONCRETE SHALL HAVE CONTRACTION JOINTS SPACED 10 FEET APART. ALL TRANSVERSE CONTRACTION JOINTS SHALL MATCH AND ALIGN WITH CURBS AND/OR GUTTERS UNLESS PAVING AND CURBS ARE SEPARATED BY AN ISOLATION JOINT. MAXIMUM JOINT SPACING SHALL BE 10 FEET.

TYPICAL CROWNED STREET WITHOUT CURB DETAIL

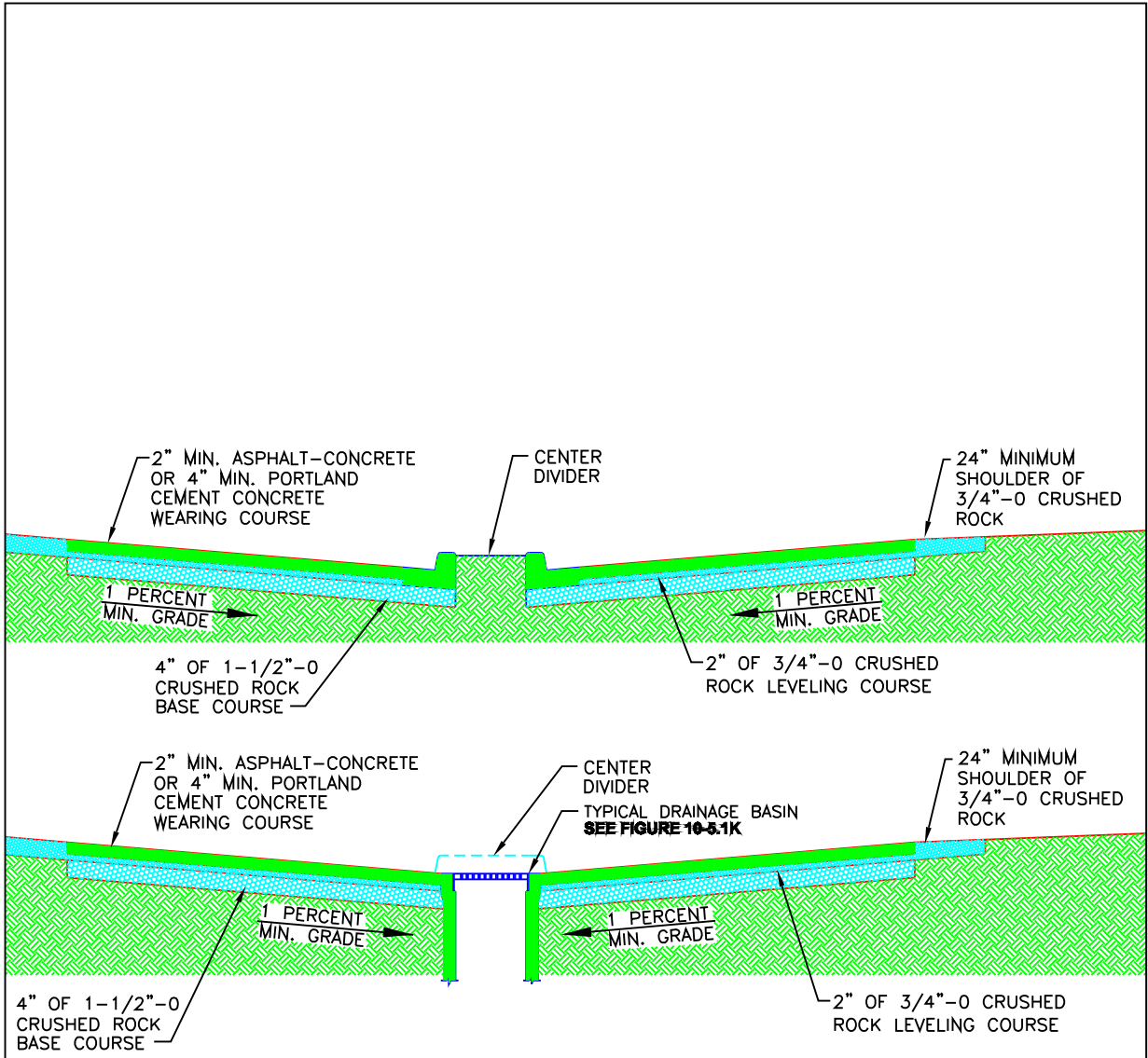
	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1F



NOTE: PARK STREETS SHALL BE CONSTRUCTED WITH A WELL-COMPACTED AND WELL-GRADED BASE OF 4" OF 1-1/2"-0 CRUSHED ROCK TOPPED WITH 2" OF 3/4"-0 CRUSHED ROCK AND FINISHED WITH A 2" WEARING COURSE OF ASPHALT-CONCRETE OVER OR A 4" WEARING COURSE OF PORTLAND CEMENT CONCRETE. STREETS MADE OF PORTLAND CEMENT CONCRETE SHALL HAVE CONTRACTION JOINTS SPACED 10 FEET APART. ALL TRANSVERSE CONTRACTION JOINTS SHALL MATCH AND ALIGN WITH CURBS AND/OR GUTTERS UNLESS PAVING AND CURBS ARE SEPARATED BY AN ISOLATION JOINT. MAXIMUM JOINT SPACING SHALL BE 10 FEET.

TYPICAL INVERTED CROWN STREET WITH CENTER GUTTER DETAILS

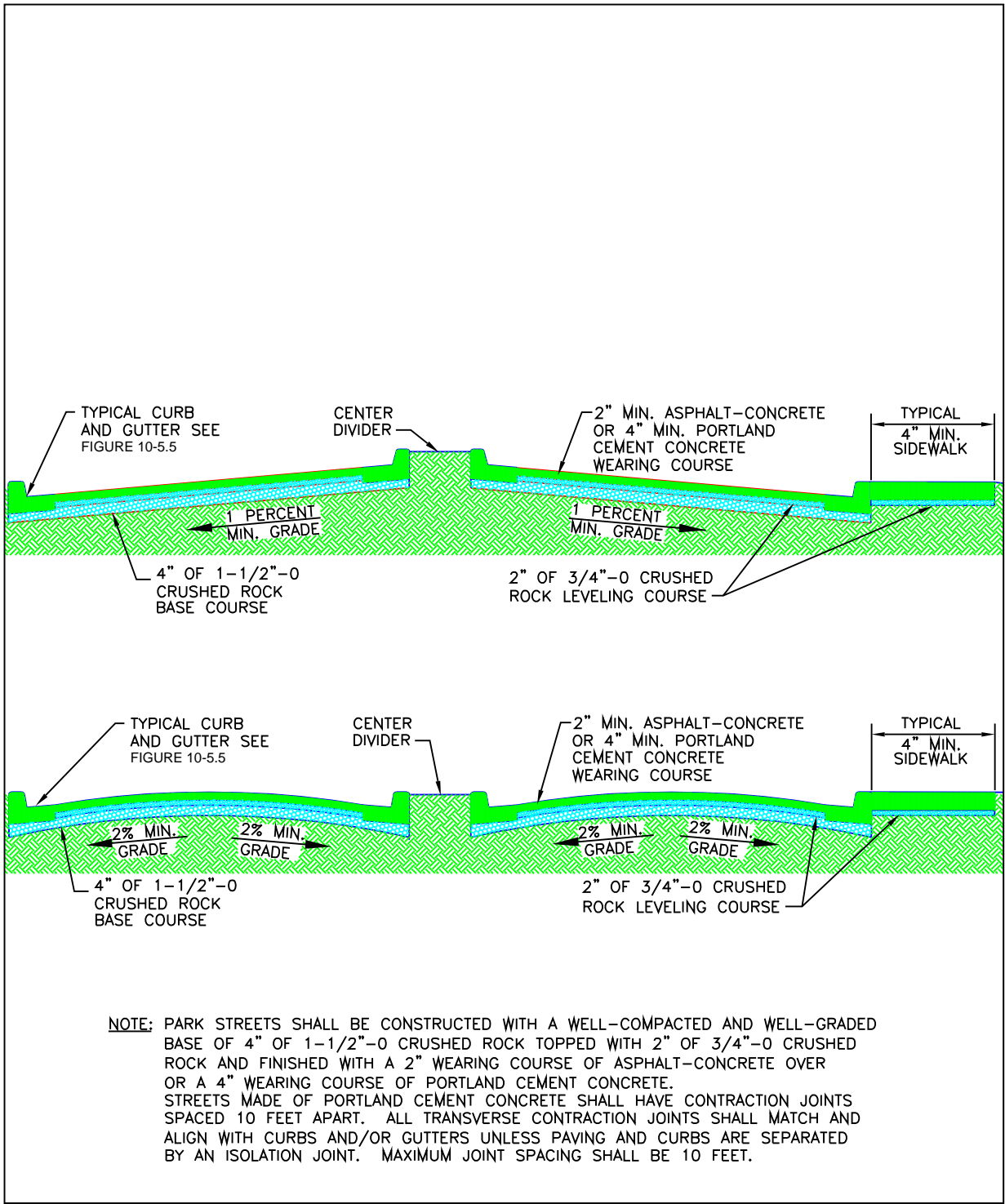
	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1G



NOTE: PARK STREETS SHALL BE CONSTRUCTED WITH A WELL-COMPACTED AND WELL-GRADED BASE OF 4" OF 1-1/2"-0 CRUSHED ROCK TOPPED WITH 2" OF 3/4"-0 CRUSHED ROCK AND FINISHED WITH A 2" WEARING COURSE OF ASPHALT-CONCRETE OVER OR A 4" WEARING COURSE OF PORTLAND CEMENT CONCRETE. STREETS MADE OF PORTLAND CEMENT CONCRETE SHALL HAVE CONTRACTION JOINTS SPACED 10 FEET APART. ALL TRANSVERSE CONTRACTION JOINTS SHALL MATCH AND ALIGN WITH CURBS AND/OR GUTTERS UNLESS PAVING AND CURBS ARE SEPARATED BY AN ISOLATION JOINT. MAXIMUM JOINT SPACING SHALL BE 10 FEET.

TYPICAL DIVIDED STREET WITHOUT CURB DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1H

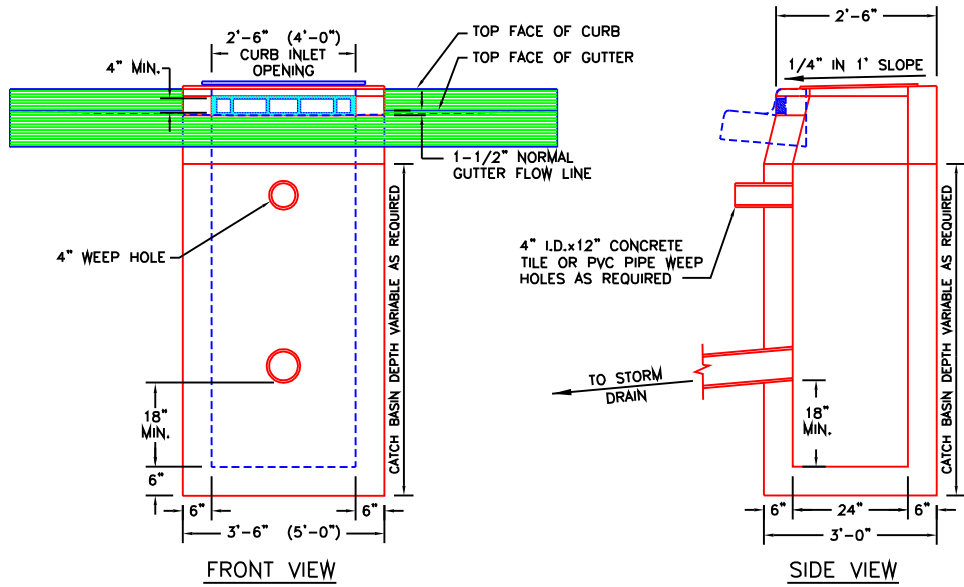
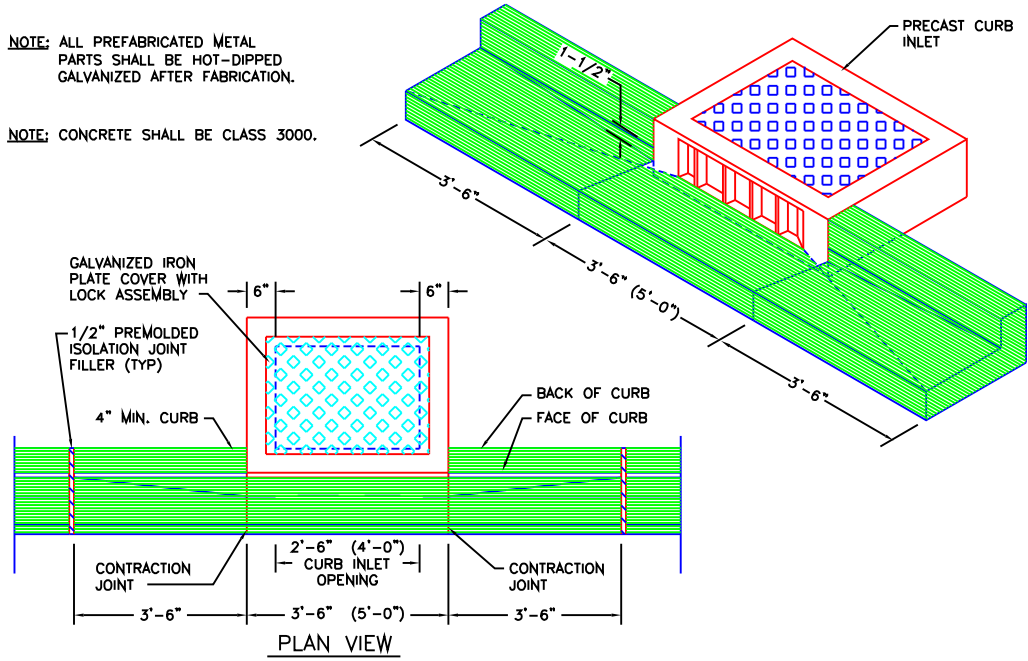


TYPICAL DIVIDED STREET WITH CURB DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.11

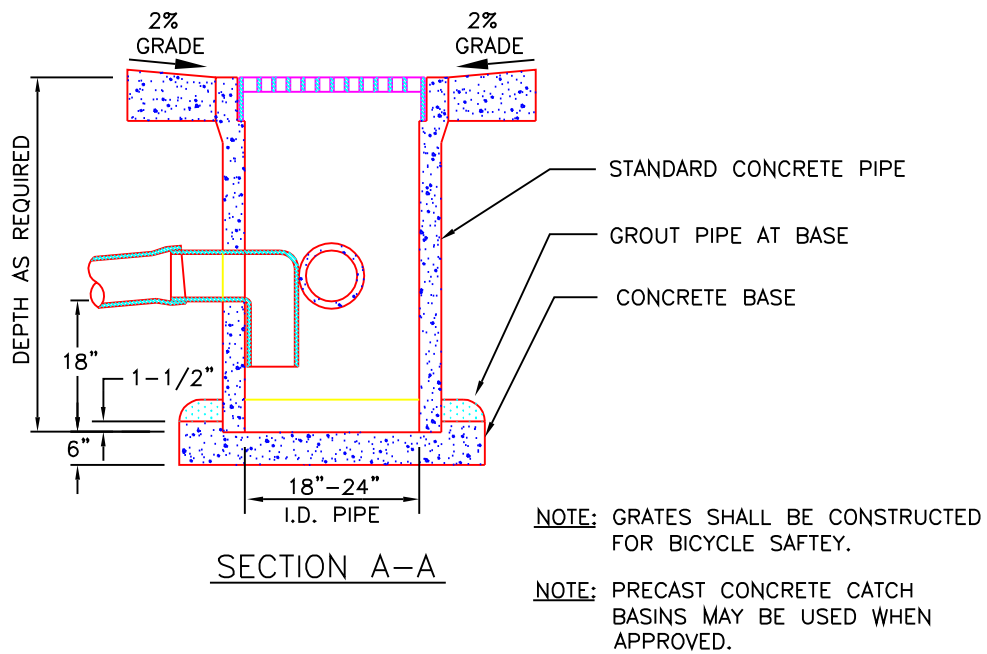
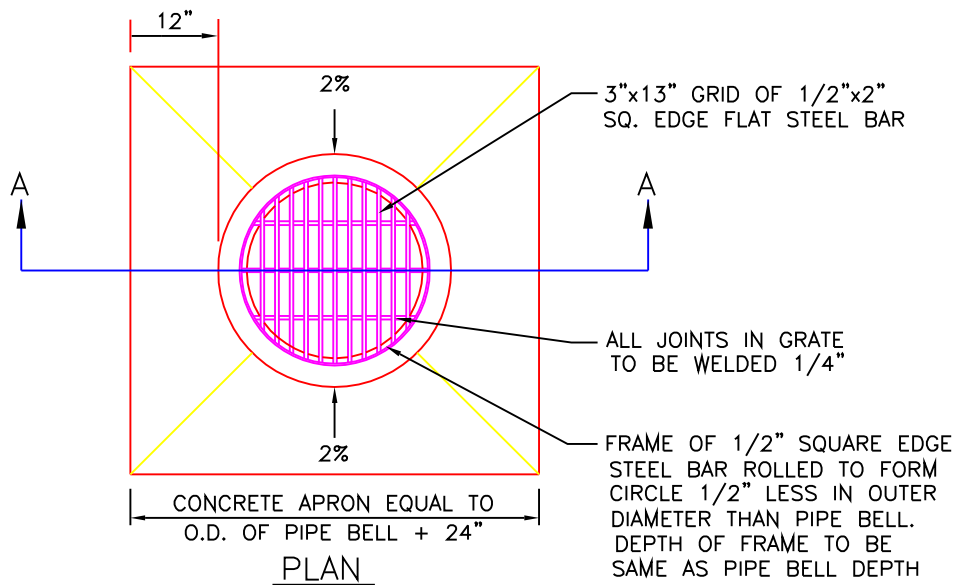
NOTE: ALL PREFABRICATED METAL PARTS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION.

NOTE: CONCRETE SHALL BE CLASS 3000.



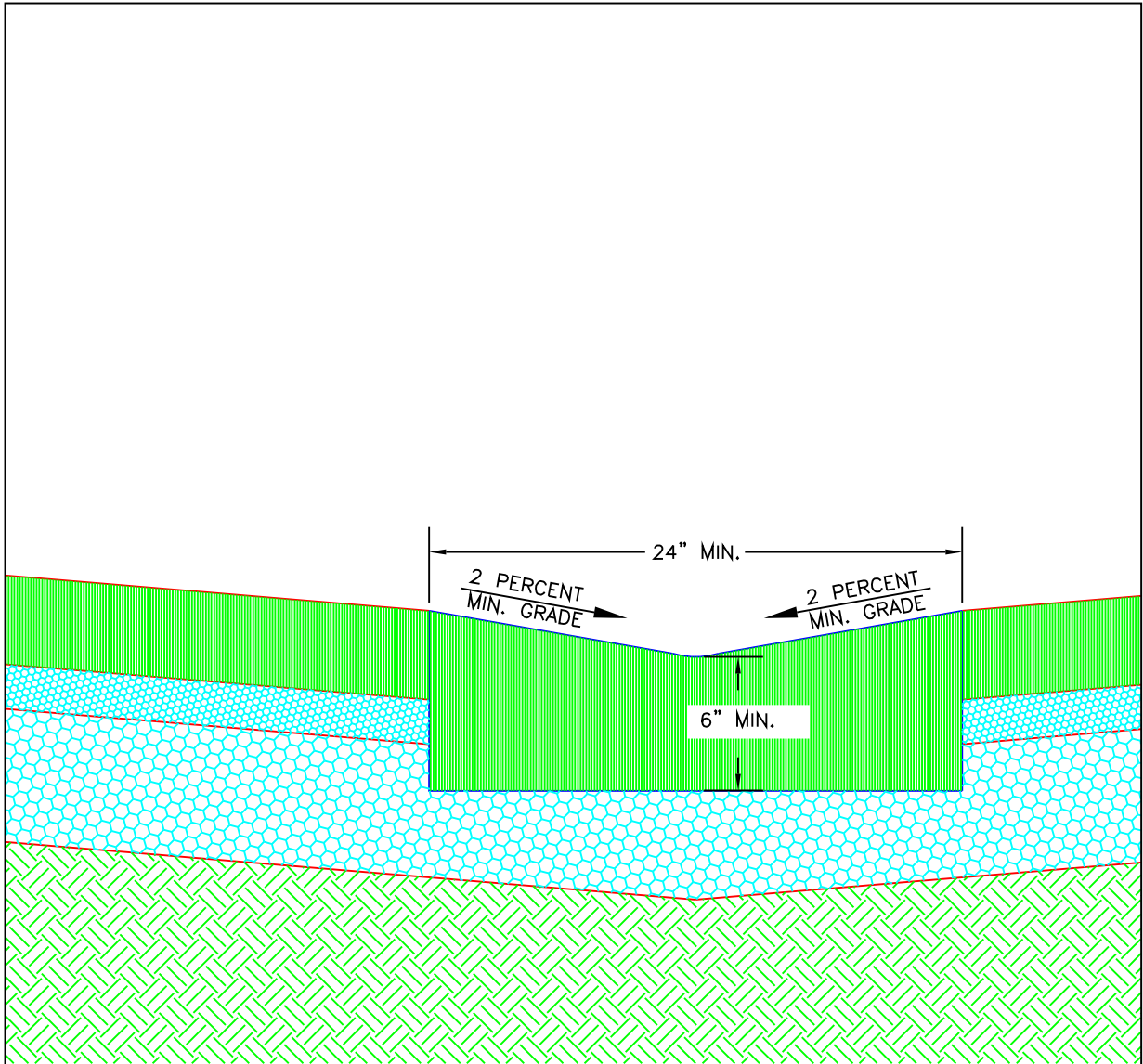
TYPICAL CROWNED STREET CURB DRAIN DETAIL

REV. 12/01/01 RHW	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10 FIGURE 10-5.1J
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TYPICAL INVERTED CROWN STREET DRAINAGE BASIN DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1K



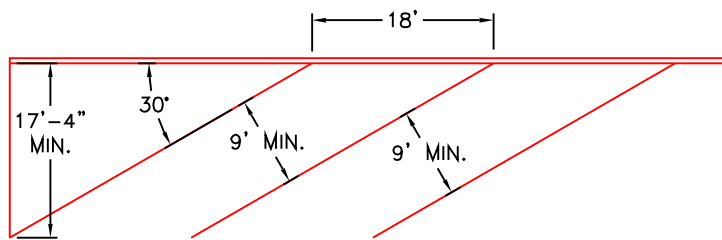
NOTE: ALL RADII SHALL BE 3/4" UNLESS OTHERWISE SPECIFIED.

NOTE: ISOLATION JOINTS SHALL BE PLACED AS SPECIFIED.

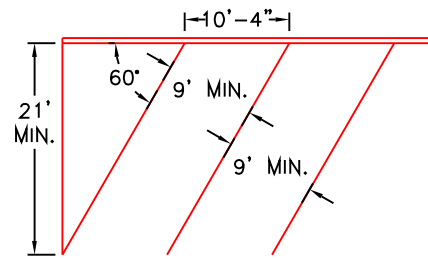
NOTE: CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE GUTTER

TYPICAL CENTER GUTTER DETAILS

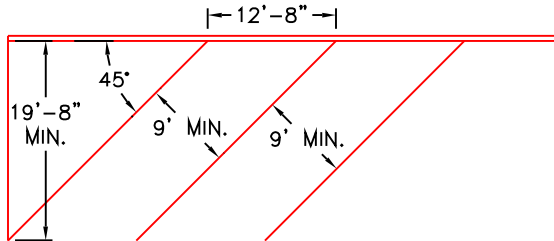
	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.1L



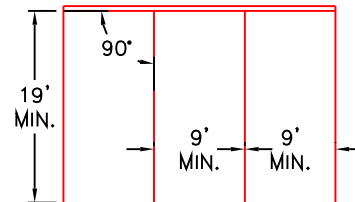
30 DEGREE DIAGONAL PARKING



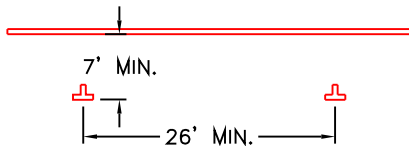
60 DEGREE DIAGONAL PARKING



45 DEGREE DIAGONAL PARKING



PERPENDICULAR PARKING



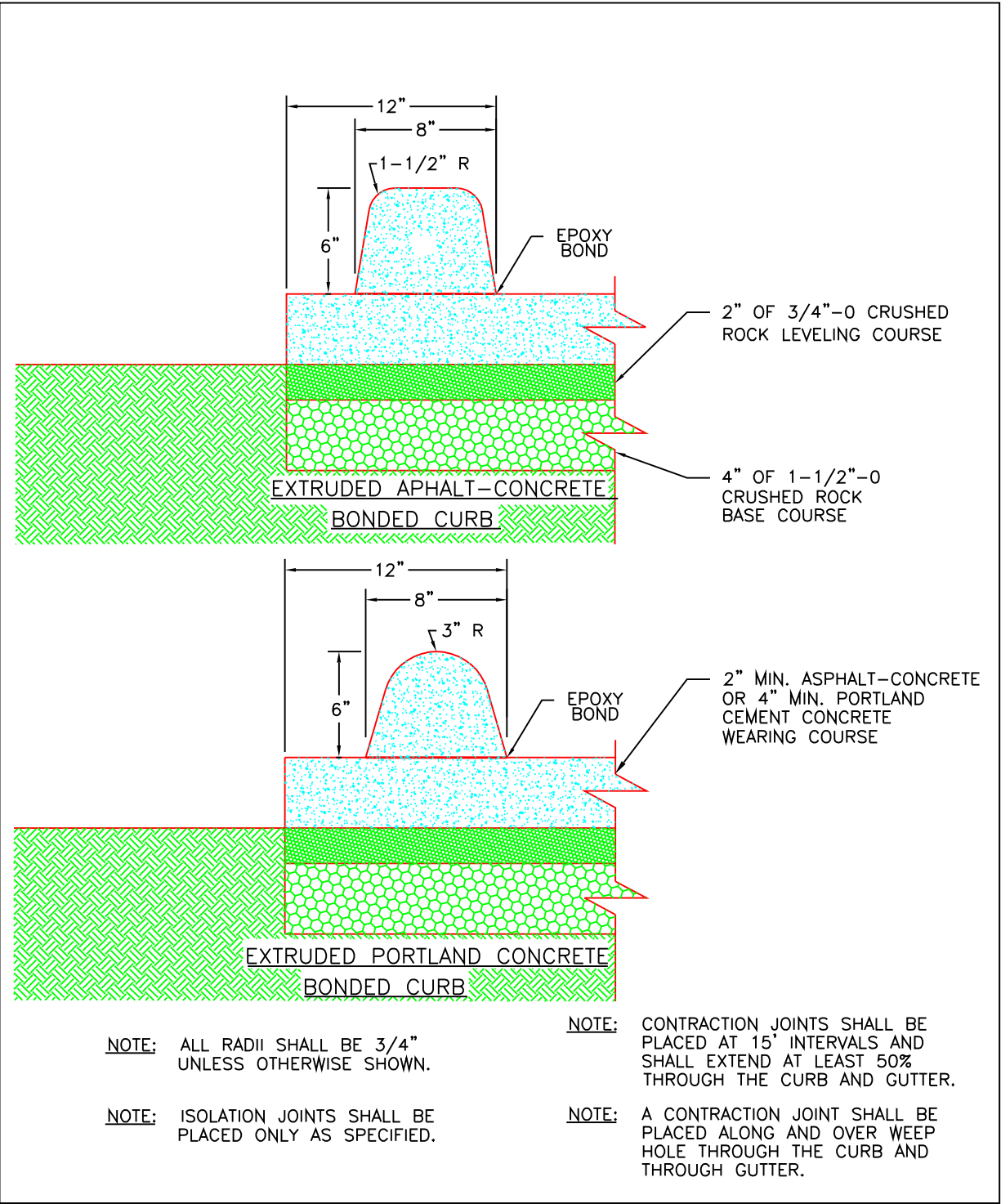
PARALLEL PARKING

NOTE: WHEN OTHER THAN PARALLEL STREET PARKING IS PROVIDED, USE THE DIMENSIONS SHOWN ON THESE ILLUSTRATIONS, LESS 7 FEET TO SIZE THE PARK STREETS.

EXAMPLE: IF 45 DEGREE DIAGONAL PARKING IS BEING USED ON ONE SIDE OF THE STREET, DEDUCT 7 FEET FROM 13 FEET AND ADD THE DIFFERENCE TO THE MINIMUM WIDTH OF THE STREET. ($13' - 7' + 30' = 36'$)

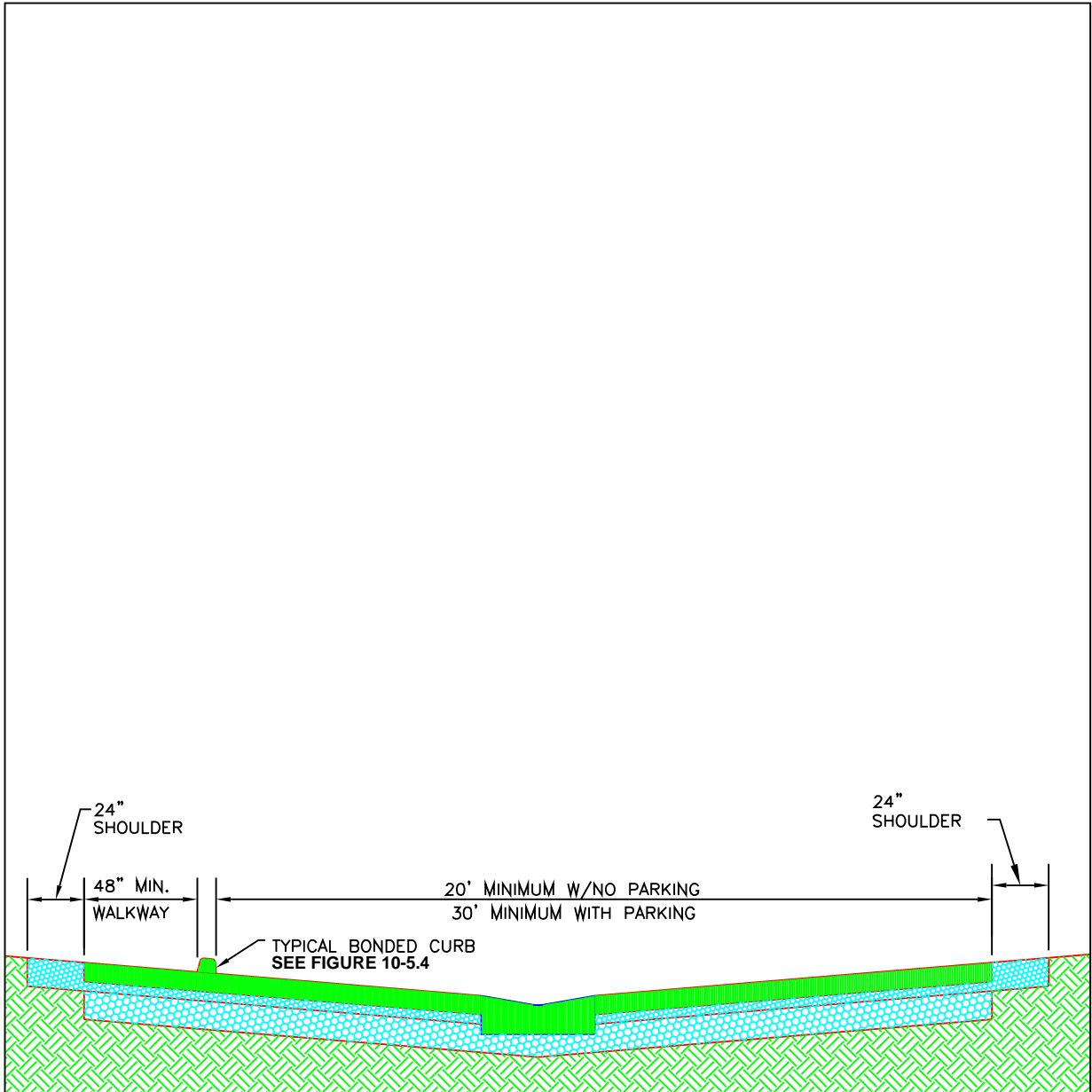
TYPICAL PARKING CONFIGURATIONS

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.3



TYPICAL BONDED CURB DETAILS

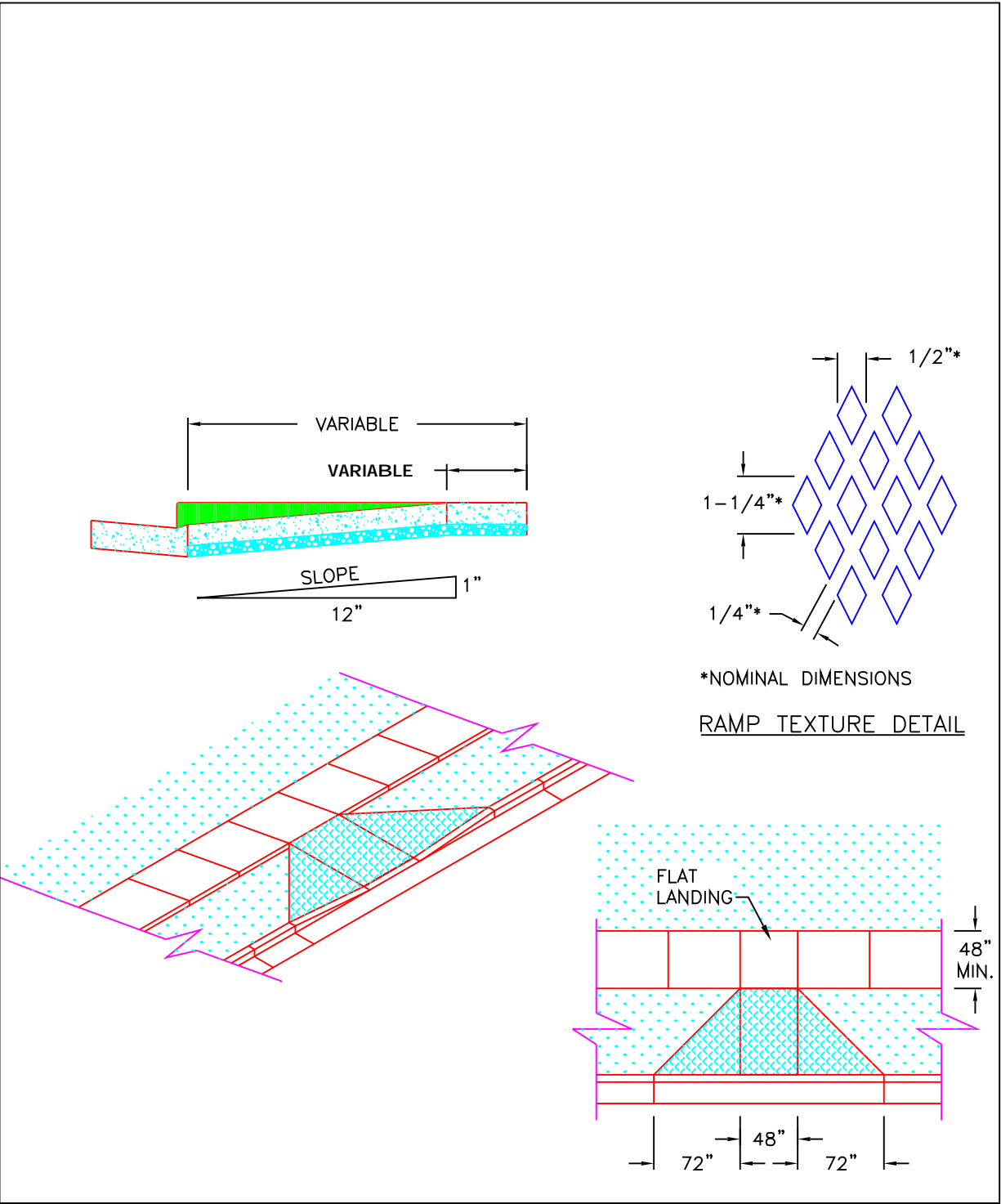
	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.4



NOTE: PARK STREETS WITHOUT SIDEWALKS MAY HAVE A DESIGNATED 48" WIDE WALKWAY ON ONE SIDE OF THE STREET. THE WALKWAY SHALL BE MARKED FOR PEDESTRIAN TRAFFIC OR DIVIDED FROM THE TRAFFIC AREA WITH CURBING OR SIMILAR BARRIERS. WALKWAYS SHALL NOT DIMINISH THE MINIMUM REQUIRED WIDTH OF THE STREET.

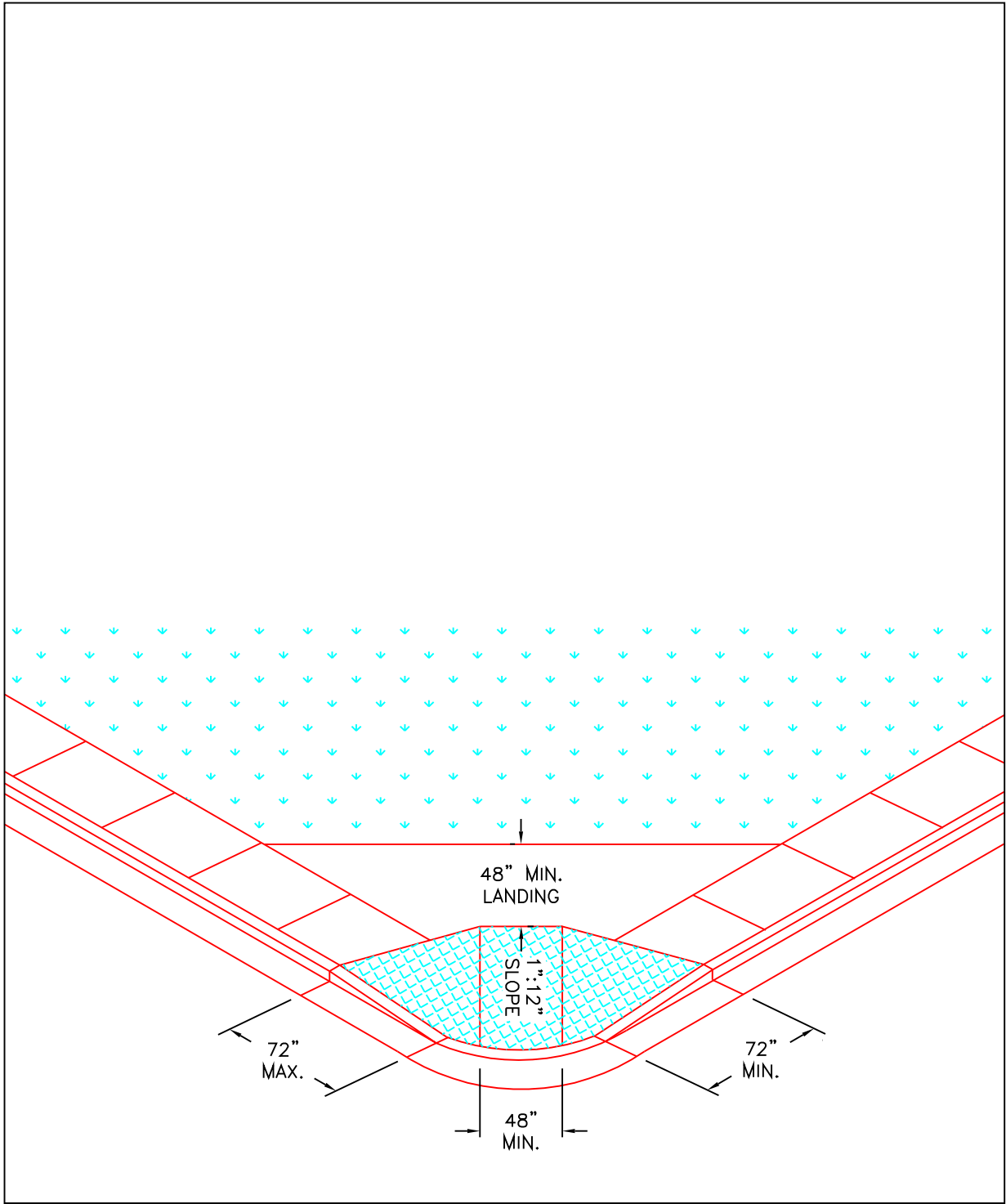
TYPICAL ON-STREET WALKWAY DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.4A



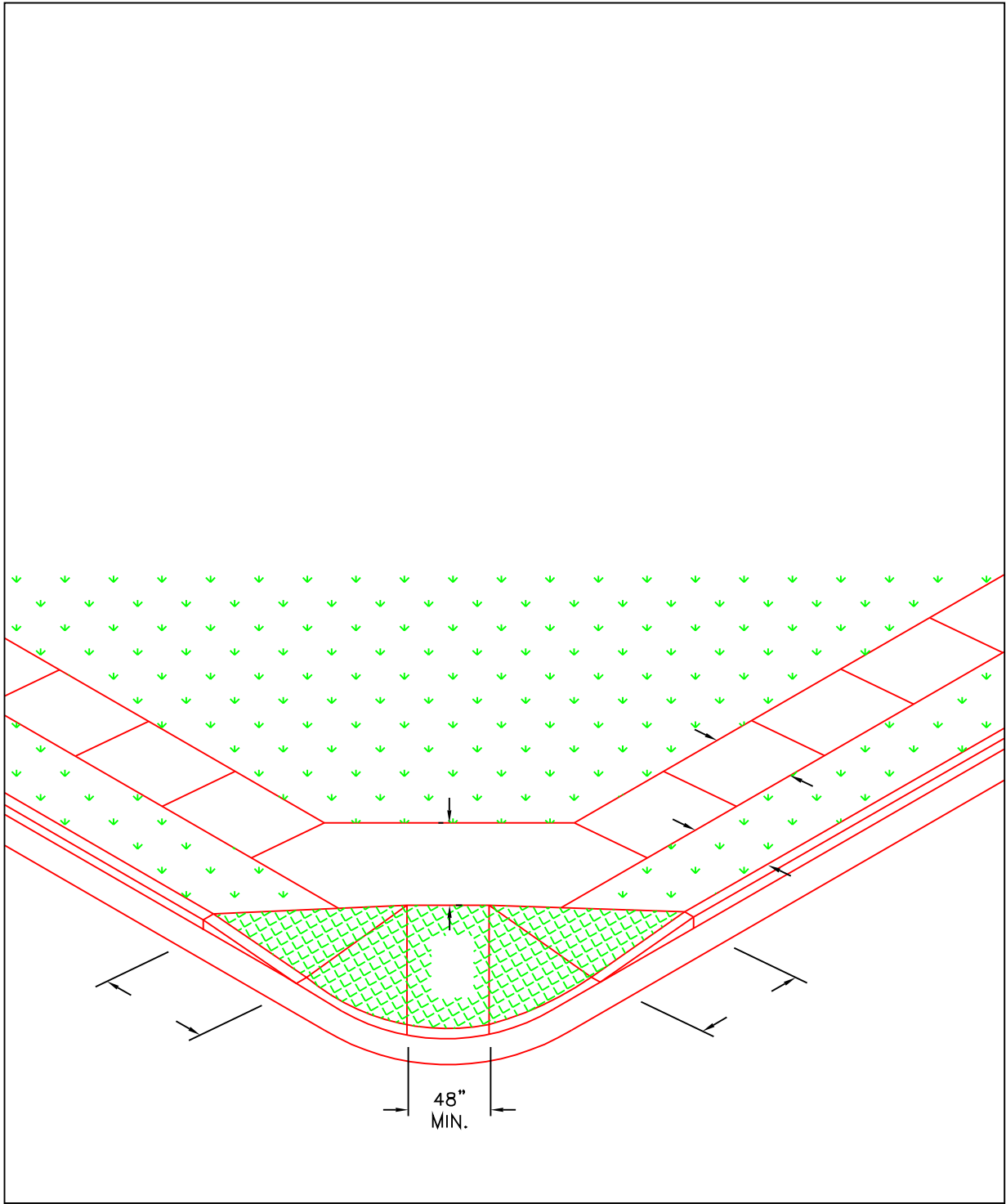
TYPICAL ACCESSIBLE CURB-RAMP DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.4B



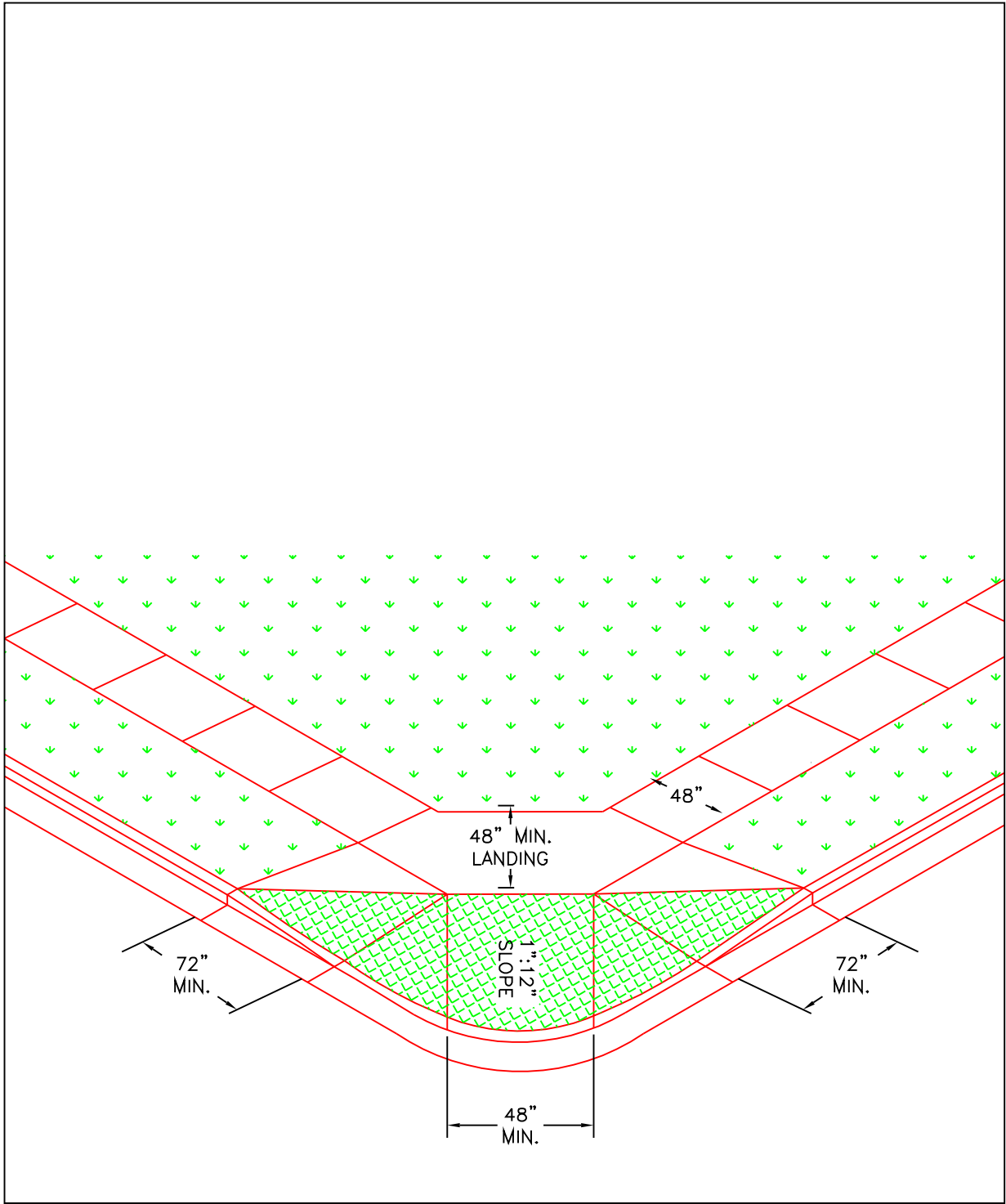
TYPICAL ACCESSIBLE CURB-RAMP DETAIL

	<p>MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES</p>	<p>CHAPTER 10</p>
<p>REV. 12/01/01 RHW</p>		<p>FIGURE 10-5.4C</p>



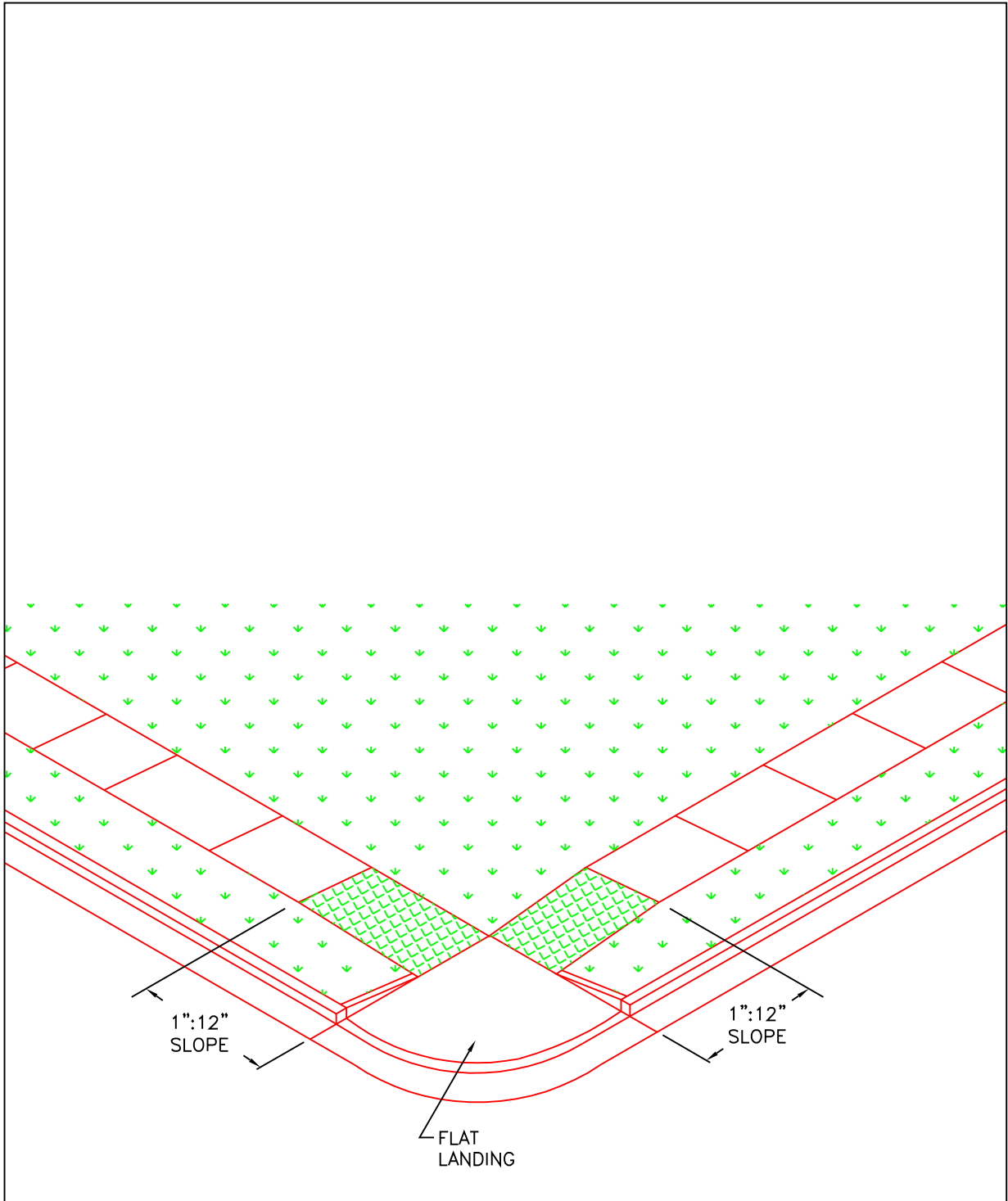
TYPICAL ACCESSIBLE CURB-RAMP DETAIL

	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.4D



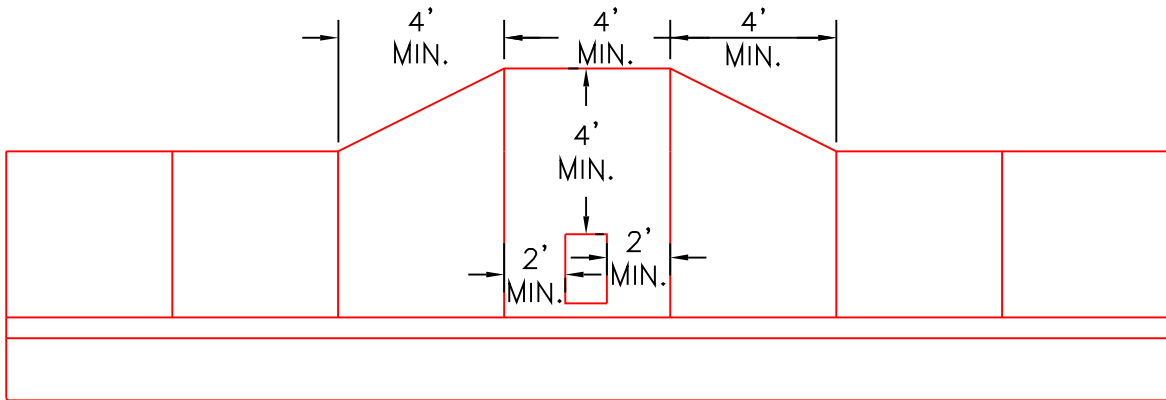
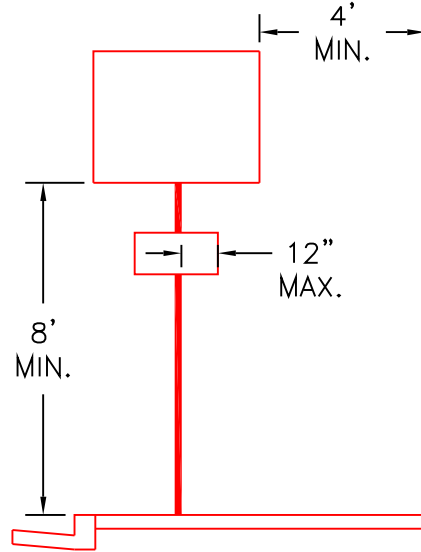
TYPICAL ACCESSIBLE CURB-RAMP DETAIL

	<p>MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES</p>	<p>CHAPTER 10</p>
<p>REV. 12/01/01 RHW</p>		<p>FIGURE 10-5.4E</p>



TYPICAL ACCESSIBLE CURB-RAMP DETAIL

	<p>MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES</p>	<p>CHAPTER 10</p>
<p>REV. 12/01/01 RHW</p>		<p>FIGURE 10-5.4F</p>



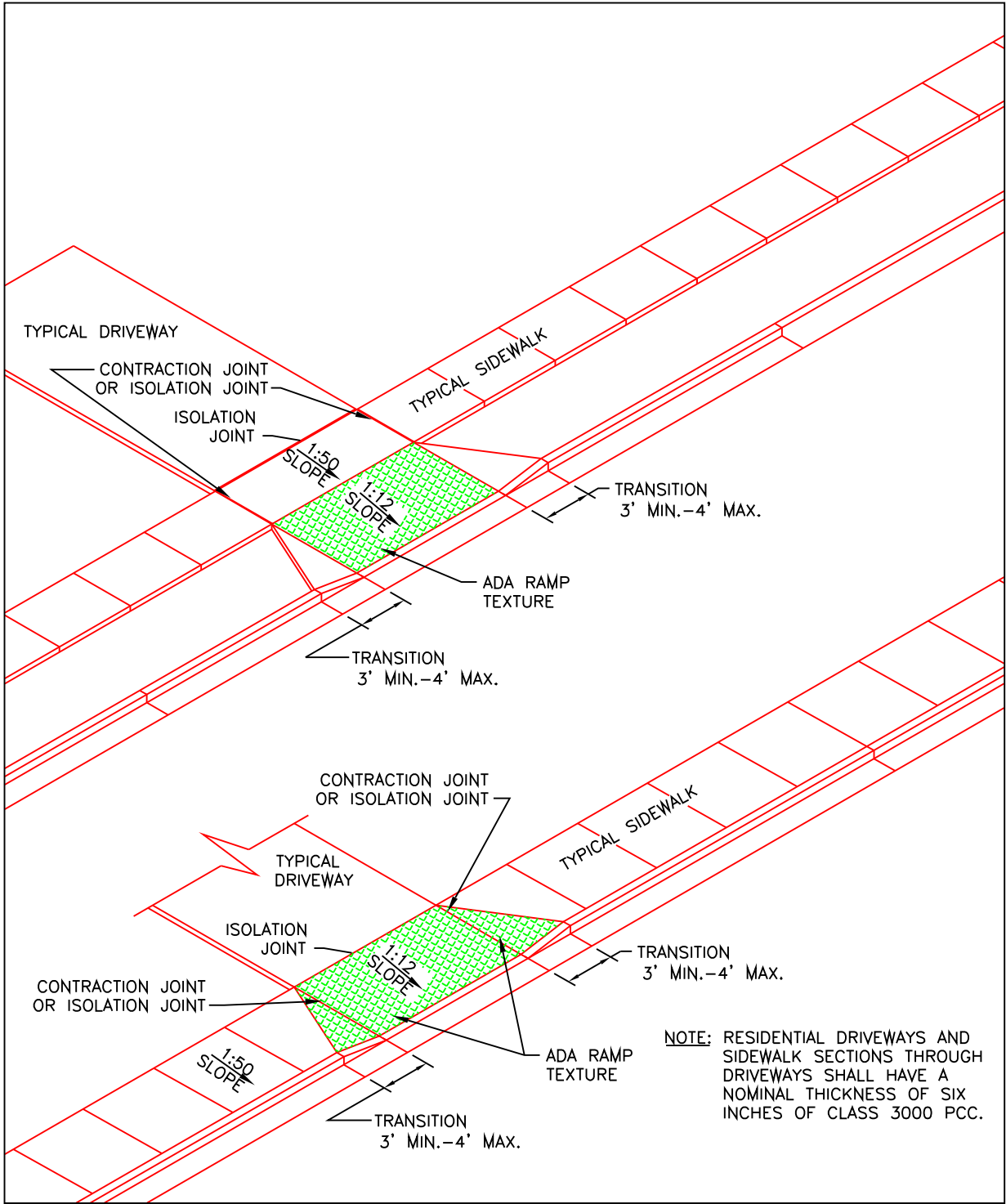
NOTE: WHEN SITE CONSTRAINTS PROHIBIT A FOUR FOOT CLEARANCE, THE CLEARANCE MAY BE REDUCED TO TO NO LESS THAN THREE FEET.

TYPICAL SIDEWALK OBSTRUCTION DETAIL

REV. 12/01/01 RHW

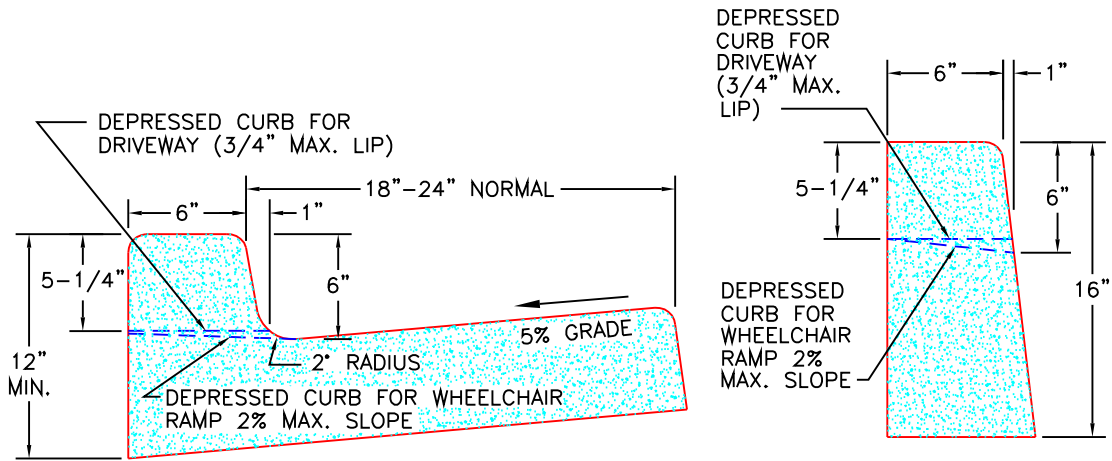
MANUFACTURED STRUCTURE
AND PARK SPECIALTY CODES

CHAPTER 10
FIGURE 10-5.4G

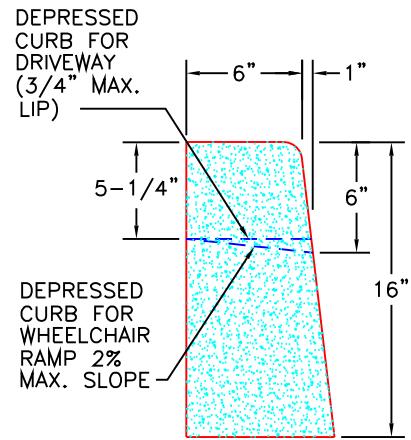


TYPICAL PEDESTRIAN ACCESS ACROSS DRIVEWAY

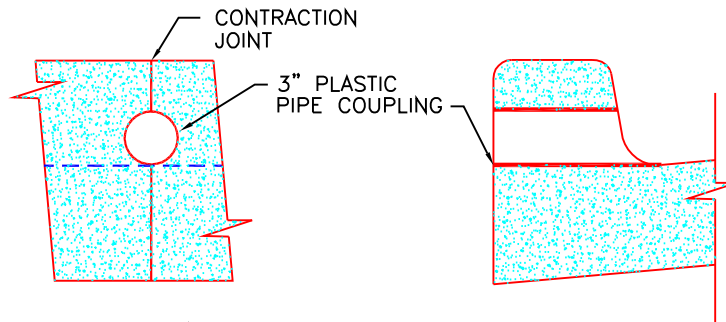
	MANUFACTURED STRUCTURE AND PARK SPECIALTY CODES	CHAPTER 10
REV. 12/01/01 RHW		FIGURE 10-5.4H



TYPICAL CURB & GUTTER



TYPICAL STRAIGHT CURB



WEEP HOLE THROUGH CURB

NOTE: WHEN SIDEWALKS ARE CONSTRUCTED, EXTEND 3" PIPE TO BACK OF SIDEWALK AND INSTALL COUPLING.

NOTE: ALL RADII SHALL BE 3/4" UNLESS OTHERWISE SHOWN.

NOTE: ISOLATION JOINTS SHALL BE PLACED ONLY AS SPECIFIED.

NOTE: CONTRACTION JOINTS SHALL BE PLACED AT 15' INTERVALS AND SHALL EXTEND AT LEAST 50% THROUGH THE CURB AND GUTTER.

NOTE: A CONTRACTION JOINT SHALL BE PLACED ALONG AND OVER WEEP HOLE THROUGH THE CURB AND THROUGH GUTTER.

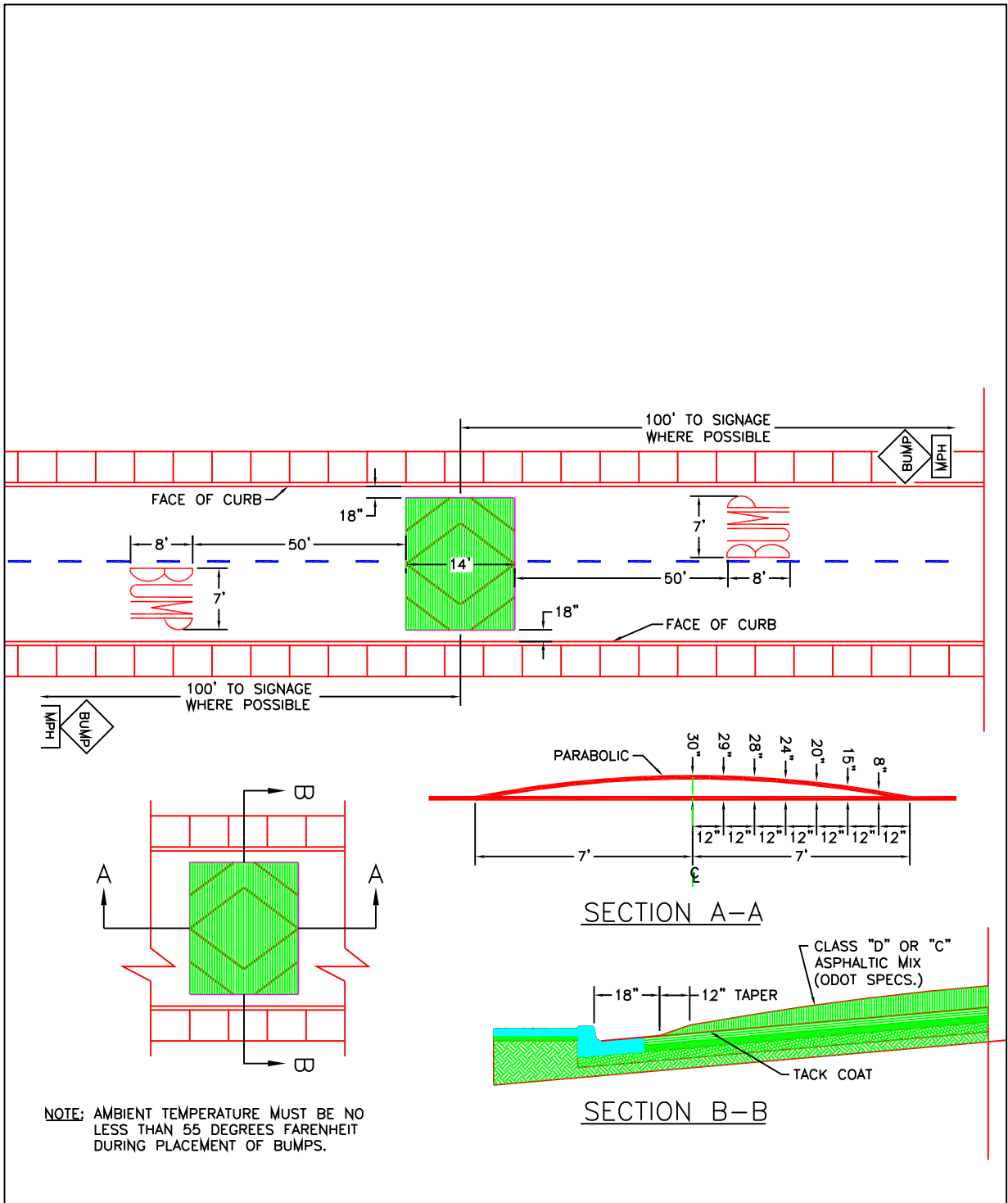
TYPICAL CURB, GUTTER & WEEPHOLE DETAIL

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FIGURE 10-5.5



TYPICAL SPEED BUMP DETAIL

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