APPENDICES

13. APPENDICES

13.1. APPENDIX 1: SOIL PROFILES

Rio Rancho, Sandoval County Soils
142—Grieta fine sandy loam, 1 to 4 percent slopes
Map Unit Setting
Elevation: 5,000 to 6,000 feet
Mean annual precipitation: 8 to 10 inches
Mean annual air temperature: 53 to 55degrees F
Frost-free period: 140 to 160 days
Map Unit Composition
Grieta and similar soils: 85 percent

Description of Grieta
Setting
Landform: Ridges, plateaus, mesas, fan remnants
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits over fan alluvium derived from sandstone

Properties and qualities
Slope: 1 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 20 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Available water capacity: Moderate (about 7.9 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Loamy (R042XA052NM)

Typical profile
0 to 3 inches: Fine sandy loam
3 to 11 inches: Fine sandy loam
11 to 34 inches: Sandy clay loam
34 to 48 inches: Sandy clay loam
48 to 60 inches: Loamy sand

143—Clovis fine sandy loam, 1 to 4 percent slopes
Map Unit Setting
Elevation: 6,000 to 6,600 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 120 to 140 days

Map Unit Composition
Clovis and similar soils: 85 percent

Setting
Landform: Fan remnants, mesas, plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits over slope alluvium derived from sandstone and shale

Properties and qualities
Slope: 1 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 1.0
Available water capacity: Moderate (about 8.9 inches)

Interpretive groups
Land capability (nonirrigated): 6c
Ecological site: Loamy (R035XA112NM)

Typical profile
0 to 3 inches: Fine sandy loam
3 to 7 inches: Sandy clay loam
7 to 12 inches: Sandy clay loam
12 to 22 inches: Sandy clay loam
22 to 34 inches: Sandy clay loam
34 to 60 inches: Sandy clay loam

145—Grieta-Sheppard loamy fine sands, 2 to 9 percent slopes
Map Unit Setting
Elevation: 5,200 to 6,000 feet
Mean annual precipitation: 8 to 10 inches
Mean annual air temperature: 53 to 55 degrees F
Frost-free period: 140 to 160 days
Map Unit Composition
Grieta and similar soils: 55 percent
Sheppard and similar soils: 40 percent

Description of Grieta
Setting
Landform: Mesas, plateaus, ridges, fan remnants
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits over fan alluvium derived from sandstone

Properties and qualities
Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 6.6 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Loamy (R042XA052NM)
Typical profile
0 to 7 inches: Loamy fine sand
7 to 14 inches: Sandy clay loam
14 to 21 inches: Sandy clay loam
21 to 38 inches: Coarse sandy loam
38 to 50 inches: Coarse sandy loam
50 to 60 inches: Coarse sandy loam
Description of Sheppard

Setting
Landform: Terraces, alluvial fans, benches, dunes, structural benches
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Linear, convex
Across-slope shape: Linear
Parent material: Eolian deposits derived from sandstone

Properties and qualities
Slope: 3 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.4 inches)
Interpretive groups
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile
0 to 5 inches: Loamy fine sand
5 to 27 inches: Loamy fine sand
27 to 60 inches: Loamy fine sand

183—Sheppard loamy fine sand, 8 to 15 percent slopes
Map Unit Setting
Elevation: 5,200 to 5,700 feet
Mean annual precipitation: 8 to 10 inches
Mean annual air temperature: 53 to 55 degrees F
Frost-free period: 140 to 160 days
Map Unit Composition
Sheppard and similar soils: 85 percent

Description of Sheppard
Setting
Landform: Structural benches, dunes, benches, alluvial fans, stream terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Eolian deposits derived from sandstone

Properties and qualities
Slope: 8 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high(6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.4 inches)

Interpretive groups
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile
0 to 4 inches: Loamy fine sand
4 to 45 inches: Loamy fine sand
45 to 60 inches: Loamy fine sand

191—Sheppard loamy fine sand, 3 to 8 percent slopes
Map Unit Setting
Elevation: 5,200 to 5,700 feet
Mean annual precipitation: 8 to 10 inches
Mean annual air temperature: 53 to 55 degrees F
Frost-free period: 140 to 160 days
Map Unit Composition
Sheppard and similar soils: 85 percent

Description of Sheppard
Setting
Landform: Structural benches, dunes, benches, alluvial fans, stream terraces
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Eolian deposits derived from sandstone

Properties and qualities
Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Low (about 5.4 inches)

Interpretive groups
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile
0 to 3 inches: Loamy fine sand
3 to 27 inches: Loamy fine sand
27 to 60 inches: Loamy fine sand

211—Zia-Clovis association, 2 to 10 percent slopes
Map Unit Setting
Elevation: 5,500 to 6,400 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 120 to 140 days
Map Unit Composition
Zia and similar soils: 45 percent
Clovis and similar soils: 30 percent

Description of Zia
Setting
Landform: Plateaus
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from sandstone over fan alluvium derived from sandstone; eolian deposits and alluvium derived from sandstone and shale

Properties and qualities
Slope: 2 to 10 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups
Land capability (nonirrigated): 6c
Ecological site: Sandy (R035XA113NM)

Typical profile
0 to 5 inches: Sandy loam
5 to 14 inches: Sandy loam
14 to 33 inches: Sandy loam
33 to 46 inches: Sandy clay loam
46 to 60 inches: Sandy loam

Description of Clovis
Setting
Landform: Fan remnants, plains
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from sandstone over fan alluvium derived from sandstone and shale; eolian deposits and alluvium derived from sandstone and shale

Properties and qualities
Slope: 2 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 8.9 inches)

Interpretive groups
Land capability (nonirrigated): 6c
Ecological site: Loamy (R035XA112NM)

Typical profile
0 to 5 inches: Fine sandy loam
5 to 60 inches: Sandy clay loam

213—Pinavetes-Rock outcrop complex, 15 to 35 percent slopes
Map Unit Setting
Elevation: 5,600 to 6,100 feet
Mean annual precipitation: 10 to 13 inches
Mean annual air temperature: 52 to 54 degrees F
Frost-free period: 120 to 140 days
Map Unit Composition
Pinavetes and similar soils: 55 percent
Rock outcrop: 30 percent

Description of Pinavetes
Setting
Landform: Dunes, valley sides
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Eolian deposits derived from sandstone

Properties and qualities
Slope: 15 to 35 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Available water capacity: Very low (about 2.9 inches)

Interpretive groups
Land capability (nonirrigated): 6e
Ecological site: Deep Sand (R035XA115NM)
Typical profile
0 to 7 inches: Sand
7 to 60 inches: Stratified sand to loamy sand
Description of Rock Outcrop

Setting
Landform: Escarpments, breaks
Properties and qualities
Depth to restrictive feature: 0 inches to lithic bedrock
Capacity of the most limiting layer to transmit water (Ksat): Very low to low (0.00 to 0.01 in/hr)

Interpretive groups
Land capability (nonirrigated): 8s

Typical profile
0 to 60 inches: Bedrock

823—Gilco loam, 1 to 4 percent slopes, unprotected
Map Unit Setting
Elevation: 5,000 to 5,500 feet
Mean annual precipitation: 8 to 10 inches
Mean annual air temperature: 53 to 55 degrees F
Frost-free period: 140 to 160 days

Map Unit Composition
Gilco, unprotected, and similar soils: 85 percent

Setting
Landform: Flood plains
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Stream alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 1 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 5.0
Available water capacity: High (about 9.6 inches)

Interpretive groups
Land capability classification (irrigated): 4e
Land capability (nonirrigated): 7e
Ecological site: Bottomland (R042XA057NM)

Typical profile
0 to 8 inches: Loam
8 to 60 inches: Stratified fine sandy loam to loam to silt loam

Rio Rancho, Bernalillo County Soils
AmB—Alemeda sandy loam, 0 to 5 percent slopes
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days

Map Unit Composition
Alemeda and similar soils: 70 percent

Description of Alemeda
Setting
Landform: Hillslopes, lava flows
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Center third of mountainflank, lower third of mountainflank, side slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian deposits derived from igneous and sedimentary rock

Properties and qualities
Slope: 0 to 5 percent
Depth to restrictive feature: 20 to 40 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 50 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 6.0
Available water capacity: Very low (about 2.6 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Malpais (R042XA056NM)

Typical profile
0 to 4 inches: Sandy loam
4 to 13 inches: Gravelly sandy loam
13 to 26 inches: Very cobbly loam
26 to 30 inches: Bedrock

Bb—Bluepoint fine sand, hummocky
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days

Map Unit Composition
Bluepoint and similar soils: 100 percent

Description of Bluepoint
Setting
Landform: Flood plains, alluvial flats
Landform position (three-dimensional): Talf, rise
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy alluvium and/or eolian sands

Properties and qualities
Slope: 5 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Gypsum, maximum content: 1 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 4.3 inches)

Interpretive groups
Land capability classification (irrigated): 4s
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile
0 to 8 inches: Fine sand
8 to 20 inches: Stratified fine sand to gravelly loamy fine sand
20 to 60 inches: Loamy sand

BCC—Bluepoint loamy fine sand, 1 to 9 percent slopes
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days
Map Unit Composition
Bluepoint and similar soils: 85 percent

Description of Bluepoin
Setting
Landform: Flood plains, alluvial flats
Landform position (three-dimensional): Talf, rise
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy alluvium and/or eolian sands

Properties and qualities
Slope: 1 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 4.3 inches)

Interpretive groups
Land capability classification (irrigated): 3s
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile
0 to 8 inches: Loamy fine sand
8 to 20 inches: Stratified fine sand to gravelly loamy fine sand
20 to 60 inches: Loamy sand

BKD—Bluepoint-Kokan association, hilly
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days

Map Unit Composition
Bluepoint and similar soils: 50 percent
Kokan and similar soils: 40 percent

Description of Bluepoint
Setting
Landform: Flood plains, alluvial flats
Landform position (three-dimensional): Talf, rise
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Sandy alluvium and/or eolian sands

Properties and qualities
Slope: 5 to 15 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 3 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Low (about 4.3 inches)

Interpretive groups
Land capability classification (irrigated): 4s
Land capability (nonirrigated): 7s
Ecological site: Deep Sand (R042XA054NM)

Typical profile
0 to 8 inches: Loamy fine sand
8 to 60 inches: Stratified fine sand to gravelly loamy fine sand

Description of Kokan
Setting
Landform: Fan piedmonts, hillslopes
Landform position (two-dimensional): Shoulder, footslope, backslope
Landform position (three-dimensional): Side slope, rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 15 to 40 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very high (20.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None

Frequency of ponding: None
Calcium carbonate, maximum content: 2 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Very low (about 2.4 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Gravelly Sand (R042XA053NM)

Typical profile
0 to 4 inches: Gravelly sand
4 to 60 inches: Stratified very gravelly sand to extremely gravelly loamy coarse sand

LtB—Latene sandy loam, 1 to 5 percent slopes
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days

Map Unit Composition
Latene and similar soils: 85 percent

Description of Latene
Setting
Landform: Stream terraces, alluvial fans
Landform position (three-dimensional): Tread, rise
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 45 percent
Maximum salinity: Nonsaline to very slightly saline (2.0 to 4.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 6.3 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Loamy (R042XA052NM)

Typical profile
0 to 15 inches: Sandy loam
15 to 60 inches: Gravelly sandy loam

MaB—Madurez loamy fine sand, 1 to 5 percent slopes
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days
Map Unit Composition
Madurez and similar soils: 90 percent

Description of Madure
Setting
Landform: Fan piedmonts, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 7 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 8.8 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Sandy (R042XA051NM)

Typical profile
0 to 4 inches: Loamy fine sand
4 to 21 inches: Sandy clay loam
21 to 60 inches: Sandy loam

MWA—Madurez-Wink associatin, gently sloping
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days
Map Unit Composition
Madurez and similar soils: 55 percent
Wink and similar soils: 25 percent

Description of Madurez
Setting
Landform: Alluvial fans, fan piedmonts
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 1 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.60 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 7 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 8.9 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Loamy (R042XA052NM)

Typical profile
0 to 4 inches: Fine sandy loam
4 to 21 inches: Fine sandy loam
21 to 60 inches: Sandy loam

Description of Wink
Setting
Landform: Fan piedmonts, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 1 to 7 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 7.7 inches)

Interpretive groups
Land capability (nonirrigated): 7e
Ecological site: Loamy (R042XA052NM)

Typical profile
0 to 4 inches: Fine sandy loam
4 to 60 inches: Sandy loam

PAC—Pajarito loamy fine sand, 1 to 9 percent slopes
Map Unit Setting
Elevation: 4,850 to 6,000 feet
Mean annual precipitation: 7 to 10 inches
Mean annual air temperature: 58 to 60 degrees F
Frost-free period: 170 to 195 days
Map Unit Composition
Pajarito and similar soils: 85 percent

Description of Pajarito
Setting
Landform: Bajadas, plains, alluvial fans
Landform position (three-dimensional): Rise
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Eolian sands and/or alluvium derived from igneous and sedimentary rock

Properties and qualities
Slope: 1 to 9 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): High (2.00 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 2.0
Available water capacity: Moderate (about 8.3 inches)

Interpretive groups
Land capability classification (irrigated): 3e
Land capability (nonirrigated): 7e
Ecological site: Sandy (R042XA051NM)

Typical profile
0 to 3 inches: Loamy fine sand
3 to 42 inches: Fine sandy loam
42 to 60 inches: Fine sandy loam

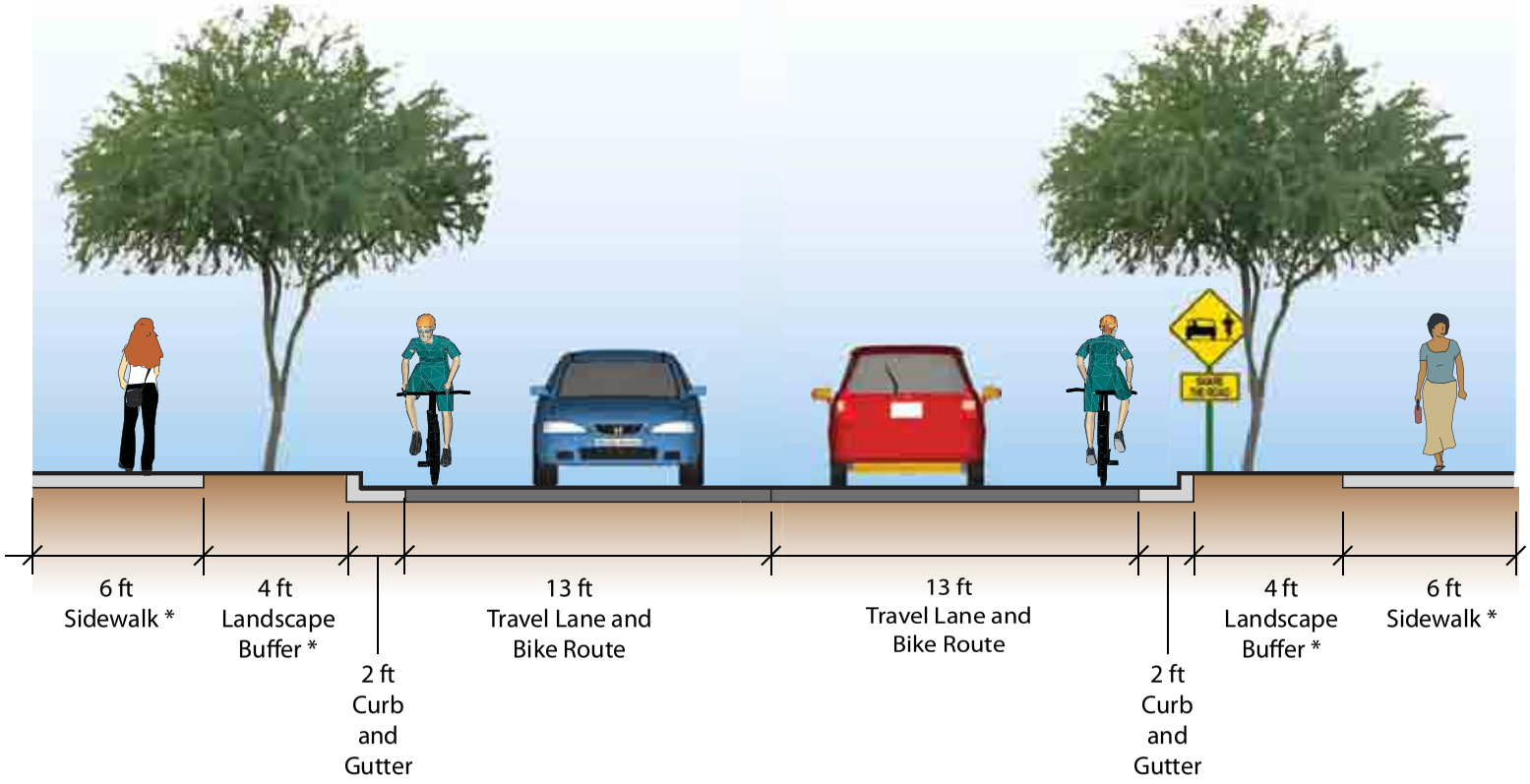
13.2. APPENDIX 2: LEED RATING

LEED has a rating system where developments can receive credits in 56 subcategories based on the following general criteria: sustainable sites 26 possible points, water efficiency 10 possible points, energy & atmosphere 35 possible points, materials & resources 14 possible points, indoor environmental quality 15 possible points, innovation & design process 6 possible points, and regional priority credits 4 possible points. A development seeking LEED certification can receive a total 110 points. There are four levels of LEED certification, they are:

- Certified 40–49 points
- Silver 50–59 points
- Gold 60–79 points
- Platinum 80–110 points

13.3. APPENDIX 3: LOCAL STREET CROSS SECTION

Cross Section for Typical Local Street



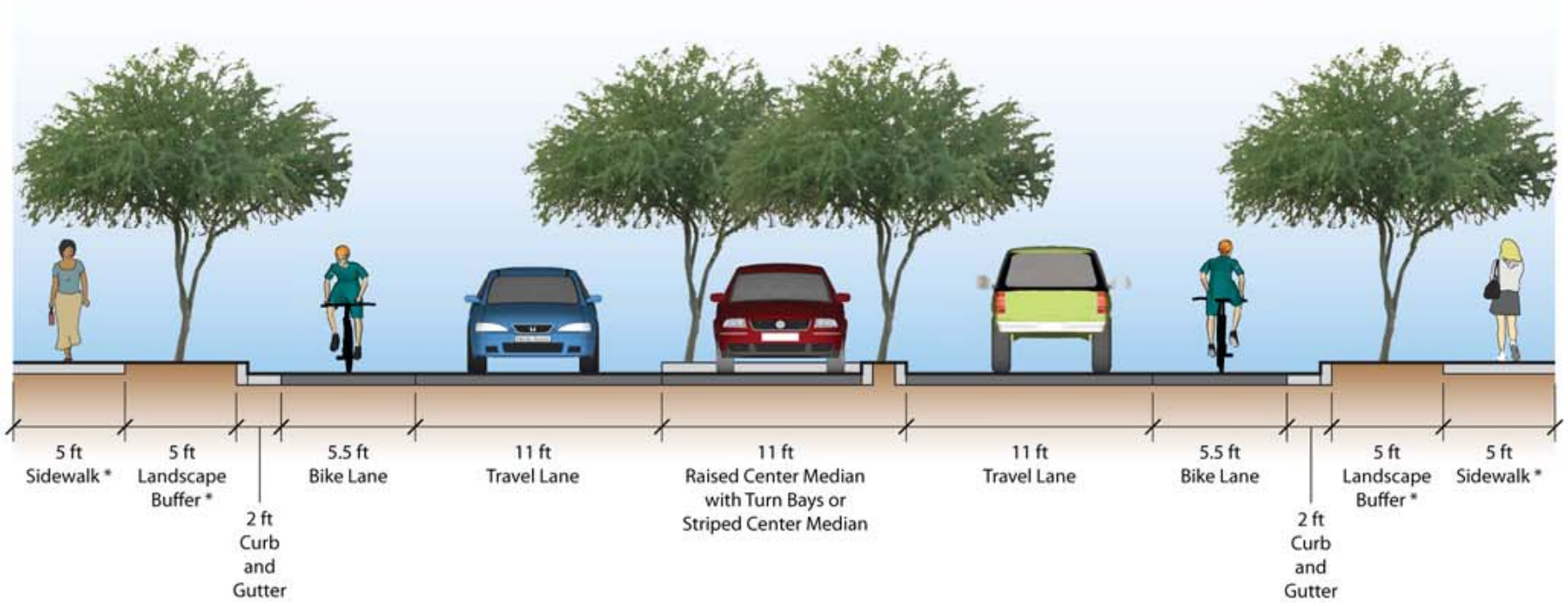
50 ft Minimum
Right-of-Way

* Dedicated access easements are required as part of conditions of approval to allow for a minimum 6' sidewalk width with a 4' minimum landscape buffer between the sidewalk and roadway to be maintained by the property owner.

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed.

13.4. APPENDIX 4: COLLECTOR STREET CROSS SECTION

Cross Section for Typical Collector Street



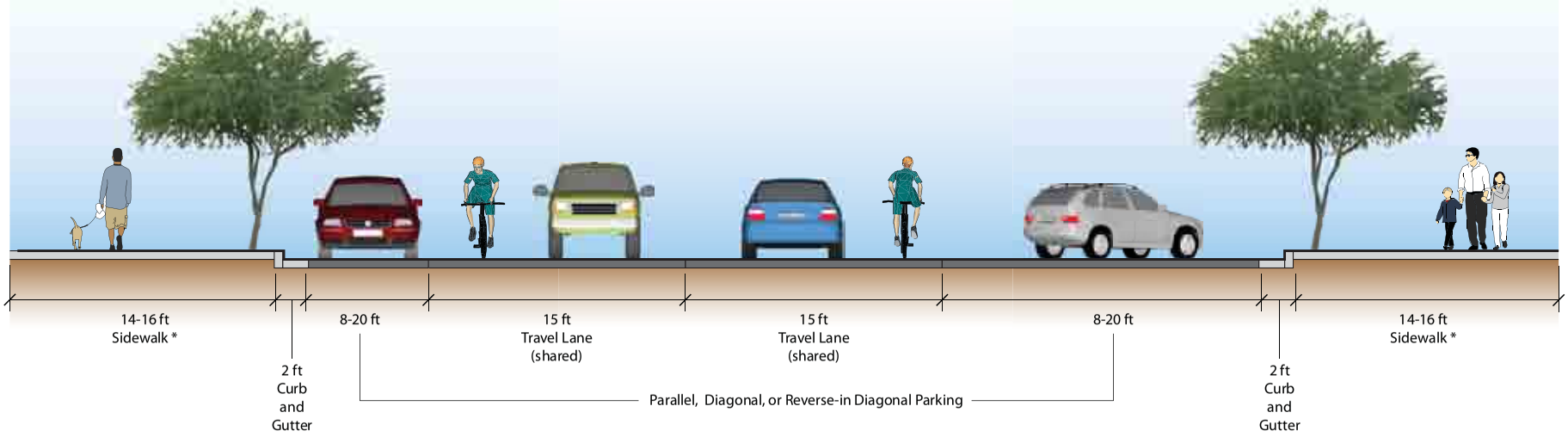
68 ft Minimum
Right-of-Way

* Dedicated access easements are required as part of conditions of approval to allow for a minimum 5' sidewalk width with a 5' minimum landscape buffer between the sidewalk and roadway to be maintained by the property owner.

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed.

13.5. APPENDIX 5: OFFICE COLLECTOR STREET CROSS SECTION

Cross Section for Office Collector Street



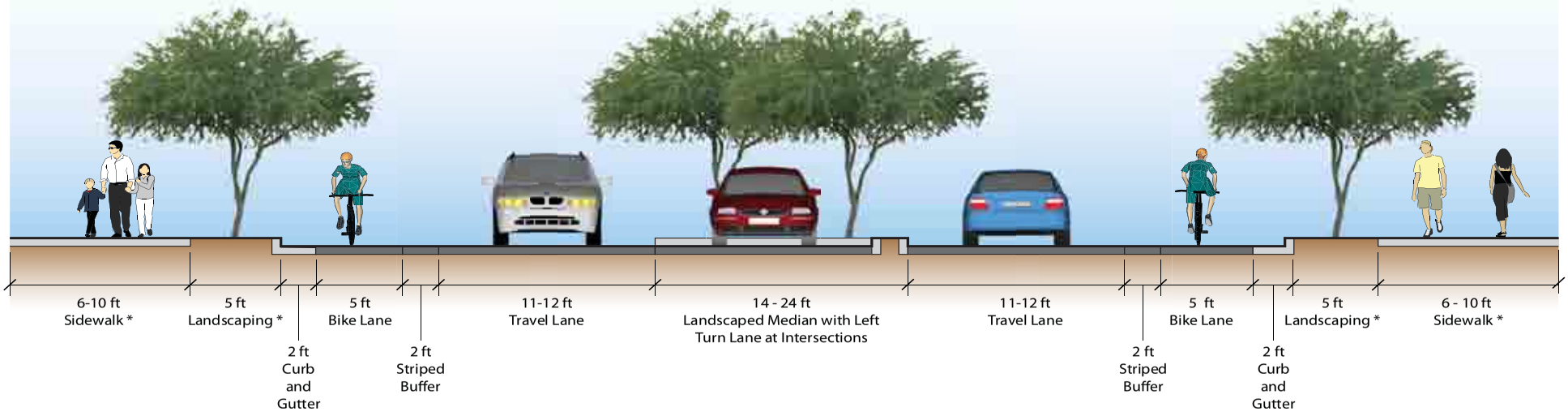
80-102 ft
Right-of-Way

* Dedicated access easements are required as part of conditions of approval to allow for a minimum 16' sidewalk width, which includes landscaping to be maintained by the property owner.

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed.

13.6. APPENDIX 6: MINOR ARTERIAL (2 LANES) STREET CROSS SECTION

Cross Section for Typical Minor Arterial (2 Lanes)



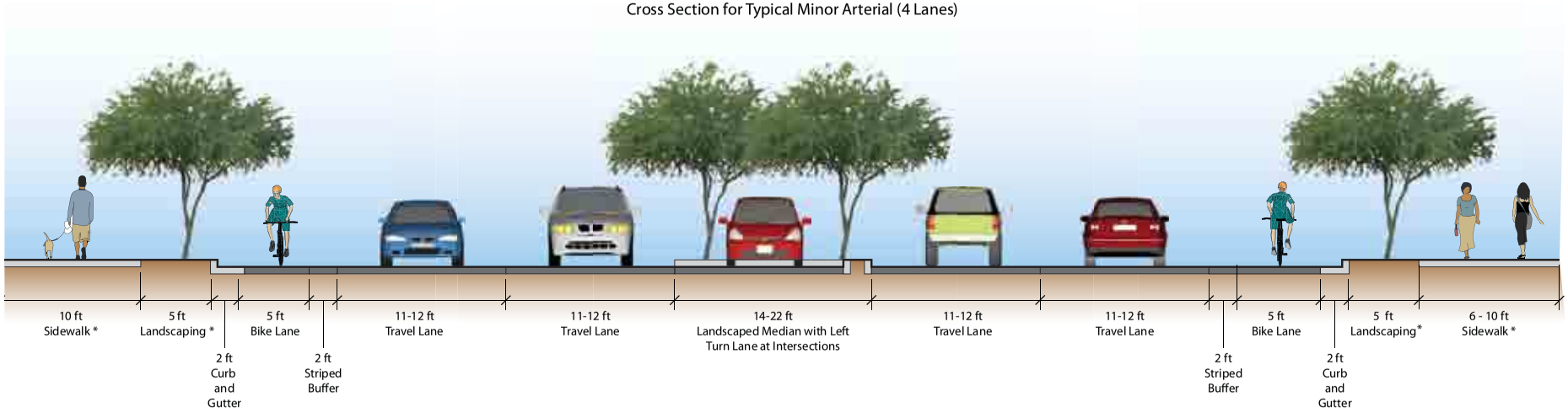
86 ft Minimum
Right-of-Way

* Dedicated access easements are required as part of conditions of approval to allow for a minimum 6' sidewalk width (or 10' minimum in commercial areas) with a 5' minimum landscape buffer between the sidewalk and roadway to be maintained by the property owner.

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed

13.7. APPENDIX 7: MINOR ARTERIAL (4 LANES) STREET CROSS SECTION

Cross Section for Typical Minor Arterial (4 Lanes)



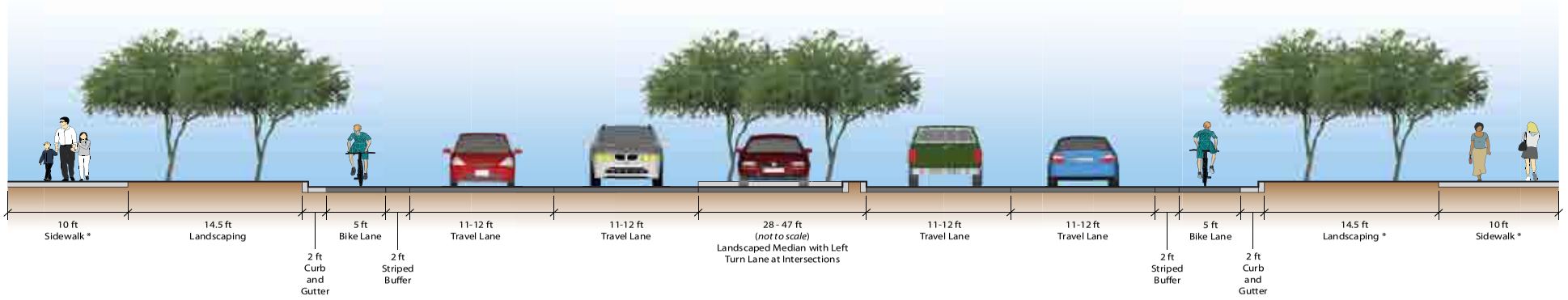
106 ft Minimum
Right-of-Way

* Dedicated access easements are required as part of conditions of approval to allow for a minimum 6' sidewalk width (or 10' minimum in commercial areas) with a 5' minimum landscape buffer between the sidewalk and roadway to be maintained by the property owner.

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed.

13.8. APPENDIX 8: PRINCIPLE ARTERIAL (4 LANES) STREET CROSS SECTION

Cross Section for Typical Principal Arterial (4 Lanes)



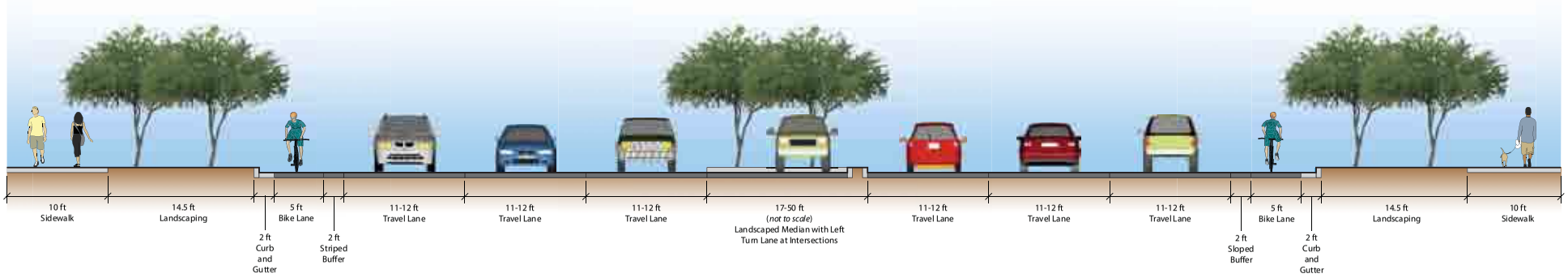
156 ft Minimum
Right-of-Way

* Dedicated access easements are required as part of conditions of approval to allow for a minimum 10' sidewalk width with a 14.5' minimum landscape buffer between the sidewalk and roadway to be maintained by the property owner.

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed.

13.9. APPENDIX 9: PRINCIPLE ARTERIAL (6 LANES) STREET CROSS SECTION

Cross Section for Typical Principal Arterial (6 Lanes)



156 ft Minimum Right-of-Way

Landscaping and other features are shown for illustrative purposes. The selection of actual design components will be done at the time that final plans are developed.

13.10. APPENDIX 4: GLOSSARY

Antiquated Platting: A subdivision that does not meet the standard outlined by the New Mexico Subdivision Act of 1978.

Crime Prevention through Environmental Design (CPTED): A multi-disciplinary approach to deterring crime through environmental design.

Hardscape: Features such as structures, patios, streets, sidewalks and other pathways, and other areas where the upper soil profile is no longer exposed.

Infill Development: The development of vacant or partially developed parcels which are surrounded by or in close proximity to areas that are substantially or fully developed.

Retail Leakage: When members of a community spend money outside that community or when money spent inside that community is transferred outside the community.

Industrial Revenue Bond (IRB): A tax-exempt bond issued by a state or local government agency to finance industrial or commercial projects that serve a public good.

Infrastructure and Capital Improvements Plan (ICIP): A local infrastructure capital improvement plan (ICIP) is a plan that establishes planning priorities for anticipated capital projects.

Intelligent Transportation System (ITS): Intelligent Transport Systems (ITS) is an umbrella term for a range of technologies including processing, control, communication and electronics, that are applied to a transportation system.

Level of Service (LOS): A measure used by traffic engineers to determine the effectiveness of elements of transportation infrastructure, such as roads and highways.

Low Impact Development (LID): The use of site planning and subdivision design techniques in coordination with storm water management techniques to mimic the hydrologic conditions associated with an undeveloped site to the greatest extent possible.

Metropolitan Statistical Area (MSA): The U.S. Government classification for a free-standing urban population center with a population in the urban center of at least 50,000 and a total MSA population of 100,000 or more. MSAs usually border on non-urbanized counties.

Mixed-Use Development: The practice of allowing more than one type of use (residential, retail, office) in a building or group of buildings.

National Pollutant Discharge Elimination System (NPDES): A two-phased surface water quality program authorized by Congress as part of the 1987 Clean Water Act. This federally mandated system is used for regulating point source and non-point source storm water discharge.

New Urbanism: A movement within the community planning and urban design disciplines that promotes walkable neighborhoods that contain a range of housing and job types. New Urbanism is strongly influenced by urban design standards prominent before the rise of the automobile and encompasses principles such as traditional neighborhood design (TND) and transit-oriented development (TOD).

North American Industry Classification Service (NAICS): The standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy.

Premature Subdivision or Tract of Land: A subdivision that does not meet the standard outlined by the New Mexico Subdivision Act of 1978.

Single Occupant Vehicle (SOV): A privately operated vehicle whose only occupant is the driver.

Special Assessment District (SAD): A district in which governmental units can assess a unique charge against real estate parcels for certain public projects. A special assessment may only be levied against parcels of real estate which have been identified as having received a direct and unique benefit from the public project.

Streetscape: A design term referring to all the elements that constitute the physical makeup of a street and that, as a group, define its character, including building frontage, street paving, street furniture, landscaping, including trees and other plantings, awnings and marquees, signs, and lighting.

Tax Increment Development District (TIDD): A TIDD allows a developer to issue bonds to cover the initial costs of infrastructure and is repaid using a portion of the gross-receipts tax revenues generated by the new development.

Tax Increment Financing (TIF): TIF is a financing tool that leverages the future additional taxes generated by a completed development to pay for current development costs such as land acquisition and site improvements.

Traditional Neighborhood Development (TND): Development based on human-scale design with concerns for walkability, increasing density, a mix of uses, and reducing automobile usage.

Transit-Oriented Development (TOD): A compact form of development that incorporates high-density housing concentrated in mixed-use developments located along transit routes. The location, design, and mix of uses in a TOD emphasize pedestrian-oriented environments to make the use of public transportation as convenient as possible.

Transportation System Management (TSM): The application of actions that improve the operation and coordination of transportation services and facilities.

Travel Demand Management (TDM): TMD is the application of strategies and policies to reduce travel demand (specifically that of single-occupancy private vehicles), or to redistribute this demand in space or in time.

Vehicle Miles Travelled (VMT): The number of miles that residential vehicles are driven.

Zoning Regulation: A set of regulations that divides land under a local government's jurisdiction into zones or districts. Zoning regulations also contain standards common to all districts and a set of procedures for applying, administering, and enforcing its regulations. For each district or zone, the following can be regulated:

- Types of land uses allowed;
- Intensity or density of development;
- Height, bulk, and placement of buildings;
- Amount and design of parking;
- A number of other aspects of land use and development activity

13.11. ACRONYMS

Albuquerque Metropolitan Planning Area (AMPA)

Bus Rapid Transit (BRT)

Capital Improvements Plan Citizen's Advisory Committee (CIPCAC)

Central New Mexico Community College (CNM)

Comprehensive Economic Development Strategy (CEDS)

Comprehensive Housing Affordability Strategy (CHAS)

Crime Prevention through Environmental Design (CPTED)

Data Analysis Subzones (DASZ)

Economic Development Administration (EDA)

Emergency Operations Center (EOC)

Greater Albuquerque Association of Realtors (GAAR)

Gross Receipts Investment Policy (GRIP)

Gross Receipts Tax (GRT)

Industrial Revenue Bond (IRB)

Infrastructure and Capital Improvements Plan (ICIP)

Intelligent Transportation System (ITS)

Keep Rio Rancho Beautiful Program (KRRB)

Level of Service (LOS)

Low Impact Development (LID)

Metropolitan Planning Organization (MPO)

Metropolitan Statistical Area (MSA)

Metropolitan Transportation Board (MTB)

Mid-Region Council of Governments (MRCOG)

Multiple Listing Service (MLS)

National Pollutant Discharge Elimination System (NPDES)

New Mexico Environment Department (NMED)

New Mexico Gas Company (NMGC)

New Mexico Office of the State Engineer (OSE)

New Mexico Taxation and Revenue Department (NMTRD)

North American Industry Classification Service (NAICS)

Planning and Zoning Board (PZB)

Public Service Company of New Mexico (PNM)

Rio Metro Regional Transit District (RTD)

Rio Rancho Chamber of Commerce (RRCC)

Rio Rancho Economic Development Corporation (RREDC)

Rio Rancho Public Schools (RRPS)

Single Occupant Vehicle (SOV)

Southern Sandoval County Arroyo and Flood Control Agency (SSCAFCA)

Special Assessment Districts (SAD)

State Municipal Boundary Commission (SMBC)

Storm Water Management Plan (SWMP)

Storm Water Pollution Prevention Plan (SWPPP)

Tax Increment Development District (TIDD)

Traditional Neighborhood Development (TND)

Transit-Oriented Development (TOD)

Transportation Improvement Plan (TIP)

Transportation System Management (TSM)

Travel Demand Management (TDM)

University of New Mexico (UNM)

UNM Bureau of Business and Economic Research (BBER)

US Department of Housing and Urban Development (HUD)

US Environmental Protection Agency (EPA)

Vehicle Miles Travelled (VMT)

Water Resources Management Plan (WRMP)

Neighborhood Meeting Schedule:

Neighborhood Meeting 1: Stapleton Elementary School	11/14/2009 9:00-11:30 AM
Neighborhood Meeting 2: Sandia Vista Elementary School	11/17/2009 5:30-8:00 PM
Neighborhood Meeting 3: Maggie Cordova Elementary School	11/19/2009 5:30-8:00 PM
Neighborhood Meeting 4: Loma Colorado Library	09/09/2010 5:30-7:30 PM
Neighborhood Meeting 5: Fire Station #5	09/15/2010 5:30-7:30 PM
Neighborhood Meeting 6: Cabezon Community Center	09/18/2010 9:30-11:30 AM

Public Meeting Schedule:

Planning & Zoning Board Update: City Council Chambers	08/24/2010 6:00 PM
Governing Body Update: City Council Chambers	08/25/2010 6:00 PM
Parks Commission: City Council Chambers	09/20/2010 6:30 PM
Utility Commission: City Council Chambers	09/21/2010 6:00 PM
Youth Governing Body: City Council Chambers	09/22/2010 5:30 PM
Planning & Zoning Board City Council Joint Work Session City Council Chambers	10/6/2010 6:00 PM
Planning & Zoning Board Public Hearing City Council Chambers	10/26/2010 6:00 PM
City Council Public Hearing City Council Chambers	11/17/2010 6:00 PM

City of Rio Rancho
3200 Civic Center Circle NE
Rio Rancho, NM 87144-4501