Site Standards 32.39.00

Description:
The purpose of the section is to highlight the current applicable UMCP Design Standards for the design, selection and installation of common site features utilized on the campus.

Related Sections:
- TBD

Effective Date:
November 20, 2013

Applicable Standards:
- TBD

General Requirements:
Site standards have been established for the following items:
- Concrete Steps
- Curbs
- Bituminous Concrete Curb
- 6" and 8" Concrete Curb and Gutter
- 8" Mountable Curb
- 4" Concrete Landscape Curb
- Handrails
- Paving
- Concrete Pavers
- Concrete Walks
- Bituminous Asphalt Paving
- Brick on Concrete
- Planting Details
- Trees
- Shrubs
- Ramps for Persons with Disabilities (PWD)
- PWD Ramp, Plan View
- PWD Ramp, Section
- Tree Grates

Specific Requirements:
1. Concrete Steps
   - Material: As indicated on detail
   - Manufacturer: As indicated on detail
   - Model: As indicated on detail
   - Description: As indicated on detail
   - Performance: As indicated on detail
   - Related Details: Refer to detail numbered 1.
2. **Curbs**
   - Bituminous Concrete Curb
   - 6" and 8" Concrete Curb and Gutter
   - 8" Mountable Curb
   - 4" Concrete Landscape Curb
     - **Material:** As indicted on details
     - **Manufacturer:** As indicted on details
     - **Model:** As indicted on details
     - **Description:** As indicted on details
     - **Performance:** As indicted on details
     - **Related Details:** Refer to details numbered 2a, 2b, and 2c.

3. **Handrails**
   - **Material:** Molded steel with flat black paint finish.
   - **Manufacturer:** ACME Iron Works, Inc. Tuxedo, Md.
   - **Model:** Style #104 or similar style
   - **Description:** Molded steel with red enamel primer and black flat paint finish. Molded top bar, 1/2" square pickets spaced 4" O.C. and a lamb's tongue.
   - **Performance:** Placed on steps of more than three treads and as required by ADA Standards.
   - **Related Details:** Refer to detail number 3.

4. **Paving**
   - Interlocking Concrete Pavers
   - Concrete Walk
   - Bituminous Asphalt Paving
   - Brick on Concrete
     - **Material:** As indicted on details
     - **Manufacturer:** As indicted on details
     - **Model:** As indicted on details
     - **Description:** As indicted on details
     - **Performance:** As indicted on details
     - **Related Details:** Refer to details numbered 4a, 4b, 4c and 4d.

5. **Planting Details**
   - Tree
   - Shrub
     - **Material:** As indicted on details
     - **Manufacturer:** As indicted on details
     - **Model:** As indicated on details
     - **Description:** As indicated on details
     - **Performance:** As indicated on details
     - **Related Details:** Refer to details numbered 5a, and 5b.
6. **Ramps for Persons with Disabilities (PWD)**
   - PWD Ramp, Plan View
   - PWD Ramp, Section
     - Material: As indicted on details
     - Manufacturer: As indicted on details
     - Model: As indicted on details
     - Description: As per ADA Guidelines
     - Performance: As indicted on details
     - Related Details: Refer to details numbered 6a, and 6b.

7. **Security Gates**
   - Material: As indicted on detail
   - Manufacturer: As indicted on detail
   - Model: As indicted on detail
   - Description: As indicted on detail
   - Performance: As indicted on detail
   - Related Details: Refer to detail numbered 7.

8. **Tree Grates**
   - Material: Cast Iron
   - Manufacturer: Neehan Foundry Company or Equal.
   - Model: As specified
   - Description: 90 degree round with cast iron angle frame.
   - Performance: Install flush with adjacent surfaces.
   - Related Details: Refer to detail numbered 8a and 8b.
Site Standard Detail #1

FULL DEPTH 1/2" EXPANSION JOINT (TYP)
1/2" BATTER (TYP)
1" RADIUS (TYP)
1/8" PER FOOT (TYP)

TOP OF CHEEKWALL
1'-2"

1'-0"

2'-0"

COMPACTED BACKFILL OR UNDISTURBED SOIL

#4 REBAR 12" OC BOTH WAYS

NOTE
SEE HANDRAIL DETAIL

CONCRETE STEPS

NTS
Site Standard Detail #2a

NOTE:
PROPOSED SURFACE SHOULD EXTEND
6' BEYOND BACK OF CURB BUT
NOT MORE THAN 12'

BITUMINOUS CONCRETE CURB

NTS
Site Standard Detail #2b

6" & 8" CONCRETE CURB AND GUTTER

3500 PSI CONCRETE
4" COMPACTED MSHA GA BASE
COMPACTED BACKFILL/UNDISTURBED SOIL

ASPHALT PAVING

1'-4' 8'

7'/1FT
Site Standard Detail #2c

COMPACTED MSHA GA BASE
3500 PSI CONCRETE
COMPACTED BACKFILL/
UNDISTURBED SOIL

8" MOUNTABLE CURB
NTS
Site Standard Detail #3

1/2" SQUARE SOLID PICKETS (4" O.C.)
1" SQUARE SOLID POSTS (4" O.C. MAX)
1/2"x1/2"x1/2"x1/8" TOP CHANNEL
1/2"x1/2"x1/2"x1/8" BOTTOM CHANNEL
LAMBS TONGUE #44495 BLUMACO

NOTE:
1. PROVIDE HORIZONTAL RAILINGS AT LANDING
2. SLOPE ANCHOR CEMENT AWAY FROM POST AND CONTAIN CLEANLY WITHIN 2" HOLE
3. ALLOW 1" CLEARANCE BETWEEN LAMBS TONGUE AND END POST
4. ALTERNATIVE RAILINGS WILL BE CONSIDERED

SECTION A-A

HANDRAIL
Site Standard Detail #4a

INTERLOCKING CONCRETE PAVERS

NOTE: CONCRETE PAVER TO BE COMPACTED
WITH VIBRATORY TAMPER
Site Standard Detail #4b

6"x6" W2.5xW2.5 WWF (STOP AT EXPANSION JOINTS)
TOOLED CONTROL JOINT (1/4" WIDE X 1" DEEP)
3500 PSI CONCRETE (STANDARD BROOM FINISH)
1/2" FULL DEPTH EXPANSION JOINT

NOTE:
MINIMUM DISTANCE BETWEEN CONTROL JOINTS SHALL BE EQUAL TO WIDTH OF SIDEWALK OR AS SHOWN ON THE SITE PLAN

COMPACTED MSHA GA BASE
COMPACTED BACKFILL
UNDISTURBED SOIL

CONCRETE WALK

NTS
Site Standard Detail #4c

FINISHED SURFACE
SC MIX
TACK COAT
BF MIX
GRANED AGGREGATE BASE
PER MSHA
COMPACTED BACKFILL/
UNDISTURBED SOIL

BITUMINOUS ASPHALT PAVING

NOTE: PROVIDE THIS SECTION ONLY IF ENGINEERED DESIGN IS NOT FEASIBLE, AND ONLY WITH APPROVAL FROM FACILITIES MANAGEMENT
Site Standard Detail #4d

- SILICON CAULK, 1/2" DEEP
- FULL DEPTH EXPANSION JOINT
- SPECIFIED BRICK PAVER
- 3/8" MORTAR JOINT WITH FLUSH JOINT
- 6" X 6" WWF (W2.1 X W2.1)
- PLACED 2" FROM SURFACE
- CONCRETE BASE
- COMPACTED MSHA GA BASE
- COMPACTED SUBGRADE

SECTION

BRICK ON CONCRETE

NOTE: FOR USE IN NON-VEHICULAR AREAS. SEE CONCRETE PAVER DETAIL FOR TYPICAL VEHICULAR PAVER APPLICATION.
Site Standard Detail #5a

NOTE:
1. DO NOT INSTALL MULCH WITHIN 6' OF TREE TRUNK
2. INSTALL TOP OF ROOT BALL AT FINISHED GRADE

RUBBER HOSE
TWISTED GUY WIRE
2"x2"x8' HARDWOOD STAKE DRIVEN FIRMLY INTO SOIL
CUT BURLAP AND ROPE AWAY FROM 1/2 OF BALL
2" SHREDDED HARDWOOD MULCH
FINISHED GRADE
APPROVED BACKFILL AND PLANTING MIX AS SPECIFIED
UNDISTURBED SUBSOIL

TREE PLANTING DETAIL

3" ROOT BALL DIA.
Site Standard Detail #5b

- CUT BURLAP AND ROPE AWAY FROM 1/2 OF BALL
- 3" SHREDDED HARDWOOD MULCH
- 6" SAUCER
- FINISHED GRADE
- APPROVED BACKFILL AND PLANTING MIX AS SPECIFIED
- COMPACTED BACKFILL
- 3X DIA. ROOT BALL

NOTE:
PLANT TOP OF ROOT BALL 2' ABOVE GRADE

CUT CONTAINER GROWN ROOTBALL AS SHOWN PRIOR TO PLANTING

SHRUB PLANTING DETAIL
Site Standard Detail #6a

NOTE
1. SEE SECTION A-A
2. REFER TO ADA STANDARDS FOR SPECIFIC ADJUNCT SITE REQUIREMENTS

PLAN VIEW

CURB RAMP
NTS
Site Standard Detail #6b

1/2' EXPANSION JOINT

6'x6' W2.1 x W2.1 WWF

STIFF BROOM FINISH (SEE PLAN VIEW)

1:20 MAX.

1:12 MAX.

COMPACTED BACKFILL OR UNDISTURBED SOIL

4' COMPACTED MSHA GA BASE

NOTE
3500 PSI CONCRETE (STIFF BROOM FINISH)

SECTION 'A-A'

NTS

PWD RAMP

NTS
Site Standard Detail #7

NOTE
1. WELDED JOINTS TO BE CONTINUOUS WELD.
2. APPLY ONE COAT PRIMER AND TWO COATS ENAMEL PAINT, COLOR PER OWNER
3. ATTACH SIGN TO GATE USING GALVANIZED BOLTS.

1/2" X 3-1/2" MACHINE BOLT
1/8" WASHER
1/2" STEEL PLATE WELDED TO POST

HINGE DETAIL
NTS

SECURITY GATE
NTS
Site Standard Detail #8a

SECTION 'A-A'

PLAN VIEW

TREE GRATE

NTS
Site Standard Detail #8b

- Top of ball 3' below grate
- Fill w/pea gravel to top of grate
- 3' depth
- Tree grate (see specs) w/frame

6' 40 schedule, PVC perforated pipe within 12' x 12' trench filled with pea gravel. Wrap trench with filter cloth.

TREE GRATE

NTS