C BU: NC DOT + USPS + NC DOI

Since the last time Mailboxes + CBUs were addressed [V2I6; V7I1; V7I2; V7I4; V7I5], additional information was received from both the North Carolina Department of Transportation (NCDOT) and the United States Postal Service (USPS) regarding installation of CBUs. The requirements are applicable to exterior CBUs that are covered or uncovered, and to CBUs in both single family and multifamily developments. [The requirements are attached at the end of this newsletter.]

Summary:

1. **NCDOT Policy for Placement of Mail Cluster Box Units [9/1/15]**
   - Addresses placement of CBUs ‘outside of the road right of way to provide safe and convenient parking and pedestrian access for postal patrons and to minimize impedance to roadway operation.’

2. **USPS Cluster Box Units (CBU) Concrete Pad Installation - Interim Pad Policy [2/9/17] - see last page of attachment.**
   - Requires 60” turning circle in front of entire CBU length
   - Min. 1% - max. 2% cross slope away from CBU
   - 48” minimum sidewalk
   - 12” clear from CBU to sidewalk
   - Min. 5’-4” from CBU to furthest edge of sidewalk

3. **NCDOI Parking Requirement + Accessible Route**
   - **ANSI 503** Passenger Loading Zbne with curb cut - OR -
   - **NCBC 1106.5** Van space with **ANSI 502.4** access aisle + **NCBC 1106.1** Regular parking space with curb cut.

**NOTE:** CBU parking is independent of all other parking provisions.
- Reach ranges on exterior single-family CBUs not enforced.
- Alterations of CBUs shall comply with current requirements.

Let’s think about good design for a moment and how much we love all those glossy, window-filled structures even though they often create a problem for birds mistaking the glazing’s reflection for the clear open sky. [NYC Apple, below.]

- When you design /install glazing to provide that ‘open (office) feeling,’ have you considered the effect on the visually impaired?
- When you design glass panels/entrance doors adjacent to paneled glazing, how readily apparent is that opening?

There is an informational website with example photos that discusses Glazing Bands per **AS1428.1** (an Australian standard). The minor distortion (see above) may be enough to not only increase good design features but may also have the effect of reducing potential litigation resulting from injuries (well, not certain it will help with birds, but remember, not everyone who is visually impaired is blind). Worth considering, if not already doing now.
Q + A regarding CBUs

Q1: Where multiple CBUs are located on a site, is it possible to provide mailboxes for all accessible units at one CBU location instead of designing every CBU location to be accessible?

A1: Unfortunately, it is not. CBUs are considered common use areas. [See NCBC 1102 definition of COMMON USE.] An accessible route is required to all common use areas on a site. While NCBC 1109.14.1 and NCBC 1109.14.2 both have language limiting access to only 25%, or a minimum of one of each type, of recreational facilities, CBUs are not recreational facilities. None of the applicable documents [NCDOT, USPS] has any language limiting the number of accessible CBUs.

Q2: If the local postmaster indicates that the postal worker will deliver mail to the door of individuals with disabilities, are CBUs still required to be accessible and on an accessible route?

A2: Such an agreement is an Operational Agreement that may vary from location to location. Operational Agreements are subject to change based on changes in personnel. Such an agreement may also not address temporary disabilities that occur where postal recipients would have to request a change in mail delivery for an indefinite period. Building code requirements regarding access are based on an individual not having to specifically request accessible service. The intent is that services for both able-bodied persons and persons with disabilities be equally provided.

Q3: For a covered mail stop with multiple CBU units, what is the minimum accessible route requirement between each CBU unit? Does the minimum accessible route change if it is single-loaded (one side only) rather than double-loaded (both sides) with mail boxes?

A3: Based on the USPS document, the minimum accessible route requirement to all CBU components is now 60” clear along the entire length of the CBU component. The minimum 60” width will apply for both single- and double-loaded CBU components.

Q4: May the parking required at the CBU be shared with the parking required or provided for other areas, such as, but not limited to, clubhouses, pools, and recreational areas?

A4: No. Parking for the CBUs is dedicated solely for that purpose. The stated intent in both the USPS and NCDOT documents is to design and site CBUs for ready access. If the parking were to be shared with another use, the parking spaces required by the USPS document might not be available when a resident arrived to check and retrieve their mail.

Q5: Are there specific parking requirements, i.e., numbers of parking spaces, required at the CBUs?

A5: Yes, the NCDOT document, under Turnout Requirements, required the following for each CBU site:
1. ‘A paved turnout for each CBU site.’
   a. There is an exception that reads: ‘As an exception, no turnout will be required on cul-de-sacs with curb and gutter and roadways having an AADT of 200 vehicles or less, with curb and gutter and an adjacent lane width if 15’ or greater and no designated bike lane is provided.’
   b. While NCDOT may not require a paved turnout in the above location, NCBC 1102 still defines the area as a common use space and requires a minimum of either a passenger loading zone per ANSI 503 or two parking spaces, one van accessible per NCBC 1106.5 with an access aisle complying with ANSI 502.
2. ‘A minimum 25’ of full width vehicle storage, exclusive of transition tapers, shall be constructed to serve up to 20 postal patrons.’
   a. 9’ van space +9’ access aisle +9’ regular parking space = 27’ [This is the minimum parking that the 2012 NCBC 1106.1 requires.]
   b. An additional 25’ of vehicle storage, exclusive of transition tapers, will be required for each additional 20 postal patrons, or fraction thereof.’

Q6: If parking is immediately in front of, and perpendicular to, the sidewalk in front of the CBUs, are wheel stops required at each parking space to maintain the clear width along the sidewalk?

A6: It depends on whether there is sufficient sidewalk area to maintain the more restrictive dimension of the following clear path requirements when vehicle(s) are parked:

   a. Minimum 5’-4” (64”) from face of CBU to outside edge of sidewalk (USPS);
   b. Minimum 5’-6” (66”) from the face of CBU to outside edge of sidewalk (NCDOT+NCBC). Item b represents the ANSI 403.5.2 exterior path requirement of 60” to permit passing spaces plus the 2’-6” vehicle overhang that is recognized by NCDOT. If less than a 2’-6” vehicle overhang is provided (without installing wheel stops), then a parked car will reduce the NCBC 1104.2 accessible route to less than the 48” exterior accessible route requirement.

   NOTE: if a curb is provided, the width of the curb is not included in the accessible route measurements.
September 1, 2015

MEMORANDUM TO: Division Engineers
District Engineers

FROM: Mike Holder, P.E.
Chief Engineers

SUBJECT: Policy for Placement of Mail Cluster Box Units in Subdivisions

Several months ago the United States Postal Service (USPS) began implementing a policy for centralized delivery of mail for new developments. This equates to requiring developers of residential subdivisions to provide necessary mail receptacle equipment for centralized mail delivery, i.e. cluster box units (CBU's) in new developments. Most transportation agencies and developers did not know about USPS's new requirement until far into the planning phase, or build out phase of new subdivisions.

As a response to the many requests from land developers and builders, a work group was assembled by the Chief Engineer's Office to study the impacts of accommodating the CBUs on residential subdivision streets. The work group met with industry partners on several occasions and developed a policy for accommodating CBUs on subdivision streets. While the safest and most preferred placement of CBUs is outside the right-of-way, there are cases where it is not feasible to do so.

The attached document will serve as the Department's policy when reviewing plans for placement of CBUs on right-of-way for subdivision streets. This document will also serve for plan review where developers must retrofit subdivisions already built with CBUs and encroach on right-of-way. I think you will find the policy firm enough to determine acceptable safe conditions for typical placement of the CBU's, and flexible enough to make wise decisions for new cases as they evolve.

Please distribute this to the appropriate staff in your Division. If you have questions or need clarification on this policy, please contact Delbert Roddenberry, Operations Program Manager at 919.707.2509.

MLH/drr

Attachment

CC: Delbert Roddenberry, file
Placement of Mail Cluster Box Units (CBU) on State Maintained Subdivision Streets

Policy September 1, 2015

The purpose of this policy is to provide administrative and design guidelines for safe and efficient accommodation of delivery and receipt of mail in residential subdivisions or business developments by use of cluster box units (CBU) placed centrally or distributed in groups. These guidelines will apply to roadways eligible for addition to the State system with design speeds of 35 MPH or less within the subdivision/community as referenced in the North Carolina Department of Transportation Subdivision Roads Minimum Construction Standards January -2010.


CBU’s are specialized multiple mailbox installations containing a cluster of 8 to 16 or more locked boxes serving multiple postal patrons and mounted on a pedestal or framework per USPS requirements. Multiple CBU’s may be located at a mail stop or kiosk at one or more locations within a development as allowed by USPS. Generally, CBU’s have such mass that they are not considered crashworthy and must be located outside of the clear area needed for safe recovery of errant vehicles.

Preference shall be given to placement of CBU’s in subdivision or development common areas and outside of the road right of way to provide safe and convenient parking and pedestrian access for postal patrons and to minimize impedance to roadway operation. Under extenuating circumstances when such common areas are justifiably not available due to the nature of the development, CBU’s may be accommodated within the road right of way in accordance with this policy and subject to approval of the District Engineer.

Location Requirements:

CBU sites shall be located internal to the development and shall be located on the right hand side of the roadway in the direction of travel. In general, CBU’s should be located in common areas, near lot lines, outside of public utility easements, private storm drainage easements, well outside any clear zones/clear recovery areas and at least 10 feet away from water meters, cleanouts, and hydrants. CBU sites must be selected to preserve necessary lines of sight at intersections, driveways, and horizontal and vertical curves. CBU’s shall be located outside the influence area of adjacent intersections and not impede driveways or other functional areas of access. The units shall be 100’ minimum from minor street intersections, 200’ minimum from primary route intersections. CBU sites shall be located so as to minimize unnecessary travel distance, backing or U-turns. CBU sites shall not be located directly across from one another on opposing sides of the road. Under no circumstances shall the units be placed such that traffic will be negatively affected on existing or proposed streets outside of the subdivision or development.

Turnout Requirements:

A paved turnout shall be required for each CBU site. The turnout pavement shall be consistent with the adjacent roadway pavement structure. A minimum of 25’ of full width vehicle storage, exclusive of transition tapers, shall be constructed to serve up to 20 postal patrons. An additional 25’ of vehicle
storage, exclusive of transition tapers, will be required for each additional 20 postal patrons, or fraction thereof, that are served at any CBU site. This treatment is applicable to both streets with unpaved shoulder sections, and curb and gutter sections with and without sidewalk. ADA accessibility and compliance must be maintained in each instance. As an exception, no turn out will be required on cul-de-sacs with curb and gutter and roadways having an AADT of 200 vehicles or less, with curb and gutter and an adjacent lane width of 15’ or greater and no designated bike lane is provided.

Minimum Design Requirements:

Minimum required design criteria for CBU sites located within the right of way are shown in the attached figures 1 thru 4. Prior to installation, the District Engineer shall review and approve the proposed site placement and design for each CBU. Subdivision plans submitted to the Department shall clearly indicate all proposed CBU site locations and provide appropriate design detail. The designer shall independently coordinate with the USPS and local government for review and approval. Approval of the CBU installation by the Department, in no way constitutes acceptance by the USPS or assurance of mail delivery.

Road Addition and Maintenance Responsibilities:

Prior to road addition, the District Engineer shall inspect each CBU site. If safety, operational or maintenance issues become evident during the road addition process, the CBU will be relocated, modified, or repaired at no cost to the Department prior to road addition.

Upon addition of the road to the State system, NCDOT shall assume maintenance of the paved turn out, shoulder and curb and gutter, ditch, and storm drainage within the right of way in accordance with established minimum maintenance standards. NCDOT shall not own or maintain CBU’s or other appurtenances associated with these units such as concrete pads, sidewalk, and wheel chair ramps. The CBU and appurtenances shall be considered an encroachment and administered in accordance with the current edition of the Policies and Procedures for Accommodating Utilities on Highway Rights of Way. In addition, NCDOT is not responsible for clearing snow, ice, limbs, trash accumulation, specialized vegetation management, etc. from associated sidewalk, parking areas (if applicable), and the immediate area around the CBU. These maintenance activities must be provided by mailbox users or a homeowner’s association as a condition of the encroachment agreement.
FIGURE 1
CBU PLACEMENT FOR SHOULDER SECTION RESIDENTIAL LOCAL AND COLLECTOR SUBDIVISION STREETS
FIGURE 2
CBU PLACEMENT FOR C & G SECTION RESIDENTIAL LOCAL AND COLLECTOR SUBDIVISION STREETS
FIGURE 3
CBU PLACEMENT FOR C & G SECTION RESIDENTIAL SUBDIVISION STREETS
CUL-DE-SAC

SEE FIGURE 7 PAGE 45 “NCDOT SUBDIVISION ROADS MINIMUM CONSTRUCTION STANDARDS JANUARY 2010” FOR LOCAL AND COLLECTOR ROAD DIMENSIONS.
FIGURE 4
CBU PLACEMENT FOR SHOULDER SECTION RESIDENTIAL SUBDIVISION STREETS
CUL-DE-SAC
February 9, 2017

AREA VICE PRESIDENTS
DISTRICT MANAGERS

SUBJECT: Cluster Box Units (CBU) Concrete Pad Installations

Recently, questions have arisen related to the installation of concrete pads for Cluster Box Units (CBU) and the applicability of handicap accessibility requirements to those pads. In the interest of offering accessible service to all of our customers, please find attached the interim policy for CBU Concrete Pad Installations.

Effective immediately, the guidelines in the CBU Concrete Pad Installations must be followed for all installations and repairs. Further, USPS will only proceed with CBU concrete pad installations for conversions or locations where USPS maintenance responsibility has been documented in the change in delivery agreement. Any deviation to the attached policy must be submitted by the Area Vice President to the Vice President, Delivery Operations for review and approval prior to proceeding.

If you have any questions, please contact Jacqueline Cooks at 202-268-5648 or Craig Ballard at 303-264-0461.

Tom A. Samra  
VP, Facilities

Kevin L. McAdams  
VP, Delivery Operations
Facilities Repair & Alterations
Interim Policy for
CBU Concrete Pad Installations

January 27, 2017
In accordance with USPS Policy, the District Growth Coordinator or designee verifies the following:

- In compliance with USPS policy, Facilities will not install CBU pads for new deliveries. USPS can dictate the mode of delivery. New CBUs and pads should be installed by the developer.
- USPS has installed many CBUs and pads over the years, but that does not automatically mean that USPS is responsible for maintenance or replacement. Facilities will only repair and/or replace existing CBU pads when there is a written contract showing that USPS is responsible.

District Growth Coordinator or designee verifies and assembles required documents:

- Number of Cluster Box Units (CBU) to be installed.
- Photographs of the proposed installation location and surrounding area. If a replacement of existing damaged CBU concrete slabs, photographs to include affected pads and surrounding area.
- Executed agreement form with the property owner / landlord allowing the U.S. Postal Service to install concrete pads on their property. Agreement to identify property owner / landlord as having full maintenance of the concrete pads including snow removal.
- Approved funding eBuy on the District finance number for the full cost of the CBU concrete pad installation project. Assume $1,000.00 per CBU unit to be installed.
- All of the above documents constitutes the “Scope of Work Package” and needs to accompany the CBU Concrete Pad Request form.

District Growth Coordinator or designee submits completed Scope of Work package to Facilities Response Line Self Service (on Blue Page) to be entered and assigned to FMO/MO for Article 32 consideration.

- If FMO/MO accepts the work in FSSP then they will contact the Growth Coordinator or designee for transmittal of required scope of work documents to them.
- If FMO/MO accepts the work and completes the concrete pad installation, then Growth Coordinator or designee completes the Simplified Certificate of Accessibility and includes photographs of completed installation from FMO/MO.
- If FMO/MO declines the work in the FSSP system the work will be assigned to a Facilities designated Project Manager for completion.
If the CBU Concrete Pad request is declined by FMO/MO, it is then assigned to the Facilities
designated Project Manager for that Area:

- Facilities Project Manager contacts the Growth Coordinator or designee for transmittal of required
  scope of work documents.
- Once documents are received, the Facilities Project Manager contacts recommended contractor
  and/or other known contractor to acquire proposals. Design to be in accordance with USPS
  standard details including wheelchair turning radius (attached) and adequate concrete sidewalk to
  provide an accessible route back to the nearest existing sidewalk, parking area, public access point,
  or foot path. No modification to existing parking spaces or any other features is required.
- The Facilities Project Manager reviews and concurs with the contractors design documents.
- Project Manager to award work to appropriate local contractor. No electrical, lighting, or physical
  shelters are to be included in the scope of work.
- Contractor completes work.
- FMO/MO, at the time of the CBU equipment installation, verifies the work is completed per the
  scope of work given to contractor and the approved design documents. Then the FMO/MO
  photographs of the completed installation.
- Growth Coordinator or designee completes the Simplified Certificate of Accessibility and includes
  photographs of completed installation from FMO/MO and provides a completed copy of the
  Simplified Certificate of Accessibility to the Facilities Project Manager.
- The Facilities Project Manager will have the photos and CoA signed by the concrete contractor. He
  should send an electronic copy of these documents to the District Growth Coordinator Rep who will
  sign the CoA. The Growth Coordinator Rep will then add the photos of the CBUs submitted by
  FMO/MO and sign the CoA. An electronic copy of the complete CoA document will then be
  submitted to the Facilities Project Manager so they can close out the project.
- Facilities Project Manager pays contractor upon receipt of a complete invoice package which
  demonstrates the concrete slab was installed properly. A Simplified Certificate of Accessibility
  signed by the Growth Coordinator or designee is not required for payment to the contractor.
- Growth Coordinator or designee keeps the original Simplified Certificate of Accessibility and other
  pertinent documents on file for future coordination.
REQUEST FOR CBU CONCRETE PAD INSTALLATION
Delivery Growth Management

Number of CBU Units: ____________ Date: ________
Type of CBU Units: ____________ Control No.: ________
Type of Installation: New Development: [ ] Conversion: [ ] Replacement: [ ]

WHERE WILL THE CBU(S) BE INSTALLED?
Street Address: ________________________________
City: ________________________________ State: ______
ZIP + 4: ______ - ______
Subdivision (if known): ________________________________
Section (if known): ________________________________
Nearest Cross Street: ________________________________
Verbal Description: ________________________________

On-Site POC Name: ________________________________
On-Site POC Phone: ________________________________
USPS POC Name: ________________________________
USPS POC Phone: ________________________________
Contractor Name (if known): ________________________________
Contractor Phone (if known): ________________________________

CHECKLIST OF REQUIRED ATTACHMENTS
☐ Photographs of the proposed installation location and surrounding area
☐ Executed agreement form with property owner or landlord
☐ Approved funding eBuy on the District finance number

Requestor Name: ________________________________
Requestor Title: ________________ Phone: ________________
Growth Coord. Name: ________________________________
District: ________________________________ Phone: ________________

Growth Coordinator Signature: ________________________________

December 20, 2016
Responsible Facilities Unit: eFMS Proj. No.:  
Responsible Postal District: FSSP Problem No.:  
Number of CBU Units: Control No.:  
Delivery Facility: Facility ID.:  

Physical Location of CBU Installation  
Street: State:  
City: ZIP:  

CoA Compliance Criteria  
1. Is there a smooth and level paved surface in front of each CBU pad?  
2. Is there at least 4 ft. of level pavement perpendicular from the edge of each CBU foundation pad?  
3. Is there a smooth paved path that connects the maneuvering area in front of the CBUs to a pedestrian arrival point? Pedestrian arrival points include public streets and sidewalks, privately owned sidewalks that are wheelchair accessible, and parking areas that are available for use by Postal customers.  
4. Is the path from the maneuvering area in front of the CBUs to the pedestrian arrival point at least 36" wide?  
5. Is the running slope of the path from the CBU maneuvering area to the pedestrian arrival point 5% or less, and is the cross slope 2% or less?  
6. If there is a vertical curb where the path from the CBU maneuvering area meets the site arrival surface, is there a curb ramp to provide access for customers who use wheelchairs?  

Explanatory Comments and Additional Information  
Provide explanatory comments and additional information below and record references above.  

This certifies that the CBU units and pads referenced above meet the standards indicated, or that a waiver of standards has been issued. Note that photo documentation is required and must be attached.  

Name of Pad Installer  
Signature of Pad Installer  
Date signed.  
Title of Pad Installer  
Name of Company  
Telephone  
Name of District Representative  
Signature of District Rep.  
Date signed.  
Title of District Representative  
District Name  
Telephone  

December 20, 2016
NOTES TO A/E:

1. CONCRETE SHALL HAVE A COMpressive STRENGTH OF 3,000 PSI @ 28 DAYS, CONTAIN 4% MIN. - 6% MAX. AIR ENTRAINMENT AND BE PLACED WITH A 3.50-4.50 SLUMP IN ACCORDANCE WITH ACT 301.
2. REINFORCING STEEL BARS SHALL CONFORM TO ASTM A615, GRADE 60.
3. EXPANSION BOLT SHALL BE EQUIVALENT TO THE FOLLOWING PROVIDERS:
a. HILTI Kwik Bolt (www.hilti.com) 1/2" DIAMETER X 5-1/2" OVERALL LENGTH, CATALOG #: 000-451-656.
b. RAWL STUB (www.rawl.com) 1/2" DIAMETER X 5-1/2" OVERALL LENGTH, CATALOG #: 000-727.

CLUSTER BOX UNIT (CBU) INSTALLATION - SINGLE UNIT

G1-2-0e

1/2" - 1'-0"

STANDARD DETAIL LIBRARY
NOTES TO A/E:

1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3,000 PSI @ 28 DAYS, CONTAIN 4% MIN. - BY VOLUME - CEMENT CONTENT, AND BE PLACED WITH A 3.50 - 4.50Slump in accordance with ACI 301.

2. EXPANSION BOLTS SHALL CONFORM TO ASTM A451, GRADE 80.

3. Expansion bolts shall be equivalent to the following provided:
   a. HELI-KREW BOLT (www.us.hilti.com) 1-1/2" DIAMETER x 5-1/2' OVERALL LENGTH
      GALVANIZED, CATALOG #: 000-463-696
   b. KILL RIBBED STEM BOLT (www.ribbed-stem-bolt.com) 1/2" DIAMETER x 7" OVERALL LENGTH, CATALOG NUMBER: WS-17002
      GALVANIZED, ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4-1/8".
   c. RAIL STUD (www.zinc.com) 1/2" DIAMETER x 5-1/2' OVERALL LENGTH, CATALOG NUMBER: 7724
      GALVANIZED, ENSURE THAT THE MIN. EMBEDMENT IN CONCRETE IS AT LEAST 4-1/8".

4. A 3 CBU CONFIGURATION IS DEPICTED. A 2 ON 4 CBU CONFIGURATION MAY BE USED AS LONG AS THEY ARE ARRANGED IN GROUPS SUCH THAT THE OVERALL DIMENSION OF THE CONCRETE BASE DOES NOT EXCEED 16 FEET.

CLUSTER BOX UNIT (CBU) INSTALLATION - MULTIPLE UNIT

G1 - 2 - 0 e1

STANDARD DETAIL LIBRARY
NOTES TO A/E:

1. IF THE ACCESSIBLE ROUTE FROM THE CBU(s) CONNECTS WITH A STREET OR OTHER PAVED SURFACE AT A VERTICAL CURB, A CURB RAMP SHOULD BE INSTALLED IN ACCORDANCE WITH RE-4 REQUIREMENTS.

NOTE: TURNING SPACE MAY BE ON PUBLIC WALKWAY IF THE WALKWAY CONFORMS TO THE SLOPE REQUIREMENTS (MAXIMUM 2% SLOPE).

Paved Pedestrian Surface (if available) or Public Street

CLUSTER BOX UNIT (CBU) ACCESS MANEUVERING SPACE - SINGLE UNIT

1/2" EXP. JOINT WITH PRE-MOLDED FILLER

CUB SINGLE INSTALLATION
SEE DETAIL G1-2-0e

5.0% MAX. RUNNING SLOPE, 2.0% MAX.
CROSS SLOPE

15" FIELD VERIFIED

CBU OUTLINE

T-SHAPED TURNING SPACE

OPTIONAL CONNECTOR—MINIMUM 4" WIDE

OLD JOINT

6"X6" THICKENED SLAB EDGE (TYP.)

CHAMFER EDGES IN LANDSCAPE AREAS.
TOOL EDGES FLUSH WITH ADJOINING SURFACES IN PAVED AREAS.

SLOPE SURFACES MINIMUM 1% FOR DRAINAGE.
MAXIMUM SLOPE SHALL NOT EXCEED 2%

SAWN CONTROL JOINT

NOTES:
1. CONCRETE SHALL HAVE A COMPREHENSIVE STRENGTH OF 3,000 PSI @ 28 DAYS
CONTAIN 4% MIN. - 6% MAX.
AIR ENTRAINMENT AND BE
PLACED WITH A 3.50-4.50 SLUMP IN ACCORDANCE WITH ACI 301.
2. ACCESSIBILITY PAD TO BE LEVEL WITH CBU FOUNDATION
3. CONNECT ACCESSIBILITY PAD TO EXISTING PAVED PEDESTRIAN SURFACE (PREFERRED) OR PUBLIC STREET
4. REINFORCE ALL SLAB WITH 6X5 W1.4 X W1.4 WMS
5. PROVIDE LIGHT BROOM FINISH

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STANDARD DETAIL LIBRARY
NOTES TO A/E:

1. IF THE ACCESSIBLE ROUTE FROM THE CBU(s) CONNECTS WITH A STREET OR OTHER PAVED SURFACE AT A VERTICAL CURB, A CURB RAMP SHOULD BE INSTALLED IN ACCORDANCE WITH RE-4 REQUIREMENTS.

Paved Pedestrian Surface (if available) or Public Street