

DESCRIPTION:

INLET PROTECTION CONSISTS OF A VARIETY OF METHODS TO INTERCEPT SEDIMENT AT LOW POINT INLETS THROUGH THE USE OF DEPRESSED GRADING, FILTER STONE, FILTER FABRIC, INLET INSERTS, AND OTHER MATERIALS. THE PROTECTION DEVICES ARE PLACED AROUND OR ACROSS THE INLET OPENINGS TO PROVIDE LOCALIZED DETENTION OR FILTRATION OF SEDIMENT AND FLOATABLE MATERIALS IN STORMWATER. PROTECTION DEVICES MAY BE ASSEMBLED ONSITE OR PURCHASED AS MANUFACTURED ASSEMBLIES. CURB INLET PROTECTION SHALL BE IN ACCORDANCE WITH [WP-7B](#).

GENERAL NOTES:

1. DRAINAGE PATTERNS SHALL BE EVALUATED TO ENSURE INLET PROTECTION WILL NOT DIVERT FLOW OR FLOOD THE ROADWAY OR ADJACENT PROPERTIES AND STRUCTURES.
2. INLET PROTECTION MEASURES OR DEVICES THAT COMPLETELY BLOCK THE INLET ARE PROHIBITED. THEY MUST ALSO INCLUDE A BYPASS CAPABILITY IN CASE THE PROTECTION MEASURES ARE CLOGGED.
3. INLET PROTECTION MUST BE DESIGNED TO PASS THE CONVEYANCE STORM (25-YEAR, 24-HOUR) WITHOUT CREATING A ROAD HAZARD OR DAMAGING ADJACENT PROPERTY. THIS MAY BE ACCOMPLISHED BY ANY OF THE FOLLOWING MEASURES:
 - A. AN OVERFLOW WEIR ON THE PROTECTION MEASURE.
 - B. AN EXISTING POSITIVE OVERFLOW SWALE ON THE INLET.
 - C. SUFFICIENT STORAGE VOLUME AROUND THE INLET TO HOLD THE PONDED WATER UNTIL IT CAN ALL FILTER INTO THE INLET.
 - D. OTHER ENGINEERED METHOD.
4. POSITIVE OVERFLOW DRAINAGE IS CRITICAL IN THE DESIGN OF INLET PROTECTION. IF OVERFLOW IS NOT PROVIDED FOR AT THE INLET, TEMPORARY MEANS SHALL BE PROVIDED TO ROUTE EXCESS FLOWS THROUGH ESTABLISHED SWALES, STREETS, OR OTHER WATERCOURSES TO MINIMIZE DAMAGE DUE TO FLOODING.
5. FILTER FABRIC AND WIRE MESH USED FOR INLET PROTECTION SHALL MEET THE MATERIAL REQUIREMENTS SPECIFIED IN CITY OF WACO STANDARD SPECIFICATIONS FOR CONSTRUCTION.
6. BLOCK AND GRAVEL (CRUSHED STONE OR RECYCLED CONCRETE) PROTECTION IS USED WHEN FLOWS EXCEED 0.5 CUBIC FEET PER SECOND AND IT IS NECESSARY TO ALLOW FOR OVERTOPPING TO PREVENT FLOODING.
7. BAGS USED TO SECURE INLET PROTECTION DEVICES ON TOP OF CURB INLET SHALL BE FILLED WITH AGGREGATE, FILTER STONE, OR CRUSHED ROCK THAT IS LESS LIKELY THAN SAND TO BE WASHED INTO AN INLET IF THE BAG IS BROKEN. FILLED BAGS SHALL BE 24 TO 30 INCHES LONG, 16 TO 18 INCHES WIDE, AND 6 TO 8 INCHES THICK. BAGS SHALL BE POLYPROPYLENE, POLYETHYLENE, OR POLYAMIDE WOVEN FABRIC WITH A MINIMUM UNIT WEIGHT OF 4 OUNCES PER SQUARE YARD AND MEET THE FOLLOWING CRITERIA:
 - A. GREATER THAN 300 PSI MULLEN BURST STRENGTH USING ASTM D3786 STANDARD TEST METHOD FOR HYDRAULIC BURSTING STRENGTH OF TEXTILE FABRICS-DIAPHRAGM BURSTING STRENGTH TESTER METHOD.
 - B. GREATER THAN 70 PERCENT UV STABILITY USING ASTM D4355 STANDARD TEST METHOD FOR DETERIORATION OF GEOTEXTILES BY EXPOSURE TO LIGHT, MOISTURE, AND HEAT IN A XENON ARC TYPE APPARATUS.
8. INLET PROTECTION SHALL BE MAINTAINED AS FOLLOWS:
 - A. INSPECT EVERY 14 DAYS
 - B. CHECK FOR AND REMOVE BLOCKAGE OF INLET AFTER EVERY STORM EVENT WITHIN 24 HOURS
 - C. REMOVE SEDIMENT BEFORE IT REACHES HALF THE DESIGN HEIGHT OR VOLUME OF THE INLET PROTECTION, MORE FREQUENTLY FOR CURB INLETS
 - D. REPAIR OR REPLACE DAMAGED MATERIALS
 - E. CLEAN OR REPLACE FILTER STONE WHEN CLOGGED WITH SEDIMENT
9. FOR NON-CITY PROJECTS, REMOVAL OR TRANSFER (SEE FORM [WSP-0001](#)) OF ALL INLET PROTECTION AT SUBMISSION OF NOTICE OF TERMINATION.
10. PLEASE REFER TO THE CITY OF WACO STANDARD SPECIFICATIONS FOR CONSTRUCTION, SECTION 1.10, PART 2, A 4 AND PART 3, B 3 FOR INLET PROTECTION MATERIAL AND INSTALLATION SPECIFICATIONS.

INLET PROTECTION GENERAL NOTES

SEE [WP-7B](#) FOR ADDITIONAL DETAILS



ENGINEERING DIVISION

DISCLAIMER: THE USE OF THIS STANDARD IS GOVERNED BY THE "TEXAS ENGINEERING PRACTICE ACT". NO WARRANTY OF ANY KIND IS MADE BY THE CITY OF WACO FOR ANY PURPOSE WHATSOEVER. THE CITY OF WACO ASSUMES NO RESPONSIBILITY FOR THE CONVERSION OF THIS STANDARD TO OTHER FORMATS OR FOR INCORRECT RESULTS OR DAMAGES RESULTING FROM ITS USE.

REVISIONS			
NO.	COMMENTS	BY	DATE
1	RENUMBER NOTES	MZ	04/19/2024
##	DESCRIPTION	FL	MM/DD/YYYY

DATE
01/01/2024

WP-7A