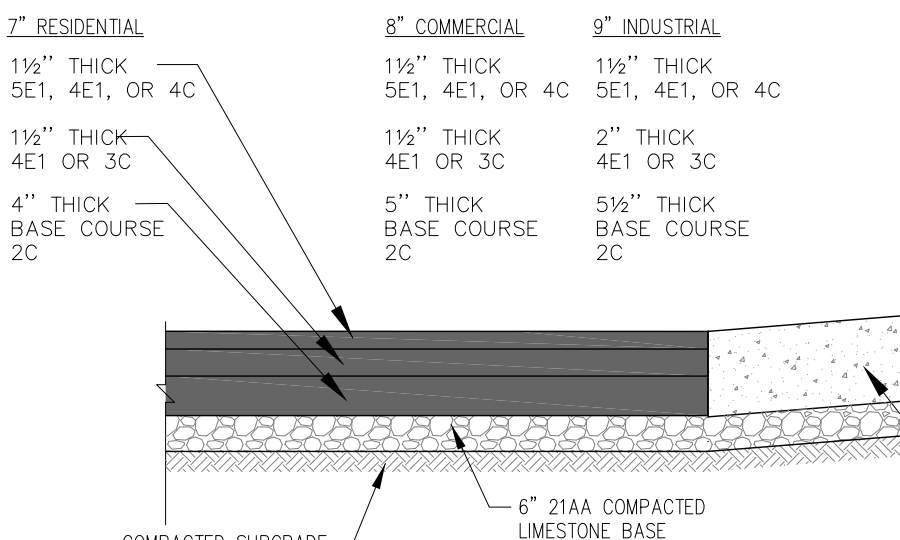
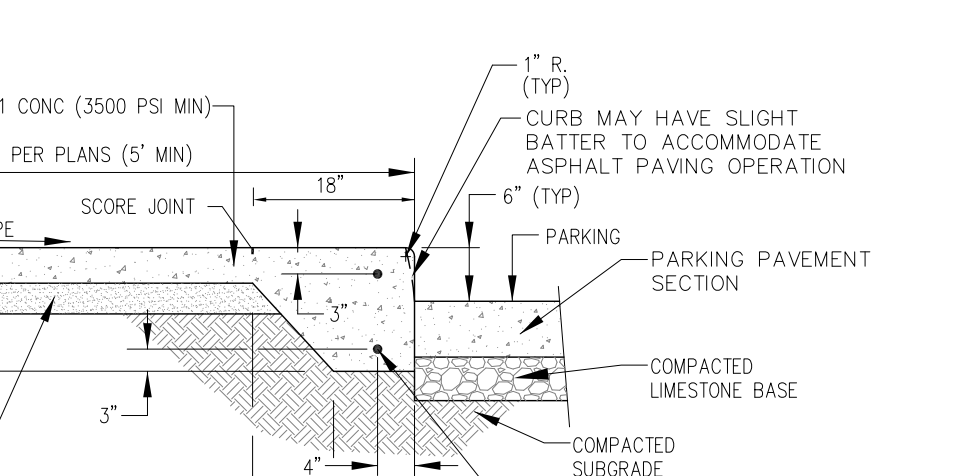


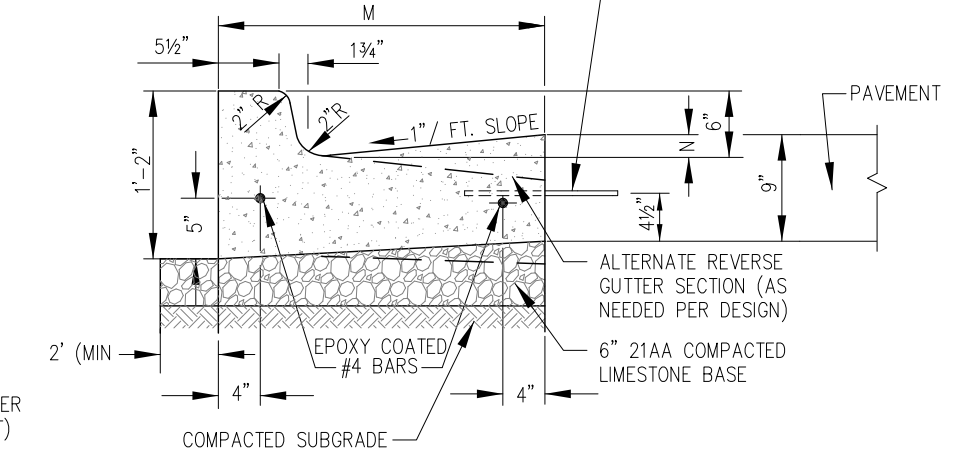
**TYPICAL CONCRETE PARKING SECTION**  
NOT TO SCALE



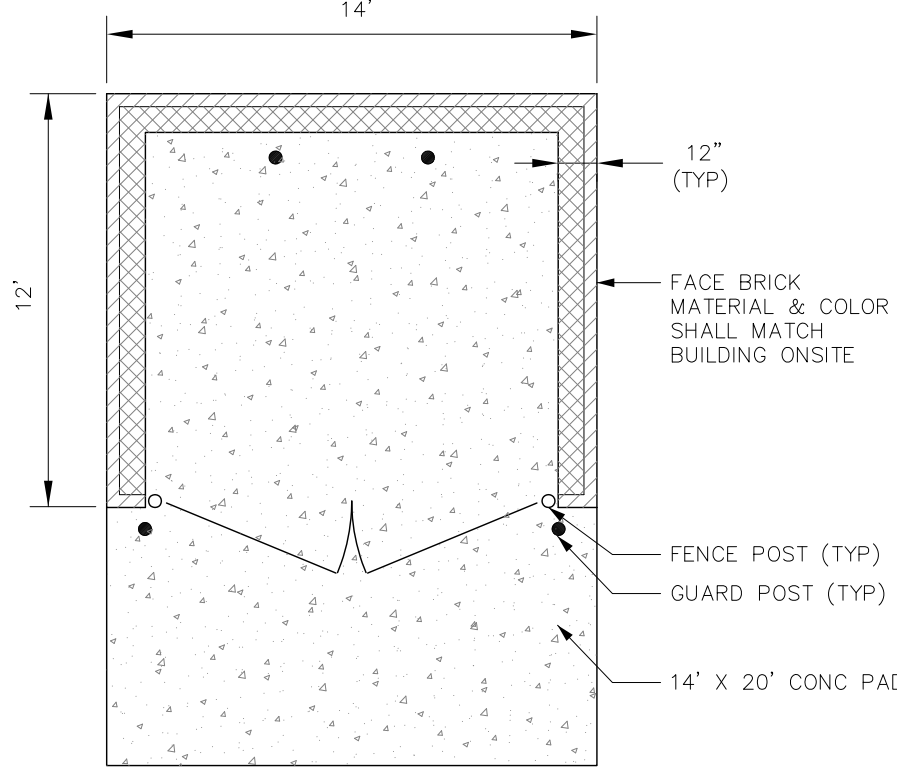
**TYPICAL BITUMINOUS PARKING SECTION**  
NOT TO SCALE



**TYPICAL CONCRETE PAVEMENT INTEGRAL WALK/CURB**  
NOT TO SCALE



**6\"/>**



**TYPICAL SCREENED DUMPSTER ENCLOSURE DETAILS**  
NOT TO SCALE

**GENERAL NOTES**

- EXISTING TOPSOIL, VEGETATION AND ORGANIC MATERIALS SHALL BE STRIPPED AND REMOVED FROM PROPOSED PAVEMENT AREA PRIOR TO PLACEMENT OF BASE MATERIALS. TREE ROOTS SHALL BE COMPLETELY REMOVED.
- EXCAVATE TO THE DEPTH OF THE FINAL SUBGRADE ELEVATION TO ALLOW FOR GRADE CHANGES AND THE PLACEMENT OF THE RECOMMENDED PAVEMENT SYSTEM.
- THE PAVEMENT SUBGRADE SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT. THE FINAL SUBGRADE SHALL BE THOROUGHLY PROOF-ROLLED IN THE PRESENCE OF A GEOTECHNICAL/PAVEMENT ENGINEER TO DETERMINE STABILITY. LOOSE OR YIELDING AREAS WHICH CANNOT BE MECHANICALLY STABILIZED SHALL BE REMOVED AND REPLACED WITH CLASS II SAND OR AS DIRECTED BY THE ENGINEER. ALL FILL MATERIAL AND BASE MATERIAL SHALL BE TESTED AND ITS COMPACTION AND SUITABILITY FOR ACCEPTANCE OF THE BASE MATERIAL AND PAVEMENT SHALL BE CERTIFIED BY SAID TESTING FIRM. THE OWNER SHALL SUPPLY THREE COPIES OF GEOTECHNICAL AND TECHNICAL REPORTS TO NEW HAVEN VILLAGE.
- IF IN THE OPINION OF THE INSPECTOR/ENGINEER, FIELD CONDITIONS WARRANT ADDITIONAL TESTING, THE DEVELOPER SHALL ARRANGE FOR AND PAY FOR ALL REQUIRED ADDITIONAL TESTING.
- 21AA LIMESTONE AGGREGATE BASE SHALL BE COMPACTED TO ACHIEVE A 95% COMPACTION LEVEL (MODIFIED PROCTOR - ASTM D 1557-91). THE BASE SHALL EXTEND A MINIMUM OF 2 FEET BEYOND THE BACK OF CURB OR THE PAVED EDGE.
- CONCRETE PAVEMENT TESTING SHALL BE REQUIRED FOR ALL PROJECTS.
- ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE NEW HAVEN VILLAGE, MACOMB COUNTY DEPARTMENT OF ROADS, AND THE MICHIGAN DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION, CURRENT EDITION.
- CONSTRUCTION OF A NEW OR RECONSTRUCTED DRIVE APPROACH CONNECTING TO AN EXISTING STATE OR COUNTY ROADWAY SHALL BE ALLOWED ONLY AFTER AN APPROVED PERMIT HAS BEEN SECURED FROM THE AGENCY HAVING JURISDICTION OVER SAID ROADWAY.
- FOR ANY WORK WITHIN THE PUBLIC RIGHT-OF-WAY, THE CONTRACTOR SHALL PAY FOR AND SECURE ALL NECESSARY PERMITS AND LICENSES AS REQUIRED BY ALL APPLICABLE REGULATIONS.
- 1.0 INCH AND 2.0 INCH EXPANSION JOINTS SHALL BE INSTALLED PER MCDR / MDT STANDARDS.
- FILL AREAS SHALL BE MACHINE COMPACTED IN UNIFORM LIFTS NOT EXCEEDING 9 INCHES THICK TO 95% OF THE MAXIMUM DRY DENSITY (MODIFIED PROCTOR) PRIOR TO PLACEMENT OF PROPOSED PAVEMENT.
- 6\"/>
- CONSTRUCTION TRAFFIC SHALL BE MINIMIZED ON THE NEW BITUMINOUS PAVEMENT. IF CONSTRUCTION TRAFFIC IS ANTICIPATED ON THE PAVEMENT STRUCTURE, SUBJECT TO NEW HAVEN VILLAGE AND MCDR APPROVAL, THE PLACEMENT OF THE FINAL LIFT SHALL BE DELAYED UNTIL THE MAJORITY OF THE CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED BY THE DEVELOPER. PAVEMENT SHALL BE OF THE TYPE, THICKNESS AND CROSS SECTION AS INDICATED ON THE PLANS.
- ONLY PLANT MIXED PAVEMENT MATERIAL ALLOWED. MILLINGS OR RECYCLED MATERIAL OF ANY TYPE ARE PROHIBITED. APPLICABLE FOR ALL PAVEMENT TYPES INCLUDING DRIVEWAYS (RESIDENTIAL AND NON-RESIDENTIAL), GRAVEL DRIVEWAYS (MIN 6\"/>

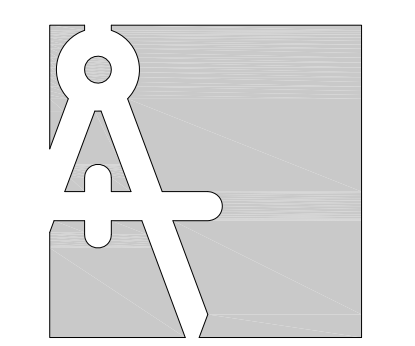
**PAVING NOTES**

**CONCRETE PAVEMENT**

- CONCRETE SHALL CONSIST OF PORTLAND CEMENT TYPE IA (AIR-ENTRAINED) WITH A MINIMUM CEMENT CONTENT OF SIX SACKS PER CUBIC YARD, MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3500 PSI AND A SLUMP OF 1 1/2 TO 3 INCHES. PAVEMENT SHALL BE PLANT MIXED CONFORMING TO MDT GRADE P1 DESIGNED TO MITIGATE ASR PER ASTM STANDARDS.
- ALL CONCRETE PAVEMENT, DRIVEWAYS, CURB & GUTTER, ETC., SHALL BE SPRAY CURED WITH WHITE MEMBRANE CURING COMPOUND IMMEDIATELY FOLLOWING FINISHING OPERATION.
- THE CONCRETE BATCH PLANT SHALL BE MDT CERTIFIED WITH LOCATION APPROVED BY THE VILLAGE AND MCDR.
- NO CONCRETE PAVING SHALL BE ALLOWED PRIOR TO MAY 1, OR AFTER NOVEMBER 1 (UNLESS APPROVED BY MDT, MCDR OR NEW HAVEN VILLAGE).
- AIR TEMPERATURE AT POINT OF PLACEMENT, AWAY FROM ARTIFICIAL HEAT SHALL BE MINIMUM 25° F AND RISING.
- TEMPERATURE OF CONCRETE AT TIME OF PLACEMENT SHALL BE BETWEEN 45° F AND 90° F.

**BITUMINOUS PAVEMENT**

- BITUMINOUS MIXTURE SHALL CONSIST OF: BASE COURSE - MDT BITUMINOUS MIXTURE NO. 2C; LEVELING COURSE - MDT BITUMINOUS MIXTURE NO. 3C; WEARING COURSE - MDT BITUMINOUS MIXTURE NO. 4C; ASPHALT CEMENT PENETRATION GRADE 85-100 (PG 64-22) RECLAIMED ASPHALT PAVEMENT (RAP) SHALL NOT BE ALLOWED IN THE HMA. 4C MAX.
- FOR PRIVATE RESIDENTIAL ROADWAYS, COMMERCIAL PARKING LOTS, AND BIKE PATHS ALTERNATE EQUIVALENT MDT BITUMINOUS MIXTURE MAY BE USED, WITH APPROVAL FROM THE VILLAGE ENGINEER.
- ALL BITUMINOUS MATERIAL SHALL BE COMPACTED TO A DENSITY OF 92% OF THE FIELD CONTROL DENSITY AS DETERMINED BY THE MARSHALL METHOD.
- A BOND COAT OF 55-1H EMULSION IS REQUIRED BETWEEN THE BASE COURSE AND LEVELING COURSE AND BETWEEN THE LEVELING COURSE AND WEARING COURSE WHEN EITHER 48 HOURS HAVE ELAPSED BETWEEN PLACEMENT OF THE BITUMINOUS COURSES OR THE SURFACE OF THE PAVEMENT HAS BEEN CONTAMINATED WITH DIRT, DUST, OR FOREIGN MATERIAL. THE BOND COAT SHALL BE APPLIED IN A UNIFORM MANNER OVER THE SURFACE AT A RATE OF 0.10 GALLON/S.Y. (BETWEEN LEVELING COURSE AND BASE COURSE & 0.05 GALLON/SY BETWEEN WEARING COURSE AND LEVELING COURSE) THE COATS MAY DIFFER, IN THE EVENT A BOND COAT IS NOT REQUIRED, THE LEVELING COURSE MAY REQUIRE LOCALIZED BROOM CLEANING.
- DO NOT PLACE HMA OR APPLY BOND COAT WHEN PRECIPITATION IS IMMINENT OR WHEN MOISTURE ON THE EXISTING SURFACE WILL PREVENT SATISFACTORY CURING. UNLESS OTHERWISE APPROVED BY THE ENGINEER IN WRITING, TEMPERATURE AND SEASONAL REQUIREMENTS FOR PLACING HMA WILL BE ACCORDING TO THE CURRENT MDT SPECIFICATIONS. PAVING WILL NOT BE ALLOWED BELOW THESE MINIMUM TEMPERATURES, NOR WHEN FROST IS ON OR IN THE GRADE OR ON THE EXISTING SURFACE.



**TRI-COUNTY**  
Engineering Consultants  
48701 Hayes Road  
Shelby Twp, MI 48315  
TEL: (810) 394-7887  
FAX: (586) 686-4642  
info@Tri-CountyEng.com  
www.Tri-CountyEng.com



CLIENT NAME:  
**VILLAGE OF NEW HAVEN**  
MACOMB COUNTY

3 WORKING DAYS  
800-482-7171



Know what's below.  
Call before you dig.

PRIOR TO CONSTRUCTION, ALL EXISTING UTILITIES, LOCATION AND DEPTH WITHIN THE PROJECT AREA SHALL BE FIELD VERIFIED. CALL MISS DIG SYSTEM 3 WORKING DAYS PRIOR TO CONSTRUCTION.

UTILITY INFORMATION SHOWN ON THIS DRAWING IS APPROXIMATE AND MAY BE DISCLOSED INFORMATION BY VARIOUS UTILITY COMPANIES, PUBLIC AGENCIES OR OTHER SOURCES AND THIS MAY NOT NECESSARILY REFLECT ACTUAL FIELD LOCATIONS AND NO GUARANTEE IS GIVEN TO COMPLETENESS OR ACCURACY.

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PROJECT NAME:  
**NEW HAVEN**  
PAVING  
STANDARD DETAILS

PROJECT LOCATION:  
SEC 28/34, T04N, R14E  
VILLAGE OF NEW HAVEN  
MACOMB COUNTY

Drawn By: TCEC  
Checked By: NHPDW  
Approved By: NEW HAVEN

REVISIONS:  
1. 01/12/25



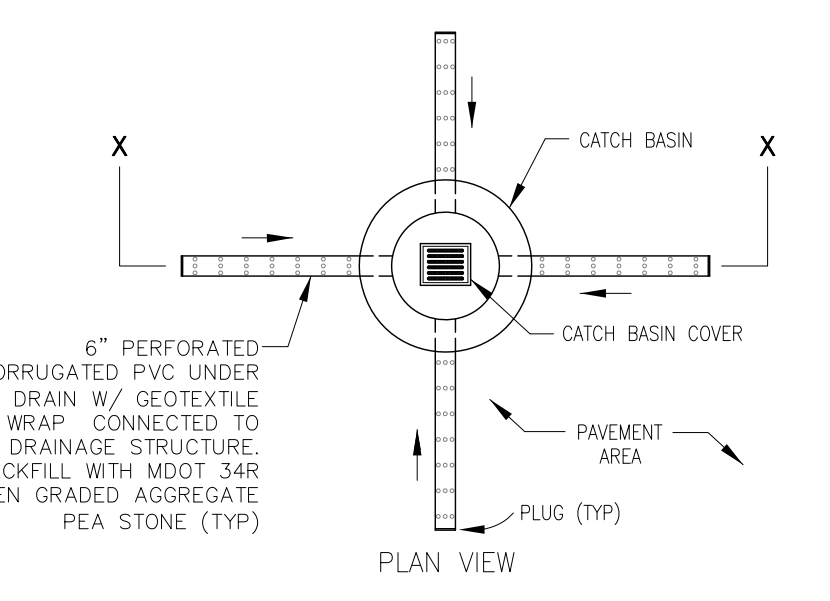
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ADJUST SCALES ACCORDINGLY IF NOT

SCALE: NONE

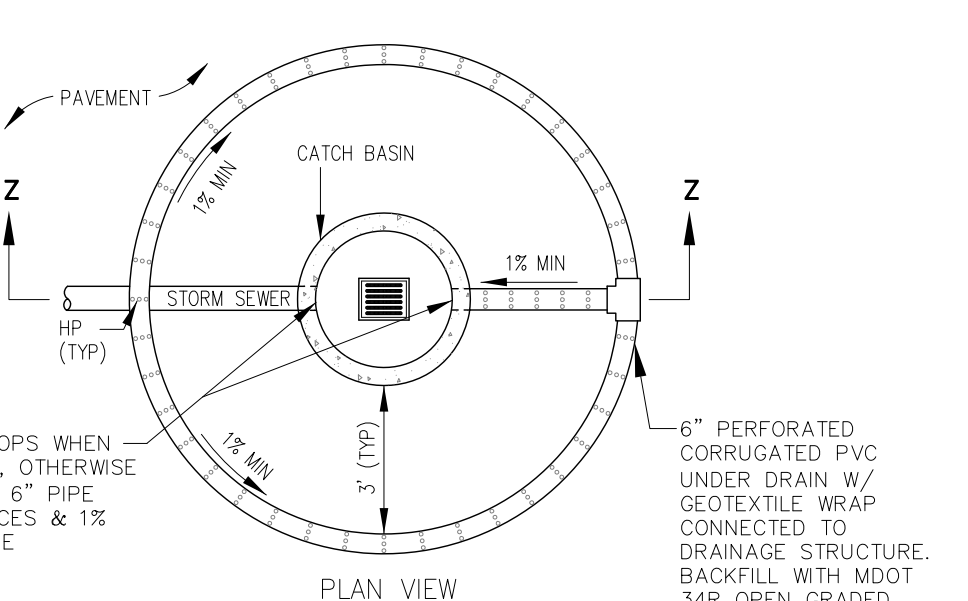
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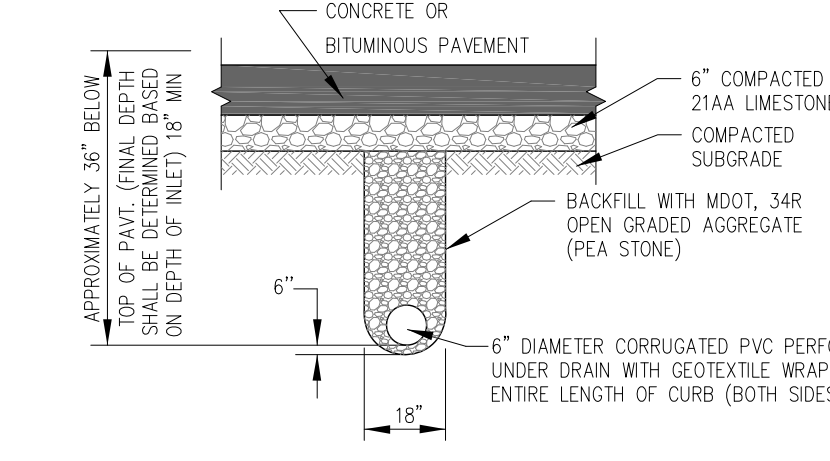
**TYPICAL PARKING AREA PAVEMENT / CURB DETAILS**



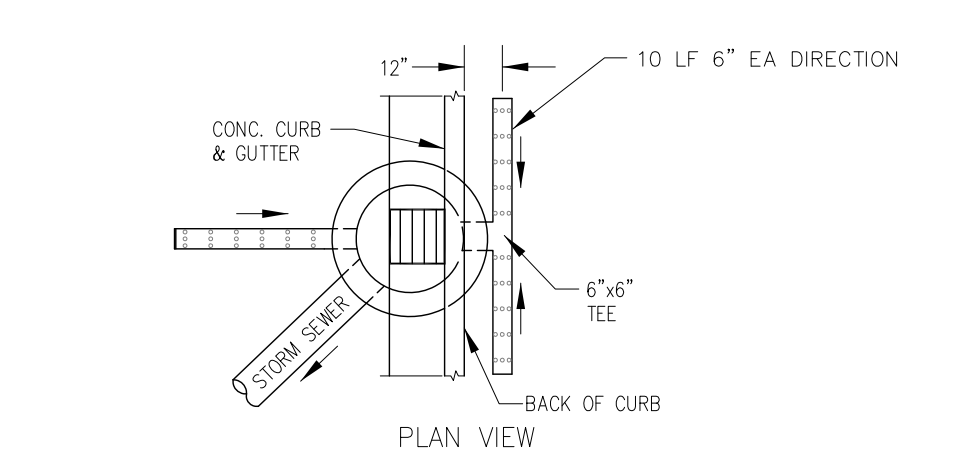
**TYPICAL FINGER TYPE UNDERDRAIN (WITHIN PARKING LOTS OUTSIDE CURB LINES)**  
NOT TO SCALE



**TYPICAL CIRCULAR UNDERDRAIN DETAIL (WITHIN PARKING LOTS OUTSIDE CURB LINES)**  
NOT TO SCALE



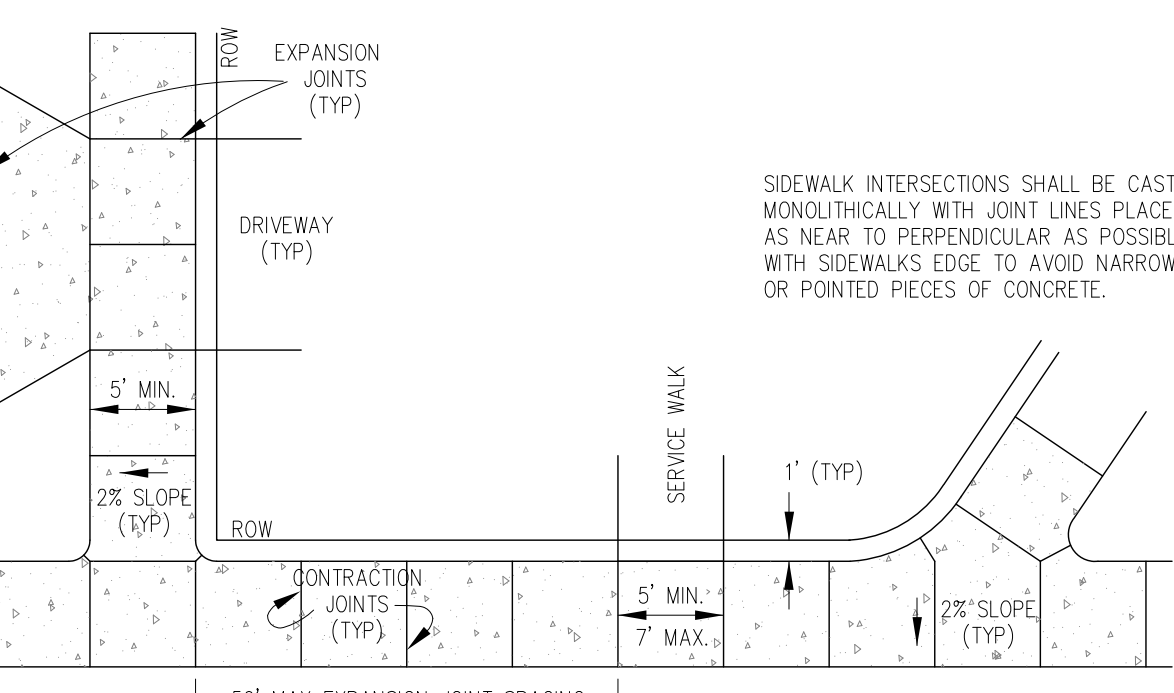
**TYPICAL UNDER DRAIN SECTION**  
NOT TO SCALE



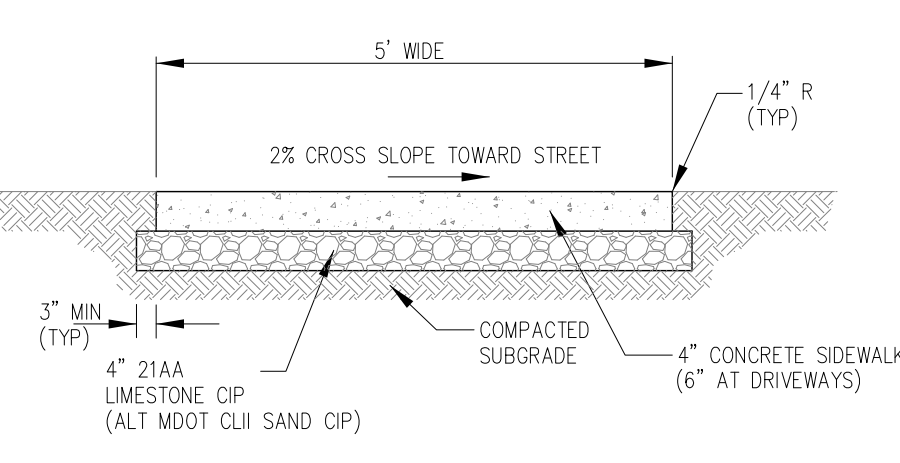
**TYPICAL FINGER TYPE UNDERDRAIN (WITHIN PARKING LOTS AT CURB LINES)**  
NOT TO SCALE

- NOTES:
- UNDER DRAIN TO BE 6\"/>
  - ALL UNDER DRAIN PIPES SHALL BE INSTALLED AT A MIN SLOPE OF 1%.
  - PIPE SHALL BE INSTALLED WITH THE PERFORATIONS PLACED DOWN.
  - PROPOSED UNDER DRAIN PIPE LAYOUT, FLOW LINE ELEV. AND DETAILS SHALL BE APPROVED PRIOR TO CONSTRUCTION.

**TYPICAL UNDER DRAIN DETAILS**



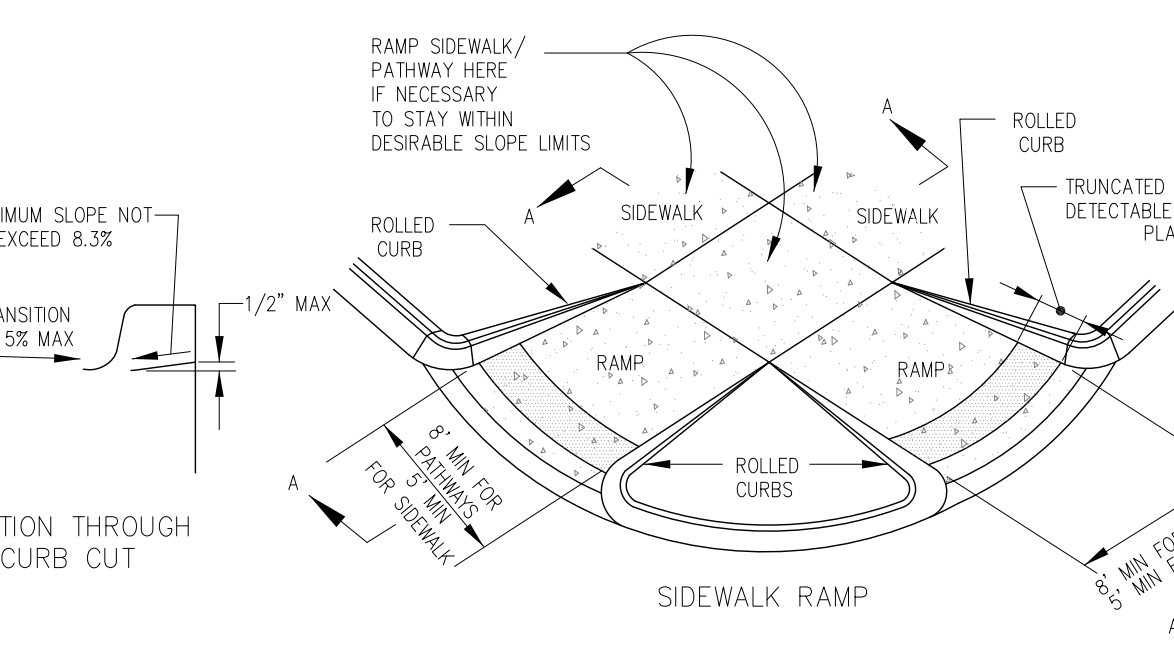
**TYPICAL SIDEWALK JOINT LAYOUTS**  
NOT TO SCALE



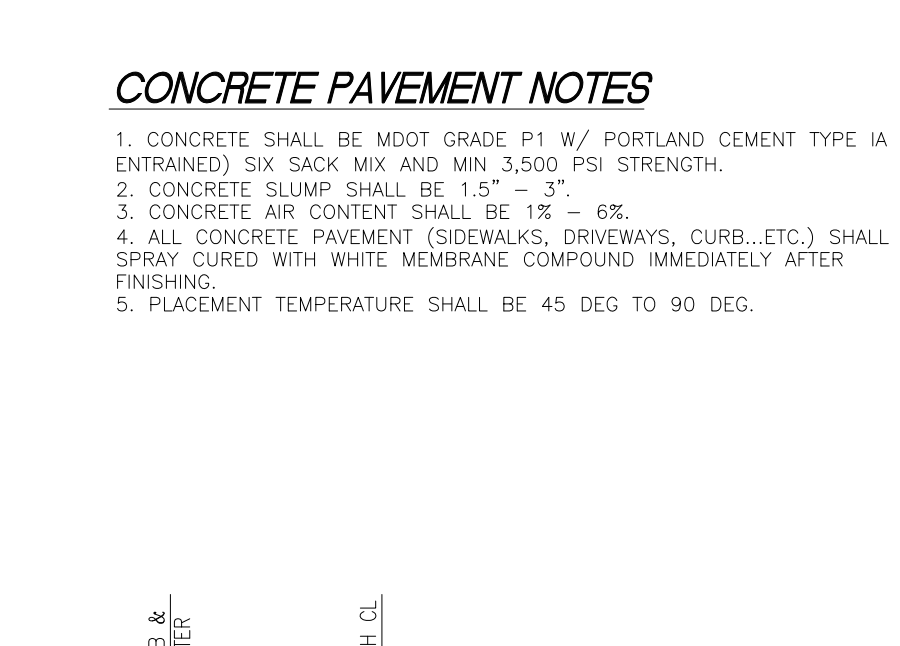
**CONCRETE SIDEWALK DETAIL**  
NOT TO SCALE

**CONCRETE PAVEMENT NOTES**

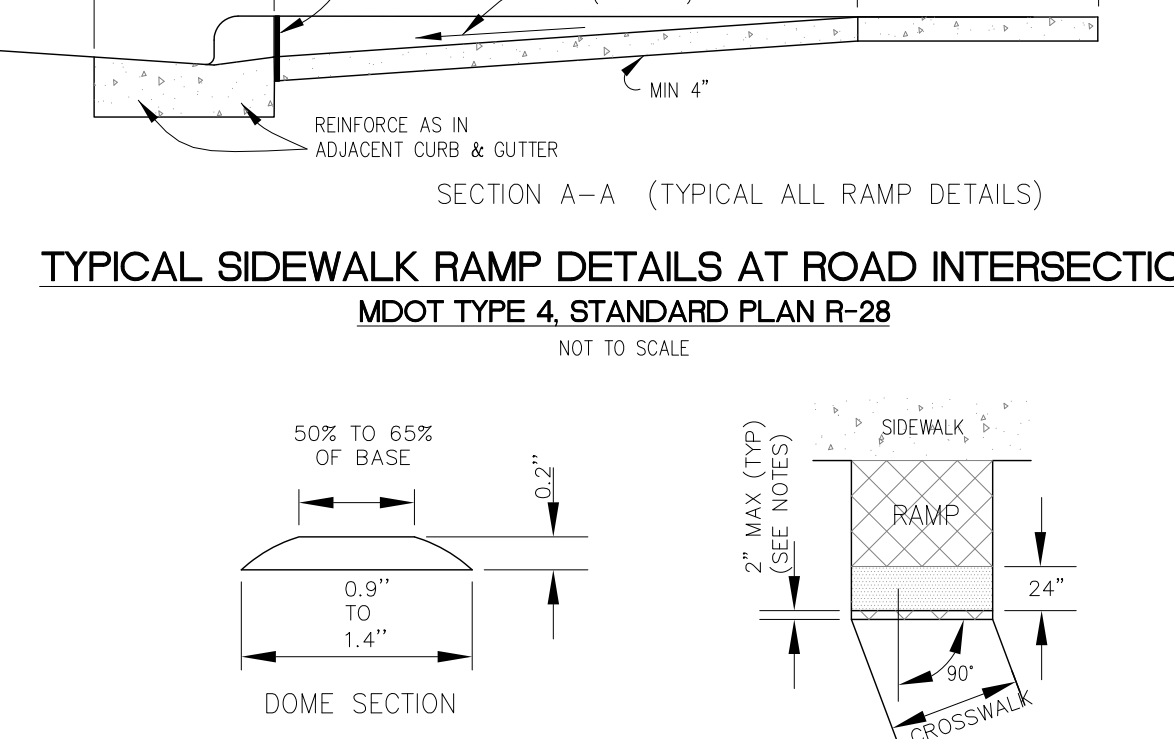
- CONCRETE SHALL BE MDT GRADE P1 W/ PORTLAND CEMENT TYPE IA (AIR ENTRAINED) SIX SACK MIX AND MIN. 3500 PSI STRENGTH.
- CONCRETE SLUMP SHALL BE 1.5\"/>
- CONCRETE AIR CONTENT SHALL BE 1% - 6%.
- ALL CONCRETE PAVEMENT (SIDEWALKS, DRIVEWAYS, CURB, ETC.) SHALL BE SPRAY CURED WITH WHITE MEMBRANE COMPOUND IMMEDIATELY AFTER FINISHING.
- PLACEMENT TEMPERATURE SHALL BE 45 DEG TO 90 DEG.



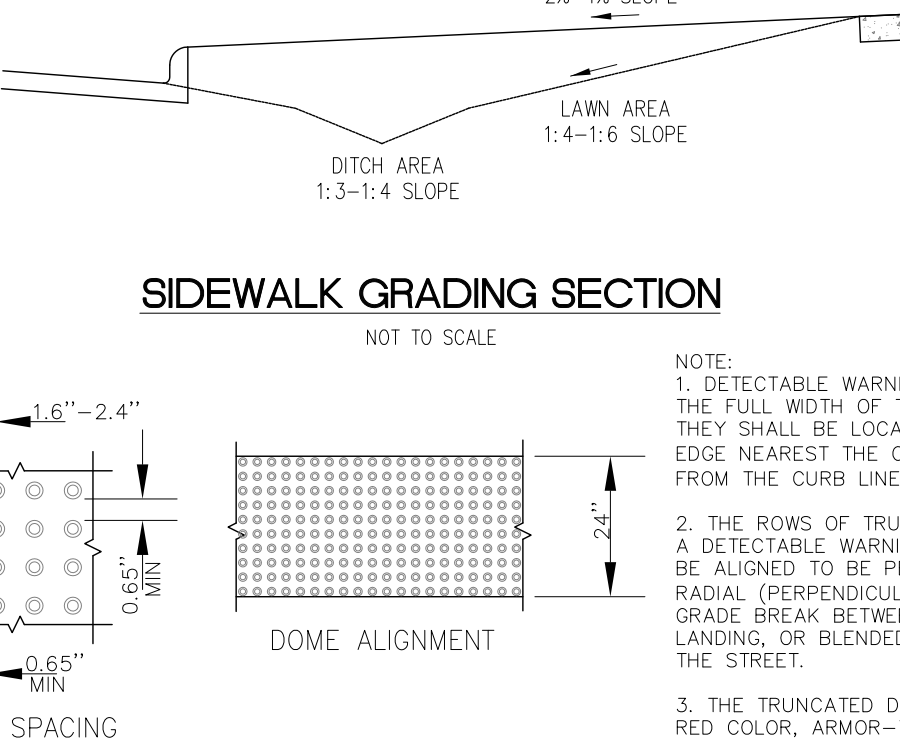
**TYPICAL SIDEWALK RAMP DETAILS AT ROAD INTERSECTION MDT TYPE 4, STANDARD PLAN R-28**  
NOT TO SCALE



**SIDEWALK GRADING SECTION**  
NOT TO SCALE



**DETECTABLE WARNING DETAILS MDT STANDARD PLAN R-28**  
NOT TO SCALE



**TYPICAL CONCRETE SIDEWALK DETAILS**