

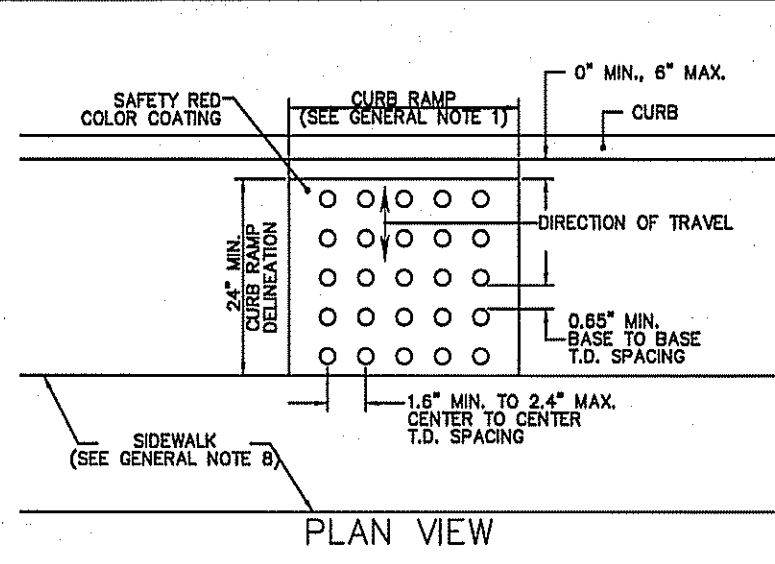
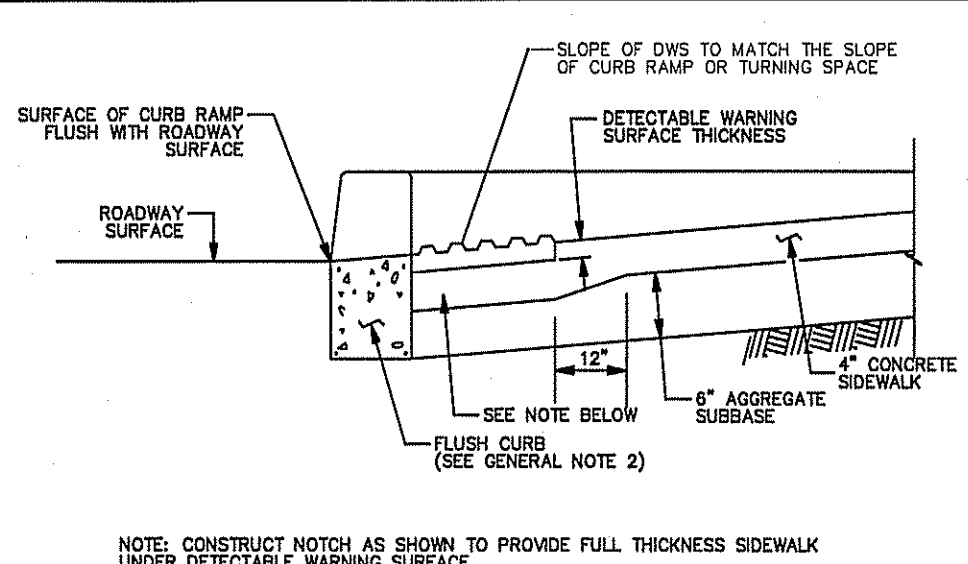
CURB RAMP DETAIL NOTES

- CHEEK WALLS**
 - CHEEK WALLS ARE PERMITTED WHEN ADJACENT TO NON-WALK AREAS OR ELEVATION DIFFERENCES CANNOT BE ACCOMMODATED BY FLARES OR GRADING.
 - AVOID THE USE OF CHEEK WALLS IN SIDEWALK AND CURB DESIGN. APPROVAL FROM THE OCEAN COUNTY ENGINEERING DEPARTMENT IS REQUIRED.
- CROSSWALKS**
 - FOR CURB RAMPS THAT LEAD TO A SINGLE CROSSWALK, THE RAMP (EXCLUDING FLARES) TO BE FULLY INSIDE A MARKED CROSSWALK LINE.
 - SHOULD BE PLACED A MINIMUM DISTANCE OF 4'-0" FROM STOP AND YIELD LINES.
 - FOR UN-SIGNALIZED AREAS, CROSSWALKS SHOULD BE PLACED A MINIMUM DISTANCE OF 20'-0" AWAY FROM ON ROAD PARKING ZONES. FOR SIGNALIZED AREAS, CROSSWALKS SHOULD BE PLACED A MINIMUM DISTANCE OF 30'-0" FROM ON ROAD PARKING ZONES.
 - PEDESTRIAN CROSSWALK IS 6'-0" MINIMUM MEASURED FROM INSIDE THE PAINTED EDGE TO INSIDE PAINTED EDGE AND THE INSIDE LINES MUST BE OUTSIDE THE PROJECTED CURB LINES.
 - AVOID USING THE PARALLEL LINE CROSSWALK DESIGN. INSTEAD USE THE LONGITUDINAL LINES AT 6'-0" LONG AND 1'-2" WIDE WITH A SPACING OF 1'-2" APART. SPACING SHOULD BE DESIGNED SO THE PAINTED AREAS AVOID THE WHEEL PATHS.
- CURB RAMPS**
 - CONSTRUCT CURB RAMPS WITH A MINIMUM 4'-0" X 4'-0" CLEAR SPACE BEFORE THE CURB FACE, WITHIN THE WIDTH OF THE CROSSWALK.
 - SLOPES THAT EXCEED 8.00%, OR CONTRACT DOCUMENTS AS APPLICABLE, WILL NOT BE ACCEPTED AND WILL BE RECONSTRUCTED.
 - PROVIDE SLIP RESISTANT TEXTURE ON CURB RAMP BY COARSE BROODING TRANSVERSE TO THE SLOPE OF THE RAMP. EXTEND TEXTURE THE FULL WIDTH AND LENGTH OF THE CURB RAMP INCLUDING FLARED SIDE RAMPS.
 - TO AVOID CHASING GRADE INDEFINITELY WHEN TRAVERSING THE HEIGHT OF CURB, RAMP LENGTH NOT TO EXCEED 15'-0". ADJUST RAMP SLOPE AS NEEDED TO PROVIDE ACCESS TO THE MAXIMUM EXTENT FEASIBLE.
 - FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE.
 - FOR NEW CONSTRUCTION, ATTEMPT TO KEEP THE CROSS SLOPE AS FLAT AS POSSIBLE. DO NOT EXCEED 2.00% CROSS SLOPE ON THE CURB RAMP OR PEDESTRIAN ACCESSIBLE ROUTE (MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL).
 - CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
 - CURB RAMP WIDTH IS 4'-0" MINIMUM.
 - AVOID CURB RAMP DESIGNS WHERE THE WIDTH OF THE CROSSWALK WILL NEED TO BE GREATER THAN 10'-0" WIDE.
 - ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12% SLOPE.
 - THE CHANGE IN GRADE AT THE BOTTOM OF THE CURB RAMP AND ADJOINING ROAD SURFACE IS NOT TO EXCEED 2.00% DIFFERENCE OF 1.00%. THE COUNTER SLOPE OF THE GUTTER OR ROAD AT THE FOOT OF A CURB RAMP, TURNING SPACE OR BLENDED TRANSITION IS NOT TO EXCEED 8.00% AND IT IS NOT NECESSARY TO HAVE THE LENGTH GREATER THAN 15'-0".
 - FOR BLENDED TRANSITION CURB RAMPS (TYPE 3), THE MAXIMUM RUNNING SLOPE IS 5% WITH A MAXIMUM 2% CROSS SLOPE. BLENDED TRANSITION CURB RAMPS REQUIRE THE OCEAN COUNTY ENGINEER'S APPROVAL.
- FLUSH CURB**
 - CONSTRUCT TOP OF PLAIN CEMENT CONCRETE FLUSH CURB TO BE FLUSH WITH ADJACENT SURFACES (RAMPS, SIDEWALKS, FLARES).
 - CONSTRUCT FLUSH CURB FOR CURB RAMPS FLUSH TO ADJACENT ROADWAY. GRADE EDGE OF ROAD ELEVATIONS AT THE LOW LINE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING. FOR LEVEL TURNING SPACES BEHIND FLUSH CURB, ADJUST SLOPES TO PROVIDE POSITIVE DRAINAGE. THE VERTICAL ALIGNMENT OF A CURB RAMP, EXCLUDING FLARES, SHALL BE PLANAR. GRADE BREAKS SHALL BE FLUSH AND PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. RAMP TRANSITIONS BETWEEN WALKS, GUTTERS, TURNING SPACES, OR STREETS SHALL BE FLUSH AND FREE OF ABRUPT VERTICAL CHANGES 1/4" MAXIMUM.
- DETECTABLE WARNING SURFACES**
 - NO SEPARATION BETWEEN DETECTABLE WARNING SURFACES FOR MEDIANS LESS THAN 4'-0" BETWEEN BACK OF CURBS.
 - PROVIDE DETECTABLE WARNING SURFACES (DWS) 24" MINIMUM ON THE DIRECTION OF PEDESTRIAN TRAVEL ACROSS FULL WIDTH OF RAMP AT THE GRADE BREAK NEAR STREET EDGE. PROVIDE DWS THAT CONTRAST VISUALLY WITH ADJACENT WALKWAY SURFACES. EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT FOR THE FULL WIDTH OF RAMP.
 - ALIGN DETECTABLE WARNING SURFACE TRUNCATED DOMES ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF THE RAMP AND PERPENDICULAR TO CURB WHERE APPROPRIATE.
 - THE PUBLIC SIDEWALK CURB RAMP DETECTABLE WARNING SURFACES (SHADED AREA) SHALL BE SAFETY RED COLOR, EXCEPT IF THE MUNICIPALITIES HAVE ESTABLISHED AN ALTERNATIVE COLOR SCHEME.
 - FOR TYPE 3 RAMPS AND BLENDED TRANSITIONS, THE DETECTABLE WARNING SURFACE MUST BE PLACED ALONG THE ENTIRE FLUSH CURB AND THE DOMES MUST BE PLACED IN SUCH A WAY THAT THE DIRECTION OF TRAVEL IS ORIENTED INTO THE CROSSWALK.
- DRIVEWAYS**
 - 6.00 X MAXIMUM SLOPE FOR THE DRIVEWAY APRON.
 - 1 1/2" MAXIMUM VERTICAL CHANGE IN HEIGHT BETWEEN THE ROAD SURFACE AND THE FLUSH CURB AT THE DRIVEWAY APRON.
- JOINTS**
 - PROVIDE EXPANSION JOINT MATERIAL 1/2" THICK WHERE CURB RAMP ADJOINS ANY RIGID PAVEMENT, SIDEWALK OR STRUCTURE WITH THE TOP OF JOINT FILLER FLUSH WITH ADJACENT CONCRETE SURFACE.
- SEAL JOINTS WITH AN APPROVED SEALING MATERIAL.**
- TURNING SPACES**
 - TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS, UNLESS AN EXCEPTION IS GRANTED.
 - DO NOT EXCEED 2.00% SLOPE IN ANY DIRECTION.
 - TURNING SPACE SHOULD BE 4'-0" X 4'-0" MINIMUM CLEAR SPACE. IF THE TURNING SPACE IS CONSTRAINED ON 2 OR MORE SIDES, IT MUST BE 4'x5' WITH THE 5' LENGTH ALONG THE UNCONSTRICTED SIDE. FOR TYPE 3 RAMPS AND BLENDED TRANSITIONS, THE TURNING SPACE MUST HAVE A MINIMUM OF A 5'-0" DEPTH (INCLUDING THE DETECTABLE WARNING SURFACE) ALONG THE FLUSH CURB/ROADWAY.
 - OCEAN COUNTY ENGINEERING DEPARTMENT APPROVAL REQUIRED IF TURNING SPACE FOR TURNING MANUEVER IS NOT ON THE SIDEWALK, I.E. IF THE TURNING SPACE "CLEAR SPACE" IS IN THE ROADWAY.
 - 4'x4" TURNING SPACES ARE REQUIRED AT EVERY ACCESSIBLE PEDESTRIAN SIGNAL/PUSHBUTTON LOCATION.
 - TURNING SPACES SHALL BE CONSTRUCTED AT THE TOP OF EVERY PERPENDICULAR RAMP AND AT THE BOTTOM OF EVERY PARALLEL RAMP.

NON-WALK SURFACES

- NON-WALK AREA IS AN OBSTRUCTION OR GRASS/NON-PAVED AREA ADJACENT TO THE PEDESTRIAN ACCESS ROUTE THAT IS NOT USED BY THE PEDESTRIAN FOR ACCESS.
- PEDESTRIAN PUSHBUTTONS**
 - THE DETAILS DEPICT PEDESTRIAN PUSHBUTTON POLES TO ILLUSTRATE THE RECOMMENDED PLACEMENT OF PEDESTRIAN PUSHBUTTONS. FOR ALTERNATION PROJECTS, PROVIDE ACCESS TO EXISTING PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT FEASIBLE. INSTALL PEDESTRIAN PUSHBUTTON STUD POLES, WHERE APPLICABLE, SO AS NOT TO CREATE PEDESTRIAN OBSTRUCTIONS.
 - NEW CONSTRUCTION MUST COMPLY WITH RECOMMENDED LOCATIONS FOR ALTERNATION PROJECTS LOCATE PEDESTRIAN PUSHBUTTONS TO THE MAXIMUM EXTENT FEASIBLE (SEE 2009 MUTCD FIG 4E-3).
 - ADJACENT TO A LEVEL NON-SLIP SURFACE TO PROVIDE ACCESS FROM A WHEELCHAIR, AND WHERE THERE IS A NON-SLIP WHEELCHAIR ACCESSIBLE ROUTE TO THE RAMP
 - WITHIN 5'-0" OF THE CROSSWALK EXTENDED
 - BETWEEN 1'-6" AND 10'-0" OF THE EDGE OF CURB, SHOULDER OR PAVEMENT
 - PARALLEL TO THE CROSSWALK TO BE USED
 - MOUNT PEDESTRIAN PUSHBUTTON 42" ABOVE THE SIDEWALK OR FINISHED GRADE TO THE CENTER OF THE PUSHBUTTON AND 18" MAXIMUM LATERALLY FROM TURNING SPACE. IN ADDITION, THE PEDESTRIAN PUSHBUTTON MUST ALSO BE 5'-0" MINIMUM DISTANCE FROM THE CURB RAMP AND 2'-0" MINIMUM DISTANCE BETWEEN A CATCH BASIN AND THE PEDESTRIAN PUSHBUTTON.
- SIDE FLARES**
 - ALL SLOPES ARE MEASURED WITH RESPECT TO A LEVEL PLANE. THEREFORE, THE LENGTH OF RAMP IS NOT SOLELY DEPENDANT ON THE HEIGHT OF CURB. FOR EXAMPLE, A 6" CURB DOES NOT NECESSARILY MEAN A RAMP LENGTH OF 6'-0" FOR A 12% SLOPE.
 - SIDE FLARES 10.00% MAXIMUM SLOPE WHERE THE PEDESTRIAN PATH CROSSES THE CURB RAMP.
 - SIDE FLARES MUST BE PARALLEL TO THE CURB LINE.
 - CURB RAMP AND SIDE FLARE LENGTHS ARE VARIABLE AND BASED ON CURB HEIGHT AND THE SIDEWALK SLOPE.
 - GRADE GRASS AREAS OR OTHER NON-WALK AREAS AT 3% (1:33) MAXIMUM. DO NOT INSTALL CHEEK WALLS THAT INTERSECT THE PEDESTRIAN ACCESS ROUTE.
 - SIDE FLARE WIDTH IS TYPICALLY 24" AND A MINIMUM OF 12".
- SIDEWALKS**
 - NOTES THE AREA CONSIDERED TO BE THE "PEDESTRIAN ACCESSIBLE ROUTE"
 - THE MAXIMUM SIDEWALK CROSS SLOPE IS 2.00% (MEASURED PERPENDICULAR TO THE DIRECTION OF TRAVEL). THE MAXIMUM GRADE IS 5.00% FOR SIDEWALKS ALONG STREETS. HOWEVER, THE LONGITUDINAL GRADE OF THE SIDEWALK SHOULD BE CONSISTENT WITH THE GRADE OF THE ADJACENT ROADWAY. IF THE 5.00% GRADE IS NOT FEASIBLE DUE TO TOPOGRAPHY AND OTHER PHYSICAL CONSTRAINTS, THE LOWEST PRACTICAL GRADE GREATER THAN 5.00% SHOULD BE USED.
 - SIDEWALK WIDTH MAY BE REDUCED TO 4'-0", WHEN PASSING AREAS 5'-0" X 5'-0" ARE PROVIDED EVERY 20'.
- TRAVEL LANES**
 - THE TRAVEL LANE IS DEFINED BY THE OUTSIDE EDGE OF THE WHITE PAVEMENT MARKING LINE. IF A WHITE PAVEMENT MARKING LINE DOES NOT EXIST, THE TRAVEL LANE IS DEFINED BY THE CONTRACT DOCUMENTS.
 - MODIFY CONSTRUCTION DETAILS TO ADAPT DIMENSIONS TO EXISTING CURB HEIGHTS WHERE THE CURB IS LESS OR MORE THAN THE STANDARD 6" HEIGHT.
- CONSTRUCTION MUST MEET THE STANDARDS CONTAINED HEREIN UNLESS OTHERWISE NOTED OR DIRECTED.
- PREFERRED AND ALTERNATE TREATMENTS SHOULD NOT BE INTERMIXED WITHIN THE SAME INTERSECTION.
- ALL HANDICAP RAMPS CONSTRUCTED IN THIS CONTRACT SHALL MEET ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND THE PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES.
- THE CONTRACTOR IS REQUIRED TO CONTACT THE OCEAN COUNTY ENGINEERING TRAFFIC DEPARTMENT ABOUT THE CONSTRUCTION OF ALL HANDICAP CURB RAMPS AT SIGNALIZED INTERSECTIONS AND VERIFY THE STRIPING PLAN IS IN ACCORDANCE WITH THE MOST RECENT NO PASSING ZONE PLAN.
- GRADE BREAKS**
 - GRADE BREAKS AT THE TOP AND BOTTOM OF THE CURB RAMP SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN.
 - GRADE BREAKS ARE NOT PERMITTED ON THE SURFACE OF RAMP RUNS OR TURNING SPACES.
 - SURFACE SLOPES THAT MEET AT THE GRADE BREAKS SHALL BE FLUSH.
- FOR NEW CONSTRUCTION AND ALTERATIONS, CONSTRUCT CURB RAMP AND FLARE SLOPES WITH THE FLATTEST SLOPE POSSIBLE.
- ALL VERTICAL SURFACE DISCONTINUITIES SHALL NOT EXCEED 3/4" IN HEIGHT. ANY VERTICAL SURFACE DISCONTINUITY BETWEEN 3/4" AND 1" SHALL BE BEVELED AT A SLOPE NO GREATER THAN SIXX ACROSS THE ENTIRE DISCONTINUITY.
- HORIZONTAL OPENINGS IN GRATES AND JOINTS SHALL NOT EXCEED 3/4" IN DIAMETER AND THE GRATES SHALL BE PLACED SO THE LONG DIMENSION IS PERPENDICULAR TO THE DIRECTION OF TRAVEL.
- THE CROSS SLOPE FOR CURB RAMPS, BLENDED TRANSITIONS, AND TURNING SPACES SHALL BE 2% MAXIMUM. AT PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL, THE CROSS SLOPE SHALL BE PERMITTED TO MATCH THE STREET GRADE. PEDESTRIAN STREET CROSSINGS WITHOUT YIELD OR STOP CONTROL ARE CROSSINGS WHERE THERE IS NO YIELD OR STOP SIGN, OR WHERE THERE IS A TRAFFIC SIGNAL THAT IS DESIGNED FOR THE GREEN PHASE.

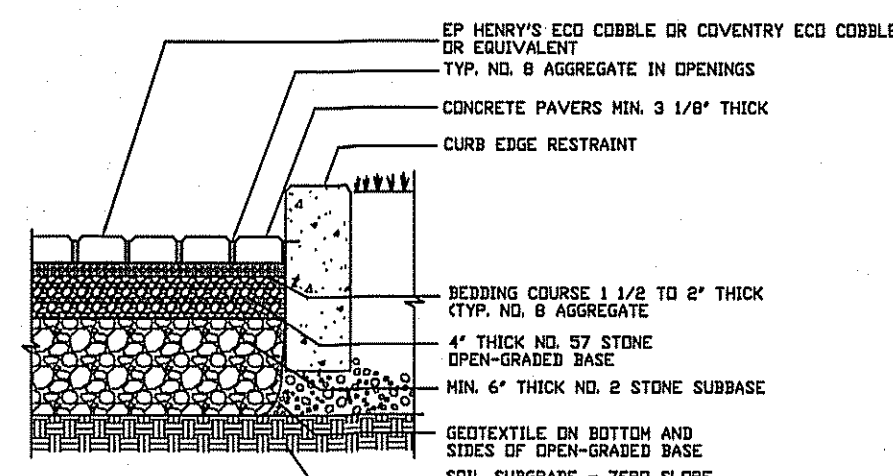
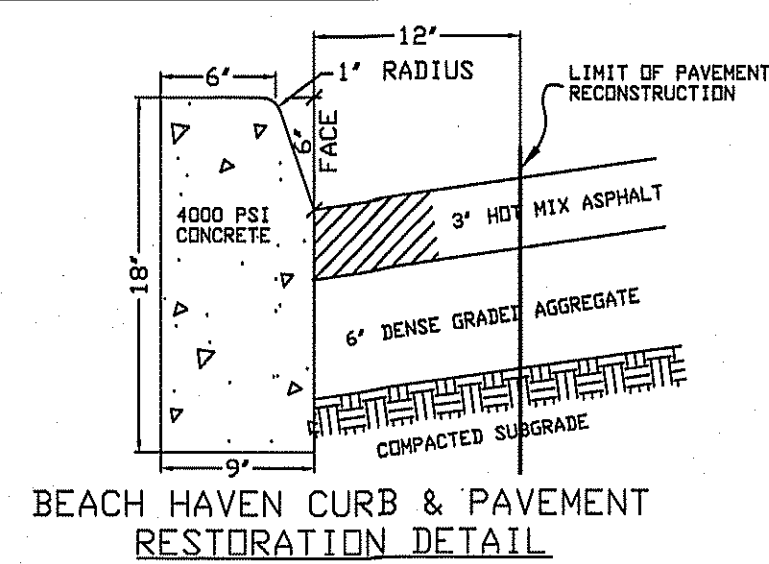
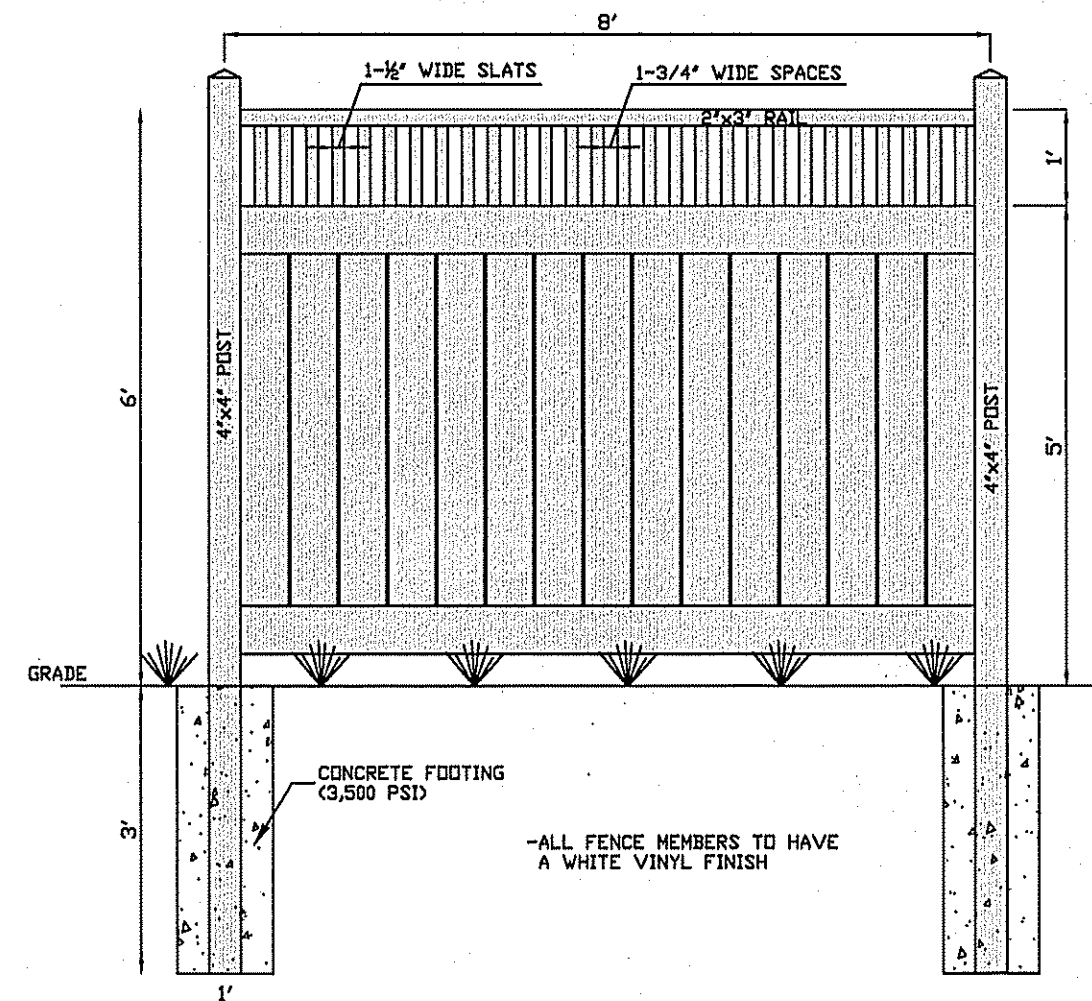
DETECTABLE WARNING SURFACE EMBEDDING DETAIL



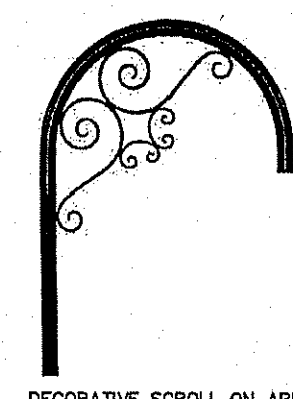
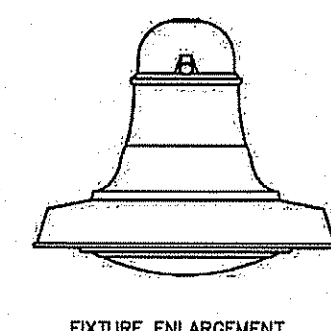
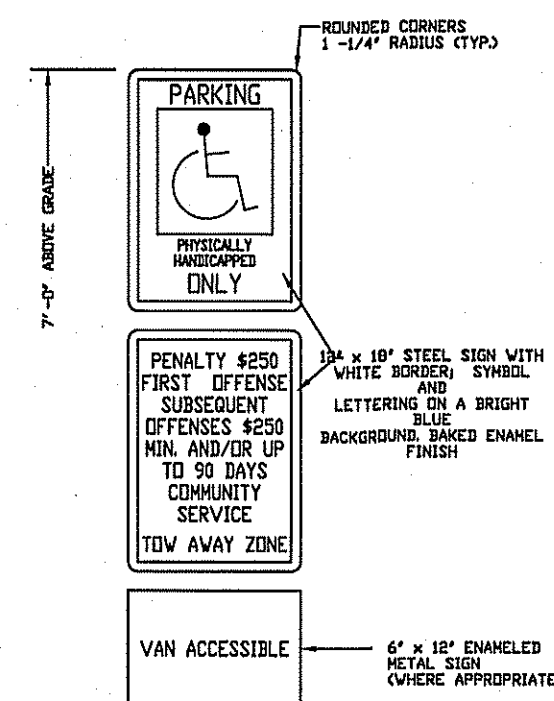
DETECTABLE WARNING SURFACE TRUNCATED DOME DETAILS

- DETECTABLE WARNING SURFACE (DWS) INSTALLATION INSTRUCTIONS**
- Saw cut existing curb ramp surface where the DWS will be placed.
 - Remove existing concrete from this area.
 - Replace and compact any disturbed aggregate subbase.
 - Place new cement concrete and level to a 4 inch depth so that the top of the concrete is lower than the adjoining sidewalk, equivalent to the embedding depth of the DWS material.
 - Lay out and properly fit each unit prior to setting in wet concrete.
 - Cut units as necessary along perimeter of detectable warning surface.
 - Place units across the entire width of the curb ramp surface under where the curb is flush.
 - Press units into full contact with the fresh concrete.
 - Adjust height of each unit edge to be level with adjacent ramp surface.
 - Only truncated domes should be above the adjacent finished concrete.
 - Fill any saw cut gaps with approved joint sealant material.

- DWS Notes:**
- The details provided are not drawn to scale. The quantity of domes depicted on the detectable warning unit (the domes and the entire 24" level surface) is for illustration only.
- Detectable Warning Unit Dimensions:**
- The size of the detectable warning field shall be 24" in the direction of travel and shall extend the full width of the curb, ramp or flush surface. Exclusive of side flares.
- Dome Alignment:**
- The rows of domes shall be aligned to be perpendicular or radial to the grade break between the ramp turning space or curb ramp and the street.
 - Where domes are arrayed radially they may differ in dome diameter and center-to-center spacing within the ranges specified on this sheet.
- Color Requirements:**
- The detectable warning field shall be the color "safety red" unless noted otherwise in the contract documents and must meet the requirements of the standard specifications.
- Detectable Warnings Locations:**
- Detectable warnings shall be located so that the edge or corner of the warning field nearest to the roadway is 3" to 9" from the front of the curb or the roadway edge (12" where untraversable curb is used).
 - The edge of the detectable warning field nearest to a railroad crossing shall be 6'-0" minimum and 15'-0" maximum from the centerlines of the nearest rail.



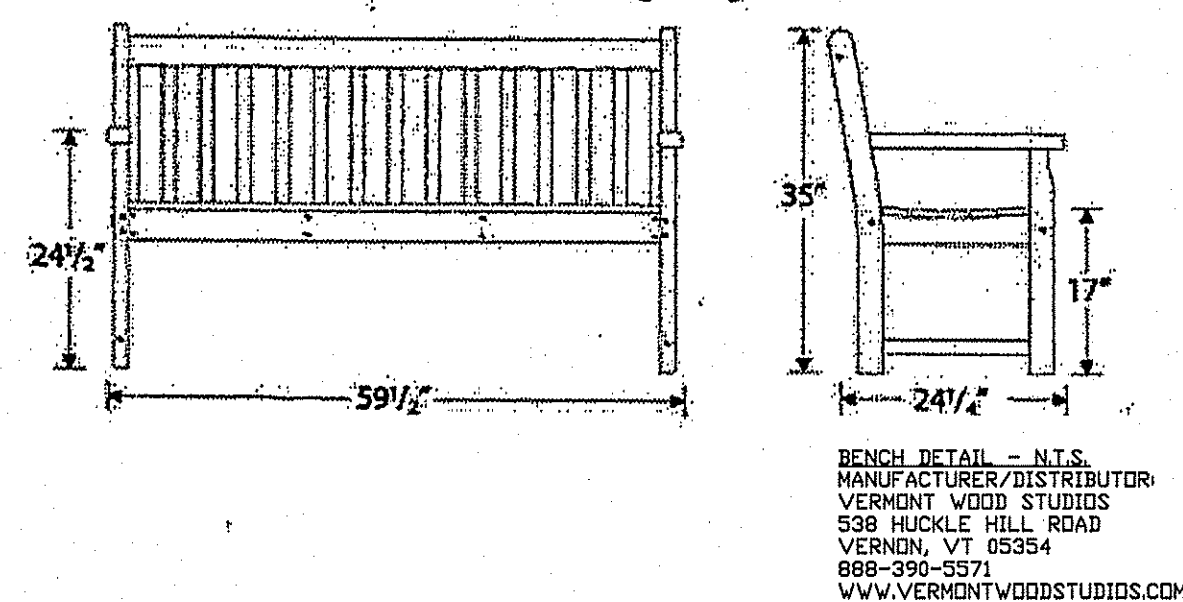
- MAINTENANCE:**
- VACUUM SWEEP SURFACE TO REMOVE SEDIMENT TWICE A YEAR.
 - REPLACE AGGREGATE IN JOINTS AS NEEDED.



- LIGHTING NOTES**
- PROVIDE SERIES FIXTURE AS MANUFACTURED BY ARCHITECTURAL AREA LIGHTING. HEAD: PRMD, ARM: TRA9 POLE: DB3-4R14
 - ARCHITECTURAL AREA LIGHTING 13 PILASKE STREET 16555 East GALE AVENUE CITY OF INDUSTRY, CA 91745 (626)968-5666 WWW.AAL.NET
 - Final finish of pole, arm and fixture shall meet Borough standards or be approved by the owner.
 - Pole, arm and fixture shall be installed as per manufacturers specifications.
 - Footing design shall be by others.

LIGHT FIXTURE/POLE DETAIL - (3 Fixtures) Scale: N.T.S.

TGB40 - Traditional Garden Bench [70 lbs]



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CERTIFICATE 246A27951700 - ISSUED SEPTEMBER 1, 2022
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**SITE PLAN
DETAIL SHEET
LOT 5.06, BLOCK 152
TAX MAP SHEET # 8
BOROUGH OF BEACH HAVEN
OCEAN COUNTY, NEW JERSEY**

SCALE: 1" = 10'	DRAWN BY: JDB	SHEET 2 OF 2
JOB NO.: 23-079	DATE: 2/5/2024	