



Robert P. Astorino
County Executive

Westchester County
Department of Public Works

John Hsu, P.E.
Commissioner

**WESTCHESTER COUNTY
DEPARTMENT OF PUBLIC WORKS**

**ROAD MAINTENANCE DIVISION
198 LAKE STREET
WHITE PLAINS, NY 10604
(914) 995-4951**

Superintendent of Road Maintenance – James Statini
Asst. Superintendent of Road Maintenance – William Phillips
Engineering Inspector – William Makar
Engineering Inspector – John Nicholson

**PERMIT AGENT
148 MARTINE AVENUE, ROOM 522
WHITE PLAINS, NY 10601
(914) 995-2594**

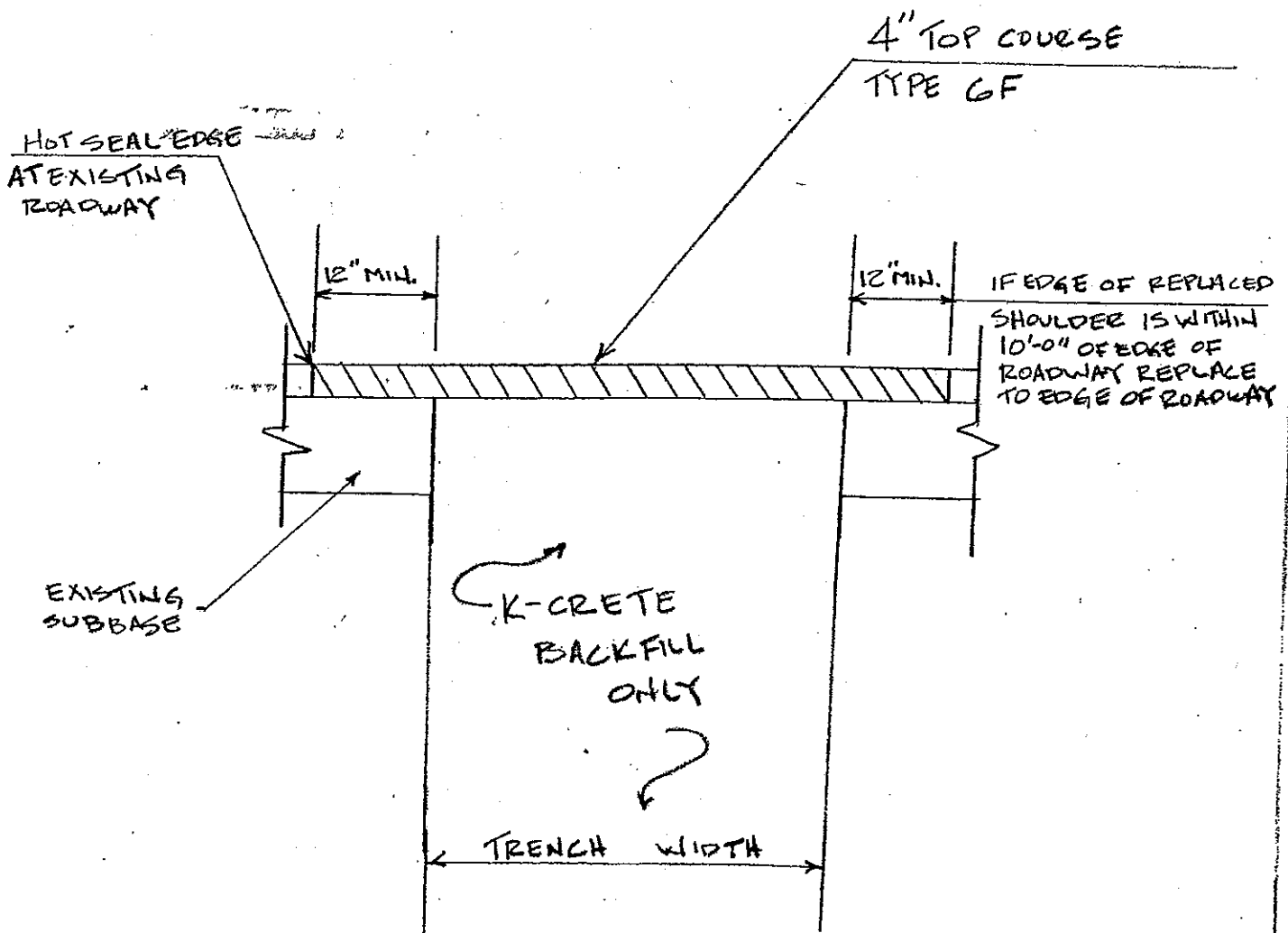
Administration
Engineering
148 Martine Avenue
White Plains, NY 10601
westchestergov.com/dpw

Fleet/Garage Operations
38 Brockway Place
White Plains, NY 10604
Tel: (914) 995-4961
Fax: (914) 995-3709

Road Maintenance
198 Lake Street
White Plains, NY 10604
Tel: (914) 995-4951
Fax: (914) 995-6233

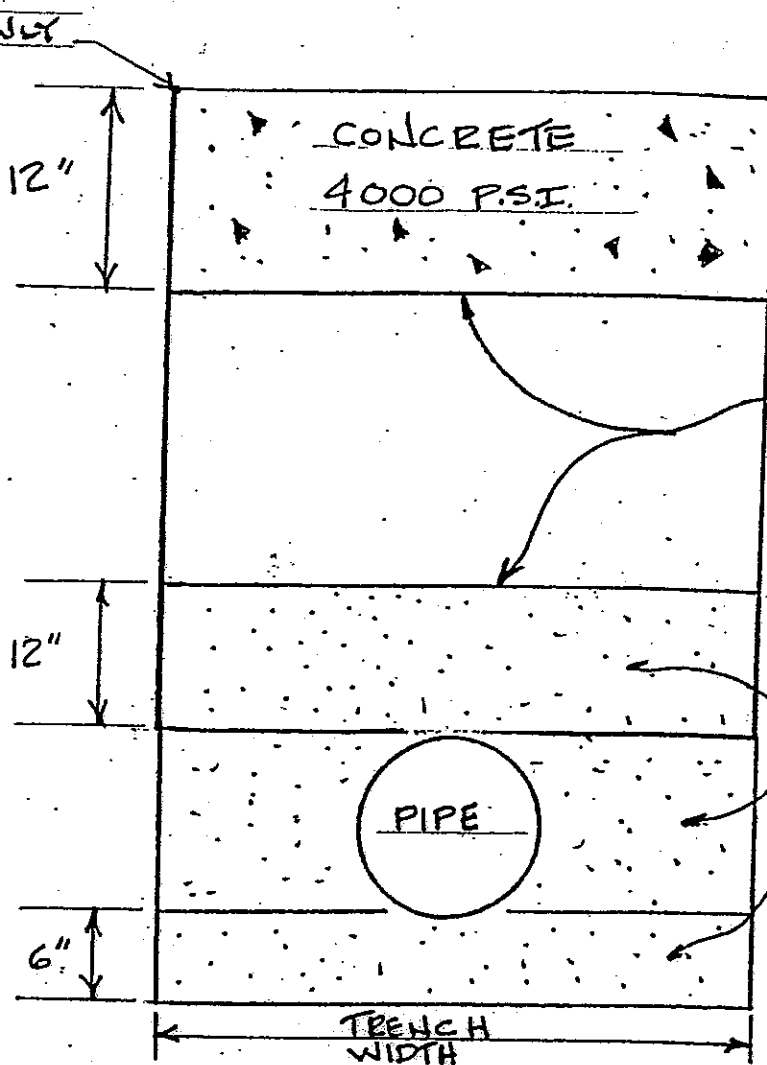
Valhalla Operations
Operations Building
Valhalla, NY 10595
Tel: (914) 231-1294
Fax: (914) 231-1164

White Plains Operations
148 Martine Avenue
White Plains, NY 10601
Tel: (914) 995-4156
Fax: (914) 995-6146



DETAIL OF PERMANENT ASPHALT
SHOULDER REPLACEMENT
 N.T.S.

SAWCUT PERIMETER ONLY



IF EDGE OF REPLACED CONCRETE IS WITHIN 8'-0" OF CONSTRUCTION JOINT REPLACE CONCRETE TO JOINT

K-KRETE BACKFILL ONLY

SAND

PIPE

TRENCH WIDTH

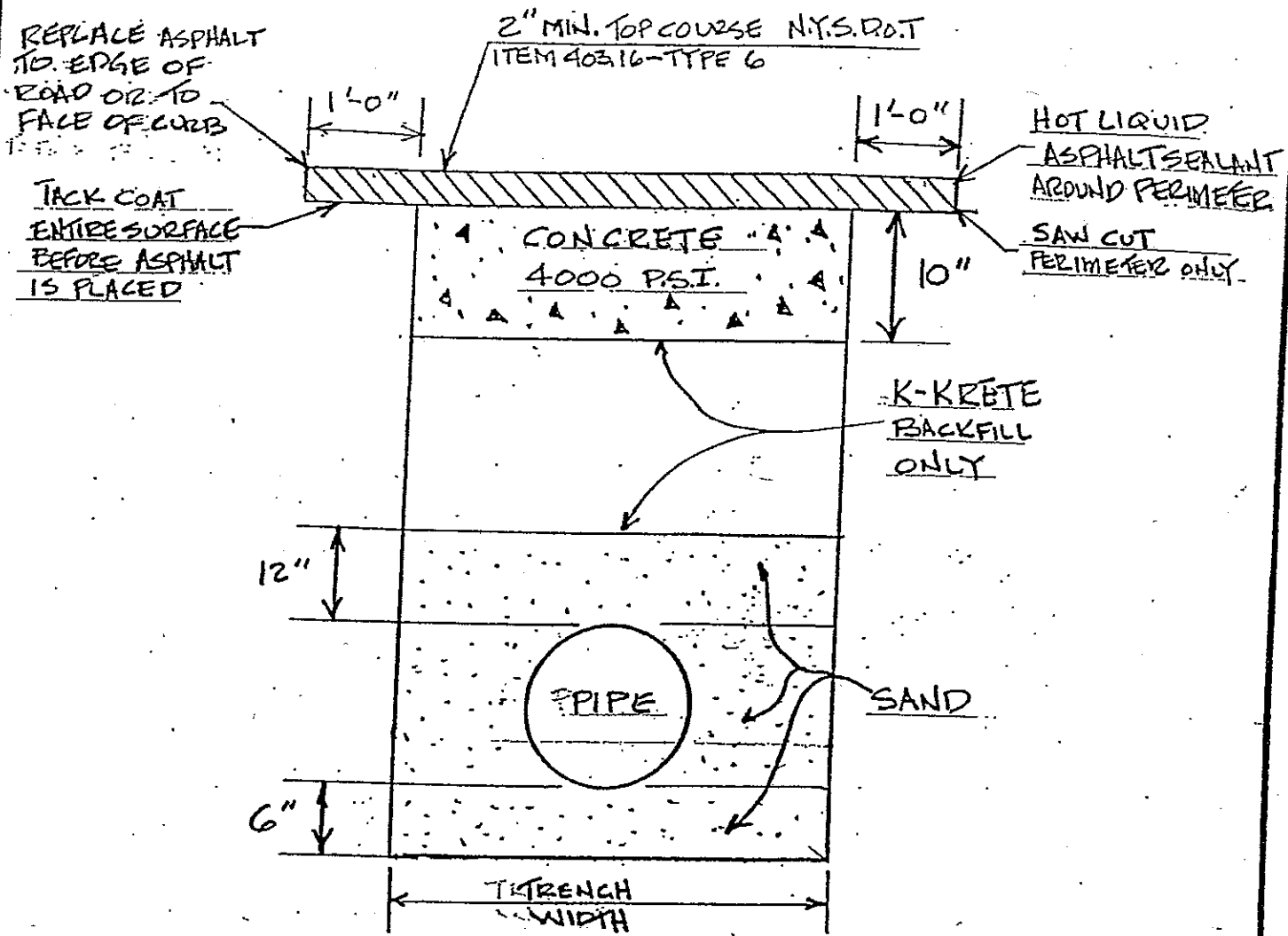
DETAIL OF PERMANENT CONCRETE PAVEMENT

REPLACEMENT FOR COUNTY ROADS

NOTES:

- 1 TEMPORARY PAVEMENT REPLACEMENT WILL BE ALLOWED ONLY WHEN ASPHALT PLANTS ARE NOT IN OPERATION. WHEN TEMP. PAVEMENT IS USED, CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTANANCE AND UPKEEP OF SAID PATCH UNTIL PERMANENT PATCH IS INSTALLED.
- 2 UPON THE AVAILABILITY OF ASPHALT, THE CONTRACTOR SHALL EXCAVATE THE "K - KRETE" BACKFILL TO THE ORDERED DEPTH AND REPLACE WITH 4000 P.S.I CONCRETE AND THE REQUIRED 2" TH. ASPHALT TO THE LIMITS AND SPECIFICATIONS AS SHOWN IN FIG. (1).
- 3 STEEL PLATES OF ADEQUATE SIZE, SHALL BE PLACED OVER ALL TRENCHES UNTIL THE 4000 P.S.I CONCRETE PLUG IS DEEMED PASSABLE.
- 4 STEEL PLATES SHALL BE PINNED AS REQUIRED TO PREVENT MOVEMENT. DURING WINTER ALL STEEL PLATES SHALL BE RECESSED.

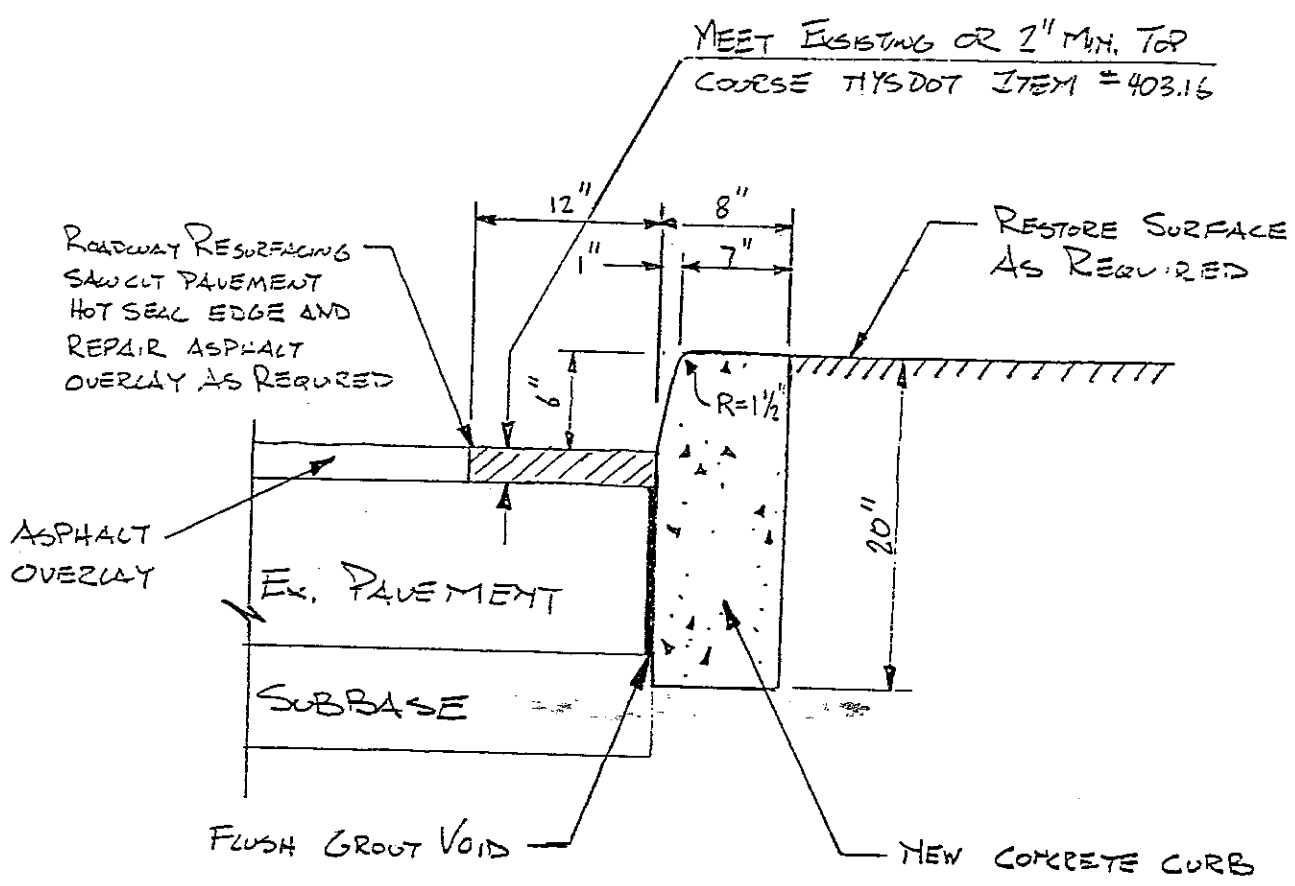
PAZ



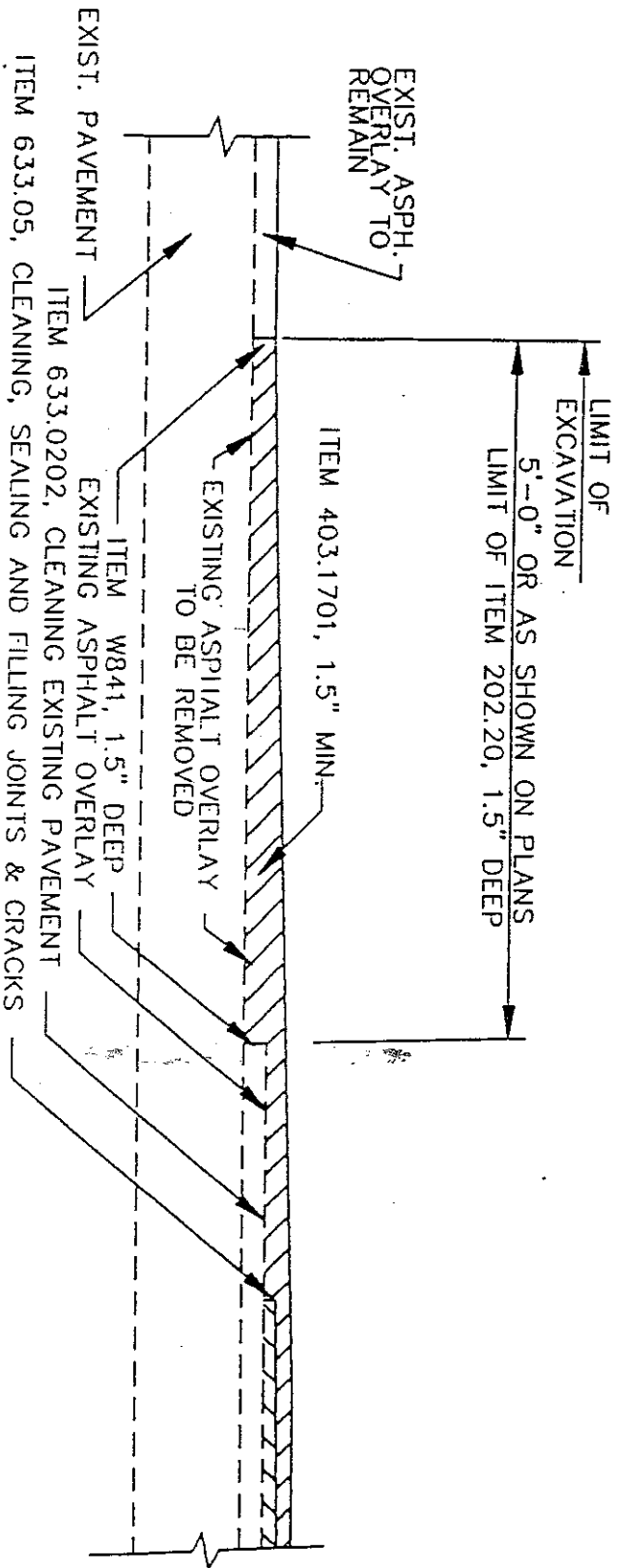
DETAIL OF PERMANENT CONCRETE PAVEMENT REPLACEMENT WITH ASPHALT OVERLAY

NOTES:

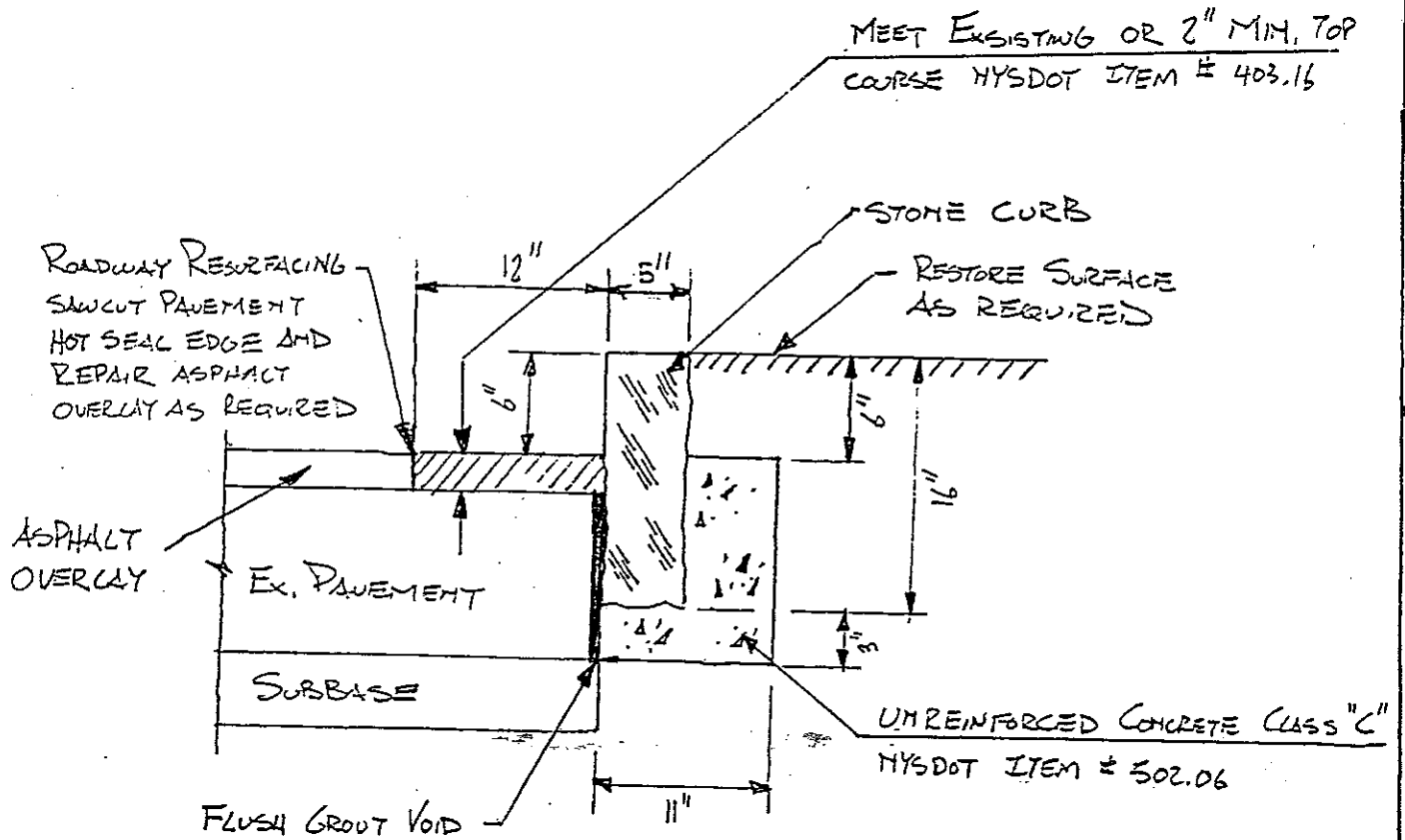
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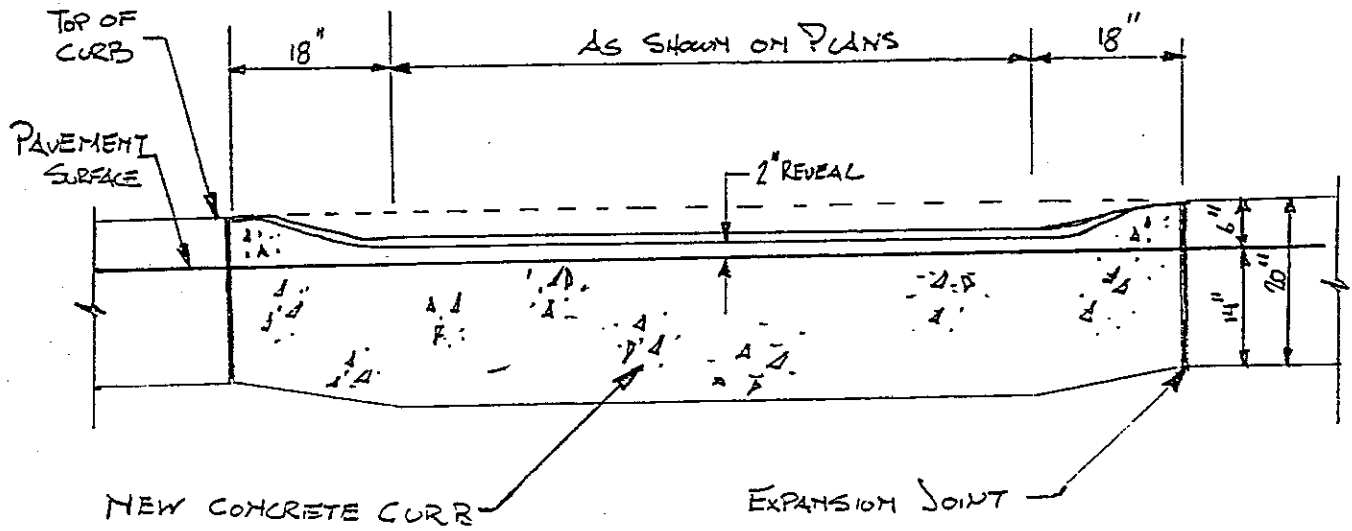
CONCRETE CURB



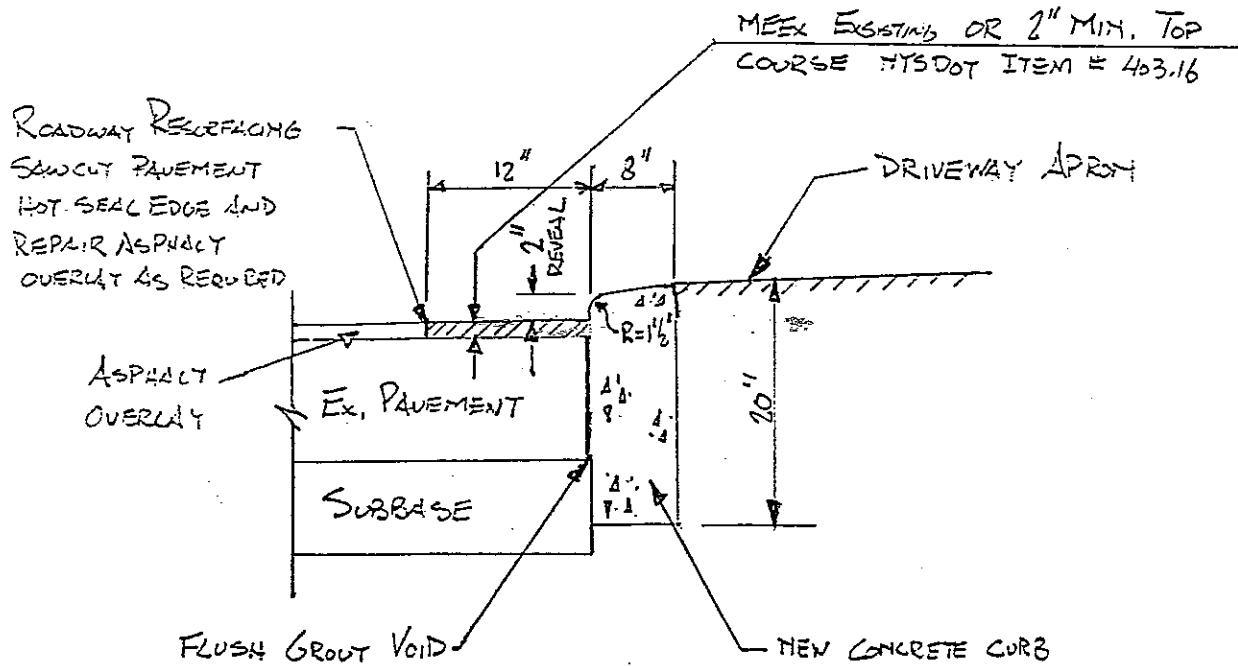
BEGIN AND END RESURFACING
 NOT TO SCALE



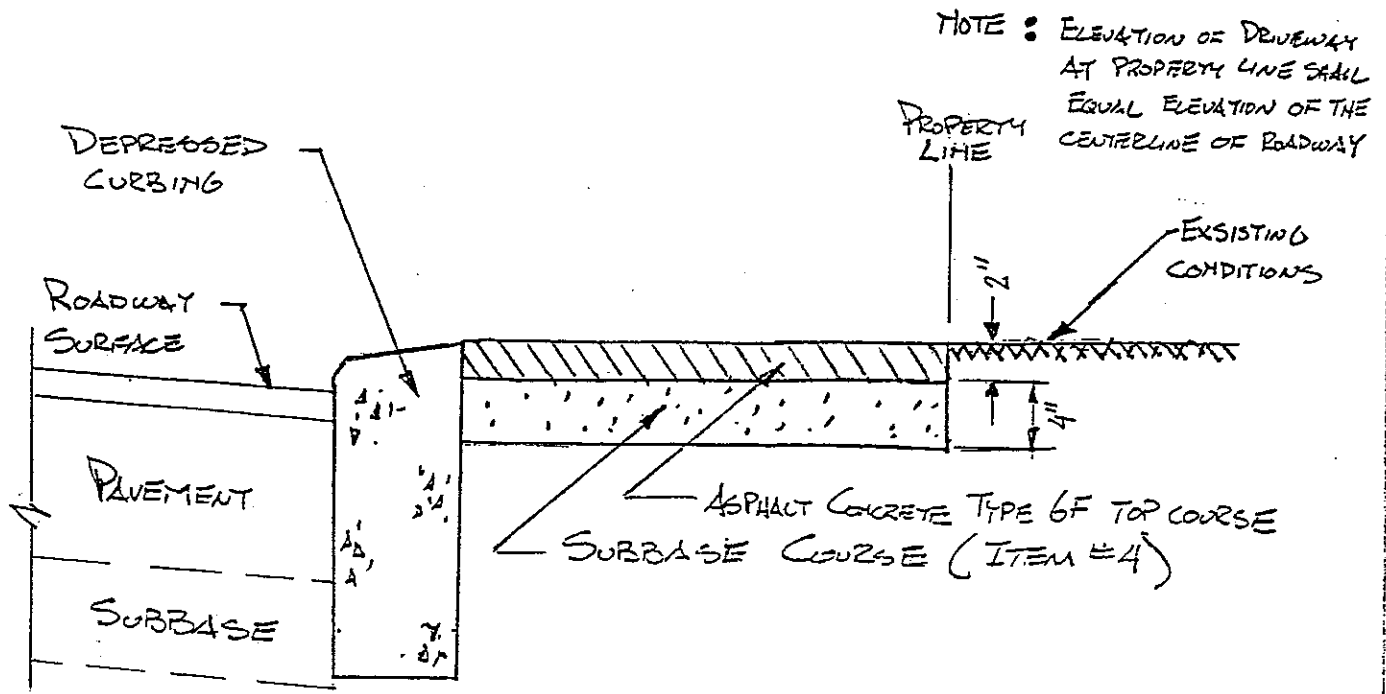
STONE CURB



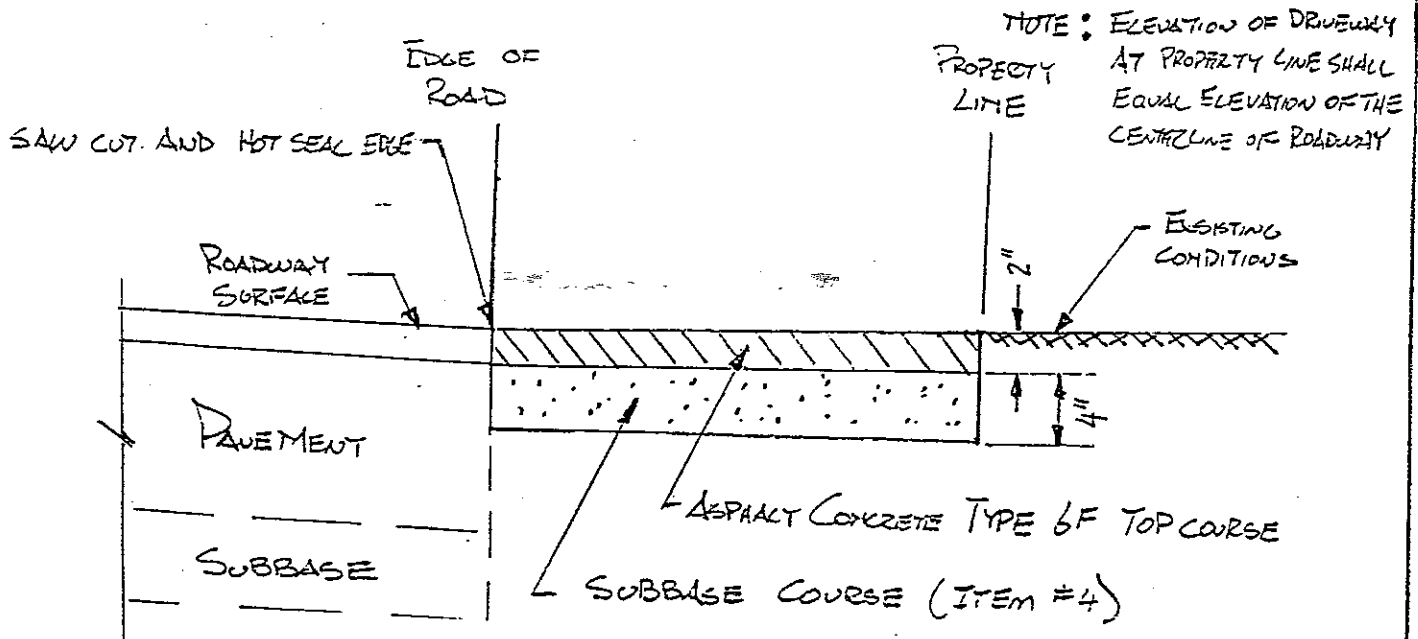
DEPRESSED CONCRETE
CURB ELEVATION



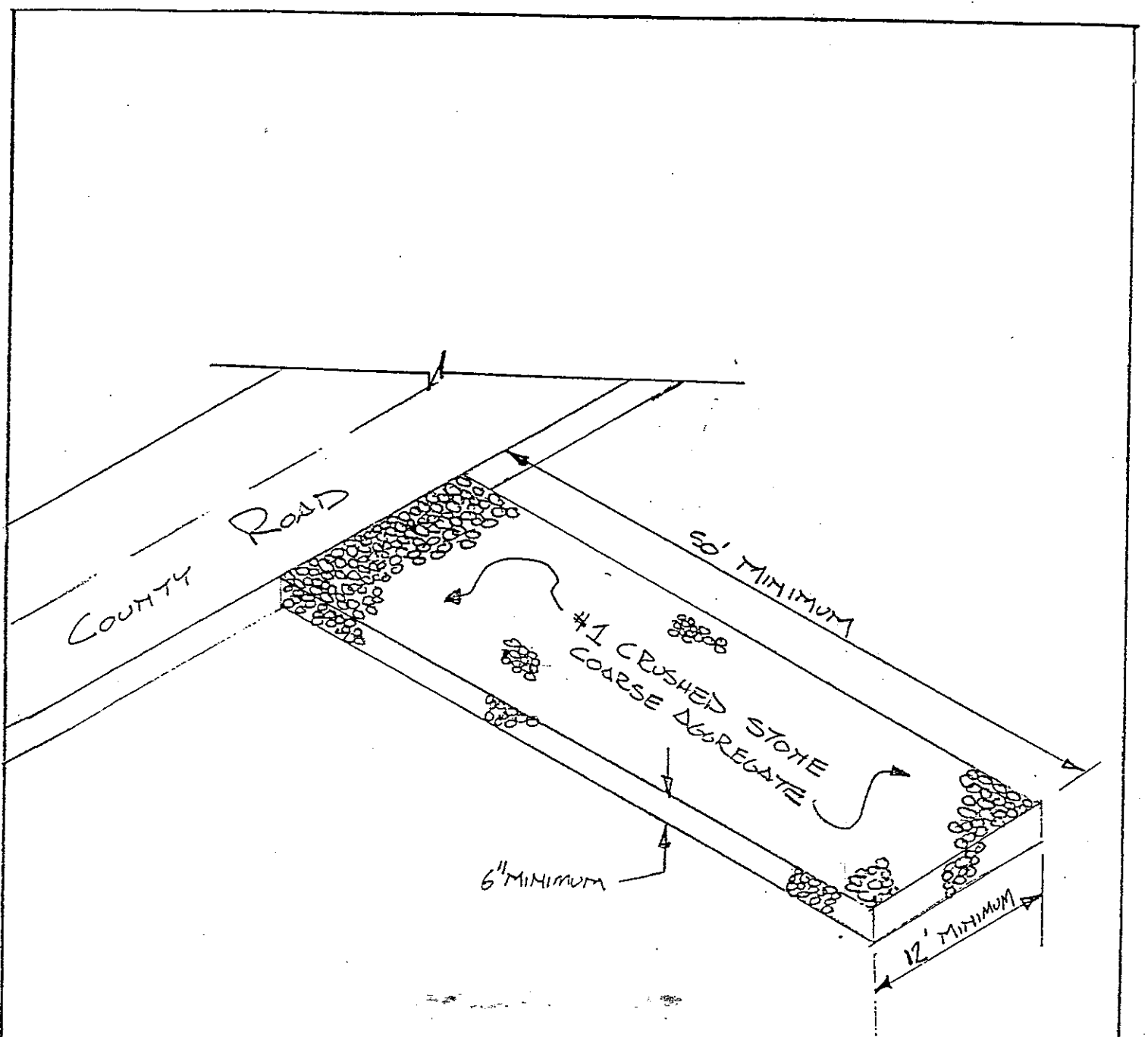
DEPRESSED CONCRETE
CURB SECTION



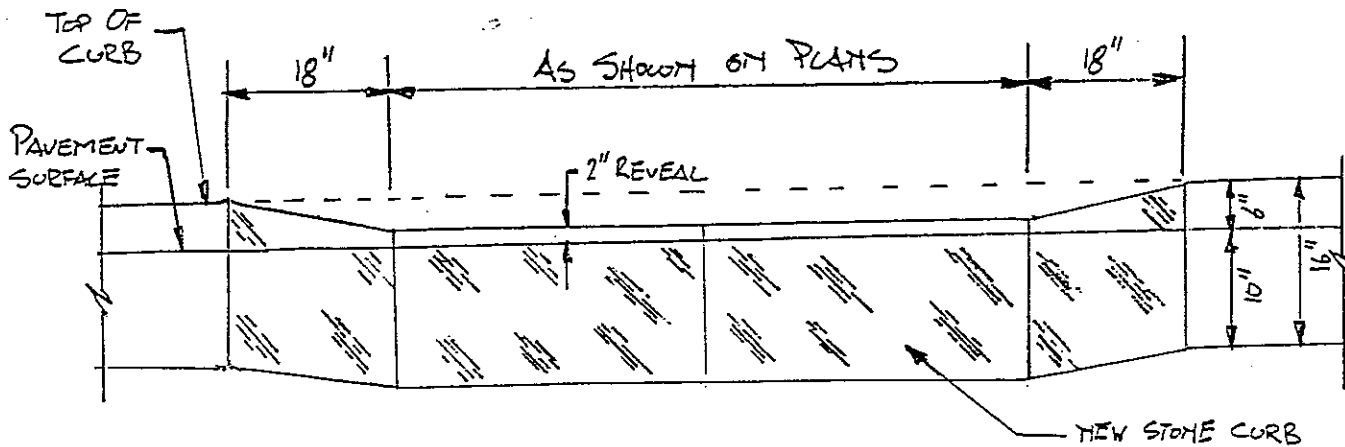
ASPHALT DRIVEWAY APRON
ADJACENT TO CURB



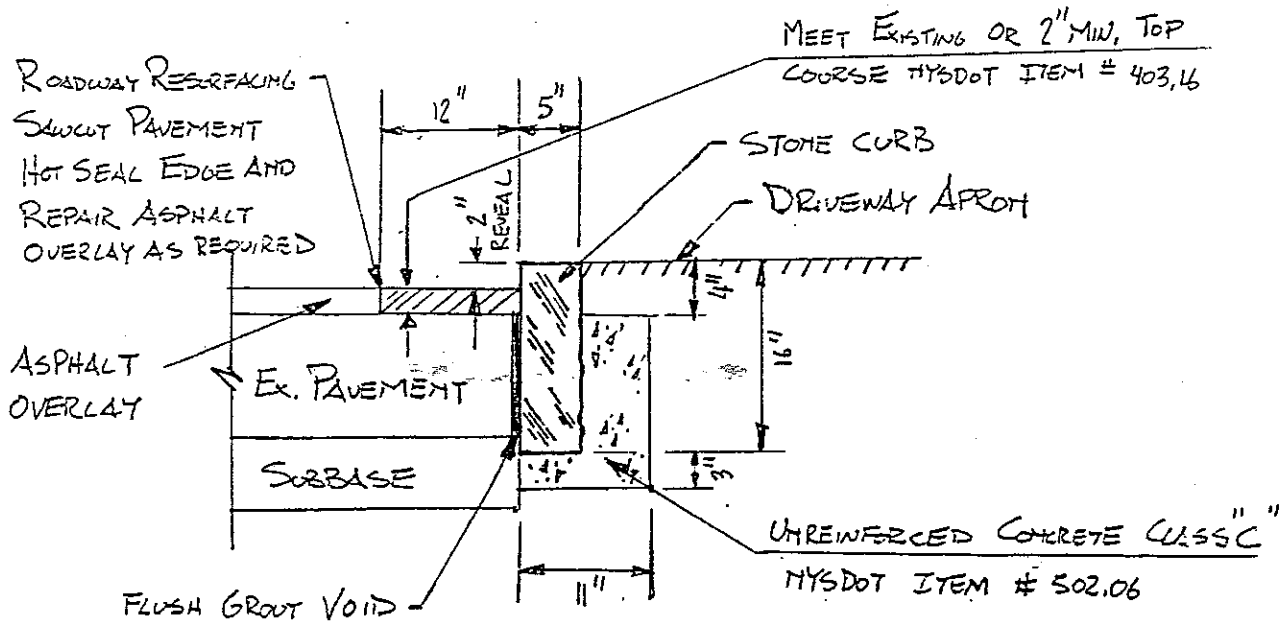
ASPHALT DRIVEWAY APRON
ADJACENT TO ROADWAY



CONSTRUCTION ENTRANCE

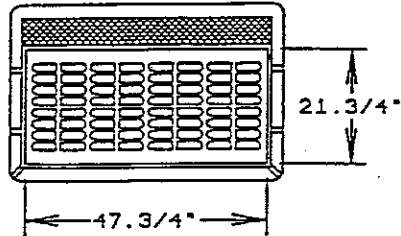


DEPRESSED STONE
CURB ELEVATION

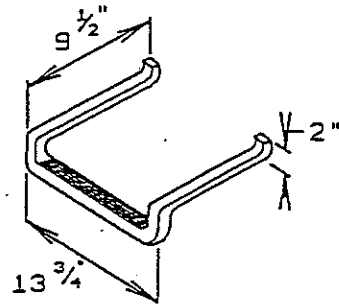


DEPRESSED STONE
CURB SECTION

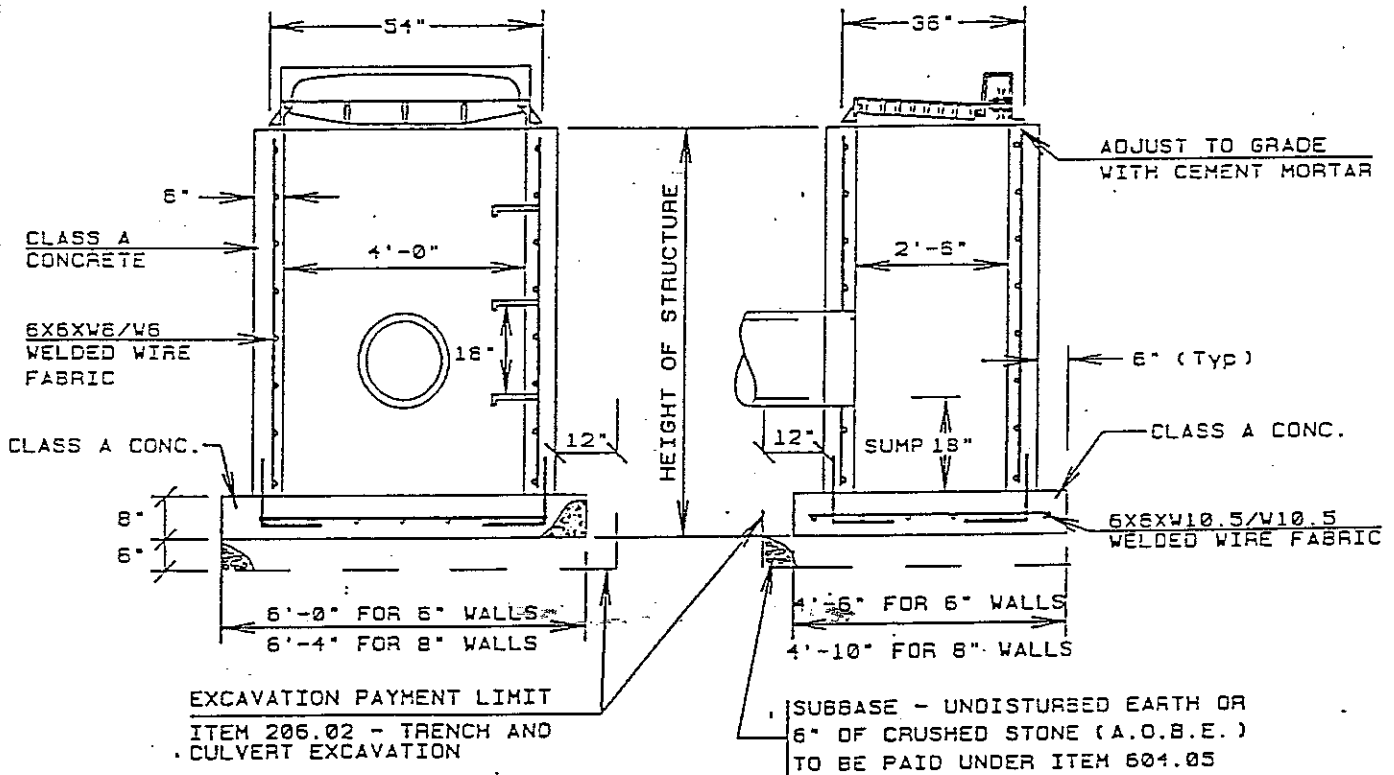
CAMPBELL FOUNDRY CO.
 PATTERN No. 2617
 OR APPROVED EQUAL
 PAYMENT AREA = 7.3 S.F.



ITEM 655.01. FRAMES
 AND GRATES (CASTINGS)



STEP DETAIL



NOTES:

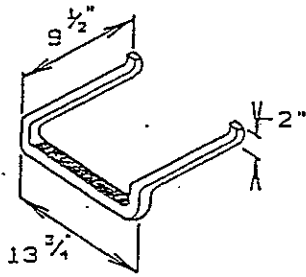
1. Well thickness: 8" Common Brick, 8" Concrete Brick
 6" Poured Concrete or Precast Concrete Sections.
2. Outside of common brick or concrete brick to be plastered with 1/2" coat of cement mortar.
3. Steps shall conform to Section 725-02 "Steps for Manholes" of N.Y.S. Standard Specifications.

CATCH BASIN TYPE B
 (BICYCLE TYPE GRATES)

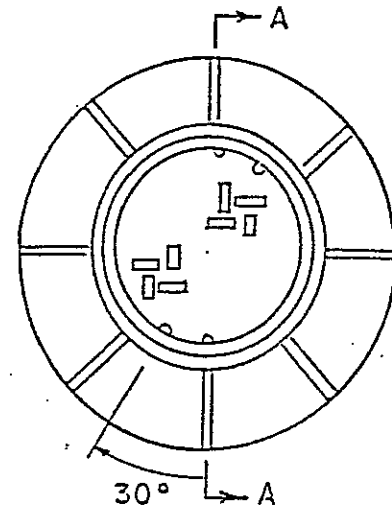
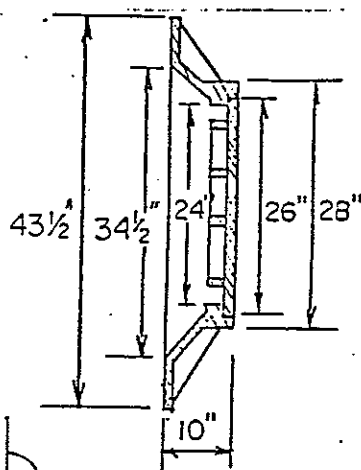
GENERAL NOTES

1. Catch Basins, Manholes and Drop Inlets shall be constructed of Class A Concrete or Precast Concrete Sections.
2. Precast Concrete Sections shall meet the appropriate requirements of Section 706.04, Precast Reinforced Concrete Manhole Units of N.Y.S. Standard Specifications.
3. The minimum height of precast wall sections shall be 1'-0".
4. A maximum 2" thick layer of mortar shall be used for the top slab and/or frame and grate adjustment.
5. Steps will be required on all structures deeper than 4 feet, spacing will be 18" C. to C. with the top step within 2 feet of the top of pavement.
6. The cost of welded wire fabric and bar reinforcement shall be included in the price bid for the structure.
7. All pipes shall be laid to or cut flush with the inside wall of the structure and grouted.
8. All mortar shall meet the requirements of Section 705-21 Mortar for Concrete Masonry of N.Y.S. Standard Specifications.
9. Precast sections shall have oversized holes cast into wall at angles and elevations as required. Outlet and inlet pipes shall be securely grouted in place.
10. The drainage structure invert elevations shown on the plan sheets shall be the invert elevations of the outlet pipe.
11. All structures over 7' in depth shall be constructed of 8" reinforced concrete or suitable precast concrete section below that depth.
12. The Contractor may elect to interchange rectangular manholes and circular manholes with the Engineer's approval. The practical size substitute shall be determined by the Engineer and the cost of the new structure shall be the same cost bid per linear foot as the original structure.

SECTION A-A

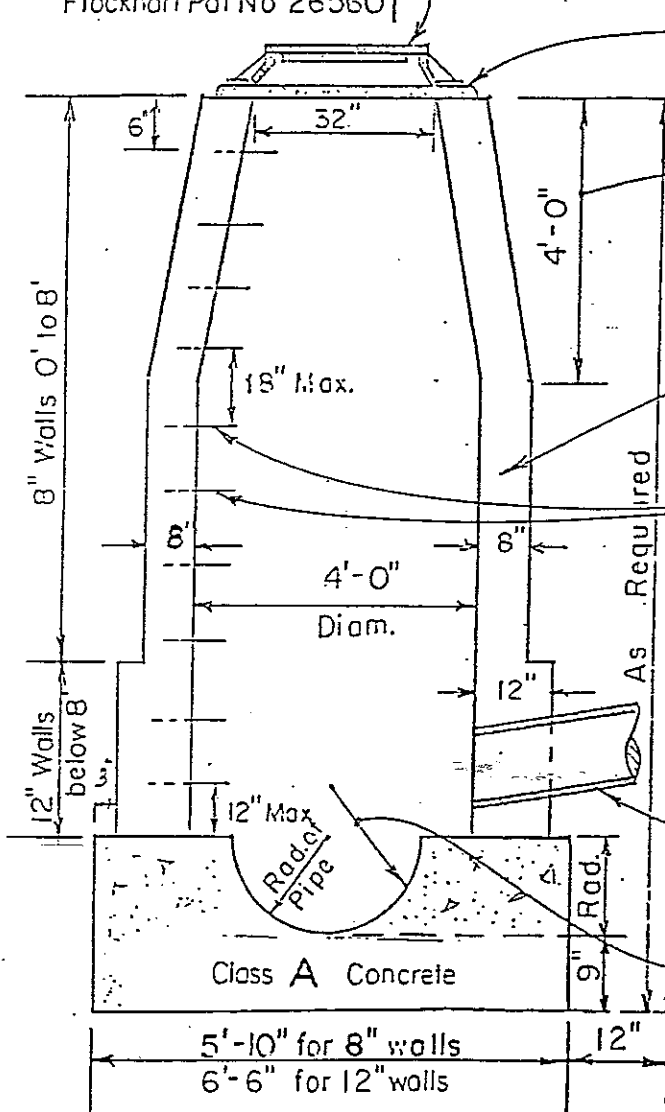


STEP DETAIL



Standard Frame & Grate
Campbell Pat No 1204
Flockhart Pat No 26560

Adjust to grade with cement mortar
1: 2 Mix.



Vary this dimension as necessary if
built of Block or Concrete.

Concrete Block with 1/2" parge coat.

Steps

As Required

Connection from Catch Basin.

3/4 Dia. of pipe for line Manholes
only.

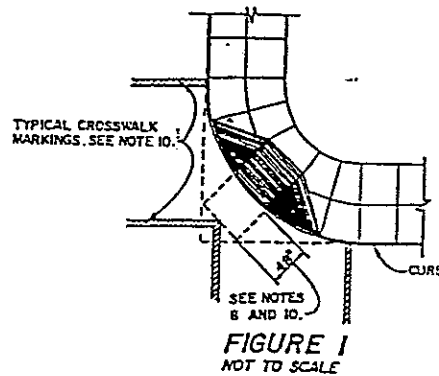
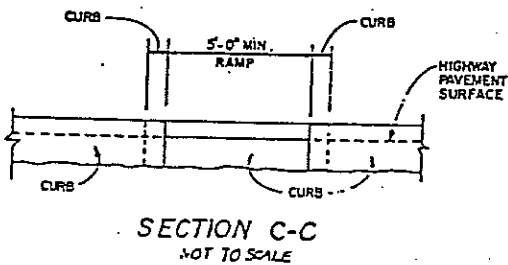
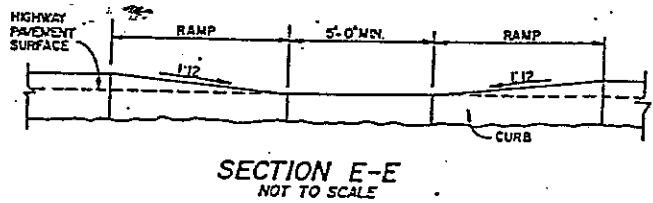
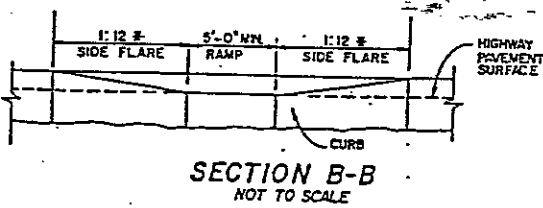
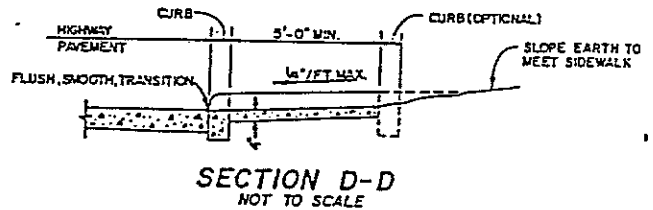
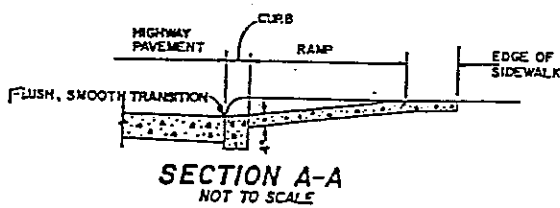
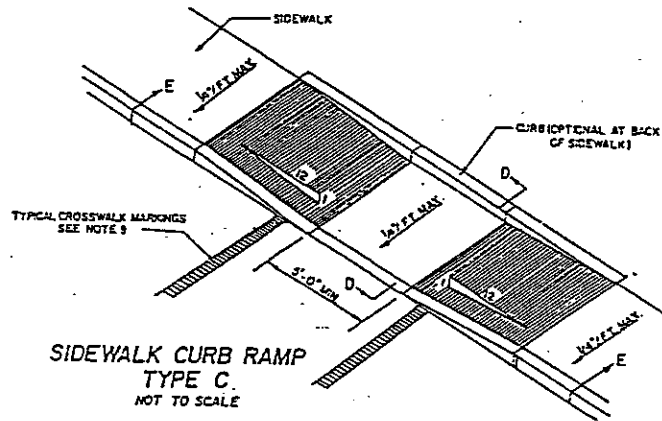
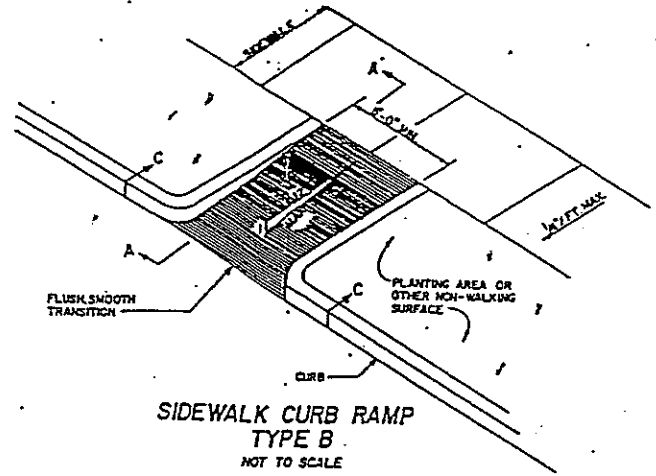
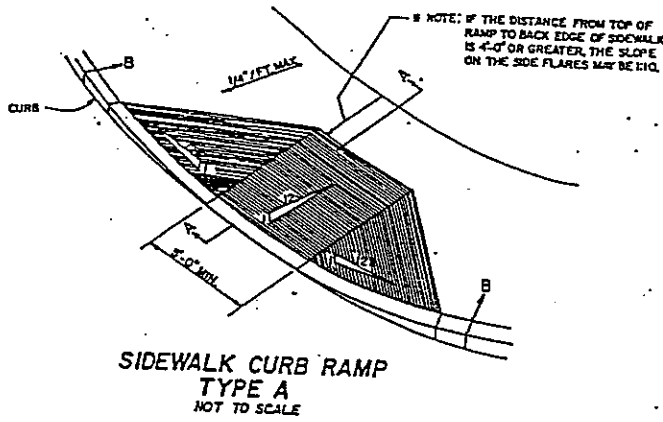
NOTES:

1. Well thickness: 8" Common Brick, 8" Concrete Brick
5" Poured Concrete or Precast Concrete Sections.
2. Outside of common brick or concrete brick to be plastered
with 1/2" coat of cement mortar.
3. Steps shall conform to Section 725-02 "Steps for Manholes"
of N.Y.S. Standard Specifications.

MANHOLE

GENERAL NOTES

1. Catch Basins, Manholes and Drop Inlets shall be constructed of Class A Concrete or Precast Concrete Sections.
2. Precast Concrete Sections shall meet the appropriate requirements of Section 706.04, Precast Reinforced Concrete Manhole Units of N.Y.S. Standard Specifications.
3. The minimum height of precast wall sections shall be 1'-0".
4. A maximum 2" thick layer of mortar shall be used for the top slab and/or frame and grate adjustment.
5. Steps will be required on all structures deeper than 4 feet, spacing will be 18" C. to C. with the top step within 2 feet of the top of pavement.
6. The cost of welded wire fabric and bar reinforcement shall be included in the price bid for the structure.
7. All pipes shall be laid to or cut flush with the inside wall of the structure and grouted.
8. All mortar shall meet the requirements of Section 705-21 Mortar for Concrete Masonry of N.Y.S. Standard Specifications.
9. Precast sections shall have oversized holes cast into wall at angles and elevations as required. Outlet and inlet pipes shall be securely grouted in place.
10. The drainage structure invert elevations shown on the plan sheets shall be the invert elevations of the outlet pipe.
11. All structures over 7' in depth shall be constructed of 8" reinforced concrete or suitable precast concrete section below that depth.
12. The Contractor may elect to interchange rectangular manholes and circular manholes with the Engineer's approval. The practical size substitute shall be determined by the Engineer and the cost of the new structure shall be the same cost bid per linear foot as the original structure.



SIDEWALK CURB RAMP

NOTES

GENERAL

1. SIDEWALK CURB RAMP TYPE AND LOCATION ARE AS SHOWN ON THE PLANS OR AS DIRECTED.
2. ALL SIDEWALK CURB RAMP TYPES MAY BE USED IN STRAIGHT OR CURVED CURBED SECTIONS.
3. SIDEWALK CURB RAMP TYPES MAY BE DIFFERENT AT EACH LOCATION WITHIN AN INTERSECTION.

SIDEWALK CURB RAMP CRITERIA

4. THE MAXIMUM SLOPE OF A SIDEWALK CURB RAMP IN NEW CONSTRUCTION SHALL BE 1:12. IF SPACE LIMITATIONS ON EXISTING SITES PROHIBIT THE USE OF 1:12, THE FOLLOWING SLOPES AND RISES MAY BE USED:
 - A) STEEPER THAN 1:12 (8.33%) BUT NO STEEPER THAN 1:10 (10%)
6" MAXIMUM RISE, 5 FT. MAXIMUM RUN
 - B) STEEPER THAN 1:10 (10%) BUT NO STEEPER THAN 1:8 (12.5%)
3" MAXIMUM RISE, 2 FT. MAXIMUM RUN
 - C) A SLOPE STEEPER THAN 1:8 (12.5%) NOT ALLOWED.
5. THE MINIMUM WIDTH OF A SIDEWALK CURB RAMP SHALL BE FIVE FEET, EXCLUSIVE OF FLARED SIDES.
6. ALL SIDEWALK CURB RAMPS SHALL HAVE FLUSH, SMOOTH TRANSITIONS TO THE ADJACENT STREET OR HIGHWAY SURFACE.

SURFACE FINISH

7. THE SURFACE OF ALL SIDEWALK CURB RAMPS SHALL BE STABLE, FIRM, AND SLIP RESISTANT. (E.G., A COARSE BROOM FINISH PERPENDICULAR TO THE RAMP SLOPE IS ACCEPTABLE ON CEMENT CONCRETE CURB RAMPS.)

SIDEWALK CURB RAMP PLACEMENT

8. AT A CORNER, WHERE THE CURB RADIUS IS 25' OR LESS, A SINGLE RAMP (EITHER TYPE A, B, OR C) LOCATED DIAGONALLY CAN OFTEN SERVE CROSSWALKS IN TWO DIRECTIONS. HOWEVER, A SINGLE RAMP SHALL ONLY BE USED WHERE THERE IS A MINIMUM CLEAR SPACE OF 48" FALLING ENTIRELY WITHIN THE PROJECTION OF THE INTERSECTING CURBS (SEE FIGURE 1). WHERE THE RADIUS EXCEEDS 25' OR THE MINIMUM 48" CLEAR SPACE IS UNACHIEVABLE, THEN SEPARATE RAMPS SHOULD BE PROVIDED FOR EACH CROSSWALK.

PAVEMENT MARKINGS AT CROSSWALKS

9. SIDEWALK CURB RAMPS AT MARKED CROSSINGS SHALL BE WHOLLY CONTAINED WITHIN THE MARKINGS, EXCLUDING ANY FLARED SIDES.
10. AT A CORNER, WHERE A SINGLE RAMP (EITHER TYPE A, B, OR C) LOCATED DIAGONALLY SERVES TWO CROSSWALKS, THERE SHALL BE A 48" MINIMUM CLEAR SPACE AT THE RAMP BOTTOM WHOLLY CONTAINED WITHIN THE INTERSECTING CROSSWALK MARKINGS (SEE FIGURE 1).
11. WHERE STOP LINES ARE NECESSARY, THEY SHALL BE LOCATED IN ADVANCE OF SIDEWALK CURB RAMPS.

UTILITIES AND DRAINAGE INLETS OR GRATES

12. WHERE FEASIBLE PROVIDE FOR DRAINAGE INLETS OR GRATES IMMEDIATELY UPSTREAM FROM THE CURB RAMPS. RETICULINE OR RECTANGULAR DRAINAGE GRATES ARE TO BE USED IN THE AREA OF CURB RAMPS.
13. DO NOT PLACE SIGNAL POLES, SIGN POSTS, UTILITY POLES, FIRE HYDRANTS, ETC., WITHIN THE RAMP OR SIDE FLARE AREAS.