CITY OF WEST PARK
ENGINEERING PERMITTING GUIDELINES MANUAL

City of West Park
1965 S. State Road 7
West Park, Florida 33023
Ph: 954-989-2676 / Fax: 954-989-2684

October, 2023

CITY OF WEST PARK
ENGINEERING PERMITTING GUIDELINES MANUAL

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SECTION 1 – GENERAL INFORMATION

1.1 Purpose

Engineering permits to be issued by the City of West Park, are required for all construction activities within dedicated public rights-of-way and easements, and on-site parking facilities, including, but not limited to, excavation, fill, road or pavement construction, parking areas, sidewalks, curbing, median treatment, swales, landscaping, irrigation, street lighting, pavement marking and signing, channelization, turning lanes, drainage systems, waterways, driveway approaches, water distribution, sanitary sewer collection and other engineering related activities.

The purpose of this manual is to promote the general welfare, health, safety, comfort, convenience and economic well-being of the residents and property owners within the City of West Park by providing guidelines and criteria which will facilitate proper and acceptable construction practices within the public right-of-way.

The information contained herein provides certain important requirements that individual(s) working in the City’s public right-of-way, or areas accessible to the general public, need to be aware of. However, it is not intended to be a complete list of all the City’s rules and regulations pertaining to this type of construction.

1.2 Authority

These criteria have been prepared under the authority of the City of West Park as provided by act of the State Legislature establishing the City’s boundaries and authority in 2005.

SECTION 2 – DESIGN CRITERIA

2.1 General

Design criteria to be followed for all construction activities within dedicated public rights-of-way and easements shall be in strict accordance with the requirements of the City of West Park, and the "Minimum Standards Applicable to Public Right-of-Way under Broward County Jurisdiction". If a conflict should arise between these standards and those of any other regulatory agency, the more stringent shall apply.

2.2 Roadway

The geometric design of streets shall conform to the minimum standards established by Resolution No. 85-3606, the "Minimum Construction Standards Applicable to Public Rights-of-Way Under Broward County Jurisdiction", the Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways prepared by Florida Department of Transportation (FDOT), and A Policy on Design of Urban Highways and Arterial Streets prepared by the American Association of State Highway and Transportation Officials (AASHTO).

2.3 Drainage

All drainage facilities and systems within the public right-of-way shall be designed and constructed in accordance with the requirements of the Environmental Protection Department, the Surface Water Management Division "Management of Surface Water Discharge and Non-Point Source Pollution" Regulations, Chapter 27, Section 405, and FDOT "Utility Accommodation Guide", and in accordance with the "Minimum Standards Applicable to Public Right-of-Way under Broward County Jurisdiction". Best management practices (BMPs) shall be employed during the implementation of all on-site or off-site infrastructure improvements.

2.4 Pavement Marking and Signing

The design and construction of pavement marking systems shall be in accordance with the following standards:

- Broward County "Traffic Engineering Standards and Specifications"
- Broward County "Neighborhood Traffic Management Manual"
- FHWA "Manual on Uniform Traffic Control Devices"
- FDOT "Design Standards"
- FDOT "Standard Specifications for Road and Bridge Construction"

2.5 Water Distribution and Sanitary Sewer Collection Systems

All water distribution systems in public right-of-way shall meet or exceed the provisions of the "Minimum Standards Applicable to Public Right-of-Way under

Broward County Jurisdiction" and the following standards, specifications, and regulations:

- Broward County Public Health Department (BCPHD)
- Florida Department of Health
- Florida Department of Environmental Protection
- Broward County Environmental Protection Department
- Recommended Standards for Water Works
- Broward County Fire Protection Division
- FDOT "Utility Accommodation Manual"
- American Water Works Association Standards (AWWA)
- American National Standards Institute (ANSI)
- American Society for Testing Materials (ASTM)
- Broward County Water and Wastewater Operations Division (WWOD) "Minimum Design and Construction Standards"
- City of West Park Building and Zoning and other agencies (as applicable)

All sewage collection systems in public right-of-way shall meet or exceed the provisions of the "Minimum Standards Applicable to Public Right-of-Way under Broward County Jurisdiction" and the following standards, specifications, and regulations:

- Broward County Public Health Department (BCPHD)
- Florida Department of Health
- Florida Department of Environmental Protection
- Broward County Environmental Protection Department
- Recommended Standards for Wastewater Facilities
- FDOT "Utility Accommodation Manual"
- American Water Works Association Standards (AWWA)
- American National Standards Institute (ANSI)
- American Society for Testing Materials (ASTM)
- Broward County Water and Wastewater Operations Division (WWOD) "Minimum Design and Construction Standards"
- City of West Park Building and Zoning and other agencies (as applicable)

Permitting and inspection of all water and sewer related repairs and improvements shall be performed by the Broward County Water and Wastewater Division with copies of documentation provided to the City of West Park Engineering Department.

2.6 Landscaping and Irrigation

Planting within public right-of-way shall be performed in accordance with the following documents:

- FDOT "Green Book"

- FDOT Roadway “Design Standards” Index 546
- Broward County “Land Development Code”
- Provisions of Chapters 1 through 4 of the “Minimum Standards Applicable to Public Right-of-Way under Broward County Jurisdiction”.

All landscape irrigation systems constructed in public right-of-way shall be in accordance with the American Water Works Association (AWWA) “Standards for Pressure Pipes”, the American Society for Testing Materials (ASTM), the Florida Irrigation Society “Standards and Specifications for Turf and Landscape Irrigation”, and the requirements of governmental agencies having jurisdiction, and shall be installed in accordance with the manufacturer’s recommendations.

SECTION 3 – PLAN SUBMITTAL, REVIEW, AND APPROVAL PROCESS

3.1 General

The plan submittal, review, and approval process is designed to ensure that the applicant provides sufficient information which will allow the City reviewer to properly analyze the proposed improvement or modification, and make sound recommendations regarding the application. Providing all requested information is crucial to ensuring a prompt turnaround during the permitting process.

This section addresses basic guidelines for the plan submittal process and is not intended to be a complete list of all documentation that may be required for permit approval.

3.2 Plan Submittal Requirements

The applicant is referred to the list of requirements for plan submittal which is outlined in **Engineering Permit Application**. All submittals made without the required backup information as outlined in the document will be returned to the applicant or placed on hold without review at the discretion of the City of West Park Engineering Department. For special cases where projects are of a unique or complex nature and the standard submittal guidelines may not be applicable, the applicant is encouraged to arrange a pre-submittal conference with the City's Engineering and/or Building Departments.

Copies of approvals and permits issued by other governmental agencies shall be submitted with the application. These may include the County/State Health and Rehabilitative Services, Department of Environmental Protection, South Florida Water Management District, Broward County Traffic, Broward County Water and Wastewater and all other applicable review agencies. In each case, all approvals must be within a maximum period of 12 months preceding the date of issuance of the permit.

3.3 Plan Review and Approval

Reviews are conducted for conformance to the requirements of the City and generally accepted engineering standards. Applications that do not meet these requirements shall be rejected, and the applicant should resubmit with appropriate compliance to City requirements. Upon successful submittal of a complete permit application package, the City's Engineering Plan Reviewer will review, comment, and make recommendations on the applicant's submittal. The applicant shall address all review comments and provide a re-submittal, if necessary. If no revisions are necessary, and the project does not conflict with or impact any ongoing or pending improvements within the immediate vicinity, the City shall issue a permit for the project within an appropriate period of time (within 10 working days). **No**

construction shall commence until plans are approved, a permit is issued by the City and a preconstruction conference is held.

Should any owner/applicant commence construction prior to approval by the City and the improvement(s) exhibit deficiencies due to improper placement or construction not in accordance with City Standards, the City of West Park reserves the right to assess applicable fines and/or additional fees and have the applicant and/or property owner repair and/or reconstruct said items under new Permit, at no cost to the City.

SECTION 4 – PROJECT INSPECTION AND CERTIFICATION

4.1 General

All projects within the public rights-of-way of the City of West Park shall be inspected and approved by the City. All construction shall be performed in accordance with the requirements of the City of West Park, and with the "Minimum Standards Applicable to Public Right-of-Way under Broward County Jurisdiction". If a conflict should arise between these standards and those of any other regulatory agency, the more stringent shall apply.

4.2 Pre-construction Meetings

At the discretion of the Engineering Plans Reviewer a pre-construction meeting may be scheduled prior to the issuance of the construction permit. In general, the following individuals need to be present unless otherwise instructed by the City:

- The applicant / permittee, or a representative of the applicant / permittee
- Each Subcontractor, or a representative of the Subcontractor
- The Engineer of Record
- A representative from the City of West Park Public Works Department
- Representatives of affected utility owners, if deemed necessary
- Representatives of other agencies, as deemed necessary

At a minimum, the applicant / permittee is required to have the following items at the meeting:

- A copy of the Maintenance of Traffic (MOT) Plan
- A copy of the proposed construction schedule
- At least two (2) copies of reviewed Shop Drawings, if applicable

4.3 Permit Conditions

As a condition of an approved permit application, the following must be adhered to at all times:

- The City of West Park must be given forty-eight (48) hours advance Notice of Intent to begin construction within public right-of-way, and requests for Engineering Inspections. All notices and requests for inspections must either be submitted in person or emailed to *Enginsp@cityofwestpark.org*. The notice must contain information indicating project name, location, City of West Park Permit Number and primary contact person's phone number.
- Contractor shall give at least forty-eight (48) hours notice to utility companies to provide for the location of existing underground utilities in advance of construction. Contact "Sunshine One Call" at 811.

- Contractor shall also give at least forty-eight (48) hours notice to residents or businesses within a three (3) block radius of project area.
- The acceptable work hours for work within the public right-of-way are from 7:00 A.M. to 7:00 P.M., Monday through Friday, except holidays. Without prior authorization from the City Manager, the permittee shall not be permitted to work outside the normal hours of operation.
- Permits for construction work must be on the project site at all times.
- All construction shall be performed in a safe manner in accordance with the rules and regulations of the Occupational Safety and Health Administration (OSHA) and the Manual of Uniform Traffic Control Devices (MUTCD).
- The MOT shall be established at the proper time and before any work is done, and shall be removed promptly at the end of work. Traffic lanes shall be opened as necessary in accordance with the provisions of the MOT.
- During construction, the project site and all adjacent areas must be maintained in a neat and clean manner at all times. Dust must be controlled and all construction related litter and debris picked up over the course of each work day.
- Throughout the life of the project, the Contractor, where applicable, shall implement and strictly adhere to all necessary Best Management Practices (BMPs) in accordance with N.P.D.E.S requirements.
- At the end of every work day, the project site must be thoroughly cleaned, construction material and equipment securely stored without obstructing the travel way and access to adjacent properties, and the maintenance of traffic elements (barricades, fences, cones, tape etc.) must be intact per the approved plan.

The applicant / permittee acknowledges when making an application for permit that they are aware of these permit conditions which are attached to the "Permit Application for Work Within the Public Right-of-Way". Depending upon the nature of the project, additional special requirements may also be imposed by the City as a condition of permit. **Permit(s) may be suspended or revoked for violation of any of these "Permit Conditions" as listed herein or on the actual Permit**, or if work is suspended for a time period in excess of ninety (90) days, unless a prior authorization has been requested and granted by the City.

4.4 Scheduling of Tests and Inspections

- The City of West Park requires forty-eight (48) hours / two (2) working days advance notice for scheduling of any inspection(s) or testing within public right-of-way. Requests for inspections must either be submitted in person or emailed to *Enginsp@cityofwestpark.org*.

All tests and inspections shall be witnessed by the following:

- A representative of the City of West Park
- A representative of the (permitted) Engineering Contractor

- A representative of the testing lab (to perform and certify test results)
- A representative of the Engineer of record, if applicable

A retest fee shall be imposed for any unacceptable (failed) tests. Payment of this fee shall be made to the City of West Park in accordance with the requirements outlined in Section 5 of this manual.

4.5 Final Certification Package

When construction is completed, the permittee may request a “pre-final” inspection at which time the final “punch list” shall be generated. When the “Final Certification Package” has been received and has been found to be acceptable and all punch list items have been addressed during the “Final” inspection, the permit shall be closed, and the project shall be accepted and placed into the one (1) year warranty / maintenance period.

The “Final Certification Package” typically consists of the following items as applicable:

- A letter of certification signed and sealed by a Professional Engineer, licensed to do work in the State of Florida (the Engineer of Record), stating that the project has been completed in substantial compliance with the approved plans and specifications.
- One (1) set of “as-built” drawings signed and sealed by a Professional Surveyor and Mapper. The “as-built” drawings shall be on a copy of the approved plans and shall include the elevations and locations of all work performed in public right-of-way.
- A copy of the density reports on all embankment, backfill, subgrade and limerock material used in public right-of-way.
- Copy of BCPHD Clearance Letter, Pressure Testing, Bacteriological Sampling, or Sewer Lamping reports for water and sewer projects.
- A letter of acceptance from the Broward County Traffic Engineering Division, approving any pavement marking (thermoplastic) and signing restoration, street lights, traffic and pedestrian signals, conduit/cable, and all other traffic engineering related items.
- Copies of Work Order completion forms (or similar) by other utilities performing work on the project.
- Copy of approved Final Inspection as conducted by City of West Park and/or its representative.

SECTION 5 – FEES

5.1 General

It is the policy of the City of West Park to collect fees for all projects located within the boundaries of the City. Fees are collected for all work within the public right-of-way and are established to help the City defray the cost of enforcing the requirements as outlined in the Right-of-Way Permitting Guidelines Manual. Please note that the City of West Park reserves the right to collect fees, whenever revision(s) are made to an already approved set of permitted plans or application. In these cases, the applicant/owner/contractor must complete a new permit application indicating the revised changes.

5.2 Engineering Permitting Fee Schedule

Fees associated with the engineering/right-of-way permitting process are contained in the City of West Park Schedule of Permit Fees (latest edition). ***(*)Prior to any submittal, it is strongly recommended that the applicant consult with the City at the time of permit application to verify the current amount of the listed fees.***

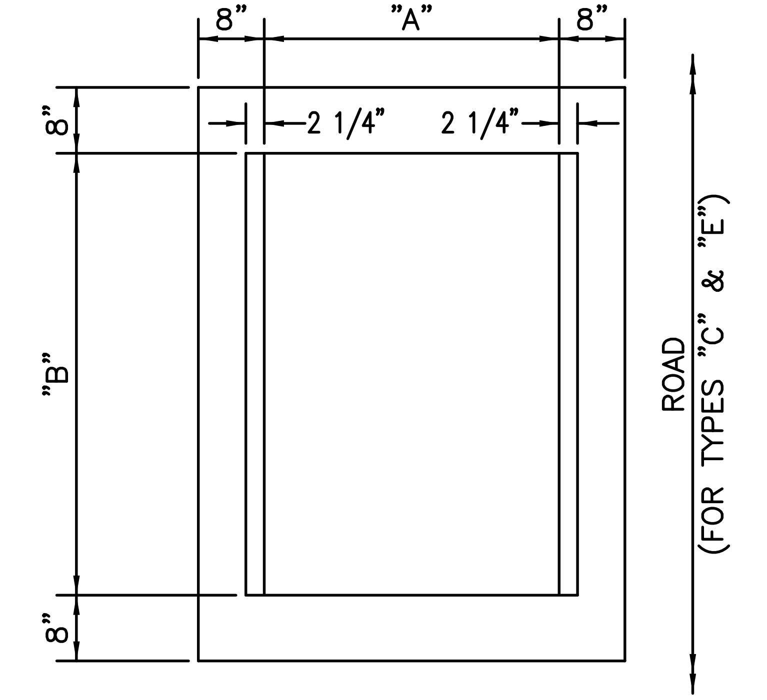
PLAN REVIEW

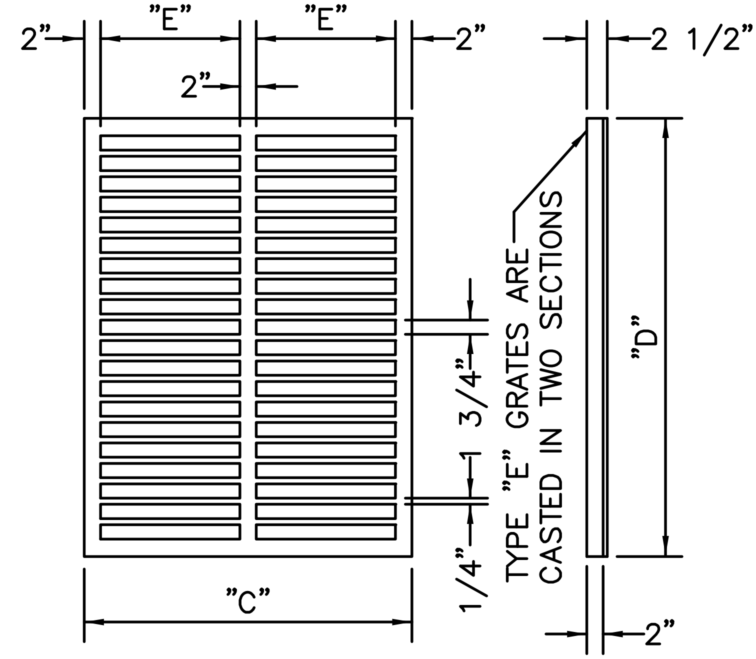
ENGINEERING PLAN REVIEW	STANDARD FEE
1st Submittal	4% of Construction Cost plus administrative fee*
2nd Submittal / Revision Set	N/C
Plan Review Beyond 2 Submittals	Additional Fee*
Utility Plan Review	Franchise Agreement

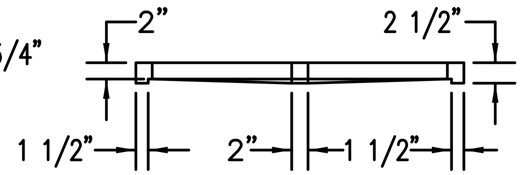
PERMITTING AND INSPECTION

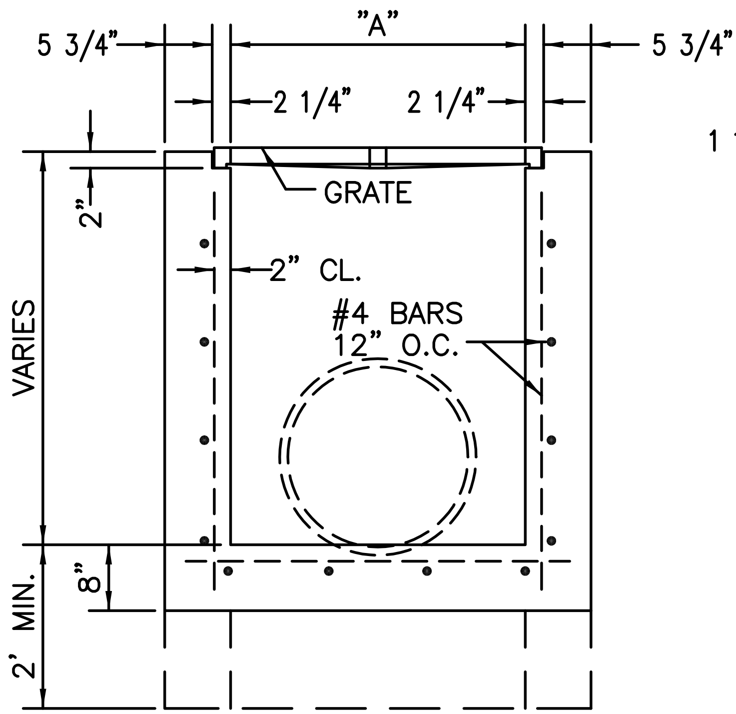
ACTIVITY / REQUEST	FEE
Engineering Permit Extension or Renewal	50% of Original Fee
Failed Inspection, required party is not present, requester fails to cancel within one hour of inspection.	Additional Fee*

STANDARD FORMS AND DETAILS









TYPE INLET	DIMENSIONS					MAX. SIZE R.C.P.
	"A"	"B"	"C"	"D"	"E"	
"C"	2'-0"	3'-1"	2'-4"	3'-0"	11"	18"
"E"	3'-0"	4'-6"	3'-4"	4'-4"	1'-5"	30"
"E MOD"*	3'-0"	4'-6"	3'-4"	4'-4"	1'-5"	48"

NOTE: SEE STD. PLAN FOR DETAILS WHEN USING THIS TYPE INLET WITH VALLEY GUTTER ROAD SECTIONS.

BEVELED EDGES:
ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 1/4".

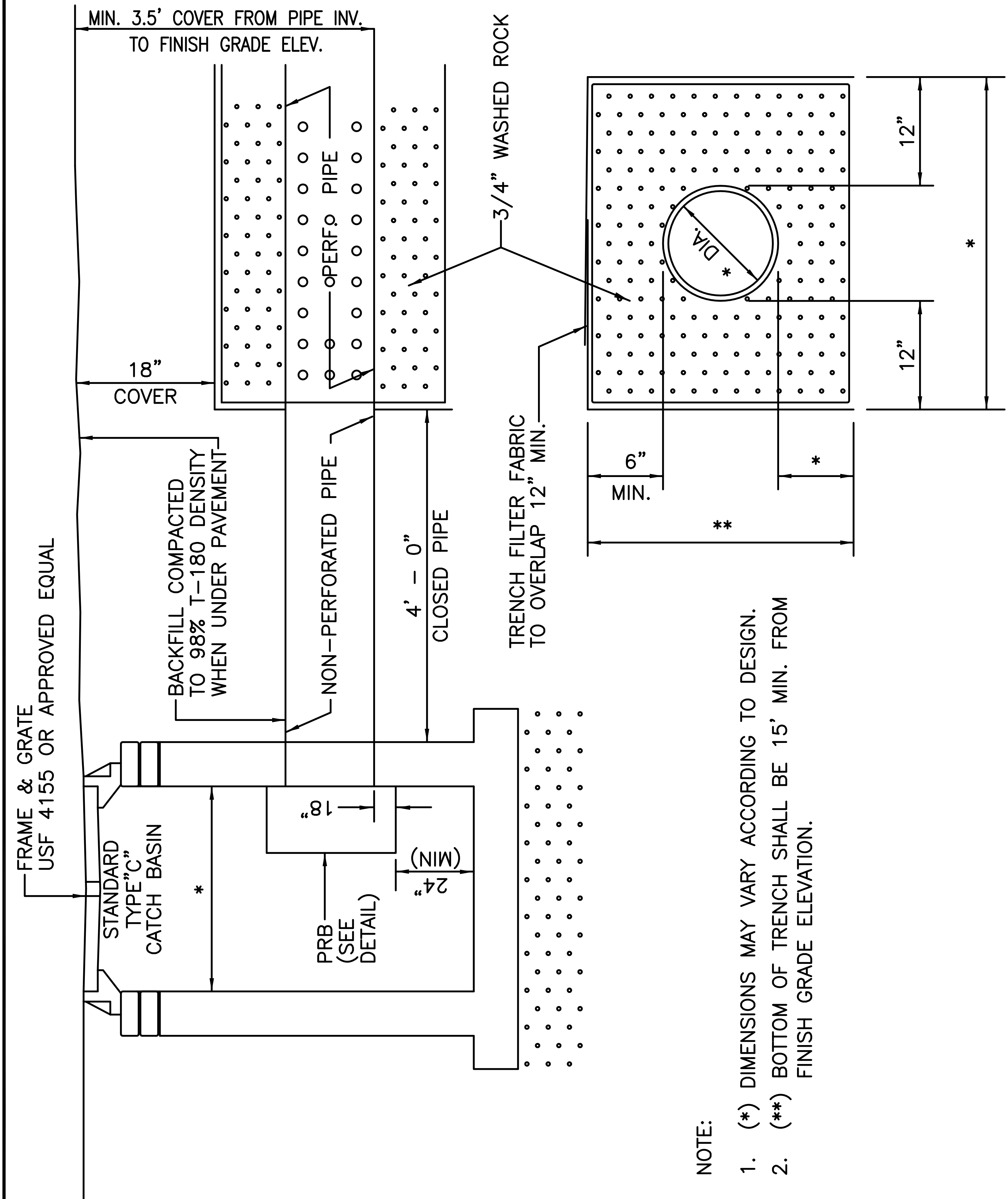
FOUNDATION MATERIAL:
WHERE MATERIAL UNSATISFACTORY FOR FOUNDATION IS ENCOUNTERED AT FLOW LINE, OMIT FLOOR AND CARRY WALLS DOWN TO SATISFACTORY FOUNDATION. BACKFILL TO FLOW LINE WITH CLEAN SAND.

GRATES:
CAST IRON GRATES IN ACCORDANCE WITH FLA. D.O.T. SPECS.

* INLET TYPES:
INLETS ARE TO BE AS SHOWN HEREON. TYPE "E MOD." IS A TYPE "E" TURNED 90° TO RECEIVE R.C.P. UP TO 48" DIA. INLETS RECEIVING R.C.P. LARGER THAN 48" DIA. SHALL BE IN ACCORDANCE WITH FLA. D.O.T. STANDARDS.

MATERIAL:
INLET WALLS AND FOOTING MAY EITHER BE POURED-IN-PLACE 2500 LB. CONC.; OR PRECAST CLASS "A" 3000 L.B. CONC.; OR STANDARD MANHOLE BRICK (NO BLOCK) WITH 1/2" PLASTER (NO LIME) WITH 8" PRECAST CAP.

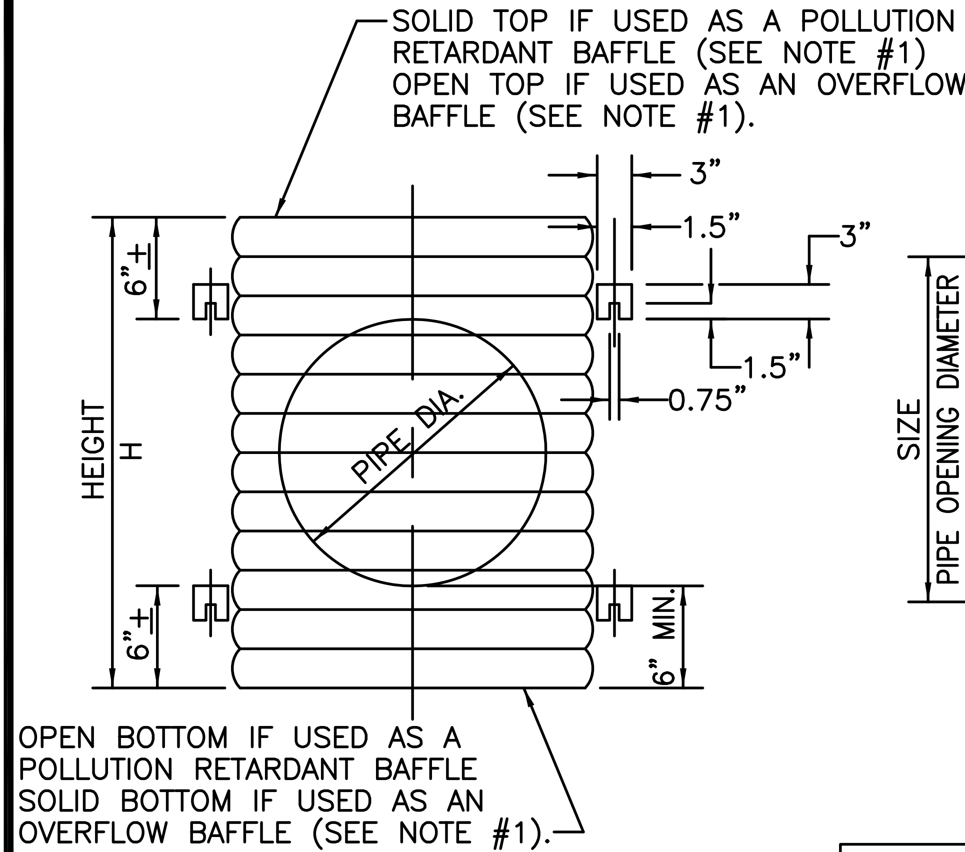
CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD STORM DRAINAGE DETAIL STORM SEWER INLETS	D-1



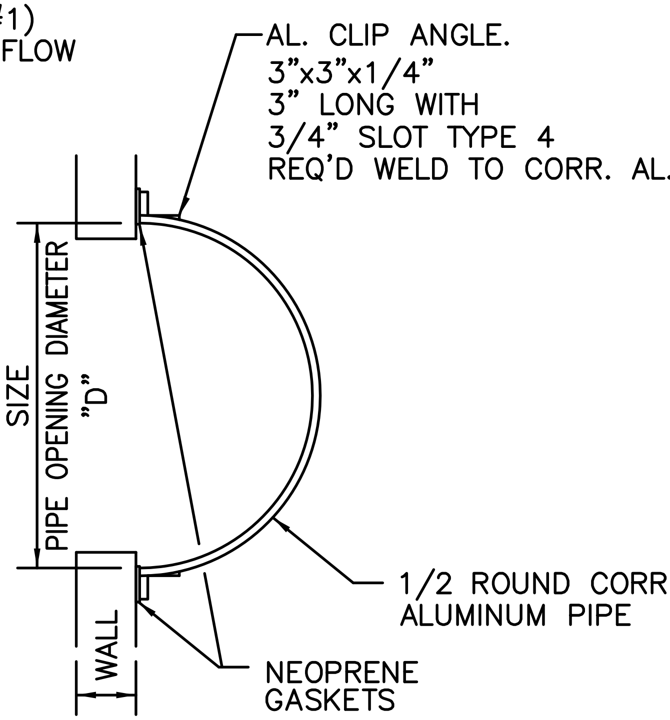
NOTE:

1. (*) DIMENSIONS MAY VARY ACCORDING TO DESIGN.
2. (**) BOTTOM OF TRENCH SHALL BE 15' MIN. FROM FINISH GRADE ELEVATION.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD STORM DRAINAGE DETAIL EXFILTRATION TRENCH	D-2

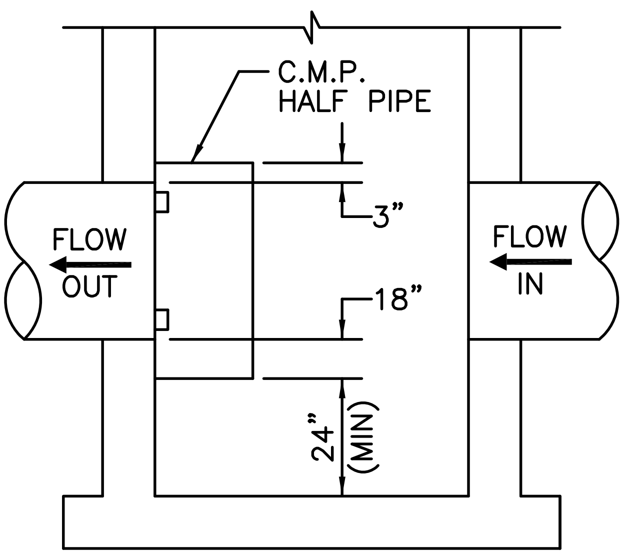


FRONT VIEW



TOP VIEW

STANDARD DIMENSIONS			
PIPE DIA.	D (INCHES)	T (GAUGE)	H (INCHES)
15"	27"	16	24"
18"	30"	16	27"
24"	36"	16	33"



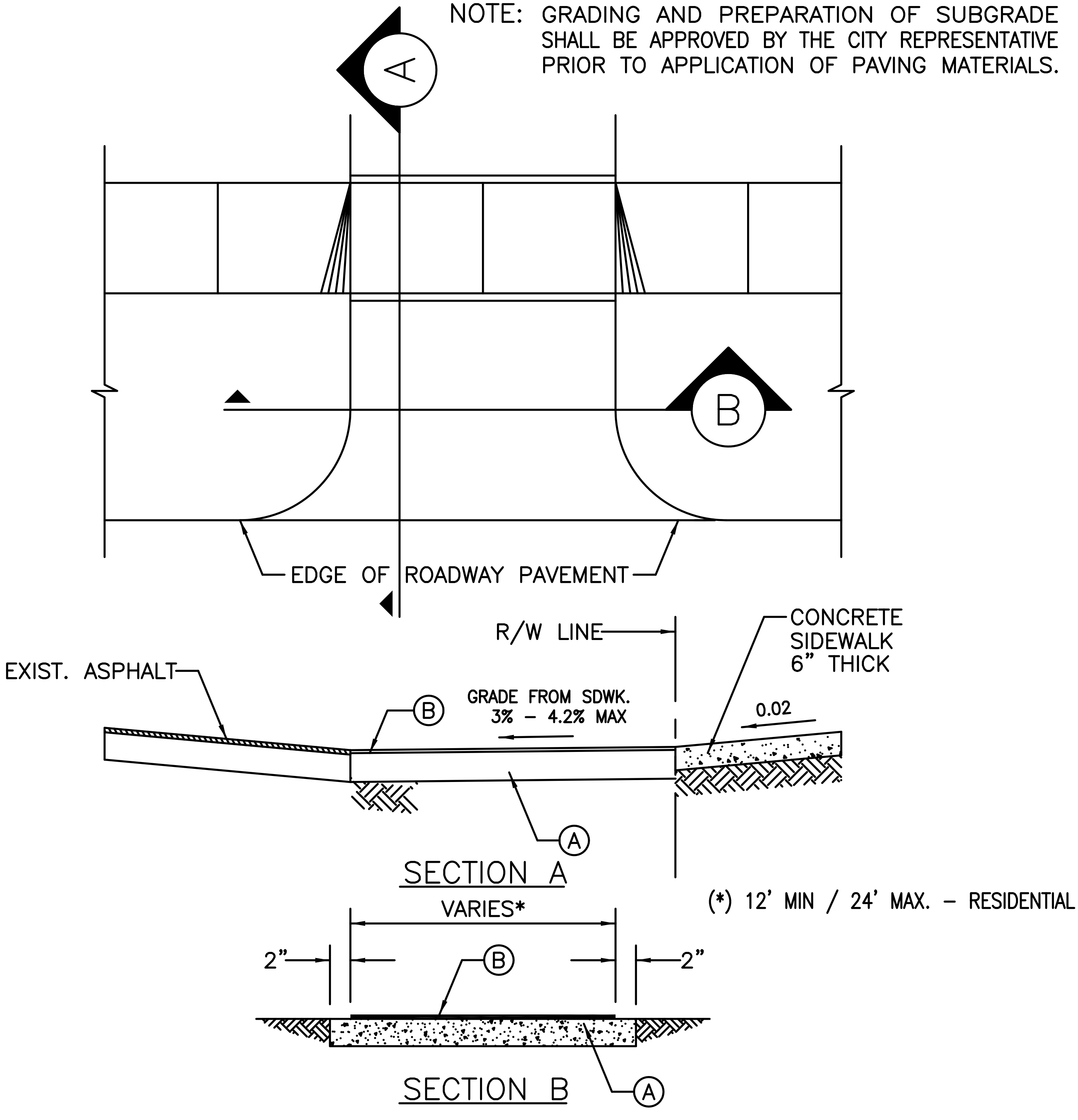
SIDE VIEW

NOTES:

1. ALUMINUM SHEET OF SAME THICKNESS (GAUGE) AS PIPE SHALL BE WELDED TO CLOSE OPENING.
2. NEOPRENE GASKET SHALL BE INSTALLED AT ALL BAFFLES.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD STORM DRAINAGE DETAIL POLLUTION RETARDANT BAFFLE	D-3

NOTE: GRADING AND PREPARATION OF SUBGRADE SHALL BE APPROVED BY THE CITY REPRESENTATIVE PRIOR TO APPLICATION OF PAVING MATERIALS.

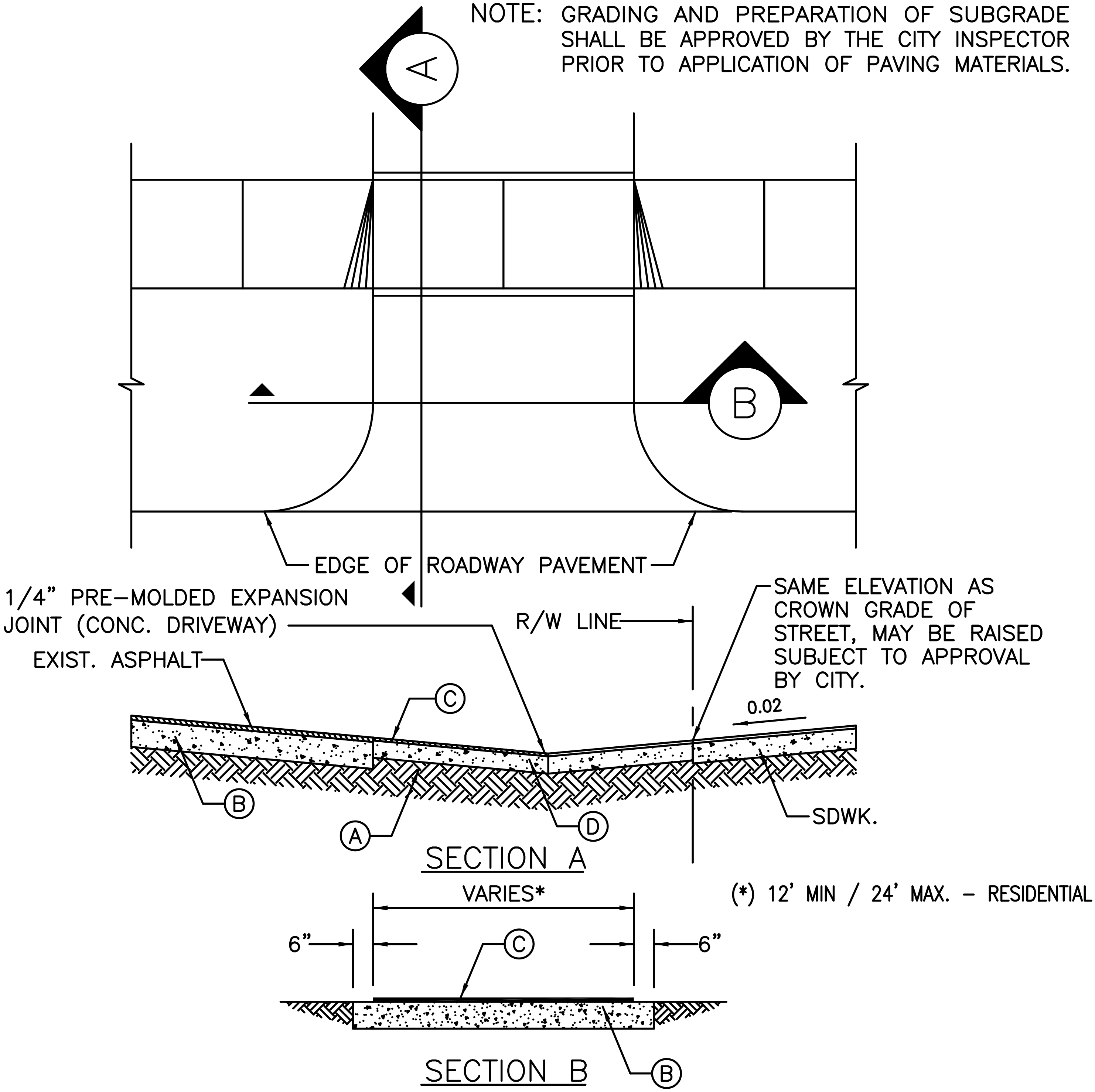


(A) BASE COURSE (6" THICK MIN.) 98% AASHTO T-180
6" MIN. LIMEROCK BASE COURSE FOR ASPHALT DRIVEWAYS.
6" MIN. 3,000 PSI CONCRETE (FOR CONCRETE DRIVEWAYS)(NO WIRE MESH)

(B) ASPHALTIC CONCRETE SURFACE COURSE:
1" THICK MIN. COMPACTED (RESIDENTIAL)
1 1/2" THICK MIN. COMPACTED (COMMERCIAL & INDUSTRIAL)

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: FEB 18	STANDARD ROAD DETAIL DRIVEWAY APPROACHES NON-CONTINUOUS SWALE	R-1

NOTE: GRADING AND PREPARATION OF SUBGRADE SHALL BE APPROVED BY THE CITY INSPECTOR PRIOR TO APPLICATION OF PAVING MATERIALS.



(*) 12' MIN / 24' MAX. – RESIDENTIAL

(A) CLEAN AND COMPACT SUBGRADE.

(B) BASE COURSE (6" THICK MIN.)

(C) ASPHALTIC CONCRETE SURFACE COURSE:
1" THICK MIN. COMPACTED (RESIDENTIAL)
1 1/2" THICK MIN. COMPACTED (COMMERCIAL & INDUSTRIAL)

(D) 6" MIN. LIMEROCK BASE COURSE FOR ASPHALT DRIVEWAYS.
6" MIN. 3,000 PSI CONCRETE (FOR CONCRETE DRIVEWAYS)(NO WIRE MESH)

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: FEB 18	STANDARD ROAD DETAIL DRIVEWAY APPROACHES CONTINUOUS SWALE AREAS	R-2

"PROCEDURE FOR RESTORATION OF FLEXIBLE PAVEMENT"

THE PROCEDURE FOR BACKFILL AND PAVEMENT RESTORATION SHALL BE AS FOLLOWS:

"DENSITY TEST OF COMPACTED FILL, BACKFILL AND/OR BASE SHALL BE TAKEN AT EACH LIFT. PRIOR TO PLACEMENT OF THE SUCCEEDING LIFT OF MATERIAL, DENSITY TESTS SHALL BE TAKEN AT EACH 6" LIFT FOR BASE ROCK AND EACH 8" LIFT FOR COMPACTED FILL OR BACKFILL, ACCORDING TO THE FOLLOWING SCHEDULE".

1. FOR ANY ROAD CROSSING IN WHICH THE ROAD IS CUT AND RESTORED ONE LANE AT A TIME, ONE DENSITY TEST SHALL BE TAKEN IN EACH LANE AT EACH LIFT.

2. FOR ANY ROAD CROSSING IN WHICH THE ROAD IS CUT AND RESTORED TWO LANES AT A TIME, DENSITIES SHALL BE TESTED IN ONE LANE PER LIFT, ALTERNATING LANES WITH EACH LIFT.

3. FOR ANY ROAD CROSSING IN WHICH THE ROAD IS CUT AND RESTORED THREE LANES AT A TIME, DENSITIES SHALL BE TESTED IN TWO LOCATIONS PER LIFT, STAGGERING LOCATIONS WITH EACH SUCCESSIVE LIFT.

4. CUTS ACROSS ROADS SHALL NOT BE LEFT OPEN OVER-NIGHT. STEEL PLATES SHALL BE REQUIRED OR TRENCHES SHALL BE BACKFILLED AND A TEMPORARY ASPHALT APPLIED TO MAKE A SMOOTH LEVEL PATCH. THE TRENCHES SHALL THEN BE EXCAVATED THE NEXT DAY AND PERMANENT BACKFILL AND PAVEMENT INSTALLED IN ACCORDANCE WITH THESE STANDARDS. THE ONLY EXCEPTIONS WILL BE IN CASES WHERE THE FACILITY INSTALLED MUST BE TESTED BEFORE THE ROADS ARE RESTORED. IN THESE CASES, THE PERMANENT RESTORATION MUST BE PERFORMED ON THE DAY OF TESTING OR THE NEXT DAY.

5. IN CASES WHERE THE INSTALLATION PARALLELS THE ROADWAY AND DAMAGES THE PAVEMENT, THE DENSITY TESTS SHALL BE MADE EVERY 100 L.F. AT EACH LIFT, WITH TEST LOCATIONS STAGGERED 25' EACH LIFT.

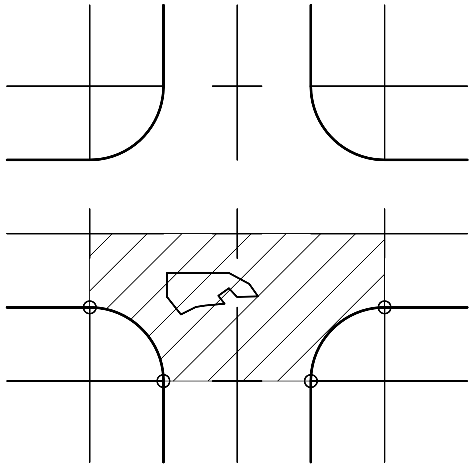
6. ROADWAY BASE MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 98% OF MAXIMUM DRY DENSITY, AS DETERMINED BY A.A.S.H.T.O. T-180 (MODIFIED PROCTOR TEST). SUBGRADE MATERIAL UNDER PAVED AREAS SHALL BE COMPACTED TO A MINIMUM OF 100% OF MAXIMUM DRY DENSITY PER AASHTO T-99-C. SHOULDER AREAS AND SWALE AREAS BEYOND SHOULDERS SHALL BE COMPACTED TO A MINIMUM OF 95% OF DRY DENSITY, ALL AS DETERMINED BY A.A.S.H.T.O. T-99-C (STANDARD PROCTOR TEST).

7. RESTORATION OF STRIPING, SIGNING AND SIGNALIZATION DEVICES SHALL BE ACCOM- PLISHED IMMEDIATELY AFTER PAVEMENT RESTORATION IS COMPLETED.

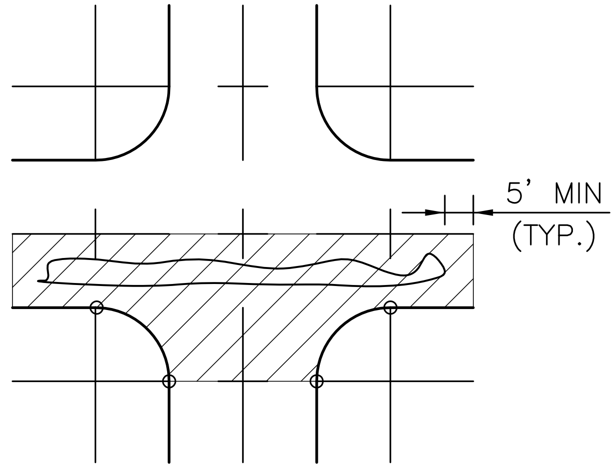
   A COPY OF ALL PROCTOR AND FIELD DENSITY TESTS SHALL BE FURNISHED TO THE ENGINEERING DIVISION UPON REQUEST.

NOTE: THE ABOVE LISTED REPRESENTS THE MINIMUM PROCEDURE. THE CITY INSPECTOR MAY REQUIRE ADDITIONAL TESTING IF, IN HIS/HER OPINION, CONDITIONS OR PRIOR TEST RESULTS WARRANT THEM.

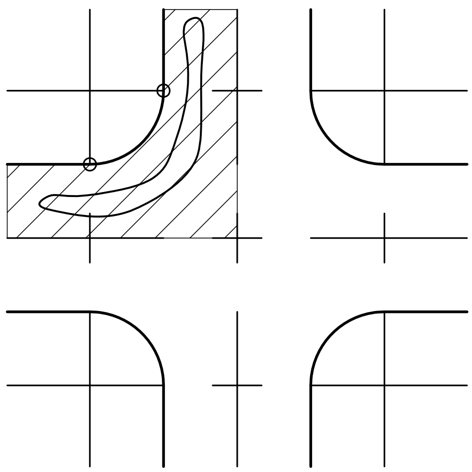
CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL PROCEDURE FOR RESTORATION OF FLEXIBLE PAVEMENT	R-3



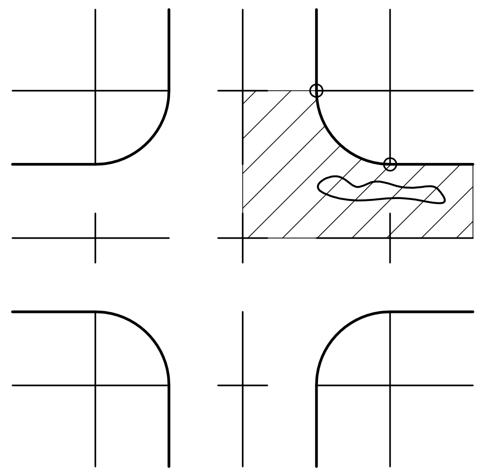
CASE 1



CASE 2



CASE 3



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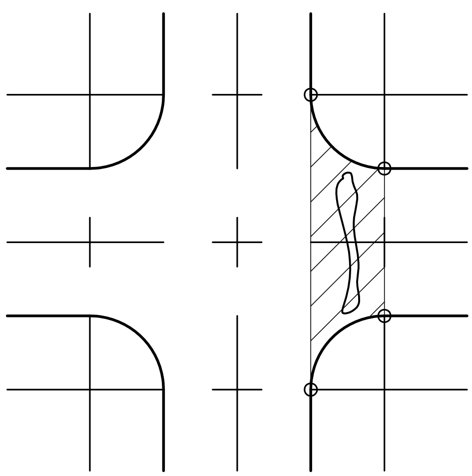
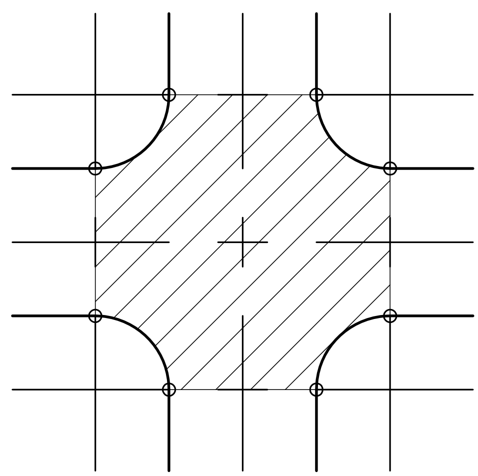


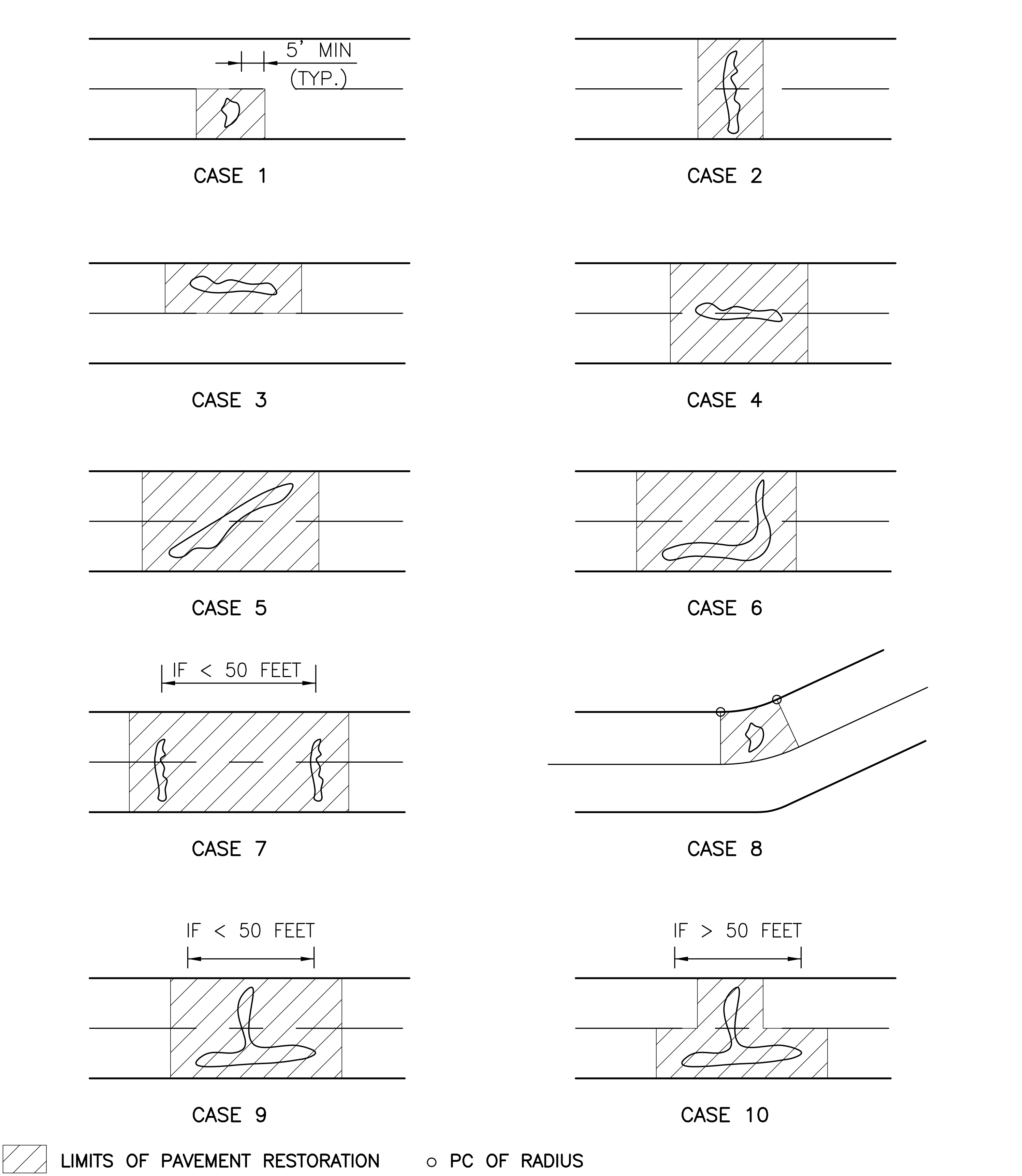
CASE 5



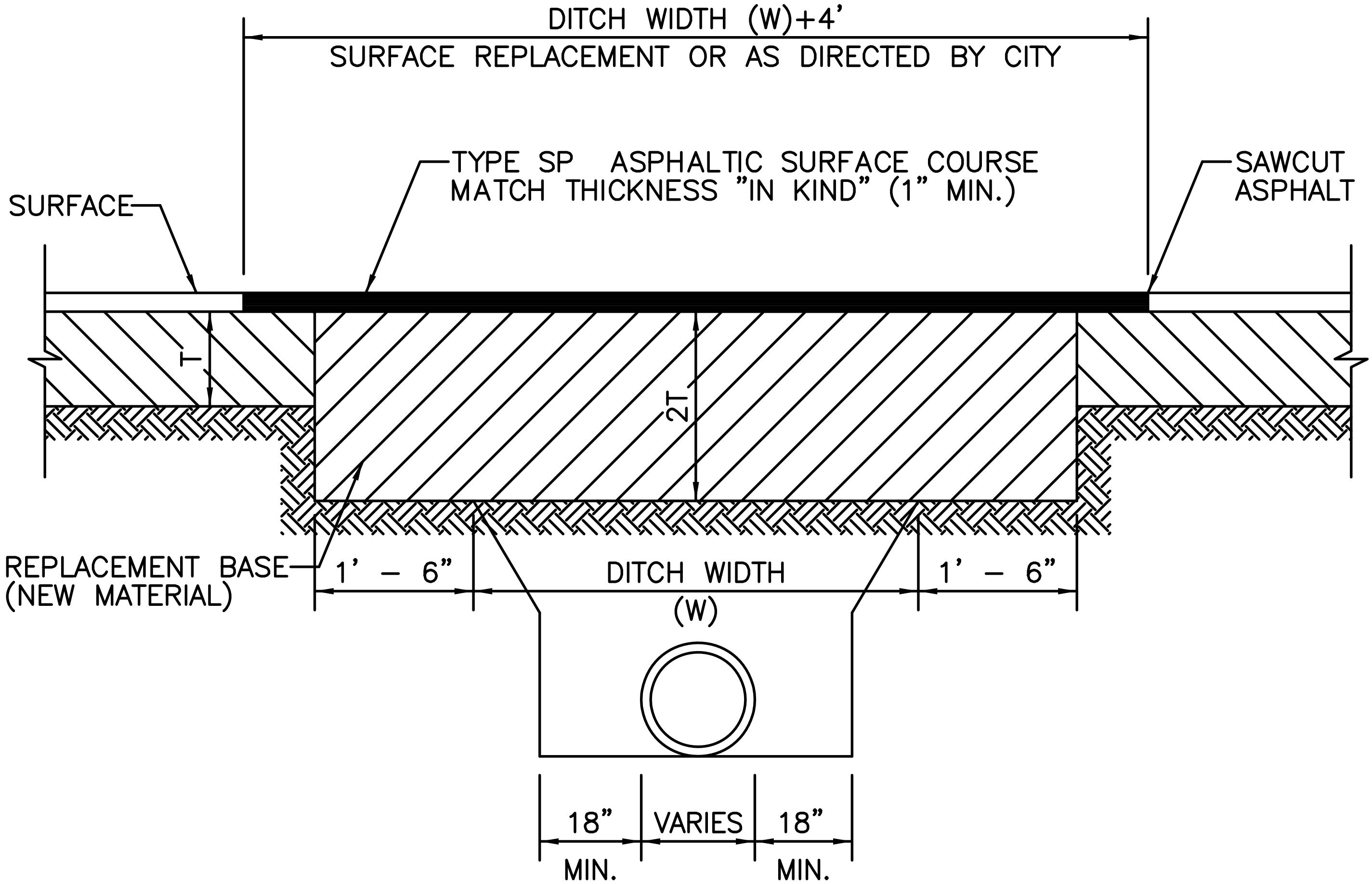
SIGNALIZED INTERSECTION

LIMITS OF PAVEMENT RESTORATION   ○ PC OF RADIUS

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: OCT 23	STANDARD ROAD DETAIL PAVEMENT RESTORATION FOR ROADWAY INTERSECTIONS	R-3a



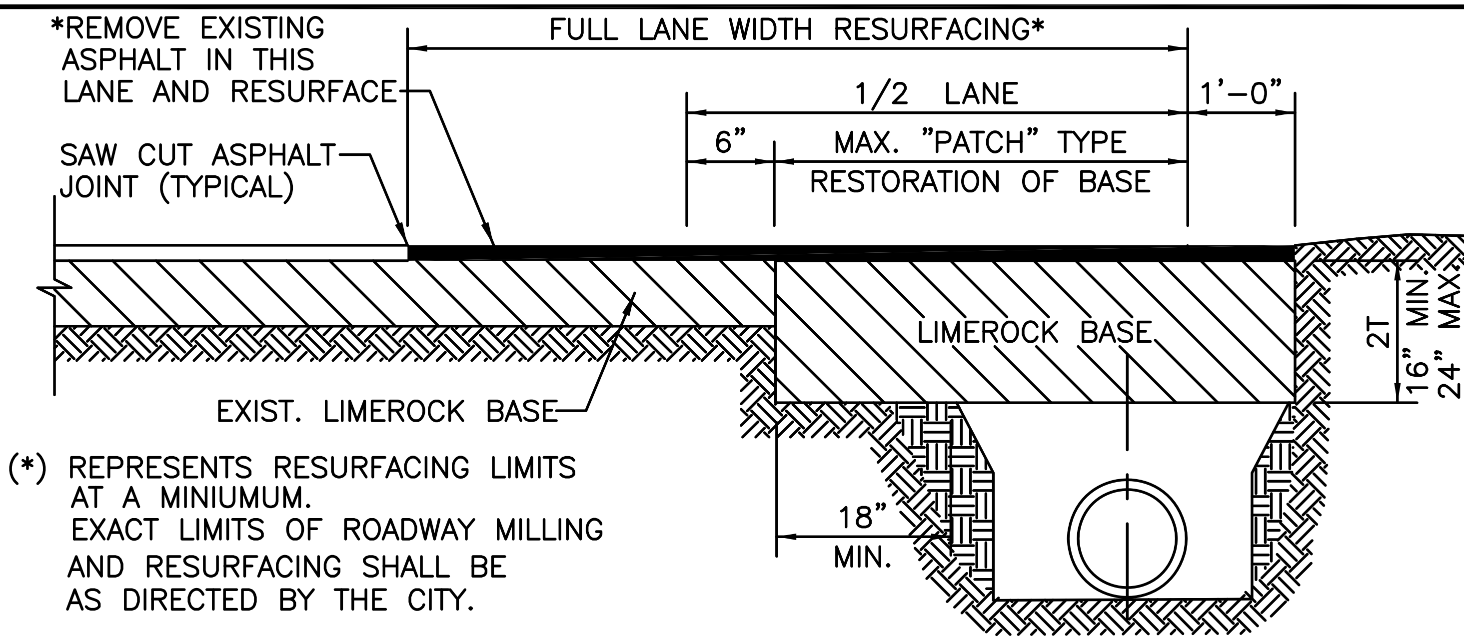
CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: OCT 23	STANDARD ROAD DETAIL PAVEMENT RESTORATION FOR TRENCH CUTS	R-3b



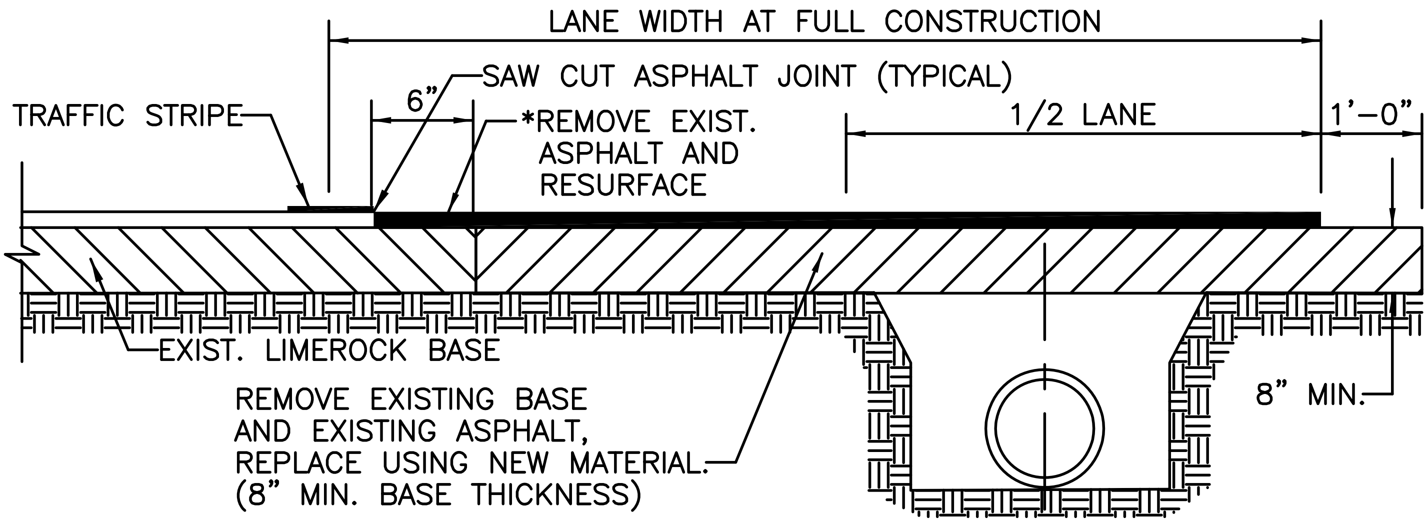
NOTES:

1. REPLACED BASE MATERIAL OVER DITCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE. (16" MIN. & 24" MAX.)
2. BASE MATERIAL SHALL BE PLACED IN 6" MAXIMUM LAYERS AND EACH LAYER COMPACTED TO 98% DENSITY PER A.A.S.H.T.O. T–180.
3. SUBGRADE MATERIAL SHALL BE PLACED IN A 12" LAYER AND COMPACTED TO 100% DENSITY PER A.A.S.H.T.O. T–99–C.
4. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED.
5. BASE MATERIAL SHALL HAVE A MINIMUM LBR OF 100 AND A MINIMUM CARBONATE CONTENT OF 70% (60% FOR LOCAL STREETS).
6. IF THE DITCH IS FILLED TEMPORARILY, IT SHALL BE COVERED WITH A 2" THICK ASPHALTIC CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING, UNTIL PLACED WITH A PERMANENT PATCH.
7. RESTORATION MUST BE RECTANGLE IN SHAPE WITH A UNIFORM WIDTH ACROSS A FULL LANE.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: OCT 23	STANDARD ROAD DETAIL PAVEMENT RESTORATION PERPENDICULAR CROSSING	R–4



TYPICAL RESTORATION OF LESS THAN 1/2 LANE OF ROCK BASE

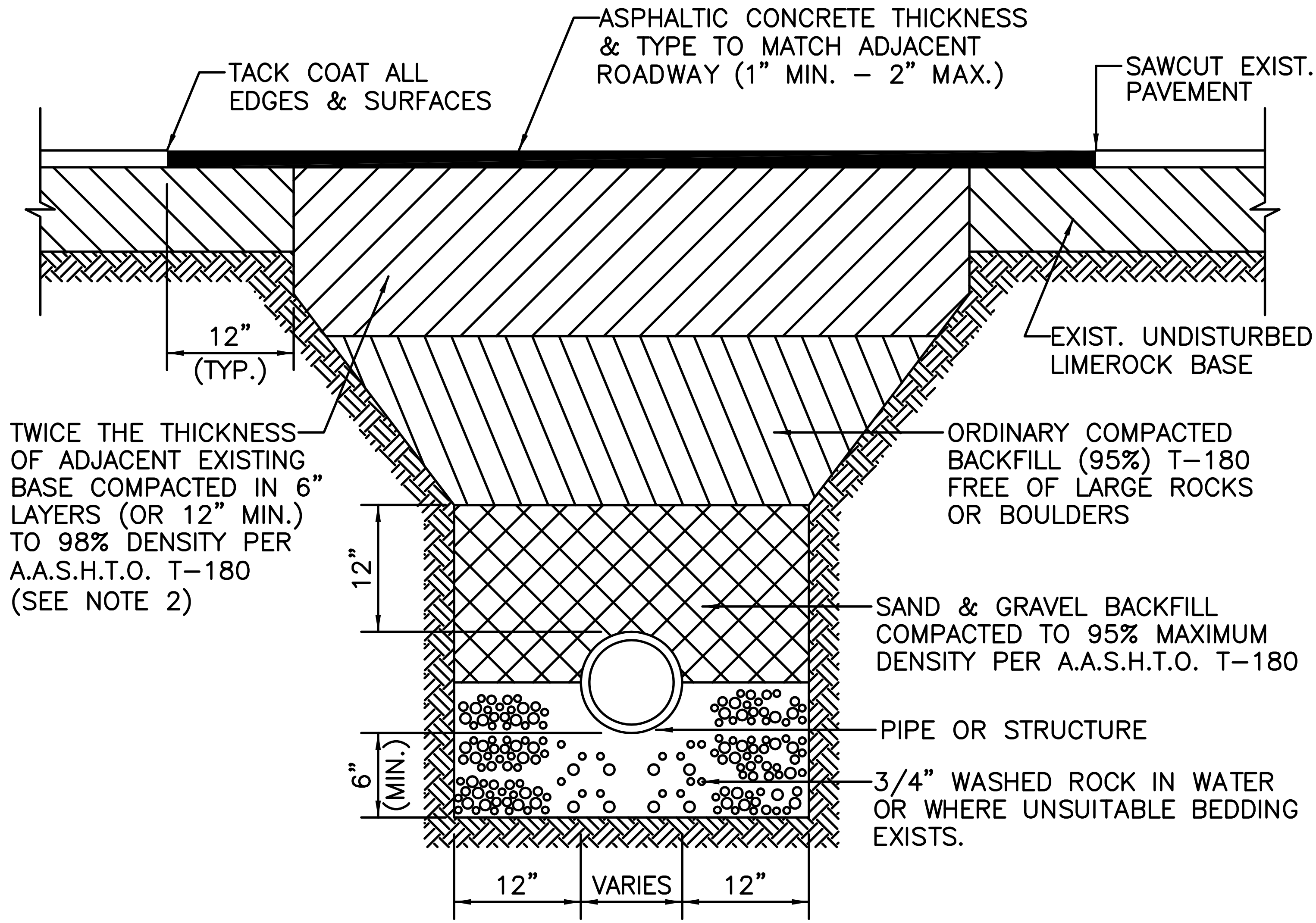


TYPICAL RESTORATION OF 1/2 LANE OR MORE OF ROCK BASE

NOTES:

1. BASE MATERIAL SHALL HAVE A MINIMUM LBR OF 100 AND A MINIMUM CARBONATE CONTENT OF 70% (60% FOR LOCAL STREETS).
2. BASE SHALL BE PLACED IN 6" MAXIMUM THICK LAYERS WITH EACH LAYER COMPACTED TO 98% DENSITY PER A.A.S.H.T.O. T-180 AND TESTED PRIOR TO PLACEMENT OF SUCCEEDING LAYERS.
3. SUBGRADE MATERIAL SHALL BE GRANULAR AND ANGULAR AND SHALL HAVE A MINIMUM LBR. OF 40 AND COMPACTED TO 100% DENSITY PER A.A.S.H.T.O. T-99-C.
4. BACKFILL SHALL BE PLACED AND COMPACTED IN 8" LAYERS; BUT TESTING WILL BEGIN 12" ABOVE THE INSTALLED FACILITY.
5. ALL EDGES OF EXISTING ASPHALT PAVEMENT WHERE RESURFACING WILL ABUT SHALL BE SAWCUT IN STRAIGHT LINES PARALLEL TO OR PERPENDICULAR TO THE ROADWAY, PRIOR TO RESURFACING.
6. RESURFACING MATERIAL SHALL BE CONSISTENT WITH EXISTING SURROUNDING SURFACE, AND SHALL BE APPLIED A MINIMUM OF ONE INCH AND A MAXIMUM OF TWO INCHES IN THICKNESS.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL PAVEMENT RESTORATION LONGITUDINAL	R-5



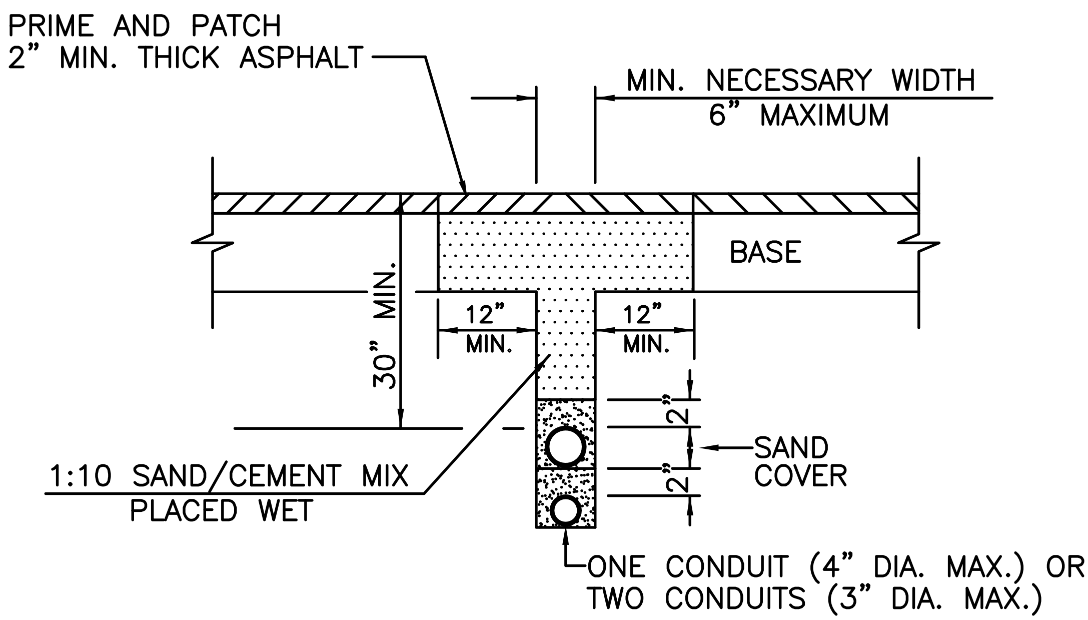
NOTES:

1. ENTIRE PAVEMENT WIDTH MAY REQUIRE MILLING AND RESURFACING AS DIRECTED BY THE CITY ENGINEER.
2. CONTRACTOR MAY ELECT TO BACKFILL WITH 1:10 SAND CEMENT MIX.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL PAVEMENT RESTORATION LOCAL ROADS–WATER MAIN	R–6

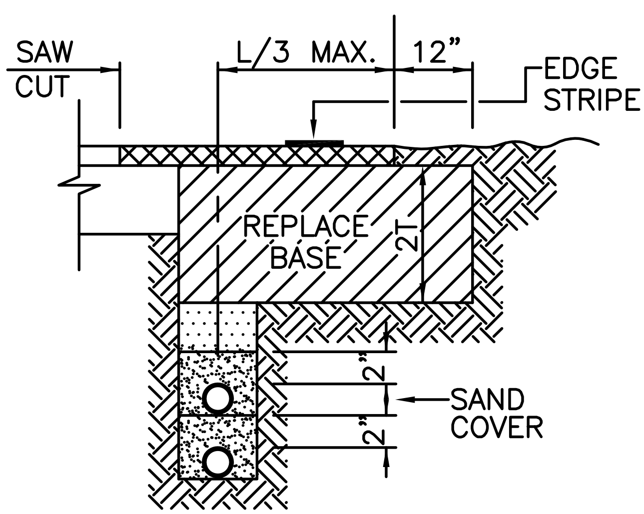
NOTES:

1. IF CRACKS APPEAR IN ASPHALT ADJACENT TO CUT, EDGES MUST BE SAW CUT TO A STRAIGHT LINE 6" BEYOND THE FURTHEST CRACK.
2. ENTIRE PAVEMENT WIDTH MAY REQUIRE MILLING AND RESURFACING AS DIRECTED BY THE CITY ENGINEER.



DETAIL "A"

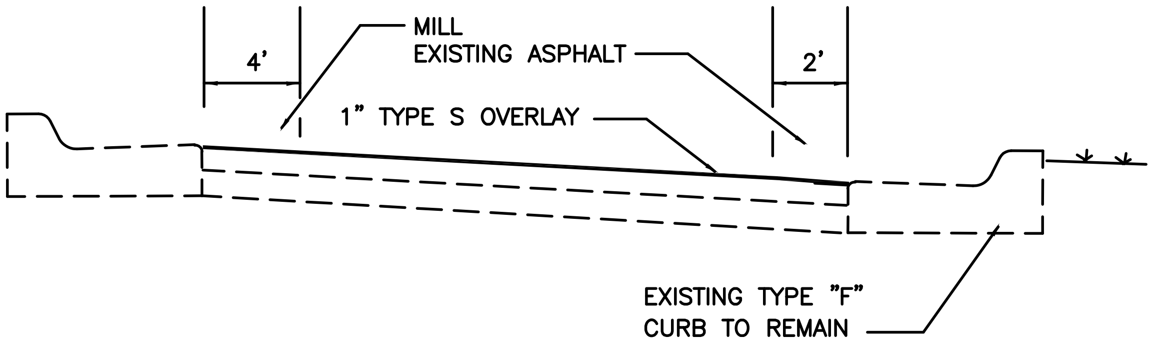
MINIMUM UTILITY CROSSING OF ROADWAY



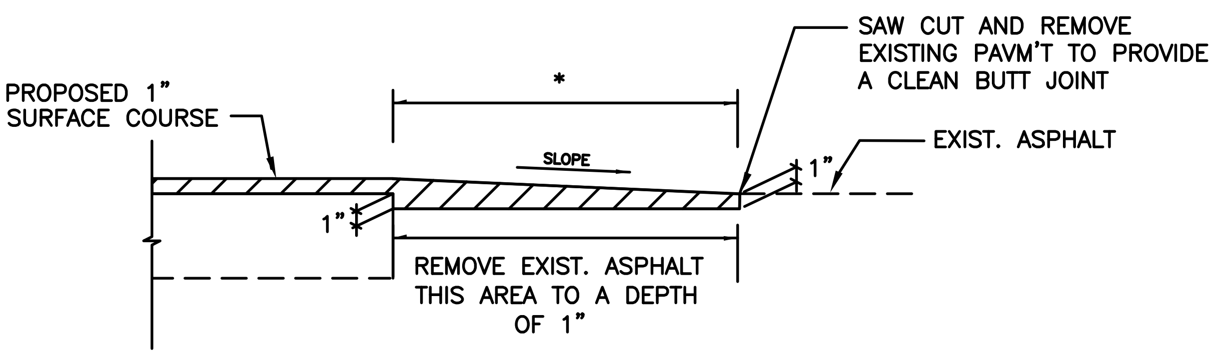
DETAIL "B"

MINIMUM PARALLEL UTILITY INSTALLATION

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL PAVEMENT RESTORATION FOR DIRECT BURIAL CABLE OR CONDUIT	R-7



MILLING AT EDGE OF PAVEMENT
WITH EXISTING CURB



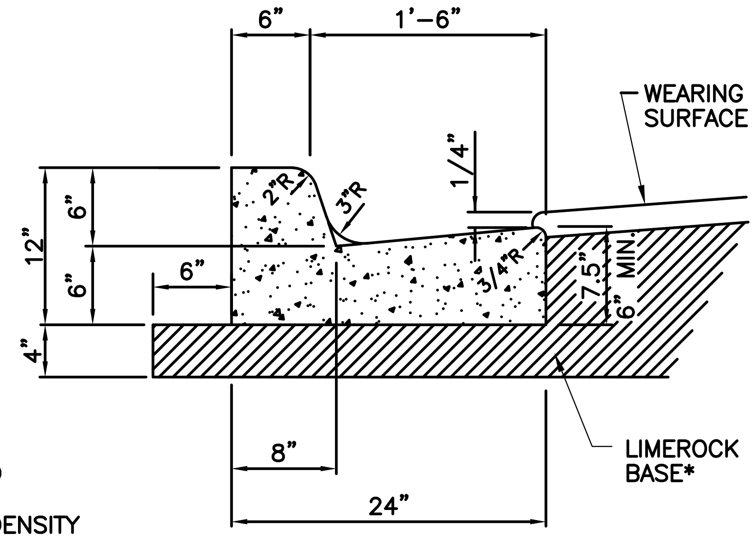
PAVEMENT CONNECTION

NOTE:

(*) = 6' AT TERMINI OF PROJECT AND CONNECTIONS TO EXISTING STREETS

(*) = 2' AT CONNECTION TO EXISTING DRIVEWAYS UNLESS OTHERWISE INSTRUCTED BY ENGINEER OF RECORD BASED ON ACTUAL FIELD CONDITIONS.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL FEATHERING DETAILS	R-8

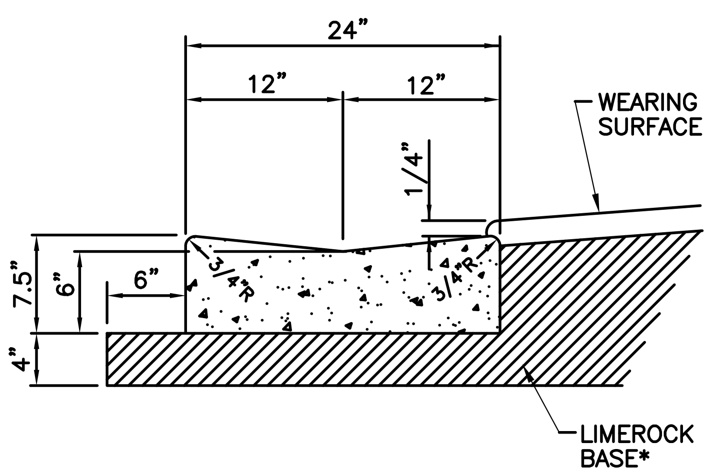


(*) LIMEROCK BASE OR PAD TO BE AT LEAST 4" THICK COMPACTED TO 98% MAX. DENSITY PER AASHTO T-180.

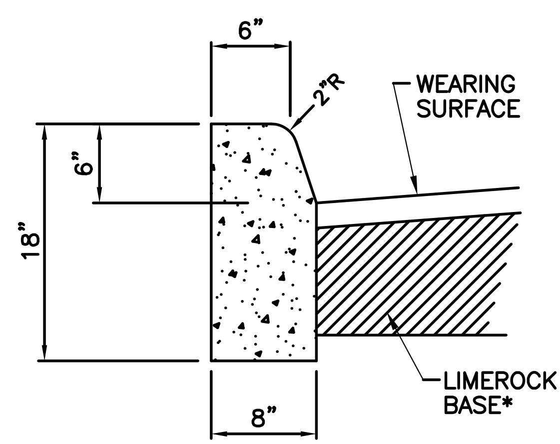
NOTE:

1. WHEN USED ON HIGH SIDE OF ROADWAYS, CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6".
2. SAWCUTS REQUIRED AT 10' CENTERS.

TYPE 'F' CURB & GUTTER DETAIL



VALLEY GUTTER

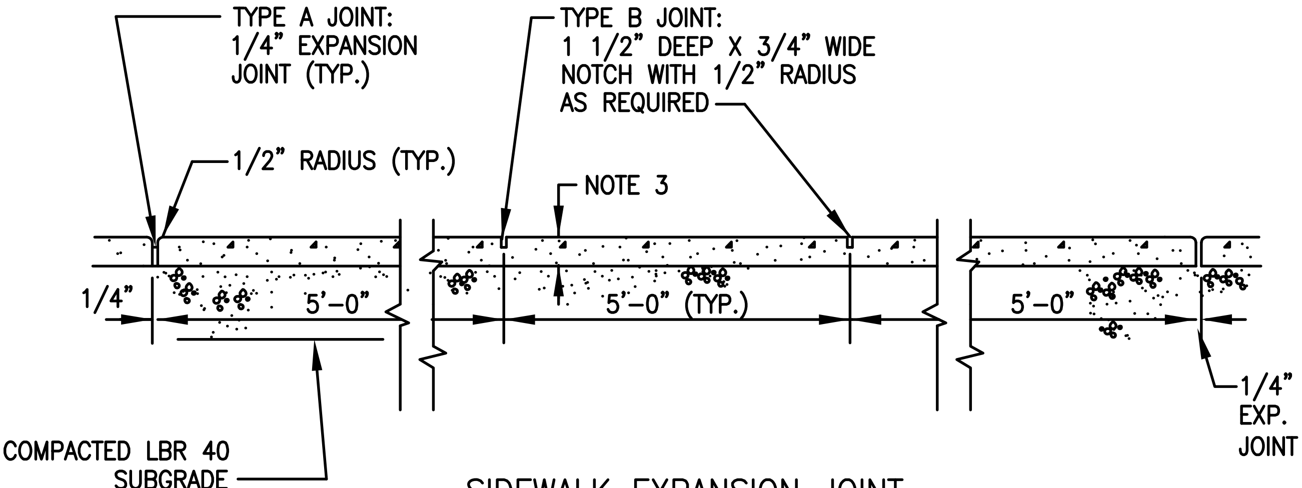


TYPE 'D' CURB

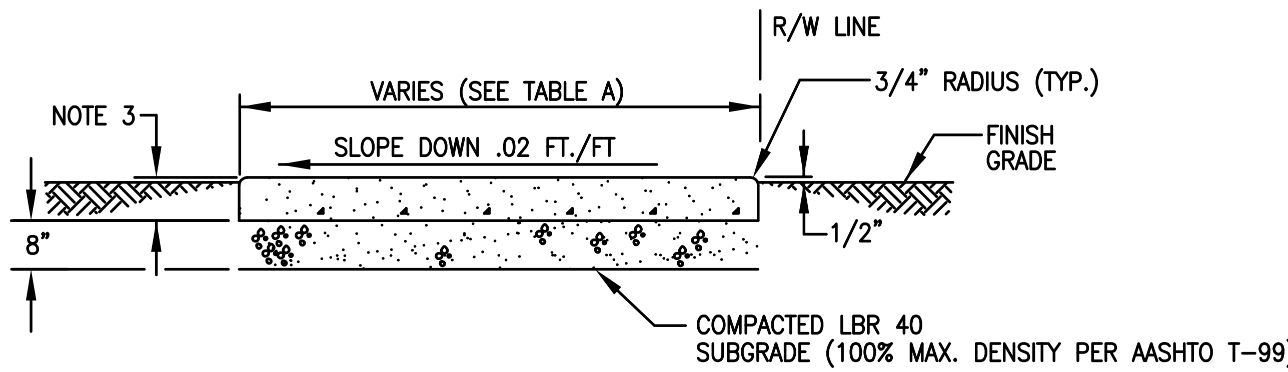
NOTES:

1. ROADWAY SUBGRADE SHALL IN ALL CASES EXTEND BELOW CURBING.
2. SAWCUTS AT 10' CENTERS SHALL BE MADE WITHIN 24 HOURS OF CONCRETE PLACEMENT.
3. CONCRETE SHALL HAVE A MIN. 28 DAY STRENGTH OF 3,000 P.S.I

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL CURB DETAILS	R-9



SIDEWALK EXPANSION JOINT
LONGITUDINAL SECTION



SIDEWALK SECTION

SIDEWALK JOINTS	
TYPE	LOCATION
"A"	P.C. P.T. OF CURVES
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS

NOTES:

1. CONCRETE TO BE CLASS 1, 3,000 P.S.I.
2. 4" THK. MIN. (TYP.); 6" THK. AT DRIVEWAYS, EXTENDED TWO-FEET BEYOND DRIVE, ON BOTH SIDES.
3. SIDEWALK SLOPES AND HORIZONTAL CLEARANCES SHALL MEET THE REQUIREMENTS OF THE AMERICAN WITH DISABILITIES ACT (ADA).
4. PEDESTRIAN RAMPS SHALL INCLUDE A DETECTABLE WARNING SURFACE PER FDOT INDEX 304.
5. CONSTRUCT EXPANSION JOINTS AT SPACINGS SHOWN ABOVE; AT POINT OF CURVATURE; AT ADJOINING STRUCTURES; AT THE END OF DAYS WORK; AND WHERE NEW SIDEWALK MEETS EXISTING SIDEWALK.
6. STAMPED CONCRETE IS NOT ALLOWED IN LIEU OF TRUNCATED DOMES.

CITY OF WEST PARK ENGINEERING STANDARDS WEST PARK, FLORIDA	SCALE: N.T.S. REVISED: JAN 12	STANDARD ROAD DETAIL TYPICAL SIDEWALK DETAIL	R-10