

NOTES:

1. YARD DRAINS SHALL ONLY BE USED IN PRIVATE PROPERTY LOCATIONS; PUBLIC RIGHT-OF-WAY LOCATIONS WILL NOT BE PERMITTED UNLESS APPROVED BY THE DEPARTMENT.
2. CONCRETE COLLAR IS NOT REQUIRED IN PAVED AREAS IF PAVEMENT SURFACE IS FINISHED PRIOR TO CONDITIONAL FINAL INSPECTION.
3. SEE "TYPICAL TRENCH DETAIL" FOR BACKFILLING REQUIREMENTS.

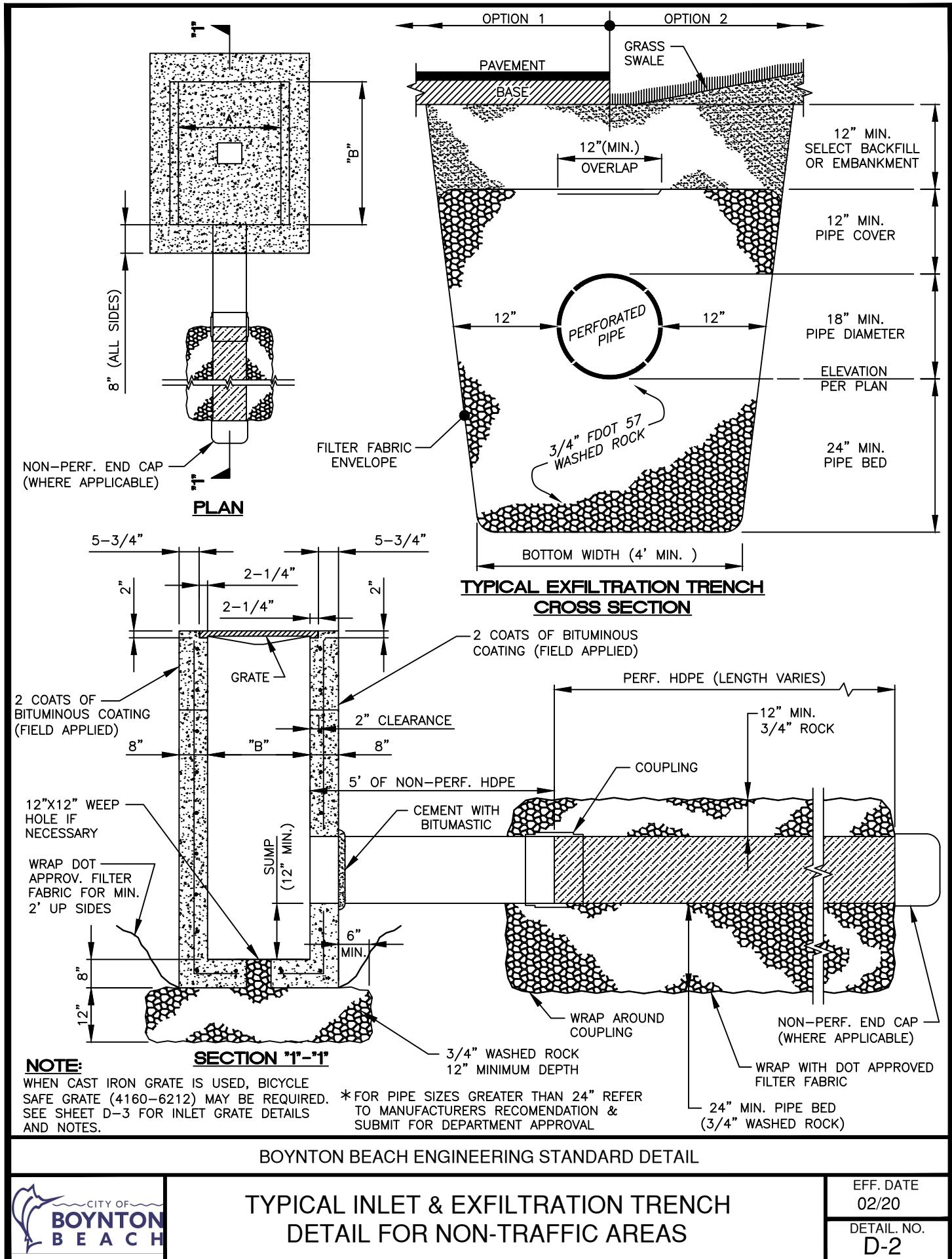
BOYNTON BEACH ENGINEERING STANDARD DETAIL

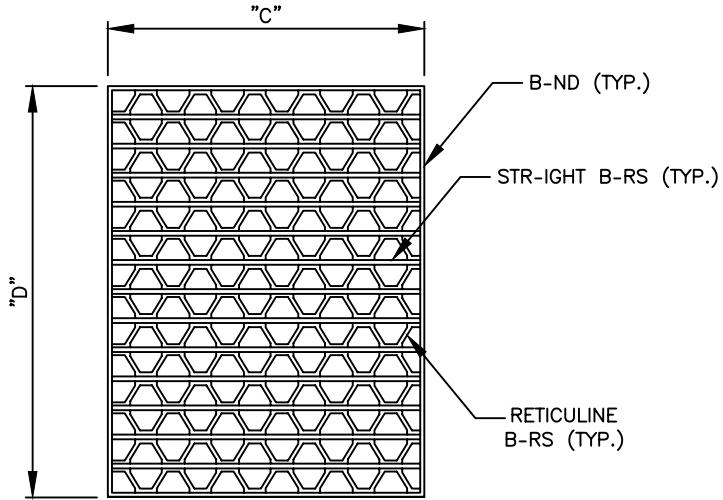


TYPICAL YARD DRAIN/CPEP INSTALLATION DETAIL

EFF. DATE
02/20

DETAIL. NO.
D-1





RETICULINE STEEL GRATE

STR-IGHT B-RS: 2"x1/4"
 RETICULINE B-RS: 1-1/4"x3/16"
 B-NDs: 2"x1/14"

TYPE INLET	DIMENSIONS					MAX. PIPE DIAMETER	
	"-"	"B"	"C"	"D"	"E"	"-"	"B"
"C"	2'-0"	3'-1"	2'-4"	3'-0"	11"	18"	30"
"E"	3'-0"	4'-6"	3'-4"	4'-4"	1'-5"	30"	48"

INLET NOTES:

- BEVELED EDGES: ALL EXPOSED CORNERS AND EDGES TO BE CHAMFERED 3/4".
- FOUNDATION M-TERI-L: WHERE M-TERI-L UNITS-TIF-CTORY FOR FOUNDATION IS ENCOUNTERED, ALL SUCH M-TERI-L MUST BE REMOVED DOWN TO S-TIF-CTORY M-TERI-L AND BACKFILLED TO SUBGRADE WITH CLEAN S-ND.
- GRATES: IN ACCORDANCE WITH F.D.O.T. SPECIFIC-TIONS.
- INLET TYPES: INLETS ARE TO BE CONSTRUCTED TO THE DIMENSIONS SHOWN HEREON. TYPE "E MOD." IS A TYPE "E" TURNED 90° TO RECEIVE R.C.P. UP TO 48" DI-METER.
- M-TERI-L: INLET WALLS AND BASES MAY BE EITHER C-ST-IN-PL-CE CL-SS I, 2500 P.S.I. CONCRETE OR PREC-ST CL-SS II, 4000 P.S.I. CONCRETE.
- LOCKDOWN: PROVIDE EYEBOLT PER F.D.O.T. ST-ND-RD INDEX 201.
- ALL GRATES SHALL BE CHINED TO THE STRUCTURE.

BACKFILL NOTE:

COMPACT TRENCH BACKFILL AND SOIL WITHIN MIN. 5' OF TRENCH TO MIN. 95% OF MAX IN GR-SS ARE, 98% OF MAX IN P-ED AREAS. DRY DENSITY PER STM D-1557.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



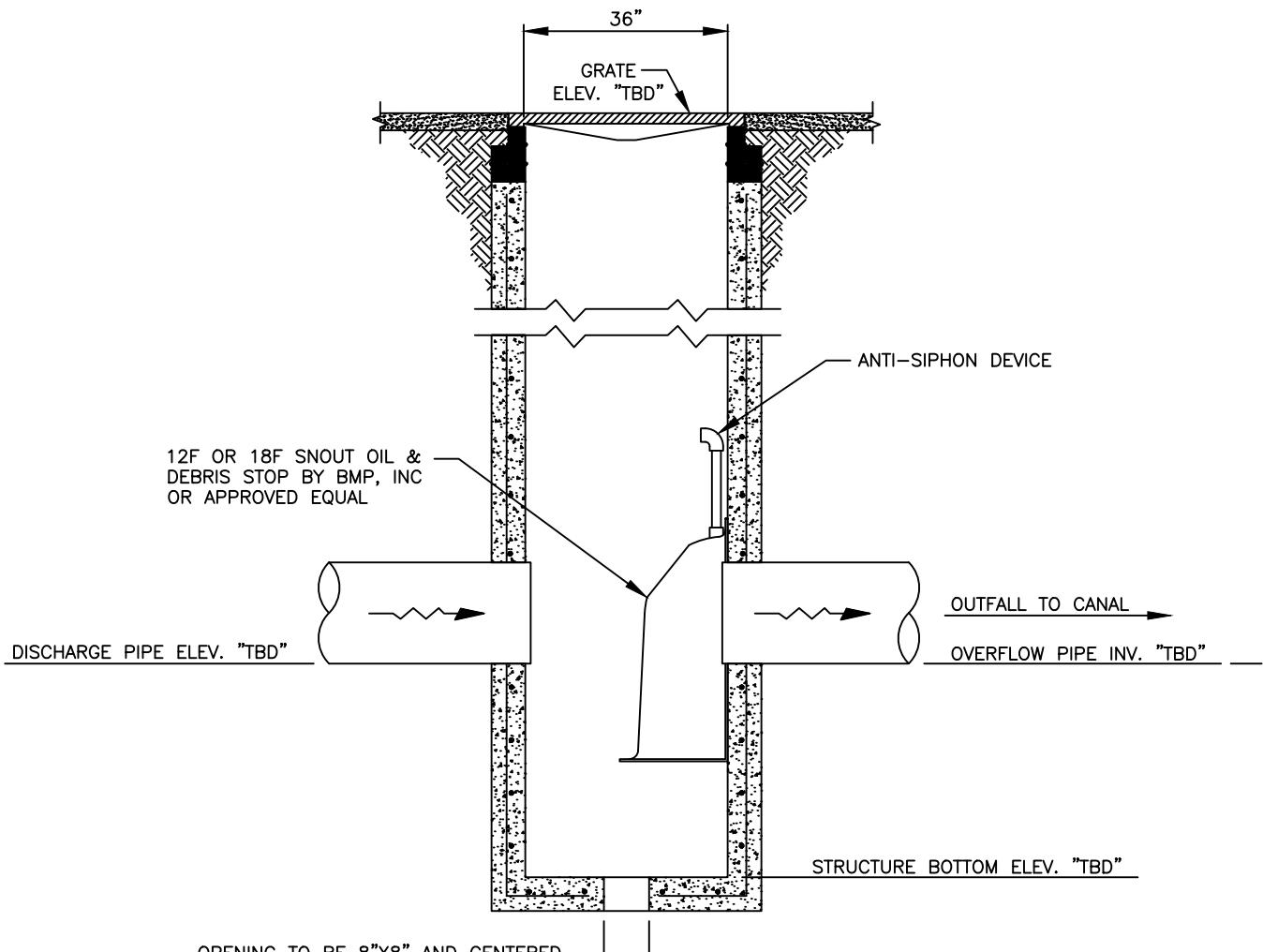
**TYPICAL INLET & EXFILTRATION TRENCH
DETAIL FOR NON-TRAFFIC AREAS**

EFF. DATE

02/20

DETAIL. NO.

D-3



TYPICAL DRAINAGE CONTROL STRUCTURE CROSS SECTION
TYPE E MODIFIED – SEE F.D.O.T. TYPICAL INLET DETAIL SHEET

BOYNTON BEACH ENGINEERING STANDARD DETAIL



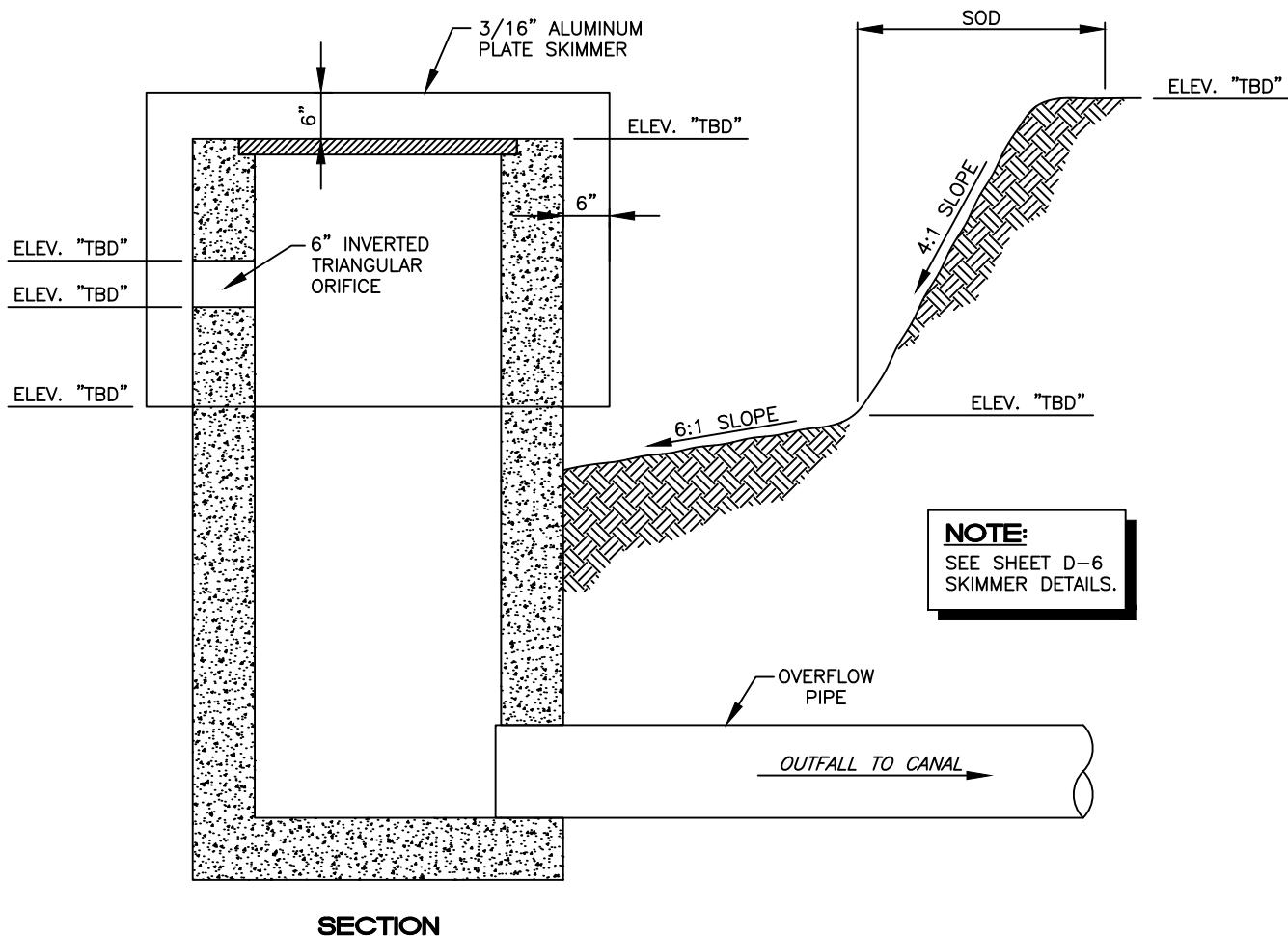
DRAINAGE CONTROL STRUCTURE
DETAIL - TYPE A

EFF. DATE
02/20

DETAIL. NO.
D-4

EROSION AND SEDIMENTATION REQUIREMENTS DURING CONSTRUCTION:

1. THE CONTRACTOR SHALL MAKE EVERY EFFORT DURING CONSTRUCTION TO CONTROL WIND AND WATER EROSION OF THE SOIL ON SITE.
2. THE CONTRACTOR SHALL CONTROL EXCESSIVE RUNOFF FROM THE PROJECT BY EXCAVATING THE PROPOSED SWALE AREAS DURING THE PRELIMINARY CLEANING AND GRUBBING OPERATION OF THE PROJECT.
3. SHOULD THE SITE BECOME EXCESSIVELY DRY, AND WIND AND SOIL EROSION BECOMES PREVAILANT AND A NUISANCE, THE CONTRACTOR SHALL WATER AND/OR SEED AND MULCH THE AREA, AND/OR PROVIDE FENCING AS NECESSARY.
4. TYPE I HAY BALE BARRIERS SHALL BE PLACED AROUND ALL EXISTING DITCH BOTTOM INLETS IN ACCORDANCE WITH F.D.O.T. STANDARD INDEX NO. 102.



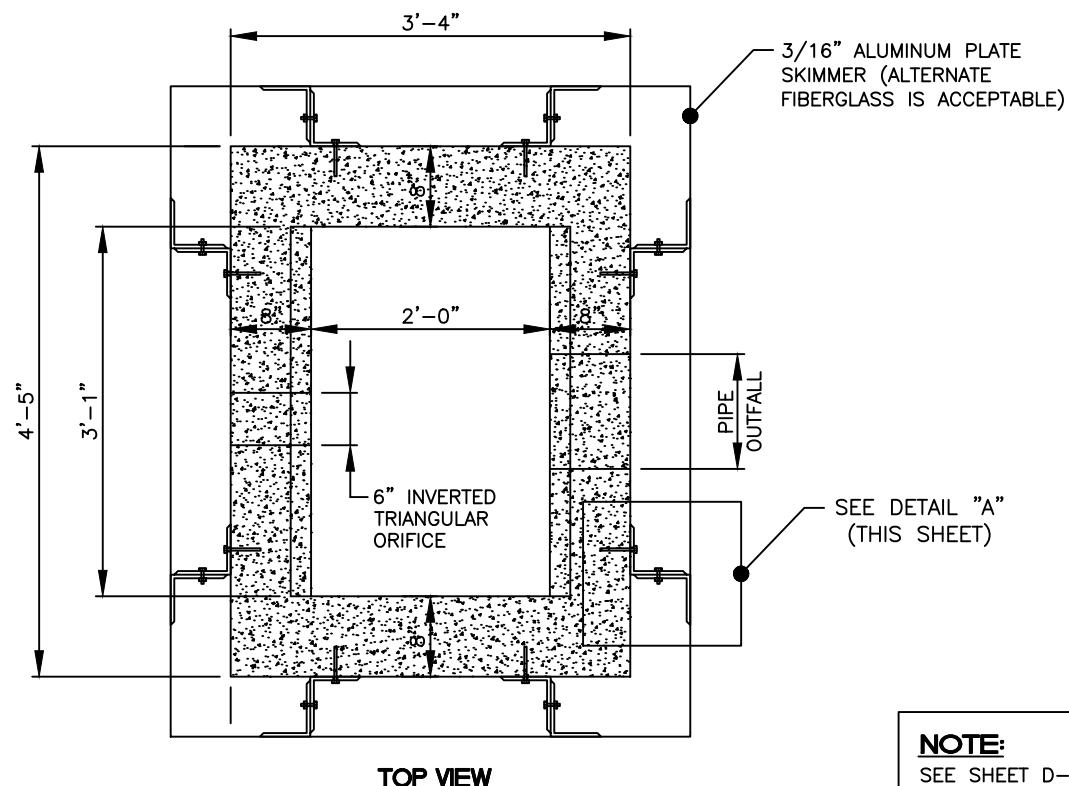
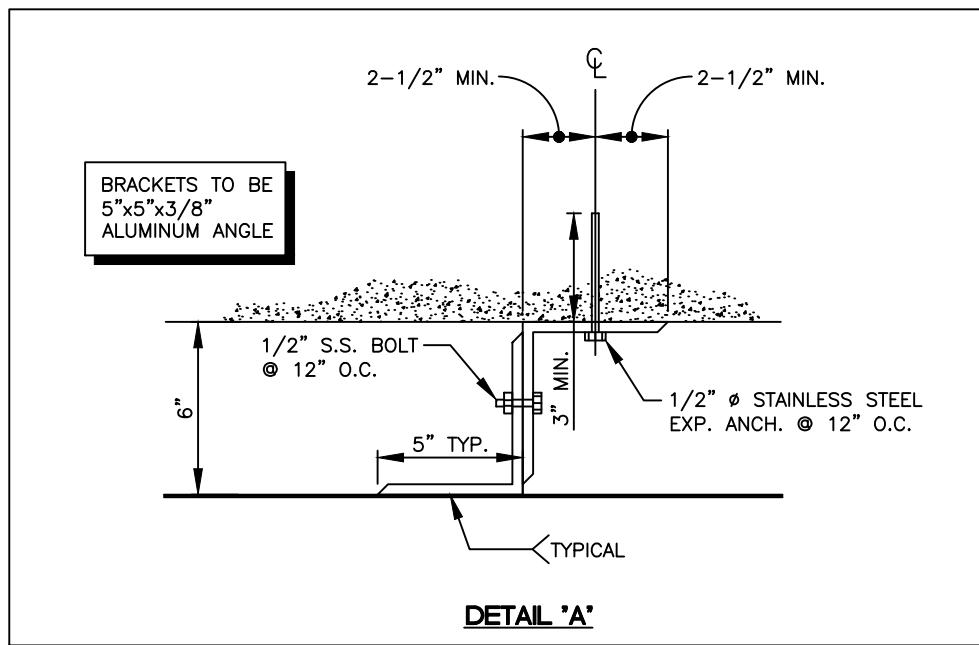
BOYNTON BEACH ENGINEERING STANDARD DETAIL



DRAINAGE CONTROL STRUCTURE
DETAIL - TYPE B

EFF. DATE
02/20

DETAIL. NO.
D-5



BOYNTON BEACH ENGINEERING STANDARD DETAIL



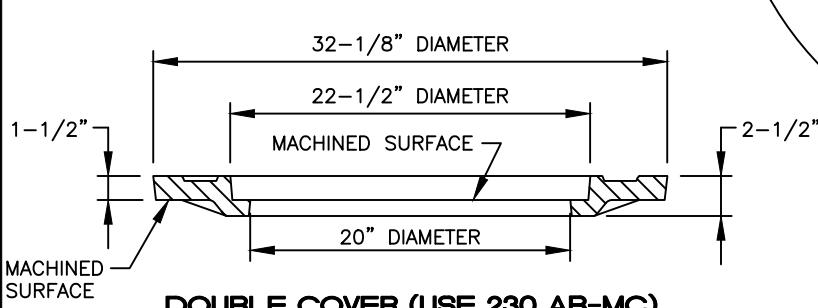
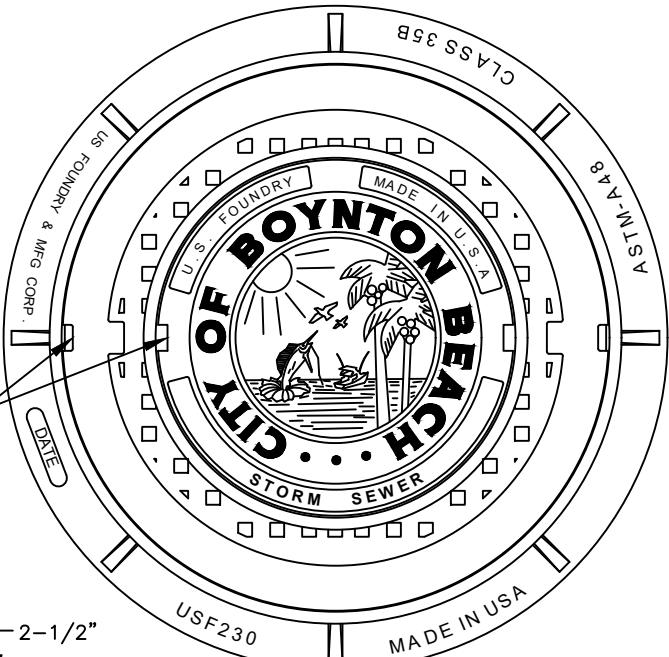
**DRAINAGE CONTROL STRUCTURE
DETAIL - TYPE B**

EFF. DATE

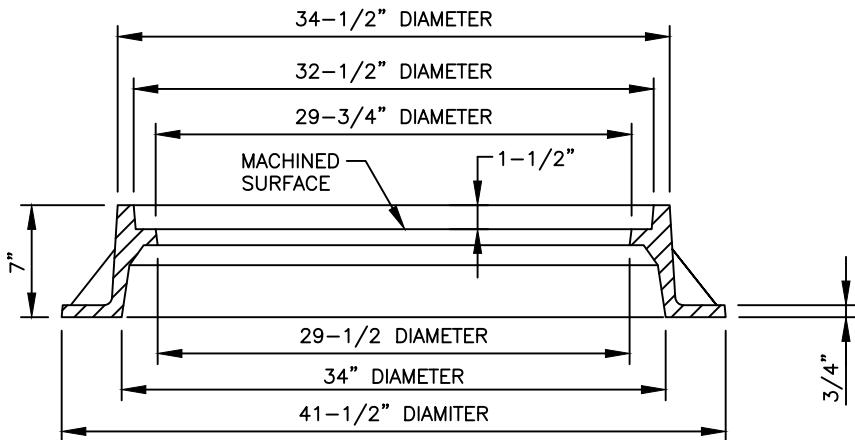
02/20

DETAIL. NO.

D-6



DOUBLE COVER (USF 230 AB-MC)



RING (USF 230 AB-MC)

NOTES:

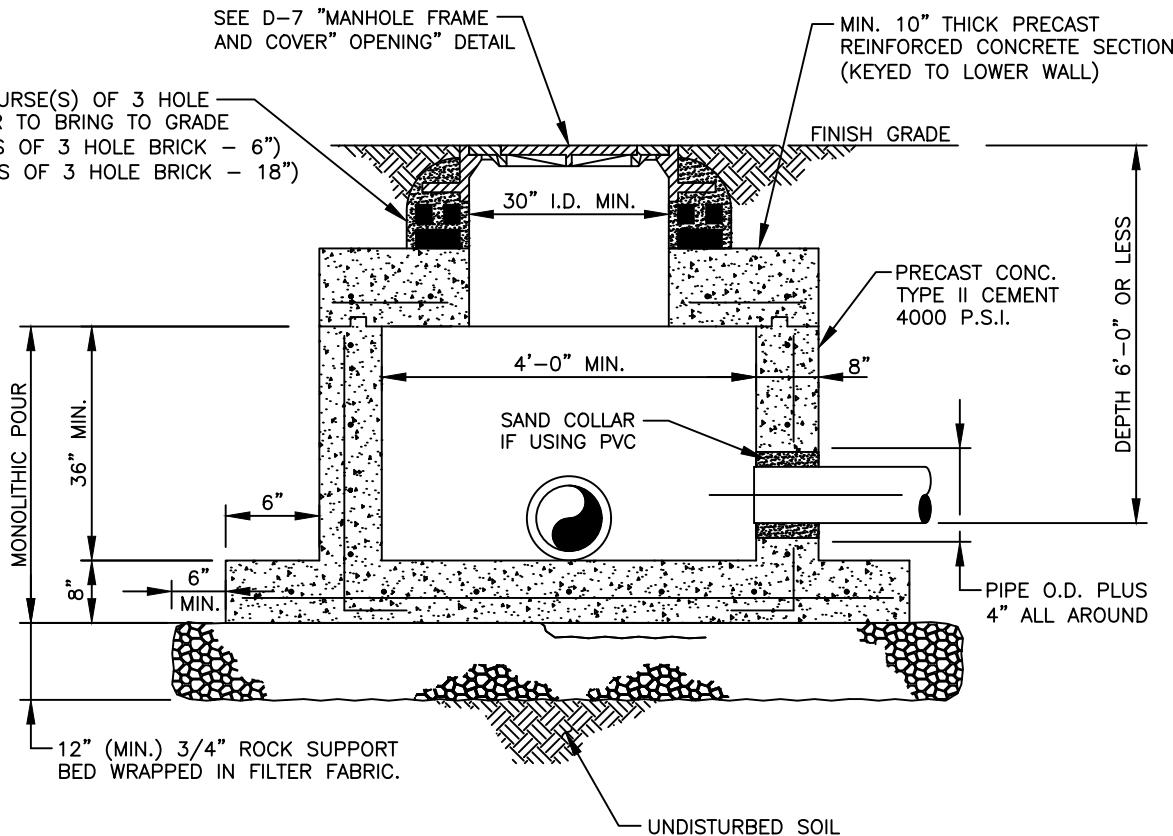
1. IN GREEN AREAS OR ANY AREA DEEMED TO HAVE QUESTIONABLE DRAINAGE, A WATER-TIGHT MANHOLE INSERT SUCH AS "SEWER GUARD" OR APPROVED EQUAL WILL BE REQUIRED.
2. APPROVED MANHOLES (DOUBLE COVER TYPE): U.S. FOUNDRY MODEL No. 230-AB-MC DRAWINGS #A4218 INNER COVER.
3. MANHOLE ADJUSTING SHALL BE BY ADDITIONAL BRICKS USED TO ELEVATE MANHOLE COVERS TO RESURFACED GRADE (MAX. 4" HEIGHT).
4. CONCRETE COLLAR 6'x6'x8" WITH 4"x4" WIRE MESH REINFORCING MAY BE REQUIRED FOR MANHOLES IN LANDSCAPE AREA.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



**MANHOLE FRAME AND COVER
(30" OPENING)**

EFF. DATE 02/20
DETAIL. NO. D-7



NOTES:

1. BRICK MASONRY CONSTRUCTION TO BE STUCCOED WITH 3/4" CEMENT PLASTER INSIDE AND OUTSIDE, TYPE II CEMENT SHALL BE USED.
2. LIFT HOLES THROUGH PRECAST STRUCTURE ARE NOT PERMITTED.
3. SEE TECHNICAL SPECIFICATIONS FOR BEDDING REQUIREMENTS.
4. "RAM-NEK" OR APPROVED EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
5. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF, NON-SHRINKING GROUT.
6. IF TWO CAGES OF WIRE MESH ARE USED, ONE SHALL BE POSITIONED 3" FROM THE INSIDE SURFACE AND ONE 3" FROM THE OUTSIDE SURFACE. IF A SINGLE CAGE OR REBAR IS USED, IT SHALL BE CENTERED WITHIN WALL THICKNESS. NO EXPOSED STEEL SHALL BE PERMITTED.
7. WALL REINFORCEMENTS A.S.T.M. DESIGNATION A185-64.(LATEST REVISION)(MIN.)
8. MANHOLES SHALL CONFORM TO A.S.T.M. C478.(MIN.)
9. A MINIMUM OF SEVEN DAYS CURE TIME IS REQUIRED PRIOR TO DELIVERY.
10. ALL PIPE HOLES SHALL BE PRECAST OR CORE-DRILLED. OVERSIZED HOLES WILL BE REJECTED.
11. ANY VISIBLE REINFORCING WIRE, STEEL OR HONEYCOMBS SHALL BE CAUSE FOR REJECTION.
12. SHOP DRAWINGS SHALL BE APPROVED BY THE DEPARTMENT.
13. MANHOLE LID SHALL BE MARKED "STORM SEWER".
14. WEEP HOLE MAY BE REQUIRED PER THE ENGINEER'S DESIGN.

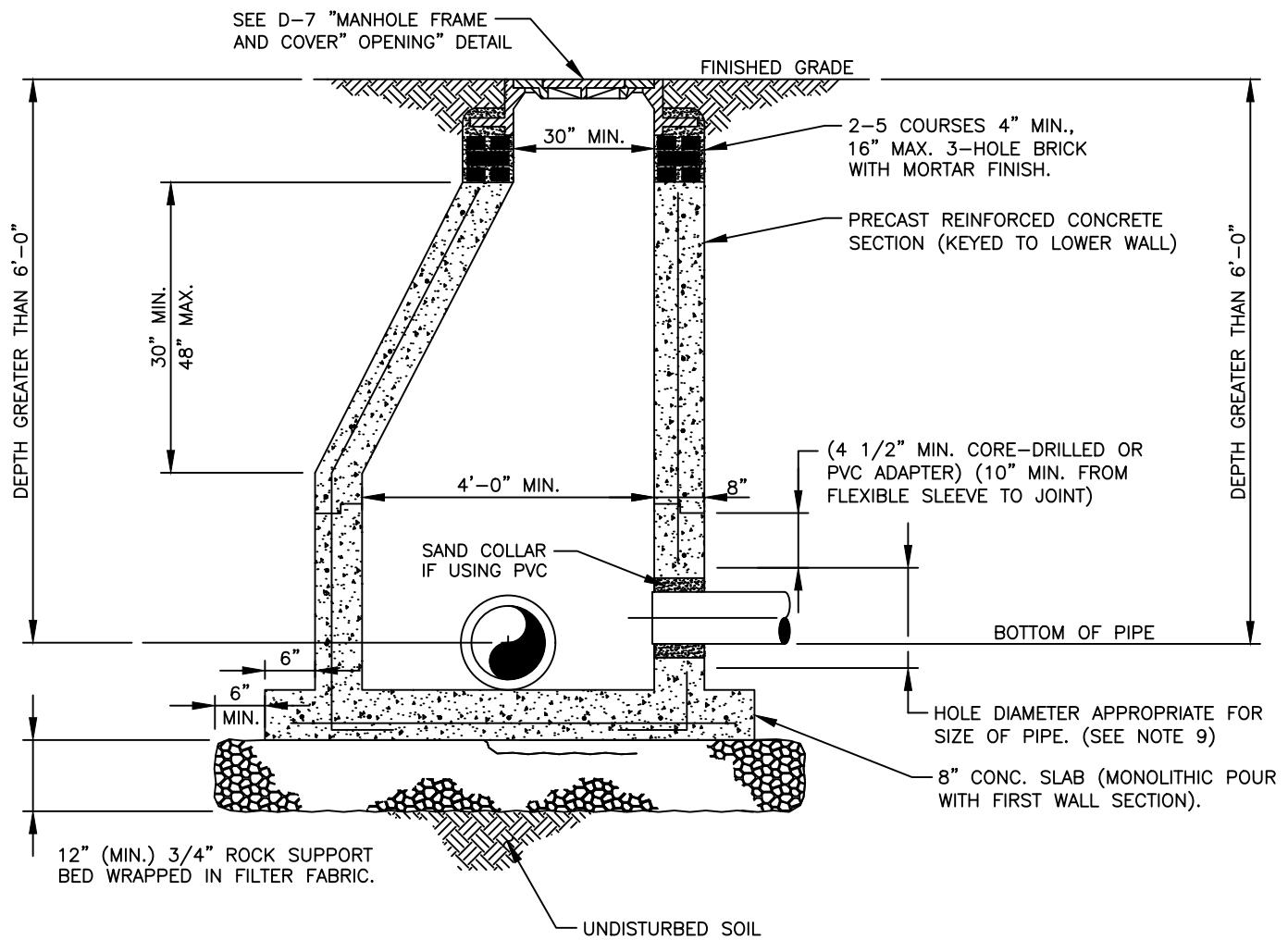
BOYNTON BEACH ENGINEERING STANDARD DETAIL



STANDARD PRECAST MANHOLE
TYPE II (SHALLOW)

EFF. DATE
02/20

DETAIL. NO.
D-8



NOTES:

1. PRECAST CONCRETE TYPE II 4000 P.S.I.
2. "RAMNEK" OR EQUAL AT ALL RISER JOINTS (1/2" THICK WITH THE WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE & OUTSIDE.
3. ALL OPENINGS SHALL BE SEALED WITH A WATERPROOF NON-SHRINKING GROUT.
4. LIFT HOLES ARE NOT PERMITTED.
5. ALL PIPE HOLES SHALL BE PRECAST.
6. MANHOLE FABRICATION SHALL BE IN ACCORDANCE WITH ASTM C-478, LATEST STANDARD.
7. ANY VISIBLE REINFORCING WIRE, STEEL OR HONEYCOMB SHALL BE CAUSE FOR REJECTION.
8. REFER TO F.D.O.T. STANDARD INDEXES 200 & 201 FOR OTHER APPROVED MANHOLES TO BE PERMITTED/
9. SHOP DRAWINGS SHALL BE APPROVED BY THE DEPARTMENT.
10. MANHOLE LID SHALL BE MARKED "STORM SEWER".
11. WEEP HOLE MAY BE REQUIRED PER THE ENGINEER'S DESIGN.
12. "RAM-NEK" OR APPROVED EQUAL AT ALL RISER JOINTS (1/2" THICK WITH WIDTH AT LEAST 1/2 THE WALL THICKNESS) WITH GROUT ON INSIDE AND OUTSIDE.
13. MANHOLE EXTERIOR PROTECTION SHALL CONSIST OF THE USE OF CARBOLINE (KOPPERS) BITUMASTIC 300M (OR APPROVED EQUAL). THE FIRST COAT IN THE COLOR GRAY OR RED & THE SECOND COAT BEING THE COLOR BLACK.
14. LIFTING HOOKS SHALL BE INSIDE STRUCTURE.

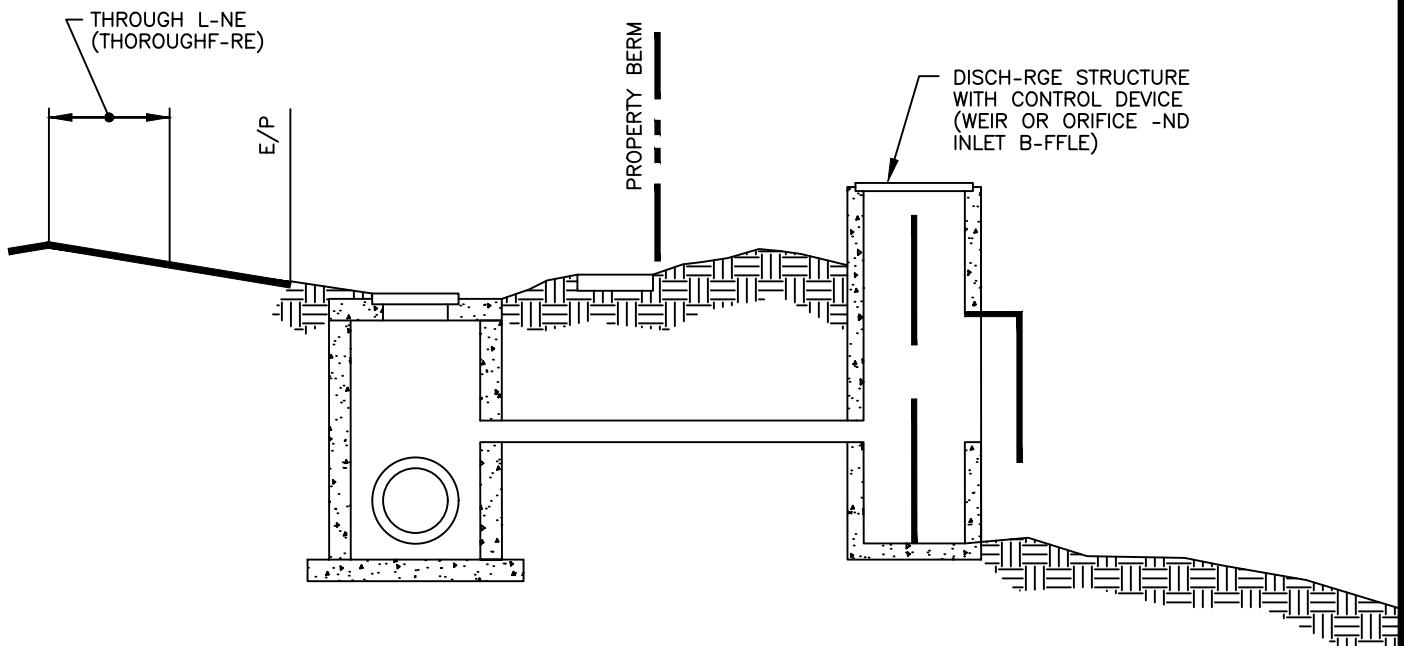
BOYNTON BEACH ENGINEERING STANDARD DETAIL



STANDARD MANHOLE
(WITH ECCENTRIC CONE)

EFF. DATE
02/20

DETAIL. NO.
D-9



- (A) ON-SITE STOR-GE ELEV-TION FOR GRE-TER OF FIRST 1 IN. OF RUNOFF OR TOT-L RUNOFF PRODUCED BY 3-YR., 1-HR. R-INF-LL FROM TOT-L -RE- DR-INED BY SERVICE CONNECTION.
- (B) PE-K ON-SITE STOR-GE ELEV-TION FOR RUNOFF PRODUCED BY 3-YR., 24-HR. R-INF-LL, FROM TOT-L -RE- DR-INED BY SERVICE CONNECTION, NOT TO EXCEED H.G.L. ELEV-TION -S NOTED IN (E) .
- (C) PE-K ON-SITE STOR-GE ELEV-TION FOR RUNOFF PRODUCED BY 25-YR., 3-D-Y R-INF-LL, NOT TO EXCEED LOWER OF SITE PERIMETER BERM ELEV-TION OR (FOR THOROUGHF-RE-PL-N STREETS) P- EMENT ELEV-TION -S NOTED IN (F) .
- (D) STORM SEWER HYDR-ULIC GR-DE LINE ELEV-TION -T ZERO FLOW IN RECEIVING SEWER (i.e., T-ILW-TER ELEV-TION TO BE USED FOR DETERMINING ST-GE VS. DISCH-RGE OF CONTROL DEVICE)
- (E) STORM SEWER HYDR-ULIC GR-DE LINE ELEV-TION -T DESIGN PE-K FLOW -T POINT OF CONNECTION. IF NOT OTHERWISE KNOWN, USE 1 FT. BELOW INLET ELEV-TION OF NEXT UPSTRE-M ON-LINE INLET.
- (F) P- EMENT ELEV-TION -T OUTSIDE EDGE OF HIGHEST THROUGH L-NES (ONE IN E-CH DIRECTION) FOR THOROUGHF-RE-PL-N STREET.

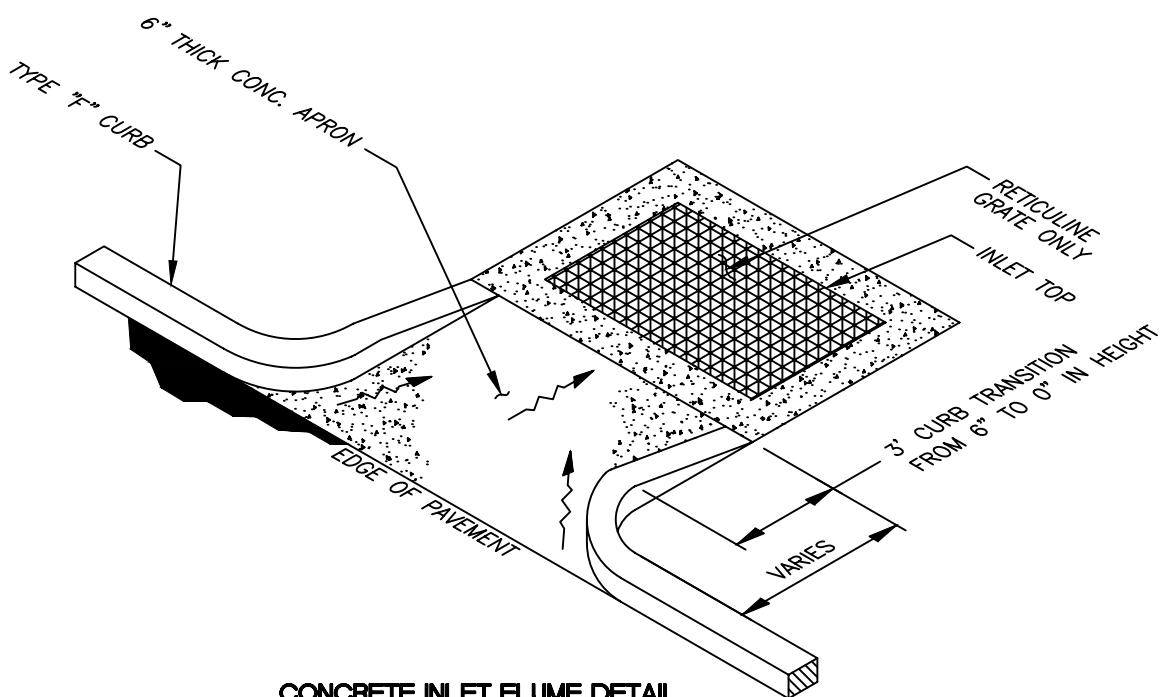
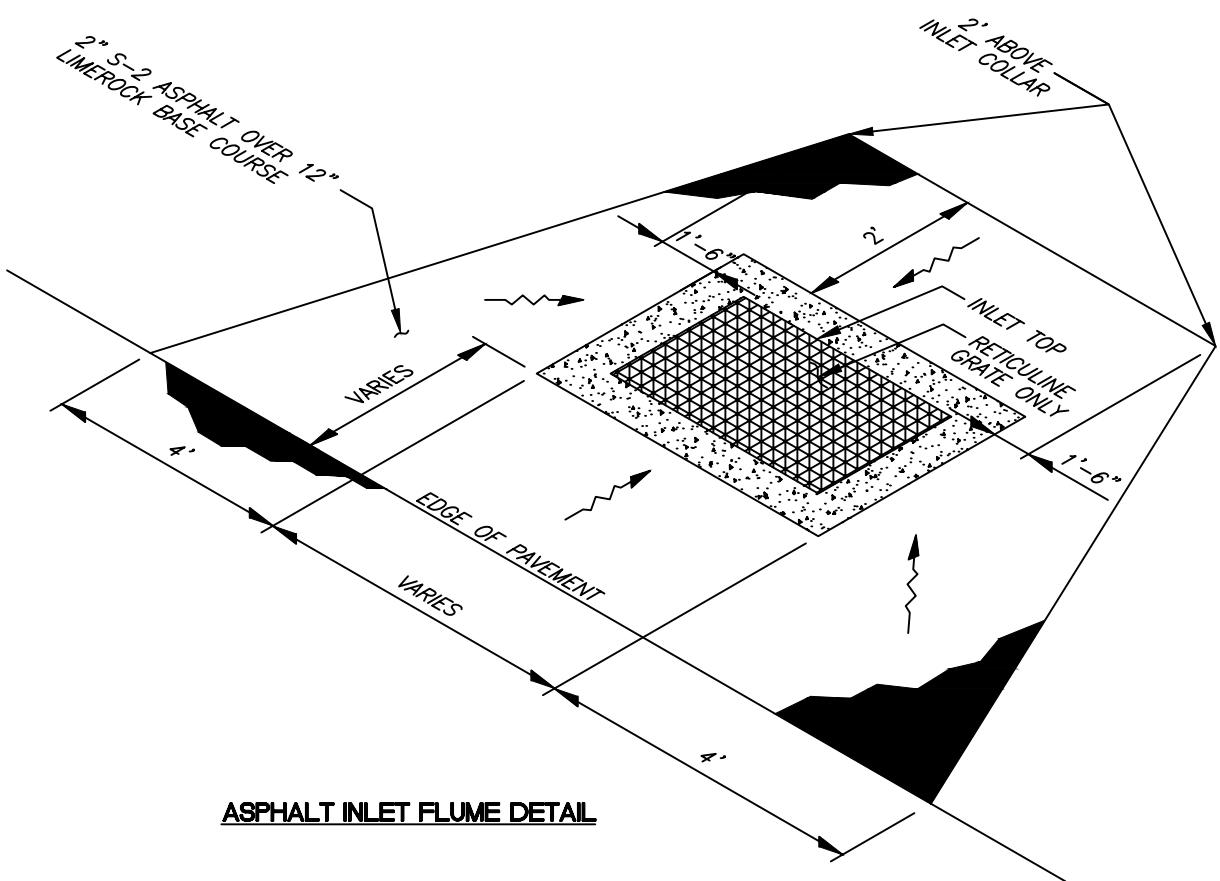
BOYNTON BEACH ENGINEERING STANDARD DETAIL



SERVICE CONNECTION TO ROADWAY STORM RETENTION POND (HYDRAULIC DESIGN SCHEMATIC)

EFF. DATE
02/20

DETAIL. NO.
D-10



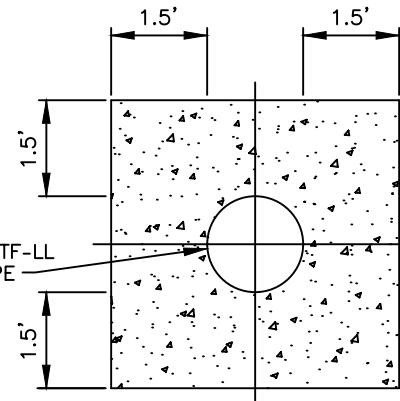
BOYNTON BEACH ENGINEERING STANDARD DETAIL



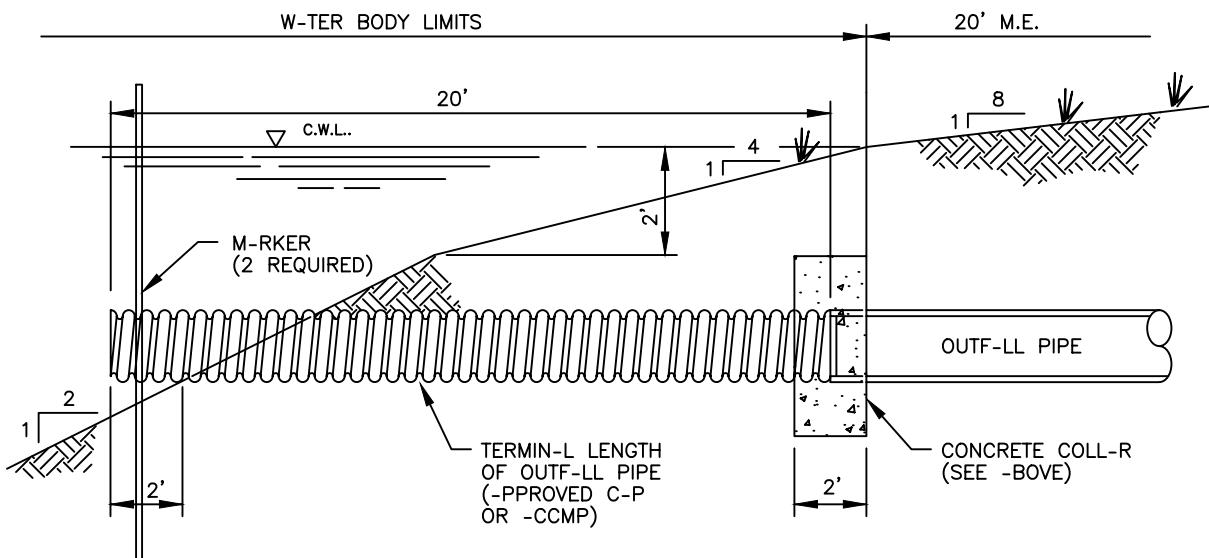
INLET FLUME DETAILS

EFF. DATE
02/20

DETAIL. NO.
D-11



CONCRETE COLLAR



NOTE: M.E. = MAINTENANCE ESMT.
C.W.L. = CONTROL WATER LEVEL

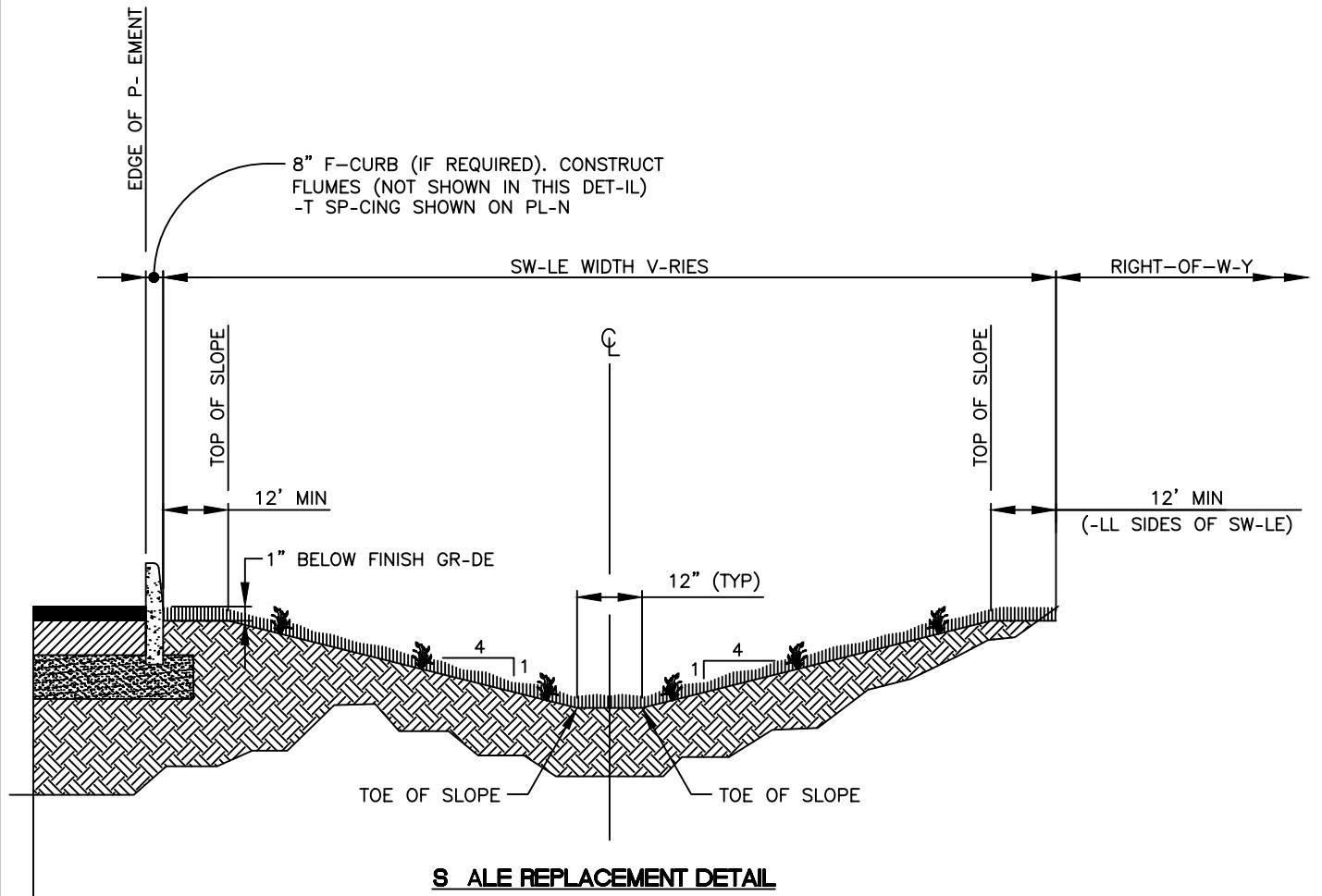
1. OUTF-LL DISCH-RGE PIPE SH-LL BE JOINED TO W-TER BODY WITH -N JURISDICTION-L -PPROVED TERMIN-L LENGTH OF CORRUG-TED PIPE.
2. CONCRETE COLL-R TO BE 2500 PSI - 28 D-Y STRENGTH.
3. M-RKER PIPE LOC-TED -T TERMIN-L END OF OUTF-LL PIPE SH-LL BE 2"Ø (OR L-RGER) PVC PIPE, CONCRETE FILLED, LOC-TED -DJ-CENT TO E-CH SIDE OF PIPE. - 6"x12" IDENTIFYING SIGN MOUNTED TO M-RKER PIPE IS OPTION-L.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



TYPICAL SUBMERGED OUTFALL

EFF. DATE
02/20
DETAIL. NO.
D-12



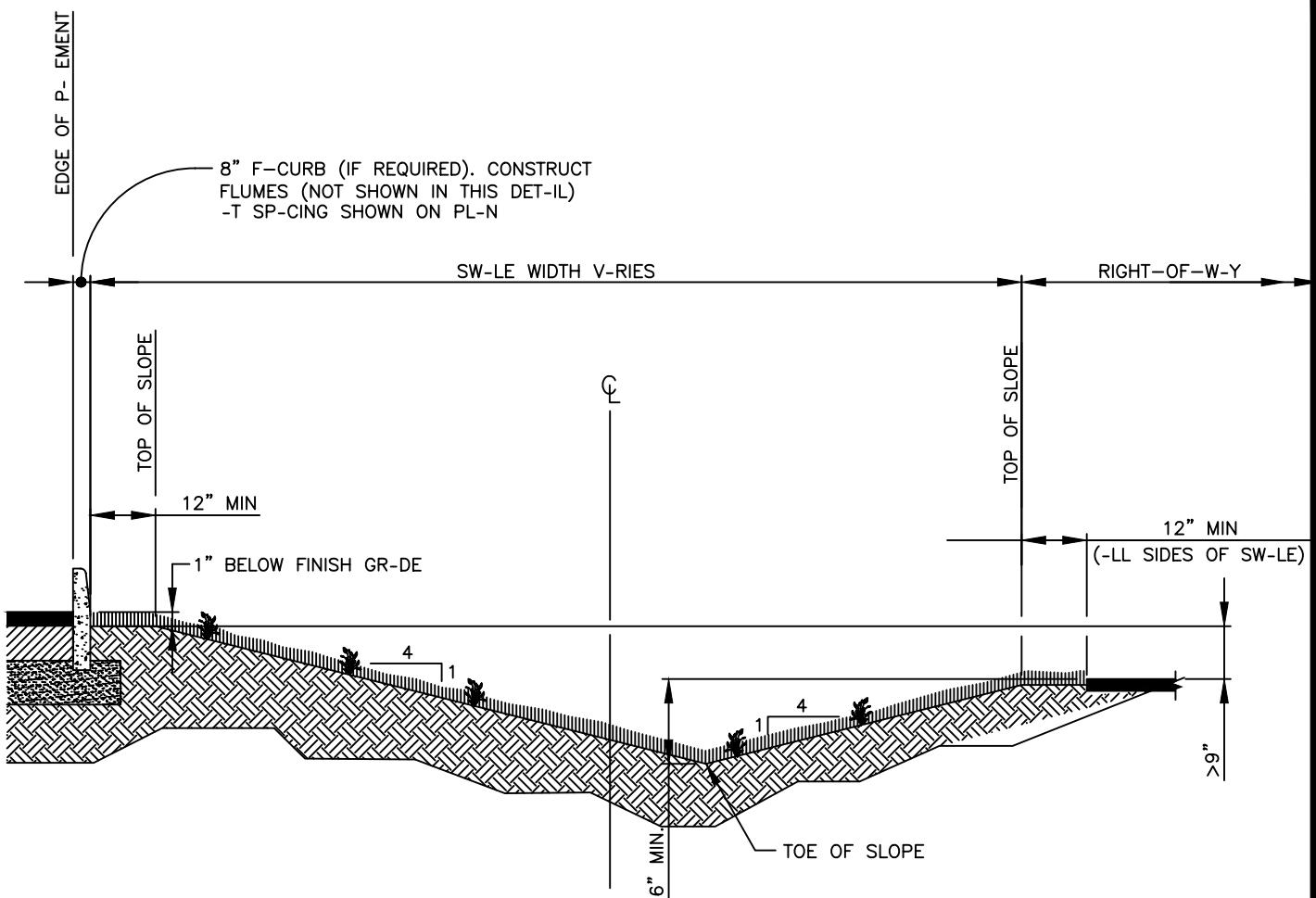
1. SOD SH-LL BE PL-CED PER SPECIFIC-TIONS.
2. ST-ND-RD M-XIMUM SW-LE DEPTH SH-LL BE 9" -ND MINIMUM 6".
3. OFFSET BOTTOM OF SW-LE -S REQUIRED. DEEPER SW-LES M-Y BE -PPROVED BY THE DEP-RTMENT FOR SPECIFIC SITE CONDITIONS.
4. 12" FL-T -T BOTTOM OF SW-LE M-Y BE OMITTED WHEN REQUIRED TO -TT-IN 4:1 SLOPES.
5. DEEPER SW-LES M-Y BE -PPROVED BY THE DEP-RTMENT FOR SPECIFIC SITE CONDITIONS.
6. SW-LES MUST BE INSPECTED -ND -PPROVED BY UTILITIES PRIOR TO INST-LLING SOD.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



SWALE REPLACEMENT DETAIL

EFF. DATE
02/20
DETAIL. NO.
D-13



OFFSET SWALE REPLACEMENT DETAIL

NOTES:

1. SOD SH-LL BE PL-CED PER SPECIFIC-TIONS.
2. M-XIMUM SW-LE DEPTH SH-LL BE 9" -ND MINIMUM 6".
3. PROVIDE POSITIVE SLOPE OFF THE RO-D, 12" MINIMUM FL-T.
4. M-INT-IN 4:1 SLOPES ON E-CH SIDE OF SW-LE.
5. 12" FL-T -T BOTTOM OF SW-LE M-Y BE OMITTED WHEN REQUIRED TO -TT-IN 4:1 SLOPES.
6. OFFSET BOTTOM OF SW-LE -S REQUIRED, DEEPER SW-LES M-Y BE -PPROVED BY THE DEP-RTMENT FOR SPECIFIC SITE CONDITIONS.
7. DET-IL -PPLIC-BLE FOR N-RRROW -RE-S -ND ELEV-TION DIFFERENCES BETWEEN SIDEW-LK -ND EDGE OF P- EMENT >9"
8. SW-LES MUST BE INSPECTED -ND -PPROVED BY UTILITIES PRIOR TO INST-LLING SOD.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



OFFSET SWALE REPLACEMENT DETAIL

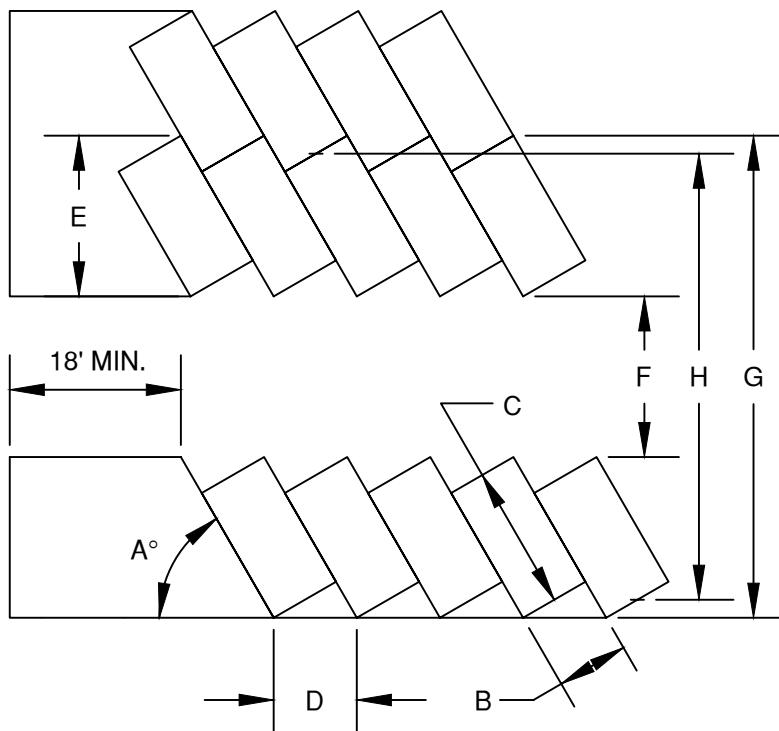
EFF. DATE
02/20
DETAIL. NO.
D-14

FOR ALL STALLS				
A	B	C	D	E
0°	9'-6"	25'-0"	25'-0"	9'-6"
45°	9'-6"	18'-6"	13'-6"	19'-10"
60°	9'-6"	18'-6"	11'-0"	20'-9"
75°	9'-6"	18'-6"	9'-10"	20'-4"
90°	9'-6"	18'-6"	9'-6"	18'-6"

LEGEND	
A	ANGLE
B	STALL WIDTH
C	STALL LENGTH
D	CURB LENGTH
E	STALL DEPTH
F	AISLE WIDTH
G	WALL TO WALL WIDTH
H	INTERLOCK TO INTERLOCK WIDTH

FOR ALL OTHER DIMENSIONS												
STALLS ON BOTH SIDES				STALLS ON ONE SIDE ONLY								
ONE WAY TRAFFIC		TWO WAY TRAFFIC		ONE WAY TRAFFIC		TWO WAY TRAFFIC						
A	F	G	H	F	G	H	F	G	H	F	G	
0°	12'-0"	31'-0"	31'-0"	24'-0"	43'-0"	43'-0"	12'-0"	21'-6"	21'-6"	24'-0"	33'-6"	33'-6"
45°	20'-0"	59'-7"	52'-11"	24'-3"	63'-10"	57'-2"	20'-0"	39'-10"	33'-1"	24'-3"	44'-1"	37'-4"
60°	22'-0"	63'-7"	58'-9"	24'-6"	66'-1"	61'-4"	22'-0"	42'-9"	38'-0"	24'-6"	45'-3"	40'-6"
75°	24'-0"	64'-8"	62'-3"	24'-9"	65'-5"	62'-11"	24'-0"	44'-4"	41'-10"	24'-9"	45'-1"	42'-7"
90°	25'-0"	62'-0"	62'-0"	25'-0"	62'-0"	62'-0"	25'-0"	43'-6"	43'-6"	25'-0"	43'-6"	43'-6"

NOTE: ALL DIMENSIONS ARE MINIMUM.



BOYNTON BEACH ENGINEERING STANDARD DETAIL



PARKING STALL & AISLE DIMENSIONS (STANDARD)

EFF. DATE
02/20

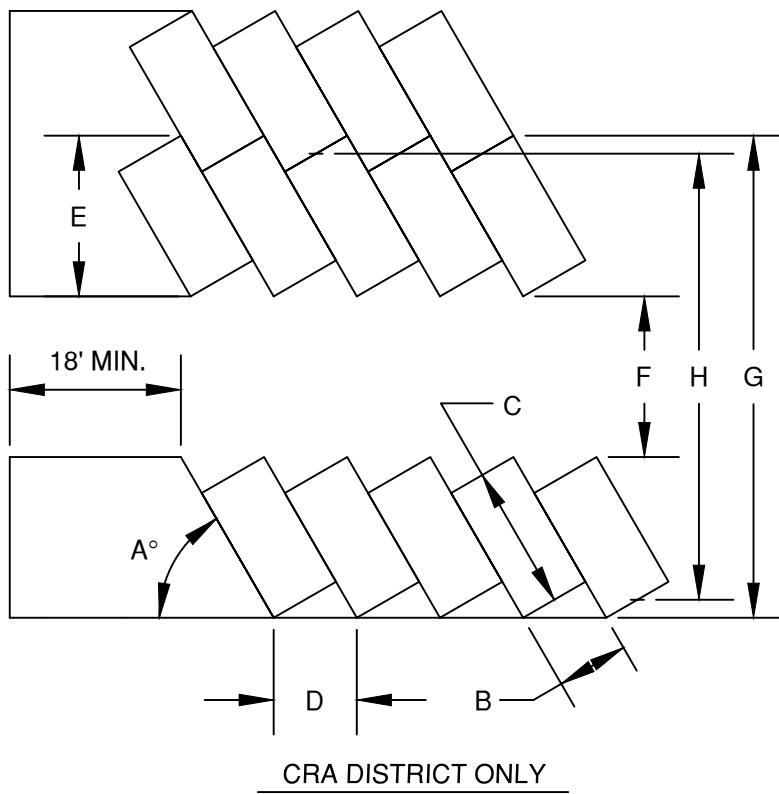
DETAIL. NO.
K-1

FOR ALL STALLS				
A	B	C	D	E
0°	9'-0"	25'-0"	25'-0"	9'-0"
45°	9'-0"	18'-0"	12'-9"	19'-1"
60°	9'-0"	18'-0"	10'-5"	20'-1"
75°	9'-0"	18'-0"	9'-4"	19'-9"
90°	9'-0"	18'-0"	9'-0"	18'-0"

LEGEND	
A	ANGLE
B	STALL WIDTH
C	STALL LENGTH
D	CURB LENGTH
E	STALL DEPTH
F	AISLE WIDTH
G	WALL TO WALL WIDTH
H	INTERLOCK TO INTERLOCK WIDTH

FOR ALL OTHER DIMENSIONS												
STALLS ON BOTH SIDES				STALLS ON ONE SIDE ONLY								
ONE WAY TRAFFIC		TWO WAY TRAFFIC		ONE WAY TRAFFIC		TWO WAY TRAFFIC						
A	F	G	H	F	G	H	F	G	H	F	G	
0°	12'-0"	30'-0"	30'-0"	24'-0"	42'-0"	42'-0"	12'-0"	21'-0"	21'-0"	24'-0"	33'-0"	33'-0"
45°	20'-0"	58'-2"	51'-10"	24'-0"	62'-2"	55'-10"	20'-0"	39'-1"	32'-9"	24'-0"	43'-1"	36'-9"
60°	22'-0"	62'-2"	57'-8"	24'-0"	64'-2"	59'-8"	22'-0"	42'-1"	37'-7"	24'-0"	44'-1"	39'-7"
75°	24'-0"	63'-5"	61'-1"	24'-0"	63'-5"	61'-1"	24'-0"	43'-9"	41'-5"	24'-0"	43'-9"	41'-5"
90°	24'-0"	60'-0"	60'-0"	24'-0"	60'-0"	60'-0"	24'-0"	42'-0"	42'-0"	24'-0"	42'-0"	42'-0"

NOTE: ALL DIMENSIONS ARE MINIMUM.



CRA DISTRICT ONLY

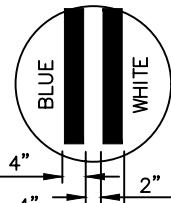
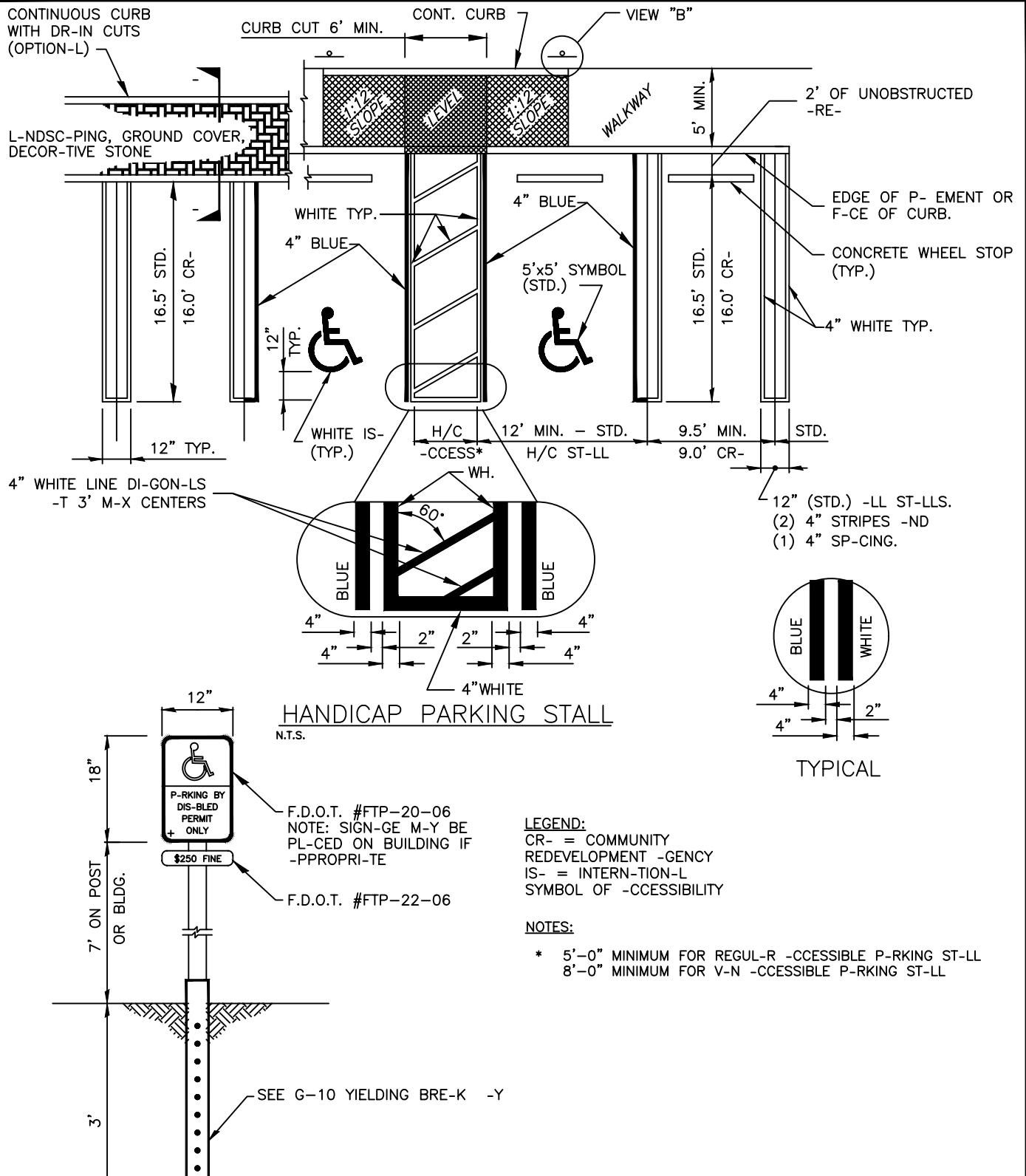
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PARKING STALL & AISLE DIMENSIONS
(CRA ONLY)

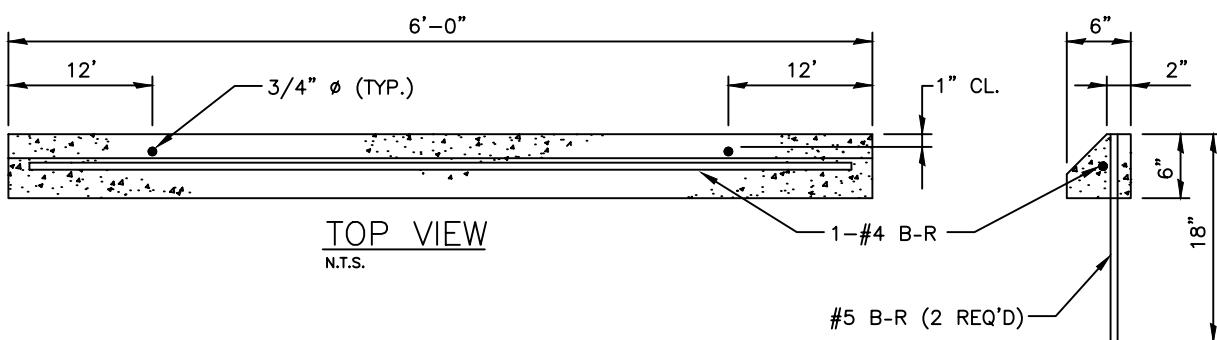
EFF. DATE
02/20

DETAIL. NO.
K-2



NOTES:

1. REFER TO LDR P-RT III -L-ND DEVELOPMENT REGUL-TION FOR COMPLETE DET-ILS.
2. -LL P-RKING ST-LLS SH-LL BE DOUBLE STRIPED -ND -LL STRIPING SH-LL BE FOUR (4) INCHES WIDE.
3. H-NDIC-P -CCESSW-Y STRIPING SH-LL BE L-ID OUT ON 60° -T 4' ON CENTER -S ME-SURED -LONG THE -CCESSW-Y.
4. P-INT SH-LL BE -PPLIED -T - R-TE THICK ENOUGH TO PROVIDE SOLID WHITE/BLUE/BL-CRK LINES WITH NO LIGHT SPOTS OR P-INT SKIPS (15 MILS MIN.).
5. P-RKING ST-LL -RE-S SH-LL H- E - MIN. OF 6" OF B-SE COMP-CTED TO 98% DRY DENSITY PER -SHTO T-180 SPEC. -ND - MINIMUM OF 1" OF TYPE S-III P- EMENT.



CONCRETE WHEEL STOP

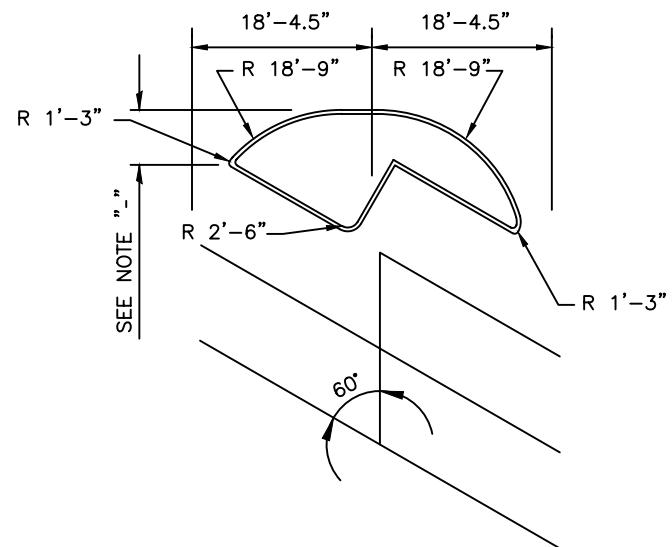
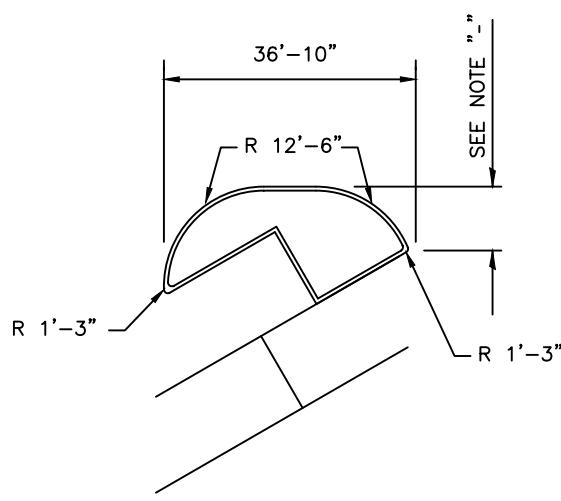
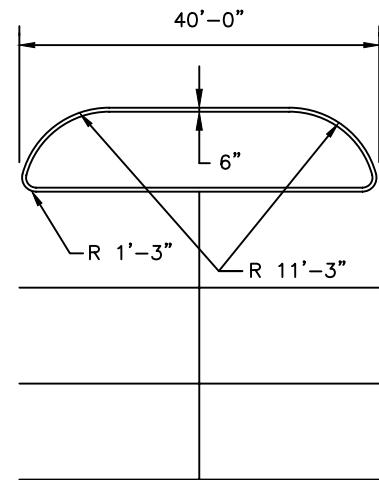
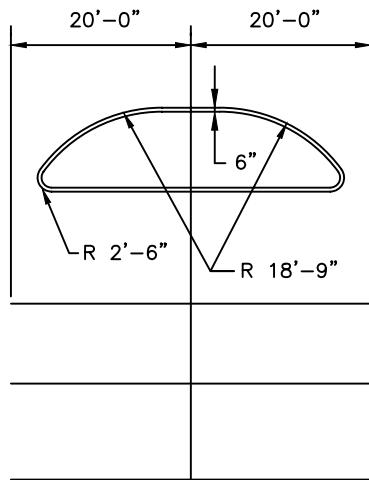
(SHEET 2 OF 2)

BOYNTON BEACH ENGINEERING STANDARD DETAIL



HANDICAP PARKING, STALLS AND DETAILS

EFF. DATE
02/20
DETAIL. NO.
K-4



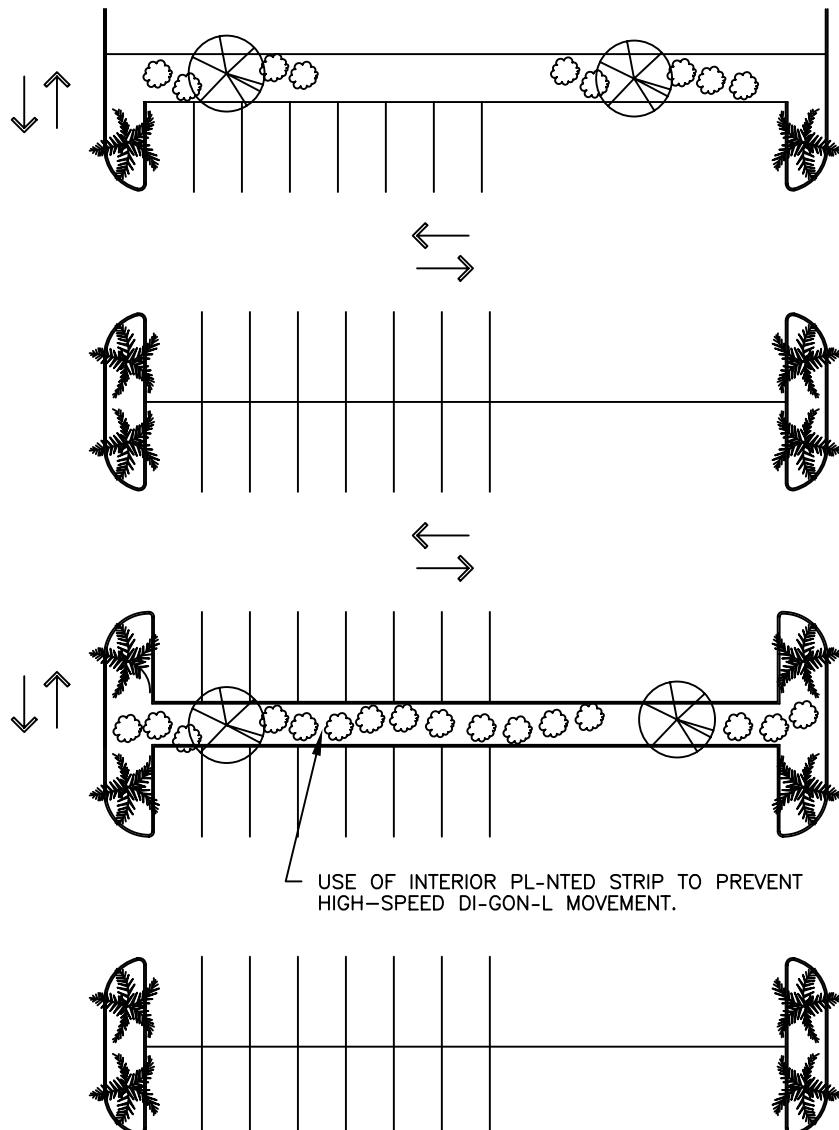
NOTE:

"-" PROVIDE 20 FEET OF UNOBSTRUCTED SP-CE BETWEEN INGRESS END,
P-RKING SP-CE -ND -CESS -ISLE.

BOYNTON BEACH ENGINEERING STANDARD DETAIL

PARKING AREA - TERMINAL ISLANDS

EFF. DATE 02/20
DETAIL. NO. K-5

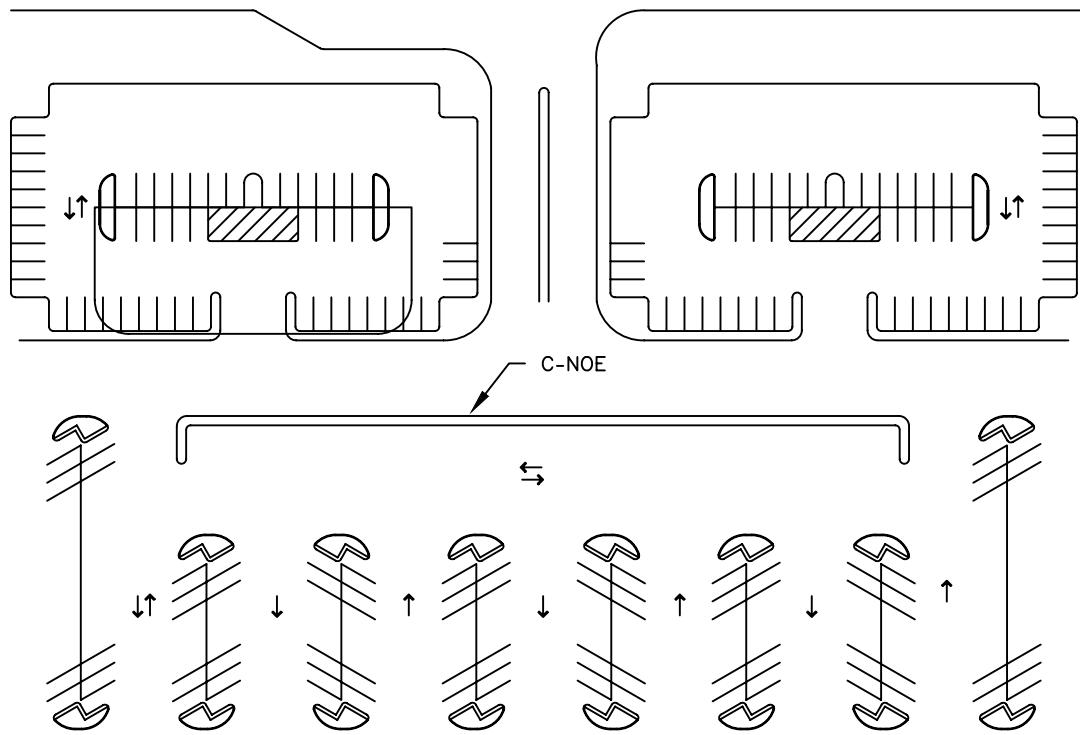


NOTE: NO MORE THAN TWO ROWS OF PARKING WITHOUT A LANDSCAPE STRIP.

BOYNTON BEACH ENGINEERING STANDARD DETAIL

PARKING AREA - LANDSCAPE STRIPS

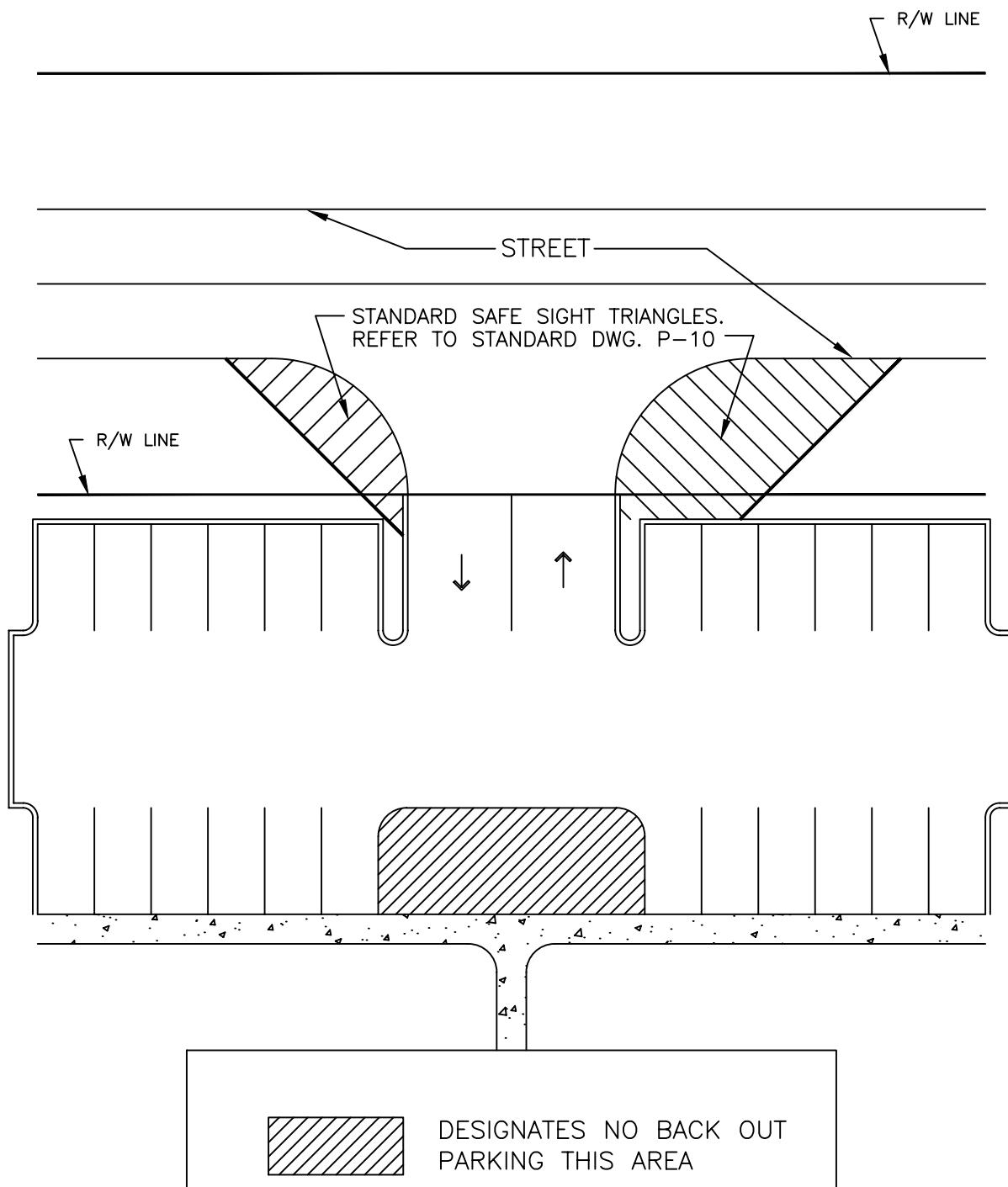
EFF. DATE
02/20
DETAIL. NO.
K-6



BOYNTON BEACH ENGINEERING STANDARD DETAIL

PARKING AREA - EXAMPLE OF "CANOE"

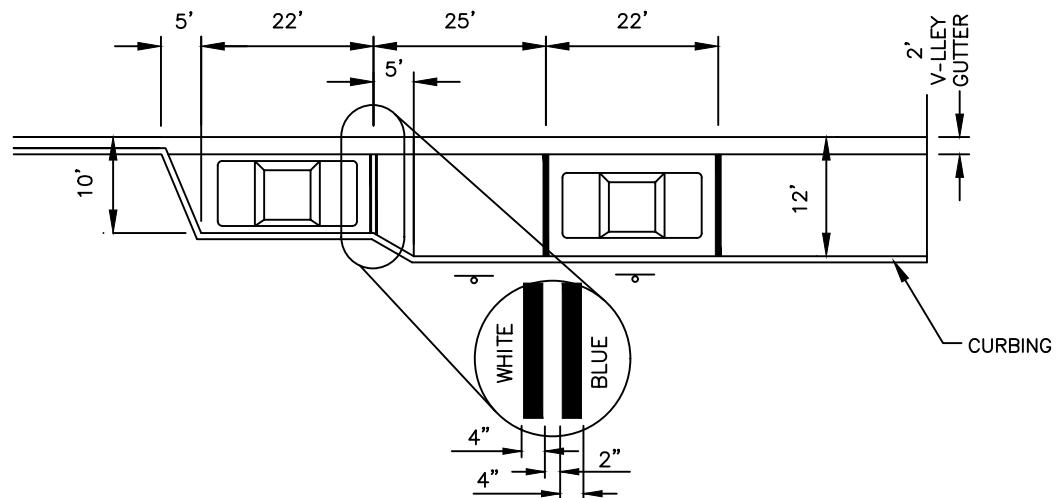
EFF. DATE
02/20
DETAIL. NO.
K-7



BOYNTON BEACH ENGINEERING STANDARD DETAIL

PARKING AREA - RESTRICTED PARKING AREA

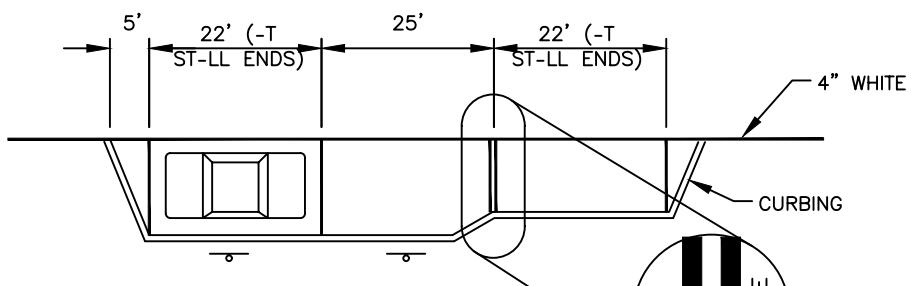
EFF. DATE
02/20
DETAIL. NO.
K-8



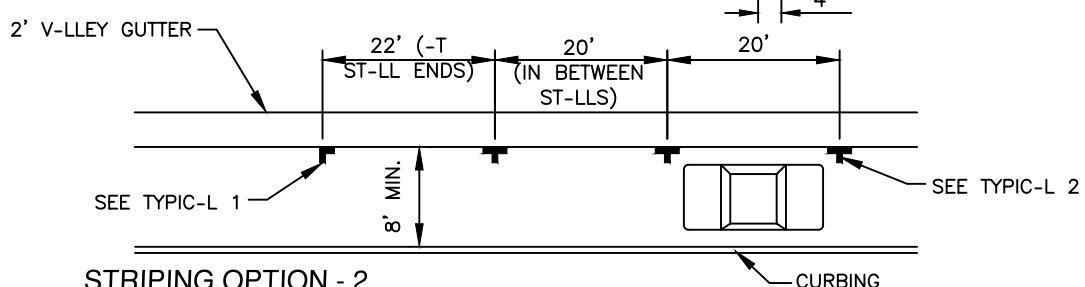
DIMENSIONAL REQUIREMENTS

NOTE:

HC P-R-LLEL SP-CES SH-LL BE 22 FT LONG. -LL OTHERS SH-LL BE 20 FEET.



STRIPING OPTION - 1



STRIPING OPTION - 2



TYPICAL 1

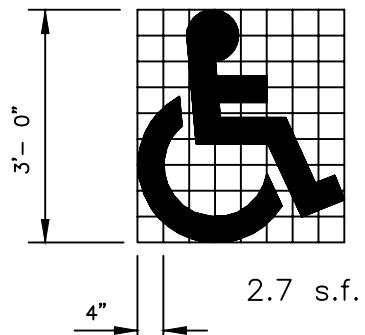
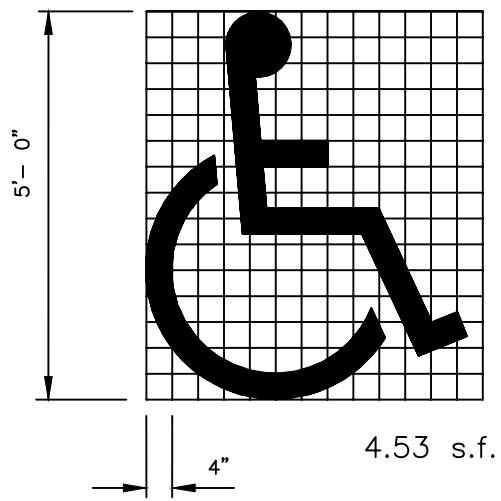
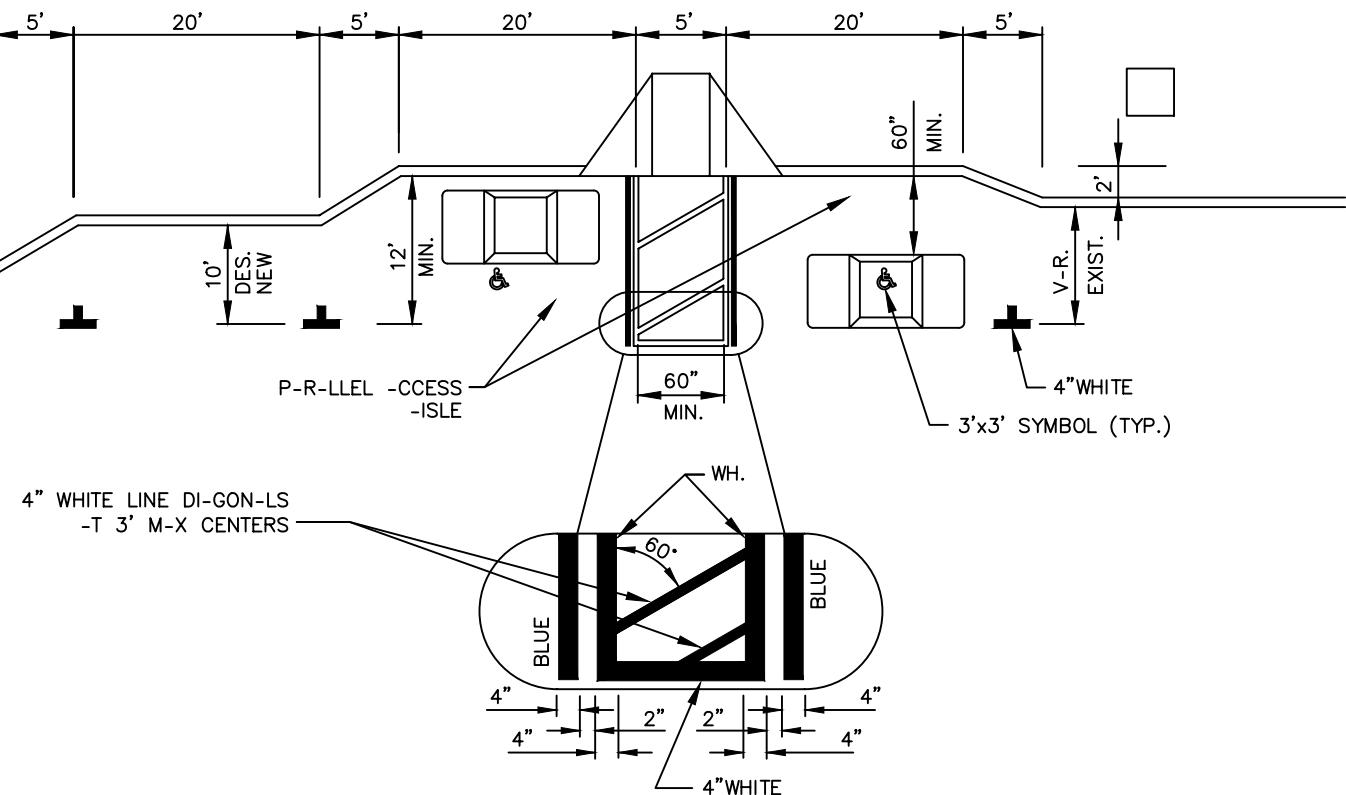
TYPICAL 2

BOYNTON BEACH ENGINEERING STANDARD DETAIL

STREET PARALLEL HANDICAP PARKING STANDARD AND MARKING OPTIONS

EFF. DATE
02/20

DETAIL. NO.
K-9A



THE SYMBOL SH-LL BE 3 OR 5 FT. HIGH -ND WHITE IN COLOR.

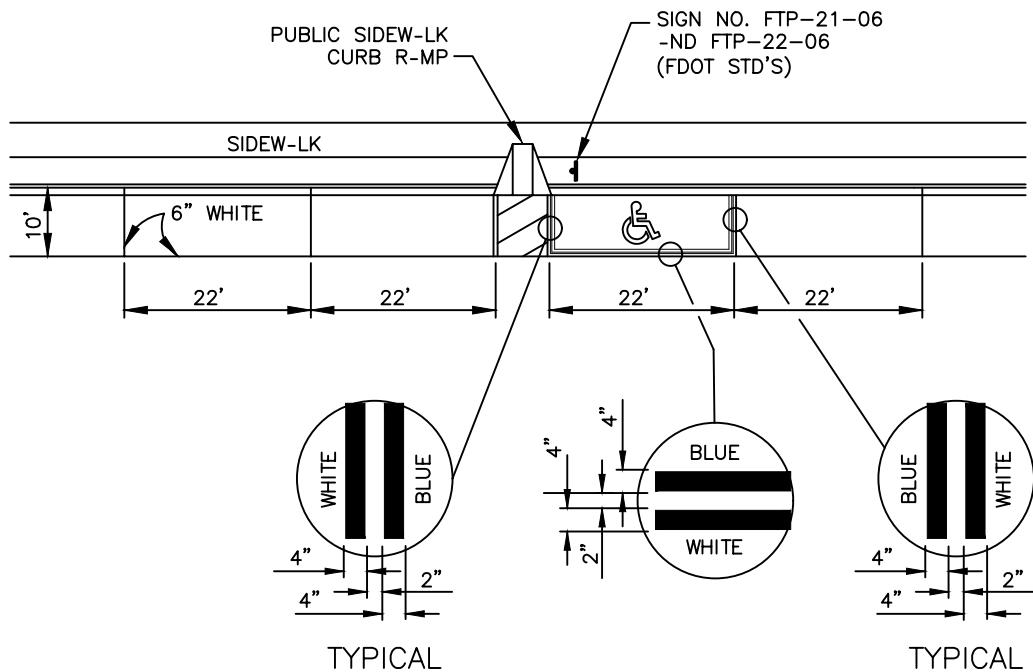
”INTERNATIONAL SYMBOL OF ACCESSIBILITY”

BOYNTON BEACH ENGINEERING STANDARD DETAIL

STREET PARALLEL HANDICAP PARKING
STANDARD AND MARKING AREA

EFF. DATE
02/20

DETAIL. NO.
K-9B



NOTES:

1. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
2. AN ACCESS AISLE IS REQUIRED FOR EACH SPACE WHEN PARALLEL PARKING IS USED.
3. CRITERIA FOR PAVEMENT MARKINGS ONLY, NOT PUBLIC SIDEWALK CURB RAMP LOCATIONS. FOR RAMP LOCATIONS REFER TO PLANS.
4. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595A.
5. THE FTP-22-06 PANEL SHALL BE MOUNTED BELOW THE FTP-22-06 SIGN.

PAVEMENT MARKING FOR PUBLIC
SIDEWALK CURB RAMPS IN PARALLEL AREAS

BOYNTON BEACH ENGINEERING STANDARD DETAIL

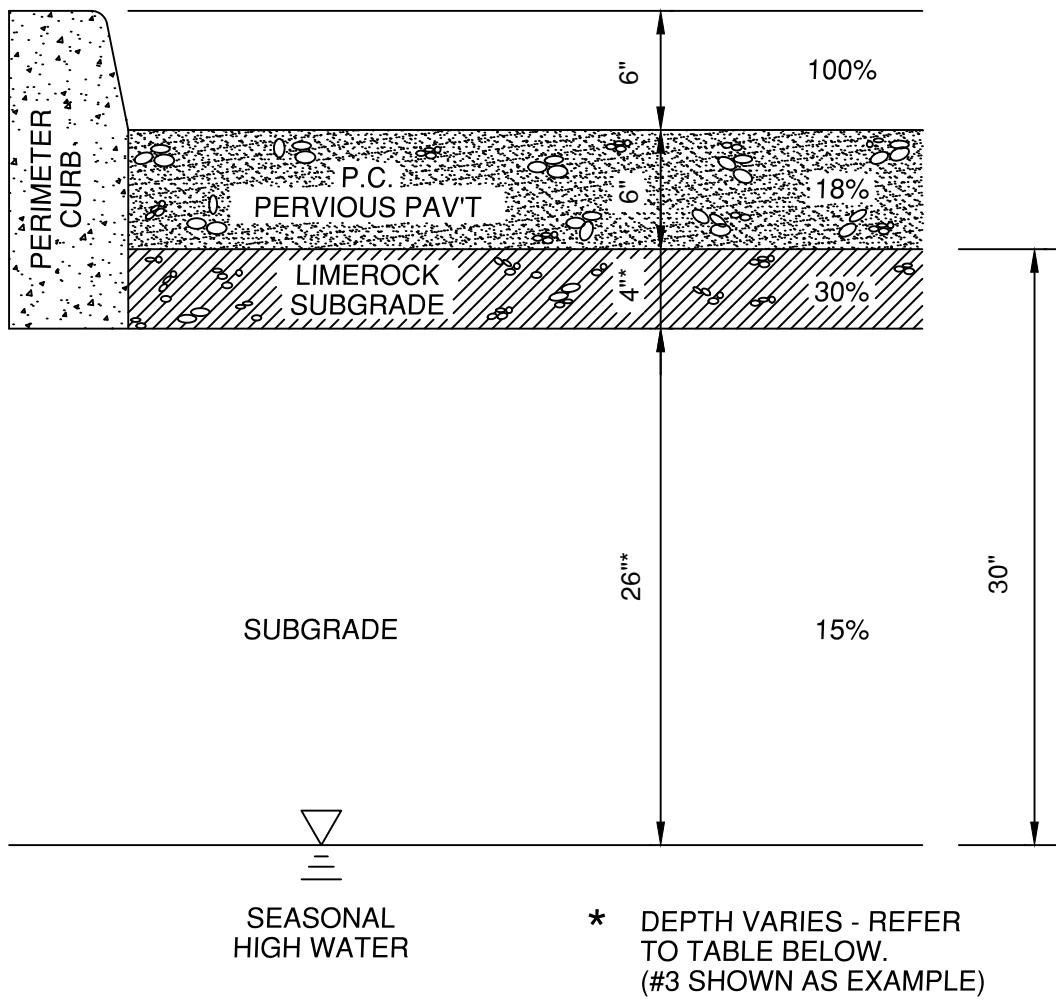


STREET PARALLEL HANDICAP PARKING
STANDARD AND MARKING OPTIONS

EFF. DATE
02/20

DETAIL. NO.
K-9C

ILLUSTRATED
VOID PCT.



DESIGN BASE VS. SUBBASE THICKNESS
(TYPICAL EXAMPLE)

NO.	P.C. PERVIOUS PVMT. (IN INCHES)	LIMESTONE BASE (IN INCHES)	SUBGRADE (IN INCHES)
1	6	0	30
2	6	2	28
3	6	4	26
4	6	6	24
5	6	8	22
6	6	10	20

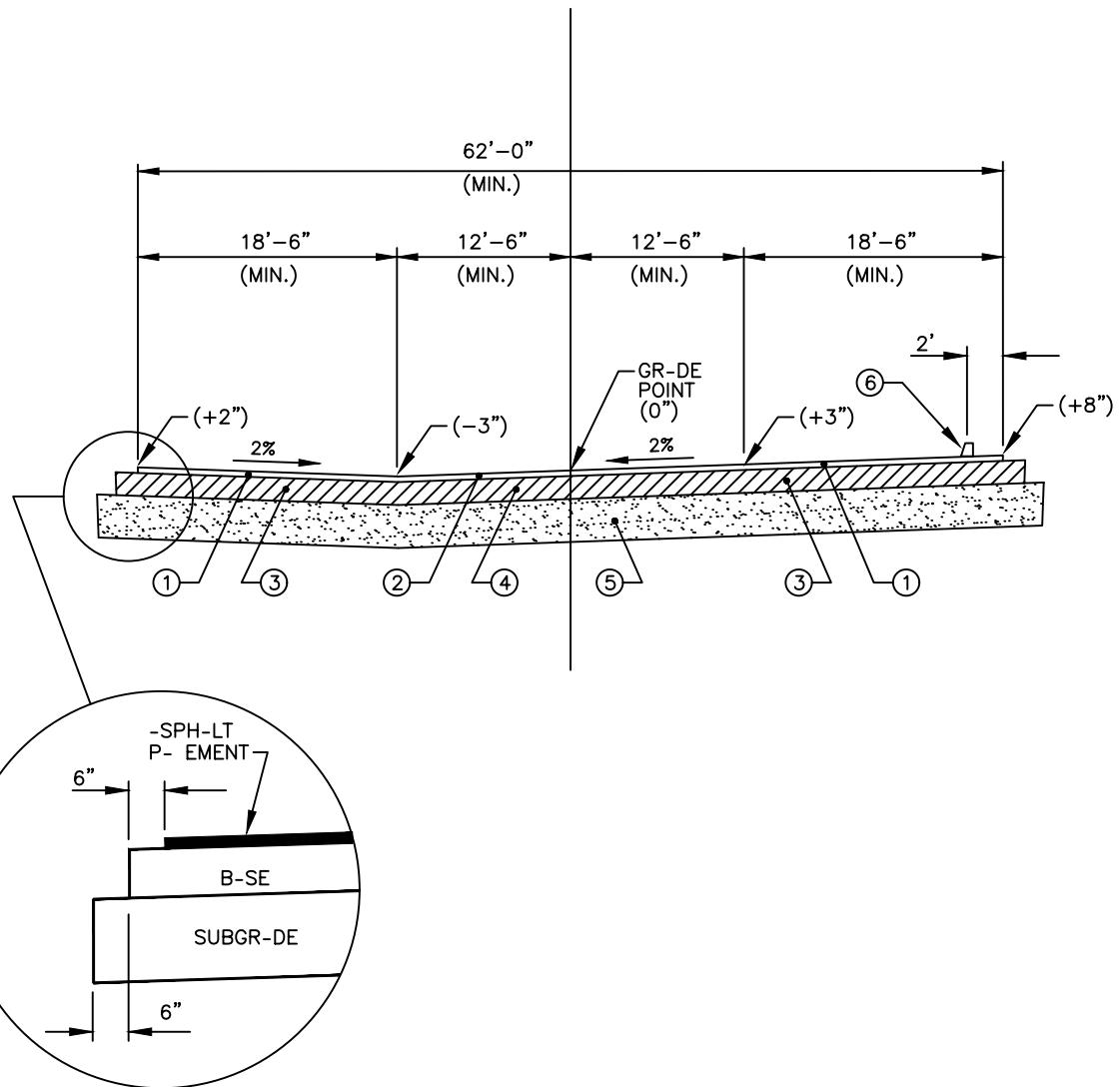
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PORTLAND CEMENT PERVIOUS
PAVEMENT LAYER DESIGN SECTION

EFF. DATE
02/20

DETAIL. NO.
K-10



LEGEND

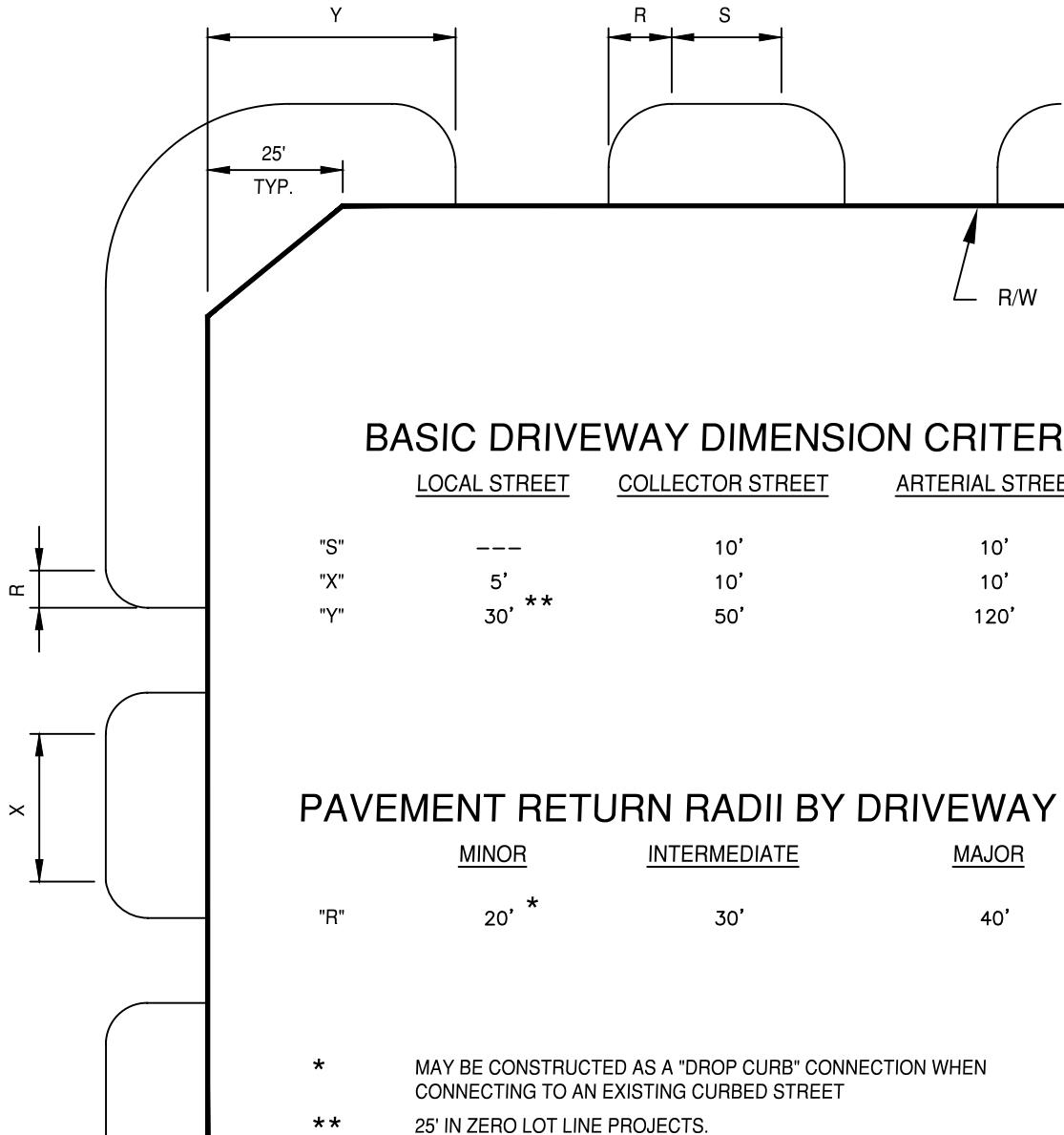
- ① P- EMENT SURF-CE: 1", TYPE S-3 OR EQUIV-LENT.
- ② P- EMENT SURF-CE: 1-1/2", TYPE S-3 OR EQUIV-LENT.
- ③ B-SE COURSE: 6" SHELLROCK, COMP-CTED TO 98% M-X. DENSITY OR EQUIV-LENT.
- ④ B-SE COURSE: 8" SHELLROCK, COMP-CTED TO 98% M-X. DENSITY OR EQUIV-LENT.
- ⑤ SUBGR-DE: 12" COMP-CTED TO 98% M-X. DENSITY OF -SHTO T-180 SPECIFIC-TION.
- ⑥ CONCRETE WHEEL STOP, SEE ST-ND-RD DR- ING K-4.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



PARKING TRACT TYPICAL SECTION

EFF. DATE
02/20
DETAIL. NO.
K-11

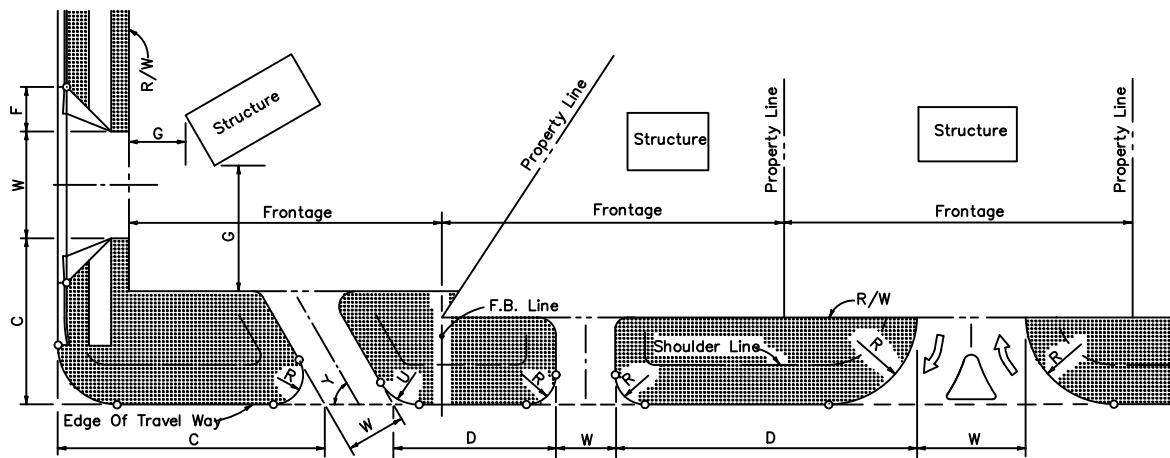


BOYNTON BEACH ENGINEERING STANDARD DETAIL



DRIVEWAY LOCATION CRITERIA

EFF. DATE
02/20
DETAIL. NO.
K-12



For Additional Information Refer To FDOT Rules Chapters 14-96 And 14-97.
SKETCH ILLUSTRATING DEFINITIONS

ELEMENT DESCRIPTION	URBAN (CURB & GUTTER)					
	1-500 Trips/Day or 1-50 Trips/Hour	501-2000 Trips/Day or 50-200 Trips/Hour	2000-4000 Trips/Day or 200-400 Trips/Hour			
	2-Way <input type="checkbox"/>	2-Way <input type="checkbox"/>	2-Way <input type="checkbox"/>			
CONNECTION WIDTH W	12' Min. 24' Max.	25' Min. 37' Max.	26' Min. 40' Max.			
FLARE (Drop Curb) F	10' Min.	10' Min.	N/A			
RETURNS (Radius) R & U	N/A	△	25' Min. 50' Std. 75' Max.			
ANGLE OF DRIVE Y		60°-90°	60°-90°			
DIVISIONAL ISLAND (Throat Median)		4'-22' Wide	4'-22' Wide			
SETBACK G	12' Min., All categories. <input checked="" type="checkbox"/>					
<ul style="list-style-type: none"> ◻ Street or road intersection design, with possible auxiliary lanes and channelization, may be necessary. Intersection design, with possible auxiliary lanes and channelization, should be considered for connections with more than 4000 trips/day. ◻ "2-Way" refers to one "in" movement and one "out" movement i.e. not exclusive left or right turn lanes on the connection. △ Small radii may be used in lieu of flares as approved by the Division. 						
DESIGN NOTE: 1-Way connections will be designed to effectively eliminate unpermitted movements.						

LEGEND

○	Return Radius Point Or Flare Point
▨	Buffer Areas
—	F.B. Line Frontage Boundary Line
W	Driveway Width
Y	Driveway Angle
C	Corner Clearance
G	Setback
R	Outside Radius
U	Inside Radius
D	Distance Between Connections
F	Flare
⊗	Not Applicable in CRA or Redevelopment Downtown Areas.

NOT INTENDED FOR FULL INTERSECTION DESIGN SUMMARY OF GEOMETRIC REQUIREMENTS FOR TURNOUTS

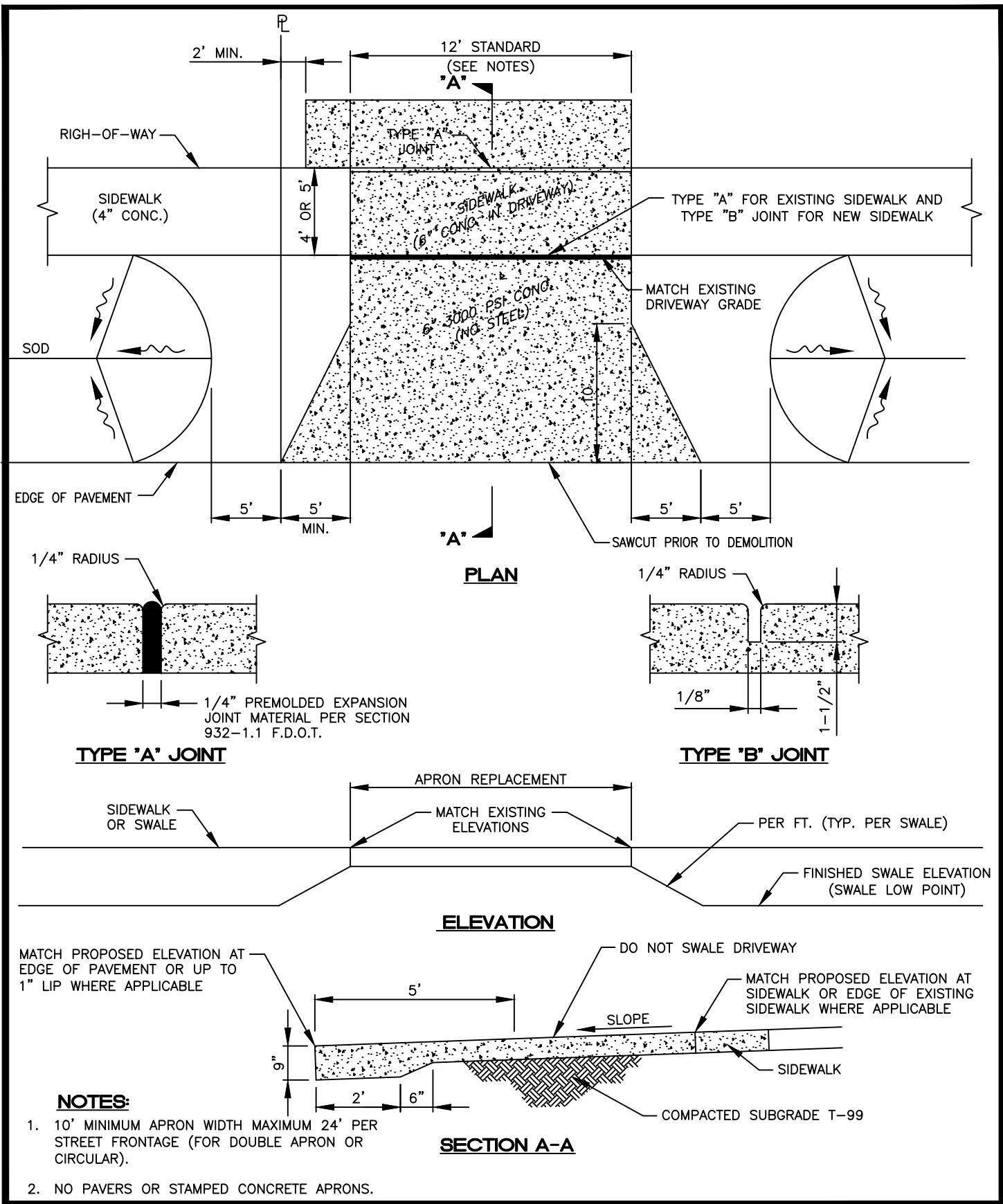
NOTE: REFER TO FDOT STANDARD INDEX 515 FOR GENERAL NOTES AND OTHER INFORMATION THAT MAY BE APPLICABLE IN DESIGN CONSIDERATIONS.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



COMMERCIAL DRIVEWAY SKETCHES

EFF. DATE
02/20
DETAIL. NO.
K-13



BOYNTON BEACH ENGINEERING STANDARD DETAIL



RESIDENTIAL DRIVEWAY SWALE SECTION
(CONCRETE)

EFF. DATE
02/20

DETAIL. NO.
K-14

ROADWAY DESIGN CRITERIA							
RO-DW-Y TYPE	ROW WIDTH (MIN.)	NUMBER OF L-NES	P- EMENT WIDTH (MIN.)	LONG. GR-DE (%)	-SPH-LT THICKNESS TYPE S-1 OR TYPE 12.5 S-III (1 LIFT)	-SPH-LT THICKNESS TYPE S-1 OR TYPE 9.5 S-III (2 LIFT)	NOTES
-LLEY	20'	2	18'	0.40%-2.4%	1 1/4"	1 1/2"	(1)
M-RGIN-L -CESS	40'	2	22'-34'	0.32%-2.4%	1 1/4"	1 1/2"	-
LOC-L (CURB & GUTTER)	50'	2	22'	0.24%-2.4%	1 1/4"	1 1/2"	(2)
LOC-L (W/ SW-LES)	60'	2	22'	0.32%-2.4%	1 1/4"	1 1/2"	(2)
LOC-L (NON-RES.)*	50'	2	24'	0.24%-2.4%	1 1/2"	1 3/4"	(7)
COLLECTOR	80'	3 (MIN.)	36' (MIN.)	0.32%-2.4%	1 1/2"	1 3/4"	(2) (3)
-TERI-L	120'	5 (MIN.)	60' (MIN.)	0.24%-2.4%	1 3/4"	2"	(3)

REFER TO DET-IL # P-2 FOR P- EMENT COMPOSITIONS.

* USE ON LOC-L RESIDENTI-L STREETS WHERE THE -DT IS > 2000 TRIPS/D-Y, -ND ON -LL RET-IL/COMMERCIAL/INDUSTRI-L STREETS (RO-DW-YS).

NOTES:

1. -LLEYS -RE REQUIRED -LONG RE-R LOT LINES OF COMMERCIAL SUBDIVISIONS -ND -RE -LLOWED IN INDUSTRI-L SUBDIVISIONS. -LLEYS REQUIRE -N INVERTED CROWN W/ 3% CROSS (-DVERSE) SLOPE.
2. RIGHT-OF-W-Y M-Y BE REDUCED BY EIGHT (8) FEET IF -DEQU-TE PEDESTRI-N CIRCUL-TION IS PROVIDED BY BICYCLE/PEDESTRI-N P-THS LOC-TED OUTSIDE THE RIGHT-OF-W-Y.
3. THIS M-Y INCLUDE TURNING L-NES.
4. REFER TO CITY'S L-ND DEVELOPMENT REGUL-TIONS (CH-APTER 4, -RTICLE V111, SECTION 3.C) FOR DET-ILED RO-DW-Y DEVELOPMENT CRITERI- NOT DEFINED ON THESE DET-ILS.
5. DESIGN -ND CONSTRUCTION IS INTENDED TO FOLLOW THE CRITERI- OF THE F.D.O.T. "ST-ND-RDS FOR RO-D -ND BRIDGE CONSTRUCTION", CURRENT EDITION, CITING THE "RO-DW-Y -ND TR-FFIC DESIGN ST-ND-RDS" CURRENT EDITION WHERE -PPLIC-BLE.
6. SIDEW-LKS SH-LL BE CONSTRUCTED ON BOTH SIDES OF -LL LOC-L -ND COLLECTOR STREETS, -ND ON ONE SIDE OF THE M-RGIN-L -CESS STREETS.
7. IN COMMERCIAL -ND INDUSTRI-L SUBDIVISIONS, -LL LOC-L STREETS SH-LL BE DESIGNED IN -CCORD-NCE WITH THE REQUIREMENTS FOR - COLLECTOR STREET.
8. -LL INTERSECTING STREET R/W LINES SH-LL BE JOINED BY - LONG CHORD WITH - MINIMUM R-DIUS OF 25 FEET.
9. RO-D GR-DES SH-LL BE SHOWN ON THE DEVELOPMENT PL-NS BY THE DIRECTION-L, PERCENT (%) F-LL, -ND WITH - CENTERLINE LINE-L DIST-NCE BETWEEN CONTROL POINTS.
10. SP-12.5 -ND SP-9.5 M-Y BE SUBSTITUTED FOR S-1 & S-III, RESPECTIVELY.
11. S-1 LIFT THICKNESS (PER FDOT SECTION 334) SP-9.5 MINIMUM 3/4" -ND - M-XIMUM OF 1-1/4"
12. S-III LIFT THICKNESS (PER FDOT SECTION 334) SP-12.5 MINIMUM 1-1/4" -ND - M-XIMUM OF 2-1/2"

BOYNTON BEACH ENGINEERING STANDARD DETAIL



ROADWAY DESIGN CRITERIA

EFF. DATE

02/20

DETAIL. NO.

P-1

TABLE OF MATERIALS AND CONSTRUCTION STANDARDS:
RESIDENTIAL ACCESS AND LOCAL STREETS

COMPONENT (1)	DESCRIPTION OF M-TERI-LS	CONSTRUCTION ST-ND-RDS MINIMUM IN PL-CE		NOTES
		THICKNESS (2)	METHOD (3)	
(A)	TYPE S-1 OR SP 12.5 -SPH-LTIC CONCRETE	1-1/4"	ONE (1) LIFT	
	TYPE S-3 OR SP-9.5 -SPH-LTIC CONCRETE	1-1/2"	TWO (2) EQU-L LIFTS	T-CK CO-T REQUIRED WITH MULTIPLE LIFTS
(B)	LIMEROCK	6"	COMP-CTED	
	SHELLROCK	8"	COMP-CTED	SEE DET-IL DR- INGS FOR PRIME CO-T NOT-TION
	CRUSHED CONCRETE	8"	COMP-CTED	
(C)	SUBGR-DE	12"	COMP-CTED	[3]
	SUBGR-DE	12"	ST-BILIZED TYPE B	[4]

KEY	
[1]	- = P- EMENT B = B-SE C = SUBGR-DE
[2]	-LL DIMENSIONS REFER TO COMP-CTED THICKNESS.
[3]	COMP-CTED TO -T LE-ST 98% M-XIMUM DENSITY PER -.-S.H.T.O. T-180 SPECIFIC-TION.
[4]	ST-BILIZE TO L.B.R. V-LUE OF 40 FOR LOC-L STREETS, -ND TO L.B.R. V-LUE OF 50 OR GRE-TER FOR HIGHER STREET CL-SSIFIC-TIONS.

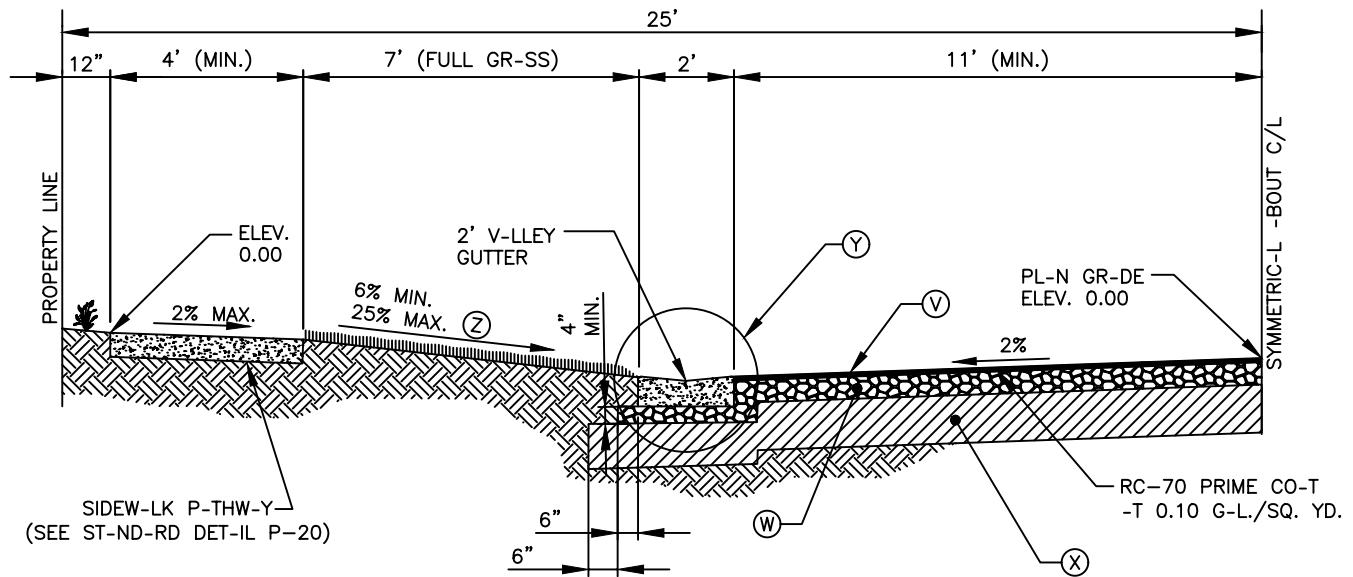
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PAVEMENT COMPOSITION
RESIDENTIAL ACCESS AND LOCAL STREETS

EFF. DATE
02/20

DETAIL. NO.
P-2



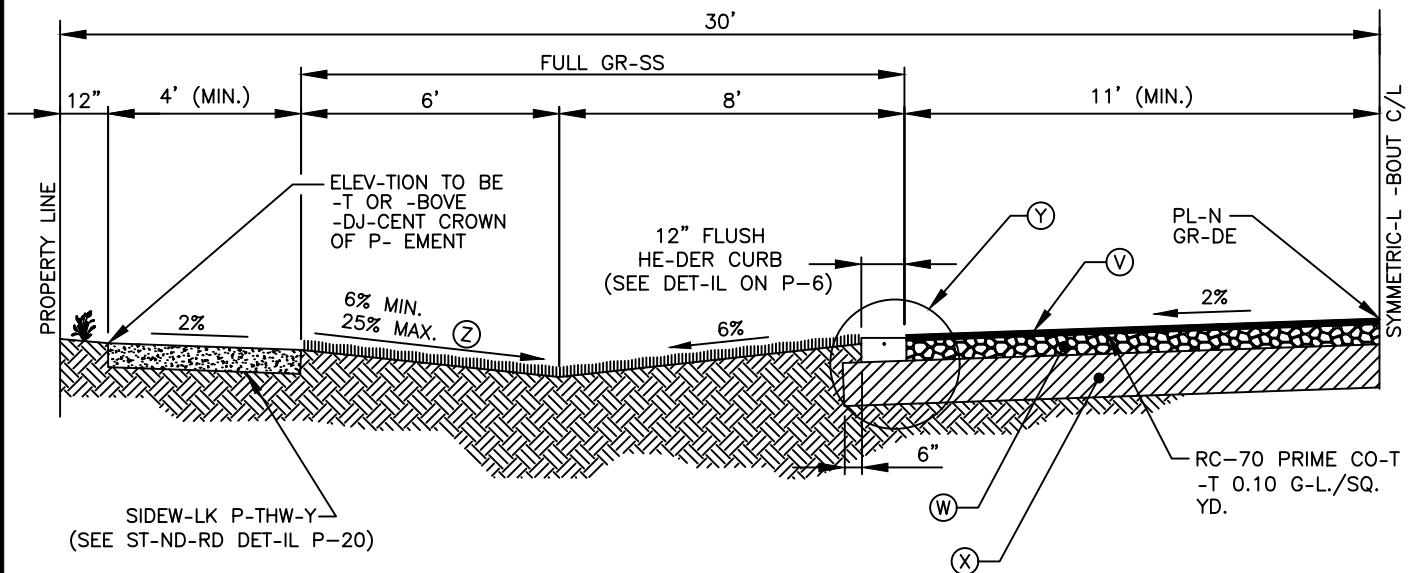
- (V) WE-RING SURF-CE: SEE T-BLE ON ST-ND-RD DET-ILS P-1 & P-2.
- (W) B-SE: SEE T-BLE ON ST-ND-RD DET-ILS P-1 & P-2.
- (X) SUBGR-DE: SEE T-BLE ON ST-ND-RD DET-ILS P-1 & P-2.
- (Y) SHOULDER -nd P- EMENT EDGE: SEE ST-ND-RD DET-ILS P-5 & P-6.
- (Z) NOT TO EXCEED 10% IN LOT -CESS & DRIVEW-Y -RE-S.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



TYPICAL ROADWAY SECTION
50' LOCAL STREET

EFF. DATE 02/20
DETAIL. NO. P-3



- (V) WE-RING SURF-CE: SEE T-BLE ON ST-ND-RD DET-ILS P-1 & P-2.
- (W) B-SE: SEE T-BLE ON ST-ND-RD DET-ILS P-1 & P-2.
- (X) SUBGR-DE: SEE T-BLE ON ST-ND-RD DET-ILS P-1 & P-2.
- (Y) SHOULDER -ND P- EMENT EDGE: SEE ST-ND-RD DET-ILS P-5 & P-6.
- (Z) NOT TO EXCEED 10% IN LOT -CESS & DRIVEW-Y -RE-S.

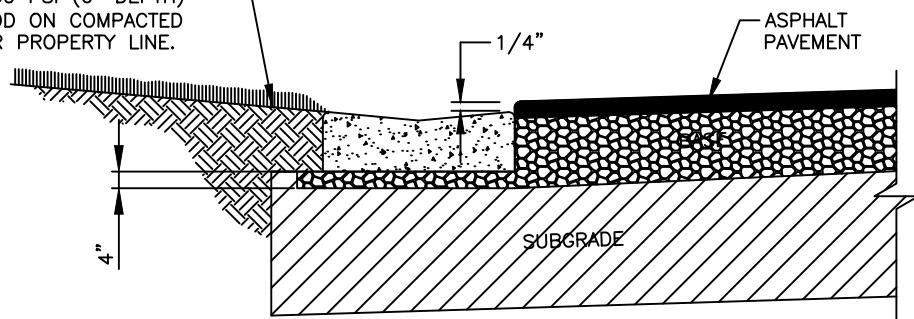
BOYNTON BEACH ENGINEERING STANDARD DETAIL



TYPICAL ROADWAY SECTION
60' LOCAL STREET

EFF. DATE
02/20
DETAIL. NO.
P-4

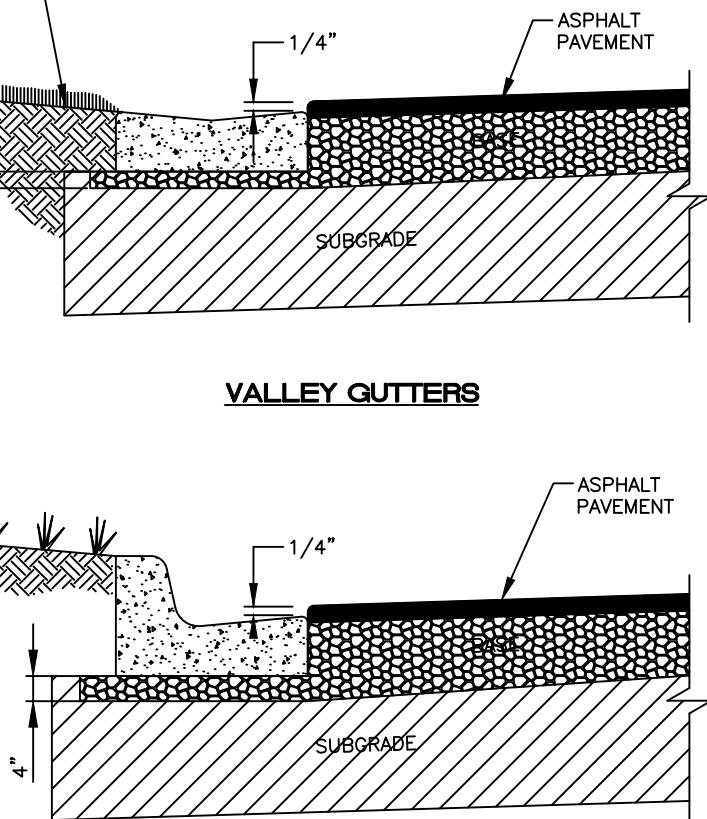
SEED & MULCH ON COMPACTED SHOULDER TO PATHWAY OR PROPERTY LINE. STABILIZE AS NEEDED TO MIN. FBV OF 50 PSI (6" DEPTH) (IF ALLOWED), OR FULL SOD ON COMPACTED SHOULDER TO PATHWAY OR PROPERTY LINE.



VALLEY GUTTERS

FULL SOD OR
SEED & MULCH
(IF ALLOWED)

COMPACTED BEHIND
CURB 2' MIN. TO
95% MAXIMUM
DENSITY

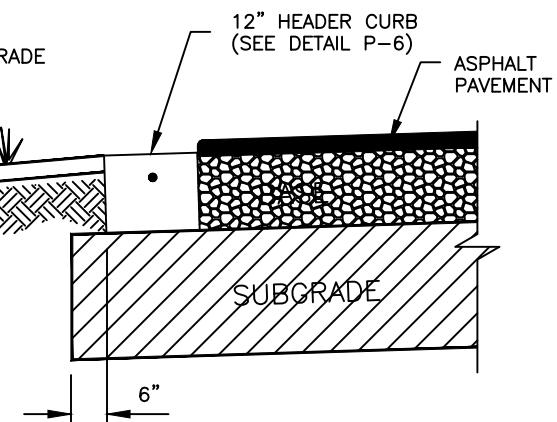


NON-MOUNTABLE CURB AND GUTTER

FULL SOD OR
SEED & MULCH
(IF ALLOWED)

GRADE 0.2' BELOW
PLAN GRADE FOR
SOD INSTALLATION

8' WIDE COMPACTED SHOULDER.
STABILIZED AS NEEDED TO MIN.
FBV OF 50 PSI (6" DEPTH)



SWALE

BOYNTON BEACH ENGINEERING STANDARD DETAIL



LOCAL STREET PAVEMENT EDGE DETAILS

EFF. DATE
02/20

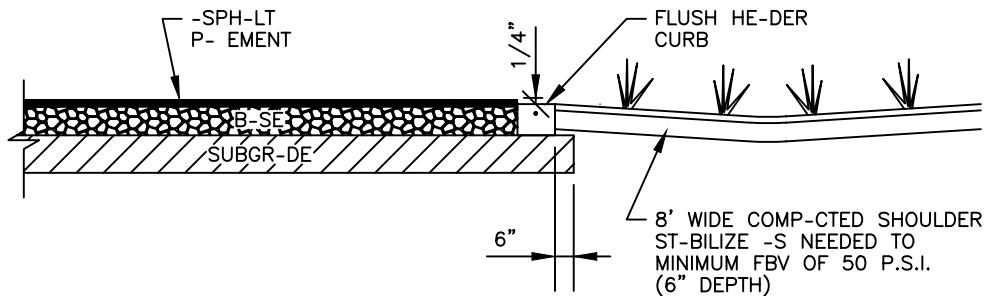
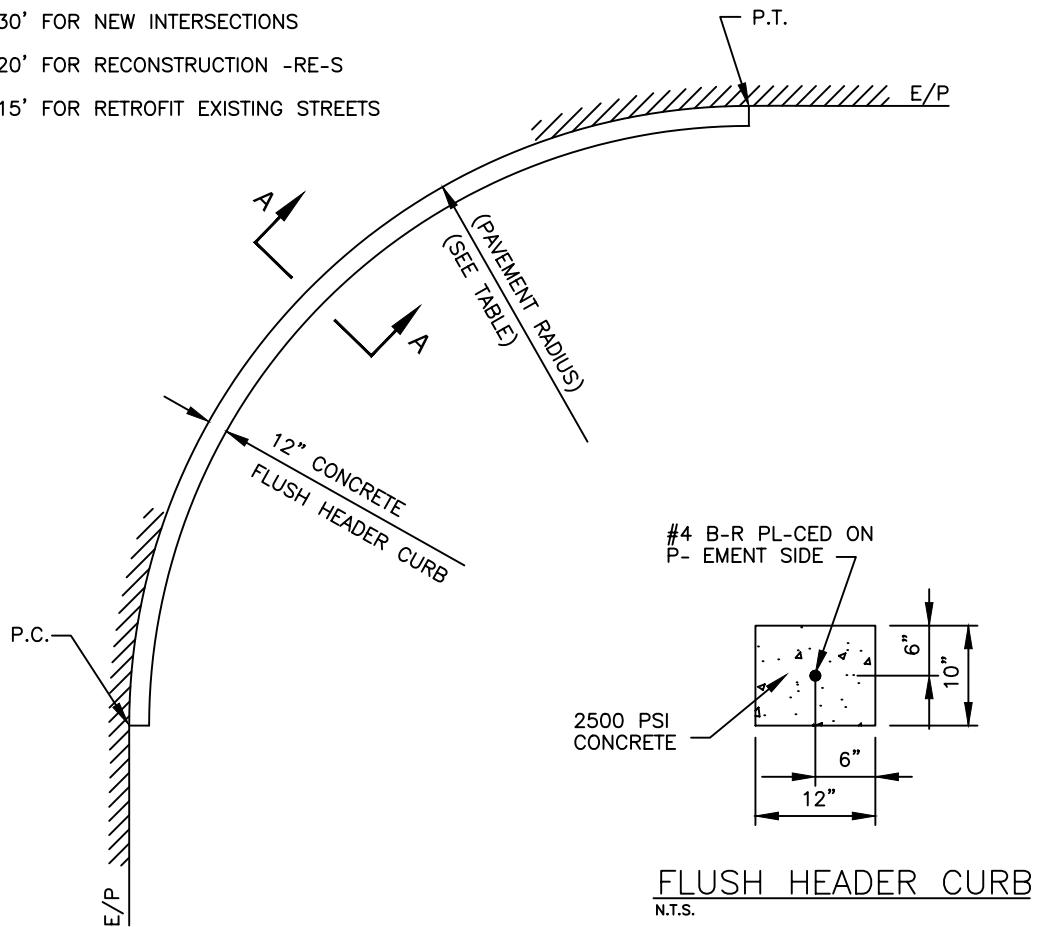
DETAIL. NO.
P-5

RADIUS TABLE

30' FOR NEW INTERSECTIONS

20' FOR RECONSTRUCTION -RE-S

15' FOR RETROFIT EXISTING STREETS



SECTION A-A

BOYNTON BEACH ENGINEERING STANDARD DETAIL



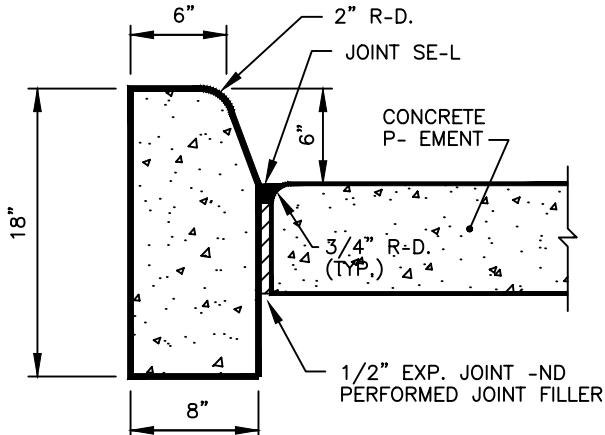
PAVEMENT EDGE DETAILS WITH
FLUSH HEADER CURB

EFF. DATE

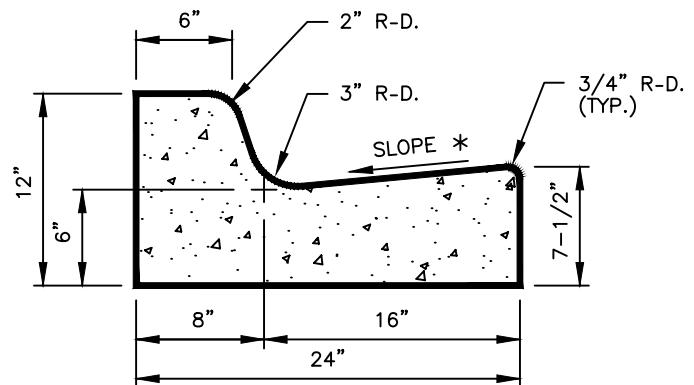
02/20

DETAIL. NO.

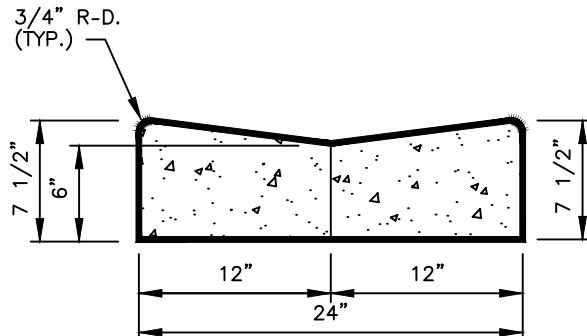
P-6



TYPE D CURB **



VERTICAL CURB & GUTTER



2' VALLEY GUTTER -
SYMMETRICAL

NOTES: * 1. WHEN USED ON HIGH SIDE OF RO-DW-Y'S, THE CROSS SLOPE OF THE GUTTER SH-LL M-TCH THE CROSS SLOPE OF THE -DJ-CENT P- EMENT -ND THE THICKNESS OF THE P- EMENT SIDE CUTTER SH-LL BE 6". USE 2500 PSI CONCRETE STRENGTH.

* * 2. FOR USE -DJ-CENT TO CONCRETE OF FLEXIBLE P- EMENT, CONCRETE SHOWN. EXP-NSION JOINT, PREFORMED JOINT FILLER -ND JOINT SEL-RE REQUIRED BETWEEN CURBS -ND CONCRETE P- EMENT ONLY.

3. GUTTERS SH-LL H- E 4" MIN B-SE ROCK SUPPORT W/12" SUBGR-DE (SEE DET-IL P-3)

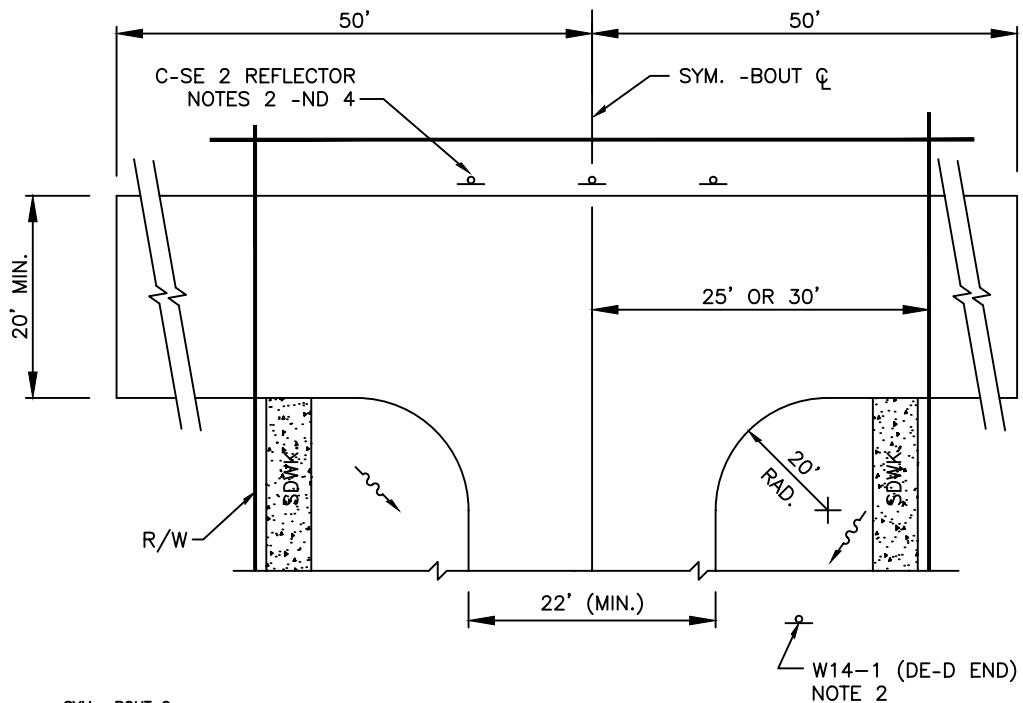
BOYNTON BEACH ENGINEERING STANDARD DETAIL



CURB & GUTTER

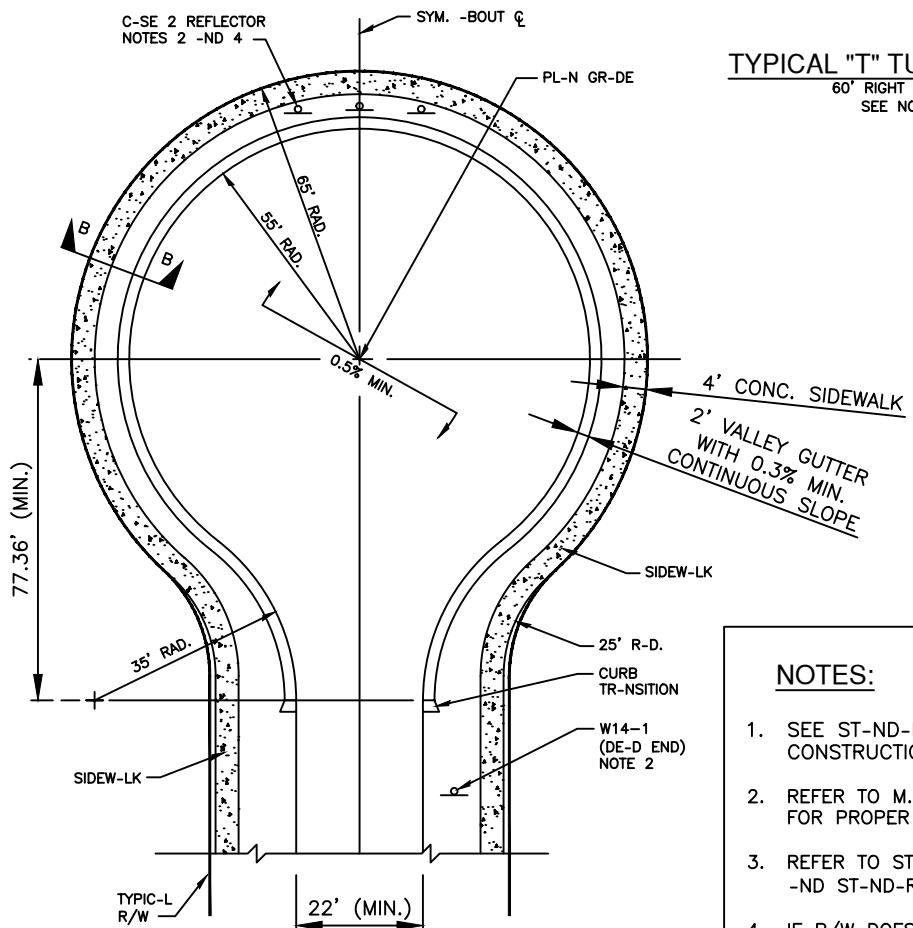
EFF. DATE
02/20

DETAIL. NO.
P-7



TYPICAL "T" TURN AROUND

60' RIGHT OF W-Y
SEE NOTE 1



TYPICAL CUL-DE-SAC

50' OR 60' RIGHT-OF-W-Y
SEE NOTE 1

NOTES:

1. SEE ST-ND-RD DET-ILS #P-1 & P-2 FOR RO-DW-Y CONSTRUCTION, M-TERI-LS, -ND SPECIFIC-TIONS.
2. REFER TO M.U.T.C.D. 2C.66 -ND F.D.O.T. STD. INDEX 17349 FOR PROPER SIGN-GE -ND LOC-TIONS.
3. REFER TO STD. DET-ILS #P-6 & 7 FOR CURB -ND GUTTER, -ND ST-ND-RD DET-ILS #P-20 FOR SIDEW-LK.
4. IF R/W DOES NOT CONTINUE, PROVIDE -DEQU-TE SETB-CK FOR GR-DING, GU-RDR-IL, -ND REFLECTORS.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



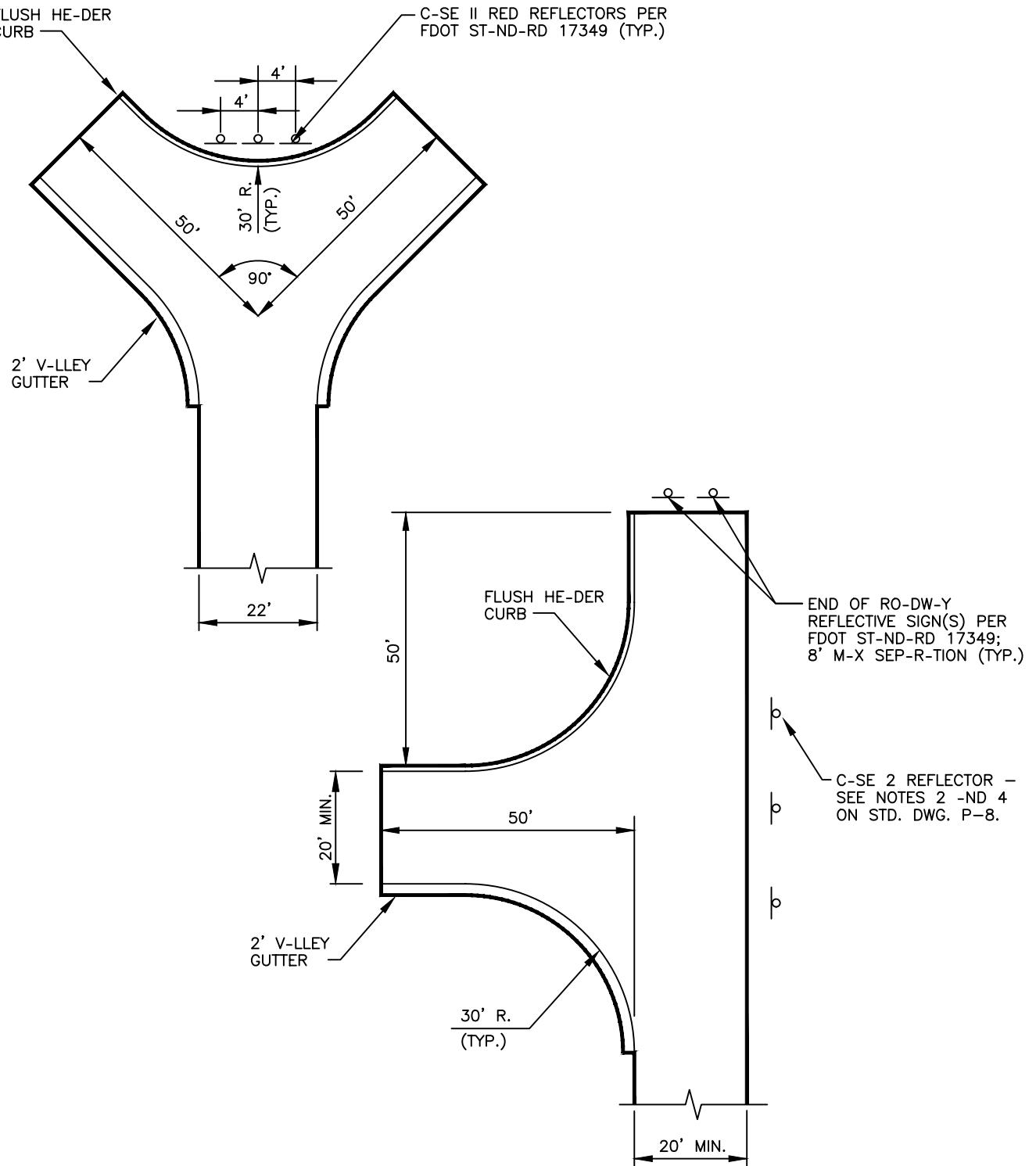
STREET TERMINATIONS

EFF. DATE

02/20

DETAIL. NO.

P-8



NOTES: 1. MOUNT-BLE CURBING REQUIRED BUT NOT REQUIRED TO BE INST-LLED
-S SHOWN IN THIS DET-IL.

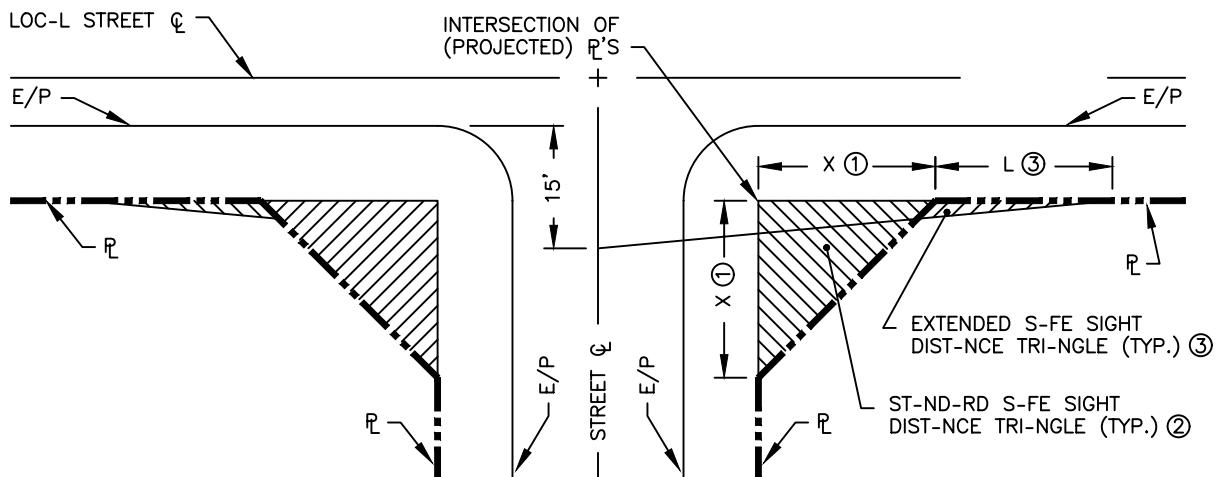
BOYNTON BEACH ENGINEERING STANDARD DETAIL



STREET TERMINATION
SHUNT & WYE TURNAROUND

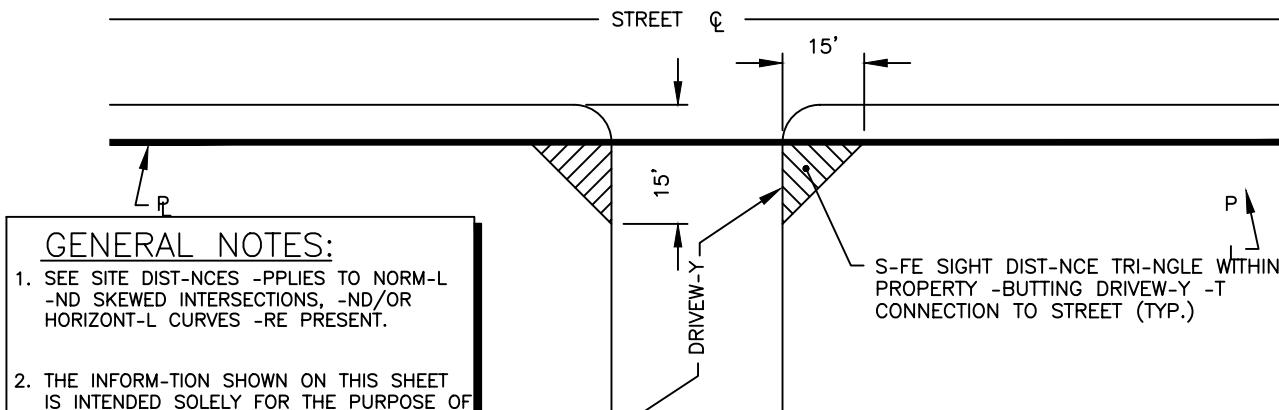
EFF. DATE
02/20

DETAIL. NO.
P-9



- ① $X = 40'$ FOR INTERSECTIONS OF TWO THOROUGHF-RE PL-N STREETS.
 $X = 25'$ FOR -LL OTHER STREET INTERSECTIONS.
- ② ST-ND-RD S-FE SIGHT DIST-NCE TRI-ANGLE M-Y BE INCLUDED IN THE STREET RIGHT-OF-W-Y -T INTERSECTIONS.
- ③ EXTENDED S-FE SIGHT DIST-NCE TRI-ANGLE(S) M-Y BE REQUIRED TO BE EST-BLISHED BY RESTRICTIVE E-SEGMENT, WITH -DDITION-L DIST-NCE (L) -S NEEDED TO PROVIDE REQUIRED STOPPING -ND TURNING SIGHT DIST-NCE PER SECTION III, F.D.O.T. RO-DW-Y DESIGN M-NU-L. USE OF SUCH E-SEGMENTS M-Y BE CONSIDERED FOR -PPROV-L BY THE ENGINEERING DEP-RTMENT ONLY IN C-SES WHERE - NEW STREET IS PROPOSED TO INTERSECT -LONG OR -DJ-CENT TO - CURVED SEGMENT OF -N EXISTING STREET, -ND THE INTERSECTION C-NNOT BE RE-SON-BLY RELOC-TED SO -S TO PROVIDE FOR REQUIRED SIGHT DIST-NCES WITHIN THE LIMITS OF THE STREET TR-CTS.

STREET INTERSECTION



GENERAL NOTES:

1. SEE SITE DIST-NCES -PPLIES TO NORM-L -ND SKewed INTERSECTIONS, -ND/OR HORIZONTAL CURVES -RE PRESENT.
2. THE INFORM-TION SHOWN ON THIS SHEET IS INTENDED SOLELY FOR THE PURPOSE OF CLE-R SIGHT DEVELOPMENT -ND M-INTEN-NCE OF RO-DS -ND STREETS, -ND IS NOT INTENDED TO BE USED FOR GEOMETRIC DESIGN, SPEED CONTROL, ETC.
3. THE MINIMUM DRIVER EYE SETB-CK OF 15' FROM THE EDGE OF TR-FFIC L-NE M-Y BE -DJUDED ON -NY INTERSECTION LEG ONLY WHEN JUSTIFIED BY - DOCUMENTED SITE SPECIFIC FIELD STUDY.
4. REFER TO F.D.O.T. ST-ND-RD INDEX NO. 546 FOR GENER-L -ND DESIGN NOTES FOR HIGHER RO-DW-Y CL-SSIFIC-TION.

DRIVEWAY CONNECTION TO STREET

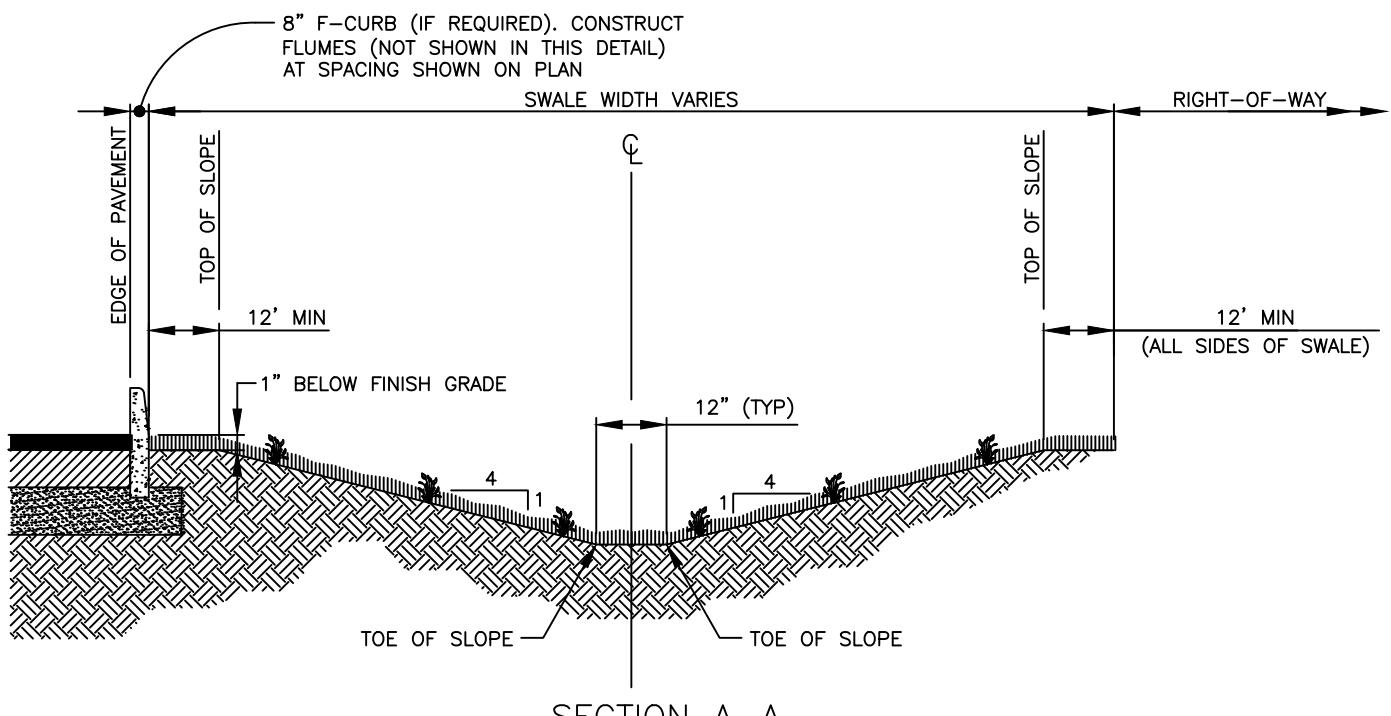
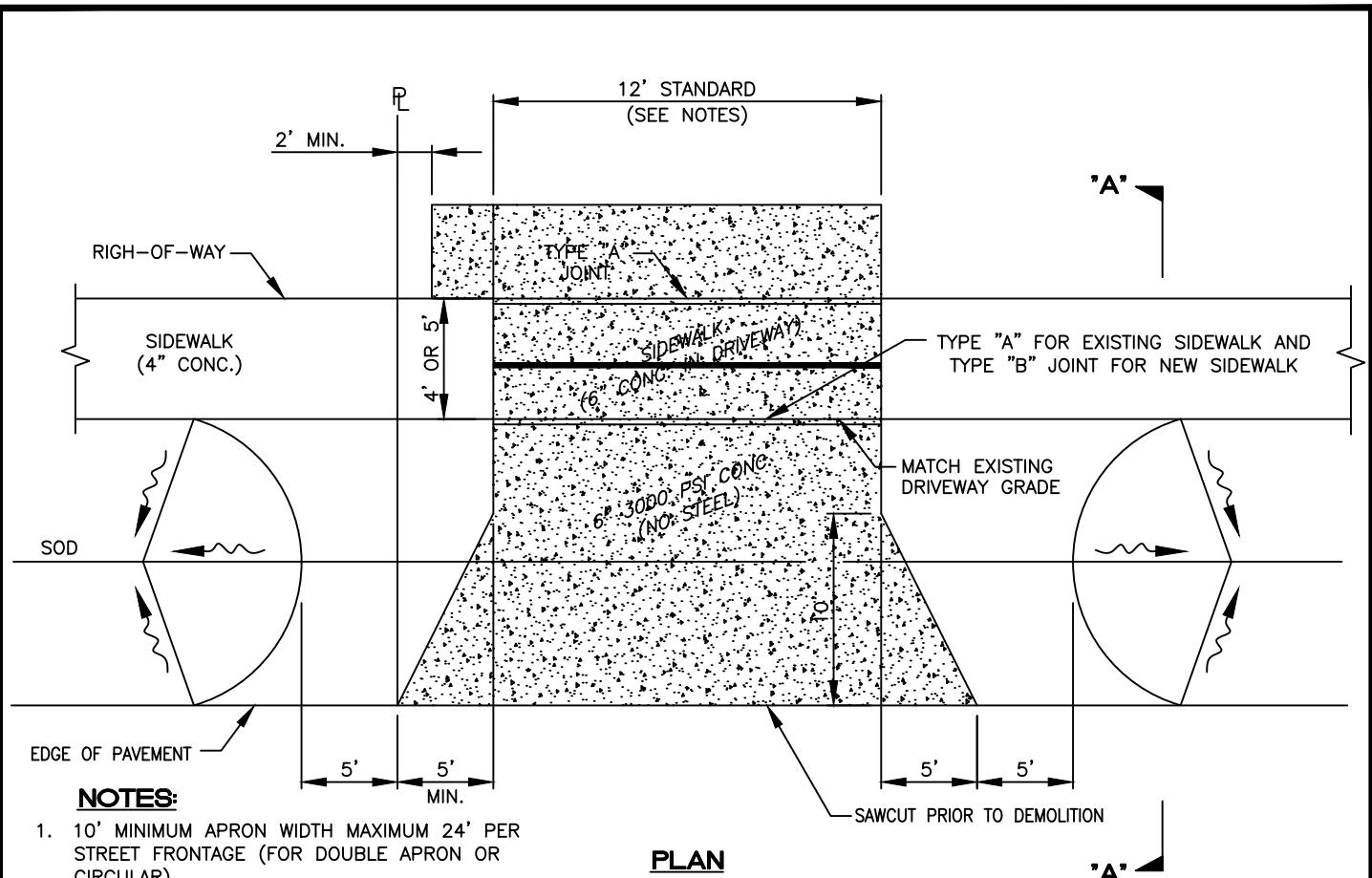
BOYNTON BEACH ENGINEERING STANDARD DETAIL



SAFE SIGHT DISTANCE TRIANGLES

EFF. DATE
02/20

DETAIL. NO.
P-10



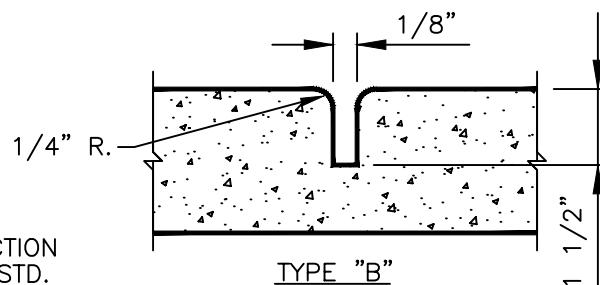
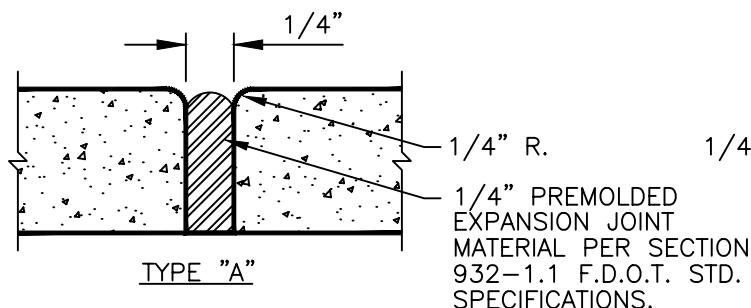
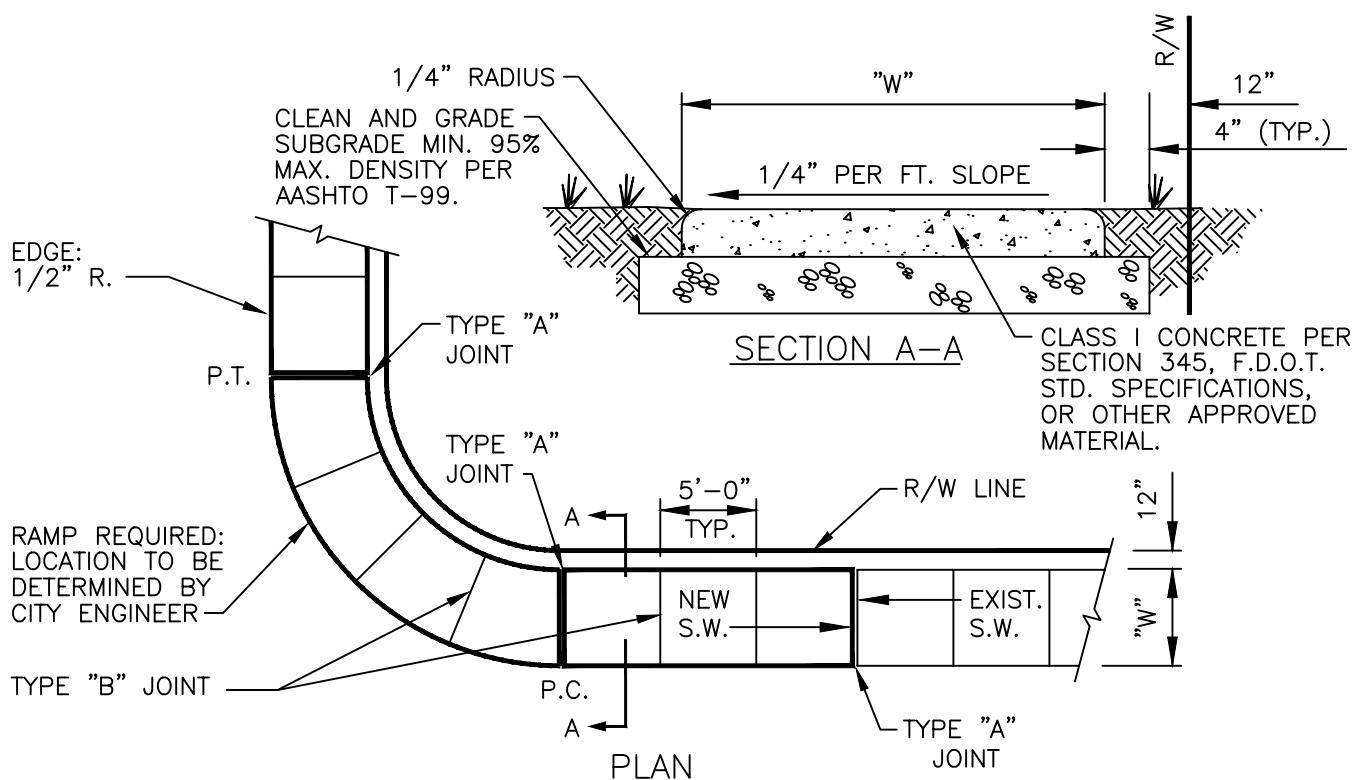
BOYNTON BEACH ENGINEERING STANDARD DETAIL



ROADWAY SWALES

EFF. DATE
02/20

DETAIL. NO.
P-11



SIDEWALK JOINT

**TABLE OF SIDEWALK
THICKNESS - "T"**

RESIDENTIAL AREAS	4"
WITHIN 10' OF CROSS-STREETS, AT DRIVEWAYS & OTHER AREAS	6"

**TABLE OF SIDEWALK
WIDTHS - "W"**

SINGLE-FAMILY AREAS	4*
MULTI-FAMILY AREAS	5'
OTHER AREAS AS SPECIFIED BY THE LAND DEVELOPMENT REGULATIONS.	

* MINIMUM.

TABLE OF SIDEWALK JOINTS

TYPE	LOCATION
"A"	P.C. AND P.T. OF CURVES, JUNCTION OF EXISTING & NEW SIDEWALKS & EVERY 30'.
"B"	5'-0" CENTER TO CENTER ON SIDEWALKS SCORED DURING PLACEMENT OR SAWCUT WITHIN 24 HOURS OF PLACEMENT
"A"	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS, AND SIMILAR STRUCTURES

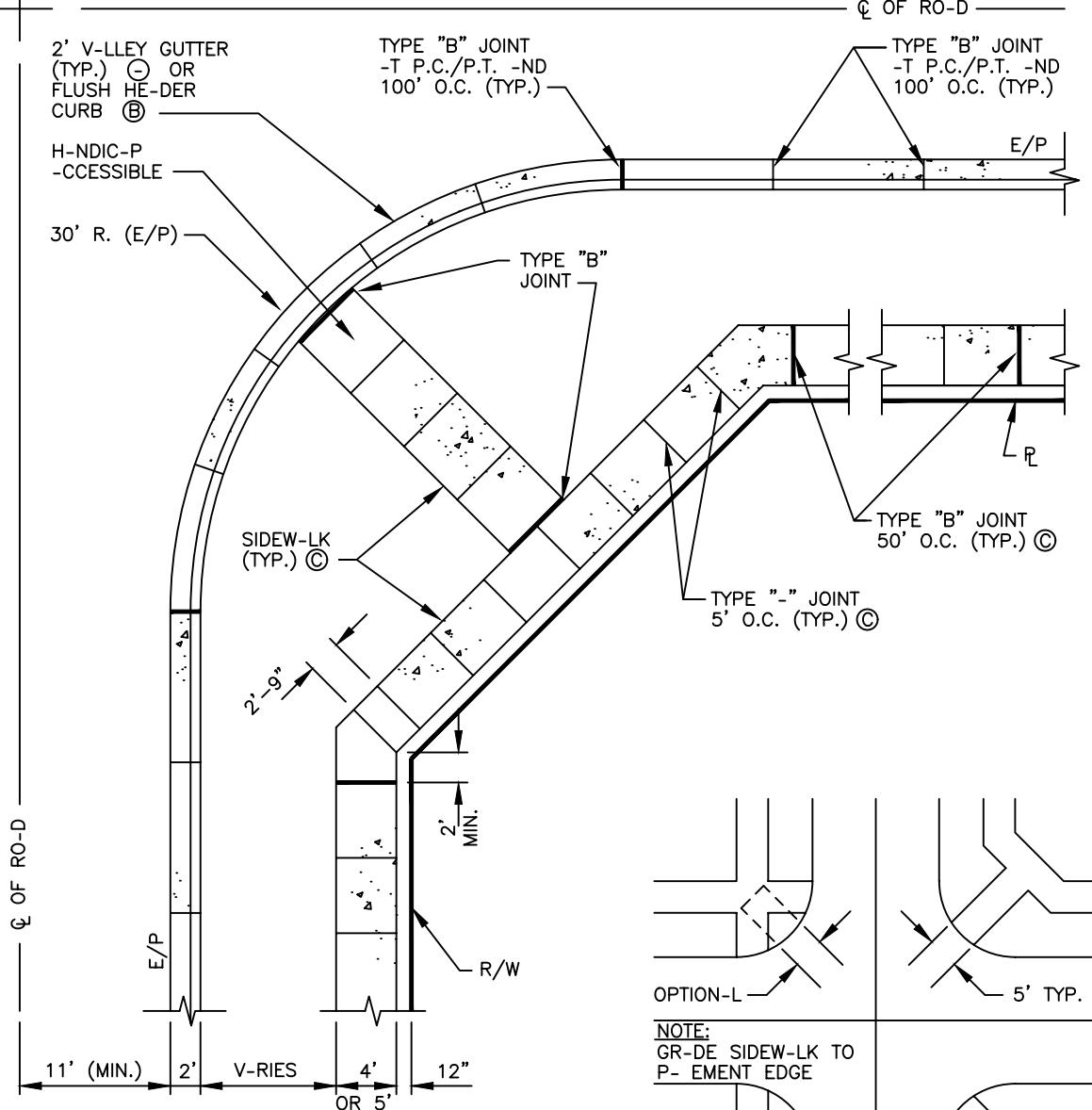
BOYNTON BEACH ENGINEERING STANDARD DETAIL



SIDEWALK CONSTRUCTION DETAIL

EFF. DATE
02/20

DETAIL. NO.
P-16



(C) SEE STD. DET-IL #P-8.

(B) SEE STD. DET-IL #P-6.

(C) SEE STD. DET-IL #P-20.

SEE CH-PTER 22 (STREETS -ND SIDEW-LK) OF THE CITY'S L-ND DEVELOPMENT REGUL-TIONS FOR COMPLETE DET-ILS.

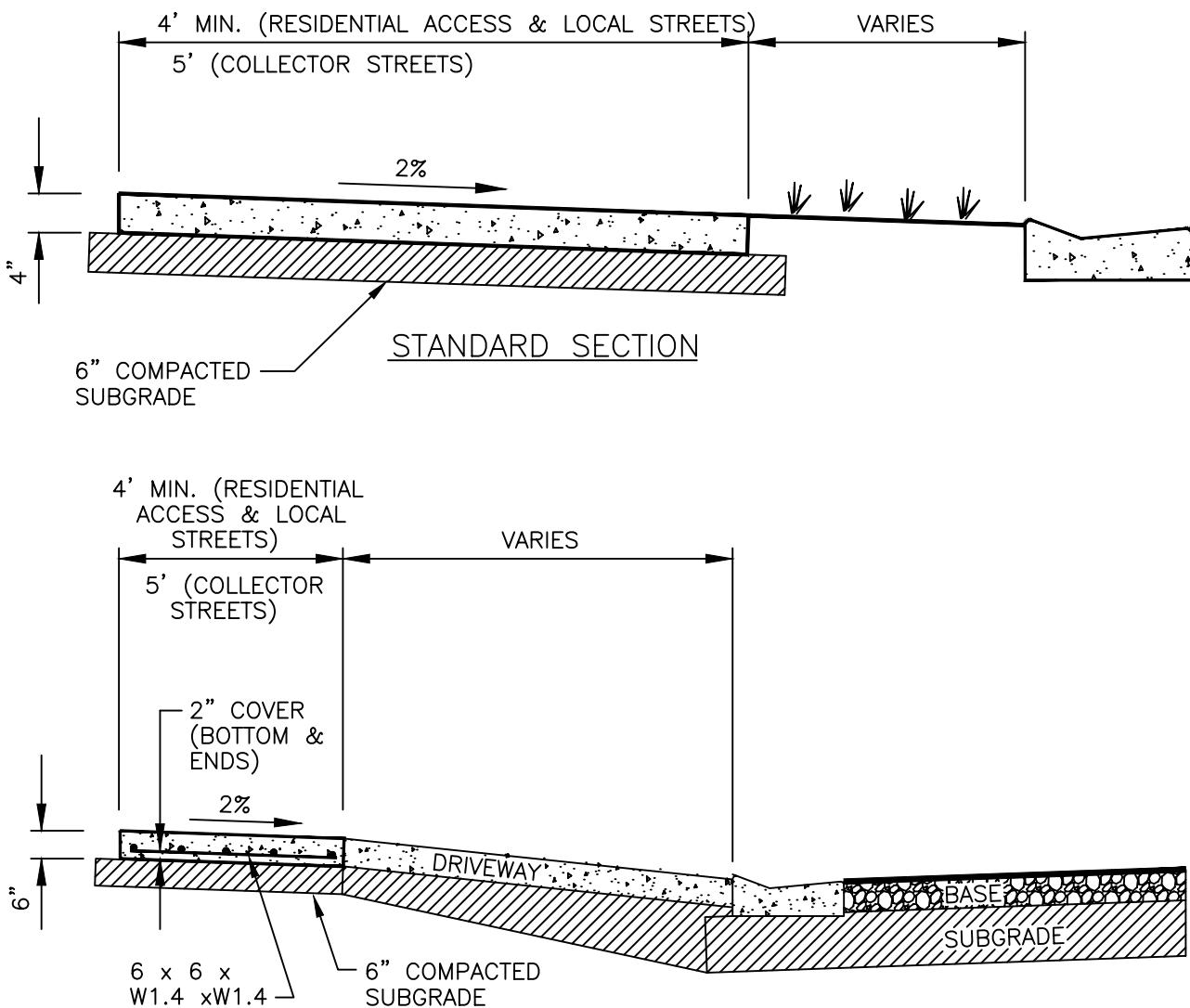
BOYNTON BEACH ENGINEERING STANDARD DETAIL



SIDEWALK AND CURBING CONSTRUCTION
AT STREET INTERSECTION

EFF. DATE
02/20

DETAIL. NO.
P-17



DRIVEWAYS (RESIDENTIAL AND NON-RESIDENTIAL AREAS)

NOTES:

1. SIDEW-LKS TO BE PORTLAND CEMENT CONCRETE, MIN. 2500 P.S.I. @ 28 D-YRS, OR OTHER APPROVED SURF-CE M-TERI-L(S).
2. SUBGR-DE TO BE MINIMUM 6" FULLY COMP-CTED 95% -SHTO, FULL WIDTH + 8".
3. SIDEW-LKS TO BE BROOM FINISHED WITH EVEN, DUSTLESS SURF-CE.
4. FIBERMESH CONCRETE M-Y BE USED IN LIEU OF WIRE MESH.
5. SIDEW-LKS TO BE 6" THICK -T DRIVEW-YS.

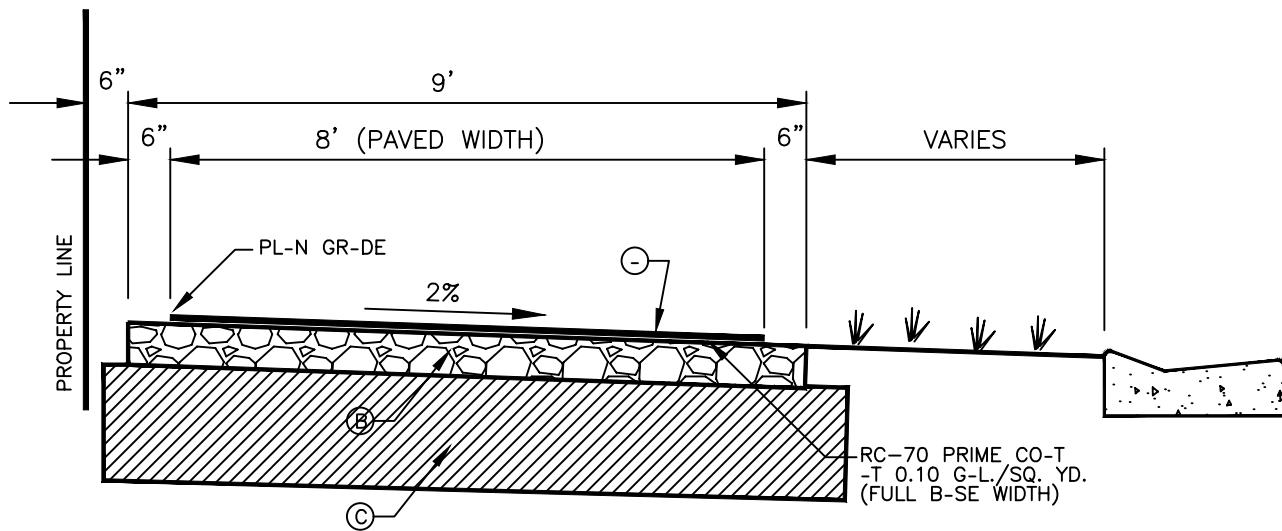
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PATHWAY: SIDEWALK

EFF. DATE
02/20

DETAIL. NO.
P-18



NOTE:
THIS P-THW-Y M-Y ONLY BE USED WHERE SHOWN ON -PPROVED
M-STER CIRCUL-TION PL-N.

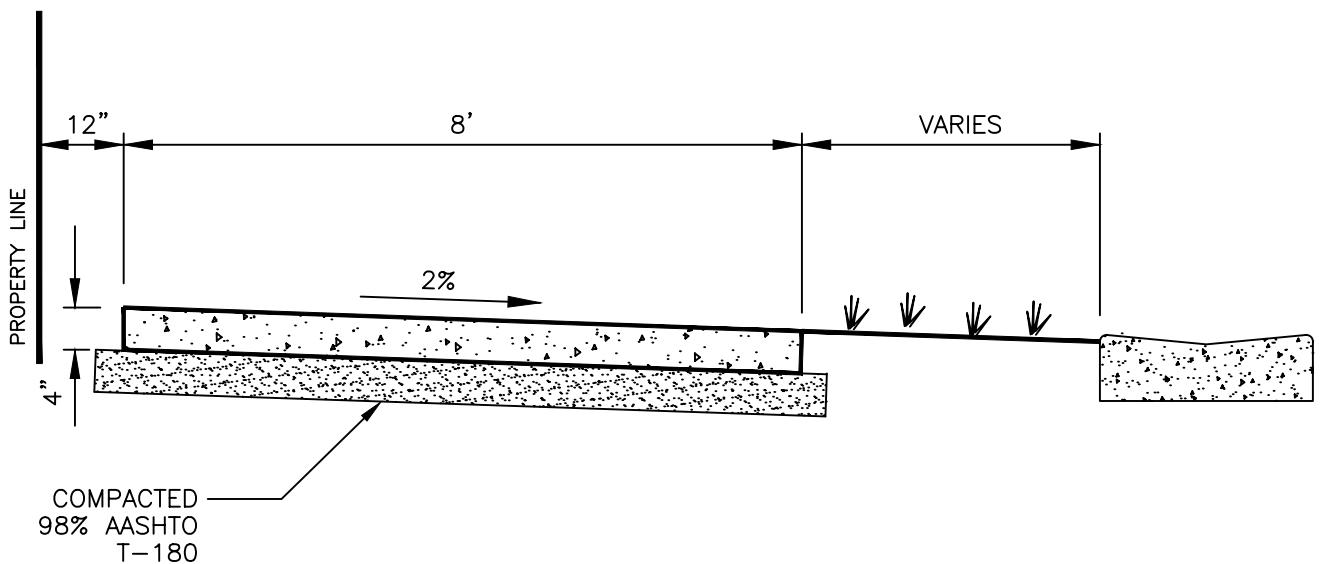
- (A) WE-RING SURF-CE: 1" TYPE S-3, OR 1 1/4" TYPE S-1 OR TYPE II -SPH-LTIC CONCRETE.
- (B) B-SE: 6" COMP-CTED LIMEROCK OR SHELLROCK TO LBR 100 MIN.
- (C) SUBB-SE: 12" COMP-CTED SUBGR-DE TO 93% -SHTO T-18.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



PATHWAY: ASPHALT

EFF. DATE
02/20
DETAIL. NO.
P-19



NOTE:
THIS P-THW-Y M-Y ONLY BE USED
WHERE SHOWN ON -PPROVED SITE PL-N.

NOTES:

1. P-THW-Y TO BE PORTL-ND CEMENT CONCRETE, MIN. 2500 P.S.I. @ 28 D-Y'S.
2. SUBGR-DE TO BE MINIMUM 6", FULLY COMP-CTED, FULL WIDTH + 8".
3. SIDEW-LKS TO BE BROOM FINISHED WITH EVEN, DUSTLESS SURF-CE.

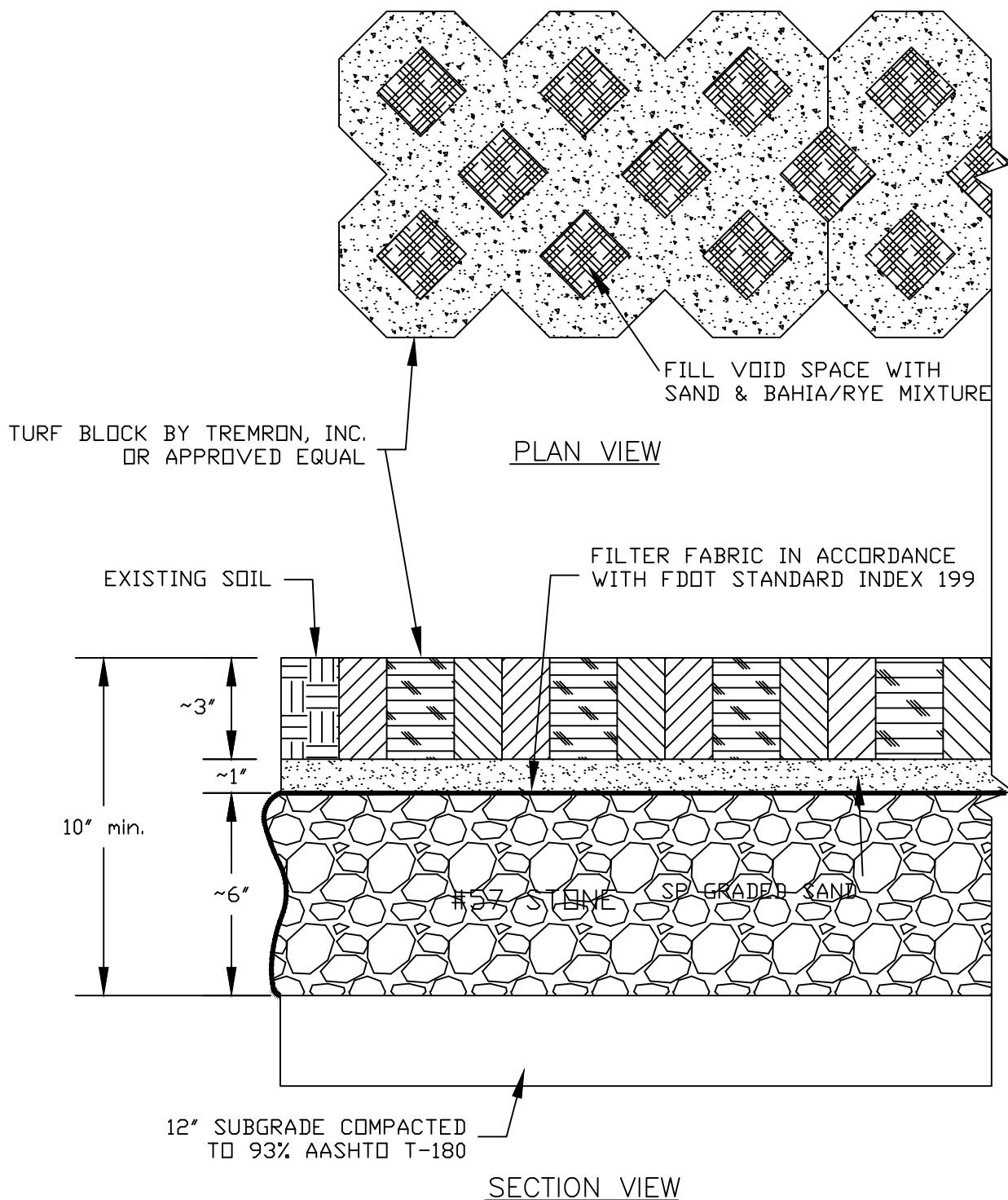
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PATHWAY: 8' CONCRETE

EFF. DATE
02/20

DETAIL. NO.
P-20



NOTES:

1. DRIVEWAYS TO BE BORDERED WITH 12" WIDE X 4" CONCRETE HEADER.
2. DRIVEWAY APRON SHALL BE CONCRETE.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



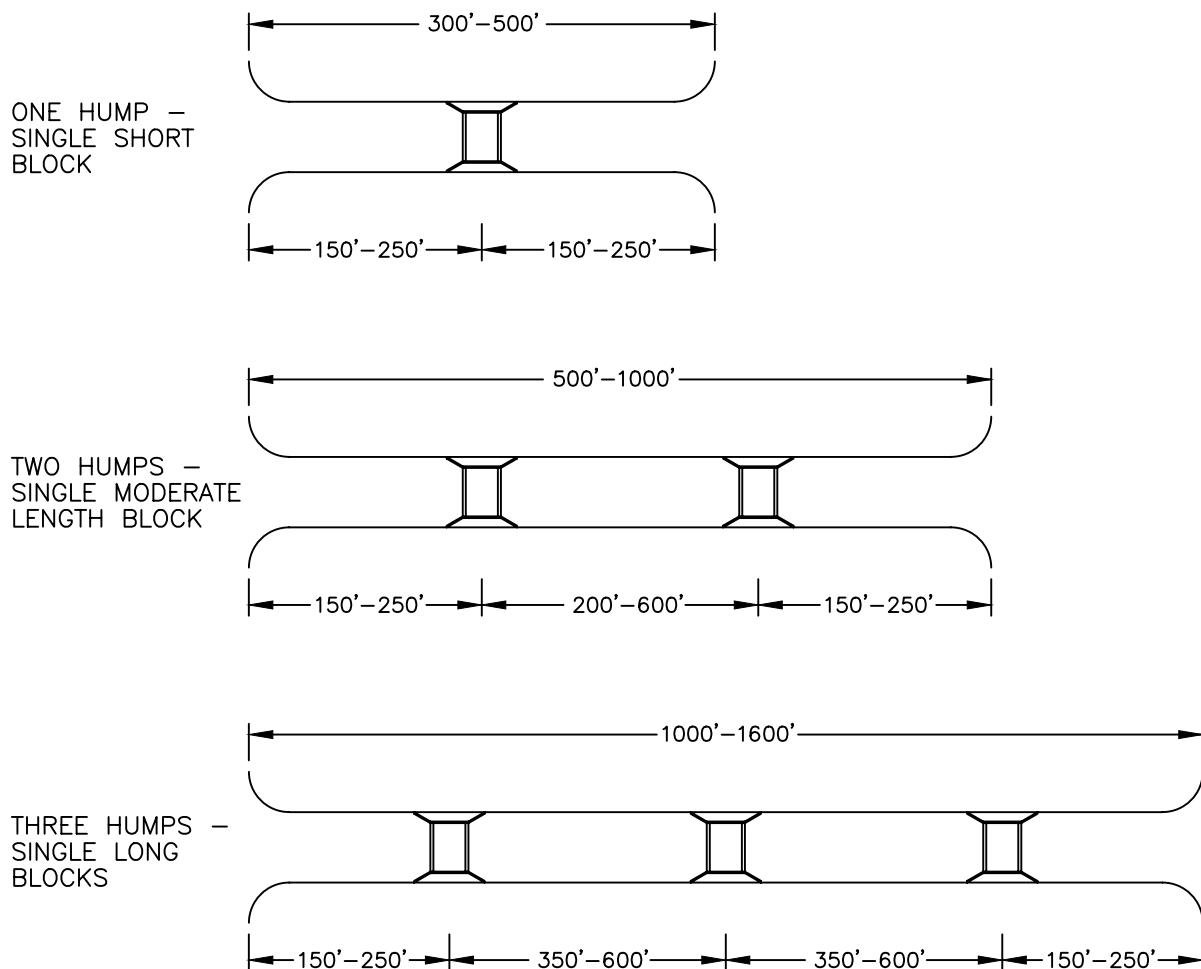
TURF BLOCK DRIVEWAY

EFF. DATE
02/20

DETAIL. NO.
P-21

MAINTENANCE OF TRAFFIC NOTES

- (1) THE CONTR-CTOR IS REQUIRED TO M-INT-IN PEDESTRI-N -ND VEHICUL-R TR-FFIC ON THIS PROJECT. THE F.D.O.T. ST-ND-RD INDEX DR- ING NOS. 600 THROUGH 660 -ND THE M-NU-L OF UNIFORM TR-FFIC CONTROL DEVICES -ND SUBSEQUENT -DDENDUM -ND REVISIONS SH-LL SET FORTH THE MINIMUM ST-ND-RDS FOR INST-LL-TION, M-INTEN-NCE -ND SUBSEQUENT REMOV-L OF -LL CONSTRUCTION SIGNS, DETOURS, STREET CLOSINGS, FL-SHING -RROW BO-RDS FOR L-NE DROPS, -NY TEMPOR-RY P- EMENT, WORK ZONE P- EMENT M-RKINGS, B-RRIC-DES -ND WIRING LIGHTS -S M-Y BE NEEDED TO M-INT-IN VEHICLE -ND PEDESTRI-N TR-FFIC.
- (2) THE CONTR-CTOR SH-LL PREP-RE -ND SUBMIT FOR REVIEW -ND -PPROV-L, - M-INTEN-NCE OF TR-FFIC PL-N FOR E-CH SEGMENT OF CONTR-CTION IN -CCORD-NCE WITH SECTION 102 OF THE F.D.O.T. SPECIFIC-TIONS. THE CONTR-CTOR -SSUMES FULL RESPONSIBILITY TO S-FELY M-INT-IN -LL -RE-S -FFECTED BY CONSTRUCTION -ND TO PROPERLY ROUTE -ND DIRECT TR-FFIC. NOTIFY THE CITY'S POLICE DEP-RTMENT (742-6100) -ND THE CITY FIRE DEP-RTMENT (742-6600) PRIOR TO CLOSING OF TR-FFIC L-NE(S) WITH THE EXCEPTION OF LOC-L STREETS.
- (3) THE CONTR-CTOR SH-LL CONT-CT UTILITY LOC-TE SERVICE (1-800-432-4770) -ND THE CITY'S UTILITIES DEP-RTMENT (742-6400) 48 HOURS PRIOR TO -NY EXC -TION.



HUMP SPACING CONCEPTS

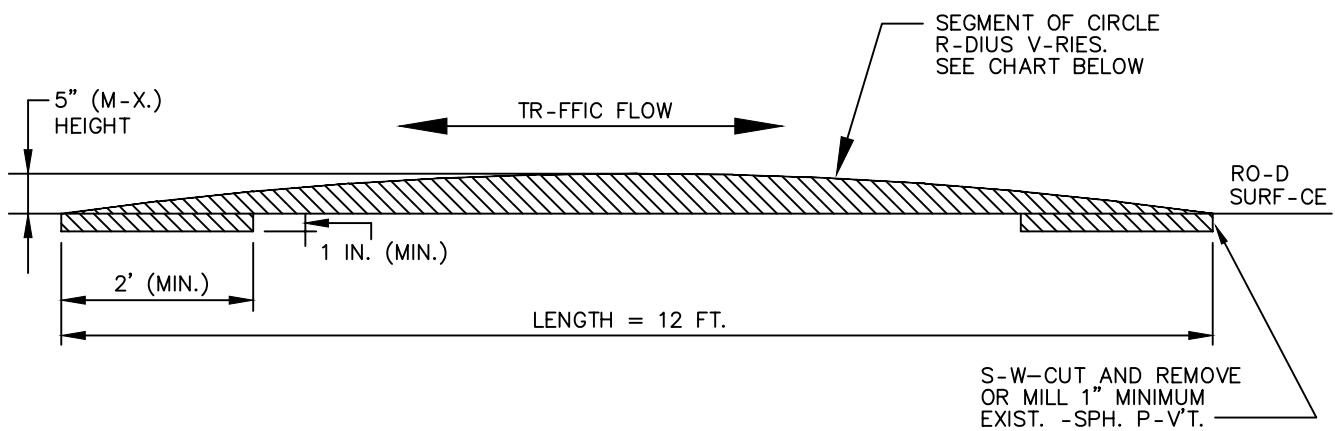
BOYNTON BEACH ENGINEERING STANDARD DETAIL



TRAFFIC CALMING
SPEED HUMP LOCATIONS

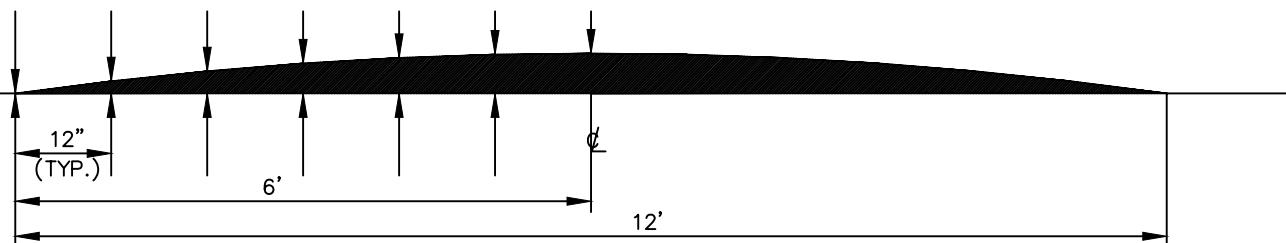
EFF. DATE
02/20

DETAIL. NO.
P-25



CROSS SECTION AND HUMP DIMENSIONS

0	1.53	2.78	3.76	4.45	4.87	5.00"
0	1.23	2.23	3.00	3.56	3.89	4.00"
0	0.92	1.67	2.25	2.67	2.92	3.00"



TYPICAL SPEED HUMP DIMENSIONS
(SURFACE OFFSETS 5 IN., 4 IN., AND 3 IN.)

HUMP HEIGHT	SURFACE RADIUS	SPEED LIMIT
5"	43.43'	15
4"	54.22'	20
3"	72.12'	25

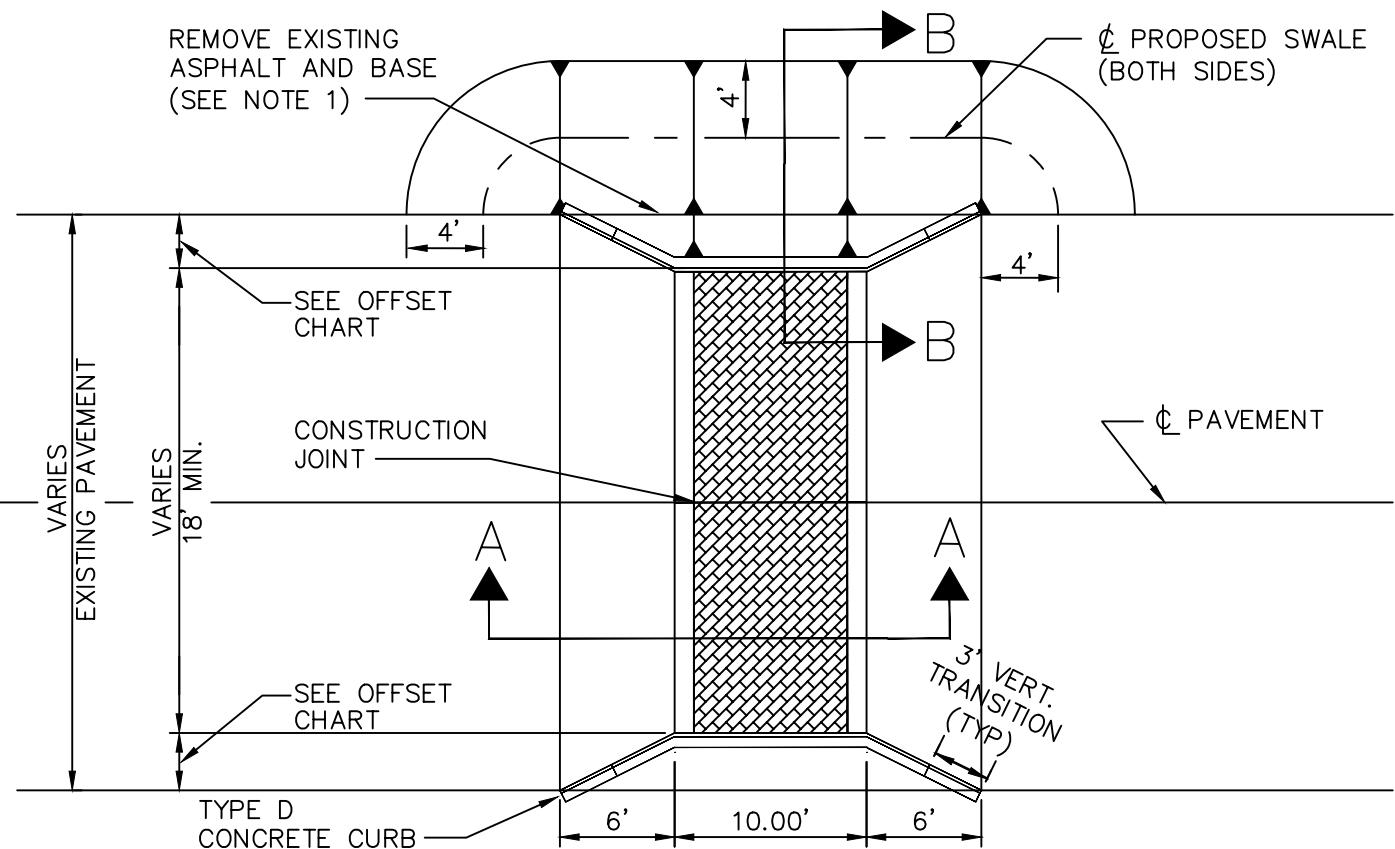
BOYNTON BEACH ENGINEERING STANDARD DETAIL



TRAFFIC CALMING
STANDARD SPEED HUMP
CONSTRUCTION DETAILS

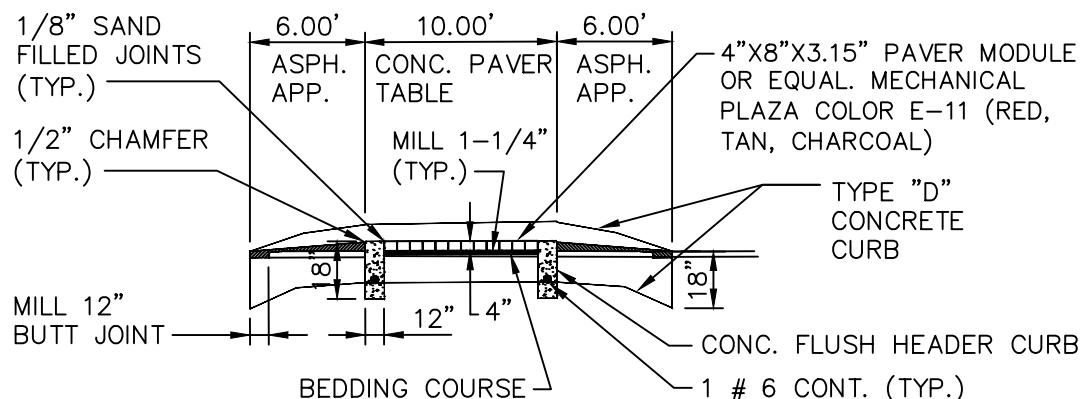
EFF. DATE
02/20

DETAIL. NO.
P-26



PLAN VIEW

SCALE : 1" = 10'



OFFSET CHART

ROAD WIDTH (FT)	OFFSET (FT)
= > 24	3
23 : 22	2
< 22	0

SECTION 'A-A'

SCALE HOR.: 1" = 10'
SCALE VER.: 1" = 5'

(SHEET 1 OF 2)

BOYNTON BEACH ENGINEERING STANDARD DETAIL



TRAFFIC CALMING
ENHANCED SPEED HUMP
CONSTRUCTION DETAILS

EFF. DATE
02/20

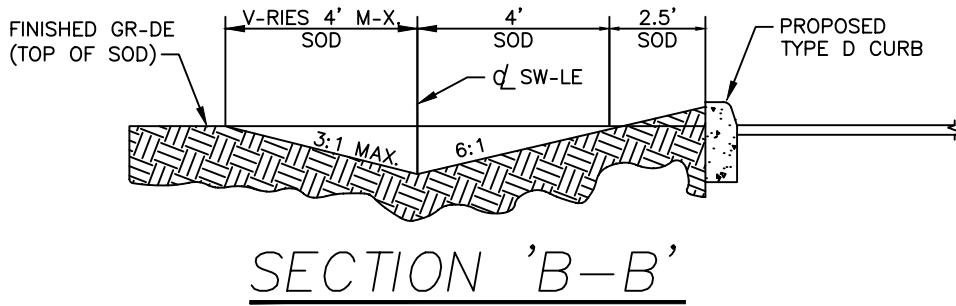
DETAIL. NO.
P-27

CONSTRUCTION NOTES

GOVERNING SPECIFICATIONS:

THE F.D.O.T. ST-ND-RD SPECIFIC-TIONS FOR RO-D -ND BRIDGE CONSTRUCTION, D-TED 2000 -ND THE SUPPLEMENTS -ND SPECI-L PROVISIONS THERETO. THE F.D.O.T. RO-DW-Y -ND TR-FFIC ST-ND-RDS FOR DESIGN, CONSTRUCTION, M-INTEN-NCE -ND UTILITY OPER-TIONS ON THE ST-TE HIGHW-Y SYSTEM, D-TED J-NU-RY 2000.

1. -SPH-LT P- EMENT (2"-4" THICK) -ND ROCK B-SE (8"-10") THICK SH-LL BE COMPLETELY REMOVED -ND PROPERLY DISPOSED IN -N -RE- OUTSIDE OF THE PROJECT, SUBJECT TO THE -PPROV-L OF THE ENGINEER. THE SUBSEQUENT VOID SH-LL BE B-CK-FILLED TO THE ORIGIN-GR-DE WITH CLE-N FILL -ND SODDED. -NY EXISTING OPER-TIVE IRRIG-TION SYSTEMS WITHIN 20 FEET OF THE NEWLY SODDED -RE- SH-LL BE -DJUSTED/EXTENDED TO PROVIDE COVER-GE TO NEWLY SODDED -RE-.
2. THE CONTR-CTOR SH-LL T-KE NECESS-RY STEPS, INCLUDING BUT NOT LIMITED TO, THE -PPLIC-TION -ND M-INTEN-NCE OF - L-YER OF BEDDING S-ND ON THE CONCRETE P- ERS, OF SUFFICIENT QU-NTITY TO PROTECT THE P- ERS FROM -NY D-M-GE OR ST-INS TH-T M-Y RESULT FROM THE P- ING OPER-TIONS.
3. THE CONCRETE P- ERS SH-LL BE INTERLOCKING -ND SH-LL BE L-ID IN - 45-DEGREE HERRINGBONE P- TTERN. BEDDING S-ND SH-LL BE IN -CCORD-NCE WITH -STM C33 (1" - ER-GE THICKNESS). CONCRETE P- ERS SH-LL BE - MINIMUM OF 3.15" THICK -ND SH-LL CONFORM TO -STM C936 (6). -SPH-LT SH-LL BE TYPE S-II IN -CCORD-NCE WITH SECTION 311 OF THE F.D.O.T. SPECIFIC-TIONS. B-SIS OF P-YMENT FOR -SPH-LT SH-LL BE 120 LBS./S.Y./IN. CONCRETE HE-DER CURB SH-LL BE 3,000 PSI (MIN.), IN -CCORD-NCE WITH SECTION 400 OF THE F.D.O.T. SPECIFIC-TIONS.
4. CONCRETE P- ERS S-MPLES SH-LL BE SUBMITTED TO THE ENGINEER FOR REVIEW -ND -PPROV-L.
5. VERTIC-L CONSTRUCTION TOLER-NCE FOR CONCRETE HE-DER CURB SH-LL BE PLUS OR MINUS 0.5".
6. L-NDSC-PING IN SW-LE -RE-S SH-LL BE XERISC-PE -ND M-Y INCLUDE TREES, SHRUBS -ND MULCH. EXISTING IRRIG-TION SYSTEM TO BE -DJUSTED -S NEEDED. PURSU-NT TO THE LDR, THE OWNER -ND OR OCCUP-NT OF THE -DJ-CENT PROPERTY SH-LL M-INT-IN THE -BUTTING SW-LE -RE-S.



GRADING NOTES:

1. THE EX-CT LOC-TION OF B-CKSLOPES, TIE-IN POINTS -ND LIMITS OF CONSTRUCTION SH-LL BE -S DIRECTED BY THE ENGINEER.
2. FINISH GR-DES SH-LL INCLUDE THE THICKNESS OF THE SOD.
3. -LL EXISTING SODDED -RE-S DISTURBED DURING CONSTRUCTION FOR GR-DING SH-LL BE SODDED WITH THE TYPE SOD FOUND TO BE EXISTING -T THE SITE.
4. EXISTING OPER-TIVE IRRIG-TION SYSTEMS, -S DETERMINED BY THE ENGINEER, WITHIN THE LIMITS OF CONSTRUCTION SH-LL BE -DJUSTED TO THE FIN-L GR-DE USING NEW IRRIG-TION M-TERI-LS -S PROVIDED IN THE BID LINE ITEMS FOR IRRIG-TION PIPE -ND SPR-Y HE-DS.

(SHEET 2 OF 2)

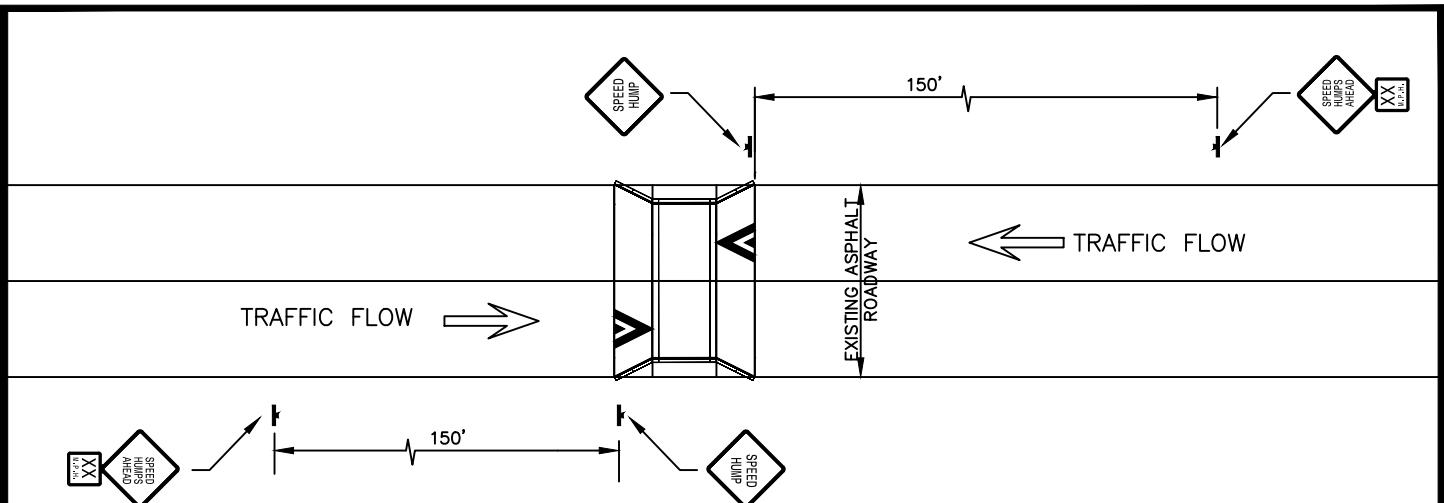
BOYNTON BEACH ENGINEERING STANDARD DETAIL



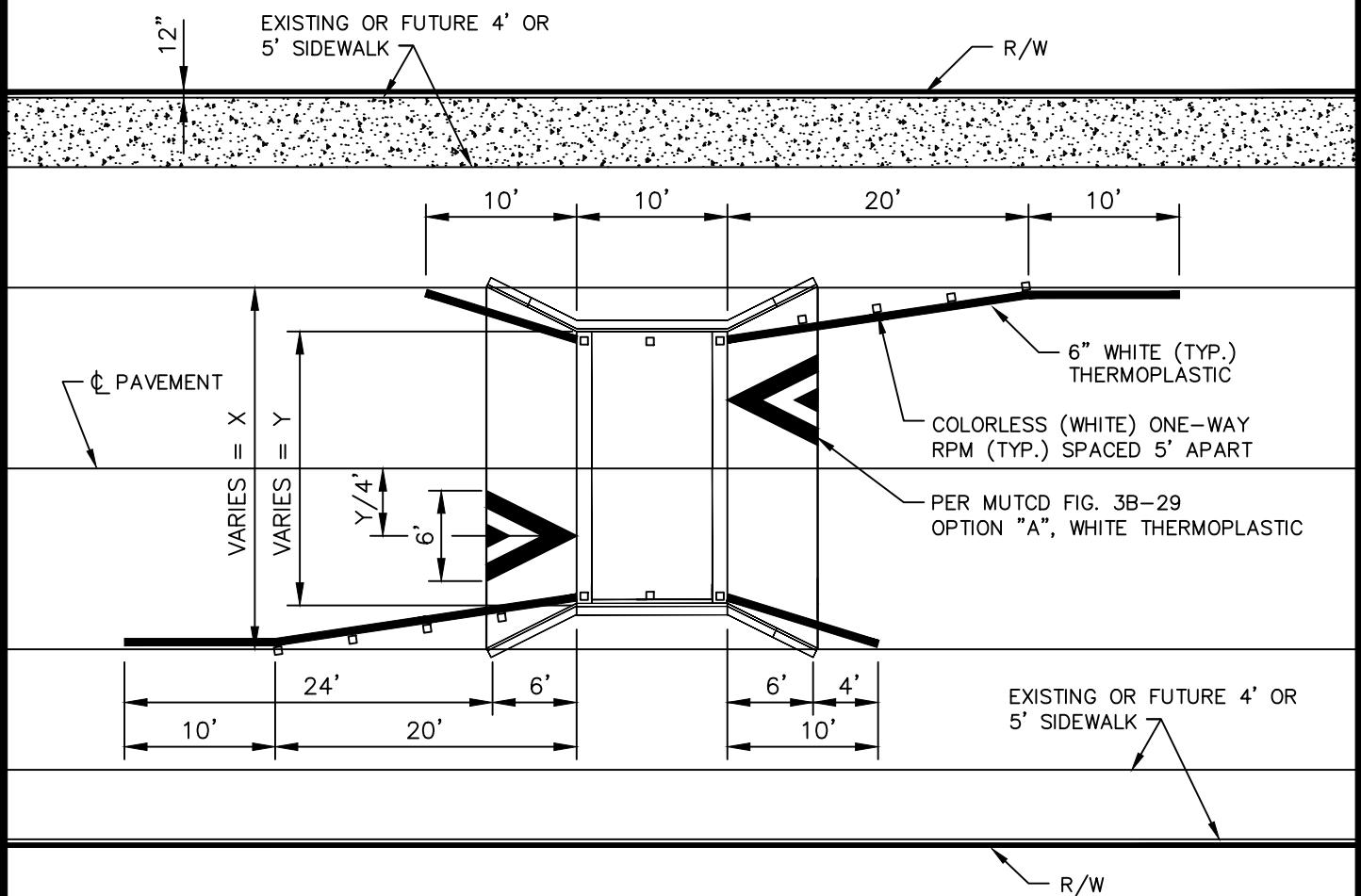
TRAFFIC CALMING
ENHANCED SPEED HUMP
CONSTRUCTION DETAILS

EFF. DATE
02/20

DETAIL. NO.
P-28



TYPICAL SIGN LOCATIONS



TYPICAL PAVEMENT MARKINGS PLAN

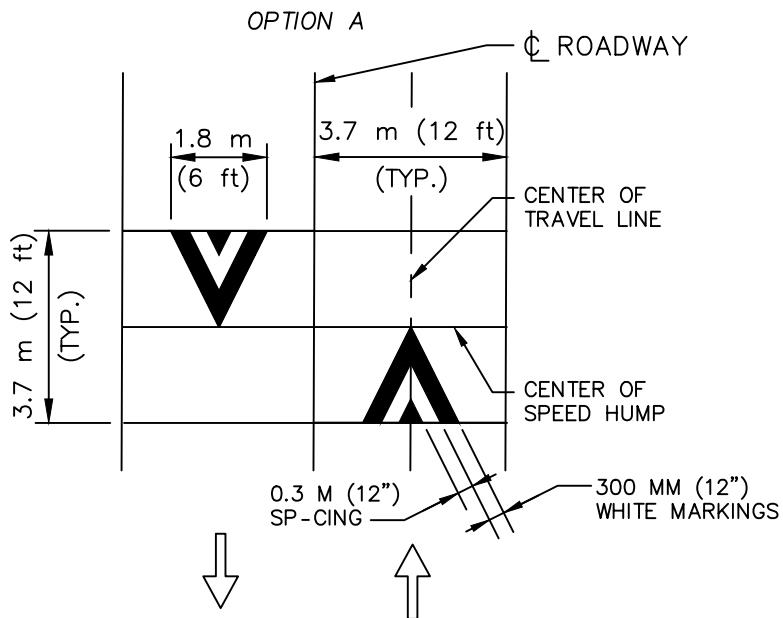
BOYNTON BEACH ENGINEERING STANDARD DETAIL



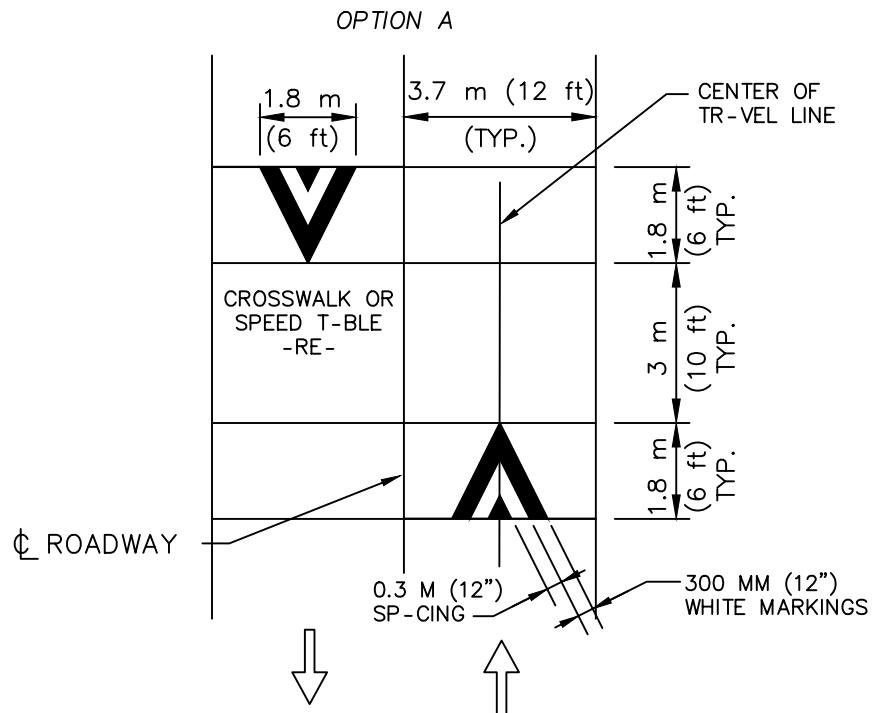
TRAFFIC CALMING ENHANCED SPEED HUMP
STANDARD PAVEMENT MARKING AND
SIGNAGE DETAIL

EFF. DATE
02/20

DETAIL. NO.
P-29



MUTCD FIGURE 3B-28. TYPICAL
PAVEMENT MARKINGS FOR SPEED
HUMPS



MUTCD FIGURE 3B-29. TYPICAL
PAVEMENT MARKINGS FOR SPEED
TABLES

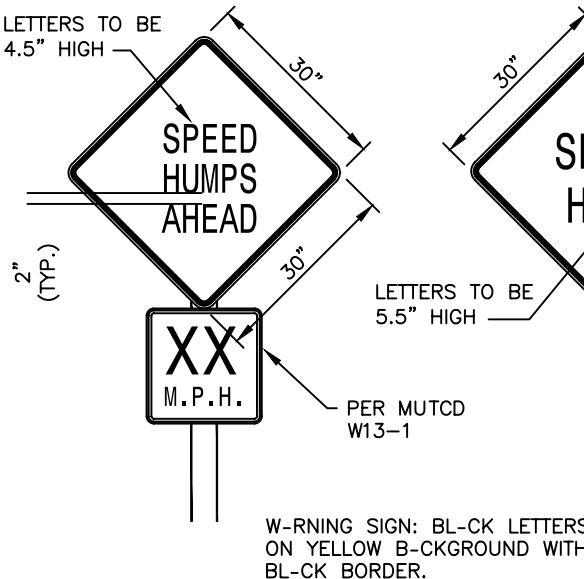
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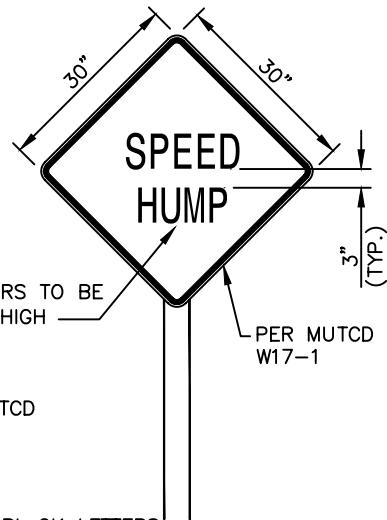
TYPICAL PAVEMENT MARKINGS
SPEED HUMPS OR TABLES

EFF. DATE
02/20

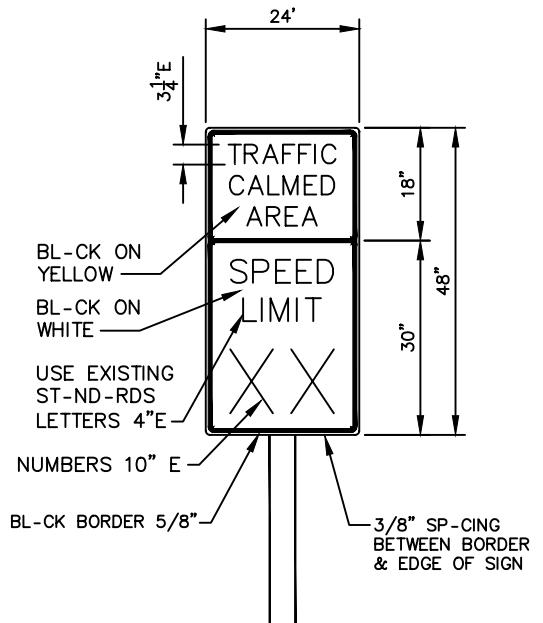
DETAIL. NO.
P-30



SPECIAL ADVANCED SIGNS



LOCATION SIGN



SPECIAL TRAFFIC CALMED AREA SIGNS

GOVERNING SPECIFICATIONS:

THE F.D.O.T. ST-ND-RD SPECIFIC-TIONS FOR RO-D -ND BRIDGE CONSTRUCTION, D-TED 2000 -ND THE SUPPLEMENTS -ND SPECI-L PROVISIONS THERETO. THE F.D.O.T. RO-DW-Y -ND TR-FFIC ST-ND-RDS FOR DESIGN, CONSTRUCTION, M-INTEN-NCE -ND UTILITY OPER-TIONS ON THE ST-TE HIGHW-Y SYSTEM, D-TED J-NU-RY 2000.

1. TR-FFIC SIGNS WILL BE IN -CCORD-NCE WITH SECTION 700 OF THE F.D.O.T. SPECIFIC-TIONS
2. THE FURNISHING -ND INST-LL-TION OF REFLECTIVE P- EMENT M-RKERS SH-LL BE IN CONFORM-NCE WITH SECTION 706 OF THE F.D.O.T. SPECIFIC-TIONS.
3. -LL THERMOPL-STIC P- EMENT M-RKINGS SH-LL BE IN CONFORM-NCE WITH SECTION 711 OF THE F.D.O.T. SPECIFIC-TIONS.
4. SPEED HUMP SIGNS INST-LLED IN -DV-NCE OF THE TIME THE SPEED HUMP IS OPENED TO TR-FFIC SH-LL BE COVERED.
5. USE THE WORD "HUMPS" (PLUR-L) ON SPECI-L -DV-NCED SIGNS, ONLY IF MULTIPLE SPEED HUMPS -RE INST-LLED. OTHERWISE, USE THE WORD "HUMP" (SINGUL-R).
6. SPECI-L TR-FFIC C-LMED -RE- SIGNS -RE TO BE USED -T EVERY ENTR-NCE TO THE NEIGHBORHOOD WHENEVER - COMPREHENSIVE TR-FFIC C-LMED PROJECT IS CONSTRUCTED. ONE SPECI-L -DV-NCED SIGN IS TO BE USED -T E-CH -PPRO-CH TO - SERIES OF SPEED HUMPS TH-T -RE SP-CED LESS TH-N - 1/4 OF - MILE -P-RT. SPECI-L -DV-NCED SIGNS -RE NOT REQUIRED WHEN SPECI-L TR-FFIC C-LMED -RE- SIGNS -RE IN USE.
7. THE EX-CT LOC-TION -ND TYPE OF SIGNS SH-LL BE -S DIRECTED BY THE ENGINEER.
8. BEFORE -NY SPEED HUMP C-N BE OPENED TO TR-FFIC, -LL REQUIRED SIGNING -ND M-RKINGS MUST BE INST-LLED. SPEED HUMP W-RNING SIGNS SH-LL BE FITTED WITH RED W-RNING FL-GS FOR - PERIOD OF NOT LESS TH-N 30 D-Y'S.
9. THE CONTR-CTOR MUST OBT-IN WRITTEN PERMISSION FROM THE ENGINEER BEFORE SPEED HUMP C-N BE OPENED TO TR-FFIC.

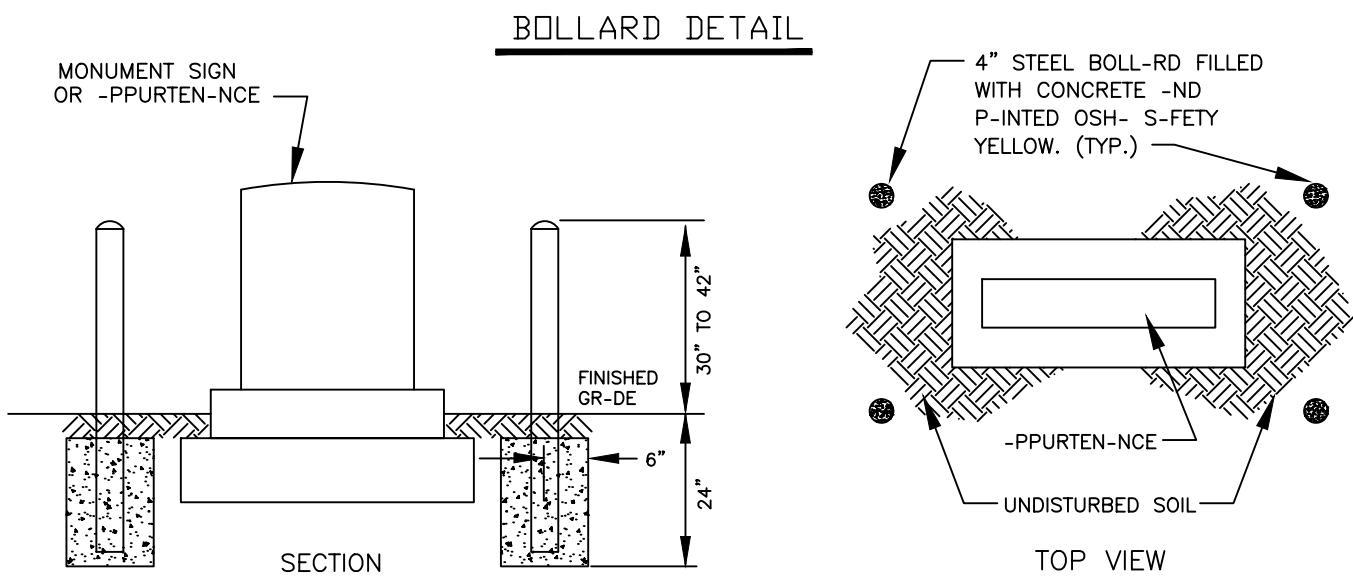
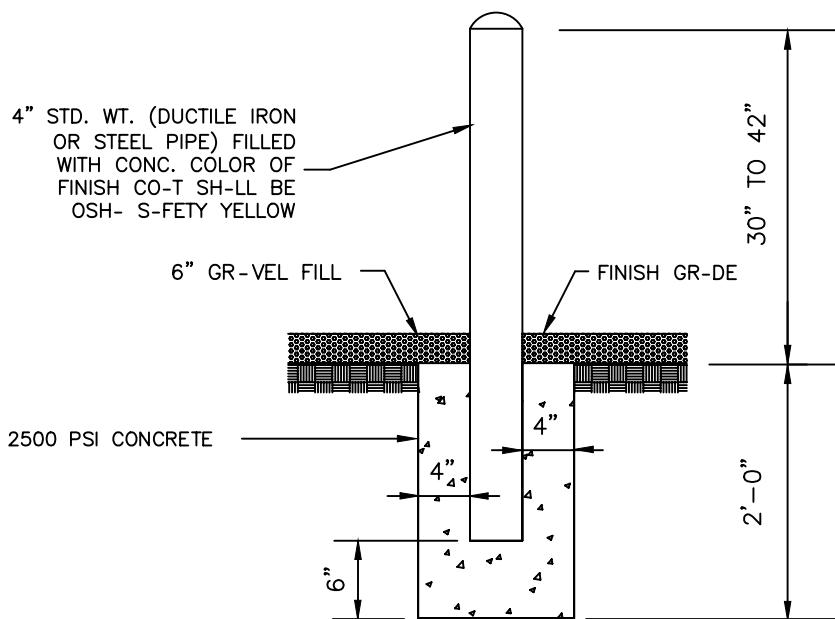
BOYNTON BEACH ENGINEERING STANDARD DETAIL



TRAFFIC CALMING STANDARDS
AND SIGNAGE DETAILS

EFF. DATE
02/20

DETAIL. NO.
P-31



INSTALLATION WITH BOLLARDS

NOTES:

1. BOLL-RDS -RE REQUIRED FOR -PPURTEN-NCES WITH LESS TH-N 4 FEET TO B-CK OF CURB.
2. FOR UTILITY METER BOX -ND B-CKFLOW DEVICE PREVENTION, SEE UTILITY DEP-RTMENT ST-ND-RD DR- INGS G-19, W-17, W-18 & W-19.

BOYNTON BEACH ENGINEERING STANDARD DETAIL

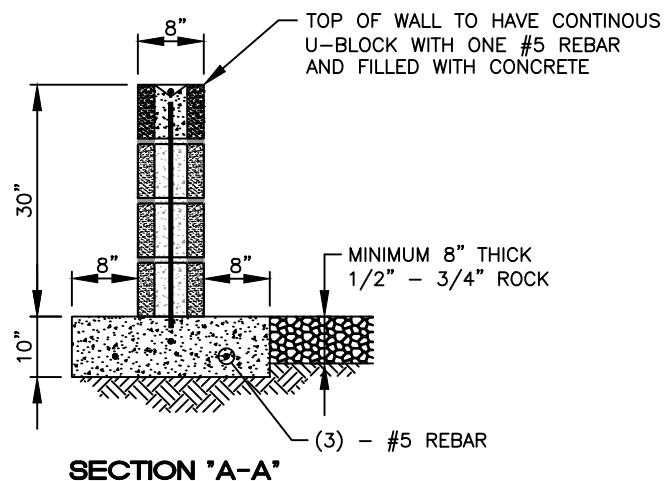
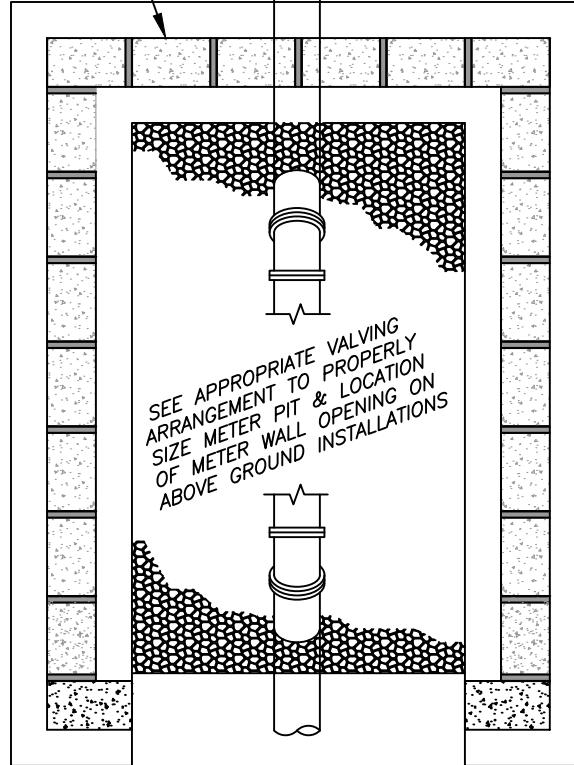
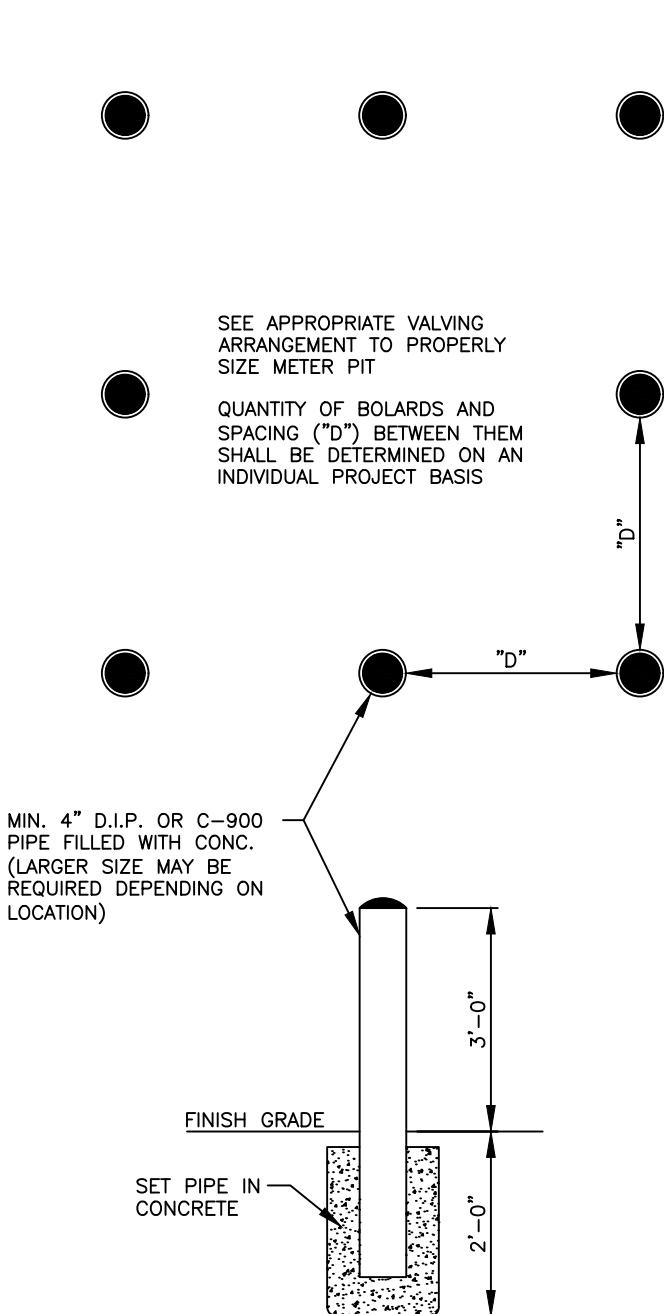


BOLLARD DETAIL

EFF. DATE
02/20

DETAIL. NO.
G-1

CONCRETE BLOCKS WITH #5 REBAR AT CORNERS AND ON 2'-0" CENTERS, FILL Voids WITH 2500 P.S.I. CONCRETE



OPTION 'A'
PROTECTIVE PIPE BOLLARDS

OPTION 'B'
SCREENING WALL

BLOCK FOOTER TO BE A MINIMUM OF 12" FROM PIPE ASSEMBLY AND SIDE WALLS TO BE A MINIMUM OF 36" FROM PIPE ASSEMBLY

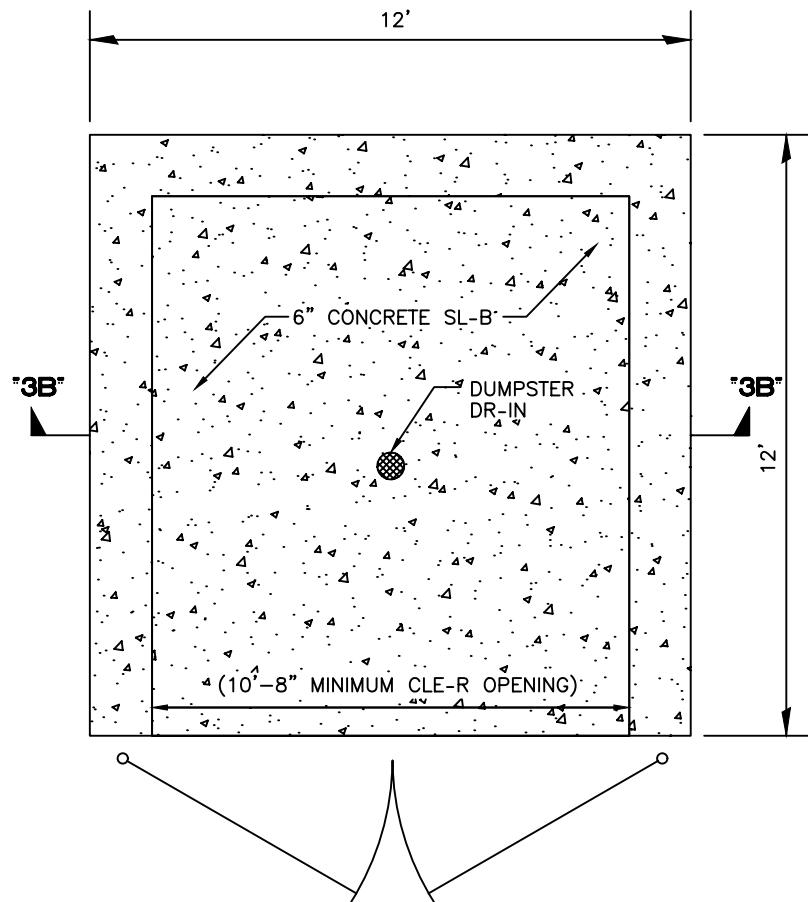
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PROTECTIVE ENCLOSURE FOR
ABOVE GROUND DEVICES

EFF. DATE
02/20

DETAIL. NO.
G-2

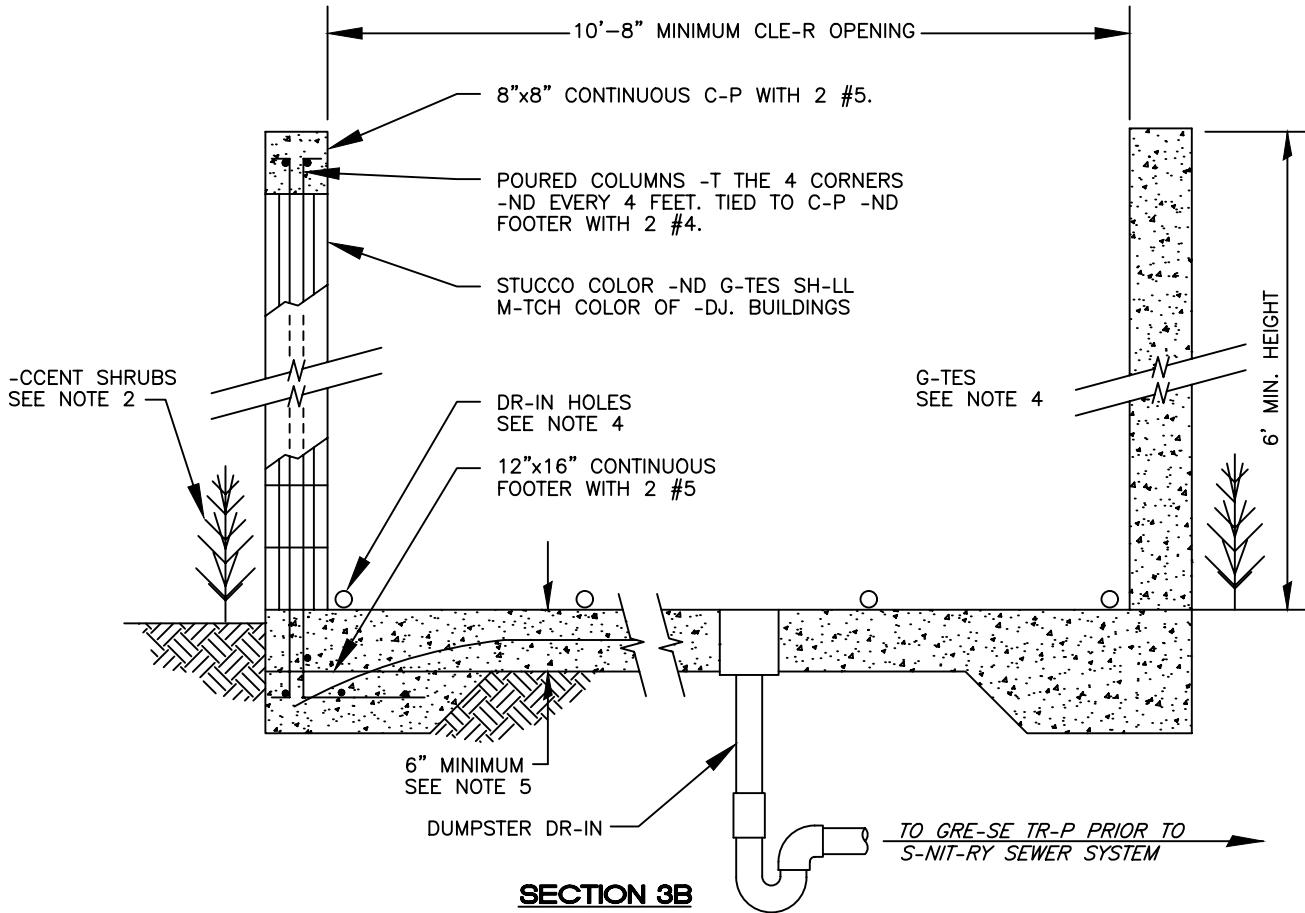


BOYNTON BEACH ENGINEERING STANDARD DETAIL



DUMPSTER ENCLOSURE DETAIL

EFF. DATE
02/20
DETAIL. NO.
G-3A



1. -LL CONSTRUCTION SH-LL CONFORM WITH BUILDING -ND L-NDSC-PE CODES.
2. -CCENT SHRUBS TO H- E MIN. PL-NTED HEIGHT OF 18" -T 24" O.C. ON THE W-LLED SIDES.
3. G-TES SH-LL H- E DROP PINS TO DROP INTO HOLES IN SL-B (CLOSED) -ND INTO SLEEVES IN THE P- EMENT (OPEN). FENCE G-TES SH-LL H- E SL-TS TO SCREEN DUMPSTER.
4. PITCH SL-B TO RE-R & PROVIDE DR-IN HOLES. IF SL-B DR-IN REQUIRED, PITCH TO DR-IN.
5. CONCRETE P-D TO BE 6" THICK WITH 6X6 #10 WIRE MESH WITH 2500 PSI CONCRETE.
6. THERE SH-LL BE - CLE-R, UNOBSTRUCTED VERTIC-L DIST-NCE OF 15 FEET MINIMUM -BOVE THE DUMPSTER, ME-SURED FROM THE SL-B.
7. DR-INS ONLY REQUIRED WHEN FOOD SCR-PS MIGHT BE INCLUDED IN W-STE.
8. FLOOR DR-IN SH-LL BE ZURN MODEL Z415B OR -PPROVED EQU-L.

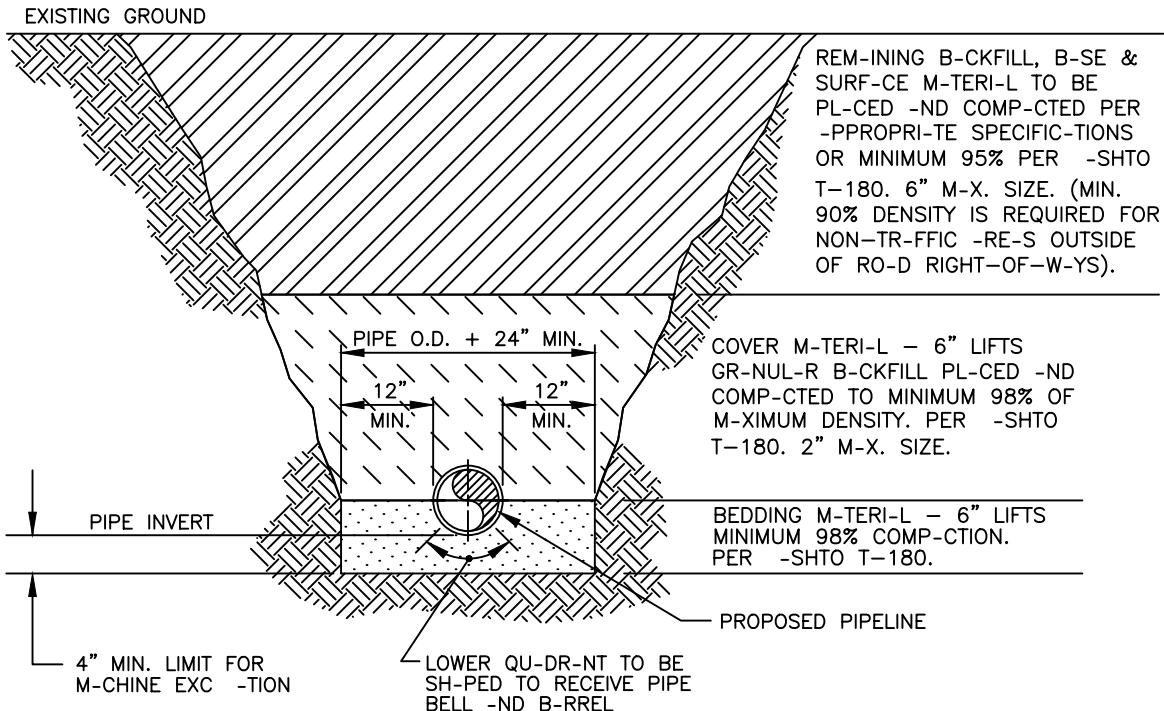
BOYNTON BEACH ENGINEERING STANDARD DETAIL



DUMPSTER ENCLOSURE DETAIL

EFF. DATE
02/20

DETAIL. NO.
G-3B



NOTES:

1. EXCAVATION SIDE SLOPE SHORING, ETC. SHALL CONFORM TO O.S.H.A. STANDARDS. COMPACT TRENCH BACKFILL TO 98% OF MAXIMUM DENSITY IN ACCORDANCE WITH -SHTO T-180 DENSITY TESTS. SHALL BE TAKEN AT 12" LIFTS EVERY 100' IN PUBLIC RIGHTS-OF-WAY AND 200' IN E-SEGMENTS.
2. BEDDING SHALL CONSIST OF IN-SITU GR-NUL-R M-TERI-L OR W-SHED AND GR-DED LIMEROCK 3/8"-7/8" SIZING. UNSUITABLE IN-SITU M-TERI-LS SUCH AS MUCK, DEBRIS AND LARGER ROCKS SHALL BE REMOVED.
3. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH COMPACTION UNDER THE PIPE HUNCHES.
4. THE PIPE SHALL BE PLACED IN A DRY TRENCH.
5. BACKFILL SHALL BE FREE OF UNSUITABLE M-TERI-L SUCH AS LARGE ROCK, MUCK, AND DEBRIS.
6. DENSITY TESTS ARE REQUIRED IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 100' IN PUBLIC RIGHT-OF-WAY AND 200' IN E-SEGMENTS, OR AS DIRECTED BY THE INSPECTOR.
7. THE DEVELOPER/CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE TRENCH SAFETY LAWS AND REGULATIONS.
8. SEE SEPARATE DETAIL FOR "P-EMENT REPLACEMENT/PIPE INSTALLATION UNDER EXISTING ROADWAY - OPEN CUT."
9. THE AFFECTED AREA SHALL BE RESTORED TO EQUAL OR BETTER CONDITION AS REQUIRED.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



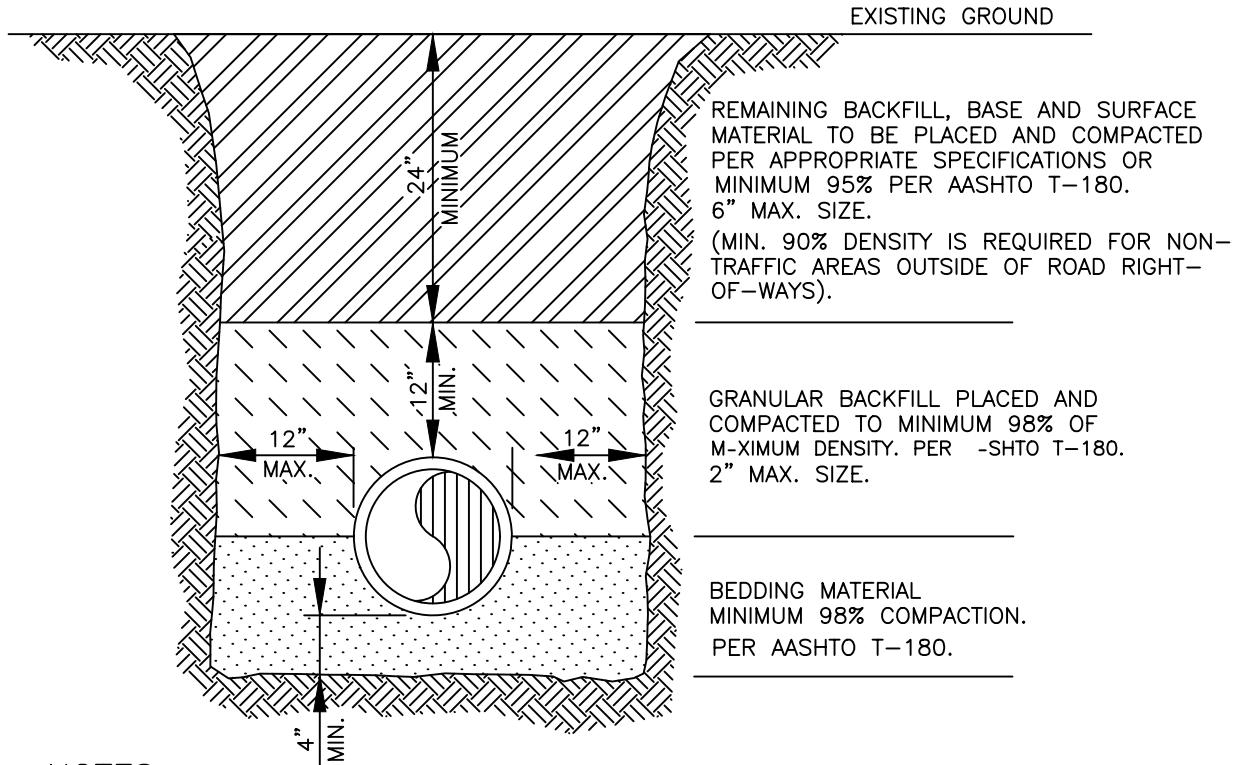
STANDARD TRENCHING PROCEDURE

EFF. DATE

02/20

DETAIL. NO.

G-4



NOTES:

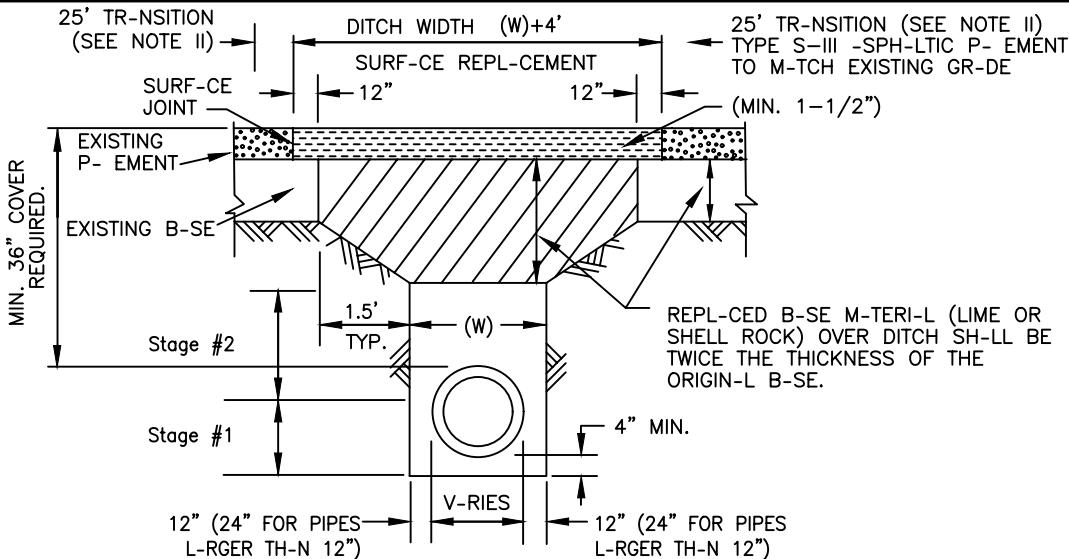
1. BEDDING SHALL CONSIST OF IN-SITU GR-NUL-R M-TERI-L OR W-SHED AND GR-DED LIMEROCK 3/8"-7/8" SIZING. UNSUIT-BLE IN-SITU M-TERI-LS SUCH AS MUCK, DEBRIS AND L-RGER ROCKS SHALL BE REMOVED.
2. THE PIPE SHALL BE FULLY SUPPORTED FOR ITS ENTIRE LENGTH WITH APPROPRIATE COMP-CTION UNDER THE PIPE H-UNCHES.
3. THE PIPE SHALL BE PL-CED IN DRY TRENCH.
4. BACKFILL SHALL BE FREE OF UNSUIT-BLE M-TERI-L SUCH AS L-RGE ROCK, MUCK, AND DEBRIS.
5. DENSITY TESTS ARE REQUIRED IN 1 FOOT LIFTS ABOVE THE PIPE AT INTERVALS OF 100' IN PUBLIC RIGHT-OF-W-Y AND 200' IN E-SEMENTS, OR AS DIRECTED BY THE INSPECTOR.
6. THE DEVELOPER/CONTR-CTOR SHALL COMPLY WITH ALL APPLICABLE TRENCH SAFETY LAWS AND REGUL-TIONS. SEE SEP-R-TE DET-IL FOR "P- EMENT REPL-CEMENT/PIPE INST-LL-TION UNDER EXISTING RO-DW-Y OPEN CUT."
8. THE AFFECTED AREAS SHALL BE RESTORED TO EQU-L OR BETTER CONDITION AS REQUIRED.
9. EXCAVATION SIDE SLOPE SHORING, ETC SHALL CONFORM TO O.S.H.-STD-NDS. COMP-CT TRENCH BACKFILL TO 98% OF MAXIMUM DENSITY IN ACCORD-NCE WITH AASHTO-T180.
10. 6 INCH WIDE MAGNETIC C-UTION T-PE SHALL BE INST-LLLED 18" ABOVE THE CROWN OF THE PIPE.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



TYPICAL TRENCH DETAIL

EFF. DATE
02/20
DETAIL. NO.
G-5



DENSITY PROCEDURES:

THE B-CKFILL FOR THE FIRST AND SECOND STAGES SH-LL BE PL-CED IN 6" L-YERS (COMP-CTED THICKNESS) AND SH-LL BE COMP-CTED TO 98% OF M-XIMUM DENSITY -S DETERMINED BY -SHTO T-180.

ST-GE #1

THE CONTR-CTOR SH-LL PROVIDE -DEQU-TE COMP-CTED FILL BENE-TH THE H-UNCLES OF THE PIPE, USING MECH-NIC-L T-MPS SUIT-BLE FOR THIS PURPOSE. THIS COMP-CTION -PPLIES TO THE M-TERI-L PL-CED BENE-TH THE H-UNCLES OF THE PIPE AND ABOVE ANY BEDDING REQUIRED.

ST-GE #2

THE CONTR-CTOR SH-LL OBT-IN - WELL-COMP-CTED BED AND FILL -LONG THE SIDES OF THE PIPE AND TO - POINT INDIC-TING THE TOP OF SUB-GR-DE M-TERI-L.

GENER-L NOTES:

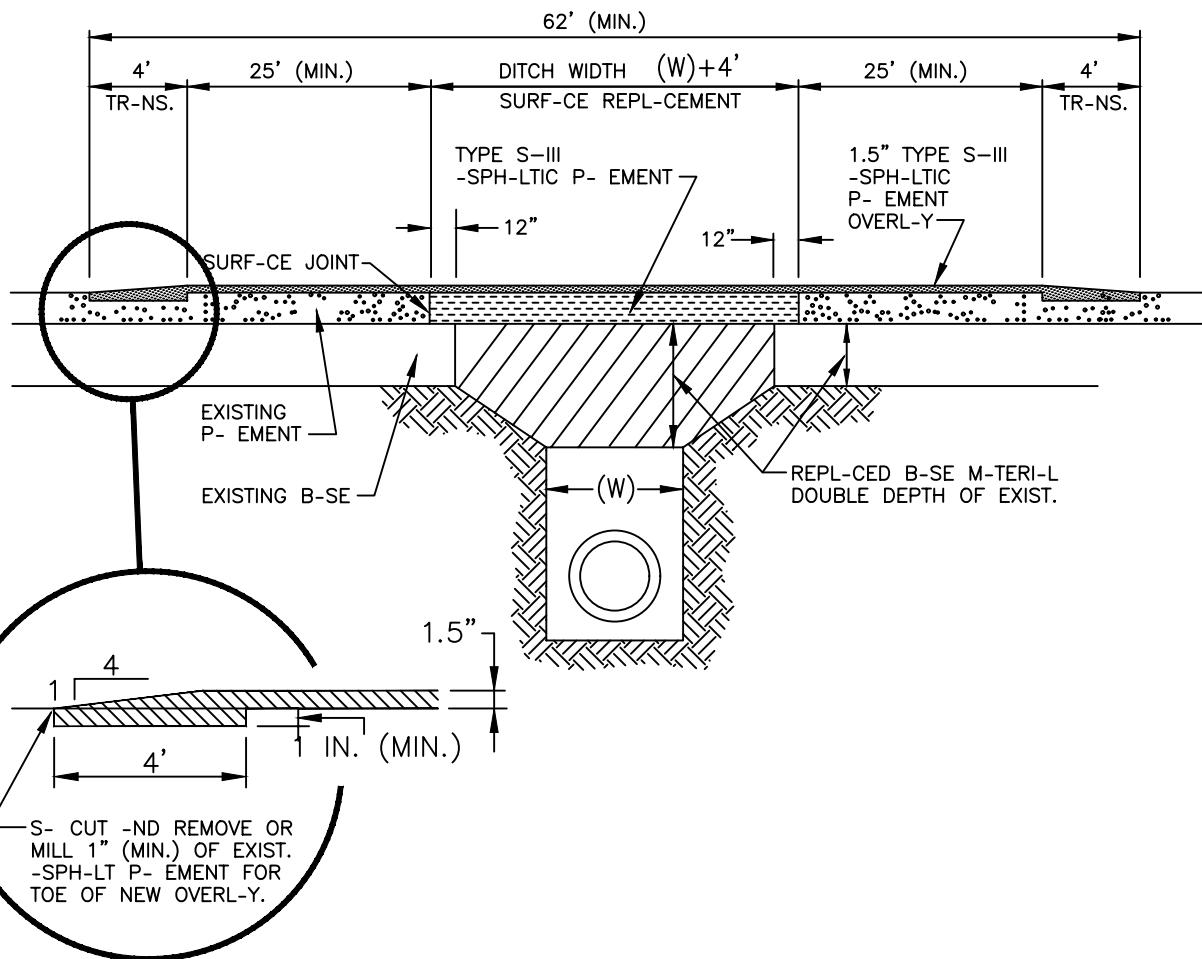
1. SEE NOTES FOR TYPIC-L TRENCH DET-IL FOR B-CKFILL AND BEDDING M-TERI-L SPECIFIC-TIONS.
2. B-SE M-TERI-L SH-LL BE PL-CED IN 6" L-YERS AND E-CH L-YER COMP-CTED TO 98% OF M-XIMUM DENSITY PER -SHTO T-180.
3. -SPH-LT CONCRETE P- EMENT JOINTS SH-LL BE MECH-NIC-LLY S- ED -T SPLICE POINT.
4. SURF-CE TRE-TED P- EMENT JOINTS SPLICE JOINTS SH-LL BE L-PPED AND FE-THERED OR TOE -NCHORED.
5. SURF-CE M-TERI-L WILL BE CONSISTENT WITH THE EXISTING SURF-CE. THE -FFECTED -RE- SH-LL BE RESTORED TO EQU-L OR BETTER CONDITION.
6. THE DEVELOPER/CONTR-CTOR SH-LL BE RESPONSIBLE FOR COMPLI-NCE REG-IRDING ANY ADDITION-L SPECIFIC-TIONS -S REQUIRED BY THE PROPERTY OWNER. (FDOT, COUNTY, CITY, ETC.....)
7. EXC -T-BLE "FLOW-BLE FILL" WITH ULTIM-TE COMPRESSIVE STRENGTH BETWEEN 50 AND 150 PSI M-Y BE USED TO SUBSTITUTE FOR THE B-CKFILL AND B-SE M-TERI-LS IF -PPROVED BY THE ENGINEER.
8. -NY D-M-GE TO TR-FFIC SIGN-LIZ-TION EQUIPMENT SH-LL BE REP-IRED BY THE P-LM BE-CH TR-FFIC DIVISION -T THE PERMITTEE'S EXPENSE.
9. THESE SPECIFIC-TIONS M-Y BE SUPERCEDED BY THE PERMITTING -GENCY.
10. -FFECTED DRIVEW-Y'S SH-LL BE REPL-CED IN KIND.
11. 6 INCH WIDE M-GNETIC C-UTION T-PE SH-LL BE INST-LLED 18" ABOVE THE CROWN OF THE PIPE
12. FOR THE FIN-L RESTOR-TION (INCLUDES THE P-TCHED/SURF-CE REPL-CEMENT -RE- OVER THE TRENCH), THE RO-D SH-LL BE MILLED AND RESURF-CED WITH 1-1/2" (ONE AND H-LF INCH) OF SP 12.5 STRUCTUR-L COURSE (TR-FFIC LEVEL -) WITH T-CK CO-T -T 0.05 G-L/SY AND RC-70 PRIME CO-T -T 0.10 G-L/SY. FOR - FULL L-NE WIDTH ENCRO-CHEC BY THE TRENCH INCLUDING - TR-NSITION -RE- OF 25FT E-CH SIDE ME-SURED FROM TOP OF TRENCH.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



PAVEMENT REPLACEMENT/PIPE INSTALLATION UNDER ROADWAY - OPEN CUT

EFF. DATE
02/20
DETAIL. NO.
G-6



GENERAL PROCEDURES

1. COMPLETE PAVEMENT REPLACEMENT FROM PIPE INSTALLATION UNDER EXISTING ROADWAY AS [REFLECTED IN STANDARD DRAWING G-7][AS SHOWN OF ADJACENT DETAIL].
2. SAWCUT AND REMOVE OR MILL A 4-FOOT NOTCH IN EXISTING PAVEMENT AT THE LOCATION SHOWN ABOVE FOR TOE OF NEW ASPHALT OVERLAY.
3. INSTALL NEW 1-INCH TYPE S-III ASPHALT CONCRETE PAVEMENT OVERLAY (WITH APPROPRIATE TACK COAT).
4. RESTRIPE ANY ROADWAY CENTERLINE STRIPING COVERED WITH OVERLAY TO MEET EXISTING MARKING(S).

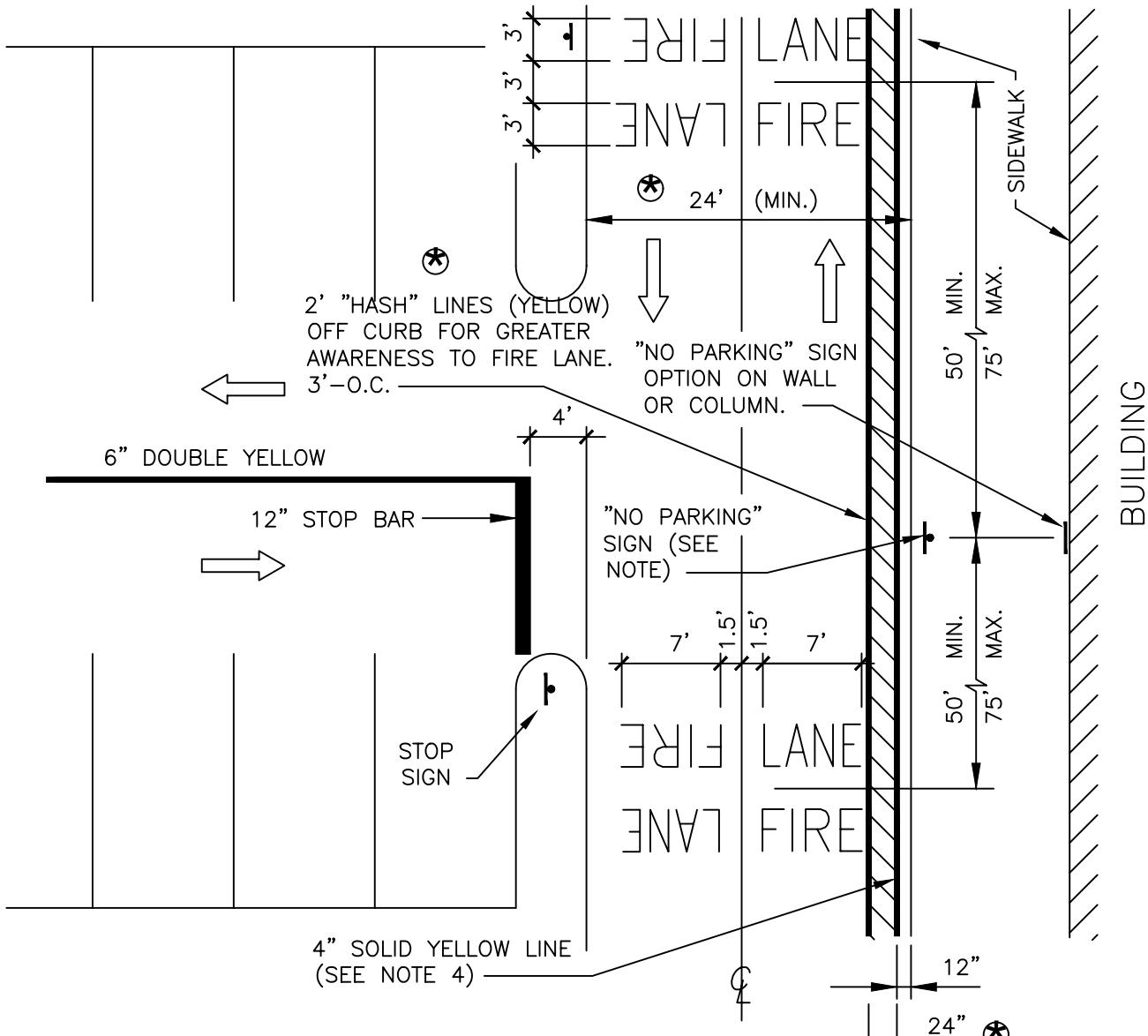
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PAVEMENT OVERLAY AFTER PIPE
INSTALLATION

EFF. DATE
02/20

DETAIL. NO.
G-7



NOTES:

1. THE "NO PARKING" SIGN, SHALL BE 12" x 18" MINIMUM, LETTERING NOT LESS THAN 2" IN HEIGHT OR MORE THAN 3".
2. SIGN MESSAGE SHALL STATE: "NO STOPPING, STANDING OR PARKING BY ORDER OF THE FIRE MARSHALL" LETTERING SHALL BE RED ON WHITE BACKGROUND.
3. WORD AND SYMBOL MARKINGS ON PAVEMENT SHALL BE WHITE, WITH 6" WIDE LETTERING.
4. IF CONCRETE CURB SEPARATES RAISED SIDEWALK FROM FIRE LANE, THEN CURB SHALL BE PAINTED SOLID YELLOW IN LIEU OF LINE STRIPE.
5. DIRECTIONAL ARROWS ARE SHOWN FOR REFERENCE ON THE DETAIL.

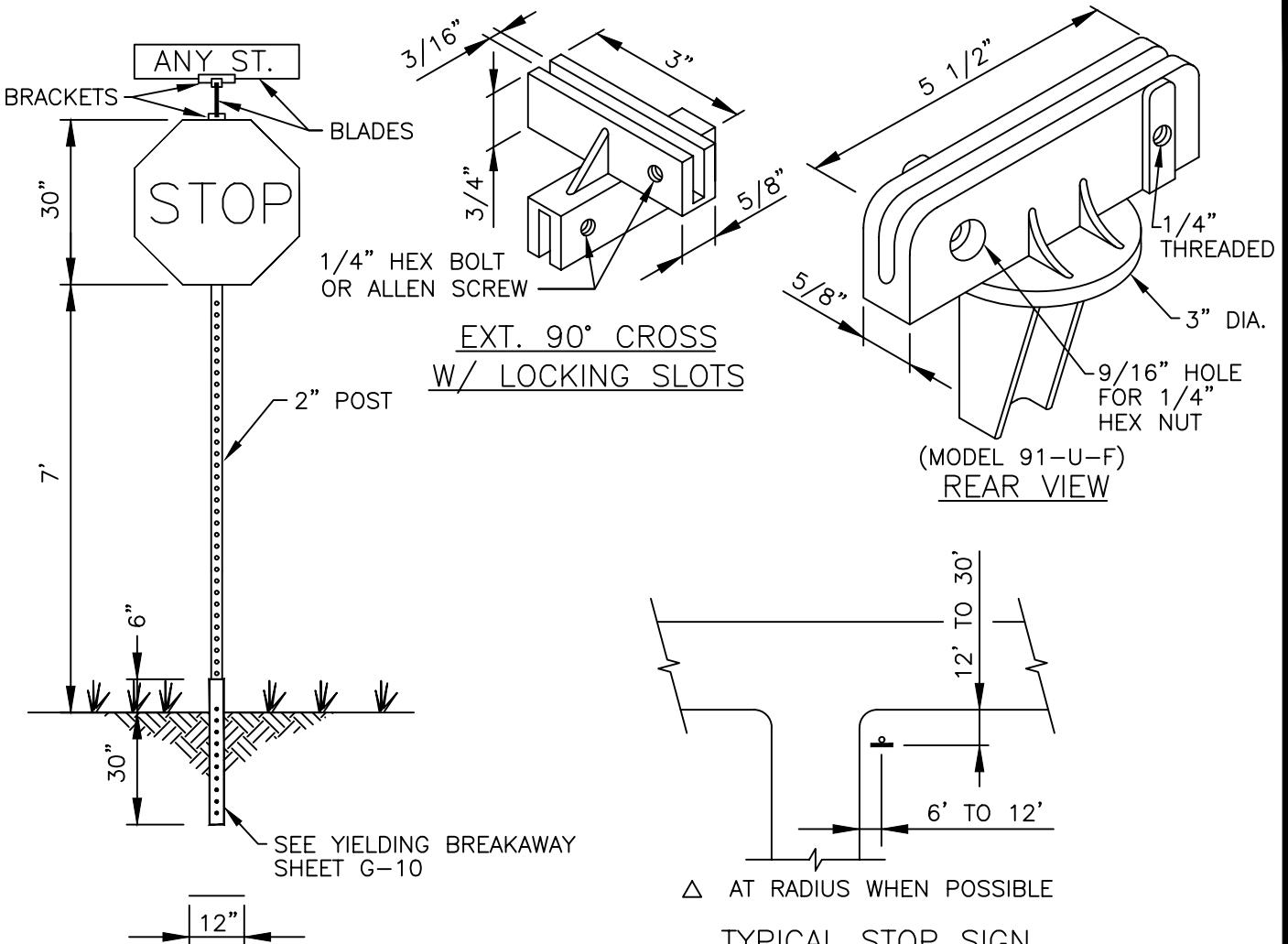
BOYNTON BEACH ENGINEERING STANDARD DETAIL



FIRE LANE MARKINGS

EFF. DATE
02/20

DETAIL. NO.
G-8



GENERAL SPECIFICATIONS

SHEET BLADE: ALCOA #86054.6063-T6 ALLOY
ETCHED, DEGREASED WITH #1200 ALODINE FINISH
WITH #2277 GREEN SCOTCHLITE BACKGROUND OR
EQUAL DIMENSIONS - 6" H., 24", 30" OR 36" L.

LETTER: NAME - 4" SERIES 'B' #2270
SCOTCHLITE (SLAVER) OR EQUAL - SUFFIX - 2"
SERIES AS ABOVE.

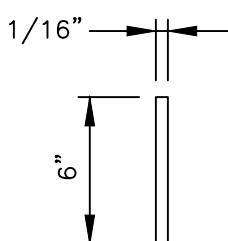
BRACKETS: SUPR-LOK PRUF.

POST: 2" SQUARE GALVANIZED STEEL SIGN POST
WITH BAKED GREEN ALKYD FINISH PER A.S.T.M. -
A - 123 WITHOUT ANCHOR PLATES. SEE DETAIL

SHEET CONCRETE BASE: 2000# AS SHOWN.

STOP SIGN: R1-1 MUTCD - 30"x30" (HIGH INTENSITY)

LOCATION: ONE PER INTERSECTION AS INDICATED ON
THE PLANS.



SHEET
BLADE
SECTION

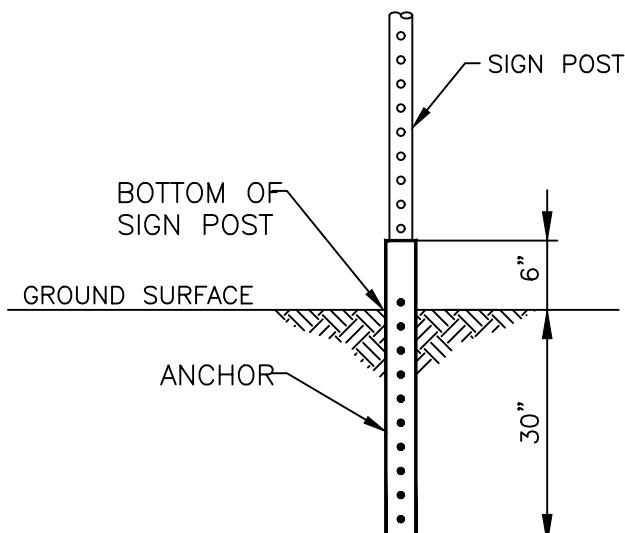
BOYNTON BEACH ENGINEERING STANDARD DETAIL



STREET SIGN/STOP SIGN DETAIL

EFF. DATE
02/20

DETAIL. NO.
G-9

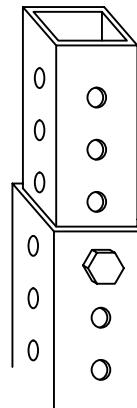


YIELDING
BREAKAWAY

GROUND SUPPORT OPTIONS

USE 12 GAUGE SQUARE TUBING DRIVEN INTO SOIL.
LEAVE 6" LEFT EXPOSED ABOVE SURFACE.

NOT-TO-SCALE



GENERAL SPECIFICATIONS:

MATERIAL: HOT-ROLLED CARBON SHEET STEEL, ASTM A570, GRADE 50.

POST: SQUARE PERFORATED, WELDED STEEL TUBING, VARIOUS SIZES, 3 GAUGES BEING 14, 12 & 10 FOR EXTRA HEAVY-DUTY REQUIREMENTS. QWIK-PUNCH SQUARE POSTS ARE 1-3/4" & 2" IN 14 GAUGE ONLY.

FABRICATION: STRAIGHT WITH SMOOTH FINISH. SHALL BE POSSIBLE TO TELESCOPE CONSECUTIVE SIZES WITH MINIMUM OF PLAY.

FINISH: HOT DIPPED GALVANIZING WITH CONVERSION COATING TOPPED WITH A CLEAR POLYMER COATING.

ANCHOR: GROUND SUPPORT IS MOST COMMON. OMNI ANCHOR/SLEEVE AVAILABLE FOR LOOSE SOIL CONDITIONS.

FASTENERS: DRIVE RIVETS FOR ONE-PIECE FASTENER. STANDARD HEX NUTS AND BOLTS COMMON. CORNER BOLTS USED FOR TAKING UP FIT TOLERANCE IN TELESCOPING ASSEMBLIES.

SIGNS: REGULATORY, WARNING, GUIDE, SPECIFIC SERVICE, TOURIST-ORIENTED, RECREATIONAL AND CULTURAL INTEREST AREA PER THE M.U.T.C.D., LATEST EDITION.

LOCATION: AS INDICATED ON PLANS.

BOYNTON BEACH ENGINEERING STANDARD DETAIL



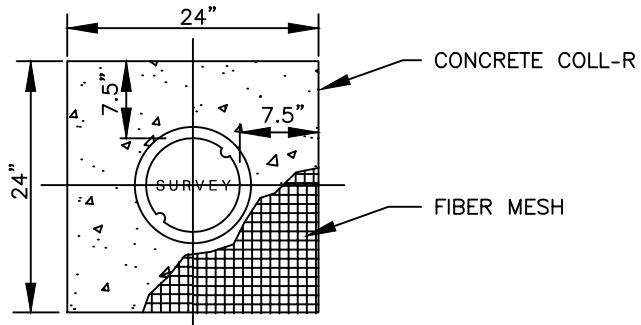
"TELESPAR" SIGN SUPPORT SYSTEM

EFF. DATE

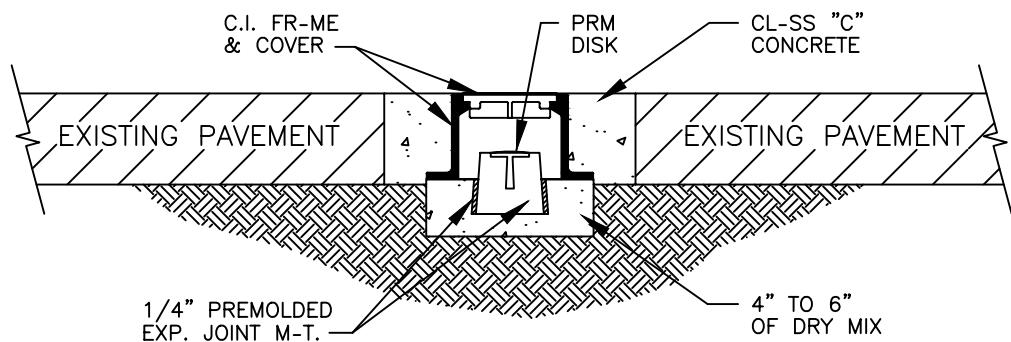
02/20

DETAIL. NO.

G-10



PLAN VIEW



SECTION VIEW

NOTES:

1. CONCRETE COLL-R IS NOT REQUIRED IN P- ED -RE-S IF P- EMENT SURF-CE IS FINISHED PRIOR TO CONDITION-L FIN-L INSPECTION.
2. BOX COVER SH-LL H- E M-RKING "SURVEY".
3. DEPTH OF PRM DISK MONUMENT V-RIES B-SED ON EXISTING SUBB-SE CONDITIONS.

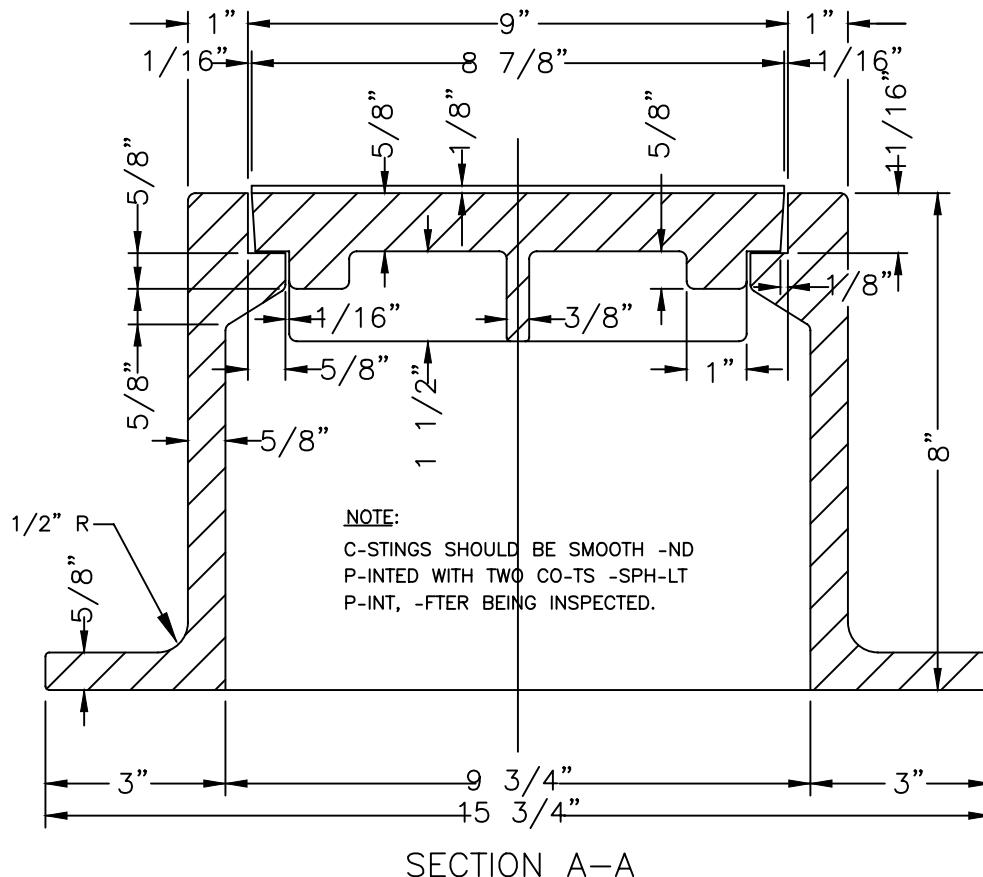
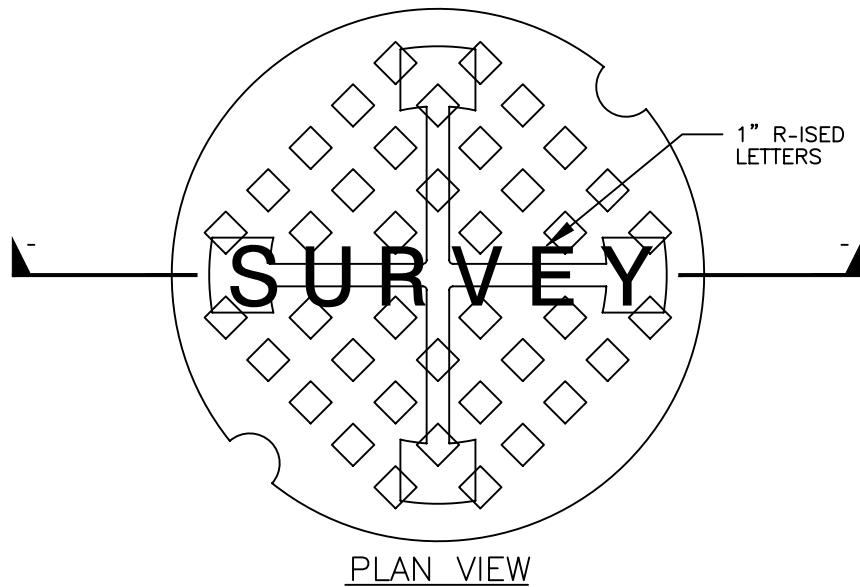
BOYNTON BEACH ENGINEERING STANDARD DETAIL



PRM LOCATION IN PAVEMENT AREA

EFF. DATE
02/20

DETAIL. NO.
G-11



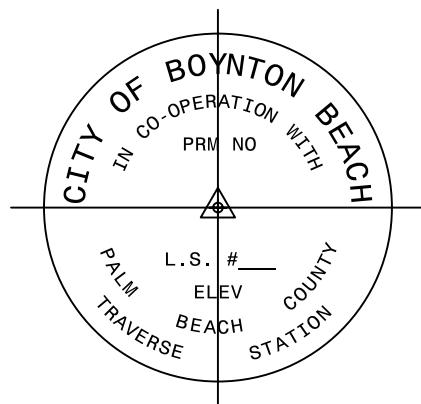
BOYNTON BEACH ENGINEERING STANDARD DETAIL



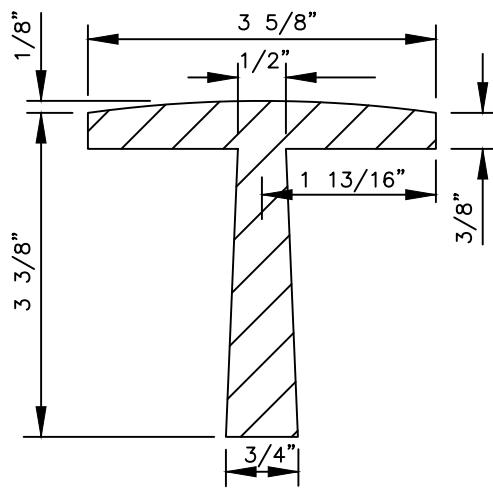
CAST IRON FRAME & COVER
FOR PRM MONUMENTS

EFF. DATE
02/20

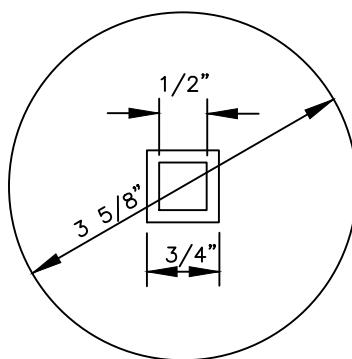
DETAIL. NO.
G-12



PLAN VIEW



SECTION VIEW



BOTTOM VIEW

BOYNTON BEACH ENGINEERING STANDARD DETAIL



PRM BRONZE DISC

EFF. DATE
02/20
DETAIL. NO.
G-13