# STREET IMPROVEMENT STANDARD DETAILS

# **INDEX:**

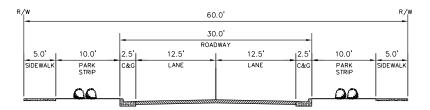
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3	APPROVED		SEPT. 06	
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY

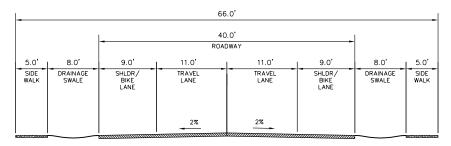
STANDARD STREET IMPROVEMENT DETAILS

# DRAPER CITY TYPICAL STREET SECTIONS

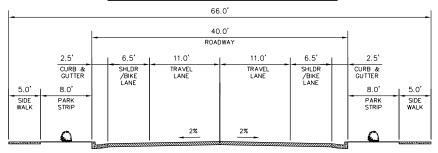
#### VALLEY LOCAL ROAD



#### RURAL MINOR COLLECTOR



#### STANDARD MINOR COLLECTOR



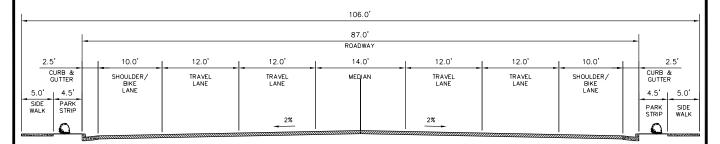
- 1. CROSS-SECTIONS SHOWN ARE STANDARD DETAILS FOR ROADWAYS. MODIFIED CROSS-SECTIONS CAN BE FOUND IN THE DRAPER CITY TRANSPORTATION MASTER PLAN.
- 2. HIGHLAND DRIVE AND ALL MOUNTAIN ROADS REQUIRE SPECIFIC CROSS—SECTIONS, WHICH CAN BE FOUND IN THE DRAPER CITY TRANSPORTATION MASTER PLAN.
- 3. SEE DRAPER CITY TRANSPORTATION MASTER PLAN FOR ROADWAY SPEED DESIGNATIONS.

1	APPROVED		SEPT. 06		TYPICAL LOCAL ROAD CROSS SECTIONS	ST-01
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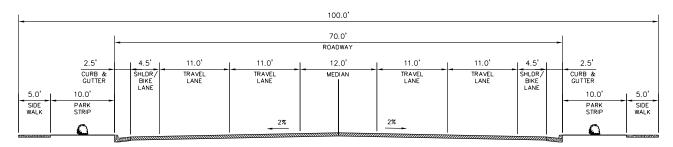
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# DRAPER CITY TYPICAL STREET SECTIONS

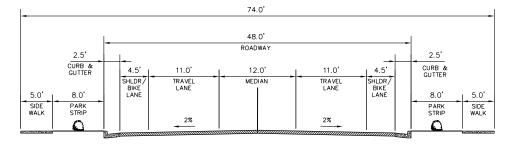
#### UDOT ARTERIAL



#### DRAPER ARTERIAL

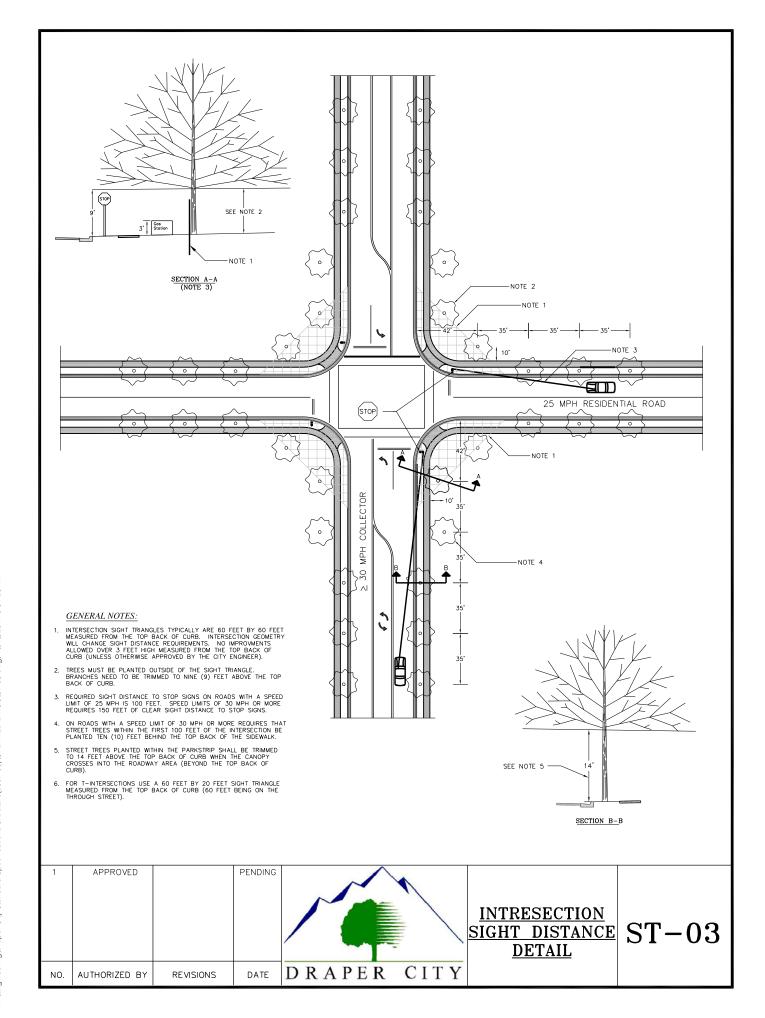


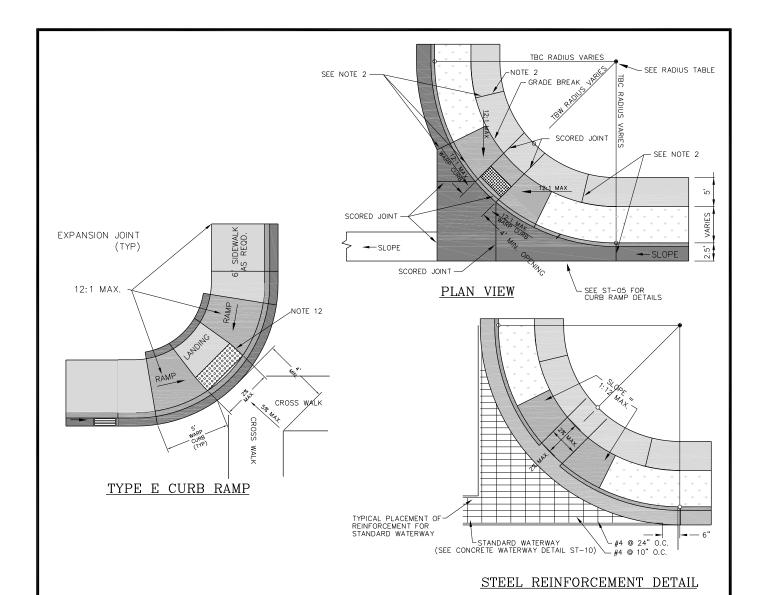
#### STANDARD MAJOR COLLECTOR



- CROSS-SECTIONS SHOWN ARE STANDARD DETAILS FOR ROADWAYS. MODIFIED CROSS-SECTIONS CAN BE FOUND IN THE DRAPER CITY TRANSPORTATION MASTER PLAN.
- 2. HIGHLAND DRIVE AND ALL MOUNTAIN ROADS REQUIRE SPECIFIC CROSS—SECTIONS, WHICH CAN BE FOUND IN THE DRAPER CITY TRANSPORTATION MASTER PLAN.
- 3. SEE DRAPER CITY TRANSPORTATION MASTER PLAN FOR ROADWAY SPEED DESIGNATIONS.

1	APPROVED		SEPT. 06		TYPICAL MAJOR ROAD CROSS SECTIONS	ST-02
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#### NOTES:

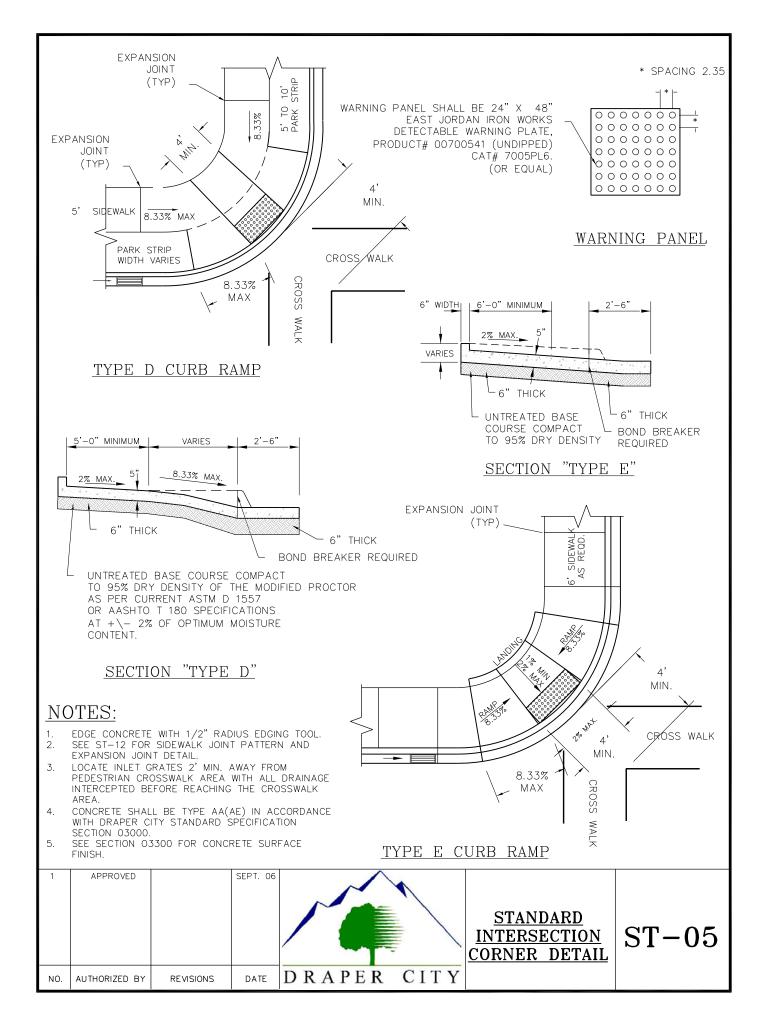
- EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL. SEE ST-12 FOR SIDEWALK JOINT PATTERN AND EXPANSION JOINT DETAIL. LOCATE INLEET GRATES 2' MIN. AWAY FROM PEDESTRIAN CROSSWALK AREA WITH ALL DRAINAGE INTERCEPTED BEFORE REACHING THE CROSSWALK AREA. CONCRETE SHALL BE TYPE AA(AE) IN ACCORDANCE WITH DRAPER CITY STANDARD SPECIFICATION SECTION 03000.

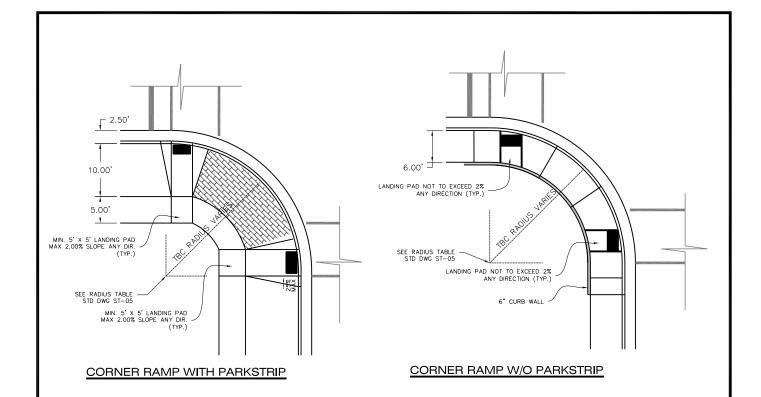
	TABLE OF INTERSECTION CORNER RADIUS (R)					
ROADWAY TYPE	ARTERIAL MINOR ARTERIAL 106' ROW 84' ROW 80' ROW 66' ROW 50' ROW					
ARTERIAL 106' ROW	TBC=40' TBW=31'	TBC=40' TBW=31'	TBC=35' TBW=26'	TBC=35' TBW=26'	TBC=30' TBW=21'	
MINOR ARTERIAL 84' ROW	TBC=40' TBW=31'	TBC=40' TBW=31'	TBC=35' TBW=26'	TBC=35' TBW=26'	TBC=30' TBW=21'	
COLLECTOR 80' ROW	TBC=35' TBW=26'	TBC=35' TBW=26'	TBC=35' TBW=26'	TBC=30' TBW=21'	TBC=30' TBW=21'	
MINOR COLLECTOR 66' ROW						
LOCAL TBC=30' TBC=30' TBC=30' TBC=25' TBW=21' TBW=21' TBW=16' TBW=16'						
TBC = TOP BACK OF CURB TBW = TOP BACK OF SIDEWALK						

1	APPROVED		pending	
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**TYPICAL INTERSECTION** CORNER DETAIL

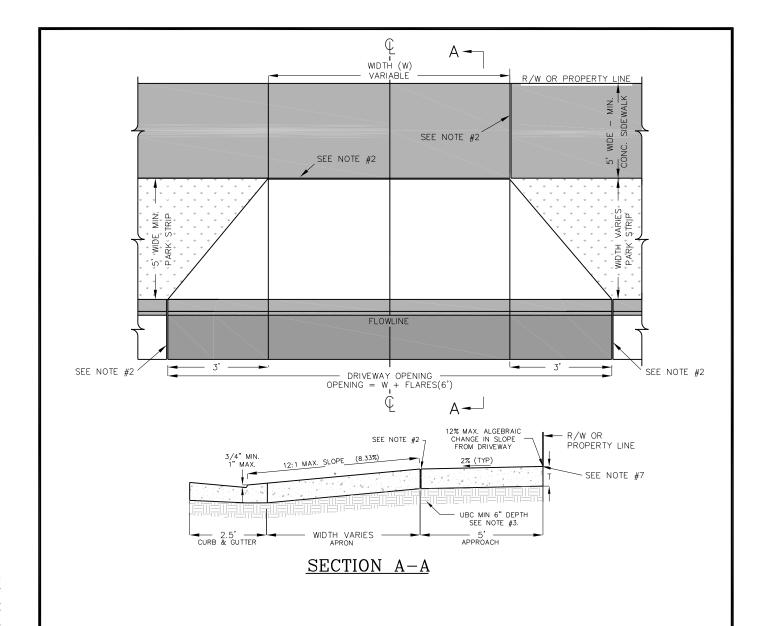






- . EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL.
- 2. SEE DWG. ST-12 FOR EXPANSION JOINT DETAILS AND SIDEWALK JOINT DETAILS.
- 3. USE 6" MIN. UNTREATED BASE COURSE MATERIAL. COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR AS PER CURRENT ASTM D 1557 OR AASHTO T 180 SPECIFICATIONS; AT +/- 2% OF OPTIMUM MOISTURE CONTENT.
- 4. CONCRETE SHALL BE TYPE AA(AE) IN ACCORDANCE WITH DRAPER CITY STANDARD SPECIFICATION SECTION 03000.
- 5. LOCATE INLET GRATES 2' MIN. AWAY FROM PEDESTRIAN CROSSWALK AREA WITH ALL DRAINAGE INTERCEPTED BEFORE REACHING THE CROSSWALK AREA.
- 6. SEE SECTION 03300 FOR CONCRETE SURFACE FINISH.
- 7. SLOPES SHOWN ARE MAXIMUM AND ARE TO COMPLY WITH A.D.A. AND A.N.S.I. STANDARDS.
- 8. REFER TO DRAPER CITY SPECIFICATION SECTION 03050.
- 9. 24" X 24" DETECTABLE WARNING IN ACCORDANCE WITH ADAAG GUIDELINE (TRUNCATED DOMES). PLACE SO PANEL CORNERS ARE 4"-6" FROM TBC. PANELS SHALL BE RED. CONCRETE STAMPS/FORMS ARE NOT TO BE USED.

					ALTERNATE LOCATIONS FOR HANDICAP RAMPS BY APPROVAL	ST-06
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY	ONLY	



# TABLE OF DRIVEWAY DIMENSIONS

DIMENSION	ZONE
Т	0'-6" RESIDENTIAL ZONES 0'-8" COMMERCIAL & INDUSTRIAL ZONES
W	25'-0" MIN. INDUSTRIAL & COMMERCIAL USE 36'-0" MAX. INDUSTRIAL & COMMERCIAL USE 16'-0" MIN. MAJOR & COLLECTOR STREET RESIDENTIAL USE 12'-0" MIN. LOCAL STREET RESIDENTIAL USE 30'-0" MAX. ALL RESIDENTIAL USE

# GENERAL NOTES

- EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL. PLACE 1/2" BITUMINOUS IMPREGNATED EXPANSION JOINT WHERE NOTED AND IN THE DRIVEWAY CENTERLINE IF "W" IS GREATER THAN 20'. EXPANSION JOINT SHALL BE FULL DEPTH OF CONCRETE PLUS 1", WITH TOP SET FLUSH WITH TOP OF CONCRETE. BOND BREAKER SHALL BE REQUIRED AT THE LINE BETWEEN TBC AND APRON.
- USE 6" MIN. UNTREATED BASE COURSE MATERIAL, COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR AS PER CURRENT ASTM D 1557 OR AASHTO T 180 SPECIFICATIONS; AT  $\pm 1$  2% OF OPTIMUM MOISTURE CONTENT. SEE ST-12 FOR SIDEWALK JOINT PATTERN.

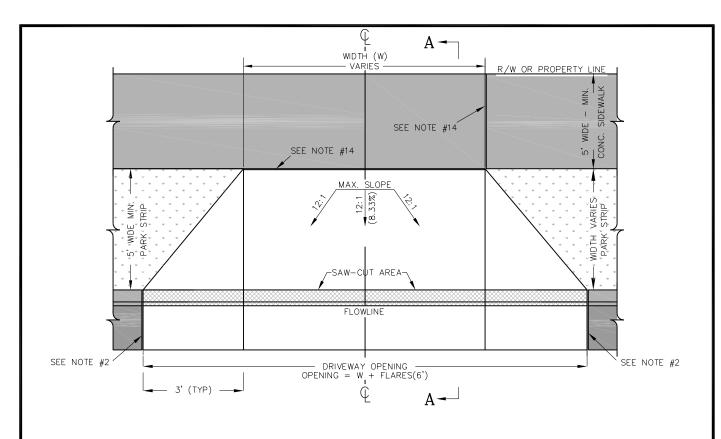
- ALL CONCRETE SHALL BE CLASS AA (AE). SEE SECTION 03000.
  ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 2:1 SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO MAINTAIN A 2:1 RATIO MAX.
- ALL DRIVEWAYS MUST MAINTAIN A NEGATIVE SLOPE AWAY FROM THE HOME. NO DOWN SLOPING DRIVEWAYS WILL BE ALLOWED UNLESS APPROVED BY ENGINEER.

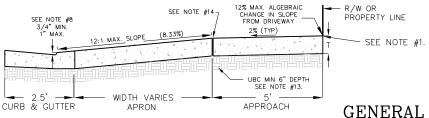
1	APPROVED		SEPT. 06		<u>FLARED</u> <u>DRIVE</u> <u>APPROACH</u>	ST-0
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY		

DIMENSION

Τ

W





SECTION A-A

TABLE OF DRIVEWAY DIMENSIONS

0'-6" RESIDENTIAL ZONES

RESIDENTIAL USE

0'-8" COMMERCIAL & INDUSTRIAL ZONES

16'-0" MIN. MAJOR & COLLECTOR STREET

25'-0" MIN. INDUSTRIAL & COMMERCIAL USE

36'-0" MAX. INDUSTRIAL & COMMERCIAL USE

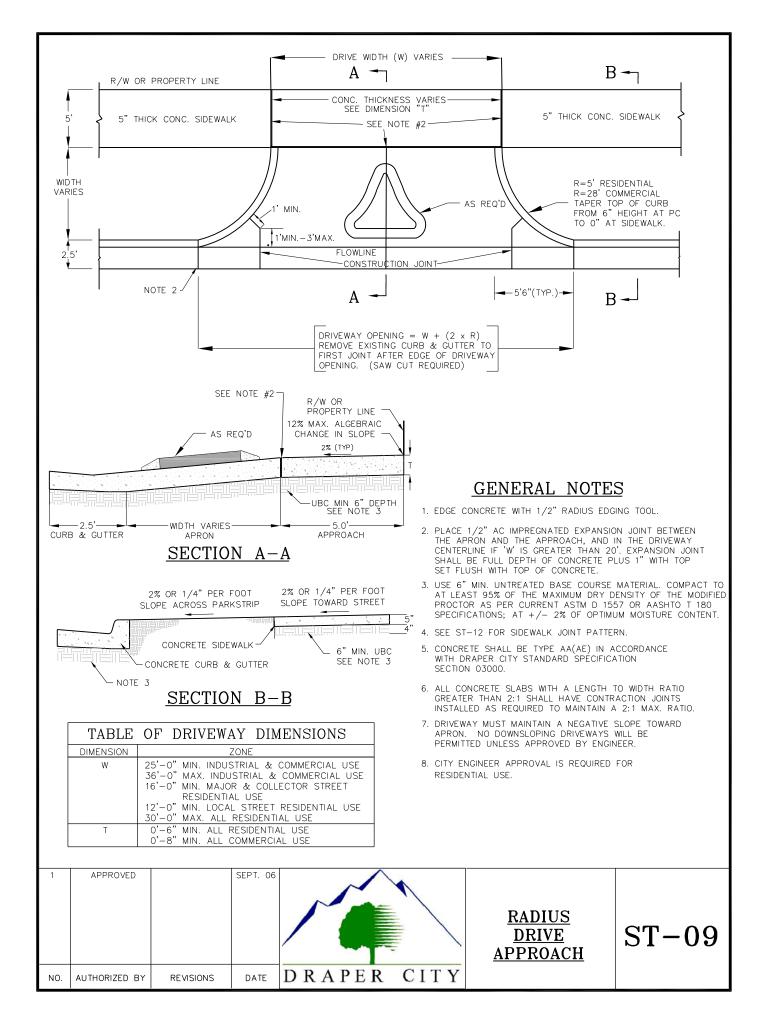
12'-0" MIN. LOCAL STREET RESIDENTIAL USE 30'-0" MAX. ALL RESIDENTIAL USE

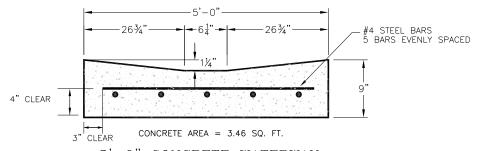
<u>GENERAL</u>	NOTES

- EDGE CONCRETE WITH 1/2" RADIUS EDGING TOOL. PLACE 1/2" BITUMINOUS IMPREGNATED EXPANSION JOINT WHERE NOTED AND IN THE DRIVEWAY CENTERLINE IF "W" IS GREATER THAN 20'. EXPANSION JOINT SHALL BE FULL DEPTH OF CONCRETE PLUS 1", WITH TOP SET FLUSH WITH TOP OF CONCRETE. BOND BREAKER SHALL BE REQUIRED AT THE LINE BETWEEN TBC
- USE 6" MIN. UNTREATED BASE COURSE MATERIAL, COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR AS PER CURRENT ASTM D 1557 OR AASHTO T 180 SPECIFICATIONS; AT +/- 2% OF OPTIMUM MOISTURE CONTENT. SEE ST-12 FOR SIDEWALK JOINT PATTERN.
- 5. ALL CONCRETE SHALL BE CLASS AA (AE). SEE SECTION 03000.
- ALL CONCRETE SLABS WITH A LENGTH/WIDTH RATIO GREATER THAN 6. SHALL HAVE CONTRACTION JOINTS INSTALLED AS REQUIRED TO MAINTAIN A 2:1 RATIO MAX.
- ALL DRIVEWAYS MUST MAINTAIN A NEGATIVE SLOPE AWAY FROM THE HOME. NO DOWN SLOPING DRIVEWAYS WILL BE ALLOWED UNLESS APPROVED BY ENGINEER.
- HORIZONTAL CUT TO BE WIDTH OF DRIVEWAY SAWCUT MUST BE SLOPED TOWARD THE GUTTER TO MATCH 9. SLOPE OF APRON.
- 10. NO OVERCUTTING WHERE CUTS MERGE.
- GRIND FRONT EDGES TO AN APPROXIMATE 1-1/2" RADIUS AND SAWED SURFACE SO THAT NO BLADE MARKS APPEAR. PATCH ALL HOLES 1/2" OR LARGER IN EXPOSED SURFACE WITH UDOT APPROVED PATCHING COMPOUND.
- REMOVE AND REPLACE ALL DETERIORATED, WEAK OR UNSOUND 13.

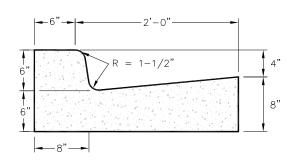
NO. AUTHORIZED BY REVISIONS DATE DRAPER CITY					CONCRETE	٠
NO. AUTHORIZED BY REVISIONS DATE DRAPER CITY	1	APPROVED		SEPT. 06		
	NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY	

FLARED DRIVE APPROACH REQUIRING CURB **CUT** 





#### 5'-0" CONCRETE WATERWAY



12" | 9½"

CONCRETE AREA = 1.69 SQ. FT.

30" CONCRETE STANDARD

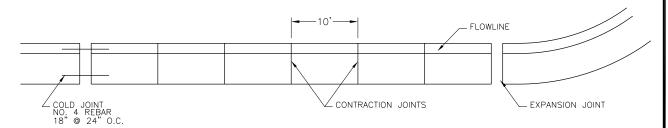
CURB & GUTTER

CONCRETE AREA = 1.539 SQ. FT.

TYPE "F" CURB & GUTTER

#### NOTES:

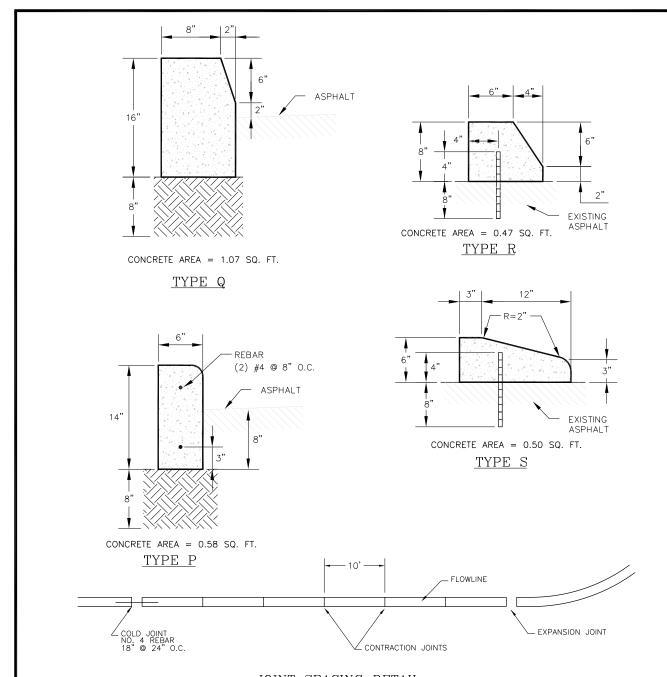
- 1. CONCRETE SHALL BE, CLASS AA (AE) AS PER DRAPER CITY STANDARD SPECIFICATION SECTION 03000.
- PLACE EXPANSION—CONTRACTION JOINTS, (JOINT FILLER MATERIAL FULL DEPTH OF CONCRETE PLUS 1 INCH, FLUSH WITH TOP OF CONCRETE) EVERY 50 FEET FOR HAND SET FORMING AND FOR SLIP FORMING AND AT THE PC. AND PT. OF EACH RADIUS AND START AND FINISH OF EACH POUR.
- 3. ALL REINFORCING STEEL TO BE A MINIMUM OF THREE INCHES CLEAR CONCRETE COVERAGE UNLESS OTHERWISE SHOWN.
- 4. ROLLED AND OUTFALL GUTTER SHALL NOT BE USED FOR NEW CONSTRUCTION UNLESS AUTHORIZED BY THE CITY ENGINEER.
- 5. EDGE CONCRETE WITH A 1/2" EDGING TOOL.
- 6. USE 6" MIN. UNTREATED BASE COURSE MATERIAL, COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR AS PER ASTM D 1557 OR AASHTO T 180 SPECIFICATIONS; AT +/- 2% OF OPTIMUM MOISTURE CONTENT.
- 7. STAGGER LAP SPLICES WITH A MINIMUM OF 15 INCHES.
- 8. FORM OIL CONTAMINATED REINFORCING STEEL WILL BE REJECTED.



#### CURB AND GUTTER JOINT DETAIL

1	APPROVED		SEPT. 06	
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY

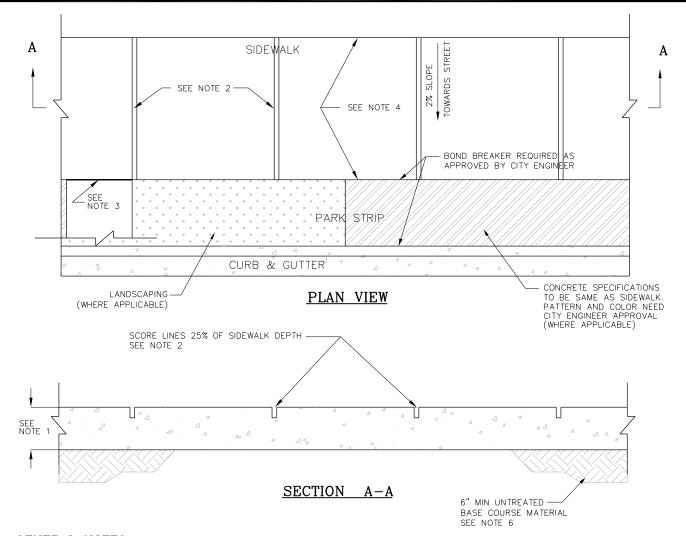
STANDARD
CURB
&
GUTTERS



#### JOINT SPACING DETAIL

- 1. CONCRETE SHALL BE, CLASS AA (AE) AS PER STANDARD SPECIFICATION SECTION 03000.
- 2. PLACE EXPANSION-CONTRACTION JOINTS, (JOINT FILLER MATERIAL FULL DEPTH OF CONCRETE PLUS 1 INCH, FLUSH WITH TOP OF CONCRETE) EVERY 50 FEET FOR HAND SET FORMING AND 150 FEET FOR SLIP FORMING.
- 3. ALL REINFORCING STEEL TO BE A MINIMUM OF THREE INCHES CLEAR CONCRETE COVERAGE UNLESS OTHERWISE SHOWN.
- 4. EDGE CONCRETE WITH A 1/2" EDGING TOOL.
- 5. USE 6" MIN. UNTREATED BASE COURSE MATERIAL, COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR AS PER ASTM D 1557 OR AASHTO T 180 SPECIFICATIONS; AT +/- 2% OF OPTIMUM MOISTURE CONTENT.
- 6. STAGGER LAP SPLICES WITH A MINIMUM OF 15 INCHES.
- 7. FORM OIL CONTAMINATED REINFORCING STEEL WILL BE REJECTED.

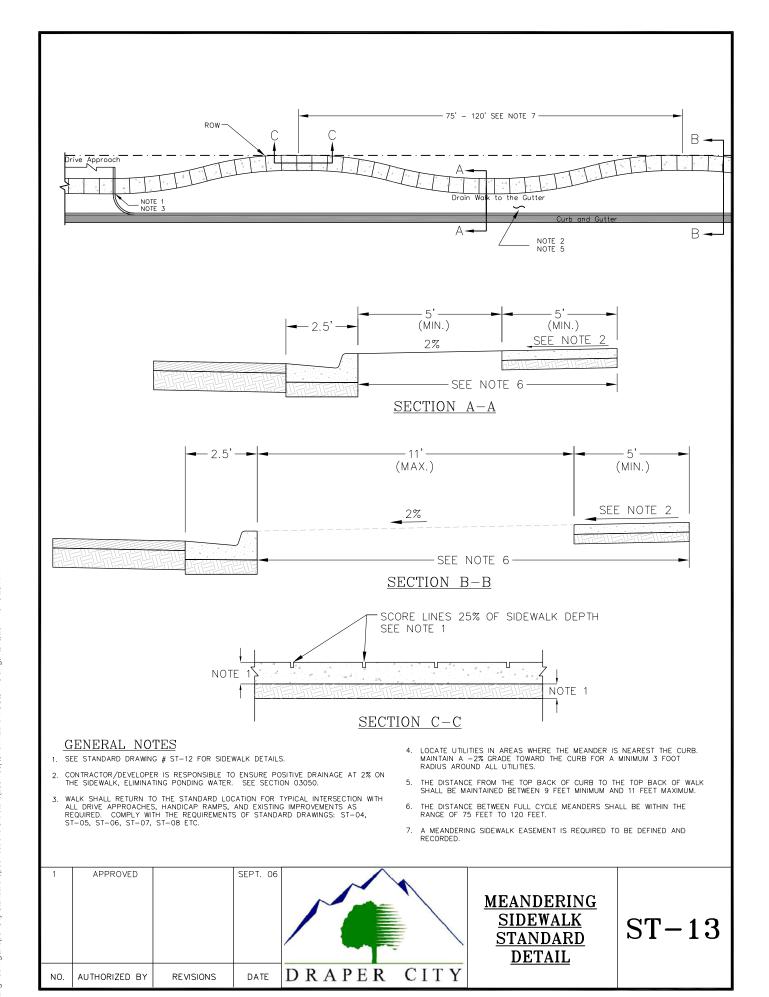
1	APPROVED		SEPT. 06		STANDARD CURB WALLS	ST-11
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY		



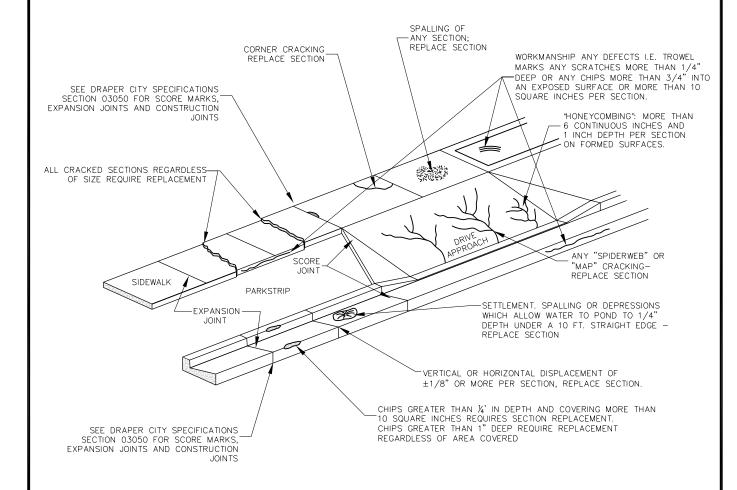
#### GENERAL NOTES

- 1. USE MONOLITHIC CONSTRUCTION FOR SIDEWALK 5" THICK EXCEPT AT DRIVEWAYS WHERE THICKNESS OF 8" IN COMMERCIAL AND INDUSTRIAL ZONE AREAS AND 6" IN RESIDENTIAL ZONE AREAS IS REQUIRED.
- 2. PLACE SCORE LINES AT INTERVALS EQUAL TO 1 TIMES THE WIDTH OF THE SIDEWALK UNIFORMLY PLACED ALONG LENGTH OF SIDEWALK. SEE SECTION 03050.
- 3. USE 1/2" F1 BITUMINOUS IMPREGNATED EXPANSION JOINT (ASTM D994) FILLER MADE OF PREMOLDED BITUMINOUS OR SIMILAR MATERIAL AT INTERSECTIONS WITH PERPENDICULAR SIDEWALKS OR DRIVEWAYS. SEE ST-04 OR ST-05 FOR WHEELCHAIR RAMP DETAILS.
- 4. EDGE SIDEWALK WITH 1/2" RADIUS EDGING TOOL. ROUND EDGES AT EXPANSION JOINTS TO A RADIUS OF 1/2".
- 5. WALKS SHALL BE FINISHED AS PER SECTION 03050.
- 6. USE 6" MIN. UNTREATED BASE COURSE MATERIAL. COMPACT TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY OF THE MODIFIED PROCTOR AS PER CURRENT ASTM D 1557 OR AASHTO T 180 SPECIFICATIONS; AT +/- 2% OF OPTIMUM MOISTURE CONTENT.
- 7. UNLESS SPECIFIED OTHERWISE, CONSTRUCT WIDTH OF SIDEWALK AS FOLLOWS: A) 5 FEET IF SIDEWALK IS ADJACENT TO A PARKING STRIP OVER 1 FOOT WIDE, OR B) 6 FEET IF SIDEWALK IS ADJACENT TO CURB AND GUTTER OR PARKING STRIPS LESS THAN 1 FOOT IN WIDTH, OR C) MATCH TO EXISTING SIDEWALK EXTENSION WIDTHS.
- 8. THE CLASS OF CONCRETE FOR SIDEWALK AND STAMPED CONCRETE PARK STRIP SHALL BE AA(AE), SEE SECTION 03000 (APWA 232).
- 9. EXPANSION JOINTS TO BE PLACED NOT TO EXCEED 50'. ON GRADES GREATER THAN 10% PLACE JOINTS AT 30'.

1	APPROVED		SEPT. 06		STANDARD SIDEWALK DETAIL	ST-12
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY		

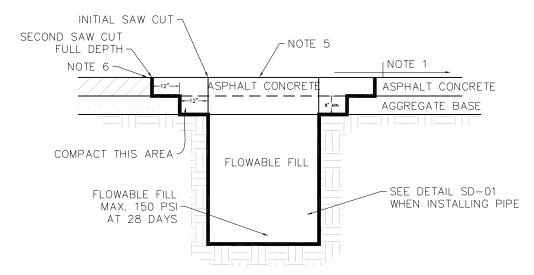


TRUE LINE AND GRADE: IF SIDEWALK AND/OR CURB & GUTTER DEVIATES MORE THAN THE FOLLOWING, CONTRACTOR SHALL REPLACE: LINE  $\chi^{\prime\prime}_{\rm U}$  IN 10 FEET GRADE  $\chi^{\prime\prime}$  IN 10 FEET



- 1. REPLACEMENT IS REQUIRED IF ANY COMPONENT HAS ONE OR MORE OF THE CONDITIONS NOTED ABOVE. OTHERWISE REPAIR SECTION UNDER THE DIRECTION OF THE CITY OR ENGINEER.
- 2. ALL CRACKS WITHIN SIDEWALK SECTIONS REQUIRE REPLACEMENT.
- REPLACEMENT CONCRETE SHALL MEET CRITERIA SET FORTH IN DRAPER CITY STANDARDS AND SPECIFICATIONS: SECTION 03000 - CONCRETE WORK.
- 4. MINIMUM REPLACEMENT LENGTH SHALL BE PER SECTION. TYPICALLY 5' PER SECTION SIDEWALK & 10' PER SECTION CURB & GUTTER.

1	APPROVED		SEPT. 06		DEFECTIVE CONCRETE REPLACEMENT CRITERIA DETAIL	ST-14
NO	. AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY	DETAIL	



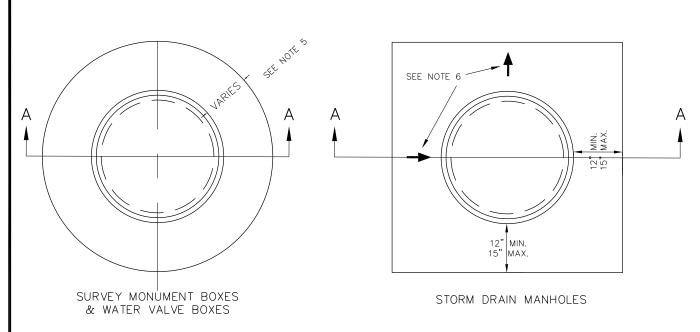


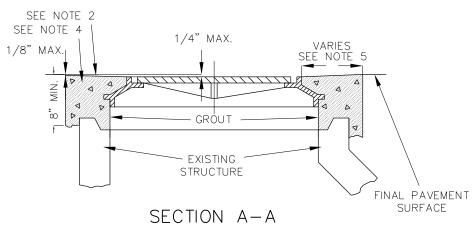
# **EXCAVATION ASPHALT PAVEMENT**

#### **GENERAL NOTES**

- 1. UNTREATED BASE COURSE: PROVIDE MATERIAL SPECIFIED IN SECTION 02230. PLACE AND COMPACT PER SECTION 02240 AND SECTION 02575. MAXIMUM LIFT THICKNESS IS 8-INCHES BEFORE COMPACTION.
- 2. SHORING: SHORE IN CONFORMANCE WITH SECTION 02214.
- 3. TACK COAT: FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES.
- 4. ASPHALT PAVEMENT: USE ASPHALT CONCRETE SPECIFIED IN SECTION 02513.
  - A. COMPACT EACH LIFT IN CONFORMANCE WITH SECTION 02503
  - B. PLANE OFF SURFACE DISTORTIONS THAT EXCEED 1/4 INCH DEVIATION IN 10 FEET. COAT PLANED SURFACES WITH A CATIONIC OR ANIONIC EMULSION AS APPROVED BY CITY ENGINEER.
  - C. ASPHALT PAVEMENT THICKNESS DEPTH SHALL EQUAL EXISTING PLUS 1-INCH, 4" MINIMUM, 6" MAXIMUM
  - D. MATCH EXISTING ASPHALT GRADATION 1/2 OR 3/4.
- 5. JOINT REPAIR: IF A CRACK OCCURS AT THE "T" PATCH CONNECTION TO EXISTING PAVEMENT OR AT ANY STREET FIXTURE, SEAL THE CRACK PER SECTION 02511.
- 6. EQUIPMENT: ALL ASPHALT PAVEMENT SHALL BE INSTALLED WITH MECHANICAL PAVING EQUIPMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 7. COMPLY WITH ALL REQUIREMENTS OF SECTION 02575.
- 8. PLANT MIX SEAL COAT: FOR PLANT MIX SEAL COAT COMPLY WITH UDOT SPECIFICATION, SECTION 02786. MILL AND REPLACE EXISTING PLANT MIX SEAL COAT 10 FEET FROM EDGE OF SECOND CUT IN ALL DIRECTIONS.

1	APPROVED		SEPT. 06		RESTORATION OF ASPHALT CONCRETE IN TRENCHES	ST-15
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY	<u>DETAIL</u>	

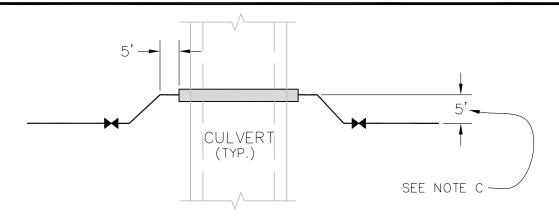




### GENERAL NOTES

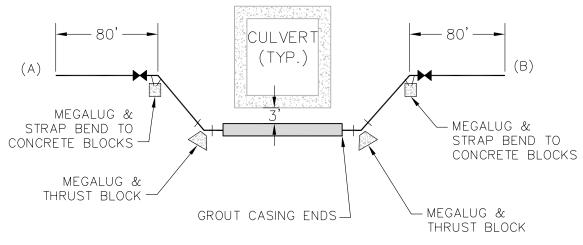
- ALL MATERIALS REFER TO DRAPER CITY SPECIFICATIONS
   SECTION 02438 STRUCTURES TO FINISH GRADE.
   FINISH GRADE OF FRAME AND LID TO BE A MAXIMUM OF 1/4"
   BELOW NEW STREET PAVING SURFACE AND SHALL MATCH THE
   NEW TRANSVERSE SLOPE. THE 1/4" MAXIMUM ELEVATION
- NEW TRANSVERSE SLOPE. THE 1/4 MAXIMUM ELEVATION
  DIFFERENCE SHALL BE DISTRIBUTED GRADUALLY WITHIN THE
  WIDTH OF THE CONCRETE COLLAR.
  ANY PART OF THE COLLAR OR STRUCTURE HIGHER THAN THE
  SURROUNDING SURFACE COURSE AS MEASURED WITH A STRAIGHT
  EDGE SPANNING THE STRUCTURE WILL BE CAUSE FOR REJECTION
  REQUIRING COMPLETE REMOVAL AND REPLACEMENT.
- 4. ALL CONCRETE SHALL BE CLASS AA (AE). DRAPER CITY STANDARD SPECIFICATIONS SECTION 03000.
- CONSTRUCT CONCRETE COLLARS AS FOLLOWS: STORM DRAIN MANHOLES — SQUARE — 12" WDTH
  SANITARY SEWER MANHOLES — ROUND — 12" WDTH
  WATER VALVE BOXES — ROUND — 8" WIDTH
  SURVEY MONUMENT BOXES — ROUND — 8" WIDTH OTHER UTILITY MANHOLES OR VAULTS - CONTACT CITY ENGINEER
- 6. ETCH OR SCORE AN ARROW IN THE SURFACE OF THE CONCRETE COLLAR INDICATING THE DIRECTION OF FLOW FOR ALL STORM DRAIN PIPES IN MANHOLE.

1	APPROVED		SEPT. 06		STRUCTURES TO FINISH GRADE
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY	



# PLAN VIEW

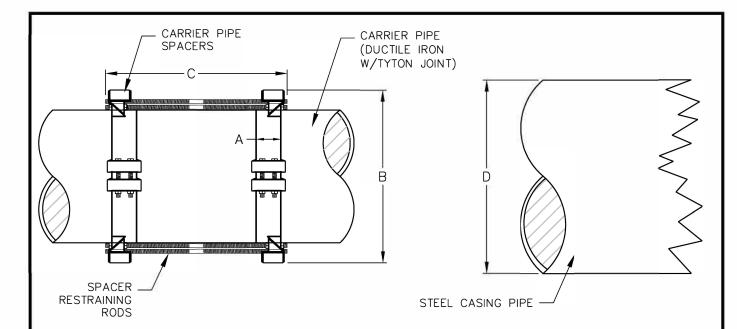
APPROX. EXISTING GROUND ELEVATION



# **SECTION VIEW**

- A. ALL JOINTS BETWEEN POINT "A" AND POINT "B" SHALL BE MECHANICALLY RESTRAINED (MEGALUGS) JOINTS.
- B. SEE SECTION 02224 FOR CASING INFORMATION.
- C. ALL 45° BENDS SHALL BE ROLLED TO ACHIEVE 5' HORIZONTAL OFF SET.

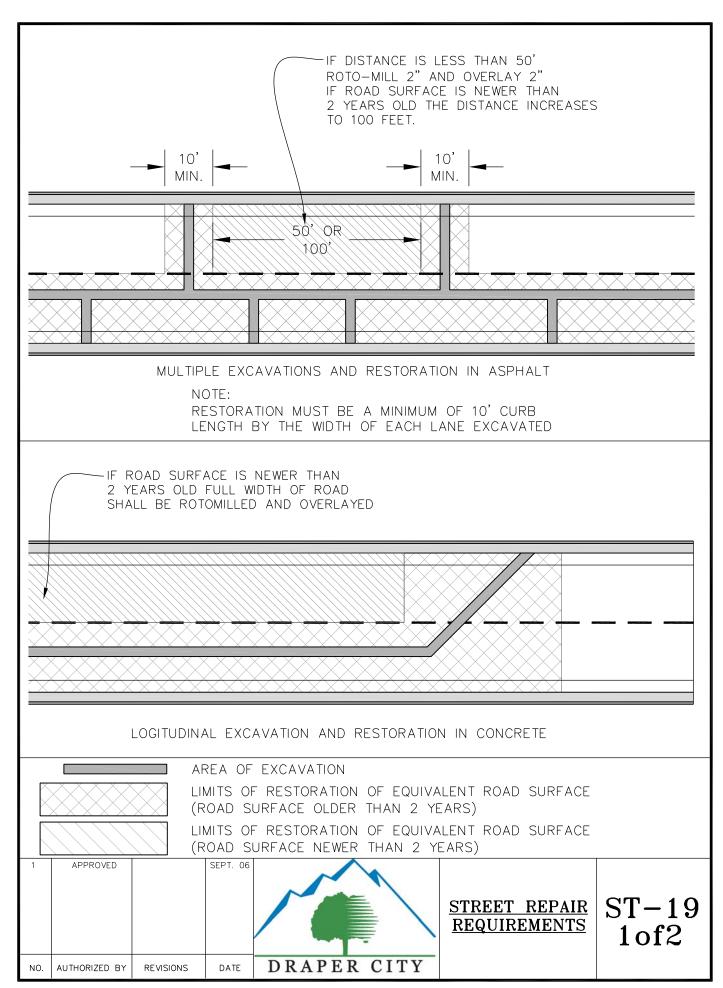
1	APPROVED		SEPT. 06	_	CASING PIPE INSTALLATION DETAILS	ST-17
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY		

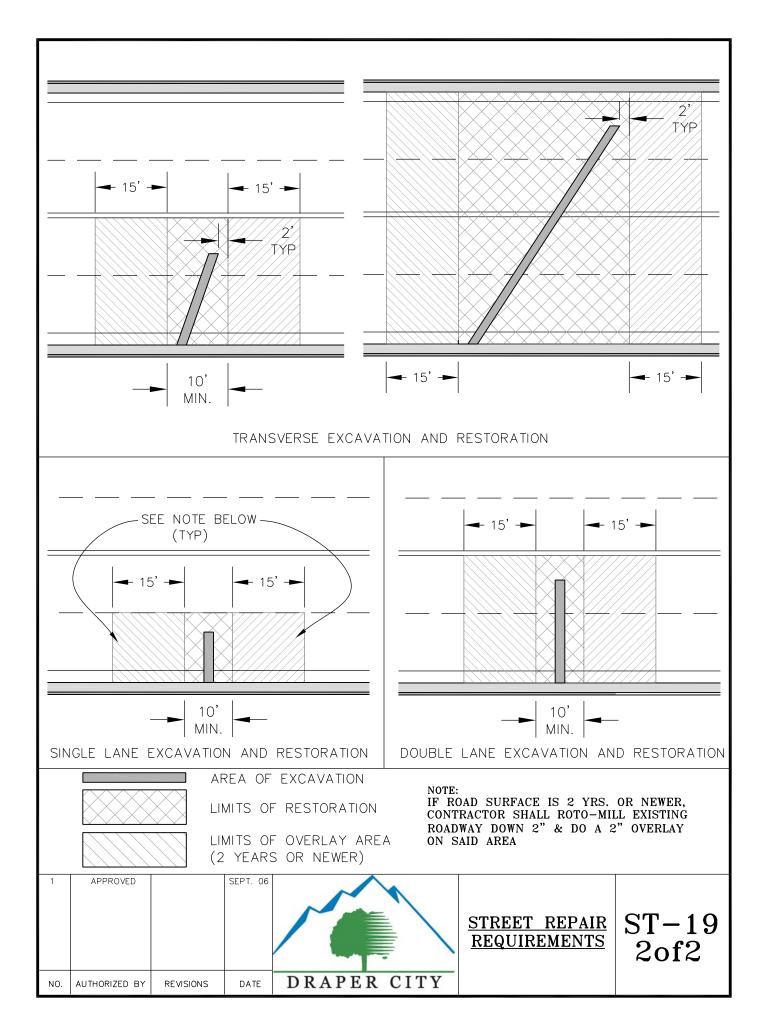


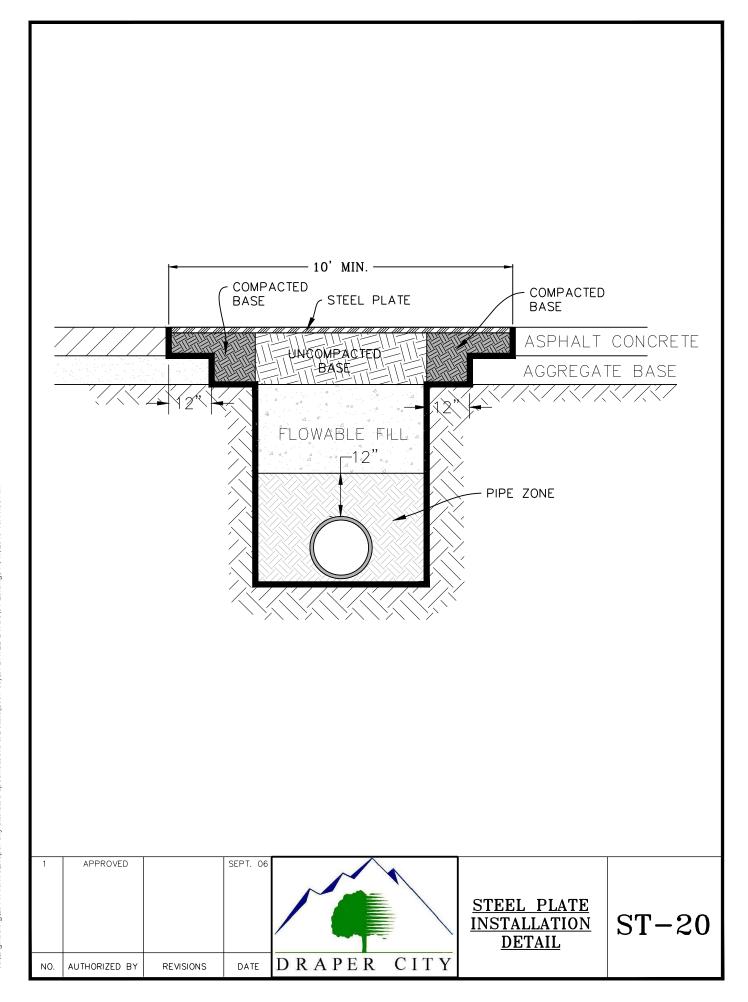
CARRIER PIPE NOMINAL SIZE (in.)	CARRIER PIPE OD (in.)	DIM. A (in.)	DIM. B (in.)	DIM. C (in.)	DIM. D MIN. CASING SIZE (ID) (in.)	REQUIRED CASING PIPE ID (in.)	WALL THICKNESS (in.)
4	4.8	1 1/8	11 3/4	12	12.4	16	3/8
6	6.9	1 1/8	13 3/8	13	13.6	16	3/8
8	9.05	1 1/8	17 1/8	15	17.5	20	3/8
10	11.10	1 3/8	19 3/4	16	21.5	24	3/8
12	13.2	1 3/8	21 7/8	18	23	24	3/8
14	15.3	4	26 3/8	24	27	28	1/2
16	17.4	4	28 3/8	28	30	33	5/8
18	19.5	5	30 1/2	28	31	36	5/8
20	21.6	7	32 1/4	28	33	36	5/8
24	25.8	7	38 1/4	28	39	40	5/8

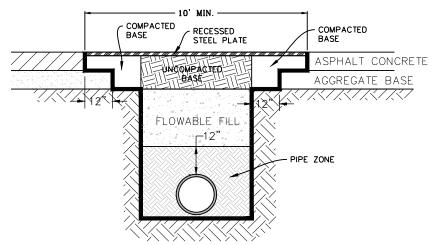
- SPECIFIC SITE REQUIREMENTS MAY DICTATE ADJUSTMENTS IN STEEL CASING PIPE SIZE AND WALL THICKNESS.
- 2. CARRIER PIPE IS DUCTILE IRON 350 PSI CLASS, TYTON JOINT UNLESS OTHERWISE NOTED ON THE PROJECT PLANS.
- 3. CASING PIPE IS A-252 GRADE B STEEL UNLESS OTHERWISE NOTED ON THE PROJECT PLANS.
- SEE APPROVED PLAN FOR CASING LAYOUT. OTHERWISE SEE STANDARD DETAIL ST-17.
- 5. CARRIER PIPE JOINTS SHALL BE RESTRAINED FOR A MINIMUM OF 80' BEYOND VALVES ON EITHER SIDE OF CASING
- WORKING PRESSURE RATING FOR THE RESTRAINED CARRIER PIPE, MIN. 2:1 SAFETY FACTOR IN ALL SIZES.

া	APPROVED		SEPT. 06		CASING PIPE AND SPACERS DETAIL	ST-18
NO.	AUTHORIZED BY	REVISIONS	DATE	DRAPER CITY		

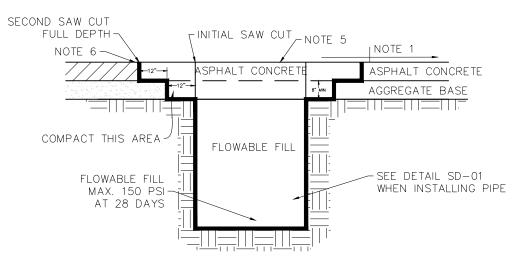








#### RECESSED STEEL PLATE DETAIL



#### **EXCAVATION ASPHALT PAVEMENT**

#### **EXCAVATION GENERAL NOTES**

- 1. UNTREATED BASE COURSE: PROVIDE MATERIAL SPECIFIED IN SECTION 02230. PLACE AND COMPACT PER SECTION 02240 AND SECTION 02575. MAXIMUM LIFT THICKNESS IS 8-INCHES BEFORE COMPACTION.
- 2. SHORING: SHORE IN CONFORMANCE WITH SECTION 02214.
- 3. TACK COAT: FULL TACK COAT COVERAGE ON ALL VERTICAL SURFACES.
- 4. ASPHALT PAVEMENT: USE ASPHALT CONCRETE SPECIFIED IN SECTION 02513.

  A. COMPACT EACH LIFT IN CONFORMANCE WITH SECTION 02503

  B. PLANE OFF SURFACE DISTORTIONS THAT EXCEED 1/4 INCH DEVIATION IN 10 FEET.

  COAT PLANED SURFACES WITH A CATIONIC OR ANIONIC EMULSION AS APPROVED BY CITY ENGINEER.
  - C. ASPHALT PAVEMENT THICKNESS DEPTH SHALL EQUAL EXISTING PLUS 1-INCH, 4" MINIMUM, 6" MAXIMUM
  - D. MATCH EXISTING ASPHALT GRADATION 1/2 OR 3/4.
- 5. JOINT REPAIR: IF A CRACK OCCURS AT THE "T" PATCH CONNECTION TO EXISTING PAVEMENT OR AT ANY STREET FIXTURE, SEAL THE CRACK PER SECTION 02511.
- 6. EQUIPMENT: ALL ASPHALT PAVEMENT SHALL BE INSTALLED WITH MECHANICAL PAVING EQUIPMENT UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.
- 7. COMPLY WITH ALL REQUIREMENTS OF SECTION 02575.
- 8. PLANT MIX SEAL COAT: FOR PLANT MIX SEAL COAT COMPLY WITH UDOT SPECIFICATION, SECTION 02786. MILL AND REPLACE EXISTING PLANT MIX SEAL COAT 10 FEET FROM EDGE OF SECOND CUT IN ALL DIRECTIONS.

	APPROVE	D	SEPT. 06		TRENCH REPAIR DETAIL	ST-21
٨	O. AUTHORIZED	BY REVISIONS	DATE	DRAPER CITY		