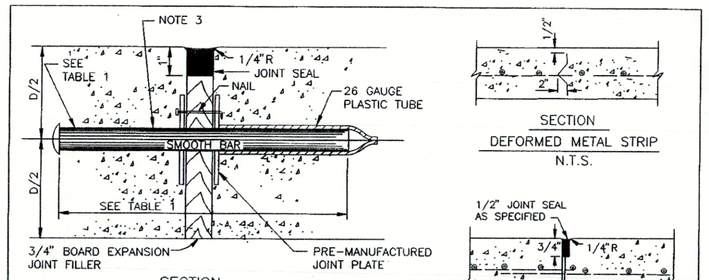


SECTION

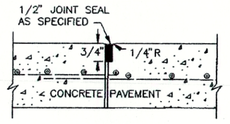
DOWEL TYPE EXPANSION JOINT

N.T.S

SECTION

DEFORMED METAL STRIP

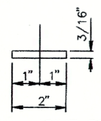
N.T.S.



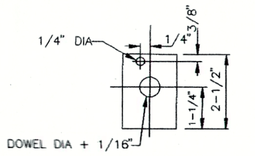
SECTION

CONSTRUCTION JOINT SEAL

N.T.S.



PLAN – JOINT PLATE



ELEVATION – JOINT PLATE

N.T.S.

NOTES:

1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS. UNITS TO BE SPACED ON 12" CENTERS.
2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED AT A MAXIMUM DISTANCE OF 40' FEET 6 INCHES.
3. CENTER DOWEL HORIZONTALLY ON JOINT.
4. CENTER DOWEL VERTICALLY IN CONCRETE BASE. EXTEND THICKENED CONCRETE AS NEEDED TO MAINTAIN 3" MIN. COVER.
5. CITY OF HOUSTON APPROVED PRODUCTS MAY BE USED AS JOINT PLATE ALTERNATIVE.

TABLE 1

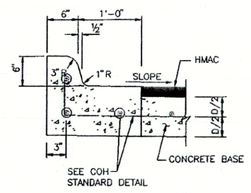
PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
6	3/4	18	12
7	1	18	12
8	1	18	12
9	1 1/4	18	12
10	1 1/4	18	12
11	1 1/4	18	12
12	1 1/4	18	12

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

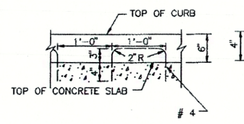
PAVEMENT EXPANSION AND CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

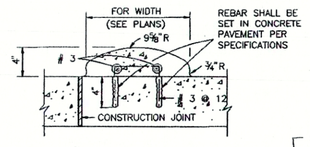
EFF DATE: OCT-01-2002 DWG NO: 02752-01



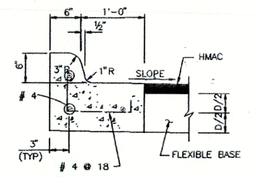
ESPLANADE CURB CONNECTED TO CONCRETE BASE



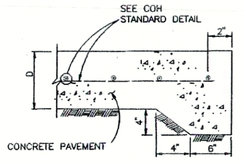
ALTERNATE CONCRETE CURB REINFORCEMENT



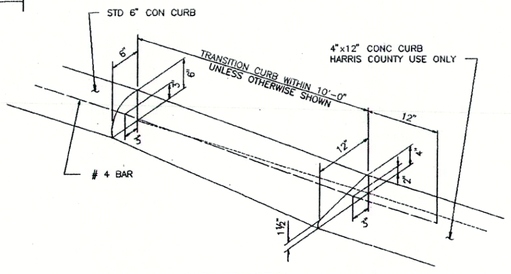
MOUNTABLE CURB



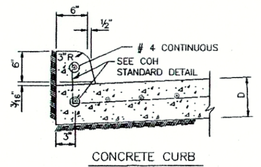
ESPLANADE CURB CONNECTED TO FLEXIBLE BASE



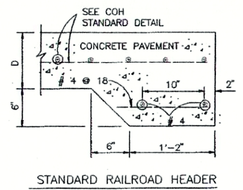
STANDARD CONCRETE PAVING HEADER



CURB TRANSITION

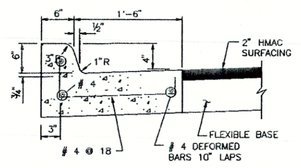


CONCRETE CURB

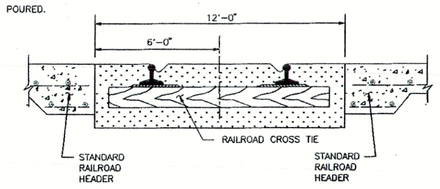


STANDARD RAILROAD HEADER

NOTE:
WHEN CONCRETE CURB IS TO BE PLACED EXISTING CONCRETE USE BASE #4 @ 18x10" LONG, DOWELLED AND SET IN EPOXY GROUT SET #4 DOWELLS, 25" LONG AT 12" C-C WHEN PAVEMENT SECTION POURED.



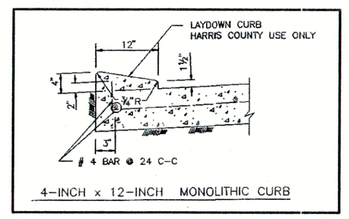
MONOLITHIC CURB AND GUTTER



STANDARD RAILROAD CROSSING – SINGLE TRACK

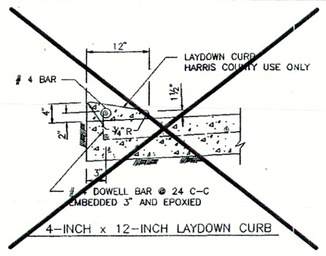
4"x12" MONOLITHIC AND TRANSITION CURB NOTES:

1. 6-INCH CONCRETE CURB TO BE CONSTRUCTED ON ALL ESPLANADES, ISLANDS NON-RESIDENTIAL STREETS, AND RESIDENTIAL STREETS
2. TRANSITIONS FROM 6-INCH CONCRETE CURB TO 4-INCH x 12-INCH CONCRETE CURB TO BE ACCOMPLISHED WITHIN 10 FEET, UNLESS OTHERWISE SHOWN. IF THIS 10-FOOT TRANSITION CURB IS NOT POURED MONOLITHICLY WITH THE PAVEMENT, THEN REINFORCING STEEL AS SHOWN IN "4-INCH x 12-INCH TRANSITION CURB" IS TO BE INSTALLED.



4-INCH x 12-INCH MONOLITHIC CURB

CURB DETAIL FOR THIS PROJECT



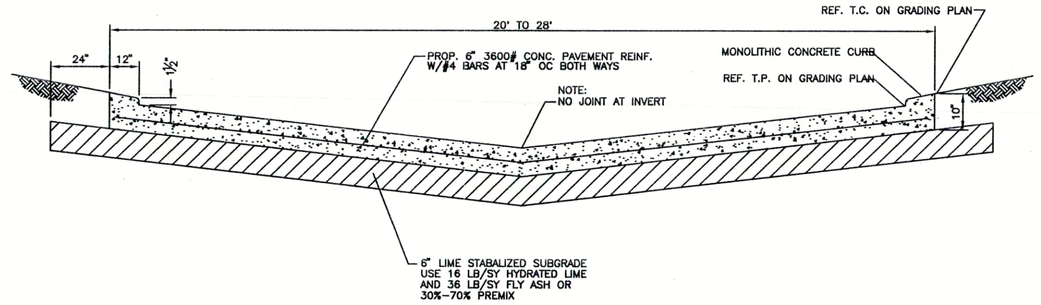
4-INCH x 12-INCH LAYDOWN CURB

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

CURB, CURB AND GUTTER AND HEADER DETAILS
(NOT TO SCALE)

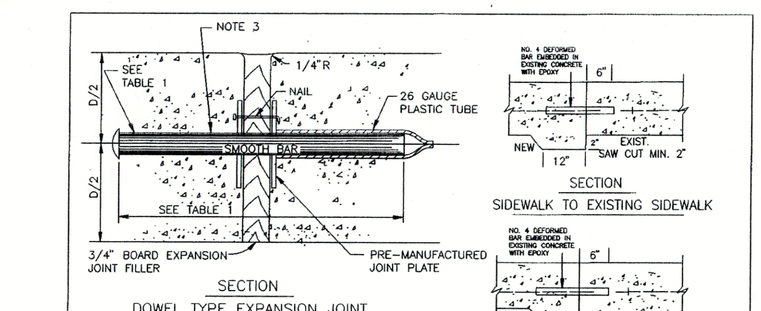
APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: OCT-01-2002 DWG NO: 02771-01



NOTE:

1. PARADIGM CONSULTANTS INC. TO DETERMINE SUITABLE MIX AFTER SUBGRADE IS EXPOSED AND ACCEPT FINAL SUBGRADE PREPARATION, IN WRITING, PRIOR TO CONCRETE POUR.
2. PLAN SHOWS APPROXIMATE LOCATION OF TWO CONSTRUCTION JOINTS WHICH ARE TO BE LOCATED A MINIMUM OF 20 FEET ON EITHER SIDE OF A GEOLOGIC FAULT LINE. PARADIGM GEOTECHNICAL CONSULTANTS WILL DEFINE SPECIFIC LIMITS AND TRANSVERSE JOINT DESIGN AFTER SUBGRADE IS PREPARED, OTHER JOINT SPACING TO BE IN ACCORDANCE WITH CITY DWG. 02752-01 SHOWN ABOVE. ALL SUBGRADE TREATMENT, CONCRETE PAVING MIX AND CONCRETE SUPPLIER STOCK PILES TO BE APPROVED IN WRITING BY PARADIGM CONSULTANTS PRIOR TO PLACEMENT OF ANY AND ALL CONCRETE PAVING.



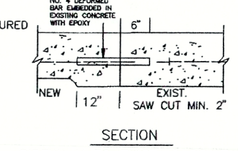
SECTION

DOWEL TYPE EXPANSION JOINT

N.T.S

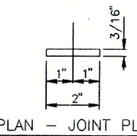
SECTION

SIDEWALK TO EXISTING SIDEWALK

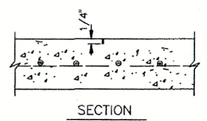


SECTION

SIDEWALK TO EXISTING DRIVEWAY



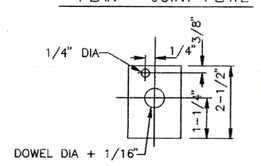
PLAN – JOINT PLATE



SECTION

CONTROL JOINT

N.T.S.



ELEVATION – JOINT PLATE

N.T.S.

NOTES:

1. STEEL TO MEET ASTM STANDARD SPECIFICATIONS FOR CONCRETE REINFORCING BARS.
2. EXPANSION JOINT TO BE PLACED AT THE END OF EACH CURB RADIUS AND SPACED AT A MAXIMUM DISTANCE OF 36' FEET. MAXIMUM SPACING FOR CONTROL JOINTS SHALL BE 5' FEET.
3. CENTER DOWEL HORIZONTALLY ON JOINT.
4. CENTER DOWEL VERTICALLY IN CONCRETE AS NEEDED TO MAINTAIN 2" MIN. COVER.

TABLE 1

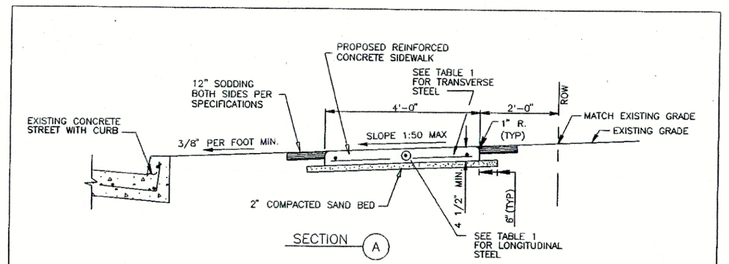
PAVEMENT THICKNESS (IN)	DOWEL SIZES AND SPACINGS		
	DIAMETER (IN)	LENGTH (IN)	SPACING (IN)
4 1/2	1/2	18	12
5	1/2	18	12
6	3/4	18	12
7	1	18	12

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

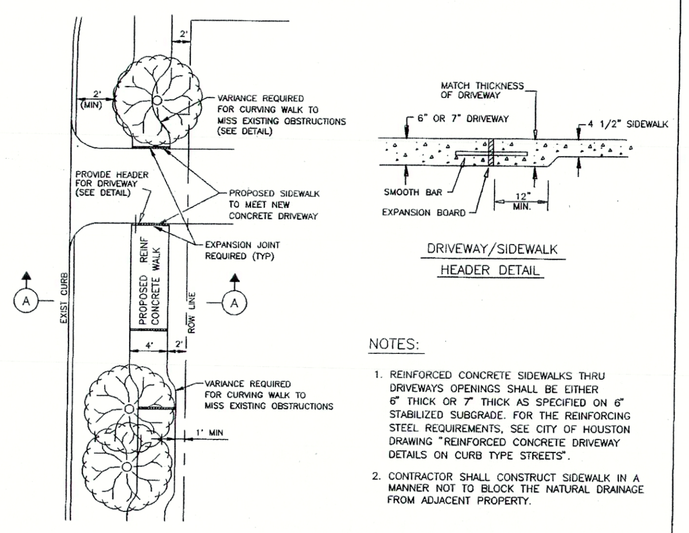
SIDEWALK EXPANSION AND CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: OCT-01-2002 DWG NO: 02752-02



SECTION (A)



DRIVEWAY/SIDEWALK HEADER DETAIL

NOTES:

1. REINFORCED CONCRETE SIDEWALKS THRU DRIVEWAYS OPENINGS SHALL BE EITHER 6" THICK OR 7" THICK AS SPECIFIED ON 6" STABILIZED SUBGRADE. FOR THE REINFORCING STEEL REQUIREMENTS, SEE CITY OF HOUSTON DRAWING "REINFORCED CONCRETE DRIVEWAY DETAILS ON CURB TYPE STREETS".
2. CONTRACTOR SHALL CONSTRUCT SIDEWALK IN A MANNER NOT TO BLOCK THE NATURAL DRAINAGE FROM ADJACENT PROPERTY.

TABLE 1

REINFORCING STEEL INFORMATION FOR 4 1/2" THICK SIDEWALKS
EXPANSION JOINT SPACING = 36 FT
f'_c = 3,000 PSI AND f_y = 60,000 PSI

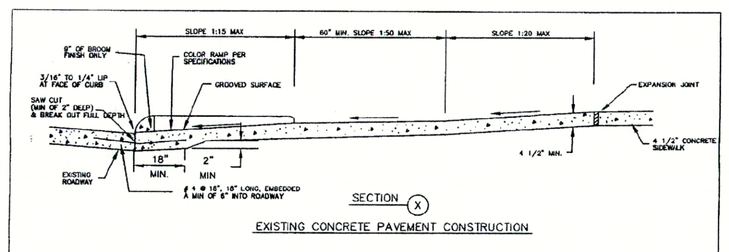
SIDEWALK THICKNESS (IN)	SIDEWALK WIDTH (FT)	LONGITUDINAL STEEL # 3 BARS			TRANSVERSE STEEL # 3 BARS SPACING (IN)
		NUMBER OF BARS	SPACING (IN)	END BAR SPACING (IN)	
4.5	4	3	21	3	48
4.5	5	3	27	3	48
4.5	6	4	22	3	48

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

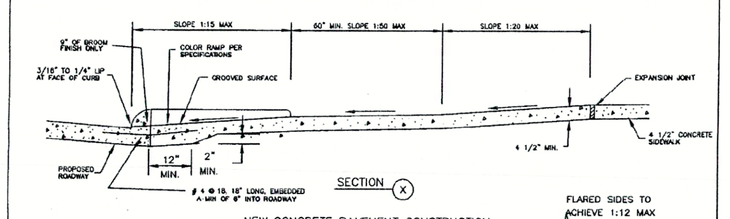
CONCRETE SIDEWALK DETAILS FOR STREETS WITH CURBS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

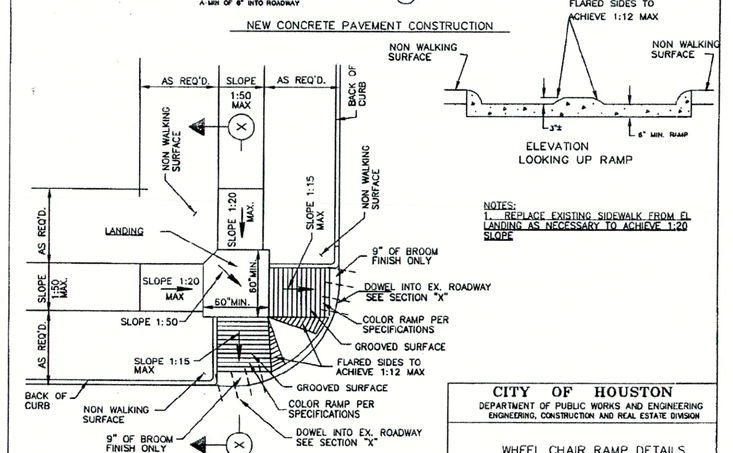
EFF DATE: OCT-01-2002 DWG NO: 02775-01



EXISTING CONCRETE PAVEMENT CONSTRUCTION



NEW CONCRETE PAVEMENT CONSTRUCTION



STREETS WITH NON-WALKING SURFACE BEHIND CURB

N.T.S.

ELEVATION LOOKING UP RAMP

NOTES:
1. REPLACE EXISTING SIDEWALK FROM EL LANDING AS NECESSARY TO ACHIEVE 1:20 SLOPE

CITY OF HOUSTON
DEPARTMENT OF PUBLIC WORKS AND ENGINEERING
ENGINEERING, CONSTRUCTION AND REAL ESTATE DIVISION

WHEEL CHAIR RAMP DETAILS
(NOT TO SCALE)

APPROVED BY: CITY ENGINEER — APPROVED BY: DIRECTOR OF PUBLIC WORKS AND ENGINEERING

EFF DATE: Sep-15-04 DWG NO: 02775-02

STATE OF TEXAS
CALVIN J. MORGAN
25914
REGISTERED PROFESSIONAL ENGINEER

08.11.06

REVISIONS

Carter::Burgess
Consultants in Planning, Engineering, Architecture, Construction Management and Related Services
CARTER & BURGESS, INC.
55 WALKUP DRIVE, SUITE 300
HOUSTON, TX 77007-5842

CITY OF HOUSTON
GARDEN OAKS COURT PARTIAL REPLAT AND EXTENSION NO. 1 SITE IMPROVEMENTS

PAVEMENT DETAILS

SCALE: NONE	PROJ. NO. 030784.050.I.0010	
	DATE	SHEET
DESIGNED: N.L.R.	JULY, 2006	11 of 15
DRAWN: N.L.R.		
APPROVED: C.J.M.		

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